APPENDIX F

Laboratory Analytical Results

000674

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

SLR

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☑ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT: DHA

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGER: [redacted]

PM CONTACT No: [redacted]

LABORATORY: SGS

LABORATORY ADDRESS: 24d

SAMPLER: [redacted]

SAMPLER CONTACT No:

Email Reports and Invoices to: LQR340@slrconsulting.com

Turnaround Time (TAT)

☑ Standard TAT

☐ Non Standard or Urgent TAT

Required TAT:

COC Number 1 of 3

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	Hold	Additional Information (Comment on any gross contamination or specific requirements)
	0407_TP83_0.1_200622	22/6 20	Soil			X	
1	0407_TP83_0.5_200622			b	X		
	0407_TP83_1.0_200622					X	
2	0407_TP83_1.5_200622				X		
3	0407_TP93_0.1_200622			b	X		
4	0407_TP93_0.5_200622			b	X		
	0407_TP93_1.0_200622					X	
5	0407_TP231_0.1_200622			b	X		
	0407_TP231_0.5_200622					X	
	0407_TP231_1.0_200622					X	
6	0407_TP231_1.5_200622			b	X		
	0407_TP231_2.0_200622					X	

SGS EHS Sydney COC

SE207824

[redacted]

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	Received by	Sign [redacted]	Date / Time 22/6 16:30	Temperature Received: 1.3 C
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

source: [Untitled].pdf page: 1 SGS Ref: SE207824_COC

000675

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
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- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT:	DHA
PROJECT:	Randwick Barracks
PROJECT NUMBER:	610.30041
PROJECT MANAGER:	[redacted]
PM CONTACT No:	
LABORATORY:	SGS
LABORATORY ADDRESS:	Syd
SAMPLER:	
SAMPLER CONTACT No:	
Email Reports and Invoices to:	LQRSYD@slrconsulting

Turnaround Time (TAT)

☑ Standard TAT

☐ Non Standard or Urgent TAT

Required TAT:

COC Number 2 of 3

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	PFAS						Hold	Additional Information (Comment on any gross contamination or specific requirements)
7	0407_TP232_01_200622	22-6-20	Soil	b	X								
	0407_TP232_0.5_200622											X	
8	0407_TP232_1.0_200622			b	X								
	0407_TP232_1.5_200622											X	
	0407_TP233_0.1_200622											X	
9	0407_TP233_0.5_200622			b	X								
	0407_TP233_1.0_200622											X	
10	0407_TP233_1.5_200622				X								
11	0407_TP84_0.1_200622			b	X								
12	0407_TP84_0.5_200622				X								
	0407_TP84_1.0_200622											X	
13	0407_QC135_200622				X	X							

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	Received by	Sign [redacted]	Date / Time 22/6 4:30	Temperature Received: 1.3 °C
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

000676

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
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- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☑ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
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- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT:	DHA
PROJECT:	Randwick Barracks
PROJECT NUMBER:	610.30041
PROJECT MANAGER:	[redacted]
PM CONTACT No:	
LABORATORY:	SCS
LABORATORY ADDRESS:	Syd
SAMPLER:	[redacted]
SAMPLER CONTACT No:	
Email Reports and Invoices to:	LQRSYD@slrconsulting.com

Turnaround Time (TAT): ☑ Standard TAT ☐ Non Standard or Urgent TAT

Required TAT:

COC Number: 3 of 3

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	PFAS	Asbestos					Hold	Additional Information (Comment on any gross contamination or specific requirements)
14	0407_QC125_200622	22620	Soil		X	X							
15	0407_QC130_200622				X	X							
*	0407_QC235_200622			*	Please forward to Eurofins for Suite A and PFAS								
*	0407_QC225_200622												
*	0407_QC230_200622												
	0407_TP232_A01_200622		ACM									X	
16	0407_TP231_A02_200622						X						
17	0407_TP231_A01_200622						X					X	
18	0407_TP233_A01_200622						X						
19	0407_TP232_A02_200622						X						
~~20~~	~~0407_TP232_A01_200622~~												

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	Received by	Sign [redacted]	Date / Time 27/6 @ 4:30	Temperature Received:
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	1.3°C
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

SAMPLE RECEIPT ADVICE

SE207824

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000674--000676**
Samples	19

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Mon 22/6/2020
Report Due	Mon 29/6/2020
SGS Reference	**SE207824**

SUBMISSION DETAILS

This is to confirm that 19 samples were received on Monday 22/6/2020. Results are expected to be ready by COB Monday 29/6/2020. Please quote SGS reference SE207824 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	15 Soil, 4 Material
Date documentation received	22/6/2020	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	1.3°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

11 Soil and 1 Material have been placed on hold as no tests have been assigned for them by the client. These samples will not be processed.
PFAS subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420.
Samples with bags not received will not be analysed for Asbestos .

This document is issued by the Company under its General Conditions of Service accessible at www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

SAMPLE RECEIPT ADVICE

SE207824

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	Speciated Phenols in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
001	0407_TP83_0.5_200622	29	14	26	11	18	10	81	7
002	0407_TP83_1.5_200622	29	14	26	11	18	10	81	7
003	0407_TP93_0.1_200622	29	14	26	11	18	10	81	7
004	0407_TP93_0.5_200622	29	14	26	11	18	10	81	7
005	0407_TP231_0.1_200622	29	14	26	11	18	10	81	7
006	0407_TP231_1.5_200622	29	14	26	11	18	10	81	7
007	0407_TP232_0.1_200622	29	14	26	11	18	10	81	7
008	0407_TP232_1.0_200622	29	14	26	11	18	10	81	7
009	0407_TP233_0.5_200622	29	14	26	11	18	10	81	7
010	0407_TP233_1.5_200622	29	14	26	11	18	10	81	7
011	0407_TP84_0.1_200622	29	14	26	11	18	10	81	7
012	0407_TP84_0.5_200622	29	14	26	11	18	10	81	7
013	0407_QC135_200622	29	14	26	11	18	10	81	7
014	0407_QC125_200622	29	14	26	11	18	10	81	7
015	0407_QC130_200622	29	14	26	11	18	10	81	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE207824

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Fibre ID in bulk materials	Fibre Identification in soil	Gravimetric Determination of Asbestos in Soil	Mercury in Soil	Moisture Content	Per- and Polyfluoroalkyl Substances (PFAS) in	Total Recoverable Elements in Soil/Waste
001	0407_TP83_0.5_200622	-	2	9	1	1	-	7
002	0407_TP83_1.5_200622	-	-	-	1	1	-	7
003	0407_TP93_0.1_200622	-	2	9	1	1	-	7
004	0407_TP93_0.5_200622	-	2	9	1	1	-	7
005	0407_TP231_0.1_200622	-	2	9	1	1	-	7
006	0407_TP231_1.5_200622	-	2	9	1	1	-	7
007	0407_TP232_0.1_200622	-	2	9	1	1	-	7
008	0407_TP232_1.0_200622	-	2	9	1	1	-	7
009	0407_TP233_0.5_200622	-	2	9	1	1	-	7
010	0407_TP233_1.5_200622	-	-	-	1	1	-	7
011	0407_TP84_0.1_200622	-	2	9	1	1	-	7
012	0407_TP84_0.5_200622	-	-	-	1	1	-	7
013	0407_QC135_200622	-	-	-	1	1	55	7
014	0407_QC125_200622	-	-	-	1	1	55	7
015	0407_QC130_200622	-	-	-	1	1	55	7
016	0407_TP231_A02_200622	1	-	-	-	-	-	-
017	0407_TP231_A01_200622	1	-	-	-	-	-	-
018	0407_TP233_A01_200622	1	-	-	-	-	-	-
019	0407_TP232_A02_200622	1	-	-	-	-	-	-

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS		LABORATORY DETAILS	
Contact	[redacted]	Manager	[redacted]
Client	SGS EHS SYDNEY	Laboratory	SGS Melbourne EH&S
Address	Unit 16, 33 Maddox Street Alexandria NSW 2015	Address	10/585 Blackburn Road Notting Hill Victoria 3168
Telephone	02 8594 0400	Telephone	+61395743200
Facsimile	02 8594 0499	Facsimile	+61395743399
Email	au.environmental.sydney@sgs.com	Email	Au.SampleReceipt.Melbourne@sgs.com
Project	**610.30041 Randwick Barracks**	SGS Reference	**ME315385 R0**
Order Number	**SE207824**	Date Received	24 Jun 2020
Samples	19	Date Reported	29 Jun 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(14420).

Some PFAS surrogate recovery values out of acceptance range due to matrix interference .Some PFAS surrogate recovery values out of acceptance range due to matrix interference.

SIGNATORIES

[redacted]

Australian Chemistry Manager

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315385.001 Soil 22 Jun 2020 SE207824.001	ME315385.002 Soil 22 Jun 2020 SE207824.002	ME315385.003 Soil 22 Jun 2020 SE207824.003	ME315385.004 Soil 22 Jun 2020 SE207824.004
Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level	**Method: MA-1523**	**Tested: 26/6/2020**					
Perfluorobutanoic acid (PFBA)	mg/kg	0.0001		-	-	-	-
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0005		-	-	-	-
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0001		-	-	-	-
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0001		-	-	-	-
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0001		-	-	-	-
Perfluorononanoic acid (PFNA)	mg/kg	0.0001		-	-	-	-
Perfluorodecanoic acid (PFDA)	mg/kg	0.0001		-	-	-	-
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0001		-	-	-	-
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0001		-	-	-	-
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0001		-	-	-	-
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0001		-	-	-	-
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0001		-	-	-	-
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0001		-	-	-	-
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0001		-	-	-	-
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0001		-	-	-	-
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0001		-	-	-	-
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0001		-	-	-	-
Sum PFOS and PFHXS	mg/kg	0.0001		-	-	-	-
Perfluorononane sulfonate (PFNS)	mg/kg	0.0001		-	-	-	-
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0001		-	-	-	-
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0001		-	-	-	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.001		-	-	-	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.001		-	-	-	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.001		-	-	-	-
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.001		-	-	-	-
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.001		-	-	-	-
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.001		-	-	-	-
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002		-	-	-	-
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002		-	-	-	-
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.001		-	-	-	-
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.001		-	-	-	-
(13C4-PFBA) Surrogate	%	-		-	-	-	-
(13C5_PFPeA) Surrogate	%	-		-	-	-	-
(13C5-PFHxA) Surrogate	%	-		-	-	-	-
(13C4-PFHpA) Surrogate	%	-		-	-	-	-
(13C4-PFOA) Surrogate	%	-		-	-	-	-
(13C9-PFNA) Surrogate	%	-		-	-	-	-
(13C6-PFDA) Surrogate	%	-		-	-	-	-
(13C7-PFUdA) Surrogate	%	-		-	-	-	-
(13C2-PFDoA) Surrogate	%	-		-	-	-	-
(13C2-PFTeDA) Surrogate	%	-		-	-	-	-
(13C2-PFHxDA) Surrogate	%	-		-	-	-	-
(13C3-PFBS) Surrogate	%	-		-	-	-	-
(13C3-PFHxS) Surrogate	%	-		-	-	-	-
(13C8-PFOS) Surrogate	%	-		-	-	-	-
(13C2-4:2FTS) Surrogate	%	-		-	-	-	-
(13C2-6:2FTS) Surrogate	%	-		-	-	-	-
(13C2-8:2FTS) Surrogate	%	-		-	-	-	-
(13C8-PFOSA) Surrogate	%	-		-	-	-	-
(D3-N-MeFOSA) Surrogate	%	-		-	-	-	-
(D5-N-EtFOSA) Surrogate	%	-		-	-	-	-
(D7-N-MeFOSE) Surrogate	%	-		-	-	-	-
(D9-N-EtFOSE) Surrogate	%	-		-	-	-	-
(D3-N-MeFOSAA) Surrogate	%	-		-	-	-	-
(D5-N-EtFOSAA) Surrogate	%	-		-	-	-	-
Moisture Content	**Method: AN002**	**Tested: 26/6/2020**					

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315385.001 Soil 22 Jun 2020 SE207824.001	ME315385.002 Soil 22 Jun 2020 SE207824.002	ME315385.003 Soil 22 Jun 2020 SE207824.003	ME315385.004 Soil 22 Jun 2020 SE207824.004
Moisture Content Method: AN002 Tested: 26/6/2020 (continued)							
% Moisture*	%w/w	1		-	-	-	-

Parameter	Units	LOR	Sample Number: ME315385.005 Sample Matrix: Soil Sample Date: 22 Jun 2020 Sample Name: SE207824.005	ME315385.006 Soil 22 Jun 2020 SE207824.006	ME315385.007 Soil 22 Jun 2020 SE207824.007	ME315385.008 Soil 22 Jun 2020 SE207824.008
Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level	**Method: MA-1523**	**Tested: 26/6/2020**				
Perfluorobutanoic acid (PFBA)	mg/kg	0.0001	-	-	-	-
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0005	-	-	-	-
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0001	-	-	-	-
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0001	-	-	-	-
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0001	-	-	-	-
Perfluorononanoic acid (PFNA)	mg/kg	0.0001	-	-	-	-
Perfluorodecanoic acid (PFDA)	mg/kg	0.0001	-	-	-	-
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0001	-	-	-	-
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0001	-	-	-	-
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0001	-	-	-	-
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0001	-	-	-	-
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0001	-	-	-	-
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0001	-	-	-	-
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0001	-	-	-	-
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0001	-	-	-	-
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0001	-	-	-	-
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0001	-	-	-	-
Sum PFOS and PFHXS	mg/kg	0.0001	-	-	-	-
Perfluorononane sulfonate (PFNS)	mg/kg	0.0001	-	-	-	-
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0001	-	-	-	-
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0001	-	-	-	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.001	-	-	-	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.001	-	-	-	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.001	-	-	-	-
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.001	-	-	-	-
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.001	-	-	-	-
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.001	-	-	-	-
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002	-	-	-	-
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002	-	-	-	-
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.001	-	-	-	-
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.001	-	-	-	-
(13C4-PFBA) Surrogate	%	-	-	-	-	-
(13C5_PFPeA) Surrogate	%	-	-	-	-	-
(13C5-PFHxA) Surrogate	%	-	-	-	-	-
(13C4-PFHpA) Surrogate	%	-	-	-	-	-
(13C4-PFOA) Surrogate	%	-	-	-	-	-
(13C9-PFNA) Surrogate	%	-	-	-	-	-
(13C6-PFDA) Surrogate	%	-	-	-	-	-
(13C7-PFUdA) Surrogate	%	-	-	-	-	-
(13C2-PFDoA) Surrogate	%	-	-	-	-	-
(13C2-PFTeDA) Surrogate	%	-	-	-	-	-
(13C2-PFHxDA) Surrogate	%	-	-	-	-	-
(13C3-PFBS) Surrogate	%	-	-	-	-	-
(13C3-PFHxS) Surrogate	%	-	-	-	-	-
(13C8-PFOS) Surrogate	%	-	-	-	-	-
(13C2-4:2FTS) Surrogate	%	-	-	-	-	-
(13C2-6:2FTS) Surrogate	%	-	-	-	-	-
(13C2-8:2FTS) Surrogate	%	-	-	-	-	-
(13C8-PFOSA) Surrogate	%	-	-	-	-	-
(D3-N-MeFOSA) Surrogate	%	-	-	-	-	-
(D5-N-EtFOSA) Surrogate	%	-	-	-	-	-
(D7-N-MeFOSE) Surrogate	%	-	-	-	-	-
(D9-N-EtFOSE) Surrogate	%	-	-	-	-	-
(D3-N-MeFOSAA) Surrogate	%	-	-	-	-	-
(D5-N-EtFOSAA) Surrogate	%	-	-	-	-	-

Moisture Content **Method: AN002** **Tested: 26/6/2020**

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name ME315385.005 Soil 22 Jun 2020 SE207824.005	ME315385.006 Soil 22 Jun 2020 SE207824.006	ME315385.007 Soil 22 Jun 2020 SE207824.007	ME315385.008 Soil 22 Jun 2020 SE207824.008
Moisture Content Method: AN002 Tested: 26/6/2020 (continued)						
% Moisture*	%w/w	1	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315385.009 Soil 22 Jun 2020 SE207824.009	ME315385.010 Soil 22 Jun 2020 SE207824.010	ME315385.011 Soil 22 Jun 2020 SE207824.011	ME315385.012 Soil 22 Jun 2020 SE207824.012
Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level	**Method: MA-1523**	**Tested: 26/6/2020**					
Perfluorobutanoic acid (PFBA)	mg/kg	0.0001		-	-	-	-
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0005		-	-	-	-
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0001		-	-	-	-
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0001		-	-	-	-
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0001		-	-	-	-
Perfluorononanoic acid (PFNA)	mg/kg	0.0001		-	-	-	-
Perfluorodecanoic acid (PFDA)	mg/kg	0.0001		-	-	-	-
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0001		-	-	-	-
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0001		-	-	-	-
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0001		-	-	-	-
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0001		-	-	-	-
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0001		-	-	-	-
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0001		-	-	-	-
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0001		-	-	-	-
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0001		-	-	-	-
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0001		-	-	-	-
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0001		-	-	-	-
Sum PFOS and PFHXS	mg/kg	0.0001		-	-	-	-
Perfluorononane sulfonate (PFNS)	mg/kg	0.0001		-	-	-	-
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0001		-	-	-	-
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0001		-	-	-	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.001		-	-	-	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.001		-	-	-	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.001		-	-	-	-
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.001		-	-	-	-
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.001		-	-	-	-
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.001		-	-	-	-
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002		-	-	-	-
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002		-	-	-	-
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.001		-	-	-	-
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.001		-	-	-	-
(13C4-PFBA) Surrogate	%	-		-	-	-	-
(13C5_PFPeA) Surrogate	%	-		-	-	-	-
(13C5-PFHxA) Surrogate	%	-		-	-	-	-
(13C4-PFHpA) Surrogate	%	-		-	-	-	-
(13C4-PFOA) Surrogate	%	-		-	-	-	-
(13C9-PFNA) Surrogate	%	-		-	-	-	-
(13C6-PFDA) Surrogate	%	-		-	-	-	-
(13C7-PFUdA) Surrogate	%	-		-	-	-	-
(13C2-PFDoA) Surrogate	%	-		-	-	-	-
(13C2-PFTeDA) Surrogate	%	-		-	-	-	-
(13C2-PFHxDA) Surrogate	%	-		-	-	-	-
(13C3-PFBS) Surrogate	%	-		-	-	-	-
(13C3-PFHxS) Surrogate	%	-		-	-	-	-
(13C8-PFOS) Surrogate	%	-		-	-	-	-
(13C2-4:2FTS) Surrogate	%	-		-	-	-	-
(13C2-6:2FTS) Surrogate	%	-		-	-	-	-
(13C2-8:2FTS) Surrogate	%	-		-	-	-	-
(13C8-PFOSA) Surrogate	%	-		-	-	-	-
(D3-N-MeFOSA) Surrogate	%	-		-	-	-	-
(D5-N-EtFOSA) Surrogate	%	-		-	-	-	-
(D7-N-MeFOSE) Surrogate	%	-		-	-	-	-
(D9-N-EtFOSE) Surrogate	%	-		-	-	-	-
(D3-N-MeFOSAA) Surrogate	%	-		-	-	-	-
(D5-N-EtFOSAA) Surrogate	%	-		-	-	-	-

Moisture Content **Method: AN002** **Tested: 26/6/2020**

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315385.009 Soil 22 Jun 2020 SE207824.009	ME315385.010 Soil 22 Jun 2020 SE207824.010	ME315385.011 Soil 22 Jun 2020 SE207824.011	ME315385.012 Soil 22 Jun 2020 SE207824.012
Moisture Content Method: AN002 Tested: 26/6/2020 (continued)							
% Moisture*	%w/w	1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315385.013 Soil 22 Jun 2020 SE207824.013	ME315385.014 Soil 22 Jun 2020 SE207824.014	ME315385.015 Soil 22 Jun 2020 SE207824.015	ME315385.016 Material 22 Jun 2020 SE207824.016
Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level	**Method: MA-1523**	**Tested: 25/6/2020**					
Perfluorobutanoic acid (PFBA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	-
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0005		<0.0005	<0.0005	<0.0005	-
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	-
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	-
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	-
Perfluorononanoic acid (PFNA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	-
Perfluorodecanoic acid (PFDA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	-
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	-
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	-
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	-
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	-
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	-
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	-
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	-
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	-
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	-
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0001		<0.0001	**0.0001**	**0.0004**	-
Sum PFOS and PFHXS	mg/kg	0.0001		<0.0001	**0.0001**	**0.0004**	-
Perfluorononane sulfonate (PFNS)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	-
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	-
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.001		<0.001	<0.001	<0.001	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.001		<0.001	<0.001	<0.001	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.001		<0.001	<0.001	<0.001	-
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.001		<0.001	<0.001	<0.001	-
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.001		<0.001	<0.001	<0.001	-
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.001		<0.001	<0.001	<0.001	-
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002		<0.002	<0.002	<0.002	-
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002		<0.002	<0.002	<0.002	-
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.001		<0.001	<0.001	<0.001	-
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.001		<0.001	<0.001	<0.001	-
(13C4-PFBA) Surrogate	%	-		**102**	**97**	**100**	-
(13C5_PFPeA) Surrogate	%	-		**88**	**87**	**91**	-
(13C5-PFHxA) Surrogate	%	-		**101**	**108**	**99**	-
(13C4-PFHpA) Surrogate	%	-		**108**	**112**	**102**	-
(13C4-PFOA) Surrogate	%	-		**98**	**100**	**98**	-
(13C9-PFNA) Surrogate	%	-		**95**	**111**	**85**	-
(13C6-PFDA) Surrogate	%	-		**90**	**114**	**110**	-
(13C7-PFUdA) Surrogate	%	-		**110**	**112**	**99**	-
(13C2-PFDoA) Surrogate	%	-		**111**	**116**	**84**	-
(13C2-PFTeDA) Surrogate	%	-		**68**	**47**	**36**	-
(13C2-PFHxDA) Surrogate	%	-		**17**	**11**	**6**	-
(13C3-PFBS) Surrogate	%	-		**112**	**116**	**110**	-
(13C3-PFHxS) Surrogate	%	-		**94**	**95**	**94**	-
(13C8-PFOS) Surrogate	%	-		**130**	**93**	**104**	-
(13C2-4:2FTS) Surrogate	%	-		**81**	**100**	**92**	-
(13C2-6:2FTS) Surrogate	%	-		**79**	**98**	**85**	-
(13C2-8:2FTS) Surrogate	%	-		**86**	**75**	**76**	-
(13C8-PFOSA) Surrogate	%	-		**77**	**63**	**70**	-
(D3-N-MeFOSA) Surrogate	%	-		**77**	**57**	**62**	-
(D5-N-EtFOSA) Surrogate	%	-		**66**	**48**	**41**	-
(D7-N-MeFOSE) Surrogate	%	-		**61**	**68**	**51**	-
(D9-N-EtFOSE) Surrogate	%	-		**87**	**58**	**50**	-
(D3-N-MeFOSAA) Surrogate	%	-		**116**	**77**	**59**	-
(D5-N-EtFOSAA) Surrogate	%	-		**110**	**69**	**60**	-
Moisture Content	**Method: AN002**	**Tested: 25/6/2020**					

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315385.013 Soil 22 Jun 2020 SE207824.013	ME315385.014 Soil 22 Jun 2020 SE207824.014	ME315385.015 Soil 22 Jun 2020 SE207824.015	ME315385.016 Material 22 Jun 2020 SE207824.016
Moisture Content Method: AN002 Tested: 26/6/2020 (continued)							
% Moisture*	%w/w	1		**4.6**	**5.3**	**4.4**	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315385.017 Material 22 Jun 2020 SE207824.017	ME315385.018 Material 22 Jun 2020 SE207824.018	ME315385.019 Material 22 Jun 2020 SE207824.019
Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level	**Method: MA-1523**	**Tested: 26/6/2020**				
Perfluorobutanoic acid (PFBA)	mg/kg	0.0001		-	-	-
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0005		-	-	-
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0001		-	-	-
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0001		-	-	-
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0001		-	-	-
Perfluorononanoic acid (PFNA)	mg/kg	0.0001		-	-	-
Perfluorodecanoic acid (PFDA)	mg/kg	0.0001		-	-	-
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0001		-	-	-
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0001		-	-	-
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0001		-	-	-
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0001		-	-	-
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0001		-	-	-
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0001		-	-	-
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0001		-	-	-
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0001		-	-	-
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0001		-	-	-
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0001		-	-	-
Sum PFOS and PFHXS	mg/kg	0.0001		-	-	-
Perfluorononane sulfonate (PFNS)	mg/kg	0.0001		-	-	-
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0001		-	-	-
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0001		-	-	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.001		-	-	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.001		-	-	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.001		-	-	-
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.001		-	-	-
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.001		-	-	-
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.001		-	-	-
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002		-	-	-
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002		-	-	-
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.001		-	-	-
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.001		-	-	-
(13C4-PFBA) Surrogate	%	-		-	-	-
(13C5_PFPeA) Surrogate	%	-		-	-	-
(13C5-PFHxA) Surrogate	%	-		-	-	-
(13C4-PFHpA) Surrogate	%	-		-	-	-
(13C4-PFOA) Surrogate	%	-		-	-	-
(13C9-PFNA) Surrogate	%	-		-	-	-
(13C6-PFDA) Surrogate	%	-		-	-	-
(13C7-PFUdA) Surrogate	%	-		-	-	-
(13C2-PFDoA) Surrogate	%	-		-	-	-
(13C2-PFTeDA) Surrogate	%	-		-	-	-
(13C2-PFHxDA) Surrogate	%	-		-	-	-
(13C3-PFBS) Surrogate	%	-		-	-	-
(13C3-PFHxS) Surrogate	%	-		-	-	-
(13C8-PFOS) Surrogate	%	-		-	-	-
(13C2-4:2FTS) Surrogate	%	-		-	-	-
(13C2-6:2FTS) Surrogate	%	-		-	-	-
(13C2-8:2FTS) Surrogate	%	-		-	-	-
(13C8-PFOSA) Surrogate	%	-		-	-	-
(D3-N-MeFOSA) Surrogate	%	-		-	-	-
(D5-N-EtFOSA) Surrogate	%	-		-	-	-
(D7-N-MeFOSE) Surrogate	%	-		-	-	-
(D9-N-EtFOSE) Surrogate	%	-		-	-	-
(D3-N-MeFOSAA) Surrogate	%	-		-	-	-
(D5-N-EtFOSAA) Surrogate	%	-		-	-	-
Moisture Content	**Method: AN002**	**Tested: 26/6/2020**				

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name ME315385.017 Material 22 Jun 2020 SE207824.017	ME315385.018 Material 22 Jun 2020 SE207824.018	ME315385.019 Material 22 Jun 2020 SE207824.019
Moisture Content Method: AN002 Tested: 26/6/2020 (continued)					
% Moisture*	%w/w	1	-	-	-

QC SUMMARY

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Moisture Content Method: ME-(AU)-[ENV]AN002

Parameter	QC Reference	Units	LOR	DUP %RPD
% Moisture*	LB033775	%w/w	1	1 - 3%

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level Method: MA-1523

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Perfluorobutanoic acid (PFBA)	LB033769	mg/kg	0.0001	<0.0001	0 - 6%	NA
Perfluoropentanoic acid (PFPeA)	LB033769	mg/kg	0.0005	<0.0005	0 - 26%	NA
Perfluorohexanoic acid (PFHxA)	LB033769	mg/kg	0.0001	<0.0001	0 - 15%	NA
Perfluoroheptanoic acid (PFHpA)	LB033769	mg/kg	0.0001	<0.0001	0 - 30%	94%
Perfluorooctanoic Acid (PFOA)	LB033769	mg/kg	0.0001	<0.0001	0 - 16%	95%
Perfluorononanoic acid (PFNA)	LB033769	mg/kg	0.0001	<0.0001	0 - 28%	119%
Perfluorodecanoic acid (PFDA)	LB033769	mg/kg	0.0001	<0.0001	0 - 14%	96%
Perfluoroundecanoic acid (PFUnA)	LB033769	mg/kg	0.0001	<0.0001	0 - 7%	84%
Perfluorododecanoic acid (PFDoA)	LB033769	mg/kg	0.0001	<0.0001	0 - 18%	86%
Perfluorotridecanoic acid (PFTrDA)	LB033769	mg/kg	0.0001	<0.0001	0 - 24%	124%
Perfluorotetradecanoic acid (PFTeDA)	LB033769	mg/kg	0.0001	<0.0001	0 - 1%	76%
Perfluorohexadecanoic acid (PFHxDA)	LB033769	mg/kg	0.0001	<0.0001	0%	NA
Perfluorobutane sulfonate (PFBS)	LB033769	mg/kg	0.0001	<0.0001	0 - 11%	NA
Perfluoropentane sulfonate (PFPeS)	LB033769	mg/kg	0.0001	<0.0001	0 - 23%	NA
Perfluorohexane sulfonate (PFHxS)	LB033769	mg/kg	0.0001	<0.0001	0 - 11%	NA
Perfluoroheptane sulfonate (PFHpS)	LB033769	mg/kg	0.0001	<0.0001	0 - 5%	NA
Perfluorooctane sulfonate (PFOS)	LB033769	mg/kg	0.0001	<0.0001	0 - 2%	70%
Sum PFOS and PFHXS	LB033769	mg/kg	0.0001	<0.0001	0 - 4%	NA
Perfluorononane sulfonate (PFNS)	LB033769	mg/kg	0.0001	<0.0001	0%	NA
Perfluorodecane sulfonate (PFDS)	LB033769	mg/kg	0.0001	<0.0001	0%	NA
Perfluorododecane sulfonate (PFDoS)	LB033769	mg/kg	0.0001	<0.0001	0%	NA
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	LB033769	mg/kg	0.001	<0.001	0%	NA
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	LB033769	mg/kg	0.001	<0.001	0%	NA
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	LB033769	mg/kg	0.001	<0.001	0%	NA
Perfluorooctane sulfonamide (PFOSA)	LB033769	mg/kg	0.001	<0.001	0%	67%
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	LB033769	mg/kg	0.001	<0.001	0%	NA
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	LB033769	mg/kg	0.001	<0.001	0%	NA
2-(N-Methylperfluorooctane sulfonamido)-ethanol (N-MeFOSE)	LB033769	mg/kg	0.002	<0.002	0 - 45%	NA
2-(N-Ethylperfluorooctane sulfonamido)-ethanol (N-EtFOSE)	LB033769	mg/kg	0.002	<0.002	0 - 24%	NA
N-Methylperfluorooctanesulfonamidoacetic acid (N_MeFOSAA)	LB033769	mg/kg	0.001	<0.001	0%	NA
N-Ethylperfluorooctanesulfonamidoacetic Acid (N-EtFOSAA)	LB033769	mg/kg	0.001	<0.001	0%	NA
(13C4-PFBA) Surrogate	LB033769	%	-	101%	3 - 13%	100%
(13C5_PFPeA) Surrogate	LB033769	%	-	78%	1 - 19%	97%
(13C5-PFHxA) Surrogate	LB033769	%	-	109%	2 - 20%	87%
(13C4-PFHpA) Surrogate	LB033769	%	-	104%	4 - 5%	100%
(13C4-PFOA) Surrogate	LB033769	%	-	98%	4%	96%
(13C9-PFNA) Surrogate	LB033769	%	-	102%	0 - 2%	92%
(13C6-PFDA) Surrogate	LB033769	%	-	112%	1 - 27%	110%
(13C7-PFUdA) Surrogate	LB033769	%	-	72%	8 - 26%	109%
(13C2-PFDoA) Surrogate	LB033769	%	-	39%	1 - 15%	115%
(13C2-PFTeDA) Surrogate	LB033769	%	-	3%	2 - 12%	118%
(13C2-PFHxDA) Surrogate	LB033769	%	-	1%	22 - 81%	44%
(13C3-PFBS) Surrogate	LB033769	%	-	120%	6 - 12%	82%
(13C3-PFHxS) Surrogate	LB033769	%	-	102%	7 - 12%	98%
(13C8-PFOS) Surrogate	LB033769	%	-	99%	18 - 25%	85%
(13C2-4:2FTS) Surrogate	LB033769	%	-	127%	6 - 18%	74%
(13C2-6:2FTS) Surrogate	LB033769	%	-	112%	1 - 10%	77%
(13C2-8:2FTS) Surrogate	LB033769	%	-	62%	5 - 13%	97%
(13C8-PFOSA) Surrogate	LB033769	%	-	79%	8 - 30%	52%
(D3-N-MeFOSA) Surrogate	LB033769	%	-	58%	10 - 41%	41%
(D5-N-EtFOSA) Surrogate	LB033769	%	-	36%	3 - 6%	46%

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level Method: MA-1523 (continued)

				MB	DUP %RPD	LCS %Recovery
(D7-N-MeFOSE) Surrogate	LB033769	%	-	62%	18 - 42%	49%
(D9-N-EtFOSE) Surrogate	LB033769	%	-	38%	3 - 53%	46%
(D3-N-MeFOSAA) Surrogate	LB033769	%	-	74%	11 - 37%	56%
(D5-N-EtFOSAA) Surrogate	LB033769	%	-	65%	9 - 27%	92%

METHOD SUMMARY

ME315385 R0

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
MA-1523	This method covers the analysis of per- and polyfluoroalkyl substances (PFAS) in aqueous, solid and biosolid samples and solvent extracts, determined as the total of linear and branched isomers. After spiking with isotopically labelled quantification surrogates and clean-up via SPE cartridges sample extracts are analysed by liquid chromatography/mass spectrometry (LC-MS/MS). PFAS concentrations are determined by isotope dilution quantification.

FOOTNOTES

IS	Insufficient sample for analysis.	LOR	Limit of Reporting
LNR	Sample listed, but not received.	↑↓	Raised or Lowered Limit of Reporting
*	NATA accreditation does not cover the performance of this service.	QFH	QC result is above the upper tolerance
		QFL	QC result is below the lower tolerance
**	Indicative data, theoretical holding time exceeded.	-	The sample was not analysed for this analyte
		NVL	Not Validated

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calcuated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000674--000676**
Samples	19

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207824 R0**
Date Received	22/6/2020
Date Reported	30/6/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

PFAS subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420. Report Number ME315385

Some PFAS surrogate recovery values out of acceptance range due to matrix interference .Some PFAS surrogate recovery values out of acceptance range due to matrix interference.

No respirable fibres detected in all soil samples using trace analysis technique.

Sample #6: Asbestos found as approx 3x2x2mm cement sheet fragment in >2mm portion.

Asbestos analysed by Approved Identifier Ravee Sivasubramaniam .

SIGNATORIES

[redacted]

Chemist | Senior Organic Chemist/Metals Chemist | Metals/Inorganics Team Leader

[redacted]

Organic Section Head | Asbestos Analyst

VOC's in Soil [AN433] Tested: 24/6/2020

PARAMETER	UOM	LOR	0407_TP83_0.5_20022 SOIL - 22/6/2020 SE207824.001	0407_TP83_1.5_20022 SOIL - 22/6/2020 SE207824.002	0407_TP93_0.1_20022 SOIL - 22/6/2020 SE207824.003	0407_TP93_0.5_20022 SOIL - 22/6/2020 SE207824.004	0407_TP231_0.1_20622 SOIL - 22/6/2020 SE207824.005
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 24/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP83_0.5_200(22 SOIL - 22/6/2020 SE207824.001	0407_TP83_1.5_200(22 SOIL - 22/6/2020 SE207824.002	0407_TP93_0.1_200(22 SOIL - 22/6/2020 SE207824.003	0407_TP93_0.5_200(22 SOIL - 22/6/2020 SE207824.004	0407_TP231_0.1_20(622 SOIL - 22/6/2020 SE207824.005
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 24/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP231_1.5_20(622 SOIL - 22/6/2020 SE207824.006	0407_TP232_0.1_20(622 SOIL - 22/6/2020 SE207824.007	0407_TP232_1.0_20(622 SOIL - 22/6/2020 SE207824.008	0407_TP233_0.5_20(622 SOIL - 22/6/2020 SE207824.009	0407_TP233_1.5_20(622 SOIL - 22/6/2020 SE207824.010
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 24/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP231_1.5_20(622 SOIL - 22/6/2020 SE207824.006	0407_TP232_0.1_20(622 SOIL - 22/6/2020 SE207824.007	0407_TP232_1.0_20(622 SOIL - 22/6/2020 SE207824.008	0407_TP233_0.5_20(622 SOIL - 22/6/2020 SE207824.009	0407_TP233_1.5_20(622 SOIL - 22/6/2020 SE207824.010
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 24/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP84_0.1_20022 SOIL - 22/6/2020 SE207824.011	0407_TP84_0.5_20022 SOIL - 22/6/2020 SE207824.012	0407_QC135_20062 SOIL - 22/6/2020 SE207824.013	0407_QC125_20062 SOIL - 22/6/2020 SE207824.014	0407_QC130_20062 SOIL - 22/6/2020 SE207824.015
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 24/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP84_0.1_20022 SOIL - 22/6/2020 SE207824.011	0407_TP84_0.5_20022 SOIL - 22/6/2020 SE207824.012	0407_QC135_20062 SOIL - 22/6/2020 SE207824.013	0407_QC125_20062 SOIL - 22/6/2020 SE207824.014	0407_QC130_20062 SOIL - 22/6/2020 SE207824.015
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 24/6/2020

PARAMETER	UOM	LOR	0407_TP83_0.5_20022 SOIL - 22/6/2020 SE207824.001	0407_TP83_1.5_20022 SOIL - 22/6/2020 SE207824.002	0407_TP93_0.1_20022 SOIL - 22/6/2020 SE207824.003	0407_TP93_0.5_20022 SOIL - 22/6/2020 SE207824.004	0407_TP231_0.1_20622 SOIL - 22/6/2020 SE207824.005
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP231_1.5_20622 SOIL - 22/6/2020 SE207824.006	0407_TP232_0.1_20622 SOIL - 22/6/2020 SE207824.007	0407_TP232_1.0_20622 SOIL - 22/6/2020 SE207824.008	0407_TP233_0.5_20622 SOIL - 22/6/2020 SE207824.009	0407_TP233_1.5_20622 SOIL - 22/6/2020 SE207824.010
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP84_0.1_20022 SOIL - 22/6/2020 SE207824.011	0407_TP84_0.5_20022 SOIL - 22/6/2020 SE207824.012	0407_QC135_20062 SOIL - 22/6/2020 SE207824.013	0407_QC125_20062 SOIL - 22/6/2020 SE207824.014	0407_QC130_20062 SOIL - 22/6/2020 SE207824.015
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 24/6/2020

PARAMETER	UOM	LOR	0407_TP83_0.5_20022 SOIL - 22/6/2020 SE207824.001	0407_TP83_1.5_20022 SOIL - 22/6/2020 SE207824.002	0407_TP93_0.1_20022 SOIL - 22/6/2020 SE207824.003	0407_TP93_0.5_20022 SOIL - 22/6/2020 SE207824.004	0407_TP231_0.1_20622 SOIL - 22/6/2020 SE207824.005
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP231_1.5_20622 SOIL - 22/6/2020 SE207824.006	0407_TP232_0.1_20622 SOIL - 22/6/2020 SE207824.007	0407_TP232_1.0_20622 SOIL - 22/6/2020 SE207824.008	0407_TP233_0.5_20622 SOIL - 22/6/2020 SE207824.009	0407_TP233_1.5_20622 SOIL - 22/6/2020 SE207824.010
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP84_0.1_20022 SOIL - 22/6/2020 SE207824.011	0407_TP84_0.5_20022 SOIL - 22/6/2020 SE207824.012	0407_QC135_20062 SOIL - 22/6/2020 SE207824.013	0407_QC125_20062 SOIL - 22/6/2020 SE207824.014	0407_QC130_20062 SOIL - 22/6/2020 SE207824.015
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 24/6/2020

PARAMETER	UOM	LOR	0407_TP83_0.5_20022 SOIL - 22/6/2020 SE207824.001	0407_TP83_1.5_20022 SOIL - 22/6/2020 SE207824.002	0407_TP93_0.1_20022 SOIL - 22/6/2020 SE207824.003	0407_TP93_0.5_20022 SOIL - 22/6/2020 SE207824.004	0407_TP231_0.1_20622 SOIL - 22/6/2020 SE207824.005
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	**0.4**
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	**0.1**
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	**1.7**
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	**0.6**
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	**5.1**
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	**5.3**
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	**2.4**
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	**1.6**
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	**2.5**
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	**1.3**
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	**2.5**
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	**1.4**
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	**0.2**
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	**1.4**
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	**3.4**
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	**3.4**
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	**3.4**
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	**26**
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	**26**

PARAMETER	UOM	LOR	0407_TP231_1.5_20622 SOIL - 22/6/2020 SE207824.006	0407_TP232_0.1_20622 SOIL - 22/6/2020 SE207824.007	0407_TP232_1.0_20622 SOIL - 22/6/2020 SE207824.008	0407_TP233_0.5_20622 SOIL - 22/6/2020 SE207824.009	0407_TP233_1.5_20622 SOIL - 22/6/2020 SE207824.010
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	**0.3**	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	**0.2**	**1.6**	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	**0.8**	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	**0.7**	**4.5**	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	**0.8**	**4.4**	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	**0.3**	**1.7**	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	**0.3**	**1.4**	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	**0.4**	**1.9**	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	**0.2**	**1.0**	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	**0.4**	**1.9**	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	**0.2**	**1.3**	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	**0.3**	**1.5**	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	**0.5**	**2.5**	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	**0.6**	**2.6**	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	**0.6**	**2.6**	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	**3.6**	**22**	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	**3.6**	**22**	<0.8	<0.8	<0.8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 24/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP84_0.1_20022 SOIL - 22/6/2020 SE207824.011	0407_TP84_0.5_20022 SOIL - 22/6/2020 SE207824.012	0407_QC135_20062 SOIL - 22/6/2020 SE207824.013	0407_QC125_20062 SOIL - 22/6/2020 SE207824.014	0407_QC130_20062 SOIL - 22/6/2020 SE207824.015
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

Speciated Phenols in Soil [AN420] Tested: 24/6/2020

PARAMETER	UOM	LOR	0407_TP83_0.5_20022 SOIL - 22/6/2020 SE207824.001	0407_TP83_1.5_20022 SOIL - 22/6/2020 SE207824.002	0407_TP93_0.1_20022 SOIL - 22/6/2020 SE207824.003	0407_TP93_0.5_20022 SOIL - 22/6/2020 SE207824.004	0407_TP231_0.1_20622 SOIL - 22/6/2020 SE207824.005
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_TP231_1.5_20622 SOIL - 22/6/2020 SE207824.006	0407_TP232_0.1_20622 SOIL - 22/6/2020 SE207824.007	0407_TP232_1.0_20622 SOIL - 22/6/2020 SE207824.008	0407_TP233_0.5_20622 SOIL - 22/6/2020 SE207824.009	0407_TP233_1.5_20622 SOIL - 22/6/2020 SE207824.010
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

Speciated Phenols in Soil [AN420] Tested: 24/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP84_0.1_20022 SOIL - 22/6/2020 SE207824.011	0407_TP84_0.5_20022 SOIL - 22/6/2020 SE207824.012	0407_QC135_20062 SOIL - 22/6/2020 SE207824.013	0407_QC125_20062 SOIL - 22/6/2020 SE207824.014	0407_QC130_20062 SOIL - 22/6/2020 SE207824.015
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

OC Pesticides in Soil [AN420] Tested: 24/6/2020

PARAMETER	UOM	LOR	0407_TP83_0.5_20022 SOIL - 22/6/2020 SE207824.001	0407_TP83_1.5_20022 SOIL - 22/6/2020 SE207824.002	0407_TP93_0.1_20022 SOIL - 22/6/2020 SE207824.003	0407_TP93_0.5_20022 SOIL - 22/6/2020 SE207824.004	0407_TP231_0.1_20622 SOIL - 22/6/2020 SE207824.005
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 24/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP231_1.5_20(622 SOIL - 22/6/2020 SE207824.006	0407_TP232_0.1_20(622 SOIL - 22/6/2020 SE207824.007	0407_TP232_1.0_20(622 SOIL - 22/6/2020 SE207824.008	0407_TP233_0.5_20(622 SOIL - 22/6/2020 SE207824.009	0407_TP233_1.5_20(622 SOIL - 22/6/2020 SE207824.010
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 24/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP84_0.1_20022 SOIL - 22/6/2020 SE207824.011	0407_TP84_0.5_20022 SOIL - 22/6/2020 SE207824.012	0407_QC135_20062 SOIL - 22/6/2020 SE207824.013	0407_QC125_20062 SOIL - 22/6/2020 SE207824.014	0407_QC130_20062 SOIL - 22/6/2020 SE207824.015
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OP Pesticides in Soil [AN420] Tested: 24/6/2020

PARAMETER	UOM	LOR	0407_TP83_0.5_20022 SOIL - 22/6/2020 SE207824.001	0407_TP83_1.5_20022 SOIL - 22/6/2020 SE207824.002	0407_TP93_0.1_20022 SOIL - 22/6/2020 SE207824.003	0407_TP93_0.5_20022 SOIL - 22/6/2020 SE207824.004	0407_TP231_0.1_20622 SOIL - 22/6/2020 SE207824.005
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP231_1.5_20622 SOIL - 22/6/2020 SE207824.006	0407_TP232_0.1_20622 SOIL - 22/6/2020 SE207824.007	0407_TP232_1.0_20622 SOIL - 22/6/2020 SE207824.008	0407_TP233_0.5_20622 SOIL - 22/6/2020 SE207824.009	0407_TP233_1.5_20622 SOIL - 22/6/2020 SE207824.010
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP84_0.1_20022 SOIL - 22/6/2020 SE207824.011	0407_TP84_0.5_20022 SOIL - 22/6/2020 SE207824.012	0407_QC135_20062 SOIL - 22/6/2020 SE207824.013	0407_QC125_20062 SOIL - 22/6/2020 SE207824.014	0407_QC130_20062 SOIL - 22/6/2020 SE207824.015
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PCBs in Soil [AN420] Tested: 24/6/2020

PARAMETER	UOM	LOR	0407_TP83_0.5_20022 SOIL - 22/6/2020 SE207824.001	0407_TP83_1.5_20022 SOIL - 22/6/2020 SE207824.002	0407_TP93_0.1_20022 SOIL - 22/6/2020 SE207824.003	0407_TP93_0.5_20022 SOIL - 22/6/2020 SE207824.004	0407_TP231_0.1_20622 SOIL - 22/6/2020 SE207824.005
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP231_1.5_20622 SOIL - 22/6/2020 SE207824.006	0407_TP232_0.1_20622 SOIL - 22/6/2020 SE207824.007	0407_TP232_1.0_20622 SOIL - 22/6/2020 SE207824.008	0407_TP233_0.5_20622 SOIL - 22/6/2020 SE207824.009	0407_TP233_1.5_20622 SOIL - 22/6/2020 SE207824.010
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP84_0.1_20022 SOIL - 22/6/2020 SE207824.011	0407_TP84_0.5_20022 SOIL - 22/6/2020 SE207824.012	0407_QC135_20062 SOIL - 22/6/2020 SE207824.013	0407_QC125_20062 SOIL - 22/6/2020 SE207824.014	0407_QC130_20062 SOIL - 22/6/2020 SE207824.015
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 24/6/2020

PARAMETER	UOM	LOR	0407_TP83_0.5_20022 SOIL - 22/6/2020 SE207824.001	0407_TP83_1.5_20022 SOIL - 22/6/2020 SE207824.002	0407_TP93_0.1_20022 SOIL - 22/6/2020 SE207824.003	0407_TP93_0.5_20022 SOIL - 22/6/2020 SE207824.004	0407_TP231_0.1_20622 SOIL - 22/6/2020 SE207824.005
Arsenic, As	mg/kg	1	<1	<1	2	<1	2
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	0.7	0.7	4.2	1.2	4.6
Copper, Cu	mg/kg	0.5	1.0	<0.5	1.9	1.0	38
Lead, Pb	mg/kg	1	3	<1	9	2	38
Nickel, Ni	mg/kg	0.5	0.6	<0.5	<0.5	1.0	15
Zinc, Zn	mg/kg	2	11	<2.0	8.3	5.4	43

PARAMETER	UOM	LOR	0407_TP231_1.5_20622 SOIL - 22/6/2020 SE207824.006	0407_TP232_0.1_20622 SOIL - 22/6/2020 SE207824.007	0407_TP232_1.0_20622 SOIL - 22/6/2020 SE207824.008	0407_TP233_0.5_20622 SOIL - 22/6/2020 SE207824.009	0407_TP233_1.5_20622 SOIL - 22/6/2020 SE207824.010
Arsenic, As	mg/kg	1	1	3	<1	<1	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	3.3	7.1	1.4	1.1	1.2
Copper, Cu	mg/kg	0.5	30	52	9.0	2.2	2.8
Lead, Pb	mg/kg	1	31	55	11	3	6
Nickel, Ni	mg/kg	0.5	12	18	1.9	0.8	0.8
Zinc, Zn	mg/kg	2	53	48	19	4.9	5.7

PARAMETER	UOM	LOR	0407_TP84_0.1_20022 SOIL - 22/6/2020 SE207824.011	0407_TP84_0.5_20022 SOIL - 22/6/2020 SE207824.012	0407_QC135_20062 SOIL - 22/6/2020 SE207824.013	0407_QC125_20062 SOIL - 22/6/2020 SE207824.014	0407_QC130_20062 SOIL - 22/6/2020 SE207824.015
Arsenic, As	mg/kg	1	<1	<1	<1	1	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	<0.5	<0.5	<0.5	3.5	0.9
Copper, Cu	mg/kg	0.5	<0.5	<0.5	<0.5	6.0	0.9
Lead, Pb	mg/kg	1	2	<1	2	17	3
Nickel, Ni	mg/kg	0.5	<0.5	<0.5	<0.5	1.2	0.6
Zinc, Zn	mg/kg	2	<2.0	<2.0	<2.0	24	11

Mercury in Soil [AN312] Tested: 24/6/2020

PARAMETER	UOM	LOR	0407_TP83_0.5_20022 SOIL - 22/6/2020 SE207824.001	0407_TP83_1.5_20022 SOIL - 22/6/2020 SE207824.002	0407_TP93_0.1_20022 SOIL - 22/6/2020 SE207824.003	0407_TP93_0.5_20022 SOIL - 22/6/2020 SE207824.004	0407_TP231_0.1_20622 SOIL - 22/6/2020 SE207824.005
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_TP231_1.5_20622 SOIL - 22/6/2020 SE207824.006	0407_TP232_0.1_20622 SOIL - 22/6/2020 SE207824.007	0407_TP232_1.0_20622 SOIL - 22/6/2020 SE207824.008	0407_TP233_0.5_20622 SOIL - 22/6/2020 SE207824.009	0407_TP233_1.5_20622 SOIL - 22/6/2020 SE207824.010
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_TP84_0.1_20022 SOIL - 22/6/2020 SE207824.011	0407_TP84_0.5_20022 SOIL - 22/6/2020 SE207824.012	0407_QC135_20062 SOIL - 22/6/2020 SE207824.013	0407_QC125_20062 SOIL - 22/6/2020 SE207824.014	0407_QC130_20062 SOIL - 22/6/2020 SE207824.015
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

Moisture Content [AN002] Tested: 24/6/2020

PARAMETER	UOM	LOR	0407_TP83_0.5_20022 SOIL - 22/6/2020 SE207824.001	0407_TP83_1.5_20022 SOIL - 22/6/2020 SE207824.002	0407_TP93_0.1_20022 SOIL - 22/6/2020 SE207824.003	0407_TP93_0.5_20022 SOIL - 22/6/2020 SE207824.004	0407_TP231_0.1_20622 SOIL - 22/6/2020 SE207824.005
% Moisture	%w/w	1	4.4	4.2	9.8	4.0	7.5

PARAMETER	UOM	LOR	0407_TP231_1.5_20622 SOIL - 22/6/2020 SE207824.006	0407_TP232_0.1_20622 SOIL - 22/6/2020 SE207824.007	0407_TP232_1.0_20622 SOIL - 22/6/2020 SE207824.008	0407_TP233_0.5_20622 SOIL - 22/6/2020 SE207824.009	0407_TP233_1.5_20622 SOIL - 22/6/2020 SE207824.010
% Moisture	%w/w	1	6.1	10.7	4.1	3.8	4.3

PARAMETER	UOM	LOR	0407_TP84_0.1_20022 SOIL - 22/6/2020 SE207824.011	0407_TP84_0.5_20022 SOIL - 22/6/2020 SE207824.012	0407_QC135_20062 SOIL - 22/6/2020 SE207824.013	0407_QC125_20062 SOIL - 22/6/2020 SE207824.014	0407_QC130_20062 SOIL - 22/6/2020 SE207824.015
% Moisture	%w/w	1	3.8	3.2	3.9	7.7	4.5

Fibre ID in bulk materials [AN602] Tested: 29/6/2020

PARAMETER	UOM	LOR	0407_TP231_A02_20622 MATERIAL - 22/6/2020 SE207824.016	0407_TP231_A01_20622 MATERIAL - 22/6/2020 SE207824.017	0407_TP233_A01_20622 MATERIAL - 22/6/2020 SE207824.018	0407_TP232_A02_20622 MATERIAL - 22/6/2020 SE207824.019
Asbestos Detected	No unit	-	Yes	Yes	Yes	Yes

Fibre Identification in soil [AN602] Tested: 26/6/2020

PARAMETER	UOM	LOR	0407_TP83_0.5_20022 SOIL - 22/6/2020 SE207824.001	0407_TP93_0.1_20022 SOIL - 22/6/2020 SE207824.003	0407_TP93_0.5_20022 SOIL - 22/6/2020 SE207824.004	0407_TP231_0.1_20622 SOIL - 22/6/2020 SE207824.005	0407_TP231_1.5_20622 SOIL - 22/6/2020 SE207824.006
Asbestos Detected	No unit	-	No	No	No	No	Yes
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	0407_TP232_0.1_20622 SOIL - 22/6/2020 SE207824.007	0407_TP232_1.0_20622 SOIL - 22/6/2020 SE207824.008	0407_TP233_0.5_20622 SOIL - 22/6/2020 SE207824.009	0407_TP84_0.1_20022 SOIL - 22/6/2020 SE207824.011
Asbestos Detected	No unit	-	No	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 26/6/2020

PARAMETER	UOM	LOR	0407_TP83_0.5_200 22 SOIL - 22/6/2020 SE207824.001	0407_TP93_0.1_200 22 SOIL - 22/6/2020 SE207824.003	0407_TP93_0.5_200 22 SOIL - 22/6/2020 SE207824.004	0407_TP231_0.1_20 622 SOIL - 22/6/2020 SE207824.005	0407_TP231_1.5_20 622 SOIL - 22/6/2020 SE207824.006
Total Sample Weight*	g	1	**889**	**835**	**929**	**778**	**1065**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	**0.00672**
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP232_0.1_20 622 SOIL - 22/6/2020 SE207824.007	0407_TP232_1.0_20 622 SOIL - 22/6/2020 SE207824.008	0407_TP233_0.5_20 622 SOIL - 22/6/2020 SE207824.009	0407_TP84_0.1_200 22 SOIL - 22/6/2020 SE207824.011
Total Sample Weight*	g	1	**817**	**892**	**946**	**756**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level [MA-1523] Tested: 29/6/2020

PARAMETER	UOM	LOR	0407_QC135_20062 SOIL - 22/6/2020 SE207824.013	0407_QC125_20062 SOIL - 22/6/2020 SE207824.014	0407_QC130_20062 SOIL - 22/6/2020 SE207824.015
Perfluorobutanoic acid (PFBA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0005	<0.0005	<0.0005	<0.0005
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluorononanoic acid (PFNA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluorodecanoic acid (PFDA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0001	<0.0001	**0.0001**	**0.0004**
Sum PFOS and PFHXS	mg/kg	0.0001	<0.0001	**0.0001**	**0.0004**
Perfluorononane sulfonate (PFNS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.001	<0.001	<0.001	<0.001
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.001	<0.001	<0.001	<0.001
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.001	<0.001	<0.001	<0.001
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.001	<0.001	<0.001	<0.001
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.001	<0.001	<0.001	<0.001
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.001	<0.001	<0.001	<0.001
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002	<0.002	<0.002	<0.002
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002	<0.002	<0.002	<0.002
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.001	<0.001	<0.001	<0.001
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.001	<0.001	<0.001	<0.001

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid , mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser . Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC /MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents .
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup /fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS /ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples, Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable ’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.
AN605	This technique gravimetrically determines the mass of Bonded Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight. Any fibrous asbestos (FA) found in this fraction will be added to the 2-7mm fraction and its mass recorded there.

AN605	This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free/respirable fibres which are only observed by standard trace analysis as per AN602.
AN605	Bonded asbestos containing material (Bonded ACM) comprises asbestos-containing-material which is sound in condition. Fibrous asbestos (FA) comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material. Asbestos fines (AF) includes free fibres, small fibre bundles and also small fragments of bonded ACM that passes through a 7mm sieve - which implies that the bonded ACM fragments have a substantial degree of damage which increases the potential for fibre release.
AN-605	Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009 and NEPM 1999 (2013) schedule B1 section 4..
MA-1523	This method covers the analysis of per- and polyfluoroalkyl substances (PFAS) in aqueous, solid and biosolid samples and solvent extracts, determined as the total of linear and branched isomers. After spiking with isotopically labelled quantification surrogates and clean-up via SPE cartridges sample extracts are analysed by liquid chromatography/mass spectrometry (LC-MS/MS). PFAS concentrations are determined by isotope dilution quantification.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

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Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000674--000676**
Samples	13

LABORATORY DETAILS

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Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207824 R0**
Date Received	22 Jun 2020
Date Reported	30 Jun 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

PFAS subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420. Report Number ME315385

Some PFAS surrogate recovery values out of acceptance range due to matrix interference .Some PFAS surrogate recovery values out of acceptance range due to matrix interference.

No respirable fibres detected in all soil samples using trace analysis technique.

Sample #6: Asbestos found as approx 3x2x2mm cement sheet fragment in >2mm portion.

Asbestos analysed by Approved Identifier Ravee Sivasubramaniam .

SIGNATORIES

[redacted]

Chemist | Senior Organic Chemist/Metals Chemis | Organic Section Head

[redacted]

Asbestos Analyst

RESULTS

Fibre ID in bulk materials — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE207824.016	0407_TP231_A02_200622	Other	25x20x5mm Cement Sheet Fragment	22 Jun 2020	Chrysotile Asbestos Detected	
SE207824.017	0407_TP231_A01_200622	Other	30x20x4mm Cement Sheet Fragment	22 Jun 2020	Amosite, Chrysotile & Crocidolite Asbestos Detected	
SE207824.018	0407_TP233_A01_200622	Other	80x50x6mm Cement Sheet Fragment	22 Jun 2020	Chrysotile Asbestos Detected	
SE207824.019	0407_TP232_A02_200622	Other	40x40x5mm Cement Sheet Fragment	22 Jun 2020	Chrysotile Asbestos Detected	

RESULTS

Fibre Identification in soil — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE207824.001	0407_TP83_0.5_200622	Soil	889g Sand	22 Jun 2020	No Asbestos Found	<0.01
SE207824.003	0407_TP93_0.1_200622	Soil	835g Sand	22 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE207824.004	0407_TP93_0.5_200622	Soil	929g Sand	22 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE207824.005	0407_TP231_0.1_200622	Soil	778g Sand, Soil, Rocks	22 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE207824.006	0407_TP231_1.5_200622	Soil	1065g Sand, Rocks	22 Jun 2020	Chrysotile Asbestos Found	<0.01
SE207824.007	0407_TP232_0.1_200622	Soil	817g Sand, Soil, Rocks, Plant matter	22 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE207824.008	0407_TP232_1.0_200622	Soil	892g Sand	22 Jun 2020	No Asbestos Found	<0.01
SE207824.009	0407_TP233_0.5_200622	Soil	946g Sand	22 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE207824.011	0407_TP84_0.1_200622	Soil	756g Sand	22 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01

METHOD SUMMARY

SE207824 R0

METHOD	METHODOLOGY SUMMARY
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples , Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable ’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.

FOOTNOTES

Amosite	-	Brown Asbestos	NA	-	Not Analysed
Chrysotile	-	White Asbestos	LNR	-	Listed, Not Required
Crocidolite	-	Blue Asbestos	*	-	NATA accreditation does not cover the performance of this service .
Amphiboles	-	Amosite and/or Crocidolite	**	-	Indicative data, theoretical holding time exceeded.

(In reference to soil samples only) This report does not comply with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment and Remediation and Management of Asbestos Contaminated sites in Western Australia - May 2009.

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.

Where reported: 'Asbestos Detected': Asbestos detected by polarised light microscopy, including dispersion staining.
Where reported: 'No Asbestos Found': No Asbestos Found by polarised light microscopy , including dispersion staining.
Where reported: 'UMF Detected': Mineral fibres of unknown type detected by polarised light microscopy, including dispersion staining. Confirmation by another independent analytical technique may be necessary.

Even after disintegration it can be very difficult, or impossible, to detect the presence of asbestos in some asbestos -containing bulk materials using polarised light microscopy. This is due to the low grade or small length or diameter of asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety .

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STATEMENT OF QA/QC PERFORMANCE

SE207824 R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000674--000676**
Samples	19

LABORATORY DETAILS

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SGS Reference	**SE207824 R0**
Date Received	22 Jun 2020
Date Reported	30 Jun 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Surrogate	Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level	1 item
Duplicate	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	1 item

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	15 Soil, 4 Material
Date documentation received	22/6/2020	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	1.3°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE207824 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Fibre ID in bulk materials

Method: ME-(AU)-[ENV]AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP231_A02_200622	SE207824.016	LB202934	22 Jun 2020	22 Jun 2020	22 Jun 2021	29 Jun 2020	22 Jun 2021	29 Jun 2020
0407_TP231_A01_200622	SE207824.017	LB202934	22 Jun 2020	22 Jun 2020	22 Jun 2021	29 Jun 2020	22 Jun 2021	29 Jun 2020
0407_TP233_A01_200622	SE207824.018	LB202934	22 Jun 2020	22 Jun 2020	22 Jun 2021	29 Jun 2020	22 Jun 2021	29 Jun 2020
0407_TP232_A02_200622	SE207824.019	LB202934	22 Jun 2020	22 Jun 2020	22 Jun 2021	29 Jun 2020	22 Jun 2021	29 Jun 2020

Fibre Identification in soil

Method: ME-(AU)-[ENV]AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP83_0.5_200622	SE207824.001	LB202872	22 Jun 2020	22 Jun 2020	22 Jun 2021	26 Jun 2020	22 Jun 2021	29 Jun 2020
0407_TP93_0.1_200622	SE207824.003	LB202872	22 Jun 2020	22 Jun 2020	22 Jun 2021	26 Jun 2020	22 Jun 2021	29 Jun 2020
0407_TP93_0.5_200622	SE207824.004	LB202872	22 Jun 2020	22 Jun 2020	22 Jun 2021	26 Jun 2020	22 Jun 2021	29 Jun 2020
0407_TP231_0.1_200622	SE207824.005	LB202872	22 Jun 2020	22 Jun 2020	22 Jun 2021	26 Jun 2020	22 Jun 2021	29 Jun 2020
0407_TP231_1.5_200622	SE207824.006	LB202872	22 Jun 2020	22 Jun 2020	22 Jun 2021	26 Jun 2020	22 Jun 2021	29 Jun 2020
0407_TP232_0.1_200622	SE207824.007	LB202872	22 Jun 2020	22 Jun 2020	22 Jun 2021	26 Jun 2020	22 Jun 2021	29 Jun 2020
0407_TP232_1.0_200622	SE207824.008	LB202872	22 Jun 2020	22 Jun 2020	22 Jun 2021	26 Jun 2020	22 Jun 2021	29 Jun 2020
0407_TP233_0.5_200622	SE207824.009	LB202872	22 Jun 2020	22 Jun 2020	22 Jun 2021	26 Jun 2020	22 Jun 2021	29 Jun 2020
0407_TP84_0.1_200622	SE207824.011	LB202872	22 Jun 2020	22 Jun 2020	22 Jun 2021	26 Jun 2020	22 Jun 2021	29 Jun 2020

Gravimetric Determination of Asbestos in Soil

Method: ME-(AU)-[ENV]AN605

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP83_0.5_200622	SE207824.001	LB202872	22 Jun 2020	22 Jun 2020	19 Dec 2020	26 Jun 2020	19 Dec 2020	29 Jun 2020
0407_TP93_0.1_200622	SE207824.003	LB202872	22 Jun 2020	22 Jun 2020	19 Dec 2020	26 Jun 2020	19 Dec 2020	29 Jun 2020
0407_TP93_0.5_200622	SE207824.004	LB202872	22 Jun 2020	22 Jun 2020	19 Dec 2020	26 Jun 2020	19 Dec 2020	29 Jun 2020
0407_TP231_0.1_200622	SE207824.005	LB202872	22 Jun 2020	22 Jun 2020	19 Dec 2020	26 Jun 2020	19 Dec 2020	29 Jun 2020
0407_TP231_1.5_200622	SE207824.006	LB202872	22 Jun 2020	22 Jun 2020	19 Dec 2020	26 Jun 2020	19 Dec 2020	29 Jun 2020
0407_TP232_0.1_200622	SE207824.007	LB202872	22 Jun 2020	22 Jun 2020	19 Dec 2020	26 Jun 2020	19 Dec 2020	29 Jun 2020
0407_TP232_1.0_200622	SE207824.008	LB202872	22 Jun 2020	22 Jun 2020	19 Dec 2020	26 Jun 2020	19 Dec 2020	29 Jun 2020
0407_TP233_0.5_200622	SE207824.009	LB202872	22 Jun 2020	22 Jun 2020	19 Dec 2020	26 Jun 2020	19 Dec 2020	29 Jun 2020
0407_TP84_0.1_200622	SE207824.011	LB202872	22 Jun 2020	22 Jun 2020	19 Dec 2020	26 Jun 2020	19 Dec 2020	29 Jun 2020

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP83_0.5_200622	SE207824.001	LB202692	22 Jun 2020	22 Jun 2020	20 Jul 2020	24 Jun 2020	20 Jul 2020	29 Jun 2020
0407_TP83_1.5_200622	SE207824.002	LB202692	22 Jun 2020	22 Jun 2020	20 Jul 2020	24 Jun 2020	20 Jul 2020	29 Jun 2020
0407_TP93_0.1_200622	SE207824.003	LB202692	22 Jun 2020	22 Jun 2020	20 Jul 2020	24 Jun 2020	20 Jul 2020	29 Jun 2020
0407_TP93_0.5_200622	SE207824.004	LB202692	22 Jun 2020	22 Jun 2020	20 Jul 2020	24 Jun 2020	20 Jul 2020	29 Jun 2020
0407_TP231_0.1_200622	SE207824.005	LB202692	22 Jun 2020	22 Jun 2020	20 Jul 2020	24 Jun 2020	20 Jul 2020	29 Jun 2020
0407_TP231_1.5_200622	SE207824.006	LB202692	22 Jun 2020	22 Jun 2020	20 Jul 2020	24 Jun 2020	20 Jul 2020	29 Jun 2020
0407_TP232_0.1_200622	SE207824.007	LB202692	22 Jun 2020	22 Jun 2020	20 Jul 2020	24 Jun 2020	20 Jul 2020	29 Jun 2020
0407_TP232_1.0_200622	SE207824.008	LB202692	22 Jun 2020	22 Jun 2020	20 Jul 2020	24 Jun 2020	20 Jul 2020	29 Jun 2020
0407_TP233_0.5_200622	SE207824.009	LB202692	22 Jun 2020	22 Jun 2020	20 Jul 2020	24 Jun 2020	20 Jul 2020	29 Jun 2020
0407_TP233_1.5_200622	SE207824.010	LB202692	22 Jun 2020	22 Jun 2020	20 Jul 2020	24 Jun 2020	20 Jul 2020	29 Jun 2020
0407_TP84_0.1_200622	SE207824.011	LB202692	22 Jun 2020	22 Jun 2020	20 Jul 2020	24 Jun 2020	20 Jul 2020	29 Jun 2020
0407_TP84_0.5_200622	SE207824.012	LB202692	22 Jun 2020	22 Jun 2020	20 Jul 2020	24 Jun 2020	20 Jul 2020	29 Jun 2020
0407_QC135_200622	SE207824.013	LB202692	22 Jun 2020	22 Jun 2020	20 Jul 2020	24 Jun 2020	20 Jul 2020	29 Jun 2020
0407_QC125_200622	SE207824.014	LB202692	22 Jun 2020	22 Jun 2020	20 Jul 2020	24 Jun 2020	20 Jul 2020	29 Jun 2020
0407_QC130_200622	SE207824.015	LB202692	22 Jun 2020	22 Jun 2020	20 Jul 2020	24 Jun 2020	20 Jul 2020	29 Jun 2020

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP83_0.5_200622	SE207824.001	LB202605	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP83_1.5_200622	SE207824.002	LB202605	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP93_0.1_200622	SE207824.003	LB202605	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP93_0.5_200622	SE207824.004	LB202605	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP231_0.1_200622	SE207824.005	LB202605	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP231_1.5_200622	SE207824.006	LB202605	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP232_0.1_200622	SE207824.007	LB202605	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP232_1.0_200622	SE207824.008	LB202605	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP233_0.5_200622	SE207824.009	LB202605	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP233_1.5_200622	SE207824.010	LB202605	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP84_0.1_200622	SE207824.011	LB202605	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP84_0.5_200622	SE207824.012	LB202605	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_QC135_200622	SE207824.013	LB202605	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020

HOLDING TIME SUMMARY

SE207824 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Moisture Content (continued)

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC125_200622	SE207824.014	LB202605	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_QC130_200622	SE207824.015	LB202605	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP83_0.5_200622	SE207824.001	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP83_1.5_200622	SE207824.002	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP93_0.1_200622	SE207824.003	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP93_0.5_200622	SE207824.004	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP231_0.1_200622	SE207824.005	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP231_1.5_200622	SE207824.006	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP232_0.1_200622	SE207824.007	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP232_1.0_200622	SE207824.008	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP233_0.5_200622	SE207824.009	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP233_1.5_200622	SE207824.010	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP84_0.1_200622	SE207824.011	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP84_0.5_200622	SE207824.012	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_QC135_200622	SE207824.013	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_QC125_200622	SE207824.014	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_QC130_200622	SE207824.015	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP83_0.5_200622	SE207824.001	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP83_1.5_200622	SE207824.002	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP93_0.1_200622	SE207824.003	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP93_0.5_200622	SE207824.004	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP231_0.1_200622	SE207824.005	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP231_1.5_200622	SE207824.006	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP232_0.1_200622	SE207824.007	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP232_1.0_200622	SE207824.008	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP233_0.5_200622	SE207824.009	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP233_1.5_200622	SE207824.010	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP84_0.1_200622	SE207824.011	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP84_0.5_200622	SE207824.012	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_QC135_200622	SE207824.013	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_QC125_200622	SE207824.014	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_QC130_200622	SE207824.015	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP83_0.5_200622	SE207824.001	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP83_1.5_200622	SE207824.002	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP93_0.1_200622	SE207824.003	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP93_0.5_200622	SE207824.004	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP231_0.1_200622	SE207824.005	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP231_1.5_200622	SE207824.006	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP232_0.1_200622	SE207824.007	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP232_1.0_200622	SE207824.008	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP233_0.5_200622	SE207824.009	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP233_1.5_200622	SE207824.010	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP84_0.1_200622	SE207824.011	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP84_0.5_200622	SE207824.012	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_QC135_200622	SE207824.013	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_QC125_200622	SE207824.014	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_QC130_200622	SE207824.015	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP83_0.5_200622	SE207824.001	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP83_1.5_200622	SE207824.002	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP93_0.1_200622	SE207824.003	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020

HOLDING TIME SUMMARY

SE207824 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

PCBs in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP93_0.5_200622	SE207824.004	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP231_0.1_200622	SE207824.005	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP231_1.5_200622	SE207824.006	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP232_0.1_200622	SE207824.007	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP232_1.0_200622	SE207824.008	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP233_0.5_200622	SE207824.009	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP233_1.5_200622	SE207824.010	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP84_0.1_200622	SE207824.011	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP84_0.5_200622	SE207824.012	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_QC135_200622	SE207824.013	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_QC125_200622	SE207824.014	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_QC130_200622	SE207824.015	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP83_0.5_200622	SE207824.001	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP83_1.5_200622	SE207824.002	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP93_0.1_200622	SE207824.003	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP93_0.5_200622	SE207824.004	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP231_0.1_200622	SE207824.005	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP231_1.5_200622	SE207824.006	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP232_0.1_200622	SE207824.007	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP232_1.0_200622	SE207824.008	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP233_0.5_200622	SE207824.009	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP233_1.5_200622	SE207824.010	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP84_0.1_200622	SE207824.011	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP84_0.5_200622	SE207824.012	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_QC135_200622	SE207824.013	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_QC125_200622	SE207824.014	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_QC130_200622	SE207824.015	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP83_0.5_200622	SE207824.001	LB202681	22 Jun 2020	22 Jun 2020	19 Dec 2020	24 Jun 2020	19 Dec 2020	26 Jun 2020
0407_TP83_1.5_200622	SE207824.002	LB202681	22 Jun 2020	22 Jun 2020	19 Dec 2020	24 Jun 2020	19 Dec 2020	26 Jun 2020
0407_TP93_0.1_200622	SE207824.003	LB202681	22 Jun 2020	22 Jun 2020	19 Dec 2020	24 Jun 2020	19 Dec 2020	26 Jun 2020
0407_TP93_0.5_200622	SE207824.004	LB202681	22 Jun 2020	22 Jun 2020	19 Dec 2020	24 Jun 2020	19 Dec 2020	26 Jun 2020
0407_TP231_0.1_200622	SE207824.005	LB202681	22 Jun 2020	22 Jun 2020	19 Dec 2020	24 Jun 2020	19 Dec 2020	26 Jun 2020
0407_TP231_1.5_200622	SE207824.006	LB202681	22 Jun 2020	22 Jun 2020	19 Dec 2020	24 Jun 2020	19 Dec 2020	26 Jun 2020
0407_TP232_0.1_200622	SE207824.007	LB202681	22 Jun 2020	22 Jun 2020	19 Dec 2020	24 Jun 2020	19 Dec 2020	26 Jun 2020
0407_TP232_1.0_200622	SE207824.008	LB202681	22 Jun 2020	22 Jun 2020	19 Dec 2020	24 Jun 2020	19 Dec 2020	26 Jun 2020
0407_TP233_0.5_200622	SE207824.009	LB202681	22 Jun 2020	22 Jun 2020	19 Dec 2020	24 Jun 2020	19 Dec 2020	26 Jun 2020
0407_TP233_1.5_200622	SE207824.010	LB202681	22 Jun 2020	22 Jun 2020	19 Dec 2020	24 Jun 2020	19 Dec 2020	26 Jun 2020
0407_TP84_0.1_200622	SE207824.011	LB202681	22 Jun 2020	22 Jun 2020	19 Dec 2020	24 Jun 2020	19 Dec 2020	26 Jun 2020
0407_TP84_0.5_200622	SE207824.012	LB202681	22 Jun 2020	22 Jun 2020	19 Dec 2020	24 Jun 2020	19 Dec 2020	26 Jun 2020
0407_QC135_200622	SE207824.013	LB202681	22 Jun 2020	22 Jun 2020	19 Dec 2020	24 Jun 2020	19 Dec 2020	26 Jun 2020
0407_QC125_200622	SE207824.014	LB202681	22 Jun 2020	22 Jun 2020	19 Dec 2020	24 Jun 2020	19 Dec 2020	26 Jun 2020
0407_QC130_200622	SE207824.015	LB202681	22 Jun 2020	22 Jun 2020	19 Dec 2020	24 Jun 2020	19 Dec 2020	26 Jun 2020

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP83_0.5_200622	SE207824.001	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP83_1.5_200622	SE207824.002	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP93_0.1_200622	SE207824.003	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP93_0.5_200622	SE207824.004	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP231_0.1_200622	SE207824.005	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP231_1.5_200622	SE207824.006	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP232_0.1_200622	SE207824.007	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP232_1.0_200622	SE207824.008	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP233_0.5_200622	SE207824.009	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP233_1.5_200622	SE207824.010	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020

HOLDING TIME SUMMARY

SE207824 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP84_0.1_200622	SE207824.011	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP84_0.5_200622	SE207824.012	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_QC135_200622	SE207824.013	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_QC125_200622	SE207824.014	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_QC130_200622	SE207824.015	LB202604	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP83_0.5_200622	SE207824.001	LB202606	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP83_1.5_200622	SE207824.002	LB202606	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP93_0.1_200622	SE207824.003	LB202606	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP93_0.5_200622	SE207824.004	LB202606	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP231_0.1_200622	SE207824.005	LB202606	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP231_1.5_200622	SE207824.006	LB202606	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP232_0.1_200622	SE207824.007	LB202606	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP232_1.0_200622	SE207824.008	LB202606	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP233_0.5_200622	SE207824.009	LB202606	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP233_1.5_200622	SE207824.010	LB202606	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP84_0.1_200622	SE207824.011	LB202606	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP84_0.5_200622	SE207824.012	LB202606	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_QC135_200622	SE207824.013	LB202606	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_QC125_200622	SE207824.014	LB202606	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_QC130_200622	SE207824.015	LB202606	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP83_0.5_200622	SE207824.001	LB202606	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP83_1.5_200622	SE207824.002	LB202606	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP93_0.1_200622	SE207824.003	LB202606	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP93_0.5_200622	SE207824.004	LB202606	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP231_0.1_200622	SE207824.005	LB202606	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP231_1.5_200622	SE207824.006	LB202606	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP232_0.1_200622	SE207824.007	LB202606	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP232_1.0_200622	SE207824.008	LB202606	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP233_0.5_200622	SE207824.009	LB202606	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP233_1.5_200622	SE207824.010	LB202606	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP84_0.1_200622	SE207824.011	LB202606	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP84_0.5_200622	SE207824.012	LB202606	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_QC135_200622	SE207824.013	LB202606	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_QC125_200622	SE207824.014	LB202606	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_QC130_200622	SE207824.015	LB202606	22 Jun 2020	22 Jun 2020	06 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP83_0.5_200622	SE207824.001	%	60 - 130%	95
	0407_TP83_1.5_200622	SE207824.002	%	60 - 130%	97
	0407_TP93_0.1_200622	SE207824.003	%	60 - 130%	103
	0407_TP93_0.5_200622	SE207824.004	%	60 - 130%	96
	0407_TP231_0.1_200622	SE207824.005	%	60 - 130%	105
	0407_TP231_1.5_200622	SE207824.006	%	60 - 130%	98
	0407_TP232_0.1_200622	SE207824.007	%	60 - 130%	102
	0407_TP232_1.0_200622	SE207824.008	%	60 - 130%	96
	0407_TP233_0.5_200622	SE207824.009	%	60 - 130%	99
	0407_TP233_1.5_200622	SE207824.010	%	60 - 130%	99
	0407_TP84_0.1_200622	SE207824.011	%	60 - 130%	97
	0407_TP84_0.5_200622	SE207824.012	%	60 - 130%	99
	0407_QC135_200622	SE207824.013	%	60 - 130%	98
	0407_QC125_200622	SE207824.014	%	60 - 130%	100
	0407_QC130_200622	SE207824.015	%	60 - 130%	93

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP83_0.5_200622	SE207824.001	%	60 - 130%	80
	0407_TP83_1.5_200622	SE207824.002	%	60 - 130%	80
	0407_TP93_0.1_200622	SE207824.003	%	60 - 130%	82
	0407_TP93_0.5_200622	SE207824.004	%	60 - 130%	78
	0407_TP231_0.1_200622	SE207824.005	%	60 - 130%	84
	0407_TP231_1.5_200622	SE207824.006	%	60 - 130%	76
	0407_TP232_0.1_200622	SE207824.007	%	60 - 130%	88
	0407_TP232_1.0_200622	SE207824.008	%	60 - 130%	84
	0407_TP233_0.5_200622	SE207824.009	%	60 - 130%	78
	0407_TP233_1.5_200622	SE207824.010	%	60 - 130%	80
	0407_TP84_0.1_200622	SE207824.011	%	60 - 130%	82
	0407_TP84_0.5_200622	SE207824.012	%	60 - 130%	78
	0407_QC135_200622	SE207824.013	%	60 - 130%	80
	0407_QC125_200622	SE207824.014	%	60 - 130%	82
	0407_QC130_200622	SE207824.015	%	60 - 130%	80
d14-p-terphenyl (Surrogate)	0407_TP83_0.5_200622	SE207824.001	%	60 - 130%	102
	0407_TP83_1.5_200622	SE207824.002	%	60 - 130%	102
	0407_TP93_0.1_200622	SE207824.003	%	60 - 130%	100
	0407_TP93_0.5_200622	SE207824.004	%	60 - 130%	100
	0407_TP231_0.1_200622	SE207824.005	%	60 - 130%	104
	0407_TP231_1.5_200622	SE207824.006	%	60 - 130%	102
	0407_TP232_0.1_200622	SE207824.007	%	60 - 130%	96
	0407_TP232_1.0_200622	SE207824.008	%	60 - 130%	104
	0407_TP233_0.5_200622	SE207824.009	%	60 - 130%	98
	0407_TP233_1.5_200622	SE207824.010	%	60 - 130%	104
	0407_TP84_0.1_200622	SE207824.011	%	60 - 130%	100
	0407_TP84_0.5_200622	SE207824.012	%	60 - 130%	100
	0407_QC135_200622	SE207824.013	%	60 - 130%	100
	0407_QC125_200622	SE207824.014	%	60 - 130%	106
	0407_QC130_200622	SE207824.015	%	60 - 130%	102

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP83_0.5_200622	SE207824.001	%	70 - 130%	80
	0407_TP83_1.5_200622	SE207824.002	%	70 - 130%	80
	0407_TP93_0.1_200622	SE207824.003	%	70 - 130%	82
	0407_TP93_0.5_200622	SE207824.004	%	70 - 130%	78
	0407_TP231_0.1_200622	SE207824.005	%	70 - 130%	84
	0407_TP231_1.5_200622	SE207824.006	%	70 - 130%	76
	0407_TP232_0.1_200622	SE207824.007	%	70 - 130%	88
	0407_TP232_1.0_200622	SE207824.008	%	70 - 130%	84
	0407_TP233_0.5_200622	SE207824.009	%	70 - 130%	78
	0407_TP233_1.5_200622	SE207824.010	%	70 - 130%	80
	0407_TP84_0.1_200622	SE207824.011	%	70 - 130%	82

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP84_0.5_200622	SE207824.012	%	70 - 130%	78
	0407_QC135_200622	SE207824.013	%	70 - 130%	80
	0407_QC125_200622	SE207824.014	%	70 - 130%	82
	0407_QC130_200622	SE207824.015	%	70 - 130%	80
d14-p-terphenyl (Surrogate)	0407_TP83_0.5_200622	SE207824.001	%	70 - 130%	102
	0407_TP83_1.5_200622	SE207824.002	%	70 - 130%	102
	0407_TP93_0.1_200622	SE207824.003	%	70 - 130%	100
	0407_TP93_0.5_200622	SE207824.004	%	70 - 130%	100
	0407_TP231_0.1_200622	SE207824.005	%	70 - 130%	104
	0407_TP231_1.5_200622	SE207824.006	%	70 - 130%	102
	0407_TP232_0.1_200622	SE207824.007	%	70 - 130%	96
	0407_TP232_1.0_200622	SE207824.008	%	70 - 130%	104
	0407_TP233_0.5_200622	SE207824.009	%	70 - 130%	98
	0407_TP233_1.5_200622	SE207824.010	%	70 - 130%	104
	0407_TP84_0.1_200622	SE207824.011	%	70 - 130%	100
	0407_TP84_0.5_200622	SE207824.012	%	70 - 130%	100
	0407_QC135_200622	SE207824.013	%	70 - 130%	100
	0407_QC125_200622	SE207824.014	%	70 - 130%	106
	0407_QC130_200622	SE207824.015	%	70 - 130%	102
d5-nitrobenzene (Surrogate)	0407_TP83_0.5_200622	SE207824.001	%	70 - 130%	74
	0407_TP83_1.5_200622	SE207824.002	%	70 - 130%	100
	0407_TP93_0.1_200622	SE207824.003	%	70 - 130%	98
	0407_TP93_0.5_200622	SE207824.004	%	70 - 130%	74
	0407_TP231_0.1_200622	SE207824.005	%	70 - 130%	92
	0407_TP231_1.5_200622	SE207824.006	%	70 - 130%	96
	0407_TP232_0.1_200622	SE207824.007	%	70 - 130%	86
	0407_TP232_1.0_200622	SE207824.008	%	70 - 130%	78
	0407_TP233_0.5_200622	SE207824.009	%	70 - 130%	74
	0407_TP233_1.5_200622	SE207824.010	%	70 - 130%	100
	0407_TP84_0.1_200622	SE207824.011	%	70 - 130%	78
	0407_TP84_0.5_200622	SE207824.012	%	70 - 130%	84
	0407_QC135_200622	SE207824.013	%	70 - 130%	82
	0407_QC125_200622	SE207824.014	%	70 - 130%	90
	0407_QC130_200622	SE207824.015	%	70 - 130%	84

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP83_0.5_200622	SE207824.001	%	60 - 130%	95
	0407_TP83_1.5_200622	SE207824.002	%	60 - 130%	97
	0407_TP93_0.1_200622	SE207824.003	%	60 - 130%	103
	0407_TP93_0.5_200622	SE207824.004	%	60 - 130%	96
	0407_TP231_0.1_200622	SE207824.005	%	60 - 130%	105
	0407_TP231_1.5_200622	SE207824.006	%	60 - 130%	98
	0407_TP232_0.1_200622	SE207824.007	%	60 - 130%	102
	0407_TP232_1.0_200622	SE207824.008	%	60 - 130%	96
	0407_TP233_0.5_200622	SE207824.009	%	60 - 130%	99
	0407_TP233_1.5_200622	SE207824.010	%	60 - 130%	99
	0407_TP84_0.1_200622	SE207824.011	%	60 - 130%	97
	0407_TP84_0.5_200622	SE207824.012	%	60 - 130%	99
	0407_QC135_200622	SE207824.013	%	60 - 130%	98
	0407_QC125_200622	SE207824.014	%	60 - 130%	100
	0407_QC130_200622	SE207824.015	%	60 - 130%	93

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level

Method: MA-1523

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C2-4:2FTS) Surrogate	0407_QC135_200622	SE207824.013	%	10 - 150%	81
	0407_QC125_200622	SE207824.014	%	10 - 150%	100
	0407_QC130_200622	SE207824.015	%	10 - 150%	92
(13C2-6:2FTS) Surrogate	0407_QC135_200622	SE207824.013	%	10 - 150%	79
	0407_QC125_200622	SE207824.014	%	10 - 150%	98
	0407_QC130_200622	SE207824.015	%	10 - 150%	85
(13C2-8:2FTS) Surrogate	0407_QC135_200622	SE207824.013	%	10 - 150%	86

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level (continued) **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C2-8:2FTS) Surrogate	0407_QC125_200622	SE207824.014	%	10 - 150%	75
	0407_QC130_200622	SE207824.015	%	10 - 150%	76
(13C2-PFDoA) Surrogate	0407_QC135_200622	SE207824.013	%	10 - 150%	111
	0407_QC125_200622	SE207824.014	%	10 - 150%	116
	0407_QC130_200622	SE207824.015	%	10 - 150%	84
(13C2-PFHxDA) Surrogate	0407_QC135_200622	SE207824.013	%	10 - 150%	17
	0407_QC125_200622	SE207824.014	%	10 - 150%	11
	0407_QC130_200622	SE207824.015	%	10 - 150%	6 †
(13C2-PFTeDA) Surrogate	0407_QC135_200622	SE207824.013	%	10 - 130%	68
	0407_QC125_200622	SE207824.014	%	10 - 130%	47
	0407_QC130_200622	SE207824.015	%	10 - 130%	36
(13C3-PFBS) Surrogate	0407_QC135_200622	SE207824.013	%	10 - 150%	112
	0407_QC125_200622	SE207824.014	%	10 - 150%	116
	0407_QC130_200622	SE207824.015	%	10 - 150%	110
(13C3-PFHxS) Surrogate	0407_QC135_200622	SE207824.013	%	10 - 150%	94
	0407_QC125_200622	SE207824.014	%	10 - 150%	95
	0407_QC130_200622	SE207824.015	%	10 - 150%	94
(13C4-PFBA) Surrogate	0407_QC135_200622	SE207824.013	%	10 - 150%	102
	0407_QC125_200622	SE207824.014	%	10 - 150%	97
	0407_QC130_200622	SE207824.015	%	10 - 150%	100
(13C4-PFHpA) Surrogate	0407_QC135_200622	SE207824.013	%	10 - 150%	108
	0407_QC125_200622	SE207824.014	%	10 - 150%	112
	0407_QC130_200622	SE207824.015	%	10 - 150%	102
(13C4-PFOA) Surrogate	0407_QC135_200622	SE207824.013	%	10 - 150%	98
	0407_QC125_200622	SE207824.014	%	10 - 150%	100
	0407_QC130_200622	SE207824.015	%	10 - 150%	98
(13C5_PFPeA) Surrogate	0407_QC135_200622	SE207824.013	%	10 - 150%	88
	0407_QC125_200622	SE207824.014	%	10 - 150%	87
	0407_QC130_200622	SE207824.015	%	10 - 150%	91
(13C5-PFHxA) Surrogate	0407_QC135_200622	SE207824.013	%	10 - 150%	101
	0407_QC125_200622	SE207824.014	%	10 - 150%	108
	0407_QC130_200622	SE207824.015	%	10 - 150%	99
(13C6-PFDA) Surrogate	0407_QC135_200622	SE207824.013	%	10 - 150%	90
	0407_QC125_200622	SE207824.014	%	10 - 150%	114
	0407_QC130_200622	SE207824.015	%	10 - 150%	110
(13C7-PFUdA) Surrogate	0407_QC135_200622	SE207824.013	%	10 - 150%	110
	0407_QC125_200622	SE207824.014	%	10 - 150%	112
	0407_QC130_200622	SE207824.015	%	10 - 150%	99
(13C8-PFOS) Surrogate	0407_QC135_200622	SE207824.013	%	10 - 150%	130
	0407_QC125_200622	SE207824.014	%	10 - 150%	93
	0407_QC130_200622	SE207824.015	%	10 - 150%	104
(13C8-PFOSA) Surrogate	0407_QC135_200622	SE207824.013	%	10 - 150%	77
	0407_QC125_200622	SE207824.014	%	10 - 150%	63
	0407_QC130_200622	SE207824.015	%	10 - 150%	70
(13C9-PFNA) Surrogate	0407_QC135_200622	SE207824.013	%	10 - 150%	95
	0407_QC125_200622	SE207824.014	%	10 - 150%	111
	0407_QC130_200622	SE207824.015	%	10 - 150%	85
(D3-N-MeFOSA) Surrogate	0407_QC135_200622	SE207824.013	%	10 - 150%	77
	0407_QC125_200622	SE207824.014	%	10 - 150%	57
	0407_QC130_200622	SE207824.015	%	10 - 150%	62
(D3-N-MeFOSAA) Surrogate	0407_QC135_200622	SE207824.013	%	10 - 150%	116
	0407_QC125_200622	SE207824.014	%	10 - 150%	77
	0407_QC130_200622	SE207824.015	%	10 - 150%	59
(D5-N-EtFOSA) Surrogate	0407_QC135_200622	SE207824.013	%	10 - 150%	66
	0407_QC125_200622	SE207824.014	%	10 - 150%	48
	0407_QC130_200622	SE207824.015	%	10 - 150%	41
(D5-N-EtFOSAA) Surrogate	0407_QC135_200622	SE207824.013	%	10 - 150%	110
	0407_QC125_200622	SE207824.014	%	10 - 150%	69
	0407_QC130_200622	SE207824.015	%	10 - 150%	60
(D7-N-MeFOSE) Surrogate	0407_QC135_200622	SE207824.013	%	10 - 150%	61
	0407_QC125_200622	SE207824.014	%	10 - 150%	68

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level (continued)

Method: MA-1523

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(D7-N-MeFOSE) Surrogate	0407_QC130_200622	SE207824.015	%	10 - 150%	51
(D9-N-EtFOSE) Surrogate	0407_QC135_200622	SE207824.013	%	10 - 150%	87
	0407_QC125_200622	SE207824.014	%	10 - 150%	58
	0407_QC130_200622	SE207824.015	%	10 - 150%	50

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	0407_TP83_0.5_200622	SE207824.001	%	70 - 130%	79
	0407_TP83_1.5_200622	SE207824.002	%	70 - 130%	82
	0407_TP93_0.1_200622	SE207824.003	%	70 - 130%	88
	0407_TP93_0.5_200622	SE207824.004	%	70 - 130%	83
	0407_TP231_0.1_200622	SE207824.005	%	70 - 130%	89
	0407_TP231_1.5_200622	SE207824.006	%	70 - 130%	86
	0407_TP232_0.1_200622	SE207824.007	%	70 - 130%	90
	0407_TP232_1.0_200622	SE207824.008	%	70 - 130%	87
	0407_TP233_0.5_200622	SE207824.009	%	70 - 130%	86
	0407_TP233_1.5_200622	SE207824.010	%	70 - 130%	87
	0407_TP84_0.1_200622	SE207824.011	%	70 - 130%	87
	0407_TP84_0.5_200622	SE207824.012	%	70 - 130%	84
	0407_QC135_200622	SE207824.013	%	70 - 130%	82
	0407_QC125_200622	SE207824.014	%	70 - 130%	84
	0407_QC130_200622	SE207824.015	%	70 - 130%	81
d5-phenol (Surrogate)	0407_TP83_0.5_200622	SE207824.001	%	50 - 130%	77
	0407_TP83_1.5_200622	SE207824.002	%	50 - 130%	83
	0407_TP93_0.1_200622	SE207824.003	%	50 - 130%	81
	0407_TP93_0.5_200622	SE207824.004	%	50 - 130%	83
	0407_TP231_0.1_200622	SE207824.005	%	50 - 130%	82
	0407_TP231_1.5_200622	SE207824.006	%	50 - 130%	80
	0407_TP232_0.1_200622	SE207824.007	%	50 - 130%	82
	0407_TP232_1.0_200622	SE207824.008	%	50 - 130%	85
	0407_TP233_0.5_200622	SE207824.009	%	50 - 130%	83
	0407_TP233_1.5_200622	SE207824.010	%	50 - 130%	83
	0407_TP84_0.1_200622	SE207824.011	%	50 - 130%	83
	0407_TP84_0.5_200622	SE207824.012	%	50 - 130%	83
	0407_QC135_200622	SE207824.013	%	50 - 130%	82
	0407_QC125_200622	SE207824.014	%	50 - 130%	82
	0407_QC130_200622	SE207824.015	%	50 - 130%	80

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP83_0.5_200622	SE207824.001	%	60 - 130%	101
	0407_TP83_1.5_200622	SE207824.002	%	60 - 130%	95
	0407_TP93_0.1_200622	SE207824.003	%	60 - 130%	79
	0407_TP93_0.5_200622	SE207824.004	%	60 - 130%	88
	0407_TP231_0.1_200622	SE207824.005	%	60 - 130%	94
	0407_TP231_1.5_200622	SE207824.006	%	60 - 130%	85
	0407_TP232_0.1_200622	SE207824.007	%	60 - 130%	89
	0407_TP232_1.0_200622	SE207824.008	%	60 - 130%	99
	0407_TP233_0.5_200622	SE207824.009	%	60 - 130%	102
	0407_TP233_1.5_200622	SE207824.010	%	60 - 130%	87
	0407_TP84_0.1_200622	SE207824.011	%	60 - 130%	96
	0407_TP84_0.5_200622	SE207824.012	%	60 - 130%	92
	0407_QC135_200622	SE207824.013	%	60 - 130%	86
	0407_QC125_200622	SE207824.014	%	60 - 130%	83
	0407_QC130_200622	SE207824.015	%	60 - 130%	94
d4-1,2-dichloroethane (Surrogate)	0407_TP83_0.5_200622	SE207824.001	%	60 - 130%	96
	0407_TP83_1.5_200622	SE207824.002	%	60 - 130%	97
	0407_TP93_0.1_200622	SE207824.003	%	60 - 130%	89
	0407_TP93_0.5_200622	SE207824.004	%	60 - 130%	98
	0407_TP231_0.1_200622	SE207824.005	%	60 - 130%	97
	0407_TP231_1.5_200622	SE207824.006	%	60 - 130%	83
	0407_TP232_0.1_200622	SE207824.007	%	60 - 130%	89

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d4-1,2-dichloroethane (Surrogate)	0407_TP232_1.0_200622	SE207824.008	%	60 - 130%	94
	0407_TP233_0.5_200622	SE207824.009	%	60 - 130%	96
	0407_TP233_1.5_200622	SE207824.010	%	60 - 130%	91
	0407_TP84_0.1_200622	SE207824.011	%	60 - 130%	93
	0407_TP84_0.5_200622	SE207824.012	%	60 - 130%	92
	0407_QC135_200622	SE207824.013	%	60 - 130%	96
	0407_QC125_200622	SE207824.014	%	60 - 130%	94
	0407_QC130_200622	SE207824.015	%	60 - 130%	94
d8-toluene (Surrogate)	0407_TP83_0.5_200622	SE207824.001	%	60 - 130%	90
	0407_TP83_1.5_200622	SE207824.002	%	60 - 130%	88
	0407_TP93_0.1_200622	SE207824.003	%	60 - 130%	76
	0407_TP93_0.5_200622	SE207824.004	%	60 - 130%	86
	0407_TP231_0.1_200622	SE207824.005	%	60 - 130%	87
	0407_TP231_1.5_200622	SE207824.006	%	60 - 130%	81
	0407_TP232_0.1_200622	SE207824.007	%	60 - 130%	83
	0407_TP232_1.0_200622	SE207824.008	%	60 - 130%	83
	0407_TP233_0.5_200622	SE207824.009	%	60 - 130%	91
	0407_TP233_1.5_200622	SE207824.010	%	60 - 130%	85
	0407_TP84_0.1_200622	SE207824.011	%	60 - 130%	84
	0407_TP84_0.5_200622	SE207824.012	%	60 - 130%	86
	0407_QC135_200622	SE207824.013	%	60 - 130%	91
	0407_QC125_200622	SE207824.014	%	60 - 130%	84
	0407_QC130_200622	SE207824.015	%	60 - 130%	95

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP83_0.5_200622	SE207824.001	%	60 - 130%	101
	0407_TP83_1.5_200622	SE207824.002	%	60 - 130%	95
	0407_TP93_0.1_200622	SE207824.003	%	60 - 130%	79
	0407_TP93_0.5_200622	SE207824.004	%	60 - 130%	88
	0407_TP231_0.1_200622	SE207824.005	%	60 - 130%	94
	0407_TP231_1.5_200622	SE207824.006	%	60 - 130%	85
	0407_TP232_0.1_200622	SE207824.007	%	60 - 130%	89
	0407_TP232_1.0_200622	SE207824.008	%	60 - 130%	99
	0407_TP233_0.5_200622	SE207824.009	%	60 - 130%	102
	0407_TP233_1.5_200622	SE207824.010	%	60 - 130%	87
	0407_TP84_0.1_200622	SE207824.011	%	60 - 130%	96
	0407_TP84_0.5_200622	SE207824.012	%	60 - 130%	92
	0407_QC135_200622	SE207824.013	%	60 - 130%	86
	0407_QC125_200622	SE207824.014	%	60 - 130%	83
	0407_QC130_200622	SE207824.015	%	60 - 130%	94
d4-1,2-dichloroethane (Surrogate)	0407_TP83_0.5_200622	SE207824.001	%	60 - 130%	96
	0407_TP83_1.5_200622	SE207824.002	%	60 - 130%	97
	0407_TP93_0.1_200622	SE207824.003	%	60 - 130%	89
	0407_TP93_0.5_200622	SE207824.004	%	60 - 130%	98
	0407_TP231_0.1_200622	SE207824.005	%	60 - 130%	97
	0407_TP231_1.5_200622	SE207824.006	%	60 - 130%	83
	0407_TP232_0.1_200622	SE207824.007	%	60 - 130%	89
	0407_TP232_1.0_200622	SE207824.008	%	60 - 130%	94
	0407_TP233_0.5_200622	SE207824.009	%	60 - 130%	96
	0407_TP233_1.5_200622	SE207824.010	%	60 - 130%	91
	0407_TP84_0.1_200622	SE207824.011	%	60 - 130%	93
	0407_TP84_0.5_200622	SE207824.012	%	60 - 130%	92
	0407_QC135_200622	SE207824.013	%	60 - 130%	96
	0407_QC125_200622	SE207824.014	%	60 - 130%	94
	0407_QC130_200622	SE207824.015	%	60 - 130%	94
d8-toluene (Surrogate)	0407_TP83_0.5_200622	SE207824.001	%	60 - 130%	90
	0407_TP83_1.5_200622	SE207824.002	%	60 - 130%	88
	0407_TP93_0.1_200622	SE207824.003	%	60 - 130%	76
	0407_TP93_0.5_200622	SE207824.004	%	60 - 130%	86
	0407_TP231_0.1_200622	SE207824.005	%	60 - 130%	87

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d8-toluene (Surrogate)	0407_TP231_1.5_200622	SE207824.006	%	60 - 130%	81
	0407_TP232_0.1_200622	SE207824.007	%	60 - 130%	83
	0407_TP232_1.0_200622	SE207824.008	%	60 - 130%	83
	0407_TP233_0.5_200622	SE207824.009	%	60 - 130%	91
	0407_TP233_1.5_200622	SE207824.010	%	60 - 130%	85
	0407_TP84_0.1_200622	SE207824.011	%	60 - 130%	84
	0407_TP84_0.5_200622	SE207824.012	%	60 - 130%	86
	0407_QC135_200622	SE207824.013	%	60 - 130%	91
	0407_QC125_200622	SE207824.014	%	60 - 130%	84
	0407_QC130_200622	SE207824.015	%	60 - 130%	95

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result
LB202692.001	Mercury	mg/kg	0.05	<0.05

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202604.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	117

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202604.001		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	100
		d14-p-terphenyl (Surrogate)	%	-	80

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB202604.001	Naphthalene	mg/kg	0.1	<0.1
	2-methylnaphthalene	mg/kg	0.1	<0.1
	1-methylnaphthalene	mg/kg	0.1	<0.1
	Acenaphthylene	mg/kg	0.1	<0.1
	Acenaphthene	mg/kg	0.1	<0.1
	Fluorene	mg/kg	0.1	<0.1
	Phenanthrene	mg/kg	0.1	<0.1
	Anthracene	mg/kg	0.1	<0.1
	Fluoranthene	mg/kg	0.1	<0.1
	Pyrene	mg/kg	0.1	<0.1
	Benzo(a)anthracene	mg/kg	0.1	<0.1
	Chrysene	mg/kg	0.1	<0.1
	Benzo(a)pyrene	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202604.001		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	86
		2-fluorobiphenyl (Surrogate)	%	-	82
		d14-p-terphenyl (Surrogate)	%	-	92

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202604.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	117

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202604.001		Phenol	mg/kg	0.5	<0.5
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5
		2-nitrophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
		Pentachlorophenol	mg/kg	0.5	<0.5
		2,4-dinitrophenol	mg/kg	2	<2
		4-chloro-3-methylphenol	mg/kg	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	89
		d5-phenol (Surrogate)	%	-	86

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB202681.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB202604.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number	Parameter	Units	LOR

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB202606.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued) — Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB202606.001	Oxygenated Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	97
		d8-toluene (Surrogate)	%	-	90
		Bromofluorobenzene (Surrogate)	%	-	95
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1

Volatile Petroleum Hydrocarbons in Soil — Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB202606.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	97

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207824.006	LB202692.014	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE207824.015	LB202692.024	Mercury	mg/kg	0.05	<0.05	<0.05	200	0

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207824.006	LB202605.011	% Moisture	%w/w	1	6.1	5.6	47	9
SE207824.015	LB202605.021	% Moisture	%w/w	1	4.5	4.6	52	2

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207824.006	LB202604.014		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.16	30	6
SE207824.015	LB202604.024		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207824.015	LB202604.024		p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	0.14	30	4

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207824.015	LB202604.026		Dichlorvos	mg/kg	0.5	<0.5	0.01	200	0
			Dimethoate	mg/kg	0.5	<0.5	0	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	0.01	200	0
			Fenitrothion	mg/kg	0.2	<0.2	0	200	0
			Malathion	mg/kg	0.2	<0.2	0	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	0	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	0	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	0	200	0
			Methidathion	mg/kg	0.5	<0.5	0	200	0
			Ethion	mg/kg	0.2	<0.2	0	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	0	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	0	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.41	30	2
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.52	30	2

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207824.015	LB202604.026		Naphthalene	mg/kg	0.1	<0.1	0	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	0	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	0	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	0	200	0
			Acenaphthene	mg/kg	0.1	<0.1	0	200	0
			Fluorene	mg/kg	0.1	<0.1	0	200	0
			Phenanthrene	mg/kg	0.1	<0.1	0	200	0
			Anthracene	mg/kg	0.1	<0.1	0	200	0
			Fluoranthene	mg/kg	0.1	<0.1	0.01	200	0
			Pyrene	mg/kg	0.1	<0.1	0.01	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	0.01	200	0
			Chrysene	mg/kg	0.1	<0.1	0.01	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	0.01	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	0.01	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	0	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	0	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	0	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	0	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	0	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	0.242	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	0.121	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	0	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	30	5
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.41	30	2
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.52	30	2

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207824.006	LB202604.014	Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PCBs in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207824.006	LB202604.014		Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	6
SE207824.015	LB202604.024		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	4

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207824.010	LB202604.028		Phenol	mg/kg	0.5	<0.5	0.01	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	0	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	0	200	0
			Total Cresol	mg/kg	1.5	<1.5	0	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	0	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	0	200	0
			4-nitrophenol	mg/kg	1	<1	0	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	0	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dinitrophenol	mg/kg	2	<2	0	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	0	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.3	4.24	30	2
			d5-phenol (Surrogate)	mg/kg	-	1.7	1.65	30	1
SE207824.015	LB202604.024		Phenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	200	0
			Total Cresol	mg/kg	1.5	<1.5	<1.5	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	200	0
			4-nitrophenol	mg/kg	1	<1	<1	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dinitrophenol	mg/kg	2	<2	<2	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.1	4.1	30	1
			d5-phenol (Surrogate)	mg/kg	-	1.6	1.6	30	1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate		Parameter	Units	LOR

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207824.006	LB202681.014		Arsenic, As	mg/kg	1	1	2	93	19
			Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
			Chromium, Cr	mg/kg	0.5	3.3	3.7	44	14
			Copper, Cu	mg/kg	0.5	30	35	32	16
			Nickel, Ni	mg/kg	0.5	12	14	34	17
			Lead, Pb	mg/kg	1	31	53	32	52 ②
			Zinc, Zn	mg/kg	2	53	52	34	3
SE207824.015	LB202681.024		Arsenic, As	mg/kg	1	<1	<1	200	0
			Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
			Chromium, Cr	mg/kg	0.5	0.9	0.8	87	8
			Copper, Cu	mg/kg	0.5	0.9	0.9	84	2
			Nickel, Ni	mg/kg	0.5	0.6	0.6	115	9
			Lead, Pb	mg/kg	1	3	3	66	4
			Zinc, Zn	mg/kg	2	11	11	49	4

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207824.006	LB202604.014		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE207824.015	LB202604.024		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207824.007	LB202606.014	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207824.007	LB202606.014	Halogenated	Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
		Aliphatics	Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.9	8.7	50	2
			d8-toluene (Surrogate)	mg/kg	-	8.3	8.3	50	1
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.9	9.6	50	8
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE207824.015	LB202606.023	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207824.015	LB202606.023	Fumigants	cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207824.015	LB202606.023	Oxygenated	MEK (2-butanone)	mg/kg	10	<10	<10	200	0
		Compounds	MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.4	9.4	50	0
			d8-toluene (Surrogate)	mg/kg	-	9.5	8.4	50	12
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.4	9.5	50	1
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207824.007	LB202606.014		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.9	8.7	30	2
			d8-toluene (Surrogate)	mg/kg	-	8.3	8.3	30	1
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.9	9.6	30	8
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE207824.015	LB202606.023		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.4	9.4	30	0
			d8-toluene (Surrogate)	mg/kg	-	9.5	8.4	30	12
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.4	9.5	30	1
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202692.002	Mercury	mg/kg	0.05	0.17	0.2	70 - 130	87

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202604.002		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	75
		Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	77
		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	77
		Dieldrin	mg/kg	0.2	<0.2	0.2	60 - 140	73
		Endrin	mg/kg	0.2	<0.2	0.2	60 - 140	72
		p,p'-DDT	mg/kg	0.1	0.1	0.2	60 - 140	74
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.17	0.15	40 - 130	110

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202604.002		Dichlorvos	mg/kg	0.5	1.6	2	60 - 140	80
		Diazinon (Dimpylate)	mg/kg	0.5	1.9	2	60 - 140	96
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.8	2	60 - 140	92
		Ethion	mg/kg	0.2	1.7	2	60 - 140	83
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	98
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	78

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202604.002		Naphthalene	mg/kg	0.1	3.9	4	60 - 140	98
		Acenaphthylene	mg/kg	0.1	3.8	4	60 - 140	94
		Acenaphthene	mg/kg	0.1	4.1	4	60 - 140	102
		Phenanthrene	mg/kg	0.1	3.7	4	60 - 140	93
		Anthracene	mg/kg	0.1	4.1	4	60 - 140	104
		Fluoranthene	mg/kg	0.1	3.4	4	60 - 140	86
		Pyrene	mg/kg	0.1	3.5	4	60 - 140	88
		Benzo(a)pyrene	mg/kg	0.1	3.9	4	60 - 140	98
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	84
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	80
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	80

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202604.002	Arochlor 1260	mg/kg	0.2	0.4	0.4	60 - 140	108

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202604.002		Phenol	mg/kg	0.5	0.8	1	70 - 130	75
		2,4-dichlorophenol	mg/kg	0.5	0.8	1	70 - 130	77
		2,4,6-trichlorophenol	mg/kg	0.5	1.1	1	70 - 130	112
		Pentachlorophenol	mg/kg	0.5	0.8	1	70 - 130	76
	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.5	5	40 - 130	90
		d5-phenol (Surrogate)	mg/kg	-	1.7	2	40 - 130	86

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202681.002	Arsenic, As	mg/kg	1	340	318.22	80 - 120	106
	Cadmium, Cd	mg/kg	0.3	4.5	5.41	80 - 120	84
	Chromium, Cr	mg/kg	0.5	40	38.31	80 - 120	104
	Copper, Cu	mg/kg	0.5	300	290	80 - 120	105
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	102
	Lead, Pb	mg/kg	1	94	89.9	80 - 120	104
	Zinc, Zn	mg/kg	2	280	273	80 - 120	101

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202604.002		TRH C10-C14	mg/kg	20	42	40	60 - 140	105
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	95
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	75
	TRH F Bands	TRH >C10-C16	mg/kg	25	40	40	60 - 140	100
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	103
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	90

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202606.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	4.1	5	60 - 140	81
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	5.1	5	60 - 140	102
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	4.5	5	60 - 140	90
	Halogenated	Chlorobenzene	mg/kg	0.1	5.2	5	60 - 140	104
	Monocyclic	Benzene	mg/kg	0.1	5.4	5	60 - 140	109
	Aromatic	Toluene	mg/kg	0.1	5.6	5	60 - 140	113
		Ethylbenzene	mg/kg	0.1	5.7	5	60 - 140	114
		m/p-xylene	mg/kg	0.2	12	10	60 - 140	115
		o-xylene	mg/kg	0.1	5.8	5	60 - 140	115
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	11.1	10	70 - 130	111
		d8-toluene (Surrogate)	mg/kg	-	9.7	10	70 - 130	97
		Bromofluorobenzene (Surrogate)	mg/kg	-	11.2	10	70 - 130	112
	Trihalomethan	Chloroform	mg/kg	0.1	4.2	5	60 - 140	85

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202606.002		TRH C6-C10	mg/kg	25	72	92.5	60 - 140	77
		TRH C6-C9	mg/kg	20	65	80	60 - 140	82
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	11.1	10	70 - 130	111
		Bromofluorobenzene (Surrogate)	mg/kg	-	11.2	10	70 - 130	112
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	38	62.5	60 - 140	60

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207727.001	LB202692.004	Mercury	mg/kg	0.05	0.21	<0.05	0.2	90

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE207824.002	LB202604.029		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	-	-
			Alpha BHC	mg/kg	0.1	<0.1	-	-
			Lindane	mg/kg	0.1	<0.1	-	-
			Heptachlor	mg/kg	0.1	<0.1	0.2	114
			Aldrin	mg/kg	0.1	<0.1	0.2	116
			Beta BHC	mg/kg	0.1	<0.1	-	-
			Delta BHC	mg/kg	0.1	<0.1	0.2	116
			Heptachlor epoxide	mg/kg	0.1	<0.1	-	-
			o,p'-DDE	mg/kg	0.1	<0.1	-	-
			Alpha Endosulfan	mg/kg	0.2	<0.2	-	-
			Gamma Chlordane	mg/kg	0.1	<0.1	-	-
			Alpha Chlordane	mg/kg	0.1	<0.1	-	-
			trans-Nonachlor	mg/kg	0.1	<0.1	-	-
			p,p'-DDE	mg/kg	0.1	<0.1	-	-
			Dieldrin	mg/kg	0.2	<0.2	0.2	114
			Endrin	mg/kg	0.2	<0.2	0.2	110
			o,p'-DDD	mg/kg	0.1	<0.1	-	-
			o,p'-DDT	mg/kg	0.1	<0.1	-	-
			Beta Endosulfan	mg/kg	0.2	<0.2	-	-
			p,p'-DDD	mg/kg	0.1	<0.1	-	-
			p,p'-DDT	mg/kg	0.1	<0.1	0.2	96
			Endosulfan sulphate	mg/kg	0.1	<0.1	-	-
			Endrin Aldehyde	mg/kg	0.1	<0.1	-	-
			Methoxychlor	mg/kg	0.1	<0.1	-	-
			Endrin Ketone	mg/kg	0.1	<0.1	-	-
			Isodrin	mg/kg	0.1	<0.1	-	-
			Mirex	mg/kg	0.1	<0.1	-	-
			Total CLP OC Pesticides	mg/kg	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	-	102

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE207824.001	LB202604.025		Dichlorvos	mg/kg	0.5	<0.5	2	79
			Dimethoate	mg/kg	0.5	<0.5	-	-
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	2	91
			Fenitrothion	mg/kg	0.2	<0.2	-	-
			Malathion	mg/kg	0.2	<0.2	-	-
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	2	92
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	-	-
			Bromophos Ethyl	mg/kg	0.2	<0.2	-	-
			Methidathion	mg/kg	0.5	<0.5	-	-
			Ethion	mg/kg	0.2	<0.2	2	80
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	-	-
			Total OP Pesticides*	mg/kg	1.7	<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	-	86
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	-	104

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number	Parameter	Units	LOR	Original	Spike	Recovery%
SE207824.001	LB202604.025	Naphthalene	mg/kg	0.1	<0.1	4	99
		2-methylnaphthalene	mg/kg	0.1	<0.1	-	-
		1-methylnaphthalene	mg/kg	0.1	<0.1	-	-
		Acenaphthylene	mg/kg	0.1	<0.1	4	100
		Acenaphthene	mg/kg	0.1	<0.1	4	101
		Fluorene	mg/kg	0.1	<0.1	-	-
		Phenanthrene	mg/kg	0.1	<0.1	4	94

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE207824.001	LB202604.025		Anthracene	mg/kg	0.1	<0.1	4	102
			Fluoranthene	mg/kg	0.1	<0.1	4	111
			Pyrene	mg/kg	0.1	<0.1	4	118
			Benzo(a)anthracene	mg/kg	0.1	<0.1	-	-
			Chrysene	mg/kg	0.1	<0.1	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	-	-
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	-	-
			Benzo(a)pyrene	mg/kg	0.1	<0.1	4	115
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	-	-
			Total PAH (18)	mg/kg	0.8	<0.8	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	-	90
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	-	86
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	-	104

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE207824.002	LB202604.025		Arochlor 1016	mg/kg	0.2	<0.2	-	-
			Arochlor 1221	mg/kg	0.2	<0.2	-	-
			Arochlor 1232	mg/kg	0.2	<0.2	-	-
			Arochlor 1242	mg/kg	0.2	<0.2	-	-
			Arochlor 1248	mg/kg	0.2	<0.2	-	-
			Arochlor 1254	mg/kg	0.2	<0.2	-	-
			Arochlor 1260	mg/kg	0.2	<0.2	0.4	100
			Arochlor 1262	mg/kg	0.2	<0.2	-	-
			Arochlor 1268	mg/kg	0.2	<0.2	-	-
			Total PCBs (Arochlors)	mg/kg	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	-	98

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE207824.001	LB202604.027		Phenol	mg/kg	0.5	<0.5	1	76
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	-	-
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	-	-
			Total Cresol	mg/kg	1.5	<1.5	-	-
			2-chlorophenol	mg/kg	0.5	<0.5	-	-
			2,4-dimethylphenol	mg/kg	0.5	<0.5	-	-
			2,6-dichlorophenol	mg/kg	0.5	<0.5	-	-
			2,4-dichlorophenol	mg/kg	0.5	<0.5	1	72
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	1	109
			2-nitrophenol	mg/kg	0.5	<0.5	-	-
			4-nitrophenol	mg/kg	1	<1	-	-
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	-	-
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	-	-
			Pentachlorophenol	mg/kg	0.5	<0.5	1	86
			2,4-dinitrophenol	mg/kg	2	<2	-	-
			4-chloro-3-methylphenol	mg/kg	2	<2	-	-
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.0	-	86
			d5-phenol (Surrogate)	mg/kg	-	1.5	-	83

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207727.001	LB202681.004	Arsenic, As	mg/kg	1	42	2	50	79
		Cadmium, Cd	mg/kg	0.3	44	<0.3	50	89
		Chromium, Cr	mg/kg	0.5	54	6.6	50	95
		Copper, Cu	mg/kg	0.5	100	67	50	73
		Nickel, Ni	mg/kg	0.5	51	2.5	50	98
		Lead, Pb	mg/kg	1	56	9	50	93

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207727.001	LB202681.004	Zinc, Zn	mg/kg	2	72	26	50	93

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE207824.001	LB202604.025		TRH C10-C14	mg/kg	20	<20	40	100
			TRH C15-C28	mg/kg	45	<45	40	95
			TRH C29-C36	mg/kg	45	<45	40	68
			TRH C37-C40	mg/kg	100	<100	-	-
			TRH C10-C36 Total	mg/kg	110	<110	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	40	98
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	<90	40	85
			TRH >C34-C40 (F4)	mg/kg	120	<120	-	-

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE207824.001	LB202606.026	Monocyclic Aromatic	Benzene	mg/kg	0.1	<0.1	5	97
			Toluene	mg/kg	0.1	<0.1	5	99
			Ethylbenzene	mg/kg	0.1	<0.1	5	101
			m/p-xylene	mg/kg	0.2	<0.2	10	102
			o-xylene	mg/kg	0.1	<0.1	5	96
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.6	10	105
			d8-toluene (Surrogate)	mg/kg	-	9.0	10	85
			Bromofluorobenzene (Surrogate)	mg/kg	-	10.1	10	92
		Totals	Total Xylenes	mg/kg	0.3	<0.3	-	-
			Total BTEX	mg/kg	0.6	<0.6	-	-
SE207824.014	LB202606.024	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	-	-
			1,2-dichloropropane	mg/kg	0.1	<0.1	-	-
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	-	-
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	-	-
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	-	-
		Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	-	-
			Chloromethane	mg/kg	1	<1	-	-
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	-	-
			Bromomethane	mg/kg	1	<1	-	-
			Chloroethane	mg/kg	1	<1	-	-
			Trichlorofluoromethane	mg/kg	1	<1	-	-
			Iodomethane	mg/kg	5	<5	-	-
			1,1-dichloroethene	mg/kg	0.1	<0.1	5	101
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	-	-
			Allyl chloride	mg/kg	0.1	<0.1	-	-
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	-	-
			1,1-dichloroethane	mg/kg	0.1	<0.1	-	-
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	-	-
			Bromochloromethane	mg/kg	0.1	<0.1	-	-
			1,2-dichloroethane	mg/kg	0.1	<0.1	5	110
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	-	-
			1,1-dichloropropene	mg/kg	0.1	<0.1	-	-
			Carbon tetrachloride	mg/kg	0.1	<0.1	-	-
			Dibromomethane	mg/kg	0.1	<0.1	-	-
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	5	97
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	-	-
			1,3-dichloropropane	mg/kg	0.1	<0.1	-	-
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	-	-
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	-	-
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	-	-
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	-	-
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	-	-
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	-	-
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE207824.014	LB202606.024	Halogenated	Hexachlorobutadiene	mg/kg	0.1	<0.1	-	-
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	5	114
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	-	-
			2-chlorotoluene	mg/kg	0.1	<0.1	-	-
			4-chlorotoluene	mg/kg	0.1	<0.1	-	-
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	-	-
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	-	-
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	-	-
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	-	-
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	-	-
		Monocyclic	Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	-	-
		Aromatic	Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	-	-
			n-propylbenzene	mg/kg	0.1	<0.1	-	-
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	-	-
			tert-butylbenzene	mg/kg	0.1	<0.1	-	-
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	-	-
			sec-butylbenzene	mg/kg	0.1	<0.1	-	-
			p-isopropyltoluene	mg/kg	0.1	<0.1	-	-
			n-butylbenzene	mg/kg	0.1	<0.1	-	-
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	-	-
		Compounds	2-nitropropane	mg/kg	10	<10	-	-
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	-	-
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	-	-
			Vinyl acetate	mg/kg	10	<10	-	-
			MEK (2-butanone)	mg/kg	10	<10	-	-
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	-	-
			2-hexanone (MBK)	mg/kg	5	<5	-	-
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	-	-
		Totals	Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	-	-
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	-	-
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	-	-
		Trihalometha	Chloroform	mg/kg	0.1	<0.1	5	91
		nes	Bromodichloromethane	mg/kg	0.1	<0.1	-	-
			Chlorodibromomethane	mg/kg	0.1	<0.1	-	-
			Bromoform	mg/kg	0.1	<0.1	-	-

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE207824.001	LB202606.026		TRH C6-C10	mg/kg	25	<25	92.5	68
			TRH C6-C9	mg/kg	20	<20	80	72
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.6	10	105
			d8-toluene (Surrogate)	mg/kg	-	9.0	10	85
			Bromofluorobenzene (Surrogate)	mg/kg	-	10.1	-	92
		VPH F	Benzene (F0)	mg/kg	0.1	<0.1	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	62.5	52

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

SLR

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- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐

CLIENT: Defence Housing Australia

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGER: [redacted]

PM CONTACT No: [redacted]

LABORATORY: SGS Australia

LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015

SAMPLER: [redacted]

SAMPLER CONTACT No: [redacted]

Email Reports and Invoices to: LQRSYD@slrconsulting.com ; awsmith@slrconsulting.com

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number 1 of 5

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only	HOLD	Suite D			Additional Information (Comment on any gross contamination or specific requirements)
1	0407_TP014_0.1_200623	23-06-2020	Soil		x								Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
2	0407_TP014_0.5_200623	23-06-2020	Soil		x								
	0407_TP014_1.0_200623	23-06-2020	Soil						x				
3	0407_TP014_0.1-0.2_200623	23-06-2020	Soil					x					
4	0407_QC142_200623	23-06-2020	Soil		x								
	0407_QC242_200623	23-06-2020	Soil										Please send to Eurofins for Suite A
5	0407_TP015_0.1_200623	23-06-2020	Soil							x			
6	0407_TP015_0.5_200623	23-06-2020	Soil							x			
	0407_TP015_1.0_200623	23-06-2020	Soil						x				
	0407_TP015_0.1-0.2_200623	23-06-2020	Soil						x				
7	0407_TP016_0.1_200623	23-06-2020	Soil		x								
	0407_TP016_0.5_200623	23-06-2020	Soil						x				

SGS EHS Sydney COC

SE208000

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 23-06-2020	**Received by**	Sign [redacted]	Date / Time 23/06/20	**Temperature Received:**
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time 16:30	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

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- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ

CLIENT: Defence Housing Australia

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGER: [redacted]

PM CONTACT No: [redacted]

LABORATORY: SGS Australia

LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015

SAMPLER: [redacted]

SAMPLER CONTACT N [redacted]

Email Reports and Invoices to: LQRSYD@slrconsulting.com [redacted]

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number 2 of 5

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only	HOLD	Suite D			Additional Information (Comment on any gross contamination or specific requirements)
8	0407_TP016_1.0_200623	23-06-2020	Soil		x								Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
9	0407_TP016_0.1-0.2_200623	23-06-2020	Soil					x					
10	0407_QC140_200623	23-06-2020	Soil		x								
	0407_QC240_200623	23-06-2020	Soil										Please send to Eurofins for Suite A
11	0407_TP024_0.1_200623	23-06-2020	Soil							x			
	0407_TP024_0.5_200623	23-06-2020	Soil						x				
12	0407_TP024_1.0_200623	23-06-2020	Soil							x			
	0407_TP024_0.1-0.2_200623	23-06-2020	Soil						x				
13	0407_TP023_0.1_200623	23-06-2020	Soil		x								
	0407_TP023_0.5_200623	23-06-2020	Soil						x				
14	0407_TP023_1.0_200623	23-06-2020	Soil		x								
15	0407_TP023_0.1-0.2_200623	23-06-2020	Soil					x					

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 23-06-2020	**Received by**	Sign [redacted]	Date / Time 23/06/20	**Temperature Received:**
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time 1543	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

CHAIN OF CUSTODY DOCUMENTATION

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CLIENT: Defence Housing Australia	**LABORATORY: SGS Australia**
PROJECT: Randwick Barracks	**LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015**
PROJECT NUMBER: 610.30041	**SAMPLER** [redacted]
PROJECT MANAGER: [redacted]	**SAMPLER CONTACT No:** [redacted]
PM CONTACT No: [redacted]	**Email Reports and Invoices to: LQRSYD@slrconsulting.com ;** [redacted]
COMMENTS OR ADDITIONAL DIRECTIONS	**Turnaround Time (TAT)** ☐ Standard TAT ☐ Non Standard or Urgent TAT **Required TAT: Standard**
	COC Number 3 of 5

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only	HOLD	Suite D			Additional Information (Comment on any gross contamination or specific requirements)
16	0407_TP025_0.1_200623	23-06-2020	Soil		x								Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
17	0407_TP025_0.5_200623	23-06-2020	Soil		x								
	0407_TP025_1.0_200623	23-06-2020	Soil						x				
18	0407_TP025_0.1-0.2_200623	23-06-2020	Soil					x					
19	0407_TP032_0.1_200623	23-06-2020	Soil		x								
	0407_TP032_0.5_200623	23-06-2020	Soil						x				
20	0407_TP032_1.0_200623	23-06-2020	Soil		x								
21	0407_TP032_0.1-0.2_200623	23-06-2020	Soil					x					
22	0407_QC143_200623	23-06-2020	Soil		x								
	0407_QC243_200623	23-06-2020	Soil										Please send to Eurofins for Suite A
23	0407_TP033_0.1_200623	23-06-2020	Soil		x								
24	0407_TP033_0.5_200623	23-06-2020	Soil		x								

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 23-06-2020	**Received by**	Sign [redacted]	Date / Time 23/06/20	**Temperature Received:**
Relinquished By	Sign	Date / Time	**Received by**	Sign [redacted]	Date / Time 04:30	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

CHAIN OF CUSTODY DOCUMENTATION

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- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4330 NZ

CLIENT: Defence Housing Australia	**LABORATORY: SGS Australia**
PROJECT: Randwick Barracks	**LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015**
PROJECT NUMBER: 610.30041	**SAMPLER: MR**
PROJECT MANAGER: [redacted]	**SAMPLER CONTACT No** [redacted]
PM CONTACT No: [redacted]	**Email Reports and Invoices to: LQRSYD@slrconsulting.com** [redacted]

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number 4 of 5

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only	HOLD	Suite D	TRH, BTEX/N, and VOCs ONLY		Additional Information (Comment on any gross contamination or specific requirements)
	0407_TP033_1.0_200623	23-06-2020	Soil						x				Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
25	0407_TP033_1.6_200623	23-06-2020	Soil								x		
26	0407_TP033_2.6_200623	23-06-2020	Soil								x		
27	0407_TP033_3.6_200623	23-06-2020	Soil								x		
28	0407_TP033_4.6_200623	23-06-2020	Soil								x		
29	0407_TP033_5.6_200623	23-06-2020	Soil								x		
30	0407_TP033_6.0_200623	23-06-2020	Soil								x		
31	0407_TP033_7.6_200623	23-06-2020	Soil								x		
32	0407_QC146_200623	23-06-2020	Soil		x								
	0407_QC246_200623	23-06-2020	Soil										Please send to Eurofins for Suite A

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 23-06-2020	**Received by**	Sign [redacted]	Date / Time 23/06	**Temperature Received:**
Relinquished By	Sign	Date / Time	**Received by**	Sign [redacted]	Date / Time 04:30	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

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PROJECT OFFICE (Tick one)

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- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ

CLIENT: Defence Housing Australia	**LABORATORY: SGS Australia**
PROJECT: Randwick Barracks	**LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015**
PROJECT NUMBER: 610.30041	**SAMPLER: MR**
PROJECT MANAGER [redacted]	**SAMPLER CONTACT No** [redacted]
PM CONTACT No: [redacted]	**Email Reports and Invoices to: LQRSYD@slrconsulting.com** [redacted]

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number 5 of 5

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS	Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only	HOLD	Suite D	Suite E and H	Suite F	Additional Information (Comment on any gross contamination or specific requirements)
32	0407_TP041_0.1_200623	23-06-2020	Soil									x		Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
	0407_TP041_0.5_200623	23-06-2020	Soil							x				
34	0407_TP041_1.0_200623	23-06-2020	Soil									x		
	0407_TP041_0.1-0.2_200623	23-06-2020	Soil							x				
35	0407_TP042_0.1_200623	23-06-2020	Soil										x	
36	0407_TP042_0.5_200623	23-06-2020	Soil										x	
	0407_TP042_1.0_200623	23-06-2020	Soil							x				
	0407_TP042_0.1-0.2_200623	23-06-2020	Soil							x				
37	0407_QC14[5]_200623	23-06-2020	Soil										x	
	0407_QC24[5]_200623	23-06-2020	Soil											Please send to Eurofins for Suite A

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 23-06-2020	**Received by**	Sign [redacted]	Date / Time 22/06/20	**Temperature Received:**
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time 04:30	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

SAMPLE RECEIPT ADVICE

SE208000

CLIENT DETAILS

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Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	38

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Tue 23/6/2020
Report Due	Mon 6/7/2020
SGS Reference	**SE208000**

SUBMISSION DETAILS

This is to confirm that 38 samples were received on Tuesday 23/6/2020. Results are expected to be ready by COB Monday 6/7/2020. Please quote SGS reference SE208000 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	38 Soil
Date documentation received	25/6/2020	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	5.4°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

14 soil have been placed on hold as no tests have been assigned for them by the client. These samples will not be processed.
Explosives subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420. Report Number ME315499

This document is issued by the Company under its General Conditions of Service accessible at www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

SAMPLE RECEIPT ADVICE

SE208000

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	Speciated Phenols in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
001	0407_TP014_0.1_200623	29	14	26	11	18	10	81	7
002	0407_TP014_0.5_200623	29	14	26	11	18	10	81	7
004	0407_QC142_200623	29	14	26	11	18	10	81	7
005	0407_TP015_0.1_200623	-	-	26	-	18	10	11	7
006	0407_TP015_0.5_200623	-	-	26	-	18	10	11	7
007	0407_TP016_0.1_200623	29	14	26	11	18	10	81	7
008	0407_TP016_1.0_200623	29	14	26	11	18	10	81	7
010	0407_QC140_200623	29	14	26	11	18	10	81	7
011	0407_TP024_0.1_200623	-	-	26	-	18	10	11	7
012	0407_TP024_1.0_200623	-	-	26	-	18	10	11	7
013	0407_TP023_0.1_200623	29	14	26	11	18	10	81	7
014	0407_TP023_1.0_200623	29	14	26	11	18	10	81	7
016	0407_TP025_0.1_200623	29	14	26	11	18	10	81	7
017	0407_TP025_0.5_200623	29	14	26	11	18	10	81	7
019	0407_TP032_0.1_200623	29	14	26	11	18	10	81	7
020	0407_TP032_1.0_200623	29	14	26	11	18	10	81	7
022	0407_QC143_200623	29	14	26	11	18	10	81	7
023	0407_TP033_0.1_200623	29	14	26	11	18	10	81	7
024	0407_TP033_0.5_200623	29	14	26	11	18	10	81	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
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Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE208000

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	Speciated Phenols in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
025	0407_TP033_1.6_200623	-	-	-	-	-	10	81	7
026	0407_TP033_2.6_200623	-	-	-	-	-	10	81	7
027	0407_TP033_3.6_200623	-	-	-	-	-	10	81	7
028	0407_TP033_4.6_200623	-	-	-	-	-	10	81	7
029	0407_TP033_5.6_200623	-	-	-	-	-	10	81	7
030	0407_TP033_6.0_200623	-	-	-	-	-	10	81	7
031	0407_TP033_7.6_200623	-	-	-	-	-	10	81	7
032	0407_QC146_200623	29	14	26	11	18	10	81	7
033	0407_TP041_0.1_200623	-	-	26	-	-	-	-	-
034	0407_TP041_1.0_200623	-	-	26	-	-	-	-	-
035	0407_TP042_0.1_200623	-	-	-	11	-	10	81	7
036	0407_TP042_0.5_200623	-	-	-	11	-	10	81	7
037	0407_QC145_200623	-	-	-	11	-	10	81	7

CONTINUED OVERLEAF

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SAMPLE RECEIPT ADVICE

SE208000

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Fibre Identification in soil	Gravimetric Determination of Asbestos in Soil	Mercury in Soil	Moisture Content	Total Recoverable Elements in Soil/Waste
001	0407_TP014_0.1_200623	-	-	1	1	7
002	0407_TP014_0.5_200623	-	-	1	1	7
003	0407_TP014_0.1-0.2_200623	2	9	-	-	-
004	0407_QC142_200623	-	-	1	1	7
005	0407_TP015_0.1_200623	-	-	-	1	1
006	0407_TP015_0.5_200623	-	-	-	1	1
007	0407_TP016_0.1_200623	-	-	1	1	7
008	0407_TP016_1.0_200623	-	-	1	1	7
009	0407_TP016_0.1-0.2_200623	2	9	-	-	-
010	0407_QC140_200623	-	-	1	1	7
011	0407_TP024_0.1_200623	-	-	-	1	1
012	0407_TP024_1.0_200623	-	-	-	1	1
013	0407_TP023_0.1_200623	-	-	1	1	7
014	0407_TP023_1.0_200623	-	-	1	1	7
015	0407_TP023_0.1-0.2_200623	2	9	-	-	-
016	0407_TP025_0.1_200623	-	-	1	1	7
017	0407_TP025_0.5_200623	-	-	1	1	7
018	0407_TP025_0.1-0.2_200623	2	9	-	-	-
019	0407_TP032_0.1_200623	-	-	1	1	7
020	0407_TP032_1.0_200623	-	-	1	1	7
021	0407_TP032_0.1-0.2_200623	2	9	-	-	-
022	0407_QC143_200623	-	-	1	1	7
023	0407_TP033_0.1_200623	-	-	1	1	7
024	0407_TP033_0.5_200623	-	-	1	1	7

CONTINUED OVERLEAF

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SAMPLE RECEIPT ADVICE

SE208000

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Explosives in Soil	Fibre Identification in soil	Gravimetric Determination of Asbestos in Soil	Mercury in Soil	Moisture Content	Total Recoverable Elements in Soil/Waste
025	0407_TP033_1.6_200623	-	-	-	-	1	-
026	0407_TP033_2.6_200623	-	-	-	-	1	-
027	0407_TP033_3.6_200623	-	-	-	-	1	-
028	0407_TP033_4.6_200623	-	-	-	-	1	-
029	0407_TP033_5.6_200623	-	-	-	-	1	-
030	0407_TP033_6.0_200623	-	-	-	-	1	-
031	0407_TP033_7.6_200623	-	-	-	-	1	-
032	0407_QC146_200623	-	-	-	1	1	7
033	0407_TP041_0.1_200623	16	-	-	1	1	11
034	0407_TP041_1.0_200623	16	-	-	1	1	11
035	0407_TP042_0.1_200623	-	-	-	1	1	7
036	0407_TP042_0.5_200623	-	-	-	1	1	7
037	0407_QC145_200623	-	-	-	1	1	7
038	0407_TP033_0.1-0.2_200623	-	2	9	-	-	-

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	38

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208000 R0**
Date Received	23/6/2020
Date Reported	9/7/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.

Asbestos analysed by Approved Identifier Ravee Sivasubramaniam .

SIGNATORIES

[redacted]

Chemist | Senior Organic Chemist/Metals Chemist | Metals/Inorganics Team Leader

[redacted]

Organic Section Head | Hygiene Team Leader

VOC's in Soil [AN433] Tested: 1/7/2020

PARAMETER	UOM	LOR	0407_TP014_0.1_20023 SOIL - 23/6/2020 SE208000.001	0407_TP014_0.5_20023 SOIL - 23/6/2020 SE208000.002	0407_QC142_20062 SOIL - 23/6/2020 SE208000.004	0407_TP015_0.1_20023 SOIL - 23/6/2020 SE208000.005	0407_TP015_0.5_20023 SOIL - 23/6/2020 SE208000.006
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	-	-
Chloromethane	mg/kg	1	<1	<1	<1	-	-
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Bromomethane	mg/kg	1	<1	<1	<1	-	-
Chloroethane	mg/kg	1	<1	<1	<1	-	-
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	-	-
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	-	-
Iodomethane	mg/kg	5	<5	<5	<5	-	-
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	-	-
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	-	-
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Vinyl acetate	mg/kg	10	<10	<10	<10	-	-
MEK (2-butanone)	mg/kg	10	<10	<10	<10	-	-
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
2-nitropropane	mg/kg	10	<10	<10	<10	-	-
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	-	-
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	-	-
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	-	-
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	-	-

VOC's in Soil [AN433] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP014_0.1_20023 SOIL - 23/6/2020 SE208000.001	0407_TP014_0.5_20023 SOIL - 23/6/2020 SE208000.002	0407_QC142_20062 SOIL - 23/6/2020 SE208000.004	0407_TP015_0.1_20023 SOIL - 23/6/2020 SE208000.005	0407_TP015_0.5_20023 SOIL - 23/6/2020 SE208000.006
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Total VOC*	mg/kg	24	<24	<24	<24	-	-
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	-	-
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	-	-
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	-	-

VOC's in Soil [AN433] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP016_0.1_200 23 SOIL - 23/6/2020 SE208000.007	0407_TP016_1.0_200 23 SOIL - 23/6/2020 SE208000.008	0407_QC140_20062 SOIL - 23/6/2020 SE208000.010	0407_TP024_0.1_200 23 SOIL - 23/6/2020 SE208000.011	0407_TP024_1.0_200 23 SOIL - 23/6/2020 SE208000.012
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	-	-
Chloromethane	mg/kg	1	<1	<1	<1	-	-
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Bromomethane	mg/kg	1	<1	<1	<1	-	-
Chloroethane	mg/kg	1	<1	<1	<1	-	-
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	-	-
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	-	-
Iodomethane	mg/kg	5	<5	<5	<5	-	-
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	-	-
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	-	-
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Vinyl acetate	mg/kg	10	<10	<10	<10	-	-
MEK (2-butanone)	mg/kg	10	<10	<10	<10	-	-
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
2-nitropropane	mg/kg	10	<10	<10	<10	-	-
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	-	-
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	-	-
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	-	-
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	-	-

VOC's in Soil [AN433] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP016_0.1_20023 SOIL - 23/6/2020 SE208000.007	0407_TP016_1.0_20023 SOIL - 23/6/2020 SE208000.008	0407_QC140_200623 SOIL - 23/6/2020 SE208000.010	0407_TP024_0.1_20023 SOIL - 23/6/2020 SE208000.011	0407_TP024_1.0_20023 SOIL - 23/6/2020 SE208000.012
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Total VOC*	mg/kg	24	<24	<24	<24	-	-
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	-	-
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	-	-
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	-	-

VOC's in Soil [AN433] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP023_0.1_20023 SOIL - 23/6/2020 SE208000.013	0407_TP023_1.0_20023 SOIL - 23/6/2020 SE208000.014	0407_TP025_0.1_20023 SOIL - 23/6/2020 SE208000.016	0407_TP025_0.5_20023 SOIL - 23/6/2020 SE208000.017	0407_TP032_0.1_20023 SOIL - 23/6/2020 SE208000.019
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP023_0.1_20023 SOIL - 23/6/2020 SE208000.013	0407_TP023_1.0_20023 SOIL - 23/6/2020 SE208000.014	0407_TP025_0.1_20023 SOIL - 23/6/2020 SE208000.016	0407_TP025_0.5_20023 SOIL - 23/6/2020 SE208000.017	0407_TP032_0.1_20023 SOIL - 23/6/2020 SE208000.019
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP032_1.0_20023 SOIL - 23/6/2020 SE208000.020	0407_QC143_20062 SOIL - 23/6/2020 SE208000.022	0407_TP033_0.1_20023 SOIL - 23/6/2020 SE208000.023	0407_TP033_0.5_20023 SOIL - 23/6/2020 SE208000.024	0407_TP033_1.6_20023 SOIL - 23/6/2020 SE208000.025
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP032_1.0_20023 SOIL - 23/6/2020 SE208000.020	0407_QC143_20062 SOIL - 23/6/2020 SE208000.022	0407_TP033_0.1_20023 SOIL - 23/6/2020 SE208000.023	0407_TP033_0.5_20023 SOIL - 23/6/2020 SE208000.024	0407_TP033_1.6_20023 SOIL - 23/6/2020 SE208000.025
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP033_2.6_20023 SOIL - 23/6/2020 SE208000.026	0407_TP033_3.6_20023 SOIL - 23/6/2020 SE208000.027	0407_TP033_4.6_20023 SOIL - 23/6/2020 SE208000.028	0407_TP033_5.6_20023 SOIL - 23/6/2020 SE208000.029	0407_TP033_6.0_20023 SOIL - 23/6/2020 SE208000.030
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP033_2.6_20023 SOIL - 23/6/2020 SE208000.026	0407_TP033_3.6_20023 SOIL - 23/6/2020 SE208000.027	0407_TP033_4.6_20023 SOIL - 23/6/2020 SE208000.028	0407_TP033_5.6_20023 SOIL - 23/6/2020 SE208000.029	0407_TP033_6.0_20023 SOIL - 23/6/2020 SE208000.030
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP033_7.6_20023 SOIL - 23/6/2020 SE208000.031	0407_QC146_20062 SOIL - 23/6/2020 SE208000.032	0407_TP042_0.1_20023 SOIL - 23/6/2020 SE208000.035	0407_TP042_0.5_20023 SOIL - 23/6/2020 SE208000.036	0407_QC145_20062 SOIL - 23/6/2020 SE208000.037
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP033_7.6_20023 SOIL - 23/6/2020 SE208000.031	0407_QC146_20062 SOIL - 23/6/2020 SE208000.032	0407_TP042_0.1_20023 SOIL - 23/6/2020 SE208000.035	0407_TP042_0.5_20023 SOIL - 23/6/2020 SE208000.036	0407_QC145_20062 SOIL - 23/6/2020 SE208000.037
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 1/7/2020

PARAMETER	UOM	LOR	0407_TP014_0.1_20023 SOIL - 23/6/2020 SE208000.001	0407_TP014_0.5_20023 SOIL - 23/6/2020 SE208000.002	0407_QC142_20062 SOIL - 23/6/2020 SE208000.004	0407_TP015_0.1_20023 SOIL - 23/6/2020 SE208000.005	0407_TP015_0.5_20023 SOIL - 23/6/2020 SE208000.006
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP016_0.1_20023 SOIL - 23/6/2020 SE208000.007	0407_TP016_1.0_20023 SOIL - 23/6/2020 SE208000.008	0407_QC140_20062 SOIL - 23/6/2020 SE208000.010	0407_TP024_0.1_20023 SOIL - 23/6/2020 SE208000.011	0407_TP024_1.0_20023 SOIL - 23/6/2020 SE208000.012
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP023_0.1_20023 SOIL - 23/6/2020 SE208000.013	0407_TP023_1.0_20023 SOIL - 23/6/2020 SE208000.014	0407_TP025_0.1_20023 SOIL - 23/6/2020 SE208000.016	0407_TP025_0.5_20023 SOIL - 23/6/2020 SE208000.017	0407_TP032_0.1_20023 SOIL - 23/6/2020 SE208000.019
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP032_1.0_20023 SOIL - 23/6/2020 SE208000.020	0407_QC143_20062 SOIL - 23/6/2020 SE208000.022	0407_TP033_0.1_20023 SOIL - 23/6/2020 SE208000.023	0407_TP033_0.5_20023 SOIL - 23/6/2020 SE208000.024	0407_TP033_1.6_20023 SOIL - 23/6/2020 SE208000.025
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP033_2.6_20023 SOIL - 23/6/2020 SE208000.026	0407_TP033_3.6_20023 SOIL - 23/6/2020 SE208000.027	0407_TP033_4.6_20023 SOIL - 23/6/2020 SE208000.028	0407_TP033_5.6_20023 SOIL - 23/6/2020 SE208000.029	0407_TP033_6.0_20023 SOIL - 23/6/2020 SE208000.030
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP033_7.6_20023 SOIL - 23/6/2020 SE208000.031	0407_QC146_20062 SOIL - 23/6/2020 SE208000.032	0407_TP042_0.1_20023 SOIL - 23/6/2020 SE208000.035	0407_TP042_0.5_20023 SOIL - 23/6/2020 SE208000.036	0407_QC145_20062 SOIL - 23/6/2020 SE208000.037
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 1/7/2020

PARAMETER	UOM	LOR	0407_TP014_0.1_20023 SOIL - 23/6/2020 SE208000.001	0407_TP014_0.5_20023 SOIL - 23/6/2020 SE208000.002	0407_QC142_20062 SOIL - 23/6/2020 SE208000.004	0407_TP015_0.1_20023 SOIL - 23/6/2020 SE208000.005	0407_TP015_0.5_20023 SOIL - 23/6/2020 SE208000.006
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP016_0.1_20023 SOIL - 23/6/2020 SE208000.007	0407_TP016_1.0_20023 SOIL - 23/6/2020 SE208000.008	0407_QC140_20062 SOIL - 23/6/2020 SE208000.010	0407_TP024_0.1_20023 SOIL - 23/6/2020 SE208000.011	0407_TP024_1.0_20023 SOIL - 23/6/2020 SE208000.012
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP023_0.1_20023 SOIL - 23/6/2020 SE208000.013	0407_TP023_1.0_20023 SOIL - 23/6/2020 SE208000.014	0407_TP025_0.1_20023 SOIL - 23/6/2020 SE208000.016	0407_TP025_0.5_20023 SOIL - 23/6/2020 SE208000.017	0407_TP032_0.1_20023 SOIL - 23/6/2020 SE208000.019
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP032_1.0_20023 SOIL - 23/6/2020 SE208000.020	0407_QC143_20062 SOIL - 23/6/2020 SE208000.022	0407_TP033_0.1_20023 SOIL - 23/6/2020 SE208000.023	0407_TP033_0.5_20023 SOIL - 23/6/2020 SE208000.024	0407_TP033_1.6_20023 SOIL - 23/6/2020 SE208000.025
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP033_2.6_20023 SOIL - 23/6/2020 SE208000.026	0407_TP033_3.6_20023 SOIL - 23/6/2020 SE208000.027	0407_TP033_4.6_20023 SOIL - 23/6/2020 SE208000.028	0407_TP033_5.6_20023 SOIL - 23/6/2020 SE208000.029	0407_TP033_6.0_20023 SOIL - 23/6/2020 SE208000.030
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP033_7.6_20023 SOIL - 23/6/2020 SE208000.031	0407_QC146_20062 SOIL - 23/6/2020 SE208000.032	0407_TP042_0.1_20023 SOIL - 23/6/2020 SE208000.035	0407_TP042_0.5_20023 SOIL - 23/6/2020 SE208000.036	0407_QC145_20062 SOIL - 23/6/2020 SE208000.037
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 1/7/2020

PARAMETER	UOM	LOR	0407_TP014_0.1_20023 SOIL - 23/6/2020 SE208000.001	0407_TP014_0.5_20023 SOIL - 23/6/2020 SE208000.002	0407_QC142_20062 SOIL - 23/6/2020 SE208000.004	0407_TP015_0.1_20023 SOIL - 23/6/2020 SE208000.005	0407_TP015_0.5_20023 SOIL - 23/6/2020 SE208000.006
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	**0.2**	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	**0.2**	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PARAMETER	UOM	LOR	0407_TP016_0.1_20023 SOIL - 23/6/2020 SE208000.007	0407_TP016_1.0_20023 SOIL - 23/6/2020 SE208000.008	0407_QC140_20062 SOIL - 23/6/2020 SE208000.010	0407_TP024_0.1_20023 SOIL - 23/6/2020 SE208000.011	0407_TP024_1.0_20023 SOIL - 23/6/2020 SE208000.012
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP023_0.1_20023 SOIL - 23/6/2020 SE208000.013	0407_TP023_1.0_20023 SOIL - 23/6/2020 SE208000.014	0407_TP025_0.1_20023 SOIL - 23/6/2020 SE208000.016	0407_TP025_0.5_20023 SOIL - 23/6/2020 SE208000.017	0407_TP032_0.1_20023 SOIL - 23/6/2020 SE208000.019
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PARAMETER	UOM	LOR	0407_TP032_1.0_20023 SOIL - 23/6/2020 SE208000.020	0407_QC143_20062 SOIL - 23/6/2020 SE208000.022	0407_TP033_0.1_20023 SOIL - 23/6/2020 SE208000.023	0407_TP033_0.5_20023 SOIL - 23/6/2020 SE208000.024	0407_QC146_20062 SOIL - 23/6/2020 SE208000.032
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP041_0.1_2023 SOIL - 23/6/2020 SE208000.033	0407_TP041_1.0_2023 SOIL - 23/6/2020 SE208000.034
Naphthalene	mg/kg	0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	**0.1**	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8

Speciated Phenols in Soil [AN420] Tested: 1/7/2020

PARAMETER	UOM	LOR	0407_TP014_0.1_20023 SOIL - 23/6/2020 SE208000.001	0407_TP014_0.5_20023 SOIL - 23/6/2020 SE208000.002	0407_QC142_20062 SOIL - 23/6/2020 SE208000.004	0407_TP015_0.1_20023 SOIL - 23/6/2020 SE208000.005	0407_TP015_0.5_20023 SOIL - 23/6/2020 SE208000.006
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_TP016_0.1_20023 SOIL - 23/6/2020 SE208000.007	0407_TP016_1.0_20023 SOIL - 23/6/2020 SE208000.008	0407_QC140_20062 SOIL - 23/6/2020 SE208000.010	0407_TP024_0.1_20023 SOIL - 23/6/2020 SE208000.011	0407_TP024_1.0_20023 SOIL - 23/6/2020 SE208000.012
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

Speciated Phenols in Soil [AN420] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP023_0.1_20023 SOIL - 23/6/2020 SE208000.013	0407_TP023_1.0_20023 SOIL - 23/6/2020 SE208000.014	0407_TP025_0.1_20023 SOIL - 23/6/2020 SE208000.016	0407_TP025_0.5_20023 SOIL - 23/6/2020 SE208000.017	0407_TP032_0.1_20023 SOIL - 23/6/2020 SE208000.019
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_TP032_1.0_20023 SOIL - 23/6/2020 SE208000.020	0407_QC143_200623 SOIL - 23/6/2020 SE208000.022	0407_TP033_0.1_20023 SOIL - 23/6/2020 SE208000.023	0407_TP033_0.5_20023 SOIL - 23/6/2020 SE208000.024	0407_QC146_20062 SOIL - 23/6/2020 SE208000.032
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

OC Pesticides in Soil [AN420] Tested: 1/7/2020

PARAMETER	UOM	LOR	0407_TP014_0.1_20023 SOIL - 23/6/2020 SE208000.001	0407_TP014_0.5_20023 SOIL - 23/6/2020 SE208000.002	0407_QC142_20062 SOIL - 23/6/2020 SE208000.004	0407_TP015_0.1_20023 SOIL - 23/6/2020 SE208000.005	0407_TP015_0.5_20023 SOIL - 23/6/2020 SE208000.006
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	-	-
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	-	-
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	-	-
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	-	-
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	-	-

OC Pesticides in Soil [AN420] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP016_0.1_200 23 SOIL - 23/6/2020 SE208000.007	0407_TP016_1.0_200 23 SOIL - 23/6/2020 SE208000.008	0407_QC140_20062 SOIL - 23/6/2020 SE208000.010	0407_TP024_0.1_200 23 SOIL - 23/6/2020 SE208000.011	0407_TP024_1.0_200 23 SOIL - 23/6/2020 SE208000.012
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	-	-
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	-	-
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	-	-
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	-	-
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	-	-

OC Pesticides in Soil [AN420] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP023_0.1_20023 SOIL - 23/6/2020 SE208000.013	0407_TP023_1.0_20023 SOIL - 23/6/2020 SE208000.014	0407_TP025_0.1_20023 SOIL - 23/6/2020 SE208000.016	0407_TP025_0.5_20023 SOIL - 23/6/2020 SE208000.017	0407_TP032_0.1_20023 SOIL - 23/6/2020 SE208000.019
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP032_1.0_20023 SOIL - 23/6/2020 SE208000.020	0407_QC143_20062 SOIL - 23/6/2020 SE208000.022	0407_TP033_0.1_20023 SOIL - 23/6/2020 SE208000.023	0407_TP033_0.5_20023 SOIL - 23/6/2020 SE208000.024	0407_TP033_1.6_20023 SOIL - 23/6/2020 SE208000.025
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	-
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	-
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	-
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	-
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	-

OC Pesticides in Soil [AN420] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP033_2.6_2000 23 SOIL - 23/6/2020 SE208000.026	0407_TP033_3.6_2000 23 SOIL - 23/6/2020 SE208000.027	0407_TP033_4.6_2000 23 SOIL - 23/6/2020 SE208000.028	0407_TP033_5.6_2000 23 SOIL - 23/6/2020 SE208000.029	0407_TP033_6.0_2000 23 SOIL - 23/6/2020 SE208000.030
Hexachlorobenzene (HCB)	mg/kg	0.1	-	-	-	-	-
Alpha BHC	mg/kg	0.1	-	-	-	-	-
Lindane	mg/kg	0.1	-	-	-	-	-
Heptachlor	mg/kg	0.1	-	-	-	-	-
Aldrin	mg/kg	0.1	-	-	-	-	-
Beta BHC	mg/kg	0.1	-	-	-	-	-
Delta BHC	mg/kg	0.1	-	-	-	-	-
Heptachlor epoxide	mg/kg	0.1	-	-	-	-	-
o,p'-DDE	mg/kg	0.1	-	-	-	-	-
Alpha Endosulfan	mg/kg	0.2	-	-	-	-	-
Gamma Chlordane	mg/kg	0.1	-	-	-	-	-
Alpha Chlordane	mg/kg	0.1	-	-	-	-	-
trans-Nonachlor	mg/kg	0.1	-	-	-	-	-
p,p'-DDE	mg/kg	0.1	-	-	-	-	-
Dieldrin	mg/kg	0.2	-	-	-	-	-
Endrin	mg/kg	0.2	-	-	-	-	-
o,p'-DDD	mg/kg	0.1	-	-	-	-	-
o,p'-DDT	mg/kg	0.1	-	-	-	-	-
Beta Endosulfan	mg/kg	0.2	-	-	-	-	-
p,p'-DDD	mg/kg	0.1	-	-	-	-	-
p,p'-DDT	mg/kg	0.1	-	-	-	-	-
Endosulfan sulphate	mg/kg	0.1	-	-	-	-	-
Endrin Aldehyde	mg/kg	0.1	-	-	-	-	-
Methoxychlor	mg/kg	0.1	-	-	-	-	-
Endrin Ketone	mg/kg	0.1	-	-	-	-	-
Isodrin	mg/kg	0.1	-	-	-	-	-
Mirex	mg/kg	0.1	-	-	-	-	-
Total CLP OC Pesticides	mg/kg	1	-	-	-	-	-

OC Pesticides in Soil [AN420] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP033_7.6_20023 SOIL - 23/6/2020 SE208000.031	0407_QC146_200623 SOIL - 23/6/2020 SE208000.032	0407_TP041_0.1_20023 SOIL - 23/6/2020 SE208000.033	0407_TP041_1.0_20023 SOIL - 23/6/2020 SE208000.034	0407_TP042_0.1_20023 SOIL - 23/6/2020 SE208000.035
Hexachlorobenzene (HCB)	mg/kg	0.1	-	<0.1	-	-	-
Alpha BHC	mg/kg	0.1	-	<0.1	-	-	-
Lindane	mg/kg	0.1	-	<0.1	-	-	-
Heptachlor	mg/kg	0.1	-	<0.1	-	-	-
Aldrin	mg/kg	0.1	-	<0.1	-	-	-
Beta BHC	mg/kg	0.1	-	<0.1	-	-	-
Delta BHC	mg/kg	0.1	-	<0.1	-	-	-
Heptachlor epoxide	mg/kg	0.1	-	<0.1	-	-	-
o,p'-DDE	mg/kg	0.1	-	<0.1	-	-	-
Alpha Endosulfan	mg/kg	0.2	-	<0.2	-	-	-
Gamma Chlordane	mg/kg	0.1	-	<0.1	-	-	-
Alpha Chlordane	mg/kg	0.1	-	<0.1	-	-	-
trans-Nonachlor	mg/kg	0.1	-	<0.1	-	-	-
p,p'-DDE	mg/kg	0.1	-	<0.1	-	-	-
Dieldrin	mg/kg	0.2	-	<0.2	-	-	-
Endrin	mg/kg	0.2	-	<0.2	-	-	-
o,p'-DDD	mg/kg	0.1	-	<0.1	-	-	-
o,p'-DDT	mg/kg	0.1	-	<0.1	-	-	-
Beta Endosulfan	mg/kg	0.2	-	<0.2	-	-	-
p,p'-DDD	mg/kg	0.1	-	<0.1	-	-	-
p,p'-DDT	mg/kg	0.1	-	<0.1	-	-	-
Endosulfan sulphate	mg/kg	0.1	-	<0.1	-	-	-
Endrin Aldehyde	mg/kg	0.1	-	<0.1	-	-	-
Methoxychlor	mg/kg	0.1	-	<0.1	-	-	-
Endrin Ketone	mg/kg	0.1	-	<0.1	-	-	-
Isodrin	mg/kg	0.1	-	<0.1	-	-	-
Mirex	mg/kg	0.1	-	<0.1	-	-	-
Total CLP OC Pesticides	mg/kg	1	-	<1	-	-	-

OC Pesticides in Soil [AN420] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP042_0.5_20023 SOIL - 23/6/2020 SE208000.036	0407_QC145_20062 SOIL - 23/6/2020 SE208000.037
Hexachlorobenzene (HCB)	mg/kg	0.1	-	-
Alpha BHC	mg/kg	0.1	-	-
Lindane	mg/kg	0.1	-	-
Heptachlor	mg/kg	0.1	-	-
Aldrin	mg/kg	0.1	-	-
Beta BHC	mg/kg	0.1	-	-
Delta BHC	mg/kg	0.1	-	-
Heptachlor epoxide	mg/kg	0.1	-	-
o,p'-DDE	mg/kg	0.1	-	-
Alpha Endosulfan	mg/kg	0.2	-	-
Gamma Chlordane	mg/kg	0.1	-	-
Alpha Chlordane	mg/kg	0.1	-	-
trans-Nonachlor	mg/kg	0.1	-	-
p,p'-DDE	mg/kg	0.1	-	-
Dieldrin	mg/kg	0.2	-	-
Endrin	mg/kg	0.2	-	-
o,p'-DDD	mg/kg	0.1	-	-
o,p'-DDT	mg/kg	0.1	-	-
Beta Endosulfan	mg/kg	0.2	-	-
p,p'-DDD	mg/kg	0.1	-	-
p,p'-DDT	mg/kg	0.1	-	-
Endosulfan sulphate	mg/kg	0.1	-	-
Endrin Aldehyde	mg/kg	0.1	-	-
Methoxychlor	mg/kg	0.1	-	-
Endrin Ketone	mg/kg	0.1	-	-
Isodrin	mg/kg	0.1	-	-
Mirex	mg/kg	0.1	-	-
Total CLP OC Pesticides	mg/kg	1	-	-

OP Pesticides in Soil [AN420] Tested: 1/7/2020

PARAMETER	UOM	LOR	0407_TP014_0.1_20023 SOIL - 23/6/2020 SE208000.001	0407_TP014_0.5_20023 SOIL - 23/6/2020 SE208000.002	0407_QC142_20062 SOIL - 23/6/2020 SE208000.004	0407_TP016_0.1_20023 SOIL - 23/6/2020 SE208000.007	0407_TP016_1.0_20023 SOIL - 23/6/2020 SE208000.008
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_QC140_20062 SOIL - 23/6/2020 SE208000.010	0407_TP023_0.1_20023 SOIL - 23/6/2020 SE208000.013	0407_TP023_1.0_20023 SOIL - 23/6/2020 SE208000.014	0407_TP025_0.1_20023 SOIL - 23/6/2020 SE208000.016	0407_TP025_0.5_20023 SOIL - 23/6/2020 SE208000.017
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP032_0.1_20023 SOIL - 23/6/2020 SE208000.019	0407_TP032_1.0_20023 SOIL - 23/6/2020 SE208000.020	0407_QC143_20062 SOIL - 23/6/2020 SE208000.022	0407_TP033_0.1_20023 SOIL - 23/6/2020 SE208000.023	0407_TP033_0.5_20023 SOIL - 23/6/2020 SE208000.024
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

OP Pesticides in Soil [AN420] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_QC146_20062 SOIL - 23/6/2020 SE208000.032
Dichlorvos	mg/kg	0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2
Malathion	mg/kg	0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2
Methidathion	mg/kg	0.5	<0.5
Ethion	mg/kg	0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7

PCBs in Soil [AN420] Tested: 1/7/2020

PARAMETER	UOM	LOR	0407_TP014_0.1_20023 SOIL - 23/6/2020 SE208000.001	0407_TP014_0.5_20023 SOIL - 23/6/2020 SE208000.002	0407_QC142_20062 SOIL - 23/6/2020 SE208000.004	0407_TP015_0.1_20023 SOIL - 23/6/2020 SE208000.005	0407_TP015_0.5_20023 SOIL - 23/6/2020 SE208000.006
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	-	-
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	-	-
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	-	-
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	-	-
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	-	-
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	-	-
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	-	-
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	-	-
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	-	-
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	-	-

PARAMETER	UOM	LOR	0407_TP016_0.1_20023 SOIL - 23/6/2020 SE208000.007	0407_TP016_1.0_20023 SOIL - 23/6/2020 SE208000.008	0407_QC140_20062 SOIL - 23/6/2020 SE208000.010	0407_TP024_0.1_20023 SOIL - 23/6/2020 SE208000.011	0407_TP024_1.0_20023 SOIL - 23/6/2020 SE208000.012
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	-	-
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	-	-
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	-	-
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	-	-
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	-	-
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	-	-
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	-	-
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	-	-
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	-	-
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	-	-

PARAMETER	UOM	LOR	0407_TP023_0.1_20023 SOIL - 23/6/2020 SE208000.013	0407_TP023_1.0_20023 SOIL - 23/6/2020 SE208000.014	0407_TP025_0.1_20023 SOIL - 23/6/2020 SE208000.016	0407_TP025_0.5_20023 SOIL - 23/6/2020 SE208000.017	0407_TP032_0.1_20023 SOIL - 23/6/2020 SE208000.019
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PCBs in Soil [AN420] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP032_1.0_20023 SOIL - 23/6/2020 SE208000.020	0407_QC143_20062 SOIL - 23/6/2020 SE208000.022	0407_TP033_0.1_20023 SOIL - 23/6/2020 SE208000.023	0407_TP033_0.5_20023 SOIL - 23/6/2020 SE208000.024	0407_TP033_1.6_20023 SOIL - 23/6/2020 SE208000.025
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	-
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	-
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	-
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	-
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	-
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	-
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	-
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	-
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	-
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	-

PARAMETER	UOM	LOR	0407_TP033_2.6_20023 SOIL - 23/6/2020 SE208000.026	0407_TP033_3.6_20023 SOIL - 23/6/2020 SE208000.027	0407_TP033_4.6_20023 SOIL - 23/6/2020 SE208000.028	0407_TP033_5.6_20023 SOIL - 23/6/2020 SE208000.029	0407_TP033_6.0_20023 SOIL - 23/6/2020 SE208000.030
Arochlor 1016	mg/kg	0.2	-	-	-	-	-
Arochlor 1221	mg/kg	0.2	-	-	-	-	-
Arochlor 1232	mg/kg	0.2	-	-	-	-	-
Arochlor 1242	mg/kg	0.2	-	-	-	-	-
Arochlor 1248	mg/kg	0.2	-	-	-	-	-
Arochlor 1254	mg/kg	0.2	-	-	-	-	-
Arochlor 1260	mg/kg	0.2	-	-	-	-	-
Arochlor 1262	mg/kg	0.2	-	-	-	-	-
Arochlor 1268	mg/kg	0.2	-	-	-	-	-
Total PCBs (Arochlors)	mg/kg	1	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP033_7.6_20023 SOIL - 23/6/2020 SE208000.031	0407_QC146_20062 SOIL - 23/6/2020 SE208000.032	0407_TP041_0.1_20023 SOIL - 23/6/2020 SE208000.033	0407_TP041_1.0_20023 SOIL - 23/6/2020 SE208000.034	0407_TP042_0.1_20023 SOIL - 23/6/2020 SE208000.035
Arochlor 1016	mg/kg	0.2	-	<0.2	-	-	<0.2
Arochlor 1221	mg/kg	0.2	-	<0.2	-	-	<0.2
Arochlor 1232	mg/kg	0.2	-	<0.2	-	-	<0.2
Arochlor 1242	mg/kg	0.2	-	<0.2	-	-	<0.2
Arochlor 1248	mg/kg	0.2	-	<0.2	-	-	<0.2
Arochlor 1254	mg/kg	0.2	-	<0.2	-	-	<0.2
Arochlor 1260	mg/kg	0.2	-	<0.2	-	-	<0.2
Arochlor 1262	mg/kg	0.2	-	<0.2	-	-	<0.2
Arochlor 1268	mg/kg	0.2	-	<0.2	-	-	<0.2
Total PCBs (Arochlors)	mg/kg	1	-	<1	-	-	<1

PCBs in Soil [AN420] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP042_0.5_20023 SOIL - 23/6/2020 SE208000.036	0407_QC145_20062 SOIL - 23/6/2020 SE208000.037
Arochlor 1016	mg/kg	0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 1/7/2020

PARAMETER	UOM	LOR	0407_TP014_0.1_20023 SOIL - 23/6/2020 SE208000.001	0407_TP014_0.5_20023 SOIL - 23/6/2020 SE208000.002	0407_QC142_20062 SOIL - 23/6/2020 SE208000.004	0407_TP015_0.1_20023 SOIL - 23/6/2020 SE208000.005	0407_TP015_0.5_20023 SOIL - 23/6/2020 SE208000.006
Arsenic, As	mg/kg	1	<1	<1	<1	-	-
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	-	-
Chromium, Cr	mg/kg	0.5	<0.5	<0.5	<0.5	-	-
Copper, Cu	mg/kg	0.5	1.2	2.9	1.3	-	-
Lead, Pb	mg/kg	1	3	7	3	1	1
Nickel, Ni	mg/kg	0.5	<0.5	<0.5	<0.5	-	-
Zinc, Zn	mg/kg	2	3.5	5.2	3.8	-	-
Beryllium, Be	mg/kg	0.5	-	-	-	-	-
Boron, B	mg/kg	5	-	-	-	-	-
Cobalt, Co	mg/kg	0.5	-	-	-	-	-
Manganese, Mn	mg/kg	1	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP016_0.1_20023 SOIL - 23/6/2020 SE208000.007	0407_TP016_1.0_20023 SOIL - 23/6/2020 SE208000.008	0407_QC140_20062 SOIL - 23/6/2020 SE208000.010	0407_TP024_0.1_20023 SOIL - 23/6/2020 SE208000.011	0407_TP024_1.0_20023 SOIL - 23/6/2020 SE208000.012
Arsenic, As	mg/kg	1	<1	<1	<1	-	-
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	-	-
Chromium, Cr	mg/kg	0.5	0.9	3.1	<0.5	-	-
Copper, Cu	mg/kg	0.5	<0.5	<0.5	<0.5	-	-
Lead, Pb	mg/kg	1	<1	2	<1	3	1
Nickel, Ni	mg/kg	0.5	<0.5	0.6	<0.5	-	-
Zinc, Zn	mg/kg	2	<2.0	<2.0	<2.0	-	-
Beryllium, Be	mg/kg	0.5	-	-	-	-	-
Boron, B	mg/kg	5	-	-	-	-	-
Cobalt, Co	mg/kg	0.5	-	-	-	-	-
Manganese, Mn	mg/kg	1	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP023_0.1_20023 SOIL - 23/6/2020 SE208000.013	0407_TP023_1.0_20023 SOIL - 23/6/2020 SE208000.014	0407_TP025_0.1_20023 SOIL - 23/6/2020 SE208000.016	0407_TP025_0.5_20023 SOIL - 23/6/2020 SE208000.017	0407_TP032_0.1_20023 SOIL - 23/6/2020 SE208000.019
Arsenic, As	mg/kg	1	<1	<1	<1	<1	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	<0.5	3.0	<0.5	<0.5	0.7
Copper, Cu	mg/kg	0.5	1.4	<0.5	2.0	<0.5	1.3
Lead, Pb	mg/kg	1	3	1	5	<1	2
Nickel, Ni	mg/kg	0.5	<0.5	0.8	<0.5	<0.5	4.8
Zinc, Zn	mg/kg	2	4.5	<2.0	4.9	<2.0	3.9
Beryllium, Be	mg/kg	0.5	-	-	-	-	-
Boron, B	mg/kg	5	-	-	-	-	-
Cobalt, Co	mg/kg	0.5	-	-	-	-	-
Manganese, Mn	mg/kg	1	-	-	-	-	-

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP032_1.0_20023 SOIL - 23/6/2020 SE208000.020	0407_QC143_200623 SOIL - 23/6/2020 SE208000.022	0407_TP033_0.1_20023 SOIL - 23/6/2020 SE208000.023	0407_TP033_0.5_20023 SOIL - 23/6/2020 SE208000.024	0407_QC146_20062 SOIL - 23/6/2020 SE208000.032
Arsenic, As	mg/kg	1	<1	<1	<1	<1	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Copper, Cu	mg/kg	0.5	1.4	0.8	0.9	<0.5	0.7
Lead, Pb	mg/kg	1	3	2	2	<1	2
Nickel, Ni	mg/kg	0.5	<0.5	2.3	1.2	<0.5	<0.5
Zinc, Zn	mg/kg	2	7.8	2.5	3.1	<2.0	2.6
Beryllium, Be	mg/kg	0.5	-	-	-	-	-
Boron, B	mg/kg	5	-	-	-	-	-
Cobalt, Co	mg/kg	0.5	-	-	-	-	-
Manganese, Mn	mg/kg	1	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP041_0.1_20023 SOIL - 23/6/2020 SE208000.033	0407_TP041_1.0_20023 SOIL - 23/6/2020 SE208000.034	0407_TP042_0.1_20023 SOIL - 23/6/2020 SE208000.035	0407_TP042_0.5_20023 SOIL - 23/6/2020 SE208000.036	0407_QC145_20062 SOIL - 23/6/2020 SE208000.037
Arsenic, As	mg/kg	1	<1	<1	<1	<1	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	<0.5	<0.5	2.9	0.7	1.0
Copper, Cu	mg/kg	0.5	3.0	2.4	6.7	1.5	1.4
Lead, Pb	mg/kg	1	7	5	7	3	3
Nickel, Ni	mg/kg	0.5	0.6	<0.5	1.3	<0.5	<0.5
Zinc, Zn	mg/kg	2	7.2	9.1	7.2	2.9	3.1
Beryllium, Be	mg/kg	0.5	<0.5	<0.5	-	-	-
Boron, B	mg/kg	5	<5	<5	-	-	-
Cobalt, Co	mg/kg	0.5	<0.5	<0.5	-	-	-
Manganese, Mn	mg/kg	1	13	16	-	-	-

Mercury in Soil [AN312] Tested: 1/7/2020

PARAMETER	UOM	LOR	0407_TP014_0.1_20023 SOIL - 23/6/2020 SE208000.001	0407_TP014_0.5_20023 SOIL - 23/6/2020 SE208000.002	0407_QC142_20062 SOIL - 23/6/2020 SE208000.004	0407_TP016_0.1_20023 SOIL - 23/6/2020 SE208000.007	0407_TP016_1.0_20023 SOIL - 23/6/2020 SE208000.008
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_QC140_20062 SOIL - 23/6/2020 SE208000.010	0407_TP023_0.1_20023 SOIL - 23/6/2020 SE208000.013	0407_TP023_1.0_20023 SOIL - 23/6/2020 SE208000.014	0407_TP025_0.1_20023 SOIL - 23/6/2020 SE208000.016	0407_TP025_0.5_20023 SOIL - 23/6/2020 SE208000.017
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_TP032_0.1_20023 SOIL - 23/6/2020 SE208000.019	0407_TP032_1.0_20023 SOIL - 23/6/2020 SE208000.020	0407_QC143_20062 SOIL - 23/6/2020 SE208000.022	0407_TP033_0.1_20023 SOIL - 23/6/2020 SE208000.023	0407_TP033_0.5_20023 SOIL - 23/6/2020 SE208000.024
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_QC146_20062 SOIL - 23/6/2020 SE208000.032	0407_TP041_0.1_20023 SOIL - 23/6/2020 SE208000.033	0407_TP041_1.0_20023 SOIL - 23/6/2020 SE208000.034	0407_TP042_0.1_20023 SOIL - 23/6/2020 SE208000.035	0407_TP042_0.5_20023 SOIL - 23/6/2020 SE208000.036
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_QC145_20062 SOIL - 23/6/2020 SE208000.037
Mercury	mg/kg	0.05	<0.05

Moisture Content [AN002] Tested: 1/7/2020

PARAMETER	UOM	LOR	0407_TP014_0.1_20023 SOIL - 23/6/2020 SE208000.001	0407_TP014_0.5_20023 SOIL - 23/6/2020 SE208000.002	0407_QC142_20062 SOIL - 23/6/2020 SE208000.004	0407_TP015_0.1_20023 SOIL - 23/6/2020 SE208000.005	0407_TP015_0.5_20023 SOIL - 23/6/2020 SE208000.006
% Moisture	%w/w	1	11.7	12.3	17.1	20.2	5.1

PARAMETER	UOM	LOR	0407_TP016_0.1_20023 SOIL - 23/6/2020 SE208000.007	0407_TP016_1.0_20023 SOIL - 23/6/2020 SE208000.008	0407_QC140_20062 SOIL - 23/6/2020 SE208000.010	0407_TP024_0.1_20023 SOIL - 23/6/2020 SE208000.011	0407_TP024_1.0_20023 SOIL - 23/6/2020 SE208000.012
% Moisture	%w/w	1	1.2	20.0	1.4	3.1	3.0

PARAMETER	UOM	LOR	0407_TP023_0.1_20023 SOIL - 23/6/2020 SE208000.013	0407_TP023_1.0_20023 SOIL - 23/6/2020 SE208000.014	0407_TP025_0.1_20023 SOIL - 23/6/2020 SE208000.016	0407_TP025_0.5_20023 SOIL - 23/6/2020 SE208000.017	0407_TP032_0.1_20023 SOIL - 23/6/2020 SE208000.019
% Moisture	%w/w	1	4.4	4.6	2.9	3.5	9.5

PARAMETER	UOM	LOR	0407_TP032_1.0_20023 SOIL - 23/6/2020 SE208000.020	0407_QC143_20062 SOIL - 23/6/2020 SE208000.022	0407_TP033_0.1_20023 SOIL - 23/6/2020 SE208000.023	0407_TP033_0.5_20023 SOIL - 23/6/2020 SE208000.024	0407_TP033_1.6_20023 SOIL - 23/6/2020 SE208000.025
% Moisture	%w/w	1	6.2	8.0	3.7	3.7	2.3

PARAMETER	UOM	LOR	0407_TP033_2.6_20023 SOIL - 23/6/2020 SE208000.026	0407_TP033_3.6_20023 SOIL - 23/6/2020 SE208000.027	0407_TP033_4.6_20023 SOIL - 23/6/2020 SE208000.028	0407_TP033_5.6_20023 SOIL - 23/6/2020 SE208000.029	0407_TP033_6.0_20023 SOIL - 23/6/2020 SE208000.030
% Moisture	%w/w	1	3.7	<1.0	1.6	14.1	2.2

PARAMETER	UOM	LOR	0407_TP033_7.6_20023 SOIL - 23/6/2020 SE208000.031	0407_QC146_20062 SOIL - 23/6/2020 SE208000.032	0407_TP041_0.1_20023 SOIL - 23/6/2020 SE208000.033	0407_TP041_1.0_20023 SOIL - 23/6/2020 SE208000.034	0407_TP042_0.1_20023 SOIL - 23/6/2020 SE208000.035
% Moisture	%w/w	1	8.1	3.5	5.8	4.2	4.0

PARAMETER	UOM	LOR	0407_TP042_0.5_20023 SOIL - 23/6/2020 SE208000.036	0407_QC145_20062 SOIL - 23/6/2020 SE208000.037
% Moisture	%w/w	1	3.7	3.9

Fibre Identification in soil [AN602] Tested: 3/7/2020

PARAMETER	UOM	LOR	0407_TP014_0.1-0.2_00623 SOIL - 23/6/2020 SE208000.003	0407_TP016_0.1-0.2_00623 SOIL - 23/6/2020 SE208000.009	0407_TP023_0.1-0.2_00623 SOIL - 23/6/2020 SE208000.015	0407_TP025_0.1-0.2_00623 SOIL - 23/6/2020 SE208000.018	0407_TP032_0.1-0.2_00623 SOIL - 23/6/2020 SE208000.021
Asbestos Detected	No unit	-	No	No	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	0407_TP033_0.1-0.2_00623 SOIL - 23/6/2020 SE208000.038
Asbestos Detected	No unit	-	No
Estimated Fibres*	%w/w	0.01	<0.01

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 3/7/2020

PARAMETER	UOM	LOR	0407_TP014_0.1-0.2_00623 SOIL - 23/6/2020 SE208000.003	0407_TP016_0.1-0.2_00623 SOIL - 23/6/2020 SE208000.009	0407_TP023_0.1-0.2_00623 SOIL - 23/6/2020 SE208000.015	0407_TP025_0.1-0.2_00623 SOIL - 23/6/2020 SE208000.018	0407_TP032_0.1-0.2_00623 SOIL - 23/6/2020 SE208000.021
Total Sample Weight*	g	1	**868**	**1121**	**1096**	**1031**	**1018**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP033_0.1-0.2_00623 SOIL - 23/6/2020 SE208000.038
Total Sample Weight*	g	1	**1137**
Bonded ACM in >7mm Sample*	g	0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001
Fibre Type*	No unit	-	-

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid , mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser . Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents .
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken . This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup /fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS /ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples, Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."

AN602	The sample can be reported "no asbestos found at the reporting limit of 0.1 g/kg" (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no 'respirable' fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.
AN605	This technique gravimetrically determines the mass of Bonded Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight. Any fibrous asbestos (FA) found in this fraction will be added to the 2-7mm fraction and its mass recorded there.
AN605	This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free/respirable fibres which are only observed by standard trace analysis as per AN602.
AN605	Bonded asbestos containing material (Bonded ACM) comprises asbestos-containing-material which is sound in condition. Fibrous asbestos (FA) comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material. Asbestos fines (AF) includes free fibres, small fibre bundles and also small fragments of bonded ACM that passes through a 7mm sieve - which implies that the bonded ACM fragments have a substantial degree of damage which increases the potential for fibre release.
AN-605	Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009 and NEPM 1999 (2013) schedule B1 section 4..

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
**	Indicative data, theoretical holding time exceeded.	NVL	Not validated.	LOR	Limit of Reporting.
		IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	6

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208000 R0**
Date Received	23 Jun 2020
Date Reported	09 Jul 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.

Asbestos analysed by Approved Identifier Ravee Sivasubramaniam .

SIGNATORIES

[redacted]

Chemist Senior Organic Chemist/Metals Chemis Organic Section Head

[redacted]

Hygiene Team Leader

RESULTS

Fibre Identification in soil — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE208000.003	0407_TP014_0.1 -0.2_200623	Soil	868g Sand	23 Jun 2020	No Asbestos Found	<0.01
SE208000.009	0407_TP016_0.1 -0.2_200623	Soil	1121g Sand	23 Jun 2020	No Asbestos Found	<0.01
SE208000.015	0407_TP023_0.1 -0.2_200623	Soil	1096g Sand,Soil	23 Jun 2020	No Asbestos Found	<0.01
SE208000.018	0407_TP025_0.1 -0.2_200623	Soil	1031g Sand	23 Jun 2020	No Asbestos Found	<0.01
SE208000.021	0407_TP032_0.1 -0.2_200623	Soil	1018g Sand	23 Jun 2020	No Asbestos Found	<0.01
SE208000.038	0407_TP033_0.1 -0.2_200623	Soil	1137g Sand	23 Jun 2020	No Asbestos Found	<0.01

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 3/7/2020

PARAMETER	UOM	LOR	0407_TP014_0.1-0.2_200623 SOIL - 23/6/2020 SE208000.003	0407_TP016_0.1-0.2_200623 SOIL - 23/6/2020 SE208000.009	0407_TP023_0.1-0.2_200623 SOIL - 23/6/2020 SE208000.015	0407_TP025_0.1-0.2_200623 SOIL - 23/6/2020 SE208000.018	0407_TP032_0.1-0.2_200623 SOIL - 23/6/2020 SE208000.021
Total Sample Weight*	g	1	**868**	**1121**	**1096**	**1031**	**1018**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP033_0.1-0.2_200623 SOIL - 23/6/2020 SE208000.038
Total Sample Weight*	g	1	**1137**
Bonded ACM in >7mm Sample*	g	0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001
Fibre Type*	No unit	-	-

METHOD SUMMARY

METHOD	METHODOLOGY SUMMARY
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples , Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable ’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.
AN605	This technique gravimetrically determines the mass of Bonded Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight. Any fibrous asbestos (FA) found in this fraction will be added to the 2-7mm fraction and its mass recorded there.
AN605	This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free/respirable fibres which are only observed by standard trace analysis as per AN602.
AN605	Bonded asbestos containing material (Bonded ACM) comprises asbestos-containing-material which is sound in condition. Fibrous asbestos (FA) comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material. Asbestos fines (AF) includes free fibres, small fibre bundles and also small fragments of bonded ACM that passes through a 7mm sieve - which implies that the bonded ACM fragments have a substantial degree of damage which increases the potential for fibre release.
AN-605	Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009 and NEPM 1999 (2013) schedule B1 section 4..

FOOTNOTES

Amosite	-	Brown Asbestos	NA	-	Not Analysed
Chrysotile	-	White Asbestos	LNR	-	Listed, Not Required
Crocidolite	-	Blue Asbestos	*	-	NATA accreditation does not cover the performance of this service.
Amphiboles	-	Amosite and/or Crocidolite	**	-	Indicative data, theoretical holding time exceeded.

(In reference to soil samples only) This report does not comply with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment and Remediation and Management of Asbestos Contaminated sites in Western Australia - May 2009.

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.

Where reported: 'Asbestos Detected': Asbestos detected by polarised light microscopy, including dispersion staining.
Where reported: 'No Asbestos Found': No Asbestos Found by polarised light microscopy, including dispersion staining.
Where reported: 'UMF Detected': Mineral fibres of unknown type detected by polarised light microscopy, including dispersion staining. Confirmation by another independent analytical technique may be necessary.

Even after disintegration it can be very difficult, or impossible, to detect the presence of asbestos in some asbestos-containing bulk materials using polarised light microscopy. This is due to the low grade or small length or diameter of asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE208000 R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	38

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
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Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208000 R0**
Date Received	23 Jun 2020
Date Reported	09 Jul 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met (within the SGS Alexandria Environmental laboratory).

SAMPLE SUMMARY

HOLDING TIME SUMMARY

SE208000 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

Fibre Identification in soil

Method: ME-(AU)-[ENV]AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP014_0.1-0.2_20062	SE208000.003	LB203453	23 Jun 2020	23 Jun 2020	23 Jun 2021	03 Jul 2020	23 Jun 2021	06 Jul 2020
0407_TP016_0.1-0.2_20062	SE208000.009	LB203453	23 Jun 2020	23 Jun 2020	23 Jun 2021	03 Jul 2020	23 Jun 2021	06 Jul 2020
0407_TP023_0.1-0.2_20062	SE208000.015	LB203453	23 Jun 2020	23 Jun 2020	23 Jun 2021	03 Jul 2020	23 Jun 2021	06 Jul 2020
0407_TP025_0.1-0.2_20062	SE208000.018	LB203453	23 Jun 2020	23 Jun 2020	23 Jun 2021	03 Jul 2020	23 Jun 2021	06 Jul 2020
0407_TP032_0.1-0.2_20062	SE208000.021	LB203453	23 Jun 2020	23 Jun 2020	23 Jun 2021	03 Jul 2020	23 Jun 2021	06 Jul 2020
0407_TP033_0.1-0.2_20062	SE208000.038	LB203453	23 Jun 2020	23 Jun 2020	23 Jun 2021	03 Jul 2020	23 Jun 2021	06 Jul 2020

Gravimetric Determination of Asbestos in Soil

Method: ME-(AU)-[ENV]AN605

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP014_0.1-0.2_20062	SE208000.003	LB203453	23 Jun 2020	23 Jun 2020	20 Dec 2020	03 Jul 2020	20 Dec 2020	06 Jul 2020
0407_TP016_0.1-0.2_20062	SE208000.009	LB203453	23 Jun 2020	23 Jun 2020	20 Dec 2020	03 Jul 2020	20 Dec 2020	06 Jul 2020
0407_TP023_0.1-0.2_20062	SE208000.015	LB203453	23 Jun 2020	23 Jun 2020	20 Dec 2020	03 Jul 2020	20 Dec 2020	06 Jul 2020
0407_TP025_0.1-0.2_20062	SE208000.018	LB203453	23 Jun 2020	23 Jun 2020	20 Dec 2020	03 Jul 2020	20 Dec 2020	06 Jul 2020
0407_TP032_0.1-0.2_20062	SE208000.021	LB203453	23 Jun 2020	23 Jun 2020	20 Dec 2020	03 Jul 2020	20 Dec 2020	06 Jul 2020
0407_TP033_0.1-0.2_20062	SE208000.038	LB203453	23 Jun 2020	23 Jun 2020	20 Dec 2020	03 Jul 2020	20 Dec 2020	06 Jul 2020

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP014_0.1_200623	SE208000.001	LB203242	23 Jun 2020	23 Jun 2020	21 Jul 2020	01 Jul 2020	21 Jul 2020	06 Jul 2020
0407_TP014_0.5_200623	SE208000.002	LB203242	23 Jun 2020	23 Jun 2020	21 Jul 2020	01 Jul 2020	21 Jul 2020	06 Jul 2020
0407_QC142_200623	SE208000.004	LB203242	23 Jun 2020	23 Jun 2020	21 Jul 2020	01 Jul 2020	21 Jul 2020	06 Jul 2020
0407_TP016_0.1_200623	SE208000.007	LB203242	23 Jun 2020	23 Jun 2020	21 Jul 2020	01 Jul 2020	21 Jul 2020	06 Jul 2020
0407_TP016_1.0_200623	SE208000.008	LB203242	23 Jun 2020	23 Jun 2020	21 Jul 2020	01 Jul 2020	21 Jul 2020	06 Jul 2020
0407_QC140_200623	SE208000.010	LB203242	23 Jun 2020	23 Jun 2020	21 Jul 2020	01 Jul 2020	21 Jul 2020	06 Jul 2020
0407_TP023_0.1_200623	SE208000.013	LB203242	23 Jun 2020	23 Jun 2020	21 Jul 2020	01 Jul 2020	21 Jul 2020	06 Jul 2020
0407_TP023_1.0_200623	SE208000.014	LB203242	23 Jun 2020	23 Jun 2020	21 Jul 2020	01 Jul 2020	21 Jul 2020	06 Jul 2020
0407_TP025_0.1_200623	SE208000.016	LB203242	23 Jun 2020	23 Jun 2020	21 Jul 2020	01 Jul 2020	21 Jul 2020	06 Jul 2020
0407_TP025_0.5_200623	SE208000.017	LB203242	23 Jun 2020	23 Jun 2020	21 Jul 2020	01 Jul 2020	21 Jul 2020	06 Jul 2020
0407_TP032_0.1_200623	SE208000.019	LB203242	23 Jun 2020	23 Jun 2020	21 Jul 2020	01 Jul 2020	21 Jul 2020	06 Jul 2020
0407_TP032_1.0_200623	SE208000.020	LB203242	23 Jun 2020	23 Jun 2020	21 Jul 2020	01 Jul 2020	21 Jul 2020	06 Jul 2020
0407_QC143_200623	SE208000.022	LB203242	23 Jun 2020	23 Jun 2020	21 Jul 2020	01 Jul 2020	21 Jul 2020	06 Jul 2020
0407_TP033_0.1_200623	SE208000.023	LB203242	23 Jun 2020	23 Jun 2020	21 Jul 2020	01 Jul 2020	21 Jul 2020	06 Jul 2020
0407_TP033_0.5_200623	SE208000.024	LB203292	23 Jun 2020	23 Jun 2020	21 Jul 2020	01 Jul 2020	21 Jul 2020	06 Jul 2020
0407_QC146_200623	SE208000.032	LB203292	23 Jun 2020	23 Jun 2020	21 Jul 2020	01 Jul 2020	21 Jul 2020	06 Jul 2020
0407_TP041_0.1_200623	SE208000.033	LB203292	23 Jun 2020	23 Jun 2020	21 Jul 2020	01 Jul 2020	21 Jul 2020	06 Jul 2020
0407_TP041_1.0_200623	SE208000.034	LB203292	23 Jun 2020	23 Jun 2020	21 Jul 2020	01 Jul 2020	21 Jul 2020	06 Jul 2020
0407_TP042_0.1_200623	SE208000.035	LB203292	23 Jun 2020	23 Jun 2020	21 Jul 2020	01 Jul 2020	21 Jul 2020	06 Jul 2020
0407_TP042_0.5_200623	SE208000.036	LB203292	23 Jun 2020	23 Jun 2020	21 Jul 2020	01 Jul 2020	21 Jul 2020	06 Jul 2020
0407_QC145_200623	SE208000.037	LB203292	23 Jun 2020	23 Jun 2020	21 Jul 2020	01 Jul 2020	21 Jul 2020	06 Jul 2020

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP014_0.1_200623	SE208000.001	LB203196	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	06 Jul 2020	06 Jul 2020
0407_TP014_0.5_200623	SE208000.002	LB203196	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	06 Jul 2020	06 Jul 2020
0407_QC142_200623	SE208000.004	LB203196	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	06 Jul 2020	06 Jul 2020
0407_TP015_0.1_200623	SE208000.005	LB203196	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	06 Jul 2020	06 Jul 2020
0407_TP015_0.5_200623	SE208000.006	LB203196	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	06 Jul 2020	06 Jul 2020
0407_TP016_0.1_200623	SE208000.007	LB203196	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	06 Jul 2020	06 Jul 2020
0407_TP016_1.0_200623	SE208000.008	LB203196	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	06 Jul 2020	06 Jul 2020
0407_QC140_200623	SE208000.010	LB203196	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	06 Jul 2020	06 Jul 2020
0407_TP024_0.1_200623	SE208000.011	LB203196	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	06 Jul 2020	06 Jul 2020
0407_TP024_1.0_200623	SE208000.012	LB203196	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	06 Jul 2020	06 Jul 2020
0407_TP023_0.1_200623	SE208000.013	LB203196	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	06 Jul 2020	06 Jul 2020
0407_TP023_1.0_200623	SE208000.014	LB203196	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	06 Jul 2020	06 Jul 2020
0407_TP025_0.1_200623	SE208000.016	LB203196	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	06 Jul 2020	06 Jul 2020
0407_TP025_0.5_200623	SE208000.017	LB203196	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	06 Jul 2020	06 Jul 2020
0407_TP032_0.1_200623	SE208000.019	LB203196	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	06 Jul 2020	06 Jul 2020
0407_TP032_1.0_200623	SE208000.020	LB203197	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	06 Jul 2020	06 Jul 2020
0407_QC143_200623	SE208000.022	LB203197	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	06 Jul 2020	06 Jul 2020
0407_TP033_0.1_200623	SE208000.023	LB203197	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	06 Jul 2020	06 Jul 2020
0407_TP033_0.5_200623	SE208000.024	LB203197	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	06 Jul 2020	06 Jul 2020

HOLDING TIME SUMMARY

SE208000 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

Moisture Content (continued)

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP033_1.6_200623	SE208000.025	LB203197	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	06 Jul 2020	06 Jul 2020
0407_TP033_2.6_200623	SE208000.026	LB203197	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	06 Jul 2020	06 Jul 2020
0407_TP033_3.6_200623	SE208000.027	LB203197	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	06 Jul 2020	06 Jul 2020
0407_TP033_4.6_200623	SE208000.028	LB203197	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	06 Jul 2020	06 Jul 2020
0407_TP033_5.6_200623	SE208000.029	LB203197	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	06 Jul 2020	06 Jul 2020
0407_TP033_6.0_200623	SE208000.030	LB203197	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	06 Jul 2020	06 Jul 2020
0407_TP033_7.6_200623	SE208000.031	LB203197	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	06 Jul 2020	06 Jul 2020
0407_QC146_200623	SE208000.032	LB203197	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	06 Jul 2020	06 Jul 2020
0407_TP041_0.1_200623	SE208000.033	LB203197	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	06 Jul 2020	06 Jul 2020
0407_TP041_1.0_200623	SE208000.034	LB203197	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	06 Jul 2020	06 Jul 2020
0407_TP042_0.1_200623	SE208000.035	LB203197	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	06 Jul 2020	06 Jul 2020
0407_TP042_0.5_200623	SE208000.036	LB203197	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	06 Jul 2020	06 Jul 2020
0407_QC145_200623	SE208000.037	LB203197	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	06 Jul 2020	06 Jul 2020

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP014_0.1_200623	SE208000.001	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP014_0.5_200623	SE208000.002	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_QC142_200623	SE208000.004	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP015_0.1_200623	SE208000.005	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP015_0.5_200623	SE208000.006	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP016_0.1_200623	SE208000.007	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP016_1.0_200623	SE208000.008	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_QC140_200623	SE208000.010	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP024_0.1_200623	SE208000.011	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP024_1.0_200623	SE208000.012	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP023_0.1_200623	SE208000.013	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP023_1.0_200623	SE208000.014	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP025_0.1_200623	SE208000.016	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP025_0.5_200623	SE208000.017	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP032_0.1_200623	SE208000.019	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP032_1.0_200623	SE208000.020	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_QC143_200623	SE208000.022	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP033_0.1_200623	SE208000.023	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP033_0.5_200623	SE208000.024	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP033_1.6_200623	SE208000.025	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP033_2.6_200623	SE208000.026	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP033_3.6_200623	SE208000.027	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP033_4.6_200623	SE208000.028	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP033_5.6_200623	SE208000.029	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP033_6.0_200623	SE208000.030	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP033_7.6_200623	SE208000.031	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_QC146_200623	SE208000.032	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP041_0.1_200623	SE208000.033	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP041_1.0_200623	SE208000.034	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP042_0.1_200623	SE208000.035	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP042_0.5_200623	SE208000.036	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_QC145_200623	SE208000.037	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP014_0.1_200623	SE208000.001	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP014_0.5_200623	SE208000.002	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_QC142_200623	SE208000.004	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP015_0.1_200623	SE208000.005	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP015_0.5_200623	SE208000.006	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP016_0.1_200623	SE208000.007	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP016_1.0_200623	SE208000.008	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_QC140_200623	SE208000.010	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP024_0.1_200623	SE208000.011	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP024_1.0_200623	SE208000.012	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020

HOLDING TIME SUMMARY

SE208000 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP023_0.1_200623	SE208000.013	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP023_1.0_200623	SE208000.014	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP025_0.1_200623	SE208000.016	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP025_0.5_200623	SE208000.017	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP032_0.1_200623	SE208000.019	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP032_1.0_200623	SE208000.020	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_QC143_200623	SE208000.022	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP033_0.1_200623	SE208000.023	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP033_0.5_200623	SE208000.024	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP033_1.6_200623	SE208000.025	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP033_2.6_200623	SE208000.026	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP033_3.6_200623	SE208000.027	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP033_4.6_200623	SE208000.028	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP033_5.6_200623	SE208000.029	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP033_6.0_200623	SE208000.030	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP033_7.6_200623	SE208000.031	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_QC146_200623	SE208000.032	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP041_0.1_200623	SE208000.033	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP041_1.0_200623	SE208000.034	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP042_0.1_200623	SE208000.035	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP042_0.5_200623	SE208000.036	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_QC145_200623	SE208000.037	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP014_0.1_200623	SE208000.001	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP014_0.5_200623	SE208000.002	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_QC142_200623	SE208000.004	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP015_0.1_200623	SE208000.005	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP015_0.5_200623	SE208000.006	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP016_0.1_200623	SE208000.007	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP016_1.0_200623	SE208000.008	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_QC140_200623	SE208000.010	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP024_0.1_200623	SE208000.011	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP024_1.0_200623	SE208000.012	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP023_0.1_200623	SE208000.013	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP023_1.0_200623	SE208000.014	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP025_0.1_200623	SE208000.016	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP025_0.5_200623	SE208000.017	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP032_0.1_200623	SE208000.019	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP032_1.0_200623	SE208000.020	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_QC143_200623	SE208000.022	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP033_0.1_200623	SE208000.023	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP033_0.5_200623	SE208000.024	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP033_1.6_200623	SE208000.025	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP033_2.6_200623	SE208000.026	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP033_3.6_200623	SE208000.027	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP033_4.6_200623	SE208000.028	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP033_5.6_200623	SE208000.029	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP033_6.0_200623	SE208000.030	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP033_7.6_200623	SE208000.031	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_QC146_200623	SE208000.032	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP041_0.1_200623	SE208000.033	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP041_1.0_200623	SE208000.034	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP042_0.1_200623	SE208000.035	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP042_0.5_200623	SE208000.036	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_QC145_200623	SE208000.037	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref

HOLDING TIME SUMMARY

SE208000 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

PCBs in Soil (continued) — **Method: ME-(AU)-[ENV]AN420**

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP014_0.1_200623	SE208000.001	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP014_0.5_200623	SE208000.002	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_QC142_200623	SE208000.004	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP015_0.1_200623	SE208000.005	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP015_0.5_200623	SE208000.006	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP016_0.1_200623	SE208000.007	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP016_1.0_200623	SE208000.008	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_QC140_200623	SE208000.010	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP024_0.1_200623	SE208000.011	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP024_1.0_200623	SE208000.012	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP023_0.1_200623	SE208000.013	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP023_1.0_200623	SE208000.014	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP025_0.1_200623	SE208000.016	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP025_0.5_200623	SE208000.017	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP032_0.1_200623	SE208000.019	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP032_1.0_200623	SE208000.020	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_QC143_200623	SE208000.022	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP033_0.1_200623	SE208000.023	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP033_0.5_200623	SE208000.024	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP033_1.6_200623	SE208000.025	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP033_2.6_200623	SE208000.026	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP033_3.6_200623	SE208000.027	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP033_4.6_200623	SE208000.028	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP033_5.6_200623	SE208000.029	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP033_6.0_200623	SE208000.030	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP033_7.6_200623	SE208000.031	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_QC146_200623	SE208000.032	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP041_0.1_200623	SE208000.033	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP041_1.0_200623	SE208000.034	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP042_0.1_200623	SE208000.035	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP042_0.5_200623	SE208000.036	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_QC145_200623	SE208000.037	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020

Speciated Phenols in Soil — **Method: ME-(AU)-[ENV]AN420**

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP014_0.1_200623	SE208000.001	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP014_0.5_200623	SE208000.002	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_QC142_200623	SE208000.004	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP015_0.1_200623	SE208000.005	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP015_0.5_200623	SE208000.006	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP016_0.1_200623	SE208000.007	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP016_1.0_200623	SE208000.008	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_QC140_200623	SE208000.010	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP024_0.1_200623	SE208000.011	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP024_1.0_200623	SE208000.012	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP023_0.1_200623	SE208000.013	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP023_1.0_200623	SE208000.014	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP025_0.1_200623	SE208000.016	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP025_0.5_200623	SE208000.017	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP032_0.1_200623	SE208000.019	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP032_1.0_200623	SE208000.020	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_QC143_200623	SE208000.022	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP033_0.1_200623	SE208000.023	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP033_0.5_200623	SE208000.024	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP033_1.6_200623	SE208000.025	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP033_2.6_200623	SE208000.026	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP033_3.6_200623	SE208000.027	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP033_4.6_200623	SE208000.028	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP033_5.6_200623	SE208000.029	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP033_6.0_200623	SE208000.030	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP033_7.6_200623	SE208000.031	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_QC146_200623	SE208000.032	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP041_0.1_200623	SE208000.033	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP041_1.0_200623	SE208000.034	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP042_0.1_200623	SE208000.035	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP042_0.5_200623	SE208000.036	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_QC145_200623	SE208000.037	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP014_0.1_200623	SE208000.001	LB203237	23 Jun 2020	23 Jun 2020	20 Dec 2020	01 Jul 2020	20 Dec 2020	06 Jul 2020
0407_TP014_0.5_200623	SE208000.002	LB203237	23 Jun 2020	23 Jun 2020	20 Dec 2020	01 Jul 2020	20 Dec 2020	06 Jul 2020
0407_QC142_200623	SE208000.004	LB203237	23 Jun 2020	23 Jun 2020	20 Dec 2020	01 Jul 2020	20 Dec 2020	06 Jul 2020
0407_TP015_0.1_200623	SE208000.005	LB203237	23 Jun 2020	23 Jun 2020	20 Dec 2020	01 Jul 2020	20 Dec 2020	06 Jul 2020
0407_TP015_0.5_200623	SE208000.006	LB203237	23 Jun 2020	23 Jun 2020	20 Dec 2020	01 Jul 2020	20 Dec 2020	06 Jul 2020
0407_TP016_0.1_200623	SE208000.007	LB203237	23 Jun 2020	23 Jun 2020	20 Dec 2020	01 Jul 2020	20 Dec 2020	06 Jul 2020
0407_TP016_1.0_200623	SE208000.008	LB203237	23 Jun 2020	23 Jun 2020	20 Dec 2020	01 Jul 2020	20 Dec 2020	06 Jul 2020
0407_QC140_200623	SE208000.010	LB203237	23 Jun 2020	23 Jun 2020	20 Dec 2020	01 Jul 2020	20 Dec 2020	06 Jul 2020
0407_TP024_0.1_200623	SE208000.011	LB203237	23 Jun 2020	23 Jun 2020	20 Dec 2020	01 Jul 2020	20 Dec 2020	06 Jul 2020
0407_TP024_1.0_200623	SE208000.012	LB203237	23 Jun 2020	23 Jun 2020	20 Dec 2020	01 Jul 2020	20 Dec 2020	06 Jul 2020
0407_TP023_0.1_200623	SE208000.013	LB203237	23 Jun 2020	23 Jun 2020	20 Dec 2020	01 Jul 2020	20 Dec 2020	06 Jul 2020
0407_TP023_1.0_200623	SE208000.014	LB203237	23 Jun 2020	23 Jun 2020	20 Dec 2020	01 Jul 2020	20 Dec 2020	06 Jul 2020
0407_TP025_0.1_200623	SE208000.016	LB203237	23 Jun 2020	23 Jun 2020	20 Dec 2020	01 Jul 2020	20 Dec 2020	06 Jul 2020
0407_TP025_0.5_200623	SE208000.017	LB203237	23 Jun 2020	23 Jun 2020	20 Dec 2020	01 Jul 2020	20 Dec 2020	06 Jul 2020
0407_TP032_0.1_200623	SE208000.019	LB203237	23 Jun 2020	23 Jun 2020	20 Dec 2020	01 Jul 2020	20 Dec 2020	06 Jul 2020
0407_TP032_1.0_200623	SE208000.020	LB203237	23 Jun 2020	23 Jun 2020	20 Dec 2020	01 Jul 2020	20 Dec 2020	06 Jul 2020
0407_QC143_200623	SE208000.022	LB203237	23 Jun 2020	23 Jun 2020	20 Dec 2020	01 Jul 2020	20 Dec 2020	06 Jul 2020
0407_TP033_0.1_200623	SE208000.023	LB203237	23 Jun 2020	23 Jun 2020	20 Dec 2020	01 Jul 2020	20 Dec 2020	06 Jul 2020
0407_TP033_0.5_200623	SE208000.024	LB203290	23 Jun 2020	23 Jun 2020	20 Dec 2020	01 Jul 2020	20 Dec 2020	06 Jul 2020
0407_QC146_200623	SE208000.032	LB203290	23 Jun 2020	23 Jun 2020	20 Dec 2020	01 Jul 2020	20 Dec 2020	06 Jul 2020
0407_TP041_0.1_200623	SE208000.033	LB203290	23 Jun 2020	23 Jun 2020	20 Dec 2020	01 Jul 2020	20 Dec 2020	06 Jul 2020
0407_TP041_1.0_200623	SE208000.034	LB203290	23 Jun 2020	23 Jun 2020	20 Dec 2020	01 Jul 2020	20 Dec 2020	06 Jul 2020
0407_TP042_0.1_200623	SE208000.035	LB203290	23 Jun 2020	23 Jun 2020	20 Dec 2020	01 Jul 2020	20 Dec 2020	06 Jul 2020
0407_TP042_0.5_200623	SE208000.036	LB203290	23 Jun 2020	23 Jun 2020	20 Dec 2020	01 Jul 2020	20 Dec 2020	06 Jul 2020
0407_QC145_200623	SE208000.037	LB203290	23 Jun 2020	23 Jun 2020	20 Dec 2020	01 Jul 2020	20 Dec 2020	06 Jul 2020

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP014_0.1_200623	SE208000.001	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP014_0.5_200623	SE208000.002	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_QC142_200623	SE208000.004	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP015_0.1_200623	SE208000.005	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP015_0.5_200623	SE208000.006	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP016_0.1_200623	SE208000.007	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP016_1.0_200623	SE208000.008	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_QC140_200623	SE208000.010	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP024_0.1_200623	SE208000.011	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP024_1.0_200623	SE208000.012	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP023_0.1_200623	SE208000.013	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP023_1.0_200623	SE208000.014	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP025_0.1_200623	SE208000.016	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP025_0.5_200623	SE208000.017	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP032_0.1_200623	SE208000.019	LB203192	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP032_1.0_200623	SE208000.020	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_QC143_200623	SE208000.022	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP033_0.1_200623	SE208000.023	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP033_0.5_200623	SE208000.024	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP033_1.6_200623	SE208000.025	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP033_2.6_200623	SE208000.026	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP033_3.6_200623	SE208000.027	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP033_4.6_200623	SE208000.028	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP033_5.6_200623	SE208000.029	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP033_6.0_200623	SE208000.030	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP033_7.6_200623	SE208000.031	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_QC146_200623	SE208000.032	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP041_0.1_200623	SE208000.033	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP041_1.0_200623	SE208000.034	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP042_0.1_200623	SE208000.035	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP042_0.5_200623	SE208000.036	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_QC145_200623	SE208000.037	LB203193	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP014_0.1_200623	SE208000.001	LB203189	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	07 Jul 2020
0407_TP014_0.5_200623	SE208000.002	LB203189	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	07 Jul 2020
0407_QC142_200623	SE208000.004	LB203189	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	07 Jul 2020
0407_TP015_0.1_200623	SE208000.005	LB203189	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP015_0.5_200623	SE208000.006	LB203189	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP016_0.1_200623	SE208000.007	LB203189	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	07 Jul 2020
0407_TP016_1.0_200623	SE208000.008	LB203189	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	07 Jul 2020
0407_QC140_200623	SE208000.010	LB203189	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	07 Jul 2020
0407_TP024_0.1_200623	SE208000.011	LB203189	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP024_1.0_200623	SE208000.012	LB203189	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP023_0.1_200623	SE208000.013	LB203189	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	07 Jul 2020
0407_TP023_1.0_200623	SE208000.014	LB203189	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	07 Jul 2020
0407_TP025_0.1_200623	SE208000.016	LB203189	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	07 Jul 2020
0407_TP025_0.5_200623	SE208000.017	LB203189	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	07 Jul 2020
0407_TP032_0.1_200623	SE208000.019	LB203189	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	07 Jul 2020
0407_TP032_1.0_200623	SE208000.020	LB203190	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	07 Jul 2020
0407_QC143_200623	SE208000.022	LB203190	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	07 Jul 2020
0407_TP033_0.1_200623	SE208000.023	LB203190	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	07 Jul 2020
0407_TP033_0.5_200623	SE208000.024	LB203190	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	07 Jul 2020
0407_TP033_1.6_200623	SE208000.025	LB203190	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	07 Jul 2020
0407_TP033_2.6_200623	SE208000.026	LB203190	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	07 Jul 2020
0407_TP033_3.6_200623	SE208000.027	LB203190	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	07 Jul 2020
0407_TP033_4.6_200623	SE208000.028	LB203190	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	07 Jul 2020
0407_TP033_5.6_200623	SE208000.029	LB203190	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	07 Jul 2020
0407_TP033_6.0_200623	SE208000.030	LB203190	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	07 Jul 2020
0407_TP033_7.6_200623	SE208000.031	LB203190	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	07 Jul 2020
0407_QC146_200623	SE208000.032	LB203190	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	07 Jul 2020
0407_TP042_0.1_200623	SE208000.035	LB203190	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	07 Jul 2020
0407_TP042_0.5_200623	SE208000.036	LB203190	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	07 Jul 2020
0407_QC145_200623	SE208000.037	LB203190	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	07 Jul 2020

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP014_0.1_200623	SE208000.001	LB203189	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP014_0.5_200623	SE208000.002	LB203189	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_QC142_200623	SE208000.004	LB203189	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP015_0.1_200623	SE208000.005	LB203189	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP015_0.5_200623	SE208000.006	LB203189	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP016_0.1_200623	SE208000.007	LB203189	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP016_1.0_200623	SE208000.008	LB203189	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_QC140_200623	SE208000.010	LB203189	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP024_0.1_200623	SE208000.011	LB203189	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP024_1.0_200623	SE208000.012	LB203189	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP023_0.1_200623	SE208000.013	LB203189	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP023_1.0_200623	SE208000.014	LB203189	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP025_0.1_200623	SE208000.016	LB203189	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP025_0.5_200623	SE208000.017	LB203189	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP032_0.1_200623	SE208000.019	LB203189	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP032_1.0_200623	SE208000.020	LB203190	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC143_200623	SE208000.022	LB203190	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP033_0.1_200623	SE208000.023	LB203190	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP033_0.5_200623	SE208000.024	LB203190	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP033_1.6_200623	SE208000.025	LB203190	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP033_2.6_200623	SE208000.026	LB203190	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP033_3.6_200623	SE208000.027	LB203190	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP033_4.6_200623	SE208000.028	LB203190	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP033_5.6_200623	SE208000.029	LB203190	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP033_6.0_200623	SE208000.030	LB203190	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP033_7.6_200623	SE208000.031	LB203190	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_QC146_200623	SE208000.032	LB203190	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP042_0.1_200623	SE208000.035	LB203190	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP042_0.5_200623	SE208000.036	LB203190	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_QC145_200623	SE208000.037	LB203190	23 Jun 2020	23 Jun 2020	07 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP014_0.1_200623	SE208000.001	%	60 - 130%	95
	0407_TP014_0.5_200623	SE208000.002	%	60 - 130%	103
	0407_QC142_200623	SE208000.004	%	60 - 130%	98
	0407_TP016_0.1_200623	SE208000.007	%	60 - 130%	93
	0407_TP016_1.0_200623	SE208000.008	%	60 - 130%	101
	0407_QC140_200623	SE208000.010	%	60 - 130%	85
	0407_TP023_0.1_200623	SE208000.013	%	60 - 130%	94
	0407_TP023_1.0_200623	SE208000.014	%	60 - 130%	89
	0407_TP025_0.1_200623	SE208000.016	%	60 - 130%	93
	0407_TP025_0.5_200623	SE208000.017	%	60 - 130%	95
	0407_TP032_0.1_200623	SE208000.019	%	60 - 130%	94
	0407_TP032_1.0_200623	SE208000.020	%	60 - 130%	99
	0407_QC143_200623	SE208000.022	%	60 - 130%	117
	0407_TP033_0.1_200623	SE208000.023	%	60 - 130%	104
	0407_TP033_0.5_200623	SE208000.024	%	60 - 130%	103
	0407_QC146_200623	SE208000.032	%	60 - 130%	103

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP014_0.1_200623	SE208000.001	%	60 - 130%	82
	0407_TP014_0.5_200623	SE208000.002	%	60 - 130%	81
	0407_QC142_200623	SE208000.004	%	60 - 130%	75
	0407_TP016_0.1_200623	SE208000.007	%	60 - 130%	78
	0407_TP016_1.0_200623	SE208000.008	%	60 - 130%	77
	0407_QC140_200623	SE208000.010	%	60 - 130%	78
	0407_TP023_0.1_200623	SE208000.013	%	60 - 130%	78
	0407_TP023_1.0_200623	SE208000.014	%	60 - 130%	72
	0407_TP025_0.1_200623	SE208000.016	%	60 - 130%	73
	0407_TP025_0.5_200623	SE208000.017	%	60 - 130%	84
	0407_TP032_0.1_200623	SE208000.019	%	60 - 130%	81
	0407_TP032_1.0_200623	SE208000.020	%	60 - 130%	87
	0407_QC143_200623	SE208000.022	%	60 - 130%	75
	0407_TP033_0.1_200623	SE208000.023	%	60 - 130%	73
	0407_TP033_0.5_200623	SE208000.024	%	60 - 130%	88
	0407_QC146_200623	SE208000.032	%	60 - 130%	72
d14-p-terphenyl (Surrogate)	0407_TP014_0.1_200623	SE208000.001	%	60 - 130%	82
	0407_TP014_0.5_200623	SE208000.002	%	60 - 130%	90
	0407_QC142_200623	SE208000.004	%	60 - 130%	82
	0407_TP016_0.1_200623	SE208000.007	%	60 - 130%	85
	0407_TP016_1.0_200623	SE208000.008	%	60 - 130%	77
	0407_QC140_200623	SE208000.010	%	60 - 130%	77
	0407_TP023_0.1_200623	SE208000.013	%	60 - 130%	76
	0407_TP023_1.0_200623	SE208000.014	%	60 - 130%	71
	0407_TP025_0.1_200623	SE208000.016	%	60 - 130%	73
	0407_TP025_0.5_200623	SE208000.017	%	60 - 130%	84
	0407_TP032_0.1_200623	SE208000.019	%	60 - 130%	78
	0407_TP032_1.0_200623	SE208000.020	%	60 - 130%	81
	0407_QC143_200623	SE208000.022	%	60 - 130%	86
	0407_TP033_0.1_200623	SE208000.023	%	60 - 130%	87
	0407_TP033_0.5_200623	SE208000.024	%	60 - 130%	86
	0407_QC146_200623	SE208000.032	%	60 - 130%	82

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP014_0.1_200623	SE208000.001	%	70 - 130%	82
	0407_TP014_0.5_200623	SE208000.002	%	70 - 130%	81
	0407_QC142_200623	SE208000.004	%	70 - 130%	75
	0407_TP015_0.1_200623	SE208000.005	%	70 - 130%	76
	0407_TP015_0.5_200623	SE208000.006	%	70 - 130%	84
	0407_TP016_0.1_200623	SE208000.007	%	70 - 130%	78
	0407_TP016_1.0_200623	SE208000.008	%	70 - 130%	77
	0407_QC140_200623	SE208000.010	%	70 - 130%	78

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued) — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP024_0.1_200623	SE208000.011	%	70 - 130%	77
	0407_TP024_1.0_200623	SE208000.012	%	70 - 130%	80
	0407_TP023_0.1_200623	SE208000.013	%	70 - 130%	78
	0407_TP023_1.0_200623	SE208000.014	%	70 - 130%	72
	0407_TP025_0.1_200623	SE208000.016	%	70 - 130%	73
	0407_TP025_0.5_200623	SE208000.017	%	70 - 130%	84
	0407_TP032_0.1_200623	SE208000.019	%	70 - 130%	81
	0407_TP032_1.0_200623	SE208000.020	%	70 - 130%	87
	0407_QC143_200623	SE208000.022	%	70 - 130%	75
	0407_TP033_0.1_200623	SE208000.023	%	70 - 130%	73
	0407_TP033_0.5_200623	SE208000.024	%	70 - 130%	88
	0407_QC146_200623	SE208000.032	%	70 - 130%	72
	0407_TP041_0.1_200623	SE208000.033	%	70 - 130%	73
	0407_TP041_1.0_200623	SE208000.034	%	70 - 130%	85
d14-p-terphenyl (Surrogate)	0407_TP014_0.1_200623	SE208000.001	%	70 - 130%	82
	0407_TP014_0.5_200623	SE208000.002	%	70 - 130%	90
	0407_QC142_200623	SE208000.004	%	70 - 130%	82
	0407_TP015_0.1_200623	SE208000.005	%	70 - 130%	77
	0407_TP015_0.5_200623	SE208000.006	%	70 - 130%	76
	0407_TP016_0.1_200623	SE208000.007	%	70 - 130%	85
	0407_TP016_1.0_200623	SE208000.008	%	70 - 130%	77
	0407_QC140_200623	SE208000.010	%	70 - 130%	77
	0407_TP024_0.1_200623	SE208000.011	%	70 - 130%	74
	0407_TP024_1.0_200623	SE208000.012	%	70 - 130%	79
	0407_TP023_0.1_200623	SE208000.013	%	70 - 130%	76
	0407_TP023_1.0_200623	SE208000.014	%	70 - 130%	71
	0407_TP025_0.1_200623	SE208000.016	%	70 - 130%	73
	0407_TP025_0.5_200623	SE208000.017	%	70 - 130%	84
	0407_TP032_0.1_200623	SE208000.019	%	70 - 130%	78
	0407_TP032_1.0_200623	SE208000.020	%	70 - 130%	81
	0407_QC143_200623	SE208000.022	%	70 - 130%	86
	0407_TP033_0.1_200623	SE208000.023	%	70 - 130%	87
	0407_TP033_0.5_200623	SE208000.024	%	70 - 130%	86
	0407_QC146_200623	SE208000.032	%	70 - 130%	82
	0407_TP041_0.1_200623	SE208000.033	%	70 - 130%	83
	0407_TP041_1.0_200623	SE208000.034	%	70 - 130%	82
d5-nitrobenzene (Surrogate)	0407_TP014_0.1_200623	SE208000.001	%	70 - 130%	81
	0407_TP014_0.5_200623	SE208000.002	%	70 - 130%	83
	0407_QC142_200623	SE208000.004	%	70 - 130%	79
	0407_TP015_0.1_200623	SE208000.005	%	70 - 130%	82
	0407_TP015_0.5_200623	SE208000.006	%	70 - 130%	83
	0407_TP016_0.1_200623	SE208000.007	%	70 - 130%	83
	0407_TP016_1.0_200623	SE208000.008	%	70 - 130%	86
	0407_QC140_200623	SE208000.010	%	70 - 130%	87
	0407_TP024_0.1_200623	SE208000.011	%	70 - 130%	85
	0407_TP024_1.0_200623	SE208000.012	%	70 - 130%	88
	0407_TP023_0.1_200623	SE208000.013	%	70 - 130%	83
	0407_TP023_1.0_200623	SE208000.014	%	70 - 130%	84
	0407_TP025_0.1_200623	SE208000.016	%	70 - 130%	90
	0407_TP025_0.5_200623	SE208000.017	%	70 - 130%	87
	0407_TP032_0.1_200623	SE208000.019	%	70 - 130%	90
	0407_TP032_1.0_200623	SE208000.020	%	70 - 130%	80
	0407_QC143_200623	SE208000.022	%	70 - 130%	79
	0407_TP033_0.1_200623	SE208000.023	%	70 - 130%	81
	0407_TP033_0.5_200623	SE208000.024	%	70 - 130%	81
	0407_QC146_200623	SE208000.032	%	70 - 130%	78
	0407_TP041_0.1_200623	SE208000.033	%	70 - 130%	77
	0407_TP041_1.0_200623	SE208000.034	%	70 - 130%	81

PCBs in Soil — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PCBs in Soil (continued) — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP014_0.1_200623	SE208000.001	%	60 - 130%	95
	0407_TP014_0.5_200623	SE208000.002	%	60 - 130%	103
	0407_QC142_200623	SE208000.004	%	60 - 130%	98
	0407_TP016_0.1_200623	SE208000.007	%	60 - 130%	93
	0407_TP016_1.0_200623	SE208000.008	%	60 - 130%	101
	0407_QC140_200623	SE208000.010	%	60 - 130%	85
	0407_TP023_0.1_200623	SE208000.013	%	60 - 130%	94
	0407_TP023_1.0_200623	SE208000.014	%	60 - 130%	89
	0407_TP025_0.1_200623	SE208000.016	%	60 - 130%	93
	0407_TP025_0.5_200623	SE208000.017	%	60 - 130%	95
	0407_TP032_0.1_200623	SE208000.019	%	60 - 130%	94
	0407_TP032_1.0_200623	SE208000.020	%	60 - 130%	103
	0407_QC143_200623	SE208000.022	%	60 - 130%	117
	0407_TP033_0.1_200623	SE208000.023	%	60 - 130%	104
	0407_TP033_0.5_200623	SE208000.024	%	60 - 130%	103
	0407_QC146_200623	SE208000.032	%	60 - 130%	103
	0407_TP042_0.1_200623	SE208000.035	%	60 - 130%	107
	0407_TP042_0.5_200623	SE208000.036	%	60 - 130%	114
	0407_QC145_200623	SE208000.037	%	60 - 130%	103

Speciated Phenols in Soil — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	0407_TP014_0.1_200623	SE208000.001	%	70 - 130%	84
	0407_TP014_0.5_200623	SE208000.002	%	70 - 130%	82
	0407_QC142_200623	SE208000.004	%	70 - 130%	86
	0407_TP015_0.1_200623	SE208000.005	%	70 - 130%	71
	0407_TP015_0.5_200623	SE208000.006	%	70 - 130%	82
	0407_TP016_0.1_200623	SE208000.007	%	70 - 130%	82
	0407_TP016_1.0_200623	SE208000.008	%	70 - 130%	85
	0407_QC140_200623	SE208000.010	%	70 - 130%	76
	0407_TP024_0.1_200623	SE208000.011	%	70 - 130%	81
	0407_TP024_1.0_200623	SE208000.012	%	70 - 130%	75
	0407_TP023_0.1_200623	SE208000.013	%	70 - 130%	71
	0407_TP023_1.0_200623	SE208000.014	%	70 - 130%	79
	0407_TP025_0.1_200623	SE208000.016	%	70 - 130%	78
	0407_TP025_0.5_200623	SE208000.017	%	70 - 130%	75
	0407_TP032_0.1_200623	SE208000.019	%	70 - 130%	74
	0407_TP032_1.0_200623	SE208000.020	%	70 - 130%	79
	0407_QC143_200623	SE208000.022	%	70 - 130%	96
	0407_TP033_0.1_200623	SE208000.023	%	70 - 130%	83
	0407_TP033_0.5_200623	SE208000.024	%	70 - 130%	81
	0407_QC146_200623	SE208000.032	%	70 - 130%	80
d5-phenol (Surrogate)	0407_TP014_0.1_200623	SE208000.001	%	50 - 130%	89
	0407_TP014_0.5_200623	SE208000.002	%	50 - 130%	109
	0407_QC142_200623	SE208000.004	%	50 - 130%	92
	0407_TP015_0.1_200623	SE208000.005	%	50 - 130%	99
	0407_TP015_0.5_200623	SE208000.006	%	50 - 130%	87
	0407_TP016_0.1_200623	SE208000.007	%	50 - 130%	98
	0407_TP016_1.0_200623	SE208000.008	%	50 - 130%	121
	0407_QC140_200623	SE208000.010	%	50 - 130%	79
	0407_TP024_0.1_200623	SE208000.011	%	50 - 130%	81
	0407_TP024_1.0_200623	SE208000.012	%	50 - 130%	76
	0407_TP023_0.1_200623	SE208000.013	%	50 - 130%	82
	0407_TP023_1.0_200623	SE208000.014	%	50 - 130%	80
	0407_TP025_0.1_200623	SE208000.016	%	50 - 130%	91
	0407_TP025_0.5_200623	SE208000.017	%	50 - 130%	77
	0407_TP032_0.1_200623	SE208000.019	%	50 - 130%	76
	0407_TP032_1.0_200623	SE208000.020	%	50 - 130%	87
	0407_QC143_200623	SE208000.022	%	50 - 130%	87
	0407_TP033_0.1_200623	SE208000.023	%	50 - 130%	102
	0407_TP033_0.5_200623	SE208000.024	%	50 - 130%	89

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil (continued) — **Method: ME-(AU)-[ENV]AN420**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d5-phenol (Surrogate)	0407_QC146_200623	SE208000.032	%	50 - 130%	86

VOC's in Soil — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP014_0.1_200623	SE208000.001	%	60 - 130%	103
	0407_TP014_0.5_200623	SE208000.002	%	60 - 130%	97
	0407_QC142_200623	SE208000.004	%	60 - 130%	91
	0407_TP015_0.1_200623	SE208000.005	%	60 - 130%	100
	0407_TP015_0.5_200623	SE208000.006	%	60 - 130%	92
	0407_TP016_0.1_200623	SE208000.007	%	60 - 130%	101
	0407_TP016_1.0_200623	SE208000.008	%	60 - 130%	83
	0407_QC140_200623	SE208000.010	%	60 - 130%	100
	0407_TP024_0.1_200623	SE208000.011	%	60 - 130%	106
	0407_TP024_1.0_200623	SE208000.012	%	60 - 130%	100
	0407_TP023_0.1_200623	SE208000.013	%	60 - 130%	103
	0407_TP023_1.0_200623	SE208000.014	%	60 - 130%	101
	0407_TP025_0.1_200623	SE208000.016	%	60 - 130%	107
	0407_TP025_0.5_200623	SE208000.017	%	60 - 130%	108
	0407_TP032_0.1_200623	SE208000.019	%	60 - 130%	89
	0407_TP032_1.0_200623	SE208000.020	%	60 - 130%	95
	0407_QC143_200623	SE208000.022	%	60 - 130%	91
	0407_TP033_0.1_200623	SE208000.023	%	60 - 130%	94
	0407_TP033_0.5_200623	SE208000.024	%	60 - 130%	97
	0407_TP033_1.6_200623	SE208000.025	%	60 - 130%	90
	0407_TP033_2.6_200623	SE208000.026	%	60 - 130%	97
	0407_TP033_3.6_200623	SE208000.027	%	60 - 130%	89
	0407_TP033_4.6_200623	SE208000.028	%	60 - 130%	87
	0407_TP033_5.6_200623	SE208000.029	%	60 - 130%	91
	0407_TP033_6.0_200623	SE208000.030	%	60 - 130%	91
	0407_TP033_7.6_200623	SE208000.031	%	60 - 130%	86
	0407_QC146_200623	SE208000.032	%	60 - 130%	106
	0407_TP042_0.1_200623	SE208000.035	%	60 - 130%	102
	0407_TP042_0.5_200623	SE208000.036	%	60 - 130%	99
	0407_QC145_200623	SE208000.037	%	60 - 130%	92
d4-1,2-dichloroethane (Surrogate)	0407_TP014_0.1_200623	SE208000.001	%	60 - 130%	111
	0407_TP014_0.5_200623	SE208000.002	%	60 - 130%	104
	0407_QC142_200623	SE208000.004	%	60 - 130%	92
	0407_TP015_0.1_200623	SE208000.005	%	60 - 130%	93
	0407_TP015_0.5_200623	SE208000.006	%	60 - 130%	96
	0407_TP016_0.1_200623	SE208000.007	%	60 - 130%	112
	0407_TP016_1.0_200623	SE208000.008	%	60 - 130%	84
	0407_QC140_200623	SE208000.010	%	60 - 130%	90
	0407_TP024_0.1_200623	SE208000.011	%	60 - 130%	94
	0407_TP024_1.0_200623	SE208000.012	%	60 - 130%	102
	0407_TP023_0.1_200623	SE208000.013	%	60 - 130%	98
	0407_TP023_1.0_200623	SE208000.014	%	60 - 130%	94
	0407_TP025_0.1_200623	SE208000.016	%	60 - 130%	106
	0407_TP025_0.5_200623	SE208000.017	%	60 - 130%	124
	0407_TP032_0.1_200623	SE208000.019	%	60 - 130%	89
	0407_TP032_1.0_200623	SE208000.020	%	60 - 130%	93
	0407_QC143_200623	SE208000.022	%	60 - 130%	88
	0407_TP033_0.1_200623	SE208000.023	%	60 - 130%	90
	0407_TP033_0.5_200623	SE208000.024	%	60 - 130%	94
	0407_TP033_1.6_200623	SE208000.025	%	60 - 130%	95
	0407_TP033_2.6_200623	SE208000.026	%	60 - 130%	91
	0407_TP033_3.6_200623	SE208000.027	%	60 - 130%	91
	0407_TP033_4.6_200623	SE208000.028	%	60 - 130%	88
	0407_TP033_5.6_200623	SE208000.029	%	60 - 130%	93
	0407_TP033_6.0_200623	SE208000.030	%	60 - 130%	87
	0407_TP033_7.6_200623	SE208000.031	%	60 - 130%	83
	0407_QC146_200623	SE208000.032	%	60 - 130%	100

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d4-1,2-dichloroethane (Surrogate)	0407_TP042_0.1_200623	SE208000.035	%	60 - 130%	90
	0407_TP042_0.5_200623	SE208000.036	%	60 - 130%	84
	0407_QC145_200623	SE208000.037	%	60 - 130%	95
d8-toluene (Surrogate)	0407_TP014_0.1_200623	SE208000.001	%	60 - 130%	91
	0407_TP014_0.5_200623	SE208000.002	%	60 - 130%	85
	0407_QC142_200623	SE208000.004	%	60 - 130%	80
	0407_TP015_0.1_200623	SE208000.005	%	60 - 130%	91
	0407_TP015_0.5_200623	SE208000.006	%	60 - 130%	92
	0407_TP016_0.1_200623	SE208000.007	%	60 - 130%	98
	0407_TP016_1.0_200623	SE208000.008	%	60 - 130%	82
	0407_QC140_200623	SE208000.010	%	60 - 130%	92
	0407_TP024_0.1_200623	SE208000.011	%	60 - 130%	91
	0407_TP024_1.0_200623	SE208000.012	%	60 - 130%	90
	0407_TP023_0.1_200623	SE208000.013	%	60 - 130%	94
	0407_TP023_1.0_200623	SE208000.014	%	60 - 130%	86
	0407_TP025_0.1_200623	SE208000.016	%	60 - 130%	96
	0407_TP025_0.5_200623	SE208000.017	%	60 - 130%	96
	0407_TP032_0.1_200623	SE208000.019	%	60 - 130%	86
	0407_TP032_1.0_200623	SE208000.020	%	60 - 130%	82
	0407_QC143_200623	SE208000.022	%	60 - 130%	80
	0407_TP033_0.1_200623	SE208000.023	%	60 - 130%	84
	0407_TP033_0.5_200623	SE208000.024	%	60 - 130%	84
	0407_TP033_1.6_200623	SE208000.025	%	60 - 130%	86
	0407_TP033_2.6_200623	SE208000.026	%	60 - 130%	86
	0407_TP033_3.6_200623	SE208000.027	%	60 - 130%	88
	0407_TP033_4.6_200623	SE208000.028	%	60 - 130%	82
	0407_TP033_5.6_200623	SE208000.029	%	60 - 130%	83
	0407_TP033_6.0_200623	SE208000.030	%	60 - 130%	87
	0407_TP033_7.6_200623	SE208000.031	%	60 - 130%	76
	0407_QC146_200623	SE208000.032	%	60 - 130%	88
	0407_TP042_0.1_200623	SE208000.035	%	60 - 130%	91
	0407_TP042_0.5_200623	SE208000.036	%	60 - 130%	88
	0407_QC145_200623	SE208000.037	%	60 - 130%	85

Volatile Petroleum Hydrocarbons in Soil — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP014_0.1_200623	SE208000.001	%	60 - 130%	103
	0407_TP014_0.5_200623	SE208000.002	%	60 - 130%	97
	0407_QC142_200623	SE208000.004	%	60 - 130%	91
	0407_TP015_0.1_200623	SE208000.005	%	60 - 130%	100
	0407_TP015_0.5_200623	SE208000.006	%	60 - 130%	92
	0407_TP016_0.1_200623	SE208000.007	%	60 - 130%	101
	0407_TP016_1.0_200623	SE208000.008	%	60 - 130%	83
	0407_QC140_200623	SE208000.010	%	60 - 130%	100
	0407_TP024_0.1_200623	SE208000.011	%	60 - 130%	106
	0407_TP024_1.0_200623	SE208000.012	%	60 - 130%	100
	0407_TP023_0.1_200623	SE208000.013	%	60 - 130%	103
	0407_TP023_1.0_200623	SE208000.014	%	60 - 130%	101
	0407_TP025_0.1_200623	SE208000.016	%	60 - 130%	107
	0407_TP025_0.5_200623	SE208000.017	%	60 - 130%	108
	0407_TP032_0.1_200623	SE208000.019	%	60 - 130%	89
	0407_TP032_1.0_200623	SE208000.020	%	60 - 130%	95
	0407_QC143_200623	SE208000.022	%	60 - 130%	91
	0407_TP033_0.1_200623	SE208000.023	%	60 - 130%	94
	0407_TP033_0.5_200623	SE208000.024	%	60 - 130%	97
	0407_TP033_1.6_200623	SE208000.025	%	60 - 130%	90
	0407_TP033_2.6_200623	SE208000.026	%	60 - 130%	97
	0407_TP033_3.6_200623	SE208000.027	%	60 - 130%	89
	0407_TP033_4.6_200623	SE208000.028	%	60 - 130%	87
	0407_TP033_5.6_200623	SE208000.029	%	60 - 130%	91
	0407_TP033_6.0_200623	SE208000.030	%	60 - 130%	91

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP033_7.6_200623	SE208000.031	%	60 - 130%	86
	0407_QC146_200623	SE208000.032	%	60 - 130%	106
	0407_TP042_0.1_200623	SE208000.035	%	60 - 130%	102
	0407_TP042_0.5_200623	SE208000.036	%	60 - 130%	99
	0407_QC145_200623	SE208000.037	%	60 - 130%	92
d4-1,2-dichloroethane (Surrogate)	0407_TP014_0.1_200623	SE208000.001	%	60 - 130%	111
	0407_TP014_0.5_200623	SE208000.002	%	60 - 130%	104
	0407_QC142_200623	SE208000.004	%	60 - 130%	92
	0407_TP015_0.1_200623	SE208000.005	%	60 - 130%	93
	0407_TP015_0.5_200623	SE208000.006	%	60 - 130%	96
	0407_TP016_0.1_200623	SE208000.007	%	60 - 130%	112
	0407_TP016_1.0_200623	SE208000.008	%	60 - 130%	84
	0407_QC140_200623	SE208000.010	%	60 - 130%	90
	0407_TP024_0.1_200623	SE208000.011	%	60 - 130%	94
	0407_TP024_1.0_200623	SE208000.012	%	60 - 130%	102
	0407_TP023_0.1_200623	SE208000.013	%	60 - 130%	98
	0407_TP023_1.0_200623	SE208000.014	%	60 - 130%	94
	0407_TP025_0.1_200623	SE208000.016	%	60 - 130%	106
	0407_TP025_0.5_200623	SE208000.017	%	60 - 130%	124
	0407_TP032_0.1_200623	SE208000.019	%	60 - 130%	89
	0407_TP032_1.0_200623	SE208000.020	%	60 - 130%	93
	0407_QC143_200623	SE208000.022	%	60 - 130%	88
	0407_TP033_0.1_200623	SE208000.023	%	60 - 130%	90
	0407_TP033_0.5_200623	SE208000.024	%	60 - 130%	94
	0407_TP033_1.6_200623	SE208000.025	%	60 - 130%	95
	0407_TP033_2.6_200623	SE208000.026	%	60 - 130%	91
	0407_TP033_3.6_200623	SE208000.027	%	60 - 130%	91
	0407_TP033_4.6_200623	SE208000.028	%	60 - 130%	88
	0407_TP033_5.6_200623	SE208000.029	%	60 - 130%	93
	0407_TP033_6.0_200623	SE208000.030	%	60 - 130%	87
	0407_TP033_7.6_200623	SE208000.031	%	60 - 130%	83
	0407_QC146_200623	SE208000.032	%	60 - 130%	100
	0407_TP042_0.1_200623	SE208000.035	%	60 - 130%	90
	0407_TP042_0.5_200623	SE208000.036	%	60 - 130%	84
	0407_QC145_200623	SE208000.037	%	60 - 130%	95
d8-toluene (Surrogate)	0407_TP014_0.1_200623	SE208000.001	%	60 - 130%	91
	0407_TP014_0.5_200623	SE208000.002	%	60 - 130%	85
	0407_QC142_200623	SE208000.004	%	60 - 130%	80
	0407_TP015_0.1_200623	SE208000.005	%	60 - 130%	91
	0407_TP015_0.5_200623	SE208000.006	%	60 - 130%	92
	0407_TP016_0.1_200623	SE208000.007	%	60 - 130%	98
	0407_TP016_1.0_200623	SE208000.008	%	60 - 130%	82
	0407_QC140_200623	SE208000.010	%	60 - 130%	92
	0407_TP024_0.1_200623	SE208000.011	%	60 - 130%	91
	0407_TP024_1.0_200623	SE208000.012	%	60 - 130%	90
	0407_TP023_0.1_200623	SE208000.013	%	60 - 130%	94
	0407_TP023_1.0_200623	SE208000.014	%	60 - 130%	86
	0407_TP025_0.1_200623	SE208000.016	%	60 - 130%	96
	0407_TP025_0.5_200623	SE208000.017	%	60 - 130%	96
	0407_TP032_0.1_200623	SE208000.019	%	60 - 130%	86
	0407_TP032_1.0_200623	SE208000.020	%	60 - 130%	82
	0407_QC143_200623	SE208000.022	%	60 - 130%	80
	0407_TP033_0.1_200623	SE208000.023	%	60 - 130%	84
	0407_TP033_0.5_200623	SE208000.024	%	60 - 130%	84
	0407_TP033_1.6_200623	SE208000.025	%	60 - 130%	86
	0407_TP033_2.6_200623	SE208000.026	%	60 - 130%	86
	0407_TP033_3.6_200623	SE208000.027	%	60 - 130%	88
	0407_TP033_4.6_200623	SE208000.028	%	60 - 130%	82
	0407_TP033_5.6_200623	SE208000.029	%	60 - 130%	83
	0407_TP033_6.0_200623	SE208000.030	%	60 - 130%	87
	0407_TP033_7.6_200623	SE208000.031	%	60 - 130%	76

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d8-toluene (Surrogate)	0407_QC146_200623	SE208000.032	%	60 - 130%	88
	0407_TP042_0.1_200623	SE208000.035	%	60 - 130%	91
	0407_TP042_0.5_200623	SE208000.036	%	60 - 130%	88
	0407_QC145_200623	SE208000.037	%	60 - 130%	85

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result
LB203242.001	Mercury	mg/kg	0.05	<0.05
LB203292.001	Mercury	mg/kg	0.05	<0.05

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203192.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	91
LB203193.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	87

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB203192.001	Dichlorvos	mg/kg	0.5	<0.5
	Dimethoate	mg/kg	0.5	<0.5
	Diazinon (Dimpylate)	mg/kg	0.5	<0.5
	Fenitrothion	mg/kg	0.2	<0.2
	Malathion	mg/kg	0.2	<0.2

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203192.001		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	87
		d14-p-terphenyl (Surrogate)	%	-	90
LB203193.001		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	90
		d14-p-terphenyl (Surrogate)	%	-	88

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203192.001		Naphthalene	mg/kg	0.1	<0.1
		2-methylnaphthalene	mg/kg	0.1	<0.1
		1-methylnaphthalene	mg/kg	0.1	<0.1
		Acenaphthylene	mg/kg	0.1	<0.1
		Acenaphthene	mg/kg	0.1	<0.1
		Fluorene	mg/kg	0.1	<0.1
		Phenanthrene	mg/kg	0.1	<0.1
		Anthracene	mg/kg	0.1	<0.1
		Fluoranthene	mg/kg	0.1	<0.1
		Pyrene	mg/kg	0.1	<0.1
		Benzo(a)anthracene	mg/kg	0.1	<0.1
		Chrysene	mg/kg	0.1	<0.1
		Benzo(a)pyrene	mg/kg	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	91
		2-fluorobiphenyl (Surrogate)	%	-	87
		d14-p-terphenyl (Surrogate)	%	-	90
LB203193.001		Naphthalene	mg/kg	0.1	<0.1
		2-methylnaphthalene	mg/kg	0.1	<0.1
		1-methylnaphthalene	mg/kg	0.1	<0.1
		Acenaphthylene	mg/kg	0.1	<0.1
		Acenaphthene	mg/kg	0.1	<0.1
		Fluorene	mg/kg	0.1	<0.1
		Phenanthrene	mg/kg	0.1	<0.1
		Anthracene	mg/kg	0.1	<0.1
		Fluoranthene	mg/kg	0.1	<0.1
		Pyrene	mg/kg	0.1	<0.1
		Benzo(a)anthracene	mg/kg	0.1	<0.1
		Chrysene	mg/kg	0.1	<0.1
		Benzo(a)pyrene	mg/kg	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203193.001	Surrogates	d5-nitrobenzene (Surrogate)	%	-	85
		2-fluorobiphenyl (Surrogate)	%	-	90
		d14-p-terphenyl (Surrogate)	%	-	88

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203192.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	91
LB203193.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	117

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203192.001		Phenol	mg/kg	0.5	<0.5
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5
		2-nitrophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
		Pentachlorophenol	mg/kg	0.5	<0.5
		2,4-dinitrophenol	mg/kg	2	<2
		4-chloro-3-methylphenol	mg/kg	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	91
		d5-phenol (Surrogate)	%	-	97
LB203193.001		Phenol	mg/kg	0.5	<0.5
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5
		2-nitrophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
		Pentachlorophenol	mg/kg	0.5	<0.5
		2,4-dinitrophenol	mg/kg	2	<2

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203193.001		4-chloro-3-methylphenol	mg/kg	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	75
		d5-phenol (Surrogate)	%	-	81

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB203237.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0
LB203290.001	Arsenic, As	mg/kg	1	<1
	Beryllium, Be	mg/kg	0.5	<0.5
	Cadmium, Cd	mg/kg	0.3	<0.3
	Cobalt, Co	mg/kg	0.5	<0.5
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Manganese, Mn	mg/kg	1	<1
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB203192.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110
LB203193.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB203189.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB203189.001	Halogenated Aliphatics	Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10
		MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	97
		d8-toluene (Surrogate)	%	-	89
		Bromofluorobenzene (Surrogate)	%	-	104
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1
LB203190.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB203190.001	Halogenated Aliphatics	Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10
		MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB203190.001	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	96
		d8-toluene (Surrogate)	%	-	93
		Bromofluorobenzene (Surrogate)	%	-	93
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB203189.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	97
LB203190.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	96

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208000.017	LB203242.014	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE208000.023	LB203242.019	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE208000.037	LB203292.024	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE208169.010	LB203292.014	Mercury	mg/kg	0.05	<0.05	<0.05	200	0

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208000.012	LB203196.011	% Moisture	%w/w	1	3.0	3.4	61	12
SE208000.019	LB203196.017	% Moisture	%w/w	1	9.5	8.2	41	15
SE208000.030	LB203197.011	% Moisture	%w/w	1	2.2	2.4	73	6
SE208000.037	LB203197.019	% Moisture	%w/w	1	3.9	3.8	56	3

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208000.019	LB203192.020		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	0.15	30	4

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208000.019	LB203192.020		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	5
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	7

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate	Parameter	Units	LOR

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208000.012	LB203192.014		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	<0.3	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	<0.2	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	30	1
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	1
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	10
SE208000.019	LB203192.020		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	<0.3	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	<0.2	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	30	8
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	5
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	7

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208000.019	LB203192.020	Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PCBs in Soil (continued) — Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208000.019	LB203192.020		Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	4
SE208000.037	LB203193.022		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	6

Speciated Phenols in Soil — Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208000.012	LB203192.014		Phenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	200	0
			Total Cresol	mg/kg	1.5	<1.5	<1.5	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	200	0
			4-nitrophenol	mg/kg	1	<1	<1	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dinitrophenol	mg/kg	2	<2	<2	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.7	4.1	30	9
			d5-phenol (Surrogate)	mg/kg	-	1.5	1.8	30	14
SE208000.019	LB203192.020		Phenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	200	0
			Total Cresol	mg/kg	1.5	<1.5	<1.5	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	200	0
			4-nitrophenol	mg/kg	1	<1	<1	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dinitrophenol	mg/kg	2	<2	<2	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.7	3.8	30	2
			d5-phenol (Surrogate)	mg/kg	-	1.5	1.6	30	3
SE208000.032	LB203193.023		Phenol	mg/kg	0.5	<0.5	0	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	0	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	0	200	0
			Total Cresol	mg/kg	1.5	<1.5	0	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	0	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208000.032	LB203193.023		2,4,6-trichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	0	200	0
			4-nitrophenol	mg/kg	1	<1	0	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	0	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dinitrophenol	mg/kg	2	<2	0	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	0	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.0	3.79	30	6
			d5-phenol (Surrogate)	mg/kg	-	1.7	1.87	30	8

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208000.012	LB203237.014		Lead, Pb	mg/kg	1	1	<1	130	6
SE208000.023	LB203237.023		Arsenic, As	mg/kg	1	<1	<1	200	0
			Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
			Chromium, Cr	mg/kg	0.5	<0.5	<0.5	200	0
			Copper, Cu	mg/kg	0.5	0.9	1.0	84	6
			Nickel, Ni	mg/kg	0.5	1.2	0.8	79	34
			Lead, Pb	mg/kg	1	2	2	76	7
			Zinc, Zn	mg/kg	2	3.1	3.2	93	3
SE208000.037	LB203290.024		Arsenic, As	mg/kg	1	<1	<1	200	0
			Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
			Chromium, Cr	mg/kg	0.5	1.0	0.7	90	34
			Copper, Cu	mg/kg	0.5	1.4	1.4	66	2
			Nickel, Ni	mg/kg	0.5	<0.5	<0.5	188	0
			Lead, Pb	mg/kg	1	3	3	68	11
			Zinc, Zn	mg/kg	2	3.1	2.6	100	17
SE208169.010	LB203290.014		Arsenic, As	mg/kg	1	6	5	49	12
			Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
			Chromium, Cr	mg/kg	0.5	6.6	5.9	38	10
			Copper, Cu	mg/kg	0.5	14	11	34	27
			Nickel, Ni	mg/kg	0.5	4.9	4.1	41	18
			Lead, Pb	mg/kg	1	12	11	39	5
			Zinc, Zn	mg/kg	2	26	38	36	35

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208000.012	LB203192.014		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE208000.019	LB203192.020		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE208000.030	LB203193.014		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208000.030	LB203193.014		TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE208000.037	LB203193.022		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208000.012	LB203189.014	Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.2	10.4	50	2
			d8-toluene (Surrogate)	mg/kg	-	9.0	8.5	50	5
			Bromofluorobenzene (Surrogate)	mg/kg	-	10.0	10.3	50	3
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
SE208000.019	LB203189.020	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued) — Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208000.019	LB203189.020	Halogenated Aliphatics	1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic Aromatic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
			Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
			2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
			MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.9	9.3	50	4
			d8-toluene (Surrogate)	mg/kg	-	8.6	8.4	50	2
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.9	9.2	50	4
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethanes	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
			Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE208000.030	LB203190.014	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
			Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208000.030	LB203190.014	Halogenated	Iodomethane	mg/kg	5	<5	<5	200	0
		Aliphatics	1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.7	8.9	50	2
			d8-toluene (Surrogate)	mg/kg	-	8.7	8.6	50	1
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.1	9.8	50	8
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208000.030	LB203190.014	Totals	Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethanes	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
			Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE208000.037	LB203190.020	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
			Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic Aromatic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
			Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208000.037	LB203190.020	Monocyclic	1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.5	8.2	50	14
			d8-toluene (Surrogate)	mg/kg	-	8.5	8.6	50	1
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.2	8.6	50	7
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208000.012	LB203189.014		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.2	10.4	30	2
			d8-toluene (Surrogate)	mg/kg	-	9.0	8.5	30	5
			Bromofluorobenzene (Surrogate)	mg/kg	-	10.0	10.3	30	3
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE208000.019	LB203189.020		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.9	9.3	30	4
			d8-toluene (Surrogate)	mg/kg	-	8.6	8.4	30	2
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.9	9.2	30	4
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE208000.030	LB203190.014		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.7	8.9	30	2
			d8-toluene (Surrogate)	mg/kg	-	8.7	8.6	30	1
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.1	9.8	30	8
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE208000.037	LB203190.020		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.5	8.2	30	14
			d8-toluene (Surrogate)	mg/kg	-	8.5	8.6	30	1
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.2	8.6	30	7
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203242.002	Mercury	mg/kg	0.05	0.21	0.2	70 - 130	104
LB203292.002	Mercury	mg/kg	0.05	0.21	0.2	70 - 130	107

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203192.002		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	124
		Aldrin	mg/kg	0.1	0.3	0.2	60 - 140	128
		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	121
		Dieldrin	mg/kg	0.2	0.3	0.2	60 - 140	128
		Endrin	mg/kg	0.2	0.2	0.2	60 - 140	117
		p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	102
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.15	40 - 130	97
LB203193.002		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	118
		Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	122
		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	116
		Dieldrin	mg/kg	0.2	0.3	0.2	60 - 140	126
		Endrin	mg/kg	0.2	0.2	0.2	60 - 140	124
		p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	107
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.15	40 - 130	101

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203192.002		Dichlorvos	mg/kg	0.5	1.3	2	60 - 140	66
		Diazinon (Dimpylate)	mg/kg	0.5	2.0	2	60 - 140	101
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.0	2	60 - 140	102
		Ethion	mg/kg	0.2	1.5	2	60 - 140	75
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	84
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	78
LB203193.002		Dichlorvos	mg/kg	0.5	1.3	2	60 - 140	64
		Diazinon (Dimpylate)	mg/kg	0.5	1.8	2	60 - 140	90
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.0	2	60 - 140	98
		Ethion	mg/kg	0.2	1.7	2	60 - 140	86
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	80
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	86

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203192.002		Naphthalene	mg/kg	0.1	4.5	4	60 - 140	113
		Acenaphthylene	mg/kg	0.1	4.4	4	60 - 140	110
		Acenaphthene	mg/kg	0.1	4.6	4	60 - 140	115
		Phenanthrene	mg/kg	0.1	4.3	4	60 - 140	108
		Anthracene	mg/kg	0.1	4.3	4	60 - 140	107
		Fluoranthene	mg/kg	0.1	4.4	4	60 - 140	111
		Pyrene	mg/kg	0.1	4.5	4	60 - 140	112
		Benzo(a)pyrene	mg/kg	0.1	4.1	4	60 - 140	103
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	85
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	84
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	78
LB203193.002		Naphthalene	mg/kg	0.1	3.8	4	60 - 140	96
		Acenaphthylene	mg/kg	0.1	4.0	4	60 - 140	99
		Acenaphthene	mg/kg	0.1	4.1	4	60 - 140	101
		Phenanthrene	mg/kg	0.1	4.0	4	60 - 140	99
		Anthracene	mg/kg	0.1	4.4	4	60 - 140	109
		Fluoranthene	mg/kg	0.1	4.2	4	60 - 140	106
		Pyrene	mg/kg	0.1	4.4	4	60 - 140	111
		Benzo(a)pyrene	mg/kg	0.1	4.4	4	60 - 140	110
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	84
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	80
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	86

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PCBs in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203192.002		Arochlor 1260	mg/kg	0.2	0.5	0.4	60 - 140	134
LB203193.002		Arochlor 1260	mg/kg	0.2	0.5	0.4	60 - 140	135

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203192.002		Phenol	mg/kg	0.5	0.8	1	70 - 130	77
		2,4-dichlorophenol	mg/kg	0.5	0.8	1	70 - 130	77
		2,4,6-trichlorophenol	mg/kg	0.5	0.9	1	70 - 130	92
		Pentachlorophenol	mg/kg	0.5	1.0	1	70 - 130	103
	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.7	5	40 - 130	93
		d5-phenol (Surrogate)	mg/kg	-	1.7	2	40 - 130	84
LB203193.002		Phenol	mg/kg	0.5	0.8	1	70 - 130	76
		2,4-dichlorophenol	mg/kg	0.5	0.8	1	70 - 130	80
		2,4,6-trichlorophenol	mg/kg	0.5	1.3	1	70 - 130	128
		Pentachlorophenol	mg/kg	0.5	0.8	1	70 - 130	81
	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.3	5	40 - 130	66
		d5-phenol (Surrogate)	mg/kg	-	1.8	2	40 - 130	89

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203237.002	Arsenic, As	mg/kg	1	310	318.22	80 - 120	97
	Cadmium, Cd	mg/kg	0.3	4.8	5.41	80 - 120	89
	Chromium, Cr	mg/kg	0.5	35	38.31	80 - 120	92
	Copper, Cu	mg/kg	0.5	280	290	80 - 120	96
	Nickel, Ni	mg/kg	0.5	180	187	80 - 120	96
	Lead, Pb	mg/kg	1	88	89.9	80 - 120	98
	Zinc, Zn	mg/kg	2	260	273	80 - 120	94
LB203290.002	Arsenic, As	mg/kg	1	350	318.22	80 - 120	109
	Boron, B	mg/kg	5	43	37.13	80 - 120	115
	Beryllium, Be	mg/kg	0.5	4.3	4.17	80 - 120	104
	Cadmium, Cd	mg/kg	0.3	5.0	5.41	80 - 120	93
	Cobalt, Co	mg/kg	0.5	22	20.71	80 - 120	108
	Chromium, Cr	mg/kg	0.5	44	38.31	80 - 120	115
	Copper, Cu	mg/kg	0.5	310	290	80 - 120	105
	Manganese, Mn	mg/kg	1	730	660	80 - 120	110
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	103
	Lead, Pb	mg/kg	1	94	89.9	80 - 120	104
	Zinc, Zn	mg/kg	2	280	273	80 - 120	104

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203192.002		TRH C10-C14	mg/kg	20	45	40	60 - 140	113
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	98
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	83
	TRH F Bands	TRH >C10-C16	mg/kg	25	42	40	60 - 140	105
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	98
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	70
LB203193.002		TRH C10-C14	mg/kg	20	50	40	60 - 140	125
		TRH C15-C28	mg/kg	45	48	40	60 - 140	120
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	78
	TRH F Bands	TRH >C10-C16	mg/kg	25	50	40	60 - 140	125
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	103
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	70

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203189.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	5.2	5	60 - 140	104
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	5.9	5	60 - 140	117
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	5.6	5	60 - 140	113
	Halogenated	Chlorobenzene	mg/kg	0.1	5.6	5	60 - 140	111
	Monocyclic	Benzene	mg/kg	0.1	4.8	5	60 - 140	97
	Aromatic	Toluene	mg/kg	0.1	5.9	5	60 - 140	118

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203189.002	Monocyclic	Ethylbenzene	mg/kg	0.1	6.0	5	60 - 140	120
	Aromatic	m/p-xylene	mg/kg	0.2	12	10	60 - 140	121
		o-xylene	mg/kg	0.1	6.2	5	60 - 140	123
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.6	10	70 - 130	106
		d8-toluene (Surrogate)	mg/kg	-	9.7	10	70 - 130	97
		Bromofluorobenzene (Surrogate)	mg/kg	-	10.0	10	70 - 130	100
	Trihalomethan	Chloroform	mg/kg	0.1	5.4	5	60 - 140	108
LB203190.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	4.9	5	60 - 140	99
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	5.3	5	60 - 140	106
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	5.2	5	60 - 140	104
	Halogenated	Chlorobenzene	mg/kg	0.1	4.8	5	60 - 140	97
	Monocyclic	Benzene	mg/kg	0.1	4.5	5	60 - 140	90
	Aromatic	Toluene	mg/kg	0.1	5.1	5	60 - 140	102
		Ethylbenzene	mg/kg	0.1	5.2	5	60 - 140	105
		m/p-xylene	mg/kg	0.2	11	10	60 - 140	108
		o-xylene	mg/kg	0.1	5.5	5	60 - 140	109
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.8	10	70 - 130	88
		d8-toluene (Surrogate)	mg/kg	-	7.5	10	70 - 130	75
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.8	10	70 - 130	88
	Trihalomethan	Chloroform	mg/kg	0.1	5.2	5	60 - 140	104

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203189.002		TRH C6-C10	mg/kg	25	89	92.5	60 - 140	96
		TRH C6-C9	mg/kg	20	78	80	60 - 140	98
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.6	10	70 - 130	106
		Bromofluorobenzene (Surrogate)	mg/kg	-	10.0	10	70 - 130	100
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	54	62.5	60 - 140	87
LB203190.002		TRH C6-C10	mg/kg	25	89	92.5	60 - 140	96
		TRH C6-C9	mg/kg	20	78	80	60 - 140	98
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.8	10	70 - 130	88
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.8	10	70 - 130	88
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	58	62.5	60 - 140	93

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208000.001	LB203242.004	Mercury	mg/kg	0.05	0.20	<0.05	0.2	96
SE208169.001	LB203292.004	Mercury	mg/kg	0.05	0.19	<0.05	0.2	80

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208000.002	LB203192.021		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	-	-
			Alpha BHC	mg/kg	0.1	<0.1	-	-
			Lindane	mg/kg	0.1	<0.1	-	-
			Heptachlor	mg/kg	0.1	<0.1	0.2	139
			Aldrin	mg/kg	0.1	<0.1	0.2	140
			Beta BHC	mg/kg	0.1	<0.1	-	-
			Delta BHC	mg/kg	0.1	<0.1	0.2	134
			Heptachlor epoxide	mg/kg	0.1	<0.1	-	-
			o,p'-DDE	mg/kg	0.1	<0.1	-	-
			Alpha Endosulfan	mg/kg	0.2	<0.2	-	-
			Gamma Chlordane	mg/kg	0.1	<0.1	-	-
			Alpha Chlordane	mg/kg	0.1	<0.1	-	-
			trans-Nonachlor	mg/kg	0.1	<0.1	-	-
			p,p'-DDE	mg/kg	0.1	<0.1	-	-
			Dieldrin	mg/kg	0.2	<0.2	0.2	137
			Endrin	mg/kg	0.2	<0.2	0.2	132
			o,p'-DDD	mg/kg	0.1	<0.1	-	-
			o,p'-DDT	mg/kg	0.1	<0.1	-	-
			Beta Endosulfan	mg/kg	0.2	<0.2	-	-
			p,p'-DDD	mg/kg	0.1	<0.1	-	-
			p,p'-DDT	mg/kg	0.1	<0.1	0.2	118
			Endosulfan sulphate	mg/kg	0.1	<0.1	-	-
			Endrin Aldehyde	mg/kg	0.1	<0.1	-	-
			Methoxychlor	mg/kg	0.1	<0.1	-	-
			Endrin Ketone	mg/kg	0.1	<0.1	-	-
			Isodrin	mg/kg	0.1	<0.1	-	-
			Mirex	mg/kg	0.1	<0.1	-	-
			Total CLP OC Pesticides	mg/kg	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.16	-	105

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208000.002	LB203192.021		Dichlorvos	mg/kg	0.5	<0.5	2	62
			Dimethoate	mg/kg	0.5	<0.5	-	-
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	2	104
			Fenitrothion	mg/kg	0.2	<0.2	-	-
			Malathion	mg/kg	0.2	<0.2	-	-
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	2	106
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	-	-
			Bromophos Ethyl	mg/kg	0.2	<0.2	-	-
			Methidathion	mg/kg	0.5	<0.5	-	-
			Ethion	mg/kg	0.2	<0.2	2	83
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	-	-
			Total OP Pesticides*	mg/kg	1.7	<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	-	89
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	-	76

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number	Parameter	Units	LOR	Original	Spike	Recovery%
SE208000.002	LB203192.021	Naphthalene	mg/kg	0.1	<0.1	4	111
		2-methylnaphthalene	mg/kg	0.1	<0.1	-	-
		1-methylnaphthalene	mg/kg	0.1	<0.1	-	-
		Acenaphthylene	mg/kg	0.1	<0.1	4	107
		Acenaphthene	mg/kg	0.1	<0.1	4	116
		Fluorene	mg/kg	0.1	<0.1	-	-
		Phenanthrene	mg/kg	0.1	<0.1	4	103

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208000.002	LB203192.021		Anthracene	mg/kg	0.1	<0.1	4	107
			Fluoranthene	mg/kg	0.1	0.2	4	109
			Pyrene	mg/kg	0.1	0.2	4	112
			Benzo(a)anthracene	mg/kg	0.1	<0.1	-	-
			Chrysene	mg/kg	0.1	<0.1	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	-	-
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	-	-
			Benzo(a)pyrene	mg/kg	0.1	<0.1	4	100
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	-	-
			Total PAH (18)	mg/kg	0.8	<0.8	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	-	82
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	-	89
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	-	76

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208000.002	LB203192.021		Arochlor 1016	mg/kg	0.2	<0.2	-	-
			Arochlor 1221	mg/kg	0.2	<0.2	-	-
			Arochlor 1232	mg/kg	0.2	<0.2	-	-
			Arochlor 1242	mg/kg	0.2	<0.2	-	-
			Arochlor 1248	mg/kg	0.2	<0.2	-	-
			Arochlor 1254	mg/kg	0.2	<0.2	-	-
			Arochlor 1260	mg/kg	0.2	<0.2	0.4	135
			Arochlor 1262	mg/kg	0.2	<0.2	-	-
			Arochlor 1268	mg/kg	0.2	<0.2	-	-
			Total PCBs (Arochlors)	mg/kg	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	-	97

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208000.001	LB203192.004		Phenol	mg/kg	0.5	0.8	<0.5	1	77
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	-	-
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	-	-
			Total Cresol	mg/kg	1.5	<1.5	<1.5	-	-
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	-	-
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	-	-
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	-	-
			2,4-dichlorophenol	mg/kg	0.5	0.8	<0.5	1	76
			2,4,6-trichlorophenol	mg/kg	0.5	0.8	<0.5	1	82
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	-	-
			4-nitrophenol	mg/kg	1	<1	<1	-	-
			2,4,5-trichlorophenol	mg/kg	0.5	0.6	<0.5	-	-
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	-	-
			Pentachlorophenol	mg/kg	0.5	0.9	<0.5	1	92
			2,4-dinitrophenol	mg/kg	2	<2	<2	-	-
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	-	-
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.1	4.2	-	81
			d5-phenol (Surrogate)	mg/kg	-	1.7	1.8	-	86

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208000.001	LB203237.004	Arsenic, As	mg/kg	1	42	<1	50	84
		Cadmium, Cd	mg/kg	0.3	38	<0.3	50	77
		Chromium, Cr	mg/kg	0.5	43	<0.5	50	85
		Copper, Cu	mg/kg	0.5	44	1.2	50	86
		Nickel, Ni	mg/kg	0.5	43	<0.5	50	86
		Lead, Pb	mg/kg	1	46	3	50	86

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208000.001	LB203237.004	Zinc, Zn	mg/kg	2	46	3.5	50	86
SE208169.001	LB203290.004	Arsenic, As	mg/kg	1	50	5	50	91
		Cadmium, Cd	mg/kg	0.3	41	<0.3	50	82
		Chromium, Cr	mg/kg	0.5	49	5.7	50	87
		Copper, Cu	mg/kg	0.5	63	18	50	91
		Nickel, Ni	mg/kg	0.5	48	3.8	50	88
		Lead, Pb	mg/kg	1	54	10	50	88
		Zinc, Zn	mg/kg	2	64	26	50	76

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208000.002	LB203192.021		TRH C10-C14	mg/kg	20	<20	40	120
			TRH C15-C28	mg/kg	45	<45	40	115
			TRH C29-C36	mg/kg	45	<45	40	100
			TRH C37-C40	mg/kg	100	<100	-	-
			TRH C10-C36 Total	mg/kg	110	<110	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	40	115
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	<90	40	115
			TRH >C34-C40 (F4)	mg/kg	120	<120	-	-
SE208000.022	LB203193.023		TRH C10-C14	mg/kg	20	<20	40	113
			TRH C15-C28	mg/kg	45	<45	40	98
			TRH C29-C36	mg/kg	45	<45	40	100
			TRH C37-C40	mg/kg	100	<100	-	-
			TRH C10-C36 Total	mg/kg	110	<110	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	40	108
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	<90	40	100
			TRH >C34-C40 (F4)	mg/kg	120	<120	-	-

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208000.001	LB203189.004	Monocyclic Aromatic	Benzene	mg/kg	0.1	4.6	<0.1	5	91
			Toluene	mg/kg	0.1	5.5	<0.1	5	110
			Ethylbenzene	mg/kg	0.1	5.5	<0.1	5	110
			m/p-xylene	mg/kg	0.2	11	<0.2	10	111
			o-xylene	mg/kg	0.1	5.7	<0.1	5	114
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.3	11.1	10	103
			d8-toluene (Surrogate)	mg/kg	-	9.2	9.1	10	92
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.6	10.3	10	96
		Totals	Total Xylenes	mg/kg	0.3	17	<0.3	-	-
			Total BTEX	mg/kg	0.6	32	<0.6	-	-
SE208000.004	LB203189.021	Fumigants	2,2-dichloropropane	mg/kg	0.1		<0.1	-	-
			1,2-dichloropropane	mg/kg	0.1		<0.1	-	-
			cis-1,3-dichloropropene	mg/kg	0.1		<0.1	-	-
			trans-1,3-dichloropropene	mg/kg	0.1		<0.1	-	-
			1,2-dibromoethane (EDB)	mg/kg	0.1		<0.1	-	-
		Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1		<1	-	-
			Chloromethane	mg/kg	1		<1	-	-
			Vinyl chloride (Chloroethene)	mg/kg	0.1		<0.1	-	-
			Bromomethane	mg/kg	1		<1	-	-
			Chloroethane	mg/kg	1		<1	-	-
			Trichlorofluoromethane	mg/kg	1		<1	-	-
			Iodomethane	mg/kg	5		<5	-	-
			1,1-dichloroethene	mg/kg	0.1		<0.1	5	91
			Dichloromethane (Methylene chloride)	mg/kg	0.5		<0.5	-	-
			Allyl chloride	mg/kg	0.1		<0.1	-	-
			trans-1,2-dichloroethene	mg/kg	0.1		<0.1	-	-
			1,1-dichloroethane	mg/kg	0.1		<0.1	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208000.004	LB203189.021	Halogenated Aliphatics	cis-1,2-dichloroethene	mg/kg	0.1		<0.1	-	-
			Bromochloromethane	mg/kg	0.1		<0.1	-	-
			1,2-dichloroethane	mg/kg	0.1		<0.1	5	105
			1,1,1-trichloroethane	mg/kg	0.1		<0.1	-	-
			1,1-dichloropropene	mg/kg	0.1		<0.1	-	-
			Carbon tetrachloride	mg/kg	0.1		<0.1	-	-
			Dibromomethane	mg/kg	0.1		<0.1	-	-
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1		<0.1	5	101
			1,1,2-trichloroethane	mg/kg	0.1		<0.1	-	-
			1,3-dichloropropane	mg/kg	0.1		<0.1	-	-
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1		<0.1	-	-
			1,1,1,2-tetrachloroethane	mg/kg	0.1		<0.1	-	-
			cis-1,4-dichloro-2-butene	mg/kg	1		<1	-	-
			1,1,2,2-tetrachloroethane	mg/kg	0.1		<0.1	-	-
			1,2,3-trichloropropane	mg/kg	0.1		<0.1	-	-
			trans-1,4-dichloro-2-butene	mg/kg	1		<1	-	-
			1,2-dibromo-3-chloropropane	mg/kg	0.1		<0.1	-	-
			Hexachlorobutadiene	mg/kg	0.1		<0.1	-	-
		Halogenated Aromatics	Chlorobenzene	mg/kg	0.1		<0.1	5	95
			Bromobenzene	mg/kg	0.1		<0.1	-	-
			2-chlorotoluene	mg/kg	0.1		<0.1	-	-
			4-chlorotoluene	mg/kg	0.1		<0.1	-	-
			1,3-dichlorobenzene	mg/kg	0.1		<0.1	-	-
			1,4-dichlorobenzene	mg/kg	0.1		<0.1	-	-
			1,2-dichlorobenzene	mg/kg	0.1		<0.1	-	-
			1,2,4-trichlorobenzene	mg/kg	0.1		<0.1	-	-
			1,2,3-trichlorobenzene	mg/kg	0.1		<0.1	-	-
		Monocyclic Aromatic	Benzene	mg/kg	0.1		<0.1	5	102
			Toluene	mg/kg	0.1		<0.1	5	108
			Ethylbenzene	mg/kg	0.1		<0.1	5	102
			m/p-xylene	mg/kg	0.2		<0.2	10	106
			o-xylene	mg/kg	0.1		<0.1	5	105
			Styrene (Vinyl benzene)	mg/kg	0.1		<0.1	-	-
			Isopropylbenzene (Cumene)	mg/kg	0.1		<0.1	-	-
			n-propylbenzene	mg/kg	0.1		<0.1	-	-
			1,3,5-trimethylbenzene	mg/kg	0.1		<0.1	-	-
			tert-butylbenzene	mg/kg	0.1		<0.1	-	-
			1,2,4-trimethylbenzene	mg/kg	0.1		<0.1	-	-
			sec-butylbenzene	mg/kg	0.1		<0.1	-	-
			p-isopropyltoluene	mg/kg	0.1		<0.1	-	-
			n-butylbenzene	mg/kg	0.1		<0.1	-	-
		Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1		<0.1	-	-
			2-nitropropane	mg/kg	10		<10	-	-
		Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10		<10	-	-
			MtBE (Methyl-tert-butyl ether)	mg/kg	0.1		<0.1	-	-
			Vinyl acetate	mg/kg	10		<10	-	-
			MEK (2-butanone)	mg/kg	10		<10	-	-
			MIBK (4-methyl-2-pentanone)	mg/kg	1		<1	-	-
			2-hexanone (MBK)	mg/kg	5		<5	-	-
		Polycyclic	Naphthalene	mg/kg	0.1		<0.1	-	-
		Sulphonated	Carbon disulfide	mg/kg	0.5		<0.5	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-		9.2	10	90
			d8-toluene (Surrogate)	mg/kg	-		8.0	10	85
			Bromofluorobenzene (Surrogate)	mg/kg	-		9.1	10	80
		Totals	Total Xylenes	mg/kg	0.3		<0.3	-	-
			Total BTEX	mg/kg	0.6		<0.6	-	-
			Total VOC*	mg/kg	24		<24	-	-
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3		<3.0	-	-
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8		<1.8	-	-
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8		<1.8	-	-
		Trihalometha	Chloroform	mg/kg	0.1		<0.1	5	101

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

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VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208000.004	LB203189.021	Trihalomethanes	Bromodichloromethane	mg/kg	0.1		<0.1	-	-
			Chlorodibromomethane	mg/kg	0.1		<0.1	-	-
			Bromoform	mg/kg	0.1		<0.1	-	-
SE208000.020	LB203190.004	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	-	-
			Chloromethane	mg/kg	1	<1	<1	-	-
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	-	-
			Bromomethane	mg/kg	1	<1	<1	-	-
			Chloroethane	mg/kg	1	<1	<1	-	-
			Trichlorofluoromethane	mg/kg	1	<1	<1	-	-
			Iodomethane	mg/kg	5	<5	<5	-	-
			1,1-dichloroethene	mg/kg	0.1	4.7	<0.1	5	93
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	-	-
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloroethane	mg/kg	0.1	5.0	<0.1	5	100
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	-	-
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	5.0	<0.1	5	101
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	-	-
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	4.7	<0.1	5	95
			Bromobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Monocyclic Aromatic	Benzene	mg/kg	0.1	4.4	<0.1	5	87
			Toluene	mg/kg	0.1	5.2	<0.1	5	103
			Ethylbenzene	mg/kg	0.1	5.3	<0.1	5	106
			m/p-xylene	mg/kg	0.2	11	<0.2	10	109
			o-xylene	mg/kg	0.1	5.5	<0.1	5	111
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	-	-
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	-	-
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	-	-
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

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VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208000.020	LB203190.004	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	-	-
			2-nitropropane	mg/kg	10	<10	<10	-	-
		Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10	<10	-	-
			MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	-	-
			Vinyl acetate	mg/kg	10	<10	<10	-	-
			MEK (2-butanone)	mg/kg	10	<10	<10	-	-
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	-	-
			2-hexanone (MBK)	mg/kg	5	<5	<5	-	-
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.7	9.3	10	97
			d8-toluene (Surrogate)	mg/kg	-	8.7	8.2	10	87
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.0	9.5	10	90
		Totals	Total Xylenes	mg/kg	0.3	16	<0.3	-	-
			Total BTEX	mg/kg	0.6	31	<0.6	-	-
			Total VOC*	mg/kg	24	56	<24	-	-
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	-	-
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	24	<1.8	-	-
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	24	<1.8	-	-
		Trihalomethanes	Chloroform	mg/kg	0.1	4.7	<0.1	5	95
			Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Bromoform	mg/kg	0.1	<0.1	<0.1	-	-

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208000.001	LB203189.004		TRH C6-C10	mg/kg	25	77	<25	92.5	83
			TRH C6-C9	mg/kg	20	68	<20	80	84
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.3	11.1	10	103
			d8-toluene (Surrogate)	mg/kg	-	9.2	9.1	10	92
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.6	10.3	-	96
		VPH F Bands	Benzene (F0)	mg/kg	0.1	4.6	<0.1	-	-
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	45	<25	62.5	71
SE208000.020	LB203190.004		TRH C6-C10	mg/kg	25	73	<25	92.5	79
			TRH C6-C9	mg/kg	20	64	<20	80	80
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.7	9.3	10	97
			d8-toluene (Surrogate)	mg/kg	-	8.7	8.2	10	87
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.0	9.5	-	90
		VPH F Bands	Benzene (F0)	mg/kg	0.1	4.4	<0.1	-	-
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	42	<25	62.5	67

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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CHAIN OF CUSTODY RECORD

COC#: SE207686

Owner job:

Ship to: XML	Project Name:	Due date: 25/06/2020 4:00:12 PM
	Client: SLR_LANECOVE_NSW	Send Results to: AUENVSE
	Sampler Name: JR	
Carrier:	Airbill #:	

Field Sample ID	Client ID	Date sampling	Time	Matrix	# of Containers	Analyses Requested										Comments
						1523LL										
SE207686.022	RWBB_QC116_200618	18/06/2020	0:00:00	Soil		X										

SGS EHS Melbourne COC
ME315357

Sample Condition Upon Receipt at Laboratory:	Cooler temperature:
Special Instructions/Comments: Job Booked by: Emily 18/6/2020 Loggin Checked by:	

#1 Released by: (Sig)	Date:	#2 Released by: (Sig)	Date:	#3 Released by: (Sig)	Date:
Company Name:	Time	Company Name:	Time	Company Name:	Time
#1 Received by: (Sig) [redacted]	Date 22/6/20	#2 Received by: (Sig)	Date	#3 Received by: (Sig)	Date
Company Name: SGS	Time: 11:25AM	Company Name:	Time:	Company Name:	Time:

SGS Notting Hill Bottle Map

Job Number:			Eskies /boxes:	envelope	Ice /icebricks:	1	Temperature:	18°C
		Matrix	BOTTLE TYPE	250 mL Jar glass + teflon lid	125 mL Jar glass + teflon lid	40 mL Glass VOA vial + teflon lid	40 mL Glass VOA vial + teflon lid	1 Litre Plastic (opaque)	500 mL Plastic (opaque)	250 mL Plastic (opaque)	125 mL Plastic (opaque)	1 Litre Amber glass + teflon lid	500mL Amber glass + teflon lid	200mL Amber glass + teflon lid	100mL Amber glass + teflon lid	1 Litre Plastic (opaque)	125 mL Plastic (opaque)	125 mL Plastic (opaque)	125 mL Plastic (opaque)	125 mL Plastic (opaque)	125 mL Plastic (opaque)	125 mL Plastic (opaque)	125 mL Plastic (opaque)	125 mL Plastic (opaque)	500 mL Amber glass + teflon lid	100 mL Amber glass + teflon lid	500 mL Amber glass + teflon lid	500 mL Amber glass + teflon lid	100 mL Amber glass + teflon lid	200mL or 500 mL Plastic (clear)	40 mL Glass VOA vial + teflon lid	40 mL Glass VOA vial + teflon lid	20ml plastic jar
Sample ID	Tray No.	soil / water / oil / filter / impinger / other	PRESERVATIVE	none	none	none (NO HEADSPACE)	none (HALF FILLED)	none	none	none	none	none	none	none	none	HNO_3	HNO_3 (field filter)	HNO_3 (no filtering)	HCl (no filtering)	HCl (field filter)	0.125M EDTA (field filter)	5M H_2SO_4	NaOH	Zn acetate & NaOH	H_2SO_4	$CuSO_4$	none (foil covered)	0.5mL thiosulphate + 3mL HNO_3 (NO HEADSPACE)	Lugol	sterilised -thiosulphate (24hr holding time)	Buffer/dechlorinating agent (NH_4Cl)	Dechlorinating agent (NH_4Cl)	none
SE207686.022	~~ET~~ ET3	✓																															*1
Totals																																	

Comments:

[redacted] 22/6/20 11.25AM

SAMPLE RECEIPT ADVICE

SE207686

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000667--000670**
Samples	25

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Thu 18/6/2020
Report Due	Thu 25/6/2020
SGS Reference	**SE207686**

SUBMISSION DETAILS

This is to confirm that 25 samples were received on Thursday 18/6/2020. Results are expected to be ready by COB Thursday 25/6/2020. Please quote SGS reference SE207686 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	24 Soil, 1 Material
Date documentation received	18/6/2020	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	13°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

6 Soil and 2 Material have been placed on hold as no tests have been assigned for them by the client. These samples will not be processed.
PFAS subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420.

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SAMPLE RECEIPT ADVICE

SE207686

CLIENT DETAILS

Client SLR CONSULTING AUSTRALIA PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	Speciated Phenols in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
001	RWBB_TP46_0.1_200618	29	14	26	11	18	10	81	7
002	RWBB_TP46_1.0_200618	29	14	26	11	18	10	81	7
003	RWBB_TP47_0.1_200618	29	14	26	11	18	10	81	7
004	RWBB_TP47_0.5_200618	29	14	26	11	18	10	81	7
005	RWBB_TP48_0.1_200618	29	14	26	11	18	10	81	7
006	RWBB_TP48_0.5_200618	29	14	26	11	18	10	81	7
007	RWBB_TP55_0.1_200618	29	14	26	11	18	10	81	7
008	RWBB_TP55_0.5_200618	29	14	26	11	18	10	81	7
009	RWBB_TP56_0.1_200618	29	14	26	11	18	10	81	7
010	RWBB_TP56_0.5_200618	29	14	26	11	18	10	81	7
011	RWBB_TP57_0.1_200618	29	14	26	11	18	10	81	7
012	RWBB_TP57_0.5_200618	29	14	26	11	18	10	81	7
013	RWBB_TP58_0.1_200618	29	14	26	11	18	10	81	7
014	RWBB_TP58_0.5_200618	29	14	26	11	18	10	81	7
015	RWBB_TP66_0.1_200618	29	14	26	11	18	10	81	7
016	RWBB_TP66_0.5_200618	29	14	26	11	18	10	81	7
017	RWBB_TP64_0.1_200618	29	14	26	11	18	10	81	7
018	RWBB_TP64_0.5_200618	29	14	26	11	18	10	81	7
019	RWBB_TP67_0.1_200618	29	14	26	11	18	10	81	7
020	RWBB_TP67_0.5_200618	29	14	26	11	18	10	81	7
022	RWBB_QC116_200618	29	14	26	11	18	10	81	7
023	RWBB_QC118_200618	29	14	26	11	18	10	81	7
024	RWBB_QC403_200618	-	-	-	-	-	-	11	-

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE207686

CLIENT DETAILS

Client SLR CONSULTING AUSTRALIA PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
025	RWBB_QC503_200618	11	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
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SAMPLE RECEIPT ADVICE

SE207686

CLIENT DETAILS

Client SLR CONSULTING AUSTRALIA PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Fibre Identification in soil	Gravimetric Determination of Asbestos in Soil	Mercury in Soil	Moisture Content	Per- and Polyfluoroalkyl Substances (PFAS) in	Total Recoverable Elements in Soil/Waste
001	RWBB_TP46_0.1_200618	2	9	1	1	-	7
002	RWBB_TP46_1.0_200618	2	9	1	1	-	7
003	RWBB_TP47_0.1_200618	2	9	1	1	-	7
004	RWBB_TP47_0.5_200618	2	9	1	1	-	7
005	RWBB_TP48_0.1_200618	2	9	1	1	-	7
006	RWBB_TP48_0.5_200618	2	9	1	1	-	7
007	RWBB_TP55_0.1_200618	2	9	1	1	-	7
008	RWBB_TP55_0.5_200618	2	9	1	1	-	7
009	RWBB_TP56_0.1_200618	2	9	1	1	-	7
010	RWBB_TP56_0.5_200618	2	9	1	1	-	7
011	RWBB_TP57_0.1_200618	2	9	1	1	-	7
012	RWBB_TP57_0.5_200618	2	9	1	1	-	7
013	RWBB_TP58_0.1_200618	2	9	1	1	-	7
014	RWBB_TP58_0.5_200618	2	9	1	1	-	7
015	RWBB_TP66_0.1_200618	2	9	1	1	-	7
016	RWBB_TP66_0.5_200618	2	9	1	1	-	7
017	RWBB_TP64_0.1_200618	2	9	1	1	-	7
018	RWBB_TP64_0.5_200618	2	9	1	1	-	7
019	RWBB_TP67_0.1_200618	2	9	1	1	-	7
020	RWBB_TP67_0.5_200618	2	9	1	1	-	7
022	RWBB_QC116_200618	-	-	1	1	55	7
023	RWBB_QC118_200618	-	-	1	1	-	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
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Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE207686

CLIENT DETAILS

Client SLR CONSULTING AUSTRALIA PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Moisture Content
025	RWBB_QC503_200618	1

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
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Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE207686

CLIENT DETAILS

Client SLR CONSULTING AUSTRALIA PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Fibre ID in bulk materials
021	RWBB_TP48_A01_200618	1

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000667--000670**
Samples	25

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207686 R1**
Date Received	18/6/2020
Date Reported	1/7/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

PFAS subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420. Report Number ME315357 RO

MA1523: Some surrogate recovery is outside of the acceptance criteria due to sample matrix interference.

No respirable fibres detected in all soil samples using trace analysis technique.

Asbestos analysed by Approved Identifiers Ravee Sivasubramaniam and Yusuf Kuthpudin .

This report cancels and supersedes the report No.SE207686 R0 dated 30th June 2020 issued by SGS Environment, Health and Safety due to amendment of sample id's.

SIGNATORIES

[redacted]

Chemist | Metals/Inorganics Team Leader | Senior Chemist

[redacted]

Organic Section Head | Hygiene Team Leader | Asbestos Analyst

VOC's in Soil [AN433] Tested: 19/6/2020

PARAMETER	UOM	LOR	0407_TP46_0.1_200(18 SOIL - 18/6/2020 SE207686.001	0407_TP46_1.0_200(18 SOIL - 18/6/2020 SE207686.002	0407_TP47_0.1_200(18 SOIL - 18/6/2020 SE207686.003	0407_TP47_0.5_200(18 SOIL - 18/6/2020 SE207686.004	0407_TP48_0.1_200(18 SOIL - 18/6/2020 SE207686.005
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP46_0.1_200(18 SOIL - 18/6/2020 SE207686.001	0407_TP46_1.0_200(18 SOIL - 18/6/2020 SE207686.002	0407_TP47_0.1_200(18 SOIL - 18/6/2020 SE207686.003	0407_TP47_0.5_200(18 SOIL - 18/6/2020 SE207686.004	0407_TP48_0.1_200(18 SOIL - 18/6/2020 SE207686.005
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP48_0.5_200(18 SOIL - 18/6/2020 SE207686.006	0407_TP55_0.1_200(18 SOIL - 18/6/2020 SE207686.007	0407_TP55_0.5_200(18 SOIL - 18/6/2020 SE207686.008	0407_TP56_0.1_200(18 SOIL - 18/6/2020 SE207686.009	0407_TP56_0.5_200(18 SOIL - 18/6/2020 SE207686.010
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP48_0.5_200(18 SOIL - 18/6/2020 SE207686.006	0407_TP55_0.1_200(18 SOIL - 18/6/2020 SE207686.007	0407_TP55_0.5_200(18 SOIL - 18/6/2020 SE207686.008	0407_TP56_0.1_200(18 SOIL - 18/6/2020 SE207686.009	0407_TP56_0.5_200(18 SOIL - 18/6/2020 SE207686.010
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP57_0.1_200(18 SOIL - 18/6/2020 SE207686.011	0407_TP57_0.5_200(18 SOIL - 18/6/2020 SE207686.012	0407_TP58_0.1_200(18 SOIL - 18/6/2020 SE207686.013	0407_TP58_0.5_200(18 SOIL - 18/6/2020 SE207686.014	0407_TP66_0.1_200(18 SOIL - 18/6/2020 SE207686.015
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP57_0.1_200(18 SOIL - 18/6/2020 SE207686.011	0407_TP57_0.5_200(18 SOIL - 18/6/2020 SE207686.012	0407_TP58_0.1_200(18 SOIL - 18/6/2020 SE207686.013	0407_TP58_0.5_200(18 SOIL - 18/6/2020 SE207686.014	0407_TP66_0.1_200(18 SOIL - 18/6/2020 SE207686.015
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP66_0.5_200(18 SOIL - 18/6/2020 SE207686.016	0407_TP64_0.1_200(18 SOIL - 18/6/2020 SE207686.017	0407_TP64_0.5_200(18 SOIL - 18/6/2020 SE207686.018	0407_TP67_0.1_200(18 SOIL - 18/6/2020 SE207686.019	0407_TP67_0.5_200(18 SOIL - 18/6/2020 SE207686.020
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP66_0.5_200(18 SOIL - 18/6/2020 SE207686.016	0407_TP64_0.1_200(18 SOIL - 18/6/2020 SE207686.017	0407_TP64_0.5_200(18 SOIL - 18/6/2020 SE207686.018	0407_TP67_0.1_200(18 SOIL - 18/6/2020 SE207686.019	0407_TP67_0.5_200(18 SOIL - 18/6/2020 SE207686.020
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_QC116_20061 SOIL - 18/6/2020 SE207686.022	0407_QC118_20061 SOIL - 18/6/2020 SE207686.023	0407_QC403_20061 SOIL - 18/6/2020 SE207686.024	0407_QC503_20061 SOIL - 18/6/2020 SE207686.025
Benzene	mg/kg	0.1	<0.1	<0.1	[104%]	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	[104%]	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	[106%]	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	[108%]	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	[119%]	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	-	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	-	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	-	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	-	-
Chloromethane	mg/kg	1	<1	<1	-	-
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	-	-
Bromomethane	mg/kg	1	<1	<1	-	-
Chloroethane	mg/kg	1	<1	<1	-	-
Trichlorofluoromethane	mg/kg	1	<1	<1	-	-
Acetone (2-propanone)	mg/kg	10	<10	<10	-	-
Iodomethane	mg/kg	5	<5	<5	-	-
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	-	-
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	-	-
Allyl chloride	mg/kg	0.1	<0.1	<0.1	-	-
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	-	-
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	-	-
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
Vinyl acetate	mg/kg	10	<10	<10	-	-
MEK (2-butanone)	mg/kg	10	<10	<10	-	-
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	-	-
Chloroform	mg/kg	0.1	<0.1	<0.1	-	-
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	-	-
Dibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	-	-
2-nitropropane	mg/kg	10	<10	<10	-	-
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	-	-
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	-	-
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
2-hexanone (MBK)	mg/kg	5	<5	<5	-	-
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	-	-
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	-	-
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
Bromoform	mg/kg	0.1	<0.1	<0.1	-	-
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	-	-
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-

VOC's in Soil [AN433] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_QC116_20061 SOIL - 18/6/2020 SE207686.022	0407_QC118_20061 SOIL - 18/6/2020 SE207686.023	0407_QC403_20061 SOIL - 18/6/2020 SE207686.024	0407_QC503_20061 SOIL - 18/6/2020 SE207686.025
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	-	-
Bromobenzene	mg/kg	0.1	<0.1	<0.1	-	-
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	-	-
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	-	-
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	-	-
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
Total VOC*	mg/kg	24	<24	<24	-	-
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	-	-
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	-	-
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	-	-

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 19/6/2020

PARAMETER	UOM	LOR	0407_TP46_0.1_200(18 SOIL - 18/6/2020 SE207686.001	0407_TP46_1.0_200(18 SOIL - 18/6/2020 SE207686.002	0407_TP47_0.1_200(18 SOIL - 18/6/2020 SE207686.003	0407_TP47_0.5_200(18 SOIL - 18/6/2020 SE207686.004	0407_TP48_0.1_200(18 SOIL - 18/6/2020 SE207686.005
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP48_0.5_200(18 SOIL - 18/6/2020 SE207686.006	0407_TP55_0.1_200(18 SOIL - 18/6/2020 SE207686.007	0407_TP55_0.5_200(18 SOIL - 18/6/2020 SE207686.008	0407_TP56_0.1_200(18 SOIL - 18/6/2020 SE207686.009	0407_TP56_0.5_200(18 SOIL - 18/6/2020 SE207686.010
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP57_0.1_200(18 SOIL - 18/6/2020 SE207686.011	0407_TP57_0.5_200(18 SOIL - 18/6/2020 SE207686.012	0407_TP58_0.1_200(18 SOIL - 18/6/2020 SE207686.013	0407_TP58_0.5_200(18 SOIL - 18/6/2020 SE207686.014	0407_TP66_0.1_200(18 SOIL - 18/6/2020 SE207686.015
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP66_0.5_200(18 SOIL - 18/6/2020 SE207686.016	0407_TP64_0.1_200(18 SOIL - 18/6/2020 SE207686.017	0407_TP64_0.5_200(18 SOIL - 18/6/2020 SE207686.018	0407_TP67_0.1_200(18 SOIL - 18/6/2020 SE207686.019	0407_TP67_0.5_200(18 SOIL - 18/6/2020 SE207686.020
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_QC116_20061(SOIL - 18/6/2020 SE207686.022	0407_QC118_20061(SOIL - 18/6/2020 SE207686.023	0407_QC503_20061(SOIL - 18/6/2020 SE207686.025
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 19/6/2020

PARAMETER	UOM	LOR	0407_TP46_0.1_200(18 SOIL - 18/6/2020 SE207686.001	0407_TP46_1.0_200(18 SOIL - 18/6/2020 SE207686.002	0407_TP47_0.1_200(18 SOIL - 18/6/2020 SE207686.003	0407_TP47_0.5_200(18 SOIL - 18/6/2020 SE207686.004	0407_TP48_0.1_200(18 SOIL - 18/6/2020 SE207686.005
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	**140**
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	**130**
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	**140**
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP48_0.5_200(18 SOIL - 18/6/2020 SE207686.006	0407_TP55_0.1_200(18 SOIL - 18/6/2020 SE207686.007	0407_TP55_0.5_200(18 SOIL - 18/6/2020 SE207686.008	0407_TP56_0.1_200(18 SOIL - 18/6/2020 SE207686.009	0407_TP56_0.5_200(18 SOIL - 18/6/2020 SE207686.010
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	**99**	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	**91**	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP57_0.1_200(18 SOIL - 18/6/2020 SE207686.011	0407_TP57_0.5_200(18 SOIL - 18/6/2020 SE207686.012	0407_TP58_0.1_200(18 SOIL - 18/6/2020 SE207686.013	0407_TP58_0.5_200(18 SOIL - 18/6/2020 SE207686.014	0407_TP66_0.1_200(18 SOIL - 18/6/2020 SE207686.015
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP66_0.5_200(18 SOIL - 18/6/2020 SE207686.016	0407_TP64_0.1_200(18 SOIL - 18/6/2020 SE207686.017	0407_TP64_0.5_200(18 SOIL - 18/6/2020 SE207686.018	0407_TP67_0.1_200(18 SOIL - 18/6/2020 SE207686.019	0407_TP67_0.5_200(18 SOIL - 18/6/2020 SE207686.020
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	**53**	**58**	**50**	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_QC116_20061(SOIL - 18/6/2020 SE207686.022	0407_QC118_20061(SOIL - 18/6/2020 SE207686.023
TRH C10-C14	mg/kg	20	<20	<20
TRH C15-C28	mg/kg	45	**57**	<45
TRH C29-C36	mg/kg	45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 19/6/2020

PARAMETER	UOM	LOR	0407_TP46_0.1_200(18 SOIL - 18/6/2020 SE207686.001	0407_TP46_1.0_200(18 SOIL - 18/6/2020 SE207686.002	0407_TP47_0.1_200(18 SOIL - 18/6/2020 SE207686.003	0407_TP47_0.5_200(18 SOIL - 18/6/2020 SE207686.004	0407_TP48_0.1_200(18 SOIL - 18/6/2020 SE207686.005
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PARAMETER	UOM	LOR	0407_TP48_0.5_200(18 SOIL - 18/6/2020 SE207686.006	0407_TP55_0.1_200(18 SOIL - 18/6/2020 SE207686.007	0407_TP55_0.5_200(18 SOIL - 18/6/2020 SE207686.008	0407_TP56_0.1_200(18 SOIL - 18/6/2020 SE207686.009	0407_TP56_0.5_200(18 SOIL - 18/6/2020 SE207686.010
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP57_0.1_200(18 SOIL - 18/6/2020 SE207686.011	0407_TP57_0.5_200(18 SOIL - 18/6/2020 SE207686.012	0407_TP58_0.1_200(18 SOIL - 18/6/2020 SE207686.013	0407_TP58_0.5_200(18 SOIL - 18/6/2020 SE207686.014	0407_TP66_0.1_200(18 SOIL - 18/6/2020 SE207686.015
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PARAMETER	UOM	LOR	0407_TP66_0.5_200(18 SOIL - 18/6/2020 SE207686.016	0407_TP64_0.1_200(18 SOIL - 18/6/2020 SE207686.017	0407_TP64_0.5_200(18 SOIL - 18/6/2020 SE207686.018	0407_TP67_0.1_200(18 SOIL - 18/6/2020 SE207686.019	0407_TP67_0.5_200(18 SOIL - 18/6/2020 SE207686.020
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_QC116_200618 SOIL - 18/6/2020 SE207686.022	0407_QC118_200618 SOIL - 18/6/2020 SE207686.023
Naphthalene	mg/kg	0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8

Speciated Phenols in Soil [AN420] Tested: 19/6/2020

PARAMETER	UOM	LOR	0407_TP46_0.1_200(18 SOIL - 18/6/2020 SE207686.001	0407_TP46_1.0_200(18 SOIL - 18/6/2020 SE207686.002	0407_TP47_0.1_200(18 SOIL - 18/6/2020 SE207686.003	0407_TP47_0.5_200(18 SOIL - 18/6/2020 SE207686.004	0407_TP48_0.1_200(18 SOIL - 18/6/2020 SE207686.005
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_TP48_0.5_200(18 SOIL - 18/6/2020 SE207686.006	0407_TP55_0.1_200(18 SOIL - 18/6/2020 SE207686.007	0407_TP55_0.5_200(18 SOIL - 18/6/2020 SE207686.008	0407_TP56_0.1_200(18 SOIL - 18/6/2020 SE207686.009	0407_TP56_0.5_200(18 SOIL - 18/6/2020 SE207686.010
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

Speciated Phenols in Soil [AN420] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP57_0.1_200(18 SOIL - 18/6/2020 SE207686.011	0407_TP57_0.5_200(18 SOIL - 18/6/2020 SE207686.012	0407_TP58_0.1_200(18 SOIL - 18/6/2020 SE207686.013	0407_TP58_0.5_200(18 SOIL - 18/6/2020 SE207686.014	0407_TP66_0.1_200(18 SOIL - 18/6/2020 SE207686.015
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_TP66_0.5_200(18 SOIL - 18/6/2020 SE207686.016	0407_TP64_0.1_200(18 SOIL - 18/6/2020 SE207686.017	0407_TP64_0.5_200(18 SOIL - 18/6/2020 SE207686.018	0407_TP67_0.1_200(18 SOIL - 18/6/2020 SE207686.019	0407_TP67_0.5_200(18 SOIL - 18/6/2020 SE207686.020
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

Speciated Phenols in Soil [AN420] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_QC116_200618 SOIL - 18/6/2020 SE207686.022	0407_QC118_200618 SOIL - 18/6/2020 SE207686.023
Phenol	mg/kg	0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2

OC Pesticides in Soil [AN420] Tested: 19/6/2020

PARAMETER	UOM	LOR	0407_TP46_0.1_200(18 SOIL - 18/6/2020 SE207686.001	0407_TP46_1.0_200(18 SOIL - 18/6/2020 SE207686.002	0407_TP47_0.1_200(18 SOIL - 18/6/2020 SE207686.003	0407_TP47_0.5_200(18 SOIL - 18/6/2020 SE207686.004	0407_TP48_0.1_200(18 SOIL - 18/6/2020 SE207686.005
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP48_0.5_200(18 SOIL - 18/6/2020 SE207686.006	0407_TP55_0.1_200(18 SOIL - 18/6/2020 SE207686.007	0407_TP55_0.5_200(18 SOIL - 18/6/2020 SE207686.008	0407_TP56_0.1_200(18 SOIL - 18/6/2020 SE207686.009	0407_TP56_0.5_200(18 SOIL - 18/6/2020 SE207686.010
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP57_0.1_200(18 SOIL - 18/6/2020 SE207686.011	0407_TP57_0.5_200(18 SOIL - 18/6/2020 SE207686.012	0407_TP58_0.1_200(18 SOIL - 18/6/2020 SE207686.013	0407_TP58_0.5_200(18 SOIL - 18/6/2020 SE207686.014	0407_TP66_0.1_200(18 SOIL - 18/6/2020 SE207686.015
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	**0.3**	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	**0.3**	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	**0.3**	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	**0.4**
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP66_0.5_200(18 SOIL - 18/6/2020 SE207686.016	0407_TP64_0.1_200(18 SOIL - 18/6/2020 SE207686.017	0407_TP64_0.5_200(18 SOIL - 18/6/2020 SE207686.018	0407_TP67_0.1_200(18 SOIL - 18/6/2020 SE207686.019	0407_TP67_0.5_200(18 SOIL - 18/6/2020 SE207686.020
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_QC116_200618 SOIL - 18/6/2020 SE207686.022	0407_QC118_200618 SOIL - 18/6/2020 SE207686.023
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1

OP Pesticides in Soil [AN420] Tested: 19/6/2020

PARAMETER	UOM	LOR	0407_TP46_0.1_200(18 SOIL - 18/6/2020 SE207686.001	0407_TP46_1.0_200(18 SOIL - 18/6/2020 SE207686.002	0407_TP47_0.1_200(18 SOIL - 18/6/2020 SE207686.003	0407_TP47_0.5_200(18 SOIL - 18/6/2020 SE207686.004	0407_TP48_0.1_200(18 SOIL - 18/6/2020 SE207686.005
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP48_0.5_200(18 SOIL - 18/6/2020 SE207686.006	0407_TP55_0.1_200(18 SOIL - 18/6/2020 SE207686.007	0407_TP55_0.5_200(18 SOIL - 18/6/2020 SE207686.008	0407_TP56_0.1_200(18 SOIL - 18/6/2020 SE207686.009	0407_TP56_0.5_200(18 SOIL - 18/6/2020 SE207686.010
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP57_0.1_200(18 SOIL - 18/6/2020 SE207686.011	0407_TP57_0.5_200(18 SOIL - 18/6/2020 SE207686.012	0407_TP58_0.1_200(18 SOIL - 18/6/2020 SE207686.013	0407_TP58_0.5_200(18 SOIL - 18/6/2020 SE207686.014	0407_TP66_0.1_200(18 SOIL - 18/6/2020 SE207686.015
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

OP Pesticides in Soil [AN420] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP66_0.5_200(18 SOIL - 18/6/2020 SE207686.016	0407_TP64_0.1_200(18 SOIL - 18/6/2020 SE207686.017	0407_TP64_0.5_200(18 SOIL - 18/6/2020 SE207686.018	0407_TP67_0.1_200(18 SOIL - 18/6/2020 SE207686.019	0407_TP67_0.5_200(18 SOIL - 18/6/2020 SE207686.020
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_QC116_20061(SOIL - 18/6/2020 SE207686.022	0407_QC118_20061(SOIL - 18/6/2020 SE207686.023
Dichlorvos	mg/kg	0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7

PCBs in Soil [AN420] Tested: 19/6/2020

PARAMETER	UOM	LOR	0407_TP46_0.1_200(18 SOIL - 18/6/2020 SE207686.001	0407_TP46_1.0_200(18 SOIL - 18/6/2020 SE207686.002	0407_TP47_0.1_200(18 SOIL - 18/6/2020 SE207686.003	0407_TP47_0.5_200(18 SOIL - 18/6/2020 SE207686.004	0407_TP48_0.1_200(18 SOIL - 18/6/2020 SE207686.005
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP48_0.5_200(18 SOIL - 18/6/2020 SE207686.006	0407_TP55_0.1_200(18 SOIL - 18/6/2020 SE207686.007	0407_TP55_0.5_200(18 SOIL - 18/6/2020 SE207686.008	0407_TP56_0.1_200(18 SOIL - 18/6/2020 SE207686.009	0407_TP56_0.5_200(18 SOIL - 18/6/2020 SE207686.010
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP57_0.1_200(18 SOIL - 18/6/2020 SE207686.011	0407_TP57_0.5_200(18 SOIL - 18/6/2020 SE207686.012	0407_TP58_0.1_200(18 SOIL - 18/6/2020 SE207686.013	0407_TP58_0.5_200(18 SOIL - 18/6/2020 SE207686.014	0407_TP66_0.1_200(18 SOIL - 18/6/2020 SE207686.015
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PCBs in Soil [AN420] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP66_0.5_200(18 SOIL - 18/6/2020 SE207686.016	0407_TP64_0.1_200(18 SOIL - 18/6/2020 SE207686.017	0407_TP64_0.5_200(18 SOIL - 18/6/2020 SE207686.018	0407_TP67_0.1_200(18 SOIL - 18/6/2020 SE207686.019	0407_TP67_0.5_200(18 SOIL - 18/6/2020 SE207686.020
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_QC116_20061(SOIL - 18/6/2020 SE207686.022	0407_QC118_20061(SOIL - 18/6/2020 SE207686.023
Arochlor 1016	mg/kg	0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 19/6/2020

PARAMETER	UOM	LOR	0407_TP46_0.1_200(18 SOIL - 18/6/2020 SE207686.001	0407_TP46_1.0_200(18 SOIL - 18/6/2020 SE207686.002	0407_TP47_0.1_200(18 SOIL - 18/6/2020 SE207686.003	0407_TP47_0.5_200(18 SOIL - 18/6/2020 SE207686.004	0407_TP48_0.1_200(18 SOIL - 18/6/2020 SE207686.005
Arsenic, As	mg/kg	1	<1	<1	<1	<1	1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	0.6	1.9	<0.5	<0.5	2.3
Copper, Cu	mg/kg	0.5	2.6	<0.5	1.0	<0.5	610
Lead, Pb	mg/kg	1	7	1	2	<1	2
Nickel, Ni	mg/kg	0.5	<0.5	1.0	<0.5	<0.5	1.6
Zinc, Zn	mg/kg	2	11	3.6	3.3	<2.0	3.1

PARAMETER	UOM	LOR	0407_TP48_0.5_200(18 SOIL - 18/6/2020 SE207686.006	0407_TP55_0.1_200(18 SOIL - 18/6/2020 SE207686.007	0407_TP55_0.5_200(18 SOIL - 18/6/2020 SE207686.008	0407_TP56_0.1_200(18 SOIL - 18/6/2020 SE207686.009	0407_TP56_0.5_200(18 SOIL - 18/6/2020 SE207686.010
Arsenic, As	mg/kg	1	<1	<1	<1	<1	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	1.5	<0.5	<0.5	<0.5	<0.5
Copper, Cu	mg/kg	0.5	98	<0.5	<0.5	0.7	<0.5
Lead, Pb	mg/kg	1	1	<1	<1	2	<1
Nickel, Ni	mg/kg	0.5	1.3	<0.5	<0.5	<0.5	<0.5
Zinc, Zn	mg/kg	2	<2.0	<2.0	23	<2.0	<2.0

PARAMETER	UOM	LOR	0407_TP57_0.1_200(18 SOIL - 18/6/2020 SE207686.011	0407_TP57_0.5_200(18 SOIL - 18/6/2020 SE207686.012	0407_TP58_0.1_200(18 SOIL - 18/6/2020 SE207686.013	0407_TP58_0.5_200(18 SOIL - 18/6/2020 SE207686.014	0407_TP66_0.1_200(18 SOIL - 18/6/2020 SE207686.015
Arsenic, As	mg/kg	1	<1	<1	1	<1	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	<0.5	1.5	6.5	<0.5	2.0
Copper, Cu	mg/kg	0.5	<0.5	<0.5	8.5	<0.5	<0.5
Lead, Pb	mg/kg	1	<1	1	19	<1	2
Nickel, Ni	mg/kg	0.5	<0.5	0.8	17	<0.5	<0.5
Zinc, Zn	mg/kg	2	2.5	<2.0	27	6.7	<2.0

PARAMETER	UOM	LOR	0407_TP66_0.5_200(18 SOIL - 18/6/2020 SE207686.016	0407_TP64_0.1_200(18 SOIL - 18/6/2020 SE207686.017	0407_TP64_0.5_200(18 SOIL - 18/6/2020 SE207686.018	0407_TP67_0.1_200(18 SOIL - 18/6/2020 SE207686.019	0407_TP67_0.5_200(18 SOIL - 18/6/2020 SE207686.020
Arsenic, As	mg/kg	1	<1	<1	<1	<1	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	1.2	<0.5	<0.5	1.1	<0.5
Copper, Cu	mg/kg	0.5	0.8	1.0	<0.5	2.2	<0.5
Lead, Pb	mg/kg	1	3	3	<1	8	<1
Nickel, Ni	mg/kg	0.5	0.9	<0.5	<0.5	0.6	<0.5
Zinc, Zn	mg/kg	2	15	10	<2.0	8.9	<2.0

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 19/6/2020

(continued)

PARAMETER	UOM	LOR	0407_QC116_200618 SOIL - 18/6/2020 SE207686.022	0407_QC118_200618 SOIL - 18/6/2020 SE207686.023
Arsenic, As	mg/kg	1	<1	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	**1.5**	**0.5**
Copper, Cu	mg/kg	0.5	**2.1**	**4.0**
Lead, Pb	mg/kg	1	**8**	**10**
Nickel, Ni	mg/kg	0.5	**1.0**	<0.5
Zinc, Zn	mg/kg	2	**32**	**32**

Mercury in Soil [AN312] Tested: 19/6/2020

PARAMETER	UOM	LOR	0407_TP46_0.1_20018 SOIL - 18/6/2020 SE207686.001	0407_TP46_1.0_20018 SOIL - 18/6/2020 SE207686.002	0407_TP47_0.1_20018 SOIL - 18/6/2020 SE207686.003	0407_TP47_0.5_20018 SOIL - 18/6/2020 SE207686.004	0407_TP48_0.1_20018 SOIL - 18/6/2020 SE207686.005
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_TP48_0.5_20018 SOIL - 18/6/2020 SE207686.006	0407_TP55_0.1_20018 SOIL - 18/6/2020 SE207686.007	0407_TP55_0.5_20018 SOIL - 18/6/2020 SE207686.008	0407_TP56_0.1_20018 SOIL - 18/6/2020 SE207686.009	0407_TP56_0.5_20018 SOIL - 18/6/2020 SE207686.010
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_TP57_0.1_20018 SOIL - 18/6/2020 SE207686.011	0407_TP57_0.5_20018 SOIL - 18/6/2020 SE207686.012	0407_TP58_0.1_20018 SOIL - 18/6/2020 SE207686.013	0407_TP58_0.5_20018 SOIL - 18/6/2020 SE207686.014	0407_TP66_0.1_20018 SOIL - 18/6/2020 SE207686.015
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_TP66_0.5_20018 SOIL - 18/6/2020 SE207686.016	0407_TP64_0.1_20018 SOIL - 18/6/2020 SE207686.017	0407_TP64_0.5_20018 SOIL - 18/6/2020 SE207686.018	0407_TP67_0.1_20018 SOIL - 18/6/2020 SE207686.019	0407_TP67_0.5_20018 SOIL - 18/6/2020 SE207686.020
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_QC116_20061 SOIL - 18/6/2020 SE207686.022	0407_QC118_20061 SOIL - 18/6/2020 SE207686.023
Mercury	mg/kg	0.05	<0.05	<0.05

Moisture Content [AN002] Tested: 19/6/2020

PARAMETER	UOM	LOR	0407_TP46_0.1_200(18 SOIL - 18/6/2020 SE207686.001	0407_TP46_1.0_200(18 SOIL - 18/6/2020 SE207686.002	0407_TP47_0.1_200(18 SOIL - 18/6/2020 SE207686.003	0407_TP47_0.5_200(18 SOIL - 18/6/2020 SE207686.004	0407_TP48_0.1_200(18 SOIL - 18/6/2020 SE207686.005
% Moisture	%w/w	1	2.6	6.8	3.2	3.7	8.0

PARAMETER	UOM	LOR	0407_TP48_0.5_200(18 SOIL - 18/6/2020 SE207686.006	0407_TP55_0.1_200(18 SOIL - 18/6/2020 SE207686.007	0407_TP55_0.5_200(18 SOIL - 18/6/2020 SE207686.008	0407_TP56_0.1_200(18 SOIL - 18/6/2020 SE207686.009	0407_TP56_0.5_200(18 SOIL - 18/6/2020 SE207686.010
% Moisture	%w/w	1	3.6	2.4	4.3	3.0	4.3

PARAMETER	UOM	LOR	0407_TP57_0.1_200(18 SOIL - 18/6/2020 SE207686.011	0407_TP57_0.5_200(18 SOIL - 18/6/2020 SE207686.012	0407_TP58_0.1_200(18 SOIL - 18/6/2020 SE207686.013	0407_TP58_0.5_200(18 SOIL - 18/6/2020 SE207686.014	0407_TP66_0.1_200(18 SOIL - 18/6/2020 SE207686.015
% Moisture	%w/w	1	3.0	6.0	14.2	2.8	10.3

PARAMETER	UOM	LOR	0407_TP66_0.5_200(18 SOIL - 18/6/2020 SE207686.016	0407_TP64_0.1_200(18 SOIL - 18/6/2020 SE207686.017	0407_TP64_0.5_200(18 SOIL - 18/6/2020 SE207686.018	0407_TP67_0.1_200(18 SOIL - 18/6/2020 SE207686.019	0407_TP67_0.5_200(18 SOIL - 18/6/2020 SE207686.020
% Moisture	%w/w	1	4.2	3.8	9.4	3.5	3.1

PARAMETER	UOM	LOR	0407_QC116_20061(SOIL - 18/6/2020 SE207686.022	0407_QC118_20061(SOIL - 18/6/2020 SE207686.023	0407_QC503_20061(SOIL - 18/6/2020 SE207686.025
% Moisture	%w/w	1	4.3	3.4	<1.0

Fibre Identification in soil [AN602] Tested: 24/6/2020

PARAMETER	UOM	LOR	0407_TP46_0.1_200(18 SOIL - 18/6/2020 SE207686.001	0407_TP47_0.1_200(18 SOIL - 18/6/2020 SE207686.003	0407_TP55_0.1_200(18 SOIL - 18/6/2020 SE207686.007	0407_TP56_0.1_200(18 SOIL - 18/6/2020 SE207686.009	0407_TP57_0.1_200(18 SOIL - 18/6/2020 SE207686.011
Asbestos Detected	No unit	-	No	No	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	0407_TP58_0.1_200(18 SOIL - 18/6/2020 SE207686.013	0407_TP66_0.1_200(18 SOIL - 18/6/2020 SE207686.015	0407_TP64_0.1_200(18 SOIL - 18/6/2020 SE207686.017	0407_TP67_0.1_200(18 SOIL - 18/6/2020 SE207686.019
Asbestos Detected	No unit	-	No	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 24/6/2020

PARAMETER	UOM	LOR	0407_TP46_0.1_200(18 SOIL - 18/6/2020 SE207686.001	0407_TP47_0.1_200(18 SOIL - 18/6/2020 SE207686.003	0407_TP55_0.1_200(18 SOIL - 18/6/2020 SE207686.007	0407_TP56_0.1_200(18 SOIL - 18/6/2020 SE207686.009	0407_TP57_0.1_200(18 SOIL - 18/6/2020 SE207686.011
Total Sample Weight*	g	1	**731**	**866**	**921**	**934**	**863**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP58_0.1_200(18 SOIL - 18/6/2020 SE207686.013	0407_TP66_0.1_200(18 SOIL - 18/6/2020 SE207686.015	0407_TP64_0.1_200(18 SOIL - 18/6/2020 SE207686.017	0407_TP67_0.1_200(18 SOIL - 18/6/2020 SE207686.019
Total Sample Weight*	g	1	**749**	**698**	**936**	**695**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level [MA-1523] Tested: 24/6/2020

PARAMETER	UOM	LOR	0407_QC116_200618 SOIL - 18/6/2020 SE207686.022
Perfluorobutanoic acid (PFBA)	mg/kg	0.0001	<0.0001
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0005	<0.0005
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0001	<0.0001
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0001	<0.0001
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0001	<0.0001
Perfluorononanoic acid (PFNA)	mg/kg	0.0001	<0.0001
Perfluorodecanoic acid (PFDA)	mg/kg	0.0001	<0.0001
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0001	<0.0001
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0001	<0.0001
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0001	<0.0001
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0001	<0.0001
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0001	<0.0001
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0001	<0.0001
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0001	<0.0001
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0001	<0.0001
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0001	<0.0001
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0001	<0.0001
Sum PFOS and PFHXS	mg/kg	0.0001	<0.0001
Perfluorononane sulfonate (PFNS)	mg/kg	0.0001	<0.0001
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0001	<0.0001
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0001	<0.0001
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.001	<0.001
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.001	<0.001
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.001	<0.001
Perfluoroctane sulfonamide (PFOSA)	mg/kg	0.001	<0.001
N-Methylperfluoroctane sulfonamide (N-MeFOSA)	mg/kg	0.001	<0.001
N-Ethylperfluoroctane sulfonamide (N-EtFOSA)	mg/kg	0.001	<0.001
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002	<0.002
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002	<0.002
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.001	<0.001
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.001	<0.001

Fibre ID in bulk materials [AN602] Tested: 25/6/2020

PARAMETER	UOM	LOR	0407_TP48_A01_20018 MATERIAL - 18/6/2020 SE207686.021
Asbestos Detected	No unit	-	Yes

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid, mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents.
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples, Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.
AN605	This technique gravimetrically determines the mass of Bonded Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight. Any fibrous asbestos (FA) found in this fraction will be added to the 2-7mm fraction and its mass recorded there.

AN605	This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free/respirable fibres which are only observed by standard trace analysis as per AN602.
AN605	Bonded asbestos containing material (Bonded ACM) comprises asbestos-containing-material which is sound in condition. Fibrous asbestos (FA) comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material. Asbestos fines (AF) includes free fibres, small fibre bundles and also small fragments of bonded ACM that passes through a 7mm sieve - which implies that the bonded ACM fragments have a substantial degree of damage which increases the potential for fibre release.
AN-605	Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009 and NEPM 1999 (2013) schedule B1 section 4..
MA-1523	This method covers the analysis of per- and polyfluoroalkyl substances (PFAS) in aqueous, solid and biosolid samples and solvent extracts, determined as the total of linear and branched isomers. After spiking with isotopically labelled quantification surrogates and clean-up via SPE cartridges sample extracts are analysed by liquid chromatography/mass spectrometry (LC-MS/MS). PFAS concentrations are determined by isotope dilution quantification.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE207686 R1

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000667--000670**
Samples	25

LABORATORY DETAILS

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Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207686 R1**
Date Received	18 Jun 2020
Date Reported	01 Jul 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Surrogate	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	8 items
Duplicate	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	2 items

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	24 Soil, 1 Material
Date documentation received	18/6/2020	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	13°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

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SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Fibre ID in bulk materials

Method: ME-(AU)-[ENV]AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP48_A01_200618	SE207686.021	LB202739	18 Jun 2020	18 Jun 2020	18 Jun 2021	25 Jun 2020	18 Jun 2021	25 Jun 2020

Fibre Identification in soil

Method: ME-(AU)-[ENV]AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP46_0.1_200618	SE207686.001	LB202693	18 Jun 2020	18 Jun 2020	18 Jun 2021	24 Jun 2020	18 Jun 2021	25 Jun 2020
0407_TP46_1.0_200618	SE207686.002	LB202693	18 Jun 2020	18 Jun 2020	18 Jun 2021	24 Jun 2020	18 Jun 2021	25 Jun 2020
0407_TP47_0.1_200618	SE207686.003	LB202693	18 Jun 2020	18 Jun 2020	18 Jun 2021	24 Jun 2020	18 Jun 2021	25 Jun 2020
0407_TP47_0.5_200618	SE207686.004	LB202693	18 Jun 2020	18 Jun 2020	18 Jun 2021	24 Jun 2020	18 Jun 2021	25 Jun 2020
0407_TP48_0.1_200618	SE207686.005	LB202693	18 Jun 2020	18 Jun 2020	18 Jun 2021	24 Jun 2020	18 Jun 2021	25 Jun 2020
0407_TP48_0.5_200618	SE207686.006	LB202693	18 Jun 2020	18 Jun 2020	18 Jun 2021	24 Jun 2020	18 Jun 2021	25 Jun 2020
0407_TP55_0.1_200618	SE207686.007	LB202693	18 Jun 2020	18 Jun 2020	18 Jun 2021	24 Jun 2020	18 Jun 2021	25 Jun 2020
0407_TP55_0.5_200618	SE207686.008	LB202693	18 Jun 2020	18 Jun 2020	18 Jun 2021	24 Jun 2020	18 Jun 2021	25 Jun 2020
0407_TP56_0.1_200618	SE207686.009	LB202693	18 Jun 2020	18 Jun 2020	18 Jun 2021	24 Jun 2020	18 Jun 2021	25 Jun 2020
0407_TP56_0.5_200618	SE207686.010	LB202693	18 Jun 2020	18 Jun 2020	18 Jun 2021	24 Jun 2020	18 Jun 2021	25 Jun 2020
0407_TP57_0.1_200618	SE207686.011	LB202693	18 Jun 2020	18 Jun 2020	18 Jun 2021	24 Jun 2020	18 Jun 2021	25 Jun 2020
0407_TP57_0.5_200618	SE207686.012	LB202693	18 Jun 2020	18 Jun 2020	18 Jun 2021	24 Jun 2020	18 Jun 2021	25 Jun 2020
0407_TP58_0.1_200618	SE207686.013	LB202693	18 Jun 2020	18 Jun 2020	18 Jun 2021	24 Jun 2020	18 Jun 2021	25 Jun 2020
0407_TP58_0.5_200618	SE207686.014	LB202693	18 Jun 2020	18 Jun 2020	18 Jun 2021	24 Jun 2020	18 Jun 2021	25 Jun 2020
0407_TP66_0.1_200618	SE207686.015	LB202693	18 Jun 2020	18 Jun 2020	18 Jun 2021	24 Jun 2020	18 Jun 2021	25 Jun 2020
0407_TP66_0.5_200618	SE207686.016	LB202693	18 Jun 2020	18 Jun 2020	18 Jun 2021	24 Jun 2020	18 Jun 2021	25 Jun 2020
0407_TP64_0.1_200618	SE207686.017	LB202693	18 Jun 2020	18 Jun 2020	18 Jun 2021	24 Jun 2020	18 Jun 2021	25 Jun 2020
0407_TP64_0.5_200618	SE207686.018	LB202693	18 Jun 2020	18 Jun 2020	18 Jun 2021	24 Jun 2020	18 Jun 2021	25 Jun 2020
0407_TP67_0.1_200618	SE207686.019	LB202693	18 Jun 2020	18 Jun 2020	18 Jun 2021	24 Jun 2020	18 Jun 2021	25 Jun 2020
0407_TP67_0.5_200618	SE207686.020	LB202693	18 Jun 2020	18 Jun 2020	18 Jun 2021	24 Jun 2020	18 Jun 2021	25 Jun 2020

Gravimetric Determination of Asbestos in Soil

Method: ME-(AU)-[ENV]AN605

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP46_0.1_200618	SE207686.001	LB202693	18 Jun 2020	18 Jun 2020	15 Dec 2020	24 Jun 2020	15 Dec 2020	25 Jun 2020
0407_TP46_1.0_200618	SE207686.002	LB202693	18 Jun 2020	18 Jun 2020	15 Dec 2020	24 Jun 2020	15 Dec 2020	25 Jun 2020
0407_TP47_0.1_200618	SE207686.003	LB202693	18 Jun 2020	18 Jun 2020	15 Dec 2020	24 Jun 2020	15 Dec 2020	25 Jun 2020
0407_TP47_0.5_200618	SE207686.004	LB202693	18 Jun 2020	18 Jun 2020	15 Dec 2020	24 Jun 2020	15 Dec 2020	25 Jun 2020
0407_TP48_0.1_200618	SE207686.005	LB202693	18 Jun 2020	18 Jun 2020	15 Dec 2020	24 Jun 2020	15 Dec 2020	25 Jun 2020
0407_TP48_0.5_200618	SE207686.006	LB202693	18 Jun 2020	18 Jun 2020	15 Dec 2020	24 Jun 2020	15 Dec 2020	25 Jun 2020
0407_TP55_0.1_200618	SE207686.007	LB202693	18 Jun 2020	18 Jun 2020	15 Dec 2020	24 Jun 2020	15 Dec 2020	25 Jun 2020
0407_TP55_0.5_200618	SE207686.008	LB202693	18 Jun 2020	18 Jun 2020	15 Dec 2020	24 Jun 2020	15 Dec 2020	25 Jun 2020
0407_TP56_0.1_200618	SE207686.009	LB202693	18 Jun 2020	18 Jun 2020	15 Dec 2020	24 Jun 2020	15 Dec 2020	25 Jun 2020
0407_TP56_0.5_200618	SE207686.010	LB202693	18 Jun 2020	18 Jun 2020	15 Dec 2020	24 Jun 2020	15 Dec 2020	25 Jun 2020
0407_TP57_0.1_200618	SE207686.011	LB202693	18 Jun 2020	18 Jun 2020	15 Dec 2020	24 Jun 2020	15 Dec 2020	25 Jun 2020
0407_TP57_0.5_200618	SE207686.012	LB202693	18 Jun 2020	18 Jun 2020	15 Dec 2020	24 Jun 2020	15 Dec 2020	25 Jun 2020
0407_TP58_0.1_200618	SE207686.013	LB202693	18 Jun 2020	18 Jun 2020	15 Dec 2020	24 Jun 2020	15 Dec 2020	25 Jun 2020
0407_TP58_0.5_200618	SE207686.014	LB202693	18 Jun 2020	18 Jun 2020	15 Dec 2020	24 Jun 2020	15 Dec 2020	25 Jun 2020
0407_TP66_0.1_200618	SE207686.015	LB202693	18 Jun 2020	18 Jun 2020	15 Dec 2020	24 Jun 2020	15 Dec 2020	25 Jun 2020
0407_TP66_0.5_200618	SE207686.016	LB202693	18 Jun 2020	18 Jun 2020	15 Dec 2020	24 Jun 2020	15 Dec 2020	25 Jun 2020
0407_TP64_0.1_200618	SE207686.017	LB202693	18 Jun 2020	18 Jun 2020	15 Dec 2020	24 Jun 2020	15 Dec 2020	25 Jun 2020
0407_TP64_0.5_200618	SE207686.018	LB202693	18 Jun 2020	18 Jun 2020	15 Dec 2020	24 Jun 2020	15 Dec 2020	25 Jun 2020
0407_TP67_0.1_200618	SE207686.019	LB202693	18 Jun 2020	18 Jun 2020	15 Dec 2020	24 Jun 2020	15 Dec 2020	25 Jun 2020
0407_TP67_0.5_200618	SE207686.020	LB202693	18 Jun 2020	18 Jun 2020	15 Dec 2020	24 Jun 2020	15 Dec 2020	25 Jun 2020

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP46_0.1_200618	SE207686.001	LB202386	18 Jun 2020	18 Jun 2020	16 Jul 2020	19 Jun 2020	16 Jul 2020	25 Jun 2020
0407_TP46_1.0_200618	SE207686.002	LB202386	18 Jun 2020	18 Jun 2020	16 Jul 2020	19 Jun 2020	16 Jul 2020	25 Jun 2020
0407_TP47_0.1_200618	SE207686.003	LB202386	18 Jun 2020	18 Jun 2020	16 Jul 2020	19 Jun 2020	16 Jul 2020	25 Jun 2020
0407_TP47_0.5_200618	SE207686.004	LB202386	18 Jun 2020	18 Jun 2020	16 Jul 2020	19 Jun 2020	16 Jul 2020	25 Jun 2020
0407_TP48_0.1_200618	SE207686.005	LB202386	18 Jun 2020	18 Jun 2020	16 Jul 2020	19 Jun 2020	16 Jul 2020	25 Jun 2020
0407_TP48_0.5_200618	SE207686.006	LB202386	18 Jun 2020	18 Jun 2020	16 Jul 2020	19 Jun 2020	16 Jul 2020	25 Jun 2020
0407_TP55_0.1_200618	SE207686.007	LB202386	18 Jun 2020	18 Jun 2020	16 Jul 2020	19 Jun 2020	16 Jul 2020	25 Jun 2020
0407_TP55_0.5_200618	SE207686.008	LB202386	18 Jun 2020	18 Jun 2020	16 Jul 2020	19 Jun 2020	16 Jul 2020	25 Jun 2020
0407_TP56_0.1_200618	SE207686.009	LB202386	18 Jun 2020	18 Jun 2020	16 Jul 2020	19 Jun 2020	16 Jul 2020	25 Jun 2020
0407_TP56_0.5_200618	SE207686.010	LB202386	18 Jun 2020	18 Jun 2020	16 Jul 2020	19 Jun 2020	16 Jul 2020	25 Jun 2020

HOLDING TIME SUMMARY

SE207686 R1

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Mercury in Soil (continued)

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP57_0.1_200618	SE207686.011	LB202386	18 Jun 2020	18 Jun 2020	16 Jul 2020	19 Jun 2020	16 Jul 2020	25 Jun 2020
0407_TP57_0.5_200618	SE207686.012	LB202386	18 Jun 2020	18 Jun 2020	16 Jul 2020	19 Jun 2020	16 Jul 2020	25 Jun 2020
0407_TP58_0.1_200618	SE207686.013	LB202386	18 Jun 2020	18 Jun 2020	16 Jul 2020	19 Jun 2020	16 Jul 2020	25 Jun 2020
0407_TP58_0.5_200618	SE207686.014	LB202386	18 Jun 2020	18 Jun 2020	16 Jul 2020	19 Jun 2020	16 Jul 2020	25 Jun 2020
0407_TP66_0.1_200618	SE207686.015	LB202386	18 Jun 2020	18 Jun 2020	16 Jul 2020	19 Jun 2020	16 Jul 2020	25 Jun 2020
0407_TP66_0.5_200618	SE207686.016	LB202386	18 Jun 2020	18 Jun 2020	16 Jul 2020	19 Jun 2020	16 Jul 2020	25 Jun 2020
0407_TP64_0.1_200618	SE207686.017	LB202386	18 Jun 2020	18 Jun 2020	16 Jul 2020	19 Jun 2020	16 Jul 2020	25 Jun 2020
0407_TP64_0.5_200618	SE207686.018	LB202386	18 Jun 2020	18 Jun 2020	16 Jul 2020	19 Jun 2020	16 Jul 2020	25 Jun 2020
0407_TP67_0.1_200618	SE207686.019	LB202386	18 Jun 2020	18 Jun 2020	16 Jul 2020	19 Jun 2020	16 Jul 2020	25 Jun 2020
0407_TP67_0.5_200618	SE207686.020	LB202609	18 Jun 2020	18 Jun 2020	16 Jul 2020	24 Jun 2020	16 Jul 2020	25 Jun 2020
0407_QC116_200618	SE207686.022	LB202609	18 Jun 2020	18 Jun 2020	16 Jul 2020	24 Jun 2020	16 Jul 2020	25 Jun 2020
0407_QC118_200618	SE207686.023	LB202609	18 Jun 2020	18 Jun 2020	16 Jul 2020	24 Jun 2020	16 Jul 2020	25 Jun 2020

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP46_0.1_200618	SE207686.001	LB202342	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020
0407_TP46_1.0_200618	SE207686.002	LB202342	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020
0407_TP47_0.1_200618	SE207686.003	LB202342	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020
0407_TP47_0.5_200618	SE207686.004	LB202342	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020
0407_TP48_0.1_200618	SE207686.005	LB202342	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020
0407_TP48_0.5_200618	SE207686.006	LB202342	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020
0407_TP55_0.1_200618	SE207686.007	LB202342	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020
0407_TP55_0.5_200618	SE207686.008	LB202342	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020
0407_TP56_0.1_200618	SE207686.009	LB202342	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020
0407_TP56_0.5_200618	SE207686.010	LB202342	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020
0407_TP57_0.1_200618	SE207686.011	LB202342	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020
0407_TP57_0.5_200618	SE207686.012	LB202342	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020
0407_TP58_0.1_200618	SE207686.013	LB202342	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020
0407_TP58_0.5_200618	SE207686.014	LB202342	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020
0407_TP66_0.1_200618	SE207686.015	LB202342	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020
0407_TP66_0.5_200618	SE207686.016	LB202342	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020
0407_TP64_0.1_200618	SE207686.017	LB202342	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020
0407_TP64_0.5_200618	SE207686.018	LB202342	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020
0407_TP67_0.1_200618	SE207686.019	LB202342	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020
0407_TP67_0.5_200618	SE207686.020	LB202342	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020
0407_QC116_200618	SE207686.022	LB202342	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020
0407_QC118_200618	SE207686.023	LB202342	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020
0407_QC503_200618	SE207686.025	LB202342	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP46_0.1_200618	SE207686.001	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP46_1.0_200618	SE207686.002	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP47_0.1_200618	SE207686.003	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP47_0.5_200618	SE207686.004	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP48_0.1_200618	SE207686.005	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP48_0.5_200618	SE207686.006	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP55_0.1_200618	SE207686.007	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP55_0.5_200618	SE207686.008	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP56_0.1_200618	SE207686.009	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP56_0.5_200618	SE207686.010	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP57_0.1_200618	SE207686.011	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP57_0.5_200618	SE207686.012	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP58_0.1_200618	SE207686.013	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP58_0.5_200618	SE207686.014	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP66_0.1_200618	SE207686.015	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP66_0.5_200618	SE207686.016	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP64_0.1_200618	SE207686.017	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP64_0.5_200618	SE207686.018	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP67_0.1_200618	SE207686.019	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP67_0.5_200618	SE207686.020	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020

HOLDING TIME SUMMARY

SE207686 R1

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC116_200618	SE207686.022	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_QC118_200618	SE207686.023	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP46_0.1_200618	SE207686.001	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP46_1.0_200618	SE207686.002	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP47_0.1_200618	SE207686.003	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP47_0.5_200618	SE207686.004	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP48_0.1_200618	SE207686.005	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP48_0.5_200618	SE207686.006	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP55_0.1_200618	SE207686.007	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP55_0.5_200618	SE207686.008	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP56_0.1_200618	SE207686.009	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP56_0.5_200618	SE207686.010	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP57_0.1_200618	SE207686.011	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP57_0.5_200618	SE207686.012	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP58_0.1_200618	SE207686.013	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP58_0.5_200618	SE207686.014	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP66_0.1_200618	SE207686.015	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP66_0.5_200618	SE207686.016	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP64_0.1_200618	SE207686.017	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP64_0.5_200618	SE207686.018	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP67_0.1_200618	SE207686.019	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP67_0.5_200618	SE207686.020	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_QC116_200618	SE207686.022	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_QC118_200618	SE207686.023	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP46_0.1_200618	SE207686.001	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP46_1.0_200618	SE207686.002	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP47_0.1_200618	SE207686.003	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP47_0.5_200618	SE207686.004	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP48_0.1_200618	SE207686.005	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP48_0.5_200618	SE207686.006	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP55_0.1_200618	SE207686.007	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP55_0.5_200618	SE207686.008	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP56_0.1_200618	SE207686.009	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP56_0.5_200618	SE207686.010	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP57_0.1_200618	SE207686.011	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP57_0.5_200618	SE207686.012	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP58_0.1_200618	SE207686.013	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP58_0.5_200618	SE207686.014	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP66_0.1_200618	SE207686.015	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP66_0.5_200618	SE207686.016	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP64_0.1_200618	SE207686.017	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP64_0.5_200618	SE207686.018	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP67_0.1_200618	SE207686.019	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP67_0.5_200618	SE207686.020	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_QC116_200618	SE207686.022	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_QC118_200618	SE207686.023	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP46_0.1_200618	SE207686.001	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP46_1.0_200618	SE207686.002	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP47_0.1_200618	SE207686.003	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP47_0.5_200618	SE207686.004	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP48_0.1_200618	SE207686.005	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP48_0.5_200618	SE207686.006	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020

HOLDING TIME SUMMARY

SE207686 R1

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

PCBs in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP55_0.1_200618	SE207686.007	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP55_0.5_200618	SE207686.008	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP56_0.1_200618	SE207686.009	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP56_0.5_200618	SE207686.010	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP57_0.1_200618	SE207686.011	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP57_0.5_200618	SE207686.012	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP58_0.1_200618	SE207686.013	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP58_0.5_200618	SE207686.014	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP66_0.1_200618	SE207686.015	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP66_0.5_200618	SE207686.016	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP64_0.1_200618	SE207686.017	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP64_0.5_200618	SE207686.018	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP67_0.1_200618	SE207686.019	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP67_0.5_200618	SE207686.020	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_QC116_200618	SE207686.022	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_QC118_200618	SE207686.023	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP46_0.1_200618	SE207686.001	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	26 Jun 2020
0407_TP46_1.0_200618	SE207686.002	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	26 Jun 2020
0407_TP47_0.1_200618	SE207686.003	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	26 Jun 2020
0407_TP47_0.5_200618	SE207686.004	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	26 Jun 2020
0407_TP48_0.1_200618	SE207686.005	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	26 Jun 2020
0407_TP48_0.5_200618	SE207686.006	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	26 Jun 2020
0407_TP55_0.1_200618	SE207686.007	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	26 Jun 2020
0407_TP55_0.5_200618	SE207686.008	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	26 Jun 2020
0407_TP56_0.1_200618	SE207686.009	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	26 Jun 2020
0407_TP56_0.5_200618	SE207686.010	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	26 Jun 2020
0407_TP57_0.1_200618	SE207686.011	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	26 Jun 2020
0407_TP57_0.5_200618	SE207686.012	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	26 Jun 2020
0407_TP58_0.1_200618	SE207686.013	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	26 Jun 2020
0407_TP58_0.5_200618	SE207686.014	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	26 Jun 2020
0407_TP66_0.1_200618	SE207686.015	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	26 Jun 2020
0407_TP66_0.5_200618	SE207686.016	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	26 Jun 2020
0407_TP64_0.1_200618	SE207686.017	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	26 Jun 2020
0407_TP64_0.5_200618	SE207686.018	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	26 Jun 2020
0407_TP67_0.1_200618	SE207686.019	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	26 Jun 2020
0407_TP67_0.5_200618	SE207686.020	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	26 Jun 2020
0407_QC116_200618	SE207686.022	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	26 Jun 2020
0407_QC118_200618	SE207686.023	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	26 Jun 2020

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP46_0.1_200618	SE207686.001	LB202376	18 Jun 2020	18 Jun 2020	15 Dec 2020	19 Jun 2020	15 Dec 2020	23 Jun 2020
0407_TP46_1.0_200618	SE207686.002	LB202376	18 Jun 2020	18 Jun 2020	15 Dec 2020	19 Jun 2020	15 Dec 2020	23 Jun 2020
0407_TP47_0.1_200618	SE207686.003	LB202376	18 Jun 2020	18 Jun 2020	15 Dec 2020	19 Jun 2020	15 Dec 2020	23 Jun 2020
0407_TP47_0.5_200618	SE207686.004	LB202376	18 Jun 2020	18 Jun 2020	15 Dec 2020	19 Jun 2020	15 Dec 2020	23 Jun 2020
0407_TP48_0.1_200618	SE207686.005	LB202376	18 Jun 2020	18 Jun 2020	15 Dec 2020	19 Jun 2020	15 Dec 2020	23 Jun 2020
0407_TP48_0.5_200618	SE207686.006	LB202376	18 Jun 2020	18 Jun 2020	15 Dec 2020	19 Jun 2020	15 Dec 2020	23 Jun 2020
0407_TP55_0.1_200618	SE207686.007	LB202376	18 Jun 2020	18 Jun 2020	15 Dec 2020	19 Jun 2020	15 Dec 2020	23 Jun 2020
0407_TP55_0.5_200618	SE207686.008	LB202376	18 Jun 2020	18 Jun 2020	15 Dec 2020	19 Jun 2020	15 Dec 2020	23 Jun 2020
0407_TP56_0.1_200618	SE207686.009	LB202376	18 Jun 2020	18 Jun 2020	15 Dec 2020	19 Jun 2020	15 Dec 2020	23 Jun 2020
0407_TP56_0.5_200618	SE207686.010	LB202376	18 Jun 2020	18 Jun 2020	15 Dec 2020	19 Jun 2020	15 Dec 2020	23 Jun 2020
0407_TP57_0.1_200618	SE207686.011	LB202376	18 Jun 2020	18 Jun 2020	15 Dec 2020	19 Jun 2020	15 Dec 2020	23 Jun 2020
0407_TP57_0.5_200618	SE207686.012	LB202376	18 Jun 2020	18 Jun 2020	15 Dec 2020	19 Jun 2020	15 Dec 2020	23 Jun 2020
0407_TP58_0.1_200618	SE207686.013	LB202376	18 Jun 2020	18 Jun 2020	15 Dec 2020	19 Jun 2020	15 Dec 2020	23 Jun 2020
0407_TP58_0.5_200618	SE207686.014	LB202376	18 Jun 2020	18 Jun 2020	15 Dec 2020	19 Jun 2020	15 Dec 2020	23 Jun 2020
0407_TP66_0.1_200618	SE207686.015	LB202376	18 Jun 2020	18 Jun 2020	15 Dec 2020	19 Jun 2020	15 Dec 2020	23 Jun 2020
0407_TP66_0.5_200618	SE207686.016	LB202376	18 Jun 2020	18 Jun 2020	15 Dec 2020	19 Jun 2020	15 Dec 2020	23 Jun 2020
0407_TP64_0.1_200618	SE207686.017	LB202376	18 Jun 2020	18 Jun 2020	15 Dec 2020	19 Jun 2020	15 Dec 2020	23 Jun 2020

HOLDING TIME SUMMARY

SE207686 R1

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP64_0.5_200618	SE207686.018	LB202376	18 Jun 2020	18 Jun 2020	15 Dec 2020	19 Jun 2020	15 Dec 2020	23 Jun 2020
0407_TP67_0.1_200618	SE207686.019	LB202376	18 Jun 2020	18 Jun 2020	15 Dec 2020	19 Jun 2020	15 Dec 2020	23 Jun 2020
0407_TP67_0.5_200618	SE207686.020	LB202608	18 Jun 2020	18 Jun 2020	15 Dec 2020	24 Jun 2020	15 Dec 2020	24 Jun 2020
0407_QC116_200618	SE207686.022	LB202608	18 Jun 2020	18 Jun 2020	15 Dec 2020	24 Jun 2020	15 Dec 2020	24 Jun 2020
0407_QC118_200618	SE207686.023	LB202608	18 Jun 2020	18 Jun 2020	15 Dec 2020	24 Jun 2020	15 Dec 2020	24 Jun 2020

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP46_0.1_200618	SE207686.001	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP46_1.0_200618	SE207686.002	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP47_0.1_200618	SE207686.003	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP47_0.5_200618	SE207686.004	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP48_0.1_200618	SE207686.005	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP48_0.5_200618	SE207686.006	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP55_0.1_200618	SE207686.007	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP55_0.5_200618	SE207686.008	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP56_0.1_200618	SE207686.009	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP56_0.5_200618	SE207686.010	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP57_0.1_200618	SE207686.011	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP57_0.5_200618	SE207686.012	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP58_0.1_200618	SE207686.013	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP58_0.5_200618	SE207686.014	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP66_0.1_200618	SE207686.015	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP66_0.5_200618	SE207686.016	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP64_0.1_200618	SE207686.017	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP64_0.5_200618	SE207686.018	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP67_0.1_200618	SE207686.019	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP67_0.5_200618	SE207686.020	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_QC116_200618	SE207686.022	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_QC118_200618	SE207686.023	LB202338	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP46_0.1_200618	SE207686.001	LB202333	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP46_1.0_200618	SE207686.002	LB202333	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP47_0.1_200618	SE207686.003	LB202333	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP47_0.5_200618	SE207686.004	LB202333	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP48_0.1_200618	SE207686.005	LB202333	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP48_0.5_200618	SE207686.006	LB202333	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP55_0.1_200618	SE207686.007	LB202333	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP55_0.5_200618	SE207686.008	LB202333	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP56_0.1_200618	SE207686.009	LB202333	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP56_0.5_200618	SE207686.010	LB202333	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP57_0.1_200618	SE207686.011	LB202333	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP57_0.5_200618	SE207686.012	LB202333	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP58_0.1_200618	SE207686.013	LB202333	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP58_0.5_200618	SE207686.014	LB202333	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP66_0.1_200618	SE207686.015	LB202333	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP66_0.5_200618	SE207686.016	LB202333	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP64_0.1_200618	SE207686.017	LB202333	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP64_0.5_200618	SE207686.018	LB202333	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP67_0.1_200618	SE207686.019	LB202333	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP67_0.5_200618	SE207686.020	LB202333	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_QC116_200618	SE207686.022	LB202333	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_QC118_200618	SE207686.023	LB202333	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_QC403_200618	SE207686.024	LB202333	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_QC503_200618	SE207686.025	LB202333	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Volatile Petroleum Hydrocarbons in Soil (continued) **Method: ME-(AU)-[ENV]AN433**

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP46_0.1_200618	SE207686.001	LB202333	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP46_1.0_200618	SE207686.002	LB202333	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP47_0.1_200618	SE207686.003	LB202333	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP47_0.5_200618	SE207686.004	LB202333	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP48_0.1_200618	SE207686.005	LB202333	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP48_0.5_200618	SE207686.006	LB202333	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP55_0.1_200618	SE207686.007	LB202333	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP55_0.5_200618	SE207686.008	LB202333	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP56_0.1_200618	SE207686.009	LB202333	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP56_0.5_200618	SE207686.010	LB202333	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP57_0.1_200618	SE207686.011	LB202333	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP57_0.5_200618	SE207686.012	LB202333	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP58_0.1_200618	SE207686.013	LB202333	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP58_0.5_200618	SE207686.014	LB202333	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP66_0.1_200618	SE207686.015	LB202333	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP66_0.5_200618	SE207686.016	LB202333	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP64_0.1_200618	SE207686.017	LB202333	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP64_0.5_200618	SE207686.018	LB202333	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP67_0.1_200618	SE207686.019	LB202333	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_TP67_0.5_200618	SE207686.020	LB202333	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_QC116_200618	SE207686.022	LB202333	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_QC118_200618	SE207686.023	LB202333	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_QC403_200618	SE207686.024	LB202333	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020
0407_QC503_200618	SE207686.025	LB202333	18 Jun 2020	18 Jun 2020	02 Jul 2020	19 Jun 2020	29 Jul 2020	25 Jun 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP46_0.1_200618	SE207686.001	%	60 - 130%	97
	0407_TP46_1.0_200618	SE207686.002	%	60 - 130%	100
	0407_TP47_0.1_200618	SE207686.003	%	60 - 130%	95
	0407_TP47_0.5_200618	SE207686.004	%	60 - 130%	91
	0407_TP48_0.1_200618	SE207686.005	%	60 - 130%	98
	0407_TP48_0.5_200618	SE207686.006	%	60 - 130%	94
	0407_TP55_0.1_200618	SE207686.007	%	60 - 130%	89
	0407_TP55_0.5_200618	SE207686.008	%	60 - 130%	91
	0407_TP56_0.1_200618	SE207686.009	%	60 - 130%	92
	0407_TP56_0.5_200618	SE207686.010	%	60 - 130%	90
	0407_TP57_0.1_200618	SE207686.011	%	60 - 130%	88
	0407_TP57_0.5_200618	SE207686.012	%	60 - 130%	87
	0407_TP58_0.1_200618	SE207686.013	%	60 - 130%	113
	0407_TP58_0.5_200618	SE207686.014	%	60 - 130%	99
	0407_TP66_0.1_200618	SE207686.015	%	60 - 130%	99
	0407_TP66_0.5_200618	SE207686.016	%	60 - 130%	96
	0407_TP64_0.1_200618	SE207686.017	%	60 - 130%	93
	0407_TP64_0.5_200618	SE207686.018	%	60 - 130%	94
	0407_TP67_0.1_200618	SE207686.019	%	60 - 130%	95
	0407_TP67_0.5_200618	SE207686.020	%	60 - 130%	95
	0407_QC116_200618	SE207686.022	%	60 - 130%	98
	0407_QC118_200618	SE207686.023	%	60 - 130%	93

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP46_0.1_200618	SE207686.001	%	60 - 130%	77
	0407_TP46_1.0_200618	SE207686.002	%	60 - 130%	81
	0407_TP47_0.1_200618	SE207686.003	%	60 - 130%	79
	0407_TP47_0.5_200618	SE207686.004	%	60 - 130%	79
	0407_TP48_0.1_200618	SE207686.005	%	60 - 130%	94
	0407_TP48_0.5_200618	SE207686.006	%	60 - 130%	77
	0407_TP55_0.1_200618	SE207686.007	%	60 - 130%	81
	0407_TP55_0.5_200618	SE207686.008	%	60 - 130%	80
	0407_TP56_0.1_200618	SE207686.009	%	60 - 130%	99
	0407_TP56_0.5_200618	SE207686.010	%	60 - 130%	80
	0407_TP57_0.1_200618	SE207686.011	%	60 - 130%	80
	0407_TP57_0.5_200618	SE207686.012	%	60 - 130%	80
	0407_TP58_0.1_200618	SE207686.013	%	60 - 130%	82
	0407_TP58_0.5_200618	SE207686.014	%	60 - 130%	99
	0407_TP66_0.1_200618	SE207686.015	%	60 - 130%	83
	0407_TP66_0.5_200618	SE207686.016	%	60 - 130%	82
	0407_TP64_0.1_200618	SE207686.017	%	60 - 130%	76
	0407_TP64_0.5_200618	SE207686.018	%	60 - 130%	81
	0407_TP67_0.1_200618	SE207686.019	%	60 - 130%	82
	0407_TP67_0.5_200618	SE207686.020	%	60 - 130%	82
	0407_QC116_200618	SE207686.022	%	60 - 130%	85
	0407_QC118_200618	SE207686.023	%	60 - 130%	81
d14-p-terphenyl (Surrogate)	0407_TP46_0.1_200618	SE207686.001	%	60 - 130%	77
	0407_TP46_1.0_200618	SE207686.002	%	60 - 130%	87
	0407_TP47_0.1_200618	SE207686.003	%	60 - 130%	77
	0407_TP47_0.5_200618	SE207686.004	%	60 - 130%	81
	0407_TP48_0.1_200618	SE207686.005	%	60 - 130%	95
	0407_TP48_0.5_200618	SE207686.006	%	60 - 130%	82
	0407_TP55_0.1_200618	SE207686.007	%	60 - 130%	91
	0407_TP55_0.5_200618	SE207686.008	%	60 - 130%	91
	0407_TP56_0.1_200618	SE207686.009	%	60 - 130%	82
	0407_TP56_0.5_200618	SE207686.010	%	60 - 130%	92
	0407_TP57_0.1_200618	SE207686.011	%	60 - 130%	80
	0407_TP57_0.5_200618	SE207686.012	%	60 - 130%	78
	0407_TP58_0.1_200618	SE207686.013	%	60 - 130%	86
	0407_TP58_0.5_200618	SE207686.014	%	60 - 130%	77

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d14-p-terphenyl (Surrogate)	0407_TP66_0.1_200618	SE207686.015	%	60 - 130%	99
	0407_TP66_0.5_200618	SE207686.016	%	60 - 130%	83
	0407_TP64_0.1_200618	SE207686.017	%	60 - 130%	79
	0407_TP64_0.5_200618	SE207686.018	%	60 - 130%	82
	0407_TP67_0.1_200618	SE207686.019	%	60 - 130%	83
	0407_TP67_0.5_200618	SE207686.020	%	60 - 130%	87
	0407_QC116_200618	SE207686.022	%	60 - 130%	87
	0407_QC118_200618	SE207686.023	%	60 - 130%	82

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP46_0.1_200618	SE207686.001	%	70 - 130%	77
	0407_TP46_1.0_200618	SE207686.002	%	70 - 130%	81
	0407_TP47_0.1_200618	SE207686.003	%	70 - 130%	79
	0407_TP47_0.5_200618	SE207686.004	%	70 - 130%	79
	0407_TP48_0.1_200618	SE207686.005	%	70 - 130%	94
	0407_TP48_0.5_200618	SE207686.006	%	70 - 130%	77
	0407_TP55_0.1_200618	SE207686.007	%	70 - 130%	81
	0407_TP55_0.5_200618	SE207686.008	%	70 - 130%	80
	0407_TP56_0.1_200618	SE207686.009	%	70 - 130%	99
	0407_TP56_0.5_200618	SE207686.010	%	70 - 130%	80
	0407_TP57_0.1_200618	SE207686.011	%	70 - 130%	80
	0407_TP57_0.5_200618	SE207686.012	%	70 - 130%	80
	0407_TP58_0.1_200618	SE207686.013	%	70 - 130%	82
	0407_TP58_0.5_200618	SE207686.014	%	70 - 130%	99
	0407_TP66_0.1_200618	SE207686.015	%	70 - 130%	83
	0407_TP66_0.5_200618	SE207686.016	%	70 - 130%	82
	0407_TP64_0.1_200618	SE207686.017	%	70 - 130%	76
	0407_TP64_0.5_200618	SE207686.018	%	70 - 130%	81
	0407_TP67_0.1_200618	SE207686.019	%	70 - 130%	82
	0407_TP67_0.5_200618	SE207686.020	%	70 - 130%	82
	0407_QC116_200618	SE207686.022	%	70 - 130%	85
	0407_QC118_200618	SE207686.023	%	70 - 130%	81
d14-p-terphenyl (Surrogate)	0407_TP46_0.1_200618	SE207686.001	%	70 - 130%	77
	0407_TP46_1.0_200618	SE207686.002	%	70 - 130%	87
	0407_TP47_0.1_200618	SE207686.003	%	70 - 130%	77
	0407_TP47_0.5_200618	SE207686.004	%	70 - 130%	81
	0407_TP48_0.1_200618	SE207686.005	%	70 - 130%	95
	0407_TP48_0.5_200618	SE207686.006	%	70 - 130%	82
	0407_TP55_0.1_200618	SE207686.007	%	70 - 130%	91
	0407_TP55_0.5_200618	SE207686.008	%	70 - 130%	91
	0407_TP56_0.1_200618	SE207686.009	%	70 - 130%	82
	0407_TP56_0.5_200618	SE207686.010	%	70 - 130%	92
	0407_TP57_0.1_200618	SE207686.011	%	70 - 130%	80
	0407_TP57_0.5_200618	SE207686.012	%	70 - 130%	78
	0407_TP58_0.1_200618	SE207686.013	%	70 - 130%	86
	0407_TP58_0.5_200618	SE207686.014	%	70 - 130%	77
	0407_TP66_0.1_200618	SE207686.015	%	70 - 130%	99
	0407_TP66_0.5_200618	SE207686.016	%	70 - 130%	83
	0407_TP64_0.1_200618	SE207686.017	%	70 - 130%	79
	0407_TP64_0.5_200618	SE207686.018	%	70 - 130%	82
	0407_TP67_0.1_200618	SE207686.019	%	70 - 130%	83
	0407_TP67_0.5_200618	SE207686.020	%	70 - 130%	87
	0407_QC116_200618	SE207686.022	%	70 - 130%	87
	0407_QC118_200618	SE207686.023	%	70 - 130%	82
d5-nitrobenzene (Surrogate)	0407_TP46_0.1_200618	SE207686.001	%	70 - 130%	71
	0407_TP46_1.0_200618	SE207686.002	%	70 - 130%	71
	0407_TP47_0.1_200618	SE207686.003	%	70 - 130%	75
	0407_TP47_0.5_200618	SE207686.004	%	70 - 130%	87
	0407_TP48_0.1_200618	SE207686.005	%	70 - 130%	67 ①
	0407_TP48_0.5_200618	SE207686.006	%	70 - 130%	72

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d5-nitrobenzene (Surrogate)	0407_TP55_0.1_200618	SE207686.007	%	70 - 130%	71
	0407_TP55_0.5_200618	SE207686.008	%	70 - 130%	68 ①
	0407_TP56_0.1_200618	SE207686.009	%	70 - 130%	67 ①
	0407_TP56_0.5_200618	SE207686.010	%	70 - 130%	73
	0407_TP57_0.1_200618	SE207686.011	%	70 - 130%	76
	0407_TP57_0.5_200618	SE207686.012	%	70 - 130%	63 ①
	0407_TP58_0.1_200618	SE207686.013	%	70 - 130%	64 ①
	0407_TP58_0.5_200618	SE207686.014	%	70 - 130%	65 ①
	0407_TP66_0.1_200618	SE207686.015	%	70 - 130%	68 ①
	0407_TP66_0.5_200618	SE207686.016	%	70 - 130%	68 ①
	0407_TP64_0.1_200618	SE207686.017	%	70 - 130%	72
	0407_TP64_0.5_200618	SE207686.018	%	70 - 130%	86
	0407_TP67_0.1_200618	SE207686.019	%	70 - 130%	84
	0407_TP67_0.5_200618	SE207686.020	%	70 - 130%	87
	0407_QC116_200618	SE207686.022	%	70 - 130%	86
	0407_QC118_200618	SE207686.023	%	70 - 130%	74

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP46_0.1_200618	SE207686.001	%	60 - 130%	97
	0407_TP46_1.0_200618	SE207686.002	%	60 - 130%	100
	0407_TP47_0.1_200618	SE207686.003	%	60 - 130%	95
	0407_TP47_0.5_200618	SE207686.004	%	60 - 130%	91
	0407_TP48_0.1_200618	SE207686.005	%	60 - 130%	98
	0407_TP48_0.5_200618	SE207686.006	%	60 - 130%	94
	0407_TP55_0.1_200618	SE207686.007	%	60 - 130%	89
	0407_TP55_0.5_200618	SE207686.008	%	60 - 130%	91
	0407_TP56_0.1_200618	SE207686.009	%	60 - 130%	92
	0407_TP56_0.5_200618	SE207686.010	%	60 - 130%	90
	0407_TP57_0.1_200618	SE207686.011	%	60 - 130%	88
	0407_TP57_0.5_200618	SE207686.012	%	60 - 130%	87
	0407_TP58_0.1_200618	SE207686.013	%	60 - 130%	113
	0407_TP58_0.5_200618	SE207686.014	%	60 - 130%	99
	0407_TP66_0.1_200618	SE207686.015	%	60 - 130%	99
	0407_TP66_0.5_200618	SE207686.016	%	60 - 130%	96
	0407_TP64_0.1_200618	SE207686.017	%	60 - 130%	93
	0407_TP64_0.5_200618	SE207686.018	%	60 - 130%	94
	0407_TP67_0.1_200618	SE207686.019	%	60 - 130%	95
	0407_TP67_0.5_200618	SE207686.020	%	60 - 130%	95
	0407_QC116_200618	SE207686.022	%	60 - 130%	98
	0407_QC118_200618	SE207686.023	%	60 - 130%	93

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level

Method: MA-1523

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C2-4:2FTS) Surrogate	0407_QC116_200618	SE207686.022	%	10 - 150%	85
(13C2-6:2FTS) Surrogate	0407_QC116_200618	SE207686.022	%	10 - 150%	90
(13C2-8:2FTS) Surrogate	0407_QC116_200618	SE207686.022	%	10 - 150%	79
(13C2-PFDoA) Surrogate	0407_QC116_200618	SE207686.022	%	10 - 150%	121
(13C2-PFHxDA) Surrogate	0407_QC116_200618	SE207686.022	%	10 - 150%	31
(13C2-PFTeDA) Surrogate	0407_QC116_200618	SE207686.022	%	10 - 130%	72
(13C3-PFBS) Surrogate	0407_QC116_200618	SE207686.022	%	10 - 150%	99
(13C3-PFHxS) Surrogate	0407_QC116_200618	SE207686.022	%	10 - 150%	91
(13C4-PFBA) Surrogate	0407_QC116_200618	SE207686.022	%	10 - 150%	102
(13C4-PFHpA) Surrogate	0407_QC116_200618	SE207686.022	%	10 - 150%	97
(13C4-PFOA) Surrogate	0407_QC116_200618	SE207686.022	%	10 - 150%	102
(13C5_PFPeA) Surrogate	0407_QC116_200618	SE207686.022	%	10 - 150%	86
(13C5-PFHxA) Surrogate	0407_QC116_200618	SE207686.022	%	10 - 150%	96
(13C6-PFDA) Surrogate	0407_QC116_200618	SE207686.022	%	10 - 150%	125
(13C7-PFUdA) Surrogate	0407_QC116_200618	SE207686.022	%	10 - 150%	115
(13C8-PFOS) Surrogate	0407_QC116_200618	SE207686.022	%	10 - 150%	89
(13C8-PFOSA) Surrogate	0407_QC116_200618	SE207686.022	%	10 - 150%	79
(13C9-PFNA) Surrogate	0407_QC116_200618	SE207686.022	%	10 - 150%	103

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level (continued)

Method: MA-1523

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(D3-N-MeFOSA) Surrogate	0407_QC116_200618	SE207686.022	%	10 - 150%	72
(D3-N-MeFOSAA) Surrogate	0407_QC116_200618	SE207686.022	%	10 - 150%	74
(D5-N-EtFOSA) Surrogate	0407_QC116_200618	SE207686.022	%	10 - 150%	70
(D5-N-EtFOSAA) Surrogate	0407_QC116_200618	SE207686.022	%	10 - 150%	100
(D7-N-MeFOSE) Surrogate	0407_QC116_200618	SE207686.022	%	10 - 150%	74
(D9-N-EtFOSE) Surrogate	0407_QC116_200618	SE207686.022	%	10 - 150%	70

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	0407_TP46_0.1_200618	SE207686.001	%	70 - 130%	82
	0407_TP46_1.0_200618	SE207686.002	%	70 - 130%	85
	0407_TP47_0.1_200618	SE207686.003	%	70 - 130%	83
	0407_TP47_0.5_200618	SE207686.004	%	70 - 130%	81
	0407_TP48_0.1_200618	SE207686.005	%	70 - 130%	97
	0407_TP48_0.5_200618	SE207686.006	%	70 - 130%	94
	0407_TP55_0.1_200618	SE207686.007	%	70 - 130%	85
	0407_TP55_0.5_200618	SE207686.008	%	70 - 130%	83
	0407_TP56_0.1_200618	SE207686.009	%	70 - 130%	84
	0407_TP56_0.5_200618	SE207686.010	%	70 - 130%	84
	0407_TP57_0.1_200618	SE207686.011	%	70 - 130%	83
	0407_TP57_0.5_200618	SE207686.012	%	70 - 130%	89
	0407_TP58_0.1_200618	SE207686.013	%	70 - 130%	85
	0407_TP58_0.5_200618	SE207686.014	%	70 - 130%	86
	0407_TP66_0.1_200618	SE207686.015	%	70 - 130%	91
	0407_TP66_0.5_200618	SE207686.016	%	70 - 130%	89
	0407_TP64_0.1_200618	SE207686.017	%	70 - 130%	89
	0407_TP64_0.5_200618	SE207686.018	%	70 - 130%	83
	0407_TP67_0.1_200618	SE207686.019	%	70 - 130%	86
	0407_TP67_0.5_200618	SE207686.020	%	70 - 130%	84
	0407_QC116_200618	SE207686.022	%	70 - 130%	88
	0407_QC118_200618	SE207686.023	%	70 - 130%	86
d5-phenol (Surrogate)	0407_TP46_0.1_200618	SE207686.001	%	50 - 130%	84
	0407_TP46_1.0_200618	SE207686.002	%	50 - 130%	80
	0407_TP47_0.1_200618	SE207686.003	%	50 - 130%	80
	0407_TP47_0.5_200618	SE207686.004	%	50 - 130%	79
	0407_TP48_0.1_200618	SE207686.005	%	50 - 130%	81
	0407_TP48_0.5_200618	SE207686.006	%	50 - 130%	84
	0407_TP55_0.1_200618	SE207686.007	%	50 - 130%	82
	0407_TP55_0.5_200618	SE207686.008	%	50 - 130%	80
	0407_TP56_0.1_200618	SE207686.009	%	50 - 130%	79
	0407_TP56_0.5_200618	SE207686.010	%	50 - 130%	81
	0407_TP57_0.1_200618	SE207686.011	%	50 - 130%	78
	0407_TP57_0.5_200618	SE207686.012	%	50 - 130%	79
	0407_TP58_0.1_200618	SE207686.013	%	50 - 130%	78
	0407_TP58_0.5_200618	SE207686.014	%	50 - 130%	79
	0407_TP66_0.1_200618	SE207686.015	%	50 - 130%	80
	0407_TP66_0.5_200618	SE207686.016	%	50 - 130%	81
	0407_TP64_0.1_200618	SE207686.017	%	50 - 130%	80
	0407_TP64_0.5_200618	SE207686.018	%	50 - 130%	77
	0407_TP67_0.1_200618	SE207686.019	%	50 - 130%	79
	0407_TP67_0.5_200618	SE207686.020	%	50 - 130%	79
	0407_QC116_200618	SE207686.022	%	50 - 130%	81
	0407_QC118_200618	SE207686.023	%	50 - 130%	79

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP46_0.1_200618	SE207686.001	%	60 - 130%	92
	0407_TP46_1.0_200618	SE207686.002	%	60 - 130%	98
	0407_TP47_0.1_200618	SE207686.003	%	60 - 130%	96
	0407_TP47_0.5_200618	SE207686.004	%	60 - 130%	85
	0407_TP48_0.1_200618	SE207686.005	%	60 - 130%	102
	0407_TP48_0.5_200618	SE207686.006	%	60 - 130%	91

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued) **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP55_0.1_200618	SE207686.007	%	60 - 130%	99
	0407_TP55_0.5_200618	SE207686.008	%	60 - 130%	89
	0407_TP56_0.1_200618	SE207686.009	%	60 - 130%	98
	0407_TP56_0.5_200618	SE207686.010	%	60 - 130%	92
	0407_TP57_0.1_200618	SE207686.011	%	60 - 130%	92
	0407_TP57_0.5_200618	SE207686.012	%	60 - 130%	98
	0407_TP58_0.1_200618	SE207686.013	%	60 - 130%	90
	0407_TP58_0.5_200618	SE207686.014	%	60 - 130%	94
	0407_TP66_0.1_200618	SE207686.015	%	60 - 130%	92
	0407_TP66_0.5_200618	SE207686.016	%	60 - 130%	104
	0407_TP64_0.1_200618	SE207686.017	%	60 - 130%	95
	0407_TP64_0.5_200618	SE207686.018	%	60 - 130%	99
	0407_TP67_0.1_200618	SE207686.019	%	60 - 130%	106
	0407_TP67_0.5_200618	SE207686.020	%	60 - 130%	95
	0407_QC116_200618	SE207686.022	%	60 - 130%	91
	0407_QC118_200618	SE207686.023	%	60 - 130%	102
	0407_QC403_200618	SE207686.024	%	60 - 130%	87
	0407_QC503_200618	SE207686.025	%	60 - 130%	97
d4-1,2-dichloroethane (Surrogate)	0407_TP46_0.1_200618	SE207686.001	%	60 - 130%	89
	0407_TP46_1.0_200618	SE207686.002	%	60 - 130%	88
	0407_TP47_0.1_200618	SE207686.003	%	60 - 130%	95
	0407_TP47_0.5_200618	SE207686.004	%	60 - 130%	89
	0407_TP48_0.1_200618	SE207686.005	%	60 - 130%	92
	0407_TP48_0.5_200618	SE207686.006	%	60 - 130%	82
	0407_TP55_0.1_200618	SE207686.007	%	60 - 130%	94
	0407_TP55_0.5_200618	SE207686.008	%	60 - 130%	104
	0407_TP56_0.1_200618	SE207686.009	%	60 - 130%	96
	0407_TP56_0.5_200618	SE207686.010	%	60 - 130%	101
	0407_TP57_0.1_200618	SE207686.011	%	60 - 130%	86
	0407_TP57_0.5_200618	SE207686.012	%	60 - 130%	87
	0407_TP58_0.1_200618	SE207686.013	%	60 - 130%	83
	0407_TP58_0.5_200618	SE207686.014	%	60 - 130%	92
	0407_TP66_0.1_200618	SE207686.015	%	60 - 130%	92
	0407_TP66_0.5_200618	SE207686.016	%	60 - 130%	96
	0407_TP64_0.1_200618	SE207686.017	%	60 - 130%	89
	0407_TP64_0.5_200618	SE207686.018	%	60 - 130%	95
	0407_TP67_0.1_200618	SE207686.019	%	60 - 130%	88
	0407_TP67_0.5_200618	SE207686.020	%	60 - 130%	99
	0407_QC116_200618	SE207686.022	%	60 - 130%	98
	0407_QC118_200618	SE207686.023	%	60 - 130%	100
	0407_QC403_200618	SE207686.024	%	60 - 130%	83
	0407_QC503_200618	SE207686.025	%	60 - 130%	90
d8-toluene (Surrogate)	0407_TP46_0.1_200618	SE207686.001	%	60 - 130%	87
	0407_TP46_1.0_200618	SE207686.002	%	60 - 130%	85
	0407_TP47_0.1_200618	SE207686.003	%	60 - 130%	91
	0407_TP47_0.5_200618	SE207686.004	%	60 - 130%	91
	0407_TP48_0.1_200618	SE207686.005	%	60 - 130%	86
	0407_TP48_0.5_200618	SE207686.006	%	60 - 130%	87
	0407_TP55_0.1_200618	SE207686.007	%	60 - 130%	91
	0407_TP55_0.5_200618	SE207686.008	%	60 - 130%	96
	0407_TP56_0.1_200618	SE207686.009	%	60 - 130%	86
	0407_TP56_0.5_200618	SE207686.010	%	60 - 130%	91
	0407_TP57_0.1_200618	SE207686.011	%	60 - 130%	89
	0407_TP57_0.5_200618	SE207686.012	%	60 - 130%	86
	0407_TP58_0.1_200618	SE207686.013	%	60 - 130%	81
	0407_TP58_0.5_200618	SE207686.014	%	60 - 130%	89
	0407_TP66_0.1_200618	SE207686.015	%	60 - 130%	87
	0407_TP66_0.5_200618	SE207686.016	%	60 - 130%	85
	0407_TP64_0.1_200618	SE207686.017	%	60 - 130%	95
	0407_TP64_0.5_200618	SE207686.018	%	60 - 130%	90
	0407_TP67_0.1_200618	SE207686.019	%	60 - 130%	90

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d8-toluene (Surrogate)	0407_TP67_0.5_200618	SE207686.020	%	60 - 130%	99
	0407_QC116_200618	SE207686.022	%	60 - 130%	89
	0407_QC118_200618	SE207686.023	%	60 - 130%	93
	0407_QC403_200618	SE207686.024	%	60 - 130%	87
	0407_QC503_200618	SE207686.025	%	60 - 130%	92

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP46_0.1_200618	SE207686.001	%	60 - 130%	92
	0407_TP46_1.0_200618	SE207686.002	%	60 - 130%	98
	0407_TP47_0.1_200618	SE207686.003	%	60 - 130%	96
	0407_TP47_0.5_200618	SE207686.004	%	60 - 130%	85
	0407_TP48_0.1_200618	SE207686.005	%	60 - 130%	102
	0407_TP48_0.5_200618	SE207686.006	%	60 - 130%	91
	0407_TP55_0.1_200618	SE207686.007	%	60 - 130%	99
	0407_TP55_0.5_200618	SE207686.008	%	60 - 130%	89
	0407_TP56_0.1_200618	SE207686.009	%	60 - 130%	98
	0407_TP56_0.5_200618	SE207686.010	%	60 - 130%	92
	0407_TP57_0.1_200618	SE207686.011	%	60 - 130%	92
	0407_TP57_0.5_200618	SE207686.012	%	60 - 130%	98
	0407_TP58_0.1_200618	SE207686.013	%	60 - 130%	90
	0407_TP58_0.5_200618	SE207686.014	%	60 - 130%	94
	0407_TP66_0.1_200618	SE207686.015	%	60 - 130%	92
	0407_TP66_0.5_200618	SE207686.016	%	60 - 130%	104
	0407_TP64_0.1_200618	SE207686.017	%	60 - 130%	95
	0407_TP64_0.5_200618	SE207686.018	%	60 - 130%	99
	0407_TP67_0.1_200618	SE207686.019	%	60 - 130%	106
	0407_TP67_0.5_200618	SE207686.020	%	60 - 130%	95
	0407_QC116_200618	SE207686.022	%	60 - 130%	91
	0407_QC118_200618	SE207686.023	%	60 - 130%	102
	0407_QC503_200618	SE207686.025	%	60 - 130%	97
d4-1,2-dichloroethane (Surrogate)	0407_TP46_0.1_200618	SE207686.001	%	60 - 130%	89
	0407_TP46_1.0_200618	SE207686.002	%	60 - 130%	88
	0407_TP47_0.1_200618	SE207686.003	%	60 - 130%	95
	0407_TP47_0.5_200618	SE207686.004	%	60 - 130%	89
	0407_TP48_0.1_200618	SE207686.005	%	60 - 130%	92
	0407_TP48_0.5_200618	SE207686.006	%	60 - 130%	82
	0407_TP55_0.1_200618	SE207686.007	%	60 - 130%	94
	0407_TP55_0.5_200618	SE207686.008	%	60 - 130%	104
	0407_TP56_0.1_200618	SE207686.009	%	60 - 130%	96
	0407_TP56_0.5_200618	SE207686.010	%	60 - 130%	101
	0407_TP57_0.1_200618	SE207686.011	%	60 - 130%	86
	0407_TP57_0.5_200618	SE207686.012	%	60 - 130%	87
	0407_TP58_0.1_200618	SE207686.013	%	60 - 130%	83
	0407_TP58_0.5_200618	SE207686.014	%	60 - 130%	92
	0407_TP66_0.1_200618	SE207686.015	%	60 - 130%	92
	0407_TP66_0.5_200618	SE207686.016	%	60 - 130%	96
	0407_TP64_0.1_200618	SE207686.017	%	60 - 130%	89
	0407_TP64_0.5_200618	SE207686.018	%	60 - 130%	95
	0407_TP67_0.1_200618	SE207686.019	%	60 - 130%	88
	0407_TP67_0.5_200618	SE207686.020	%	60 - 130%	99
	0407_QC116_200618	SE207686.022	%	60 - 130%	98
	0407_QC118_200618	SE207686.023	%	60 - 130%	100
	0407_QC503_200618	SE207686.025	%	60 - 130%	90
d8-toluene (Surrogate)	0407_TP46_0.1_200618	SE207686.001	%	60 - 130%	87
	0407_TP46_1.0_200618	SE207686.002	%	60 - 130%	85
	0407_TP47_0.1_200618	SE207686.003	%	60 - 130%	91
	0407_TP47_0.5_200618	SE207686.004	%	60 - 130%	91
	0407_TP48_0.1_200618	SE207686.005	%	60 - 130%	86
	0407_TP48_0.5_200618	SE207686.006	%	60 - 130%	87
	0407_TP55_0.1_200618	SE207686.007	%	60 - 130%	91

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d8-toluene (Surrogate)	0407_TP55_0.5_200618	SE207686.008	%	60 - 130%	96
	0407_TP56_0.1_200618	SE207686.009	%	60 - 130%	86
	0407_TP56_0.5_200618	SE207686.010	%	60 - 130%	91
	0407_TP57_0.1_200618	SE207686.011	%	60 - 130%	89
	0407_TP57_0.5_200618	SE207686.012	%	60 - 130%	86
	0407_TP58_0.1_200618	SE207686.013	%	60 - 130%	81
	0407_TP58_0.5_200618	SE207686.014	%	60 - 130%	89
	0407_TP66_0.1_200618	SE207686.015	%	60 - 130%	87
	0407_TP66_0.5_200618	SE207686.016	%	60 - 130%	85
	0407_TP64_0.1_200618	SE207686.017	%	60 - 130%	95
	0407_TP64_0.5_200618	SE207686.018	%	60 - 130%	90
	0407_TP67_0.1_200618	SE207686.019	%	60 - 130%	90
	0407_TP67_0.5_200618	SE207686.020	%	60 - 130%	99
	0407_QC116_200618	SE207686.022	%	60 - 130%	89
	0407_QC118_200618	SE207686.023	%	60 - 130%	93
	0407_QC503_200618	SE207686.025	%	60 - 130%	92

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result
LB202386.001	Mercury	mg/kg	0.05	<0.05
LB202609.001	Mercury	mg/kg	0.05	<0.05

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202338.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	95

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202338.001		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	96
		d14-p-terphenyl (Surrogate)	%	-	85

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB202338.001	Naphthalene	mg/kg	0.1	<0.1
	2-methylnaphthalene	mg/kg	0.1	<0.1
	1-methylnaphthalene	mg/kg	0.1	<0.1
	Acenaphthylene	mg/kg	0.1	<0.1
	Acenaphthene	mg/kg	0.1	<0.1
	Fluorene	mg/kg	0.1	<0.1
	Phenanthrene	mg/kg	0.1	<0.1
	Anthracene	mg/kg	0.1	<0.1
	Fluoranthene	mg/kg	0.1	<0.1
	Pyrene	mg/kg	0.1	<0.1
	Benzo(a)anthracene	mg/kg	0.1	<0.1
	Chrysene	mg/kg	0.1	<0.1
	Benzo(a)pyrene	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202338.001		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	79
		2-fluorobiphenyl (Surrogate)	%	-	96
		d14-p-terphenyl (Surrogate)	%	-	85

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202338.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	95

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202338.001		Phenol	mg/kg	0.5	<0.5
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5
		2-nitrophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
		Pentachlorophenol	mg/kg	0.5	<0.5
		2,4-dinitrophenol	mg/kg	2	<2
		4-chloro-3-methylphenol	mg/kg	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	102
		d5-phenol (Surrogate)	%	-	98

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB202376.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0
LB202608.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR

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Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB202338.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB202333.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB202333.001	Monocyclic Aromatic Hydrocarbons	tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10
		MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	90
		d8-toluene (Surrogate)	%	-	90
		Bromofluorobenzene (Surrogate)	%	-	93
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB202333.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	90

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207686.010	LB202386.014	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE207686.019	LB202386.024	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE207741.006	LB202609.014	Mercury	mg/kg	0.05	<0.05	<0.05	180	0
SE207742.005	LB202609.023	Mercury	mg/kg	0.05	0.006395733	0.0095888956	200	0

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207686.010	LB202342.011	% Moisture	%w/w	1	4.3	4.2	53	2
SE207686.020	LB202342.022	% Moisture	%w/w	1	3.1	2.9	64	7

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207686.010	LB202338.014		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	0.14	30	3
SE207686.020	LB202338.028		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207686.020	LB202338.028		p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	0.14	30	1
SE207686.023	LB202338.031		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	0.13	30	4

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207686.010	LB202338.014		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	7
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.4	30	15
SE207686.020	LB202338.028		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207686.020	LB202338.028		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	1
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	1

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207686.010	LB202338.014		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	<0.3	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	<0.2	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	30	2
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	9
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.4	30	15
SE207686.020	LB202338.028		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	<0.2	200	0
				TEQ (mg/kg)	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	<0.3	134	0
				TEQ (mg/kg)	0.3	<0.3	<0.3	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	<0.2	175	0
				TEQ (mg/kg)	0.2	<0.2	<0.2	175	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207686.020	LB202338.028		Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	30	1
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	1
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	1

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207686.010	LB202338.014		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	3
SE207686.020	LB202338.028		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	1
SE207686.023	LB202338.031		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	4

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207686.010	LB202338.014		Phenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	200	0
			Total Cresol	mg/kg	1.5	<1.5	<1.5	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	200	0
			4-nitrophenol	mg/kg	1	<1	<1	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dinitrophenol	mg/kg	2	<2	<2	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.2	4.2	30	1
			d5-phenol (Surrogate)	mg/kg	-	1.6	1.6	30	2
SE207686.023	LB202338.031		Phenol	mg/kg	0.5	<0.5	<0.5	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207686.023	LB202338.031		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	200	0
			Total Cresol	mg/kg	1.5	<1.5	<1.5	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	200	0
			4-nitrophenol	mg/kg	1	<1	<1	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dinitrophenol	mg/kg	2	<2	<2	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.3	4.3	30	0
			d5-phenol (Surrogate)	mg/kg	-	1.6	1.6	30	1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207686.010	LB202376.014	Arsenic, As	mg/kg	1	<1	<1	200	0
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	<0.5	<0.5	200	0
		Copper, Cu	mg/kg	0.5	<0.5	<0.5	148	0
		Nickel, Ni	mg/kg	0.5	<0.5	<0.5	200	0
		Lead, Pb	mg/kg	1	<1	<1	172	0
		Zinc, Zn	mg/kg	2	<2.0	<2.0	200	0
SE207686.019	LB202376.024	Arsenic, As	mg/kg	1	<1	<1	200	0
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	1.1	1.0	78	10
		Copper, Cu	mg/kg	0.5	2.2	1.9	54	14
		Nickel, Ni	mg/kg	0.5	0.6	0.6	113	11
		Lead, Pb	mg/kg	1	8	7	43	9
		Zinc, Zn	mg/kg	2	8.9	9.5	52	7
SE207741.006	LB202608.014	Arsenic, As	mg/kg	1	3	5	57	61 ②
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	50	38	31	28
		Copper, Cu	mg/kg	0.5	20	23	32	13
		Nickel, Ni	mg/kg	0.5	48	36	31	28
		Lead, Pb	mg/kg	1	11	16	37	40 ②
		Zinc, Zn	mg/kg	2	72	76	33	5
SE207742.005	LB202608.023	Arsenic, As	mg/kg	1	11.763586425	11.926784916	38	1
		Cadmium, Cd	mg/kg	0.3	0.0745361328	0.0918263333	200	0
		Chromium, Cr	mg/kg	0.5	35.883374023	45.885170833	31	24
		Copper, Cu	mg/kg	0.5	22.851623535	17.468280166	32	27
		Nickel, Ni	mg/kg	0.5	5.46948242188	5.4149540833	39	1
		Lead, Pb	mg/kg	1	27.793579101	29.806043916	33	7
		Zinc, Zn	mg/kg	2	50.943347167	46.046426833	34	10

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207686.010	LB202338.014		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE207686.020	LB202338.028		TRH C10-C14	mg/kg	20	<20	<20	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207686.020	LB202338.028		TRH C15-C28	mg/kg	45	<45	50	127	11
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE207686.023	LB202338.031		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	57	120	24
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207686.010	LB202333.015	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207686.010	LB202333.015	Halogenated	1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.1	8.9	50	12
			d8-toluene (Surrogate)	mg/kg	-	9.1	8.7	50	4
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.2	8.8	50	4
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE207686.020	LB202333.029	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207686.020	LB202333.029	Halogenated	1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
		Aliphatics	1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.9	8.9	50	11
			d8-toluene (Surrogate)	mg/kg	-	9.9	9.6	50	3
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.5	9.2	50	3
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207686.020	LB202333.029	Trihalomethan	Bromoform	mg/kg	0.1	<0.1	<0.1	200	0

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207686.010	LB202333.015		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.1	8.9	30	12
			d8-toluene (Surrogate)	mg/kg	-	9.1	8.7	30	4
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.2	8.8	30	4
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE207686.020	LB202333.029		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.9	8.9	30	11
			d8-toluene (Surrogate)	mg/kg	-	9.9	9.6	30	3
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.5	9.2	30	3
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202386.002	Mercury	mg/kg	0.05	0.20	0.2	70 - 130	100
LB202609.002	Mercury	mg/kg	0.05	0.19	0.2	70 - 130	97

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202338.002		Heptachlor	mg/kg	0.1	0.3	0.2	60 - 140	130
		Aldrin	mg/kg	0.1	0.3	0.2	60 - 140	130
		Delta BHC	mg/kg	0.1	0.3	0.2	60 - 140	132
		Dieldrin	mg/kg	0.2	0.3	0.2	60 - 140	130
		Endrin	mg/kg	0.2	0.3	0.2	60 - 140	130
		p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	101
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	0.15	40 - 130	93

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202338.002		Dichlorvos	mg/kg	0.5	1.3	2	60 - 140	67
		Diazinon (Dimpylate)	mg/kg	0.5	1.3	2	60 - 140	65
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.0	2	60 - 140	99
		Ethion	mg/kg	0.2	1.5	2	60 - 140	76
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	84
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	81

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202338.002		Naphthalene	mg/kg	0.1	4.4	4	60 - 140	109
		Acenaphthylene	mg/kg	0.1	4.2	4	60 - 140	106
		Acenaphthene	mg/kg	0.1	4.2	4	60 - 140	104
		Phenanthrene	mg/kg	0.1	4.5	4	60 - 140	112
		Anthracene	mg/kg	0.1	4.5	4	60 - 140	113
		Fluoranthene	mg/kg	0.1	4.6	4	60 - 140	116
		Pyrene	mg/kg	0.1	4.7	4	60 - 140	117
		Benzo(a)pyrene	mg/kg	0.1	4.7	4	60 - 140	118
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	76
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	84
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	81

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202338.002	Arochlor 1260	mg/kg	0.2	0.4	0.4	60 - 140	98

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202338.002		Phenol	mg/kg	0.5	0.8	1	70 - 130	75
		2,4-dichlorophenol	mg/kg	0.5	0.8	1	70 - 130	80
		2,4,6-trichlorophenol	mg/kg	0.5	0.7	1	70 - 130	73
		Pentachlorophenol	mg/kg	0.5	0.7	1	70 - 130	70
	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	5.1	5	40 - 130	102
		d5-phenol (Surrogate)	mg/kg	-	1.8	2	40 - 130	92

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202376.002	Arsenic, As	mg/kg	1	330	318.22	80 - 120	104
	Cadmium, Cd	mg/kg	0.3	5.0	5.41	80 - 120	92
	Chromium, Cr	mg/kg	0.5	37	38.31	80 - 120	96
	Copper, Cu	mg/kg	0.5	300	290	80 - 120	103
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	100
	Lead, Pb	mg/kg	1	96	89.9	80 - 120	106
	Zinc, Zn	mg/kg	2	280	273	80 - 120	102
LB202608.002	Arsenic, As	mg/kg	1	330	318.22	80 - 120	103
	Cadmium, Cd	mg/kg	0.3	5.6	5.41	80 - 120	104
	Chromium, Cr	mg/kg	0.5	36	38.31	80 - 120	93

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202608.002		Copper, Cu	mg/kg	0.5	290	290	80 - 120	99
		Nickel, Ni	mg/kg	0.5	180	187	80 - 120	96
		Lead, Pb	mg/kg	1	92	89.9	80 - 120	102
		Zinc, Zn	mg/kg	2	270	273	80 - 120	100

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202338.002		TRH C10-C14	mg/kg	20	40	40	60 - 140	100
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	95
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	75
	TRH F Bands	TRH >C10-C16	mg/kg	25	39	40	60 - 140	98
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	93
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	65

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202333.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	4.5	5	60 - 140	89
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	5.3	5	60 - 140	107
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	4.8	5	60 - 140	96
	Halogenated	Chlorobenzene	mg/kg	0.1	5.4	5	60 - 140	107
	Monocyclic	Benzene	mg/kg	0.1	5.5	5	60 - 140	111
	Aromatic	Toluene	mg/kg	0.1	5.5	5	60 - 140	110
		Ethylbenzene	mg/kg	0.1	5.4	5	60 - 140	109
		m/p-xylene	mg/kg	0.2	11	10	60 - 140	110
		o-xylene	mg/kg	0.1	5.5	5	60 - 140	111
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	11.0	10	70 - 130	110
		d8-toluene (Surrogate)	mg/kg	-	10.1	10	70 - 130	101
		Bromofluorobenzene (Surrogate)	mg/kg	-	10.1	10	70 - 130	101
	Trihalomethan	Chloroform	mg/kg	0.1	4.7	5	60 - 140	94

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202333.002		TRH C6-C10	mg/kg	25	73	92.5	60 - 140	79
		TRH C6-C9	mg/kg	20	67	80	60 - 140	83
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	11.0	10	70 - 130	110
		Bromofluorobenzene (Surrogate)	mg/kg	-	10.1	10	70 - 130	101
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	40	62.5	60 - 140	64

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207686.001	LB202386.004	Mercury	mg/kg	0.05	0.22	<0.05	0.2	105
SE207768.001	LB202609.004	Mercury	mg/kg	0.05	0.21	<0.05	0.2	92

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE207686.002	LB202338.032		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	-	-
			Alpha BHC	mg/kg	0.1	<0.1	-	-
			Lindane	mg/kg	0.1	<0.1	-	-
			Heptachlor	mg/kg	0.1	<0.1	0.2	129
			Aldrin	mg/kg	0.1	<0.1	0.2	129
			Beta BHC	mg/kg	0.1	<0.1	-	-
			Delta BHC	mg/kg	0.1	<0.1	0.2	133
			Heptachlor epoxide	mg/kg	0.1	<0.1	-	-
			o,p'-DDE	mg/kg	0.1	<0.1	-	-
			Alpha Endosulfan	mg/kg	0.2	<0.2	-	-
			Gamma Chlordane	mg/kg	0.1	<0.1	-	-
			Alpha Chlordane	mg/kg	0.1	<0.1	-	-
			trans-Nonachlor	mg/kg	0.1	<0.1	-	-
			p,p'-DDE	mg/kg	0.1	<0.1	-	-
			Dieldrin	mg/kg	0.2	<0.2	0.2	130
			Endrin	mg/kg	0.2	<0.2	0.2	130
			o,p'-DDD	mg/kg	0.1	<0.1	-	-
			o,p'-DDT	mg/kg	0.1	<0.1	-	-
			Beta Endosulfan	mg/kg	0.2	<0.2	-	-
			p,p'-DDD	mg/kg	0.1	<0.1	-	-
			p,p'-DDT	mg/kg	0.1	<0.1	0.2	101
			Endosulfan sulphate	mg/kg	0.1	<0.1	-	-
			Endrin Aldehyde	mg/kg	0.1	<0.1	-	-
			Methoxychlor	mg/kg	0.1	<0.1	-	-
			Endrin Ketone	mg/kg	0.1	<0.1	-	-
			Isodrin	mg/kg	0.1	<0.1	-	-
			Mirex	mg/kg	0.1	<0.1	-	-
			Total CLP OC Pesticides	mg/kg	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	-	94

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207686.001	LB202338.004		Dichlorvos	mg/kg	0.5	1.3	<0.5	2	65
			Dimethoate	mg/kg	0.5	<0.5	<0.5	-	-
			Diazinon (Dimpylate)	mg/kg	0.5	1.3	<0.5	2	64
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	-	-
			Malathion	mg/kg	0.2	<0.2	<0.2	-	-
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.5	<0.2	2	76
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	-	-
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	-	-
			Methidathion	mg/kg	0.5	<0.5	<0.5	-	-
			Ethion	mg/kg	0.2	1.4	<0.2	2	71
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	-	-
			Total OP Pesticides*	mg/kg	1.7	5.5	<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	82
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	73

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207686.001	LB202338.004	Naphthalene	mg/kg	0.1	4.5	<0.1	4	112
		2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Acenaphthylene	mg/kg	0.1	4.2	<0.1	4	105
		Acenaphthene	mg/kg	0.1	4.5	<0.1	4	112
		Fluorene	mg/kg	0.1	<0.1	<0.1	-	-
		Phenanthrene	mg/kg	0.1	4.3	<0.1	4	108

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207686.001	LB202338.004		Anthracene	mg/kg	0.1	4.4	<0.1	4	109
			Fluoranthene	mg/kg	0.1	4.5	<0.1	4	112
			Pyrene	mg/kg	0.1	4.6	<0.1	4	114
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Chrysene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(a)pyrene	mg/kg	0.1	4.6	<0.1	4	115
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	4.6	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	4.8	<0.3	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	4.7	<0.2	-	-
			Total PAH (18)	mg/kg	0.8	36	<0.8	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	-	71
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	82
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	73

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE207686.002	LB202338.032		Arochlor 1016	mg/kg	0.2	<0.2	-	-
			Arochlor 1221	mg/kg	0.2	<0.2	-	-
			Arochlor 1232	mg/kg	0.2	<0.2	-	-
			Arochlor 1242	mg/kg	0.2	<0.2	-	-
			Arochlor 1248	mg/kg	0.2	<0.2	-	-
			Arochlor 1254	mg/kg	0.2	<0.2	-	-
			Arochlor 1260	mg/kg	0.2	<0.2	0.4	117
			Arochlor 1262	mg/kg	0.2	<0.2	-	-
			Arochlor 1268	mg/kg	0.2	<0.2	-	-
			Total PCBs (Arochlors)	mg/kg	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	-	105

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207686.001	LB202338.004		Phenol	mg/kg	0.5	0.7	<0.5	1	72
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	-	-
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	-	-
			Total Cresol	mg/kg	1.5	<1.5	<1.5	-	-
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	-	-
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	-	-
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	-	-
			2,4-dichlorophenol	mg/kg	0.5	0.7	<0.5	1	72
			2,4,6-trichlorophenol	mg/kg	0.5	0.8	<0.5	1	79
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	-	-
			4-nitrophenol	mg/kg	1	<1	<1	-	-
			2,4,5-trichlorophenol	mg/kg	0.5	0.7	<0.5	-	-
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	-	-
			Pentachlorophenol	mg/kg	0.5	0.8	<0.5	1	82
			2,4-dinitrophenol	mg/kg	2	<2	<2	-	-
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	-	-
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.3	4.1	-	86
			d5-phenol (Surrogate)	mg/kg	-	1.6	1.7	-	81

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207686.001	LB202376.004	Arsenic, As	mg/kg	1	50	<1	50	100
		Cadmium, Cd	mg/kg	0.3	44	<0.3	50	87
		Chromium, Cr	mg/kg	0.5	50	0.6	50	99
		Copper, Cu	mg/kg	0.5	54	2.6	50	103
		Nickel, Ni	mg/kg	0.5	50	<0.5	50	100
		Lead, Pb	mg/kg	1	58	7	50	103

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207686.001	LB202376.004	Zinc, Zn	mg/kg	2	68	11	50	114
SE207768.001	LB202608.004	Arsenic, As	mg/kg	1	44	3	50	83
		Cadmium, Cd	mg/kg	0.3	38	<0.3	50	75
		Chromium, Cr	mg/kg	0.5	60	13	50	94
		Copper, Cu	mg/kg	0.5	50	6.7	50	87
		Nickel, Ni	mg/kg	0.5	49	5.7	50	86
		Lead, Pb	mg/kg	1	57	13	50	87
		Zinc, Zn	mg/kg	2	86	45	50	81

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207686.001	LB202338.004		TRH C10-C14	mg/kg	20	43	<20	40	108
			TRH C15-C28	mg/kg	45	<45	<45	40	100
			TRH C29-C36	mg/kg	45	<45	<45	40	80
			TRH C37-C40	mg/kg	100	<100	<100	-	-
			TRH C10-C36 Total	mg/kg	110	<110	<110	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25	42	<25	40	105
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	42	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	40	98
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	-	-

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207686.001	LB202333.004	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	-	-
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	-	-
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	-	-
			Bromomethane	mg/kg	1	<1	<1	-	-
			Chloroethane	mg/kg	1	<1	<1	-	-
			Trichlorofluoromethane	mg/kg	1	<1	<1	-	-
			Iodomethane	mg/kg	5	<5	<5	-	-
			1,1-dichloroethene	mg/kg	0.1	4.3	<0.1	5	86
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	-	-
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloroethane	mg/kg	0.1	5.3	<0.1	5	106
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	-	-
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	4.7	<0.1	5	94
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	-	-
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated	Chlorobenzene	mg/kg	0.1	5.6	<0.1	5	112
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207686.001	LB202333.004	Halogenated	4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-
		Aromatics	1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Monocyclic	Benzene	mg/kg	0.1	4.8	<0.1	5	95
		Aromatic	Toluene	mg/kg	0.1	5.0	<0.1	5	99
			Ethylbenzene	mg/kg	0.1	5.0	<0.1	5	99
			m/p-xylene	mg/kg	0.2	9.8	<0.2	10	98
			o-xylene	mg/kg	0.1	5.0	<0.1	5	100
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	-	-
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	-	-
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	-	-
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	-	-
		Compounds	2-nitropropane	mg/kg	10	<10	<10	-	-
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	-	-
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	-	-
			Vinyl acetate	mg/kg	10	<10	<10	-	-
			MEK (2-butanone)	mg/kg	10	<10	<10	-	-
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	-	-
			2-hexanone (MBK)	mg/kg	5	<5	<5	-	-
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.7	8.9	10	87
			d8-toluene (Surrogate)	mg/kg	-	9.2	8.7	10	92
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.8	9.2	10	88
		Totals	Total Xylenes	mg/kg	0.3	15	<0.3	-	-
			Total BTEX	mg/kg	0.6	30	<0.6	-	-
			Total VOC*	mg/kg	24	55	<24	-	-
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	-	-
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	24	<1.8	-	-
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	24	<1.8	-	-
		Trihalometha	Chloroform	mg/kg	0.1	4.5	<0.1	5	91
		nes	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Bromoform	mg/kg	0.1	<0.1	<0.1	-	-

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207686.001	LB202333.005		TRH C6-C10	mg/kg	25	69	<25	92.5	74
			TRH C6-C9	mg/kg	20	63	<20	80	79
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.7	8.9	10	87
			d8-toluene (Surrogate)	mg/kg	-	9.2	8.7	10	92
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.8	9.2	-	88
		VPH F	Benzene (F0)	mg/kg	0.1	4.8	<0.1	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	39	<25	62.5	63

MATRIX SPIKE DUPLICATES

SE207686 R1

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

QC Sample	Sample Number	Parameter	Units	LOR

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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000690

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CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

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CLIENT: DHA	LABORATORY: SGS	Turnaround Time (TAT)	COC Number 1 of 3
PROJECT: ~~610.30044~~ Randwick Barracks	LABORATORY ADDRESS: SYD		
PROJECT NUMBER: 610.30641	SAMPLER: [redacted]	☑ Standard TAT	
PROJECT MANAGER: [redacted]	SAMPLER CONTACT No:	☐ Non Standard or Urgent TAT	
PM CONTACT No:	Email Reports and Invoices to: LGRAYD@slrconsulting.com	Required TAT:	

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	Hold	Additional Information (Comment on any gross contamination or specific requirements)
1	0407_TP255_0.1_200629	29/6/20	Soil	✓	X		
2	0407_TP255_0.5_200629			✓	X		
	0407_TP255_1.0_200629					X	
3	0407_TP256_0.1_200629			✓	X		
4	0407_TP256_0.5_200629			✓	X		
	0407_TP256_1.0_200629					X	
5	0407_TP141_0.1_200629			✓	X		
6	0407_TP141_0.5_200629			✓	X		
	0407_TP141_1.0_200629					X	
7	0407_TP151_0.1_200629			✓	X		
8	0407_TP151_0.5_200629			✓	X		
	0407_TP151_1.0_200629					X	

SGS EHS Sydney COC

SE208142

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	Received by	Sign [redacted]	Date / Time 29/06/20	Temperature Received:
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time @ 4:30	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

000691

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

SLR

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- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
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- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The General Building, UOW Innovation Campus, North Wollongong, 2520

CLIENT: DHA	LABORATORY: SGS	Turnaround Time (TAT)	COC Number
PROJECT: Randwick Barracks	LABORATORY ADDRESS: 540		2 of 3
PROJECT NUMBER: 610.30941	SAMPLER: [redacted]	☑ Standard TAT	
PROJECT MANAGER: [redacted]	SAMPLER CONTACT No: [redacted]	☐ Non Standard or Urgent TAT	
PM CONTACT No:	Email Reports and Invoices to: LARSON@slrconsulting.com	Required TAT:	

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	Asbestos								Hold	Additional Information (Comment on any gross contamination or specific requirements)
	0407_TP257_0.1_200629	29.6.20	Soil	✓										X	
9	0407_TP257_0.5_200629			✓	X										
10	0407_TP257_1.0_200629			✓	X										
	0407_TP257_1.5_200629													X	
11	0407_TP258_01_200629			✓	X										
12	0407_TP258_0.5_200629			✓	X										
	0407_TP258_1.0_200629													X	
13	0407_QC177_200629				X										
14	0407_QC179_200629				X										
15	0407_TP258_A01_200629		ACM			X									
16	0407_TP151_A01_200629	↓	1			X									
	0407_														

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	Received by	Sign [redacted]	Date / Time 29/6/20	Temperature Received:
Relinquished By	Sign	Date / Time	Received by	Sign [redacted]	Date / Time 04:20	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

000692

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☑ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Stuart Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010, NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT:	DHA
PROJECT:	Randwick Barracks
PROJECT NUMBER:	610.30041
PROJECT MANAGER:	[redacted]
PM CONTACT No:	
LABORATORY:	SGS
LABORATORY ADDRESS:	SYD
SAMPLER:	SR
SAMPLER CONTACT No:	
Email Reports and Invoices to:	LGRSYD@slrconsulting.com

Turnaround Time (TAT)

☑ Standard TAT

☐ Non Standard or Urgent TAT

Required TAT:

COC Number 3 of 3

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

Additional Information *(Comment on any gross contamination or specific requirements)*

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives
	0407_QC277_200629	29/6/20	Soil	Please forward to Eurofins for 'Suite A'
	0407_QC279_200629	1	1	"

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	**Received by**	Sign [redacted]	Date / Time 29/06/20	**Temperature Received:**
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time 04:30	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

SAMPLE RECEIPT ADVICE

SE208142

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000690-000692**
Samples	16

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Mon 29/6/2020
Report Due	Wed 8/7/2020
SGS Reference	**SE208142**

SUBMISSION DETAILS

This is to confirm that 16 samples were received on Monday 29/6/2020. Results are expected to be ready by COB Wednesday 8/7/2020.
Please quote SGS reference SE208142 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	14 Soil, 2 Material
Date documentation received	29/6/2020	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	3.5°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

7 Soil have been placed on hold as no tests have been assigned for them by the client. These samples will not be processed.

This document is issued by the Company under its General Conditions of Service accessible at www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

SAMPLE RECEIPT ADVICE

SE208142

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	Speciated Phenols in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
001	0407_TP255_0.1_200629	29	14	26	11	18	10	81	7
002	0407_TP255_0.5_200629	29	14	26	11	18	10	81	7
003	0407_TP256_0.1_200629	29	14	26	11	18	10	81	7
004	0407_TP256_0.5_200629	29	14	26	11	18	10	81	7
005	0407_TP141_0.1_200629	29	14	26	11	18	10	81	7
006	0407_TP141_0.5_200629	29	14	26	11	18	10	81	7
007	0407_TP151_0.1_200629	29	14	26	11	18	10	81	7
008	0407_TP151_0.5_200629	29	14	26	11	18	10	81	7
009	0407_TP257_0.5_200629	29	14	26	11	18	10	81	7
010	0407_TP257_1.0_200629	29	14	26	11	18	10	81	7
011	0407_TP258_0.1_200629	29	14	26	11	18	10	81	7
012	0407_TP258_0.5_200629	29	14	26	11	18	10	81	7
013	0407_QC177_200629	29	14	26	11	18	10	81	7
014	0407_QC179_200629	29	14	26	11	18	10	81	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE208142

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Fibre Identification in soil	Gravimetric Determination of Asbestos in Soil	Mercury in Soil	Moisture Content	Total Recoverable Elements in Soil/Waste
001	0407_TP255_0.1_200629	2	8	1	1	7
002	0407_TP255_0.5_200629	2	8	1	1	7
003	0407_TP256_0.1_200629	2	8	1	1	7
004	0407_TP256_0.5_200629	2	8	1	1	7
005	0407_TP141_0.1_200629	2	8	1	1	7
006	0407_TP141_0.5_200629	2	8	1	1	7
007	0407_TP151_0.1_200629	2	8	1	1	7
008	0407_TP151_0.5_200629	2	8	1	1	7
009	0407_TP257_0.5_200629	2	8	1	1	7
010	0407_TP257_1.0_200629	2	8	1	1	7
011	0407_TP258_0.1_200629	2	8	1	1	7
012	0407_TP258_0.5_200629	2	8	1	1	7
013	0407_QC177_200629	-	-	1	1	7
014	0407_QC179_200629	-	-	1	1	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE208142

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Fibre ID in bulk materials
015	0407_TP258_A01_200629	1
016	0407_TP151_A01_200629	1

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000690-000692**
Samples	16

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208142 R0**
Date Received	29/6/2020
Date Reported	9/7/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

Sample # 16: No trace asbestos fibres detected using trace analysis technique.
No respirable fibres detected in all soil samples using trace analysis technique.

Sample #5: Asbestos found in approx 5x3x2mm cement sheet fragments in >2mm portion.
Sample #7: Asbestos found in approx 6x4x2mm cement sheet fragments in >2mm portion.
Sample #11: Approx 9-10x2mm fibre bundles x>20 found loose in <2mm and >2mm portions.

Asbestos analysed by Approved Identifiers Ravee Sivasubramaniam and Yusuf Kuthpudin .

SIGNATORIES

[redacted]

Chemist | Senior Organic Chemist/Metals Chemist | Metals/Inorganics Team Leader

[redacted]

Organic Section Head | Hygiene Team Leader | Asbestos Analyst

VOC's in Soil [AN433] Tested: 6/7/2020

PARAMETER	UOM	LOR	0407_TP255_0.1_20029 SOIL - 29/6/2020 SE208142.001	0407_TP255_0.5_20029 SOIL - 29/6/2020 SE208142.002	0407_TP256_0.1_20029 SOIL - 29/6/2020 SE208142.003	0407_TP256_0.5_20029 SOIL - 29/6/2020 SE208142.004	0407_TP141_0.1_20029 SOIL - 29/6/2020 SE208142.005
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 6/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP255_0.1_200 29 SOIL - 29/6/2020 SE208142.001	0407_TP255_0.5_200 29 SOIL - 29/6/2020 SE208142.002	0407_TP256_0.1_200 29 SOIL - 29/6/2020 SE208142.003	0407_TP256_0.5_200 29 SOIL - 29/6/2020 SE208142.004	0407_TP141_0.1_200 29 SOIL - 29/6/2020 SE208142.005
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 6/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP141_0.5_20029 SOIL - 29/6/2020 SE208142.006	0407_TP151_0.1_20029 SOIL - 29/6/2020 SE208142.007	0407_TP151_0.5_20029 SOIL - 29/6/2020 SE208142.008	0407_TP257_0.5_20029 SOIL - 29/6/2020 SE208142.009	0407_TP257_1.0_20029 SOIL - 29/6/2020 SE208142.010
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 6/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP141_0.5_200 29 SOIL - 29/6/2020 SE208142.006	0407_TP151_0.1_200 29 SOIL - 29/6/2020 SE208142.007	0407_TP151_0.5_200 29 SOIL - 29/6/2020 SE208142.008	0407_TP257_0.5_200 29 SOIL - 29/6/2020 SE208142.009	0407_TP257_1.0_200 29 SOIL - 29/6/2020 SE208142.010
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 6/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP258_0.1_20029 SOIL - 29/6/2020 SE208142.011	0407_TP258_0.5_20029 SOIL - 29/6/2020 SE208142.012	0407_QC177_20062 SOIL - 29/6/2020 SE208142.013	0407_QC179_20062 SOIL - 29/6/2020 SE208142.014
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 6/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP258_0.1_20029 SOIL - 29/6/2020 SE208142.011	0407_TP258_0.5_20029 SOIL - 29/6/2020 SE208142.012	0407_QC177_20062 SOIL - 29/6/2020 SE208142.013	0407_QC179_20062 SOIL - 29/6/2020 SE208142.014
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 6/7/2020

PARAMETER	UOM	LOR	0407_TP255_0.1_20029 SOIL - 29/6/2020 SE208142.001	0407_TP255_0.5_20029 SOIL - 29/6/2020 SE208142.002	0407_TP256_0.1_20029 SOIL - 29/6/2020 SE208142.003	0407_TP256_0.5_20029 SOIL - 29/6/2020 SE208142.004	0407_TP141_0.1_20029 SOIL - 29/6/2020 SE208142.005
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP141_0.5_20029 SOIL - 29/6/2020 SE208142.006	0407_TP151_0.1_20029 SOIL - 29/6/2020 SE208142.007	0407_TP151_0.5_20029 SOIL - 29/6/2020 SE208142.008	0407_TP257_0.5_20029 SOIL - 29/6/2020 SE208142.009	0407_TP257_1.0_20029 SOIL - 29/6/2020 SE208142.010
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP258_0.1_20029 SOIL - 29/6/2020 SE208142.011	0407_TP258_0.5_20029 SOIL - 29/6/2020 SE208142.012	0407_QC177_20062 SOIL - 29/6/2020 SE208142.013	0407_QC179_20062 SOIL - 29/6/2020 SE208142.014
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 6/7/2020

PARAMETER	UOM	LOR	0407_TP255_0.1_20029 SOIL - 29/6/2020 SE208142.001	0407_TP255_0.5_20029 SOIL - 29/6/2020 SE208142.002	0407_TP256_0.1_20029 SOIL - 29/6/2020 SE208142.003	0407_TP256_0.5_20029 SOIL - 29/6/2020 SE208142.004	0407_TP141_0.1_20029 SOIL - 29/6/2020 SE208142.005
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	**58**
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	**94**
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP141_0.5_20029 SOIL - 29/6/2020 SE208142.006	0407_TP151_0.1_20029 SOIL - 29/6/2020 SE208142.007	0407_TP151_0.5_20029 SOIL - 29/6/2020 SE208142.008	0407_TP257_0.5_20029 SOIL - 29/6/2020 SE208142.009	0407_TP257_1.0_20029 SOIL - 29/6/2020 SE208142.010
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	**91**	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	**93**	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	**160**	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	**180**	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP258_0.1_20029 SOIL - 29/6/2020 SE208142.011	0407_TP258_0.5_20029 SOIL - 29/6/2020 SE208142.012	0407_QC177_20062 SOIL - 29/6/2020 SE208142.013	0407_QC179_20062 SOIL - 29/6/2020 SE208142.014
TRH C10-C14	mg/kg	20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	**52**	<45	<45	<45
TRH C29-C36	mg/kg	45	**91**	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	**120**	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	**140**	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 6/7/2020

PARAMETER	UOM	LOR	0407_TP255_0.1_20029 SOIL - 29/6/2020 SE208142.001	0407_TP255_0.5_20029 SOIL - 29/6/2020 SE208142.002	0407_TP256_0.1_20029 SOIL - 29/6/2020 SE208142.003	0407_TP256_0.5_20029 SOIL - 29/6/2020 SE208142.004	0407_TP141_0.1_20029 SOIL - 29/6/2020 SE208142.005
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	0.2
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	0.2	<0.1	0.2
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	0.3
Fluoranthene	mg/kg	0.1	0.2	0.1	0.4	<0.1	1.1
Pyrene	mg/kg	0.1	0.2	0.1	0.4	<0.1	1.4
Benzo(a)anthracene	mg/kg	0.1	0.1	<0.1	0.2	<0.1	1.3
Chrysene	mg/kg	0.1	0.1	<0.1	0.2	<0.1	1.3
Benzo(b&j)fluoranthene	mg/kg	0.1	0.1	<0.1	0.2	<0.1	1.6
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	0.1	<0.1	0.7
Benzo(a)pyrene	mg/kg	0.1	0.1	<0.1	0.2	<0.1	1.5
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	0.1	<0.1	0.7
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	0.2
Benzo(ghi)perylene	mg/kg	0.1	0.1	<0.1	0.2	<0.1	0.8
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	0.3	<0.2	2.1
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	0.4	<0.3	2.1
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	0.2	<0.2	0.3	<0.2	2.1
Total PAH (18)	mg/kg	0.8	1.1	<0.8	2.3	<0.8	11
Total PAH (NEPM/WHO 16)	mg/kg	0.8	1.1	<0.8	2.3	<0.8	11

PARAMETER	UOM	LOR	0407_TP141_0.5_20029 SOIL - 29/6/2020 SE208142.006	0407_TP151_0.1_20029 SOIL - 29/6/2020 SE208142.007	0407_TP151_0.5_20029 SOIL - 29/6/2020 SE208142.008	0407_TP257_0.5_20029 SOIL - 29/6/2020 SE208142.009	0407_TP257_1.0_20029 SOIL - 29/6/2020 SE208142.010
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	0.3	0.3	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	0.1	0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	0.6	0.4	0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	0.7	0.4	0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	0.4	0.2	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	0.4	0.2	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	0.4	0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	0.2	0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	0.4	0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	0.2	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	0.3	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	0.6	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	0.7	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	0.6	0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	4.2	2.0	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	4.2	2.0	<0.8	<0.8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 6/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP258_0.1_20029 SOIL - 29/6/2020 SE208142.011	0407_TP258_0.5_20029 SOIL - 29/6/2020 SE208142.012	0407_QC177_20062 SOIL - 29/6/2020 SE208142.013	0407_QC179_20062 SOIL - 29/6/2020 SE208142.014
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	**0.1**	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	**0.1**	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8

Speciated Phenols in Soil [AN420] Tested: 6/7/2020

PARAMETER	UOM	LOR	0407_TP255_0.1_20029 SOIL - 29/6/2020 SE208142.001	0407_TP255_0.5_20029 SOIL - 29/6/2020 SE208142.002	0407_TP256_0.1_20029 SOIL - 29/6/2020 SE208142.003	0407_TP256_0.5_20029 SOIL - 29/6/2020 SE208142.004	0407_TP141_0.1_20029 SOIL - 29/6/2020 SE208142.005
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_TP141_0.5_20029 SOIL - 29/6/2020 SE208142.006	0407_TP151_0.1_20029 SOIL - 29/6/2020 SE208142.007	0407_TP151_0.5_20029 SOIL - 29/6/2020 SE208142.008	0407_TP257_0.5_20029 SOIL - 29/6/2020 SE208142.009	0407_TP257_1.0_20029 SOIL - 29/6/2020 SE208142.010
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

Speciated Phenols in Soil [AN420] Tested: 6/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP258_0.1_200 29 SOIL - 29/6/2020 SE208142.011	0407_TP258_0.5_200 29 SOIL - 29/6/2020 SE208142.012	0407_QC177_20062 SOIL - 29/6/2020 SE208142.013	0407_QC179_20062 SOIL - 29/6/2020 SE208142.014
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2

OC Pesticides in Soil [AN420] Tested: 6/7/2020

PARAMETER	UOM	LOR	0407_TP255_0.1_20029 SOIL - 29/6/2020 SE208142.001	0407_TP255_0.5_20029 SOIL - 29/6/2020 SE208142.002	0407_TP256_0.1_20029 SOIL - 29/6/2020 SE208142.003	0407_TP256_0.5_20029 SOIL - 29/6/2020 SE208142.004	0407_TP141_0.1_20029 SOIL - 29/6/2020 SE208142.005
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 6/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP141_0.5_200 29 SOIL - 29/6/2020 SE208142.006	0407_TP151_0.1_200 29 SOIL - 29/6/2020 SE208142.007	0407_TP151_0.5_200 29 SOIL - 29/6/2020 SE208142.008	0407_TP257_0.5_200 29 SOIL - 29/6/2020 SE208142.009	0407_TP257_1.0_200 29 SOIL - 29/6/2020 SE208142.010
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	**0.3**	**1.3**	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	**1**	<1	<1

OC Pesticides in Soil [AN420] Tested: 6/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP258_0.1_20029 SOIL - 29/6/2020 SE208142.011	0407_TP258_0.5_20029 SOIL - 29/6/2020 SE208142.012	0407_QC177_20062 SOIL - 29/6/2020 SE208142.013	0407_QC179_20062 SOIL - 29/6/2020 SE208142.014
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	**1.8**	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	**2**	<1

OP Pesticides in Soil [AN420] Tested: 6/7/2020

PARAMETER	UOM	LOR	0407_TP255_0.1_20029 SOIL - 29/6/2020 SE208142.001	0407_TP255_0.5_20029 SOIL - 29/6/2020 SE208142.002	0407_TP256_0.1_20029 SOIL - 29/6/2020 SE208142.003	0407_TP256_0.5_20029 SOIL - 29/6/2020 SE208142.004	0407_TP141_0.1_20029 SOIL - 29/6/2020 SE208142.005
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP141_0.5_20029 SOIL - 29/6/2020 SE208142.006	0407_TP151_0.1_20029 SOIL - 29/6/2020 SE208142.007	0407_TP151_0.5_20029 SOIL - 29/6/2020 SE208142.008	0407_TP257_0.5_20029 SOIL - 29/6/2020 SE208142.009	0407_TP257_1.0_20029 SOIL - 29/6/2020 SE208142.010
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP258_0.1_20029 SOIL - 29/6/2020 SE208142.011	0407_TP258_0.5_20029 SOIL - 29/6/2020 SE208142.012	0407_QC177_20062 SOIL - 29/6/2020 SE208142.013	0407_QC179_20062 SOIL - 29/6/2020 SE208142.014
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7

PCBs in Soil [AN420] Tested: 6/7/2020

PARAMETER	UOM	LOR	0407_TP255_0.1_20029 SOIL - 29/6/2020 SE208142.001	0407_TP255_0.5_20029 SOIL - 29/6/2020 SE208142.002	0407_TP256_0.1_20029 SOIL - 29/6/2020 SE208142.003	0407_TP256_0.5_20029 SOIL - 29/6/2020 SE208142.004	0407_TP141_0.1_20029 SOIL - 29/6/2020 SE208142.005
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP141_0.5_20029 SOIL - 29/6/2020 SE208142.006	0407_TP151_0.1_20029 SOIL - 29/6/2020 SE208142.007	0407_TP151_0.5_20029 SOIL - 29/6/2020 SE208142.008	0407_TP257_0.5_20029 SOIL - 29/6/2020 SE208142.009	0407_TP257_1.0_20029 SOIL - 29/6/2020 SE208142.010
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP258_0.1_20029 SOIL - 29/6/2020 SE208142.011	0407_TP258_0.5_20029 SOIL - 29/6/2020 SE208142.012	0407_QC177_20062 SOIL - 29/6/2020 SE208142.013	0407_QC179_20062 SOIL - 29/6/2020 SE208142.014
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 6/7/2020

PARAMETER	UOM	LOR	0407_TP255_0.1_20029 SOIL - 29/6/2020 SE208142.001	0407_TP255_0.5_20029 SOIL - 29/6/2020 SE208142.002	0407_TP256_0.1_20029 SOIL - 29/6/2020 SE208142.003	0407_TP256_0.5_20029 SOIL - 29/6/2020 SE208142.004	0407_TP141_0.1_20029 SOIL - 29/6/2020 SE208142.005
Arsenic, As	mg/kg	1	7	<1	9	2	8
Cadmium, Cd	mg/kg	0.3	0.4	<0.3	<0.3	1.3	0.4
Chromium, Cr	mg/kg	0.5	20	<0.5	19	5.3	21
Copper, Cu	mg/kg	0.5	38	2.3	58	12	44
Lead, Pb	mg/kg	1	92	17	290	17	120
Nickel, Ni	mg/kg	0.5	9.8	<0.5	11	13	13
Zinc, Zn	mg/kg	2	260	6.5	250	67	320

PARAMETER	UOM	LOR	0407_TP141_0.5_20029 SOIL - 29/6/2020 SE208142.006	0407_TP151_0.1_20029 SOIL - 29/6/2020 SE208142.007	0407_TP151_0.5_20029 SOIL - 29/6/2020 SE208142.008	0407_TP257_0.5_20029 SOIL - 29/6/2020 SE208142.009	0407_TP257_1.0_20029 SOIL - 29/6/2020 SE208142.010
Arsenic, As	mg/kg	1	<1	9	<1	<1	<1
Cadmium, Cd	mg/kg	0.3	<0.3	0.5	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	<0.5	19	1.0	1.6	<0.5
Copper, Cu	mg/kg	0.5	2.2	59	3.2	2.1	2.2
Lead, Pb	mg/kg	1	8	110	34	23	10
Nickel, Ni	mg/kg	0.5	0.8	12	0.7	0.5	<0.5
Zinc, Zn	mg/kg	2	28	370	26	13	2.6

PARAMETER	UOM	LOR	0407_TP258_0.1_20029 SOIL - 29/6/2020 SE208142.011	0407_TP258_0.5_20029 SOIL - 29/6/2020 SE208142.012	0407_QC177_20062 SOIL - 29/6/2020 SE208142.013	0407_QC179_20062 SOIL - 29/6/2020 SE208142.014
Arsenic, As	mg/kg	1	<1	<1	<1	<1
Cadmium, Cd	mg/kg	0.3	1.1	0.3	<0.3	0.3
Chromium, Cr	mg/kg	0.5	10	0.6	1.0	0.6
Copper, Cu	mg/kg	0.5	24	6.2	3.2	6.0
Lead, Pb	mg/kg	1	110	20	27	18
Nickel, Ni	mg/kg	0.5	2.0	<0.5	0.5	<0.5
Zinc, Zn	mg/kg	2	140	20	23	18

Mercury in Soil [AN312] Tested: 6/7/2020

PARAMETER	UOM	LOR	0407_TP255_0.1_20029 SOIL - 29/6/2020 SE208142.001	0407_TP255_0.5_20029 SOIL - 29/6/2020 SE208142.002	0407_TP256_0.1_20029 SOIL - 29/6/2020 SE208142.003	0407_TP256_0.5_20029 SOIL - 29/6/2020 SE208142.004	0407_TP141_0.1_20029 SOIL - 29/6/2020 SE208142.005
Mercury	mg/kg	0.05	**0.14**	<0.05	**0.10**	<0.05	**0.08**

PARAMETER	UOM	LOR	0407_TP141_0.5_20029 SOIL - 29/6/2020 SE208142.006	0407_TP151_0.1_20029 SOIL - 29/6/2020 SE208142.007	0407_TP151_0.5_20029 SOIL - 29/6/2020 SE208142.008	0407_TP257_0.5_20029 SOIL - 29/6/2020 SE208142.009	0407_TP257_1.0_20029 SOIL - 29/6/2020 SE208142.010
Mercury	mg/kg	0.05	<0.05	**0.13**	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_TP258_0.1_20029 SOIL - 29/6/2020 SE208142.011	0407_TP258_0.5_20029 SOIL - 29/6/2020 SE208142.012	0407_QC177_20062 SOIL - 29/6/2020 SE208142.013	0407_QC179_20062 SOIL - 29/6/2020 SE208142.014
Mercury	mg/kg	0.05	**0.06**	<0.05	<0.05	<0.05

Moisture Content [AN002] Tested: 6/7/2020

PARAMETER	UOM	LOR	0407_TP255_0.1_200 29 SOIL - 29/6/2020 SE208142.001	0407_TP255_0.5_200 29 SOIL - 29/6/2020 SE208142.002	0407_TP256_0.1_200 29 SOIL - 29/6/2020 SE208142.003	0407_TP256_0.5_200 29 SOIL - 29/6/2020 SE208142.004	0407_TP141_0.1_200 29 SOIL - 29/6/2020 SE208142.005
% Moisture	%w/w	1	23.6	7.3	25.9	23.7	24.0

PARAMETER	UOM	LOR	0407_TP141_0.5_200 29 SOIL - 29/6/2020 SE208142.006	0407_TP151_0.1_200 29 SOIL - 29/6/2020 SE208142.007	0407_TP151_0.5_200 29 SOIL - 29/6/2020 SE208142.008	0407_TP257_0.5_200 29 SOIL - 29/6/2020 SE208142.009	0407_TP257_1.0_200 29 SOIL - 29/6/2020 SE208142.010
% Moisture	%w/w	1	4.0	27.9	5.3	4.9	9.0

PARAMETER	UOM	LOR	0407_TP258_0.1_200 29 SOIL - 29/6/2020 SE208142.011	0407_TP258_0.5_200 29 SOIL - 29/6/2020 SE208142.012	0407_QC177_20062 SOIL - 29/6/2020 SE208142.013	0407_QC179_20062 SOIL - 29/6/2020 SE208142.014
% Moisture	%w/w	1	9.7	3.9	6.3	4.6

Fibre Identification in soil [AN602] Tested: 7/7/2020

PARAMETER	UOM	LOR	0407_TP255_0.1_20029 SOIL - 29/6/2020 SE208142.001	0407_TP255_0.5_20029 SOIL - 29/6/2020 SE208142.002	0407_TP256_0.1_20029 SOIL - 29/6/2020 SE208142.003	0407_TP256_0.5_20029 SOIL - 29/6/2020 SE208142.004	0407_TP141_0.1_20029 SOIL - 29/6/2020 SE208142.005
Asbestos Detected	No unit	-	No	No	No	No	Yes
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	**>0.01**

PARAMETER	UOM	LOR	0407_TP141_0.5_20029 SOIL - 29/6/2020 SE208142.006	0407_TP151_0.1_20029 SOIL - 29/6/2020 SE208142.007	0407_TP151_0.5_20029 SOIL - 29/6/2020 SE208142.008	0407_TP257_0.5_20029 SOIL - 29/6/2020 SE208142.009	0407_TP257_1.0_20029 SOIL - 29/6/2020 SE208142.010
Asbestos Detected	No unit	-	No	Yes	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	**>0.01**	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	0407_TP258_0.1_20029 SOIL - 29/6/2020 SE208142.011	0407_TP258_0.5_20029 SOIL - 29/6/2020 SE208142.012
Asbestos Detected	No unit	-	Yes	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 7/7/2020

PARAMETER	UOM	LOR	0407_TP255_0.1_20029 SOIL - 29/6/2020 SE208142.001	0407_TP255_0.5_20029 SOIL - 29/6/2020 SE208142.002	0407_TP256_0.1_20029 SOIL - 29/6/2020 SE208142.003	0407_TP256_0.5_20029 SOIL - 29/6/2020 SE208142.004	0407_TP141_0.1_20029 SOIL - 29/6/2020 SE208142.005
Total Sample Weight*	g	1	326	794	375	558	425
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.0465
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	0.011
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	0.011
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP141_0.5_20029 SOIL - 29/6/2020 SE208142.006	0407_TP151_0.1_20029 SOIL - 29/6/2020 SE208142.007	0407_TP151_0.5_20029 SOIL - 29/6/2020 SE208142.008	0407_TP257_0.5_20029 SOIL - 29/6/2020 SE208142.009	0407_TP257_1.0_20029 SOIL - 29/6/2020 SE208142.010
Total Sample Weight*	g	1	736	358	752	792	783
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	0.0533	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	0.015	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	0.015	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP258_0.1_20029 SOIL - 29/6/2020 SE208142.011	0407_TP258_0.5_20029 SOIL - 29/6/2020 SE208142.012
Total Sample Weight*	g	1	662	815
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	0.0159	<0.00001
AF/FA in <2mm Sample*	g	0.00001	0.0307	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	0.002	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	0.005	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	0.007	<0.001
Fibre Type*	No unit	-	-	-

Fibre ID in bulk materials [AN602] Tested: 8/7/2020

PARAMETER	UOM	LOR	0407_TP258_A01_20629 MATERIAL - 29/6/2020 SE208142.015	0407_TP151_A01_20629 MATERIAL - 29/6/2020 SE208142.016
Asbestos Detected	No unit	-	Yes	No

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid , mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser . Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents .
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken . This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup /fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS /ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples, Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."

AN602	The sample can be reported "no asbestos found at the reporting limit of 0.1 g/kg" (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no 'respirable' fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.
AN605	This technique gravimetrically determines the mass of Bonded Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight. Any fibrous asbestos (FA) found in this fraction will be added to the 2-7mm fraction and its mass recorded there.
AN605	This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free/respirable fibres which are only observed by standard trace analysis as per AN602.
AN605	Bonded asbestos containing material (Bonded ACM) comprises asbestos-containing-material which is sound in condition. Fibrous asbestos (FA) comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material. Asbestos fines (AF) includes free fibres, small fibre bundles and also small fragments of bonded ACM that passes through a 7mm sieve - which implies that the bonded ACM fragments have a substantial degree of damage which increases the potential for fibre release.
AN-605	Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009 and NEPM 1999 (2013) schedule B1 section 4..

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
**	Indicative data, theoretical holding time exceeded.	NVL	Not validated.	LOR	Limit of Reporting.
		IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

This document is issued by the Company under its General Conditions of Service accessible at www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000690-000692**
Samples	14

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208142 R0**
Date Received	29 Jun 2020
Date Reported	09 Jul 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

Sample # 16: No trace asbestos fibres detected using trace analysis technique.
No respirable fibres detected in all soil samples using trace analysis technique.

Sample #5: Asbestos found in approx 5x3x2mm cement sheet fragments in >2mm portion.
Sample #7: Asbestos found in approx 6x4x2mm cement sheet fragments in >2mm portion.
Sample #11: Approx 9-10x2mm fibre bundles x>20 found loose in <2mm and >2mm portions.

Asbestos analysed by Approved Identifiers Ravee Sivasubramaniam and Yusuf Kuthpudin .

SIGNATORIES

[redacted]

Chemist | Senior Organic Chemist/Metals Chemis | Organic Section Head

[redacted]

Hygiene Team Leader | Asbestos Analyst

RESULTS

Fibre Identification in soil — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE208142.001	0407_TP255_0.1 _200629	Soil	326g Sand, Soil, Rocks, Plant matter	29 Jun 2020	No Asbestos Found Synthetic Mineral Fibres Detected Organic Fibres Detected	<0.01
SE208142.002	0407_TP255_0.5 _200629	Soil	794g Sand, Soil, Rocks	29 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208142.003	0407_TP256_0.1 _200629	Soil	375g Sand, Soil, Rocks, Plant matter	29 Jun 2020	No Asbestos Found Synthetic Mineral Fibres Detected Organic Fibres Detected	<0.01
SE208142.004	0407_TP256_0.5 _200629	Soil	558g Sand, Soil, Rocks	29 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208142.005	0407_TP141_0.1 _200629	Soil	425g Sand, Soil, Rocks, Plant matter	29 Jun 2020	Chrysotile Asbestos Found Synthetic Mineral Fibres Detected Organic Fibres Detected	>0.01
SE208142.006	0407_TP141_0.5 _200629	Soil	736g Sand, Soil	29 Jun 2020	No Asbestos Found	<0.01
SE208142.007	0407_TP151_0.1 _200629	Soil	358g Sand, Soil, Rocks, Plant matter	29 Jun 2020	Chrysotile Asbestos Found Synthetic Mineral Fibres Detected Organic Fibres Detected	>0.01
SE208142.008	0407_TP151_0.5 _200629	Soil	752g Sand, Soil, Rocks	29 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208142.009	0407_TP257_0.5 _200629	Soil	792g Sand, Soil, Rocks	29 Jun 2020	No Asbestos Found	<0.01
SE208142.010	0407_TP257_1.0 _200629	Soil	783g Sand, Soil	29 Jun 2020	No Asbestos Found	<0.01
SE208142.011	0407_TP258_0.1 _200629	Soil	662g Sand, Soil, Rocks	29 Jun 2020	Chrysotile Asbestos Found Organic Fibres Detected	<0.01
SE208142.012	0407_TP258_0.5 _200629	Soil	815g Sand, Soil	29 Jun 2020	No Asbestos Found	<0.01

RESULTS

Fibre ID in bulk materials — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE208142.015	0407_TP258_A01_200629	Other	100x100x5mm Cement Sheet Fragment	29 Jun 2020	Chrysotile Asbestos Detected	
SE208142.016	0407_TP151_A01_200629	Other	50x40x4mm Tile Fragment	29 Jun 2020	No Asbestos Detected	

METHOD SUMMARY

METHOD	METHODOLOGY SUMMARY
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples , Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable ’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.

FOOTNOTES

Amosite	-	Brown Asbestos	NA	-	Not Analysed
Chrysotile	-	White Asbestos	LNR	-	Listed, Not Required
Crocidolite	-	Blue Asbestos	*	-	NATA accreditation does not cover the performance of this service .
Amphiboles	-	Amosite and/or Crocidolite	**	-	Indicative data, theoretical holding time exceeded.

(In reference to soil samples only) This report does not comply with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment and Remediation and Management of Asbestos Contaminated sites in Western Australia - May 2009.

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.

Where reported: 'Asbestos Detected': Asbestos detected by polarised light microscopy, including dispersion staining.
Where reported: 'No Asbestos Found': No Asbestos Found by polarised light microscopy , including dispersion staining.
Where reported: 'UMF Detected': Mineral fibres of unknown type detected by polarised light microscopy, including dispersion staining. Confirmation by another independent analytical technique may be necessary.

Even after disintegration it can be very difficult, or impossible, to detect the presence of asbestos in some asbestos -containing bulk materials using polarised light microscopy. This is due to the low grade or small length or diameter of asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety .

This document is issued by the Company under its General Conditions of Service accessible at www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

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STATEMENT OF QA/QC PERFORMANCE

SE208142 R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000690-000692**
Samples	16

LABORATORY DETAILS

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SGS Reference	**SE208142 R0**
Date Received	29 Jun 2020
Date Reported	09 Jul 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Surrogate	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	1 item
	VOC's in Soil	2 items
	Volatile Petroleum Hydrocarbons in Soil	2 items
Matrix Spike	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	2 items

SAMPLE SUMMARY

HOLDING TIME SUMMARY

SE208142 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

Fibre ID in bulk materials

Method: ME-(AU)-[ENV]AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP258_A01_200629	SE208142.015	LB203742	29 Jun 2020	29 Jun 2020	29 Jun 2021	08 Jul 2020	29 Jun 2021	08 Jul 2020
0407_TP151_A01_200629	SE208142.016	LB203742	29 Jun 2020	29 Jun 2020	29 Jun 2021	08 Jul 2020	29 Jun 2021	08 Jul 2020

Fibre Identification in soil

Method: ME-(AU)-[ENV]AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP255_0.1_200629	SE208142.001	LB203710	29 Jun 2020	29 Jun 2020	29 Jun 2021	07 Jul 2020	29 Jun 2021	08 Jul 2020
0407_TP255_0.5_200629	SE208142.002	LB203710	29 Jun 2020	29 Jun 2020	29 Jun 2021	07 Jul 2020	29 Jun 2021	08 Jul 2020
0407_TP256_0.1_200629	SE208142.003	LB203710	29 Jun 2020	29 Jun 2020	29 Jun 2021	07 Jul 2020	29 Jun 2021	08 Jul 2020
0407_TP256_0.5_200629	SE208142.004	LB203710	29 Jun 2020	29 Jun 2020	29 Jun 2021	07 Jul 2020	29 Jun 2021	08 Jul 2020
0407_TP141_0.1_200629	SE208142.005	LB203710	29 Jun 2020	29 Jun 2020	29 Jun 2021	07 Jul 2020	29 Jun 2021	08 Jul 2020
0407_TP141_0.5_200629	SE208142.006	LB203710	29 Jun 2020	29 Jun 2020	29 Jun 2021	07 Jul 2020	29 Jun 2021	08 Jul 2020
0407_TP151_0.1_200629	SE208142.007	LB203710	29 Jun 2020	29 Jun 2020	29 Jun 2021	07 Jul 2020	29 Jun 2021	08 Jul 2020
0407_TP151_0.5_200629	SE208142.008	LB203710	29 Jun 2020	29 Jun 2020	29 Jun 2021	07 Jul 2020	29 Jun 2021	08 Jul 2020
0407_TP257_0.5_200629	SE208142.009	LB203710	29 Jun 2020	29 Jun 2020	29 Jun 2021	07 Jul 2020	29 Jun 2021	08 Jul 2020
0407_TP257_1.0_200629	SE208142.010	LB203710	29 Jun 2020	29 Jun 2020	29 Jun 2021	07 Jul 2020	29 Jun 2021	08 Jul 2020
0407_TP258_0.1_200629	SE208142.011	LB203710	29 Jun 2020	29 Jun 2020	29 Jun 2021	07 Jul 2020	29 Jun 2021	08 Jul 2020
0407_TP258_0.5_200629	SE208142.012	LB203710	29 Jun 2020	29 Jun 2020	29 Jun 2021	07 Jul 2020	29 Jun 2021	08 Jul 2020

Gravimetric Determination of Asbestos in Soil

Method: ME-(AU)-[ENV]AN605

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP255_0.1_200629	SE208142.001	LB203710	29 Jun 2020	29 Jun 2020	26 Dec 2020	07 Jul 2020	26 Dec 2020	08 Jul 2020
0407_TP255_0.5_200629	SE208142.002	LB203710	29 Jun 2020	29 Jun 2020	26 Dec 2020	07 Jul 2020	26 Dec 2020	08 Jul 2020
0407_TP256_0.1_200629	SE208142.003	LB203710	29 Jun 2020	29 Jun 2020	26 Dec 2020	07 Jul 2020	26 Dec 2020	08 Jul 2020
0407_TP256_0.5_200629	SE208142.004	LB203710	29 Jun 2020	29 Jun 2020	26 Dec 2020	07 Jul 2020	26 Dec 2020	08 Jul 2020
0407_TP141_0.1_200629	SE208142.005	LB203710	29 Jun 2020	29 Jun 2020	26 Dec 2020	07 Jul 2020	26 Dec 2020	08 Jul 2020
0407_TP141_0.5_200629	SE208142.006	LB203710	29 Jun 2020	29 Jun 2020	26 Dec 2020	07 Jul 2020	26 Dec 2020	08 Jul 2020
0407_TP151_0.1_200629	SE208142.007	LB203710	29 Jun 2020	29 Jun 2020	26 Dec 2020	07 Jul 2020	26 Dec 2020	08 Jul 2020
0407_TP151_0.5_200629	SE208142.008	LB203710	29 Jun 2020	29 Jun 2020	26 Dec 2020	07 Jul 2020	26 Dec 2020	08 Jul 2020
0407_TP257_0.5_200629	SE208142.009	LB203710	29 Jun 2020	29 Jun 2020	26 Dec 2020	07 Jul 2020	26 Dec 2020	08 Jul 2020
0407_TP257_1.0_200629	SE208142.010	LB203710	29 Jun 2020	29 Jun 2020	26 Dec 2020	07 Jul 2020	26 Dec 2020	08 Jul 2020
0407_TP258_0.1_200629	SE208142.011	LB203710	29 Jun 2020	29 Jun 2020	26 Dec 2020	07 Jul 2020	26 Dec 2020	08 Jul 2020
0407_TP258_0.5_200629	SE208142.012	LB203710	29 Jun 2020	29 Jun 2020	26 Dec 2020	07 Jul 2020	26 Dec 2020	08 Jul 2020

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP255_0.1_200629	SE208142.001	LB203607	29 Jun 2020	29 Jun 2020	27 Jul 2020	06 Jul 2020	27 Jul 2020	08 Jul 2020
0407_TP255_0.5_200629	SE208142.002	LB203607	29 Jun 2020	29 Jun 2020	27 Jul 2020	06 Jul 2020	27 Jul 2020	08 Jul 2020
0407_TP256_0.1_200629	SE208142.003	LB203607	29 Jun 2020	29 Jun 2020	27 Jul 2020	06 Jul 2020	27 Jul 2020	08 Jul 2020
0407_TP256_0.5_200629	SE208142.004	LB203607	29 Jun 2020	29 Jun 2020	27 Jul 2020	06 Jul 2020	27 Jul 2020	08 Jul 2020
0407_TP141_0.1_200629	SE208142.005	LB203607	29 Jun 2020	29 Jun 2020	27 Jul 2020	06 Jul 2020	27 Jul 2020	08 Jul 2020
0407_TP141_0.5_200629	SE208142.006	LB203607	29 Jun 2020	29 Jun 2020	27 Jul 2020	06 Jul 2020	27 Jul 2020	08 Jul 2020
0407_TP151_0.1_200629	SE208142.007	LB203607	29 Jun 2020	29 Jun 2020	27 Jul 2020	06 Jul 2020	27 Jul 2020	08 Jul 2020
0407_TP151_0.5_200629	SE208142.008	LB203607	29 Jun 2020	29 Jun 2020	27 Jul 2020	06 Jul 2020	27 Jul 2020	08 Jul 2020
0407_TP257_0.5_200629	SE208142.009	LB203607	29 Jun 2020	29 Jun 2020	27 Jul 2020	06 Jul 2020	27 Jul 2020	08 Jul 2020
0407_TP257_1.0_200629	SE208142.010	LB203607	29 Jun 2020	29 Jun 2020	27 Jul 2020	06 Jul 2020	27 Jul 2020	08 Jul 2020
0407_TP258_0.1_200629	SE208142.011	LB203607	29 Jun 2020	29 Jun 2020	27 Jul 2020	06 Jul 2020	27 Jul 2020	08 Jul 2020
0407_TP258_0.5_200629	SE208142.012	LB203607	29 Jun 2020	29 Jun 2020	27 Jul 2020	06 Jul 2020	27 Jul 2020	08 Jul 2020
0407_QC177_200629	SE208142.013	LB203607	29 Jun 2020	29 Jun 2020	27 Jul 2020	06 Jul 2020	27 Jul 2020	08 Jul 2020
0407_QC179_200629	SE208142.014	LB203607	29 Jun 2020	29 Jun 2020	27 Jul 2020	06 Jul 2020	27 Jul 2020	08 Jul 2020

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP255_0.1_200629	SE208142.001	LB203568	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_TP255_0.5_200629	SE208142.002	LB203568	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_TP256_0.1_200629	SE208142.003	LB203568	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_TP256_0.5_200629	SE208142.004	LB203568	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_TP141_0.1_200629	SE208142.005	LB203568	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_TP141_0.5_200629	SE208142.006	LB203568	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_TP151_0.1_200629	SE208142.007	LB203568	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_TP151_0.5_200629	SE208142.008	LB203568	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_TP257_0.5_200629	SE208142.009	LB203568	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_TP257_1.0_200629	SE208142.010	LB203568	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020

HOLDING TIME SUMMARY

SE208142 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

Moisture Content (continued)

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP258_0.1_200629	SE208142.011	LB203568	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_TP258_0.5_200629	SE208142.012	LB203568	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_QC177_200629	SE208142.013	LB203568	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_QC179_200629	SE208142.014	LB203568	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP255_0.1_200629	SE208142.001	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP255_0.5_200629	SE208142.002	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP256_0.1_200629	SE208142.003	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP256_0.5_200629	SE208142.004	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP141_0.1_200629	SE208142.005	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP141_0.5_200629	SE208142.006	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP151_0.1_200629	SE208142.007	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP151_0.5_200629	SE208142.008	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP257_0.5_200629	SE208142.009	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP257_1.0_200629	SE208142.010	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP258_0.1_200629	SE208142.011	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP258_0.5_200629	SE208142.012	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_QC177_200629	SE208142.013	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_QC179_200629	SE208142.014	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP255_0.1_200629	SE208142.001	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP255_0.5_200629	SE208142.002	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP256_0.1_200629	SE208142.003	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP256_0.5_200629	SE208142.004	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP141_0.1_200629	SE208142.005	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP141_0.5_200629	SE208142.006	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP151_0.1_200629	SE208142.007	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP151_0.5_200629	SE208142.008	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP257_0.5_200629	SE208142.009	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP257_1.0_200629	SE208142.010	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP258_0.1_200629	SE208142.011	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP258_0.5_200629	SE208142.012	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_QC177_200629	SE208142.013	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_QC179_200629	SE208142.014	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP255_0.1_200629	SE208142.001	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP255_0.5_200629	SE208142.002	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP256_0.1_200629	SE208142.003	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP256_0.5_200629	SE208142.004	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP141_0.1_200629	SE208142.005	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP141_0.5_200629	SE208142.006	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP151_0.1_200629	SE208142.007	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP151_0.5_200629	SE208142.008	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP257_0.5_200629	SE208142.009	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP257_1.0_200629	SE208142.010	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP258_0.1_200629	SE208142.011	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP258_0.5_200629	SE208142.012	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_QC177_200629	SE208142.013	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_QC179_200629	SE208142.014	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP255_0.1_200629	SE208142.001	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP255_0.5_200629	SE208142.002	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP256_0.1_200629	SE208142.003	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP256_0.5_200629	SE208142.004	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

PCBs in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP141_0.1_200629	SE208142.005	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP141_0.5_200629	SE208142.006	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP151_0.1_200629	SE208142.007	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP151_0.5_200629	SE208142.008	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP257_0.5_200629	SE208142.009	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP257_1.0_200629	SE208142.010	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP258_0.1_200629	SE208142.011	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP258_0.5_200629	SE208142.012	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_QC177_200629	SE208142.013	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_QC179_200629	SE208142.014	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP255_0.1_200629	SE208142.001	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP255_0.5_200629	SE208142.002	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP256_0.1_200629	SE208142.003	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP256_0.5_200629	SE208142.004	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP141_0.1_200629	SE208142.005	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP141_0.5_200629	SE208142.006	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP151_0.1_200629	SE208142.007	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP151_0.5_200629	SE208142.008	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP257_0.5_200629	SE208142.009	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP257_1.0_200629	SE208142.010	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP258_0.1_200629	SE208142.011	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP258_0.5_200629	SE208142.012	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_QC177_200629	SE208142.013	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_QC179_200629	SE208142.014	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP255_0.1_200629	SE208142.001	LB203601	29 Jun 2020	29 Jun 2020	26 Dec 2020	06 Jul 2020	26 Dec 2020	08 Jul 2020
0407_TP255_0.5_200629	SE208142.002	LB203601	29 Jun 2020	29 Jun 2020	26 Dec 2020	06 Jul 2020	26 Dec 2020	08 Jul 2020
0407_TP256_0.1_200629	SE208142.003	LB203601	29 Jun 2020	29 Jun 2020	26 Dec 2020	06 Jul 2020	26 Dec 2020	08 Jul 2020
0407_TP256_0.5_200629	SE208142.004	LB203601	29 Jun 2020	29 Jun 2020	26 Dec 2020	06 Jul 2020	26 Dec 2020	08 Jul 2020
0407_TP141_0.1_200629	SE208142.005	LB203601	29 Jun 2020	29 Jun 2020	26 Dec 2020	06 Jul 2020	26 Dec 2020	08 Jul 2020
0407_TP141_0.5_200629	SE208142.006	LB203601	29 Jun 2020	29 Jun 2020	26 Dec 2020	06 Jul 2020	26 Dec 2020	08 Jul 2020
0407_TP151_0.1_200629	SE208142.007	LB203601	29 Jun 2020	29 Jun 2020	26 Dec 2020	06 Jul 2020	26 Dec 2020	08 Jul 2020
0407_TP151_0.5_200629	SE208142.008	LB203601	29 Jun 2020	29 Jun 2020	26 Dec 2020	06 Jul 2020	26 Dec 2020	08 Jul 2020
0407_TP257_0.5_200629	SE208142.009	LB203601	29 Jun 2020	29 Jun 2020	26 Dec 2020	06 Jul 2020	26 Dec 2020	08 Jul 2020
0407_TP257_1.0_200629	SE208142.010	LB203601	29 Jun 2020	29 Jun 2020	26 Dec 2020	06 Jul 2020	26 Dec 2020	08 Jul 2020
0407_TP258_0.1_200629	SE208142.011	LB203601	29 Jun 2020	29 Jun 2020	26 Dec 2020	06 Jul 2020	26 Dec 2020	08 Jul 2020
0407_TP258_0.5_200629	SE208142.012	LB203601	29 Jun 2020	29 Jun 2020	26 Dec 2020	06 Jul 2020	26 Dec 2020	08 Jul 2020
0407_QC177_200629	SE208142.013	LB203601	29 Jun 2020	29 Jun 2020	26 Dec 2020	06 Jul 2020	26 Dec 2020	08 Jul 2020
0407_QC179_200629	SE208142.014	LB203601	29 Jun 2020	29 Jun 2020	26 Dec 2020	06 Jul 2020	26 Dec 2020	08 Jul 2020

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP255_0.1_200629	SE208142.001	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP255_0.5_200629	SE208142.002	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP256_0.1_200629	SE208142.003	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP256_0.5_200629	SE208142.004	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP141_0.1_200629	SE208142.005	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP141_0.5_200629	SE208142.006	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP151_0.1_200629	SE208142.007	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP151_0.5_200629	SE208142.008	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP257_0.5_200629	SE208142.009	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP257_1.0_200629	SE208142.010	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP258_0.1_200629	SE208142.011	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP258_0.5_200629	SE208142.012	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_QC177_200629	SE208142.013	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_QC179_200629	SE208142.014	LB203561	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020

HOLDING TIME SUMMARY

SE208142 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP255_0.1_200629	SE208142.001	LB203552	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP255_0.5_200629	SE208142.002	LB203552	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP256_0.1_200629	SE208142.003	LB203552	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP256_0.5_200629	SE208142.004	LB203552	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP141_0.1_200629	SE208142.005	LB203552	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP141_0.5_200629	SE208142.006	LB203552	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP151_0.1_200629	SE208142.007	LB203552	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP151_0.5_200629	SE208142.008	LB203552	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP257_0.5_200629	SE208142.009	LB203552	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP257_1.0_200629	SE208142.010	LB203552	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP258_0.1_200629	SE208142.011	LB203552	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP258_0.5_200629	SE208142.012	LB203552	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_QC177_200629	SE208142.013	LB203552	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_QC179_200629	SE208142.014	LB203552	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP255_0.1_200629	SE208142.001	LB203552	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP255_0.5_200629	SE208142.002	LB203552	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP256_0.1_200629	SE208142.003	LB203552	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP256_0.5_200629	SE208142.004	LB203552	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP141_0.1_200629	SE208142.005	LB203552	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP141_0.5_200629	SE208142.006	LB203552	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP151_0.1_200629	SE208142.007	LB203552	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP151_0.5_200629	SE208142.008	LB203552	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP257_0.5_200629	SE208142.009	LB203552	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP257_1.0_200629	SE208142.010	LB203552	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP258_0.1_200629	SE208142.011	LB203552	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP258_0.5_200629	SE208142.012	LB203552	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_QC177_200629	SE208142.013	LB203552	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_QC179_200629	SE208142.014	LB203552	29 Jun 2020	29 Jun 2020	13 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP255_0.1_200629	SE208142.001	%	60 - 130%	101
	0407_TP255_0.5_200629	SE208142.002	%	60 - 130%	93
	0407_TP256_0.1_200629	SE208142.003	%	60 - 130%	104
	0407_TP256_0.5_200629	SE208142.004	%	60 - 130%	101
	0407_TP141_0.1_200629	SE208142.005	%	60 - 130%	101
	0407_TP141_0.5_200629	SE208142.006	%	60 - 130%	97
	0407_TP151_0.1_200629	SE208142.007	%	60 - 130%	105
	0407_TP151_0.5_200629	SE208142.008	%	60 - 130%	99
	0407_TP257_0.5_200629	SE208142.009	%	60 - 130%	99
	0407_TP257_1.0_200629	SE208142.010	%	60 - 130%	89
	0407_TP258_0.1_200629	SE208142.011	%	60 - 130%	99
	0407_TP258_0.5_200629	SE208142.012	%	60 - 130%	93
	0407_QC177_200629	SE208142.013	%	60 - 130%	92
	0407_QC179_200629	SE208142.014	%	60 - 130%	103

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP255_0.1_200629	SE208142.001	%	60 - 130%	96
	0407_TP255_0.5_200629	SE208142.002	%	60 - 130%	84
	0407_TP256_0.1_200629	SE208142.003	%	60 - 130%	88
	0407_TP256_0.5_200629	SE208142.004	%	60 - 130%	85
	0407_TP141_0.1_200629	SE208142.005	%	60 - 130%	91
	0407_TP141_0.5_200629	SE208142.006	%	60 - 130%	82
	0407_TP151_0.1_200629	SE208142.007	%	60 - 130%	75
	0407_TP151_0.5_200629	SE208142.008	%	60 - 130%	68
	0407_TP257_0.5_200629	SE208142.009	%	60 - 130%	83
	0407_TP257_1.0_200629	SE208142.010	%	60 - 130%	94
	0407_TP258_0.1_200629	SE208142.011	%	60 - 130%	87
	0407_TP258_0.5_200629	SE208142.012	%	60 - 130%	76
	0407_QC177_200629	SE208142.013	%	60 - 130%	86
	0407_QC179_200629	SE208142.014	%	60 - 130%	94
d14-p-terphenyl (Surrogate)	0407_TP255_0.1_200629	SE208142.001	%	60 - 130%	83
	0407_TP255_0.5_200629	SE208142.002	%	60 - 130%	96
	0407_TP256_0.1_200629	SE208142.003	%	60 - 130%	98
	0407_TP256_0.5_200629	SE208142.004	%	60 - 130%	86
	0407_TP141_0.1_200629	SE208142.005	%	60 - 130%	105
	0407_TP141_0.5_200629	SE208142.006	%	60 - 130%	87
	0407_TP151_0.1_200629	SE208142.007	%	60 - 130%	100
	0407_TP151_0.5_200629	SE208142.008	%	60 - 130%	92
	0407_TP257_0.5_200629	SE208142.009	%	60 - 130%	87
	0407_TP257_1.0_200629	SE208142.010	%	60 - 130%	94
	0407_TP258_0.1_200629	SE208142.011	%	60 - 130%	85
	0407_TP258_0.5_200629	SE208142.012	%	60 - 130%	89
	0407_QC177_200629	SE208142.013	%	60 - 130%	91
	0407_QC179_200629	SE208142.014	%	60 - 130%	103

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP255_0.1_200629	SE208142.001	%	70 - 130%	96
	0407_TP255_0.5_200629	SE208142.002	%	70 - 130%	84
	0407_TP256_0.1_200629	SE208142.003	%	70 - 130%	88
	0407_TP256_0.5_200629	SE208142.004	%	70 - 130%	85
	0407_TP141_0.1_200629	SE208142.005	%	70 - 130%	91
	0407_TP141_0.5_200629	SE208142.006	%	70 - 130%	82
	0407_TP151_0.1_200629	SE208142.007	%	70 - 130%	75
	0407_TP151_0.5_200629	SE208142.008	%	70 - 130%	68 †
	0407_TP257_0.5_200629	SE208142.009	%	70 - 130%	83
	0407_TP257_1.0_200629	SE208142.010	%	70 - 130%	94
	0407_TP258_0.1_200629	SE208142.011	%	70 - 130%	87
	0407_TP258_0.5_200629	SE208142.012	%	70 - 130%	76
	0407_QC177_200629	SE208142.013	%	70 - 130%	86
	0407_QC179_200629	SE208142.014	%	70 - 130%	94

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d14-p-terphenyl (Surrogate)	0407_TP255_0.1_200629	SE208142.001	%	70 - 130%	83
	0407_TP255_0.5_200629	SE208142.002	%	70 - 130%	96
	0407_TP256_0.1_200629	SE208142.003	%	70 - 130%	98
	0407_TP256_0.5_200629	SE208142.004	%	70 - 130%	86
	0407_TP141_0.1_200629	SE208142.005	%	70 - 130%	105
	0407_TP141_0.5_200629	SE208142.006	%	70 - 130%	87
	0407_TP151_0.1_200629	SE208142.007	%	70 - 130%	100
	0407_TP151_0.5_200629	SE208142.008	%	70 - 130%	92
	0407_TP257_0.5_200629	SE208142.009	%	70 - 130%	87
	0407_TP257_1.0_200629	SE208142.010	%	70 - 130%	94
	0407_TP258_0.1_200629	SE208142.011	%	70 - 130%	85
	0407_TP258_0.5_200629	SE208142.012	%	70 - 130%	89
	0407_QC177_200629	SE208142.013	%	70 - 130%	91
	0407_QC179_200629	SE208142.014	%	70 - 130%	103
d5-nitrobenzene (Surrogate)	0407_TP255_0.1_200629	SE208142.001	%	70 - 130%	86
	0407_TP255_0.5_200629	SE208142.002	%	70 - 130%	88
	0407_TP256_0.1_200629	SE208142.003	%	70 - 130%	89
	0407_TP256_0.5_200629	SE208142.004	%	70 - 130%	85
	0407_TP141_0.1_200629	SE208142.005	%	70 - 130%	96
	0407_TP141_0.5_200629	SE208142.006	%	70 - 130%	79
	0407_TP151_0.1_200629	SE208142.007	%	70 - 130%	85
	0407_TP151_0.5_200629	SE208142.008	%	70 - 130%	86
	0407_TP257_0.5_200629	SE208142.009	%	70 - 130%	86
	0407_TP257_1.0_200629	SE208142.010	%	70 - 130%	86
	0407_TP258_0.1_200629	SE208142.011	%	70 - 130%	86
	0407_TP258_0.5_200629	SE208142.012	%	70 - 130%	83
	0407_QC177_200629	SE208142.013	%	70 - 130%	84
	0407_QC179_200629	SE208142.014	%	70 - 130%	98

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP255_0.1_200629	SE208142.001	%	60 - 130%	101
	0407_TP255_0.5_200629	SE208142.002	%	60 - 130%	93
	0407_TP256_0.1_200629	SE208142.003	%	60 - 130%	104
	0407_TP256_0.5_200629	SE208142.004	%	60 - 130%	101
	0407_TP141_0.1_200629	SE208142.005	%	60 - 130%	101
	0407_TP141_0.5_200629	SE208142.006	%	60 - 130%	97
	0407_TP151_0.1_200629	SE208142.007	%	60 - 130%	105
	0407_TP151_0.5_200629	SE208142.008	%	60 - 130%	99
	0407_TP257_0.5_200629	SE208142.009	%	60 - 130%	99
	0407_TP257_1.0_200629	SE208142.010	%	60 - 130%	89
	0407_TP258_0.1_200629	SE208142.011	%	60 - 130%	99
	0407_TP258_0.5_200629	SE208142.012	%	60 - 130%	93
	0407_QC177_200629	SE208142.013	%	60 - 130%	92
	0407_QC179_200629	SE208142.014	%	60 - 130%	103

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	0407_TP255_0.1_200629	SE208142.001	%	70 - 130%	89
	0407_TP255_0.5_200629	SE208142.002	%	70 - 130%	91
	0407_TP256_0.1_200629	SE208142.003	%	70 - 130%	96
	0407_TP256_0.5_200629	SE208142.004	%	70 - 130%	95
	0407_TP141_0.1_200629	SE208142.005	%	70 - 130%	94
	0407_TP141_0.5_200629	SE208142.006	%	70 - 130%	96
	0407_TP151_0.1_200629	SE208142.007	%	70 - 130%	94
	0407_TP151_0.5_200629	SE208142.008	%	70 - 130%	93
	0407_TP257_0.5_200629	SE208142.009	%	70 - 130%	94
	0407_TP257_1.0_200629	SE208142.010	%	70 - 130%	93
	0407_TP258_0.1_200629	SE208142.011	%	70 - 130%	93
	0407_TP258_0.5_200629	SE208142.012	%	70 - 130%	89
	0407_QC177_200629	SE208142.013	%	70 - 130%	88
	0407_QC179_200629	SE208142.014	%	70 - 130%	86

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil (continued) — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d5-phenol (Surrogate)	0407_TP255_0.1_200629	SE208142.001	%	50 - 130%	87
	0407_TP255_0.5_200629	SE208142.002	%	50 - 130%	88
	0407_TP256_0.1_200629	SE208142.003	%	50 - 130%	90
	0407_TP256_0.5_200629	SE208142.004	%	50 - 130%	90
	0407_TP141_0.1_200629	SE208142.005	%	50 - 130%	89
	0407_TP141_0.5_200629	SE208142.006	%	50 - 130%	90
	0407_TP151_0.1_200629	SE208142.007	%	50 - 130%	87
	0407_TP151_0.5_200629	SE208142.008	%	50 - 130%	88
	0407_TP257_0.5_200629	SE208142.009	%	50 - 130%	87
	0407_TP257_1.0_200629	SE208142.010	%	50 - 130%	90
	0407_TP258_0.1_200629	SE208142.011	%	50 - 130%	89
	0407_TP258_0.5_200629	SE208142.012	%	50 - 130%	87
	0407_QC177_200629	SE208142.013	%	50 - 130%	88
	0407_QC179_200629	SE208142.014	%	50 - 130%	89

VOC's in Soil — Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP255_0.1_200629	SE208142.001	%	60 - 130%	66
	0407_TP255_0.5_200629	SE208142.002	%	60 - 130%	83
	0407_TP256_0.1_200629	SE208142.003	%	60 - 130%	60 ①
	0407_TP256_0.5_200629	SE208142.004	%	60 - 130%	69
	0407_TP141_0.1_200629	SE208142.005	%	60 - 130%	59 ④
	0407_TP141_0.5_200629	SE208142.006	%	60 - 130%	70
	0407_TP151_0.1_200629	SE208142.007	%	60 - 130%	64
	0407_TP151_0.5_200629	SE208142.008	%	60 - 130%	67
	0407_TP257_0.5_200629	SE208142.009	%	60 - 130%	69
	0407_TP257_1.0_200629	SE208142.010	%	60 - 130%	70
	0407_TP258_0.1_200629	SE208142.011	%	60 - 130%	68
	0407_TP258_0.5_200629	SE208142.012	%	60 - 130%	73
	0407_QC177_200629	SE208142.013	%	60 - 130%	86
	0407_QC179_200629	SE208142.014	%	60 - 130%	78
d4-1,2-dichloroethane (Surrogate)	0407_TP255_0.1_200629	SE208142.001	%	60 - 130%	82
	0407_TP255_0.5_200629	SE208142.002	%	60 - 130%	89
	0407_TP256_0.1_200629	SE208142.003	%	60 - 130%	76
	0407_TP256_0.5_200629	SE208142.004	%	60 - 130%	85
	0407_TP141_0.1_200629	SE208142.005	%	60 - 130%	77
	0407_TP141_0.5_200629	SE208142.006	%	60 - 130%	84
	0407_TP151_0.1_200629	SE208142.007	%	60 - 130%	80
	0407_TP151_0.5_200629	SE208142.008	%	60 - 130%	79
	0407_TP257_0.5_200629	SE208142.009	%	60 - 130%	83
	0407_TP257_1.0_200629	SE208142.010	%	60 - 130%	89
	0407_TP258_0.1_200629	SE208142.011	%	60 - 130%	91
	0407_TP258_0.5_200629	SE208142.012	%	60 - 130%	87
	0407_QC177_200629	SE208142.013	%	60 - 130%	79
	0407_QC179_200629	SE208142.014	%	60 - 130%	77
d8-toluene (Surrogate)	0407_TP255_0.1_200629	SE208142.001	%	60 - 130%	75
	0407_TP255_0.5_200629	SE208142.002	%	60 - 130%	81
	0407_TP256_0.1_200629	SE208142.003	%	60 - 130%	71
	0407_TP256_0.5_200629	SE208142.004	%	60 - 130%	77
	0407_TP141_0.1_200629	SE208142.005	%	60 - 130%	70
	0407_TP141_0.5_200629	SE208142.006	%	60 - 130%	76
	0407_TP151_0.1_200629	SE208142.007	%	60 - 130%	73
	0407_TP151_0.5_200629	SE208142.008	%	60 - 130%	72
	0407_TP257_0.5_200629	SE208142.009	%	60 - 130%	73
	0407_TP257_1.0_200629	SE208142.010	%	60 - 130%	81
	0407_TP258_0.1_200629	SE208142.011	%	60 - 130%	74
	0407_TP258_0.5_200629	SE208142.012	%	60 - 130%	78
	0407_QC177_200629	SE208142.013	%	60 - 130%	79
	0407_QC179_200629	SE208142.014	%	60 - 130%	79

Volatile Petroleum Hydrocarbons in Soil — Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP255_0.1_200629	SE208142.001	%	60 - 130%	66
	0407_TP255_0.5_200629	SE208142.002	%	60 - 130%	83
	0407_TP256_0.1_200629	SE208142.003	%	60 - 130%	60 ①
	0407_TP256_0.5_200629	SE208142.004	%	60 - 130%	69
	0407_TP141_0.1_200629	SE208142.005	%	60 - 130%	59 ④
	0407_TP141_0.5_200629	SE208142.006	%	60 - 130%	70
	0407_TP151_0.1_200629	SE208142.007	%	60 - 130%	64
	0407_TP151_0.5_200629	SE208142.008	%	60 - 130%	67
	0407_TP257_0.5_200629	SE208142.009	%	60 - 130%	69
	0407_TP257_1.0_200629	SE208142.010	%	60 - 130%	70
	0407_TP258_0.1_200629	SE208142.011	%	60 - 130%	68
	0407_TP258_0.5_200629	SE208142.012	%	60 - 130%	73
	0407_QC177_200629	SE208142.013	%	60 - 130%	86
	0407_QC179_200629	SE208142.014	%	60 - 130%	78
d4-1,2-dichloroethane (Surrogate)	0407_TP255_0.1_200629	SE208142.001	%	60 - 130%	82
	0407_TP255_0.5_200629	SE208142.002	%	60 - 130%	89
	0407_TP256_0.1_200629	SE208142.003	%	60 - 130%	76
	0407_TP256_0.5_200629	SE208142.004	%	60 - 130%	85
	0407_TP141_0.1_200629	SE208142.005	%	60 - 130%	77
	0407_TP141_0.5_200629	SE208142.006	%	60 - 130%	84
	0407_TP151_0.1_200629	SE208142.007	%	60 - 130%	80
	0407_TP151_0.5_200629	SE208142.008	%	60 - 130%	79
	0407_TP257_0.5_200629	SE208142.009	%	60 - 130%	83
	0407_TP257_1.0_200629	SE208142.010	%	60 - 130%	89
	0407_TP258_0.1_200629	SE208142.011	%	60 - 130%	91
	0407_TP258_0.5_200629	SE208142.012	%	60 - 130%	87
	0407_QC177_200629	SE208142.013	%	60 - 130%	79
	0407_QC179_200629	SE208142.014	%	60 - 130%	77
d8-toluene (Surrogate)	0407_TP255_0.1_200629	SE208142.001	%	60 - 130%	75
	0407_TP255_0.5_200629	SE208142.002	%	60 - 130%	81
	0407_TP256_0.1_200629	SE208142.003	%	60 - 130%	71
	0407_TP256_0.5_200629	SE208142.004	%	60 - 130%	77
	0407_TP141_0.1_200629	SE208142.005	%	60 - 130%	70
	0407_TP141_0.5_200629	SE208142.006	%	60 - 130%	76
	0407_TP151_0.1_200629	SE208142.007	%	60 - 130%	73
	0407_TP151_0.5_200629	SE208142.008	%	60 - 130%	72
	0407_TP257_0.5_200629	SE208142.009	%	60 - 130%	73
	0407_TP257_1.0_200629	SE208142.010	%	60 - 130%	81
	0407_TP258_0.1_200629	SE208142.011	%	60 - 130%	74
	0407_TP258_0.5_200629	SE208142.012	%	60 - 130%	78
	0407_QC177_200629	SE208142.013	%	60 - 130%	79
	0407_QC179_200629	SE208142.014	%	60 - 130%	79

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result
LB203607.001	Mercury	mg/kg	0.05	<0.05

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203561.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	81

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203561.001		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	75
		d14-p-terphenyl (Surrogate)	%	-	89

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB203561.001	Naphthalene	mg/kg	0.1	<0.1
	2-methylnaphthalene	mg/kg	0.1	<0.1
	1-methylnaphthalene	mg/kg	0.1	<0.1
	Acenaphthylene	mg/kg	0.1	<0.1
	Acenaphthene	mg/kg	0.1	<0.1
	Fluorene	mg/kg	0.1	<0.1
	Phenanthrene	mg/kg	0.1	<0.1
	Anthracene	mg/kg	0.1	<0.1
	Fluoranthene	mg/kg	0.1	<0.1
	Pyrene	mg/kg	0.1	<0.1
	Benzo(a)anthracene	mg/kg	0.1	<0.1
	Chrysene	mg/kg	0.1	<0.1
	Benzo(a)pyrene	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203561.001		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	79
		2-fluorobiphenyl (Surrogate)	%	-	80
		d14-p-terphenyl (Surrogate)	%	-	84

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203561.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	81

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203561.001		Phenol	mg/kg	0.5	<0.5
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5
		2-nitrophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
		Pentachlorophenol	mg/kg	0.5	<0.5
		2,4-dinitrophenol	mg/kg	2	<2
		4-chloro-3-methylphenol	mg/kg	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	94
		d5-phenol (Surrogate)	%	-	98

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB203601.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB203561.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number	Parameter	Units	LOR

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB203552.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB203552.001	Oxygenated Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	85
		d8-toluene (Surrogate)	%	-	81
		Bromofluorobenzene (Surrogate)	%	-	75
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB203552.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	85

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208142.005	LB203607.014	Mercury	mg/kg	0.05	0.08	0.08	92	6
SE208142.014	LB203607.024	Mercury	mg/kg	0.05	<0.05	<0.05	200	0

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208142.009	LB203568.011	% Moisture	%w/w	1	4.9	5.0	50	2
SE208142.014	LB203568.017	% Moisture	%w/w	1	4.6	4.0	53	13

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208142.006	LB203561.022		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	0	200	0
			Alpha BHC	mg/kg	0.1	<0.1	0	200	0
			Lindane	mg/kg	0.1	<0.1	0	200	0
			Heptachlor	mg/kg	0.1	<0.1	0	200	0
			Aldrin	mg/kg	0.1	<0.1	0	200	0
			Beta BHC	mg/kg	0.1	<0.1	0	200	0
			Delta BHC	mg/kg	0.1	<0.1	0	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	0	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	0	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	0	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Dieldrin	mg/kg	0.2	<0.2	0	200	0
			Endrin	mg/kg	0.2	<0.2	0	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	0	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	0	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	0	200	0
			Methoxychlor	mg/kg	0.1	<0.1	0	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	0	200	0
			Isodrin	mg/kg	0.1	<0.1	0	200	0
			Mirex	mg/kg	0.1	<0.1	0	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.151	30	4

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208142.006	LB203561.022		Dichlorvos	mg/kg	0.5	<0.5	0	200	0
			Dimethoate	mg/kg	0.5	<0.5	0.0008603455	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	0	200	0
			Fenitrothion	mg/kg	0.2	<0.2	0	200	0
			Malathion	mg/kg	0.2	<0.2	0.0102099310	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	0	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	0	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	0	200	0
			Methidathion	mg/kg	0.5	<0.5	0	200	0
			Ethion	mg/kg	0.2	<0.2	0.0027624652	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	0.0008894082	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	0	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.2473930871	30	14
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.2696417952	30	3

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate	Parameter	Units	LOR

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208142.006	LB203561.022		Naphthalene	mg/kg	0.1	<0.1	0.0015740727	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	0	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	0	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	0.0035198481	200	0
			Acenaphthene	mg/kg	0.1	<0.1	0.0008677281	200	0
			Fluorene	mg/kg	0.1	<0.1	0.0005061576	200	0
			Phenanthrene	mg/kg	0.1	<0.1	0.0085125769	200	0
			Anthracene	mg/kg	0.1	<0.1	0.0039916860	200	0
			Fluoranthene	mg/kg	0.1	<0.1	0.0254548045	200	0
			Pyrene	mg/kg	0.1	<0.1	0.0282142077	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	0.0147510423	200	0
			Chrysene	mg/kg	0.1	<0.1	0.0205290542	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	0.0336575660	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	0.0386604836	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	0.0143242055	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	0.0134375446	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	0.0016831847	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	0.0157719332	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	0	200	0
				TEQ (mg/kg)	0.2	<0.2	0	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	0.242	134	0
				TEQ (mg/kg)	0.3	<0.3	0.242	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	0.121	175	0
				TEQ (mg/kg)	0.2	<0.2	0.121	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	0	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.2396257455	30	6
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.2473930871	30	14
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.2696417952	30	3

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208142.006	LB203561.022		Arochlor 1016	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	0	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0.151	30	4

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208142.006	LB203561.022		Phenol	mg/kg	0.5	<0.5	0	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	0	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	0	200	0
			Total Cresol	mg/kg	1.5	<1.5	0	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	0	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	0	200	0
			4-nitrophenol	mg/kg	1	<1	0	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	0	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dinitrophenol	mg/kg	2	<2	0	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	0	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.8	4.77	30	1

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208142.006	LB203561.022	Surrogates	d5-phenol (Surrogate)	mg/kg	-	1.8	1.76	30	2

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208142.005	LB203601.014		Arsenic, As	mg/kg	1	8	9	42	20
			Cadmium, Cd	mg/kg	0.3	0.4	0.3	114	23
			Chromium, Cr	mg/kg	0.5	21	22	32	7
			Copper, Cu	mg/kg	0.5	44	41	31	6
			Nickel, Ni	mg/kg	0.5	13	9.4	35	29
			Lead, Pb	mg/kg	1	120	150	31	19
			Zinc, Zn	mg/kg	2	320	260	31	21
SE208142.014	LB203601.024		Arsenic, As	mg/kg	1	<1	<1	200	0
			Cadmium, Cd	mg/kg	0.3	0.3	0.5	104	32
			Chromium, Cr	mg/kg	0.5	0.6	0.5	115	15
			Copper, Cu	mg/kg	0.5	6.0	6.3	38	4
			Nickel, Ni	mg/kg	0.5	<0.5	<0.5	200	0
			Lead, Pb	mg/kg	1	18	18	35	2
			Zinc, Zn	mg/kg	2	18	16	42	12

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208142.006	LB203561.022		TRH C10-C14	mg/kg	20	<20	0	200	0
			TRH C15-C28	mg/kg	45	<45	0	200	0
			TRH C29-C36	mg/kg	45	<45	0	200	0
			TRH C37-C40	mg/kg	100	<100	0	200	0
			TRH C10-C36 Total	mg/kg	110	<110	0	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	0	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	0	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	0	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	0	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	0	200	0

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208142.009	LB203552.014	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued) — Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208142.009	LB203552.014	Halogenated Aliphatics	1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic Aromatic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
			Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
			2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
			MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.3	9.3	50	12
			d8-toluene (Surrogate)	mg/kg	-	7.3	8.4	50	14
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.9	7.4	50	7
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethanes	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
			Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE208142.014	LB203552.020	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
			Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208142.014	LB203552.020	Halogenated	Bromomethane	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	187	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.7	8.0	50	4

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208142.014	LB203552.020	Surrogates	d8-toluene (Surrogate)	mg/kg	-	7.9	7.8	50	1
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.8	8.6	50	10
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethanes	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
			Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208142.009	LB203552.014		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.3	9.3	30	12
			d8-toluene (Surrogate)	mg/kg	-	7.3	8.4	30	14
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.9	7.4	30	7
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE208142.014	LB203552.020		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.7	8.0	30	4
			d8-toluene (Surrogate)	mg/kg	-	7.9	7.8	30	1
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.8	8.6	30	10
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203607.002	Mercury	mg/kg	0.05	0.22	0.2	70 - 130	109

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203561.002		Heptachlor	mg/kg	0.1	0.3	0.2	60 - 140	131
		Aldrin	mg/kg	0.1	0.3	0.2	60 - 140	132
		Delta BHC	mg/kg	0.1	0.3	0.2	60 - 140	130
		Dieldrin	mg/kg	0.2	0.3	0.2	60 - 140	130
		Endrin	mg/kg	0.2	0.3	0.2	60 - 140	140
		p,p'-DDT	mg/kg	0.1	0.3	0.2	60 - 140	135
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.13	0.15	40 - 130	87

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203561.002		Dichlorvos	mg/kg	0.5	1.5	2	60 - 140	73
		Diazinon (Dimpylate)	mg/kg	0.5	2.0	2	60 - 140	99
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.0	2	60 - 140	99
		Ethion	mg/kg	0.2	1.7	2	60 - 140	85
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	85
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	84

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203561.002		Naphthalene	mg/kg	0.1	4.4	4	60 - 140	109
		Acenaphthylene	mg/kg	0.1	4.5	4	60 - 140	112
		Acenaphthene	mg/kg	0.1	4.4	4	60 - 140	111
		Phenanthrene	mg/kg	0.1	4.2	4	60 - 140	106
		Anthracene	mg/kg	0.1	4.6	4	60 - 140	114
		Fluoranthene	mg/kg	0.1	4.3	4	60 - 140	108
		Pyrene	mg/kg	0.1	4.5	4	60 - 140	112
		Benzo(a)pyrene	mg/kg	0.1	4.6	4	60 - 140	116
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.6	0.5	40 - 130	113
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.6	0.5	40 - 130	113
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.6	0.5	40 - 130	112

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203561.002	Arochlor 1260	mg/kg	0.2	0.3	0.4	60 - 140	79

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203561.002		Phenol	mg/kg	0.5	0.7	1	70 - 130	74
		2,4-dichlorophenol	mg/kg	0.5	0.7	1	70 - 130	74
		2,4,6-trichlorophenol	mg/kg	0.5	0.7	1	70 - 130	70
		Pentachlorophenol	mg/kg	0.5	0.7	1	70 - 130	70
	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.6	5	40 - 130	92
		d5-phenol (Surrogate)	mg/kg	-	2.0	2	40 - 130	98

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203601.002	Arsenic, As	mg/kg	1	330	318.22	80 - 120	105
	Cadmium, Cd	mg/kg	0.3	5.2	5.41	80 - 120	96
	Chromium, Cr	mg/kg	0.5	37	38.31	80 - 120	97
	Copper, Cu	mg/kg	0.5	300	290	80 - 120	102
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	100
	Lead, Pb	mg/kg	1	93	89.9	80 - 120	103
	Zinc, Zn	mg/kg	2	280	273	80 - 120	102

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203561.002		TRH C10-C14	mg/kg	20	40	40	60 - 140	100
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	93
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	93
	TRH F Bands	TRH >C10-C16	mg/kg	25	39	40	60 - 140	98
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	90
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	100

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203552.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	3.9	5	60 - 140	77
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	3.8	5	60 - 140	77
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	3.5	5	60 - 140	69
	Halogenated	Chlorobenzene	mg/kg	0.1	4.8	5	60 - 140	96
	Monocyclic	Benzene	mg/kg	0.1	3.9	5	60 - 140	79
	Aromatic	Toluene	mg/kg	0.1	3.6	5	60 - 140	72
		Ethylbenzene	mg/kg	0.1	4.5	5	60 - 140	90
		m/p-xylene	mg/kg	0.2	9.1	10	60 - 140	91
		o-xylene	mg/kg	0.1	4.5	5	60 - 140	89
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.9	10	70 - 130	99
		d8-toluene (Surrogate)	mg/kg	-	8.7	10	70 - 130	87
		Bromofluorobenzene (Surrogate)	mg/kg	-	7.4	10	70 - 130	74
	Trihalomethan	Chloroform	mg/kg	0.1	3.8	5	60 - 140	77

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203552.002		TRH C6-C10	mg/kg	25	64	92.5	60 - 140	69
		TRH C6-C9	mg/kg	20	56	80	60 - 140	69
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.9	10	70 - 130	99
		Bromofluorobenzene (Surrogate)	mg/kg	-	7.4	10	70 - 130	74
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	39	62.5	60 - 140	62

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208136.020	LB203607.004	Mercury	mg/kg	0.05	0.77	0.57491909385	0.2	96

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208275.001	LB203561.004		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	-	-
			Lindane	mg/kg	0.1	<0.1	<0.1	-	-
			Heptachlor	mg/kg	0.1	0.2	<0.1	0.2	77
			Aldrin	mg/kg	0.1	0.2	<0.1	0.2	71
			Beta BHC	mg/kg	0.1	<0.1	<0.1	-	-
			Delta BHC	mg/kg	0.1	0.2	<0.1	0.2	78
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	-	-
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	-	-
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	-	-
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	-	-
			Dieldrin	mg/kg	0.2	<0.2	<0.2	0.2	69
			Endrin	mg/kg	0.2	<0.2	<0.2	0.2	80
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	-	-
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	-	-
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	-	-
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	-	-
			p,p'-DDT	mg/kg	0.1	0.2	<0.1	0.2	74
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	-	-
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	-	-
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	-	-
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	-	-
			Isodrin	mg/kg	0.1	<0.1	<0.1	-	-
			Mirex	mg/kg	0.1	<0.1	<0.1	-	-
			Total CLP OC Pesticides	mg/kg	1	<1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.14	-	97

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208142.002	LB203561.021		Dichlorvos	mg/kg	0.5	1.22305054047	<0.5	2	61
			Dimethoate	mg/kg	0.5	0	<0.5	-	-
			Diazinon (Dimpylate)	mg/kg	0.5	2.32448690824	<0.5	2	116
			Fenitrothion	mg/kg	0.2	0.00827694676	<0.2	-	-
			Malathion	mg/kg	0.2	0.00872404343	<0.2	-	-
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.45266041734	<0.2	2	123
			Parathion-ethyl (Parathion)	mg/kg	0.2	0	<0.2	-	-
			Bromophos Ethyl	mg/kg	0.2	0	<0.2	-	-
			Methidathion	mg/kg	0.5	0.00182394673	<0.5	-	-
			Ethion	mg/kg	0.2	2.21867815862	<0.2	2	111
			Azinphos-methyl (Guthion)	mg/kg	0.2	0	<0.2	-	-
			Total OP Pesticides*	mg/kg	1.7	8.21887602469	<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.30499134602	0.4	-	83
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.35336111526	0.5	-	83

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208142.002	LB203561.021	Naphthalene	mg/kg	0.1	3.76711734330	<0.1	4	94
		2-methylnaphthalene	mg/kg	0.1	0.00066187674	<0.1	-	-
		1-methylnaphthalene	mg/kg	0.1	0.00138221267	<0.1	-	-
		Acenaphthylene	mg/kg	0.1	3.94386687236	<0.1	4	98
		Acenaphthene	mg/kg	0.1	3.82997940248	<0.1	4	96
		Fluorene	mg/kg	0.1	0.03450310593	<0.1	-	-
		Phenanthrene	mg/kg	0.1	3.61618921592	<0.1	4	89

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208142.002	LB203561.021		Anthracene	mg/kg	0.1	3.99175587027	<0.1	4	98
			Fluoranthene	mg/kg	0.1	3.68748339799	0.1	4	89
			Pyrene	mg/kg	0.1	3.82968754687	0.1	4	92
			Benzo(a)anthracene	mg/kg	0.1	0.02443171145	<0.1	-	-
			Chrysene	mg/kg	0.1	0.02898362021	<0.1	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1	0.05055715562	<0.1	-	-
			Benzo(k)fluoranthene	mg/kg	0.1	0.00534704312	<0.1	-	-
			Benzo(a)pyrene	mg/kg	0.1	4.26502171450	<0.1	4	105
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.01756026552	<0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	0.00204641182	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	0.01877100798	<0.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	4.26502171450	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	4.40702171450	<0.3	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	4.33602171450	<0.2	-	-
			Total PAH (18)	mg/kg	0.8	30.9311013637	<0.8	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.35350199140	0.4	-	81
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.30499134602	0.4	-	83
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.35336111526	0.5	-	83

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208275.001	LB203561.004		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1260	mg/kg	0.2	0.3	<0.2	0.4	84
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	-	-
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0.14	-	95

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208142.001	LB203561.023		Phenol	mg/kg	0.5	<0.5	1	71
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	-	-
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	-	-
			Total Cresol	mg/kg	1.5	<1.5	-	-
			2-chlorophenol	mg/kg	0.5	<0.5	-	-
			2,4-dimethylphenol	mg/kg	0.5	<0.5	-	-
			2,6-dichlorophenol	mg/kg	0.5	<0.5	-	-
			2,4-dichlorophenol	mg/kg	0.5	<0.5	1	77
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	1	71
			2-nitrophenol	mg/kg	0.5	<0.5	-	-
			4-nitrophenol	mg/kg	1	<1	-	-
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	-	-
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	-	-
			Pentachlorophenol	mg/kg	0.5	<0.5	1	74
			2,4-dinitrophenol	mg/kg	2	<2	-	-
			4-chloro-3-methylphenol	mg/kg	2	<2	-	-
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.4	-	90
			d5-phenol (Surrogate)	mg/kg	-	1.7	-	88

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208136.020	LB203601.004	Arsenic, As	mg/kg	1	51	5.48836716681	50	92
		Cadmium, Cd	mg/kg	0.3	41	0.34746690203	50	81
		Chromium, Cr	mg/kg	0.5	59	15.4555692850	50	87
		Copper, Cu	mg/kg	0.5	86	42.76593115622	50	87
		Nickel, Ni	mg/kg	0.5	53	11.36377758164	50	83
		Lead, Pb	mg/kg	1	120	102.5563989408	50	42 ④

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208136.020	LB203601.004	Zinc, Zn	mg/kg	2	260	67.6970873786	50	-16 ④

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208142.002	LB203561.021		TRH C10-C14	mg/kg	20	38	<20	40	95
			TRH C15-C28	mg/kg	45	38	<45	40	95
			TRH C29-C36	mg/kg	45	35	<45	40	88
			TRH C37-C40	mg/kg	100	0	<100	-	-
			TRH C10-C36 Total	mg/kg	110	38	<110	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	38	<210	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25	38	<25	40	95
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	38	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	38	<90	40	95
			TRH >C34-C40 (F4)	mg/kg	120	17	<120	-	-

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208142.001	LB203552.023	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	-	-
			1,2-dichloropropane	mg/kg	0.1	<0.1	-	-
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	-	-
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	-	-
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	-	-
		Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	-	-
			Chloromethane	mg/kg	1	<1	-	-
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	-	-
			Bromomethane	mg/kg	1	<1	-	-
			Chloroethane	mg/kg	1	<1	-	-
			Trichlorofluoromethane	mg/kg	1	<1	-	-
			Iodomethane	mg/kg	5	<5	-	-
			1,1-dichloroethene	mg/kg	0.1	<0.1	5	76
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	-	-
			Allyl chloride	mg/kg	0.1	<0.1	-	-
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	-	-
			1,1-dichloroethane	mg/kg	0.1	<0.1	-	-
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	-	-
			Bromochloromethane	mg/kg	0.1	<0.1	-	-
			1,2-dichloroethane	mg/kg	0.1	<0.1	5	90
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	-	-
			1,1-dichloropropene	mg/kg	0.1	<0.1	-	-
			Carbon tetrachloride	mg/kg	0.1	<0.1	-	-
			Dibromomethane	mg/kg	0.1	<0.1	-	-
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	5	81
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	-	-
			1,3-dichloropropane	mg/kg	0.1	<0.1	-	-
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	-	-
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	-	-
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	-	-
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	-	-
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	-	-
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	-	-
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	-	-
			Hexachlorobutadiene	mg/kg	0.1	<0.1	-	-
		Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1	5	110
			Bromobenzene	mg/kg	0.1	<0.1	-	-
			2-chlorotoluene	mg/kg	0.1	<0.1	-	-
			4-chlorotoluene	mg/kg	0.1	<0.1	-	-
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	-	-
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	-	-
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	-	-
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	-	-
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	-	-
		Monocyclic	Benzene	mg/kg	0.1	<0.1	5	68

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208142.001	LB203552.023	Monocyclic Aromatic	Toluene	mg/kg	0.1	<0.1	5	66
			Ethylbenzene	mg/kg	0.1	<0.1	5	81
			m/p-xylene	mg/kg	0.2	<0.2	10	82
			o-xylene	mg/kg	0.1	<0.1	5	82
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	-	-
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	-	-
			n-propylbenzene	mg/kg	0.1	<0.1	-	-
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	-	-
			tert-butylbenzene	mg/kg	0.1	<0.1	-	-
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	-	-
			sec-butylbenzene	mg/kg	0.1	<0.1	-	-
			p-isopropyltoluene	mg/kg	0.1	<0.1	-	-
			n-butylbenzene	mg/kg	0.1	<0.1	-	-
		Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1	-	-
			2-nitropropane	mg/kg	10	<10	-	-
		Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10	-	-
			MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	-	-
			Vinyl acetate	mg/kg	10	<10	-	-
			MEK (2-butanone)	mg/kg	10	<10	-	-
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	-	-
			2-hexanone (MBK)	mg/kg	5	<5	-	-
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	-	-
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.2	10	85
			d8-toluene (Surrogate)	mg/kg	-	7.5	10	78
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.6	10	66
		Totals	Total Xylenes	mg/kg	0.3	<0.3	-	-
			Total BTEX	mg/kg	0.6	<0.6	-	-
			Total VOC*	mg/kg	24	<24	-	-
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	-	-
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	-	-
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	-	-
		Trihalomethanes	Chloroform	mg/kg	0.1	<0.1	5	85
			Bromodichloromethane	mg/kg	0.1	<0.1	-	-
			Chlorodibromomethane	mg/kg	0.1	<0.1	-	-
			Bromoform	mg/kg	0.1	<0.1	-	-

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208142.001	LB203552.021		TRH C6-C10	mg/kg	25	<25	92.5	67
			TRH C6-C9	mg/kg	20	<20	80	67
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.2	10	85
			d8-toluene (Surrogate)	mg/kg	-	7.5	10	78
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.6	-	66
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	-	-
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	62.5	62

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 430, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☒ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge [illegible] Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ

SLR

CLIENT: Defence Housing Australia	**LABORATORY: SGS Australia**
PROJECT: Randwick Barracks	**LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015**
PROJECT NUMBER: 610.30041	**SAMPLER:** [redacted]
PROJECT MANAGER [redacted]	**SAMPLER CONTACT No** [redacted]
PM CONTACT No: [redacted]	**Email Reports and Invoices to: LQRSYD@slrconsulting.com** [redacted]
COMMENTS OR ADDITIONAL DIRECTIONS	**Turnaround Time (TAT)**: ☐ Standard TAT ☐ Non Standard or Urgent TAT. **Required TAT: Standard**
	COC Number / **of**

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: OCP/OPP	PFAS	Asbestos ONLY	HOLD	Additional Information (Comment on any gross contamination or specific requirements)
1	0407_BH019_0.2_200618	18-06-2020	Soil		x	x			Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
2	0407_BH019_0.3_200618	18-06-2020	Soil		x	x			
	0407_BH019_0.8_200618	18-06-2020	Soil					x	
	0407_BH019_1.5_200618	18-06-2020	Soil					x	
	0407_BH019_2.5_200618	18-06-2020	Soil					x	

SGS EHS Sydney COC

SE207870

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler [redacted]	Date / Time 18-06-2020	**Received by**	Sig [redacted]	Date / Time 19/06/20	**Temperature Received:**
Relinquished By Sign	Date / Time	**Received by**	Sig [redacted]	Date / Time 4.30	

source: [Untitled].pdf page: 1 SGS Ref: SE207870_COC

SAMPLE RECEIPT ADVICE

SE207870

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	2

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Fri 19/6/2020
Report Due	Mon 29/6/2020
SGS Reference	**SE207870**

SUBMISSION DETAILS

This is to confirm that 2 samples were received on Friday 19/6/2020. Results are expected to be ready by COB Monday 29/6/2020. Please quote SGS reference SE207870 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	2 Soil
Date documentation received	22/6/2020	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	1.9°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

PFAS subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420. Report Number ME315415
3 samples have been placed on hold as no tests have been assigned for them by the client. These samples will not be processed.
0407_BH019_0.3_200618 labelled as 0407_BH019_0.4_200618.

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SAMPLE RECEIPT ADVICE

SE207870

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Moisture Content	OC Pesticides in Soil	OP Pesticides in Soil	Per- and Polyfluoroalkyl Substances (PFAS) in
001	0407_BH019_0.2_200618	1	29	14	55
002	0407_BH019_0.3_200618	1	29	14	55

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	2

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207870 R0**
Date Received	19/6/2020
Date Reported	29/6/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

PFAS subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420. Report Number ME315415

SIGNATORIES

[redacted]

Organic Section Head

OC Pesticides in Soil [AN420] Tested: 25/6/2020

PARAMETER	UOM	LOR	0407_BH019_0.2_20618 SOIL - 18/6/2020 SE207870.001	0407_BH019_0.3_20618 SOIL - 18/6/2020 SE207870.002
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1

OP Pesticides in Soil [AN420] Tested: 25/6/2020

PARAMETER	UOM	LOR	0407_BH019_0.2_20618 SOIL - 18/6/2020 SE207870.001	0407_BH019_0.3_20618 SOIL - 18/6/2020 SE207870.002
Dichlorvos	mg/kg	0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7

Moisture Content [AN002] Tested: 25/6/2020

PARAMETER	UOM	LOR	0407_BH019_0.2_20618 SOIL - 18/6/2020 SE207870.001	0407_BH019_0.3_20618 SOIL - 18/6/2020 SE207870.002
% Moisture	%w/w	1	**18.2**	**10.8**

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level [MA-1523] Tested: 29/6/2020

PARAMETER	UOM	LOR	0407_BH019_0.2_20618 SOIL - 18/6/2020 SE207870.001	0407_BH019_0.3_20618 SOIL - 18/6/2020 SE207870.002
Perfluorobutanoic acid (PFBA)	mg/kg	0.0001	<0.0001	**0.0002**
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0005	<0.0005	<0.0005
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0001	<0.0001	<0.0001
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0001	<0.0001	<0.0001
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0001	<0.0001	<0.0001
Perfluorononanoic acid (PFNA)	mg/kg	0.0001	<0.0001	<0.0001
Perfluorodecanoic acid (PFDA)	mg/kg	0.0001	<0.0001	<0.0001
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0001	<0.0001	<0.0001
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0001	<0.0001	<0.0001
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0001	<0.0001	<0.0001
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0001	<0.0001	<0.0001
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0001	<0.0001	<0.0001
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0001	<0.0001	<0.0001
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0001	<0.0001	<0.0001
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0001	<0.0001	<0.0001
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0001	<0.0001	<0.0001
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0001	<0.0001	<0.0001
Sum PFOS and PFHXS	mg/kg	0.0001	<0.0001	<0.0001
Perfluorononane sulfonate (PFNS)	mg/kg	0.0001	<0.0001	<0.0001
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0001	<0.0001	<0.0001
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0001	<0.0001	<0.0001
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.001	<0.001	<0.001
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.001	<0.001	<0.001
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.001	<0.001	<0.001
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.001	<0.001	<0.001
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.001	<0.001	<0.001
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.001	<0.001	<0.001
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002	<0.002	<0.002
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002	<0.002	<0.002
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.001	<0.001	<0.001
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.001	<0.001	<0.001

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
MA-1523	This method covers the analysis of per- and polyfluoroalkyl substances (PFAS) in aqueous, solid and biosolid samples and solvent extracts, determined as the total of linear and branched isomers. After spiking with isotopically labelled quantification surrogates and clean-up via SPE cartridges sample extracts are analysed by liquid chromatography/mass spectrometry (LC-MS/MS). PFAS concentrations are determined by isotope dilution quantification.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the "Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE207870 R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	2

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207870 R0**
Date Received	19 Jun 2020
Date Reported	29 Jun 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met (within the SGS Alexandria Environmental laboratory).

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	2 Soil
Date documentation received	22/6/2020	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	1.9°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

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SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH019_0.2_200618	SE207870.001	LB202792	18 Jun 2020	19 Jun 2020	02 Jul 2020	25 Jun 2020	30 Jun 2020	29 Jun 2020
0407_BH019_0.3_200618	SE207870.002	LB202792	18 Jun 2020	19 Jun 2020	02 Jul 2020	25 Jun 2020	30 Jun 2020	29 Jun 2020

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH019_0.2_200618	SE207870.001	LB202791	18 Jun 2020	19 Jun 2020	02 Jul 2020	25 Jun 2020	04 Aug 2020	29 Jun 2020
0407_BH019_0.3_200618	SE207870.002	LB202791	18 Jun 2020	19 Jun 2020	02 Jul 2020	25 Jun 2020	04 Aug 2020	29 Jun 2020

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH019_0.2_200618	SE207870.001	LB202791	18 Jun 2020	19 Jun 2020	02 Jul 2020	25 Jun 2020	04 Aug 2020	29 Jun 2020
0407_BH019_0.3_200618	SE207870.002	LB202791	18 Jun 2020	19 Jun 2020	02 Jul 2020	25 Jun 2020	04 Aug 2020	29 Jun 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_BH019_0.2_200618	SE207870.001	%	60 - 130%	102
	0407_BH019_0.3_200618	SE207870.002	%	60 - 130%	99

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_BH019_0.2_200618	SE207870.001	%	60 - 130%	90
	0407_BH019_0.3_200618	SE207870.002	%	60 - 130%	91
d14-p-terphenyl (Surrogate)	0407_BH019_0.2_200618	SE207870.001	%	60 - 130%	94
	0407_BH019_0.3_200618	SE207870.002	%	60 - 130%	92

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level

Method: MA-1523

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C2-4:2FTS) Surrogate	0407_BH019_0.2_200618	SE207870.001	%	10 - 150%	60
	0407_BH019_0.3_200618	SE207870.002	%	10 - 150%	65
(13C2-6:2FTS) Surrogate	0407_BH019_0.2_200618	SE207870.001	%	10 - 150%	57
	0407_BH019_0.3_200618	SE207870.002	%	10 - 150%	61
(13C2-8:2FTS) Surrogate	0407_BH019_0.2_200618	SE207870.001	%	10 - 150%	47
	0407_BH019_0.3_200618	SE207870.002	%	10 - 150%	58
(13C2-PFDoA) Surrogate	0407_BH019_0.2_200618	SE207870.001	%	10 - 150%	91
	0407_BH019_0.3_200618	SE207870.002	%	10 - 150%	82
(13C2-PFHxDA) Surrogate	0407_BH019_0.2_200618	SE207870.001	%	10 - 150%	11
	0407_BH019_0.3_200618	SE207870.002	%	10 - 150%	11
(13C2-PFTeDA) Surrogate	0407_BH019_0.2_200618	SE207870.001	%	10 - 130%	54
	0407_BH019_0.3_200618	SE207870.002	%	10 - 130%	44
(13C3-PFBS) Surrogate	0407_BH019_0.2_200618	SE207870.001	%	10 - 150%	93
	0407_BH019_0.3_200618	SE207870.002	%	10 - 150%	91
(13C3-PFHxS) Surrogate	0407_BH019_0.2_200618	SE207870.001	%	10 - 150%	92
	0407_BH019_0.3_200618	SE207870.002	%	10 - 150%	94
(13C4-PFBA) Surrogate	0407_BH019_0.2_200618	SE207870.001	%	10 - 150%	100
	0407_BH019_0.3_200618	SE207870.002	%	10 - 150%	103
(13C4-PFHpA) Surrogate	0407_BH019_0.2_200618	SE207870.001	%	10 - 150%	125
	0407_BH019_0.3_200618	SE207870.002	%	10 - 150%	120
(13C4-PFOA) Surrogate	0407_BH019_0.2_200618	SE207870.001	%	10 - 150%	99
	0407_BH019_0.3_200618	SE207870.002	%	10 - 150%	105
(13C5_PFPeA) Surrogate	0407_BH019_0.2_200618	SE207870.001	%	10 - 150%	99
	0407_BH019_0.3_200618	SE207870.002	%	10 - 150%	94
(13C5-PFHxA) Surrogate	0407_BH019_0.2_200618	SE207870.001	%	10 - 150%	100
	0407_BH019_0.3_200618	SE207870.002	%	10 - 150%	102
(13C6-PFDA) Surrogate	0407_BH019_0.2_200618	SE207870.001	%	10 - 150%	102
	0407_BH019_0.3_200618	SE207870.002	%	10 - 150%	107
(13C7-PFUdA) Surrogate	0407_BH019_0.2_200618	SE207870.001	%	10 - 150%	96
	0407_BH019_0.3_200618	SE207870.002	%	10 - 150%	109
(13C8-PFOS) Surrogate	0407_BH019_0.2_200618	SE207870.001	%	10 - 150%	88
	0407_BH019_0.3_200618	SE207870.002	%	10 - 150%	105
(13C8-PFOSA) Surrogate	0407_BH019_0.2_200618	SE207870.001	%	10 - 150%	34
	0407_BH019_0.3_200618	SE207870.002	%	10 - 150%	45
(13C9-PFNA) Surrogate	0407_BH019_0.2_200618	SE207870.001	%	10 - 150%	93
	0407_BH019_0.3_200618	SE207870.002	%	10 - 150%	107
(D3-N-MeFOSA) Surrogate	0407_BH019_0.2_200618	SE207870.001	%	10 - 150%	28
	0407_BH019_0.3_200618	SE207870.002	%	10 - 150%	31
(D3-N-MeFOSAA) Surrogate	0407_BH019_0.2_200618	SE207870.001	%	10 - 150%	58
	0407_BH019_0.3_200618	SE207870.002	%	10 - 150%	53
(D5-N-EtFOSA) Surrogate	0407_BH019_0.2_200618	SE207870.001	%	10 - 150%	24
	0407_BH019_0.3_200618	SE207870.002	%	10 - 150%	26
(D5-N-EtFOSAA) Surrogate	0407_BH019_0.2_200618	SE207870.001	%	10 - 150%	57
	0407_BH019_0.3_200618	SE207870.002	%	10 - 150%	74
(D7-N-MeFOSE) Surrogate	0407_BH019_0.2_200618	SE207870.001	%	10 - 150%	27
	0407_BH019_0.3_200618	SE207870.002	%	10 - 150%	35
(D9-N-EtFOSE) Surrogate	0407_BH019_0.2_200618	SE207870.001	%	10 - 150%	27
	0407_BH019_0.3_200618	SE207870.002	%	10 - 150%	34

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202791.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	89

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202791.001		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	100
		d14-p-terphenyl (Surrogate)	%	-	99

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207888.001	LB202792.017	% Moisture	%w/w	1	10.652173913	0.488599348	39	2
SE207959.007	LB202792.011	% Moisture	%w/w	1	11.7	10.0	39	16

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207870.002	LB202791.009		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.15	30	1

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207870.002	LB202791.009		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	1
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	2

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202791.002		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	96
		Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	110
		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	113
		Dieldrin	mg/kg	0.2	0.2	0.2	60 - 140	107
		Endrin	mg/kg	0.2	0.2	0.2	60 - 140	101
		p,p'-DDT	mg/kg	0.1	0.1	0.2	60 - 140	71
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.13	0.15	40 - 130	87

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202791.002		Dichlorvos	mg/kg	0.5	1.6	2	60 - 140	78
		Diazinon (Dimpylate)	mg/kg	0.5	1.9	2	60 - 140	93
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.2	2	60 - 140	108
		Ethion	mg/kg	0.2	2.0	2	60 - 140	98
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	94
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	78

MATRIX SPIKES

SE207870 R0

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

QC Sample	Sample Number	Parameter	Units	LOR

MATRIX SPIKE DUPLICATES

SE207870 R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

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- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ

SLR

CLIENT: Defence Housing Australia	**LABORATORY: SGS Australia**
PROJECT: Randwick Barracks	**LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015**
PROJECT NUMBER: 610.30041	**SAMPLER:** [redacted]
PROJECT MANAGER [redacted]	**SAMPLER CONTACT No:** [redacted]
PM CONTACT No: [redacted]	**Email Reports and Invoices to: LQRSYD@slrconsulting.com ;** [redacted]

Turnaround Time (TAT) | **COC Number** of

☐ Standard TAT

☐ Non Standard or Urgent TAT

Required TAT: Standard

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only	HOLD				Additional Information (Comment on any gross contamination or specific requirements)
1	0407_BH0025_0.1_200619	19-06-2020	Soil		x								Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
2	0407_BH0025_0.5_200619	19-06-2020	Soil		x								
	0407_BH0025_1.0_200619	19-06-2020	Soil						x				
	0407_BH0025_2.0_200619	19-06-2020	Soil						x				
	0407_BH0025_3.0_200619	19-06-2020	Soil						x				
3	0407_BH0025_0.1-0.2_200619	19-06-2020	Soil					x					
4	0407_BH0026_0.1_200619	19-06-2020	Soil				x						
5	0407_BH0026_0.5_200619	19-06-2020	Soil				x						
	0407_BH0026_1.0_200619	19-06-2020	Soil						x				
	0407_BH0026_2.0_200619	19-06-2020	Soil						x				
	0407_BH0026_3.0_200619	19-06-2020	Soil						x				

SGS EHS Sydney COC

SE207876

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	MR	Date / Time 19-06-2020	**Received by**	Sign [redacted]	Date / Time 22/06	**Temperature Received:**
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time @ 4°30	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

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PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☒ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ TOWNSVILLE: 514 Stort Street, Townsville, QLD 4810
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ DARWIN: 23 Parap Rd, Darwin, NT 0820
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐

CLIENT: Defence Housing Australia	**LABORATORY: SGS Australia**	**Turnaround Time (TAT)** / **COC Number** of
PROJECT: Randwick Barracks	**LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015**	
PROJECT NUMBER: 610.30041	**SAMPLER** [redacted]	☐ Standard TAT
PROJECT MANAGER: [redacted]	**SAMPLER CONTACT No** [redacted]	☐ Non Standard or Urgent TAT
PM CONTACT No: [redacted]	**Email Reports and Invoices to: LQRSYD@slrconsulting.com ;** [redacted]	**Required TAT: Standard**

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only	HOLD				**Additional Information** *(Comment on any gross contamination or specific requirements)*
6	0407_TP114_0.1_200619	19-06-2020	Soil		x								Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
7	0407_TP114_0.5_200619	19-06-2020	Soil		x								
	0407_TP114_1.0_200619	19-06-2020	Soil						x				
8	0407_TP114_0.1-0.2_200619	19-06-2020	Soil					x					
9	0407_TP115_0.1_200619	19-06-2020	Soil		x								
	0407_TP115_0.5_200619	19-06-2020	Soil						x				
10	0407_TP115_1.0_200619	19-06-2020	Soil		x								
11	0407_TP115_0.1-0.2_200619	19-06-2020	Soil					x					
12	0407_TP116_0.1_200619	19-06-2020	Soil		x								
13	0407_TP116_0.5_200619	19-06-2020	Soil		x								
	0407_TP116_1.0_200619	19-06-2020	Soil						x				

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 19-06-2020	**Received by**	Sign [redacted]	Date / Time 22/06/20	**Temperature Received:**
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time 04:30	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☒ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Stuart Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ

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CLIENT: Defence Housing Australia	**LABORATORY: SGS Australia**
PROJECT: Randwick Barracks	**LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015**
PROJECT NUMBER: 610.30041	**SAMPLER:** [redacted]
PROJECT MANAGER: [redacted]	**SAMPLER CONTACT No** [redacted]
PM CONTACT No: [redacted]	**Email Reports and Invoices to: LQRSYD@slrconsulting.com ;** [redacted]

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number of

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only	HOLD				Additional Information (Comment on any gross contamination or specific requirements)
14	0407_TP116_0.1-0.2_200619	19-06-2020	Soil					x					Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
15	0407_TP116_0.6_200619	19-06-2020	Soil					x					
16	0407_QC123_200619	19-06-2020	Soil		x								
	0407_QC223_200619	19-06-2020	Soil										Please send to Eurofins
17	0407_TP124_0.1_200619	19-06-2020	Soil		x								
18	0407_TP124_0.5_200619	19-06-2020	Soil		x								
	0407_TP124_1.0_200619	19-06-2020	Soil						x				
19	0407_TP124_0.1-0.2_200619	19-06-2020	Soil					x					
20	0407_TP125_0.1_200619	19-06-2020	Soil		x								
	0407_TP125_0.5_200619	19-06-2020	Soil						x				
21	0407_TP125_1.0_200619	19-06-2020	Soil		x								
22	0407_TP125_0.1-0.2_200619	19-06-2020	Soil					x					

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 19-06-2020	**Received by**	Sign [redacted]	Date / Time 22/06/20	**Temperature Received:**
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time 04:30	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

SLR

PROJECT OFFICE (Tick one)

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- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐

CLIENT: Defence Housing Australia	**LABORATORY: SGS Australia**	**Turnaround Time (TAT)**	**COC Number**
PROJECT: Randwick Barracks	**LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015**		**of**
PROJECT NUMBER: 610.30041	**SAMPLER: MR**	☐ Standard TAT	
PROJECT MANAGER: [redacted]	**SAMPLER CONTACT No: [redacted]**	☐ Non Standard or Urgent TAT	
PM CONTACT No: [redacted]	**Email Reports and Invoices to: LQRSYD@slrconsulting.com [redacted]**	**Required TAT: Standard**	

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only	HOLD				Additional Information (Comment on any gross contamination or specific requirements)
23	0407_TP126_0.1_200619	19-06-2020	Soil		x								Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
24	0407_TP126_0.5_200619	19-06-2020	Soil		x								
	0407_TP126_1.0_200619	19-06-2020	Soil						x				
25	0407_TP126_0.1-0.2_200619	19-06-2020	Soil					x					
26	0407_QC124_200619	19-06-2020	Soil		x								
	0407_QC224_200619	19-06-2020	Soil										Please send to Eurofins
27	0407_TP136_0.1_200619	19-06-2020	Soil		x								
	0407_TP136_0.5_200619	19-06-2020	Soil						x				
28	0407_TP136_1.0_200619	19-06-2020	Soil		x								
29	0407_TP136_0.1-0.2_200619	19-06-2020	Soil					x					
		19-06-2020	Soil										
		19-06-2020	Soil										

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 19-06-2020	**Received by**	Sign [redacted]	Date / Time 22/06/20	**Temperature Received:**
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time 04:30	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0820
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- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☒ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Shurt Street, Townsville, QLD 4810
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- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ

SLR

CLIENT: Defence Housing Australia	**LABORATORY:** SGS Australia
PROJECT: Randwick Barracks	**LABORATORY ADDRESS:** Unit 16/33 Maddox St, Alexandria NSW 2015
PROJECT NUMBER: 610.30041	**SAMPLER:** [redacted]
PROJECT MANAGER: [redacted]	**SAMPLER CONTACT No:** [redacted]
PM CONTACT No: [redacted]	**Email Reports and Invoices to:** LQRSYD@slrconsulting.com ; [redacted]

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number of

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only	HOLD				Additional Information (Comment on any gross contamination or specific requirements)
30	0407_TP134_0.1_200619	19-06-2020	Soil		x								Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
	0407_TP134_0.5_200619	19-06-2020	Soil						x				
31	0407_TP134_1.0_200619	19-06-2020	Soil		x								
32	0407_TP134_0.1-0.2_200619	19-06-2020	Soil					x					
33	0407_TP135_0.1_200619	19-06-2020	Soil		x								
34	0407_TP135_0.5_200619	19-06-2020	Soil		x								
	0407_TP135_1.0_200619	19-06-2020	Soil						x				
35	0407_TP135_0.1-0.2_200619	19-06-2020	Soil					x					
		19-06-2020	Soil										
		19-06-2020	Soil										
		19-06-2020	Soil										
		19-06-2020	Soil										

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 19-06-2020	**Received by**	Sign [redacted]	Date / Time 22/06/20	**Temperature Received:**
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time 04:30	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

SAMPLE RECEIPT ADVICE

SE207876

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	35

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Mon 22/6/2020
Report Due	Wed 1/7/2020
SGS Reference	**SE207876**

SUBMISSION DETAILS

This is to confirm that 35 samples were received on Monday 22/6/2020. Results are expected to be ready by COB Wednesday 1/7/2020.
Please quote SGS reference SE207876 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	35 Soil
Date documentation received	22/6/1920	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	1.9°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

15 soil have been placed on hold as no tests have been assigned for them by the client. These samples will not be processed.

This document is issued by the Company under its General Conditions of Service accessible at www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

SAMPLE RECEIPT ADVICE

SE207876

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	Speciated Phenols in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
001	0407_BH0025_0.1_200619	29	14	26	11	18	10	81	7
002	0407_BH0025_0.5_200619	29	14	26	11	18	10	81	7
004	0407_BH0026_0.1_200619	29	14	-	-	-	-	-	-
005	0407_BH0026_0.5_200619	29	14	-	-	-	-	-	-
006	0407_TP114_0.1_200619	29	14	26	11	18	10	81	7
007	0407_TP114_0.5_200619	29	14	26	11	18	10	81	7
009	0407_TP115_0.1_200619	29	14	26	11	18	10	81	7
010	0407_TP115_1.0_200619	29	14	26	11	18	10	81	7
012	0407_TP116_0.1_200619	29	14	26	11	18	10	81	7
013	0407_TP116_0.5_200619	29	14	26	11	18	10	81	7
016	0407_QC123_200619	29	14	26	11	18	10	81	7
017	0407_TP124_0.1_200619	29	14	26	11	18	10	81	7
018	0407_TP124_0.5_200619	29	14	26	11	18	10	81	7
020	0407_TP125_0.1_200619	29	14	26	11	18	10	81	7
021	0407_TP125_1.0_200619	29	14	26	11	18	10	81	7
023	0407_TP126_0.1_200619	29	14	26	11	18	10	81	7
024	0407_TP126_0.5_200619	29	14	26	11	18	10	81	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE207876

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	Speciated Phenols in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
026	0407_QC124_200619	29	14	26	11	18	10	81	7
027	0407_TP136_0.1_200619	29	14	26	11	18	10	81	7
028	0407_TP136_1.0_200619	29	14	26	11	18	10	81	7
030	0407_TP134_0.1_200619	29	14	26	11	18	10	81	7
031	0407_TP134_1.0_200619	29	14	26	11	18	10	81	7
033	0407_TP135_0.1_200619	29	14	26	11	18	10	81	7
034	0407_TP135_0.5_200619	29	14	26	11	18	10	81	7

CONTINUED OVERLEAF

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SAMPLE RECEIPT ADVICE

SE207876

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Fibre Identification in soil	Gravimetric Determination of Asbestos in Soil	Mercury in Soil	Moisture Content	Total Recoverable Elements in Soil/Waste
001	0407_BH0025_0.1_200619	-	-	1	1	7
002	0407_BH0025_0.5_200619	-	-	1	1	7
003	0407_BH0025_0.1-0.2_200619	2	9	-	-	-
004	0407_BH0026_0.1_200619	-	-	-	1	-
005	0407_BH0026_0.5_200619	-	-	-	1	-
006	0407_TP114_0.1_200619	-	-	1	1	7
007	0407_TP114_0.5_200619	-	-	1	1	7
008	0407_TP114_0.1-0.2_200619	2	9	-	-	-
009	0407_TP115_0.1_200619	-	-	1	1	7
010	0407_TP115_1.0_200619	-	-	1	1	7
011	0407_TP115_0.1-0.2_200619	2	9	-	-	-
012	0407_TP116_0.1_200619	-	-	1	1	7
013	0407_TP116_0.5_200619	-	-	1	1	7
014	0407_TP116_0.1-0.2_200619	2	9	-	-	-
015	0407_TP116_0.6_200619	2	9	-	-	-
016	0407_QC123_200619	-	-	1	1	7
017	0407_TP124_0.1_200619	-	-	1	1	7
018	0407_TP124_0.5_200619	-	-	1	1	7
019	0407_TP124_0.1-0.2_200619	2	9	-	-	-
020	0407_TP125_0.1_200619	-	-	1	1	7
021	0407_TP125_1.0_200619	-	-	1	1	7
022	0407_TP125_0.1-0.2_200619	2	9	-	-	-
023	0407_TP126_0.1_200619	-	-	1	1	7
024	0407_TP126_0.5_200619	-	-	1	1	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
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SAMPLE RECEIPT ADVICE

SE207876

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Fibre Identification in soil	Gravimetric Determination of Asbestos in Soil	Mercury in Soil	Moisture Content	Total Recoverable Elements in Soil/Waste
025	0407_TP126_0.1-0.2_200619	2	9	-	-	-
026	0407_QC124_200619	-	-	1	1	7
027	0407_TP136_0.1_200619	-	-	1	1	7
028	0407_TP136_1.0_200619	-	-	1	1	7
029	0407_TP136_0.1-0.2_200619	2	9	-	-	-
030	0407_TP134_0.1_200619	-	-	1	1	7
031	0407_TP134_1.0_200619	-	-	1	1	7
032	0407_TP134_0.1-0.2_200619	2	9	-	-	-
033	0407_TP135_0.1_200619	-	-	1	1	7
034	0407_TP135_0.5_200619	-	-	1	1	7
035	0407_TP135_0.1-0.2_200619	2	9	-	-	-

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	35

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207876 R0**
Date Received	22/6/2020
Date Reported	2/7/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.

Asbestos analysed by Approved Identifier Ravee Sivasubramaniam .

SIGNATORIES

[redacted]

Senior Organic Chemist/Metals Chemist | Metals/Inorganics Team Leader | Organic Section Head

[redacted]

Hygiene Team Leader

VOC's in Soil [AN433] Tested: 25/6/2020

PARAMETER	UOM	LOR	0407_BH0025_0.1_20619 SOIL - 24/6/20 18:42 SE207876.001	0407_BH0025_0.5_20619 SOIL - 24/6/20 18:42 SE207876.002	0407_TP114_0.1_20619 SOIL - 24/6/20 18:42 SE207876.006	0407_TP114_0.5_20619 SOIL - 24/6/20 18:42 SE207876.007	0407_TP115_0.1_20619 SOIL - 24/6/20 18:42 SE207876.009
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 25/6/2020 (continued)

PARAMETER	UOM	LOR	0407_BH0025_0.1_20619 SOIL - 24/6/20 18:42 SE207876.001	0407_BH0025_0.5_20619 SOIL - 24/6/20 18:42 SE207876.002	0407_TP114_0.1_20619 SOIL - 24/6/20 18:42 SE207876.006	0407_TP114_0.5_20619 SOIL - 24/6/20 18:42 SE207876.007	0407_TP115_0.1_20619 SOIL - 24/6/20 18:42 SE207876.009
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 25/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP115_1.0_20(619 SOIL - 24/6/20 18:42 SE207876.010	0407_TP116_0.1_20(619 SOIL - 24/6/20 18:42 SE207876.012	0407_TP116_0.5_20(619 SOIL - 24/6/20 18:42 SE207876.013	0407_QC123_20061(SOIL - 24/6/20 18:42 SE207876.016	0407_TP124_0.1_20(619 SOIL - 24/6/20 18:42 SE207876.017
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 25/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP115_1.0_20(619 SOIL - 24/6/20 18:42 SE207876.010	0407_TP116_0.1_20(619 SOIL - 24/6/20 18:42 SE207876.012	0407_TP116_0.5_20(619 SOIL - 24/6/20 18:42 SE207876.013	0407_QC123_20061(SOIL - 24/6/20 18:42 SE207876.016	0407_TP124_0.1_20(619 SOIL - 24/6/20 18:42 SE207876.017
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 25/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP124_0.5_20(619 SOIL - 24/6/20 18:42 SE207876.018	0407_TP125_0.1_20(619 SOIL - 24/6/20 18:42 SE207876.020	0407_TP125_1.0_20(619 SOIL - 24/6/20 18:42 SE207876.021	0407_TP126_0.1_20(619 SOIL - 24/6/20 18:42 SE207876.023	0407_TP126_0.5_20(619 SOIL - 24/6/20 18:42 SE207876.024
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 25/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP124_0.5_20(619 SOIL - 24/6/20 18:42 SE207876.018	0407_TP125_0.1_20(619 SOIL - 24/6/20 18:42 SE207876.020	0407_TP125_1.0_20(619 SOIL - 24/6/20 18:42 SE207876.021	0407_TP126_0.1_20(619 SOIL - 24/6/20 18:42 SE207876.023	0407_TP126_0.5_20(619 SOIL - 24/6/20 18:42 SE207876.024
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 25/6/2020 (continued)

PARAMETER	UOM	LOR	0407_QC124_20061 SOIL - 24/6/20 18:42 SE207876.026	0407_TP136_0.1_20 619 SOIL - 24/6/20 18:42 SE207876.027	0407_TP136_1.0_20 619 SOIL - 24/6/20 18:42 SE207876.028	0407_TP134_0.1_20 619 SOIL - 24/6/20 18:42 SE207876.030	0407_TP134_1.0_20 619 SOIL - 24/6/20 18:42 SE207876.031
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 25/6/2020 (continued)

PARAMETER	UOM	LOR	0407_QC124_20061 SOIL - 24/6/20 18:42 SE207876.026	0407_TP136_0.1_20 619 SOIL - 24/6/20 18:42 SE207876.027	0407_TP136_1.0_20 619 SOIL - 24/6/20 18:42 SE207876.028	0407_TP134_0.1_20 619 SOIL - 24/6/20 18:42 SE207876.030	0407_TP134_1.0_20 619 SOIL - 24/6/20 18:42 SE207876.031
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 25/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP135_0.1_20619 SOIL - 24/6/20 18:42 SE207876.033	0407_TP135_0.5_20619 SOIL - 24/6/20 18:42 SE207876.034
Benzene	mg/kg	0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1
Chloromethane	mg/kg	1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1
Chloroethane	mg/kg	1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10
Iodomethane	mg/kg	5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1

VOC's in Soil [AN433] Tested: 25/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP135_0.1_20619 SOIL - 24/6/20 18:42 SE207876.033	0407_TP135_0.5_20619 SOIL - 24/6/20 18:42 SE207876.034
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 25/6/2020

PARAMETER	UOM	LOR	0407_BH0025_0.1_20619 SOIL - 24/6/20 18:42 SE207876.001	0407_BH0025_0.5_20619 SOIL - 24/6/20 18:42 SE207876.002	0407_TP114_0.1_20619 SOIL - 24/6/20 18:42 SE207876.006	0407_TP114_0.5_20619 SOIL - 24/6/20 18:42 SE207876.007	0407_TP115_0.1_20619 SOIL - 24/6/20 18:42 SE207876.009
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP115_1.0_20619 SOIL - 24/6/20 18:42 SE207876.010	0407_TP116_0.1_20619 SOIL - 24/6/20 18:42 SE207876.012	0407_TP116_0.5_20619 SOIL - 24/6/20 18:42 SE207876.013	0407_QC123_20061 SOIL - 24/6/20 18:42 SE207876.016	0407_TP124_0.1_20619 SOIL - 24/6/20 18:42 SE207876.017
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP124_0.5_20619 SOIL - 24/6/20 18:42 SE207876.018	0407_TP125_0.1_20619 SOIL - 24/6/20 18:42 SE207876.020	0407_TP125_1.0_20619 SOIL - 24/6/20 18:42 SE207876.021	0407_TP126_0.1_20619 SOIL - 24/6/20 18:42 SE207876.023	0407_TP126_0.5_20619 SOIL - 24/6/20 18:42 SE207876.024
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_QC124_20061 SOIL - 24/6/20 18:42 SE207876.026	0407_TP136_0.1_20619 SOIL - 24/6/20 18:42 SE207876.027	0407_TP136_1.0_20619 SOIL - 24/6/20 18:42 SE207876.028	0407_TP134_0.1_20619 SOIL - 24/6/20 18:42 SE207876.030	0407_TP134_1.0_20619 SOIL - 24/6/20 18:42 SE207876.031
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP135_0.1_20619 SOIL - 24/6/20 18:42 SE207876.033	0407_TP135_0.5_20619 SOIL - 24/6/20 18:42 SE207876.034
Benzene (F0)	mg/kg	0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 25/6/2020

PARAMETER	UOM	LOR	0407_BH0025_0.1_20 0619 SOIL - 24/6/20 18:42 SE207876.001	0407_BH0025_0.5_20 0619 SOIL - 24/6/20 18:42 SE207876.002	0407_TP114_0.1_20 619 SOIL - 24/6/20 18:42 SE207876.006	0407_TP114_0.5_20 619 SOIL - 24/6/20 18:42 SE207876.007	0407_TP115_0.1_20 619 SOIL - 24/6/20 18:42 SE207876.009
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP115_1.0_20 619 SOIL - 24/6/20 18:42 SE207876.010	0407_TP116_0.1_20 619 SOIL - 24/6/20 18:42 SE207876.012	0407_TP116_0.5_20 619 SOIL - 24/6/20 18:42 SE207876.013	0407_QC123_20061 SOIL - 24/6/20 18:42 SE207876.016	0407_TP124_0.1_20 619 SOIL - 24/6/20 18:42 SE207876.017
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP124_0.5_20 619 SOIL - 24/6/20 18:42 SE207876.018	0407_TP125_0.1_20 619 SOIL - 24/6/20 18:42 SE207876.020	0407_TP125_1.0_20 619 SOIL - 24/6/20 18:42 SE207876.021	0407_TP126_0.1_20 619 SOIL - 24/6/20 18:42 SE207876.023	0407_TP126_0.5_20 619 SOIL - 24/6/20 18:42 SE207876.024
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	59	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 25/6/2020 (continued)

PARAMETER	UOM	LOR	0407_QC124_20061 SOIL - 24/6/20 18:42 SE207876.026	0407_TP136_0.1_20 619 SOIL - 24/6/20 18:42 SE207876.027	0407_TP136_1.0_20 619 SOIL - 24/6/20 18:42 SE207876.028	0407_TP134_0.1_20 619 SOIL - 24/6/20 18:42 SE207876.030	0407_TP134_1.0_20 619 SOIL - 24/6/20 18:42 SE207876.031
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP135_0.1_20 619 SOIL - 24/6/20 18:42 SE207876.033	0407_TP135_0.5_20 619 SOIL - 24/6/20 18:42 SE207876.034
TRH C10-C14	mg/kg	20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 25/6/2020

PARAMETER	UOM	LOR	0407_BH0025_0.1_20 0619 SOIL - 24/6/20 18:42 SE207876.001	0407_BH0025_0.5_20 0619 SOIL - 24/6/20 18:42 SE207876.002	0407_TP114_0.1_20 619 SOIL - 24/6/20 18:42 SE207876.006	0407_TP114_0.5_20 619 SOIL - 24/6/20 18:42 SE207876.007	0407_TP115_0.1_20 619 SOIL - 24/6/20 18:42 SE207876.009
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	**0.4**	<0.1	**0.1**	<0.1	<0.1
Pyrene	mg/kg	0.1	**0.3**	<0.1	**0.1**	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	**0.1**	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	**0.1**	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	**0.1**	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	**0.1**	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	**0.1**	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	**0.1**	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	**1.5**	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	**1.5**	<0.8	<0.8	<0.8	<0.8

PARAMETER	UOM	LOR	0407_TP115_1.0_20 619 SOIL - 24/6/20 18:42 SE207876.010	0407_TP116_0.1_20 619 SOIL - 24/6/20 18:42 SE207876.012	0407_TP116_0.5_20 619 SOIL - 24/6/20 18:42 SE207876.013	0407_QC123_20061 SOIL - 24/6/20 18:42 SE207876.016	0407_TP124_0.1_20 619 SOIL - 24/6/20 18:42 SE207876.017
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 25/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP124_0.5_20(619 SOIL - 24/6/20 18:42 SE207876.018	0407_TP125_0.1_20(619 SOIL - 24/6/20 18:42 SE207876.020	0407_TP125_1.0_20(619 SOIL - 24/6/20 18:42 SE207876.021	0407_TP126_0.1_20(619 SOIL - 24/6/20 18:42 SE207876.023	0407_TP126_0.5_20(619 SOIL - 24/6/20 18:42 SE207876.024
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	**0.2**	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	**0.2**	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	**0.1**	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	**0.1**	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	**0.2**	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	**0.8**	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	**0.8**	<0.8	<0.8	<0.8	<0.8

PARAMETER	UOM	LOR	0407_QC124_20061(SOIL - 24/6/20 18:42 SE207876.026	0407_TP136_0.1_20(619 SOIL - 24/6/20 18:42 SE207876.027	0407_TP136_1.0_20(619 SOIL - 24/6/20 18:42 SE207876.028	0407_TP134_0.1_20(619 SOIL - 24/6/20 18:42 SE207876.030	0407_TP134_1.0_20(619 SOIL - 24/6/20 18:42 SE207876.031
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 25/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP135_0.1_20619 SOIL - 24/6/20 18:42 SE207876.033	0407_TP135_0.5_20619 SOIL - 24/6/20 18:42 SE207876.034
Naphthalene	mg/kg	0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8

Speciated Phenols in Soil [AN420] Tested: 25/6/2020

PARAMETER	UOM	LOR	0407_BH0025_0.1_20619 SOIL - 24/6/20 18:42 SE207876.001	0407_BH0025_0.5_20619 SOIL - 24/6/20 18:42 SE207876.002	0407_BH0026_0.1_20619 SOIL - 24/6/20 18:42 SE207876.004	0407_BH0026_0.5_20619 SOIL - 24/6/20 18:42 SE207876.005	0407_TP114_0.1_20619 SOIL - 24/6/20 18:42 SE207876.006
Phenol	mg/kg	0.5	<0.5	<0.5	-	-	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	-	-	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	-	-	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	-	-	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	-	-	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	-	-	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	-	-	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	-	-	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	-	-	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	-	-	<0.5
4-nitrophenol	mg/kg	1	<1	<1	-	-	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	-	-	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	-	-	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	-	-	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	-	-	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	-	-	<2

PARAMETER	UOM	LOR	0407_TP114_0.5_20619 SOIL - 24/6/20 18:42 SE207876.007	0407_TP115_0.1_20619 SOIL - 24/6/20 18:42 SE207876.009	0407_TP115_1.0_20619 SOIL - 24/6/20 18:42 SE207876.010	0407_TP116_0.1_20619 SOIL - 24/6/20 18:42 SE207876.012	0407_TP116_0.5_20619 SOIL - 24/6/20 18:42 SE207876.013
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

Speciated Phenols in Soil [AN420] Tested: 25/6/2020 (continued)

PARAMETER	UOM	LOR	0407_QC123_20061 SOIL - 24/6/20 18:42 SE207876.016	0407_TP124_0.1_20 619 SOIL - 24/6/20 18:42 SE207876.017	0407_TP124_0.5_20 619 SOIL - 24/6/20 18:42 SE207876.018	0407_TP125_0.1_20 619 SOIL - 24/6/20 18:42 SE207876.020	0407_TP125_1.0_20 619 SOIL - 24/6/20 18:42 SE207876.021
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_TP126_0.1_20 619 SOIL - 24/6/20 18:42 SE207876.023	0407_TP126_0.5_20 619 SOIL - 24/6/20 18:42 SE207876.024	0407_QC124_20061 SOIL - 24/6/20 18:42 SE207876.026	0407_TP136_0.1_20 619 SOIL - 24/6/20 18:42 SE207876.027	0407_TP136_1.0_20 619 SOIL - 24/6/20 18:42 SE207876.028
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

Speciated Phenols in Soil [AN420] Tested: 25/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP134_0.1_20(619 SOIL - 24/6/20 18:42 SE207876.030	0407_TP134_1.0_20(619 SOIL - 24/6/20 18:42 SE207876.031	0407_TP135_0.1_20(619 SOIL - 24/6/20 18:42 SE207876.033	0407_TP135_0.5_20(619 SOIL - 24/6/20 18:42 SE207876.034
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2

OC Pesticides in Soil [AN420] Tested: 25/6/2020

PARAMETER	UOM	LOR	0407_BH0025_0.1_20619 SOIL - 24/6/20 18:42 SE207876.001	0407_BH0025_0.5_20619 SOIL - 24/6/20 18:42 SE207876.002	0407_BH0026_0.1_20619 SOIL - 24/6/20 18:42 SE207876.004	0407_BH0026_0.5_20619 SOIL - 24/6/20 18:42 SE207876.005	0407_TP114_0.1_20619 SOIL - 24/6/20 18:42 SE207876.006
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 25/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP114_0.5_20(619 SOIL - 24/6/20 18:42 SE207876.007	0407_TP115_0.1_20(619 SOIL - 24/6/20 18:42 SE207876.009	0407_TP115_1.0_20(619 SOIL - 24/6/20 18:42 SE207876.010	0407_TP116_0.1_20(619 SOIL - 24/6/20 18:42 SE207876.012	0407_TP116_0.5_20(619 SOIL - 24/6/20 18:42 SE207876.013
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 25/6/2020 (continued)

PARAMETER	UOM	LOR	0407_QC123_20061	0407_TP124_0.1_20	0407_TP124_0.5_20	0407_TP125_0.1_20	0407_TP125_1.0_20
			619	619	619	619	619
			SOIL	SOIL	SOIL	SOIL	SOIL
			-	-	-	-	-
			24/6/20 18:42	24/6/20 18:42	24/6/20 18:42	24/6/20 18:42	24/6/20 18:42
			SE207876.016	SE207876.017	SE207876.018	SE207876.020	SE207876.021
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 25/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP126_0.1_20(619 SOIL - 24/6/20 18:42 SE207876.023	0407_TP126_0.5_20(619 SOIL - 24/6/20 18:42 SE207876.024	0407_QC124_20061(SOIL - 24/6/20 18:42 SE207876.026	0407_TP136_0.1_20(619 SOIL - 24/6/20 18:42 SE207876.027	0407_TP136_1.0_20(619 SOIL - 24/6/20 18:42 SE207876.028
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 25/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP134_0.1_20(619 SOIL - 24/6/20 18:42 SE207876.030	0407_TP134_1.0_20(619 SOIL - 24/6/20 18:42 SE207876.031	0407_TP135_0.1_20(619 SOIL - 24/6/20 18:42 SE207876.033	0407_TP135_0.5_20(619 SOIL - 24/6/20 18:42 SE207876.034
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1

OP Pesticides in Soil [AN420] Tested: 25/6/2020

PARAMETER	UOM	LOR	0407_BH0025_0.1_20 0619 SOIL - 24/6/20 18:42 SE207876.001	0407_BH0025_0.5_20 0619 SOIL - 24/6/20 18:42 SE207876.002	0407_BH0026_0.1_20 0619 SOIL - 24/6/20 18:42 SE207876.004	0407_BH0026_0.5_20 0619 SOIL - 24/6/20 18:42 SE207876.005	0407_TP114_0.1_20(619 SOIL - 24/6/20 18:42 SE207876.006
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP114_0.5_20(619 SOIL - 24/6/20 18:42 SE207876.007	0407_TP115_0.1_20(619 SOIL - 24/6/20 18:42 SE207876.009	0407_TP115_1.0_20(619 SOIL - 24/6/20 18:42 SE207876.010	0407_TP116_0.1_20(619 SOIL - 24/6/20 18:42 SE207876.012	0407_TP116_0.5_20(619 SOIL - 24/6/20 18:42 SE207876.013
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_QC123_20061 SOIL - 24/6/20 18:42 SE207876.016	0407_TP124_0.1_20(619 SOIL - 24/6/20 18:42 SE207876.017	0407_TP124_0.5_20(619 SOIL - 24/6/20 18:42 SE207876.018	0407_TP125_0.1_20(619 SOIL - 24/6/20 18:42 SE207876.020	0407_TP125_1.0_20(619 SOIL - 24/6/20 18:42 SE207876.021
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

OP Pesticides in Soil [AN420] Tested: 25/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP126_0.1_20(619 SOIL - 24/6/20 18:42 SE207876.023	0407_TP126_0.5_20(619 SOIL - 24/6/20 18:42 SE207876.024	0407_QC124_20061(SOIL - 24/6/20 18:42 SE207876.026	0407_TP136_0.1_20(619 SOIL - 24/6/20 18:42 SE207876.027	0407_TP136_1.0_20(619 SOIL - 24/6/20 18:42 SE207876.028
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP134_0.1_20(619 SOIL - 24/6/20 18:42 SE207876.030	0407_TP134_1.0_20(619 SOIL - 24/6/20 18:42 SE207876.031	0407_TP135_0.1_20(619 SOIL - 24/6/20 18:42 SE207876.033	0407_TP135_0.5_20(619 SOIL - 24/6/20 18:42 SE207876.034
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7

PCBs in Soil [AN420] Tested: 25/6/2020

PARAMETER	UOM	LOR	0407_BH0025_0.1_20 0619 SOIL - 24/6/20 18:42 SE207876.001	0407_BH0025_0.5_20 0619 SOIL - 24/6/20 18:42 SE207876.002	0407_BH0026_0.1_20 0619 SOIL - 24/6/20 18:42 SE207876.004	0407_BH0026_0.5_20 0619 SOIL - 24/6/20 18:42 SE207876.005	0407_TP114_0.1_20(619 SOIL - 24/6/20 18:42 SE207876.006
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	-	-	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	-	-	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	-	-	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	-	-	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	-	-	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	-	-	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	-	-	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	-	-	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	-	-	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	-	-	<1

PARAMETER	UOM	LOR	0407_TP114_0.5_20(619 SOIL - 24/6/20 18:42 SE207876.007	0407_TP115_0.1_20(619 SOIL - 24/6/20 18:42 SE207876.009	0407_TP115_1.0_20(619 SOIL - 24/6/20 18:42 SE207876.010	0407_TP116_0.1_20(619 SOIL - 24/6/20 18:42 SE207876.012	0407_TP116_0.5_20(619 SOIL - 24/6/20 18:42 SE207876.013
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_QC123_20061 SOIL - 24/6/20 18:42 SE207876.016	0407_TP124_0.1_20(619 SOIL - 24/6/20 18:42 SE207876.017	0407_TP124_0.5_20(619 SOIL - 24/6/20 18:42 SE207876.018	0407_TP125_0.1_20(619 SOIL - 24/6/20 18:42 SE207876.020	0407_TP125_1.0_20(619 SOIL - 24/6/20 18:42 SE207876.021
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PCBs in Soil [AN420] Tested: 25/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP126_0.1_20(619 SOIL - 24/6/20 18:42 SE207876.023	0407_TP126_0.5_20(619 SOIL - 24/6/20 18:42 SE207876.024	0407_QC124_20061(SOIL - 24/6/20 18:42 SE207876.026	0407_TP136_0.1_20(619 SOIL - 24/6/20 18:42 SE207876.027	0407_TP136_1.0_20(619 SOIL - 24/6/20 18:42 SE207876.028
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP134_0.1_20(619 SOIL - 24/6/20 18:42 SE207876.030	0407_TP134_1.0_20(619 SOIL - 24/6/20 18:42 SE207876.031	0407_TP135_0.1_20(619 SOIL - 24/6/20 18:42 SE207876.033	0407_TP135_0.5_20(619 SOIL - 24/6/20 18:42 SE207876.034
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 26/6/2020

PARAMETER	UOM	LOR	0407_BH0025_0.1_2(0619 SOIL - 24/6/20 18:42 SE207876.001	0407_BH0025_0.5_2(0619 SOIL - 24/6/20 18:42 SE207876.002	0407_TP114_0.1_20(619 SOIL - 24/6/20 18:42 SE207876.006	0407_TP114_0.5_20(619 SOIL - 24/6/20 18:42 SE207876.007	0407_TP115_0.1_20(619 SOIL - 24/6/20 18:42 SE207876.009
Arsenic, As	mg/kg	1	<1	<1	<1	<1	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	**0.5**	<0.5	**0.6**	<0.5	<0.5
Copper, Cu	mg/kg	0.5	**5.6**	<0.5	**2.3**	<0.5	<0.5
Lead, Pb	mg/kg	1	**20**	<1	**7**	<1	<1
Nickel, Ni	mg/kg	0.5	**1.1**	<0.5	<0.5	<0.5	<0.5
Zinc, Zn	mg/kg	2	**11**	<2.0	**6.0**	<2.0	<2.0

PARAMETER	UOM	LOR	0407_TP115_1.0_20(619 SOIL - 24/6/20 18:42 SE207876.010	0407_TP116_0.1_20(619 SOIL - 24/6/20 18:42 SE207876.012	0407_TP116_0.5_20(619 SOIL - 24/6/20 18:42 SE207876.013	0407_QC123_20061(SOIL - 24/6/20 18:42 SE207876.016	0407_TP124_0.1_20(619 SOIL - 24/6/20 18:42 SE207876.017
Arsenic, As	mg/kg	1	**2**	<1	<1	<1	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	**5.5**	<0.5	<0.5	<0.5	<0.5
Copper, Cu	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	**2.6**
Lead, Pb	mg/kg	1	**2**	<1	<1	<1	**12**
Nickel, Ni	mg/kg	0.5	**1.3**	<0.5	<0.5	**0.6**	**0.5**
Zinc, Zn	mg/kg	2	<2.0	<2.0	<2.0	<2.0	**7.7**

PARAMETER	UOM	LOR	0407_TP124_0.5_20(619 SOIL - 24/6/20 18:42 SE207876.018	0407_TP125_0.1_20(619 SOIL - 24/6/20 18:42 SE207876.020	0407_TP125_1.0_20(619 SOIL - 24/6/20 18:42 SE207876.021	0407_TP126_0.1_20(619 SOIL - 24/6/20 18:42 SE207876.023	0407_TP126_0.5_20(619 SOIL - 24/6/20 18:42 SE207876.024
Arsenic, As	mg/kg	1	<1	<1	<1	<1	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	**0.7**	**1.3**	<0.5	<0.5	<0.5
Copper, Cu	mg/kg	0.5	**4.9**	**4.5**	<0.5	<0.5	<0.5
Lead, Pb	mg/kg	1	**19**	**17**	<1	**1**	<1
Nickel, Ni	mg/kg	0.5	<0.5	**2.6**	<0.5	<0.5	<0.5
Zinc, Zn	mg/kg	2	**9.1**	**6.1**	<2.0	<2.0	<2.0

PARAMETER	UOM	LOR	0407_QC124_20061(SOIL - 24/6/20 18:42 SE207876.026	0407_TP136_0.1_20(619 SOIL - 24/6/20 18:42 SE207876.027	0407_TP136_1.0_20(619 SOIL - 24/6/20 18:42 SE207876.028	0407_TP134_0.1_20(619 SOIL - 24/6/20 18:42 SE207876.030	0407_TP134_1.0_20(619 SOIL - 24/6/20 18:42 SE207876.031
Arsenic, As	mg/kg	1	<1	<1	**2**	<1	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	<0.5	<0.5	**3.8**	<0.5	<0.5
Copper, Cu	mg/kg	0.5	<0.5	<0.5	<0.5	**0.7**	<0.5
Lead, Pb	mg/kg	1	<1	<1	**2**	**3**	<1
Nickel, Ni	mg/kg	0.5	<0.5	<0.5	**1.0**	<0.5	<0.5
Zinc, Zn	mg/kg	2	<2.0	<2.0	<2.0	**2.9**	<2.0

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 26/6/2020

(continued)

PARAMETER	UOM	LOR	0407_TP135_0.1_20619 SOIL - 24/6/20 18:42 SE207876.033	0407_TP135_0.5_20619 SOIL - 24/6/20 18:42 SE207876.034
Arsenic, As	mg/kg	1	<1	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	**0.8**	<0.5
Copper, Cu	mg/kg	0.5	**16**	<0.5
Lead, Pb	mg/kg	1	**15**	<1
Nickel, Ni	mg/kg	0.5	**1.0**	<0.5
Zinc, Zn	mg/kg	2	**23**	<2.0

Mercury in Soil [AN312] Tested: 26/6/2020

PARAMETER	UOM	LOR	0407_BH0025_0.1_20 0619 SOIL - 24/6/20 18:42 SE207876.001	0407_BH0025_0.5_20 0619 SOIL - 24/6/20 18:42 SE207876.002	0407_TP114_0.1_20(619 SOIL - 24/6/20 18:42 SE207876.006	0407_TP114_0.5_20(619 SOIL - 24/6/20 18:42 SE207876.007	0407_TP115_0.1_20(619 SOIL - 24/6/20 18:42 SE207876.009
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_TP115_1.0_20(619 SOIL - 24/6/20 18:42 SE207876.010	0407_TP116_0.1_20(619 SOIL - 24/6/20 18:42 SE207876.012	0407_TP116_0.5_20(619 SOIL - 24/6/20 18:42 SE207876.013	0407_QC123_20061(SOIL - 24/6/20 18:42 SE207876.016	0407_TP124_0.1_20(619 SOIL - 24/6/20 18:42 SE207876.017
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_TP124_0.5_20(619 SOIL - 24/6/20 18:42 SE207876.018	0407_TP125_0.1_20(619 SOIL - 24/6/20 18:42 SE207876.020	0407_TP125_1.0_20(619 SOIL - 24/6/20 18:42 SE207876.021	0407_TP126_0.1_20(619 SOIL - 24/6/20 18:42 SE207876.023	0407_TP126_0.5_20(619 SOIL - 24/6/20 18:42 SE207876.024
Mercury	mg/kg	0.05	**0.08**	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_QC124_20061(SOIL - 24/6/20 18:42 SE207876.026	0407_TP136_0.1_20(619 SOIL - 24/6/20 18:42 SE207876.027	0407_TP136_1.0_20(619 SOIL - 24/6/20 18:42 SE207876.028	0407_TP134_0.1_20(619 SOIL - 24/6/20 18:42 SE207876.030	0407_TP134_1.0_20(619 SOIL - 24/6/20 18:42 SE207876.031
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_TP135_0.1_20(619 SOIL - 24/6/20 18:42 SE207876.033	0407_TP135_0.5_20(619 SOIL - 24/6/20 18:42 SE207876.034
Mercury	mg/kg	0.05	<0.05	<0.05

Moisture Content [AN002] Tested: 25/6/2020

PARAMETER	UOM	LOR	0407_BH0025_0.1_20619 SOIL - 24/6/20 18:42 SE207876.001	0407_BH0025_0.5_20619 SOIL - 24/6/20 18:42 SE207876.002	0407_BH0026_0.1_20619 SOIL - 24/6/20 18:42 SE207876.004	0407_BH0026_0.5_20619 SOIL - 24/6/20 18:42 SE207876.005	0407_TP114_0.1_20619 SOIL - 24/6/20 18:42 SE207876.006
% Moisture	%w/w	1	4.4	<1.0	5.2	3.0	3.8

PARAMETER	UOM	LOR	0407_TP114_0.5_20619 SOIL - 24/6/20 18:42 SE207876.007	0407_TP115_0.1_20619 SOIL - 24/6/20 18:42 SE207876.009	0407_TP115_1.0_20619 SOIL - 24/6/20 18:42 SE207876.010	0407_TP116_0.1_20619 SOIL - 24/6/20 18:42 SE207876.012	0407_TP116_0.5_20619 SOIL - 24/6/20 18:42 SE207876.013
% Moisture	%w/w	1	1.2	4.9	8.0	8.6	3.8

PARAMETER	UOM	LOR	0407_QC123_20061 SOIL - 24/6/20 18:42 SE207876.016	0407_TP124_0.1_20619 SOIL - 24/6/20 18:42 SE207876.017	0407_TP124_0.5_20619 SOIL - 24/6/20 18:42 SE207876.018	0407_TP125_0.1_20619 SOIL - 24/6/20 18:42 SE207876.020	0407_TP125_1.0_20619 SOIL - 24/6/20 18:42 SE207876.021
% Moisture	%w/w	1	3.4	3.8	9.5	4.9	4.0

PARAMETER	UOM	LOR	0407_TP126_0.1_20619 SOIL - 24/6/20 18:42 SE207876.023	0407_TP126_0.5_20619 SOIL - 24/6/20 18:42 SE207876.024	0407_QC124_20061 SOIL - 24/6/20 18:42 SE207876.026	0407_TP136_0.1_20619 SOIL - 24/6/20 18:42 SE207876.027	0407_TP136_1.0_20619 SOIL - 24/6/20 18:42 SE207876.028
% Moisture	%w/w	1	10.4	12.0	14.8	18.7	14.2

PARAMETER	UOM	LOR	0407_TP134_0.1_20619 SOIL - 24/6/20 18:42 SE207876.030	0407_TP134_1.0_20619 SOIL - 24/6/20 18:42 SE207876.031	0407_TP135_0.1_20619 SOIL - 24/6/20 18:42 SE207876.033	0407_TP135_0.5_20619 SOIL - 24/6/20 18:42 SE207876.034
% Moisture	%w/w	1	12.1	16.8	5.0	9.7

Fibre Identification in soil [AN602] Tested: 30/6/2020

PARAMETER	UOM	LOR	0407_BH0025_0.1-0._200619 SOIL - 24/6/20 18:42 SE207876.003	0407_TP114_0.1-0.2 200619 SOIL - 24/6/20 18:42 SE207876.008	0407_TP115_0.1-0.2 200619 SOIL - 24/6/20 18:42 SE207876.011	0407_TP116_0.1-0.2 200619 SOIL - 24/6/20 18:42 SE207876.014	0407_TP116_0.6_20(619 SOIL - 24/6/20 18:42 SE207876.015
Asbestos Detected	No unit	-	No	No	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	0407_TP124_0.1-0.2 200619 SOIL - 24/6/20 18:42 SE207876.019	0407_TP125_0.1-0.2 200619 SOIL - 24/6/20 18:42 SE207876.022	0407_TP126_0.1-0.2 200619 SOIL - 24/6/20 18:42 SE207876.025	0407_TP136_0.1-0.2 200619 SOIL - 24/6/20 18:42 SE207876.029	0407_TP134_0.1-0.2 200619 SOIL - 24/6/20 18:42 SE207876.032
Asbestos Detected	No unit	-	No	No	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	0407_TP135_0.1-0.2 200619 SOIL - 24/6/20 18:42 SE207876.035
Asbestos Detected	No unit	-	No
Estimated Fibres*	%w/w	0.01	<0.01

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 30/6/2020

PARAMETER	UOM	LOR	0407_BH0025_0.1-0._200619 SOIL - 24/6/20 18:42 SE207876.003	0407_TP114_0.1-0.2 200619 SOIL - 24/6/20 18:42 SE207876.008	0407_TP115_0.1-0.2 200619 SOIL - 24/6/20 18:42 SE207876.011	0407_TP116_0.1-0.2 200619 SOIL - 24/6/20 18:42 SE207876.014	0407_TP116_0.6_20(619 SOIL - 24/6/20 18:42 SE207876.015
Total Sample Weight*	g	1	**724**	**771**	**773**	**837**	**865**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP124_0.1-0.2 200619 SOIL - 24/6/20 18:42 SE207876.019	0407_TP125_0.1-0.2 200619 SOIL - 24/6/20 18:42 SE207876.022	0407_TP126_0.1-0.2 200619 SOIL - 24/6/20 18:42 SE207876.025	0407_TP136_0.1-0.2 200619 SOIL - 24/6/20 18:42 SE207876.029	0407_TP134_0.1-0.2 200619 SOIL - 24/6/20 18:42 SE207876.032
Total Sample Weight*	g	1	**807**	**794**	**794**	**833**	**772**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP135_0.1-0.2_ 200619 SOIL - 24/6/20 18:42 SE207876.035
Total Sample Weight*	g	1	**806**
Bonded ACM in >7mm Sample*	g	0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001
Fibre Type*	No unit	-	-

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid , mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser . Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC /MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents .
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup /fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS /ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples, Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable ’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.
AN605	This technique gravimetrically determines the mass of Bonded Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight. Any fibrous asbestos (FA) found in this fraction will be added to the 2-7mm fraction and its mass recorded there.

AN605	This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free/respirable fibres which are only observed by standard trace analysis as per AN602.
AN605	Bonded asbestos containing material (Bonded ACM) comprises asbestos-containing-material which is sound in condition. Fibrous asbestos (FA) comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material. Asbestos fines (AF) includes free fibres, small fibre bundles and also small fragments of bonded ACM that passes through a 7mm sieve - which implies that the bonded ACM fragments have a substantial degree of damage which increases the potential for fibre release.
AN-605	Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009 and NEPM 1999 (2013) schedule B1 section 4..

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	11

LABORATORY DETAILS

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Address	Unit 16, 33 Maddox St Alexandria NSW 2015
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Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207876 R0**
Date Received	22 Jun 2020
Date Reported	02 Jul 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.

Asbestos analysed by Approved Identifier Ravee Sivasubramaniam .

SIGNATORIES

[redacted]

Senior Organic Chemist/Metals Chemis Organic Section Head Hygiene Team Leader

RESULTS

Fibre Identification in soil — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE207876.003	0407_BH0025_0.1-0.2_200619	Soil	724g Sand,Soil,Plant Matter	24 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE207876.008	0407_TP114_0.1-0.2_200619	Soil	771g Sand,Rocks	24 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE207876.011	0407_TP115_0.1-0.2_200619	Soil	773g Sand	24 Jun 2020	No Asbestos Found	<0.01
SE207876.014	0407_TP116_0.1-0.2_200619	Soil	837g Sand	24 Jun 2020	No Asbestos Found	<0.01
SE207876.015	0407_TP116_0.6_200619	Soil	865g Sand	24 Jun 2020	No Asbestos Found	<0.01
SE207876.019	0407_TP124_0.1-0.2_200619	Soil	807g Sand,Rocks	24 Jun 2020	No Asbestos Found	<0.01
SE207876.022	0407_TP125_0.1-0.2_200619	Soil	794g Sand	24 Jun 2020	No Asbestos Found	<0.01
SE207876.025	0407_TP126_0.1-0.2_200619	Soil	794g Sand	24 Jun 2020	No Asbestos Found	<0.01
SE207876.029	0407_TP136_0.1-0.2_200619	Soil	833g Sand	24 Jun 2020	No Asbestos Found	<0.01
SE207876.032	0407_TP134_0.1-0.2_200619	Soil	772g Sand,Plant Matter	24 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE207876.035	0407_TP135_0.1-0.2_200619	Soil	806g Sand	24 Jun 2020	No Asbestos Found	<0.01

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 30/6/2020

PARAMETER	UOM	LOR	0407_BH0025_0.1-0._200619 SOIL - 24/6/20 18:42 SE207876.003	0407_TP114_0.1-0.2_200619 SOIL - 24/6/20 18:42 SE207876.008	0407_TP115_0.1-0.2_200619 SOIL - 24/6/20 18:42 SE207876.011	0407_TP116_0.1-0.2_200619 SOIL - 24/6/20 18:42 SE207876.014	0407_TP116_0.6_200619 SOIL - 24/6/20 18:42 SE207876.015
Total Sample Weight*	g	1	**724**	**771**	**773**	**837**	**865**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP124_0.1-0.2_200619 SOIL - 24/6/20 18:42 SE207876.019	0407_TP125_0.1-0.2_200619 SOIL - 24/6/20 18:42 SE207876.022	0407_TP126_0.1-0.2_200619 SOIL - 24/6/20 18:42 SE207876.025	0407_TP136_0.1-0.2_200619 SOIL - 24/6/20 18:42 SE207876.029	0407_TP134_0.1-0.2_200619 SOIL - 24/6/20 18:42 SE207876.032
Total Sample Weight*	g	1	**807**	**794**	**794**	**833**	**772**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP135_0.1-0.2_200619 SOIL - 24/6/20 18:42 SE207876.035
Total Sample Weight*	g	1	**806**
Bonded ACM in >7mm Sample*	g	0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001
Fibre Type*	No unit	-	-

METHOD SUMMARY

METHOD	METHODOLOGY SUMMARY
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples , Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable ’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.
AN605	This technique gravimetrically determines the mass of Bonded Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight. Any fibrous asbestos (FA) found in this fraction will be added to the 2-7mm fraction and its mass recorded there.
AN605	This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free/respirable fibres which are only observed by standard trace analysis as per AN602.
AN605	Bonded asbestos containing material (Bonded ACM) comprises asbestos-containing-material which is sound in condition. Fibrous asbestos (FA) comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material. Asbestos fines (AF) includes free fibres, small fibre bundles and also small fragments of bonded ACM that passes through a 7mm sieve - which implies that the bonded ACM fragments have a substantial degree of damage which increases the potential for fibre release.
AN-605	Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009 and NEPM 1999 (2013) schedule B1 section 4..

FOOTNOTES

Amosite	-	Brown Asbestos	NA	-	Not Analysed
Chrysotile	-	White Asbestos	LNR	-	Listed, Not Required
Crocidolite	-	Blue Asbestos	*	-	NATA accreditation does not cover the performance of this service.
Amphiboles	-	Amosite and/or Crocidolite	**	-	Indicative data, theoretical holding time exceeded.

(In reference to soil samples only) This report does not comply with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment and Remediation and Management of Asbestos Contaminated sites in Western Australia - May 2009.

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.

Where reported: 'Asbestos Detected': Asbestos detected by polarised light microscopy, including dispersion staining.
Where reported: 'No Asbestos Found': No Asbestos Found by polarised light microscopy, including dispersion staining.
Where reported: 'UMF Detected': Mineral fibres of unknown type detected by polarised light microscopy, including dispersion staining. Confirmation by another independent analytical technique may be necessary.

Even after disintegration it can be very difficult, or impossible, to detect the presence of asbestos in some asbestos-containing bulk materials using polarised light microscopy. This is due to the low grade or small length or diameter of asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE207876 R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	35

LABORATORY DETAILS

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Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207876 R0**
Date Received	22 Jun 2020
Date Reported	02 Jul 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Surrogate	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	5 items
Matrix Spike	Volatile Petroleum Hydrocarbons in Soil	1 item

SAMPLE SUMMARY

HOLDING TIME SUMMARY

SE207876 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Fibre Identification in soil

Method: ME-(AU)-[ENV]AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH0025_0.1-0.2_200	SE207876.003	LB203077	24 Jun 2020	22 Jun 2020	24 Jun 2021	30 Jun 2020	24 Jun 2021	01 Jul 2020
0407_TP114_0.1-0.2_20061	SE207876.008	LB203077	24 Jun 2020	22 Jun 2020	24 Jun 2021	30 Jun 2020	24 Jun 2021	01 Jul 2020
0407_TP115_0.1-0.2_20061	SE207876.011	LB203077	24 Jun 2020	22 Jun 2020	24 Jun 2021	30 Jun 2020	24 Jun 2021	01 Jul 2020
0407_TP116_0.1-0.2_20061	SE207876.014	LB203077	24 Jun 2020	22 Jun 2020	24 Jun 2021	30 Jun 2020	24 Jun 2021	01 Jul 2020
0407_TP116_0.6_200619	SE207876.015	LB203077	24 Jun 2020	22 Jun 2020	24 Jun 2021	30 Jun 2020	24 Jun 2021	01 Jul 2020
0407_TP124_0.1-0.2_20061	SE207876.019	LB203077	24 Jun 2020	22 Jun 2020	24 Jun 2021	30 Jun 2020	24 Jun 2021	01 Jul 2020
0407_TP125_0.1-0.2_20061	SE207876.022	LB203077	24 Jun 2020	22 Jun 2020	24 Jun 2021	30 Jun 2020	24 Jun 2021	01 Jul 2020
0407_TP126_0.1-0.2_20061	SE207876.025	LB203077	24 Jun 2020	22 Jun 2020	24 Jun 2021	30 Jun 2020	24 Jun 2021	01 Jul 2020
0407_TP136_0.1-0.2_20061	SE207876.029	LB203077	24 Jun 2020	22 Jun 2020	24 Jun 2021	30 Jun 2020	24 Jun 2021	01 Jul 2020
0407_TP134_0.1-0.2_20061	SE207876.032	LB203077	24 Jun 2020	22 Jun 2020	24 Jun 2021	30 Jun 2020	24 Jun 2021	01 Jul 2020
0407_TP135_0.1-0.2_20061	SE207876.035	LB203077	24 Jun 2020	22 Jun 2020	24 Jun 2021	30 Jun 2020	24 Jun 2021	01 Jul 2020

Gravimetric Determination of Asbestos in Soil

Method: ME-(AU)-[ENV]AN605

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH0025_0.1-0.2_200	SE207876.003	LB203077	24 Jun 2020	22 Jun 2020	21 Dec 2020	30 Jun 2020	21 Dec 2020	01 Jul 2020
0407_TP114_0.1-0.2_20061	SE207876.008	LB203077	24 Jun 2020	22 Jun 2020	21 Dec 2020	30 Jun 2020	21 Dec 2020	01 Jul 2020
0407_TP115_0.1-0.2_20061	SE207876.011	LB203077	24 Jun 2020	22 Jun 2020	21 Dec 2020	30 Jun 2020	21 Dec 2020	01 Jul 2020
0407_TP116_0.1-0.2_20061	SE207876.014	LB203077	24 Jun 2020	22 Jun 2020	21 Dec 2020	30 Jun 2020	21 Dec 2020	01 Jul 2020
0407_TP116_0.6_200619	SE207876.015	LB203077	24 Jun 2020	22 Jun 2020	21 Dec 2020	30 Jun 2020	21 Dec 2020	01 Jul 2020
0407_TP124_0.1-0.2_20061	SE207876.019	LB203077	24 Jun 2020	22 Jun 2020	21 Dec 2020	30 Jun 2020	21 Dec 2020	01 Jul 2020
0407_TP125_0.1-0.2_20061	SE207876.022	LB203077	24 Jun 2020	22 Jun 2020	21 Dec 2020	30 Jun 2020	21 Dec 2020	01 Jul 2020
0407_TP126_0.1-0.2_20061	SE207876.025	LB203077	24 Jun 2020	22 Jun 2020	21 Dec 2020	30 Jun 2020	21 Dec 2020	01 Jul 2020
0407_TP136_0.1-0.2_20061	SE207876.029	LB203077	24 Jun 2020	22 Jun 2020	21 Dec 2020	30 Jun 2020	21 Dec 2020	01 Jul 2020
0407_TP134_0.1-0.2_20061	SE207876.032	LB203077	24 Jun 2020	22 Jun 2020	21 Dec 2020	30 Jun 2020	21 Dec 2020	01 Jul 2020
0407_TP135_0.1-0.2_20061	SE207876.035	LB203077	24 Jun 2020	22 Jun 2020	21 Dec 2020	30 Jun 2020	21 Dec 2020	01 Jul 2020

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH0025_0.1_200619	SE207876.001	LB202880	24 Jun 2020	22 Jun 2020	22 Jul 2020	26 Jun 2020	22 Jul 2020	01 Jul 2020
0407_BH0025_0.5_200619	SE207876.002	LB202880	24 Jun 2020	22 Jun 2020	22 Jul 2020	26 Jun 2020	22 Jul 2020	01 Jul 2020
0407_TP114_0.1_200619	SE207876.006	LB202880	24 Jun 2020	22 Jun 2020	22 Jul 2020	26 Jun 2020	22 Jul 2020	01 Jul 2020
0407_TP114_0.5_200619	SE207876.007	LB202880	24 Jun 2020	22 Jun 2020	22 Jul 2020	26 Jun 2020	22 Jul 2020	01 Jul 2020
0407_TP115_0.1_200619	SE207876.009	LB202880	24 Jun 2020	22 Jun 2020	22 Jul 2020	26 Jun 2020	22 Jul 2020	01 Jul 2020
0407_TP115_1.0_200619	SE207876.010	LB202880	24 Jun 2020	22 Jun 2020	22 Jul 2020	26 Jun 2020	22 Jul 2020	01 Jul 2020
0407_TP116_0.1_200619	SE207876.012	LB202880	24 Jun 2020	22 Jun 2020	22 Jul 2020	26 Jun 2020	22 Jul 2020	01 Jul 2020
0407_TP116_0.5_200619	SE207876.013	LB202880	24 Jun 2020	22 Jun 2020	22 Jul 2020	26 Jun 2020	22 Jul 2020	01 Jul 2020
0407_QC123_200619	SE207876.016	LB202880	24 Jun 2020	22 Jun 2020	22 Jul 2020	26 Jun 2020	22 Jul 2020	01 Jul 2020
0407_TP124_0.1_200619	SE207876.017	LB202880	24 Jun 2020	22 Jun 2020	22 Jul 2020	26 Jun 2020	22 Jul 2020	01 Jul 2020
0407_TP124_0.5_200619	SE207876.018	LB202880	24 Jun 2020	22 Jun 2020	22 Jul 2020	26 Jun 2020	22 Jul 2020	01 Jul 2020
0407_TP125_0.1_200619	SE207876.020	LB202880	24 Jun 2020	22 Jun 2020	22 Jul 2020	26 Jun 2020	22 Jul 2020	01 Jul 2020
0407_TP125_1.0_200619	SE207876.021	LB202880	24 Jun 2020	22 Jun 2020	22 Jul 2020	26 Jun 2020	22 Jul 2020	01 Jul 2020
0407_TP126_0.1_200619	SE207876.023	LB202880	24 Jun 2020	22 Jun 2020	22 Jul 2020	26 Jun 2020	22 Jul 2020	01 Jul 2020
0407_TP126_0.5_200619	SE207876.024	LB202880	24 Jun 2020	22 Jun 2020	22 Jul 2020	26 Jun 2020	22 Jul 2020	01 Jul 2020
0407_QC124_200619	SE207876.026	LB202880	24 Jun 2020	22 Jun 2020	22 Jul 2020	26 Jun 2020	22 Jul 2020	01 Jul 2020
0407_TP136_0.1_200619	SE207876.027	LB202880	24 Jun 2020	22 Jun 2020	22 Jul 2020	26 Jun 2020	22 Jul 2020	01 Jul 2020
0407_TP136_1.0_200619	SE207876.028	LB202880	24 Jun 2020	22 Jun 2020	22 Jul 2020	26 Jun 2020	22 Jul 2020	01 Jul 2020
0407_TP134_0.1_200619	SE207876.030	LB202880	24 Jun 2020	22 Jun 2020	22 Jul 2020	26 Jun 2020	22 Jul 2020	01 Jul 2020
0407_TP134_1.0_200619	SE207876.031	LB202988	24 Jun 2020	22 Jun 2020	22 Jul 2020	29 Jun 2020	22 Jul 2020	01 Jul 2020
0407_TP135_0.1_200619	SE207876.033	LB202988	24 Jun 2020	22 Jun 2020	22 Jul 2020	29 Jun 2020	22 Jul 2020	01 Jul 2020
0407_TP135_0.5_200619	SE207876.034	LB202988	24 Jun 2020	22 Jun 2020	22 Jul 2020	29 Jun 2020	22 Jul 2020	01 Jul 2020

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH0025_0.1_200619	SE207876.001	LB202767	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	30 Jun 2020	30 Jun 2020
0407_BH0025_0.5_200619	SE207876.002	LB202767	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	30 Jun 2020	30 Jun 2020
0407_BH0026_0.1_200619	SE207876.004	LB202767	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	30 Jun 2020	30 Jun 2020
0407_BH0026_0.5_200619	SE207876.005	LB202767	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	30 Jun 2020	30 Jun 2020
0407_TP114_0.1_200619	SE207876.006	LB202767	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	30 Jun 2020	30 Jun 2020
0407_TP114_0.5_200619	SE207876.007	LB202767	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	30 Jun 2020	30 Jun 2020
0407_TP115_0.1_200619	SE207876.009	LB202767	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	30 Jun 2020	30 Jun 2020
0407_TP115_1.0_200619	SE207876.010	LB202767	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	30 Jun 2020	30 Jun 2020

HOLDING TIME SUMMARY

SE207876 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Moisture Content (continued)

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP116_0.1_200619	SE207876.012	LB202767	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	30 Jun 2020	30 Jun 2020
0407_TP116_0.5_200619	SE207876.013	LB202767	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	30 Jun 2020	30 Jun 2020
0407_QC123_200619	SE207876.016	LB202767	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	30 Jun 2020	30 Jun 2020
0407_TP124_0.1_200619	SE207876.017	LB202767	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	30 Jun 2020	30 Jun 2020
0407_TP124_0.5_200619	SE207876.018	LB202767	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	30 Jun 2020	30 Jun 2020
0407_TP125_0.1_200619	SE207876.020	LB202767	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	30 Jun 2020	30 Jun 2020
0407_TP125_1.0_200619	SE207876.021	LB202767	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	30 Jun 2020	30 Jun 2020
0407_TP126_0.1_200619	SE207876.023	LB202767	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	30 Jun 2020	30 Jun 2020
0407_TP126_0.5_200619	SE207876.024	LB202767	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	30 Jun 2020	30 Jun 2020
0407_QC124_200619	SE207876.026	LB202767	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	30 Jun 2020	30 Jun 2020
0407_TP136_0.1_200619	SE207876.027	LB202767	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	30 Jun 2020	30 Jun 2020
0407_TP136_1.0_200619	SE207876.028	LB202767	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	30 Jun 2020	30 Jun 2020
0407_TP134_0.1_200619	SE207876.030	LB202767	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	30 Jun 2020	30 Jun 2020
0407_TP134_1.0_200619	SE207876.031	LB202767	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	30 Jun 2020	30 Jun 2020
0407_TP135_0.1_200619	SE207876.033	LB202767	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	30 Jun 2020	30 Jun 2020
0407_TP135_0.5_200619	SE207876.034	LB202767	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	30 Jun 2020	30 Jun 2020

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH0025_0.1_200619	SE207876.001	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	02 Jul 2020
0407_BH0025_0.5_200619	SE207876.002	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	02 Jul 2020
0407_BH0026_0.1_200619	SE207876.004	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	02 Jul 2020
0407_BH0026_0.5_200619	SE207876.005	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	02 Jul 2020
0407_TP114_0.1_200619	SE207876.006	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	02 Jul 2020
0407_TP114_0.5_200619	SE207876.007	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	02 Jul 2020
0407_TP115_0.1_200619	SE207876.009	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	02 Jul 2020
0407_TP115_1.0_200619	SE207876.010	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	02 Jul 2020
0407_TP116_0.1_200619	SE207876.012	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	02 Jul 2020
0407_TP116_0.5_200619	SE207876.013	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	02 Jul 2020
0407_QC123_200619	SE207876.016	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	02 Jul 2020
0407_TP124_0.1_200619	SE207876.017	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	02 Jul 2020
0407_TP124_0.5_200619	SE207876.018	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	02 Jul 2020
0407_TP125_0.1_200619	SE207876.020	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	02 Jul 2020
0407_TP125_1.0_200619	SE207876.021	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	02 Jul 2020
0407_TP126_0.1_200619	SE207876.023	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	02 Jul 2020
0407_TP126_0.5_200619	SE207876.024	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	02 Jul 2020
0407_QC124_200619	SE207876.026	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	02 Jul 2020
0407_TP136_0.1_200619	SE207876.027	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	02 Jul 2020
0407_TP136_1.0_200619	SE207876.028	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	02 Jul 2020
0407_TP134_0.1_200619	SE207876.030	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	02 Jul 2020
0407_TP134_1.0_200619	SE207876.031	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	02 Jul 2020
0407_TP135_0.1_200619	SE207876.033	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	02 Jul 2020
0407_TP135_0.5_200619	SE207876.034	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	02 Jul 2020

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH0025_0.1_200619	SE207876.001	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_BH0025_0.5_200619	SE207876.002	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_BH0026_0.1_200619	SE207876.004	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_BH0026_0.5_200619	SE207876.005	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP114_0.1_200619	SE207876.006	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP114_0.5_200619	SE207876.007	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP115_0.1_200619	SE207876.009	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP115_1.0_200619	SE207876.010	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP116_0.1_200619	SE207876.012	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP116_0.5_200619	SE207876.013	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_QC123_200619	SE207876.016	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP124_0.1_200619	SE207876.017	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP124_0.5_200619	SE207876.018	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP125_0.1_200619	SE207876.020	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP125_1.0_200619	SE207876.021	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP126_0.1_200619	SE207876.023	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP126_0.5_200619	SE207876.024	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_QC124_200619	SE207876.026	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP136_0.1_200619	SE207876.027	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP136_1.0_200619	SE207876.028	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP134_0.1_200619	SE207876.030	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP134_1.0_200619	SE207876.031	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP135_0.1_200619	SE207876.033	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP135_0.5_200619	SE207876.034	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH0025_0.1_200619	SE207876.001	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_BH0025_0.5_200619	SE207876.002	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_BH0026_0.1_200619	SE207876.004	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_BH0026_0.5_200619	SE207876.005	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP114_0.1_200619	SE207876.006	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP114_0.5_200619	SE207876.007	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP115_0.1_200619	SE207876.009	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP115_1.0_200619	SE207876.010	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP116_0.1_200619	SE207876.012	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP116_0.5_200619	SE207876.013	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_QC123_200619	SE207876.016	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP124_0.1_200619	SE207876.017	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP124_0.5_200619	SE207876.018	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP125_0.1_200619	SE207876.020	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP125_1.0_200619	SE207876.021	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP126_0.1_200619	SE207876.023	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP126_0.5_200619	SE207876.024	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_QC124_200619	SE207876.026	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP136_0.1_200619	SE207876.027	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP136_1.0_200619	SE207876.028	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP134_0.1_200619	SE207876.030	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP134_1.0_200619	SE207876.031	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP135_0.1_200619	SE207876.033	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP135_0.5_200619	SE207876.034	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH0025_0.1_200619	SE207876.001	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	02 Jul 2020
0407_BH0025_0.5_200619	SE207876.002	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	02 Jul 2020
0407_BH0026_0.1_200619	SE207876.004	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	02 Jul 2020
0407_BH0026_0.5_200619	SE207876.005	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	02 Jul 2020
0407_TP114_0.1_200619	SE207876.006	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	02 Jul 2020
0407_TP114_0.5_200619	SE207876.007	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	02 Jul 2020
0407_TP115_0.1_200619	SE207876.009	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	02 Jul 2020
0407_TP115_1.0_200619	SE207876.010	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	02 Jul 2020
0407_TP116_0.1_200619	SE207876.012	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	02 Jul 2020
0407_TP116_0.5_200619	SE207876.013	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	02 Jul 2020
0407_QC123_200619	SE207876.016	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	02 Jul 2020
0407_TP124_0.1_200619	SE207876.017	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	02 Jul 2020
0407_TP124_0.5_200619	SE207876.018	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	02 Jul 2020
0407_TP125_0.1_200619	SE207876.020	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	02 Jul 2020
0407_TP125_1.0_200619	SE207876.021	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	02 Jul 2020
0407_TP126_0.1_200619	SE207876.023	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	02 Jul 2020
0407_TP126_0.5_200619	SE207876.024	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	02 Jul 2020
0407_QC124_200619	SE207876.026	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	02 Jul 2020
0407_TP136_0.1_200619	SE207876.027	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	02 Jul 2020
0407_TP136_1.0_200619	SE207876.028	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	02 Jul 2020
0407_TP134_0.1_200619	SE207876.030	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	02 Jul 2020
0407_TP134_1.0_200619	SE207876.031	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	02 Jul 2020

HOLDING TIME SUMMARY

SE207876 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

PCBs in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP135_0.1_200619	SE207876.033	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	02 Jul 2020
0407_TP135_0.5_200619	SE207876.034	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	02 Jul 2020

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH0025_0.1_200619	SE207876.001	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_BH0025_0.5_200619	SE207876.002	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_BH0026_0.1_200619	SE207876.004	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_BH0026_0.5_200619	SE207876.005	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP114_0.1_200619	SE207876.006	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP114_0.5_200619	SE207876.007	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP115_0.1_200619	SE207876.009	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP115_1.0_200619	SE207876.010	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP116_0.1_200619	SE207876.012	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP116_0.5_200619	SE207876.013	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_QC123_200619	SE207876.016	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP124_0.1_200619	SE207876.017	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP124_0.5_200619	SE207876.018	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP125_0.1_200619	SE207876.020	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP125_1.0_200619	SE207876.021	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP126_0.1_200619	SE207876.023	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP126_0.5_200619	SE207876.024	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_QC124_200619	SE207876.026	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP136_0.1_200619	SE207876.027	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP136_1.0_200619	SE207876.028	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP134_0.1_200619	SE207876.030	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP134_1.0_200619	SE207876.031	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP135_0.1_200619	SE207876.033	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP135_0.5_200619	SE207876.034	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH0025_0.1_200619	SE207876.001	LB202865	24 Jun 2020	22 Jun 2020	21 Dec 2020	26 Jun 2020	21 Dec 2020	01 Jul 2020
0407_BH0025_0.5_200619	SE207876.002	LB202865	24 Jun 2020	22 Jun 2020	21 Dec 2020	26 Jun 2020	21 Dec 2020	01 Jul 2020
0407_TP114_0.1_200619	SE207876.006	LB202865	24 Jun 2020	22 Jun 2020	21 Dec 2020	26 Jun 2020	21 Dec 2020	01 Jul 2020
0407_TP114_0.5_200619	SE207876.007	LB202865	24 Jun 2020	22 Jun 2020	21 Dec 2020	26 Jun 2020	21 Dec 2020	01 Jul 2020
0407_TP115_0.1_200619	SE207876.009	LB202865	24 Jun 2020	22 Jun 2020	21 Dec 2020	26 Jun 2020	21 Dec 2020	01 Jul 2020
0407_TP115_1.0_200619	SE207876.010	LB202865	24 Jun 2020	22 Jun 2020	21 Dec 2020	26 Jun 2020	21 Dec 2020	01 Jul 2020
0407_TP116_0.1_200619	SE207876.012	LB202865	24 Jun 2020	22 Jun 2020	21 Dec 2020	26 Jun 2020	21 Dec 2020	01 Jul 2020
0407_TP116_0.5_200619	SE207876.013	LB202865	24 Jun 2020	22 Jun 2020	21 Dec 2020	26 Jun 2020	21 Dec 2020	01 Jul 2020
0407_QC123_200619	SE207876.016	LB202865	24 Jun 2020	22 Jun 2020	21 Dec 2020	26 Jun 2020	21 Dec 2020	01 Jul 2020
0407_TP124_0.1_200619	SE207876.017	LB202865	24 Jun 2020	22 Jun 2020	21 Dec 2020	26 Jun 2020	21 Dec 2020	01 Jul 2020
0407_TP124_0.5_200619	SE207876.018	LB202865	24 Jun 2020	22 Jun 2020	21 Dec 2020	26 Jun 2020	21 Dec 2020	01 Jul 2020
0407_TP125_0.1_200619	SE207876.020	LB202865	24 Jun 2020	22 Jun 2020	21 Dec 2020	26 Jun 2020	21 Dec 2020	01 Jul 2020
0407_TP125_1.0_200619	SE207876.021	LB202865	24 Jun 2020	22 Jun 2020	21 Dec 2020	26 Jun 2020	21 Dec 2020	01 Jul 2020
0407_TP126_0.1_200619	SE207876.023	LB202865	24 Jun 2020	22 Jun 2020	21 Dec 2020	26 Jun 2020	21 Dec 2020	01 Jul 2020
0407_TP126_0.5_200619	SE207876.024	LB202865	24 Jun 2020	22 Jun 2020	21 Dec 2020	26 Jun 2020	21 Dec 2020	01 Jul 2020
0407_QC124_200619	SE207876.026	LB202865	24 Jun 2020	22 Jun 2020	21 Dec 2020	26 Jun 2020	21 Dec 2020	01 Jul 2020
0407_TP136_0.1_200619	SE207876.027	LB202865	24 Jun 2020	22 Jun 2020	21 Dec 2020	26 Jun 2020	21 Dec 2020	01 Jul 2020
0407_TP136_1.0_200619	SE207876.028	LB202865	24 Jun 2020	22 Jun 2020	21 Dec 2020	26 Jun 2020	21 Dec 2020	01 Jul 2020
0407_TP134_0.1_200619	SE207876.030	LB202865	24 Jun 2020	22 Jun 2020	21 Dec 2020	26 Jun 2020	21 Dec 2020	01 Jul 2020
0407_TP134_1.0_200619	SE207876.031	LB202986	24 Jun 2020	22 Jun 2020	21 Dec 2020	29 Jun 2020	21 Dec 2020	01 Jul 2020
0407_TP135_0.1_200619	SE207876.033	LB202986	24 Jun 2020	22 Jun 2020	21 Dec 2020	29 Jun 2020	21 Dec 2020	01 Jul 2020
0407_TP135_0.5_200619	SE207876.034	LB202986	24 Jun 2020	22 Jun 2020	21 Dec 2020	29 Jun 2020	21 Dec 2020	01 Jul 2020

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH0025_0.1_200619	SE207876.001	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020
0407_BH0025_0.5_200619	SE207876.002	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020
0407_BH0026_0.1_200619	SE207876.004	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_BH0026_0.5_200619	SE207876.005	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP114_0.1_200619	SE207876.006	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020
0407_TP114_0.5_200619	SE207876.007	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020
0407_TP115_0.1_200619	SE207876.009	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020
0407_TP115_1.0_200619	SE207876.010	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020
0407_TP116_0.1_200619	SE207876.012	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020
0407_TP116_0.5_200619	SE207876.013	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_QC123_200619	SE207876.016	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP124_0.1_200619	SE207876.017	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP124_0.5_200619	SE207876.018	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP125_0.1_200619	SE207876.020	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020
0407_TP125_1.0_200619	SE207876.021	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020
0407_TP126_0.1_200619	SE207876.023	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020
0407_TP126_0.5_200619	SE207876.024	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020
0407_QC124_200619	SE207876.026	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020
0407_TP136_0.1_200619	SE207876.027	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020
0407_TP136_1.0_200619	SE207876.028	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020
0407_TP134_0.1_200619	SE207876.030	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020
0407_TP134_1.0_200619	SE207876.031	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP135_0.1_200619	SE207876.033	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020
0407_TP135_0.5_200619	SE207876.034	LB202766	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	01 Jul 2020

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH0025_0.1_200619	SE207876.001	LB202765	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020
0407_BH0025_0.5_200619	SE207876.002	LB202765	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020
0407_TP114_0.1_200619	SE207876.006	LB202765	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020
0407_TP114_0.5_200619	SE207876.007	LB202765	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020
0407_TP115_0.1_200619	SE207876.009	LB202765	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020
0407_TP115_1.0_200619	SE207876.010	LB202765	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020
0407_TP116_0.1_200619	SE207876.012	LB202765	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020
0407_TP116_0.5_200619	SE207876.013	LB202765	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020
0407_QC123_200619	SE207876.016	LB202765	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020
0407_TP124_0.1_200619	SE207876.017	LB202765	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020
0407_TP124_0.5_200619	SE207876.018	LB202765	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020
0407_TP125_0.1_200619	SE207876.020	LB202765	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020
0407_TP125_1.0_200619	SE207876.021	LB202765	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020
0407_TP126_0.1_200619	SE207876.023	LB202765	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020
0407_TP126_0.5_200619	SE207876.024	LB202765	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020
0407_QC124_200619	SE207876.026	LB202765	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020
0407_TP136_0.1_200619	SE207876.027	LB202765	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020
0407_TP136_1.0_200619	SE207876.028	LB202765	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020
0407_TP134_0.1_200619	SE207876.030	LB202765	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020
0407_TP134_1.0_200619	SE207876.031	LB202765	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020
0407_TP135_0.1_200619	SE207876.033	LB202765	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020
0407_TP135_0.5_200619	SE207876.034	LB202765	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH0025_0.1_200619	SE207876.001	LB202765	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020
0407_BH0025_0.5_200619	SE207876.002	LB202765	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020
0407_TP114_0.1_200619	SE207876.006	LB202765	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020
0407_TP114_0.5_200619	SE207876.007	LB202765	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020
0407_TP115_0.1_200619	SE207876.009	LB202765	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020
0407_TP115_1.0_200619	SE207876.010	LB202765	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020
0407_TP116_0.1_200619	SE207876.012	LB202765	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020
0407_TP116_0.5_200619	SE207876.013	LB202765	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020
0407_QC123_200619	SE207876.016	LB202765	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020
0407_TP124_0.1_200619	SE207876.017	LB202765	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020
0407_TP124_0.5_200619	SE207876.018	LB202765	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020
0407_TP125_0.1_200619	SE207876.020	LB202765	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020
0407_TP125_1.0_200619	SE207876.021	LB202765	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020

HOLDING TIME SUMMARY

SE207876 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Volatile Petroleum Hydrocarbons in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP126_0.1_200619	SE207876.023	LB202765	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020
0407_TP126_0.5_200619	SE207876.024	LB202765	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020
0407_QC124_200619	SE207876.026	LB202765	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020
0407_TP136_0.1_200619	SE207876.027	LB202765	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020
0407_TP136_1.0_200619	SE207876.028	LB202765	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020
0407_TP134_0.1_200619	SE207876.030	LB202765	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020
0407_TP134_1.0_200619	SE207876.031	LB202765	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020
0407_TP135_0.1_200619	SE207876.033	LB202765	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020
0407_TP135_0.5_200619	SE207876.034	LB202765	24 Jun 2020	22 Jun 2020	08 Jul 2020	25 Jun 2020	04 Aug 2020	30 Jun 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_BH0025_0.1_200619	SE207876.001	%	60 - 130%	102
	0407_BH0025_0.5_200619	SE207876.002	%	60 - 130%	101
	0407_BH0026_0.1_200619	SE207876.004	%	60 - 130%	103
	0407_BH0026_0.5_200619	SE207876.005	%	60 - 130%	97
	0407_TP114_0.1_200619	SE207876.006	%	60 - 130%	103
	0407_TP114_0.5_200619	SE207876.007	%	60 - 130%	97
	0407_TP115_0.1_200619	SE207876.009	%	60 - 130%	106
	0407_TP115_1.0_200619	SE207876.010	%	60 - 130%	101
	0407_TP116_0.1_200619	SE207876.012	%	60 - 130%	112
	0407_TP116_0.5_200619	SE207876.013	%	60 - 130%	100
	0407_QC123_200619	SE207876.016	%	60 - 130%	101
	0407_TP124_0.1_200619	SE207876.017	%	60 - 130%	106
	0407_TP124_0.5_200619	SE207876.018	%	60 - 130%	105
	0407_TP125_0.1_200619	SE207876.020	%	60 - 130%	105
	0407_TP125_1.0_200619	SE207876.021	%	60 - 130%	103
	0407_TP126_0.1_200619	SE207876.023	%	60 - 130%	101
	0407_TP126_0.5_200619	SE207876.024	%	60 - 130%	109
	0407_QC124_200619	SE207876.026	%	60 - 130%	113
	0407_TP136_0.1_200619	SE207876.027	%	60 - 130%	110
	0407_TP136_1.0_200619	SE207876.028	%	60 - 130%	112
	0407_TP134_0.1_200619	SE207876.030	%	60 - 130%	109
	0407_TP134_1.0_200619	SE207876.031	%	60 - 130%	107
	0407_TP135_0.1_200619	SE207876.033	%	60 - 130%	107
	0407_TP135_0.5_200619	SE207876.034	%	60 - 130%	103

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_BH0025_0.1_200619	SE207876.001	%	60 - 130%	78
	0407_BH0025_0.5_200619	SE207876.002	%	60 - 130%	82
	0407_BH0026_0.1_200619	SE207876.004	%	60 - 130%	87
	0407_BH0026_0.5_200619	SE207876.005	%	60 - 130%	87
	0407_TP114_0.1_200619	SE207876.006	%	60 - 130%	71
	0407_TP114_0.5_200619	SE207876.007	%	60 - 130%	76
	0407_TP115_0.1_200619	SE207876.009	%	60 - 130%	83
	0407_TP115_1.0_200619	SE207876.010	%	60 - 130%	77
	0407_TP116_0.1_200619	SE207876.012	%	60 - 130%	73
	0407_TP116_0.5_200619	SE207876.013	%	60 - 130%	71
	0407_QC123_200619	SE207876.016	%	60 - 130%	70
	0407_TP124_0.1_200619	SE207876.017	%	60 - 130%	76
	0407_TP124_0.5_200619	SE207876.018	%	60 - 130%	98
	0407_TP125_0.1_200619	SE207876.020	%	60 - 130%	104
	0407_TP125_1.0_200619	SE207876.021	%	60 - 130%	92
	0407_TP126_0.1_200619	SE207876.023	%	60 - 130%	86
	0407_TP126_0.5_200619	SE207876.024	%	60 - 130%	83
	0407_QC124_200619	SE207876.026	%	60 - 130%	91
	0407_TP136_0.1_200619	SE207876.027	%	60 - 130%	86
	0407_TP136_1.0_200619	SE207876.028	%	60 - 130%	76
	0407_TP134_0.1_200619	SE207876.030	%	60 - 130%	71
	0407_TP134_1.0_200619	SE207876.031	%	60 - 130%	76
	0407_TP135_0.1_200619	SE207876.033	%	60 - 130%	72
	0407_TP135_0.5_200619	SE207876.034	%	60 - 130%	71
d14-p-terphenyl (Surrogate)	0407_BH0025_0.1_200619	SE207876.001	%	60 - 130%	126
	0407_BH0025_0.5_200619	SE207876.002	%	60 - 130%	94
	0407_BH0026_0.1_200619	SE207876.004	%	60 - 130%	85
	0407_BH0026_0.5_200619	SE207876.005	%	60 - 130%	94
	0407_TP114_0.1_200619	SE207876.006	%	60 - 130%	99
	0407_TP114_0.5_200619	SE207876.007	%	60 - 130%	93
	0407_TP115_0.1_200619	SE207876.009	%	60 - 130%	93
	0407_TP115_1.0_200619	SE207876.010	%	60 - 130%	110
	0407_TP116_0.1_200619	SE207876.012	%	60 - 130%	94
	0407_TP116_0.5_200619	SE207876.013	%	60 - 130%	93

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d14-p-terphenyl (Surrogate)	0407_QC123_200619	SE207876.016	%	60 - 130%	95
	0407_TP124_0.1_200619	SE207876.017	%	60 - 130%	106
	0407_TP124_0.5_200619	SE207876.018	%	60 - 130%	112
	0407_TP125_0.1_200619	SE207876.020	%	60 - 130%	116
	0407_TP125_1.0_200619	SE207876.021	%	60 - 130%	112
	0407_TP126_0.1_200619	SE207876.023	%	60 - 130%	106
	0407_TP126_0.5_200619	SE207876.024	%	60 - 130%	105
	0407_QC124_200619	SE207876.026	%	60 - 130%	105
	0407_TP136_0.1_200619	SE207876.027	%	60 - 130%	88
	0407_TP136_1.0_200619	SE207876.028	%	60 - 130%	95
	0407_TP134_0.1_200619	SE207876.030	%	60 - 130%	93
	0407_TP134_1.0_200619	SE207876.031	%	60 - 130%	93
	0407_TP135_0.1_200619	SE207876.033	%	60 - 130%	94
	0407_TP135_0.5_200619	SE207876.034	%	60 - 130%	86

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_BH0025_0.1_200619	SE207876.001	%	70 - 130%	78
	0407_BH0025_0.5_200619	SE207876.002	%	70 - 130%	82
	0407_TP114_0.1_200619	SE207876.006	%	70 - 130%	71
	0407_TP114_0.5_200619	SE207876.007	%	70 - 130%	76
	0407_TP115_0.1_200619	SE207876.009	%	70 - 130%	83
	0407_TP115_1.0_200619	SE207876.010	%	70 - 130%	77
	0407_TP116_0.1_200619	SE207876.012	%	70 - 130%	73
	0407_TP116_0.5_200619	SE207876.013	%	70 - 130%	71
	0407_QC123_200619	SE207876.016	%	70 - 130%	70
	0407_TP124_0.1_200619	SE207876.017	%	70 - 130%	76
	0407_TP124_0.5_200619	SE207876.018	%	70 - 130%	98
	0407_TP125_0.1_200619	SE207876.020	%	70 - 130%	104
	0407_TP125_1.0_200619	SE207876.021	%	70 - 130%	92
	0407_TP126_0.1_200619	SE207876.023	%	70 - 130%	86
	0407_TP126_0.5_200619	SE207876.024	%	70 - 130%	83
	0407_QC124_200619	SE207876.026	%	70 - 130%	91
	0407_TP136_0.1_200619	SE207876.027	%	70 - 130%	86
	0407_TP136_1.0_200619	SE207876.028	%	70 - 130%	76
	0407_TP134_0.1_200619	SE207876.030	%	70 - 130%	71
	0407_TP134_1.0_200619	SE207876.031	%	70 - 130%	76
	0407_TP135_0.1_200619	SE207876.033	%	70 - 130%	72
	0407_TP135_0.5_200619	SE207876.034	%	70 - 130%	71
d14-p-terphenyl (Surrogate)	0407_BH0025_0.1_200619	SE207876.001	%	70 - 130%	126
	0407_BH0025_0.5_200619	SE207876.002	%	70 - 130%	94
	0407_TP114_0.1_200619	SE207876.006	%	70 - 130%	99
	0407_TP114_0.5_200619	SE207876.007	%	70 - 130%	93
	0407_TP115_0.1_200619	SE207876.009	%	70 - 130%	93
	0407_TP115_1.0_200619	SE207876.010	%	70 - 130%	110
	0407_TP116_0.1_200619	SE207876.012	%	70 - 130%	94
	0407_TP116_0.5_200619	SE207876.013	%	70 - 130%	93
	0407_QC123_200619	SE207876.016	%	70 - 130%	95
	0407_TP124_0.1_200619	SE207876.017	%	70 - 130%	106
	0407_TP124_0.5_200619	SE207876.018	%	70 - 130%	112
	0407_TP125_0.1_200619	SE207876.020	%	70 - 130%	116
	0407_TP125_1.0_200619	SE207876.021	%	70 - 130%	112
	0407_TP126_0.1_200619	SE207876.023	%	70 - 130%	106
	0407_TP126_0.5_200619	SE207876.024	%	70 - 130%	105
	0407_QC124_200619	SE207876.026	%	70 - 130%	105
	0407_TP136_0.1_200619	SE207876.027	%	70 - 130%	88
	0407_TP136_1.0_200619	SE207876.028	%	70 - 130%	95
	0407_TP134_0.1_200619	SE207876.030	%	70 - 130%	93
	0407_TP134_1.0_200619	SE207876.031	%	70 - 130%	93
	0407_TP135_0.1_200619	SE207876.033	%	70 - 130%	94
	0407_TP135_0.5_200619	SE207876.034	%	70 - 130%	86

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued) — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d5-nitrobenzene (Surrogate)	0407_BH0025_0.1_200619	SE207876.001	%	70 - 130%	72
	0407_BH0025_0.5_200619	SE207876.002	%	70 - 130%	74
	0407_TP114_0.1_200619	SE207876.006	%	70 - 130%	71
	0407_TP114_0.5_200619	SE207876.007	%	70 - 130%	71
	0407_TP115_0.1_200619	SE207876.009	%	70 - 130%	71
	0407_TP115_1.0_200619	SE207876.010	%	70 - 130%	70 ⓘ
	0407_TP116_0.1_200619	SE207876.012	%	70 - 130%	70
	0407_TP116_0.5_200619	SE207876.013	%	70 - 130%	71
	0407_QC123_200619	SE207876.016	%	70 - 130%	73
	0407_TP124_0.1_200619	SE207876.017	%	70 - 130%	91
	0407_TP124_0.5_200619	SE207876.018	%	70 - 130%	81
	0407_TP125_0.1_200619	SE207876.020	%	70 - 130%	83
	0407_TP125_1.0_200619	SE207876.021	%	70 - 130%	72
	0407_TP126_0.1_200619	SE207876.023	%	70 - 130%	73
	0407_TP126_0.5_200619	SE207876.024	%	70 - 130%	71
	0407_QC124_200619	SE207876.026	%	70 - 130%	80
	0407_TP136_0.1_200619	SE207876.027	%	70 - 130%	66 †
	0407_TP136_1.0_200619	SE207876.028	%	70 - 130%	68 ⓘ
	0407_TP134_0.1_200619	SE207876.030	%	70 - 130%	69 †
	0407_TP134_1.0_200619	SE207876.031	%	70 - 130%	69 ⓘ
	0407_TP135_0.1_200619	SE207876.033	%	70 - 130%	74
	0407_TP135_0.5_200619	SE207876.034	%	70 - 130%	79

PCBs in Soil — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_BH0025_0.1_200619	SE207876.001	%	60 - 130%	102
	0407_BH0025_0.5_200619	SE207876.002	%	60 - 130%	101
	0407_TP114_0.1_200619	SE207876.006	%	60 - 130%	103
	0407_TP114_0.5_200619	SE207876.007	%	60 - 130%	97
	0407_TP115_0.1_200619	SE207876.009	%	60 - 130%	106
	0407_TP115_1.0_200619	SE207876.010	%	60 - 130%	101
	0407_TP116_0.1_200619	SE207876.012	%	60 - 130%	112
	0407_TP116_0.5_200619	SE207876.013	%	60 - 130%	100
	0407_QC123_200619	SE207876.016	%	60 - 130%	101
	0407_TP124_0.1_200619	SE207876.017	%	60 - 130%	106
	0407_TP124_0.5_200619	SE207876.018	%	60 - 130%	105
	0407_TP125_0.1_200619	SE207876.020	%	60 - 130%	105
	0407_TP125_1.0_200619	SE207876.021	%	60 - 130%	103
	0407_TP126_0.1_200619	SE207876.023	%	60 - 130%	101
	0407_TP126_0.5_200619	SE207876.024	%	60 - 130%	109
	0407_QC124_200619	SE207876.026	%	60 - 130%	113
	0407_TP136_0.1_200619	SE207876.027	%	60 - 130%	110
	0407_TP136_1.0_200619	SE207876.028	%	60 - 130%	112
	0407_TP134_0.1_200619	SE207876.030	%	60 - 130%	109
	0407_TP134_1.0_200619	SE207876.031	%	60 - 130%	107
	0407_TP135_0.1_200619	SE207876.033	%	60 - 130%	107
	0407_TP135_0.5_200619	SE207876.034	%	60 - 130%	103

Speciated Phenols in Soil — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	0407_BH0025_0.1_200619	SE207876.001	%	70 - 130%	77
	0407_BH0025_0.5_200619	SE207876.002	%	70 - 130%	78
	0407_TP114_0.1_200619	SE207876.006	%	70 - 130%	79
	0407_TP114_0.5_200619	SE207876.007	%	70 - 130%	78
	0407_TP115_0.1_200619	SE207876.009	%	70 - 130%	79
	0407_TP115_1.0_200619	SE207876.010	%	70 - 130%	76
	0407_TP116_0.1_200619	SE207876.012	%	70 - 130%	76
	0407_TP116_0.5_200619	SE207876.013	%	70 - 130%	79
	0407_QC123_200619	SE207876.016	%	70 - 130%	76
	0407_TP124_0.1_200619	SE207876.017	%	70 - 130%	80
	0407_TP124_0.5_200619	SE207876.018	%	70 - 130%	78
	0407_TP125_0.1_200619	SE207876.020	%	70 - 130%	77

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil (continued) — **Method: ME-(AU)-[ENV]AN420**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	0407_TP125_1.0_200619	SE207876.021	%	70 - 130%	79
	0407_TP126_0.1_200619	SE207876.023	%	70 - 130%	79
	0407_TP126_0.5_200619	SE207876.024	%	70 - 130%	79
	0407_QC124_200619	SE207876.026	%	70 - 130%	80
	0407_TP136_0.1_200619	SE207876.027	%	70 - 130%	82
	0407_TP136_1.0_200619	SE207876.028	%	70 - 130%	81
	0407_TP134_0.1_200619	SE207876.030	%	70 - 130%	79
	0407_TP134_1.0_200619	SE207876.031	%	70 - 130%	79
	0407_TP135_0.1_200619	SE207876.033	%	70 - 130%	78
	0407_TP135_0.5_200619	SE207876.034	%	70 - 130%	77
d5-phenol (Surrogate)	0407_BH0025_0.1_200619	SE207876.001	%	50 - 130%	75
	0407_BH0025_0.5_200619	SE207876.002	%	50 - 130%	77
	0407_TP114_0.1_200619	SE207876.006	%	50 - 130%	77
	0407_TP114_0.5_200619	SE207876.007	%	50 - 130%	75
	0407_TP115_0.1_200619	SE207876.009	%	50 - 130%	76
	0407_TP115_1.0_200619	SE207876.010	%	50 - 130%	72
	0407_TP116_0.1_200619	SE207876.012	%	50 - 130%	75
	0407_TP116_0.5_200619	SE207876.013	%	50 - 130%	78
	0407_QC123_200619	SE207876.016	%	50 - 130%	74
	0407_TP124_0.1_200619	SE207876.017	%	50 - 130%	76
	0407_TP124_0.5_200619	SE207876.018	%	50 - 130%	77
	0407_TP125_0.1_200619	SE207876.020	%	50 - 130%	73
	0407_TP125_1.0_200619	SE207876.021	%	50 - 130%	77
	0407_TP126_0.1_200619	SE207876.023	%	50 - 130%	78
	0407_TP126_0.5_200619	SE207876.024	%	50 - 130%	77
	0407_QC124_200619	SE207876.026	%	50 - 130%	78
	0407_TP136_0.1_200619	SE207876.027	%	50 - 130%	79
	0407_TP136_1.0_200619	SE207876.028	%	50 - 130%	76
	0407_TP134_0.1_200619	SE207876.030	%	50 - 130%	78
	0407_TP134_1.0_200619	SE207876.031	%	50 - 130%	77
	0407_TP135_0.1_200619	SE207876.033	%	50 - 130%	78
	0407_TP135_0.5_200619	SE207876.034	%	50 - 130%	78

VOC's in Soil — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_BH0025_0.1_200619	SE207876.001	%	60 - 130%	76
	0407_BH0025_0.5_200619	SE207876.002	%	60 - 130%	91
	0407_TP114_0.1_200619	SE207876.006	%	60 - 130%	94
	0407_TP114_0.5_200619	SE207876.007	%	60 - 130%	92
	0407_TP115_0.1_200619	SE207876.009	%	60 - 130%	92
	0407_TP115_1.0_200619	SE207876.010	%	60 - 130%	98
	0407_TP116_0.1_200619	SE207876.012	%	60 - 130%	93
	0407_TP116_0.5_200619	SE207876.013	%	60 - 130%	87
	0407_QC123_200619	SE207876.016	%	60 - 130%	91
	0407_TP124_0.1_200619	SE207876.017	%	60 - 130%	94
	0407_TP124_0.5_200619	SE207876.018	%	60 - 130%	84
	0407_TP125_0.1_200619	SE207876.020	%	60 - 130%	96
	0407_TP125_1.0_200619	SE207876.021	%	60 - 130%	83
	0407_TP126_0.1_200619	SE207876.023	%	60 - 130%	94
	0407_TP126_0.5_200619	SE207876.024	%	60 - 130%	83
	0407_QC124_200619	SE207876.026	%	60 - 130%	81
	0407_TP136_0.1_200619	SE207876.027	%	60 - 130%	88
	0407_TP136_1.0_200619	SE207876.028	%	60 - 130%	89
	0407_TP134_0.1_200619	SE207876.030	%	60 - 130%	90
	0407_TP134_1.0_200619	SE207876.031	%	60 - 130%	91
	0407_TP135_0.1_200619	SE207876.033	%	60 - 130%	96
	0407_TP135_0.5_200619	SE207876.034	%	60 - 130%	95
d4-1,2-dichloroethane (Surrogate)	0407_BH0025_0.1_200619	SE207876.001	%	60 - 130%	96
	0407_BH0025_0.5_200619	SE207876.002	%	60 - 130%	96
	0407_TP114_0.1_200619	SE207876.006	%	60 - 130%	101
	0407_TP114_0.5_200619	SE207876.007	%	60 - 130%	105

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d4-1,2-dichloroethane (Surrogate)	0407_TP115_0.1_200619	SE207876.009	%	60 - 130%	93
	0407_TP115_1.0_200619	SE207876.010	%	60 - 130%	108
	0407_TP116_0.1_200619	SE207876.012	%	60 - 130%	101
	0407_TP116_0.5_200619	SE207876.013	%	60 - 130%	92
	0407_QC123_200619	SE207876.016	%	60 - 130%	102
	0407_TP124_0.1_200619	SE207876.017	%	60 - 130%	103
	0407_TP124_0.5_200619	SE207876.018	%	60 - 130%	89
	0407_TP125_0.1_200619	SE207876.020	%	60 - 130%	93
	0407_TP125_1.0_200619	SE207876.021	%	60 - 130%	85
	0407_TP126_0.1_200619	SE207876.023	%	60 - 130%	92
	0407_TP126_0.5_200619	SE207876.024	%	60 - 130%	88
	0407_QC124_200619	SE207876.026	%	60 - 130%	89
	0407_TP136_0.1_200619	SE207876.027	%	60 - 130%	83
	0407_TP136_1.0_200619	SE207876.028	%	60 - 130%	96
	0407_TP134_0.1_200619	SE207876.030	%	60 - 130%	102
	0407_TP134_1.0_200619	SE207876.031	%	60 - 130%	94
	0407_TP135_0.1_200619	SE207876.033	%	60 - 130%	91
	0407_TP135_0.5_200619	SE207876.034	%	60 - 130%	93
d8-toluene (Surrogate)	0407_BH0025_0.1_200619	SE207876.001	%	60 - 130%	76
	0407_BH0025_0.5_200619	SE207876.002	%	60 - 130%	89
	0407_TP114_0.1_200619	SE207876.006	%	60 - 130%	89
	0407_TP114_0.5_200619	SE207876.007	%	60 - 130%	89
	0407_TP115_0.1_200619	SE207876.009	%	60 - 130%	91
	0407_TP115_1.0_200619	SE207876.010	%	60 - 130%	93
	0407_TP116_0.1_200619	SE207876.012	%	60 - 130%	90
	0407_TP116_0.5_200619	SE207876.013	%	60 - 130%	86
	0407_QC123_200619	SE207876.016	%	60 - 130%	95
	0407_TP124_0.1_200619	SE207876.017	%	60 - 130%	93
	0407_TP124_0.5_200619	SE207876.018	%	60 - 130%	86
	0407_TP125_0.1_200619	SE207876.020	%	60 - 130%	92
	0407_TP125_1.0_200619	SE207876.021	%	60 - 130%	86
	0407_TP126_0.1_200619	SE207876.023	%	60 - 130%	85
	0407_TP126_0.5_200619	SE207876.024	%	60 - 130%	86
	0407_QC124_200619	SE207876.026	%	60 - 130%	90
	0407_TP136_0.1_200619	SE207876.027	%	60 - 130%	85
	0407_TP136_1.0_200619	SE207876.028	%	60 - 130%	90
	0407_TP134_0.1_200619	SE207876.030	%	60 - 130%	86
	0407_TP134_1.0_200619	SE207876.031	%	60 - 130%	84
	0407_TP135_0.1_200619	SE207876.033	%	60 - 130%	93
	0407_TP135_0.5_200619	SE207876.034	%	60 - 130%	93

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_BH0025_0.1_200619	SE207876.001	%	60 - 130%	76
	0407_BH0025_0.5_200619	SE207876.002	%	60 - 130%	91
	0407_TP114_0.1_200619	SE207876.006	%	60 - 130%	94
	0407_TP114_0.5_200619	SE207876.007	%	60 - 130%	92
	0407_TP115_0.1_200619	SE207876.009	%	60 - 130%	92
	0407_TP115_1.0_200619	SE207876.010	%	60 - 130%	98
	0407_TP116_0.1_200619	SE207876.012	%	60 - 130%	93
	0407_TP116_0.5_200619	SE207876.013	%	60 - 130%	87
	0407_QC123_200619	SE207876.016	%	60 - 130%	91
	0407_TP124_0.1_200619	SE207876.017	%	60 - 130%	94
	0407_TP124_0.5_200619	SE207876.018	%	60 - 130%	84
	0407_TP125_0.1_200619	SE207876.020	%	60 - 130%	96
	0407_TP125_1.0_200619	SE207876.021	%	60 - 130%	83
	0407_TP126_0.1_200619	SE207876.023	%	60 - 130%	94
	0407_TP126_0.5_200619	SE207876.024	%	60 - 130%	83
	0407_QC124_200619	SE207876.026	%	60 - 130%	81
	0407_TP136_0.1_200619	SE207876.027	%	60 - 130%	88
	0407_TP136_1.0_200619	SE207876.028	%	60 - 130%	89

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP134_0.1_200619	SE207876.030	%	60 - 130%	90
	0407_TP134_1.0_200619	SE207876.031	%	60 - 130%	91
	0407_TP135_0.1_200619	SE207876.033	%	60 - 130%	96
	0407_TP135_0.5_200619	SE207876.034	%	60 - 130%	95
d4-1,2-dichloroethane (Surrogate)	0407_BH0025_0.1_200619	SE207876.001	%	60 - 130%	96
	0407_BH0025_0.5_200619	SE207876.002	%	60 - 130%	96
	0407_TP114_0.1_200619	SE207876.006	%	60 - 130%	101
	0407_TP114_0.5_200619	SE207876.007	%	60 - 130%	105
	0407_TP115_0.1_200619	SE207876.009	%	60 - 130%	93
	0407_TP115_1.0_200619	SE207876.010	%	60 - 130%	108
	0407_TP116_0.1_200619	SE207876.012	%	60 - 130%	101
	0407_TP116_0.5_200619	SE207876.013	%	60 - 130%	92
	0407_QC123_200619	SE207876.016	%	60 - 130%	102
	0407_TP124_0.1_200619	SE207876.017	%	60 - 130%	103
	0407_TP124_0.5_200619	SE207876.018	%	60 - 130%	89
	0407_TP125_0.1_200619	SE207876.020	%	60 - 130%	93
	0407_TP125_1.0_200619	SE207876.021	%	60 - 130%	85
	0407_TP126_0.1_200619	SE207876.023	%	60 - 130%	92
	0407_TP126_0.5_200619	SE207876.024	%	60 - 130%	88
	0407_QC124_200619	SE207876.026	%	60 - 130%	89
	0407_TP136_0.1_200619	SE207876.027	%	60 - 130%	83
	0407_TP136_1.0_200619	SE207876.028	%	60 - 130%	96
	0407_TP134_0.1_200619	SE207876.030	%	60 - 130%	102
	0407_TP134_1.0_200619	SE207876.031	%	60 - 130%	94
	0407_TP135_0.1_200619	SE207876.033	%	60 - 130%	91
	0407_TP135_0.5_200619	SE207876.034	%	60 - 130%	93
d8-toluene (Surrogate)	0407_BH0025_0.1_200619	SE207876.001	%	60 - 130%	76
	0407_BH0025_0.5_200619	SE207876.002	%	60 - 130%	89
	0407_TP114_0.1_200619	SE207876.006	%	60 - 130%	89
	0407_TP114_0.5_200619	SE207876.007	%	60 - 130%	89
	0407_TP115_0.1_200619	SE207876.009	%	60 - 130%	91
	0407_TP115_1.0_200619	SE207876.010	%	60 - 130%	93
	0407_TP116_0.1_200619	SE207876.012	%	60 - 130%	90
	0407_TP116_0.5_200619	SE207876.013	%	60 - 130%	86
	0407_QC123_200619	SE207876.016	%	60 - 130%	95
	0407_TP124_0.1_200619	SE207876.017	%	60 - 130%	93
	0407_TP124_0.5_200619	SE207876.018	%	60 - 130%	86
	0407_TP125_0.1_200619	SE207876.020	%	60 - 130%	92
	0407_TP125_1.0_200619	SE207876.021	%	60 - 130%	86
	0407_TP126_0.1_200619	SE207876.023	%	60 - 130%	85
	0407_TP126_0.5_200619	SE207876.024	%	60 - 130%	86
	0407_QC124_200619	SE207876.026	%	60 - 130%	90
	0407_TP136_0.1_200619	SE207876.027	%	60 - 130%	85
	0407_TP136_1.0_200619	SE207876.028	%	60 - 130%	90
	0407_TP134_0.1_200619	SE207876.030	%	60 - 130%	86
	0407_TP134_1.0_200619	SE207876.031	%	60 - 130%	84
	0407_TP135_0.1_200619	SE207876.033	%	60 - 130%	93
	0407_TP135_0.5_200619	SE207876.034	%	60 - 130%	93

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result
LB202880.001	Mercury	mg/kg	0.05	<0.05
LB202988.001	Mercury	mg/kg	0.05	<0.05

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202766.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	104

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202766.001		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	99
		d14-p-terphenyl (Surrogate)	%	-	103

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB202766.001	Naphthalene	mg/kg	0.1	<0.1
	2-methylnaphthalene	mg/kg	0.1	<0.1
	1-methylnaphthalene	mg/kg	0.1	<0.1
	Acenaphthylene	mg/kg	0.1	<0.1
	Acenaphthene	mg/kg	0.1	<0.1
	Fluorene	mg/kg	0.1	<0.1
	Phenanthrene	mg/kg	0.1	<0.1
	Anthracene	mg/kg	0.1	<0.1
	Fluoranthene	mg/kg	0.1	<0.1
	Pyrene	mg/kg	0.1	<0.1
	Benzo(a)anthracene	mg/kg	0.1	<0.1
	Chrysene	mg/kg	0.1	<0.1
	Benzo(a)pyrene	mg/kg	0.1	<0.1

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Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202766.001		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	84
		2-fluorobiphenyl (Surrogate)	%	-	99
		d14-p-terphenyl (Surrogate)	%	-	103

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202766.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	104

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202766.001		Phenol	mg/kg	0.5	<0.5
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5
		2-nitrophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
		Pentachlorophenol	mg/kg	0.5	<0.5
		2,4-dinitrophenol	mg/kg	2	<2
		4-chloro-3-methylphenol	mg/kg	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	79
		d5-phenol (Surrogate)	%	-	78

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB202865.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0
LB202986.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB202766.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB202765.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB202765.001	Monocyclic Aromatic Hydrocarbons	tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10
		MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	85
		d8-toluene (Surrogate)	%	-	81
		Bromofluorobenzene (Surrogate)	%	-	79
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB202765.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	85

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207876.017	LB202880.014	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE207876.030	LB202880.024	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE207876.034	LB202988.020	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE207911.021	LB202988.014	Mercury	mg/kg	0.05	<0.05	<0.05	200	0

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207876.013	LB202767.011	% Moisture	%w/w	1	3.8	4.6	54	18
SE207876.028	LB202767.022	% Moisture	%w/w	1	14.2	14.3	37	0
SE207876.034	LB202767.027	% Moisture	%w/w	1	9.7	8.4	41	14

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207876.013	LB202766.014		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.16	30	3
SE207876.034	LB202766.033		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207876.034	LB202766.033		p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.16	0.17	30	9

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207876.013	LB202766.014		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	8
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	0
SE207876.034	LB202766.033		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	11
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	30	11

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207876.013	LB202766.014	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
		Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
		Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207876.013	LB202766.014		Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	<0.3	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	<0.2	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	30	9
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	8
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	0
SE207876.034	LB202766.033		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	<0.3	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	<0.2	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	30	1
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	11
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	30	11

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207876.013	LB202766.014		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	3
SE207876.034	LB202766.033		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	9

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207876.013	LB202766.014		Phenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	200	0
			Total Cresol	mg/kg	1.5	<1.5	<1.5	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	200	0
			4-nitrophenol	mg/kg	1	<1	<1	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dinitrophenol	mg/kg	2	<2	<2	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.0	3.9	30	2
			d5-phenol (Surrogate)	mg/kg	-	1.6	1.6	30	1
SE207876.034	LB202766.033		Phenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	200	0
			Total Cresol	mg/kg	1.5	<1.5	<1.5	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	200	0
			4-nitrophenol	mg/kg	1	<1	<1	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dinitrophenol	mg/kg	2	<2	<2	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.9	3.7	30	4
			d5-phenol (Surrogate)	mg/kg	-	1.6	1.5	30	5

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207876.017	LB202865.014	Arsenic, As	mg/kg	1	<1	<1	195	0
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	<0.5	<0.5	164	0
		Copper, Cu	mg/kg	0.5	2.6	2.9	48	12
		Nickel, Ni	mg/kg	0.5	0.5	0.6	122	4
		Lead, Pb	mg/kg	1	12	11	39	10
		Zinc, Zn	mg/kg	2	7.7	8.9	54	15
SE207876.030	LB202865.024	Arsenic, As	mg/kg	1	<1	<1	200	0
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	<0.5	<0.5	200	0
		Copper, Cu	mg/kg	0.5	0.7	0.8	95	15
		Nickel, Ni	mg/kg	0.5	<0.5	<0.5	150	0
		Lead, Pb	mg/kg	1	3	4	58	29
		Zinc, Zn	mg/kg	2	2.9	3.5	92	17
SE207876.034	LB202986.022	Arsenic, As	mg/kg	1	<1	<1	200	0
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	<0.5	<0.5	200	0
		Copper, Cu	mg/kg	0.5	<0.5	<0.5	200	0
		Nickel, Ni	mg/kg	0.5	<0.5	<0.5	200	0
		Lead, Pb	mg/kg	1	<1	<1	200	0
		Zinc, Zn	mg/kg	2	<2.0	<2.0	200	0
SE208016.010	LB202986.014	Copper, Cu	mg/kg	0.5	11	11	35	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207876.013	LB202766.014		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE207876.034	LB202766.033		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207876.017	LB202765.015	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207876.017	LB202765.015	Halogenated	4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.3	8.7	50	17
			d8-toluene (Surrogate)	mg/kg	-	9.3	8.9	50	4
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.4	8.7	50	7
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE207876.034	LB202765.031	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207876.034	LB202765.031	Halogenated	Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
		Aliphatics	1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.3	12.0	50	26
			d8-toluene (Surrogate)	mg/kg	-	9.3	11.1	50	17
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.5	10.3	50	8
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207876.034	LB202765.031	Trihalomethan	Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromoform	mg/kg	0.1	<0.1	<0.1	200	0

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207876.017	LB202765.015		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.3	8.7	30	17
			d8-toluene (Surrogate)	mg/kg	-	9.3	8.9	30	4
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.4	8.7	30	7
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE207876.034	LB202765.031		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.3	12.0	30	26
			d8-toluene (Surrogate)	mg/kg	-	9.3	11.1	30	17
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.5	10.3	30	8
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202880.002		Mercury	mg/kg	0.05	0.17	0.2	70 - 130	86
LB202988.002		Mercury	mg/kg	0.05	0.18	0.2	70 - 130	88

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202766.002		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	122
		Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	105
		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	116
		Dieldrin	mg/kg	0.2	0.2	0.2	60 - 140	124
		Endrin	mg/kg	0.2	0.2	0.2	60 - 140	115
		p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	103
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	0.15	40 - 130	90

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202766.002		Dichlorvos	mg/kg	0.5	1.4	2	60 - 140	69
		Diazinon (Dimpylate)	mg/kg	0.5	2.0	2	60 - 140	102
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.1	2	60 - 140	107
		Ethion	mg/kg	0.2	1.9	2	60 - 140	97
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	104
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	84

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202766.002		Naphthalene	mg/kg	0.1	4.3	4	60 - 140	107
		Acenaphthylene	mg/kg	0.1	4.3	4	60 - 140	106
		Acenaphthene	mg/kg	0.1	4.4	4	60 - 140	110
		Phenanthrene	mg/kg	0.1	3.6	4	60 - 140	89
		Anthracene	mg/kg	0.1	4.3	4	60 - 140	108
		Fluoranthene	mg/kg	0.1	4.1	4	60 - 140	102
		Pyrene	mg/kg	0.1	4.2	4	60 - 140	105
		Benzo(a)pyrene	mg/kg	0.1	3.2	4	60 - 140	80
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	81
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	104
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	84

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202766.002		Arochlor 1260	mg/kg	0.2	0.4	0.4	60 - 140	112

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202766.002		Phenol	mg/kg	0.5	0.7	1	70 - 130	71
		2,4-dichlorophenol	mg/kg	0.5	0.8	1	70 - 130	81
		2,4,6-trichlorophenol	mg/kg	0.5	0.7	1	70 - 130	72
		Pentachlorophenol	mg/kg	0.5	0.8	1	70 - 130	81
	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.0	5	40 - 130	81
		d5-phenol (Surrogate)	mg/kg	-	1.6	2	40 - 130	78

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202865.002	Arsenic, As	mg/kg	1	340	318.22	80 - 120	106
	Cadmium, Cd	mg/kg	0.3	5.1	5.41	80 - 120	94
	Chromium, Cr	mg/kg	0.5	39	38.31	80 - 120	103
	Copper, Cu	mg/kg	0.5	300	290	80 - 120	105
	Nickel, Ni	mg/kg	0.5	200	187	80 - 120	105
	Lead, Pb	mg/kg	1	93	89.9	80 - 120	104
	Zinc, Zn	mg/kg	2	280	273	80 - 120	102
LB202986.002	Arsenic, As	mg/kg	1	340	318.22	80 - 120	107
	Cadmium, Cd	mg/kg	0.3	4.9	5.41	80 - 120	90
	Chromium, Cr	mg/kg	0.5	42	38.31	80 - 120	110

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202986.002	Copper, Cu	mg/kg	0.5	300	290	80 - 120	105
	Nickel, Ni	mg/kg	0.5	200	187	80 - 120	106
	Lead, Pb	mg/kg	1	94	89.9	80 - 120	104
	Zinc, Zn	mg/kg	2	280	273	80 - 120	103

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202766.002		TRH C10-C14	mg/kg	20	43	40	60 - 140	108
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	103
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	83
	TRH F Bands	TRH >C10-C16	mg/kg	25	43	40	60 - 140	108
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	95
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	75

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202765.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	5.1	5	60 - 140	103
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	5.6	5	60 - 140	113
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	5.2	5	60 - 140	104
	Halogenated	Chlorobenzene	mg/kg	0.1	5.9	5	60 - 140	117
	Monocyclic	Benzene	mg/kg	0.1	3.2	5	60 - 140	64
	Aromatic	Toluene	mg/kg	0.1	3.7	5	60 - 140	75
		Ethylbenzene	mg/kg	0.1	3.5	5	60 - 140	69
		m/p-xylene	mg/kg	0.2	6.9	10	60 - 140	69
		o-xylene	mg/kg	0.1	3.4	5	60 - 140	69
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.7	10	70 - 130	87
		d8-toluene (Surrogate)	mg/kg	-	9.5	10	70 - 130	95
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.0	10	70 - 130	80
	Trihalomethan	Chloroform	mg/kg	0.1	5.1	5	60 - 140	102

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202765.002		TRH C6-C10	mg/kg	25	68	92.5	60 - 140	73
		TRH C6-C9	mg/kg	20	61	80	60 - 140	76
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.7	10	70 - 130	87
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.0	10	70 - 130	80
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	47	62.5	60 - 140	75

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207876.001	LB202880.004	Mercury	mg/kg	0.05	0.18	<0.05	0.2	83
SE208016.001	LB202988.004	Mercury	mg/kg	0.05	0.15	<0.05	0.2	72

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE207876.002	LB202766.034		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	-	-
			Alpha BHC	mg/kg	0.1	<0.1	-	-
			Lindane	mg/kg	0.1	<0.1	-	-
			Heptachlor	mg/kg	0.1	<0.1	0.2	119
			Aldrin	mg/kg	0.1	<0.1	0.2	120
			Beta BHC	mg/kg	0.1	<0.1	-	-
			Delta BHC	mg/kg	0.1	<0.1	0.2	115
			Heptachlor epoxide	mg/kg	0.1	<0.1	-	-
			o,p'-DDE	mg/kg	0.1	<0.1	-	-
			Alpha Endosulfan	mg/kg	0.2	<0.2	-	-
			Gamma Chlordane	mg/kg	0.1	<0.1	-	-
			Alpha Chlordane	mg/kg	0.1	<0.1	-	-
			trans-Nonachlor	mg/kg	0.1	<0.1	-	-
			p,p'-DDE	mg/kg	0.1	<0.1	-	-
			Dieldrin	mg/kg	0.2	<0.2	0.2	121
			Endrin	mg/kg	0.2	<0.2	0.2	112
			o,p'-DDD	mg/kg	0.1	<0.1	-	-
			o,p'-DDT	mg/kg	0.1	<0.1	-	-
			Beta Endosulfan	mg/kg	0.2	<0.2	-	-
			p,p'-DDD	mg/kg	0.1	<0.1	-	-
			p,p'-DDT	mg/kg	0.1	<0.1	0.2	99
			Endosulfan sulphate	mg/kg	0.1	<0.1	-	-
			Endrin Aldehyde	mg/kg	0.1	<0.1	-	-
			Methoxychlor	mg/kg	0.1	<0.1	-	-
			Endrin Ketone	mg/kg	0.1	<0.1	-	-
			Isodrin	mg/kg	0.1	<0.1	-	-
			Mirex	mg/kg	0.1	<0.1	-	-
			Total CLP OC Pesticides	mg/kg	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	-	101

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE207876.002	LB202766.034		Dichlorvos	mg/kg	0.5	<0.5	2	72
			Dimethoate	mg/kg	0.5	<0.5	-	-
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	2	110
			Fenitrothion	mg/kg	0.2	<0.2	-	-
			Malathion	mg/kg	0.2	<0.2	-	-
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	2	124
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	-	-
			Bromophos Ethyl	mg/kg	0.2	<0.2	-	-
			Methidathion	mg/kg	0.5	<0.5	-	-
			Ethion	mg/kg	0.2	<0.2	2	113
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	-	-
			Total OP Pesticides*	mg/kg	1.7	<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	-	88
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	-	80

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number	Parameter	Units	LOR	Original	Spike	Recovery%
SE207876.002	LB202766.034	Naphthalene	mg/kg	0.1	<0.1	4	102
		2-methylnaphthalene	mg/kg	0.1	<0.1	-	-
		1-methylnaphthalene	mg/kg	0.1	<0.1	-	-
		Acenaphthylene	mg/kg	0.1	<0.1	4	103
		Acenaphthene	mg/kg	0.1	<0.1	4	100
		Fluorene	mg/kg	0.1	<0.1	-	-
		Phenanthrene	mg/kg	0.1	<0.1	4	86

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE207876.002	LB202766.034		Anthracene	mg/kg	0.1	<0.1	4	105
			Fluoranthene	mg/kg	0.1	<0.1	4	105
			Pyrene	mg/kg	0.1	<0.1	4	108
			Benzo(a)anthracene	mg/kg	0.1	<0.1	-	-
			Chrysene	mg/kg	0.1	<0.1	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	-	-
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	-	-
			Benzo(a)pyrene	mg/kg	0.1	<0.1	4	84
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	-	-
			Total PAH (18)	mg/kg	0.8	<0.8	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	-	72
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	-	88
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	-	80

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE207876.002	LB202766.034		Arochlor 1016	mg/kg	0.2	<0.2	-	-
			Arochlor 1221	mg/kg	0.2	<0.2	-	-
			Arochlor 1232	mg/kg	0.2	<0.2	-	-
			Arochlor 1242	mg/kg	0.2	<0.2	-	-
			Arochlor 1248	mg/kg	0.2	<0.2	-	-
			Arochlor 1254	mg/kg	0.2	<0.2	-	-
			Arochlor 1260	mg/kg	0.2	<0.2	0.4	130
			Arochlor 1262	mg/kg	0.2	<0.2	-	-
			Arochlor 1268	mg/kg	0.2	<0.2	-	-
			Total PCBs (Arochlors)	mg/kg	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	-	105

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE207876.002	LB202766.034		Phenol	mg/kg	0.5	<0.5	1	75
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	-	-
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	-	-
			Total Cresol	mg/kg	1.5	<1.5	-	-
			2-chlorophenol	mg/kg	0.5	<0.5	-	-
			2,4-dimethylphenol	mg/kg	0.5	<0.5	-	-
			2,6-dichlorophenol	mg/kg	0.5	<0.5	-	-
			2,4-dichlorophenol	mg/kg	0.5	<0.5	1	82
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	1	73
			2-nitrophenol	mg/kg	0.5	<0.5	-	-
			4-nitrophenol	mg/kg	1	<1	-	-
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	-	-
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	-	-
			Pentachlorophenol	mg/kg	0.5	<0.5	1	88
			2,4-dinitrophenol	mg/kg	2	<2	-	-
			4-chloro-3-methylphenol	mg/kg	2	<2	-	-
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.9	-	82
			d5-phenol (Surrogate)	mg/kg	-	1.5	-	79

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207876.001	LB202865.004	Arsenic, As	mg/kg	1	50	<1	50	98
		Cadmium, Cd	mg/kg	0.3	44	<0.3	50	87
		Chromium, Cr	mg/kg	0.5	50	0.5	50	99
		Copper, Cu	mg/kg	0.5	55	5.6	50	99
		Nickel, Ni	mg/kg	0.5	52	1.1	50	103
		Lead, Pb	mg/kg	1	68	20	50	96

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207876.001	LB202865.004	Zinc, Zn	mg/kg	2	60	11	50	99
SE208016.001	LB202986.004	Arsenic, As	mg/kg	1	58	7	50	103
		Cadmium, Cd	mg/kg	0.3	47	<0.3	50	94
		Chromium, Cr	mg/kg	0.5	63	8.4	50	109
		Copper, Cu	mg/kg	0.5	66	10	50	112
		Nickel, Ni	mg/kg	0.5	56	1.0	50	110
		Lead, Pb	mg/kg	1	61	7	50	107
		Zinc, Zn	mg/kg	2	68	11	50	114

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE207876.002	LB202766.034		TRH C10-C14	mg/kg	20	<20	40	100
			TRH C15-C28	mg/kg	45	<45	40	103
			TRH C29-C36	mg/kg	45	<45	40	78
			TRH C37-C40	mg/kg	100	<100	-	-
			TRH C10-C36 Total	mg/kg	110	<110	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	40	100
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	<90	40	103
			TRH >C34-C40 (F4)	mg/kg	120	<120	-	-

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207876.001	LB202765.004	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	-	-
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	-	-
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	-	-
			Bromomethane	mg/kg	1	<1	<1	-	-
			Chloroethane	mg/kg	1	<1	<1	-	-
			Trichlorofluoromethane	mg/kg	1	<1	<1	-	-
			Iodomethane	mg/kg	5	<5	<5	-	-
			1,1-dichloroethene	mg/kg	0.1	5.2	<0.1	5	104
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	-	-
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloroethane	mg/kg	0.1	5.3	<0.1	5	106
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	-	-
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	4.7	<0.1	5	94
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	-	-
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated	Chlorobenzene	mg/kg	0.1	5.8	<0.1	5	116
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207876.001	LB202765.004	Halogenated	4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-
		Aromatics	1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Monocyclic	Benzene	mg/kg	0.1	5.9	<0.1	5	119
		Aromatic	Toluene	mg/kg	0.1	4.9	<0.1	5	98
			Ethylbenzene	mg/kg	0.1	5.2	<0.1	5	104
			m/p-xylene	mg/kg	0.2	10	<0.2	10	103
			o-xylene	mg/kg	0.1	5.5	<0.1	5	109
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	-	-
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	-	-
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	-	-
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	-	-
		Compounds	2-nitropropane	mg/kg	10	<10	<10	-	-
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	-	-
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	-	-
			Vinyl acetate	mg/kg	10	<10	<10	-	-
			MEK (2-butanone)	mg/kg	10	<10	<10	-	-
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	-	-
			2-hexanone (MBK)	mg/kg	5	<5	<5	-	-
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.3	9.6	10	93
			d8-toluene (Surrogate)	mg/kg	-	8.6	7.6	10	86
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.6	7.6	10	86
		Totals	Total Xylenes	mg/kg	0.3	16	<0.3	-	-
			Total BTEX	mg/kg	0.6	32	<0.6	-	-
			Total VOC*	mg/kg	24	59	<24	-	-
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	-	-
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	26	<1.8	-	-
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	26	<1.8	-	-
		Trihalometha	Chloroform	mg/kg	0.1	4.7	<0.1	5	95
		nes	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Bromoform	mg/kg	0.1	<0.1	<0.1	-	-

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207876.001	LB202765.005		TRH C6-C10	mg/kg	25	65	<25	92.5	70
			TRH C6-C9	mg/kg	20	58	<20	80	72
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.3	9.6	10	93
			d8-toluene (Surrogate)	mg/kg	-	8.6	7.6	10	86
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.6	7.6	-	86
		VPH F	Benzene (F0)	mg/kg	0.1	5.9	<0.1	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	33	<25	62.5	52 ④

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

QC Sample	Sample Number	Parameter	Units	LOR

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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E-MAILED 24/6 @ 9.44 am

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CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0820
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- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☒ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Stuart Street, Townsville, QLD 4810
- ☐ AUCKLAND: 58 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7030 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐

CLIENT: Defence Housing Australia	**LABORATORY: SGS Australia**
PROJECT: Randwick Barracks	**LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015**
PROJECT NUMBER: 610.30041	**SAMPLER:**
PROJECT MANAGER [redacted]	**SAMPLER CONTACT No:**
PM CONTACT No [redacted]	**Email Reports and Invoices to: LQRSYD@slrconsulting.com** [redacted]
COMMENTS OR ADDITIONAL DIRECTIONS	**Turnaround Time (TAT)** ☐ Standard TAT ☐ Non Standard or Urgent TAT **Required TAT: Standard**
	COC Number of

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: Suite A	Asbestos ONLY	HOLD	Additional Information (Comment on any gross contamination or specific requirements)
1	0407_TP223_0.1_200622	22/06/2020	Soil	jar, pfas, bag	x			Please hold all PFAS Containers
2	0407_TP223_0.5_200622	22/06/2020	Soil	jar, pfas	x			
3	0407_TP224_0.1_200622	22/06/2020	Soil	jar, pfas, bag	x			
4	0407_TP224_0.5_200622	22/06/2020	Soil	jar, pfas	x			
	0407_TP224_1.0_200622	22/06/2020	Soil	jar, pfas			x	
5	0407_TP225_0.1_200622	22/06/2020	Soil	jar, pfas, bag	x			
6	0407_TP225_0.25_200622	22/06/2020	Soil	bag		x		
7	0407_TP225_0.5_200622	22/06/2020	Soil	jar, pfas	x			
	0407_TP225_0.8_200622	22/06/2020	Soil	jar, pfas			x	
8	0407_TP226_0.1_200622	22/06/2020	Soil	jar, pfas, bag	x			
9	0407_TP226_0.5_200622	22/06/2020	Soil	jar, pfas	x			
10	0407_TP227_0.1_200622	22/06/2020	Soil	jar, pfas, bag	x			

SGS EHS Sydney COC

SE207998

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 18/06/2020	**Received by**	Sign [redacted]	Date / Time 23/06/20	**Temperature Received:**
Relinquished By	Sign	Date / Time	**Received by**	Sign [redacted]	Date / Time @ 4:30	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

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- ☐ NEW PLYMOUTH: Level 2, 30 Devon Street East, New Plymouth, 4810 NZ
- ☐

CLIENT: Defence Housing Australia

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGER: [redacted]

PM CONTACT No [redacted]

LABORATORY: SGS Australia

LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015

SAMPLER:

SAMPLER CONTACT No:

Email Reports and Invoices to: LQRSYD@slrconsulting.com [redacted]

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number of

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	Asbestos ONLY	HOLD						Additional Information (Comment on any gross contamination or specific requirements)
11	0407_TP227_0.3_200622	22/06/2020	Soil	bag		x							Please hold all PFAS Containers
12	0407_TP227_0.5_200622	22/06/2020	Soil	jar, pfas, bag	x								
	0407_TP227_1.0_200622	22/06/2020	Soil	jar, pfas			x						
	0407_TP227_1.5_200623	22/06/2020	Soil	jar, pfas			x						
13	0407_TP228_0.1_200622	22/06/2020	Soil	jar, pfas, bag	x								
14	0407_TP228_0.5_200622	22/06/2020	Soil	jar, pfas	x								
	0407_TP228_1.0_200622	22/06/2020	Soil	jar, pfas			x						
15	0407_TP228_1.2_200622	22/06/2020	Soil	bag		x							
	0407_TP228_1.5_200622	22/06/2020	Soil	jar, pfas			x						
16	0407_TP229_0.1_200622	22/06/2020	Soil	jar, pfas, bag	x								
17	0407_TP229_0.5_200622	22/06/2020	Soil	jar, pfas, bag	x								
	0407_TP229_1.0_200622	22/06/2020	Soil	jar, pfas			x						

Relinquished By Sampler	[redacted]	Date / Time 18/06/2020	**Received by**	Sign [redacted]	Date / Time 23/06/20	**Temperature Received:**
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time @ 4.30	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

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- ☐

CLIENT: Defence Housing Australia

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGER: [redacted]

PM CONTACT No: [redacted]

LABORATORY: SGS Australia

LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015

SAMPLER:

SAMPLER CONTACT No:

Email Reports and Invoices to: LQRSYD@slrconsulting.com ; [redacted]

Turnaround Time (TAT)

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- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number of

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	Asbestos ONLY	HOLD						Additional Information (Comment on any gross contamination or specific requirements)
	0407_TP229_1.5_200622	22/06/2020	Soil	jar, pfas			x						Please hold all PFAS Containers
18	0407_TP230_0.1_200622	22/06/2020	Soil	jar, pfas, bag	x								
19	0407_TP230_0.5_200622	22/06/2020	Soil	jar, pfas, bag	x								
	0407_TP230_1.0_200622	22/06/2020	Soil	jar, pfas			x						
	0407_TP230_1.8_200622	22/06/2020	Soil	jar, pfas, bag			x						

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 18/06/2020	**Received by**	Sign [redacted]	Date / Time 23/06/20	**Temperature Received:**
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time @ 4:30	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

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SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

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CLIENT: Defence Housing Australia	**LABORATORY: SGS Australia**	**Turnaround Time (TAT)**	**COC Number**
PROJECT: Randwick Barracks	**LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015**		of
PROJECT NUMBER: 610.30041	**SAMPLER: GF**	☐ Standard TAT	
PROJECT MANAGER: [redacted]	**SAMPLER CONTACT No:** [redacted]	☐ Non Standard or Urgent TAT	
PM CONTACT No: [redacted]	**Email Reports and Invoices to: LQRSYD@slrconsulting.com** [redacted]	**Required TAT: Standard**	

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	Asbestos ONLY	HOLD	C6-C10/BETXN					**Additional Information** *(Comment on any gross contamination or specific requirements)*
20	0407_QC126_200622	22/06/2020	Soil	jar, pfas	x								Please hold all PFAS containers
	0407_QC226_200622	22/06/2020	Soil	jar, pfas	x								Please send to Eurofins
21	0407_QC127_200622	22/06/2020	Soil	jar, pfas	x								
	0407_QC227_200622	22/06/2020	Soil	jar, pfas	x								Please send to Eurofins
22	0407_QC134_200622	22/06/2020	Soil	jar, pfas	x								
	0407_QC234_200622	22/06/2020	Soil	jar, pfas	x								Please send to Eurofins
23	0407_QC137_200622	22/06/2020	Soil	jar, pfas	x								
	0407_QC237_200622	22/06/2020	Soil	jar, pfas	x								Please send to Eurofins
24	0407_QC411_200619	22/06/2020	Trip Blank	vial				x					
25	0407_QC511_200619	22/06/2020	Trip Spike	vial				x					

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 18/06/2020	**Received by**	Sign [redacted]	Date / Time 23/06/20	**Temperature Received:**	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time @ 4:30		
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time		

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	25

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207998 R0**
Date Received	23/6/2020
Date Reported	3/7/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.
Sample # 3: approx 3-4 x0.5mm fibre bundles x2 found loose in sample in >2mm portion.
Sample # 10: Asbestos found as 3x2x2mm cement sheet fragment in >2mm portion.
Sample # 16 Asbestos found as 5x3x2mm cement sheet fragment in >2mm portion.

Asbestos analysed by Approved Identifier Ravee Sivasubramaniam .

SIGNATORIES

[redacted]

Chemist | Senior Organic Chemist/Metals Chemist | Senior Chemist

[redacted]

Organic Section Head | Hygiene Team Leader

VOC's in Soil [AN433] Tested: 29/6/2020

PARAMETER	UOM	LOR	0407_TP223_0.1_20(622 SOIL - 22/6/2020 SE207998.001	0407_TP223_0.5_20(622 SOIL - 22/6/2020 SE207998.002	0407_TP224_0.1_20(622 SOIL - 22/6/2020 SE207998.003	0407_TP224_0.5_20(622 SOIL - 22/6/2020 SE207998.004	0407_TP225_0.1_20(622 SOIL - 22/6/2020 SE207998.005
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP223_0.1_20(622 SOIL - 22/6/2020 SE207998.001	0407_TP223_0.5_20(622 SOIL - 22/6/2020 SE207998.002	0407_TP224_0.1_20(622 SOIL - 22/6/2020 SE207998.003	0407_TP224_0.5_20(622 SOIL - 22/6/2020 SE207998.004	0407_TP225_0.1_20(622 SOIL - 22/6/2020 SE207998.005
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP225_0.5_20(622 SOIL - 22/6/2020 SE207998.007	0407_TP226_0.1_20(622 SOIL - 22/6/2020 SE207998.008	0407_TP226_0.5_20(622 SOIL - 22/6/2020 SE207998.009	0407_TP227_0.1_20(622 SOIL - 22/6/2020 SE207998.010	0407_TP227_0.5_20(622 SOIL - 22/6/2020 SE207998.012
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP225_0.5_20(622 SOIL - 22/6/2020 SE207998.007	0407_TP226_0.1_20(622 SOIL - 22/6/2020 SE207998.008	0407_TP226_0.5_20(622 SOIL - 22/6/2020 SE207998.009	0407_TP227_0.1_20(622 SOIL - 22/6/2020 SE207998.010	0407_TP227_0.5_20(622 SOIL - 22/6/2020 SE207998.012
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP228_0.1_20(622 SOIL - 22/6/2020 SE207998.013	0407_TP228_0.5_20(622 SOIL - 22/6/2020 SE207998.014	0407_TP229_0.1_20(622 SOIL - 22/6/2020 SE207998.016	0407_TP229_0.5_20(622 SOIL - 22/6/2020 SE207998.017	0407_TP230_0.1_20(622 SOIL - 22/6/2020 SE207998.018
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP228_0.1_20(622 SOIL - 22/6/2020 SE207998.013	0407_TP228_0.5_20(622 SOIL - 22/6/2020 SE207998.014	0407_TP229_0.1_20(622 SOIL - 22/6/2020 SE207998.016	0407_TP229_0.5_20(622 SOIL - 22/6/2020 SE207998.017	0407_TP230_0.1_20(622 SOIL - 22/6/2020 SE207998.018
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP230_0.5_20(622 SOIL - 22/6/2020 SE207998.019	0407_QC126_20062: SOIL - 22/6/2020 SE207998.020	0407_QC127_20062: SOIL - 22/6/2020 SE207998.021	0407_QC134_20062: SOIL - 22/6/2020 SE207998.022	0407_QC137_20062: SOIL - 22/6/2020 SE207998.023
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP230_0.5_20622 SOIL - 22/6/2020 SE207998.019	0407_QC126_20062 SOIL - 22/6/2020 SE207998.020	0407_QC127_20062 SOIL - 22/6/2020 SE207998.021	0407_QC134_20062 SOIL - 22/6/2020 SE207998.022	0407_QC137_20062 SOIL - 22/6/2020 SE207998.023
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_QC411_200622 SOIL - 22/6/2020 SE207998.024	0407_QC511_200622 SOIL - 22/6/2020 SE207998.025
Benzene	mg/kg	0.1	<0.1	[99%]
Toluene	mg/kg	0.1	<0.1	[84%]
Ethylbenzene	mg/kg	0.1	<0.1	[71%]
m/p-xylene	mg/kg	0.2	<0.2	[75%]
o-xylene	mg/kg	0.1	<0.1	[80%]
Naphthalene	mg/kg	0.1	<0.1	-
Total Xylenes	mg/kg	0.3	<0.3	-
Total BTEX	mg/kg	0.6	<0.6	-
Dichlorodifluoromethane (CFC-12)	mg/kg	1	-	-
Chloromethane	mg/kg	1	-	-
Vinyl chloride (Chloroethene)	mg/kg	0.1	-	-
Bromomethane	mg/kg	1	-	-
Chloroethane	mg/kg	1	-	-
Trichlorofluoromethane	mg/kg	1	-	-
Acetone (2-propanone)	mg/kg	10	-	-
Iodomethane	mg/kg	5	-	-
1,1-dichloroethene	mg/kg	0.1	-	-
Acrylonitrile	mg/kg	0.1	-	-
Dichloromethane (Methylene chloride)	mg/kg	0.5	-	-
Allyl chloride	mg/kg	0.1	-	-
Carbon disulfide	mg/kg	0.5	-	-
trans-1,2-dichloroethene	mg/kg	0.1	-	-
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	-	-
1,1-dichloroethane	mg/kg	0.1	-	-
Vinyl acetate	mg/kg	10	-	-
MEK (2-butanone)	mg/kg	10	-	-
cis-1,2-dichloroethene	mg/kg	0.1	-	-
Bromochloromethane	mg/kg	0.1	-	-
Chloroform	mg/kg	0.1	-	-
2,2-dichloropropane	mg/kg	0.1	-	-
1,2-dichloroethane	mg/kg	0.1	-	-
1,1,1-trichloroethane	mg/kg	0.1	-	-
1,1-dichloropropene	mg/kg	0.1	-	-
Carbon tetrachloride	mg/kg	0.1	-	-
Dibromomethane	mg/kg	0.1	-	-
1,2-dichloropropane	mg/kg	0.1	-	-
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	-	-
2-nitropropane	mg/kg	10	-	-
Bromodichloromethane	mg/kg	0.1	-	-
MIBK (4-methyl-2-pentanone)	mg/kg	1	-	-
cis-1,3-dichloropropene	mg/kg	0.1	-	-
trans-1,3-dichloropropene	mg/kg	0.1	-	-
1,1,2-trichloroethane	mg/kg	0.1	-	-
1,3-dichloropropane	mg/kg	0.1	-	-
Chlorodibromomethane	mg/kg	0.1	-	-
2-hexanone (MBK)	mg/kg	5	-	-
1,2-dibromoethane (EDB)	mg/kg	0.1	-	-
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	-	-
1,1,1,2-tetrachloroethane	mg/kg	0.1	-	-
Chlorobenzene	mg/kg	0.1	-	-
Bromoform	mg/kg	0.1	-	-
cis-1,4-dichloro-2-butene	mg/kg	1	-	-
Styrene (Vinyl benzene)	mg/kg	0.1	-	-
1,1,2,2-tetrachloroethane	mg/kg	0.1	-	-
1,2,3-trichloropropane	mg/kg	0.1	-	-
trans-1,4-dichloro-2-butene	mg/kg	1	-	-

VOC's in Soil [AN433] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_QC411_200622 SOIL - 22/6/2020 SE207998.024	0407_QC511_200622 SOIL - 22/6/2020 SE207998.025
Isopropylbenzene (Cumene)	mg/kg	0.1	-	-
Bromobenzene	mg/kg	0.1	-	-
n-propylbenzene	mg/kg	0.1	-	-
2-chlorotoluene	mg/kg	0.1	-	-
4-chlorotoluene	mg/kg	0.1	-	-
1,3,5-trimethylbenzene	mg/kg	0.1	-	-
tert-butylbenzene	mg/kg	0.1	-	-
1,2,4-trimethylbenzene	mg/kg	0.1	-	-
sec-butylbenzene	mg/kg	0.1	-	-
1,3-dichlorobenzene	mg/kg	0.1	-	-
1,4-dichlorobenzene	mg/kg	0.1	-	-
p-isopropyltoluene	mg/kg	0.1	-	-
1,2-dichlorobenzene	mg/kg	0.1	-	-
n-butylbenzene	mg/kg	0.1	-	-
1,2-dibromo-3-chloropropane	mg/kg	0.1	-	-
1,2,4-trichlorobenzene	mg/kg	0.1	-	-
Hexachlorobutadiene	mg/kg	0.1	-	-
1,2,3-trichlorobenzene	mg/kg	0.1	-	-
Total VOC*	mg/kg	24	-	-
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	-	-
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	-	-
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	-	-

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 29/6/2020

PARAMETER	UOM	LOR	0407_TP223_0.1_20(622 SOIL - 22/6/2020 SE207998.001	0407_TP223_0.5_20(622 SOIL - 22/6/2020 SE207998.002	0407_TP224_0.1_20(622 SOIL - 22/6/2020 SE207998.003	0407_TP224_0.5_20(622 SOIL - 22/6/2020 SE207998.004	0407_TP225_0.1_20(622 SOIL - 22/6/2020 SE207998.005
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP225_0.5_20(622 SOIL - 22/6/2020 SE207998.007	0407_TP226_0.1_20(622 SOIL - 22/6/2020 SE207998.008	0407_TP226_0.5_20(622 SOIL - 22/6/2020 SE207998.009	0407_TP227_0.1_20(622 SOIL - 22/6/2020 SE207998.010	0407_TP227_0.5_20(622 SOIL - 22/6/2020 SE207998.012
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP228_0.1_20(622 SOIL - 22/6/2020 SE207998.013	0407_TP228_0.5_20(622 SOIL - 22/6/2020 SE207998.014	0407_TP229_0.1_20(622 SOIL - 22/6/2020 SE207998.016	0407_TP229_0.5_20(622 SOIL - 22/6/2020 SE207998.017	0407_TP230_0.1_20(622 SOIL - 22/6/2020 SE207998.018
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP230_0.5_20(622 SOIL - 22/6/2020 SE207998.019	0407_QC126_20062: SOIL - 22/6/2020 SE207998.020	0407_QC127_20062: SOIL - 22/6/2020 SE207998.021	0407_QC134_20062: SOIL - 22/6/2020 SE207998.022	0407_QC137_20062: SOIL - 22/6/2020 SE207998.023
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_QC411_20062: SOIL - 22/6/2020 SE207998.024
Benzene (F0)	mg/kg	0.1	<0.1
TRH C6-C9	mg/kg	20	<20
TRH C6-C10	mg/kg	25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 29/6/2020

PARAMETER	UOM	LOR	0407_TP223_0.1_20(622 SOIL - 22/6/2020 SE207998.001	0407_TP223_0.5_20(622 SOIL - 22/6/2020 SE207998.002	0407_TP224_0.1_20(622 SOIL - 22/6/2020 SE207998.003	0407_TP224_0.5_20(622 SOIL - 22/6/2020 SE207998.004	0407_TP225_0.1_20(622 SOIL - 22/6/2020 SE207998.005
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	**49**
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	**69**
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	**31**
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	**31**
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	**120**
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP225_0.5_20(622 SOIL - 22/6/2020 SE207998.007	0407_TP226_0.1_20(622 SOIL - 22/6/2020 SE207998.008	0407_TP226_0.5_20(622 SOIL - 22/6/2020 SE207998.009	0407_TP227_0.1_20(622 SOIL - 22/6/2020 SE207998.010	0407_TP227_0.5_20(622 SOIL - 22/6/2020 SE207998.012
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP228_0.1_20(622 SOIL - 22/6/2020 SE207998.013	0407_TP228_0.5_20(622 SOIL - 22/6/2020 SE207998.014	0407_TP229_0.1_20(622 SOIL - 22/6/2020 SE207998.016	0407_TP229_0.5_20(622 SOIL - 22/6/2020 SE207998.017	0407_TP230_0.1_20(622 SOIL - 22/6/2020 SE207998.018
TRH C10-C14	mg/kg	20	**21**	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	**180**	<45	**120**	<45	<45
TRH C29-C36	mg/kg	45	**120**	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	**37**	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	**37**	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	**250**	<90	**150**	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	**330**	<110	**120**	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	**290**	<210	<210	<210	<210

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP230_0.5_20(622 SOIL - 22/6/2020 SE207998.019	0407_QC126_20062: SOIL - 22/6/2020 SE207998.020	0407_QC127_20062: SOIL - 22/6/2020 SE207998.021	0407_QC134_20062: SOIL - 22/6/2020 SE207998.022	0407_QC137_20062: SOIL - 22/6/2020 SE207998.023
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	**170**	**170**	<45
TRH C29-C36	mg/kg	45	<45	<45	**370**	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	**170**	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	**34**	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	**34**	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	**410**	**160**	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	**290**	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	**540**	**170**	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	**710**	<210	<210

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 29/6/2020

PARAMETER	UOM	LOR	0407_TP223_0.1_20(622 SOIL - 22/6/2020 SE207998.001	0407_TP223_0.5_20(622 SOIL - 22/6/2020 SE207998.002	0407_TP224_0.1_20(622 SOIL - 22/6/2020 SE207998.003	0407_TP224_0.5_20(622 SOIL - 22/6/2020 SE207998.004	0407_TP225_0.1_20(622 SOIL - 22/6/2020 SE207998.005
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	0.3	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	0.2	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	0.1	2.0	0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	0.6	<0.1	<0.1
Fluoranthene	mg/kg	0.1	0.5	0.6	2.9	0.6	0.2
Pyrene	mg/kg	0.1	0.5	0.8	3.0	0.6	0.2
Benzo(a)anthracene	mg/kg	0.1	0.3	0.3	1.4	0.3	0.1
Chrysene	mg/kg	0.1	0.3	0.4	1.4	0.3	0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	0.5	0.7	2.0	0.6	0.2
Benzo(k)fluoranthene	mg/kg	0.1	0.3	0.4	0.9	0.2	<0.1
Benzo(a)pyrene	mg/kg	0.1	0.5	0.7	1.9	0.4	0.2
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.2	0.3	1.0	0.2	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	0.2	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	0.4	0.4	1.3	0.3	0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	0.6	0.8	2.6	0.6	0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	0.7	0.9	2.6	0.7	0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	0.6	0.9	2.6	0.6	0.3
Total PAH (18)	mg/kg	0.8	3.4	4.7	19	3.6	1.3
Total PAH (NEPM/WHO 16)	mg/kg	0.8	3.4	4.7	19	3.6	1.3

PARAMETER	UOM	LOR	0407_TP225_0.5_20(622 SOIL - 22/6/2020 SE207998.007	0407_TP226_0.1_20(622 SOIL - 22/6/2020 SE207998.008	0407_TP226_0.5_20(622 SOIL - 22/6/2020 SE207998.009	0407_TP227_0.1_20(622 SOIL - 22/6/2020 SE207998.010	0407_TP227_0.5_20(622 SOIL - 22/6/2020 SE207998.012
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	0.2	0.2
Pyrene	mg/kg	0.1	<0.1	<0.1	0.1	0.2	0.3
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	0.1	0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	0.1	0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	0.2	0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	0.2	0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	0.3	0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	1.4	1.0
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	1.4	1.0

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP228_0.1_20(622 SOIL - 22/6/2020 SE207998.013	0407_TP228_0.5_20(622 SOIL - 22/6/2020 SE207998.014	0407_TP229_0.1_20(622 SOIL - 22/6/2020 SE207998.016	0407_TP229_0.5_20(622 SOIL - 22/6/2020 SE207998.017	0407_TP230_0.1_20(622 SOIL - 22/6/2020 SE207998.018
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	0.1	<0.1	0.2	<0.1	0.1
Pyrene	mg/kg	0.1	0.2	<0.1	0.3	<0.1	0.1
Benzo(a)anthracene	mg/kg	0.1	0.1	<0.1	0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	0.1	<0.1	0.2	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	1.2	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	1.2	<0.8	<0.8

PARAMETER	UOM	LOR	0407_TP230_0.5_20(622 SOIL - 22/6/2020 SE207998.019	0407_QC126_20062 SOIL - 22/6/2020 SE207998.020	0407_QC127_20062 SOIL - 22/6/2020 SE207998.021	0407_QC134_20062 SOIL - 22/6/2020 SE207998.022	0407_QC137_20062 SOIL - 22/6/2020 SE207998.023
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	0.2	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	0.2	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	0.2	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	0.2	2.2	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	0.8	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	1.2	5.5	0.2	0.2
Pyrene	mg/kg	0.1	<0.1	1.3	5.6	0.3	0.2
Benzo(a)anthracene	mg/kg	0.1	<0.1	0.7	3.1	0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	0.7	2.9	0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	1.0	5.5	0.2	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	0.5	2.3	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	0.9	4.9	0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	0.4	2.5	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	0.3	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	0.5	2.8	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	1.1	6.6	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	1.2	6.6	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	1.2	6.6	0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	7.3	38	1.2	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	7.3	38	1.2	<0.8

Speciated Phenols in Soil [AN420] Tested: 29/6/2020

PARAMETER	UOM	LOR	0407_TP223_0.1_20(622 SOIL - 22/6/2020 SE207998.001	0407_TP223_0.5_20(622 SOIL - 22/6/2020 SE207998.002	0407_TP224_0.1_20(622 SOIL - 22/6/2020 SE207998.003	0407_TP224_0.5_20(622 SOIL - 22/6/2020 SE207998.004	0407_TP225_0.1_20(622 SOIL - 22/6/2020 SE207998.005
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_TP225_0.5_20(622 SOIL - 22/6/2020 SE207998.007	0407_TP226_0.1_20(622 SOIL - 22/6/2020 SE207998.008	0407_TP226_0.5_20(622 SOIL - 22/6/2020 SE207998.009	0407_TP227_0.1_20(622 SOIL - 22/6/2020 SE207998.010	0407_TP227_0.5_20(622 SOIL - 22/6/2020 SE207998.012
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

Speciated Phenols in Soil [AN420] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP228_0.1_20(622 SOIL - 22/6/2020 SE207998.013	0407_TP228_0.5_20(622 SOIL - 22/6/2020 SE207998.014	0407_TP229_0.1_20(622 SOIL - 22/6/2020 SE207998.016	0407_TP229_0.5_20(622 SOIL - 22/6/2020 SE207998.017	0407_TP230_0.1_20(622 SOIL - 22/6/2020 SE207998.018
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_TP230_0.5_20(622 SOIL - 22/6/2020 SE207998.019	0407_QC126_20062: SOIL - 22/6/2020 SE207998.020	0407_QC127_20062: SOIL - 22/6/2020 SE207998.021	0407_QC134_20062: SOIL - 22/6/2020 SE207998.022	0407_QC137_20062: SOIL - 22/6/2020 SE207998.023
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

OC Pesticides in Soil [AN420] Tested: 29/6/2020

PARAMETER	UOM	LOR	0407_TP223_0.1_20(622 SOIL - 22/6/2020 SE207998.001	0407_TP223_0.5_20(622 SOIL - 22/6/2020 SE207998.002	0407_TP224_0.1_20(622 SOIL - 22/6/2020 SE207998.003	0407_TP224_0.5_20(622 SOIL - 22/6/2020 SE207998.004	0407_TP225_0.1_20(622 SOIL - 22/6/2020 SE207998.005
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP225_0.5_20(622 SOIL - 22/6/2020 SE207998.007	0407_TP226_0.1_20(622 SOIL - 22/6/2020 SE207998.008	0407_TP226_0.5_20(622 SOIL - 22/6/2020 SE207998.009	0407_TP227_0.1_20(622 SOIL - 22/6/2020 SE207998.010	0407_TP227_0.5_20(622 SOIL - 22/6/2020 SE207998.012
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP228_0.1_20(622 SOIL - 22/6/2020 SE207998.013	0407_TP228_0.5_20(622 SOIL - 22/6/2020 SE207998.014	0407_TP229_0.1_20(622 SOIL - 22/6/2020 SE207998.016	0407_TP229_0.5_20(622 SOIL - 22/6/2020 SE207998.017	0407_TP230_0.1_20(622 SOIL - 22/6/2020 SE207998.018
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP230_0.5_20622 SOIL - 22/6/2020 SE207998.019	0407_QC126_20062 SOIL - 22/6/2020 SE207998.020	0407_QC127_20062 SOIL - 22/6/2020 SE207998.021	0407_QC134_20062 SOIL - 22/6/2020 SE207998.022	0407_QC137_20062 SOIL - 22/6/2020 SE207998.023
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OP Pesticides in Soil [AN420] Tested: 29/6/2020

PARAMETER	UOM	LOR	0407_TP223_0.1_20(622 SOIL - 22/6/2020 SE207998.001	0407_TP223_0.5_20(622 SOIL - 22/6/2020 SE207998.002	0407_TP224_0.1_20(622 SOIL - 22/6/2020 SE207998.003	0407_TP224_0.5_20(622 SOIL - 22/6/2020 SE207998.004	0407_TP225_0.1_20(622 SOIL - 22/6/2020 SE207998.005
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP225_0.5_20(622 SOIL - 22/6/2020 SE207998.007	0407_TP226_0.1_20(622 SOIL - 22/6/2020 SE207998.008	0407_TP226_0.5_20(622 SOIL - 22/6/2020 SE207998.009	0407_TP227_0.1_20(622 SOIL - 22/6/2020 SE207998.010	0407_TP227_0.5_20(622 SOIL - 22/6/2020 SE207998.012
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP228_0.1_20(622 SOIL - 22/6/2020 SE207998.013	0407_TP228_0.5_20(622 SOIL - 22/6/2020 SE207998.014	0407_TP229_0.1_20(622 SOIL - 22/6/2020 SE207998.016	0407_TP229_0.5_20(622 SOIL - 22/6/2020 SE207998.017	0407_TP230_0.1_20(622 SOIL - 22/6/2020 SE207998.018
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

OP Pesticides in Soil [AN420] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP230_0.5_20622 SOIL - 22/6/2020 SE207998.019	0407_QC126_20062 SOIL - 22/6/2020 SE207998.020	0407_QC127_20062 SOIL - 22/6/2020 SE207998.021	0407_QC134_20062 SOIL - 22/6/2020 SE207998.022	0407_QC137_20062 SOIL - 22/6/2020 SE207998.023
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PCBs in Soil [AN420] Tested: 29/6/2020

PARAMETER	UOM	LOR	0407_TP223_0.1_20(622 SOIL - 22/6/2020 SE207998.001	0407_TP223_0.5_20(622 SOIL - 22/6/2020 SE207998.002	0407_TP224_0.1_20(622 SOIL - 22/6/2020 SE207998.003	0407_TP224_0.5_20(622 SOIL - 22/6/2020 SE207998.004	0407_TP225_0.1_20(622 SOIL - 22/6/2020 SE207998.005
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP225_0.5_20(622 SOIL - 22/6/2020 SE207998.007	0407_TP226_0.1_20(622 SOIL - 22/6/2020 SE207998.008	0407_TP226_0.5_20(622 SOIL - 22/6/2020 SE207998.009	0407_TP227_0.1_20(622 SOIL - 22/6/2020 SE207998.010	0407_TP227_0.5_20(622 SOIL - 22/6/2020 SE207998.012
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP228_0.1_20(622 SOIL - 22/6/2020 SE207998.013	0407_TP228_0.5_20(622 SOIL - 22/6/2020 SE207998.014	0407_TP229_0.1_20(622 SOIL - 22/6/2020 SE207998.016	0407_TP229_0.5_20(622 SOIL - 22/6/2020 SE207998.017	0407_TP230_0.1_20(622 SOIL - 22/6/2020 SE207998.018
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PCBs in Soil [AN420] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP230_0.5_20622 SOIL - 22/6/2020 SE207998.019	0407_QC126_20062 SOIL - 22/6/2020 SE207998.020	0407_QC127_20062 SOIL - 22/6/2020 SE207998.021	0407_QC134_20062 SOIL - 22/6/2020 SE207998.022	0407_QC137_20062 SOIL - 22/6/2020 SE207998.023
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 30/6/2020

PARAMETER	UOM	LOR	0407_TP223_0.1_20(622 SOIL - 22/6/2020 SE207998.001	0407_TP223_0.5_20(622 SOIL - 22/6/2020 SE207998.002	0407_TP224_0.1_20(622 SOIL - 22/6/2020 SE207998.003	0407_TP224_0.5_20(622 SOIL - 22/6/2020 SE207998.004	0407_TP225_0.1_20(622 SOIL - 22/6/2020 SE207998.005
Arsenic, As	mg/kg	1	2	2	2	3	1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	2.7	2.8	12	2.8	3.2
Copper, Cu	mg/kg	0.5	11	23	26	46	11
Lead, Pb	mg/kg	1	31	22	30	84	95
Nickel, Ni	mg/kg	0.5	2.7	7.0	8.9	2.3	3.2
Zinc, Zn	mg/kg	2	74	59	51	110	150

PARAMETER	UOM	LOR	0407_TP225_0.5_20(622 SOIL - 22/6/2020 SE207998.007	0407_TP226_0.1_20(622 SOIL - 22/6/2020 SE207998.008	0407_TP226_0.5_20(622 SOIL - 22/6/2020 SE207998.009	0407_TP227_0.1_20(622 SOIL - 22/6/2020 SE207998.010	0407_TP227_0.5_20(622 SOIL - 22/6/2020 SE207998.012
Arsenic, As	mg/kg	1	<1	5	2	8	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	0.6	<0.3
Chromium, Cr	mg/kg	0.5	1.6	3.0	1.3	22	1.9
Copper, Cu	mg/kg	0.5	0.6	6.3	5.1	54	3.3
Lead, Pb	mg/kg	1	15	41	24	100	6
Nickel, Ni	mg/kg	0.5	0.8	1.5	0.9	11	1.1
Zinc, Zn	mg/kg	2	5.1	110	90	290	10

PARAMETER	UOM	LOR	0407_TP228_0.1_20(622 SOIL - 22/6/2020 SE207998.013	0407_TP228_0.5_20(622 SOIL - 22/6/2020 SE207998.014	0407_TP229_0.1_20(622 SOIL - 22/6/2020 SE207998.016	0407_TP229_0.5_20(622 SOIL - 22/6/2020 SE207998.017	0407_TP230_0.1_20(622 SOIL - 22/6/2020 SE207998.018
Arsenic, As	mg/kg	1	3	<1	10	<1	5
Cadmium, Cd	mg/kg	0.3	0.5	<0.3	0.4	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	9.9	1.3	23	1.7	15
Copper, Cu	mg/kg	0.5	30	2.9	50	6.8	33
Lead, Pb	mg/kg	1	68	5	130	6	170
Nickel, Ni	mg/kg	0.5	5.4	1.3	15	3.1	6.8
Zinc, Zn	mg/kg	2	200	8.1	510	15	220

PARAMETER	UOM	LOR	0407_TP230_0.5_20(622 SOIL - 22/6/2020 SE207998.019	0407_QC126_20062: SOIL - 22/6/2020 SE207998.020	0407_QC127_20062: SOIL - 22/6/2020 SE207998.021	0407_QC134_20062: SOIL - 22/6/2020 SE207998.022	0407_QC137_20062: SOIL - 22/6/2020 SE207998.023
Arsenic, As	mg/kg	1	1	2	5	2	4
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	0.4	<0.3
Chromium, Cr	mg/kg	0.5	1.4	2.8	12	9.7	11
Copper, Cu	mg/kg	0.5	3.7	6.4	27	34	32
Lead, Pb	mg/kg	1	4	37	26	72	59
Nickel, Ni	mg/kg	0.5	0.9	1.6	11	6.0	7.3
Zinc, Zn	mg/kg	2	6.4	66	49	220	200

Mercury in Soil [AN312] Tested: 30/6/2020

PARAMETER	UOM	LOR	0407_TP223_0.1_20(622 SOIL - 22/6/2020 SE207998.001	0407_TP223_0.5_20(622 SOIL - 22/6/2020 SE207998.002	0407_TP224_0.1_20(622 SOIL - 22/6/2020 SE207998.003	0407_TP224_0.5_20(622 SOIL - 22/6/2020 SE207998.004	0407_TP225_0.1_20(622 SOIL - 22/6/2020 SE207998.005
Mercury	mg/kg	0.05	<0.05	**0.30**	<0.05	**0.07**	**0.25**

PARAMETER	UOM	LOR	0407_TP225_0.5_20(622 SOIL - 22/6/2020 SE207998.007	0407_TP226_0.1_20(622 SOIL - 22/6/2020 SE207998.008	0407_TP226_0.5_20(622 SOIL - 22/6/2020 SE207998.009	0407_TP227_0.1_20(622 SOIL - 22/6/2020 SE207998.010	0407_TP227_0.5_20(622 SOIL - 22/6/2020 SE207998.012
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	**0.11**	<0.05

PARAMETER	UOM	LOR	0407_TP228_0.1_20(622 SOIL - 22/6/2020 SE207998.013	0407_TP228_0.5_20(622 SOIL - 22/6/2020 SE207998.014	0407_TP229_0.1_20(622 SOIL - 22/6/2020 SE207998.016	0407_TP229_0.5_20(622 SOIL - 22/6/2020 SE207998.017	0407_TP230_0.1_20(622 SOIL - 22/6/2020 SE207998.018
Mercury	mg/kg	0.05	**0.06**	<0.05	**0.10**	<0.05	**0.08**

PARAMETER	UOM	LOR	0407_TP230_0.5_20(622 SOIL - 22/6/2020 SE207998.019	0407_QC126_20062: SOIL - 22/6/2020 SE207998.020	0407_QC127_20062: SOIL - 22/6/2020 SE207998.021	0407_QC134_20062: SOIL - 22/6/2020 SE207998.022	0407_QC137_20062: SOIL - 22/6/2020 SE207998.023
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	**0.06**	**0.08**

Moisture Content [AN002] Tested: 29/6/2020

PARAMETER	UOM	LOR	0407_TP223_0.1_20(622 SOIL - 22/6/2020 SE207998.001	0407_TP223_0.5_20(622 SOIL - 22/6/2020 SE207998.002	0407_TP224_0.1_20(622 SOIL - 22/6/2020 SE207998.003	0407_TP224_0.5_20(622 SOIL - 22/6/2020 SE207998.004	0407_TP225_0.1_20(622 SOIL - 22/6/2020 SE207998.005
% Moisture	%w/w	1	15.9	12.1	11.2	20.3	24.6

PARAMETER	UOM	LOR	0407_TP225_0.5_20(622 SOIL - 22/6/2020 SE207998.007	0407_TP226_0.1_20(622 SOIL - 22/6/2020 SE207998.008	0407_TP226_0.5_20(622 SOIL - 22/6/2020 SE207998.009	0407_TP227_0.1_20(622 SOIL - 22/6/2020 SE207998.010	0407_TP227_0.5_20(622 SOIL - 22/6/2020 SE207998.012
% Moisture	%w/w	1	12.5	6.2	8.8	26.2	4.1

PARAMETER	UOM	LOR	0407_TP228_0.1_20(622 SOIL - 22/6/2020 SE207998.013	0407_TP228_0.5_20(622 SOIL - 22/6/2020 SE207998.014	0407_TP229_0.1_20(622 SOIL - 22/6/2020 SE207998.016	0407_TP229_0.5_20(622 SOIL - 22/6/2020 SE207998.017	0407_TP230_0.1_20(622 SOIL - 22/6/2020 SE207998.018
% Moisture	%w/w	1	64.8	3.3	23.7	5.5	45.9

PARAMETER	UOM	LOR	0407_TP230_0.5_20(622 SOIL - 22/6/2020 SE207998.019	0407_QC126_20062: SOIL - 22/6/2020 SE207998.020	0407_QC127_20062: SOIL - 22/6/2020 SE207998.021	0407_QC134_20062: SOIL - 22/6/2020 SE207998.022	0407_QC137_20062: SOIL - 22/6/2020 SE207998.023
% Moisture	%w/w	1	4.8	14.8	11.2	69.8	37.6

PARAMETER	UOM	LOR	0407_QC411_20062: SOIL - 22/6/2020 SE207998.024
% Moisture	%w/w	1	<1.0

Fibre Identification in soil [AN602] Tested: 1/7/2020

PARAMETER	UOM	LOR	0407_TP223_0.1_20(622 SOIL - 22/6/2020 SE207998.001	0407_TP224_0.1_20(622 SOIL - 22/6/2020 SE207998.003	0407_TP225_0.1_20(622 SOIL - 22/6/2020 SE207998.005	0407_TP225_0.25_2(0622 SOIL - 22/6/2020 SE207998.006	0407_TP226_0.1_20(622 SOIL - 22/6/2020 SE207998.008
Asbestos Detected	No unit	-	No	Yes	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	0407_TP227_0.1_20(622 SOIL - 22/6/2020 SE207998.010	0407_TP227_0.3_20(622 SOIL - 22/6/2020 SE207998.011	0407_TP227_0.5_20(622 SOIL - 22/6/2020 SE207998.012	0407_TP228_0.1_20(622 SOIL - 22/6/2020 SE207998.013	0407_TP228_1.2_20(622 SOIL - 22/6/2020 SE207998.015
Asbestos Detected	No unit	-	Yes	No	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	0407_TP229_0.1_20(622 SOIL - 22/6/2020 SE207998.016	0407_TP229_0.5_20(622 SOIL - 22/6/2020 SE207998.017	0407_TP230_0.1_20(622 SOIL - 22/6/2020 SE207998.018	0407_TP230_0.5_20(622 SOIL - 22/6/2020 SE207998.019
Asbestos Detected	No unit	-	Yes	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 1/7/2020

PARAMETER	UOM	LOR	0407_TP223_0.1_20(622 SOIL - 22/6/2020 SE207998.001	0407_TP224_0.1_20(622 SOIL - 22/6/2020 SE207998.003	0407_TP225_0.1_20(622 SOIL - 22/6/2020 SE207998.005	0407_TP225_0.25_2(0622 SOIL - 22/6/2020 SE207998.006	0407_TP226_0.1_20(622 SOIL - 22/6/2020 SE207998.008
Total Sample Weight*	g	1	**641**	**661**	**473**	**566**	**706**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	**0.00366**	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP227_0.1_20(622 SOIL - 22/6/2020 SE207998.010	0407_TP227_0.3_20(622 SOIL - 22/6/2020 SE207998.011	0407_TP227_0.5_20(622 SOIL - 22/6/2020 SE207998.012	0407_TP228_0.1_20(622 SOIL - 22/6/2020 SE207998.013	0407_TP228_1.2_20(622 SOIL - 22/6/2020 SE207998.015
Total Sample Weight*	g	1	**467**	**766**	**729**	**223**	**737**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	**0.0190**	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	**0.004**	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	**0.004**	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP229_0.1_20(622 SOIL - 22/6/2020 SE207998.016	0407_TP229_0.5_20(622 SOIL - 22/6/2020 SE207998.017	0407_TP230_0.1_20(622 SOIL - 22/6/2020 SE207998.018	0407_TP230_0.5_20(622 SOIL - 22/6/2020 SE207998.019
Total Sample Weight*	g	1	**458**	**728**	**415**	**721**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	**0.0331**	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	**0.007**	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	**0.007**	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid, mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents .
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples, Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.
AN605	This technique gravimetrically determines the mass of Bonded Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight. Any fibrous asbestos (FA) found in this fraction will be added to the 2-7mm fraction and its mass recorded there.

AN605	This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free/respirable fibres which are only observed by standard trace analysis as per AN602.
AN605	Bonded asbestos containing material (Bonded ACM) comprises asbestos-containing-material which is sound in condition. Fibrous asbestos (FA) comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material. Asbestos fines (AF) includes free fibres, small fibre bundles and also small fragments of bonded ACM that passes through a 7mm sieve - which implies that the bonded ACM fragments have a substantial degree of damage which increases the potential for fibre release.
AN-605	Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009 and NEPM 1999 (2013) schedule B1 section 4..

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	14

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
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Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207998 R0**
Date Received	23 Jun 2020
Date Reported	03 Jul 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.
Sample # 3: approx 3-4 x0.5mm fibre bundles x2 found loose in sample in >2mm portion.
Sample # 10: Asbestos found as 3x2x2mm cement sheet fragment in >2mm portion.
Sample # 16 Asbestos found as 5x3x2mm cement sheet fragment in >2mm portion.

Asbestos analysed by Approved Identifier Ravee Sivasubramaniam .

SIGNATORIES

[redacted]

Chemist | Senior Organic Chemist/Metals Chemis | Senior Chemist

[redacted]

Organic Section Head | Hygiene Team Leader

RESULTS

Fibre Identification in soil — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE207998.001	0407_TP223_0.1 _200622	Soil	641g Sand,Soil,Rocks ,Plant Matter	22 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE207998.003	0407_TP224_0.1 _200622	Soil	661g Sand,Soil,Rocks	22 Jun 2020	Chrysotile Asbestos Found	<0.01
SE207998.005	0407_TP225_0.1 _200622	Soil	473g Sand,Soil,Plant Matter	22 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE207998.006	0407_TP225_0.2 5_200622	Soil	566g Sand,Soil,Plant Matter	22 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE207998.008	0407_TP226_0.1 _200622	Soil	706g Sand,Plant Matter	22 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE207998.010	0407_TP227_0.1 _200622	Soil	467g Clay,Sand,Soil, Rocks,Plant Matter	22 Jun 2020	Chrysotile Asbestos Found Organic Fibres Detected	<0.01
SE207998.011	0407_TP227_0.3 _200622	Soil	766g Sand,Rocks	22 Jun 2020	No Asbestos Found Synthetic Mineral Fibres Detected Organic Fibres Detected	<0.01
SE207998.012	0407_TP227_0.5 _200622	Soil	729g Sand,Rocks	22 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE207998.013	0407_TP228_0.1 _200622	Soil	223g Sand,Soil,Plant Matter	22 Jun 2020	No Asbestos Found Synthetic Mineral Fibres Detected Organic Fibres Detected	<0.01
SE207998.015	0407_TP228_1.2 _200622	Soil	737g Sand	22 Jun 2020	No Asbestos Found	<0.01
SE207998.016	0407_TP229_0.1 _200622	Soil	458g Clay,Sand,Soil, Rocks	22 Jun 2020	Chrysotile Asbestos Found Synthetic Mineral Fibres Detected Organic Fibres Detected	<0.01
SE207998.017	0407_TP229_0.5 _200622	Soil	728g Sand	22 Jun 2020	No Asbestos Found	<0.01
SE207998.018	0407_TP230_0.1 _200622	Soil	415g Clay,Sand,Soil, Rocks,Plant Matter	22 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE207998.019	0407_TP230_0.5 _200622	Soil	721g Sand	22 Jun 2020	No Asbestos Found	<0.01

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 1/7/2020

PARAMETER	UOM	LOR	0407_TP223_0.1_20(622 SOIL - 22/6/2020 SE207998.001	0407_TP224_0.1_20(622 SOIL - 22/6/2020 SE207998.003	0407_TP225_0.1_20(622 SOIL - 22/6/2020 SE207998.005	0407_TP225_0.25_2(0622 SOIL - 22/6/2020 SE207998.006	0407_TP226_0.1_20(622 SOIL - 22/6/2020 SE207998.008
Total Sample Weight*	g	1	**641**	**661**	**473**	**566**	**706**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	**0.00366**	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP227_0.1_20(622 SOIL - 22/6/2020 SE207998.010	0407_TP227_0.3_20(622 SOIL - 22/6/2020 SE207998.011	0407_TP227_0.5_20(622 SOIL - 22/6/2020 SE207998.012	0407_TP228_0.1_20(622 SOIL - 22/6/2020 SE207998.013	0407_TP228_1.2_20(622 SOIL - 22/6/2020 SE207998.015
Total Sample Weight*	g	1	**467**	**766**	**729**	**223**	**737**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	**0.0190**	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	**0.004**	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	**0.004**	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP229_0.1_20(622 SOIL - 22/6/2020 SE207998.016	0407_TP229_0.5_20(622 SOIL - 22/6/2020 SE207998.017	0407_TP230_0.1_20(622 SOIL - 22/6/2020 SE207998.018	0407_TP230_0.5_20(622 SOIL - 22/6/2020 SE207998.019
Total Sample Weight*	g	1	**458**	**728**	**415**	**721**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	**0.0331**	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	**0.007**	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	**0.007**	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-

METHOD SUMMARY

METHOD	METHODOLOGY SUMMARY
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples , Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable ’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.
AN605	This technique gravimetrically determines the mass of Bonded Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight. Any fibrous asbestos (FA) found in this fraction will be added to the 2-7mm fraction and its mass recorded there.
AN605	This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free/respirable fibres which are only observed by standard trace analysis as per AN602.
AN605	Bonded asbestos containing material (Bonded ACM) comprises asbestos-containing-material which is sound in condition. Fibrous asbestos (FA) comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material. Asbestos fines (AF) includes free fibres, small fibre bundles and also small fragments of bonded ACM that passes through a 7mm sieve - which implies that the bonded ACM fragments have a substantial degree of damage which increases the potential for fibre release.
AN-605	Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009 and NEPM 1999 (2013) schedule B1 section 4..

FOOTNOTES

Amosite	-	Brown Asbestos	NA	-	Not Analysed
Chrysotile	-	White Asbestos	LNR	-	Listed, Not Required
Crocidolite	-	Blue Asbestos	*	-	NATA accreditation does not cover the performance of this service.
Amphiboles	-	Amosite and/or Crocidolite	**	-	Indicative data, theoretical holding time exceeded.

(In reference to soil samples only) This report does not comply with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment and Remediation and Management of Asbestos Contaminated sites in Western Australia - May 2009.

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.

Where reported: 'Asbestos Detected': Asbestos detected by polarised light microscopy, including dispersion staining.
Where reported: 'No Asbestos Found': No Asbestos Found by polarised light microscopy, including dispersion staining.
Where reported: 'UMF Detected': Mineral fibres of unknown type detected by polarised light microscopy, including dispersion staining. Confirmation by another independent analytical technique may be necessary.

Even after disintegration it can be very difficult, or impossible, to detect the presence of asbestos in some asbestos-containing bulk materials using polarised light microscopy. This is due to the low grade or small length or diameter of asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE207998 R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	25

LABORATORY DETAILS

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Address	Unit 16, 33 Maddox St Alexandria NSW 2015
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Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207998 R0**
Date Received	23 Jun 2020
Date Reported	03 Jul 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Surrogate	VOC's in Soil	1 item
	Volatile Petroleum Hydrocarbons in Soil	1 item
Duplicate	OC Pesticides in Soil	1 item
	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	1 item
	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	1 item
Matrix Spike	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	1 item
	Volatile Petroleum Hydrocarbons in Soil	1 item
	Volatile Petroleum Hydrocarbons in Soil	1 item

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	25 Soil
Date documentation received	25/6/20@9:45AM	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	5.4°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE207998 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Fibre Identification in soil

Method: ME-(AU)-[ENV]AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP223_0.1_200622	SE207998.001	LB203178	22 Jun 2020	23 Jun 2020	22 Jun 2021	01 Jul 2020	22 Jun 2021	02 Jul 2020
0407_TP224_0.1_200622	SE207998.003	LB203178	22 Jun 2020	23 Jun 2020	22 Jun 2021	01 Jul 2020	22 Jun 2021	02 Jul 2020
0407_TP225_0.1_200622	SE207998.005	LB203178	22 Jun 2020	23 Jun 2020	22 Jun 2021	01 Jul 2020	22 Jun 2021	02 Jul 2020
0407_TP225_0.25_200622	SE207998.006	LB203178	22 Jun 2020	23 Jun 2020	22 Jun 2021	01 Jul 2020	22 Jun 2021	02 Jul 2020
0407_TP226_0.1_200622	SE207998.008	LB203178	22 Jun 2020	23 Jun 2020	22 Jun 2021	01 Jul 2020	22 Jun 2021	02 Jul 2020
0407_TP227_0.1_200622	SE207998.010	LB203178	22 Jun 2020	23 Jun 2020	22 Jun 2021	01 Jul 2020	22 Jun 2021	02 Jul 2020
0407_TP227_0.3_200622	SE207998.011	LB203178	22 Jun 2020	23 Jun 2020	22 Jun 2021	01 Jul 2020	22 Jun 2021	02 Jul 2020
0407_TP227_0.5_200622	SE207998.012	LB203178	22 Jun 2020	23 Jun 2020	22 Jun 2021	01 Jul 2020	22 Jun 2021	02 Jul 2020
0407_TP228_0.1_200622	SE207998.013	LB203178	22 Jun 2020	23 Jun 2020	22 Jun 2021	01 Jul 2020	22 Jun 2021	02 Jul 2020
0407_TP228_1.2_200622	SE207998.015	LB203178	22 Jun 2020	23 Jun 2020	22 Jun 2021	01 Jul 2020	22 Jun 2021	02 Jul 2020
0407_TP229_0.1_200622	SE207998.016	LB203178	22 Jun 2020	23 Jun 2020	22 Jun 2021	01 Jul 2020	22 Jun 2021	02 Jul 2020
0407_TP229_0.5_200622	SE207998.017	LB203178	22 Jun 2020	23 Jun 2020	22 Jun 2021	01 Jul 2020	22 Jun 2021	02 Jul 2020
0407_TP230_0.1_200622	SE207998.018	LB203178	22 Jun 2020	23 Jun 2020	22 Jun 2021	01 Jul 2020	22 Jun 2021	02 Jul 2020
0407_TP230_0.5_200622	SE207998.019	LB203178	22 Jun 2020	23 Jun 2020	22 Jun 2021	01 Jul 2020	22 Jun 2021	02 Jul 2020

Gravimetric Determination of Asbestos in Soil

Method: ME-(AU)-[ENV]AN605

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP223_0.1_200622	SE207998.001	LB203178	22 Jun 2020	23 Jun 2020	19 Dec 2020	01 Jul 2020	19 Dec 2020	02 Jul 2020
0407_TP224_0.1_200622	SE207998.003	LB203178	22 Jun 2020	23 Jun 2020	19 Dec 2020	01 Jul 2020	19 Dec 2020	02 Jul 2020
0407_TP225_0.1_200622	SE207998.005	LB203178	22 Jun 2020	23 Jun 2020	19 Dec 2020	01 Jul 2020	19 Dec 2020	02 Jul 2020
0407_TP225_0.25_200622	SE207998.006	LB203178	22 Jun 2020	23 Jun 2020	19 Dec 2020	01 Jul 2020	19 Dec 2020	02 Jul 2020
0407_TP226_0.1_200622	SE207998.008	LB203178	22 Jun 2020	23 Jun 2020	19 Dec 2020	01 Jul 2020	19 Dec 2020	02 Jul 2020
0407_TP227_0.1_200622	SE207998.010	LB203178	22 Jun 2020	23 Jun 2020	19 Dec 2020	01 Jul 2020	19 Dec 2020	02 Jul 2020
0407_TP227_0.3_200622	SE207998.011	LB203178	22 Jun 2020	23 Jun 2020	19 Dec 2020	01 Jul 2020	19 Dec 2020	02 Jul 2020
0407_TP227_0.5_200622	SE207998.012	LB203178	22 Jun 2020	23 Jun 2020	19 Dec 2020	01 Jul 2020	19 Dec 2020	02 Jul 2020
0407_TP228_0.1_200622	SE207998.013	LB203178	22 Jun 2020	23 Jun 2020	19 Dec 2020	01 Jul 2020	19 Dec 2020	02 Jul 2020
0407_TP228_1.2_200622	SE207998.015	LB203178	22 Jun 2020	23 Jun 2020	19 Dec 2020	01 Jul 2020	19 Dec 2020	02 Jul 2020
0407_TP229_0.1_200622	SE207998.016	LB203178	22 Jun 2020	23 Jun 2020	19 Dec 2020	01 Jul 2020	19 Dec 2020	02 Jul 2020
0407_TP229_0.5_200622	SE207998.017	LB203178	22 Jun 2020	23 Jun 2020	19 Dec 2020	01 Jul 2020	19 Dec 2020	02 Jul 2020
0407_TP230_0.1_200622	SE207998.018	LB203178	22 Jun 2020	23 Jun 2020	19 Dec 2020	01 Jul 2020	19 Dec 2020	02 Jul 2020
0407_TP230_0.5_200622	SE207998.019	LB203178	22 Jun 2020	23 Jun 2020	19 Dec 2020	01 Jul 2020	19 Dec 2020	02 Jul 2020

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP223_0.1_200622	SE207998.001	LB203113	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020
0407_TP223_0.5_200622	SE207998.002	LB203113	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020
0407_TP224_0.1_200622	SE207998.003	LB203113	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020
0407_TP224_0.5_200622	SE207998.004	LB203113	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020
0407_TP225_0.1_200622	SE207998.005	LB203113	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020
0407_TP225_0.5_200622	SE207998.007	LB203113	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020
0407_TP226_0.1_200622	SE207998.008	LB203113	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020
0407_TP226_0.5_200622	SE207998.009	LB203113	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020
0407_TP227_0.1_200622	SE207998.010	LB203113	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020
0407_TP227_0.5_200622	SE207998.012	LB203113	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020
0407_TP228_0.1_200622	SE207998.013	LB203113	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020
0407_TP228_0.5_200622	SE207998.014	LB203113	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020
0407_TP229_0.1_200622	SE207998.016	LB203113	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020
0407_TP229_0.5_200622	SE207998.017	LB203113	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020
0407_TP230_0.1_200622	SE207998.018	LB203113	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020
0407_TP230_0.5_200622	SE207998.019	LB203113	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020
0407_QC126_200622	SE207998.020	LB203113	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020
0407_QC127_200622	SE207998.021	LB203113	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020
0407_QC134_200622	SE207998.022	LB203118	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020
0407_QC137_200622	SE207998.023	LB203118	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP223_0.1_200622	SE207998.001	LB202979	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	02 Jul 2020
0407_TP223_0.5_200622	SE207998.002	LB202979	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	02 Jul 2020
0407_TP224_0.1_200622	SE207998.003	LB202979	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	02 Jul 2020
0407_TP224_0.5_200622	SE207998.004	LB202979	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	02 Jul 2020

HOLDING TIME SUMMARY

SE207998 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Moisture Content (continued)

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP225_0.1_200622	SE207998.005	LB202979	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	02 Jul 2020
0407_TP225_0.5_200622	SE207998.007	LB202980	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	02 Jul 2020
0407_TP226_0.1_200622	SE207998.008	LB202980	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	02 Jul 2020
0407_TP226_0.5_200622	SE207998.009	LB202980	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	02 Jul 2020
0407_TP227_0.1_200622	SE207998.010	LB202980	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	02 Jul 2020
0407_TP227_0.5_200622	SE207998.012	LB202980	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	02 Jul 2020
0407_TP228_0.1_200622	SE207998.013	LB202980	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	02 Jul 2020
0407_TP228_0.5_200622	SE207998.014	LB202980	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	02 Jul 2020
0407_TP229_0.1_200622	SE207998.016	LB202980	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	02 Jul 2020
0407_TP229_0.5_200622	SE207998.017	LB202980	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	02 Jul 2020
0407_TP230_0.1_200622	SE207998.018	LB202980	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	02 Jul 2020
0407_TP230_0.5_200622	SE207998.019	LB202980	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	02 Jul 2020
0407_QC126_200622	SE207998.020	LB202980	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	02 Jul 2020
0407_QC127_200622	SE207998.021	LB202980	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	02 Jul 2020
0407_QC134_200622	SE207998.022	LB202980	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	02 Jul 2020
0407_QC137_200622	SE207998.023	LB202980	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	02 Jul 2020
0407_QC411_200622	SE207998.024	LB202980	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	02 Jul 2020

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP223_0.1_200622	SE207998.001	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP223_0.5_200622	SE207998.002	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP224_0.1_200622	SE207998.003	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP224_0.5_200622	SE207998.004	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP225_0.1_200622	SE207998.005	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP225_0.5_200622	SE207998.007	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP226_0.1_200622	SE207998.008	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP226_0.5_200622	SE207998.009	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP227_0.1_200622	SE207998.010	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP227_0.5_200622	SE207998.012	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP228_0.1_200622	SE207998.013	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP228_0.5_200622	SE207998.014	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP229_0.1_200622	SE207998.016	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP229_0.5_200622	SE207998.017	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP230_0.1_200622	SE207998.018	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP230_0.5_200622	SE207998.019	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_QC126_200622	SE207998.020	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_QC127_200622	SE207998.021	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_QC134_200622	SE207998.022	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_QC137_200622	SE207998.023	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP223_0.1_200622	SE207998.001	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP223_0.5_200622	SE207998.002	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP224_0.1_200622	SE207998.003	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP224_0.5_200622	SE207998.004	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP225_0.1_200622	SE207998.005	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP225_0.5_200622	SE207998.007	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP226_0.1_200622	SE207998.008	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP226_0.5_200622	SE207998.009	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP227_0.1_200622	SE207998.010	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP227_0.5_200622	SE207998.012	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP228_0.1_200622	SE207998.013	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP228_0.5_200622	SE207998.014	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP229_0.1_200622	SE207998.016	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP229_0.5_200622	SE207998.017	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP230_0.1_200622	SE207998.018	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP230_0.5_200622	SE207998.019	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_QC126_200622	SE207998.020	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_QC127_200622	SE207998.021	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020

HOLDING TIME SUMMARY

SE207998 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC134_200622	SE207998.022	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_QC137_200622	SE207998.023	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP223_0.1_200622	SE207998.001	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP223_0.5_200622	SE207998.002	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP224_0.1_200622	SE207998.003	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP224_0.5_200622	SE207998.004	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP225_0.1_200622	SE207998.005	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP225_0.5_200622	SE207998.007	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP226_0.1_200622	SE207998.008	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP226_0.5_200622	SE207998.009	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP227_0.1_200622	SE207998.010	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP227_0.5_200622	SE207998.012	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP228_0.1_200622	SE207998.013	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP228_0.5_200622	SE207998.014	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP229_0.1_200622	SE207998.016	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP229_0.5_200622	SE207998.017	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP230_0.1_200622	SE207998.018	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP230_0.5_200622	SE207998.019	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_QC126_200622	SE207998.020	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_QC127_200622	SE207998.021	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_QC134_200622	SE207998.022	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_QC137_200622	SE207998.023	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP223_0.1_200622	SE207998.001	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP223_0.5_200622	SE207998.002	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP224_0.1_200622	SE207998.003	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP224_0.5_200622	SE207998.004	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP225_0.1_200622	SE207998.005	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP225_0.5_200622	SE207998.007	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP226_0.1_200622	SE207998.008	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP226_0.5_200622	SE207998.009	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP227_0.1_200622	SE207998.010	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP227_0.5_200622	SE207998.012	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP228_0.1_200622	SE207998.013	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP228_0.5_200622	SE207998.014	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP229_0.1_200622	SE207998.016	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP229_0.5_200622	SE207998.017	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP230_0.1_200622	SE207998.018	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP230_0.5_200622	SE207998.019	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_QC126_200622	SE207998.020	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_QC127_200622	SE207998.021	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_QC134_200622	SE207998.022	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_QC137_200622	SE207998.023	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP223_0.1_200622	SE207998.001	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP223_0.5_200622	SE207998.002	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP224_0.1_200622	SE207998.003	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP224_0.5_200622	SE207998.004	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP225_0.1_200622	SE207998.005	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP225_0.5_200622	SE207998.007	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP226_0.1_200622	SE207998.008	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP226_0.5_200622	SE207998.009	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP227_0.1_200622	SE207998.010	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP227_0.5_200622	SE207998.012	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020

HOLDING TIME SUMMARY

SE207998 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP228_0.1_200622	SE207998.013	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP228_0.5_200622	SE207998.014	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP229_0.1_200622	SE207998.016	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP229_0.5_200622	SE207998.017	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP230_0.1_200622	SE207998.018	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP230_0.5_200622	SE207998.019	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_QC126_200622	SE207998.020	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_QC127_200622	SE207998.021	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_QC134_200622	SE207998.022	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_QC137_200622	SE207998.023	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP223_0.1_200622	SE207998.001	LB203101	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	02 Jul 2020
0407_TP223_0.5_200622	SE207998.002	LB203101	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	02 Jul 2020
0407_TP224_0.1_200622	SE207998.003	LB203101	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	02 Jul 2020
0407_TP224_0.5_200622	SE207998.004	LB203101	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	02 Jul 2020
0407_TP225_0.1_200622	SE207998.005	LB203101	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	02 Jul 2020
0407_TP225_0.5_200622	SE207998.007	LB203101	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	02 Jul 2020
0407_TP226_0.1_200622	SE207998.008	LB203101	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	02 Jul 2020
0407_TP226_0.5_200622	SE207998.009	LB203101	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	02 Jul 2020
0407_TP227_0.1_200622	SE207998.010	LB203101	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	02 Jul 2020
0407_TP227_0.5_200622	SE207998.012	LB203101	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	02 Jul 2020
0407_TP228_0.1_200622	SE207998.013	LB203101	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	02 Jul 2020
0407_TP228_0.5_200622	SE207998.014	LB203101	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	02 Jul 2020
0407_TP229_0.1_200622	SE207998.016	LB203101	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	02 Jul 2020
0407_TP229_0.5_200622	SE207998.017	LB203101	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	02 Jul 2020
0407_TP230_0.1_200622	SE207998.018	LB203101	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	02 Jul 2020
0407_TP230_0.5_200622	SE207998.019	LB203101	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	02 Jul 2020
0407_QC126_200622	SE207998.020	LB203101	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	02 Jul 2020
0407_QC127_200622	SE207998.021	LB203101	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	02 Jul 2020
0407_QC134_200622	SE207998.022	LB203102	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	02 Jul 2020
0407_QC137_200622	SE207998.023	LB203102	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	02 Jul 2020

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP223_0.1_200622	SE207998.001	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP223_0.5_200622	SE207998.002	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP224_0.1_200622	SE207998.003	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP224_0.5_200622	SE207998.004	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP225_0.1_200622	SE207998.005	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP225_0.5_200622	SE207998.007	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP226_0.1_200622	SE207998.008	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP226_0.5_200622	SE207998.009	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP227_0.1_200622	SE207998.010	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP227_0.5_200622	SE207998.012	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP228_0.1_200622	SE207998.013	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP228_0.5_200622	SE207998.014	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP229_0.1_200622	SE207998.016	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP229_0.5_200622	SE207998.017	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP230_0.1_200622	SE207998.018	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP230_0.5_200622	SE207998.019	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_QC126_200622	SE207998.020	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_QC127_200622	SE207998.021	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_QC134_200622	SE207998.022	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_QC137_200622	SE207998.023	LB202976	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP223_0.1_200622	SE207998.001	LB202969	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP223_0.5_200622	SE207998.002	LB202969	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020

HOLDING TIME SUMMARY

SE207998 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP224_0.1_200622	SE207998.003	LB202969	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP224_0.5_200622	SE207998.004	LB202969	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP225_0.1_200622	SE207998.005	LB202969	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP225_0.5_200622	SE207998.007	LB202970	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP226_0.1_200622	SE207998.008	LB202970	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP226_0.5_200622	SE207998.009	LB202970	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP227_0.1_200622	SE207998.010	LB202970	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP227_0.5_200622	SE207998.012	LB202970	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP228_0.1_200622	SE207998.013	LB202970	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP228_0.5_200622	SE207998.014	LB202970	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP229_0.1_200622	SE207998.016	LB202970	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP229_0.5_200622	SE207998.017	LB202970	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP230_0.1_200622	SE207998.018	LB202970	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP230_0.5_200622	SE207998.019	LB202970	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_QC126_200622	SE207998.020	LB202970	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_QC127_200622	SE207998.021	LB202970	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_QC134_200622	SE207998.022	LB202970	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_QC137_200622	SE207998.023	LB202970	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_QC411_200622	SE207998.024	LB202970	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_QC511_200622	SE207998.025	LB202970	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP223_0.1_200622	SE207998.001	LB202969	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP223_0.5_200622	SE207998.002	LB202969	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP224_0.1_200622	SE207998.003	LB202969	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP224_0.5_200622	SE207998.004	LB202969	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP225_0.1_200622	SE207998.005	LB202969	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP225_0.5_200622	SE207998.007	LB202970	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP226_0.1_200622	SE207998.008	LB202970	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP226_0.5_200622	SE207998.009	LB202970	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP227_0.1_200622	SE207998.010	LB202970	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP227_0.5_200622	SE207998.012	LB202970	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP228_0.1_200622	SE207998.013	LB202970	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP228_0.5_200622	SE207998.014	LB202970	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP229_0.1_200622	SE207998.016	LB202970	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP229_0.5_200622	SE207998.017	LB202970	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP230_0.1_200622	SE207998.018	LB202970	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP230_0.5_200622	SE207998.019	LB202970	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_QC126_200622	SE207998.020	LB202970	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_QC127_200622	SE207998.021	LB202970	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_QC134_200622	SE207998.022	LB202970	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_QC137_200622	SE207998.023	LB202970	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_QC411_200622	SE207998.024	LB202970	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_QC511_200622	SE207998.025	LB202970	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP223_0.1_200622	SE207998.001	%	60 - 130%	113
	0407_TP223_0.5_200622	SE207998.002	%	60 - 130%	110
	0407_TP224_0.1_200622	SE207998.003	%	60 - 130%	110
	0407_TP224_0.5_200622	SE207998.004	%	60 - 130%	105
	0407_TP225_0.1_200622	SE207998.005	%	60 - 130%	109
	0407_TP225_0.5_200622	SE207998.007	%	60 - 130%	105
	0407_TP226_0.1_200622	SE207998.008	%	60 - 130%	93
	0407_TP226_0.5_200622	SE207998.009	%	60 - 130%	96
	0407_TP227_0.1_200622	SE207998.010	%	60 - 130%	97
	0407_TP227_0.5_200622	SE207998.012	%	60 - 130%	101
	0407_TP228_0.1_200622	SE207998.013	%	60 - 130%	105
	0407_TP228_0.5_200622	SE207998.014	%	60 - 130%	93
	0407_TP229_0.1_200622	SE207998.016	%	60 - 130%	105
	0407_TP229_0.5_200622	SE207998.017	%	60 - 130%	92
	0407_TP230_0.1_200622	SE207998.018	%	60 - 130%	106
	0407_TP230_0.5_200622	SE207998.019	%	60 - 130%	97
	0407_QC126_200622	SE207998.020	%	60 - 130%	94
	0407_QC127_200622	SE207998.021	%	60 - 130%	101
	0407_QC134_200622	SE207998.022	%	60 - 130%	101
	0407_QC137_200622	SE207998.023	%	60 - 130%	112

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP223_0.1_200622	SE207998.001	%	60 - 130%	76
	0407_TP223_0.5_200622	SE207998.002	%	60 - 130%	82
	0407_TP224_0.1_200622	SE207998.003	%	60 - 130%	85
	0407_TP224_0.5_200622	SE207998.004	%	60 - 130%	80
	0407_TP225_0.1_200622	SE207998.005	%	60 - 130%	95
	0407_TP225_0.5_200622	SE207998.007	%	60 - 130%	82
	0407_TP226_0.1_200622	SE207998.008	%	60 - 130%	72
	0407_TP226_0.5_200622	SE207998.009	%	60 - 130%	72
	0407_TP227_0.1_200622	SE207998.010	%	60 - 130%	85
	0407_TP227_0.5_200622	SE207998.012	%	60 - 130%	90
	0407_TP228_0.1_200622	SE207998.013	%	60 - 130%	94
	0407_TP228_0.5_200622	SE207998.014	%	60 - 130%	76
	0407_TP229_0.1_200622	SE207998.016	%	60 - 130%	79
	0407_TP229_0.5_200622	SE207998.017	%	60 - 130%	80
	0407_TP230_0.1_200622	SE207998.018	%	60 - 130%	89
	0407_TP230_0.5_200622	SE207998.019	%	60 - 130%	74
	0407_QC126_200622	SE207998.020	%	60 - 130%	86
	0407_QC127_200622	SE207998.021	%	60 - 130%	85
	0407_QC134_200622	SE207998.022	%	60 - 130%	92
	0407_QC137_200622	SE207998.023	%	60 - 130%	87
d14-p-terphenyl (Surrogate)	0407_TP223_0.1_200622	SE207998.001	%	60 - 130%	82
	0407_TP223_0.5_200622	SE207998.002	%	60 - 130%	80
	0407_TP224_0.1_200622	SE207998.003	%	60 - 130%	89
	0407_TP224_0.5_200622	SE207998.004	%	60 - 130%	97
	0407_TP225_0.1_200622	SE207998.005	%	60 - 130%	99
	0407_TP225_0.5_200622	SE207998.007	%	60 - 130%	97
	0407_TP226_0.1_200622	SE207998.008	%	60 - 130%	91
	0407_TP226_0.5_200622	SE207998.009	%	60 - 130%	83
	0407_TP227_0.1_200622	SE207998.010	%	60 - 130%	90
	0407_TP227_0.5_200622	SE207998.012	%	60 - 130%	92
	0407_TP228_0.1_200622	SE207998.013	%	60 - 130%	102
	0407_TP228_0.5_200622	SE207998.014	%	60 - 130%	86
	0407_TP229_0.1_200622	SE207998.016	%	60 - 130%	90
	0407_TP229_0.5_200622	SE207998.017	%	60 - 130%	83
	0407_TP230_0.1_200622	SE207998.018	%	60 - 130%	96
	0407_TP230_0.5_200622	SE207998.019	%	60 - 130%	89
	0407_QC126_200622	SE207998.020	%	60 - 130%	94
	0407_QC127_200622	SE207998.021	%	60 - 130%	87

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OP Pesticides in Soil (continued) — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d14-p-terphenyl (Surrogate)	0407_QC134_200622	SE207998.022	%	60 - 130%	94
	0407_QC137_200622	SE207998.023	%	60 - 130%	95

PAH (Polynuclear Aromatic Hydrocarbons) in Soil — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP223_0.1_200622	SE207998.001	%	70 - 130%	76
	0407_TP223_0.5_200622	SE207998.002	%	70 - 130%	82
	0407_TP224_0.1_200622	SE207998.003	%	70 - 130%	85
	0407_TP224_0.5_200622	SE207998.004	%	70 - 130%	80
	0407_TP225_0.1_200622	SE207998.005	%	70 - 130%	95
	0407_TP225_0.5_200622	SE207998.007	%	70 - 130%	82
	0407_TP226_0.1_200622	SE207998.008	%	70 - 130%	72
	0407_TP226_0.5_200622	SE207998.009	%	70 - 130%	72
	0407_TP227_0.1_200622	SE207998.010	%	70 - 130%	85
	0407_TP227_0.5_200622	SE207998.012	%	70 - 130%	90
	0407_TP228_0.1_200622	SE207998.013	%	70 - 130%	94
	0407_TP228_0.5_200622	SE207998.014	%	70 - 130%	76
	0407_TP229_0.1_200622	SE207998.016	%	70 - 130%	79
	0407_TP229_0.5_200622	SE207998.017	%	70 - 130%	80
	0407_TP230_0.1_200622	SE207998.018	%	70 - 130%	89
	0407_TP230_0.5_200622	SE207998.019	%	70 - 130%	74
	0407_QC126_200622	SE207998.020	%	70 - 130%	86
	0407_QC127_200622	SE207998.021	%	70 - 130%	85
	0407_QC134_200622	SE207998.022	%	70 - 130%	92
	0407_QC137_200622	SE207998.023	%	70 - 130%	87
d14-p-terphenyl (Surrogate)	0407_TP223_0.1_200622	SE207998.001	%	70 - 130%	82
	0407_TP223_0.5_200622	SE207998.002	%	70 - 130%	80
	0407_TP224_0.1_200622	SE207998.003	%	70 - 130%	89
	0407_TP224_0.5_200622	SE207998.004	%	70 - 130%	97
	0407_TP225_0.1_200622	SE207998.005	%	70 - 130%	99
	0407_TP225_0.5_200622	SE207998.007	%	70 - 130%	97
	0407_TP226_0.1_200622	SE207998.008	%	70 - 130%	91
	0407_TP226_0.5_200622	SE207998.009	%	70 - 130%	83
	0407_TP227_0.1_200622	SE207998.010	%	70 - 130%	90
	0407_TP227_0.5_200622	SE207998.012	%	70 - 130%	92
	0407_TP228_0.1_200622	SE207998.013	%	70 - 130%	102
	0407_TP228_0.5_200622	SE207998.014	%	70 - 130%	86
	0407_TP229_0.1_200622	SE207998.016	%	70 - 130%	90
	0407_TP229_0.5_200622	SE207998.017	%	70 - 130%	83
	0407_TP230_0.1_200622	SE207998.018	%	70 - 130%	96
	0407_TP230_0.5_200622	SE207998.019	%	70 - 130%	89
	0407_QC126_200622	SE207998.020	%	70 - 130%	94
	0407_QC127_200622	SE207998.021	%	70 - 130%	87
	0407_QC134_200622	SE207998.022	%	70 - 130%	94
	0407_QC137_200622	SE207998.023	%	70 - 130%	95
d5-nitrobenzene (Surrogate)	0407_TP223_0.1_200622	SE207998.001	%	70 - 130%	85
	0407_TP223_0.5_200622	SE207998.002	%	70 - 130%	82
	0407_TP224_0.1_200622	SE207998.003	%	70 - 130%	87
	0407_TP224_0.5_200622	SE207998.004	%	70 - 130%	84
	0407_TP225_0.1_200622	SE207998.005	%	70 - 130%	95
	0407_TP225_0.5_200622	SE207998.007	%	70 - 130%	85
	0407_TP226_0.1_200622	SE207998.008	%	70 - 130%	86
	0407_TP226_0.5_200622	SE207998.009	%	70 - 130%	80
	0407_TP227_0.1_200622	SE207998.010	%	70 - 130%	86
	0407_TP227_0.5_200622	SE207998.012	%	70 - 130%	90
	0407_TP228_0.1_200622	SE207998.013	%	70 - 130%	90
	0407_TP228_0.5_200622	SE207998.014	%	70 - 130%	85
	0407_TP229_0.1_200622	SE207998.016	%	70 - 130%	86
	0407_TP229_0.5_200622	SE207998.017	%	70 - 130%	78
	0407_TP230_0.1_200622	SE207998.018	%	70 - 130%	90
	0407_TP230_0.5_200622	SE207998.019	%	70 - 130%	85

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d5-nitrobenzene (Surrogate)	0407_QC126_200622	SE207998.020	%	70 - 130%	87
	0407_QC127_200622	SE207998.021	%	70 - 130%	85
	0407_QC134_200622	SE207998.022	%	70 - 130%	92
	0407_QC137_200622	SE207998.023	%	70 - 130%	94

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP223_0.1_200622	SE207998.001	%	60 - 130%	113
	0407_TP223_0.5_200622	SE207998.002	%	60 - 130%	110
	0407_TP224_0.1_200622	SE207998.003	%	60 - 130%	110
	0407_TP224_0.5_200622	SE207998.004	%	60 - 130%	105
	0407_TP225_0.1_200622	SE207998.005	%	60 - 130%	109
	0407_TP225_0.5_200622	SE207998.007	%	60 - 130%	105
	0407_TP226_0.1_200622	SE207998.008	%	60 - 130%	93
	0407_TP226_0.5_200622	SE207998.009	%	60 - 130%	96
	0407_TP227_0.1_200622	SE207998.010	%	60 - 130%	97
	0407_TP227_0.5_200622	SE207998.012	%	60 - 130%	101
	0407_TP228_0.1_200622	SE207998.013	%	60 - 130%	105
	0407_TP228_0.5_200622	SE207998.014	%	60 - 130%	93
	0407_TP229_0.1_200622	SE207998.016	%	60 - 130%	105
	0407_TP229_0.5_200622	SE207998.017	%	60 - 130%	92
	0407_TP230_0.1_200622	SE207998.018	%	60 - 130%	106
	0407_TP230_0.5_200622	SE207998.019	%	60 - 130%	97
	0407_QC126_200622	SE207998.020	%	60 - 130%	94
	0407_QC127_200622	SE207998.021	%	60 - 130%	101
	0407_QC134_200622	SE207998.022	%	60 - 130%	101
	0407_QC137_200622	SE207998.023	%	60 - 130%	112

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	0407_TP223_0.1_200622	SE207998.001	%	70 - 130%	74
	0407_TP223_0.5_200622	SE207998.002	%	70 - 130%	75
	0407_TP224_0.1_200622	SE207998.003	%	70 - 130%	75
	0407_TP224_0.5_200622	SE207998.004	%	70 - 130%	79
	0407_TP225_0.1_200622	SE207998.005	%	70 - 130%	79
	0407_TP225_0.5_200622	SE207998.007	%	70 - 130%	82
	0407_TP226_0.1_200622	SE207998.008	%	70 - 130%	82
	0407_TP226_0.5_200622	SE207998.009	%	70 - 130%	83
	0407_TP227_0.1_200622	SE207998.010	%	70 - 130%	83
	0407_TP227_0.5_200622	SE207998.012	%	70 - 130%	85
	0407_TP228_0.1_200622	SE207998.013	%	70 - 130%	99
	0407_TP228_0.5_200622	SE207998.014	%	70 - 130%	87
	0407_TP229_0.1_200622	SE207998.016	%	70 - 130%	85
	0407_TP229_0.5_200622	SE207998.017	%	70 - 130%	86
	0407_TP230_0.1_200622	SE207998.018	%	70 - 130%	87
	0407_TP230_0.5_200622	SE207998.019	%	70 - 130%	86
	0407_QC126_200622	SE207998.020	%	70 - 130%	85
	0407_QC127_200622	SE207998.021	%	70 - 130%	88
	0407_QC134_200622	SE207998.022	%	70 - 130%	98
	0407_QC137_200622	SE207998.023	%	70 - 130%	94
d5-phenol (Surrogate)	0407_TP223_0.1_200622	SE207998.001	%	50 - 130%	74
	0407_TP223_0.5_200622	SE207998.002	%	50 - 130%	76
	0407_TP224_0.1_200622	SE207998.003	%	50 - 130%	74
	0407_TP224_0.5_200622	SE207998.004	%	50 - 130%	76
	0407_TP225_0.1_200622	SE207998.005	%	50 - 130%	78
	0407_TP225_0.5_200622	SE207998.007	%	50 - 130%	75
	0407_TP226_0.1_200622	SE207998.008	%	50 - 130%	75
	0407_TP226_0.5_200622	SE207998.009	%	50 - 130%	75
	0407_TP227_0.1_200622	SE207998.010	%	50 - 130%	74
	0407_TP227_0.5_200622	SE207998.012	%	50 - 130%	76
	0407_TP228_0.1_200622	SE207998.013	%	50 - 130%	87
	0407_TP228_0.5_200622	SE207998.014	%	50 - 130%	75

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil (continued) — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d5-phenol (Surrogate)	0407_TP229_0.1_200622	SE207998.016	%	50 - 130%	74
	0407_TP229_0.5_200622	SE207998.017	%	50 - 130%	75
	0407_TP230_0.1_200622	SE207998.018	%	50 - 130%	77
	0407_TP230_0.5_200622	SE207998.019	%	50 - 130%	76
	0407_QC126_200622	SE207998.020	%	50 - 130%	75
	0407_QC127_200622	SE207998.021	%	50 - 130%	77
	0407_QC134_200622	SE207998.022	%	50 - 130%	87
	0407_QC137_200622	SE207998.023	%	50 - 130%	85

VOC's in Soil — Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP223_0.1_200622	SE207998.001	%	60 - 130%	65
	0407_TP223_0.5_200622	SE207998.002	%	60 - 130%	68
	0407_TP224_0.1_200622	SE207998.003	%	60 - 130%	63
	0407_TP224_0.5_200622	SE207998.004	%	60 - 130%	62
	0407_TP225_0.1_200622	SE207998.005	%	60 - 130%	63
	0407_TP225_0.5_200622	SE207998.007	%	60 - 130%	88
	0407_TP226_0.1_200622	SE207998.008	%	60 - 130%	89
	0407_TP226_0.5_200622	SE207998.009	%	60 - 130%	81
	0407_TP227_0.1_200622	SE207998.010	%	60 - 130%	85
	0407_TP227_0.5_200622	SE207998.012	%	60 - 130%	99
	0407_TP228_0.1_200622	SE207998.013	%	60 - 130%	52 ①
	0407_TP228_0.5_200622	SE207998.014	%	60 - 130%	86
	0407_TP229_0.1_200622	SE207998.016	%	60 - 130%	82
	0407_TP229_0.5_200622	SE207998.017	%	60 - 130%	90
	0407_TP230_0.1_200622	SE207998.018	%	60 - 130%	80
	0407_TP230_0.5_200622	SE207998.019	%	60 - 130%	92
	0407_QC126_200622	SE207998.020	%	60 - 130%	91
	0407_QC127_200622	SE207998.021	%	60 - 130%	91
	0407_QC134_200622	SE207998.022	%	60 - 130%	65
	0407_QC137_200622	SE207998.023	%	60 - 130%	71
	0407_QC411_200622	SE207998.024	%	60 - 130%	94
	0407_QC511_200622	SE207998.025	%	60 - 130%	90
d4-1,2-dichloroethane (Surrogate)	0407_TP223_0.1_200622	SE207998.001	%	60 - 130%	101
	0407_TP223_0.5_200622	SE207998.002	%	60 - 130%	108
	0407_TP224_0.1_200622	SE207998.003	%	60 - 130%	99
	0407_TP224_0.5_200622	SE207998.004	%	60 - 130%	97
	0407_TP225_0.1_200622	SE207998.005	%	60 - 130%	98
	0407_TP225_0.5_200622	SE207998.007	%	60 - 130%	86
	0407_TP226_0.1_200622	SE207998.008	%	60 - 130%	88
	0407_TP226_0.5_200622	SE207998.009	%	60 - 130%	83
	0407_TP227_0.1_200622	SE207998.010	%	60 - 130%	83
	0407_TP227_0.5_200622	SE207998.012	%	60 - 130%	87
	0407_TP228_0.1_200622	SE207998.013	%	60 - 130%	83
	0407_TP228_0.5_200622	SE207998.014	%	60 - 130%	84
	0407_TP229_0.1_200622	SE207998.016	%	60 - 130%	83
	0407_TP229_0.5_200622	SE207998.017	%	60 - 130%	86
	0407_TP230_0.1_200622	SE207998.018	%	60 - 130%	84
	0407_TP230_0.5_200622	SE207998.019	%	60 - 130%	94
	0407_QC126_200622	SE207998.020	%	60 - 130%	74
	0407_QC127_200622	SE207998.021	%	60 - 130%	92
	0407_QC134_200622	SE207998.022	%	60 - 130%	69
	0407_QC137_200622	SE207998.023	%	60 - 130%	76
	0407_QC411_200622	SE207998.024	%	60 - 130%	92
	0407_QC511_200622	SE207998.025	%	60 - 130%	93
d8-toluene (Surrogate)	0407_TP223_0.1_200622	SE207998.001	%	60 - 130%	90
	0407_TP223_0.5_200622	SE207998.002	%	60 - 130%	96
	0407_TP224_0.1_200622	SE207998.003	%	60 - 130%	88
	0407_TP224_0.5_200622	SE207998.004	%	60 - 130%	87
	0407_TP225_0.1_200622	SE207998.005	%	60 - 130%	89
	0407_TP225_0.5_200622	SE207998.007	%	60 - 130%	79

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d8-toluene (Surrogate)	0407_TP226_0.1_200622	SE207998.008	%	60 - 130%	85
	0407_TP226_0.5_200622	SE207998.009	%	60 - 130%	89
	0407_TP227_0.1_200622	SE207998.010	%	60 - 130%	84
	0407_TP227_0.5_200622	SE207998.012	%	60 - 130%	89
	0407_TP228_0.1_200622	SE207998.013	%	60 - 130%	74
	0407_TP228_0.5_200622	SE207998.014	%	60 - 130%	86
	0407_TP229_0.1_200622	SE207998.016	%	60 - 130%	85
	0407_TP229_0.5_200622	SE207998.017	%	60 - 130%	88
	0407_TP230_0.1_200622	SE207998.018	%	60 - 130%	77
	0407_TP230_0.5_200622	SE207998.019	%	60 - 130%	82
	0407_QC126_200622	SE207998.020	%	60 - 130%	79
	0407_QC127_200622	SE207998.021	%	60 - 130%	92
	0407_QC134_200622	SE207998.022	%	60 - 130%	69
	0407_QC137_200622	SE207998.023	%	60 - 130%	78
	0407_QC411_200622	SE207998.024	%	60 - 130%	87
	0407_QC511_200622	SE207998.025	%	60 - 130%	88

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP223_0.1_200622	SE207998.001	%	60 - 130%	65
	0407_TP223_0.5_200622	SE207998.002	%	60 - 130%	68
	0407_TP224_0.1_200622	SE207998.003	%	60 - 130%	63
	0407_TP224_0.5_200622	SE207998.004	%	60 - 130%	62
	0407_TP225_0.1_200622	SE207998.005	%	60 - 130%	63
	0407_TP225_0.5_200622	SE207998.007	%	60 - 130%	88
	0407_TP226_0.1_200622	SE207998.008	%	60 - 130%	89
	0407_TP226_0.5_200622	SE207998.009	%	60 - 130%	81
	0407_TP227_0.1_200622	SE207998.010	%	60 - 130%	85
	0407_TP227_0.5_200622	SE207998.012	%	60 - 130%	99
	0407_TP228_0.1_200622	SE207998.013	%	60 - 130%	52 ①
	0407_TP228_0.5_200622	SE207998.014	%	60 - 130%	86
	0407_TP229_0.1_200622	SE207998.016	%	60 - 130%	82
	0407_TP229_0.5_200622	SE207998.017	%	60 - 130%	90
	0407_TP230_0.1_200622	SE207998.018	%	60 - 130%	80
	0407_TP230_0.5_200622	SE207998.019	%	60 - 130%	92
	0407_QC126_200622	SE207998.020	%	60 - 130%	91
	0407_QC127_200622	SE207998.021	%	60 - 130%	91
	0407_QC134_200622	SE207998.022	%	60 - 130%	65
	0407_QC137_200622	SE207998.023	%	60 - 130%	71
	0407_QC411_200622	SE207998.024	%	60 - 130%	94
d4-1,2-dichloroethane (Surrogate)	0407_TP223_0.1_200622	SE207998.001	%	60 - 130%	101
	0407_TP223_0.5_200622	SE207998.002	%	60 - 130%	108
	0407_TP224_0.1_200622	SE207998.003	%	60 - 130%	99
	0407_TP224_0.5_200622	SE207998.004	%	60 - 130%	97
	0407_TP225_0.1_200622	SE207998.005	%	60 - 130%	98
	0407_TP225_0.5_200622	SE207998.007	%	60 - 130%	86
	0407_TP226_0.1_200622	SE207998.008	%	60 - 130%	88
	0407_TP226_0.5_200622	SE207998.009	%	60 - 130%	83
	0407_TP227_0.1_200622	SE207998.010	%	60 - 130%	83
	0407_TP227_0.5_200622	SE207998.012	%	60 - 130%	87
	0407_TP228_0.1_200622	SE207998.013	%	60 - 130%	83
	0407_TP228_0.5_200622	SE207998.014	%	60 - 130%	84
	0407_TP229_0.1_200622	SE207998.016	%	60 - 130%	83
	0407_TP229_0.5_200622	SE207998.017	%	60 - 130%	86
	0407_TP230_0.1_200622	SE207998.018	%	60 - 130%	84
	0407_TP230_0.5_200622	SE207998.019	%	60 - 130%	94
	0407_QC126_200622	SE207998.020	%	60 - 130%	74
	0407_QC127_200622	SE207998.021	%	60 - 130%	92
	0407_QC134_200622	SE207998.022	%	60 - 130%	69
	0407_QC137_200622	SE207998.023	%	60 - 130%	76
	0407_QC411_200622	SE207998.024	%	60 - 130%	92

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d8-toluene (Surrogate)	0407_TP223_0.1_200622	SE207998.001	%	60 - 130%	90
	0407_TP223_0.5_200622	SE207998.002	%	60 - 130%	96
	0407_TP224_0.1_200622	SE207998.003	%	60 - 130%	88
	0407_TP224_0.5_200622	SE207998.004	%	60 - 130%	87
	0407_TP225_0.1_200622	SE207998.005	%	60 - 130%	89
	0407_TP225_0.5_200622	SE207998.007	%	60 - 130%	79
	0407_TP226_0.1_200622	SE207998.008	%	60 - 130%	85
	0407_TP226_0.5_200622	SE207998.009	%	60 - 130%	89
	0407_TP227_0.1_200622	SE207998.010	%	60 - 130%	84
	0407_TP227_0.5_200622	SE207998.012	%	60 - 130%	89
	0407_TP228_0.1_200622	SE207998.013	%	60 - 130%	74
	0407_TP228_0.5_200622	SE207998.014	%	60 - 130%	86
	0407_TP229_0.1_200622	SE207998.016	%	60 - 130%	85
	0407_TP229_0.5_200622	SE207998.017	%	60 - 130%	88
	0407_TP230_0.1_200622	SE207998.018	%	60 - 130%	77
	0407_TP230_0.5_200622	SE207998.019	%	60 - 130%	82
	0407_QC126_200622	SE207998.020	%	60 - 130%	79
	0407_QC127_200622	SE207998.021	%	60 - 130%	92
	0407_QC134_200622	SE207998.022	%	60 - 130%	69
	0407_QC137_200622	SE207998.023	%	60 - 130%	78
	0407_QC411_200622	SE207998.024	%	60 - 130%	87

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Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result
LB203113.001	Mercury	mg/kg	0.05	<0.05
LB203118.001	Mercury	mg/kg	0.05	<0.05

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202975.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	84
LB202976.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	97

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB202975.001	Dichlorvos	mg/kg	0.5	<0.5
	Dimethoate	mg/kg	0.5	<0.5
	Diazinon (Dimpylate)	mg/kg	0.5	<0.5
	Fenitrothion	mg/kg	0.2	<0.2
	Malathion	mg/kg	0.2	<0.2

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202975.001		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	73
		d14-p-terphenyl (Surrogate)	%	-	77
LB202976.001		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	91
		d14-p-terphenyl (Surrogate)	%	-	90

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202975.001		Naphthalene	mg/kg	0.1	<0.1
		2-methylnaphthalene	mg/kg	0.1	<0.1
		1-methylnaphthalene	mg/kg	0.1	<0.1
		Acenaphthylene	mg/kg	0.1	<0.1
		Acenaphthene	mg/kg	0.1	<0.1
		Fluorene	mg/kg	0.1	<0.1
		Phenanthrene	mg/kg	0.1	<0.1
		Anthracene	mg/kg	0.1	<0.1
		Fluoranthene	mg/kg	0.1	<0.1
		Pyrene	mg/kg	0.1	<0.1
		Benzo(a)anthracene	mg/kg	0.1	<0.1
		Chrysene	mg/kg	0.1	<0.1
		Benzo(a)pyrene	mg/kg	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	78
		2-fluorobiphenyl (Surrogate)	%	-	73
		d14-p-terphenyl (Surrogate)	%	-	77
LB202976.001		Naphthalene	mg/kg	0.1	<0.1
		2-methylnaphthalene	mg/kg	0.1	<0.1
		1-methylnaphthalene	mg/kg	0.1	<0.1
		Acenaphthylene	mg/kg	0.1	<0.1
		Acenaphthene	mg/kg	0.1	<0.1
		Fluorene	mg/kg	0.1	<0.1
		Phenanthrene	mg/kg	0.1	<0.1
		Anthracene	mg/kg	0.1	<0.1
		Fluoranthene	mg/kg	0.1	<0.1
		Pyrene	mg/kg	0.1	<0.1
		Benzo(a)anthracene	mg/kg	0.1	<0.1
		Chrysene	mg/kg	0.1	<0.1
		Benzo(a)pyrene	mg/kg	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8

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PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202976.001	Surrogates	d5-nitrobenzene (Surrogate)	%	-	87
		2-fluorobiphenyl (Surrogate)	%	-	91
		d14-p-terphenyl (Surrogate)	%	-	90

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202975.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	84
LB202976.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	97

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202975.001		Phenol	mg/kg	0.5	<0.5
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5
		2-nitrophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
		Pentachlorophenol	mg/kg	0.5	<0.5
		2,4-dinitrophenol	mg/kg	2	<2
		4-chloro-3-methylphenol	mg/kg	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	85
		d5-phenol (Surrogate)	%	-	77
LB202976.001		Phenol	mg/kg	0.5	<0.5
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5
		2-nitrophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
		Pentachlorophenol	mg/kg	0.5	<0.5
		2,4-dinitrophenol	mg/kg	2	<2

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Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202976.001		4-chloro-3-methylphenol	mg/kg	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	86
		d5-phenol (Surrogate)	%	-	81

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB203101.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0
LB203102.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB202975.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110
LB202976.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB202969.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1

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VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB202969.001	Halogenated Aliphatics	1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10
		MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	97
		d8-toluene (Surrogate)	%	-	90
		Bromofluorobenzene (Surrogate)	%	-	87
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1
LB202970.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1

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VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB202970.001	Halogenated Aliphatics	Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10
		MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	82
		d8-toluene (Surrogate)	%	-	90

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB202970.001	Surrogates	Bromofluorobenzene (Surrogate)	%	-	91
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB202969.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	97
LB202970.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	82

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207912.063	LB203118.014	Mercury	mg/kg	0.05	0.00530411320	.0051374534	200	0
SE207998.012	LB203113.014	Mercury	mg/kg	0.05	<0.05	<0.05	138	0
SE207998.021	LB203113.023	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE207998.023	LB203118.021	Mercury	mg/kg	0.05	0.08	0.07	97	10

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207912.066	LB202979.011	% Moisture	%w/w	1	9.491268033410	.234541577	40	8
SE207998.024	LB202980.018	% Moisture	%w/w	1	<1.0	<1.0	200	0

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207912.063	LB202975.024		Hexachlorobenzene (HCB)	mg/kg	0.1	0	0	200	0
			Alpha BHC	mg/kg	0.1	0	0	200	0
			Lindane	mg/kg	0.1	0	0	200	0
			Heptachlor	mg/kg	0.1	0	0	200	0
			Aldrin	mg/kg	0.1	0	0	200	0
			Beta BHC	mg/kg	0.1	0	0	200	0
			Delta BHC	mg/kg	0.1	0	0	200	0
			Heptachlor epoxide	mg/kg	0.1	0	0	200	0
			o,p'-DDE	mg/kg	0.1	0	0	200	0
			Alpha Endosulfan	mg/kg	0.2	0	0	200	0
			Gamma Chlordane	mg/kg	0.1	0	0	200	0
			Alpha Chlordane	mg/kg	0.1	0	0	200	0
			trans-Nonachlor	mg/kg	0.1	0	0	200	0
			p,p'-DDE	mg/kg	0.1	0	0	200	0
			Dieldrin	mg/kg	0.2	0	0	200	0
			Endrin	mg/kg	0.2	0	0	200	0
			o,p'-DDD	mg/kg	0.1	0	0	200	0
			o,p'-DDT	mg/kg	0.1	0	0	200	0
			Beta Endosulfan	mg/kg	0.2	0	0	200	0
			p,p'-DDD	mg/kg	0.1	0	0	200	0
			p,p'-DDT	mg/kg	0.1	0	0	200	0
			Endosulfan sulphate	mg/kg	0.1	0	0	200	0
			Endrin Aldehyde	mg/kg	0.1	0	0	200	0
			Methoxychlor	mg/kg	0.1	0	0	200	0
			Endrin Ketone	mg/kg	0.1	0	0	200	0
			Isodrin	mg/kg	0.1	0	0	200	0
			Mirex	mg/kg	0.1	0	0	200	0
			Total CLP OC Pesticides	mg/kg	1	0	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.145	0.141	30	3
SE207912.066	LB202975.014		Hexachlorobenzene (HCB)	mg/kg	0.1	NVL	NVL	NVL	NVL
			Alpha BHC	mg/kg	0.1	NVL	NVL	NVL	NVL
			Lindane	mg/kg	0.1	NVL	NVL	NVL	NVL
			Heptachlor	mg/kg	0.1	NVL	NVL	NVL	NVL
			Aldrin	mg/kg	0.1	NVL	NVL	NVL	NVL
			Beta BHC	mg/kg	0.1	NVL	NVL	NVL	NVL
			Delta BHC	mg/kg	0.1	NVL	NVL	NVL	NVL
			Heptachlor epoxide	mg/kg	0.1	NVL	NVL	NVL	NVL
			o,p'-DDE	mg/kg	0.1	NVL	NVL	NVL	NVL
			Alpha Endosulfan	mg/kg	0.2	NVL	NVL	NVL	NVL
			Gamma Chlordane	mg/kg	0.1	NVL	NVL	NVL	NVL
			Alpha Chlordane	mg/kg	0.1	NVL	NVL	NVL	NVL
			trans-Nonachlor	mg/kg	0.1	NVL	NVL	NVL	NVL
			p,p'-DDE	mg/kg	0.1	NVL	NVL	NVL	NVL
			Dieldrin	mg/kg	0.2	NVL	NVL	NVL	NVL
			Endrin	mg/kg	0.2	NVL	NVL	NVL	NVL
			o,p'-DDD	mg/kg	0.1	NVL	NVL	NVL	NVL
			o,p'-DDT	mg/kg	0.1	NVL	NVL	NVL	NVL
			Beta Endosulfan	mg/kg	0.2	NVL	NVL	NVL	NVL

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil (continued) — Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207912.066	LB202975.014		p,p'-DDD	mg/kg	0.1	NVL	NVL	NVL	NVL
			p,p'-DDT	mg/kg	0.1	NVL	NVL	NVL	NVL
			Endosulfan sulphate	mg/kg	0.1	NVL	NVL	NVL	NVL
			Endrin Aldehyde	mg/kg	0.1	NVL	NVL	NVL	NVL
			Methoxychlor	mg/kg	0.1	NVL	NVL	NVL	NVL
			Endrin Ketone	mg/kg	0.1	NVL	NVL	NVL	NVL
			Isodrin	mg/kg	0.1	NVL	NVL	NVL	NVL
			Mirex	mg/kg	0.1	NVL	NVL	NVL	NVL
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.149	0	30	200 †
SE207998.017	LB202976.023		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	0	200	0
			Alpha BHC	mg/kg	0.1	<0.1	0	200	0
			Lindane	mg/kg	0.1	<0.1	0	200	0
			Heptachlor	mg/kg	0.1	<0.1	0	200	0
			Aldrin	mg/kg	0.1	<0.1	0	200	0
			Beta BHC	mg/kg	0.1	<0.1	0	200	0
			Delta BHC	mg/kg	0.1	<0.1	0	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	0	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	0	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	0	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Dieldrin	mg/kg	0.2	<0.2	0	200	0
			Endrin	mg/kg	0.2	<0.2	0	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	0	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	0	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	0	200	0
			Methoxychlor	mg/kg	0.1	<0.1	0	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	0	200	0
			Isodrin	mg/kg	0.1	<0.1	0	200	0
			Mirex	mg/kg	0.1	<0.1	0	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	0.138	30	0
SE207998.019	LB202976.022		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	0	200	0
			Alpha BHC	mg/kg	0.1	<0.1	0	200	0
			Lindane	mg/kg	0.1	<0.1	0	200	0
			Heptachlor	mg/kg	0.1	<0.1	0	200	0
			Aldrin	mg/kg	0.1	<0.1	0	200	0
			Beta BHC	mg/kg	0.1	<0.1	0	200	0
			Delta BHC	mg/kg	0.1	<0.1	0	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	0	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	0	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	0	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Dieldrin	mg/kg	0.2	<0.2	0	200	0
			Endrin	mg/kg	0.2	<0.2	0	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	0	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	0	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207998.019	LB202976.022		Methoxychlor	mg/kg	0.1	<0.1	0	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	0	200	0
			Isodrin	mg/kg	0.1	<0.1	0	200	0
			Mirex	mg/kg	0.1	<0.1	0	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.146	30	0

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207998.017	LB202976.024		Dichlorvos	mg/kg	0.5	<0.5	0	200	0
			Dimethoate	mg/kg	0.5	<0.5	0	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	0.0208295612	200	0
			Fenitrothion	mg/kg	0.2	<0.2	0	200	0
			Malathion	mg/kg	0.2	<0.2	0	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	0	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	0.0712402168	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	0	200	0
			Methidathion	mg/kg	0.5	<0.5	0	200	0
			Ethion	mg/kg	0.2	<0.2	0.0032933516	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	0	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	0	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4092896705	30	3
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4420772142	30	6
SE207998.019	LB202976.025		Dichlorvos	mg/kg	0.5	<0.5	0	200	0
			Dimethoate	mg/kg	0.5	<0.5	0	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	0.0305267744	200	0
			Fenitrothion	mg/kg	0.2	<0.2	0	200	0
			Malathion	mg/kg	0.2	<0.2	0	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	0	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	0	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	0	200	0
			Methidathion	mg/kg	0.5	<0.5	0	200	0
			Ethion	mg/kg	0.2	<0.2	0.0097346765	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	0	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	0	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4119566280	30	10
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4441200230	30	0

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207998.017	LB202976.024	Naphthalene	mg/kg	0.1	<0.1	0.0009799068	200	0
		2-methylnaphthalene	mg/kg	0.1	<0.1	0.0006969507	200	0
		1-methylnaphthalene	mg/kg	0.1	<0.1	0.0009843478	200	0
		Acenaphthylene	mg/kg	0.1	<0.1	0.0069197087	200	0
		Acenaphthene	mg/kg	0.1	<0.1	0	200	0
		Fluorene	mg/kg	0.1	<0.1	0.0008112272	200	0
		Phenanthrene	mg/kg	0.1	<0.1	0.0101369115	200	0
		Anthracene	mg/kg	0.1	<0.1	0.0066741364	200	0
		Fluoranthene	mg/kg	0.1	<0.1	0.0348459954	200	0
		Pyrene	mg/kg	0.1	<0.1	0.0474086710	200	0
		Benzo(a)anthracene	mg/kg	0.1	<0.1	0.0302644268	200	0
		Chrysene	mg/kg	0.1	<0.1	0.0246950879	200	0
		Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	0.0532563533	200	0
		Benzo(k)fluoranthene	mg/kg	0.1	<0.1	0.0454112038	200	0
		Benzo(a)pyrene	mg/kg	0.1	<0.1	0.0236926734	200	0
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	0.0159707668	200	0
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	0.0020416872	200	0
		Benzo(ghi)perylene	mg/kg	0.1	<0.1	0.0177011678	200	0
		Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	0	200	0
		Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	0.242	134	0
		Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	0.121	175	0
		Total PAH (18)	mg/kg	0.8	<0.8	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207998.017	LB202976.024	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4542135913	30	15
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4092896705	30	3
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4420772142	30	6
SE207998.019	LB202976.025		Naphthalene	mg/kg	0.1	<0.1	0.0015535265	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	0.0005991482	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	0.0009311687	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	0.0066221731	200	0
			Acenaphthene	mg/kg	0.1	<0.1	0	200	0
			Fluorene	mg/kg	0.1	<0.1	0.0022652334	200	0
			Phenanthrene	mg/kg	0.1	<0.1	0.0176459618	200	0
			Anthracene	mg/kg	0.1	<0.1	0	200	0
			Fluoranthene	mg/kg	0.1	<0.1	0.0567099356	186	0
			Pyrene	mg/kg	0.1	<0.1	0.0700018993	164	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	0.0430237948	200	0
			Chrysene	mg/kg	0.1	<0.1	0.0337503326	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	0.0648173220	180	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	0.0556526044	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	0.0316781575	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	0.0180094528	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	0.0032982953	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	0.0207211284	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	0	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	0.242	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	0.121	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	0	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4348870221	30	2
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4119566280	30	10
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4441200230	30	0

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207998.017	LB202976.022		Arochlor 1016	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	0	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0.138	30	0
SE207998.019	LB202976.023		Arochlor 1016	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	0	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0.146	30	0

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207912.063	LB202975.024		Phenol	mg/kg	0.5	0	0	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	0	0	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	0	0	200	0
			Total Cresol	mg/kg	1.5	0	0	200	0
			2-chlorophenol	mg/kg	0.5	0	0	200	0
			2,4-dimethylphenol	mg/kg	0.5	0	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207912.063	LB202975.024		2,6-dichlorophenol	mg/kg	0.5	0	0	200	0
			2,4-dichlorophenol	mg/kg	0.5	0	0	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	0	0	200	0
			2-nitrophenol	mg/kg	0.5	0	0	200	0
			4-nitrophenol	mg/kg	1	0	0	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	0	0	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	0	0	200	0
			Pentachlorophenol	mg/kg	0.5	0	0	200	0
			2,4-dinitrophenol	mg/kg	2	0	0	200	0
			4-chloro-3-methylphenol	mg/kg	2	0	0	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.99	3.66	30	9
			d5-phenol (Surrogate)	mg/kg	-	1.43	1.44	30	1
SE207912.066	LB202975.014		Phenol	mg/kg	0.5	NVL	NVL	NVL	NVL
			2-methyl phenol (o-cresol)	mg/kg	0.5	NVL	NVL	NVL	NVL
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	NVL	NVL	NVL	NVL
			Total Cresol	mg/kg	1.5	0	0	200	0
			2-chlorophenol	mg/kg	0.5	NVL	NVL	NVL	NVL
			2,4-dimethylphenol	mg/kg	0.5	NVL	NVL	NVL	NVL
			2,6-dichlorophenol	mg/kg	0.5	NVL	NVL	NVL	NVL
			2,4-dichlorophenol	mg/kg	0.5	NVL	NVL	NVL	NVL
			2,4,6-trichlorophenol	mg/kg	0.5	NVL	NVL	NVL	NVL
			2-nitrophenol	mg/kg	0.5	NVL	NVL	NVL	NVL
			4-nitrophenol	mg/kg	1	NVL	NVL	NVL	NVL
			2,4,5-trichlorophenol	mg/kg	0.5	NVL	NVL	NVL	NVL
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	NVL	NVL	NVL	NVL
			Pentachlorophenol	mg/kg	0.5	NVL	NVL	NVL	NVL
			2,4-dinitrophenol	mg/kg	2	NVL	NVL	NVL	NVL
			4-chloro-3-methylphenol	mg/kg	2	NVL	NVL	NVL	NVL
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.12	4.21	30	2
			d5-phenol (Surrogate)	mg/kg	-	1.52	1.55	30	2
SE207998.019	LB202976.022		Phenol	mg/kg	0.5	<0.5	0	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	0	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	0	200	0
			Total Cresol	mg/kg	1.5	<1.5	0	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	0	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	0	200	0
			4-nitrophenol	mg/kg	1	<1	0	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	0	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dinitrophenol	mg/kg	2	<2	0	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	0	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.3	4.18	30	2
			d5-phenol (Surrogate)	mg/kg	-	1.5	1.5	30	1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207912.060	LB203102.014	Arsenic, As	mg/kg	1	0.957348416	20.6735324369	153	0
		Cadmium, Cd	mg/kg	0.3	0.025076923	00.0268586554	200	0
		Chromium, Cr	mg/kg	0.5	1.538051282	01.3925179831	64	10
		Copper, Cu	mg/kg	0.5	6.56474509	805.5339160504	38	17
		Nickel, Ni	mg/kg	0.5	1.746539336	61.9978707563	57	13
		Lead, Pb	mg/kg	1	22.06179185	528.586189579	35	17
		Zinc, Zn	mg/kg	2	14.73638009	043.1965810924	41	45 ②
SE207998.012	LB203101.014	Arsenic, As	mg/kg	1	<1	<1	145	0
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	1.9	2.1	55	8

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207998.012	LB203101.014	Copper, Cu	mg/kg	0.5	3.3	3.5	45	5
		Nickel, Ni	mg/kg	0.5	1.1	1.3	72	15
		Lead, Pb	mg/kg	1	6	6	46	4
		Zinc, Zn	mg/kg	2	10	10	50	0
SE207998.021	LB203101.023	Arsenic, As	mg/kg	1	5	2	56	74 ②
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	12	12	34	7
		Copper, Cu	mg/kg	0.5	27	31	32	13
		Nickel, Ni	mg/kg	0.5	11	13	34	16
		Lead, Pb	mg/kg	1	26	30	34	13
		Zinc, Zn	mg/kg	2	49	57	34	15
SE207998.023	LB203102.023	Arsenic, As	mg/kg	1	4	4	57	6
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	152	0
		Chromium, Cr	mg/kg	0.5	11	12	34	3
		Copper, Cu	mg/kg	0.5	32	33	32	3
		Nickel, Ni	mg/kg	0.5	NVL	NVL	NVL	NVL
		Lead, Pb	mg/kg	1	59	61	32	3
		Zinc, Zn	mg/kg	2	200	210	31	3

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207912.063	LB202975.024		TRH C10-C14	mg/kg	20	0	0	200	0
			TRH C15-C28	mg/kg	45	0	0	200	0
			TRH C29-C36	mg/kg	45	0	0	200	0
			TRH C37-C40	mg/kg	100	0	0	200	0
			TRH C10-C36 Total	mg/kg	110	0	0	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	0	0	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	0	0	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	0	0	200	0
			TRH >C16-C34 (F3)	mg/kg	90	0	0	200	0
			TRH >C34-C40 (F4)	mg/kg	120	0	0	200	0
SE207912.066	LB202975.014		TRH C10-C14	mg/kg	20	0	0	200	0
			TRH C15-C28	mg/kg	45	0	0	200	0
			TRH C29-C36	mg/kg	45	0	0	200	0
			TRH C37-C40	mg/kg	100	0	0	200	0
			TRH C10-C36 Total	mg/kg	110	0	0	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	0	0	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	0	0	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	0	0	200	0
			TRH >C16-C34 (F3)	mg/kg	90	0	0	200	0
			TRH >C34-C40 (F4)	mg/kg	120	0	0	200	0
SE207998.017	LB202976.022		TRH C10-C14	mg/kg	20	<20	0	200	0
			TRH C15-C28	mg/kg	45	<45	0	200	0
			TRH C29-C36	mg/kg	45	<45	0	200	0
			TRH C37-C40	mg/kg	100	<100	0	200	0
			TRH C10-C36 Total	mg/kg	110	<110	0	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	0	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	0	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	0	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	0	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	0	200	0
SE207998.019	LB202976.023		TRH C10-C14	mg/kg	20	<20	0	200	0
			TRH C15-C28	mg/kg	45	<45	0	200	0
			TRH C29-C36	mg/kg	45	<45	0	200	0
			TRH C37-C40	mg/kg	100	<100	0	200	0
			TRH C10-C36 Total	mg/kg	110	<110	0	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	0	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	0	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	0	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	0	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

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VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207912.066	LB202969.014	Fumigants	2,2-dichloropropane	mg/kg	0.1	0	0	200	0
			1,2-dichloropropane	mg/kg	0.1	0	0	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	0	0	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	0	0	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	0	0	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	0	0	200	0
		Aliphatics	Chloromethane	mg/kg	1	0	0	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	0	0	200	0
			Bromomethane	mg/kg	1	0	0	200	0
			Chloroethane	mg/kg	1	0	0	200	0
			Trichlorofluoromethane	mg/kg	1	0	0	200	0
			Iodomethane	mg/kg	5	0	0	200	0
			1,1-dichloroethene	mg/kg	0.1	0	0	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	0.0346827363	0.0253165615	200	0
			Allyl chloride	mg/kg	0.1	0	0	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	0	0	200	0
			1,1-dichloroethane	mg/kg	0.1	0	0	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	0	0	200	0
			Bromochloromethane	mg/kg	0.1	0	0	200	0
			1,2-dichloroethane	mg/kg	0.1	0	0	200	0
			1,1,1-trichloroethane	mg/kg	0.1	0	0	200	0
			1,1-dichloropropene	mg/kg	0.1	0	0	200	0
			Carbon tetrachloride	mg/kg	0.1	0	0.0464923132	200	0
			Dibromomethane	mg/kg	0.1	0	0	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	0	0	200	0
			1,1,2-trichloroethane	mg/kg	0.1	0	0	200	0
			1,3-dichloropropane	mg/kg	0.1	0	0	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	0	0	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	0	0	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	0	0	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	0	0	200	0
			1,2,3-trichloropropane	mg/kg	0.1	0	0	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	0	0	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	0	0	200	0
			Hexachlorobutadiene	mg/kg	0.1	0	0	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	0	0	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	0	0	200	0
			2-chlorotoluene	mg/kg	0.1	0	0	200	0
			4-chlorotoluene	mg/kg	0.1	0	0	200	0
			1,3-dichlorobenzene	mg/kg	0.1	0	0	200	0
			1,4-dichlorobenzene	mg/kg	0.1	0	0	200	0
			1,2-dichlorobenzene	mg/kg	0.1	0	0	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	0	0	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	0	0	200	0
		Monocyclic	Benzene	mg/kg	0.1	0	0	200	0
		Aromatic	Toluene	mg/kg	0.1	0	0	200	0
			Ethylbenzene	mg/kg	0.1	0	0	200	0
			m/p-xylene	mg/kg	0.2	0	0	200	0
			o-xylene	mg/kg	0.1	0	0	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	0	0	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	0	0	200	0
			n-propylbenzene	mg/kg	0.1	0	0	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	0	0	200	0
			tert-butylbenzene	mg/kg	0.1	0	0	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	0	0	200	0
			sec-butylbenzene	mg/kg	0.1	0	0	200	0
			p-isopropyltoluene	mg/kg	0.1	0	0	200	0
			n-butylbenzene	mg/kg	0.1	0	0	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	0	0	200	0
		Compounds	2-nitropropane	mg/kg	10	0	0	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	0.6728371942	0.5464973946	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

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VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207912.066	LB202969.014	Oxygenated	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	0	0	200	0
		Compounds	Vinyl acetate	mg/kg	10	0	0	200	0
			MEK (2-butanone)	mg/kg	10	0	0	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	0	0	200	0
			2-hexanone (MBK)	mg/kg	5	0	0	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	0	0	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	0	0	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	11.3941590936	11.3413116851	50	0
			d8-toluene (Surrogate)	mg/kg	-	9.330648038810	.105002002	50	8
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.821752191010	.5196126847	50	18
		Totals	Total Xylenes	mg/kg	0.3	0	0	200	0
			Total BTEX	mg/kg	0.6	0	0	200	0
			Total VOC*	mg/kg	24	0.7075199305	0.6183062694	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	0	0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	0.0346827363	0.0718088747	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	0.0346827363	0.0718088747	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	0	0	200	0
		es	Bromodichloromethane	mg/kg	0.1	0	0	200	0
			Chlorodibromomethane	mg/kg	0.1	0	0	200	0
			Bromoform	mg/kg	0.1	0	0	200	0
SE207998.005	LB202969.022	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207998.005	LB202969.022	Halogenated	1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.8	10.9	50	10
			d8-toluene (Surrogate)	mg/kg	-	8.9	9.9	50	10
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.3	7.1	50	11
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE207998.018	LB202970.014	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued) — Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207998.018	LB202970.014	Halogenated	1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
		Aliphatics	Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.4	8.2	50	2
			d8-toluene (Surrogate)	mg/kg	-	7.7	8.5	50	10
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.0	7.6	50	4
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE207998.023	LB202970.023	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued) — Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207998.023	LB202970.023	Fumigants	1,2-dichloropropane	mg/kg	0.1	<0.1	0	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	0.0339199738	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	0	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	0	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	0	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	0	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	0	200	0
			Bromomethane	mg/kg	1	<1	0	200	0
			Chloroethane	mg/kg	1	<1	0	200	0
			Trichlorofluoromethane	mg/kg	1	<1	0	200	0
			Iodomethane	mg/kg	5	<5	0	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	0	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	0.0385830619	200	0
			Allyl chloride	mg/kg	0.1	<0.1	0	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	0	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	0	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	0	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	0	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	0	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	0	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	0	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	0	200	0
			Dibromomethane	mg/kg	0.1	<0.1	0	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	0	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	0.0005332692	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	0.0092282449	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	0	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	0	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	0	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	0	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	0	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	0	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	0	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	0	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	0	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	0	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	0	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	0	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	0	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	0	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	0	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	0	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	0	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	0	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	0	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	0	200	0
			m/p-xylene	mg/kg	0.2	<0.2	0	200	0
			o-xylene	mg/kg	0.1	<0.1	0	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	0	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	0	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	0	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	0	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	0.0018131943	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	0	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	0	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	0.0115445050	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	0	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	0	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	0	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	0.4548548386	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207998.023	LB202970.023	Oxygenated	Vinyl acetate	mg/kg	10	<10	0	200	0
		Compounds	MEK (2-butanone)	mg/kg	10	<10	0	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	0	200	0
			2-hexanone (MBK)	mg/kg	5	<5	0	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	0	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	0	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.6	7.6511949053	50	0
			d8-toluene (Surrogate)	mg/kg	-	7.8	7.4235518934	50	5
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.1	7.6172855207	50	7
		Totals	Total Xylenes	mg/kg	0.3	<0.3	0	200	0
			Total BTEX	mg/kg	0.6	<0.6	0	200	0
			Total VOC*	mg/kg	24	<24	0.6439572077	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	0.1366283384	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	0.0391163312	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	0.0391163312	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	0	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	0.0934801196	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	0	200	0
			Bromoform	mg/kg	0.1	<0.1	0	200	0

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207912.066	LB202969.014		TRH C6-C10	mg/kg	25	0.821688445	50.6722169265	200	0
			TRH C6-C9	mg/kg	20	0.508416869	60.3628420121	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	11.394159093	81.3413116851	30	0
			d8-toluene (Surrogate)	mg/kg	-	9.330648038	810.105002002	30	8
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.821752191	010.519612684	30	18
		VPH F Bands	Benzene (F0)	mg/kg	0.1	0	0	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	0.821688445	50.6722169265	200	0
SE207998.005	LB202969.022		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.8	10.9	30	10
			d8-toluene (Surrogate)	mg/kg	-	8.9	9.9	30	10
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.3	7.1	30	11
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE207998.018	LB202970.014		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.4	8.2	30	2
			d8-toluene (Surrogate)	mg/kg	-	7.7	8.5	30	10
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.0	7.6	30	4
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE207998.023	LB202970.023		TRH C6-C10	mg/kg	25	<25	0.3341665949	200	0
			TRH C6-C9	mg/kg	20	<20	0.3340171132	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.6	7.65	30	0
			d8-toluene (Surrogate)	mg/kg	-	7.8	7.424	30	5
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.1	7.617	30	7
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	0	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	0.3341665949	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203113.002	Mercury	mg/kg	0.05	0.21	0.2	70 - 130	103
LB203118.002	Mercury	mg/kg	0.05	0.18	0.2	70 - 130	90

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202975.002		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	108
		Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	111
		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	112
		Dieldrin	mg/kg	0.2	0.2	0.2	60 - 140	112
		Endrin	mg/kg	0.2	0.2	0.2	60 - 140	110
		p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	83
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	0.15	40 - 130	93
LB202976.002		Heptachlor	mg/kg	0.1	0.3	0.2	60 - 140	126
		Aldrin	mg/kg	0.1	0.3	0.2	60 - 140	127
		Delta BHC	mg/kg	0.1	0.3	0.2	60 - 140	128
		Dieldrin	mg/kg	0.2	0.3	0.2	60 - 140	127
		Endrin	mg/kg	0.2	0.3	0.2	60 - 140	127
		p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	98
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.16	0.15	40 - 130	106

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202975.002		Dichlorvos	mg/kg	0.5	1.7	2	60 - 140	85
		Diazinon (Dimpylate)	mg/kg	0.5	2.0	2	60 - 140	101
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.2	2	60 - 140	111
		Ethion	mg/kg	0.2	1.5	2	60 - 140	74
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	83
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	89
LB202976.002		Dichlorvos	mg/kg	0.5	2.0	2	60 - 140	98
		Diazinon (Dimpylate)	mg/kg	0.5	2.2	2	60 - 140	110
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.2	2	60 - 140	111
		Ethion	mg/kg	0.2	1.9	2	60 - 140	94
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	89
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	83

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202975.002		Naphthalene	mg/kg	0.1	4.3	4	60 - 140	107
		Acenaphthylene	mg/kg	0.1	4.2	4	60 - 140	104
		Acenaphthene	mg/kg	0.1	4.4	4	60 - 140	111
		Phenanthrene	mg/kg	0.1	4.4	4	60 - 140	111
		Anthracene	mg/kg	0.1	4.5	4	60 - 140	111
		Fluoranthene	mg/kg	0.1	4.5	4	60 - 140	114
		Pyrene	mg/kg	0.1	4.7	4	60 - 140	118
		Benzo(a)pyrene	mg/kg	0.1	4.2	4	60 - 140	105
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	90
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	83
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	89
LB202976.002		Naphthalene	mg/kg	0.1	4.0	4	60 - 140	100
		Acenaphthylene	mg/kg	0.1	4.2	4	60 - 140	106
		Acenaphthene	mg/kg	0.1	4.2	4	60 - 140	104
		Phenanthrene	mg/kg	0.1	4.0	4	60 - 140	99
		Anthracene	mg/kg	0.1	4.1	4	60 - 140	102
		Fluoranthene	mg/kg	0.1	4.4	4	60 - 140	109
		Pyrene	mg/kg	0.1	4.4	4	60 - 140	110
		Benzo(a)pyrene	mg/kg	0.1	4.2	4	60 - 140	106
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	91
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	89
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	83

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PCBs in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202975.002		Arochlor 1260	mg/kg	0.2	0.5	0.4	60 - 140	117
LB202976.002		Arochlor 1260	mg/kg	0.2	0.5	0.4	60 - 140	114

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202975.002		Phenol	mg/kg	0.5	0.8	1	70 - 130	75
		2,4-dichlorophenol	mg/kg	0.5	0.7	1	70 - 130	72
		2,4,6-trichlorophenol	mg/kg	0.5	0.7	1	70 - 130	72
		Pentachlorophenol	mg/kg	0.5	0.8	1	70 - 130	79
	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.1	5	40 - 130	82
		d5-phenol (Surrogate)	mg/kg	-	1.5	2	40 - 130	76
LB202976.002		Phenol	mg/kg	0.5	0.7	1	70 - 130	71
		2,4-dichlorophenol	mg/kg	0.5	0.8	1	70 - 130	79
		2,4,6-trichlorophenol	mg/kg	0.5	1.2	1	70 - 130	115
		Pentachlorophenol	mg/kg	0.5	0.8	1	70 - 130	75
	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.4	5	40 - 130	87
		d5-phenol (Surrogate)	mg/kg	-	1.6	2	40 - 130	81

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203101.002	Arsenic, As	mg/kg	1	340	318.22	80 - 120	108
	Cadmium, Cd	mg/kg	0.3	5.1	5.41	80 - 120	94
	Chromium, Cr	mg/kg	0.5	40	38.31	80 - 120	104
	Copper, Cu	mg/kg	0.5	300	290	80 - 120	104
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	102
	Lead, Pb	mg/kg	1	94	89.9	80 - 120	104
	Zinc, Zn	mg/kg	2	280	273	80 - 120	101
LB203102.002	Arsenic, As	mg/kg	1	340	318.22	80 - 120	106
	Cadmium, Cd	mg/kg	0.3	5.1	5.41	80 - 120	94
	Chromium, Cr	mg/kg	0.5	40	38.31	80 - 120	105
	Copper, Cu	mg/kg	0.5	300	290	80 - 120	104
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	103
	Lead, Pb	mg/kg	1	94	89.9	80 - 120	105
	Zinc, Zn	mg/kg	2	270	273	80 - 120	101

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202975.002		TRH C10-C14	mg/kg	20	41	40	60 - 140	103
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	83
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	75
	TRH F Bands	TRH >C10-C16	mg/kg	25	39	40	60 - 140	98
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	88
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	65
LB202976.002		TRH C10-C14	mg/kg	20	36	40	60 - 140	90
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	80
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	75
	TRH F Bands	TRH >C10-C16	mg/kg	25	34	40	60 - 140	85
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	75
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	60

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202969.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	3.8	5	60 - 140	76
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	4.5	5	60 - 140	90
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	3.8	5	60 - 140	77
	Halogenated	Chlorobenzene	mg/kg	0.1	4.3	5	60 - 140	87
	Monocyclic	Benzene	mg/kg	0.1	3.6	5	60 - 140	73
	Aromatic	Toluene	mg/kg	0.1	4.2	5	60 - 140	84
		Ethylbenzene	mg/kg	0.1	4.3	5	60 - 140	85
		m/p-xylene	mg/kg	0.2	8.2	10	60 - 140	82
		o-xylene	mg/kg	0.1	4.1	5	60 - 140	81
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.2	10	70 - 130	82

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202969.002	Surrogates	d8-toluene (Surrogate)	mg/kg	-	7.8	10	70 - 130	78
		Bromofluorobenzene (Surrogate)	mg/kg	-	7.6	10	70 - 130	76
	Trihalomethan	Chloroform	mg/kg	0.1	4.3	5	60 - 140	85
LB202970.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	4.1	5	60 - 140	82
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	4.7	5	60 - 140	93
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	4.1	5	60 - 140	83
	Halogenated	Chlorobenzene	mg/kg	0.1	5.3	5	60 - 140	105
	Monocyclic	Benzene	mg/kg	0.1	4.4	5	60 - 140	89
	Aromatic	Toluene	mg/kg	0.1	4.6	5	60 - 140	92
		Ethylbenzene	mg/kg	0.1	4.6	5	60 - 140	91
		m/p-xylene	mg/kg	0.2	9.1	10	60 - 140	91
		o-xylene	mg/kg	0.1	4.5	5	60 - 140	90
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.4	10	70 - 130	94
		d8-toluene (Surrogate)	mg/kg	-	8.4	10	70 - 130	84
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.9	10	70 - 130	89
	Trihalomethan	Chloroform	mg/kg	0.1	4.1	5	60 - 140	82

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202969.002		TRH C6-C10	mg/kg	25	63	92.5	60 - 140	68
		TRH C6-C9	mg/kg	20	54	80	60 - 140	68
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.2	10	70 - 130	82
		Bromofluorobenzene (Surrogate)	mg/kg	-	7.6	10	70 - 130	76
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	38	62.5	60 - 140	62
LB202970.002		TRH C6-C10	mg/kg	25	66	92.5	60 - 140	71
		TRH C6-C9	mg/kg	20	57	80	60 - 140	71
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.4	10	70 - 130	94
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.9	10	70 - 130	89
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	38	62.5	60 - 140	61

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207998.001	LB203113.004	Mercury	mg/kg	0.05	0.21	<0.05	0.2	89
SE208074.001	LB203118.004	Mercury	mg/kg	0.05	0.19	<0.05	0.2	91

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE207912.055	LB202975.023		Hexachlorobenzene (HCB)	mg/kg	0.1	0	-	-
			Alpha BHC	mg/kg	0.1	0	-	-
			Lindane	mg/kg	0.1	0	-	-
			Heptachlor	mg/kg	0.1	0	0.2	114
			Aldrin	mg/kg	0.1	0	0.2	115
			Beta BHC	mg/kg	0.1	0	-	-
			Delta BHC	mg/kg	0.1	0	0.2	119
			Heptachlor epoxide	mg/kg	0.1	0	-	-
			o,p'-DDE	mg/kg	0.1	0	-	-
			Alpha Endosulfan	mg/kg	0.2	0	-	-
			Gamma Chlordane	mg/kg	0.1	0	-	-
			Alpha Chlordane	mg/kg	0.1	0	-	-
			trans-Nonachlor	mg/kg	0.1	0	-	-
			p,p'-DDE	mg/kg	0.1	0	-	-
			Dieldrin	mg/kg	0.2	0	0.2	113
			Endrin	mg/kg	0.2	0	0.2	108
			o,p'-DDD	mg/kg	0.1	0	-	-
			o,p'-DDT	mg/kg	0.1	0	-	-
			Beta Endosulfan	mg/kg	0.2	0	-	-
			p,p'-DDD	mg/kg	0.1	0	-	-
			p,p'-DDT	mg/kg	0.1	0	0.2	84
			Endosulfan sulphate	mg/kg	0.1	0	-	-
			Endrin Aldehyde	mg/kg	0.1	0	-	-
			Methoxychlor	mg/kg	0.1	0	-	-
			Endrin Ketone	mg/kg	0.1	0	-	-
			Isodrin	mg/kg	0.1	0	-	-
			Mirex	mg/kg	0.1	0	-	-
			Total CLP OC Pesticides	mg/kg	1	0	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.148	-	101
SE207998.008	LB202976.021		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	-	-
			Alpha BHC	mg/kg	0.1	<0.1	-	-
			Lindane	mg/kg	0.1	<0.1	-	-
			Heptachlor	mg/kg	0.1	<0.1	0.2	122
			Aldrin	mg/kg	0.1	<0.1	0.2	122
			Beta BHC	mg/kg	0.1	<0.1	-	-
			Delta BHC	mg/kg	0.1	<0.1	0.2	123
			Heptachlor epoxide	mg/kg	0.1	<0.1	-	-
			o,p'-DDE	mg/kg	0.1	<0.1	-	-
			Alpha Endosulfan	mg/kg	0.2	<0.2	-	-
			Gamma Chlordane	mg/kg	0.1	<0.1	-	-
			Alpha Chlordane	mg/kg	0.1	<0.1	-	-
			trans-Nonachlor	mg/kg	0.1	<0.1	-	-
			p,p'-DDE	mg/kg	0.1	<0.1	-	-
			Dieldrin	mg/kg	0.2	<0.2	0.2	122
			Endrin	mg/kg	0.2	<0.2	0.2	123
			o,p'-DDD	mg/kg	0.1	<0.1	-	-
			o,p'-DDT	mg/kg	0.1	<0.1	-	-
			Beta Endosulfan	mg/kg	0.2	<0.2	-	-
			p,p'-DDD	mg/kg	0.1	<0.1	-	-
			p,p'-DDT	mg/kg	0.1	<0.1	0.2	101
			Endosulfan sulphate	mg/kg	0.1	<0.1	-	-
			Endrin Aldehyde	mg/kg	0.1	<0.1	-	-
			Methoxychlor	mg/kg	0.1	<0.1	-	-
			Endrin Ketone	mg/kg	0.1	<0.1	-	-
			Isodrin	mg/kg	0.1	<0.1	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

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OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE207998.008	LB202976.021		Mirex	mg/kg	0.1	<0.1	-	-
			Total CLP OC Pesticides	mg/kg	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	-	95

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE207998.008	LB202976.023		Dichlorvos	mg/kg	0.5	<0.5	2	94
			Dimethoate	mg/kg	0.5	<0.5	-	-
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	2	105
			Fenitrothion	mg/kg	0.2	<0.2	-	-
			Malathion	mg/kg	0.2	<0.2	-	-
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	2	105
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	-	-
			Bromophos Ethyl	mg/kg	0.2	<0.2	-	-
			Methidathion	mg/kg	0.5	<0.5	-	-
			Ethion	mg/kg	0.2	<0.2	2	86
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	-	-
			Total OP Pesticides*	mg/kg	1.7	<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	-	85
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	-	82

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE207998.008	LB202976.023		Naphthalene	mg/kg	0.1	<0.1	4	98
			2-methylnaphthalene	mg/kg	0.1	<0.1	-	-
			1-methylnaphthalene	mg/kg	0.1	<0.1	-	-
			Acenaphthylene	mg/kg	0.1	<0.1	4	105
			Acenaphthene	mg/kg	0.1	<0.1	4	99
			Fluorene	mg/kg	0.1	<0.1	-	-
			Phenanthrene	mg/kg	0.1	<0.1	4	96
			Anthracene	mg/kg	0.1	<0.1	4	98
			Fluoranthene	mg/kg	0.1	<0.1	4	106
			Pyrene	mg/kg	0.1	<0.1	4	108
			Benzo(a)anthracene	mg/kg	0.1	<0.1	-	-
			Chrysene	mg/kg	0.1	<0.1	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	-	-
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	-	-
			Benzo(a)pyrene	mg/kg	0.1	<0.1	4	97
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	-	-
			Total PAH (18)	mg/kg	0.8	<0.8	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	-	86
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	-	85
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	-	82

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE207998.009	LB202976.021		Arochlor 1016	mg/kg	0.2	<0.2	-	-
			Arochlor 1221	mg/kg	0.2	<0.2	-	-
			Arochlor 1232	mg/kg	0.2	<0.2	-	-
			Arochlor 1242	mg/kg	0.2	<0.2	-	-
			Arochlor 1248	mg/kg	0.2	<0.2	-	-
			Arochlor 1254	mg/kg	0.2	<0.2	-	-
			Arochlor 1260	mg/kg	0.2	<0.2	0.4	121
			Arochlor 1262	mg/kg	0.2	<0.2	-	-
			Arochlor 1268	mg/kg	0.2	<0.2	-	-
			Total PCBs (Arochlors)	mg/kg	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	-	95

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Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE207912.055	LB202975.023		Phenol	mg/kg	0.5	0	1	73
			2-methyl phenol (o-cresol)	mg/kg	0.5	0	-	-
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	0	-	-
			Total Cresol	mg/kg	1.5	0	-	-
			2-chlorophenol	mg/kg	0.5	0	-	-
			2,4-dimethylphenol	mg/kg	0.5	0	-	-
			2,6-dichlorophenol	mg/kg	0.5	0	-	-
			2,4-dichlorophenol	mg/kg	0.5	0	1	72
			2,4,6-trichlorophenol	mg/kg	0.5	0	1	71
			2-nitrophenol	mg/kg	0.5	0	-	-
			4-nitrophenol	mg/kg	1	0	-	-
			2,4,5-trichlorophenol	mg/kg	0.5	0	-	-
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	0	-	-
			Pentachlorophenol	mg/kg	0.5	0	1	79
			2,4-dinitrophenol	mg/kg	2	0	-	-
			4-chloro-3-methylphenol	mg/kg	2	0	-	-
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.8	-	79
			d5-phenol (Surrogate)	mg/kg	-	1.51	-	77
SE207998.008	LB202976.021		Phenol	mg/kg	0.5	<0.5	1	74
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	-	-
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	-	-
			Total Cresol	mg/kg	1.5	<1.5	-	-
			2-chlorophenol	mg/kg	0.5	<0.5	-	-
			2,4-dimethylphenol	mg/kg	0.5	<0.5	-	-
			2,6-dichlorophenol	mg/kg	0.5	<0.5	-	-
			2,4-dichlorophenol	mg/kg	0.5	<0.5	1	82
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	1	108
			2-nitrophenol	mg/kg	0.5	<0.5	-	-
			4-nitrophenol	mg/kg	1	<1	-	-
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	-	-
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	-	-
			Pentachlorophenol	mg/kg	0.5	<0.5	1	70
			2,4-dinitrophenol	mg/kg	2	<2	-	-
			4-chloro-3-methylphenol	mg/kg	2	<2	-	-
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.1	-	84
			d5-phenol (Surrogate)	mg/kg	-	1.5	-	79

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207998.001	LB203101.004	Arsenic, As	mg/kg	1	54	2	50	104
		Cadmium, Cd	mg/kg	0.3	47	<0.3	50	94
		Chromium, Cr	mg/kg	0.5	53	2.7	50	101
		Copper, Cu	mg/kg	0.5	56	11	50	90
		Nickel, Ni	mg/kg	0.5	52	2.7	50	99
		Lead, Pb	mg/kg	1	76	31	50	91
		Zinc, Zn	mg/kg	2	110	74	50	73
SE208073.001	LB203102.004	Chromium, Cr	mg/kg	0.5	54	6.5	50	96
		Copper, Cu	mg/kg	0.5	57	9.9	50	94
		Lead, Pb	mg/kg	1	59	13	50	93
		Zinc, Zn	mg/kg	2	67	64	50	6 ④

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE207912.055	LB202975.023		TRH C10-C14	mg/kg	20	0	40	113
			TRH C15-C28	mg/kg	45	0	40	103
			TRH C29-C36	mg/kg	45	0	40	65
			TRH C37-C40	mg/kg	100	0	-	-
			TRH C10-C36 Total	mg/kg	110	0	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	0	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25	0	40	110
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	0	-	-
			TRH >C16-C34 (F3)	mg/kg	90	0	40	85

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TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE207912.055	LB202975.023	TRH F Bands	TRH >C34-C40 (F4)	mg/kg	120	0	-	-
SE207998.008	LB202976.021		TRH C10-C14	mg/kg	20	<20	40	95
			TRH C15-C28	mg/kg	45	<45	40	88
			TRH C29-C36	mg/kg	45	<45	40	65
			TRH C37-C40	mg/kg	100	<100	-	-
			TRH C10-C36 Total	mg/kg	110	<110	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	40	95
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	<90	40	83
			TRH >C34-C40 (F4)	mg/kg	120	<120	-	-

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207912.054	LB202969.004	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	0	-	-
			1,2-dichloropropane	mg/kg	0.1	<0.1	0	-	-
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	0	-	-
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	0	-	-
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	0	-	-
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	0	-	-
		Aliphatics	Chloromethane	mg/kg	1	<1	0	-	-
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	0	-	-
			Bromomethane	mg/kg	1	<1	0	-	-
			Chloroethane	mg/kg	1	<1	0	-	-
			Trichlorofluoromethane	mg/kg	1	<1	0	-	-
			Iodomethane	mg/kg	5	<5	2.83451916990	-	-
			1,1-dichloroethene	mg/kg	0.1	5.3	0	5	105
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	0.04110308829	-	-
			Allyl chloride	mg/kg	0.1	<0.1	0	-	-
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	0	-	-
			1,1-dichloroethane	mg/kg	0.1	<0.1	0	-	-
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	0	-	-
			Bromochloromethane	mg/kg	0.1	<0.1	0	-	-
			1,2-dichloroethane	mg/kg	0.1	5.8	0	5	116
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	0	-	-
			1,1-dichloropropene	mg/kg	0.1	<0.1	0	-	-
			Carbon tetrachloride	mg/kg	0.1	<0.1	0	-	-
			Dibromomethane	mg/kg	0.1	<0.1	0	-	-
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	5.8	0	5	116
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	0	-	-
			1,3-dichloropropane	mg/kg	0.1	<0.1	0	-	-
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	0	-	-
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	0	-	-
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	0	-	-
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	0	-	-
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	0	-	-
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	0	-	-
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	0	-	-
			Hexachlorobutadiene	mg/kg	0.1	<0.1	0	-	-
		Halogenated	Chlorobenzene	mg/kg	0.1	5.4	0	5	108
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	0	-	-
			2-chlorotoluene	mg/kg	0.1	<0.1	0	-	-
			4-chlorotoluene	mg/kg	0.1	<0.1	0	-	-
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	0	-	-
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	0	-	-
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	0	-	-
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	0	-	-
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	0	-	-
		Monocyclic	Benzene	mg/kg	0.1	5.6	0	5	112
		Aromatic	Toluene	mg/kg	0.1	5.4	0	5	107
			Ethylbenzene	mg/kg	0.1	5.4	0	5	107

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VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207912.054	LB202969.004	Monocyclic	m/p-xylene	mg/kg	0.2	11	0	10	106
		Aromatic	o-xylene	mg/kg	0.1	5.2	0	5	105
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	0	-	-
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	0	-	-
			n-propylbenzene	mg/kg	0.1	<0.1	0	-	-
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	0	-	-
			tert-butylbenzene	mg/kg	0.1	<0.1	0	-	-
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	0	-	-
			sec-butylbenzene	mg/kg	0.1	<0.1	0	-	-
			p-isopropyltoluene	mg/kg	0.1	<0.1	0	-	-
			n-butylbenzene	mg/kg	0.1	<0.1	0	-	-
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	0	-	-
		Compounds	2-nitropropane	mg/kg	10	<10	0	-	-
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	0.39064225499	-	-
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	0	-	-
			Vinyl acetate	mg/kg	10	<10	0	-	-
			MEK (2-butanone)	mg/kg	10	<10	0	-	-
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	0	-	-
			2-hexanone (MBK)	mg/kg	5	<5	0	-	-
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	0	-	-
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	0	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.9	10.9026389715(	10	99
			d8-toluene (Surrogate)	mg/kg	-	9.6	10.1757301185(	10	96
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.4	10.4493179900(	10	94
		Totals	Total Xylenes	mg/kg	0.3	16	0	-	-
			Total BTEX	mg/kg	0.6	32	0	-	-
			Total VOC*	mg/kg	24	62	3.26626451318	-	-
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	0	-	-
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	28	0.04110308829	-	-
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	28	0.04110308829	-	-
		Trihalometha	Chloroform	mg/kg	0.1	5.6	0	5	112
		nes	Bromodichloromethane	mg/kg	0.1	<0.1	0	-	-
			Chlorodibromomethane	mg/kg	0.1	<0.1	0	-	-
			Bromoform	mg/kg	0.1	<0.1	0	-	-
SE207998.007	LB202970.004	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	-	-
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	-	-
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	-	-
			Bromomethane	mg/kg	1	<1	<1	-	-
			Chloroethane	mg/kg	1	<1	<1	-	-
			Trichlorofluoromethane	mg/kg	1	<1	<1	-	-
			Iodomethane	mg/kg	5	<5	<5	-	-
			1,1-dichloroethene	mg/kg	0.1	3.8	<0.1	5	76
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	-	-
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloroethane	mg/kg	0.1	4.3	<0.1	5	87
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	-	-
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	4.2	<0.1	5	83
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207998.007	LB202970.004	Halogenated	Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	-	-
		Aliphatics	1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated	Chlorobenzene	mg/kg	0.1	4.3	<0.1	5	87
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Monocyclic	Benzene	mg/kg	0.1	3.9	<0.1	5	78
		Aromatic	Toluene	mg/kg	0.1	4.3	<0.1	5	86
			Ethylbenzene	mg/kg	0.1	4.3	<0.1	5	86
			m/p-xylene	mg/kg	0.2	8.5	<0.2	10	85
			o-xylene	mg/kg	0.1	4.2	<0.1	5	85
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	-	-
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	-	-
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	-	-
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	-	-
		Compounds	2-nitropropane	mg/kg	10	<10	<10	-	-
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	-	-
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	-	-
			Vinyl acetate	mg/kg	10	<10	<10	-	-
			MEK (2-butanone)	mg/kg	10	<10	<10	-	-
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	-	-
			2-hexanone (MBK)	mg/kg	5	<5	<5	-	-
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.7	8.6	10	87
			d8-toluene (Surrogate)	mg/kg	-	8.1	7.9	10	81
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.3	8.8	10	83
		Totals	Total Xylenes	mg/kg	0.3	13	<0.3	-	-
			Total BTEX	mg/kg	0.6	25	<0.6	-	-
			Total VOC*	mg/kg	24	47	<24	-	-
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	-	-
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	21	<1.8	-	-
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	21	<1.8	-	-
		Trihalometha	Chloroform	mg/kg	0.1	3.9	<0.1	5	77
		nes	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Bromoform	mg/kg	0.1	<0.1	<0.1	-	-

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207912.054	LB202969.004		TRH C6-C10	mg/kg	25	64	0.46983159776	92.5	69
			TRH C6-C9	mg/kg	20	59	0.14239032749	80	74
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.9	10.9026389715(	10	99
			d8-toluene (Surrogate)	mg/kg	-	9.6	10.1757301185(	10	96

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207912.054	LB202969.004	Surrogates	Bromofluorobenzene (Surrogate)	mg/kg	-	9.4	10.44931799002	-	94
		VPH F	Benzene (F0)	mg/kg	0.1	5.6	0	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	32	0.46983159776	62.5	51 ④
SE207998.007	LB202970.004		TRH C6-C10	mg/kg	25	56	<25	92.5	60
			TRH C6-C9	mg/kg	20	49	<20	80	60
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.7	8.6	10	87
			d8-toluene (Surrogate)	mg/kg	-	8.1	7.9	10	81
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.3	8.8	-	83
		VPH F	Benzene (F0)	mg/kg	0.1	3.9	<0.1	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	31	<25	62.5	49 ④

MATRIX SPIKE DUPLICATES

SE207998 R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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000680

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

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- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT: DHA

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGER: [redacted]

PM CONTACT No:

COMMENTS OR ADDITIONAL DIRECTIONS

LABORATORY: SGS

LABORATORY ADDRESS: SYD

SAMPLER: [redacted]

SAMPLER CONTACT No:

Email Reports and Invoices to: LGRSYD

Turnaround Time (TAT)
- ☑ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT:

COC Number 1 of 23

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	Asbestos	W/W Asbestos (WA)					Hold	Additional Information (Comment on any gross contamination or specific requirements)
	0407_TP237_0.1_200624	24.6.20	Soil	1	X								
	0407_TP237_0.5_200624			2	X		X						bag
	0407_TP107_0.1_200624			3	X								
	0407_TP107_0.5_200624			4	X								bag
	0407_TP107_1.0_200624												
	0407_TP117_0.1_200624											X	
	0407_TP117_0.5_200624												
	0407_TP117_1.0_200624												
	0407_TP117_A01_200624		ACM	5		X							
	407_TP127_0.1_200624		Soil	6	X								
	7_TP127_0.5_200624			7	X								bag
	_TP127_1.0_200624											X	

SGS EHS Sydney COC

SE208046

roper field sampling procedures were used during the collection of these samples.

mpler	Sign	Date / Time	Received by	Sig[redacted]	Date / Time 24/06/20	Temperature Received:
	Sign	Date / Time	Received by	Sig[redacted]	Date / Time 04:30	
	Sign	Date / Time	Received by	Sign	Date / Time	

000681

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CHAIN OF CUSTODY DOCUMENTATION

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- ☐ MELBOURNE: Suite 2, 2 Dornville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
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- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT: DHA	LABORATORY: SGS	Turnaround Time (TAT)	COC Number 2 of 3
PROJECT:	LABORATORY ADDRESS: SYD	☑ Standard	
PROJECT NUMBER:	SAMPLER: [redacted]	☐ Non Standard or Urgent TAT	
PROJECT MANAGER:	SAMPLER CONTACT No:	Required TAT:	
PM CONTACT No:	Email Reports and Invoices to: LQRSYD@slrconsulting.com		

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	Asbestos	PFAS					Hold	Additional Information (Comment on any gross contamination or specific requirements)	
8	0407_TP139_0.1_200624	24.6.20	Soil		X									bag
9	0407_TP139_0.5_200624				X									bag
	0407_TP139_1.0_200624											X		
10	0407_TP140_0.1_200624				X									bag
11	0407_TP140_0.5_200624				X									bag
	0407_TP140_1.0_200624											X		
12 5	0407_TP140_A01_200624		ACM		~~X~~	X								
13 6	0407_TP137_0.1_200624		Soil		X									bag
14 7	0407_TP137_0.5_200624				X									
	0407_TP137_1.0_200624											X		
15 8	0407_QC152_200624				X		X							
16 9	0407_QC160_200624				X		X							

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	Received by	Sign [redacted]	Date / Time 24/06/20	Temperature Received:
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time 04.30	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

000682

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CHAIN OF CUSTODY DOCUMENTATION

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- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT: DHA	**LABORATORY:** SGS	**Turnaround Time (TAT)**	**COC Number** 3 of 3
PROJECT: Randwick Barracks	**LABORATORY ADDRESS:** SMP		
PROJECT NUMBER: 610.30041	**SAMPLER:** [redacted]	☑ Standard TAT	
PROJECT MANAGER: [redacted]	**SAMPLER CONTACT No:**	☐ Non Standard or Urgent TAT	
PM CONTACT No:	**Email Reports and Invoices to:** LGrayde slrconsulting.com	**Required TAT:**	

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

Additional Information
(Comment on any gross contamination or specific requirements)

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	PFAS	Additional Information
	0407_QC252_200624 *	24.6.20	Soil	Please forward to Eurofins for suite A and PFAS			
	0407_QC260_200624 *	1	1				

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	**Received by**	Sign [redacted]	Date / Time 24/06/20	**Temperature Received:**
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time 25.6.20	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

SAMPLE RECEIPT ADVICE

SE208046

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000680--000682**
Samples	16

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Wed 24/6/2020
Report Due	Wed 1/7/2020
SGS Reference	**SE208046**

SUBMISSION DETAILS

This is to confirm that 16 samples were received on Wednesday 24/6/2020. Results are expected to be ready by COB Wednesday 1/7/2020.
Please quote SGS reference SE208046 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	14 Soil, 2 Material
Date documentation received	24/6/2020	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	5.3°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

8 Soil have been placed on hold as no tests have been assigned for them by the client. These samples will not be processed.
PFAS subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420. Report Number ME315500

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SAMPLE RECEIPT ADVICE

SE208046

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	Speciated Phenols in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
001	0407_TP237_0.1_200624	29	14	26	11	18	10	81	7
002	0407_TP237_0.5_200624	29	14	26	11	18	10	81	7
003	0407_TP107_0.1_200624	29	14	26	11	18	10	81	7
004	0407_TP107_0.5_200624	29	14	26	11	18	10	81	7
006	0407_TP127_0.1_200624	29	14	26	11	18	10	81	7
007	0407_TP127_0.5_200624	29	14	26	11	18	10	81	7
008	0407_TP139_0.1_200624	29	14	26	11	18	10	81	7
009	0407_TP139_0.5_200624	29	14	26	11	18	10	81	7
010	0407_TP140_0.1_200624	29	14	26	11	18	10	81	7
011	0407_TP140_0.5_200624	29	14	26	11	18	10	81	7
013	0407_TP137_0.1_200624	29	14	26	11	18	10	81	7
014	0407_TP137_0.5_200624	29	14	26	11	18	10	81	7
015	0407_QC152_200624	29	14	26	11	18	10	81	7
016	0407_QC160_200624	29	14	26	11	18	10	81	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE208046

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Fibre Identification in soil	Gravimetric Determination of Asbestos in Soil	Mercury in Soil	Moisture Content	Per- and Polyfluoroalkyl Substances (PFAS) in	Total Recoverable Elements in Soil/Waste
001	0407_TP237_0.1_200624	2	8	1	1	-	7
002	0407_TP237_0.5_200624	-	-	1	1	-	7
003	0407_TP107_0.1_200624	2	8	1	1	-	7
004	0407_TP107_0.5_200624	-	-	1	1	-	7
006	0407_TP127_0.1_200624	2	8	1	1	-	7
007	0407_TP127_0.5_200624	-	-	1	1	-	7
008	0407_TP139_0.1_200624	2	8	1	1	-	7
009	0407_TP139_0.5_200624	2	8	1	1	-	7
010	0407_TP140_0.1_200624	2	8	1	1	-	7
011	0407_TP140_0.5_200624	2	8	1	1	-	7
013	0407_TP137_0.1_200624	2	8	1	1	-	7
014	0407_TP137_0.5_200624	-	-	1	1	-	7
015	0407_QC152_200624	-	-	1	1	55	7
016	0407_QC160_200624	-	-	1	1	55	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE208046

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Fibre ID in bulk materials
005	0407_TP117_ACM_200624	1
012	0407_TP140_A01_200624	1

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000680--000682**
Samples	16

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208046 R0**
Date Received	24/6/2020
Date Reported	3/7/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

Some PFAS surrogate recovery values are out of acceptance range due to matrix interference .

No respirable fibres detected in all soil samples using trace analysis technique.

Sample #1: Asbestos found as 5x2x2mm cement sheet fragment in >2mm portion.
Sample #10: Asbestos found as 3x2x2mm cement sheet fragment in >2mm portion.

Asbestos analysed by Approved Identifier Ravee Sivasubramaniam .

SIGNATORIES

[redacted]

Chemist | Senior Organic Chemist/Metals Chemist | Metals/Inorganics Team Leader

[redacted]

Organic Section Head | Hygiene Team Leader

VOC's in Soil [AN433] Tested: 30/6/2020

PARAMETER	UOM	LOR	0407_TP237_0.1_20(624 SOIL - 24/6/2020 SE208046.001	0407_TP237_0.5_20(624 SOIL - 24/6/2020 SE208046.002	0407_TP107_0.1_20(624 SOIL - 24/6/2020 SE208046.003	0407_TP107_0.5_20(624 SOIL - 24/6/2020 SE208046.004	0407_TP127_0.1_20(624 SOIL - 24/6/2020 SE208046.006
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 30/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP237_0.1_20(624 SOIL - 24/6/2020 SE208046.001	0407_TP237_0.5_20(624 SOIL - 24/6/2020 SE208046.002	0407_TP107_0.1_20(624 SOIL - 24/6/2020 SE208046.003	0407_TP107_0.5_20(624 SOIL - 24/6/2020 SE208046.004	0407_TP127_0.1_20(624 SOIL - 24/6/2020 SE208046.006
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 30/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP127_0.5_20(624 SOIL - 24/6/2020 SE208046.007	0407_TP139_0.1_20(624 SOIL - 24/6/2020 SE208046.008	0407_TP139_0.5_20(624 SOIL - 24/6/2020 SE208046.009	0407_TP140_0.1_20(624 SOIL - 24/6/2020 SE208046.010	0407_TP140_0.5_20(624 SOIL - 24/6/2020 SE208046.011
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 30/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP127_0.5_20(624 SOIL - 24/6/2020 SE208046.007	0407_TP139_0.1_20(624 SOIL - 24/6/2020 SE208046.008	0407_TP139_0.5_20(624 SOIL - 24/6/2020 SE208046.009	0407_TP140_0.1_20(624 SOIL - 24/6/2020 SE208046.010	0407_TP140_0.5_20(624 SOIL - 24/6/2020 SE208046.011
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 30/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP137_0.1_20624 SOIL - 24/6/2020 SE208046.013	0407_TP137_0.5_20624 SOIL - 24/6/2020 SE208046.014	0407_QC152_20062 SOIL - 24/6/2020 SE208046.015	0407_QC160_20062 SOIL - 24/6/2020 SE208046.016
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 30/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP137_0.1_20624 SOIL - 24/6/2020 SE208046.013	0407_TP137_0.5_20624 SOIL - 24/6/2020 SE208046.014	0407_QC152_20062 SOIL - 24/6/2020 SE208046.015	0407_QC160_20062 SOIL - 24/6/2020 SE208046.016
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 30/6/2020

PARAMETER	UOM	LOR	0407_TP237_0.1_20(624 SOIL - 24/6/2020 SE208046.001	0407_TP237_0.5_20(624 SOIL - 24/6/2020 SE208046.002	0407_TP107_0.1_20(624 SOIL - 24/6/2020 SE208046.003	0407_TP107_0.5_20(624 SOIL - 24/6/2020 SE208046.004	0407_TP127_0.1_20(624 SOIL - 24/6/2020 SE208046.006
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP127_0.5_20(624 SOIL - 24/6/2020 SE208046.007	0407_TP139_0.1_20(624 SOIL - 24/6/2020 SE208046.008	0407_TP139_0.5_20(624 SOIL - 24/6/2020 SE208046.009	0407_TP140_0.1_20(624 SOIL - 24/6/2020 SE208046.010	0407_TP140_0.5_20(624 SOIL - 24/6/2020 SE208046.011
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP137_0.1_20(624 SOIL - 24/6/2020 SE208046.013	0407_TP137_0.5_20(624 SOIL - 24/6/2020 SE208046.014	0407_QC152_20062(SOIL - 24/6/2020 SE208046.015	0407_QC160_20062(SOIL - 24/6/2020 SE208046.016
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 30/6/2020

PARAMETER	UOM	LOR	0407_TP237_0.1_20624 SOIL - 24/6/2020 SE208046.001	0407_TP237_0.5_20624 SOIL - 24/6/2020 SE208046.002	0407_TP107_0.1_20624 SOIL - 24/6/2020 SE208046.003	0407_TP107_0.5_20624 SOIL - 24/6/2020 SE208046.004	0407_TP127_0.1_20624 SOIL - 24/6/2020 SE208046.006
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP127_0.5_20624 SOIL - 24/6/2020 SE208046.007	0407_TP139_0.1_20624 SOIL - 24/6/2020 SE208046.008	0407_TP139_0.5_20624 SOIL - 24/6/2020 SE208046.009	0407_TP140_0.1_20624 SOIL - 24/6/2020 SE208046.010	0407_TP140_0.5_20624 SOIL - 24/6/2020 SE208046.011
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP137_0.1_20624 SOIL - 24/6/2020 SE208046.013	0407_TP137_0.5_20624 SOIL - 24/6/2020 SE208046.014	0407_QC152_20062 SOIL - 24/6/2020 SE208046.015	0407_QC160_20062 SOIL - 24/6/2020 SE208046.016
TRH C10-C14	mg/kg	20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 30/6/2020

PARAMETER	UOM	LOR	0407_TP237_0.1_20(624 SOIL - 24/6/2020 SE208046.001	0407_TP237_0.5_20(624 SOIL - 24/6/2020 SE208046.002	0407_TP107_0.1_20(624 SOIL - 24/6/2020 SE208046.003	0407_TP107_0.5_20(624 SOIL - 24/6/2020 SE208046.004	0407_TP127_0.1_20(624 SOIL - 24/6/2020 SE208046.006
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	**0.2**	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	**0.2**	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	**0.1**	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	**0.1**	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PARAMETER	UOM	LOR	0407_TP127_0.5_20(624 SOIL - 24/6/2020 SE208046.007	0407_TP139_0.1_20(624 SOIL - 24/6/2020 SE208046.008	0407_TP139_0.5_20(624 SOIL - 24/6/2020 SE208046.009	0407_TP140_0.1_20(624 SOIL - 24/6/2020 SE208046.010	0407_TP140_0.5_20(624 SOIL - 24/6/2020 SE208046.011
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	**0.1**	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	**0.4**	<0.1	**0.2**	<0.1
Pyrene	mg/kg	0.1	<0.1	**0.4**	<0.1	**0.2**	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	**0.2**	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	**0.2**	<0.1	**0.1**	**0.1**
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	**0.2**	<0.1	**0.1**	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	**0.1**	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	**0.2**	<0.1	**0.1**	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	**0.3**	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	**0.4**	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	**0.3**	<0.2	**0.2**	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	**1.8**	<0.8	**0.8**	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	**1.8**	<0.8	**0.8**	<0.8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 30/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP137_0.1_20(624 SOIL - 24/6/2020 SE208046.013	0407_TP137_0.5_20(624 SOIL - 24/6/2020 SE208046.014	0407_QC152_20062(SOIL - 24/6/2020 SE208046.015	0407_QC160_20062(SOIL - 24/6/2020 SE208046.016
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.2**
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.6**
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.6**
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.3**
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.3**
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.3**
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.2**
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.3**
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.1**
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.2**
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	**0.3**
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	**0.4**
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	**0.4**
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	**2.9**
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	**2.9**

Speciated Phenols in Soil [AN420] Tested: 30/6/2020

PARAMETER	UOM	LOR	0407_TP237_0.1_20(624 SOIL - 24/6/2020 SE208046.001	0407_TP237_0.5_20(624 SOIL - 24/6/2020 SE208046.002	0407_TP107_0.1_20(624 SOIL - 24/6/2020 SE208046.003	0407_TP107_0.5_20(624 SOIL - 24/6/2020 SE208046.004	0407_TP127_0.1_20(624 SOIL - 24/6/2020 SE208046.006
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_TP127_0.5_20(624 SOIL - 24/6/2020 SE208046.007	0407_TP139_0.1_20(624 SOIL - 24/6/2020 SE208046.008	0407_TP139_0.5_20(624 SOIL - 24/6/2020 SE208046.009	0407_TP140_0.1_20(624 SOIL - 24/6/2020 SE208046.010	0407_TP140_0.5_20(624 SOIL - 24/6/2020 SE208046.011
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

Speciated Phenols in Soil [AN420] Tested: 30/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP137_0.1_20624 SOIL - 24/6/2020 SE208046.013	0407_TP137_0.5_20624 SOIL - 24/6/2020 SE208046.014	0407_QC152_20062 SOIL - 24/6/2020 SE208046.015	0407_QC160_20062 SOIL - 24/6/2020 SE208046.016
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2

OC Pesticides in Soil [AN420] Tested: 30/6/2020

PARAMETER	UOM	LOR	0407_TP237_0.1_20(624 SOIL - 24/6/2020 SE208046.001	0407_TP237_0.5_20(624 SOIL - 24/6/2020 SE208046.002	0407_TP107_0.1_20(624 SOIL - 24/6/2020 SE208046.003	0407_TP107_0.5_20(624 SOIL - 24/6/2020 SE208046.004	0407_TP127_0.1_20(624 SOIL - 24/6/2020 SE208046.006
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 30/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP127_0.5_20(624 SOIL - 24/6/2020 SE208046.007	0407_TP139_0.1_20(624 SOIL - 24/6/2020 SE208046.008	0407_TP139_0.5_20(624 SOIL - 24/6/2020 SE208046.009	0407_TP140_0.1_20(624 SOIL - 24/6/2020 SE208046.010	0407_TP140_0.5_20(624 SOIL - 24/6/2020 SE208046.011
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 30/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP137_0.1_20624 SOIL - 24/6/2020 SE208046.013	0407_TP137_0.5_20624 SOIL - 24/6/2020 SE208046.014	0407_QC152_20062 SOIL - 24/6/2020 SE208046.015	0407_QC160_20062 SOIL - 24/6/2020 SE208046.016
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1

OP Pesticides in Soil [AN420] Tested: 30/6/2020

PARAMETER	UOM	LOR	0407_TP237_0.1_20(624 SOIL - 24/6/2020 SE208046.001	0407_TP237_0.5_20(624 SOIL - 24/6/2020 SE208046.002	0407_TP107_0.1_20(624 SOIL - 24/6/2020 SE208046.003	0407_TP107_0.5_20(624 SOIL - 24/6/2020 SE208046.004	0407_TP127_0.1_20(624 SOIL - 24/6/2020 SE208046.006
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP127_0.5_20(624 SOIL - 24/6/2020 SE208046.007	0407_TP139_0.1_20(624 SOIL - 24/6/2020 SE208046.008	0407_TP139_0.5_20(624 SOIL - 24/6/2020 SE208046.009	0407_TP140_0.1_20(624 SOIL - 24/6/2020 SE208046.010	0407_TP140_0.5_20(624 SOIL - 24/6/2020 SE208046.011
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP137_0.1_20(624 SOIL - 24/6/2020 SE208046.013	0407_TP137_0.5_20(624 SOIL - 24/6/2020 SE208046.014	0407_QC152_20062(SOIL - 24/6/2020 SE208046.015	0407_QC160_20062(SOIL - 24/6/2020 SE208046.016
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7

PCBs in Soil [AN420] Tested: 30/6/2020

PARAMETER	UOM	LOR	0407_TP237_0.1_20(624 SOIL - 24/6/2020 SE208046.001	0407_TP237_0.5_20(624 SOIL - 24/6/2020 SE208046.002	0407_TP107_0.1_20(624 SOIL - 24/6/2020 SE208046.003	0407_TP107_0.5_20(624 SOIL - 24/6/2020 SE208046.004	0407_TP127_0.1_20(624 SOIL - 24/6/2020 SE208046.006
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP127_0.5_20(624 SOIL - 24/6/2020 SE208046.007	0407_TP139_0.1_20(624 SOIL - 24/6/2020 SE208046.008	0407_TP139_0.5_20(624 SOIL - 24/6/2020 SE208046.009	0407_TP140_0.1_20(624 SOIL - 24/6/2020 SE208046.010	0407_TP140_0.5_20(624 SOIL - 24/6/2020 SE208046.011
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP137_0.1_20(624 SOIL - 24/6/2020 SE208046.013	0407_TP137_0.5_20(624 SOIL - 24/6/2020 SE208046.014	0407_QC152_20062(SOIL - 24/6/2020 SE208046.015	0407_QC160_20062(SOIL - 24/6/2020 SE208046.016
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 30/6/2020

PARAMETER	UOM	LOR	0407_TP237_0.1_20(624 SOIL - 24/6/2020 SE208046.001	0407_TP237_0.5_20(624 SOIL - 24/6/2020 SE208046.002	0407_TP107_0.1_20(624 SOIL - 24/6/2020 SE208046.003	0407_TP107_0.5_20(624 SOIL - 24/6/2020 SE208046.004	0407_TP127_0.1_20(624 SOIL - 24/6/2020 SE208046.006
Arsenic, As	mg/kg	1	7	3	<1	<1	<1
Cadmium, Cd	mg/kg	0.3	<0.3	0.5	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	19	23	0.6	<0.5	1.4
Copper, Cu	mg/kg	0.5	39	67	1.2	0.7	1.1
Lead, Pb	mg/kg	1	85	550	4	2	4
Nickel, Ni	mg/kg	0.5	12	8.0	<0.5	<0.5	<0.5
Zinc, Zn	mg/kg	2	190	400	5.9	<2.0	3.1

PARAMETER	UOM	LOR	0407_TP127_0.5_20(624 SOIL - 24/6/2020 SE208046.007	0407_TP139_0.1_20(624 SOIL - 24/6/2020 SE208046.008	0407_TP139_0.5_20(624 SOIL - 24/6/2020 SE208046.009	0407_TP140_0.1_20(624 SOIL - 24/6/2020 SE208046.010	0407_TP140_0.5_20(624 SOIL - 24/6/2020 SE208046.011
Arsenic, As	mg/kg	1	<1	6	<1	10	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	0.5	<0.3
Chromium, Cr	mg/kg	0.5	1.6	13	0.6	25	1.9
Copper, Cu	mg/kg	0.5	<0.5	28	2.2	90	9.1
Lead, Pb	mg/kg	1	<1	110	8	120	25
Nickel, Ni	mg/kg	0.5	0.8	8.3	<0.5	14	0.9
Zinc, Zn	mg/kg	2	<2.0	180	4.6	480	25

PARAMETER	UOM	LOR	0407_TP137_0.1_20(624 SOIL - 24/6/2020 SE208046.013	0407_TP137_0.5_20(624 SOIL - 24/6/2020 SE208046.014	0407_QC152_20062(SOIL - 24/6/2020 SE208046.015	0407_QC160_20062(SOIL - 24/6/2020 SE208046.016
Arsenic, As	mg/kg	1	<1	<1	<1	6
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	0.4
Chromium, Cr	mg/kg	0.5	<0.5	1.9	<0.5	19
Copper, Cu	mg/kg	0.5	0.7	<0.5	0.7	58
Lead, Pb	mg/kg	1	3	1	2	110
Nickel, Ni	mg/kg	0.5	<0.5	0.7	<0.5	9.1
Zinc, Zn	mg/kg	2	2.3	<2.0	2.2	490

Mercury in Soil [AN312] Tested: 30/6/2020

PARAMETER	UOM	LOR	0407_TP237_0.1_20(624 SOIL - 24/6/2020 SE208046.001	0407_TP237_0.5_20(624 SOIL - 24/6/2020 SE208046.002	0407_TP107_0.1_20(624 SOIL - 24/6/2020 SE208046.003	0407_TP107_0.5_20(624 SOIL - 24/6/2020 SE208046.004	0407_TP127_0.1_20(624 SOIL - 24/6/2020 SE208046.006
Mercury	mg/kg	0.05	**0.07**	**0.46**	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_TP127_0.5_20(624 SOIL - 24/6/2020 SE208046.007	0407_TP139_0.1_20(624 SOIL - 24/6/2020 SE208046.008	0407_TP139_0.5_20(624 SOIL - 24/6/2020 SE208046.009	0407_TP140_0.1_20(624 SOIL - 24/6/2020 SE208046.010	0407_TP140_0.5_20(624 SOIL - 24/6/2020 SE208046.011
Mercury	mg/kg	0.05	<0.05	**0.09**	<0.05	**0.11**	<0.05

PARAMETER	UOM	LOR	0407_TP137_0.1_20(624 SOIL - 24/6/2020 SE208046.013	0407_TP137_0.5_20(624 SOIL - 24/6/2020 SE208046.014	0407_QC152_20062(SOIL - 24/6/2020 SE208046.015	0407_QC160_20062(SOIL - 24/6/2020 SE208046.016
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	**0.06**

Moisture Content [AN002] Tested: 30/6/2020

PARAMETER	UOM	LOR	0407_TP237_0.1_20(624 SOIL - 24/6/2020 SE208046.001	0407_TP237_0.5_20(624 SOIL - 24/6/2020 SE208046.002	0407_TP107_0.1_20(624 SOIL - 24/6/2020 SE208046.003	0407_TP107_0.5_20(624 SOIL - 24/6/2020 SE208046.004	0407_TP127_0.1_20(624 SOIL - 24/6/2020 SE208046.006
% Moisture	%w/w	1	27.3	12.6	22.8	2.9	3.3

PARAMETER	UOM	LOR	0407_TP127_0.5_20(624 SOIL - 24/6/2020 SE208046.007	0407_TP139_0.1_20(624 SOIL - 24/6/2020 SE208046.008	0407_TP139_0.5_20(624 SOIL - 24/6/2020 SE208046.009	0407_TP140_0.1_20(624 SOIL - 24/6/2020 SE208046.010	0407_TP140_0.5_20(624 SOIL - 24/6/2020 SE208046.011
% Moisture	%w/w	1	2.2	16.0	3.9	15.5	4.7

PARAMETER	UOM	LOR	0407_TP137_0.1_20(624 SOIL - 24/6/2020 SE208046.013	0407_TP137_0.5_20(624 SOIL - 24/6/2020 SE208046.014	0407_QC152_20062(SOIL - 24/6/2020 SE208046.015	0407_QC160_20062(SOIL - 24/6/2020 SE208046.016
% Moisture	%w/w	1	21.5	22.8	4.9	30.4

Fibre Identification in soil [AN602] Tested: 30/6/2020

PARAMETER	UOM	LOR	0407_TP237_0.1_20(624 SOIL - 24/6/2020 SE208046.001	0407_TP107_0.1_20(624 SOIL - 24/6/2020 SE208046.003	0407_TP127_0.1_20(624 SOIL - 24/6/2020 SE208046.006	0407_TP139_0.1_20(624 SOIL - 24/6/2020 SE208046.008	0407_TP139_0.5_20(624 SOIL - 24/6/2020 SE208046.009
Asbestos Detected	No unit	-	Yes	No	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	0407_TP140_0.1_20(624 SOIL - 24/6/2020 SE208046.010	0407_TP140_0.5_20(624 SOIL - 24/6/2020 SE208046.011	0407_TP137_0.1_20(624 SOIL - 24/6/2020 SE208046.013
Asbestos Detected	No unit	-	Yes	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 30/6/2020

PARAMETER	UOM	LOR	0407_TP237_0.1_20(624 SOIL - 24/6/2020 SE208046.001	0407_TP107_0.1_20(624 SOIL - 24/6/2020 SE208046.003	0407_TP127_0.1_20(624 SOIL - 24/6/2020 SE208046.006	0407_TP139_0.1_20(624 SOIL - 24/6/2020 SE208046.008	0407_TP139_0.5_20(624 SOIL - 24/6/2020 SE208046.009
Total Sample Weight*	g	1	**484**	**736**	**727**	**449**	**695**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	**0.0254**	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	**0.005**	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	**0.005**	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP140_0.1_20(624 SOIL - 24/6/2020 SE208046.010	0407_TP140_0.5_20(624 SOIL - 24/6/2020 SE208046.011	0407_TP137_0.1_20(624 SOIL - 24/6/2020 SE208046.013
Total Sample Weight*	g	1	**458**	**692**	**749**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	**0.00704**	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	**0.002**	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	**0.002**	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level [MA-1523] Tested: 2/7/2020

PARAMETER	UOM	LOR	0407_QC152_20062 SOIL - 24/6/2020 SE208046.015	0407_QC160_20062 SOIL - 24/6/2020 SE208046.016
Perfluorobutanoic acid (PFBA)	mg/kg	0.0001	<0.0001	<0.0001
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0005	<0.0005	<0.0005
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0001	<0.0001	**0.0003**
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0001	<0.0001	**0.0001**
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0001	<0.0001	**0.0003**
Perfluorononanoic acid (PFNA)	mg/kg	0.0001	<0.0001	<0.0001
Perfluorodecanoic acid (PFDA)	mg/kg	0.0001	<0.0001	**0.0003**
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0001	<0.0001	<0.0001
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0001	<0.0001	**0.0001**
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0001	<0.0001	<0.0001
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0001	<0.0001	<0.0001
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0001	<0.0001	<0.0001
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0001	<0.0001	<0.0001
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0001	<0.0001	<0.0001
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0001	<0.0001	**0.0003**
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0001	<0.0001	<0.0001
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0001	<0.0001	**0.0046**
Sum PFOS and PFHXS	mg/kg	0.0001	<0.0001	**0.0049**
Perfluorononane sulfonate (PFNS)	mg/kg	0.0001	<0.0001	<0.0001
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0001	<0.0001	<0.0001
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0001	<0.0001	<0.0001
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.001	<0.001	<0.001
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.001	<0.001	<0.001
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.001	<0.001	<0.001
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.001	<0.001	<0.001
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.001	<0.001	<0.001
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.001	<0.001	<0.001
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002	<0.002	<0.002
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002	<0.002	<0.002
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.001	<0.001	<0.001
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.001	<0.001	<0.001

Fibre ID in bulk materials [AN602] Tested: 1/7/2020

PARAMETER	UOM	LOR	0407_TP117_ACM_20624 MATERIAL - 24/6/2020 SE208046.005	0407_TP140_A01_20624 MATERIAL - 24/6/2020 SE208046.012
Asbestos Detected	No unit	-	Yes	Yes

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid , mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser . Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC /MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents .
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup /fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS /ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples, Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable ’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.
AN605	This technique gravimetrically determines the mass of Bonded Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight. Any fibrous asbestos (FA) found in this fraction will be added to the 2-7mm fraction and its mass recorded there.

AN605	This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free/respirable fibres which are only observed by standard trace analysis as per AN602.
AN605	Bonded asbestos containing material (Bonded ACM) comprises asbestos-containing-material which is sound in condition. Fibrous asbestos (FA) comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material. Asbestos fines (AF) includes free fibres, small fibre bundles and also small fragments of bonded ACM that passes through a 7mm sieve - which implies that the bonded ACM fragments have a substantial degree of damage which increases the potential for fibre release.
AN-605	Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009 and NEPM 1999 (2013) schedule B1 section 4..
MA-1523	This method covers the analysis of per- and polyfluoroalkyl substances (PFAS) in aqueous, solid and biosolid samples and solvent extracts, determined as the total of linear and branched isomers. After spiking with isotopically labelled quantification surrogates and clean-up via SPE cartridges sample extracts are analysed by liquid chromatography/mass spectrometry (LC-MS/MS). PFAS concentrations are determined by isotope dilution quantification.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000680--000682**
Samples	10

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208046 R0**
Date Received	24 Jun 2020
Date Reported	03 Jul 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

Some PFAS surrogate recovery values are out of acceptance range due to matrix interference .

No respirable fibres detected in all soil samples using trace analysis technique.

Sample #1: Asbestos found as 5x2x2mm cement sheet fragment in >2mm portion.
Sample #10: Asbestos found as 3x2x2mm cement sheet fragment in >2mm portion.

Asbestos analysed by Approved Identifier Ravee Sivasubramaniam .

SIGNATORIES

[redacted]

Chemist | Senior Organic Chemist/Metals Chemis | Organic Section Head

[redacted]

Hygiene Team Leader

RESULTS

Fibre Identification in soil — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE208046.001	0407_TP237_0.1 _200624	Soil	484g Clay,Sand,Soil, Rocks	24 Jun 2020	Chrysotile Asbestos Found Synthetic Mineral Fibres Detected Organic Fibres Detected	<0.01
SE208046.003	0407_TP107_0.1 _200624	Soil	736g Sand,Soil,Plant Matter	24 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208046.006	0407_TP127_0.1 _200624	Soil	727g Sand,Plant Matter	24 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208046.008	0407_TP139_0.1 _200624	Soil	449g Clay,Sand,Soil, Rocks,Plant Matter	24 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208046.009	0407_TP139_0.5 _200624	Soil	695g Sand,Rocks	24 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208046.010	0407_TP140_0.1 _200624	Soil	458g Clay,Sand,Soil, Rocks,Plant Matter	24 Jun 2020	Chrysotile Asbestos Found Synthetic Mineral Fibres Detected Organic Fibres Detected	<0.01
SE208046.011	0407_TP140_0.5 _200624	Soil	692g Sand,Rocks	24 Jun 2020	No Asbestos Found	<0.01
SE208046.013	0407_TP137_0.1 _200624	Soil	749g Sand,Plant Matter	24 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01

ANALYTICAL REPORT

RESULTS

Fibre ID in bulk materials — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE208046.005	0407_TP117_ACM_200624	Other	25x40x5mm Cement Sheet Fragment	24 Jun 2020	Chrysotile Asbestos Detected	
SE208046.012	0407_TP140_A01_200624	Other	25x10x3mm Cement Sheet Fragment	24 Jun 2020	Chrysotile Asbestos Detected	

METHOD SUMMARY

SE208046 R0

METHOD	METHODOLOGY SUMMARY
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples , Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable ’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.

FOOTNOTES

Amosite	-	Brown Asbestos	NA	-	Not Analysed
Chrysotile	-	White Asbestos	LNR	-	Listed, Not Required
Crocidolite	-	Blue Asbestos	*	-	NATA accreditation does not cover the performance of this service .
Amphiboles	-	Amosite and/or Crocidolite	**	-	Indicative data, theoretical holding time exceeded.

(In reference to soil samples only) This report does not comply with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment and Remediation and Management of Asbestos Contaminated sites in Western Australia - May 2009.

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.

Where reported: 'Asbestos Detected': Asbestos detected by polarised light microscopy, including dispersion staining.
Where reported: 'No Asbestos Found': No Asbestos Found by polarised light microscopy , including dispersion staining.
Where reported: 'UMF Detected': Mineral fibres of unknown type detected by polarised light microscopy, including dispersion staining. Confirmation by another independent analytical technique may be necessary.

Even after disintegration it can be very difficult, or impossible, to detect the presence of asbestos in some asbestos -containing bulk materials using polarised light microscopy. This is due to the low grade or small length or diameter of asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety .

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STATEMENT OF QA/QC PERFORMANCE

SE208046 R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
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Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000680--000682**
Samples	16

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208046 R0**
Date Received	24 Jun 2020
Date Reported	03 Jul 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Surrogate	Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level	24 items
Duplicate	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	1 item
Matrix Spike	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	2 items
	VOC's in Soil	1 item

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	14 Soil, 2 Material
Date documentation received	24/6/2020	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	5.3°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE208046 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Fibre ID in bulk materials

Method: ME-(AU)-[ENV]AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP117_ACM_200624	SE208046.005	LB203142	24 Jun 2020	24 Jun 2020	24 Jun 2021	01 Jul 2020	24 Jun 2021	01 Jul 2020
0407_TP140_A01_200624	SE208046.012	LB203142	24 Jun 2020	24 Jun 2020	24 Jun 2021	01 Jul 2020	24 Jun 2021	01 Jul 2020

Fibre Identification in soil

Method: ME-(AU)-[ENV]AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP237_0.1_200624	SE208046.001	LB203077	24 Jun 2020	24 Jun 2020	24 Jun 2021	30 Jun 2020	24 Jun 2021	01 Jul 2020
0407_TP107_0.1_200624	SE208046.003	LB203077	24 Jun 2020	24 Jun 2020	24 Jun 2021	30 Jun 2020	24 Jun 2021	01 Jul 2020
0407_TP127_0.1_200624	SE208046.006	LB203077	24 Jun 2020	24 Jun 2020	24 Jun 2021	30 Jun 2020	24 Jun 2021	01 Jul 2020
0407_TP139_0.1_200624	SE208046.008	LB203077	24 Jun 2020	24 Jun 2020	24 Jun 2021	30 Jun 2020	24 Jun 2021	01 Jul 2020
0407_TP139_0.5_200624	SE208046.009	LB203077	24 Jun 2020	24 Jun 2020	24 Jun 2021	30 Jun 2020	24 Jun 2021	01 Jul 2020
0407_TP140_0.1_200624	SE208046.010	LB203077	24 Jun 2020	24 Jun 2020	24 Jun 2021	30 Jun 2020	24 Jun 2021	01 Jul 2020
0407_TP140_0.5_200624	SE208046.011	LB203077	24 Jun 2020	24 Jun 2020	24 Jun 2021	30 Jun 2020	24 Jun 2021	01 Jul 2020
0407_TP137_0.1_200624	SE208046.013	LB203077	24 Jun 2020	24 Jun 2020	24 Jun 2021	30 Jun 2020	24 Jun 2021	01 Jul 2020

Gravimetric Determination of Asbestos in Soil

Method: ME-(AU)-[ENV]AN605

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP237_0.1_200624	SE208046.001	LB203077	24 Jun 2020	24 Jun 2020	21 Dec 2020	30 Jun 2020	21 Dec 2020	01 Jul 2020
0407_TP107_0.1_200624	SE208046.003	LB203077	24 Jun 2020	24 Jun 2020	21 Dec 2020	30 Jun 2020	21 Dec 2020	01 Jul 2020
0407_TP127_0.1_200624	SE208046.006	LB203077	24 Jun 2020	24 Jun 2020	21 Dec 2020	30 Jun 2020	21 Dec 2020	01 Jul 2020
0407_TP139_0.1_200624	SE208046.008	LB203077	24 Jun 2020	24 Jun 2020	21 Dec 2020	30 Jun 2020	21 Dec 2020	01 Jul 2020
0407_TP139_0.5_200624	SE208046.009	LB203077	24 Jun 2020	24 Jun 2020	21 Dec 2020	30 Jun 2020	21 Dec 2020	01 Jul 2020
0407_TP140_0.1_200624	SE208046.010	LB203077	24 Jun 2020	24 Jun 2020	21 Dec 2020	30 Jun 2020	21 Dec 2020	01 Jul 2020
0407_TP140_0.5_200624	SE208046.011	LB203077	24 Jun 2020	24 Jun 2020	21 Dec 2020	30 Jun 2020	21 Dec 2020	01 Jul 2020
0407_TP137_0.1_200624	SE208046.013	LB203077	24 Jun 2020	24 Jun 2020	21 Dec 2020	30 Jun 2020	21 Dec 2020	01 Jul 2020

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP237_0.1_200624	SE208046.001	LB203094	24 Jun 2020	24 Jun 2020	22 Jul 2020	30 Jun 2020	22 Jul 2020	01 Jul 2020
0407_TP237_0.5_200624	SE208046.002	LB203094	24 Jun 2020	24 Jun 2020	22 Jul 2020	30 Jun 2020	22 Jul 2020	01 Jul 2020
0407_TP107_0.1_200624	SE208046.003	LB203094	24 Jun 2020	24 Jun 2020	22 Jul 2020	30 Jun 2020	22 Jul 2020	01 Jul 2020
0407_TP107_0.5_200624	SE208046.004	LB203094	24 Jun 2020	24 Jun 2020	22 Jul 2020	30 Jun 2020	22 Jul 2020	01 Jul 2020
0407_TP127_0.1_200624	SE208046.006	LB203094	24 Jun 2020	24 Jun 2020	22 Jul 2020	30 Jun 2020	22 Jul 2020	01 Jul 2020
0407_TP127_0.5_200624	SE208046.007	LB203094	24 Jun 2020	24 Jun 2020	22 Jul 2020	30 Jun 2020	22 Jul 2020	01 Jul 2020
0407_TP139_0.1_200624	SE208046.008	LB203094	24 Jun 2020	24 Jun 2020	22 Jul 2020	30 Jun 2020	22 Jul 2020	01 Jul 2020
0407_TP139_0.5_200624	SE208046.009	LB203094	24 Jun 2020	24 Jun 2020	22 Jul 2020	30 Jun 2020	22 Jul 2020	01 Jul 2020
0407_TP140_0.1_200624	SE208046.010	LB203094	24 Jun 2020	24 Jun 2020	22 Jul 2020	30 Jun 2020	22 Jul 2020	01 Jul 2020
0407_TP140_0.5_200624	SE208046.011	LB203094	24 Jun 2020	24 Jun 2020	22 Jul 2020	30 Jun 2020	22 Jul 2020	01 Jul 2020
0407_TP137_0.1_200624	SE208046.013	LB203094	24 Jun 2020	24 Jun 2020	22 Jul 2020	30 Jun 2020	22 Jul 2020	01 Jul 2020
0407_TP137_0.5_200624	SE208046.014	LB203094	24 Jun 2020	24 Jun 2020	22 Jul 2020	30 Jun 2020	22 Jul 2020	01 Jul 2020
0407_QC152_200624	SE208046.015	LB203094	24 Jun 2020	24 Jun 2020	22 Jul 2020	30 Jun 2020	22 Jul 2020	01 Jul 2020
0407_QC160_200624	SE208046.016	LB203094	24 Jun 2020	24 Jun 2020	22 Jul 2020	30 Jun 2020	22 Jul 2020	01 Jul 2020

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP237_0.1_200624	SE208046.001	LB203027	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	05 Jul 2020	01 Jul 2020
0407_TP237_0.5_200624	SE208046.002	LB203027	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	05 Jul 2020	01 Jul 2020
0407_TP107_0.1_200624	SE208046.003	LB203027	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	05 Jul 2020	01 Jul 2020
0407_TP107_0.5_200624	SE208046.004	LB203027	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	05 Jul 2020	01 Jul 2020
0407_TP127_0.1_200624	SE208046.006	LB203027	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	05 Jul 2020	01 Jul 2020
0407_TP127_0.5_200624	SE208046.007	LB203027	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	05 Jul 2020	01 Jul 2020
0407_TP139_0.1_200624	SE208046.008	LB203027	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	05 Jul 2020	01 Jul 2020
0407_TP139_0.5_200624	SE208046.009	LB203027	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	05 Jul 2020	01 Jul 2020
0407_TP140_0.1_200624	SE208046.010	LB203027	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	05 Jul 2020	01 Jul 2020
0407_TP140_0.5_200624	SE208046.011	LB203027	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	05 Jul 2020	01 Jul 2020
0407_TP137_0.1_200624	SE208046.013	LB203027	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	05 Jul 2020	01 Jul 2020
0407_TP137_0.5_200624	SE208046.014	LB203027	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	05 Jul 2020	01 Jul 2020
0407_QC152_200624	SE208046.015	LB203027	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	05 Jul 2020	01 Jul 2020
0407_QC160_200624	SE208046.016	LB203027	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	05 Jul 2020	01 Jul 2020

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref

HOLDING TIME SUMMARY

SE208046 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP237_0.1_200624	SE208046.001	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_TP237_0.5_200624	SE208046.002	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_TP107_0.1_200624	SE208046.003	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_TP107_0.5_200624	SE208046.004	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_TP127_0.1_200624	SE208046.006	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_TP127_0.5_200624	SE208046.007	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_TP139_0.1_200624	SE208046.008	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_TP139_0.5_200624	SE208046.009	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_TP140_0.1_200624	SE208046.010	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_TP140_0.5_200624	SE208046.011	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_TP137_0.1_200624	SE208046.013	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_TP137_0.5_200624	SE208046.014	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_QC152_200624	SE208046.015	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_QC160_200624	SE208046.016	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP237_0.1_200624	SE208046.001	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	02 Jul 2020
0407_TP237_0.5_200624	SE208046.002	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	02 Jul 2020
0407_TP107_0.1_200624	SE208046.003	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	02 Jul 2020
0407_TP107_0.5_200624	SE208046.004	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	02 Jul 2020
0407_TP127_0.1_200624	SE208046.006	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	02 Jul 2020
0407_TP127_0.5_200624	SE208046.007	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	02 Jul 2020
0407_TP139_0.1_200624	SE208046.008	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	02 Jul 2020
0407_TP139_0.5_200624	SE208046.009	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	02 Jul 2020
0407_TP140_0.1_200624	SE208046.010	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	02 Jul 2020
0407_TP140_0.5_200624	SE208046.011	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	02 Jul 2020
0407_TP137_0.1_200624	SE208046.013	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	02 Jul 2020
0407_TP137_0.5_200624	SE208046.014	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	02 Jul 2020
0407_QC152_200624	SE208046.015	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	02 Jul 2020
0407_QC160_200624	SE208046.016	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	02 Jul 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP237_0.1_200624	SE208046.001	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	02 Jul 2020
0407_TP237_0.5_200624	SE208046.002	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	02 Jul 2020
0407_TP107_0.1_200624	SE208046.003	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	02 Jul 2020
0407_TP107_0.5_200624	SE208046.004	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	02 Jul 2020
0407_TP127_0.1_200624	SE208046.006	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	02 Jul 2020
0407_TP127_0.5_200624	SE208046.007	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	02 Jul 2020
0407_TP139_0.1_200624	SE208046.008	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	02 Jul 2020
0407_TP139_0.5_200624	SE208046.009	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	02 Jul 2020
0407_TP140_0.1_200624	SE208046.010	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	02 Jul 2020
0407_TP140_0.5_200624	SE208046.011	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	02 Jul 2020
0407_TP137_0.1_200624	SE208046.013	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	02 Jul 2020
0407_TP137_0.5_200624	SE208046.014	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	02 Jul 2020
0407_QC152_200624	SE208046.015	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	02 Jul 2020
0407_QC160_200624	SE208046.016	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	02 Jul 2020

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP237_0.1_200624	SE208046.001	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	02 Jul 2020
0407_TP237_0.5_200624	SE208046.002	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	02 Jul 2020
0407_TP107_0.1_200624	SE208046.003	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	02 Jul 2020
0407_TP107_0.5_200624	SE208046.004	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	02 Jul 2020
0407_TP127_0.1_200624	SE208046.006	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	02 Jul 2020
0407_TP127_0.5_200624	SE208046.007	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	02 Jul 2020
0407_TP139_0.1_200624	SE208046.008	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	02 Jul 2020
0407_TP139_0.5_200624	SE208046.009	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	02 Jul 2020
0407_TP140_0.1_200624	SE208046.010	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	02 Jul 2020
0407_TP140_0.5_200624	SE208046.011	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	02 Jul 2020

HOLDING TIME SUMMARY

SE208046 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

PCBs in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP137_0.1_200624	SE208046.013	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	02 Jul 2020
0407_TP137_0.5_200624	SE208046.014	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	02 Jul 2020
0407_QC152_200624	SE208046.015	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	02 Jul 2020
0407_QC160_200624	SE208046.016	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	02 Jul 2020

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP237_0.1_200624	SE208046.001	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_TP237_0.5_200624	SE208046.002	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_TP107_0.1_200624	SE208046.003	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_TP107_0.5_200624	SE208046.004	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_TP127_0.1_200624	SE208046.006	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_TP127_0.5_200624	SE208046.007	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_TP139_0.1_200624	SE208046.008	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_TP139_0.5_200624	SE208046.009	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_TP140_0.1_200624	SE208046.010	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_TP140_0.5_200624	SE208046.011	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_TP137_0.1_200624	SE208046.013	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_TP137_0.5_200624	SE208046.014	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_QC152_200624	SE208046.015	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_QC160_200624	SE208046.016	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP237_0.1_200624	SE208046.001	LB203091	24 Jun 2020	24 Jun 2020	21 Dec 2020	30 Jun 2020	21 Dec 2020	01 Jul 2020
0407_TP237_0.5_200624	SE208046.002	LB203091	24 Jun 2020	24 Jun 2020	21 Dec 2020	30 Jun 2020	21 Dec 2020	01 Jul 2020
0407_TP107_0.1_200624	SE208046.003	LB203091	24 Jun 2020	24 Jun 2020	21 Dec 2020	30 Jun 2020	21 Dec 2020	01 Jul 2020
0407_TP107_0.5_200624	SE208046.004	LB203091	24 Jun 2020	24 Jun 2020	21 Dec 2020	30 Jun 2020	21 Dec 2020	01 Jul 2020
0407_TP127_0.1_200624	SE208046.006	LB203091	24 Jun 2020	24 Jun 2020	21 Dec 2020	30 Jun 2020	21 Dec 2020	01 Jul 2020
0407_TP127_0.5_200624	SE208046.007	LB203091	24 Jun 2020	24 Jun 2020	21 Dec 2020	30 Jun 2020	21 Dec 2020	01 Jul 2020
0407_TP139_0.1_200624	SE208046.008	LB203091	24 Jun 2020	24 Jun 2020	21 Dec 2020	30 Jun 2020	21 Dec 2020	01 Jul 2020
0407_TP139_0.5_200624	SE208046.009	LB203091	24 Jun 2020	24 Jun 2020	21 Dec 2020	30 Jun 2020	21 Dec 2020	01 Jul 2020
0407_TP140_0.1_200624	SE208046.010	LB203091	24 Jun 2020	24 Jun 2020	21 Dec 2020	30 Jun 2020	21 Dec 2020	01 Jul 2020
0407_TP140_0.5_200624	SE208046.011	LB203091	24 Jun 2020	24 Jun 2020	21 Dec 2020	30 Jun 2020	21 Dec 2020	01 Jul 2020
0407_TP137_0.1_200624	SE208046.013	LB203091	24 Jun 2020	24 Jun 2020	21 Dec 2020	30 Jun 2020	21 Dec 2020	01 Jul 2020
0407_TP137_0.5_200624	SE208046.014	LB203091	24 Jun 2020	24 Jun 2020	21 Dec 2020	30 Jun 2020	21 Dec 2020	01 Jul 2020
0407_QC152_200624	SE208046.015	LB203091	24 Jun 2020	24 Jun 2020	21 Dec 2020	30 Jun 2020	21 Dec 2020	01 Jul 2020
0407_QC160_200624	SE208046.016	LB203091	24 Jun 2020	24 Jun 2020	21 Dec 2020	30 Jun 2020	21 Dec 2020	01 Jul 2020

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP237_0.1_200624	SE208046.001	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_TP237_0.5_200624	SE208046.002	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_TP107_0.1_200624	SE208046.003	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_TP107_0.5_200624	SE208046.004	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_TP127_0.1_200624	SE208046.006	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_TP127_0.5_200624	SE208046.007	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_TP139_0.1_200624	SE208046.008	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_TP139_0.5_200624	SE208046.009	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_TP140_0.1_200624	SE208046.010	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_TP140_0.5_200624	SE208046.011	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_TP137_0.1_200624	SE208046.013	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_TP137_0.5_200624	SE208046.014	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_QC152_200624	SE208046.015	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_QC160_200624	SE208046.016	LB203026	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP237_0.1_200624	SE208046.001	LB203025	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_TP237_0.5_200624	SE208046.002	LB203025	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_TP107_0.1_200624	SE208046.003	LB203025	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_TP107_0.5_200624	SE208046.004	LB203025	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020

HOLDING TIME SUMMARY

SE208046 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP127_0.1_200624	SE208046.006	LB203025	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_TP127_0.5_200624	SE208046.007	LB203025	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_TP139_0.1_200624	SE208046.008	LB203025	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_TP139_0.5_200624	SE208046.009	LB203025	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_TP140_0.1_200624	SE208046.010	LB203025	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_TP140_0.5_200624	SE208046.011	LB203025	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_TP137_0.1_200624	SE208046.013	LB203025	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_TP137_0.5_200624	SE208046.014	LB203025	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_QC152_200624	SE208046.015	LB203025	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_QC160_200624	SE208046.016	LB203025	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP237_0.1_200624	SE208046.001	LB203025	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_TP237_0.5_200624	SE208046.002	LB203025	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_TP107_0.1_200624	SE208046.003	LB203025	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_TP107_0.5_200624	SE208046.004	LB203025	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_TP127_0.1_200624	SE208046.006	LB203025	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_TP127_0.5_200624	SE208046.007	LB203025	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_TP139_0.1_200624	SE208046.008	LB203025	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_TP139_0.5_200624	SE208046.009	LB203025	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_TP140_0.1_200624	SE208046.010	LB203025	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_TP140_0.5_200624	SE208046.011	LB203025	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_TP137_0.1_200624	SE208046.013	LB203025	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_TP137_0.5_200624	SE208046.014	LB203025	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_QC152_200624	SE208046.015	LB203025	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020
0407_QC160_200624	SE208046.016	LB203025	24 Jun 2020	24 Jun 2020	08 Jul 2020	30 Jun 2020	09 Aug 2020	01 Jul 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP237_0.1_200624	SE208046.001	%	60 - 130%	117
	0407_TP237_0.5_200624	SE208046.002	%	60 - 130%	110
	0407_TP107_0.1_200624	SE208046.003	%	60 - 130%	113
	0407_TP107_0.5_200624	SE208046.004	%	60 - 130%	109
	0407_TP127_0.1_200624	SE208046.006	%	60 - 130%	110
	0407_TP127_0.5_200624	SE208046.007	%	60 - 130%	106
	0407_TP139_0.1_200624	SE208046.008	%	60 - 130%	115
	0407_TP139_0.5_200624	SE208046.009	%	60 - 130%	103
	0407_TP140_0.1_200624	SE208046.010	%	60 - 130%	105
	0407_TP140_0.5_200624	SE208046.011	%	60 - 130%	109
	0407_TP137_0.1_200624	SE208046.013	%	60 - 130%	119
	0407_TP137_0.5_200624	SE208046.014	%	60 - 130%	113
	0407_QC152_200624	SE208046.015	%	60 - 130%	111
	0407_QC160_200624	SE208046.016	%	60 - 130%	114

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP237_0.1_200624	SE208046.001	%	60 - 130%	88
	0407_TP237_0.5_200624	SE208046.002	%	60 - 130%	82
	0407_TP107_0.1_200624	SE208046.003	%	60 - 130%	82
	0407_TP107_0.5_200624	SE208046.004	%	60 - 130%	89
	0407_TP127_0.1_200624	SE208046.006	%	60 - 130%	78
	0407_TP127_0.5_200624	SE208046.007	%	60 - 130%	78
	0407_TP139_0.1_200624	SE208046.008	%	60 - 130%	80
	0407_TP139_0.5_200624	SE208046.009	%	60 - 130%	87
	0407_TP140_0.1_200624	SE208046.010	%	60 - 130%	80
	0407_TP140_0.5_200624	SE208046.011	%	60 - 130%	79
	0407_TP137_0.1_200624	SE208046.013	%	60 - 130%	82
	0407_TP137_0.5_200624	SE208046.014	%	60 - 130%	79
	0407_QC152_200624	SE208046.015	%	60 - 130%	73
	0407_QC160_200624	SE208046.016	%	60 - 130%	79
d14-p-terphenyl (Surrogate)	0407_TP237_0.1_200624	SE208046.001	%	60 - 130%	84
	0407_TP237_0.5_200624	SE208046.002	%	60 - 130%	86
	0407_TP107_0.1_200624	SE208046.003	%	60 - 130%	78
	0407_TP107_0.5_200624	SE208046.004	%	60 - 130%	81
	0407_TP127_0.1_200624	SE208046.006	%	60 - 130%	74
	0407_TP127_0.5_200624	SE208046.007	%	60 - 130%	71
	0407_TP139_0.1_200624	SE208046.008	%	60 - 130%	77
	0407_TP139_0.5_200624	SE208046.009	%	60 - 130%	72
	0407_TP140_0.1_200624	SE208046.010	%	60 - 130%	77
	0407_TP140_0.5_200624	SE208046.011	%	60 - 130%	75
	0407_TP137_0.1_200624	SE208046.013	%	60 - 130%	77
	0407_TP137_0.5_200624	SE208046.014	%	60 - 130%	96
	0407_QC152_200624	SE208046.015	%	60 - 130%	82
	0407_QC160_200624	SE208046.016	%	60 - 130%	81

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP237_0.1_200624	SE208046.001	%	70 - 130%	88
	0407_TP237_0.5_200624	SE208046.002	%	70 - 130%	82
	0407_TP107_0.1_200624	SE208046.003	%	70 - 130%	82
	0407_TP107_0.5_200624	SE208046.004	%	70 - 130%	89
	0407_TP127_0.1_200624	SE208046.006	%	70 - 130%	78
	0407_TP127_0.5_200624	SE208046.007	%	70 - 130%	78
	0407_TP139_0.1_200624	SE208046.008	%	70 - 130%	80
	0407_TP139_0.5_200624	SE208046.009	%	70 - 130%	87
	0407_TP140_0.1_200624	SE208046.010	%	70 - 130%	80
	0407_TP140_0.5_200624	SE208046.011	%	70 - 130%	77
	0407_TP137_0.1_200624	SE208046.013	%	70 - 130%	82
	0407_TP137_0.5_200624	SE208046.014	%	70 - 130%	79
	0407_QC152_200624	SE208046.015	%	70 - 130%	73
	0407_QC160_200624	SE208046.016	%	70 - 130%	79

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d14-p-terphenyl (Surrogate)	0407_TP237_0.1_200624	SE208046.001	%	70 - 130%	84
	0407_TP237_0.5_200624	SE208046.002	%	70 - 130%	86
	0407_TP107_0.1_200624	SE208046.003	%	70 - 130%	78
	0407_TP107_0.5_200624	SE208046.004	%	70 - 130%	81
	0407_TP127_0.1_200624	SE208046.006	%	70 - 130%	74
	0407_TP127_0.5_200624	SE208046.007	%	70 - 130%	71
	0407_TP139_0.1_200624	SE208046.008	%	70 - 130%	77
	0407_TP139_0.5_200624	SE208046.009	%	70 - 130%	72
	0407_TP140_0.1_200624	SE208046.010	%	70 - 130%	77
	0407_TP140_0.5_200624	SE208046.011	%	70 - 130%	75
	0407_TP137_0.1_200624	SE208046.013	%	70 - 130%	77
	0407_TP137_0.5_200624	SE208046.014	%	70 - 130%	96
	0407_QC152_200624	SE208046.015	%	70 - 130%	82
	0407_QC160_200624	SE208046.016	%	70 - 130%	81
d5-nitrobenzene (Surrogate)	0407_TP237_0.1_200624	SE208046.001	%	70 - 130%	77
	0407_TP237_0.5_200624	SE208046.002	%	70 - 130%	83
	0407_TP107_0.1_200624	SE208046.003	%	70 - 130%	79
	0407_TP107_0.5_200624	SE208046.004	%	70 - 130%	79
	0407_TP127_0.1_200624	SE208046.006	%	70 - 130%	77
	0407_TP127_0.5_200624	SE208046.007	%	70 - 130%	76
	0407_TP139_0.1_200624	SE208046.008	%	70 - 130%	77
	0407_TP139_0.5_200624	SE208046.009	%	70 - 130%	78
	0407_TP140_0.1_200624	SE208046.010	%	70 - 130%	79
	0407_TP140_0.5_200624	SE208046.011	%	70 - 130%	77
	0407_TP137_0.1_200624	SE208046.013	%	70 - 130%	80
	0407_TP137_0.5_200624	SE208046.014	%	70 - 130%	89
	0407_QC152_200624	SE208046.015	%	70 - 130%	82
	0407_QC160_200624	SE208046.016	%	70 - 130%	78

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP237_0.1_200624	SE208046.001	%	60 - 130%	117
	0407_TP237_0.5_200624	SE208046.002	%	60 - 130%	110
	0407_TP107_0.1_200624	SE208046.003	%	60 - 130%	113
	0407_TP107_0.5_200624	SE208046.004	%	60 - 130%	109
	0407_TP127_0.1_200624	SE208046.006	%	60 - 130%	110
	0407_TP127_0.5_200624	SE208046.007	%	60 - 130%	106
	0407_TP139_0.1_200624	SE208046.008	%	60 - 130%	115
	0407_TP139_0.5_200624	SE208046.009	%	60 - 130%	103
	0407_TP140_0.1_200624	SE208046.010	%	60 - 130%	105
	0407_TP140_0.5_200624	SE208046.011	%	60 - 130%	109
	0407_TP137_0.1_200624	SE208046.013	%	60 - 130%	119
	0407_TP137_0.5_200624	SE208046.014	%	60 - 130%	113
	0407_QC152_200624	SE208046.015	%	60 - 130%	111
	0407_QC160_200624	SE208046.016	%	60 - 130%	114

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level

Method: MA-1523

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C2-4:2FTS) Surrogate	0407_QC152_200624	SE208046.015	%	10 - 150%	0 †
	0407_QC160_200624	SE208046.016	%	10 - 150%	44
(13C2-6:2FTS) Surrogate	0407_QC152_200624	SE208046.015	%	10 - 150%	0 †
	0407_QC160_200624	SE208046.016	%	10 - 150%	47
(13C2-8:2FTS) Surrogate	0407_QC152_200624	SE208046.015	%	10 - 150%	0 †
	0407_QC160_200624	SE208046.016	%	10 - 150%	46
(13C2-PFDoA) Surrogate	0407_QC152_200624	SE208046.015	%	10 - 150%	0 †
	0407_QC160_200624	SE208046.016	%	10 - 150%	100
(13C2-PFHxDA) Surrogate	0407_QC152_200624	SE208046.015	%	10 - 150%	0 †
	0407_QC160_200624	SE208046.016	%	10 - 150%	17
(13C2-PFTeDA) Surrogate	0407_QC152_200624	SE208046.015	%	10 - 130%	0 †
	0407_QC160_200624	SE208046.016	%	10 - 130%	62
(13C3-PFBS) Surrogate	0407_QC152_200624	SE208046.015	%	10 - 150%	0 †
	0407_QC160_200624	SE208046.016	%	10 - 150%	76

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level (continued)

Method: MA-1523

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C3-PFHxS) Surrogate	0407_QC152_200624	SE208046.015	%	10 - 150%	0 †
	0407_QC160_200624	SE208046.016	%	10 - 150%	96
(13C4-PFBA) Surrogate	0407_QC152_200624	SE208046.015	%	10 - 150%	0 †
	0407_QC160_200624	SE208046.016	%	10 - 150%	100
(13C4-PFHpA) Surrogate	0407_QC152_200624	SE208046.015	%	10 - 150%	0 †
	0407_QC160_200624	SE208046.016	%	10 - 150%	117
(13C4-PFOA) Surrogate	0407_QC152_200624	SE208046.015	%	10 - 150%	0 †
	0407_QC160_200624	SE208046.016	%	10 - 150%	106
(13C5_PFPeA) Surrogate	0407_QC152_200624	SE208046.015	%	10 - 150%	0 †
	0407_QC160_200624	SE208046.016	%	10 - 150%	91
(13C5-PFHxA) Surrogate	0407_QC152_200624	SE208046.015	%	10 - 150%	0 †
	0407_QC160_200624	SE208046.016	%	10 - 150%	90
(13C6-PFDA) Surrogate	0407_QC152_200624	SE208046.015	%	10 - 150%	0 †
	0407_QC160_200624	SE208046.016	%	10 - 150%	109
(13C7-PFUdA) Surrogate	0407_QC152_200624	SE208046.015	%	10 - 150%	0 †
	0407_QC160_200624	SE208046.016	%	10 - 150%	103
(13C8-PFOS) Surrogate	0407_QC152_200624	SE208046.015	%	10 - 150%	0 †
	0407_QC160_200624	SE208046.016	%	10 - 150%	88
(13C8-PFOSA) Surrogate	0407_QC152_200624	SE208046.015	%	10 - 150%	0 †
	0407_QC160_200624	SE208046.016	%	10 - 150%	35
(13C9-PFNA) Surrogate	0407_QC152_200624	SE208046.015	%	10 - 150%	0 †
	0407_QC160_200624	SE208046.016	%	10 - 150%	105
(D3-N-MeFOSA) Surrogate	0407_QC152_200624	SE208046.015	%	10 - 150%	0 †
	0407_QC160_200624	SE208046.016	%	10 - 150%	36
(D3-N-MeFOSAA) Surrogate	0407_QC152_200624	SE208046.015	%	10 - 150%	0 †
	0407_QC160_200624	SE208046.016	%	10 - 150%	56
(D5-N-EtFOSA) Surrogate	0407_QC152_200624	SE208046.015	%	10 - 150%	0 †
	0407_QC160_200624	SE208046.016	%	10 - 150%	31
(D5-N-EtFOSAA) Surrogate	0407_QC152_200624	SE208046.015	%	10 - 150%	0 †
	0407_QC160_200624	SE208046.016	%	10 - 150%	51
(D7-N-MeFOSE) Surrogate	0407_QC152_200624	SE208046.015	%	10 - 150%	0 †
	0407_QC160_200624	SE208046.016	%	10 - 150%	22
(D9-N-EtFOSE) Surrogate	0407_QC152_200624	SE208046.015	%	10 - 150%	0 †
	0407_QC160_200624	SE208046.016	%	10 - 150%	23

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	0407_TP237_0.1_200624	SE208046.001	%	70 - 130%	80
	0407_TP237_0.5_200624	SE208046.002	%	70 - 130%	83
	0407_TP107_0.1_200624	SE208046.003	%	70 - 130%	84
	0407_TP107_0.5_200624	SE208046.004	%	70 - 130%	83
	0407_TP127_0.1_200624	SE208046.006	%	70 - 130%	87
	0407_TP127_0.5_200624	SE208046.007	%	70 - 130%	85
	0407_TP139_0.1_200624	SE208046.008	%	70 - 130%	84
	0407_TP139_0.5_200624	SE208046.009	%	70 - 130%	85
	0407_TP140_0.1_200624	SE208046.010	%	70 - 130%	85
	0407_TP140_0.5_200624	SE208046.011	%	70 - 130%	85
	0407_TP137_0.1_200624	SE208046.013	%	70 - 130%	84
	0407_TP137_0.5_200624	SE208046.014	%	70 - 130%	83
	0407_QC152_200624	SE208046.015	%	70 - 130%	82
	0407_QC160_200624	SE208046.016	%	70 - 130%	82
d5-phenol (Surrogate)	0407_TP237_0.1_200624	SE208046.001	%	50 - 130%	78
	0407_TP237_0.5_200624	SE208046.002	%	50 - 130%	81
	0407_TP107_0.1_200624	SE208046.003	%	50 - 130%	81
	0407_TP107_0.5_200624	SE208046.004	%	50 - 130%	80
	0407_TP127_0.1_200624	SE208046.006	%	50 - 130%	84
	0407_TP127_0.5_200624	SE208046.007	%	50 - 130%	81
	0407_TP139_0.1_200624	SE208046.008	%	50 - 130%	80
	0407_TP139_0.5_200624	SE208046.009	%	50 - 130%	83
	0407_TP140_0.1_200624	SE208046.010	%	50 - 130%	81
	0407_TP140_0.5_200624	SE208046.011	%	50 - 130%	83

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d5-phenol (Surrogate)	0407_TP137_0.1_200624	SE208046.013	%	50 - 130%	84
	0407_TP137_0.5_200624	SE208046.014	%	50 - 130%	80
	0407_QC152_200624	SE208046.015	%	50 - 130%	82
	0407_QC160_200624	SE208046.016	%	50 - 130%	81

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP237_0.1_200624	SE208046.001	%	60 - 130%	63
	0407_TP237_0.5_200624	SE208046.002	%	60 - 130%	68
	0407_TP107_0.1_200624	SE208046.003	%	60 - 130%	62
	0407_TP107_0.5_200624	SE208046.004	%	60 - 130%	70
	0407_TP127_0.1_200624	SE208046.006	%	60 - 130%	62
	0407_TP127_0.5_200624	SE208046.007	%	60 - 130%	71
	0407_TP139_0.1_200624	SE208046.008	%	60 - 130%	65
	0407_TP139_0.5_200624	SE208046.009	%	60 - 130%	70
	0407_TP140_0.1_200624	SE208046.010	%	60 - 130%	61
	0407_TP140_0.5_200624	SE208046.011	%	60 - 130%	71
	0407_TP137_0.1_200624	SE208046.013	%	60 - 130%	67
	0407_TP137_0.5_200624	SE208046.014	%	60 - 130%	63
	0407_QC152_200624	SE208046.015	%	60 - 130%	66
	0407_QC160_200624	SE208046.016	%	60 - 130%	63
d4-1,2-dichloroethane (Surrogate)	0407_TP237_0.1_200624	SE208046.001	%	60 - 130%	91
	0407_TP237_0.5_200624	SE208046.002	%	60 - 130%	94
	0407_TP107_0.1_200624	SE208046.003	%	60 - 130%	87
	0407_TP107_0.5_200624	SE208046.004	%	60 - 130%	97
	0407_TP127_0.1_200624	SE208046.006	%	60 - 130%	88
	0407_TP127_0.5_200624	SE208046.007	%	60 - 130%	98
	0407_TP139_0.1_200624	SE208046.008	%	60 - 130%	92
	0407_TP139_0.5_200624	SE208046.009	%	60 - 130%	96
	0407_TP140_0.1_200624	SE208046.010	%	60 - 130%	87
	0407_TP140_0.5_200624	SE208046.011	%	60 - 130%	100
	0407_TP137_0.1_200624	SE208046.013	%	60 - 130%	93
	0407_TP137_0.5_200624	SE208046.014	%	60 - 130%	87
	0407_QC152_200624	SE208046.015	%	60 - 130%	93
	0407_QC160_200624	SE208046.016	%	60 - 130%	90
d8-toluene (Surrogate)	0407_TP237_0.1_200624	SE208046.001	%	60 - 130%	88
	0407_TP237_0.5_200624	SE208046.002	%	60 - 130%	93
	0407_TP107_0.1_200624	SE208046.003	%	60 - 130%	85
	0407_TP107_0.5_200624	SE208046.004	%	60 - 130%	96
	0407_TP127_0.1_200624	SE208046.006	%	60 - 130%	85
	0407_TP127_0.5_200624	SE208046.007	%	60 - 130%	96
	0407_TP139_0.1_200624	SE208046.008	%	60 - 130%	91
	0407_TP139_0.5_200624	SE208046.009	%	60 - 130%	95
	0407_TP140_0.1_200624	SE208046.010	%	60 - 130%	85
	0407_TP140_0.5_200624	SE208046.011	%	60 - 130%	96
	0407_TP137_0.1_200624	SE208046.013	%	60 - 130%	91
	0407_TP137_0.5_200624	SE208046.014	%	60 - 130%	86
	0407_QC152_200624	SE208046.015	%	60 - 130%	91
	0407_QC160_200624	SE208046.016	%	60 - 130%	88

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP237_0.1_200624	SE208046.001	%	60 - 130%	63
	0407_TP237_0.5_200624	SE208046.002	%	60 - 130%	68
	0407_TP107_0.1_200624	SE208046.003	%	60 - 130%	62
	0407_TP107_0.5_200624	SE208046.004	%	60 - 130%	70
	0407_TP127_0.1_200624	SE208046.006	%	60 - 130%	62
	0407_TP127_0.5_200624	SE208046.007	%	60 - 130%	71
	0407_TP139_0.1_200624	SE208046.008	%	60 - 130%	65
	0407_TP139_0.5_200624	SE208046.009	%	60 - 130%	70
	0407_TP140_0.1_200624	SE208046.010	%	60 - 130%	61
	0407_TP140_0.5_200624	SE208046.011	%	60 - 130%	71

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP137_0.1_200624	SE208046.013	%	60 - 130%	67
	0407_TP137_0.5_200624	SE208046.014	%	60 - 130%	63
	0407_QC152_200624	SE208046.015	%	60 - 130%	66
	0407_QC160_200624	SE208046.016	%	60 - 130%	63
d4-1,2-dichloroethane (Surrogate)	0407_TP237_0.1_200624	SE208046.001	%	60 - 130%	91
	0407_TP237_0.5_200624	SE208046.002	%	60 - 130%	94
	0407_TP107_0.1_200624	SE208046.003	%	60 - 130%	87
	0407_TP107_0.5_200624	SE208046.004	%	60 - 130%	97
	0407_TP127_0.1_200624	SE208046.006	%	60 - 130%	88
	0407_TP127_0.5_200624	SE208046.007	%	60 - 130%	98
	0407_TP139_0.1_200624	SE208046.008	%	60 - 130%	92
	0407_TP139_0.5_200624	SE208046.009	%	60 - 130%	96
	0407_TP140_0.1_200624	SE208046.010	%	60 - 130%	87
	0407_TP140_0.5_200624	SE208046.011	%	60 - 130%	100
	0407_TP137_0.1_200624	SE208046.013	%	60 - 130%	93
	0407_TP137_0.5_200624	SE208046.014	%	60 - 130%	87
	0407_QC152_200624	SE208046.015	%	60 - 130%	93
	0407_QC160_200624	SE208046.016	%	60 - 130%	90
d8-toluene (Surrogate)	0407_TP237_0.1_200624	SE208046.001	%	60 - 130%	88
	0407_TP237_0.5_200624	SE208046.002	%	60 - 130%	93
	0407_TP107_0.1_200624	SE208046.003	%	60 - 130%	85
	0407_TP107_0.5_200624	SE208046.004	%	60 - 130%	96
	0407_TP127_0.1_200624	SE208046.006	%	60 - 130%	85
	0407_TP127_0.5_200624	SE208046.007	%	60 - 130%	96
	0407_TP139_0.1_200624	SE208046.008	%	60 - 130%	91
	0407_TP139_0.5_200624	SE208046.009	%	60 - 130%	95
	0407_TP140_0.1_200624	SE208046.010	%	60 - 130%	85
	0407_TP140_0.5_200624	SE208046.011	%	60 - 130%	96
	0407_TP137_0.1_200624	SE208046.013	%	60 - 130%	91
	0407_TP137_0.5_200624	SE208046.014	%	60 - 130%	86
	0407_QC152_200624	SE208046.015	%	60 - 130%	91
	0407_QC160_200624	SE208046.016	%	60 - 130%	88

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result
LB203094.001	Mercury	mg/kg	0.05	<0.05

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203026.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	105

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203026.001		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	84
		d14-p-terphenyl (Surrogate)	%	-	87

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB203026.001	Naphthalene	mg/kg	0.1	<0.1
	2-methylnaphthalene	mg/kg	0.1	<0.1
	1-methylnaphthalene	mg/kg	0.1	<0.1
	Acenaphthylene	mg/kg	0.1	<0.1
	Acenaphthene	mg/kg	0.1	<0.1
	Fluorene	mg/kg	0.1	<0.1
	Phenanthrene	mg/kg	0.1	<0.1
	Anthracene	mg/kg	0.1	<0.1
	Fluoranthene	mg/kg	0.1	<0.1
	Pyrene	mg/kg	0.1	<0.1
	Benzo(a)anthracene	mg/kg	0.1	<0.1
	Chrysene	mg/kg	0.1	<0.1
	Benzo(a)pyrene	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203026.001		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	82
		2-fluorobiphenyl (Surrogate)	%	-	84
		d14-p-terphenyl (Surrogate)	%	-	87

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203026.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	105

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203026.001		Phenol	mg/kg	0.5	<0.5
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5
		2-nitrophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
		Pentachlorophenol	mg/kg	0.5	<0.5
		2,4-dinitrophenol	mg/kg	2	<2
		4-chloro-3-methylphenol	mg/kg	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	84
		d5-phenol (Surrogate)	%	-	82

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB203091.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB203026.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number	Parameter	Units	LOR

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Sample Number		Parameter	Units	LOR	Result
LB203025.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10

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VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB203025.001	Oxygenated Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	96
		d8-toluene (Surrogate)	%	-	86
		Bromofluorobenzene (Surrogate)	%	-	81
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB203025.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	96

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208046.011	LB203094.014	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE208065.022	LB203094.022	Mercury	mg/kg	0.05	<0.05	<0.05	200	0

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208046.011	LB203027.011	% Moisture	%w/w	1	4.7	5.4	50	13

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208044.002	LB203026.021		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.17	0.18	30	4
SE208046.011	LB203026.014		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208046.011	LB203026.014		p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.16	0.17	30	2

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208044.002	LB203026.021		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	6
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	16
SE208046.011	LB203026.014		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	3
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	13

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208044.002	LB203026.021	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
		Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
		Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluoranthene	mg/kg	0.1	<0.1	0.1	123	31
		Pyrene	mg/kg	0.1	<0.1	0.1	138	16
		Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	178	0
		Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
		Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	<0.2	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208044.002	LB203026.021		Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	<0.3	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	<0.2	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	30	12
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	6
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	16
SE208046.011	LB203026.014		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	<0.1	<0.1	156	0
			Pyrene	mg/kg	0.1	<0.1	<0.1	144	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	181	0
			Chrysene	mg/kg	0.1	0.1	<0.1	159	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	136	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	152	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	<0.3	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	<0.2	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	30	2
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	6
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	13

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208044.002	LB203026.021		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	4
SE208046.011	LB203026.014		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	2

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208046.011	LB203026.014		Phenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	200	0
			Total Cresol	mg/kg	1.5	<1.5	<1.5	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	200	0
			4-nitrophenol	mg/kg	1	<1	<1	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dinitrophenol	mg/kg	2	<2	<2	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.2	4.2	30	0
			d5-phenol (Surrogate)	mg/kg	-	1.7	1.7	30	0

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208046.011	LB203091.014	Arsenic, As	mg/kg	1	<1	<1	164	0
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	1.9	1.6	59	15
		Copper, Cu	mg/kg	0.5	9.1	9.3	35	2
		Nickel, Ni	mg/kg	0.5	0.9	1.0	84	5
		Lead, Pb	mg/kg	1	25	24	34	6
		Zinc, Zn	mg/kg	2	25	26	38	5
SE208065.022	LB203091.022	Arsenic, As	mg/kg	1	5	4	51	11
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	12	12	34	4
		Copper, Cu	mg/kg	0.5	24	17	32	35 ②
		Nickel, Ni	mg/kg	0.5	9.2	8.0	36	13
		Lead, Pb	mg/kg	1	26	22	34	17
		Zinc, Zn	mg/kg	2	49	45	34	8

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208044.002	LB203026.021		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE208046.011	LB203026.014		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate	Parameter	Units	LOR

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued) — Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208044.002	LB203025.021	Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.0	10.6	50	16
			d8-toluene (Surrogate)	mg/kg	-	8.8	10.5	50	18
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.5	7.7	50	17
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
SE208046.011	LB203025.014	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0

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The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208046.011	LB203025.014	Monocyclic	Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.0	9.5	50	5
			d8-toluene (Surrogate)	mg/kg	-	9.6	9.2	50	5
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.1	6.7	50	7
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208044.002	LB203025.021		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.0	10.6	30	16
			d8-toluene (Surrogate)	mg/kg	-	8.8	10.5	30	18
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.5	7.7	30	17
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE208046.011	LB203025.014		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.0	9.5	30	5
			d8-toluene (Surrogate)	mg/kg	-	9.6	9.2	30	5
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.1	6.7	30	7
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203094.002	Mercury	mg/kg	0.05	0.18	0.2	70 - 130	90

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203026.002		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	118
		Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	123
		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	124
		Dieldrin	mg/kg	0.2	0.2	0.2	60 - 140	120
		Endrin	mg/kg	0.2	0.2	0.2	60 - 140	116
		p,p'-DDT	mg/kg	0.1	0.1	0.2	60 - 140	71
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.16	0.15	40 - 130	105

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203026.002		Dichlorvos	mg/kg	0.5	1.6	2	60 - 140	80
		Diazinon (Dimpylate)	mg/kg	0.5	1.7	2	60 - 140	87
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.0	2	60 - 140	98
		Ethion	mg/kg	0.2	1.4	2	60 - 140	70
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	76
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	74

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203026.002		Naphthalene	mg/kg	0.1	4.0	4	60 - 140	99
		Acenaphthylene	mg/kg	0.1	4.1	4	60 - 140	102
		Acenaphthene	mg/kg	0.1	4.1	4	60 - 140	102
		Phenanthrene	mg/kg	0.1	4.2	4	60 - 140	106
		Anthracene	mg/kg	0.1	4.1	4	60 - 140	102
		Fluoranthene	mg/kg	0.1	4.2	4	60 - 140	104
		Pyrene	mg/kg	0.1	4.2	4	60 - 140	106
		Benzo(a)pyrene	mg/kg	0.1	4.1	4	60 - 140	103
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	81
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	76
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	74

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203026.002	Arochlor 1260	mg/kg	0.2	0.3	0.4	60 - 140	73

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203026.002		Phenol	mg/kg	0.5	0.7	1	70 - 130	71
		2,4-dichlorophenol	mg/kg	0.5	1.1	1	70 - 130	114
		2,4,6-trichlorophenol	mg/kg	0.5	1.1	1	70 - 130	108
		Pentachlorophenol	mg/kg	0.5	1.0	1	70 - 130	100
	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.1	5	40 - 130	83
		d5-phenol (Surrogate)	mg/kg	-	1.6	2	40 - 130	80

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203091.002	Arsenic, As	mg/kg	1	340	318.22	80 - 120	108
	Cadmium, Cd	mg/kg	0.3	5.5	5.41	80 - 120	101
	Chromium, Cr	mg/kg	0.5	42	38.31	80 - 120	110
	Copper, Cu	mg/kg	0.5	310	290	80 - 120	107
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	103
	Lead, Pb	mg/kg	1	95	89.9	80 - 120	106
	Zinc, Zn	mg/kg	2	280	273	80 - 120	104

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203026.002		TRH C10-C14	mg/kg	20	44	40	60 - 140	110
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	88
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	75
	TRH F Bands	TRH >C10-C16	mg/kg	25	41	40	60 - 140	103
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	75
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	90

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203025.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	3.5	5	60 - 140	70
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	3.8	5	60 - 140	76
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	3.7	5	60 - 140	74
	Halogenated	Chlorobenzene	mg/kg	0.1	4.4	5	60 - 140	88
	Monocyclic	Benzene	mg/kg	0.1	3.8	5	60 - 140	76
	Aromatic	Toluene	mg/kg	0.1	4.0	5	60 - 140	81
		Ethylbenzene	mg/kg	0.1	4.0	5	60 - 140	81
		m/p-xylene	mg/kg	0.2	8.1	10	60 - 140	81
		o-xylene	mg/kg	0.1	4.1	5	60 - 140	81
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.8	10	70 - 130	78
		d8-toluene (Surrogate)	mg/kg	-	7.9	10	70 - 130	79
		Bromofluorobenzene (Surrogate)	mg/kg	-	7.7	10	70 - 130	77
	Trihalomethan	Chloroform	mg/kg	0.1	3.8	5	60 - 140	76

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203025.002		TRH C6-C10	mg/kg	25	76	92.5	60 - 140	82
		TRH C6-C9	mg/kg	20	66	80	60 - 140	82
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.8	10	70 - 130	78
		Bromofluorobenzene (Surrogate)	mg/kg	-	7.7	10	70 - 130	77
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	52	62.5	60 - 140	83

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208046.001	LB203094.004	Mercury	mg/kg	0.05	0.26	0.07	0.2	99

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208046.001	LB203026.004		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	-	-
			Lindane	mg/kg	0.1	<0.1	<0.1	-	-
			Heptachlor	mg/kg	0.1	0.3	<0.1	0.2	130
			Aldrin	mg/kg	0.1	0.3	<0.1	0.2	130
			Beta BHC	mg/kg	0.1	<0.1	<0.1	-	-
			Delta BHC	mg/kg	0.1	0.3	<0.1	0.2	130
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	-	-
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	-	-
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	-	-
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	-	-
			Dieldrin	mg/kg	0.2	0.3	<0.2	0.2	135
			Endrin	mg/kg	0.2	0.3	<0.2	0.2	134
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	-	-
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	-	-
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	-	-
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	-	-
			p,p'-DDT	mg/kg	0.1	0.2	<0.1	0.2	100
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	-	-
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	-	-
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	-	-
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	-	-
			Isodrin	mg/kg	0.1	<0.1	<0.1	-	-
			Mirex	mg/kg	0.1	<0.1	<0.1	-	-
			Total CLP OC Pesticides	mg/kg	1	2	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.18	0.18	-	121

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208046.004	LB203026.023		Dichlorvos	mg/kg	0.5	1.6	<0.5	2	80
			Dimethoate	mg/kg	0.5	<0.5	<0.5	-	-
			Diazinon (Dimpylate)	mg/kg	0.5	1.7	<0.5	2	84
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	-	-
			Malathion	mg/kg	0.2	<0.2	<0.2	-	-
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.9	<0.2	2	93
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	-	-
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	-	-
			Methidathion	mg/kg	0.5	<0.5	<0.5	-	-
			Ethion	mg/kg	0.2	1.4	<0.2	2	68
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	-	-
			Total OP Pesticides*	mg/kg	1.7	6.5	<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	86
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	75

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208046.004	LB203026.023	Naphthalene	mg/kg	0.1	3.9	<0.1	4	96
		2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Acenaphthylene	mg/kg	0.1	3.8	<0.1	4	95
		Acenaphthene	mg/kg	0.1	4.1	<0.1	4	104
		Fluorene	mg/kg	0.1	<0.1	<0.1	-	-
		Phenanthrene	mg/kg	0.1	4.2	<0.1	4	104

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208046.004	LB203026.023		Anthracene	mg/kg	0.1	3.9	<0.1	4	97
			Fluoranthene	mg/kg	0.1	4.2	<0.1	4	104
			Pyrene	mg/kg	0.1	4.2	<0.1	4	104
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Chrysene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(a)pyrene	mg/kg	0.1	3.9	<0.1	4	98
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	3.9	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	4.1	<0.3	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	4.0	<0.2	-	-
			Total PAH (18)	mg/kg	0.8	32	<0.8	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	-	76
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	86
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	75

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208046.001	LB203026.004		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1260	mg/kg	0.2	0.4	<0.2	0.4	91
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	-	-
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	-	118

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208046.004	LB203026.022		Phenol	mg/kg	0.5	<0.5	1	72
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	-	-
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	-	-
			Total Cresol	mg/kg	1.5	<1.5	-	-
			2-chlorophenol	mg/kg	0.5	<0.5	-	-
			2,4-dimethylphenol	mg/kg	0.5	<0.5	-	-
			2,6-dichlorophenol	mg/kg	0.5	<0.5	-	-
			2,4-dichlorophenol	mg/kg	0.5	<0.5	1	79
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	1	121
			2-nitrophenol	mg/kg	0.5	<0.5	-	-
			4-nitrophenol	mg/kg	1	<1	-	-
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	-	-
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	-	-
			Pentachlorophenol	mg/kg	0.5	<0.5	1	77
			2,4-dinitrophenol	mg/kg	2	<2	-	-
			4-chloro-3-methylphenol	mg/kg	2	<2	-	-
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.2	-	86
			d5-phenol (Surrogate)	mg/kg	-	1.6	-	84

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208046.001	LB203091.004	Arsenic, As	mg/kg	1	54	7	50	96
		Cadmium, Cd	mg/kg	0.3	44	<0.3	50	88
		Chromium, Cr	mg/kg	0.5	63	19	50	88
		Copper, Cu	mg/kg	0.5	74	39	50	70
		Nickel, Ni	mg/kg	0.5	53	12	50	83
		Lead, Pb	mg/kg	1	110	85	50	52 ④

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208046.001	LB203091.004	Zinc, Zn	mg/kg	2	180	190	50	-20 ⊕

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208046.004	LB203026.022		TRH C10-C14	mg/kg	20	33	<20	40	83
			TRH C15-C28	mg/kg	45	<45	<45	40	65
			TRH C29-C36	mg/kg	45	50	<45	40	125
			TRH C37-C40	mg/kg	100	<100	<100	-	-
			TRH C10-C36 Total	mg/kg	110	<110	<110	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25	31	<25	40	78
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	31	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	40	78
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	-	-

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208046.001	LB203025.004	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	-	-
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	-	-
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	-	-
			Bromomethane	mg/kg	1	<1	<1	-	-
			Chloroethane	mg/kg	1	<1	<1	-	-
			Trichlorofluoromethane	mg/kg	1	<1	<1	-	-
			Iodomethane	mg/kg	5	<5	<5	-	-
			1,1-dichloroethene	mg/kg	0.1	3.1	<0.1	5	63
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	-	-
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloroethane	mg/kg	0.1	3.5	<0.1	5	70
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	-	-
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	3.4	<0.1	5	67
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	-	-
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated	Chlorobenzene	mg/kg	0.1	4.0	<0.1	5	80
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Monocyclic	Benzene	mg/kg	0.1	3.5	<0.1	5	71

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208046.001	LB203025.004	Monocyclic	Toluene	mg/kg	0.1	3.8	<0.1	5	75
		Aromatic	Ethylbenzene	mg/kg	0.1	3.8	<0.1	5	76
			m/p-xylene	mg/kg	0.2	7.7	<0.2	10	76
			o-xylene	mg/kg	0.1	3.8	<0.1	5	75
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	-	-
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	-	-
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	-	-
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	-	-
		Compounds	2-nitropropane	mg/kg	10	<10	<10	-	-
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	-	-
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	-	-
			Vinyl acetate	mg/kg	10	<10	<10	-	-
			MEK (2-butanone)	mg/kg	10	<10	<10	-	-
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	-	-
			2-hexanone (MBK)	mg/kg	5	<5	<5	-	-
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.4	9.1	10	94
			d8-toluene (Surrogate)	mg/kg	-	9.2	8.8	10	92
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.1	6.3	10	61 ⓘ
		Totals	Total Xylenes	mg/kg	0.3	11	<0.3	-	-
			Total BTEX	mg/kg	0.6	23	<0.6	-	-
			Total VOC*	mg/kg	24	42	<24	-	-
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	-	-
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	18	<1.8	-	-
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	18	<1.8	-	-
		Trihalometha	Chloroform	mg/kg	0.1	3.5	<0.1	5	69
		nes	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Bromoform	mg/kg	0.1	<0.1	<0.1	-	-

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208046.001	LB203025.004		TRH C6-C10	mg/kg	25	78	<25	92.5	84
			TRH C6-C9	mg/kg	20	67	<20	80	84
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.4	9.1	10	94
			d8-toluene (Surrogate)	mg/kg	-	9.2	8.8	10	92
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.1	6.3	-	61
		VPH F	Benzene (F0)	mg/kg	0.1	3.5	<0.1	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	55	<25	62.5	88

MATRIX SPIKE DUPLICATES

SE208046 R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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CHAIN OF CUSTODY DOCUMENTATION

E-MAILED 24/6/09.45

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

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SLR

CLIENT: Defence Housing Australia

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGER: [redacted]

PM CONTACT No: [redacted]

LABORATORY: SGS Australia

LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015

SAMPLER: [redacted]

SAMPLER CONTACT No: [redacted]

Email Reports and Invoices to: LQRSYD@slrconsulting.com ; [redacted]

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number: 1 of 5

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only	HOLD	Suite D	Heavy metals, TPH/BTEXN, PAH, VOC/SVOCs and PFAS		Additional Information (Comment on any gross contamination or specific requirements)
1	0407_TP021_0.1_200624	24-06-2020	Soil		x								Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
2	0407_TP021_0.5_200624	24-06-2020	Soil		x								
	0407_TP021_1.0_200624	24-06-2020	Soil						x				
3	0407_TP021_0.1-0.2_200624	24-06-2020	Soil					x					
4	0407_QC150_200624	24-06-2020	Soil		x								
	0407_QC250_200624	24-06-2020	Soil										Please send to Eurofins for Suite A
5	0407_TP034_0.1_200623	23-06-2020	Soil		x								
	0407_TP034_0.5_200623	23-06-2020	Soil						x				
6	0407_TP034_1.0_200623	23-06-2020	Soil		x								
7	0407_TP034_0.1-0.2_200623	23-06-2020	Soil					x					
8	0407_QC301_200623	23-06-2020	Water								x		

SGS EHS Sydney COC

SE208047

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 24-06-2020	**Received by**	[redacted]	Date / Time 24/06/20	**Temperature Received:**
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time 04:30	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

CHAIN OF CUSTODY DOCUMENTATION

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- ☐ NELSON: c/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 16 Devon Street East, New Plymouth, 4310 NZ
- ☐

CLIENT: Defence Housing Australia

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGER: [redacted]

PM CONTACT No [redacted]

COMMENTS OR ADDITIONAL DIRECTIONS

LABORATORY: SGS Australia

LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015

SAMPLER [redacted]

SAMPLER CONTACT N [redacted]

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Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number 2 of 5

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS	Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only	HOLD	Suite D, MTBEs	Suite F		Additional Information (Comment on any gross contamination or specific requirements)
9	0407_TP043_0.1_200624	24-06-2020	Soil									x		Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
10	0407_TP043_0.5_200624	24-06-2020	Soil									x		
	0407_TP043_1.0_200624	24-06-2020	Soil							x				
11	0407_QC153_200624	24-06-2020	Soil									x		
	0407_QC253_200624	24-06-2020	Soil											Please send to Eurofins for Suite A
12	0407_TP059_0.1_200624	24-06-2020	Soil								x			
13	0407_TP059_0.5_200624	24-06-2020	Soil								x			
	0407_TP059_1.0_200624	24-06-2020	Soil							x				
14	0407_TP059_0.1-0.2_200624	24-06-2020	Soil						x					
15	0407_QC154_200624	24-06-2020	Soil								x			
	0407_QC254_200624	24-06-2020	Soil											Please send to Eurofins for Suite A

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time	24-06-2020	**Received by**	Sign [redacted]	Date / Time	24/06/20
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	@ 4:30
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	

Temperature Received:

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

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- ☐

CLIENT: Defence Housing Australia

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGER: [redacted]

PM CONTACT No [redacted]

LABORATORY: SGS Australia

LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015

SAMPLER: [redacted]

SAMPLER CONTACT No: [redacted]

Email Reports and Invoices to: LQRSYD@slrconsulting.com ; [redacted]

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number 3 of 5

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS	Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only	HOLD	Suite D, MTBEs	Suite F		Additional Information (Comment on any gross contamination or specific requirements)
16	0407_TP082_0.1_200624	24-06-2020	Soil			x								Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
17	0407_TP082_0.5_200624	24-06-2020	Soil			x								
	0407_TP082_1.0_200624	24-06-2020	Soil							x				
18	0407_TP082_0.1-0.2_200624	24-06-2020	Soil						x					
19	0407_QC155_200624	24-06-2020	Soil			x								
	0407_QC255_200624	24-06-2020	Soil											Please send to Eurofins for Suite A
20	0407_TP092_0.1_200624	24-06-2020	Soil			x								
21	0407_TP092_0.5_200624	24-06-2020	Soil			x								
	0407_TP092_1.0_200624	24-06-2020	Soil							x				
22	0407_TP092_0.1-0.2_200624	24-06-2020	Soil						x					
23	0407_QC156_200624	24-06-2020	Soil			x								
	0407_QC256_200624	24-06-2020	Soil											Please send to Eurofins for Suite A

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 24-06-2020	**Received by**	Sign [redacted]	Date / Time 24/06/20	**Temperature Received:**
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time 1630	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

SLR

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☒ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Flinders Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ

CLIENT: Defence Housing Australia

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGER: [redacted]

PM CONTACT No: [redacted]

LABORATORY: SGS Australia

LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015

SAMPLER: [redacted]

SAMPLER CONTACT No: [redacted]

Email Reports and Invoices to: LQRSYD@slrconsulting.com ; [redacted]

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number: 4 of 5

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only	HOLD	Suite D, MTBEs	Suite F		Additional Information (Comment on any gross contamination or specific requirements)
24	0407_TP102_0.1_200624	24-06-2020	Soil		x								Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
25	0407_TP102_0.5_200624	24-06-2020	Soil		x								
	0407_TP102_1.0_200624	24-06-2020	Soil						x				
26	0407_TP102_0.1-0.2_200624	24-06-2020	Soil					x					
27	0407_QC157_200624	24-06-2020	Soil		x								
	0407_QC257_200624	24-06-2020	Soil										Please send to Eurofins for Suite A
28	0407_TP112_0.1_200624	24-06-2020	Soil		x								
	0407_TP112_0.5_200624	24-06-2020	Soil						x				
29	0407_TP112_1.0_200624	24-06-2020	Soil		x								
30	0407_TP112_0.1-0.2_200624	24-06-2020	Soil					x					
31	0407_QC159_200624	24-06-2020	Soil		x								
	0407_QC259_200624	24-06-2020	Soil										Please send to Eurofins for Suite A

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time	24-06-2020	**Received by**	Sign [redacted]	Date / Time	24/06/20
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	@ 4:30
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	

Temperature Received:

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

SLR

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Darwin, NT0820
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- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☒ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Stuft Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7010 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐

CLIENT: Defence Housing Australia	**LABORATORY: SGS Australia**	**Turnaround Time (TAT)**
PROJECT: Randwick Barracks	**LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015**	**COC Number** 5 of 5
PROJECT NUMBER: 610.30041	**SAMPLER:** [redacted]	☐ Standard TAT
PROJECT MANAGER: [redacted]	**SAMPLER CONTACT No:** [redacted]	☐ Non Standard or Urgent TAT
PM CONTACT No: [redacted]	**Email Reports and Invoices to: LQRSYD@slrconsulting.com** [redacted]	**Required TAT: Standard**

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only	HOLD	Suite D, MTBEs	Suite F		Additional Information (Comment on any gross contamination or specific requirements)
	0407_BH002_0.1_200623	23-06-2020	Soil						X				Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
	0407_BH002_0.5_200623	23-06-2020	Soil						X				
	0407_BH002_1.0_200623	23-06-2020	Soil						X				
	0407_BH002_0.1-0.2_200623	23-06-2020	Soil						X				

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time	24-06-2020	**Received by**	Sign [redacted]	Date / Time	24/06/20
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	4:30
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	

Temperature Received:

SAMPLE RECEIPT ADVICE

SE208047

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	31

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Wed 24/6/2020
Report Due	Mon 6/7/2020
SGS Reference	**SE208047**

SUBMISSION DETAILS

This is to confirm that 31 samples were received on Wednesday 24/6/2020. Results are expected to be ready by COB Monday 6/7/2020.
Please quote SGS reference SE208047 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	30 Soil, 1 Water
Date documentation received	25/6/2020@9:45AM	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	5.3°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

12 soil have been placed on hold as no tests have been assigned for them by the client. These samples will not be processed.
PFAS subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420. Report Number ME315535

This document is issued by the Company under its General Conditions of Service accessible at www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

SAMPLE RECEIPT ADVICE

SE208047

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	Speciated Phenols in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
001	0407_TP021_0.1_200624	29	14	26	11	18	10	81	7
002	0407_TP021_0.5_200624	29	14	26	11	18	10	81	7
004	0407_QC150_200624	29	14	26	11	18	10	81	7
005	0407_TP034_0.1_200623	29	14	26	11	18	10	81	7
006	0407_TP034_0.5_200623	29	14	26	11	18	10	81	7
009	0407_TP043_0.1_200624	-	-	-	11	-	10	81	7
010	0407_TP043_0.5_200624	-	-	-	11	-	10	81	7
011	0407_QC153_200624	-	-	-	11	-	10	81	7
012	0407_TP059_0.1_200624	-	-	26	-	18	10	12	7
013	0407_TP059_0.5_200624	-	-	26	-	18	10	12	7
014	0407_TP059_0.1_0.2_200624	-	-	-	-	-	-	1	-
015	0407_QC154_200624	-	-	26	-	18	10	12	7
016	0407_TP082_0.1_200624	29	14	26	11	18	10	81	7
017	0407_TP082_0.5_200624	29	14	26	11	18	10	81	7
019	0407_QC155_200624	29	14	26	11	18	10	81	7
020	0407_TP092_0.1_200624	29	14	26	11	18	10	81	7
021	0407_TP092_0.5_200624	29	14	26	11	18	10	81	7
023	0407_QC156_200624	29	14	26	11	18	10	81	7
024	0407_TP102_0.1_200624	29	14	26	11	18	10	81	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE208047

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	Speciated Phenols in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
025	0407_TP102_0.5_200624	29	14	26	11	18	10	81	7
027	0407_QC157_200624	29	14	26	11	18	10	81	7
028	0407_TP112_0.1_200624	29	14	26	11	18	10	81	7
029	0407_TP112_0.5_200624	29	14	26	11	18	10	81	7
031	0407_QC159_200624	29	14	26	11	18	10	81	7

CONTINUED OVERLEAF

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SAMPLE RECEIPT ADVICE

SE208047

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Fibre Identification in soil	Gravimetric Determination of Asbestos in Soil	Mercury in Soil	Moisture Content	Total Recoverable Elements in Soil/Waste
001	0407_TP021_0.1_200624	-	-	1	1	7
002	0407_TP021_0.5_200624	-	-	1	1	7
003	0407_TP021_0.1-0.2_200624	2	9	-	-	-
004	0407_QC150_200624	-	-	1	1	7
005	0407_TP034_0.1_200623	-	-	1	1	7
006	0407_TP034_0.5_200623	-	-	1	1	7
007	0407_TP034_0.1-0.2_200623	2	9	-	-	-
009	0407_TP043_0.1_200624	-	-	1	1	7
010	0407_TP043_0.5_200624	-	-	1	1	7
011	0407_QC153_200624	-	-	1	1	7
012	0407_TP059_0.1_200624	-	-	-	1	1
013	0407_TP059_0.5_200624	-	-	-	1	1
014	0407_TP059_0.1_0.2_200624	2	9	-	-	-
015	0407_QC154_200624	-	-	-	1	1
016	0407_TP082_0.1_200624	-	-	1	1	7
017	0407_TP082_0.5_200624	-	-	1	1	7
018	0407_TP082_0.1-0.2_200624	2	9	-	-	-
019	0407_QC155_200624	-	-	1	1	7
020	0407_TP092_0.1_200624	-	-	1	1	7
021	0407_TP092_0.5_200624	-	-	1	1	7
022	0407_TP092_0.1-0.2_200624	2	9	-	-	-
023	0407_QC156_200624	-	-	1	1	7
024	0407_TP102_0.1_200624	-	-	1	1	7

CONTINUED OVERLEAF

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SAMPLE RECEIPT ADVICE

SE208047

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Fibre Identification in soil	Gravimetric Determination of Asbestos in Soil	Mercury in Soil	Moisture Content	Total Recoverable Elements in Soil/Waste
025	0407_TP102_0.5_200624	-	-	1	1	7
026	0407_TP102_0.1-0.2_200624	2	9	-	-	-
027	0407_QC157_200624	-	-	1	1	7
028	0407_TP112_0.1_200624	-	-	1	1	7
029	0407_TP112_0.5_200624	-	-	1	1	7
030	0407_TP112_0.1-0.2_200624	2	9	-	-	-
031	0407_QC159_200624	-	-	1	1	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
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Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE208047

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Full 8270 SVOC in Water	Mercury (dissolved) in Water	PAH (Polynuclear Aromatic Hydrocarbons) in Water	Trace Metals (Dissolved) in Water by ICPMS	TRH (Total Recoverable Hydrocarbons) in Water	VOCs in Water	Volatile Petroleum Hydrocarbons in Water
008	0407_QC301_200623	168	1	22	7	9	78	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
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Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE208047

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Per- and Polyfluoroalkyl Substances (PFAS) in
008	0407_QC301_200623	55

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
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Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	31

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208047 R0**
Date Received	24/6/2020
Date Reported	8/7/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.

Sample #7: Approx 9-10x2mm fibre bundles x>20 found loose in >2mm and <2mm portions of sample.

Asbestos analysed by Approved Identifier Yusuf Kuthpudin.

SIGNATORIES

[redacted]

Chemist | Senior Organic Chemist/Metals Chemist | Metals/Inorganics Team Leader

[redacted]

Senior Chemist | Organic Section Head | Asbestos Analyst

VOC's in Soil [AN433] Tested: 2/7/2020

PARAMETER	UOM	LOR	0407_TP021_0.1_20024 SOIL - 24/6/2020 SE208047.001	0407_TP021_0.5_20024 SOIL - 24/6/2020 SE208047.002	0407_QC150_200624 SOIL - 24/6/2020 SE208047.004	0407_TP034_0.1_20023 SOIL - 23/6/2020 SE208047.005	0407_TP034_0.5_20023 SOIL - 23/6/2020 SE208047.006
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 2/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP021_0.1_200 24 SOIL - 24/6/2020 SE208047.001	0407_TP021_0.5_200 24 SOIL - 24/6/2020 SE208047.002	0407_QC150_20062 SOIL - 24/6/2020 SE208047.004	0407_TP034_0.1_200 23 SOIL - 23/6/2020 SE208047.005	0407_TP034_0.5_200 23 SOIL - 23/6/2020 SE208047.006
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 2/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP043_0.1_20024 SOIL - 24/6/2020 SE208047.009	0407_TP043_0.5_20024 SOIL - 24/6/2020 SE208047.010	0407_QC153_20062 SOIL - 24/6/2020 SE208047.011	0407_TP059_0.1_20024 SOIL - 24/6/2020 SE208047.012	0407_TP059_0.5_20024 SOIL - 24/6/2020 SE208047.013
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	-	-
Chloromethane	mg/kg	1	<1	<1	<1	-	-
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Bromomethane	mg/kg	1	<1	<1	<1	-	-
Chloroethane	mg/kg	1	<1	<1	<1	-	-
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	-	-
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	-	-
Iodomethane	mg/kg	5	<5	<5	<5	-	-
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	-	-
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	-	-
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Vinyl acetate	mg/kg	10	<10	<10	<10	-	-
MEK (2-butanone)	mg/kg	10	<10	<10	<10	-	-
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
2-nitropropane	mg/kg	10	<10	<10	<10	-	-
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	-	-
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	-	-
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	-	-
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	-	-

VOC's in Soil [AN433] Tested: 2/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP043_0.1_200 24 SOIL - 24/6/2020 SE208047.009	0407_TP043_0.5_200 24 SOIL - 24/6/2020 SE208047.010	0407_QC153_20062 SOIL - 24/6/2020 SE208047.011	0407_TP059_0.1_200 24 SOIL - 24/6/2020 SE208047.012	0407_TP059_0.5_200 24 SOIL - 24/6/2020 SE208047.013
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Total VOC*	mg/kg	24	<24	<24	<24	-	-
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	-	-
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	-	-
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	-	-

VOC's in Soil [AN433] Tested: 2/7/2020 (continued)

PARAMETER	UOM	LOR	0407_QC154_20062024 SOIL - 24/6/2020 SE208047.015	0407_TP082_0.1_20062024 SOIL - 24/6/2020 SE208047.016	0407_TP082_0.5_20062024 SOIL - 24/6/2020 SE208047.017	0407_QC155_20062024 SOIL - 24/6/2020 SE208047.019	0407_TP092_0.1_20062024 SOIL - 24/6/2020 SE208047.020
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	-	<1	<1	<1	<1
Chloromethane	mg/kg	1	-	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	-	<1	<1	<1	<1
Chloroethane	mg/kg	1	-	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	-	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	-	<10	<10	<10	<10
Iodomethane	mg/kg	5	-	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	-	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	-	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	-	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	-	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	-	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	-	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	-	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	-	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	-	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 2/7/2020 (continued)

PARAMETER	UOM	LOR	0407_QC154_20062024 SOIL - 24/6/2020 SE208047.015	0407_TP082_0.1_20062024 SOIL - 24/6/2020 SE208047.016	0407_TP082_0.5_20062024 SOIL - 24/6/2020 SE208047.017	0407_QC155_20062024 SOIL - 24/6/2020 SE208047.019	0407_TP092_0.1_20062024 SOIL - 24/6/2020 SE208047.020
Isopropylbenzene (Cumene)	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	-	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	-	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	-	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	-	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 2/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP092_0.5_20024 SOIL - 24/6/2020 SE208047.021	0407_QC156_200624 SOIL - 24/6/2020 SE208047.023	0407_TP102_0.1_20024 SOIL - 24/6/2020 SE208047.024	0407_TP102_0.5_20024 SOIL - 24/6/2020 SE208047.025	0407_QC157_200624 SOIL - 24/6/2020 SE208047.027
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 2/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP092_0.5_20024 SOIL - 24/6/2020 SE208047.021	0407_QC156_200624 SOIL - 24/6/2020 SE208047.023	0407_TP102_0.1_20024 SOIL - 24/6/2020 SE208047.024	0407_TP102_0.5_20024 SOIL - 24/6/2020 SE208047.025	0407_QC157_200624 SOIL - 24/6/2020 SE208047.027
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 2/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP112_0.1_20024 SOIL - 24/6/2020 SE208047.028	0407_TP112_0.5_20024 SOIL - 24/6/2020 SE208047.029	0407_QC159_20062 SOIL - 24/6/2020 SE208047.031
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1

VOC's in Soil [AN433] Tested: 2/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP112_0.1_20024 SOIL - 24/6/2020 SE208047.028	0407_TP112_0.5_20024 SOIL - 24/6/2020 SE208047.029	0407_QC159_20062 SOIL - 24/6/2020 SE208047.031
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 2/7/2020

PARAMETER	UOM	LOR	0407_TP021_0.1_20024 SOIL - 24/6/2020 SE208047.001	0407_TP021_0.5_20024 SOIL - 24/6/2020 SE208047.002	0407_QC150_20062 SOIL - 24/6/2020 SE208047.004	0407_TP034_0.1_20023 SOIL - 23/6/2020 SE208047.005	0407_TP034_0.5_20023 SOIL - 23/6/2020 SE208047.006
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP043_0.1_20024 SOIL - 24/6/2020 SE208047.009	0407_TP043_0.5_20024 SOIL - 24/6/2020 SE208047.010	0407_QC153_20062 SOIL - 24/6/2020 SE208047.011	0407_TP059_0.1_20024 SOIL - 24/6/2020 SE208047.012	0407_TP059_0.5_20024 SOIL - 24/6/2020 SE208047.013
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_QC154_20062 SOIL - 24/6/2020 SE208047.015	0407_TP082_0.1_20024 SOIL - 24/6/2020 SE208047.016	0407_TP082_0.5_20024 SOIL - 24/6/2020 SE208047.017	0407_QC155_20062 SOIL - 24/6/2020 SE208047.019	0407_TP092_0.1_20024 SOIL - 24/6/2020 SE208047.020
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP092_0.5_20024 SOIL - 24/6/2020 SE208047.021	0407_QC156_20062 SOIL - 24/6/2020 SE208047.023	0407_TP102_0.1_20024 SOIL - 24/6/2020 SE208047.024	0407_TP102_0.5_20024 SOIL - 24/6/2020 SE208047.025	0407_QC157_20062 SOIL - 24/6/2020 SE208047.027
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP112_0.1_20024 SOIL - 24/6/2020 SE208047.028	0407_TP112_0.5_20024 SOIL - 24/6/2020 SE208047.029	0407_QC159_20062 SOIL - 24/6/2020 SE208047.031
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 2/7/2020

PARAMETER	UOM	LOR	0407_TP021_0.1_20024 SOIL - 24/6/2020 SE208047.001	0407_TP021_0.5_20024 SOIL - 24/6/2020 SE208047.002	0407_QC150_20062 SOIL - 24/6/2020 SE208047.004	0407_TP034_0.1_20023 SOIL - 23/6/2020 SE208047.005	0407_TP034_0.5_20023 SOIL - 23/6/2020 SE208047.006
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP043_0.1_20024 SOIL - 24/6/2020 SE208047.009	0407_TP043_0.5_20024 SOIL - 24/6/2020 SE208047.010	0407_QC153_20062 SOIL - 24/6/2020 SE208047.011	0407_TP059_0.1_20024 SOIL - 24/6/2020 SE208047.012	0407_TP059_0.5_20024 SOIL - 24/6/2020 SE208047.013
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_QC154_20062 SOIL - 24/6/2020 SE208047.015	0407_TP082_0.1_20024 SOIL - 24/6/2020 SE208047.016	0407_TP082_0.5_20024 SOIL - 24/6/2020 SE208047.017	0407_QC155_20062 SOIL - 24/6/2020 SE208047.019	0407_TP092_0.1_20024 SOIL - 24/6/2020 SE208047.020
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 2/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP092_0.5_20024 SOIL - 24/6/2020 SE208047.021	0407_QC156_200624 SOIL - 24/6/2020 SE208047.023	0407_TP102_0.1_20024 SOIL - 24/6/2020 SE208047.024	0407_TP102_0.5_20024 SOIL - 24/6/2020 SE208047.025	0407_QC157_200624 SOIL - 24/6/2020 SE208047.027
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP112_0.1_20024 SOIL - 24/6/2020 SE208047.028	0407_TP112_0.5_20024 SOIL - 24/6/2020 SE208047.029	0407_QC159_200624 SOIL - 24/6/2020 SE208047.031
TRH C10-C14	mg/kg	20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 2/7/2020

PARAMETER	UOM	LOR	0407_TP021_0.1_20024 SOIL - 24/6/2020 SE208047.001	0407_TP021_0.5_20024 SOIL - 24/6/2020 SE208047.002	0407_QC150_200620 SOIL - 24/6/2020 SE208047.004	0407_TP034_0.1_20023 SOIL - 23/6/2020 SE208047.005	0407_TP034_0.5_20023 SOIL - 23/6/2020 SE208047.006
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PARAMETER	UOM	LOR	0407_TP059_0.1_20024 SOIL - 24/6/2020 SE208047.012	0407_TP059_0.5_20024 SOIL - 24/6/2020 SE208047.013	0407_QC154_200620 SOIL - 24/6/2020 SE208047.015	0407_TP082_0.1_20024 SOIL - 24/6/2020 SE208047.016	0407_TP082_0.5_20024 SOIL - 24/6/2020 SE208047.017
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 2/7/2020 (continued)

PARAMETER	UOM	LOR	0407_QC155_20062	0407_TP092_0.1_200 24	0407_TP092_0.5_200 24	0407_QC156_20062	0407_TP102_0.1_200 24
			SOIL - 24/6/2020	SOIL - 24/6/2020	SOIL - 24/6/2020	SOIL - 24/6/2020	SOIL - 24/6/2020
			SE208047.019	SE208047.020	SE208047.021	SE208047.023	SE208047.024
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PARAMETER	UOM	LOR	0407_TP102_0.5_200 24	0407_QC157_20062	0407_TP112_0.1_200 24	0407_TP112_0.5_200 24	0407_QC159_20062
			SOIL - 24/6/2020	SOIL - 24/6/2020	SOIL - 24/6/2020	SOIL - 24/6/2020	SOIL - 24/6/2020
			SE208047.025	SE208047.027	SE208047.028	SE208047.029	SE208047.031
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

Speciated Phenols in Soil [AN420] Tested: 2/7/2020

PARAMETER	UOM	LOR	0407_TP021_0.1_20024 SOIL - 24/6/2020 SE208047.001	0407_TP021_0.5_20024 SOIL - 24/6/2020 SE208047.002	0407_QC150_20062 SOIL - 24/6/2020 SE208047.004	0407_TP034_0.1_20023 SOIL - 23/6/2020 SE208047.005	0407_TP034_0.5_20023 SOIL - 23/6/2020 SE208047.006
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_TP059_0.1_20024 SOIL - 24/6/2020 SE208047.012	0407_TP059_0.5_20024 SOIL - 24/6/2020 SE208047.013	0407_QC154_20062 SOIL - 24/6/2020 SE208047.015	0407_TP082_0.1_20024 SOIL - 24/6/2020 SE208047.016	0407_TP082_0.5_20024 SOIL - 24/6/2020 SE208047.017
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

Speciated Phenols in Soil [AN420] Tested: 2/7/2020 (continued)

PARAMETER	UOM	LOR	0407_QC155_20062024 SOIL - 24/6/2020 SE208047.019	0407_TP092_0.1_20062024 SOIL - 24/6/2020 SE208047.020	0407_TP092_0.5_20062024 SOIL - 24/6/2020 SE208047.021	0407_QC156_20062024 SOIL - 24/6/2020 SE208047.023	0407_TP102_0.1_20062024 SOIL - 24/6/2020 SE208047.024
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_TP102_0.5_20062024 SOIL - 24/6/2020 SE208047.025	0407_QC157_20062024 SOIL - 24/6/2020 SE208047.027	0407_TP112_0.1_20062024 SOIL - 24/6/2020 SE208047.028	0407_TP112_0.5_20062024 SOIL - 24/6/2020 SE208047.029	0407_QC159_20062024 SOIL - 24/6/2020 SE208047.031
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

OC Pesticides in Soil [AN420] Tested: 2/7/2020

PARAMETER	UOM	LOR	0407_TP021_0.1_200 24 SOIL - 24/6/2020 SE208047.001	0407_TP021_0.5_200 24 SOIL - 24/6/2020 SE208047.002	0407_QC150_20062 SOIL - 24/6/2020 SE208047.004	0407_TP034_0.1_200 23 SOIL - 23/6/2020 SE208047.005	0407_TP034_0.5_200 23 SOIL - 23/6/2020 SE208047.006
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 2/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP043_0.1_200 24 SOIL - 24/6/2020 SE208047.009	0407_TP043_0.5_200 24 SOIL - 24/6/2020 SE208047.010	0407_QC153_20062 SOIL - 24/6/2020 SE208047.011	0407_TP059_0.1_200 24 SOIL - 24/6/2020 SE208047.012	0407_TP059_0.5_200 24 SOIL - 24/6/2020 SE208047.013
Hexachlorobenzene (HCB)	mg/kg	0.1	-	-	-	-	-
Alpha BHC	mg/kg	0.1	-	-	-	-	-
Lindane	mg/kg	0.1	-	-	-	-	-
Heptachlor	mg/kg	0.1	-	-	-	-	-
Aldrin	mg/kg	0.1	-	-	-	-	-
Beta BHC	mg/kg	0.1	-	-	-	-	-
Delta BHC	mg/kg	0.1	-	-	-	-	-
Heptachlor epoxide	mg/kg	0.1	-	-	-	-	-
o,p'-DDE	mg/kg	0.1	-	-	-	-	-
Alpha Endosulfan	mg/kg	0.2	-	-	-	-	-
Gamma Chlordane	mg/kg	0.1	-	-	-	-	-
Alpha Chlordane	mg/kg	0.1	-	-	-	-	-
trans-Nonachlor	mg/kg	0.1	-	-	-	-	-
p,p'-DDE	mg/kg	0.1	-	-	-	-	-
Dieldrin	mg/kg	0.2	-	-	-	-	-
Endrin	mg/kg	0.2	-	-	-	-	-
o,p'-DDD	mg/kg	0.1	-	-	-	-	-
o,p'-DDT	mg/kg	0.1	-	-	-	-	-
Beta Endosulfan	mg/kg	0.2	-	-	-	-	-
p,p'-DDD	mg/kg	0.1	-	-	-	-	-
p,p'-DDT	mg/kg	0.1	-	-	-	-	-
Endosulfan sulphate	mg/kg	0.1	-	-	-	-	-
Endrin Aldehyde	mg/kg	0.1	-	-	-	-	-
Methoxychlor	mg/kg	0.1	-	-	-	-	-
Endrin Ketone	mg/kg	0.1	-	-	-	-	-
Isodrin	mg/kg	0.1	-	-	-	-	-
Mirex	mg/kg	0.1	-	-	-	-	-
Total CLP OC Pesticides	mg/kg	1	-	-	-	-	-

OC Pesticides in Soil [AN420] Tested: 2/7/2020 (continued)

PARAMETER	UOM	LOR	0407_QC154_20062024 SOIL - 24/6/2020 SE208047.015	0407_TP082_0.1_20062024 SOIL - 24/6/2020 SE208047.016	0407_TP082_0.5_20062024 SOIL - 24/6/2020 SE208047.017	0407_QC155_20062024 SOIL - 24/6/2020 SE208047.019	0407_TP092_0.1_20062024 SOIL - 24/6/2020 SE208047.020
Hexachlorobenzene (HCB)	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	-	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	-	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	-	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	-	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	-	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 2/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP092_0.5_20024 SOIL - 24/6/2020 SE208047.021	0407_QC156_200624 SOIL - 24/6/2020 SE208047.023	0407_TP102_0.1_20024 SOIL - 24/6/2020 SE208047.024	0407_TP102_0.5_20024 SOIL - 24/6/2020 SE208047.025	0407_QC157_200624 SOIL - 24/6/2020 SE208047.027
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 2/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP112_0.1_20024 SOIL - 24/6/2020 SE208047.028	0407_TP112_0.5_20024 SOIL - 24/6/2020 SE208047.029	0407_QC159_20062 SOIL - 24/6/2020 SE208047.031
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1

OP Pesticides in Soil [AN420] Tested: 2/7/2020

PARAMETER	UOM	LOR	0407_TP021_0.1_20024 SOIL - 24/6/2020 SE208047.001	0407_TP021_0.5_20024 SOIL - 24/6/2020 SE208047.002	0407_QC150_20062 SOIL - 24/6/2020 SE208047.004	0407_TP034_0.1_20023 SOIL - 23/6/2020 SE208047.005	0407_TP034_0.5_20023 SOIL - 23/6/2020 SE208047.006
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP082_0.1_20024 SOIL - 24/6/2020 SE208047.016	0407_TP082_0.5_20024 SOIL - 24/6/2020 SE208047.017	0407_QC155_20062 SOIL - 24/6/2020 SE208047.019	0407_TP092_0.1_20024 SOIL - 24/6/2020 SE208047.020	0407_TP092_0.5_20024 SOIL - 24/6/2020 SE208047.021
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_QC156_20062 SOIL - 24/6/2020 SE208047.023	0407_TP102_0.1_20024 SOIL - 24/6/2020 SE208047.024	0407_TP102_0.5_20024 SOIL - 24/6/2020 SE208047.025	0407_QC157_20062 SOIL - 24/6/2020 SE208047.027	0407_TP112_0.1_20024 SOIL - 24/6/2020 SE208047.028
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

OP Pesticides in Soil [AN420] Tested: 2/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP112_0.5_20024 SOIL - 24/6/2020 SE208047.029	0407_QC159_20062 SOIL - 24/6/2020 SE208047.031
Dichlorvos	mg/kg	0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7

PCBs in Soil [AN420] Tested: 2/7/2020

PARAMETER	UOM	LOR	0407_TP021_0.1_20024 SOIL - 24/6/2020 SE208047.001	0407_TP021_0.5_20024 SOIL - 24/6/2020 SE208047.002	0407_QC150_20062 SOIL - 24/6/2020 SE208047.004	0407_TP034_0.1_20023 SOIL - 23/6/2020 SE208047.005	0407_TP034_0.5_20023 SOIL - 23/6/2020 SE208047.006
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP043_0.1_20024 SOIL - 24/6/2020 SE208047.009	0407_TP043_0.5_20024 SOIL - 24/6/2020 SE208047.010	0407_QC153_20062 SOIL - 24/6/2020 SE208047.011	0407_TP059_0.1_20024 SOIL - 24/6/2020 SE208047.012	0407_TP059_0.5_20024 SOIL - 24/6/2020 SE208047.013
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	-	-
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	-	-
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	-	-
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	-	-
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	-	-
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	-	-
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	-	-
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	-	-
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	-	-
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	-	-

PARAMETER	UOM	LOR	0407_QC154_20062 SOIL - 24/6/2020 SE208047.015	0407_TP082_0.1_20024 SOIL - 24/6/2020 SE208047.016	0407_TP082_0.5_20024 SOIL - 24/6/2020 SE208047.017	0407_QC155_20062 SOIL - 24/6/2020 SE208047.019	0407_TP092_0.1_20024 SOIL - 24/6/2020 SE208047.020
Arochlor 1016	mg/kg	0.2	-	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	-	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	-	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	-	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	-	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	-	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	-	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	-	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	-	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	-	<1	<1	<1	<1

PCBs in Soil [AN420] Tested: 2/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP092_0.5_20024 SOIL - 24/6/2020 SE208047.021	0407_QC156_200624 SOIL - 24/6/2020 SE208047.023	0407_TP102_0.1_20024 SOIL - 24/6/2020 SE208047.024	0407_TP102_0.5_20024 SOIL - 24/6/2020 SE208047.025	0407_QC157_200624 SOIL - 24/6/2020 SE208047.027
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP112_0.1_20024 SOIL - 24/6/2020 SE208047.028	0407_TP112_0.5_20024 SOIL - 24/6/2020 SE208047.029	0407_QC159_200624 SOIL - 24/6/2020 SE208047.031
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 3/7/2020

PARAMETER	UOM	LOR	0407_TP021_0.1_20024 SOIL - 24/6/2020 SE208047.001	0407_TP021_0.5_20024 SOIL - 24/6/2020 SE208047.002	0407_QC150_20062 SOIL - 24/6/2020 SE208047.004	0407_TP034_0.1_20023 SOIL - 23/6/2020 SE208047.005	0407_TP034_0.5_20023 SOIL - 23/6/2020 SE208047.006
Arsenic, As	mg/kg	1	1	<1	1	<1	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	1.4	<0.5	1.3	2.7	1.1
Copper, Cu	mg/kg	0.5	14	<0.5	6.5	11	2.4
Lead, Pb	mg/kg	1	33	<1	16	11	<1
Nickel, Ni	mg/kg	0.5	1.1	<0.5	0.9	11	1.7
Zinc, Zn	mg/kg	2	3.3	<2.0	3.4	30	2.5

PARAMETER	UOM	LOR	0407_TP043_0.1_20024 SOIL - 24/6/2020 SE208047.009	0407_TP043_0.5_20024 SOIL - 24/6/2020 SE208047.010	0407_QC153_20062 SOIL - 24/6/2020 SE208047.011	0407_TP059_0.1_20024 SOIL - 24/6/2020 SE208047.012	0407_TP059_0.5_20024 SOIL - 24/6/2020 SE208047.013
Arsenic, As	mg/kg	1	<1	1	<1	-	-
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	-	-
Chromium, Cr	mg/kg	0.5	<0.5	3.9	<0.5	-	-
Copper, Cu	mg/kg	0.5	<0.5	<0.5	<0.5	-	-
Lead, Pb	mg/kg	1	<1	2	<1	4	<1
Nickel, Ni	mg/kg	0.5	0.8	1.3	0.7	-	-
Zinc, Zn	mg/kg	2	<2.0	<2.0	<2.0	-	-

PARAMETER	UOM	LOR	0407_QC154_20062 SOIL - 24/6/2020 SE208047.015	0407_TP082_0.1_20024 SOIL - 24/6/2020 SE208047.016	0407_TP082_0.5_20024 SOIL - 24/6/2020 SE208047.017	0407_QC155_20062 SOIL - 24/6/2020 SE208047.019	0407_TP092_0.1_20024 SOIL - 24/6/2020 SE208047.020
Arsenic, As	mg/kg	1	-	<1	2	<1	<1
Cadmium, Cd	mg/kg	0.3	-	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	-	2.1	5.1	1.5	1.8
Copper, Cu	mg/kg	0.5	-	1.5	<0.5	1.1	2.1
Lead, Pb	mg/kg	1	2	2	2	2	1
Nickel, Ni	mg/kg	0.5	-	1.5	1.6	0.9	1.2
Zinc, Zn	mg/kg	2	-	6.6	<2.0	5.0	3.2

PARAMETER	UOM	LOR	0407_TP092_0.5_20024 SOIL - 24/6/2020 SE208047.021	0407_QC156_20062 SOIL - 24/6/2020 SE208047.023	0407_TP102_0.1_20024 SOIL - 24/6/2020 SE208047.024	0407_TP102_0.5_20024 SOIL - 24/6/2020 SE208047.025	0407_QC157_20062 SOIL - 24/6/2020 SE208047.027
Arsenic, As	mg/kg	1	<1	<1	<1	<1	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	<0.5	<0.5	1.2	<0.5	<0.5
Copper, Cu	mg/kg	0.5	<0.5	<0.5	0.7	<0.5	<0.5
Lead, Pb	mg/kg	1	<1	<1	3	<1	<1
Nickel, Ni	mg/kg	0.5	<0.5	<0.5	0.7	<0.5	<0.5
Zinc, Zn	mg/kg	2	<2.0	<2.0	2.9	<2.0	<2.0

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 3/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP112_0.1_20024 SOIL - 24/6/2020 SE208047.028	0407_TP112_0.5_20024 SOIL - 24/6/2020 SE208047.029	0407_QC159_20062 SOIL - 24/6/2020 SE208047.031
Arsenic, As	mg/kg	1	<1	**2**	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	<0.5	**6.6**	<0.5
Copper, Cu	mg/kg	0.5	<0.5	<0.5	<0.5
Lead, Pb	mg/kg	1	**1**	**2**	<1
Nickel, Ni	mg/kg	0.5	<0.5	**1.3**	<0.5
Zinc, Zn	mg/kg	2	<2.0	<2.0	<2.0

Mercury in Soil [AN312] Tested: 3/7/2020

PARAMETER	UOM	LOR	0407_TP021_0.1_20024 SOIL - 24/6/2020 SE208047.001	0407_TP021_0.5_20024 SOIL - 24/6/2020 SE208047.002	0407_QC150_20062024 SOIL - 24/6/2020 SE208047.004	0407_TP034_0.1_20023 SOIL - 23/6/2020 SE208047.005	0407_TP034_0.5_20023 SOIL - 23/6/2020 SE208047.006
Mercury	mg/kg	0.05	**0.07**	<0.05	**0.06**	<0.05	<0.05

PARAMETER	UOM	LOR	0407_TP043_0.1_20024 SOIL - 24/6/2020 SE208047.009	0407_TP043_0.5_20024 SOIL - 24/6/2020 SE208047.010	0407_QC153_20062024 SOIL - 24/6/2020 SE208047.011	0407_TP082_0.1_20024 SOIL - 24/6/2020 SE208047.016	0407_TP082_0.5_20024 SOIL - 24/6/2020 SE208047.017
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_QC155_20062024 SOIL - 24/6/2020 SE208047.019	0407_TP092_0.1_20024 SOIL - 24/6/2020 SE208047.020	0407_TP092_0.5_20024 SOIL - 24/6/2020 SE208047.021	0407_QC156_20062024 SOIL - 24/6/2020 SE208047.023	0407_TP102_0.1_20024 SOIL - 24/6/2020 SE208047.024
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_TP102_0.5_20024 SOIL - 24/6/2020 SE208047.025	0407_QC157_20062024 SOIL - 24/6/2020 SE208047.027	0407_TP112_0.1_20024 SOIL - 24/6/2020 SE208047.028	0407_TP112_0.5_20024 SOIL - 24/6/2020 SE208047.029	0407_QC159_20062 SOIL - 24/6/2020 SE208047.031
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

Moisture Content [AN002] Tested: 2/7/2020

PARAMETER	UOM	LOR	0407_TP021_0.1_20024 SOIL - 24/6/2020 SE208047.001	0407_TP021_0.5_20024 SOIL - 24/6/2020 SE208047.002	0407_QC150_20062 SOIL - 24/6/2020 SE208047.004	0407_TP034_0.1_20023 SOIL - 23/6/2020 SE208047.005	0407_TP034_0.5_20023 SOIL - 23/6/2020 SE208047.006
% Moisture	%w/w	1	23.9	9.5	24.1	6.0	4.3

PARAMETER	UOM	LOR	0407_TP043_0.1_20024 SOIL - 24/6/2020 SE208047.009	0407_TP043_0.5_20024 SOIL - 24/6/2020 SE208047.010	0407_QC153_20062 SOIL - 24/6/2020 SE208047.011	0407_TP059_0.1_20024 SOIL - 24/6/2020 SE208047.012	0407_TP059_0.5_20024 SOIL - 24/6/2020 SE208047.013
% Moisture	%w/w	1	2.4	9.1	2.2	21.4	5.2

PARAMETER	UOM	LOR	0407_QC154_20062 SOIL - 24/6/2020 SE208047.015	0407_TP082_0.1_20024 SOIL - 24/6/2020 SE208047.016	0407_TP082_0.5_20024 SOIL - 24/6/2020 SE208047.017	0407_QC155_20062 SOIL - 24/6/2020 SE208047.019	0407_TP092_0.1_20024 SOIL - 24/6/2020 SE208047.020
% Moisture	%w/w	1	19.1	1.8	9.8	2.3	3.9

PARAMETER	UOM	LOR	0407_TP092_0.5_20024 SOIL - 24/6/2020 SE208047.021	0407_QC156_20062 SOIL - 24/6/2020 SE208047.023	0407_TP102_0.1_20024 SOIL - 24/6/2020 SE208047.024	0407_TP102_0.5_20024 SOIL - 24/6/2020 SE208047.025	0407_QC157_20062 SOIL - 24/6/2020 SE208047.027
% Moisture	%w/w	1	1.4	1.5	<1.0	4.5	1.3

PARAMETER	UOM	LOR	0407_TP112_0.1_20024 SOIL - 24/6/2020 SE208047.028	0407_TP112_0.5_20024 SOIL - 24/6/2020 SE208047.029	0407_QC159_20062 SOIL - 24/6/2020 SE208047.031
% Moisture	%w/w	1	2.8	6.9	18.2

Fibre Identification in soil [AN602] Tested: 3/7/2020

PARAMETER	UOM	LOR	0407_TP021_0.1-0.2_00624 SOIL - 24/6/2020 SE208047.003	0407_TP034_0.1-0.2_00623 SOIL - 23/6/2020 SE208047.007	0407_TP059_0.1_0.2200624 SOIL - 24/6/2020 SE208047.014	0407_TP082_0.1-0.2_00624 SOIL - 24/6/2020 SE208047.018	0407_TP092_0.1-0.2_00624 SOIL - 24/6/2020 SE208047.022
Asbestos Detected	No unit	-	No	Yes	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	0407_TP102_0.1-0.2_00624 SOIL - 24/6/2020 SE208047.026	0407_TP112_0.1-0.2_00624 SOIL - 24/6/2020 SE208047.030
Asbestos Detected	No unit	-	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 3/7/2020

PARAMETER	UOM	LOR	0407_TP021_0.1-0.2_00624 SOIL - 24/6/2020 SE208047.003	0407_TP034_0.1-0.2_00623 SOIL - 23/6/2020 SE208047.007	0407_TP059_0.1_0.2_200624 SOIL - 24/6/2020 SE208047.014	0407_TP082_0.1-0.2_00624 SOIL - 24/6/2020 SE208047.018	0407_TP092_0.1-0.2_00624 SOIL - 24/6/2020 SE208047.022
Total Sample Weight*	g	1	**968**	**1212**	**1023**	**1221**	**1124**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	**0.0281**	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	**0.0161**	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	**0.002**	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	**0.001**	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	**0.004**	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP102_0.1-0.2_00624 SOIL - 24/6/2020 SE208047.026	0407_TP112_0.1-0.2_00624 SOIL - 24/6/2020 SE208047.030
Total Sample Weight*	g	1	**1265**	**1195**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-

VOCs in Water [AN433] Tested: 3/7/2020

PARAMETER	UOM	LOR	0407_QC301_200623 WATER - 23/6/2020 SE208047.008
Dichlorodifluoromethane (CFC-12)	µg/L	5	<5
Chloromethane	µg/L	5	<5
Vinyl chloride (Chloroethene)	µg/L	0.3	<0.3
Bromomethane	µg/L	10	<10
Chloroethane	µg/L	5	<5
Trichlorofluoromethane	µg/L	1	<1
Acetone (2-propanone)	µg/L	10	<10
Iodomethane	µg/L	5	<5
1,1-dichloroethene	µg/L	0.5	<0.5
Acrylonitrile	µg/L	0.5	<0.5
Dichloromethane (Methylene chloride)	µg/L	5	<5
Allyl chloride	µg/L	2	<2
Carbon disulfide	µg/L	2	<2
trans-1,2-dichloroethene	µg/L	0.5	<0.5
MtBE (Methyl-tert-butyl ether)	µg/L	2	<2
1,1-dichloroethane	µg/L	0.5	<0.5
Vinyl acetate	µg/L	10	<10
MEK (2-butanone)	µg/L	10	<10
cis-1,2-dichloroethene	µg/L	0.5	<0.5
Bromochloromethane	µg/L	0.5	<0.5
Chloroform (THM)	µg/L	0.5	**6.8**
2,2-dichloropropane	µg/L	0.5	<0.5
1,2-dichloroethane	µg/L	0.5	<0.5
1,1,1-trichloroethane	µg/L	0.5	<0.5
1,1-dichloropropene	µg/L	0.5	<0.5
Carbon tetrachloride	µg/L	0.5	<0.5
Benzene	µg/L	0.5	<0.5
Dibromomethane	µg/L	0.5	<0.5
1,2-dichloropropane	µg/L	0.5	<0.5
Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	<0.5
2-nitropropane	µg/L	100	<100
Bromodichloromethane (THM)	µg/L	0.5	**0.8**
MIBK (4-methyl-2-pentanone)	µg/L	5	<5
cis-1,3-dichloropropene	µg/L	0.5	<0.5
trans-1,3-dichloropropene	µg/L	0.5	<0.5
1,1,2-trichloroethane	µg/L	0.5	<0.5
Toluene	µg/L	0.5	<0.5
1,3-dichloropropane	µg/L	0.5	<0.5
Dibromochloromethane (THM)	µg/L	0.5	<0.5
2-hexanone (MBK)	µg/L	5	<5
1,2-dibromoethane (EDB)	µg/L	0.5	<0.5
Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	<0.5
1,1,1,2-tetrachloroethane	µg/L	0.5	<0.5
Chlorobenzene	µg/L	0.5	<0.5
Ethylbenzene	µg/L	0.5	<0.5
Bromoform (THM)	µg/L	0.5	<0.5
m/p-xylene	µg/L	1	<1
cis-1,4-dichloro-2-butene	µg/L	1	<1
Styrene (Vinyl benzene)	µg/L	0.5	<0.5
1,1,2,2-tetrachloroethane	µg/L	0.5	<0.5
o-xylene	µg/L	0.5	<0.5
Total Xylenes	µg/L	1.5	<1.5
1,2,3-trichloropropane	µg/L	0.5	<0.5
trans-1,4-dichloro-2-butene	µg/L	1	<1
Isopropylbenzene (Cumene)	µg/L	0.5	<0.5
Bromobenzene	µg/L	0.5	<0.5

VOCs in Water [AN433] Tested: 3/7/2020 (continued)

PARAMETER	UOM	LOR	0407_QC301_20062 WATER - 23/6/2020 SE208047.008
n-propylbenzene	µg/L	0.5	<0.5
2-chlorotoluene	µg/L	0.5	<0.5
4-chlorotoluene	µg/L	0.5	<0.5
1,3,5-trimethylbenzene	µg/L	0.5	<0.5
tert-butylbenzene	µg/L	0.5	<0.5
1,2,4-trimethylbenzene	µg/L	0.5	<0.5
sec-butylbenzene	µg/L	0.5	<0.5
1,3-dichlorobenzene	µg/L	0.5	<0.5
1,4-dichlorobenzene	µg/L	0.3	<0.3
p-isopropyltoluene	µg/L	0.5	<0.5
1,2-dichlorobenzene	µg/L	0.5	<0.5
n-butylbenzene	µg/L	0.5	<0.5
1,2-dibromo-3-chloropropane	µg/L	0.5	<0.5
1,2,4-trichlorobenzene	µg/L	0.5	<0.5
Naphthalene	µg/L	0.5	<0.5
Hexachlorobutadiene	µg/L	0.5	<0.5
1,2,3-trichlorobenzene	µg/L	0.5	<0.5
Total BTEX	µg/L	3	<3
Total VOC	µg/L	10	<10

Volatile Petroleum Hydrocarbons in Water [AN433] Tested: 3/7/2020

PARAMETER	UOM	LOR	0407_QC301_20062 WATER - 23/6/2020 SE208047.008
TRH C6-C9	µg/L	40	<40
Benzene (F0)	µg/L	0.5	<0.5
TRH C6-C10	µg/L	50	<50
TRH C6-C10 minus BTEX (F1)	µg/L	50	<50

TRH (Total Recoverable Hydrocarbons) in Water [AN403] Tested: 3/7/2020

PARAMETER	UOM	LOR	0407_QC301_20062 WATER - 23/6/2020 SE208047.008
TRH C10-C14	µg/L	50	<50
TRH C15-C28	µg/L	200	<200
TRH C29-C36	µg/L	200	<200
TRH C37-C40	µg/L	200	<200
TRH >C10-C16	µg/L	60	<60
TRH >C10-C16 - Naphthalene (F2)	µg/L	60	<60
TRH >C16-C34 (F3)	µg/L	500	<500
TRH >C34-C40 (F4)	µg/L	500	<500
TRH C10-C40	µg/L	320	<320

PAH (Polynuclear Aromatic Hydrocarbons) in Water [AN420] Tested: 3/7/2020

PARAMETER	UOM	LOR	0407_QC301_20062 WATER - 23/6/2020 SE208047.008
Naphthalene	µg/L	0.1	<0.1
2-methylnaphthalene	µg/L	0.1	<0.1
1-methylnaphthalene	µg/L	0.1	<0.1
Acenaphthylene	µg/L	0.1	<0.1
Acenaphthene	µg/L	0.1	<0.1
Fluorene	µg/L	0.1	<0.1
Phenanthrene	µg/L	0.1	<0.1
Anthracene	µg/L	0.1	<0.1
Fluoranthene	µg/L	0.1	<0.1
Pyrene	µg/L	0.1	<0.1
Benzo(a)anthracene	µg/L	0.1	<0.1
Chrysene	µg/L	0.1	<0.1
Benzo(b&j)fluoranthene	µg/L	0.1	<0.1
Benzo(k)fluoranthene	µg/L	0.1	<0.1
Benzo(a)pyrene	µg/L	0.1	<0.1
Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1
Dibenzo(ah)anthracene	µg/L	0.1	<0.1
Benzo(ghi)perylene	µg/L	0.1	<0.1
Total PAH (18)	µg/L	1	<1

Full 8270 SVOC in Water [AN420] Tested: 3/7/2020

PARAMETER	UOM	LOR	0407_QC301_20062 WATER - 23/6/2020 SE208047.008
Acenaphthene	µg/L	0.1	<0.1
Acenaphthylene	µg/L	0.1	<0.1
Anthracene	µg/L	0.1	<0.1
Benzo(a)anthracene	µg/L	0.1	<0.1
Total Benzofluoranthenes (b&j&k)	µg/L	0.2	<0.2
Benzo(b&j)fluoranthene	µg/L	0.1	<0.1
Benzo(k)fluoranthene	µg/L	0.1	<0.1
Benzo(ghi)perylene	µg/L	0.1	<0.1
Benzo(a)pyrene	µg/L	0.1	<0.1
Chrysene	µg/L	0.1	<0.1
Dibenzo(ah)anthracene	µg/L	0.1	<0.1
Fluoranthene	µg/L	0.1	<0.1
Fluorene	µg/L	0.1	<0.1
Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1
1-methylnaphthalene	µg/L	0.1	<0.1
2-methylnaphthalene	µg/L	0.1	<0.1
Naphthalene	µg/L	0.1	<0.1
Phenanthrene	µg/L	0.1	<0.1
Pyrene	µg/L	0.1	<0.1
2-acetylaminofluorene	µg/L	0.5	<0.5
7,12-dimethyl-benz(a)anthracene	µg/L	0.5	<0.5
3-methylcholanthrene	µg/L	0.5	<0.5
Aldrin	µg/L	0.1	<0.1
Alpha-BHC	µg/L	0.1	<0.1
Beta-BHC	µg/L	0.1	<0.1
Delta-BHC	µg/L	0.1	<0.1
Gamma-BHC (Lindane)	µg/L	0.1	<0.1
p,p-DDD	µg/L	0.1	<0.1
p,p-DDE	µg/L	0.1	<0.1
p,p-DDT	µg/L	0.1	<0.1
Dieldrin	µg/L	0.1	<0.1
Alpha-endosulfan	µg/L	0.1	<0.1
Beta-endosulfan	µg/L	0.1	<0.1
Endosulfan sulphate	µg/L	0.1	<0.1
Endrin	µg/L	0.1	<0.1
Heptachlor	µg/L	0.1	<0.1
Heptachlor epoxide	µg/L	0.1	<0.1
Isodrin	µg/L	0.1	<0.1
Methoxychlor	µg/L	0.1	<0.1
Mirex	µg/L	0.1	<0.1
Alpha-chlordane	µg/L	0.1	<0.1
Gamma-chlordane	µg/L	0.1	<0.1
Endrin ketone	µg/L	0.1	<0.1
Azinphos-methyl (Guthion)	µg/L	0.2	<0.2
Bromophos ethyl	µg/L	0.2	<0.2
Carbophenothion	µg/L	0.5	<0.5
Chlorfenvinphos-cis	µg/L	5	<5
Chlorfenvinphos-trans	µg/L	0.5	<0.5
Chlorpyrifos (Chlorpyrifos Ethyl)	µg/L	0.2	<0.2
Chlorpyrifos-methyl	µg/L	0.5	<0.5
Co-Ral (Coumaphos)	µg/L	0.5	<0.5
Diazinon (Dimpylate)	µg/L	0.5	<0.5
Dichlorvos	µg/L	0.5	<0.5
1/2-Chloronaphthalene	µg/L	1	<1
Demeton-S-methyl	µg/L	0.5	<0.5
Dimethoate	µg/L	0.5	<0.5

Full 8270 SVOC in Water [AN420] Tested: 3/7/2020 (continued)

PARAMETER	UOM	LOR	0407_QC301_20062 WATER - 23/6/2020 SE208047.008
Disulfoton (Di-syston)	µg/L	0.5	<0.5
EPN*	µg/L	0.5	<0.5
Ethion	µg/L	0.2	<0.2
Ethoprophos (Ethoprop or Prophos)	µg/L	0.5	<0.5
Famphur (Famophos)	µg/L	0.5	<0.5
Fenamiphos (Phenamiphos)	µg/L	0.5	<0.5
Fenchlorophos (Ronnel)	µg/L	0.5	<0.5
Fenitrothion	µg/L	0.2	<0.2
Fenthion	µg/L	0.5	<0.5
Malathion (Maldison)	µg/L	0.2	<0.2
Methidathion	µg/L	0.5	<0.5
Mevinphos-cis/trans	µg/L	1	<1
o,o,o-triethyl phosphorothioate	µg/L	0.5	<0.5
Parathion ethyl (Parathion)	µg/L	0.2	<0.2
Parathion methyl	µg/L	0.5	<0.5
Phorate	µg/L	0.5	<0.5
Pirimiphos-ethyl	µg/L	0.5	<0.5
Pirimiphos-methyl	µg/L	0.5	<0.5
Profenofos	µg/L	0.5	<0.5
Prothiophos (Tokuthion)*	µg/L	0.5	<0.5
Sulfotepp	µg/L	0.5	<0.5
Tetrachlorvinphos (Stirophos)*	µg/L	0.5	<0.5
PCB Congener C28	µg/L	0.1	<0.1
PCB Congener C52	µg/L	0.1	<0.1
PCB Congener C101	µg/L	0.1	<0.1
PCB Congener C118	µg/L	0.1	<0.1
PCB Congener C138	µg/L	0.1	<0.1
PCB Congener C153	µg/L	0.1	<0.1
PCB Congener C180	µg/L	0.1	<0.1
Hexachlorobenzene (HCB)	µg/L	0.1	<0.1
1,2-dichlorobenzene	µg/L	0.5	<0.5
1,3-dichlorobenzene	µg/L	0.5	<0.5
1,4-dichlorobenzene	µg/L	0.5	<0.5
Hexachlorobutadiene	µg/L	0.5	<0.5
Hexachlorocyclopentadiene	µg/L	2	<2
Hexachloroethane	µg/L	0.5	<0.5
Hexachloroproprene	µg/L	0.5	<0.5
Pentachlorobenzene	µg/L	0.5	<0.5
Pentachloroethane	µg/L	0.5	<0.5
1,2,3,5 and 1,2,4,5-tetrachlorobenzene	µg/L	1	<1
1,2,3,4-tetrachlorobenzene	µg/L	0.5	<0.5
1,2,4-trichlorobenzene	µg/L	0.5	<0.5
Bis(2-ethylhexyl)phthalate	µg/L	50	<50
Bis(2-ethylhexyl)adipate	µg/L	1	<1
Butyl benzyl phthalate	µg/L	1	<1
Di-n-butyl phthalate	µg/L	10	<10
Diethyl phthalate	µg/L	5	<5
Dimethyl phthalate	µg/L	1	<1
Dioctyl phthalate	µg/L	1	<1
Carbofuran	µg/L	0.5	<0.5
Carbaryl	µg/L	0.5	<0.5
Trifluralin	µg/L	0.5	<0.5
N-nitroso-di-n-butylamine (NDBA)	µg/L	1	<1
N-nitroso-diethylamine (NDEA)	µg/L	1	<1
N-nitroso-di-n-propylamine (NDPA)	µg/L	1	<1
N-nitroso-morpholine (NMOR)	µg/L	1	<1

Full 8270 SVOC in Water [AN420] Tested: 3/7/2020 (continued)

PARAMETER	UOM	LOR	0407_QC301_20062 WATER - 23/6/2020 SE208047.008
N-nitroso-piperidine (NPIP)	µg/L	1	<1
N-nitroso-pyrrolidine (NPYR)	µg/L	1	<1
4-amino biphenyl	µg/L	1	<1
Acetophenone	µg/L	1	<1
1,3-dinitrobenzene	µg/L	1	<1
2,4-dinitrotoluene	µg/L	1	<1
2,6-dinitrotoluene	µg/L	1	<1
Isophorone	µg/L	1	<1
Nitrobenzene	µg/L	1	<1
p-(dimethylamino) azobenzene	µg/L	1	<1
Phenacetin	µg/L	1	<1
Pentachloronitrobenzene (quintozene)	µg/L	1	<1
Aniline	µg/L	5	<5
4-chloroaniline	µg/L	1	<1
2-nitroaniline	µg/L	1	<1
3-nitroaniline	µg/L	1	<1
4-nitroaniline	µg/L	1	<1
Diphenylamine	µg/L	1	<1
o-Toluidine	µg/L	1	<1
5-nitro-o-toluidine	µg/L	1	<1
1-naphthylamine	µg/L	2	<2
2-naphthylamine	µg/L	2	<2
Bis(2-chloroethoxy) methane	µg/L	1	<1
Bis(2-chloroethyl) ether	µg/L	1	<1
Bis(2-chloroisopropyl) ether	µg/L	1	<1
4-chlorophenyl phenyl ether	µg/L	1	<1
4-bromophenyl phenyl ether	µg/L	1	<1
Methyl methanesulfonate	µg/L	1	<1
Ethyl methanesulfonate	µg/L	1	<1
Dibenzofuran	µg/L	1	<1
Benzyl alcohol	µg/L	1	<1
Safrole	µg/L	1	<1
Isosafrole Isomer 1	µg/L	1	<1
Isosafrole Isomer 2	µg/L	1	<1
1,4-naphthoquinone	µg/L	1	<1
Thionazin	µg/L	1	<1
3/4-methyl phenol (m/p-cresol)	µg/L	1	<1
2-methyl phenol (o-cresol)	µg/L	0.5	<0.5
2,6-dichlorophenol	µg/L	0.5	<0.5
2,3,4,6 and 2,3,5,6-tetrachlorophenol	µg/L	1	<1
2,4,5-trichlorophenol	µg/L	0.5	<0.5
4-chloro-3-methylphenol	µg/L	2	<2
2-chlorophenol	µg/L	0.5	<0.5
2,4-dichlorophenol	µg/L	0.5	<0.5
2,4-dimethylphenol	µg/L	0.5	<0.5
2-nitrophenol	µg/L	0.5	<0.5
Phenol	µg/L	0.5	<0.5
2,4,6-trichlorophenol	µg/L	0.5	<0.5
Pentachlorophenol	µg/L	0.5	<0.5
4-nitrophenol	µg/L	1	<1
Total Endosulfan (alpha+beta+sulfate)	µg/L	0.2	<0.2

Trace Metals (Dissolved) in Water by ICPMS [AN318] Tested: 3/7/2020

PARAMETER	UOM	LOR	0407_QC301_20062 WATER - 23/6/2020 SE208047.008
Arsenic, As	µg/L	1	<1
Cadmium, Cd	µg/L	0.1	<0.1
Chromium, Cr	µg/L	1	<1
Copper, Cu	µg/L	1	<1
Lead, Pb	µg/L	1	<1
Nickel, Ni	µg/L	1	<1
Zinc, Zn	µg/L	5	<5

Mercury (dissolved) in Water [AN311(Perth)/AN312] Tested: 3/7/2020

PARAMETER	UOM	LOR	0407_QC301_20062 WATER - 23/6/2020 SE208047.008
Mercury	mg/L	0.0001	<0.0001

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples - Low Level [MA-1523] Tested: 6/7/2020

PARAMETER	UOM	LOR	0407_QC301_20062 WATER - 23/6/2020 SE208047.008
Perfluorobutanoic acid (PFBA)	µg/L	0.0005	<0.0005
Perfluoropentanoic acid (PFPeA)	µg/L	0.0005	<0.0005
Perfluorohexanoic acid (PFHxA)	µg/L	0.0005	**0.0006**
Perfluoroheptanoic acid (PFHpA)	µg/L	0.0005	<0.0005
Perfluorooctanoic Acid (PFOA)	µg/L	0.0005	<0.0005
Perfluorononanoic acid (PFNA)	µg/L	0.001	<0.001
Perfluorodecanoic acid (PFDA)	µg/L	0.001	<0.001
Perfluoroundecanoic acid (PFUnA)	µg/L	0.001	<0.001
Perfluorododecanoic acid (PFDoA)	µg/L	0.001	<0.001
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.001	<0.001
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.001	<0.001
Perfluorohexadecanoic acid (PFHxDA)	µg/L	0.002	<0.002
Perfluorobutane sulfonate (PFBS)	µg/L	0.001	<0.001
Perfluoropentane sulfonate (PFPeS)	µg/L	0.001	<0.001
Perfluorohexane sulfonate (PFHxS)	µg/L	0.0002	<0.0002
Perfluoroheptane sulfonate (PFHpS)	µg/L	0.0002	<0.0002
Perfluorooctane sulfonate (PFOS)	µg/L	0.0002	<0.0002
Sum of PFHxS and PFOS	µg/L	0.0002	<0.0002
Perfluorononane sulfonate (PFNS)	µg/L	0.0005	<0.0005
Perfluorodecane sulfonate (PFDS)	µg/L	0.0005	<0.0005
Perfluorododecane sulfonate (PFDoS)	µg/L	0.0005	<0.0005
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	µg/L	0.0005	<0.0005
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	µg/L	0.0005	<0.0005
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	µg/L	0.0005	<0.0005
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.002	<0.002
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	µg/L	0.0025	<0.0025
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	µg/L	0.0025	<0.0025
2-(N-Methylperfluorooctane sulfonamido)-ethanol	µg/L	0.0025	<0.0025
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	µg/L	0.0025	<0.0025
N-Methylperfluorooctanesulfonamidoacetic acid	µg/L	0.0025	<0.0025
N-Ethylperfluorooctanesulfonamidoacetic Acid	µg/L	0.0025	<0.0025

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN020	Unpreserved water sample is filtered through a 0.45µm membrane filter and acidified with nitric acid similar to APHA3030B.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
AN311(Perth)/AN312	Mercury by Cold Vapour AAS in Waters: Mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500.
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid, mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN318	Determination of elements at trace level in waters by ICP-MS technique,, referenced to USEPA 6020B and USEPA 200.8 (5.4).
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents.
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.

AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples, Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.
AN605	This technique gravimetrically determines the mass of Bonded Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight. Any fibrous asbestos (FA) found in this fraction will be added to the 2-7mm fraction and its mass recorded there.
AN605	This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free/respirable fibres which are only observed by standard trace analysis as per AN602.
AN605	Bonded asbestos containing material (Bonded ACM) comprises asbestos-containing-material which is sound in condition. Fibrous asbestos (FA) comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material. Asbestos fines (AF) includes free fibres, small fibre bundles and also small fragments of bonded ACM that passes through a 7mm sieve - which implies that the bonded ACM fragments have a substantial degree of damage which increases the potential for fibre release.
AN-605	Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009 and NEPM 1999 (2013) schedule B1 section 4..
MA-1523	This method covers the analysis of per- and polyfluoroalkyl substances (PFAS) in aqueous, solid and biosolid samples and solvent extracts, determined as the total of linear and branched isomers. After spiking with isotopically labelled quantification surrogates and clean-up via SPE cartridges sample extracts are analysed by liquid chromatography/mass spectrometry (LC-MS/MS). PFAS concentrations are determined by isotope dilution quantification.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
**	Indicative data, theoretical holding time exceeded.	NVL	Not validated.	LOR	Limit of Reporting.
		IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	7

LABORATORY DETAILS

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Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208047 R0**
Date Received	24 Jun 2020
Date Reported	08 Jul 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.

Sample #7: Approx 9-10x2mm fibre bundles x>20 found loose in >2mm and <2mm portions of sample.

Asbestos analysed by Approved Identifier Yusuf Kuthpudin.

SIGNATORIES

[redacted]

Chemist | Senior Organic Chemist/Metals Chemis | Senior Chemist

[redacted]

Organic Section Head | Asbestos Analyst

RESULTS

Fibre Identification in soil — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE208047.003	0407_TP021_0.1-0.2_200624	Soil	968g Sand, Soil, Rocks	24 Jun 2020	No Asbestos Found	<0.01
SE208047.007	0407_TP034_0.1-0.2_200623	Soil	1212g Sand, Soil, Rocks	23 Jun 2020	Chrysotile Asbestos Found	<0.01
SE208047.014	0407_TP059_0.1_0.2_200624	Soil	1023g Sand, Soil, Rocks, Bitumen	24 Jun 2020	No Asbestos Found	<0.01
SE208047.018	0407_TP082_0.1-0.2_200624	Soil	1221g Sand, Soil, Rocks, Cement mixture	24 Jun 2020	No Asbestos Found	<0.01
SE208047.022	0407_TP092_0.1-0.2_200624	Soil	1124g Sand,Rocks,Cement mixture	24 Jun 2020	No Asbestos Found	<0.01
SE208047.026	0407_TP102_0.1-0.2_200624	Soil	1265g Sand,Rocks,Cement mixture	24 Jun 2020	No Asbestos Found	<0.01
SE208047.030	0407_TP112_0.1-0.2_200624	Soil	1195g Sand,Rocks,Cement mixture	24 Jun 2020	No Asbestos Found	<0.01

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 3/7/2020

PARAMETER	UOM	LOR	0407_TP021_0.1-0.2_200624 SOIL - 24/6/2020 SE208047.003	0407_TP034_0.1-0.2_200623 SOIL - 23/6/2020 SE208047.007	0407_TP059_0.1_0.2_200624 SOIL - 24/6/2020 SE208047.014	0407_TP082_0.1-0.2_200624 SOIL - 24/6/2020 SE208047.018	0407_TP092_0.1-0.2_200624 SOIL - 24/6/2020 SE208047.022
Total Sample Weight*	g	1	**968**	**1212**	**1023**	**1221**	**1124**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	**0.0281**	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	**0.0161**	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	**0.002**	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	**0.001**	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	**0.004**	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP102_0.1-0.2_200624 SOIL - 24/6/2020 SE208047.026	0407_TP112_0.1-0.2_200624 SOIL - 24/6/2020 SE208047.030
Total Sample Weight*	g	1	**1265**	**1195**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-

METHOD SUMMARY

METHOD	METHODOLOGY SUMMARY
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples , Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable ’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.
AN605	This technique gravimetrically determines the mass of Bonded Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight. Any fibrous asbestos (FA) found in this fraction will be added to the 2-7mm fraction and its mass recorded there.
AN605	This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free/respirable fibres which are only observed by standard trace analysis as per AN602.
AN605	Bonded asbestos containing material (Bonded ACM) comprises asbestos-containing-material which is sound in condition. Fibrous asbestos (FA) comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material. Asbestos fines (AF) includes free fibres, small fibre bundles and also small fragments of bonded ACM that passes through a 7mm sieve - which implies that the bonded ACM fragments have a substantial degree of damage which increases the potential for fibre release.
AN-605	Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009 and NEPM 1999 (2013) schedule B1 section 4..

FOOTNOTES

Amosite	-	Brown Asbestos	NA	-	Not Analysed
Chrysotile	-	White Asbestos	LNR	-	Listed, Not Required
Crocidolite	-	Blue Asbestos	*	-	NATA accreditation does not cover the performance of this service.
Amphiboles	-	Amosite and/or Crocidolite	**	-	Indicative data, theoretical holding time exceeded.

(In reference to soil samples only) This report does not comply with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment and Remediation and Management of Asbestos Contaminated sites in Western Australia - May 2009.

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.

Where reported: 'Asbestos Detected': Asbestos detected by polarised light microscopy, including dispersion staining.
Where reported: 'No Asbestos Found': No Asbestos Found by polarised light microscopy, including dispersion staining.
Where reported: 'UMF Detected': Mineral fibres of unknown type detected by polarised light microscopy, including dispersion staining. Confirmation by another independent analytical technique may be necessary.

Even after disintegration it can be very difficult, or impossible, to detect the presence of asbestos in some asbestos-containing bulk materials using polarised light microscopy. This is due to the low grade or small length or diameter of asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE208047 R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
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Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	31

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
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Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208047 R0**
Date Received	24 Jun 2020
Date Reported	08 Jul 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Extraction Date	Full 8270 SVOC in Water	1 item
	PAH (Polynuclear Aromatic Hydrocarbons) in Water	1 item
	TRH (Total Recoverable Hydrocarbons) in Water	1 item
	VOCs in Water	1 item
	Volatile Petroleum Hydrocarbons in Water	1 item
Surrogate	VOC's in Soil	1 item
	Volatile Petroleum Hydrocarbons in Soil	1 item
Matrix Spike	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	1 item

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	30 Soil, 1 Water
Date documentation received	25/6/2020@9:45AM	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	5.3°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE208047 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

Fibre Identification in soil

Method: ME-(AU)-[ENV]AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP021_0.1-0.2_20062	SE208047.003	LB203453	24 Jun 2020	24 Jun 2020	24 Jun 2021	03 Jul 2020	24 Jun 2021	06 Jul 2020
0407_TP034_0.1-0.2_20062	SE208047.007	LB203453	23 Jun 2020	24 Jun 2020	23 Jun 2021	03 Jul 2020	23 Jun 2021	06 Jul 2020
0407_TP059_0.1_0.2_2006	SE208047.014	LB203453	24 Jun 2020	24 Jun 2020	24 Jun 2021	03 Jul 2020	24 Jun 2021	06 Jul 2020
0407_TP082_0.1-0.2_20062	SE208047.018	LB203453	24 Jun 2020	24 Jun 2020	24 Jun 2021	03 Jul 2020	24 Jun 2021	06 Jul 2020
0407_TP092_0.1-0.2_20062	SE208047.022	LB203453	24 Jun 2020	24 Jun 2020	24 Jun 2021	03 Jul 2020	24 Jun 2021	06 Jul 2020
0407_TP102_0.1-0.2_20062	SE208047.026	LB203453	24 Jun 2020	24 Jun 2020	24 Jun 2021	03 Jul 2020	24 Jun 2021	06 Jul 2020
0407_TP112_0.1-0.2_20062	SE208047.030	LB203453	24 Jun 2020	24 Jun 2020	24 Jun 2021	03 Jul 2020	24 Jun 2021	06 Jul 2020

Full 8270 SVOC in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC301_200623	SE208047.008	LB203366	23 Jun 2020	24 Jun 2020	30 Jun 2020	03 Jul 2020†	12 Aug 2020	07 Jul 2020

Gravimetric Determination of Asbestos in Soil

Method: ME-(AU)-[ENV]AN605

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP021_0.1-0.2_20062	SE208047.003	LB203453	24 Jun 2020	24 Jun 2020	21 Dec 2020	03 Jul 2020	21 Dec 2020	06 Jul 2020
0407_TP034_0.1-0.2_20062	SE208047.007	LB203453	23 Jun 2020	24 Jun 2020	20 Dec 2020	03 Jul 2020	20 Dec 2020	06 Jul 2020
0407_TP059_0.1_0.2_2006	SE208047.014	LB203453	24 Jun 2020	24 Jun 2020	21 Dec 2020	03 Jul 2020	21 Dec 2020	06 Jul 2020
0407_TP082_0.1-0.2_20062	SE208047.018	LB203453	24 Jun 2020	24 Jun 2020	21 Dec 2020	03 Jul 2020	21 Dec 2020	06 Jul 2020
0407_TP092_0.1-0.2_20062	SE208047.022	LB203453	24 Jun 2020	24 Jun 2020	21 Dec 2020	03 Jul 2020	21 Dec 2020	06 Jul 2020
0407_TP102_0.1-0.2_20062	SE208047.026	LB203453	24 Jun 2020	24 Jun 2020	21 Dec 2020	03 Jul 2020	21 Dec 2020	06 Jul 2020
0407_TP112_0.1-0.2_20062	SE208047.030	LB203453	24 Jun 2020	24 Jun 2020	21 Dec 2020	03 Jul 2020	21 Dec 2020	06 Jul 2020

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC301_200623	SE208047.008	LB203373	23 Jun 2020	24 Jun 2020	21 Jul 2020	03 Jul 2020	21 Jul 2020	03 Jul 2020

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP021_0.1_200624	SE208047.001	LB203436	24 Jun 2020	24 Jun 2020	22 Jul 2020	03 Jul 2020	22 Jul 2020	06 Jul 2020
0407_TP021_0.5_200624	SE208047.002	LB203436	24 Jun 2020	24 Jun 2020	22 Jul 2020	03 Jul 2020	22 Jul 2020	06 Jul 2020
0407_QC150_200624	SE208047.004	LB203436	24 Jun 2020	24 Jun 2020	22 Jul 2020	03 Jul 2020	22 Jul 2020	06 Jul 2020
0407_TP034_0.1_200623	SE208047.005	LB203436	23 Jun 2020	24 Jun 2020	21 Jul 2020	03 Jul 2020	21 Jul 2020	06 Jul 2020
0407_TP034_0.5_200623	SE208047.006	LB203436	23 Jun 2020	24 Jun 2020	21 Jul 2020	03 Jul 2020	21 Jul 2020	06 Jul 2020
0407_TP043_0.1_200624	SE208047.009	LB203436	24 Jun 2020	24 Jun 2020	22 Jul 2020	03 Jul 2020	22 Jul 2020	06 Jul 2020
0407_TP043_0.5_200624	SE208047.010	LB203436	24 Jun 2020	24 Jun 2020	22 Jul 2020	03 Jul 2020	22 Jul 2020	06 Jul 2020
0407_QC153_200624	SE208047.011	LB203436	24 Jun 2020	24 Jun 2020	22 Jul 2020	03 Jul 2020	22 Jul 2020	06 Jul 2020
0407_TP082_0.1_200624	SE208047.016	LB203436	24 Jun 2020	24 Jun 2020	22 Jul 2020	03 Jul 2020	22 Jul 2020	06 Jul 2020
0407_TP082_0.5_200624	SE208047.017	LB203436	24 Jun 2020	24 Jun 2020	22 Jul 2020	03 Jul 2020	22 Jul 2020	06 Jul 2020
0407_QC155_200624	SE208047.019	LB203436	24 Jun 2020	24 Jun 2020	22 Jul 2020	03 Jul 2020	22 Jul 2020	06 Jul 2020
0407_TP092_0.1_200624	SE208047.020	LB203436	24 Jun 2020	24 Jun 2020	22 Jul 2020	03 Jul 2020	22 Jul 2020	06 Jul 2020
0407_TP092_0.5_200624	SE208047.021	LB203436	24 Jun 2020	24 Jun 2020	22 Jul 2020	03 Jul 2020	22 Jul 2020	06 Jul 2020
0407_QC156_200624	SE208047.023	LB203436	24 Jun 2020	24 Jun 2020	22 Jul 2020	03 Jul 2020	22 Jul 2020	06 Jul 2020
0407_TP102_0.1_200624	SE208047.024	LB203436	24 Jun 2020	24 Jun 2020	22 Jul 2020	03 Jul 2020	22 Jul 2020	06 Jul 2020
0407_TP102_0.5_200624	SE208047.025	LB203436	24 Jun 2020	24 Jun 2020	22 Jul 2020	03 Jul 2020	22 Jul 2020	06 Jul 2020
0407_QC157_200624	SE208047.027	LB203437	24 Jun 2020	24 Jun 2020	22 Jul 2020	03 Jul 2020	22 Jul 2020	06 Jul 2020
0407_TP112_0.1_200624	SE208047.028	LB203437	24 Jun 2020	24 Jun 2020	22 Jul 2020	03 Jul 2020	22 Jul 2020	06 Jul 2020
0407_TP112_0.5_200624	SE208047.029	LB203437	24 Jun 2020	24 Jun 2020	22 Jul 2020	03 Jul 2020	22 Jul 2020	06 Jul 2020
0407_QC159_200624	SE208047.031	LB203437	24 Jun 2020	24 Jun 2020	22 Jul 2020	03 Jul 2020	22 Jul 2020	06 Jul 2020

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP021_0.1_200624	SE208047.001	LB203361	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	07 Jul 2020	06 Jul 2020
0407_TP021_0.5_200624	SE208047.002	LB203361	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	07 Jul 2020	06 Jul 2020
0407_QC150_200624	SE208047.004	LB203361	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	07 Jul 2020	06 Jul 2020
0407_TP034_0.1_200623	SE208047.005	LB203361	23 Jun 2020	24 Jun 2020	07 Jul 2020	02 Jul 2020	07 Jul 2020	06 Jul 2020
0407_TP034_0.5_200623	SE208047.006	LB203361	23 Jun 2020	24 Jun 2020	07 Jul 2020	02 Jul 2020	07 Jul 2020	06 Jul 2020
0407_TP043_0.1_200624	SE208047.009	LB203361	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	07 Jul 2020	06 Jul 2020
0407_TP043_0.5_200624	SE208047.010	LB203361	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	07 Jul 2020	06 Jul 2020
0407_QC153_200624	SE208047.011	LB203360	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	07 Jul 2020	06 Jul 2020
0407_TP059_0.1_200624	SE208047.012	LB203360	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	07 Jul 2020	06 Jul 2020

HOLDING TIME SUMMARY

SE208047 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

Moisture Content (continued)

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP059_0.5_200624	SE208047.013	LB203360	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	07 Jul 2020	06 Jul 2020
0407_QC154_200624	SE208047.015	LB203360	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	07 Jul 2020	06 Jul 2020
0407_TP082_0.1_200624	SE208047.016	LB203360	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	07 Jul 2020	06 Jul 2020
0407_TP082_0.5_200624	SE208047.017	LB203360	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	07 Jul 2020	06 Jul 2020
0407_QC155_200624	SE208047.019	LB203360	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	07 Jul 2020	06 Jul 2020
0407_TP092_0.1_200624	SE208047.020	LB203360	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	07 Jul 2020	06 Jul 2020
0407_TP092_0.5_200624	SE208047.021	LB203360	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	07 Jul 2020	06 Jul 2020
0407_QC156_200624	SE208047.023	LB203360	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	07 Jul 2020	06 Jul 2020
0407_TP102_0.1_200624	SE208047.024	LB203360	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	07 Jul 2020	06 Jul 2020
0407_TP102_0.5_200624	SE208047.025	LB203360	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	07 Jul 2020	06 Jul 2020
0407_QC157_200624	SE208047.027	LB203360	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	07 Jul 2020	06 Jul 2020
0407_TP112_0.1_200624	SE208047.028	LB203360	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	07 Jul 2020	06 Jul 2020
0407_TP112_0.5_200624	SE208047.029	LB203360	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	07 Jul 2020	06 Jul 2020
0407_QC159_200624	SE208047.031	LB203360	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	07 Jul 2020	06 Jul 2020

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP021_0.1_200624	SE208047.001	LB203358	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP021_0.5_200624	SE208047.002	LB203358	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_QC150_200624	SE208047.004	LB203358	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP034_0.1_200623	SE208047.005	LB203358	23 Jun 2020	24 Jun 2020	07 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP034_0.5_200623	SE208047.006	LB203358	23 Jun 2020	24 Jun 2020	07 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP043_0.1_200624	SE208047.009	LB203358	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP043_0.5_200624	SE208047.010	LB203358	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_QC153_200624	SE208047.011	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP059_0.1_200624	SE208047.012	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP059_0.5_200624	SE208047.013	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_QC154_200624	SE208047.015	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP082_0.1_200624	SE208047.016	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP082_0.5_200624	SE208047.017	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_QC155_200624	SE208047.019	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP092_0.1_200624	SE208047.020	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP092_0.5_200624	SE208047.021	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_QC156_200624	SE208047.023	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP102_0.1_200624	SE208047.024	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP102_0.5_200624	SE208047.025	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_QC157_200624	SE208047.027	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP112_0.1_200624	SE208047.028	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP112_0.5_200624	SE208047.029	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_QC159_200624	SE208047.031	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP021_0.1_200624	SE208047.001	LB203358	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP021_0.5_200624	SE208047.002	LB203358	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_QC150_200624	SE208047.004	LB203358	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP034_0.1_200623	SE208047.005	LB203358	23 Jun 2020	24 Jun 2020	07 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP034_0.5_200623	SE208047.006	LB203358	23 Jun 2020	24 Jun 2020	07 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP043_0.1_200624	SE208047.009	LB203358	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP043_0.5_200624	SE208047.010	LB203358	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_QC153_200624	SE208047.011	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP059_0.1_200624	SE208047.012	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP059_0.5_200624	SE208047.013	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_QC154_200624	SE208047.015	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP082_0.1_200624	SE208047.016	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP082_0.5_200624	SE208047.017	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_QC155_200624	SE208047.019	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP092_0.1_200624	SE208047.020	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP092_0.5_200624	SE208047.021	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_QC156_200624	SE208047.023	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP102_0.1_200624	SE208047.024	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020

HOLDING TIME SUMMARY

SE208047 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP102_0.5_200624	SE208047.025	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_QC157_200624	SE208047.027	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP112_0.1_200624	SE208047.028	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP112_0.5_200624	SE208047.029	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_QC159_200624	SE208047.031	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP021_0.1_200624	SE208047.001	LB203358	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP021_0.5_200624	SE208047.002	LB203358	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_QC150_200624	SE208047.004	LB203358	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP034_0.1_200623	SE208047.005	LB203358	23 Jun 2020	24 Jun 2020	07 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP034_0.5_200623	SE208047.006	LB203358	23 Jun 2020	24 Jun 2020	07 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP043_0.1_200624	SE208047.009	LB203358	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP043_0.5_200624	SE208047.010	LB203358	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_QC153_200624	SE208047.011	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP059_0.1_200624	SE208047.012	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP059_0.5_200624	SE208047.013	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_QC154_200624	SE208047.015	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP082_0.1_200624	SE208047.016	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP082_0.5_200624	SE208047.017	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_QC155_200624	SE208047.019	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP092_0.1_200624	SE208047.020	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP092_0.5_200624	SE208047.021	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_QC156_200624	SE208047.023	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP102_0.1_200624	SE208047.024	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP102_0.5_200624	SE208047.025	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_QC157_200624	SE208047.027	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP112_0.1_200624	SE208047.028	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP112_0.5_200624	SE208047.029	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_QC159_200624	SE208047.031	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC301_200623	SE208047.008	LB203366	23 Jun 2020	24 Jun 2020	30 Jun 2020	03 Jul 2020†	12 Aug 2020	06 Jul 2020

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP021_0.1_200624	SE208047.001	LB203358	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP021_0.5_200624	SE208047.002	LB203358	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_QC150_200624	SE208047.004	LB203358	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP034_0.1_200623	SE208047.005	LB203358	23 Jun 2020	24 Jun 2020	07 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP034_0.5_200623	SE208047.006	LB203358	23 Jun 2020	24 Jun 2020	07 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP043_0.1_200624	SE208047.009	LB203358	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP043_0.5_200624	SE208047.010	LB203358	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_QC153_200624	SE208047.011	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP059_0.1_200624	SE208047.012	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP059_0.5_200624	SE208047.013	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_QC154_200624	SE208047.015	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP082_0.1_200624	SE208047.016	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP082_0.5_200624	SE208047.017	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_QC155_200624	SE208047.019	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP092_0.1_200624	SE208047.020	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP092_0.5_200624	SE208047.021	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_QC156_200624	SE208047.023	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP102_0.1_200624	SE208047.024	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP102_0.5_200624	SE208047.025	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_QC157_200624	SE208047.027	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP112_0.1_200624	SE208047.028	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP112_0.5_200624	SE208047.029	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020

HOLDING TIME SUMMARY

SE208047 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

PCBs in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC159_200624	SE208047.031	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP021_0.1_200624	SE208047.001	LB203358	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP021_0.5_200624	SE208047.002	LB203358	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_QC150_200624	SE208047.004	LB203358	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP034_0.1_200623	SE208047.005	LB203358	23 Jun 2020	24 Jun 2020	07 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP034_0.5_200623	SE208047.006	LB203358	23 Jun 2020	24 Jun 2020	07 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP043_0.1_200624	SE208047.009	LB203358	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP043_0.5_200624	SE208047.010	LB203358	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_QC153_200624	SE208047.011	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP059_0.1_200624	SE208047.012	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP059_0.5_200624	SE208047.013	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_QC154_200624	SE208047.015	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP082_0.1_200624	SE208047.016	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP082_0.5_200624	SE208047.017	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_QC155_200624	SE208047.019	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP092_0.1_200624	SE208047.020	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP092_0.5_200624	SE208047.021	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_QC156_200624	SE208047.023	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP102_0.1_200624	SE208047.024	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP102_0.5_200624	SE208047.025	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_QC157_200624	SE208047.027	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP112_0.1_200624	SE208047.028	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP112_0.5_200624	SE208047.029	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_QC159_200624	SE208047.031	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP021_0.1_200624	SE208047.001	LB203431	24 Jun 2020	24 Jun 2020	21 Dec 2020	03 Jul 2020	21 Dec 2020	06 Jul 2020
0407_TP021_0.5_200624	SE208047.002	LB203431	24 Jun 2020	24 Jun 2020	21 Dec 2020	03 Jul 2020	21 Dec 2020	06 Jul 2020
0407_QC150_200624	SE208047.004	LB203431	24 Jun 2020	24 Jun 2020	21 Dec 2020	03 Jul 2020	21 Dec 2020	06 Jul 2020
0407_TP034_0.1_200623	SE208047.005	LB203431	23 Jun 2020	24 Jun 2020	20 Dec 2020	03 Jul 2020	20 Dec 2020	06 Jul 2020
0407_TP034_0.5_200623	SE208047.006	LB203431	23 Jun 2020	24 Jun 2020	20 Dec 2020	03 Jul 2020	20 Dec 2020	06 Jul 2020
0407_TP043_0.1_200624	SE208047.009	LB203431	24 Jun 2020	24 Jun 2020	21 Dec 2020	03 Jul 2020	21 Dec 2020	06 Jul 2020
0407_TP043_0.5_200624	SE208047.010	LB203431	24 Jun 2020	24 Jun 2020	21 Dec 2020	03 Jul 2020	21 Dec 2020	06 Jul 2020
0407_QC153_200624	SE208047.011	LB203431	24 Jun 2020	24 Jun 2020	21 Dec 2020	03 Jul 2020	21 Dec 2020	06 Jul 2020
0407_TP059_0.1_200624	SE208047.012	LB203431	24 Jun 2020	24 Jun 2020	21 Dec 2020	03 Jul 2020	21 Dec 2020	06 Jul 2020
0407_TP059_0.5_200624	SE208047.013	LB203431	24 Jun 2020	24 Jun 2020	21 Dec 2020	03 Jul 2020	21 Dec 2020	06 Jul 2020
0407_QC154_200624	SE208047.015	LB203431	24 Jun 2020	24 Jun 2020	21 Dec 2020	03 Jul 2020	21 Dec 2020	06 Jul 2020
0407_TP082_0.1_200624	SE208047.016	LB203431	24 Jun 2020	24 Jun 2020	21 Dec 2020	03 Jul 2020	21 Dec 2020	06 Jul 2020
0407_TP082_0.5_200624	SE208047.017	LB203431	24 Jun 2020	24 Jun 2020	21 Dec 2020	03 Jul 2020	21 Dec 2020	06 Jul 2020
0407_QC155_200624	SE208047.019	LB203431	24 Jun 2020	24 Jun 2020	21 Dec 2020	03 Jul 2020	21 Dec 2020	06 Jul 2020
0407_TP092_0.1_200624	SE208047.020	LB203431	24 Jun 2020	24 Jun 2020	21 Dec 2020	03 Jul 2020	21 Dec 2020	06 Jul 2020
0407_TP092_0.5_200624	SE208047.021	LB203431	24 Jun 2020	24 Jun 2020	21 Dec 2020	03 Jul 2020	21 Dec 2020	06 Jul 2020
0407_QC156_200624	SE208047.023	LB203431	24 Jun 2020	24 Jun 2020	21 Dec 2020	03 Jul 2020	21 Dec 2020	06 Jul 2020
0407_TP102_0.1_200624	SE208047.024	LB203431	24 Jun 2020	24 Jun 2020	21 Dec 2020	03 Jul 2020	21 Dec 2020	06 Jul 2020
0407_TP102_0.5_200624	SE208047.025	LB203431	24 Jun 2020	24 Jun 2020	21 Dec 2020	03 Jul 2020	21 Dec 2020	06 Jul 2020
0407_QC157_200624	SE208047.027	LB203432	24 Jun 2020	24 Jun 2020	21 Dec 2020	03 Jul 2020	21 Dec 2020	06 Jul 2020
0407_TP112_0.1_200624	SE208047.028	LB203432	24 Jun 2020	24 Jun 2020	21 Dec 2020	03 Jul 2020	21 Dec 2020	06 Jul 2020
0407_TP112_0.5_200624	SE208047.029	LB203432	24 Jun 2020	24 Jun 2020	21 Dec 2020	03 Jul 2020	21 Dec 2020	06 Jul 2020
0407_QC159_200624	SE208047.031	LB203432	24 Jun 2020	24 Jun 2020	21 Dec 2020	03 Jul 2020	21 Dec 2020	06 Jul 2020

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC301_200623	SE208047.008	LB203384	23 Jun 2020	24 Jun 2020	20 Dec 2020	03 Jul 2020	20 Dec 2020	06 Jul 2020

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref

HOLDING TIME SUMMARY

SE208047 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP021_0.1_200624	SE208047.001	LB203358	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP021_0.5_200624	SE208047.002	LB203358	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_QC150_200624	SE208047.004	LB203358	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP034_0.1_200623	SE208047.005	LB203358	23 Jun 2020	24 Jun 2020	07 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP034_0.5_200623	SE208047.006	LB203358	23 Jun 2020	24 Jun 2020	07 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP043_0.1_200624	SE208047.009	LB203358	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP043_0.5_200624	SE208047.010	LB203358	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_QC153_200624	SE208047.011	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP059_0.1_200624	SE208047.012	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP059_0.5_200624	SE208047.013	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_QC154_200624	SE208047.015	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP082_0.1_200624	SE208047.016	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP082_0.5_200624	SE208047.017	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_QC155_200624	SE208047.019	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP092_0.1_200624	SE208047.020	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP092_0.5_200624	SE208047.021	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_QC156_200624	SE208047.023	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP102_0.1_200624	SE208047.024	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP102_0.5_200624	SE208047.025	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_QC157_200624	SE208047.027	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP112_0.1_200624	SE208047.028	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP112_0.5_200624	SE208047.029	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_QC159_200624	SE208047.031	LB203359	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC301_200623	SE208047.008	LB203366	23 Jun 2020	24 Jun 2020	30 Jun 2020	03 Jul 2020†	12 Aug 2020	05 Jul 2020

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP021_0.1_200624	SE208047.001	LB203356	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP021_0.5_200624	SE208047.002	LB203356	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_QC150_200624	SE208047.004	LB203356	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP034_0.1_200623	SE208047.005	LB203356	23 Jun 2020	24 Jun 2020	07 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP034_0.5_200623	SE208047.006	LB203356	23 Jun 2020	24 Jun 2020	07 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP043_0.1_200624	SE208047.009	LB203356	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP043_0.5_200624	SE208047.010	LB203356	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_QC153_200624	SE208047.011	LB203357	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP059_0.1_200624	SE208047.012	LB203357	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP059_0.5_200624	SE208047.013	LB203357	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP059_0.1_0.2_2006	SE208047.014	LB203357	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_QC154_200624	SE208047.015	LB203357	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP082_0.1_200624	SE208047.016	LB203357	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP082_0.5_200624	SE208047.017	LB203357	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_QC155_200624	SE208047.019	LB203357	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP092_0.1_200624	SE208047.020	LB203357	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP092_0.5_200624	SE208047.021	LB203357	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_QC156_200624	SE208047.023	LB203357	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP102_0.1_200624	SE208047.024	LB203357	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP102_0.5_200624	SE208047.025	LB203357	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_QC157_200624	SE208047.027	LB203357	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP112_0.1_200624	SE208047.028	LB203357	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP112_0.5_200624	SE208047.029	LB203357	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_QC159_200624	SE208047.031	LB203357	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC301_200623	SE208047.008	LB203376	23 Jun 2020	24 Jun 2020	30 Jun 2020	03 Jul 2020†	12 Aug 2020	06 Jul 2020

HOLDING TIME SUMMARY

SE208047 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

Volatile Petroleum Hydrocarbons in Soil — **Method: ME-(AU)-[ENV]AN433**

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP021_0.1_200624	SE208047.001	LB203356	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	05 Jul 2020
0407_TP021_0.5_200624	SE208047.002	LB203356	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	05 Jul 2020
0407_QC150_200624	SE208047.004	LB203356	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	05 Jul 2020
0407_TP034_0.1_200623	SE208047.005	LB203356	23 Jun 2020	24 Jun 2020	07 Jul 2020	02 Jul 2020	11 Aug 2020	05 Jul 2020
0407_TP034_0.5_200623	SE208047.006	LB203356	23 Jun 2020	24 Jun 2020	07 Jul 2020	02 Jul 2020	11 Aug 2020	05 Jul 2020
0407_TP043_0.1_200624	SE208047.009	LB203356	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	05 Jul 2020
0407_TP043_0.5_200624	SE208047.010	LB203356	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	05 Jul 2020
0407_QC153_200624	SE208047.011	LB203357	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP059_0.1_200624	SE208047.012	LB203357	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP059_0.5_200624	SE208047.013	LB203357	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP059_0.1_0.2_2006	SE208047.014	LB203357	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_QC154_200624	SE208047.015	LB203357	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP082_0.1_200624	SE208047.016	LB203357	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP082_0.5_200624	SE208047.017	LB203357	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_QC155_200624	SE208047.019	LB203357	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP092_0.1_200624	SE208047.020	LB203357	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP092_0.5_200624	SE208047.021	LB203357	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_QC156_200624	SE208047.023	LB203357	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP102_0.1_200624	SE208047.024	LB203357	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP102_0.5_200624	SE208047.025	LB203357	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_QC157_200624	SE208047.027	LB203357	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP112_0.1_200624	SE208047.028	LB203357	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_TP112_0.5_200624	SE208047.029	LB203357	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020
0407_QC159_200624	SE208047.031	LB203357	24 Jun 2020	24 Jun 2020	08 Jul 2020	02 Jul 2020	11 Aug 2020	06 Jul 2020

Volatile Petroleum Hydrocarbons in Water — **Method: ME-(AU)-[ENV]AN433**

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC301_200623	SE208047.008	LB203376	23 Jun 2020	24 Jun 2020	30 Jun 2020	03 Jul 2020†	12 Aug 2020	05 Jul 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Full 8270 SVOC in Water

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	0407_QC301_200623	SE208047.008	%	40 - 130%	93
2-fluorobiphenyl (Surrogate)	0407_QC301_200623	SE208047.008	%	40 - 130%	94
d14-p-terphenyl (Surrogate)	0407_QC301_200623	SE208047.008	%	40 - 130%	116
d5-nitrobenzene (Surrogate)	0407_QC301_200623	SE208047.008	%	40 - 130%	96
d5-phenol (Surrogate)	0407_QC301_200623	SE208047.008	%	20 - 130%	94

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP021_0.1_200624	SE208047.001	%	60 - 130%	94
	0407_TP021_0.5_200624	SE208047.002	%	60 - 130%	97
	0407_QC150_200624	SE208047.004	%	60 - 130%	93
	0407_TP034_0.1_200623	SE208047.005	%	60 - 130%	91
	0407_TP034_0.5_200623	SE208047.006	%	60 - 130%	90
	0407_TP082_0.1_200624	SE208047.016	%	60 - 130%	99
	0407_TP082_0.5_200624	SE208047.017	%	60 - 130%	97
	0407_QC155_200624	SE208047.019	%	60 - 130%	100
	0407_TP092_0.1_200624	SE208047.020	%	60 - 130%	98
	0407_TP092_0.5_200624	SE208047.021	%	60 - 130%	96
	0407_QC156_200624	SE208047.023	%	60 - 130%	99
	0407_TP102_0.1_200624	SE208047.024	%	60 - 130%	98
	0407_TP102_0.5_200624	SE208047.025	%	60 - 130%	101
	0407_QC157_200624	SE208047.027	%	60 - 130%	99
	0407_TP112_0.1_200624	SE208047.028	%	60 - 130%	95
	0407_TP112_0.5_200624	SE208047.029	%	60 - 130%	95
	0407_QC159_200624	SE208047.031	%	60 - 130%	97

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP021_0.1_200624	SE208047.001	%	60 - 130%	93
	0407_TP021_0.5_200624	SE208047.002	%	60 - 130%	77
	0407_QC150_200624	SE208047.004	%	60 - 130%	80
	0407_TP034_0.1_200623	SE208047.005	%	60 - 130%	85
	0407_TP034_0.5_200623	SE208047.006	%	60 - 130%	74
	0407_TP082_0.1_200624	SE208047.016	%	60 - 130%	86
	0407_TP082_0.5_200624	SE208047.017	%	60 - 130%	81
	0407_QC155_200624	SE208047.019	%	60 - 130%	90
	0407_TP092_0.1_200624	SE208047.020	%	60 - 130%	80
	0407_TP092_0.5_200624	SE208047.021	%	60 - 130%	88
	0407_QC156_200624	SE208047.023	%	60 - 130%	90
	0407_TP102_0.1_200624	SE208047.024	%	60 - 130%	87
	0407_TP102_0.5_200624	SE208047.025	%	60 - 130%	81
	0407_QC157_200624	SE208047.027	%	60 - 130%	92
	0407_TP112_0.1_200624	SE208047.028	%	60 - 130%	72
	0407_TP112_0.5_200624	SE208047.029	%	60 - 130%	76
	0407_QC159_200624	SE208047.031	%	60 - 130%	78
d14-p-terphenyl (Surrogate)	0407_TP021_0.1_200624	SE208047.001	%	60 - 130%	90
	0407_TP021_0.5_200624	SE208047.002	%	60 - 130%	83
	0407_QC150_200624	SE208047.004	%	60 - 130%	83
	0407_TP034_0.1_200623	SE208047.005	%	60 - 130%	83
	0407_TP034_0.5_200623	SE208047.006	%	60 - 130%	95
	0407_TP082_0.1_200624	SE208047.016	%	60 - 130%	87
	0407_TP082_0.5_200624	SE208047.017	%	60 - 130%	90
	0407_QC155_200624	SE208047.019	%	60 - 130%	85
	0407_TP092_0.1_200624	SE208047.020	%	60 - 130%	80
	0407_TP092_0.5_200624	SE208047.021	%	60 - 130%	84
	0407_QC156_200624	SE208047.023	%	60 - 130%	82
	0407_TP102_0.1_200624	SE208047.024	%	60 - 130%	85
	0407_TP102_0.5_200624	SE208047.025	%	60 - 130%	81
	0407_QC157_200624	SE208047.027	%	60 - 130%	88
	0407_TP112_0.1_200624	SE208047.028	%	60 - 130%	88
	0407_TP112_0.5_200624	SE208047.029	%	60 - 130%	91
	0407_QC159_200624	SE208047.031	%	60 - 130%	83

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil — **Method: ME-(AU)-[ENV]AN420**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP021_0.1_200624	SE208047.001	%	70 - 130%	93
	0407_TP021_0.5_200624	SE208047.002	%	70 - 130%	77
	0407_QC150_200624	SE208047.004	%	70 - 130%	80
	0407_TP034_0.1_200623	SE208047.005	%	70 - 130%	85
	0407_TP034_0.5_200623	SE208047.006	%	70 - 130%	74
	0407_TP059_0.1_200624	SE208047.012	%	70 - 130%	74
	0407_TP059_0.5_200624	SE208047.013	%	70 - 130%	75
	0407_QC154_200624	SE208047.015	%	70 - 130%	73
	0407_TP082_0.1_200624	SE208047.016	%	70 - 130%	86
	0407_TP082_0.5_200624	SE208047.017	%	70 - 130%	81
	0407_QC155_200624	SE208047.019	%	70 - 130%	90
	0407_TP092_0.1_200624	SE208047.020	%	70 - 130%	80
	0407_TP092_0.5_200624	SE208047.021	%	70 - 130%	88
	0407_QC156_200624	SE208047.023	%	70 - 130%	90
	0407_TP102_0.1_200624	SE208047.024	%	70 - 130%	87
	0407_TP102_0.5_200624	SE208047.025	%	70 - 130%	81
	0407_QC157_200624	SE208047.027	%	70 - 130%	92
	0407_TP112_0.1_200624	SE208047.028	%	70 - 130%	72
	0407_TP112_0.5_200624	SE208047.029	%	70 - 130%	76
	0407_QC159_200624	SE208047.031	%	70 - 130%	78
d14-p-terphenyl (Surrogate)	0407_TP021_0.1_200624	SE208047.001	%	70 - 130%	90
	0407_TP021_0.5_200624	SE208047.002	%	70 - 130%	83
	0407_QC150_200624	SE208047.004	%	70 - 130%	83
	0407_TP034_0.1_200623	SE208047.005	%	70 - 130%	83
	0407_TP034_0.5_200623	SE208047.006	%	70 - 130%	95
	0407_TP059_0.1_200624	SE208047.012	%	70 - 130%	86
	0407_TP059_0.5_200624	SE208047.013	%	70 - 130%	88
	0407_QC154_200624	SE208047.015	%	70 - 130%	83
	0407_TP082_0.1_200624	SE208047.016	%	70 - 130%	87
	0407_TP082_0.5_200624	SE208047.017	%	70 - 130%	90
	0407_QC155_200624	SE208047.019	%	70 - 130%	85
	0407_TP092_0.1_200624	SE208047.020	%	70 - 130%	80
	0407_TP092_0.5_200624	SE208047.021	%	70 - 130%	84
	0407_QC156_200624	SE208047.023	%	70 - 130%	82
	0407_TP102_0.1_200624	SE208047.024	%	70 - 130%	85
	0407_TP102_0.5_200624	SE208047.025	%	70 - 130%	81
	0407_QC157_200624	SE208047.027	%	70 - 130%	88
	0407_TP112_0.1_200624	SE208047.028	%	70 - 130%	88
	0407_TP112_0.5_200624	SE208047.029	%	70 - 130%	91
	0407_QC159_200624	SE208047.031	%	70 - 130%	83
d5-nitrobenzene (Surrogate)	0407_TP021_0.1_200624	SE208047.001	%	70 - 130%	83
	0407_TP021_0.5_200624	SE208047.002	%	70 - 130%	76
	0407_QC150_200624	SE208047.004	%	70 - 130%	81
	0407_TP034_0.1_200623	SE208047.005	%	70 - 130%	76
	0407_TP034_0.5_200623	SE208047.006	%	70 - 130%	78
	0407_TP059_0.1_200624	SE208047.012	%	70 - 130%	80
	0407_TP059_0.5_200624	SE208047.013	%	70 - 130%	77
	0407_QC154_200624	SE208047.015	%	70 - 130%	80
	0407_TP082_0.1_200624	SE208047.016	%	70 - 130%	88
	0407_TP082_0.5_200624	SE208047.017	%	70 - 130%	75
	0407_QC155_200624	SE208047.019	%	70 - 130%	86
	0407_TP092_0.1_200624	SE208047.020	%	70 - 130%	78
	0407_TP092_0.5_200624	SE208047.021	%	70 - 130%	71
	0407_QC156_200624	SE208047.023	%	70 - 130%	78
	0407_TP102_0.1_200624	SE208047.024	%	70 - 130%	87
	0407_TP102_0.5_200624	SE208047.025	%	70 - 130%	73
	0407_QC157_200624	SE208047.027	%	70 - 130%	77
	0407_TP112_0.1_200624	SE208047.028	%	70 - 130%	73
	0407_TP112_0.5_200624	SE208047.029	%	70 - 130%	75
	0407_QC159_200624	SE208047.031	%	70 - 130%	71

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_QC301_200623	SE208047.008	%	40 - 130%	94
d14-p-terphenyl (Surrogate)	0407_QC301_200623	SE208047.008	%	40 - 130%	116
d5-nitrobenzene (Surrogate)	0407_QC301_200623	SE208047.008	%	40 - 130%	96

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP021_0.1_200624	SE208047.001	%	60 - 130%	94
	0407_TP021_0.5_200624	SE208047.002	%	60 - 130%	97
	0407_QC150_200624	SE208047.004	%	60 - 130%	93
	0407_TP034_0.1_200623	SE208047.005	%	60 - 130%	91
	0407_TP034_0.5_200623	SE208047.006	%	60 - 130%	90
	0407_TP043_0.1_200624	SE208047.009	%	60 - 130%	89
	0407_TP043_0.5_200624	SE208047.010	%	60 - 130%	89
	0407_QC153_200624	SE208047.011	%	60 - 130%	105
	0407_TP082_0.1_200624	SE208047.016	%	60 - 130%	99
	0407_TP082_0.5_200624	SE208047.017	%	60 - 130%	97
	0407_QC155_200624	SE208047.019	%	60 - 130%	100
	0407_TP092_0.1_200624	SE208047.020	%	60 - 130%	98
	0407_TP092_0.5_200624	SE208047.021	%	60 - 130%	96
	0407_QC156_200624	SE208047.023	%	60 - 130%	99
	0407_TP102_0.1_200624	SE208047.024	%	60 - 130%	98
	0407_TP102_0.5_200624	SE208047.025	%	60 - 130%	101
	0407_QC157_200624	SE208047.027	%	60 - 130%	99
	0407_TP112_0.1_200624	SE208047.028	%	60 - 130%	95
	0407_TP112_0.5_200624	SE208047.029	%	60 - 130%	95
	0407_QC159_200624	SE208047.031	%	60 - 130%	97

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples - Low Level

Method: MA-1523

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C2_PFTeDA) Surrogate	0407_QC301_200623	SE208047.008	%	10 - 150%	76
(13C2-4:2 FTS) Surrogate	0407_QC301_200623	SE208047.008	%	10 - 150%	76
(13C2-6:2 FTS) Surrogate	0407_QC301_200623	SE208047.008	%	10 - 150%	78
(13C2-8:2 FTS) Surrogate	0407_QC301_200623	SE208047.008	%	10 - 150%	67
(13C2-PFDoA) Surrogate	0407_QC301_200623	SE208047.008	%	10 - 150%	107
(13C2-PFHxDA) Surrogate	0407_QC301_200623	SE208047.008	%	10 - 150%	40
(13C3-PFBS) Surrogate	0407_QC301_200623	SE208047.008	%	10 - 150%	86
(13C3-PFHxS) Surrogate	0407_QC301_200623	SE208047.008	%	10 - 150%	92
(13C4_PFOA) Surrogate	0407_QC301_200623	SE208047.008	%	10 - 150%	96
(13C4-PFBA) Surrogate	0407_QC301_200623	SE208047.008	%	10 - 150%	101
(13C4-PFHpA) Surrogate	0407_QC301_200623	SE208047.008	%	10 - 150%	102
(13C5-PFHxA) Surrogate	0407_QC301_200623	SE208047.008	%	10 - 150%	102
(13C5-PFPeA) Surrogate	0407_QC301_200623	SE208047.008	%	10 - 150%	101
(13C6-PFDA) Surrogate	0407_QC301_200623	SE208047.008	%	10 - 150%	119
(13C7-PFUdA) Surrogate	0407_QC301_200623	SE208047.008	%	10 - 150%	121
(13C8-PFOS) Surrogate	0407_QC301_200623	SE208047.008	%	10 - 150%	92
(13C8-PFOSA) Surrogate	0407_QC301_200623	SE208047.008	%	10 - 150%	47
(13C9-PFNA) Surrogate	0407_QC301_200623	SE208047.008	%	10 - 150%	105
(D3-N-MeFOSA) Surrogate	0407_QC301_200623	SE208047.008	%	10 - 150%	47
(D3-N-MeFOSAA) Surrogate	0407_QC301_200623	SE208047.008	%	10 - 150%	74
(D5-N-EtFOSA) Surrogate	0407_QC301_200623	SE208047.008	%	10 - 150%	64
(D5-N-EtFOSAA) Surrogate	0407_QC301_200623	SE208047.008	%	10 - 150%	66
(D7-N-MeFOSE) Surrogate	0407_QC301_200623	SE208047.008	%	10 - 150%	52
(D9-N-EtFOSE) Surrogate	0407_QC301_200623	SE208047.008	%	10 - 150%	43

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	0407_TP021_0.1_200624	SE208047.001	%	70 - 130%	74
	0407_TP021_0.5_200624	SE208047.002	%	70 - 130%	70
	0407_QC150_200624	SE208047.004	%	70 - 130%	80
	0407_TP034_0.1_200623	SE208047.005	%	70 - 130%	75
	0407_TP034_0.5_200623	SE208047.006	%	70 - 130%	80
	0407_TP059_0.1_200624	SE208047.012	%	70 - 130%	87

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil (continued) — **Method: ME-(AU)-[ENV]AN420**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	0407_TP059_0.5_200624	SE208047.013	%	70 - 130%	85
	0407_QC154_200624	SE208047.015	%	70 - 130%	84
	0407_TP082_0.1_200624	SE208047.016	%	70 - 130%	73
	0407_TP082_0.5_200624	SE208047.017	%	70 - 130%	82
	0407_QC155_200624	SE208047.019	%	70 - 130%	74
	0407_TP092_0.1_200624	SE208047.020	%	70 - 130%	84
	0407_TP092_0.5_200624	SE208047.021	%	70 - 130%	87
	0407_QC156_200624	SE208047.023	%	70 - 130%	87
	0407_TP102_0.1_200624	SE208047.024	%	70 - 130%	86
	0407_TP102_0.5_200624	SE208047.025	%	70 - 130%	80
	0407_QC157_200624	SE208047.027	%	70 - 130%	86
	0407_TP112_0.1_200624	SE208047.028	%	70 - 130%	84
	0407_TP112_0.5_200624	SE208047.029	%	70 - 130%	80
	0407_QC159_200624	SE208047.031	%	70 - 130%	78
d5-phenol (Surrogate)	0407_TP021_0.1_200624	SE208047.001	%	50 - 130%	103
	0407_TP021_0.5_200624	SE208047.002	%	50 - 130%	73
	0407_QC150_200624	SE208047.004	%	50 - 130%	78
	0407_TP034_0.1_200623	SE208047.005	%	50 - 130%	117
	0407_TP034_0.5_200623	SE208047.006	%	50 - 130%	75
	0407_TP059_0.1_200624	SE208047.012	%	50 - 130%	89
	0407_TP059_0.5_200624	SE208047.013	%	50 - 130%	89
	0407_QC154_200624	SE208047.015	%	50 - 130%	89
	0407_TP082_0.1_200624	SE208047.016	%	50 - 130%	86
	0407_TP082_0.5_200624	SE208047.017	%	50 - 130%	81
	0407_QC155_200624	SE208047.019	%	50 - 130%	80
	0407_TP092_0.1_200624	SE208047.020	%	50 - 130%	81
	0407_TP092_0.5_200624	SE208047.021	%	50 - 130%	83
	0407_QC156_200624	SE208047.023	%	50 - 130%	81
	0407_TP102_0.1_200624	SE208047.024	%	50 - 130%	77
	0407_TP102_0.5_200624	SE208047.025	%	50 - 130%	73
	0407_QC157_200624	SE208047.027	%	50 - 130%	75
	0407_TP112_0.1_200624	SE208047.028	%	50 - 130%	74
	0407_TP112_0.5_200624	SE208047.029	%	50 - 130%	76
	0407_QC159_200624	SE208047.031	%	50 - 130%	73

VOC's in Soil — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP021_0.1_200624	SE208047.001	%	60 - 130%	66
	0407_TP021_0.5_200624	SE208047.002	%	60 - 130%	65
	0407_QC150_200624	SE208047.004	%	60 - 130%	59 ①
	0407_TP034_0.1_200623	SE208047.005	%	60 - 130%	68
	0407_TP034_0.5_200623	SE208047.006	%	60 - 130%	72
	0407_TP043_0.1_200624	SE208047.009	%	60 - 130%	71
	0407_TP043_0.5_200624	SE208047.010	%	60 - 130%	72
	0407_QC153_200624	SE208047.011	%	60 - 130%	103
	0407_TP059_0.1_200624	SE208047.012	%	60 - 130%	87
	0407_TP059_0.5_200624	SE208047.013	%	60 - 130%	100
	0407_QC154_200624	SE208047.015	%	60 - 130%	85
	0407_TP082_0.1_200624	SE208047.016	%	60 - 130%	95
	0407_TP082_0.5_200624	SE208047.017	%	60 - 130%	101
	0407_QC155_200624	SE208047.019	%	60 - 130%	98
	0407_TP092_0.1_200624	SE208047.020	%	60 - 130%	100
	0407_TP092_0.5_200624	SE208047.021	%	60 - 130%	108
	0407_QC156_200624	SE208047.023	%	60 - 130%	100
	0407_TP102_0.1_200624	SE208047.024	%	60 - 130%	90
	0407_TP102_0.5_200624	SE208047.025	%	60 - 130%	85
	0407_QC157_200624	SE208047.027	%	60 - 130%	93
	0407_TP112_0.1_200624	SE208047.028	%	60 - 130%	87
	0407_TP112_0.5_200624	SE208047.029	%	60 - 130%	93
	0407_QC159_200624	SE208047.031	%	60 - 130%	89
d4-1,2-dichloroethane (Surrogate)	0407_TP021_0.1_200624	SE208047.001	%	60 - 130%	88

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d4-1,2-dichloroethane (Surrogate)	0407_TP021_0.5_200624	SE208047.002	%	60 - 130%	90
	0407_QC150_200624	SE208047.004	%	60 - 130%	79
	0407_TP034_0.1_200623	SE208047.005	%	60 - 130%	92
	0407_TP034_0.5_200623	SE208047.006	%	60 - 130%	106
	0407_TP043_0.1_200624	SE208047.009	%	60 - 130%	95
	0407_TP043_0.5_200624	SE208047.010	%	60 - 130%	96
	0407_QC153_200624	SE208047.011	%	60 - 130%	102
	0407_TP059_0.1_200624	SE208047.012	%	60 - 130%	86
	0407_TP059_0.5_200624	SE208047.013	%	60 - 130%	89
	0407_QC154_200624	SE208047.015	%	60 - 130%	94
	0407_TP082_0.1_200624	SE208047.016	%	60 - 130%	99
	0407_TP082_0.5_200624	SE208047.017	%	60 - 130%	103
	0407_QC155_200624	SE208047.019	%	60 - 130%	97
	0407_TP092_0.1_200624	SE208047.020	%	60 - 130%	102
	0407_TP092_0.5_200624	SE208047.021	%	60 - 130%	108
	0407_QC156_200624	SE208047.023	%	60 - 130%	94
	0407_TP102_0.1_200624	SE208047.024	%	60 - 130%	82
	0407_TP102_0.5_200624	SE208047.025	%	60 - 130%	94
	0407_QC157_200624	SE208047.027	%	60 - 130%	102
	0407_TP112_0.1_200624	SE208047.028	%	60 - 130%	91
	0407_TP112_0.5_200624	SE208047.029	%	60 - 130%	92
	0407_QC159_200624	SE208047.031	%	60 - 130%	93
d8-toluene (Surrogate)	0407_TP021_0.1_200624	SE208047.001	%	60 - 130%	85
	0407_TP021_0.5_200624	SE208047.002	%	60 - 130%	85
	0407_QC150_200624	SE208047.004	%	60 - 130%	72
	0407_TP034_0.1_200623	SE208047.005	%	60 - 130%	88
	0407_TP034_0.5_200623	SE208047.006	%	60 - 130%	91
	0407_TP043_0.1_200624	SE208047.009	%	60 - 130%	92
	0407_TP043_0.5_200624	SE208047.010	%	60 - 130%	92
	0407_QC153_200624	SE208047.011	%	60 - 130%	87
	0407_TP059_0.1_200624	SE208047.012	%	60 - 130%	75
	0407_TP059_0.5_200624	SE208047.013	%	60 - 130%	88
	0407_QC154_200624	SE208047.015	%	60 - 130%	81
	0407_TP082_0.1_200624	SE208047.016	%	60 - 130%	90
	0407_TP082_0.5_200624	SE208047.017	%	60 - 130%	89
	0407_QC155_200624	SE208047.019	%	60 - 130%	87
	0407_TP092_0.1_200624	SE208047.020	%	60 - 130%	91
	0407_TP092_0.5_200624	SE208047.021	%	60 - 130%	93
	0407_QC156_200624	SE208047.023	%	60 - 130%	92
	0407_TP102_0.1_200624	SE208047.024	%	60 - 130%	85
	0407_TP102_0.5_200624	SE208047.025	%	60 - 130%	83
	0407_QC157_200624	SE208047.027	%	60 - 130%	88
	0407_TP112_0.1_200624	SE208047.028	%	60 - 130%	77
	0407_TP112_0.5_200624	SE208047.029	%	60 - 130%	85
	0407_QC159_200624	SE208047.031	%	60 - 130%	78

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_QC301_200623	SE208047.008	%	40 - 130%	101
d4-1,2-dichloroethane (Surrogate)	0407_QC301_200623	SE208047.008	%	40 - 130%	99
d8-toluene (Surrogate)	0407_QC301_200623	SE208047.008	%	40 - 130%	99

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP021_0.1_200624	SE208047.001	%	60 - 130%	66
	0407_TP021_0.5_200624	SE208047.002	%	60 - 130%	65
	0407_QC150_200624	SE208047.004	%	60 - 130%	59 ⓘ
	0407_TP034_0.1_200623	SE208047.005	%	60 - 130%	68
	0407_TP034_0.5_200623	SE208047.006	%	60 - 130%	72
	0407_TP043_0.1_200624	SE208047.009	%	60 - 130%	71
	0407_TP043_0.5_200624	SE208047.010	%	60 - 130%	72
	0407_QC153_200624	SE208047.011	%	60 - 130%	103

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP059_0.1_200624	SE208047.012	%	60 - 130%	87
	0407_TP059_0.5_200624	SE208047.013	%	60 - 130%	100
	0407_QC154_200624	SE208047.015	%	60 - 130%	85
	0407_TP082_0.1_200624	SE208047.016	%	60 - 130%	95
	0407_TP082_0.5_200624	SE208047.017	%	60 - 130%	101
	0407_QC155_200624	SE208047.019	%	60 - 130%	98
	0407_TP092_0.1_200624	SE208047.020	%	60 - 130%	100
	0407_TP092_0.5_200624	SE208047.021	%	60 - 130%	108
	0407_QC156_200624	SE208047.023	%	60 - 130%	100
	0407_TP102_0.1_200624	SE208047.024	%	60 - 130%	90
	0407_TP102_0.5_200624	SE208047.025	%	60 - 130%	85
	0407_QC157_200624	SE208047.027	%	60 - 130%	93
	0407_TP112_0.1_200624	SE208047.028	%	60 - 130%	87
	0407_TP112_0.5_200624	SE208047.029	%	60 - 130%	93
	0407_QC159_200624	SE208047.031	%	60 - 130%	89
d4-1,2-dichloroethane (Surrogate)	0407_TP021_0.1_200624	SE208047.001	%	60 - 130%	88
	0407_TP021_0.5_200624	SE208047.002	%	60 - 130%	90
	0407_QC150_200624	SE208047.004	%	60 - 130%	79
	0407_TP034_0.1_200623	SE208047.005	%	60 - 130%	92
	0407_TP034_0.5_200623	SE208047.006	%	60 - 130%	106
	0407_TP043_0.1_200624	SE208047.009	%	60 - 130%	95
	0407_TP043_0.5_200624	SE208047.010	%	60 - 130%	96
	0407_QC153_200624	SE208047.011	%	60 - 130%	102
	0407_TP059_0.1_200624	SE208047.012	%	60 - 130%	86
	0407_TP059_0.5_200624	SE208047.013	%	60 - 130%	89
	0407_QC154_200624	SE208047.015	%	60 - 130%	94
	0407_TP082_0.1_200624	SE208047.016	%	60 - 130%	99
	0407_TP082_0.5_200624	SE208047.017	%	60 - 130%	103
	0407_QC155_200624	SE208047.019	%	60 - 130%	97
	0407_TP092_0.1_200624	SE208047.020	%	60 - 130%	102
	0407_TP092_0.5_200624	SE208047.021	%	60 - 130%	108
	0407_QC156_200624	SE208047.023	%	60 - 130%	94
	0407_TP102_0.1_200624	SE208047.024	%	60 - 130%	82
	0407_TP102_0.5_200624	SE208047.025	%	60 - 130%	94
	0407_QC157_200624	SE208047.027	%	60 - 130%	102
	0407_TP112_0.1_200624	SE208047.028	%	60 - 130%	91
	0407_TP112_0.5_200624	SE208047.029	%	60 - 130%	92
	0407_QC159_200624	SE208047.031	%	60 - 130%	93
d8-toluene (Surrogate)	0407_TP021_0.1_200624	SE208047.001	%	60 - 130%	85
	0407_TP021_0.5_200624	SE208047.002	%	60 - 130%	85
	0407_QC150_200624	SE208047.004	%	60 - 130%	72
	0407_TP034_0.1_200623	SE208047.005	%	60 - 130%	88
	0407_TP034_0.5_200623	SE208047.006	%	60 - 130%	91
	0407_TP043_0.1_200624	SE208047.009	%	60 - 130%	92
	0407_TP043_0.5_200624	SE208047.010	%	60 - 130%	92
	0407_QC153_200624	SE208047.011	%	60 - 130%	87
	0407_TP059_0.1_200624	SE208047.012	%	60 - 130%	75
	0407_TP059_0.5_200624	SE208047.013	%	60 - 130%	88
	0407_QC154_200624	SE208047.015	%	60 - 130%	81
	0407_TP082_0.1_200624	SE208047.016	%	60 - 130%	90
	0407_TP082_0.5_200624	SE208047.017	%	60 - 130%	89
	0407_QC155_200624	SE208047.019	%	60 - 130%	87
	0407_TP092_0.1_200624	SE208047.020	%	60 - 130%	91
	0407_TP092_0.5_200624	SE208047.021	%	60 - 130%	93
	0407_QC156_200624	SE208047.023	%	60 - 130%	92
	0407_TP102_0.1_200624	SE208047.024	%	60 - 130%	85
	0407_TP102_0.5_200624	SE208047.025	%	60 - 130%	83
	0407_QC157_200624	SE208047.027	%	60 - 130%	88
	0407_TP112_0.1_200624	SE208047.028	%	60 - 130%	77
	0407_TP112_0.5_200624	SE208047.029	%	60 - 130%	85
	0407_QC159_200624	SE208047.031	%	60 - 130%	78

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Water — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_QC301_200623	SE208047.008	%	40 - 130%	101
d4-1,2-dichloroethane (Surrogate)	0407_QC301_200623	SE208047.008	%	60 - 130%	99
d8-toluene (Surrogate)	0407_QC301_200623	SE208047.008	%	40 - 130%	99

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Full 8270 SVOC in Water — **Method: ME-(AU)-[ENV]AN420**

Sample Number		Parameter	Units	LOR	Result
LB203366.001	01-PAHs	Acenaphthene	µg/L	0.1	<0.1
		Acenaphthylene	µg/L	0.1	<0.1
		Anthracene	µg/L	0.1	<0.1
		Benzo(a)anthracene	µg/L	0.1	<0.1
		Total Benzofluoranthenes (b&j&k)	µg/L	0.2	<0.2
		Benzo(ghi)perylene	µg/L	0.1	<0.1
		Benzo(a)pyrene	µg/L	0.1	<0.1
		Chrysene	µg/L	0.1	<0.1
		Dibenzo(ah)anthracene	µg/L	0.1	<0.1
		Fluoranthene	µg/L	0.1	<0.1
		Fluorene	µg/L	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1
		1-methylnaphthalene	µg/L	0.1	<0.1
		2-methylnaphthalene	µg/L	0.1	<0.1
		Naphthalene	µg/L	0.1	<0.1
		Phenanthrene	µg/L	0.1	<0.1
		Pyrene	µg/L	0.1	<0.1
		2-acetylaminofluorene	µg/L	0.5	<0.5
		7,12-dimethyl-benz(a)anthracene	µg/L	0.5	<0.5
		3-methylcholanthrene	µg/L	0.5	<0.5
	02-OCs	Aldrin	µg/L	0.1	<0.1
		Alpha-BHC	µg/L	0.1	<0.1
		Beta-BHC	µg/L	0.1	<0.1
		Delta-BHC	µg/L	0.1	<0.1
		Gamma-BHC (Lindane)	µg/L	0.1	<0.1
		p,p-DDD	µg/L	0.1	<0.1
		p,p-DDE	µg/L	0.1	<0.1
		p,p-DDT	µg/L	0.1	<0.1
		Dieldrin	µg/L	0.1	<0.1
		Alpha-endosulfan	µg/L	0.1	<0.1
		Beta-endosulfan	µg/L	0.1	<0.1
		Endosulfan sulphate	µg/L	0.1	<0.1
		Endrin	µg/L	0.1	<0.1
		Heptachlor	µg/L	0.1	<0.1
		Heptachlor epoxide	µg/L	0.1	<0.1
		Isodrin	µg/L	0.1	<0.1
		Methoxychlor	µg/L	0.1	<0.1
		Mirex	µg/L	0.1	<0.1
		Alpha-chlordane	µg/L	0.1	<0.1
		Gamma-chlordane	µg/L	0.1	<0.1
		Endrin ketone	µg/L	0.1	<0.1
	03-OPs	Azinphos-methyl (Guthion)	µg/L	0.2	<0.2
		Bromophos ethyl	µg/L	0.2	<0.2
		Carbophenothion	µg/L	0.5	<0.5
		Chlorfenvinphos-cis	µg/L	5	<5
		Chlorfenvinphos-trans	µg/L	0.5	<0.5
		Chlorpyrifos (Chlorpyrifos Ethyl)	µg/L	0.2	<0.2
		Chlorpyrifos-methyl	µg/L	0.5	<0.5
		Co-Ral (Coumaphos)	µg/L	0.5	<0.5
		Diazinon (Dimpylate)	µg/L	0.5	<0.5
		Dichlorvos	µg/L	0.5	<0.5
		Demeton-S-methyl	µg/L	0.5	<0.5
		Dimethoate	µg/L	0.5	<0.5
		Disulfoton (Di-syston)	µg/L	0.5	<0.5
		EPN*	µg/L	0.5	<0.5
		Ethion	µg/L	0.2	<0.2
		Ethoprophos (Ethoprop or Prophos)	µg/L	0.5	<0.5
		Famphur (Famophos)	µg/L	0.5	<0.5
		Fenamiphos (Phenamiphos)	µg/L	0.5	<0.5
		Fenchlorophos (Ronnel)	µg/L	0.5	<0.5
		Fenitrothion	µg/L	0.2	<0.2

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Full 8270 SVOC in Water (continued) — **Method: ME-(AU)-[ENV]AN420**

Sample Number		Parameter	Units	LOR	Result
LB203366.001	03-OPs	Fenthion	µg/L	0.5	<0.5
		Malathion (Maldison)	µg/L	0.2	<0.2
		Methidathion	µg/L	0.5	<0.5
		Mevinphos-cis/trans	µg/L	1	<1
		o,o,o-triethyl phosphorothioate	µg/L	0.5	<0.5
		Parathion ethyl (Parathion)	µg/L	0.2	<0.2
		Parathion methyl	µg/L	0.5	<0.5
		Phorate	µg/L	0.5	<0.5
		Pirimiphos-ethyl	µg/L	0.5	<0.5
		Pirimiphos-methyl	µg/L	0.5	<0.5
		Profenofos	µg/L	0.5	<0.5
		Prothiophos (Tokuthion)*	µg/L	0.5	<0.5
		Sulfotepp	µg/L	0.5	<0.5
		Tetrachlorvinphos (Stirophos)*	µg/L	0.5	<0.5
	04-PCB UPAC(7) Congeners	PCB Congener C28	µg/L	0.1	<0.1
		PCB Congener C52	µg/L	0.1	<0.1
		PCB Congener C101	µg/L	0.1	<0.1
		PCB Congener C118	µg/L	0.1	<0.1
		PCB Congener C138	µg/L	0.1	<0.1
		PCB Congener C153	µg/L	0.1	<0.1
		PCB Congener C180	µg/L	0.1	<0.1
	05-SVCH (Cl Benzenes, Hydrocarbons & VOCs)	1/2-Chloronaphthalene	µg/L	1	<1
		Hexachlorobenzene (HCB)	µg/L	0.1	<0.1
		1,2-dichlorobenzene	µg/L	0.5	<0.5
		1,3-dichlorobenzene	µg/L	0.5	<0.5
		1,4-dichlorobenzene	µg/L	0.5	<0.5
		Hexachlorobutadiene	µg/L	0.5	<0.5
		Hexachlorocyclopentadiene	µg/L	2	<2
		Hexachloroethane	µg/L	0.5	<0.5
		Hexachloroproprene	µg/L	0.5	<0.5
		Pentachlorobenzene	µg/L	0.5	<0.5
		Pentachloroethane	µg/L	0.5	<0.5
		1,2,3,5 and 1,2,4,5-tetrachlorobenzene	µg/L	1	<1
		1,2,3,4-tetrachlorobenzene	µg/L	0.5	<0.5
		1,2,4-trichlorobenzene	µg/L	0.5	<0.5
	06-Phthalates	Bis(2-ethylhexyl)phthalate	µg/L	50	<50
		Bis(2-ethylhexyl)adipate	µg/L	1	<1
		Butyl benzyl phthalate	µg/L	1	<1
		Di-n-butyl phthalate	µg/L	10	<10
		Diethyl phthalate	µg/L	5	<5
		Dimethyl phthalate	µg/L	1	<1
		Dioctyl phthalate	µg/L	1	<1
	07-Carbamates	Carbofuran	µg/L	0.5	<0.5
		Carbaryl	µg/L	0.5	<0.5
	08-Herbicides (normal)	Trifluralin	µg/L	0.5	<0.5
	09-Nitrosamines	N-nitroso-di-n-butylamine (NDBA)	µg/L	1	<1
		N-nitroso-diethylamine (NDEA)	µg/L	1	<1
		N-nitroso-di-n-propylamine (NDPA)	µg/L	1	<1
		N-nitroso-morpholine (NMOR)	µg/L	1	<1
		N-nitroso-piperidine (NPIP)	µg/L	1	<1
		N-nitroso-pyrrolidine (NPYR)	µg/L	1	<1
		4-amino biphenyl	µg/L	1	<1
	10-Nitroaromatics and Ketones	Acetophenone	µg/L	1	<1
		1,3-dinitrobenzene	µg/L	1	<1
		2,4-dinitrotoluene	µg/L	1	<1
		2,6-dinitrotoluene	µg/L	1	<1
		Isophorone	µg/L	1	<1
		Nitrobenzene	µg/L	1	<1
		p-(dimethylamino) azobenzene	µg/L	1	<1
		Phenacetin	µg/L	1	<1
		Pentachloronitrobenzene (quintozene)	µg/L	1	<1

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Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Full 8270 SVOC in Water (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203366.001	11-Anilines and Amines	Aniline	µg/L	5	<5
		4-chloroaniline	µg/L	1	<1
		2-nitroaniline	µg/L	1	<1
		3-nitroaniline	µg/L	1	<1
		4-nitroaniline	µg/L	1	<1
		Diphenylamine	µg/L	1	<1
		o-Toluidine	µg/L	1	<1
		5-nitro-o-toluidine	µg/L	1	<1
		1-naphthylamine	µg/L	2	<2
		2-naphthylamine	µg/L	2	<2
	12-Haloethers	Bis(2-chloroethoxy) methane	µg/L	1	<1
		Bis(2-chloroethyl) ether	µg/L	1	<1
		Bis(2-chloroisopropyl) ether	µg/L	1	<1
		4-chlorophenyl phenyl ether	µg/L	1	<1
		4-bromophenyl phenyl ether	µg/L	1	<1
	13-Other SVOCs	Methyl methanesulfonate	µg/L	1	<1
		Ethyl methanesulfonate	µg/L	1	<1
		Dibenzofuran	µg/L	1	<1
		Benzyl alcohol	µg/L	1	<1
		Safrole	µg/L	1	<1
		Isosafrole Isomer 1	µg/L	1	<1
		Isosafrole Isomer 2	µg/L	1	<1
		1,4-naphthoquinone	µg/L	1	<1
		Thionazin	µg/L	1	<1
	14-Speciated Routine Phenols	3/4-methyl phenol (m/p-cresol)	µg/L	1	<1
		2-methyl phenol (o-cresol)	µg/L	0.5	<0.5
		2,6-dichlorophenol	µg/L	0.5	<0.5
		2,3,4,6 and 2,3,5,6-tetrachlorophenol	µg/L	1	<1
		2,4,5-trichlorophenol	µg/L	0.5	<0.5
		4-chloro-3-methylphenol	µg/L	2	<2
		2-chlorophenol	µg/L	0.5	<0.5
		2,4-dichlorophenol	µg/L	0.5	<0.5
		2,4-dimethylphenol	µg/L	0.5	<0.5
		2-nitrophenol	µg/L	0.5	<0.5
		Phenol	µg/L	0.5	<0.5
		2,4,6-trichlorophenol	µg/L	0.5	<0.5
		Pentachlorophenol	µg/L	0.5	<0.5
		4-nitrophenol	µg/L	1	<1
	Surrogates	d5-phenol (Surrogate)	%	-	98
		d5-nitrobenzene (Surrogate)	%	-	92
		2-fluorobiphenyl (Surrogate)	%	-	98
		2,4,6-Tribromophenol (Surrogate)	%	-	98
		d14-p-terphenyl (Surrogate)	%	-	96

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

Sample Number	Parameter	Units	LOR	Result
LB203373.001	Mercury	mg/L	0.0001	<0.0001

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result
LB203436.001	Mercury	mg/kg	0.05	<0.05
LB203437.001	Mercury	mg/kg	0.05	<0.05

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB203358.001	Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
	Alpha BHC	mg/kg	0.1	<0.1
	Lindane	mg/kg	0.1	<0.1
	Heptachlor	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

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OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203358.001		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	105
LB203359.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	99

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203358.001		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	82
		d14-p-terphenyl (Surrogate)	%	-	100
LB203359.001		Dichlorvos	mg/kg	0.5	<0.5

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203359.001		Dimethoate	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	82
		d14-p-terphenyl (Surrogate)	%	-	107

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203358.001		Naphthalene	mg/kg	0.1	<0.1
		2-methylnaphthalene	mg/kg	0.1	<0.1
		1-methylnaphthalene	mg/kg	0.1	<0.1
		Acenaphthylene	mg/kg	0.1	<0.1
		Acenaphthene	mg/kg	0.1	<0.1
		Fluorene	mg/kg	0.1	<0.1
		Phenanthrene	mg/kg	0.1	<0.1
		Anthracene	mg/kg	0.1	<0.1
		Fluoranthene	mg/kg	0.1	<0.1
		Pyrene	mg/kg	0.1	<0.1
		Benzo(a)anthracene	mg/kg	0.1	<0.1
		Chrysene	mg/kg	0.1	<0.1
		Benzo(a)pyrene	mg/kg	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	87
		2-fluorobiphenyl (Surrogate)	%	-	82
		d14-p-terphenyl (Surrogate)	%	-	100
LB203359.001		Naphthalene	mg/kg	0.1	<0.1
		2-methylnaphthalene	mg/kg	0.1	<0.1
		1-methylnaphthalene	mg/kg	0.1	<0.1
		Acenaphthylene	mg/kg	0.1	<0.1
		Acenaphthene	mg/kg	0.1	<0.1
		Fluorene	mg/kg	0.1	<0.1
		Phenanthrene	mg/kg	0.1	<0.1
		Anthracene	mg/kg	0.1	<0.1
		Fluoranthene	mg/kg	0.1	<0.1
		Pyrene	mg/kg	0.1	<0.1
		Benzo(a)anthracene	mg/kg	0.1	<0.1
		Chrysene	mg/kg	0.1	<0.1
		Benzo(a)pyrene	mg/kg	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	87
		2-fluorobiphenyl (Surrogate)	%	-	82
		d14-p-terphenyl (Surrogate)	%	-	107

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203366.001		Naphthalene	µg/L	0.1	<0.1
		2-methylnaphthalene	µg/L	0.1	<0.1
		1-methylnaphthalene	µg/L	0.1	<0.1
		Acenaphthylene	µg/L	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Water (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203366.001		Acenaphthene	µg/L	0.1	<0.1
		Fluorene	µg/L	0.1	<0.1
		Phenanthrene	µg/L	0.1	<0.1
		Anthracene	µg/L	0.1	<0.1
		Fluoranthene	µg/L	0.1	<0.1
		Pyrene	µg/L	0.1	<0.1
		Benzo(a)anthracene	µg/L	0.1	<0.1
		Chrysene	µg/L	0.1	<0.1
		Benzo(a)pyrene	µg/L	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1
		Dibenzo(ah)anthracene	µg/L	0.1	<0.1
		Benzo(ghi)perylene	µg/L	0.1	<0.1
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	62
		2-fluorobiphenyl (Surrogate)	%	-	74
		d14-p-terphenyl (Surrogate)	%	-	88

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203358.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	105
LB203359.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	99

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203358.001		Phenol	mg/kg	0.5	<0.5
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5
		2-nitrophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
		Pentachlorophenol	mg/kg	0.5	<0.5
		2,4-dinitrophenol	mg/kg	2	<2
		4-chloro-3-methylphenol	mg/kg	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	81
		d5-phenol (Surrogate)	%	-	94
LB203359.001		Phenol	mg/kg	0.5	<0.5
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203359.001		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5
		2-nitrophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
		Pentachlorophenol	mg/kg	0.5	<0.5
		2,4-dinitrophenol	mg/kg	2	<2
		4-chloro-3-methylphenol	mg/kg	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	91
		d5-phenol (Surrogate)	%	-	90

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB203431.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0
LB203432.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Sample Number	Parameter	Units	LOR	Result
LB203384.001	Arsenic, As	µg/L	1	<1
	Cadmium, Cd	µg/L	0.1	<0.1
	Chromium, Cr	µg/L	1	<1
	Copper, Cu	µg/L	1	<1
	Lead, Pb	µg/L	1	<1
	Nickel, Ni	µg/L	1	<1
	Zinc, Zn	µg/L	5	<5

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB203358.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110
LB203359.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB203366.001	TRH C10-C14	µg/L	50	<50
	TRH C15-C28	µg/L	200	<200
	TRH C29-C36	µg/L	200	<200
	TRH C37-C40	µg/L	200	<200

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB203356.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

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VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB203356.001	Oxygenated Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	99
		d8-toluene (Surrogate)	%	-	97
		Bromofluorobenzene (Surrogate)	%	-	73
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1
LB203357.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB203357.001	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10
		MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	119
		d8-toluene (Surrogate)	%	-	97
		Bromofluorobenzene (Surrogate)	%	-	99
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB203376.001	Fumigants	2,2-dichloropropane	µg/L	0.5	<0.5
		1,2-dichloropropane	µg/L	0.5	<0.5
		cis-1,3-dichloropropene	µg/L	0.5	<0.5
		trans-1,3-dichloropropene	µg/L	0.5	<0.5
		1,2-dibromoethane (EDB)	µg/L	0.5	<0.5
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	µg/L	5	<5
		Chloromethane	µg/L	5	<5
		Vinyl chloride (Chloroethene)	µg/L	0.3	<0.3
		Bromomethane	µg/L	10	<10
		Chloroethane	µg/L	5	<5
		Trichlorofluoromethane	µg/L	1	<1
		Iodomethane	µg/L	5	<5
		1,1-dichloroethene	µg/L	0.5	<0.5
		Dichloromethane (Methylene chloride)	µg/L	5	<5
		Allyl chloride	µg/L	2	<2
		trans-1,2-dichloroethene	µg/L	0.5	<0.5
		1,1-dichloroethane	µg/L	0.5	<0.5
		cis-1,2-dichloroethene	µg/L	0.5	<0.5
		Bromochloromethane	µg/L	0.5	<0.5
		1,2-dichloroethane	µg/L	0.5	<0.5
		1,1,1-trichloroethane	µg/L	0.5	<0.5
		1,1-dichloropropene	µg/L	0.5	<0.5
		Carbon tetrachloride	µg/L	0.5	<0.5
		Dibromomethane	µg/L	0.5	<0.5

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOCs in Water (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB203376.001	Halogenated Aliphatics	Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	<0.5
		1,1,2-trichloroethane	µg/L	0.5	<0.5
		1,3-dichloropropane	µg/L	0.5	<0.5
		Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	<0.5
		1,1,1,2-tetrachloroethane	µg/L	0.5	<0.5
		cis-1,4-dichloro-2-butene	µg/L	1	<1
		1,1,2,2-tetrachloroethane	µg/L	0.5	<0.5
		1,2,3-trichloropropane	µg/L	0.5	<0.5
		trans-1,4-dichloro-2-butene	µg/L	1	<1
		1,2-dibromo-3-chloropropane	µg/L	0.5	<0.5
		Hexachlorobutadiene	µg/L	0.5	<0.5
	Halogenated Aromatics	Chlorobenzene	µg/L	0.5	<0.5
		Bromobenzene	µg/L	0.5	<0.5
		2-chlorotoluene	µg/L	0.5	<0.5
		4-chlorotoluene	µg/L	0.5	<0.5
		1,3-dichlorobenzene	µg/L	0.5	<0.5
		1,4-dichlorobenzene	µg/L	0.3	<0.3
		1,2-dichlorobenzene	µg/L	0.5	<0.5
		1,2,4-trichlorobenzene	µg/L	0.5	<0.5
		1,2,3-trichlorobenzene	µg/L	0.5	<0.5
	Monocyclic Aromatic Hydrocarbons	Benzene	µg/L	0.5	<0.5
		Toluene	µg/L	0.5	<0.5
		Ethylbenzene	µg/L	0.5	<0.5
		m/p-xylene	µg/L	1	<1
		Styrene (Vinyl benzene)	µg/L	0.5	<0.5
		o-xylene	µg/L	0.5	<0.5
		Isopropylbenzene (Cumene)	µg/L	0.5	<0.5
		n-propylbenzene	µg/L	0.5	<0.5
		1,3,5-trimethylbenzene	µg/L	0.5	<0.5
		tert-butylbenzene	µg/L	0.5	<0.5
		1,2,4-trimethylbenzene	µg/L	0.5	<0.5
		sec-butylbenzene	µg/L	0.5	<0.5
		p-isopropyltoluene	µg/L	0.5	<0.5
		n-butylbenzene	µg/L	0.5	<0.5
	Nitrogenous Compounds	Acrylonitrile	µg/L	0.5	<0.5
	Oxygenated Compounds	Acetone (2-propanone)	µg/L	10	<10
		MtBE (Methyl-tert-butyl ether)	µg/L	2	<1
		Vinyl acetate	µg/L	10	<10
		MEK (2-butanone)	µg/L	10	<10
		MIBK (4-methyl-2-pentanone)	µg/L	5	<5
		2-hexanone (MBK)	µg/L	5	<5
	Polycyclic VOCs	Naphthalene	µg/L	0.5	<0.5
	Sulphonated	Carbon disulfide	µg/L	2	<2
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	96
		d8-toluene (Surrogate)	%	-	95
		Bromofluorobenzene (Surrogate)	%	-	99
	Trihalomethanes	Chloroform (THM)	µg/L	0.5	<0.5
		Bromodichloromethane (THM)	µg/L	0.5	<0.5
		Dibromochloromethane (THM)	µg/L	0.5	<0.5
		Bromoform (THM)	µg/L	0.5	<0.5

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB203356.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	99
LB203357.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	119

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Sample Number	Parameter	Units	LOR

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Volatile Petroleum Hydrocarbons in Water (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB203376.001		TRH C6-C9	µg/L	40	<40
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	96
		d8-toluene (Surrogate)	%	-	95
		Bromofluorobenzene (Surrogate)	%	-	99

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208223.010	LB203373.009	Mercury	µg/L	0.0001	<0.00005	0.00001	200	46

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208047.017	LB203436.014	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE208047.025	LB203436.021	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE208047.031	LB203437.022	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE208223.006	LB203437.014	Mercury	mg/kg	0.05	<0.05	<0.05	158	0

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208047.010	LB203361.020	% Moisture	%w/w	1	9.1	8.9	41	3
SE208047.023	LB203360.011	% Moisture	%w/w	1	1.5	1.2	104	27
SE208047.031	LB203360.018	% Moisture	%w/w	1	18.2	18.6	35	2

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208047.027	LB203359.023		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	0	200	0
			Alpha BHC	mg/kg	0.1	<0.1	0	200	0
			Lindane	mg/kg	0.1	<0.1	0	200	0
			Heptachlor	mg/kg	0.1	<0.1	0	200	0
			Aldrin	mg/kg	0.1	<0.1	0	200	0
			Beta BHC	mg/kg	0.1	<0.1	0	200	0
			Delta BHC	mg/kg	0.1	<0.1	0	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	0	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	0	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	0	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Dieldrin	mg/kg	0.2	<0.2	0	200	0
			Endrin	mg/kg	0.2	<0.2	0	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	0	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	0	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	0	200	0
			Methoxychlor	mg/kg	0.1	<0.1	0	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	0	200	0
			Isodrin	mg/kg	0.1	<0.1	0	200	0
			Mirex	mg/kg	0.1	<0.1	0	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.151	30	1
SE208223.009	LB203358.025		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	0	200	0
			Alpha BHC	mg/kg	0.1	<0.1	0	200	0
			Lindane	mg/kg	0.1	<0.1	0	200	0
			Heptachlor	mg/kg	0.1	<0.1	0	200	0
			Aldrin	mg/kg	0.1	<0.1	0	200	0
			Beta BHC	mg/kg	0.1	<0.1	0	200	0
			Delta BHC	mg/kg	0.1	<0.1	0	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	0	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	0	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	0	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208223.009	LB203358.025		p,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Dieldrin	mg/kg	0.2	<0.05	0	200	0
			Endrin	mg/kg	0.2	<0.2	0	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	0	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	0	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	0	200	0
			Methoxychlor	mg/kg	0.1	<0.1	0	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	0	200	0
			Isodrin	mg/kg	0.1	<0.1	0	200	0
			Mirex	mg/kg	0.1	<0.1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.167	30	11

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208047.023	LB203359.014		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.4	30	10
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	2
SE208047.031	LB203359.021		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	7
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	0

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208047.023	LB203359.014	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
		Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
		Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued) — **Method: ME-(AU)-[ENV]AN420**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208047.023	LB203359.014		Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	<0.3	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	<0.2	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	30	8
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.4	30	10
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	2
SE208047.031	LB203359.021		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	<0.3	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	<0.2	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	30	1
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	7
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	0
SE208223.009	LB203358.025		Naphthalene	mg/kg	0.1	<0.1	0.0039817684	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	0	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	0.0069678109	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	0	200	0
			Acenaphthene	mg/kg	0.1	<0.1	0	200	0
			Fluorene	mg/kg	0.1	<0.1	0.0032420330	200	0
			Phenanthrene	mg/kg	0.1	<0.1	0.0124471382	200	0
			Anthracene	mg/kg	0.1	<0.1	0.0019655198	200	0
			Fluoranthene	mg/kg	0.1	<0.1	0.0119733887	200	0
			Pyrene	mg/kg	0.1	<0.1	0.0091866368	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	0.0207008487	200	0
			Chrysene	mg/kg	0.1	<0.1	0.0194531317	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	0	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	0	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	0.0074185616	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	0.0006280323	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	0	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	0.0022675746	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	0	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	0.242	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	0.121	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	0	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4181982473	30	1
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5029010299	30	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208223.009	LB203358.025	Surrogates	d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.4514564894	30	1

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208047.010	LB203358.023		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	3
SE208047.027	LB203359.023		Arochlor 1016	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	0	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0.151	30	1
SE208223.009	LB203358.025		Arochlor 1016	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	0	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0.167	30	11

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208047.006	LB203358.026		Phenol	mg/kg	0.5	<0.5	0.01	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	0	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	0	200	0
			Total Cresol	mg/kg	1.5	<1.5	0	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	0	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	0	200	0
			4-nitrophenol	mg/kg	1	<1	0	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	0	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dinitrophenol	mg/kg	2	<2	0	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	0	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.0	3.91	30	2
			d5-phenol (Surrogate)	mg/kg	-	1.5	1.65	30	10
SE208047.023	LB203359.014		Phenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	200	0
			Total Cresol	mg/kg	1.5	<1.5	<1.5	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208047.023	LB203359.014		2-chlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	200	0
			4-nitrophenol	mg/kg	1	<1	<1	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dinitrophenol	mg/kg	2	<2	<2	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.3	4.3	30	1
			d5-phenol (Surrogate)	mg/kg	-	1.6	1.7	30	2
SE208047.031	LB203359.021		Phenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	200	0
			Total Cresol	mg/kg	1.5	<1.5	<1.5	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	200	0
			4-nitrophenol	mg/kg	1	<1	<1	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dinitrophenol	mg/kg	2	<2	<2	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.9	4.1	30	3
			d5-phenol (Surrogate)	mg/kg	-	1.5	1.5	30	1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208047.013	LB203431.014	Lead, Pb	mg/kg	1	<1	<1	200	0
SE208047.025	LB203431.024	Arsenic, As	mg/kg	1	<1	<1	200	0
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	<0.5	<0.5	200	0
		Copper, Cu	mg/kg	0.5	<0.5	<0.5	200	0
		Nickel, Ni	mg/kg	0.5	<0.5	<0.5	200	0
		Lead, Pb	mg/kg	1	<1	<1	200	0
		Zinc, Zn	mg/kg	2	<2.0	<2.0	200	0
SE208047.031	LB203432.022	Arsenic, As	mg/kg	1	<1	<1	200	0
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	<0.5	<0.5	200	0
		Copper, Cu	mg/kg	0.5	<0.5	<0.5	200	0
		Nickel, Ni	mg/kg	0.5	<0.5	<0.5	200	0
		Lead, Pb	mg/kg	1	<1	<1	200	0
		Zinc, Zn	mg/kg	2	<2.0	<2.0	200	0
SE208223.006	LB203432.014	Arsenic, As	mg/kg	1	5	6	49	6
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	9.1	8.8	36	4
		Copper, Cu	mg/kg	0.5	32	31	32	3
		Nickel, Ni	mg/kg	0.5	12	12	34	4
		Lead, Pb	mg/kg	1	14	14	37	1
		Zinc, Zn	mg/kg	2	60	59	33	2

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Original	Duplicate	Parameter	Units	LOR

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Trace Metals (Dissolved) in Water by ICPMS (continued)

Method: ME-(AU)-[ENV]AN318

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208224.022	LB203384.018	Arsenic, As	µg/L	1	0.012	0.014	200	0
		Cadmium, Cd	µg/L	0.1	-0.001	-0.001	200	0
		Chromium, Cr	µg/L	1	0.07	0.071	200	0
		Copper, Cu	µg/L	1	0.064	0.024	200	0
		Lead, Pb	µg/L	1	-0.002	-0.005	200	0
		Nickel, Ni	µg/L	1	0.374	0.026	200	0
		Zinc, Zn	µg/L	5	0.19	0.661	200	0

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208047.010	LB203358.023		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE208047.023	LB203359.014		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE208047.031	LB203359.021		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE208223.009	LB203358.025		TRH C10-C14	mg/kg	20	<20	0	200	0
			TRH C15-C28	mg/kg	45	66	80	92	19
			TRH C29-C36	mg/kg	45	56	48	117	15
			TRH C37-C40	mg/kg	100	<100	0	200	0
			TRH C10-C36 Total	mg/kg	110	120	128	118	5
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	127	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	0	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	0	200	0
			TRH >C16-C34 (F3)	mg/kg	90	120	127	103	7
			TRH >C34-C40 (F4)	mg/kg	120	<120	0	200	0

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208047.010	LB203356.023	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chloromethane	mg/kg	1	<1	<1	200	0
		Aliphatics	Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208047.010	LB203356.023	Halogenated	Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
		Aliphatics	Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.6	9.1	50	5
			d8-toluene (Surrogate)	mg/kg	-	9.2	8.6	50	7
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.2	6.7	50	7

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208047.010	LB203356.023	Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethanes	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
			Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE208047.021	LB203357.014	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
			Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic Aromatic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
			Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208047.021	LB203357.014	Monocyclic	n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.8	9.8	50	9
			d8-toluene (Surrogate)	mg/kg	-	9.3	8.7	50	6
			Bromofluorobenzene (Surrogate)	mg/kg	-	10.8	9.6	50	11
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE208047.031	LB203357.022	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued) — Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208047.031	LB203357.022	Halogenated Aliphatics	1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic Aromatic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
			Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
			2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
			MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.3	9.3	50	0
			d8-toluene (Surrogate)	mg/kg	-	7.8	8.2	50	5
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.9	8.5	50	5
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethanes	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
			Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE208223.009	LB203356.014	Monocyclic Aromatic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
			Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.4	7.4	50	12
			d8-toluene (Surrogate)	mg/kg	-	8.1	7.1	50	13
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.0	7.2	50	11
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208205.001	LB203376.023	Monocyclic	Benzene	µg/L	0.5	<0.5	<0.5	200	0
		Aromatic	Toluene	µg/L	0.5	<0.5	<0.5	200	0
			Ethylbenzene	µg/L	0.5	<0.5	<0.5	200	0
			m/p-xylene	µg/L	1	<1	<1	200	0
			o-xylene	µg/L	0.5	<0.5	<0.5	200	0
		Polycyclic	Naphthalene	µg/L	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	9.7	9.8	30	1
			d8-toluene (Surrogate)	µg/L	-	9.3	9.8	30	5
			Bromofluorobenzene (Surrogate)	µg/L	-	10.5	10.3	30	2

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208047.010	LB203356.023		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.6	9.1	30	5
			d8-toluene (Surrogate)	mg/kg	-	9.2	8.6	30	7
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.2	6.7	30	7
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE208047.021	LB203357.014		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.8	9.8	30	9
			d8-toluene (Surrogate)	mg/kg	-	9.3	8.7	30	6
			Bromofluorobenzene (Surrogate)	mg/kg	-	10.8	9.6	30	11
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE208047.031	LB203357.022		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.3	9.3	30	0
			d8-toluene (Surrogate)	mg/kg	-	7.8	8.2	30	5
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.9	8.5	30	5
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE208223.009	LB203356.014		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.4	7.4	30	12
			d8-toluene (Surrogate)	mg/kg	-	8.1	7.1	30	13
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.0	7.2	30	11
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208103.001	LB203376.022		TRH C6-C10	µg/L	50	110	120	75	8
			TRH C6-C9	µg/L	40	67	76	86	12
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	9.3	9.5	30	3
			d8-toluene (Surrogate)	µg/L	-	9.9	9.8	30	1
			Bromofluorobenzene (Surrogate)	µg/L	-	10.1	10.3	30	2
		VPH F Bands	Benzene (F0)	µg/L	0.5	1.0	1.1	78	14
			TRH C6-C10 minus BTEX (F1)	µg/L	50	98	110	79	8
SE208205.001	LB203376.023	Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	0.0	0.0	30	1
			d8-toluene (Surrogate)	µg/L	-	0.0	0.0	30	5
			Bromofluorobenzene (Surrogate)	µg/L	-	0.0	0.0	30	2
		VPH F Bands	Benzene (F0)	µg/L	0.5	<0.5	<0.5	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Full 8270 SVOC in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203366.002	01-PAHs	Acenaphthene	µg/L	0.1	42	40	60 - 140	106
		Acenaphthylene	µg/L	0.1	40	40	60 - 140	100
		Anthracene	µg/L	0.1	38	40	60 - 140	94
		Benzo(a)pyrene	µg/L	0.1	47	40	60 - 140	116
		Fluoranthene	µg/L	0.1	39	40	60 - 140	97
		Naphthalene	µg/L	0.1	38	40	60 - 140	96
		Phenanthrene	µg/L	0.1	39	40	60 - 140	96
		Pyrene	µg/L	0.1	40	40	60 - 140	100
	02-OCs	Aldrin	µg/L	0.1	3.6	4	60 - 140	89
		Delta-BHC	µg/L	0.1	4.1	4	60 - 140	102
		p,p-DDT	µg/L	0.1	3.2	4	60 - 140	79
		Dieldrin	µg/L	0.1	4.3	4	60 - 140	109
		Endrin	µg/L	0.1	3.6	4	60 - 140	90
		Heptachlor	µg/L	0.1	3.2	4	60 - 140	80
	03-OPs	Chlorpyrifos (Chlorpyrifos Ethyl)	µg/L	0.2	11	8	60 - 140	133
		Diazinon (Dimpylate)	µg/L	0.5	9.7	8	60 - 140	122
		Dichlorvos	µg/L	0.5	9.2	8	60 - 140	115
		Ethion	µg/L	0.2	9.0	8	60 - 140	112
	05-SVCH (Cl Benzenes,	Hexachlorobenzene (HCB)	µg/L	0.1	4.6	4	60 - 140	114
		Hexachlorobutadiene	µg/L	0.5	4.4	4	60 - 140	111
		Hexachloroethane	µg/L	0.5	4.4	4	60 - 140	110
		Pentachlorobenzene	µg/L	0.5	4.4	4	60 - 140	110
		1,2,3,4-tetrachlorobenzene	µg/L	0.5	4.5	4	60 - 140	111
	06-Phthalates	Bis(2-ethylhexyl)phthalate	µg/L	50	<50	8	60 - 140	111
		Butyl benzyl phthalate	µg/L	1	8	8	60 - 140	100
		Di-n-butyl phthalate	µg/L	10	<10	8	60 - 140	115
		Diethyl phthalate	µg/L	5	9	8	60 - 140	116
		Dimethyl phthalate	µg/L	1	9	8	60 - 140	108
		Dioctyl phthalate	µg/L	1	9	8	60 - 140	107
	09-Nitrosamine	N-nitroso-di-n-propylamine (NDPA)	µg/L	1	43	32	60 - 140	133
	10-Nitroaromat	Pentachloronitrobenzene (quintozene)	µg/L	1	5	4	60 - 140	129
	14-Speciated Routine	2,4-dichlorophenol	µg/L	0.5	38	40	60 - 140	95
		Phenol	µg/L	0.5	32	40	60 - 140	80
		2,4,6-trichlorophenol	µg/L	0.5	37	40	60 - 140	93
		Pentachlorophenol	µg/L	0.5	30	40	60 - 140	75
	Surrogates	d5-phenol (Surrogate)	µg/L	-	2.2	2	40 - 130	108
		d5-nitrobenzene (Surrogate)	µg/L	-	0.5	0.5	40 - 130	106
		2-fluorobiphenyl (Surrogate)	µg/L	-	0.5	0.5	40 - 130	106
		2,4,6-Tribromophenol (Surrogate)	µg/L	-	5.6	5	40 - 130	111
		d14-p-terphenyl (Surrogate)	µg/L	-	0.5	0.5	40 - 130	96

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203436.002	Mercury	mg/kg	0.05	0.18	0.2	70 - 130	91
LB203437.002	Mercury	mg/kg	0.05	0.19	0.2	70 - 130	97

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203358.002		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	84
		Aldrin	mg/kg	0.1	0.3	0.2	60 - 140	132
		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	120
		Dieldrin	mg/kg	0.2	0.2	0.2	60 - 140	124
		Endrin	mg/kg	0.2	<0.2	0.2	60 - 140	88
		p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	84
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.15	40 - 130	101
LB203359.002		Heptachlor	mg/kg	0.1	0.3	0.2	60 - 140	130
		Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	124
		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	123
		Dieldrin	mg/kg	0.2	0.3	0.2	60 - 140	126
		Endrin	mg/kg	0.2	0.2	0.2	60 - 140	122
		p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	110

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203359.002	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.15	40 - 130	99

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203358.002		Dichlorvos	mg/kg	0.5	1.6	2	60 - 140	82
		Diazinon (Dimpylate)	mg/kg	0.5	1.7	2	60 - 140	83
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.2	2	60 - 140	109
		Ethion	mg/kg	0.2	1.7	2	60 - 140	87
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	83
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	80
LB203359.002		Dichlorvos	mg/kg	0.5	1.6	2	60 - 140	82
		Diazinon (Dimpylate)	mg/kg	0.5	1.6	2	60 - 140	79
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.1	2	60 - 140	105
		Ethion	mg/kg	0.2	1.5	2	60 - 140	76
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	81
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	80

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203358.002		Naphthalene	mg/kg	0.1	4.0	4	60 - 140	100
		Acenaphthylene	mg/kg	0.1	4.2	4	60 - 140	105
		Acenaphthene	mg/kg	0.1	4.1	4	60 - 140	103
		Phenanthrene	mg/kg	0.1	4.3	4	60 - 140	108
		Anthracene	mg/kg	0.1	4.3	4	60 - 140	108
		Fluoranthene	mg/kg	0.1	4.1	4	60 - 140	102
		Pyrene	mg/kg	0.1	4.3	4	60 - 140	107
		Benzo(a)pyrene	mg/kg	0.1	4.3	4	60 - 140	106
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	81
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	83
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	80
LB203359.002		Naphthalene	mg/kg	0.1	3.9	4	60 - 140	98
		Acenaphthylene	mg/kg	0.1	4.0	4	60 - 140	100
		Acenaphthene	mg/kg	0.1	4.0	4	60 - 140	100
		Phenanthrene	mg/kg	0.1	3.9	4	60 - 140	98
		Anthracene	mg/kg	0.1	4.1	4	60 - 140	102
		Fluoranthene	mg/kg	0.1	3.9	4	60 - 140	97
		Pyrene	mg/kg	0.1	4.1	4	60 - 140	102
		Benzo(a)pyrene	mg/kg	0.1	4.5	4	60 - 140	112
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	75
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	81
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	80

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203366.002		Naphthalene	µg/L	0.1	31	40	60 - 140	77
		Acenaphthylene	µg/L	0.1	31	40	60 - 140	78
		Acenaphthene	µg/L	0.1	31	40	60 - 140	78
		Phenanthrene	µg/L	0.1	35	40	60 - 140	88
		Anthracene	µg/L	0.1	31	40	60 - 140	77
		Fluoranthene	µg/L	0.1	33	40	60 - 140	82
		Pyrene	µg/L	0.1	35	40	60 - 140	88
		Benzo(a)pyrene	µg/L	0.1	37	40	60 - 140	92
	Surrogates	d5-nitrobenzene (Surrogate)	µg/L	-	0.3	0.5	40 - 130	66
		2-fluorobiphenyl (Surrogate)	µg/L	-	0.3	0.5	40 - 130	68
		d14-p-terphenyl (Surrogate)	µg/L	-	0.4	0.5	40 - 130	70

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203358.002	Arochlor 1260	mg/kg	0.2	0.3	0.4	60 - 140	74
LB203359.002	Arochlor 1260	mg/kg	0.2	0.5	0.4	60 - 140	121

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203358.002		Phenol	mg/kg	0.5	0.7	1	70 - 130	72
		2,4-dichlorophenol	mg/kg	0.5	0.8	1	70 - 130	78
		2,4,6-trichlorophenol	mg/kg	0.5	0.8	1	70 - 130	82
		Pentachlorophenol	mg/kg	0.5	0.9	1	70 - 130	88
	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.8	5	40 - 130	76
		d5-phenol (Surrogate)	mg/kg	-	1.6	2	40 - 130	81
LB203359.002		Phenol	mg/kg	0.5	0.8	1	70 - 130	82
		2,4-dichlorophenol	mg/kg	0.5	0.8	1	70 - 130	81
		2,4,6-trichlorophenol	mg/kg	0.5	0.8	1	70 - 130	78
		Pentachlorophenol	mg/kg	0.5	0.8	1	70 - 130	77
	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.6	5	40 - 130	71
		d5-phenol (Surrogate)	mg/kg	-	1.4	2	40 - 130	72

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203431.002	Arsenic, As	mg/kg	1	340	318.22	80 - 120	106
	Cadmium, Cd	mg/kg	0.3	4.6	5.41	80 - 120	85
	Chromium, Cr	mg/kg	0.5	39	38.31	80 - 120	101
	Copper, Cu	mg/kg	0.5	300	290	80 - 120	103
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	100
	Lead, Pb	mg/kg	1	94	89.9	80 - 120	104
	Zinc, Zn	mg/kg	2	280	273	80 - 120	101
LB203432.002	Arsenic, As	mg/kg	1	340	318.22	80 - 120	106
	Cadmium, Cd	mg/kg	0.3	5.1	5.41	80 - 120	95
	Chromium, Cr	mg/kg	0.5	38	38.31	80 - 120	100
	Copper, Cu	mg/kg	0.5	300	290	80 - 120	103
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	99
	Lead, Pb	mg/kg	1	94	89.9	80 - 120	105
	Zinc, Zn	mg/kg	2	270	273	80 - 120	100

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203384.002	Arsenic, As	µg/L	1	18	20	80 - 120	92
	Cadmium, Cd	µg/L	0.1	20	20	80 - 120	101
	Chromium, Cr	µg/L	1	20	20	80 - 120	101
	Copper, Cu	µg/L	1	22	20	80 - 120	108
	Lead, Pb	µg/L	1	20	20	80 - 120	100
	Nickel, Ni	µg/L	1	21	20	80 - 120	104
	Zinc, Zn	µg/L	5	21	20	80 - 120	107

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203358.002		TRH C10-C14	mg/kg	20	50	40	60 - 140	125
		TRH C15-C28	mg/kg	45	45	40	60 - 140	113
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	78
	TRH F Bands	TRH >C10-C16	mg/kg	25	49	40	60 - 140	123
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	98
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	65
LB203359.002		TRH C10-C14	mg/kg	20	43	40	60 - 140	108
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	105
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	75
	TRH F Bands	TRH >C10-C16	mg/kg	25	43	40	60 - 140	108
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	95
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	65

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203366.002		TRH C10-C14	µg/L	50	970	1200	60 - 140	81
		TRH C15-C28	µg/L	200	1400	1200	60 - 140	115
		TRH C29-C36	µg/L	200	1100	1200	60 - 140	94
	TRH F Bands	TRH >C10-C16	µg/L	60	1200	1200	60 - 140	97
		TRH >C16-C34 (F3)	µg/L	500	1400	1200	60 - 140	114
		TRH >C34-C40 (F4)	µg/L	500	550	600	60 - 140	92

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203356.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	3.5	5	60 - 140	70
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	4.2	5	60 - 140	85
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	4.0	5	60 - 140	79
	Halogenated	Chlorobenzene	mg/kg	0.1	4.8	5	60 - 140	95
	Monocyclic	Benzene	mg/kg	0.1	4.0	5	60 - 140	79
	Aromatic	Toluene	mg/kg	0.1	3.8	5	60 - 140	76
		Ethylbenzene	mg/kg	0.1	4.1	5	60 - 140	81
		m/p-xylene	mg/kg	0.2	8.2	10	60 - 140	82
		o-xylene	mg/kg	0.1	4.1	5	60 - 140	82
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	11.7	10	70 - 130	117
		d8-toluene (Surrogate)	mg/kg	-	11.7	10	70 - 130	117
		Bromofluorobenzene (Surrogate)	mg/kg	-	11.1	10	70 - 130	111
	Trihalomethan	Chloroform	mg/kg	0.1	4.3	5	60 - 140	85
LB203357.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	4.7	5	60 - 140	93
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	5.6	5	60 - 140	113
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	5.3	5	60 - 140	105
	Halogenated	Chlorobenzene	mg/kg	0.1	4.7	5	60 - 140	94
	Monocyclic	Benzene	mg/kg	0.1	5.6	5	60 - 140	113
	Aromatic	Toluene	mg/kg	0.1	5.3	5	60 - 140	106
		Ethylbenzene	mg/kg	0.1	5.2	5	60 - 140	103
		m/p-xylene	mg/kg	0.2	11	10	60 - 140	106
		o-xylene	mg/kg	0.1	5.4	5	60 - 140	107
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.6	10	70 - 130	106
		d8-toluene (Surrogate)	mg/kg	-	8.9	10	70 - 130	89
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.5	10	70 - 130	95
	Trihalomethan	Chloroform	mg/kg	0.1	5.4	5	60 - 140	108

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203376.002	Halogenated	1,1-dichloroethene	µg/L	0.5	45	45.45	60 - 140	98
	Aliphatics	1,2-dichloroethane	µg/L	0.5	50	45.45	60 - 140	109
		Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	48	45.45	60 - 140	106
	Halogenated	Chlorobenzene	µg/L	0.5	55	45.45	60 - 140	121
	Monocyclic	Benzene	µg/L	0.5	47	45.45	60 - 140	104
	Aromatic	Toluene	µg/L	0.5	46	45.45	60 - 140	102
		Ethylbenzene	µg/L	0.5	46	45.45	60 - 140	102
		m/p-xylene	µg/L	1	92	90.9	60 - 140	101
		o-xylene	µg/L	0.5	46	45.45	60 - 140	101
	Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	10.2	10	60 - 140	102
		d8-toluene (Surrogate)	µg/L	-	10.2	10	70 - 130	102
		Bromofluorobenzene (Surrogate)	µg/L	-	9.7	10	70 - 130	97
	Trihalomethan	Chloroform (THM)	µg/L	0.5	54	45.45	60 - 140	118

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203356.002		TRH C6-C10	mg/kg	25	63	92.5	60 - 140	68
		TRH C6-C9	mg/kg	20	54	80	60 - 140	68
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	11.7	10	70 - 130	117
		Bromofluorobenzene (Surrogate)	mg/kg	-	11.1	10	70 - 130	111
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	39	62.5	60 - 140	62
LB203357.002		TRH C6-C10	mg/kg	25	76	92.5	60 - 140	83
		TRH C6-C9	mg/kg	20	69	80	60 - 140	87
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.6	10	70 - 130	106
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.5	10	70 - 130	95
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	44	62.5	60 - 140	71

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203376.002		TRH C6-C10	µg/L	50	880	946.63	60 - 140	93
		TRH C6-C9	µg/L	40	760	818.71	60 - 140	93
	Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	10.2	10	60 - 140	102
		d8-toluene (Surrogate)	µg/L	-	10.2	10	70 - 130	102

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Volatile Petroleum Hydrocarbons in Water (continued) — **Method: ME-(AU)-[ENV]AN433**

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203376.002	Surrogates	Bromofluorobenzene (Surrogate)	µg/L	-	9.7	10	70 - 130	97
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	µg/L	50	600	639.67	60 - 140	94

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208047.008	LB203373.004	Mercury	mg/L	0.0001	0.0068	<0.0001	0.008	85

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208047.001	LB203436.004	Mercury	mg/kg	0.05	0.21	0.07	0.2	74
SE208222.039	LB203437.004	Mercury	mg/kg	0.05	0.24	<0.05	0.2	101

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208047.016	LB203359.022		Hexachlorobenzene (HCB)	mg/kg	0.1		<0.1	-	-
			Alpha BHC	mg/kg	0.1		<0.1	-	-
			Lindane	mg/kg	0.1		<0.1	-	-
			Heptachlor	mg/kg	0.1		<0.1	0.2	135
			Aldrin	mg/kg	0.1		<0.1	0.2	138
			Beta BHC	mg/kg	0.1		<0.1	-	-
			Delta BHC	mg/kg	0.1		<0.1	0.2	135
			Heptachlor epoxide	mg/kg	0.1		<0.1	-	-
			o,p'-DDE	mg/kg	0.1		<0.1	-	-
			Alpha Endosulfan	mg/kg	0.2		<0.2	-	-
			Gamma Chlordane	mg/kg	0.1		<0.1	-	-
			Alpha Chlordane	mg/kg	0.1		<0.1	-	-
			trans-Nonachlor	mg/kg	0.1		<0.1	-	-
			p,p'-DDE	mg/kg	0.1		<0.1	-	-
			Dieldrin	mg/kg	0.2		<0.2	0.2	139
			Endrin	mg/kg	0.2		<0.2	0.2	131
			o,p'-DDD	mg/kg	0.1		<0.1	-	-
			o,p'-DDT	mg/kg	0.1		<0.1	-	-
			Beta Endosulfan	mg/kg	0.2		<0.2	-	-
			p,p'-DDD	mg/kg	0.1		<0.1	-	-
			p,p'-DDT	mg/kg	0.1		<0.1	0.2	116
			Endosulfan sulphate	mg/kg	0.1		<0.1	-	-
			Endrin Aldehyde	mg/kg	0.1		<0.1	-	-
			Methoxychlor	mg/kg	0.1		<0.1	-	-
			Endrin Ketone	mg/kg	0.1		<0.1	-	-
			Isodrin	mg/kg	0.1		<0.1	-	-
			Mirex	mg/kg	0.1		<0.1	-	-
			Total CLP OC Pesticides	mg/kg	1		<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-		0.15	-	103
SE208188.001	LB203358.026		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	-	-
			Lindane	mg/kg	0.1	<0.1	<0.1	-	-
			Heptachlor	mg/kg	0.1	0.2	<0.1	0.2	97
			Aldrin	mg/kg	0.1	0.3	<0.1	0.2	133
			Beta BHC	mg/kg	0.1	<0.1	<0.1	-	-
			Delta BHC	mg/kg	0.1	0.3	<0.1	0.2	125
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	-	-
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	-	-
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	-	-
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	-	-
			Dieldrin	mg/kg	0.2	0.3	<0.2	0.2	135
			Endrin	mg/kg	0.2	0.2	<0.2	0.2	100
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	-	-
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	-	-
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	-	-
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208188.001	LB203358.026		p,p'-DDT	mg/kg	0.1	0.1	<0.1	0.2	74
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	-	-
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	-	-
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	-	-
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	-	-
			Isodrin	mg/kg	0.1	<0.1	<0.1	-	-
			Mirex	mg/kg	0.1	<0.1	<0.1	-	-
			Total CLP OC Pesticides	mg/kg	1	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.16	0.15	-	103

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208047.016	LB203359.022		Dichlorvos	mg/kg	0.5	<0.5	2	99
			Dimethoate	mg/kg	0.5	<0.5	-	-
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	2	76
			Fenitrothion	mg/kg	0.2	<0.2	-	-
			Malathion	mg/kg	0.2	<0.2	-	-
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	2	101
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	-	-
			Bromophos Ethyl	mg/kg	0.2	<0.2	-	-
			Methidathion	mg/kg	0.5	<0.5	-	-
			Ethion	mg/kg	0.2	<0.2	2	76
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	-	-
			Total OP Pesticides*	mg/kg	1.7	<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	-	89
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	-	79

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208047.016	LB203359.022		Naphthalene	mg/kg	0.1		<0.1	4	104
			2-methylnaphthalene	mg/kg	0.1		<0.1	-	-
			1-methylnaphthalene	mg/kg	0.1		<0.1	-	-
			Acenaphthylene	mg/kg	0.1		<0.1	4	100
			Acenaphthene	mg/kg	0.1		<0.1	4	102
			Fluorene	mg/kg	0.1		<0.1	-	-
			Phenanthrene	mg/kg	0.1		<0.1	4	105
			Anthracene	mg/kg	0.1		<0.1	4	99
			Fluoranthene	mg/kg	0.1		<0.1	4	99
			Pyrene	mg/kg	0.1		<0.1	4	102
			Benzo(a)anthracene	mg/kg	0.1		<0.1	-	-
			Chrysene	mg/kg	0.1		<0.1	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1		<0.1	-	-
			Benzo(k)fluoranthene	mg/kg	0.1		<0.1	-	-
			Benzo(a)pyrene	mg/kg	0.1		<0.1	4	99
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1		<0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1		<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1		<0.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2		<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3		<0.3	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2		<0.2	-	-
			Total PAH (18)	mg/kg	0.8		<0.8	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-		0.4	-	88
			2-fluorobiphenyl (Surrogate)	mg/kg	-		0.4	-	89
			d14-p-terphenyl (Surrogate)	mg/kg	-		0.4	-	79
SE208223.001	LB203358.024		Naphthalene	mg/kg	0.1	4.1	<0.1	4	102
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
			Acenaphthylene	mg/kg	0.1	4.3	<0.1	4	107
			Acenaphthene	mg/kg	0.1	4.3	<0.1	4	108
			Fluorene	mg/kg	0.1	<0.1	<0.1	-	-
			Phenanthrene	mg/kg	0.1	4.3	<0.1	4	107
			Anthracene	mg/kg	0.1	4.2	<0.1	4	106

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208223.001	LB203358.024		Fluoranthene	mg/kg	0.1	4.3	<0.1	4	108
			Pyrene	mg/kg	0.1	4.4	<0.1	4	109
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Chrysene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(a)pyrene	mg/kg	0.1	4.4	<0.1	4	108
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	4.4	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	4.5	<0.3	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	4.4	<0.2	-	-
			Total PAH (18)	mg/kg	0.8		<0.8	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.45	0.4	-	89
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.45	0.5	-	90
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.43	0.4	-	85

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208047.016	LB203359.022		Arochlor 1016	mg/kg	0.2		<0.2	-	-
			Arochlor 1221	mg/kg	0.2		<0.2	-	-
			Arochlor 1232	mg/kg	0.2		<0.2	-	-
			Arochlor 1242	mg/kg	0.2		<0.2	-	-
			Arochlor 1248	mg/kg	0.2		<0.2	-	-
			Arochlor 1254	mg/kg	0.2		<0.2	-	-
			Arochlor 1260	mg/kg	0.2		<0.2	0.4	115
			Arochlor 1262	mg/kg	0.2		<0.2	-	-
			Arochlor 1268	mg/kg	0.2		<0.2	-	-
			Total PCBs (Arochlors)	mg/kg	1		<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-		0	-	96
SE208188.001	LB203358.026		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1260	mg/kg	0.2	0.4	<0.2	0.4	106
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	-	-
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	-	100

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208047.012	LB203359.023		Phenol	mg/kg	0.5	<0.5	1	98
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	-	-
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	-	-
			Total Cresol	mg/kg	1.5	<1.5	-	-
			2-chlorophenol	mg/kg	0.5	<0.5	-	-
			2,4-dimethylphenol	mg/kg	0.5	<0.5	-	-
			2,6-dichlorophenol	mg/kg	0.5	<0.5	-	-
			2,4-dichlorophenol	mg/kg	0.5	<0.5	1	95
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	1	73
			2-nitrophenol	mg/kg	0.5	<0.5	-	-
			4-nitrophenol	mg/kg	1	<1	-	-
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	-	-
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	-	-
			Pentachlorophenol	mg/kg	0.5	<0.5	1	89
			2,4-dinitrophenol	mg/kg	2	<2	-	-
			4-chloro-3-methylphenol	mg/kg	2	<2	-	-
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.4	-	84

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208047.012	LB203359.023	Surrogates	d5-phenol (Surrogate)	mg/kg	-	1.8	-	90

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208047.001	LB203431.004	Arsenic, As	mg/kg	1	52	1	50	100
		Cadmium, Cd	mg/kg	0.3	46	<0.3	50	92
		Chromium, Cr	mg/kg	0.5	51	1.4	50	100
		Copper, Cu	mg/kg	0.5	58	14	50	89
		Nickel, Ni	mg/kg	0.5	51	1.1	50	100
		Lead, Pb	mg/kg	1	64	33	50	62 ④
		Zinc, Zn	mg/kg	2	54	3.3	50	101
SE208222.039	LB203432.004	Arsenic, As	mg/kg	1	52	7	50	91
		Cadmium, Cd	mg/kg	0.3	43	<0.3	50	85
		Chromium, Cr	mg/kg	0.5	57	11	50	92
		Copper, Cu	mg/kg	0.5	76	26	50	100
		Nickel, Ni	mg/kg	0.5	62	21	50	84
		Lead, Pb	mg/kg	1	74	26	50	97
		Zinc, Zn	mg/kg	2	150	90	50	123

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208047.016	LB203359.022		TRH C10-C14	mg/kg	20		<20	40	118
			TRH C15-C28	mg/kg	45		<45	40	113
			TRH C29-C36	mg/kg	45		<45	40	85
			TRH C37-C40	mg/kg	100		<100	-	-
			TRH C10-C36 Total	mg/kg	110		<110	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210		<210	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25		<25	40	118
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25		<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90		<90	40	100
			TRH >C34-C40 (F4)	mg/kg	120		<120	-	-
SE208223.001	LB203358.024		TRH C10-C14	mg/kg	20	46	<20	40	115
			TRH C15-C28	mg/kg	45	51	<45	40	128
			TRH C29-C36	mg/kg	45	<45	<45	40	65
			TRH C37-C40	mg/kg	100		<100	-	-
			TRH C10-C36 Total	mg/kg	110		<110	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210		<210	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25	46	<25	40	115
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	46	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	40	113
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	-	-

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208047.011	LB203357.004	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	-	-
			Chloromethane	mg/kg	1	<1	<1	-	-
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	-	-
			Bromomethane	mg/kg	1	<1	<1	-	-
			Chloroethane	mg/kg	1	<1	<1	-	-
			Trichlorofluoromethane	mg/kg	1	<1	<1	-	-
			Iodomethane	mg/kg	5	<5	<5	-	-
			1,1-dichloroethene	mg/kg	0.1	5.3	<0.1	5	105
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	-	-
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208047.011	LB203357.004	Halogenated Aliphatics	Bromochloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloroethane	mg/kg	0.1	5.9	<0.1	5	118
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	-	-
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	6.0	<0.1	5	121
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	-	-
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	6.0	<0.1	5	120
			Bromobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Monocyclic Aromatic	Benzene	mg/kg	0.1	5.4	<0.1	5	108
			Toluene	mg/kg	0.1	5.4	<0.1	5	108
			Ethylbenzene	mg/kg	0.1	5.5	<0.1	5	109
			m/p-xylene	mg/kg	0.2	11	<0.2	10	111
			o-xylene	mg/kg	0.1	5.6	<0.1	5	112
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	-	-
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	-	-
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	-	-
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	-	-
			2-nitropropane	mg/kg	10	<10	<10	-	-
		Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10	<10	-	-
			MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	-	-
			Vinyl acetate	mg/kg	10	<10	<10	-	-
			MEK (2-butanone)	mg/kg	10	<10	<10	-	-
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	-	-
			2-hexanone (MBK)	mg/kg	5	<5	<5	-	-
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.9	10.2	10	99
			d8-toluene (Surrogate)	mg/kg	-	9.5	8.7	10	95
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.2	10.3	10	92
		Totals	Total Xylenes	mg/kg	0.3	17	<0.3	-	-
			Total BTEX	mg/kg	0.6	33	<0.6	-	-
			Total VOC*	mg/kg	24	63	<24	-	-
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	-	-
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	29	<1.8	-	-
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	29	<1.8	-	-
		Trihalomethanes	Chloroform	mg/kg	0.1	5.8	<0.1	5	117
			Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208047.011	LB203357.004	Trihalometha	Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
		nes	Bromoform	mg/kg	0.1	<0.1	<0.1	-	-
SE208155.002	LB203356.004	Monocyclic	Benzene	mg/kg	0.1	4.0	<0.1	5	80
		Aromatic	Toluene	mg/kg	0.1	3.8	<0.1	5	76
			Ethylbenzene	mg/kg	0.1	4.2	<0.1	5	83
			m/p-xylene	mg/kg	0.2	8.4	<0.2	10	83
			o-xylene	mg/kg	0.1	4.1	<0.1	5	82
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.2	10	10	102
			d8-toluene (Surrogate)	mg/kg	-	9.9	10	10	99
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.0	7.2	10	70

VOCs in Water

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208156.001	LB203376.024	Monocyclic	Benzene	µg/L	0.5	54	<0.0005	45.45	119
		Aromatic	Toluene	µg/L	0.5	55	<0.0005	45.45	120
			Ethylbenzene	µg/L	0.5	54	<0.0005	45.45	119
			m/p-xylene	µg/L	1	110	<0.001	90.9	117
			o-xylene	µg/L	0.5	54	<0.0005	45.45	119
		Polycyclic	Naphthalene	µg/L	0.5	61	<0.0005	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	10	0.0	-	103
			d8-toluene (Surrogate)	µg/L	-	10	0.0	-	101
			Bromofluorobenzene (Surrogate)	µg/L	-	9.8	0.0	-	98

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208047.011	LB203357.004		TRH C6-C10	mg/kg	25	73	<25	92.5	79
			TRH C6-C9	mg/kg	20	67	<20	80	83
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.9	10.2	10	99
			d8-toluene (Surrogate)	mg/kg	-	9.5	8.7	10	95
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.2	10.3	-	92
		VPH F	Benzene (F0)	mg/kg	0.1	5.4	<0.1	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	40	<25	62.5	65
SE208155.002	LB203356.004		TRH C6-C10	mg/kg	25	89	<25	92.5	93
			TRH C6-C9	mg/kg	20	77	<20	80	93
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.2	10	10	102
			d8-toluene (Surrogate)	mg/kg	-	9.9	10	10	99
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.0	7.2	-	70
		VPH F	Benzene (F0)	mg/kg	0.1	4.0	<0.1	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	64	<25	62.5	98

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208156.001	LB203376.024		TRH C6-C10	µg/L	50	860	<0.05	946.63	88
			TRH C6-C9	µg/L	40	750	<0.04	818.71	88
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	10	0.0	-	103
			d8-toluene (Surrogate)	µg/L	-	10	0.0	-	101
			Bromofluorobenzene (Surrogate)	µg/L	-	9.8	0.0	-	98
		VPH F	Benzene (F0)	µg/L	0.5	54	<0.0005	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	µg/L	50	540	<0.05	639.67	80

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

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CLIENT:	DHA	**LABORATORY:**	SGS
PROJECT:	Randwick Barrack	**LABORATORY ADDRESS:**	SYD
PROJECT NUMBER:	610.30041	**SAMPLER:**	[redacted]
PROJECT MANAGER:	[redacted]	**SAMPLER CONTACT No:**	
PM CONTACT No:		**Email Reports and Invoices to:**	LGRSYD@slrconsulting.com

Turnaround Time (TAT)

☑ Standard TAT

☐ Non Standard or Urgent TAT

Required TAT:

COC Number 1 of 3

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	Hold.	Additional Information (Comment on any gross contamination or specific requirements)
1	0407_TP263_0.1_200701	01-7-20	Soil	✓	X		
2	0407_TP263_0.5_200701	"	"	✓	X		
	0407_TP263_1.0_200701	"	"			X	
3	0407_TP264_0.1_200701	"	"	✓	X		
4	0407_TP264_0.5_200701	"	"	✓	X		
	0407_TP264_1.0_200701	"	"			X	
5	0407_TP265_0.1_200701	"	"	✓	X		
6	0407_TP265_0.5_200701	"	"	✓	X		
	0407_TP265_1.0_200701	"	"			X	
7	0407_TP266_0.1_200701	"	"	✓	X		
8	0407_TP266_0.5_200701	"	"	✓	X		
	0407_TP266_1.0_200701	"	"	✓		X	

SGS EHS Sydney COC

SE208392

[redacted]

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	**Received by**	Sign [redacted]	Date / Time 01/07/20	**Temperature Received:**
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time @ 4:30	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

000697

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☑ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, PO Nelson, 7030 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT: DHA	LABORATORY: SGS	Turnaround Time (TAT)	COC Number 2 of 3
PROJECT: Randwick Barracks	LABORATORY ADDRESS: SM0	☑ Standard TAT	
PROJECT NUMBER: 610.30041	SAMPLER: JR	☐ Non Standard or Urgent TAT	
PROJECT MANAGER: [redacted]	SAMPLER CONTACT No:	Required TAT:	
PM CONTACT No:	Email Reports and Invoices to: LGBSYD@slrconsulting.com		

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: Suite A	Asbestos	Hold	Additional Information (Comment on any gross contamination or specific requirements)
	0407_TP266_1.5_200701	01-7-20	Soil				X	
9	0407_QC186_200701				X			
	0407_QC286_200701			* Please	forward to Eurofins for "Suite A"			
10	0407_TP266_A01_200701		ACM			X		
11	0407_TP266_A02_200701					X		
	0407_TP266_A03_200701						X	
	0407-TP266_A04_200701						X	
12	0407_TP264_A01_200701					X		
13	0407_TP265_A01_200701					X		
	0407_TP265_A02_200701						X	
	0407_TP265_A03_200701						X	
	0407_TP265_A04_200701						X	

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	Received by	Sign [redacted]	Date / Time	01/07/20	Temperature Received:
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	@ 4:30	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time		

000698

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 13 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra ACT 2600
- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☑ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Stuart Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT:	DHA	**LABORATORY:**	ALS
PROJECT:	Randwick Barracks	**LABORATORY ADDRESS:**	Suite 10
PROJECT NUMBER:	610.300541	**SAMPLER:**	SR
PROJECT MANAGER:	[redacted]	**SAMPLER CONTACT No:**	
PM CONTACT No:		**Email Reports and Invoices to:**	LGRS10@slrconsulting.com

Turnaround Time (TAT)

☑ Standard TAT

☐ Non Standard or Urgent TAT

Required TAT:

COC Number 3 of 3

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: Suite A	Hold	Additional Information (Comment on any gross contamination or specific requirements)
	0407_TP265_A05_20070101-7-20		ACM			X	
14	0407 SP007_01_200701	|	SOIL ✓		X		
15	0407 SP007_02_200701	|	✓		X		
16	0407 SP007_03_200701	|	✓		X		
17	0407_SP007_04_200701	|	✓		X		

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	**Received by**	Sign	[redacted]	Date / Time 08/07/20	**Temperature Received:**
Relinquished By	Sign	Date / Time	**Received by**	Sign		Date / Time 14:30	
Relinquished By	Sign	Date / Time	**Received by**	Sign		Date / Time	

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000696-98**
Samples	18

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208392 R0**
Date Received	1/7/2020
Date Reported	13/7/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.

Sample #5: Asbestos found as approx 4x3x2mm cement sheet fragments x2 in >2mm portion.

Sample #8: Asbestos found as approx 3x3x2mm cement sheet fragment in >2mm portion.

Asbestos analysed by Approved Identifier Ravee Sivasubramaniam .

SIGNATORIES

[redacted]

Chemist | Senior Organic Chemist/Metals Chemist | Metals/Inorganics Team Leader

[redacted]

Senior Chemist | Organic Section Head | Asbestos Analyst

VOC's in Soil [AN433] Tested: 8/7/2020

PARAMETER	UOM	LOR	0407_TP263_0.1_20 701 SOIL - 1/7/2020 SE208392.001	0407_TP263_0.5_20 701 SOIL - 1/7/2020 SE208392.002	0407_TP264_0.1_20 701 SOIL - 1/7/2020 SE208392.003	0407_TP264_0.5_20 701 SOIL - 1/7/2020 SE208392.004	0407_TP265_0.1_20 701 SOIL - 1/7/2020 SE208392.005
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 8/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP263_0.1_20(701 SOIL - 1/7/2020 SE208392.001	0407_TP263_0.5_20(701 SOIL - 1/7/2020 SE208392.002	0407_TP264_0.1_20(701 SOIL - 1/7/2020 SE208392.003	0407_TP264_0.5_20(701 SOIL - 1/7/2020 SE208392.004	0407_TP265_0.1_20(701 SOIL - 1/7/2020 SE208392.005
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 8/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP265_0.5_20701 SOIL - 1/7/2020 SE208392.006	0407_TP266_0.1_20701 SOIL - 1/7/2020 SE208392.007	0407_TP266_0.5_20701 SOIL - 1/7/2020 SE208392.008	0407_QC186_20070 SOIL - 1/7/2020 SE208392.009	0407_SP007_01_20001 SOIL - 1/7/2020 SE208392.014
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 8/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP265_0.5_20701 SOIL - 1/7/2020 SE208392.006	0407_TP266_0.1_20701 SOIL - 1/7/2020 SE208392.007	0407_TP266_0.5_20701 SOIL - 1/7/2020 SE208392.008	0407_QC186_20070 SOIL - 1/7/2020 SE208392.009	0407_SP007_01_20001 SOIL - 1/7/2020 SE208392.014
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 8/7/2020 (continued)

PARAMETER	UOM	LOR	0407_SP007_02_20001 SOIL - 1/7/2020 SE208392.015	0407_SP007_03_20001 SOIL - 1/7/2020 SE208392.016	0407_SP007_04_20001 SOIL - 1/7/2020 SE208392.017
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1

VOC's in Soil [AN433] Tested: 8/7/2020 (continued)

PARAMETER	UOM	LOR	0407_SP007_02_20001 SOIL - 1/7/2020 SE208392.015	0407_SP007_03_20001 SOIL - 1/7/2020 SE208392.016	0407_SP007_04_20001 SOIL - 1/7/2020 SE208392.017
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 8/7/2020

PARAMETER	UOM	LOR	0407_TP263_0.1_20(701 SOIL - 1/7/2020 SE208392.001	0407_TP263_0.5_20(701 SOIL - 1/7/2020 SE208392.002	0407_TP264_0.1_20(701 SOIL - 1/7/2020 SE208392.003	0407_TP264_0.5_20(701 SOIL - 1/7/2020 SE208392.004	0407_TP265_0.1_20(701 SOIL - 1/7/2020 SE208392.005
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP265_0.5_20(701 SOIL - 1/7/2020 SE208392.006	0407_TP266_0.1_20(701 SOIL - 1/7/2020 SE208392.007	0407_TP266_0.5_20(701 SOIL - 1/7/2020 SE208392.008	0407_QC186_20070 SOIL - 1/7/2020 SE208392.009	0407_SP007_01_200 01 SOIL - 1/7/2020 SE208392.014
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_SP007_02_200 01 SOIL - 1/7/2020 SE208392.015	0407_SP007_03_200 01 SOIL - 1/7/2020 SE208392.016	0407_SP007_04_200 01 SOIL - 1/7/2020 SE208392.017
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 8/7/2020

PARAMETER	UOM	LOR	0407_TP263_0.1_20701 SOIL - 1/7/2020 SE208392.001	0407_TP263_0.5_20701 SOIL - 1/7/2020 SE208392.002	0407_TP264_0.1_20701 SOIL - 1/7/2020 SE208392.003	0407_TP264_0.5_20701 SOIL - 1/7/2020 SE208392.004	0407_TP265_0.1_20701 SOIL - 1/7/2020 SE208392.005
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP265_0.5_20701 SOIL - 1/7/2020 SE208392.006	0407_TP266_0.1_20701 SOIL - 1/7/2020 SE208392.007	0407_TP266_0.5_20701 SOIL - 1/7/2020 SE208392.008	0407_QC186_20070 SOIL - 1/7/2020 SE208392.009	0407_SP007_01_20001 SOIL - 1/7/2020 SE208392.014
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_SP007_02_20001 SOIL - 1/7/2020 SE208392.015	0407_SP007_03_20001 SOIL - 1/7/2020 SE208392.016	0407_SP007_04_20001 SOIL - 1/7/2020 SE208392.017
TRH C10-C14	mg/kg	20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 8/7/2020

PARAMETER	UOM	LOR	0407_TP263_0.1_20(701 SOIL - 1/7/2020 SE208392.001	0407_TP263_0.5_20(701 SOIL - 1/7/2020 SE208392.002	0407_TP264_0.1_20(701 SOIL - 1/7/2020 SE208392.003	0407_TP264_0.5_20(701 SOIL - 1/7/2020 SE208392.004	0407_TP265_0.1_20(701 SOIL - 1/7/2020 SE208392.005
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	0.9	0.4	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	0.3	0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	0.2	1.6	0.9	0.3	<0.1
Pyrene	mg/kg	0.1	0.3	1.6	0.9	0.3	<0.1
Benzo(a)anthracene	mg/kg	0.1	0.1	0.7	0.4	0.2	<0.1
Chrysene	mg/kg	0.1	0.1	0.7	0.4	0.2	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	0.1	0.6	0.4	0.2	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	0.4	0.2	0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	0.1	0.7	0.4	0.2	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	0.3	0.2	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	0.3	0.2	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	0.9	0.5	0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	1.0	0.6	0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	0.2	1.0	0.6	0.3	<0.2
Total PAH (18)	mg/kg	0.8	1.1	8.3	4.5	1.3	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	1.1	8.3	4.5	1.3	<0.8

PARAMETER	UOM	LOR	0407_TP265_0.5_20(701 SOIL - 1/7/2020 SE208392.006	0407_TP266_0.1_20(701 SOIL - 1/7/2020 SE208392.007	0407_TP266_0.5_20(701 SOIL - 1/7/2020 SE208392.008	0407_QC186_20070 SOIL - 1/7/2020 SE208392.009	0407_SP007_01_200 01 SOIL - 1/7/2020 SE208392.014
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	0.1	0.1	1.5
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	0.5
Fluoranthene	mg/kg	0.1	<0.1	0.2	0.4	0.3	3.7
Pyrene	mg/kg	0.1	<0.1	0.2	0.4	0.3	3.4
Benzo(a)anthracene	mg/kg	0.1	<0.1	0.1	0.2	0.2	1.5
Chrysene	mg/kg	0.1	<0.1	0.1	0.3	0.2	1.7
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	0.2	0.2	0.2	2.0
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	0.2	<0.1	1.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	0.2	0.2	0.2	1.9
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	0.1	<0.1	1.0
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	0.1	<0.1	0.9
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	0.3	<0.2	2.6
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	0.3	0.4	0.3	2.6
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	0.3	0.4	0.3	2.6
Total PAH (18)	mg/kg	0.8	<0.8	1.1	2.3	1.5	19
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	1.1	2.3	1.5	19

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 8/7/2020 (continued)

PARAMETER	UOM	LOR	0407_SP007_02_20001 SOIL - 1/7/2020 SE208392.015	0407_SP007_03_20001 SOIL - 1/7/2020 SE208392.016	0407_SP007_04_20001 SOIL - 1/7/2020 SE208392.017
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	0.2	0.5	0.4
Anthracene	mg/kg	0.1	<0.1	0.2	0.2
Fluoranthene	mg/kg	0.1	0.5	1.3	1.5
Pyrene	mg/kg	0.1	0.5	1.4	1.8
Benzo(a)anthracene	mg/kg	0.1	0.2	0.6	0.9
Chrysene	mg/kg	0.1	0.3	0.5	1.0
Benzo(b&j)fluoranthene	mg/kg	0.1	0.3	0.7	1.6
Benzo(k)fluoranthene	mg/kg	0.1	0.2	0.3	0.8
Benzo(a)pyrene	mg/kg	0.1	0.3	0.6	1.5
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.1	0.4	0.9
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	0.1
Benzo(ghi)perylene	mg/kg	0.1	0.1	0.3	0.8
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	0.4	0.8	2.0
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	0.5	0.9	2.0
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	0.4	0.9	2.0
Total PAH (18)	mg/kg	0.8	2.7	6.8	11
Total PAH (NEPM/WHO 16)	mg/kg	0.8	2.7	6.8	11

Speciated Phenols in Soil [AN420] Tested: 8/7/2020

PARAMETER	UOM	LOR	0407_TP263_0.1_20(701 SOIL - 1/7/2020 SE208392.001	0407_TP263_0.5_20(701 SOIL - 1/7/2020 SE208392.002	0407_TP264_0.1_20(701 SOIL - 1/7/2020 SE208392.003	0407_TP264_0.5_20(701 SOIL - 1/7/2020 SE208392.004	0407_TP265_0.1_20(701 SOIL - 1/7/2020 SE208392.005
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_TP265_0.5_20(701 SOIL - 1/7/2020 SE208392.006	0407_TP266_0.1_20(701 SOIL - 1/7/2020 SE208392.007	0407_TP266_0.5_20(701 SOIL - 1/7/2020 SE208392.008	0407_QC186_20070 SOIL - 1/7/2020 SE208392.009	0407_SP007_01_200 01 SOIL - 1/7/2020 SE208392.014
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

Speciated Phenols in Soil [AN420] Tested: 8/7/2020 (continued)

PARAMETER	UOM	LOR	0407_SP007_02_20001 SOIL - 1/7/2020 SE208392.015	0407_SP007_03_20001 SOIL - 1/7/2020 SE208392.016	0407_SP007_04_20001 SOIL - 1/7/2020 SE208392.017
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2

OC Pesticides in Soil [AN420] Tested: 8/7/2020

PARAMETER	UOM	LOR	0407_TP263_0.1_20(701 SOIL - 1/7/2020 SE208392.001	0407_TP263_0.5_20(701 SOIL - 1/7/2020 SE208392.002	0407_TP264_0.1_20(701 SOIL - 1/7/2020 SE208392.003	0407_TP264_0.5_20(701 SOIL - 1/7/2020 SE208392.004	0407_TP265_0.1_20(701 SOIL - 1/7/2020 SE208392.005
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 8/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP265_0.5_20701 SOIL - 1/7/2020 SE208392.006	0407_TP266_0.1_20701 SOIL - 1/7/2020 SE208392.007	0407_TP266_0.5_20701 SOIL - 1/7/2020 SE208392.008	0407_QC186_20070 SOIL - 1/7/2020 SE208392.009	0407_SP007_01_20001 SOIL - 1/7/2020 SE208392.014
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 8/7/2020 (continued)

PARAMETER	UOM	LOR	0407_SP007_02_20001 SOIL - 1/7/2020 SE208392.015	0407_SP007_03_20001 SOIL - 1/7/2020 SE208392.016	0407_SP007_04_20001 SOIL - 1/7/2020 SE208392.017
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1

OP Pesticides in Soil [AN420] Tested: 8/7/2020

PARAMETER	UOM	LOR	0407_TP263_0.1_20(701 SOIL - 1/7/2020 SE208392.001	0407_TP263_0.5_20(701 SOIL - 1/7/2020 SE208392.002	0407_TP264_0.1_20(701 SOIL - 1/7/2020 SE208392.003	0407_TP264_0.5_20(701 SOIL - 1/7/2020 SE208392.004	0407_TP265_0.1_20(701 SOIL - 1/7/2020 SE208392.005
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP265_0.5_20(701 SOIL - 1/7/2020 SE208392.006	0407_TP266_0.1_20(701 SOIL - 1/7/2020 SE208392.007	0407_TP266_0.5_20(701 SOIL - 1/7/2020 SE208392.008	0407_QC186_20070 SOIL - 1/7/2020 SE208392.009	0407_SP007_01_200 01 SOIL - 1/7/2020 SE208392.014
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_SP007_02_200 01 SOIL - 1/7/2020 SE208392.015	0407_SP007_03_200 01 SOIL - 1/7/2020 SE208392.016	0407_SP007_04_200 01 SOIL - 1/7/2020 SE208392.017
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7

PCBs in Soil [AN420] Tested: 8/7/2020

PARAMETER	UOM	LOR	0407_TP263_0.1_20701 SOIL - 1/7/2020 SE208392.001	0407_TP263_0.5_20701 SOIL - 1/7/2020 SE208392.002	0407_TP264_0.1_20701 SOIL - 1/7/2020 SE208392.003	0407_TP264_0.5_20701 SOIL - 1/7/2020 SE208392.004	0407_TP265_0.1_20701 SOIL - 1/7/2020 SE208392.005
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP265_0.5_20701 SOIL - 1/7/2020 SE208392.006	0407_TP266_0.1_20701 SOIL - 1/7/2020 SE208392.007	0407_TP266_0.5_20701 SOIL - 1/7/2020 SE208392.008	0407_QC186_20070 SOIL - 1/7/2020 SE208392.009	0407_SP007_01_20001 SOIL - 1/7/2020 SE208392.014
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_SP007_02_20001 SOIL - 1/7/2020 SE208392.015	0407_SP007_03_20001 SOIL - 1/7/2020 SE208392.016	0407_SP007_04_20001 SOIL - 1/7/2020 SE208392.017
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 8/7/2020

PARAMETER	UOM	LOR	0407_TP263_0.1_20(701 SOIL - 1/7/2020 SE208392.001	0407_TP263_0.5_20(701 SOIL - 1/7/2020 SE208392.002	0407_TP264_0.1_20(701 SOIL - 1/7/2020 SE208392.003	0407_TP264_0.5_20(701 SOIL - 1/7/2020 SE208392.004	0407_TP265_0.1_20(701 SOIL - 1/7/2020 SE208392.005
Arsenic, As	mg/kg	1	3	1	3	2	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	0.4	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	5.7	4.6	5.3	14	1.4
Copper, Cu	mg/kg	0.5	9.7	19	17	11	2.1
Lead, Pb	mg/kg	1	49	98	70	140	7
Nickel, Ni	mg/kg	0.5	3.4	4.4	3.4	1.7	0.7
Zinc, Zn	mg/kg	2	52	63	83	82	14

PARAMETER	UOM	LOR	0407_TP265_0.5_20(701 SOIL - 1/7/2020 SE208392.006	0407_TP266_0.1_20(701 SOIL - 1/7/2020 SE208392.007	0407_TP266_0.5_20(701 SOIL - 1/7/2020 SE208392.008	0407_QC186_20070 SOIL - 1/7/2020 SE208392.009	0407_SP007_01_200 01 SOIL - 1/7/2020 SE208392.014
Arsenic, As	mg/kg	1	<1	5	5	5	2
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	3.4	6.0	7.4	8.3	3.0
Copper, Cu	mg/kg	0.5	7.9	29	24	18	40
Lead, Pb	mg/kg	1	28	61	81	63	100
Nickel, Ni	mg/kg	0.5	1.4	3.3	8.9	10	4.5
Zinc, Zn	mg/kg	2	38	70	130	93	89

PARAMETER	UOM	LOR	0407_SP007_02_200 01 SOIL - 1/7/2020 SE208392.015	0407_SP007_03_200 01 SOIL - 1/7/2020 SE208392.016	0407_SP007_04_200 01 SOIL - 1/7/2020 SE208392.017
Arsenic, As	mg/kg	1	1	1	4
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	2.7	2.3	3.5
Copper, Cu	mg/kg	0.5	17	12	24
Lead, Pb	mg/kg	1	69	61	63
Nickel, Ni	mg/kg	0.5	4.3	1.7	3.4
Zinc, Zn	mg/kg	2	74	41	88

Mercury in Soil [AN312] Tested: 8/7/2020

PARAMETER	UOM	LOR	0407_TP263_0.1_20(701 SOIL - 1/7/2020 SE208392.001	0407_TP263_0.5_20(701 SOIL - 1/7/2020 SE208392.002	0407_TP264_0.1_20(701 SOIL - 1/7/2020 SE208392.003	0407_TP264_0.5_20(701 SOIL - 1/7/2020 SE208392.004	0407_TP265_0.1_20(701 SOIL - 1/7/2020 SE208392.005
Mercury	mg/kg	0.05	0.08	0.12	0.10	0.09	<0.05

PARAMETER	UOM	LOR	0407_TP265_0.5_20(701 SOIL - 1/7/2020 SE208392.006	0407_TP266_0.1_20(701 SOIL - 1/7/2020 SE208392.007	0407_TP266_0.5_20(701 SOIL - 1/7/2020 SE208392.008	0407_QC186_20070 SOIL - 1/7/2020 SE208392.009	0407_SP007_01_200 01 SOIL - 1/7/2020 SE208392.014
Mercury	mg/kg	0.05	<0.05	0.32	0.26	0.14	0.07

PARAMETER	UOM	LOR	0407_SP007_02_200 01 SOIL - 1/7/2020 SE208392.015	0407_SP007_03_200 01 SOIL - 1/7/2020 SE208392.016	0407_SP007_04_200 01 SOIL - 1/7/2020 SE208392.017
Mercury	mg/kg	0.05	0.06	0.08	0.08

Moisture Content [AN002] Tested: 8/7/2020

PARAMETER	UOM	LOR	0407_TP263_0.1_20(701 SOIL - 1/7/2020 SE208392.001	0407_TP263_0.5_20(701 SOIL - 1/7/2020 SE208392.002	0407_TP264_0.1_20(701 SOIL - 1/7/2020 SE208392.003	0407_TP264_0.5_20(701 SOIL - 1/7/2020 SE208392.004	0407_TP265_0.1_20(701 SOIL - 1/7/2020 SE208392.005
% Moisture	%w/w	1	13.9	7.1	16.4	9.4	5.6

PARAMETER	UOM	LOR	0407_TP265_0.5_20(701 SOIL - 1/7/2020 SE208392.006	0407_TP266_0.1_20(701 SOIL - 1/7/2020 SE208392.007	0407_TP266_0.5_20(701 SOIL - 1/7/2020 SE208392.008	0407_QC186_20070 SOIL - 1/7/2020 SE208392.009	0407_SP007_01_200 01 SOIL - 1/7/2020 SE208392.014
% Moisture	%w/w	1	4.4	9.5	14.1	15.4	12.8

PARAMETER	UOM	LOR	0407_SP007_02_200 01 SOIL - 1/7/2020 SE208392.015	0407_SP007_03_200 01 SOIL - 1/7/2020 SE208392.016	0407_SP007_04_200 01 SOIL - 1/7/2020 SE208392.017
% Moisture	%w/w	1	17.3	8.3	13.8

Fibre Identification in soil [AN602] Tested: 10/7/2020

PARAMETER	UOM	LOR	0407_TP263_0.1_20(701 SOIL - 1/7/2020 SE208392.001	0407_TP263_0.5_20(701 SOIL - 1/7/2020 SE208392.002	0407_TP264_0.1_20(701 SOIL - 1/7/2020 SE208392.003	0407_TP264_0.5_20(701 SOIL - 1/7/2020 SE208392.004	0407_TP265_0.1_20(701 SOIL - 1/7/2020 SE208392.005
Asbestos Detected	No unit	-	No	No	No	No	Yes
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	0407_TP265_0.5_20(701 SOIL - 1/7/2020 SE208392.006	0407_TP266_0.5_20(701 SOIL - 1/7/2020 SE208392.008	0407_SP007_01_200(01 SOIL - 1/7/2020 SE208392.014	0407_SP007_02_200(01 SOIL - 1/7/2020 SE208392.015	0407_SP007_03_200(01 SOIL - 1/7/2020 SE208392.016
Asbestos Detected	No unit	-	No	Yes	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	0407_SP007_04_200(01 SOIL - 1/7/2020 SE208392.017
Asbestos Detected	No unit	-	No
Estimated Fibres*	%w/w	0.01	<0.01

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 10/7/2020

PARAMETER	UOM	LOR	0407_TP263_0.1_20(701 SOIL - 1/7/2020 SE208392.001	0407_TP263_0.5_20(701 SOIL - 1/7/2020 SE208392.002	0407_TP264_0.1_20(701 SOIL - 1/7/2020 SE208392.003	0407_TP264_0.5_20(701 SOIL - 1/7/2020 SE208392.004	0407_TP265_0.1_20(701 SOIL - 1/7/2020 SE208392.005
Total Sample Weight*	g	1	**566**	**670**	**644**	**687**	**697**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	**0.0138**
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	**0.002**
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	**0.002**
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP265_0.5_20(701 SOIL - 1/7/2020 SE208392.006	0407_TP266_0.5_20(701 SOIL - 1/7/2020 SE208392.008	0407_SP007_01_200 01 SOIL - 1/7/2020 SE208392.014	0407_SP007_02_200 01 SOIL - 1/7/2020 SE208392.015	0407_SP007_03_200 01 SOIL - 1/7/2020 SE208392.016
Total Sample Weight*	g	1	**794**	**555**	**695**	**361**	**632**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	**0.00791**	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	**0.001**	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	**0.001**	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_SP007_04_200 01 SOIL - 1/7/2020 SE208392.017
Total Sample Weight*	g	1	**373**
Bonded ACM in >7mm Sample*	g	0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001
Fibre Type*	No unit	-	-

Fibre ID in bulk materials [AN602] Tested: 11/7/2020

PARAMETER	UOM	LOR	0407_TP266_A01_200701 MATERIAL - 1/7/2020 SE208392.010	0407_TP266_A02_200701 MATERIAL - 1/7/2020 SE208392.011	0407_TP264_A01_200701 MATERIAL - 1/7/2020 SE208392.012	0407_TP265_A01_200701 MATERIAL - 1/7/2020 SE208392.013	0407_TP263_A01_20701 MATERIAL - 1/7/2020 SE208392.018
Asbestos Detected	No unit	-	Yes	Yes	Yes	Yes	Yes

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid , mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser . Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC /MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents .
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup /fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS /ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples, Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable ’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.
AN605	This technique gravimetrically determines the mass of Bonded Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight. Any fibrous asbestos (FA) found in this fraction will be added to the 2-7mm fraction and its mass recorded there.

AN605	This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free/respirable fibres which are only observed by standard trace analysis as per AN602.
AN605	Bonded asbestos containing material (Bonded ACM) comprises asbestos-containing-material which is sound in condition. Fibrous asbestos (FA) comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material. Asbestos fines (AF) includes free fibres, small fibre bundles and also small fragments of bonded ACM that passes through a 7mm sieve - which implies that the bonded ACM fragments have a substantial degree of damage which increases the potential for fibre release.
AN-605	Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009 and NEPM 1999 (2013) schedule B1 section 4..

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000696-98**
Samples	16

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208392 R0**
Date Received	01 Jul 2020
Date Reported	13 Jul 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.

Sample #5: Asbestos found as approx 4x3x2mm cement sheet fragments x2 in >2mm portion.

Sample #8: Asbestos found as approx 3x3x2mm cement sheet fragment in >2mm portion.

Asbestos analysed by Approved Identifier Ravee Sivasubramaniam.

SIGNATORIES

[redacted]

Chemist | Senior Organic Chemist/Metals Chemis | Senior Chemist

[redacted]

Organic Section Head | Asbestos Analyst

RESULTS

Fibre Identification in soil — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE208392.001	0407_TP263_0.1 _200701	Soil	566g Sand,Soil	01 Jul 2020	No Asbestos Found	<0.01
SE208392.002	0407_TP263_0.5 _200701	Soil	670g Sand	01 Jul 2020	No Asbestos Found	<0.01
SE208392.003	0407_TP264_0.1 _200701	Soil	644g Sand	01 Jul 2020	No Asbestos Found	<0.01
SE208392.004	0407_TP264_0.5 _200701	Soil	687g Sand	01 Jul 2020	No Asbestos Found	<0.01
SE208392.005	0407_TP265_0.1 _200701	Soil	697g Sand,Soil,Plant Matter	01 Jul 2020	Chrysotile Asbestos Found	<0.01
SE208392.006	0407_TP265_0.5 _200701	Soil	794g Sand,Plant Matter	01 Jul 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208392.008	0407_TP266_0.5 _200701	Soil	555g Sand,Soil,Rocks ,Plant Matter	01 Jul 2020	Chrysotile Asbestos Found Organic Fibres Detected	<0.01
SE208392.014	0407_SP007_01 _200701	Soil	695g Sand,Soil,Rocks	01 Jul 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208392.015	0407_SP007_02 _200701	Soil	361g Sand,Soil,Rocks ,Plant Matter	01 Jul 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208392.016	0407_SP007_03 _200701	Soil	632g Sand,Soil,Rocks	01 Jul 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208392.017	0407_SP007_04 _200701	Soil	373g Sand,Soil,Plant Matter	01 Jul 2020	No Asbestos Found	<0.01

RESULTS

Fibre ID in bulk materials — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE208392.010	0407_TP266_A01_200701	Other	150x50x6mm Cement Sheet Fragment	01 Jul 2020	Chrysotile Asbestos Detected	
SE208392.011	0407_TP266_A02_200701	Other	150x150x8mm Cement Sheet Fragment	01 Jul 2020	Chrysotile Asbestos Detected	
SE208392.012	0407_TP264_A01_200701	Other	15x15x4mm Cement Sheet Fragment	01 Jul 2020	Chrysotile Asbestos Detected	
SE208392.013	0407_TP265_A01_200701	Other	50x35x5mm Cement Sheet Fragment	01 Jul 2020	Chrysotile Asbestos Detected	
SE208392.018	0407_TP263_A01_200701	Other	40x30x4mm Cement Sheet Fragment	01 Jul 2020	Chrysotile Asbestos Detected	

METHOD SUMMARY

SE208392 R0

METHOD	METHODOLOGY SUMMARY
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples , Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable ’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.

FOOTNOTES

Amosite	-	Brown Asbestos	NA	-	Not Analysed
Chrysotile	-	White Asbestos	LNR	-	Listed, Not Required
Crocidolite	-	Blue Asbestos	*	-	NATA accreditation does not cover the performance of this service .
Amphiboles	-	Amosite and/or Crocidolite	**	-	Indicative data, theoretical holding time exceeded.

(In reference to soil samples only) This report does not comply with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment and Remediation and Management of Asbestos Contaminated sites in Western Australia - May 2009.

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.

Where reported: 'Asbestos Detected': Asbestos detected by polarised light microscopy, including dispersion staining.
Where reported: 'No Asbestos Found': No Asbestos Found by polarised light microscopy , including dispersion staining.
Where reported: 'UMF Detected': Mineral fibres of unknown type detected by polarised light microscopy, including dispersion staining. Confirmation by another independent analytical technique may be necessary.

Even after disintegration it can be very difficult, or impossible, to detect the presence of asbestos in some asbestos -containing bulk materials using polarised light microscopy. This is due to the low grade or small length or diameter of asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety .

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STATEMENT OF QA/QC PERFORMANCE

SE208392 R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000696-98**
Samples	18

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208392 R0**
Date Received	01 Jul 2020
Date Reported	13 Jul 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Duplicate	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	1 item
Matrix Spike	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	2 items

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	13 Soil, 5 Material
Date documentation received	1/7/2020	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	3.7°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE208392 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Fibre ID in bulk materials

Method: ME-(AU)-[ENV]AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP266_A01_200701	SE208392.010	LB204040	01 Jul 2020	01 Jul 2020	01 Jul 2021	11 Jul 2020	01 Jul 2021	13 Jul 2020
0407_TP266_A02_200701	SE208392.011	LB204040	01 Jul 2020	01 Jul 2020	01 Jul 2021	11 Jul 2020	01 Jul 2021	13 Jul 2020
0407_TP264_A01_200701	SE208392.012	LB204040	01 Jul 2020	01 Jul 2020	01 Jul 2021	11 Jul 2020	01 Jul 2021	13 Jul 2020
0407_TP265_A01_200701	SE208392.013	LB204040	01 Jul 2020	01 Jul 2020	01 Jul 2021	11 Jul 2020	01 Jul 2021	13 Jul 2020
0407_TP263_A01_200701	SE208392.018	LB204040	01 Jul 2020	01 Jul 2020	01 Jul 2021	11 Jul 2020	01 Jul 2021	13 Jul 2020

Fibre Identification in soil

Method: ME-(AU)-[ENV]AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP263_0.1_200701	SE208392.001	LB203950	01 Jul 2020	01 Jul 2020	01 Jul 2021	10 Jul 2020	01 Jul 2021	13 Jul 2020
0407_TP263_0.5_200701	SE208392.002	LB203950	01 Jul 2020	01 Jul 2020	01 Jul 2021	10 Jul 2020	01 Jul 2021	13 Jul 2020
0407_TP264_0.1_200701	SE208392.003	LB203950	01 Jul 2020	01 Jul 2020	01 Jul 2021	10 Jul 2020	01 Jul 2021	13 Jul 2020
0407_TP264_0.5_200701	SE208392.004	LB203950	01 Jul 2020	01 Jul 2020	01 Jul 2021	10 Jul 2020	01 Jul 2021	13 Jul 2020
0407_TP265_0.1_200701	SE208392.005	LB203950	01 Jul 2020	01 Jul 2020	01 Jul 2021	10 Jul 2020	01 Jul 2021	13 Jul 2020
0407_TP265_0.5_200701	SE208392.006	LB203950	01 Jul 2020	01 Jul 2020	01 Jul 2021	10 Jul 2020	01 Jul 2021	13 Jul 2020
0407_TP266_0.5_200701	SE208392.008	LB203950	01 Jul 2020	01 Jul 2020	01 Jul 2021	10 Jul 2020	01 Jul 2021	13 Jul 2020
0407_SP007_01_200701	SE208392.014	LB203950	01 Jul 2020	01 Jul 2020	01 Jul 2021	10 Jul 2020	01 Jul 2021	13 Jul 2020
0407_SP007_02_200701	SE208392.015	LB203950	01 Jul 2020	01 Jul 2020	01 Jul 2021	10 Jul 2020	01 Jul 2021	13 Jul 2020
0407_SP007_03_200701	SE208392.016	LB203950	01 Jul 2020	01 Jul 2020	01 Jul 2021	10 Jul 2020	01 Jul 2021	13 Jul 2020
0407_SP007_04_200701	SE208392.017	LB203950	01 Jul 2020	01 Jul 2020	01 Jul 2021	10 Jul 2020	01 Jul 2021	13 Jul 2020

Gravimetric Determination of Asbestos in Soil

Method: ME-(AU)-[ENV]AN605

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP263_0.1_200701	SE208392.001	LB203950	01 Jul 2020	01 Jul 2020	28 Dec 2020	10 Jul 2020	28 Dec 2020	13 Jul 2020
0407_TP263_0.5_200701	SE208392.002	LB203950	01 Jul 2020	01 Jul 2020	28 Dec 2020	10 Jul 2020	28 Dec 2020	13 Jul 2020
0407_TP264_0.1_200701	SE208392.003	LB203950	01 Jul 2020	01 Jul 2020	28 Dec 2020	10 Jul 2020	28 Dec 2020	13 Jul 2020
0407_TP264_0.5_200701	SE208392.004	LB203950	01 Jul 2020	01 Jul 2020	28 Dec 2020	10 Jul 2020	28 Dec 2020	13 Jul 2020
0407_TP265_0.1_200701	SE208392.005	LB203950	01 Jul 2020	01 Jul 2020	28 Dec 2020	10 Jul 2020	28 Dec 2020	13 Jul 2020
0407_TP265_0.5_200701	SE208392.006	LB203950	01 Jul 2020	01 Jul 2020	28 Dec 2020	10 Jul 2020	28 Dec 2020	13 Jul 2020
0407_TP266_0.5_200701	SE208392.008	LB203950	01 Jul 2020	01 Jul 2020	28 Dec 2020	10 Jul 2020	28 Dec 2020	13 Jul 2020
0407_SP007_01_200701	SE208392.014	LB203950	01 Jul 2020	01 Jul 2020	28 Dec 2020	10 Jul 2020	28 Dec 2020	13 Jul 2020
0407_SP007_02_200701	SE208392.015	LB203950	01 Jul 2020	01 Jul 2020	28 Dec 2020	10 Jul 2020	28 Dec 2020	13 Jul 2020
0407_SP007_03_200701	SE208392.016	LB203950	01 Jul 2020	01 Jul 2020	28 Dec 2020	10 Jul 2020	28 Dec 2020	13 Jul 2020
0407_SP007_04_200701	SE208392.017	LB203950	01 Jul 2020	01 Jul 2020	28 Dec 2020	10 Jul 2020	28 Dec 2020	13 Jul 2020

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP263_0.1_200701	SE208392.001	LB203824	01 Jul 2020	01 Jul 2020	29 Jul 2020	08 Jul 2020	29 Jul 2020	13 Jul 2020
0407_TP263_0.5_200701	SE208392.002	LB203824	01 Jul 2020	01 Jul 2020	29 Jul 2020	08 Jul 2020	29 Jul 2020	13 Jul 2020
0407_TP264_0.1_200701	SE208392.003	LB203824	01 Jul 2020	01 Jul 2020	29 Jul 2020	08 Jul 2020	29 Jul 2020	13 Jul 2020
0407_TP264_0.5_200701	SE208392.004	LB203824	01 Jul 2020	01 Jul 2020	29 Jul 2020	08 Jul 2020	29 Jul 2020	13 Jul 2020
0407_TP265_0.1_200701	SE208392.005	LB203824	01 Jul 2020	01 Jul 2020	29 Jul 2020	08 Jul 2020	29 Jul 2020	13 Jul 2020
0407_TP265_0.5_200701	SE208392.006	LB203824	01 Jul 2020	01 Jul 2020	29 Jul 2020	08 Jul 2020	29 Jul 2020	13 Jul 2020
0407_TP266_0.1_200701	SE208392.007	LB203824	01 Jul 2020	01 Jul 2020	29 Jul 2020	08 Jul 2020	29 Jul 2020	13 Jul 2020
0407_TP266_0.5_200701	SE208392.008	LB203824	01 Jul 2020	01 Jul 2020	29 Jul 2020	08 Jul 2020	29 Jul 2020	13 Jul 2020
0407_QC186_200701	SE208392.009	LB203824	01 Jul 2020	01 Jul 2020	29 Jul 2020	08 Jul 2020	29 Jul 2020	13 Jul 2020
0407_SP007_01_200701	SE208392.014	LB203824	01 Jul 2020	01 Jul 2020	29 Jul 2020	08 Jul 2020	29 Jul 2020	13 Jul 2020
0407_SP007_02_200701	SE208392.015	LB203824	01 Jul 2020	01 Jul 2020	29 Jul 2020	08 Jul 2020	29 Jul 2020	13 Jul 2020
0407_SP007_03_200701	SE208392.016	LB203824	01 Jul 2020	01 Jul 2020	29 Jul 2020	08 Jul 2020	29 Jul 2020	13 Jul 2020
0407_SP007_04_200701	SE208392.017	LB203824	01 Jul 2020	01 Jul 2020	29 Jul 2020	08 Jul 2020	29 Jul 2020	13 Jul 2020

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP263_0.1_200701	SE208392.001	LB203796	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	13 Jul 2020	10 Jul 2020
0407_TP263_0.5_200701	SE208392.002	LB203796	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	13 Jul 2020	10 Jul 2020
0407_TP264_0.1_200701	SE208392.003	LB203796	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	13 Jul 2020	10 Jul 2020
0407_TP264_0.5_200701	SE208392.004	LB203796	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	13 Jul 2020	10 Jul 2020
0407_TP265_0.1_200701	SE208392.005	LB203796	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	13 Jul 2020	10 Jul 2020
0407_TP265_0.5_200701	SE208392.006	LB203796	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	13 Jul 2020	10 Jul 2020
0407_TP266_0.1_200701	SE208392.007	LB203796	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	13 Jul 2020	10 Jul 2020
0407_TP266_0.5_200701	SE208392.008	LB203796	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	13 Jul 2020	10 Jul 2020
0407_QC186_200701	SE208392.009	LB203796	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	13 Jul 2020	10 Jul 2020
0407_SP007_01_200701	SE208392.014	LB203796	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	13 Jul 2020	10 Jul 2020

HOLDING TIME SUMMARY

SE208392 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Moisture Content (continued)

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SP007_02_200701	SE208392.015	LB203796	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	13 Jul 2020	10 Jul 2020
0407_SP007_03_200701	SE208392.016	LB203796	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	13 Jul 2020	10 Jul 2020
0407_SP007_04_200701	SE208392.017	LB203796	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	13 Jul 2020	10 Jul 2020

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP263_0.1_200701	SE208392.001	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	13 Jul 2020
0407_TP263_0.5_200701	SE208392.002	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	13 Jul 2020
0407_TP264_0.1_200701	SE208392.003	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	13 Jul 2020
0407_TP264_0.5_200701	SE208392.004	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	13 Jul 2020
0407_TP265_0.1_200701	SE208392.005	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	13 Jul 2020
0407_TP265_0.5_200701	SE208392.006	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	13 Jul 2020
0407_TP266_0.1_200701	SE208392.007	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	13 Jul 2020
0407_TP266_0.5_200701	SE208392.008	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	13 Jul 2020
0407_QC186_200701	SE208392.009	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	13 Jul 2020
0407_SP007_01_200701	SE208392.014	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	13 Jul 2020
0407_SP007_02_200701	SE208392.015	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	13 Jul 2020
0407_SP007_03_200701	SE208392.016	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	13 Jul 2020
0407_SP007_04_200701	SE208392.017	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	13 Jul 2020

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP263_0.1_200701	SE208392.001	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	13 Jul 2020
0407_TP263_0.5_200701	SE208392.002	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	13 Jul 2020
0407_TP264_0.1_200701	SE208392.003	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	13 Jul 2020
0407_TP264_0.5_200701	SE208392.004	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	13 Jul 2020
0407_TP265_0.1_200701	SE208392.005	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	13 Jul 2020
0407_TP265_0.5_200701	SE208392.006	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	13 Jul 2020
0407_TP266_0.1_200701	SE208392.007	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	13 Jul 2020
0407_TP266_0.5_200701	SE208392.008	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	13 Jul 2020
0407_QC186_200701	SE208392.009	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	13 Jul 2020
0407_SP007_01_200701	SE208392.014	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	13 Jul 2020
0407_SP007_02_200701	SE208392.015	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	13 Jul 2020
0407_SP007_03_200701	SE208392.016	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	13 Jul 2020
0407_SP007_04_200701	SE208392.017	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	13 Jul 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP263_0.1_200701	SE208392.001	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	13 Jul 2020
0407_TP263_0.5_200701	SE208392.002	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	13 Jul 2020
0407_TP264_0.1_200701	SE208392.003	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	13 Jul 2020
0407_TP264_0.5_200701	SE208392.004	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	13 Jul 2020
0407_TP265_0.1_200701	SE208392.005	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	13 Jul 2020
0407_TP265_0.5_200701	SE208392.006	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	13 Jul 2020
0407_TP266_0.1_200701	SE208392.007	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	13 Jul 2020
0407_TP266_0.5_200701	SE208392.008	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	13 Jul 2020
0407_QC186_200701	SE208392.009	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	13 Jul 2020
0407_SP007_01_200701	SE208392.014	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	13 Jul 2020
0407_SP007_02_200701	SE208392.015	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	13 Jul 2020
0407_SP007_03_200701	SE208392.016	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	13 Jul 2020
0407_SP007_04_200701	SE208392.017	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	13 Jul 2020

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP263_0.1_200701	SE208392.001	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	13 Jul 2020
0407_TP263_0.5_200701	SE208392.002	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	13 Jul 2020
0407_TP264_0.1_200701	SE208392.003	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	13 Jul 2020
0407_TP264_0.5_200701	SE208392.004	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	13 Jul 2020
0407_TP265_0.1_200701	SE208392.005	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	13 Jul 2020
0407_TP265_0.5_200701	SE208392.006	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	13 Jul 2020
0407_TP266_0.1_200701	SE208392.007	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	13 Jul 2020
0407_TP266_0.5_200701	SE208392.008	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	13 Jul 2020

HOLDING TIME SUMMARY

SE208392 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

PCBs in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC186_200701	SE208392.009	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	13 Jul 2020
0407_SP007_01_200701	SE208392.014	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	13 Jul 2020
0407_SP007_02_200701	SE208392.015	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	13 Jul 2020
0407_SP007_03_200701	SE208392.016	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	13 Jul 2020
0407_SP007_04_200701	SE208392.017	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	13 Jul 2020

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP263_0.1_200701	SE208392.001	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	10 Jul 2020
0407_TP263_0.5_200701	SE208392.002	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	10 Jul 2020
0407_TP264_0.1_200701	SE208392.003	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	10 Jul 2020
0407_TP264_0.5_200701	SE208392.004	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	10 Jul 2020
0407_TP265_0.1_200701	SE208392.005	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	10 Jul 2020
0407_TP265_0.5_200701	SE208392.006	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	10 Jul 2020
0407_TP266_0.1_200701	SE208392.007	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	10 Jul 2020
0407_TP266_0.5_200701	SE208392.008	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	10 Jul 2020
0407_QC186_200701	SE208392.009	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	10 Jul 2020
0407_SP007_01_200701	SE208392.014	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	10 Jul 2020
0407_SP007_02_200701	SE208392.015	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	10 Jul 2020
0407_SP007_03_200701	SE208392.016	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	10 Jul 2020
0407_SP007_04_200701	SE208392.017	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	10 Jul 2020

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP263_0.1_200701	SE208392.001	LB203819	01 Jul 2020	01 Jul 2020	28 Dec 2020	08 Jul 2020	28 Dec 2020	10 Jul 2020
0407_TP263_0.5_200701	SE208392.002	LB203819	01 Jul 2020	01 Jul 2020	28 Dec 2020	08 Jul 2020	28 Dec 2020	10 Jul 2020
0407_TP264_0.1_200701	SE208392.003	LB203819	01 Jul 2020	01 Jul 2020	28 Dec 2020	08 Jul 2020	28 Dec 2020	10 Jul 2020
0407_TP264_0.5_200701	SE208392.004	LB203819	01 Jul 2020	01 Jul 2020	28 Dec 2020	08 Jul 2020	28 Dec 2020	10 Jul 2020
0407_TP265_0.1_200701	SE208392.005	LB203819	01 Jul 2020	01 Jul 2020	28 Dec 2020	08 Jul 2020	28 Dec 2020	10 Jul 2020
0407_TP265_0.5_200701	SE208392.006	LB203819	01 Jul 2020	01 Jul 2020	28 Dec 2020	08 Jul 2020	28 Dec 2020	10 Jul 2020
0407_TP266_0.1_200701	SE208392.007	LB203819	01 Jul 2020	01 Jul 2020	28 Dec 2020	08 Jul 2020	28 Dec 2020	10 Jul 2020
0407_TP266_0.5_200701	SE208392.008	LB203819	01 Jul 2020	01 Jul 2020	28 Dec 2020	08 Jul 2020	28 Dec 2020	10 Jul 2020
0407_QC186_200701	SE208392.009	LB203819	01 Jul 2020	01 Jul 2020	28 Dec 2020	08 Jul 2020	28 Dec 2020	10 Jul 2020
0407_SP007_01_200701	SE208392.014	LB203819	01 Jul 2020	01 Jul 2020	28 Dec 2020	08 Jul 2020	28 Dec 2020	10 Jul 2020
0407_SP007_02_200701	SE208392.015	LB203819	01 Jul 2020	01 Jul 2020	28 Dec 2020	08 Jul 2020	28 Dec 2020	10 Jul 2020
0407_SP007_03_200701	SE208392.016	LB203819	01 Jul 2020	01 Jul 2020	28 Dec 2020	08 Jul 2020	28 Dec 2020	10 Jul 2020
0407_SP007_04_200701	SE208392.017	LB203819	01 Jul 2020	01 Jul 2020	28 Dec 2020	08 Jul 2020	28 Dec 2020	10 Jul 2020

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP263_0.1_200701	SE208392.001	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	10 Jul 2020
0407_TP263_0.5_200701	SE208392.002	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	10 Jul 2020
0407_TP264_0.1_200701	SE208392.003	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	10 Jul 2020
0407_TP264_0.5_200701	SE208392.004	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	10 Jul 2020
0407_TP265_0.1_200701	SE208392.005	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	10 Jul 2020
0407_TP265_0.5_200701	SE208392.006	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	10 Jul 2020
0407_TP266_0.1_200701	SE208392.007	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	10 Jul 2020
0407_TP266_0.5_200701	SE208392.008	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	10 Jul 2020
0407_QC186_200701	SE208392.009	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	10 Jul 2020
0407_SP007_01_200701	SE208392.014	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	10 Jul 2020
0407_SP007_02_200701	SE208392.015	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	10 Jul 2020
0407_SP007_03_200701	SE208392.016	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	10 Jul 2020
0407_SP007_04_200701	SE208392.017	LB203792	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	10 Jul 2020

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP263_0.1_200701	SE208392.001	LB203787	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	10 Jul 2020
0407_TP263_0.5_200701	SE208392.002	LB203787	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	10 Jul 2020
0407_TP264_0.1_200701	SE208392.003	LB203787	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	10 Jul 2020
0407_TP264_0.5_200701	SE208392.004	LB203787	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	10 Jul 2020
0407_TP265_0.1_200701	SE208392.005	LB203787	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	10 Jul 2020
0407_TP265_0.5_200701	SE208392.006	LB203787	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	10 Jul 2020

HOLDING TIME SUMMARY

SE208392 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP266_0.1_200701	SE208392.007	LB203787	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	10 Jul 2020
0407_TP266_0.5_200701	SE208392.008	LB203787	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	10 Jul 2020
0407_QC186_200701	SE208392.009	LB203787	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	10 Jul 2020
0407_SP007_01_200701	SE208392.014	LB203787	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	10 Jul 2020
0407_SP007_02_200701	SE208392.015	LB203787	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	10 Jul 2020
0407_SP007_03_200701	SE208392.016	LB203787	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	10 Jul 2020
0407_SP007_04_200701	SE208392.017	LB203787	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	10 Jul 2020

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP263_0.1_200701	SE208392.001	LB203787	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	10 Jul 2020
0407_TP263_0.5_200701	SE208392.002	LB203787	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	10 Jul 2020
0407_TP264_0.1_200701	SE208392.003	LB203787	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	10 Jul 2020
0407_TP264_0.5_200701	SE208392.004	LB203787	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	10 Jul 2020
0407_TP265_0.1_200701	SE208392.005	LB203787	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	10 Jul 2020
0407_TP265_0.5_200701	SE208392.006	LB203787	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	10 Jul 2020
0407_TP266_0.1_200701	SE208392.007	LB203787	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	10 Jul 2020
0407_TP266_0.5_200701	SE208392.008	LB203787	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	10 Jul 2020
0407_QC186_200701	SE208392.009	LB203787	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	10 Jul 2020
0407_SP007_01_200701	SE208392.014	LB203787	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	10 Jul 2020
0407_SP007_02_200701	SE208392.015	LB203787	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	10 Jul 2020
0407_SP007_03_200701	SE208392.016	LB203787	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	10 Jul 2020
0407_SP007_04_200701	SE208392.017	LB203787	01 Jul 2020	01 Jul 2020	15 Jul 2020	08 Jul 2020	17 Aug 2020	10 Jul 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP263_0.1_200701	SE208392.001	%	60 - 130%	109
	0407_TP263_0.5_200701	SE208392.002	%	60 - 130%	104
	0407_TP264_0.1_200701	SE208392.003	%	60 - 130%	111
	0407_TP264_0.5_200701	SE208392.004	%	60 - 130%	105
	0407_TP265_0.1_200701	SE208392.005	%	60 - 130%	103
	0407_TP265_0.5_200701	SE208392.006	%	60 - 130%	103
	0407_TP266_0.1_200701	SE208392.007	%	60 - 130%	105
	0407_TP266_0.5_200701	SE208392.008	%	60 - 130%	106
	0407_QC186_200701	SE208392.009	%	60 - 130%	105
	0407_SP007_01_200701	SE208392.014	%	60 - 130%	105
	0407_SP007_02_200701	SE208392.015	%	60 - 130%	110
	0407_SP007_03_200701	SE208392.016	%	60 - 130%	108
	0407_SP007_04_200701	SE208392.017	%	60 - 130%	106

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP263_0.1_200701	SE208392.001	%	60 - 130%	79
	0407_TP263_0.5_200701	SE208392.002	%	60 - 130%	77
	0407_TP264_0.1_200701	SE208392.003	%	60 - 130%	80
	0407_TP264_0.5_200701	SE208392.004	%	60 - 130%	79
	0407_TP265_0.1_200701	SE208392.005	%	60 - 130%	82
	0407_TP265_0.5_200701	SE208392.006	%	60 - 130%	80
	0407_TP266_0.1_200701	SE208392.007	%	60 - 130%	78
	0407_TP266_0.5_200701	SE208392.008	%	60 - 130%	78
	0407_QC186_200701	SE208392.009	%	60 - 130%	78
	0407_SP007_01_200701	SE208392.014	%	60 - 130%	85
	0407_SP007_02_200701	SE208392.015	%	60 - 130%	79
	0407_SP007_03_200701	SE208392.016	%	60 - 130%	81
	0407_SP007_04_200701	SE208392.017	%	60 - 130%	79
d14-p-terphenyl (Surrogate)	0407_TP263_0.1_200701	SE208392.001	%	60 - 130%	88
	0407_TP263_0.5_200701	SE208392.002	%	60 - 130%	84
	0407_TP264_0.1_200701	SE208392.003	%	60 - 130%	89
	0407_TP264_0.5_200701	SE208392.004	%	60 - 130%	94
	0407_TP265_0.1_200701	SE208392.005	%	60 - 130%	85
	0407_TP265_0.5_200701	SE208392.006	%	60 - 130%	89
	0407_TP266_0.1_200701	SE208392.007	%	60 - 130%	86
	0407_TP266_0.5_200701	SE208392.008	%	60 - 130%	88
	0407_QC186_200701	SE208392.009	%	60 - 130%	81
	0407_SP007_01_200701	SE208392.014	%	60 - 130%	85
	0407_SP007_02_200701	SE208392.015	%	60 - 130%	87
	0407_SP007_03_200701	SE208392.016	%	60 - 130%	93
	0407_SP007_04_200701	SE208392.017	%	60 - 130%	81

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP263_0.1_200701	SE208392.001	%	70 - 130%	79
	0407_TP263_0.5_200701	SE208392.002	%	70 - 130%	77
	0407_TP264_0.1_200701	SE208392.003	%	70 - 130%	80
	0407_TP264_0.5_200701	SE208392.004	%	70 - 130%	79
	0407_TP265_0.1_200701	SE208392.005	%	70 - 130%	82
	0407_TP265_0.5_200701	SE208392.006	%	70 - 130%	80
	0407_TP266_0.1_200701	SE208392.007	%	70 - 130%	78
	0407_TP266_0.5_200701	SE208392.008	%	70 - 130%	78
	0407_QC186_200701	SE208392.009	%	70 - 130%	78
	0407_SP007_01_200701	SE208392.014	%	70 - 130%	85
	0407_SP007_02_200701	SE208392.015	%	70 - 130%	79
	0407_SP007_03_200701	SE208392.016	%	70 - 130%	81
	0407_SP007_04_200701	SE208392.017	%	70 - 130%	79
d14-p-terphenyl (Surrogate)	0407_TP263_0.1_200701	SE208392.001	%	70 - 130%	88
	0407_TP263_0.5_200701	SE208392.002	%	70 - 130%	84
	0407_TP264_0.1_200701	SE208392.003	%	70 - 130%	89
	0407_TP264_0.5_200701	SE208392.004	%	70 - 130%	94

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d14-p-terphenyl (Surrogate)	0407_TP265_0.1_200701	SE208392.005	%	70 - 130%	85
	0407_TP265_0.5_200701	SE208392.006	%	70 - 130%	89
	0407_TP266_0.1_200701	SE208392.007	%	70 - 130%	86
	0407_TP266_0.5_200701	SE208392.008	%	70 - 130%	88
	0407_QC186_200701	SE208392.009	%	70 - 130%	81
	0407_SP007_01_200701	SE208392.014	%	70 - 130%	85
	0407_SP007_02_200701	SE208392.015	%	70 - 130%	87
	0407_SP007_03_200701	SE208392.016	%	70 - 130%	93
	0407_SP007_04_200701	SE208392.017	%	70 - 130%	81
d5-nitrobenzene (Surrogate)	0407_TP263_0.1_200701	SE208392.001	%	70 - 130%	85
	0407_TP263_0.5_200701	SE208392.002	%	70 - 130%	85
	0407_TP264_0.1_200701	SE208392.003	%	70 - 130%	91
	0407_TP264_0.5_200701	SE208392.004	%	70 - 130%	91
	0407_TP265_0.1_200701	SE208392.005	%	70 - 130%	89
	0407_TP265_0.5_200701	SE208392.006	%	70 - 130%	87
	0407_TP266_0.1_200701	SE208392.007	%	70 - 130%	87
	0407_TP266_0.5_200701	SE208392.008	%	70 - 130%	86
	0407_QC186_200701	SE208392.009	%	70 - 130%	84
	0407_SP007_01_200701	SE208392.014	%	70 - 130%	87
	0407_SP007_02_200701	SE208392.015	%	70 - 130%	90
	0407_SP007_03_200701	SE208392.016	%	70 - 130%	86
	0407_SP007_04_200701	SE208392.017	%	70 - 130%	92

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP263_0.1_200701	SE208392.001	%	60 - 130%	109
	0407_TP263_0.5_200701	SE208392.002	%	60 - 130%	104
	0407_TP264_0.1_200701	SE208392.003	%	60 - 130%	111
	0407_TP264_0.5_200701	SE208392.004	%	60 - 130%	105
	0407_TP265_0.1_200701	SE208392.005	%	60 - 130%	103
	0407_TP265_0.5_200701	SE208392.006	%	60 - 130%	103
	0407_TP266_0.1_200701	SE208392.007	%	60 - 130%	105
	0407_TP266_0.5_200701	SE208392.008	%	60 - 130%	106
	0407_QC186_200701	SE208392.009	%	60 - 130%	105
	0407_SP007_01_200701	SE208392.014	%	60 - 130%	105
	0407_SP007_02_200701	SE208392.015	%	60 - 130%	110
	0407_SP007_03_200701	SE208392.016	%	60 - 130%	108
	0407_SP007_04_200701	SE208392.017	%	60 - 130%	106

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	0407_TP263_0.1_200701	SE208392.001	%	70 - 130%	74
	0407_TP263_0.5_200701	SE208392.002	%	70 - 130%	70
	0407_TP264_0.1_200701	SE208392.003	%	70 - 130%	81
	0407_TP264_0.5_200701	SE208392.004	%	70 - 130%	80
	0407_TP265_0.1_200701	SE208392.005	%	70 - 130%	82
	0407_TP265_0.5_200701	SE208392.006	%	70 - 130%	74
	0407_TP266_0.1_200701	SE208392.007	%	70 - 130%	73
	0407_TP266_0.5_200701	SE208392.008	%	70 - 130%	82
	0407_QC186_200701	SE208392.009	%	70 - 130%	81
	0407_SP007_01_200701	SE208392.014	%	70 - 130%	79
	0407_SP007_02_200701	SE208392.015	%	70 - 130%	81
	0407_SP007_03_200701	SE208392.016	%	70 - 130%	87
	0407_SP007_04_200701	SE208392.017	%	70 - 130%	79
d5-phenol (Surrogate)	0407_TP263_0.1_200701	SE208392.001	%	50 - 130%	77
	0407_TP263_0.5_200701	SE208392.002	%	50 - 130%	79
	0407_TP264_0.1_200701	SE208392.003	%	50 - 130%	76
	0407_TP264_0.5_200701	SE208392.004	%	50 - 130%	80
	0407_TP265_0.1_200701	SE208392.005	%	50 - 130%	77
	0407_TP265_0.5_200701	SE208392.006	%	50 - 130%	73
	0407_TP266_0.1_200701	SE208392.007	%	50 - 130%	71
	0407_TP266_0.5_200701	SE208392.008	%	50 - 130%	80

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d5-phenol (Surrogate)	0407_QC186_200701	SE208392.009	%	50 - 130%	82
	0407_SP007_01_200701	SE208392.014	%	50 - 130%	86
	0407_SP007_02_200701	SE208392.015	%	50 - 130%	84
	0407_SP007_03_200701	SE208392.016	%	50 - 130%	76
	0407_SP007_04_200701	SE208392.017	%	50 - 130%	79

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP263_0.1_200701	SE208392.001	%	60 - 130%	91
	0407_TP263_0.5_200701	SE208392.002	%	60 - 130%	79
	0407_TP264_0.1_200701	SE208392.003	%	60 - 130%	80
	0407_TP264_0.5_200701	SE208392.004	%	60 - 130%	89
	0407_TP265_0.1_200701	SE208392.005	%	60 - 130%	99
	0407_TP265_0.5_200701	SE208392.006	%	60 - 130%	93
	0407_TP266_0.1_200701	SE208392.007	%	60 - 130%	93
	0407_TP266_0.5_200701	SE208392.008	%	60 - 130%	82
	0407_QC186_200701	SE208392.009	%	60 - 130%	85
	0407_SP007_01_200701	SE208392.014	%	60 - 130%	86
	0407_SP007_02_200701	SE208392.015	%	60 - 130%	78
	0407_SP007_03_200701	SE208392.016	%	60 - 130%	87
	0407_SP007_04_200701	SE208392.017	%	60 - 130%	84
d4-1,2-dichloroethane (Surrogate)	0407_TP263_0.1_200701	SE208392.001	%	60 - 130%	81
	0407_TP263_0.5_200701	SE208392.002	%	60 - 130%	83
	0407_TP264_0.1_200701	SE208392.003	%	60 - 130%	84
	0407_TP264_0.5_200701	SE208392.004	%	60 - 130%	84
	0407_TP265_0.1_200701	SE208392.005	%	60 - 130%	90
	0407_TP265_0.5_200701	SE208392.006	%	60 - 130%	88
	0407_TP266_0.1_200701	SE208392.007	%	60 - 130%	77
	0407_TP266_0.5_200701	SE208392.008	%	60 - 130%	76
	0407_QC186_200701	SE208392.009	%	60 - 130%	74
	0407_SP007_01_200701	SE208392.014	%	60 - 130%	88
	0407_SP007_02_200701	SE208392.015	%	60 - 130%	77
	0407_SP007_03_200701	SE208392.016	%	60 - 130%	84
	0407_SP007_04_200701	SE208392.017	%	60 - 130%	87
d8-toluene (Surrogate)	0407_TP263_0.1_200701	SE208392.001	%	60 - 130%	81
	0407_TP263_0.5_200701	SE208392.002	%	60 - 130%	86
	0407_TP264_0.1_200701	SE208392.003	%	60 - 130%	79
	0407_TP264_0.5_200701	SE208392.004	%	60 - 130%	80
	0407_TP265_0.1_200701	SE208392.005	%	60 - 130%	84
	0407_TP265_0.5_200701	SE208392.006	%	60 - 130%	83
	0407_TP266_0.1_200701	SE208392.007	%	60 - 130%	79
	0407_TP266_0.5_200701	SE208392.008	%	60 - 130%	83
	0407_QC186_200701	SE208392.009	%	60 - 130%	78
	0407_SP007_01_200701	SE208392.014	%	60 - 130%	83
	0407_SP007_02_200701	SE208392.015	%	60 - 130%	77
	0407_SP007_03_200701	SE208392.016	%	60 - 130%	76
	0407_SP007_04_200701	SE208392.017	%	60 - 130%	82

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP263_0.1_200701	SE208392.001	%	60 - 130%	91
	0407_TP263_0.5_200701	SE208392.002	%	60 - 130%	79
	0407_TP264_0.1_200701	SE208392.003	%	60 - 130%	80
	0407_TP264_0.5_200701	SE208392.004	%	60 - 130%	89
	0407_TP265_0.1_200701	SE208392.005	%	60 - 130%	99
	0407_TP265_0.5_200701	SE208392.006	%	60 - 130%	93
	0407_TP266_0.1_200701	SE208392.007	%	60 - 130%	93
	0407_TP266_0.5_200701	SE208392.008	%	60 - 130%	82
	0407_QC186_200701	SE208392.009	%	60 - 130%	85
	0407_SP007_01_200701	SE208392.014	%	60 - 130%	86
	0407_SP007_02_200701	SE208392.015	%	60 - 130%	78
	0407_SP007_03_200701	SE208392.016	%	60 - 130%	87

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_SP007_04_200701	SE208392.017	%	60 - 130%	84
d4-1,2-dichloroethane (Surrogate)	0407_TP263_0.1_200701	SE208392.001	%	60 - 130%	81
	0407_TP263_0.5_200701	SE208392.002	%	60 - 130%	83
	0407_TP264_0.1_200701	SE208392.003	%	60 - 130%	84
	0407_TP264_0.5_200701	SE208392.004	%	60 - 130%	84
	0407_TP265_0.1_200701	SE208392.005	%	60 - 130%	90
	0407_TP265_0.5_200701	SE208392.006	%	60 - 130%	88
	0407_TP266_0.1_200701	SE208392.007	%	60 - 130%	77
	0407_TP266_0.5_200701	SE208392.008	%	60 - 130%	76
	0407_QC186_200701	SE208392.009	%	60 - 130%	74
	0407_SP007_01_200701	SE208392.014	%	60 - 130%	88
	0407_SP007_02_200701	SE208392.015	%	60 - 130%	77
	0407_SP007_03_200701	SE208392.016	%	60 - 130%	84
	0407_SP007_04_200701	SE208392.017	%	60 - 130%	87
d8-toluene (Surrogate)	0407_TP263_0.1_200701	SE208392.001	%	60 - 130%	81
	0407_TP263_0.5_200701	SE208392.002	%	60 - 130%	86
	0407_TP264_0.1_200701	SE208392.003	%	60 - 130%	79
	0407_TP264_0.5_200701	SE208392.004	%	60 - 130%	80
	0407_TP265_0.1_200701	SE208392.005	%	60 - 130%	84
	0407_TP265_0.5_200701	SE208392.006	%	60 - 130%	83
	0407_TP266_0.1_200701	SE208392.007	%	60 - 130%	79
	0407_TP266_0.5_200701	SE208392.008	%	60 - 130%	83
	0407_QC186_200701	SE208392.009	%	60 - 130%	78
	0407_SP007_01_200701	SE208392.014	%	60 - 130%	83
	0407_SP007_02_200701	SE208392.015	%	60 - 130%	77
	0407_SP007_03_200701	SE208392.016	%	60 - 130%	76
	0407_SP007_04_200701	SE208392.017	%	60 - 130%	82

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result
LB203824.001	Mercury	mg/kg	0.05	<0.05

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203792.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	105

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203792.001		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	82
		d14-p-terphenyl (Surrogate)	%	-	92

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB203792.001	Naphthalene	mg/kg	0.1	<0.1
	2-methylnaphthalene	mg/kg	0.1	<0.1
	1-methylnaphthalene	mg/kg	0.1	<0.1
	Acenaphthylene	mg/kg	0.1	<0.1
	Acenaphthene	mg/kg	0.1	<0.1
	Fluorene	mg/kg	0.1	<0.1
	Phenanthrene	mg/kg	0.1	<0.1
	Anthracene	mg/kg	0.1	<0.1
	Fluoranthene	mg/kg	0.1	<0.1
	Pyrene	mg/kg	0.1	<0.1
	Benzo(a)anthracene	mg/kg	0.1	<0.1
	Chrysene	mg/kg	0.1	<0.1
	Benzo(a)pyrene	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203792.001		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	93
		2-fluorobiphenyl (Surrogate)	%	-	82
		d14-p-terphenyl (Surrogate)	%	-	92

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203792.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	105

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203792.001		Phenol	mg/kg	0.5	<0.5
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5
		2-nitrophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
		Pentachlorophenol	mg/kg	0.5	<0.5
		2,4-dinitrophenol	mg/kg	2	<2
		4-chloro-3-methylphenol	mg/kg	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	82
		d5-phenol (Surrogate)	%	-	81

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB203819.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB203792.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number	Parameter	Units	LOR

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB203787.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB203787.001	Oxygenated Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	90
		d8-toluene (Surrogate)	%	-	90
		Bromofluorobenzene (Surrogate)	%	-	90
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB203787.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	90

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208392.004	LB203824.014	Mercury	mg/kg	0.05	0.09	0.09	86	0
SE208392.017	LB203824.024	Mercury	mg/kg	0.05	0.08	0.08	92	6

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208392.014	LB203796.011	% Moisture	%w/w	1	12.8	13.0	38	1
SE208392.017	LB203796.015	% Moisture	%w/w	1	13.8	14.5	37	5

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208392.014	LB203792.014		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.16	0.16	30	4

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208392.014	LB203792.014		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	3
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	2

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate	Parameter	Units	LOR

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208392.014	LB203792.014		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	137	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	144	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	132	0
			Phenanthrene	mg/kg	0.1	1.5	1.6	37	7
			Anthracene	mg/kg	0.1	0.5	0.5	51	4
			Fluoranthene	mg/kg	0.1	3.7	3.7	33	0
			Pyrene	mg/kg	0.1	3.4	3.7	33	9
			Benzo(a)anthracene	mg/kg	0.1	1.5	1.6	36	4
			Chrysene	mg/kg	0.1	1.7	1.8	36	1
			Benzo(b&j)fluoranthene	mg/kg	0.1	2.0	1.9	35	2
			Benzo(k)fluoranthene	mg/kg	0.1	1.1	1.0	40	9
			Benzo(a)pyrene	mg/kg	0.1	1.9	1.8	36	5
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	1.0	1.1	40	4
			Dibenzo(ah)anthracene	mg/kg	0.1	0.1	0.1	107	9
			Benzo(ghi)perylene	mg/kg	0.1	0.9	0.9	41	9
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	2.6	2.5	18	4
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	2.6	2.5	22	4
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	2.6	2.5	18	4
			Total PAH (18)	mg/kg	0.8	19	19	34	1
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	30	2
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	3
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	2

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208392.014	LB203792.014		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	4

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208392.014	LB203792.014		Phenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	200	0
			Total Cresol	mg/kg	1.5	<1.5	<1.5	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	200	0
			4-nitrophenol	mg/kg	1	<1	<1	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dinitrophenol	mg/kg	2	<2	<2	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.0	4.4	30	10
			d5-phenol (Surrogate)	mg/kg	-	1.7	1.6	30	9

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208392.004	LB203819.014	Arsenic, As	mg/kg	1	2	2	91	2
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	14	11	34	23
		Copper, Cu	mg/kg	0.5	11	11	34	2
		Nickel, Ni	mg/kg	0.5	1.7	1.5	62	11
		Lead, Pb	mg/kg	1	140	110	31	23
		Zinc, Zn	mg/kg	2	82	81	32	2
SE208392.017	LB203819.024	Arsenic, As	mg/kg	1	4	2	65	68 ②
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	165	0
		Chromium, Cr	mg/kg	0.5	3.5	4.4	43	22
		Copper, Cu	mg/kg	0.5	24	24	32	3
		Nickel, Ni	mg/kg	0.5	3.4	3.7	44	8
		Lead, Pb	mg/kg	1	63	59	32	6
		Zinc, Zn	mg/kg	2	88	81	32	8

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208392.014	LB203792.014		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208392.014	LB203787.014	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued) — Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208392.014	LB203787.014	Halogenated Aliphatics	trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic Aromatic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
			Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
			2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
			MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.8	8.1	50	8
			d8-toluene (Surrogate)	mg/kg	-	8.3	7.8	50	6
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.6	8.5	50	1
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethanes	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
			Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE208392.017	LB203787.018	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
			Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208392.017	LB203787.018	Halogenated	1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
		Aliphatics	Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.7	8.4	50	3
			d8-toluene (Surrogate)	mg/kg	-	8.2	8.0	50	2
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.4	9.6	50	13
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208392.017	LB203787.018	Totals	Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethanes	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
			Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208392.014	LB203787.014		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.8	8.1	30	8
			d8-toluene (Surrogate)	mg/kg	-	8.3	7.8	30	6
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.6	8.5	30	1
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE208392.017	LB203787.018		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.7	8.4	30	3
			d8-toluene (Surrogate)	mg/kg	-	8.2	8.0	30	2
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.4	9.6	30	13
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203824.002	Mercury	mg/kg	0.05	0.22	0.2	70 - 130	108

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203792.002		Heptachlor	mg/kg	0.1	0.3	0.2	60 - 140	125
		Aldrin	mg/kg	0.1	0.3	0.2	60 - 140	126
		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	123
		Dieldrin	mg/kg	0.2	0.2	0.2	60 - 140	121
		Endrin	mg/kg	0.2	0.2	0.2	60 - 140	121
		p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	102
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.16	0.15	40 - 130	103

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203792.002		Dichlorvos	mg/kg	0.5	2.4	2	60 - 140	119
		Diazinon (Dimpylate)	mg/kg	0.5	2.0	2	60 - 140	101
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.1	2	60 - 140	105
		Ethion	mg/kg	0.2	1.6	2	60 - 140	82
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	82
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	84

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203792.002		Naphthalene	mg/kg	0.1	4.1	4	60 - 140	102
		Acenaphthylene	mg/kg	0.1	4.0	4	60 - 140	99
		Acenaphthene	mg/kg	0.1	4.3	4	60 - 140	107
		Phenanthrene	mg/kg	0.1	4.3	4	60 - 140	107
		Anthracene	mg/kg	0.1	4.1	4	60 - 140	103
		Fluoranthene	mg/kg	0.1	4.2	4	60 - 140	106
		Pyrene	mg/kg	0.1	4.5	4	60 - 140	114
		Benzo(a)pyrene	mg/kg	0.1	3.9	4	60 - 140	97
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	81
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	82
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	84

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203792.002	Arochlor 1260	mg/kg	0.2	0.3	0.4	60 - 140	78

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203792.002		Phenol	mg/kg	0.5	0.8	1	70 - 130	75
		2,4-dichlorophenol	mg/kg	0.5	0.9	1	70 - 130	87
		2,4,6-trichlorophenol	mg/kg	0.5	0.9	1	70 - 130	90
		Pentachlorophenol	mg/kg	0.5	0.9	1	70 - 130	93
	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.8	5	40 - 130	75
		d5-phenol (Surrogate)	mg/kg	-	1.7	2	40 - 130	84

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203819.002	Arsenic, As	mg/kg	1	340	318.22	80 - 120	106
	Cadmium, Cd	mg/kg	0.3	4.7	5.41	80 - 120	87
	Chromium, Cr	mg/kg	0.5	37	38.31	80 - 120	97
	Copper, Cu	mg/kg	0.5	290	290	80 - 120	102
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	99
	Lead, Pb	mg/kg	1	94	89.9	80 - 120	104
	Zinc, Zn	mg/kg	2	280	273	80 - 120	102

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203792.002		TRH C10-C14	mg/kg	20	36	40	60 - 140	90
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	88
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	73
	TRH F Bands	TRH >C10-C16	mg/kg	25	37	40	60 - 140	93
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	80
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	70

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203787.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	4.6	5	60 - 140	92
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	4.9	5	60 - 140	98
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	4.2	5	60 - 140	84
	Halogenated	Chlorobenzene	mg/kg	0.1	4.4	5	60 - 140	87
	Monocyclic	Benzene	mg/kg	0.1	4.7	5	60 - 140	94
	Aromatic	Toluene	mg/kg	0.1	4.5	5	60 - 140	89
		Ethylbenzene	mg/kg	0.1	4.6	5	60 - 140	92
		m/p-xylene	mg/kg	0.2	8.9	10	60 - 140	89
		o-xylene	mg/kg	0.1	4.7	5	60 - 140	94
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.4	10	70 - 130	94
		d8-toluene (Surrogate)	mg/kg	-	8.7	10	70 - 130	87
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.8	10	70 - 130	88
	Trihalomethan	Chloroform	mg/kg	0.1	4.6	5	60 - 140	91

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203787.002		TRH C6-C10	mg/kg	25	66	92.5	60 - 140	72
		TRH C6-C9	mg/kg	20	60	80	60 - 140	75
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.4	10	70 - 130	94
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.8	10	70 - 130	88
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	39	62.5	60 - 140	62

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208392.001	LB203792.004		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	-	-
			Lindane	mg/kg	0.1	<0.1	<0.1	-	-
			Heptachlor	mg/kg	0.1	0.3	<0.1	0.2	131
			Aldrin	mg/kg	0.1	0.3	<0.1	0.2	129
			Beta BHC	mg/kg	0.1	<0.1	<0.1	-	-
			Delta BHC	mg/kg	0.1	0.3	<0.1	0.2	129
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	-	-
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	-	-
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	-	-
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	-	-
			Dieldrin	mg/kg	0.2	0.3	<0.2	0.2	126
			Endrin	mg/kg	0.2	0.3	<0.2	0.2	127
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	-	-
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	-	-
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	-	-
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	-	-
			p,p'-DDT	mg/kg	0.1	0.2	<0.1	0.2	110
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	-	-
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	-	-
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	-	-
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	-	-
			Isodrin	mg/kg	0.1	<0.1	<0.1	-	-
			Mirex	mg/kg	0.1	<0.1	<0.1	-	-
			Total CLP OC Pesticides	mg/kg	1	2	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.16	0.16	-	109

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208392.001	LB203792.004		Dichlorvos	mg/kg	0.5	2.5	<0.5	2	123
			Dimethoate	mg/kg	0.5	<0.5	<0.5	-	-
			Diazinon (Dimpylate)	mg/kg	0.5	2.1	<0.5	2	104
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	-	-
			Malathion	mg/kg	0.2	<0.2	<0.2	-	-
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.1	<0.2	2	103
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	-	-
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	-	-
			Methidathion	mg/kg	0.5	<0.5	<0.5	-	-
			Ethion	mg/kg	0.2	1.9	<0.2	2	93
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	-	-
			Total OP Pesticides*	mg/kg	1.7	8.5	<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	83
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	85

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208392.001	LB203792.004	Naphthalene	mg/kg	0.1	4.1	<0.1	4	101
		2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Acenaphthylene	mg/kg	0.1	4.1	<0.1	4	101
		Acenaphthene	mg/kg	0.1	4.2	<0.1	4	105
		Fluorene	mg/kg	0.1	<0.1	<0.1	-	-
		Phenanthrene	mg/kg	0.1	4.1	<0.1	4	100
		Anthracene	mg/kg	0.1	4.0	<0.1	4	99
		Fluoranthene	mg/kg	0.1	4.6	0.2	4	108
		Pyrene	mg/kg	0.1	4.7	0.3	4	111
		Benzo(a)anthracene	mg/kg	0.1	<0.1	0.1	-	-
		Chrysene	mg/kg	0.1	<0.1	0.1	-	-
		Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	0.1	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208392.001	LB203792.004		Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(a)pyrene	mg/kg	0.1	4.0	0.1	4	98
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	4.0	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	4.2	<0.3	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	4.1	0.2	-	-
			Total PAH (18)	mg/kg	0.8	34	1.1	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	-	89
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	83
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	85

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208392.001	LB203792.004		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1260	mg/kg	0.2	0.4	<0.2	0.4	90
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	-	-
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	-	107

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208392.001	LB203792.004		Phenol	mg/kg	0.5	0.7	<0.5	1	72
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	-	-
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	-	-
			Total Cresol	mg/kg	1.5	<1.5	<1.5	-	-
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	-	-
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	-	-
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	-	-
			2,4-dichlorophenol	mg/kg	0.5	0.7	<0.5	1	74
			2,4,6-trichlorophenol	mg/kg	0.5	0.9	<0.5	1	89
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	-	-
			4-nitrophenol	mg/kg	1	<1	<1	-	-
			2,4,5-trichlorophenol	mg/kg	0.5	0.7	<0.5	-	-
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	-	-
			Pentachlorophenol	mg/kg	0.5	0.9	<0.5	1	93
			2,4-dinitrophenol	mg/kg	2	<2	<2	-	-
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	-	-
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.9	3.7	-	78
			d5-phenol (Surrogate)	mg/kg	-	1.5	1.5	-	77

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208327.001	LB203819.004	Arsenic, As	mg/kg	1	65	18	50	94
		Cadmium, Cd	mg/kg	0.3	44	0.4	50	88
		Chromium, Cr	mg/kg	0.5	55	7.6	50	94
		Copper, Cu	mg/kg	0.5	88	76	50	24 ④
		Nickel, Ni	mg/kg	0.5	59	14	50	90
		Lead, Pb	mg/kg	1	120	79	50	76
		Zinc, Zn	mg/kg	2	280	200	50	156 ④

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number	Parameter	Units	LOR

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208392.001	LB203792.004		TRH C10-C14	mg/kg	20	37	<20	40	93
			TRH C15-C28	mg/kg	45	<45	<45	40	73
			TRH C29-C36	mg/kg	45	<45	<45	40	88
			TRH C37-C40	mg/kg	100	<100	<100	-	-
			TRH C10-C36 Total	mg/kg	110	<110	<110	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25	34	<25	40	85
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	34	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	40	83
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	-	-

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208392.001	LB203787.004	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	-	-
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	-	-
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	-	-
			Bromomethane	mg/kg	1	<1	<1	-	-
			Chloroethane	mg/kg	1	<1	<1	-	-
			Trichlorofluoromethane	mg/kg	1	<1	<1	-	-
			Iodomethane	mg/kg	5	<5	<5	-	-
			1,1-dichloroethene	mg/kg	0.1	4.8	<0.1	5	97
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	-	-
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloroethane	mg/kg	0.1	4.8	<0.1	5	95
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	-	-
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	4.2	<0.1	5	85
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	-	-
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated	Chlorobenzene	mg/kg	0.1	4.8	<0.1	5	96
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Monocyclic	Benzene	mg/kg	0.1	4.2	<0.1	5	84
		Aromatic	Toluene	mg/kg	0.1	4.3	<0.1	5	85
			Ethylbenzene	mg/kg	0.1	4.4	<0.1	5	87
			m/p-xylene	mg/kg	0.2	8.6	<0.2	10	86

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208392.001	LB203787.004	Monocyclic Aromatic	o-xylene	mg/kg	0.1	4.5	<0.1	5	89
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	-	-
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	-	-
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	-	-
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	-	-
			2-nitropropane	mg/kg	10	<10	<10	-	-
		Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10	<10	-	-
			MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	-	-
			Vinyl acetate	mg/kg	10	<10	<10	-	-
			MEK (2-butanone)	mg/kg	10	<10	<10	-	-
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	-	-
			2-hexanone (MBK)	mg/kg	5	<5	<5	-	-
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.2	8.1	10	82
			d8-toluene (Surrogate)	mg/kg	-	8.3	8.1	10	83
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.8	9.1	10	88
		Totals	Total Xylenes	mg/kg	0.3	13	<0.3	-	-
			Total BTEX	mg/kg	0.6	26	<0.6	-	-
			Total VOC*	mg/kg	24	49	<24	-	-
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	-	-
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	23	<1.8	-	-
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	23	<1.8	-	-
		Trihalomethanes	Chloroform	mg/kg	0.1	4.4	<0.1	5	88
			Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Bromoform	mg/kg	0.1	<0.1	<0.1	-	-

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208392.001	LB203787.004		TRH C6-C10	mg/kg	25	63	<25	92.5	69
			TRH C6-C9	mg/kg	20	57	<20	80	72
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.2	8.1	10	82
			d8-toluene (Surrogate)	mg/kg	-	8.3	8.1	10	83
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.8	9.1	-	88
		VPH F Bands	Benzene (F0)	mg/kg	0.1	4.2	<0.1	-	-
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	38	<25	62.5	60

MATRIX SPIKE DUPLICATES

SE208392 R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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ABN 29 001 584 612

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- ☑ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT: DHA	LABORATORY: SGS	Turnaround Time (TAT)	COC Number 1 of
PROJECT: Randwick Barracks	LABORATORY ADDRESS: SYD	☐ Standard TAT	
PROJECT NUMBER: 610.30041	SAMPLER: [redacted]	☐ Non Standard or Urgent TAT	
PROJECT MANAGER: [redacted]	SAMPLER CONTACT No:	Required TAT:	
PM CONTACT No:	Email Reports and Invoices to: WRSYD@slrconsulting.com		

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	Additional Information (Comment on any gross contamination or specific requirements)
1	0407_SP008_01_200702	02.7.20	Soil		X	
2	0407_SP008_02_200702				X	
3	0407_SP008_03_200702				X	
4	0407_SP009_01_200702				X	
5	0407_SP009_02_200702				X	
6	0407_SP009_03_200702				X	
7	0407_SP013_01_200702				X	
8	0407_SP013_02_200702				X	
9	0407_SP013_03_200702				X	
10	0407_SP014_01_200702				X	
11	0407_SP014_02_200702				X	
12	0407_SP014_03_200702				X	

SGS EHS Sydney COC

SE208242

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	Received by	Sign [redacted]	Date / Time 02/07/20	Temperature Received:
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time @4:30	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☑ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Stuart Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: C/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT:	DHA	LABORATORY:	SGS
PROJECT:	Randwick Barracks	LABORATORY ADDRESS:	SYD
PROJECT NUMBER:	610.30041	SAMPLER:	[redacted]
PROJECT MANAGER:	[redacted]	SAMPLER CONTACT No:	
PM CONTACT No:		Email Reports and Invoices to:	LQRSYD@slrconsulting.com

Turnaround Time (TAT)

☑ Standard TAT

☐ Non Standard or Urgent TAT

Required TAT:

COC Number 2 of

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A.								Additional Information (Comment on any gross contamination or specific requirements)
13	0407_SP008_04_200702	2-7-20	Soil		X								
14	0407_SP018_01_200702	"	"		X								
15	0407_SP018_02_200702	"	"		X								
16	0407_SP018_03_200702	"	"		X								

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	Received by	Sign	[redacted]	Date / Time 02/07/20	Temperature Received:
Relinquished By	Sign	Date / Time	Received by	Sign		Date / Time @ 4:30	
Relinquished By	Sign	Date / Time	Received by	Sign		Date / Time	

SAMPLE RECEIPT ADVICE

SE208242

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000700**
Samples	16

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Thu 2/7/2020
Report Due	Fri 10/7/2020
SGS Reference	**SE208242**

SUBMISSION DETAILS

This is to confirm that 16 samples were received on Thursday 2/7/2020. Results are expected to be ready by COB Friday 10/7/2020. Please quote SGS reference SE208242 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	16 Soil
Date documentation received	2/7/2020	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	3.5°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

This document is issued by the Company under its General Conditions of Service accessible at www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

SAMPLE RECEIPT ADVICE

SE208242

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	Speciated Phenols in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
001	0407_SP008_01_200702	29	14	26	11	18	10	81	7
002	0407_SP008_02_200702	29	14	26	11	18	10	81	7
003	0407_SP008_03_200702	29	14	26	11	18	10	81	7
004	0407_SP009_01_200702	29	14	26	11	18	10	81	7
005	0407_SP009_02_200702	29	14	26	11	18	10	81	7
006	0407_SP009_03_200702	29	14	26	11	18	10	81	7
007	0407_SP013_01_200702	29	14	26	11	18	10	81	7
008	0407_SP013_02_200702	29	14	26	11	18	10	81	7
009	0407_SP013_03_200702	29	14	26	11	18	10	81	7
010	0407_SP014_01_200702	29	14	26	11	18	10	81	7
011	0407_SP014_02_200702	29	14	26	11	18	10	81	7
012	0407_SP014_03_200702	29	14	26	11	18	10	81	7
013	0407_SP008_04_200702	29	14	26	11	18	10	81	7
014	0407_SP018_01_200702	29	14	26	11	18	10	81	7
015	0407_SP018_02_200702	29	14	26	11	18	10	81	7
016	0407_SP018_03_200702	29	14	26	11	18	10	81	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE208242

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Fibre Identification in soil	Gravimetric Determination of Asbestos in Soil	Mercury in Soil	Moisture Content	Total Recoverable Elements in Soil/Waste
001	0407_SP008_01_200702	2	9	1	1	7
002	0407_SP008_02_200702	2	9	1	1	7
003	0407_SP008_03_200702	2	9	1	1	7
004	0407_SP009_01_200702	2	9	1	1	7
005	0407_SP009_02_200702	2	9	1	1	7
006	0407_SP009_03_200702	2	9	1	1	7
007	0407_SP013_01_200702	2	9	1	1	7
008	0407_SP013_02_200702	2	9	1	1	7
009	0407_SP013_03_200702	2	9	1	1	7
010	0407_SP014_01_200702	2	9	1	1	7
011	0407_SP014_02_200702	2	9	1	1	7
012	0407_SP014_03_200702	2	9	1	1	7
013	0407_SP008_04_200702	2	9	1	1	7
014	0407_SP018_01_200702	2	9	1	1	7
015	0407_SP018_02_200702	2	9	1	1	7
016	0407_SP018_03_200702	2	9	1	1	7

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000700**
Samples	16

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208242 R0**
Date Received	2/7/2020
Date Reported	13/7/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.

Asbestos analysed by Approved Identifier Yusuf Kuthpudin.

SIGNATORIES

[redacted]

Chemist | Senior Organic Chemist/Metals Chemist | Metals/Inorganics Team Leader

[redacted]

Organic Section Head | Asbestos Analyst

VOC's in Soil [AN433] Tested: 7/7/2020

PARAMETER	UOM	LOR	0407_SP008_01_20002 SOIL - 2/7/2020 SE208242.001	0407_SP008_02_20002 SOIL - 2/7/2020 SE208242.002	0407_SP008_03_20002 SOIL - 2/7/2020 SE208242.003	0407_SP009_01_20002 SOIL - 2/7/2020 SE208242.004	0407_SP009_02_20002 SOIL - 2/7/2020 SE208242.005
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 7/7/2020 (continued)

PARAMETER	UOM	LOR	0407_SP008_01_20002 SOIL - 2/7/2020 SE208242.001	0407_SP008_02_20002 SOIL - 2/7/2020 SE208242.002	0407_SP008_03_20002 SOIL - 2/7/2020 SE208242.003	0407_SP009_01_20002 SOIL - 2/7/2020 SE208242.004	0407_SP009_02_20002 SOIL - 2/7/2020 SE208242.005
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 7/7/2020 (continued)

PARAMETER	UOM	LOR	0407_SP009_03_20002 SOIL - 2/7/2020 SE208242.006	0407_SP013_01_20002 SOIL - 2/7/2020 SE208242.007	0407_SP013_02_20002 SOIL - 2/7/2020 SE208242.008	0407_SP013_03_20002 SOIL - 2/7/2020 SE208242.009	0407_SP014_01_20002 SOIL - 2/7/2020 SE208242.010
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 7/7/2020 (continued)

PARAMETER	UOM	LOR	0407_SP009_03_20002 SOIL - 2/7/2020 SE208242.006	0407_SP013_01_20002 SOIL - 2/7/2020 SE208242.007	0407_SP013_02_20002 SOIL - 2/7/2020 SE208242.008	0407_SP013_03_20002 SOIL - 2/7/2020 SE208242.009	0407_SP014_01_20002 SOIL - 2/7/2020 SE208242.010
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 7/7/2020 (continued)

PARAMETER	UOM	LOR	0407_SP014_02_20002 SOIL - 2/7/2020 SE208242.011	0407_SP014_03_20002 SOIL - 2/7/2020 SE208242.012	0407_SP008_04_20002 SOIL - 2/7/2020 SE208242.013	0407_SP018_01_20002 SOIL - 2/7/2020 SE208242.014	0407_SP018_02_20002 SOIL - 2/7/2020 SE208242.015
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 7/7/2020 (continued)

PARAMETER	UOM	LOR	0407_SP014_02_20002 SOIL - 2/7/2020 SE208242.011	0407_SP014_03_20002 SOIL - 2/7/2020 SE208242.012	0407_SP008_04_20002 SOIL - 2/7/2020 SE208242.013	0407_SP018_01_20002 SOIL - 2/7/2020 SE208242.014	0407_SP018_02_20002 SOIL - 2/7/2020 SE208242.015
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 7/7/2020 (continued)

PARAMETER	UOM	LOR	0407_SP018_03_20002 SOIL - 2/7/2020 SE208242.016
Benzene	mg/kg	0.1	<0.1
Toluene	mg/kg	0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2
o-xylene	mg/kg	0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
Chloromethane	mg/kg	1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
Bromomethane	mg/kg	1	<1
Chloroethane	mg/kg	1	<1
Trichlorofluoromethane	mg/kg	1	<1
Acetone (2-propanone)	mg/kg	10	<10
Iodomethane	mg/kg	5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1
Vinyl acetate	mg/kg	10	<10
MEK (2-butanone)	mg/kg	10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1
Chloroform	mg/kg	0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
2-nitropropane	mg/kg	10	<10
Bromodichloromethane	mg/kg	0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1
Bromoform	mg/kg	0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1

VOC's in Soil [AN433] Tested: 7/7/2020 (continued)

PARAMETER	UOM	LOR	0407_SP018_03_20002 SOIL - 2/7/2020 SE208242.016
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
Total VOC*	mg/kg	24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 7/7/2020

PARAMETER	UOM	LOR	0407_SP008_01_20002 SOIL - 2/7/2020 SE208242.001	0407_SP008_02_20002 SOIL - 2/7/2020 SE208242.002	0407_SP008_03_20002 SOIL - 2/7/2020 SE208242.003	0407_SP009_01_20002 SOIL - 2/7/2020 SE208242.004	0407_SP009_02_20002 SOIL - 2/7/2020 SE208242.005
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_SP009_03_20002 SOIL - 2/7/2020 SE208242.006	0407_SP013_01_20002 SOIL - 2/7/2020 SE208242.007	0407_SP013_02_20002 SOIL - 2/7/2020 SE208242.008	0407_SP013_03_20002 SOIL - 2/7/2020 SE208242.009	0407_SP014_01_20002 SOIL - 2/7/2020 SE208242.010
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_SP014_02_20002 SOIL - 2/7/2020 SE208242.011	0407_SP014_03_20002 SOIL - 2/7/2020 SE208242.012	0407_SP008_04_20002 SOIL - 2/7/2020 SE208242.013	0407_SP018_01_20002 SOIL - 2/7/2020 SE208242.014	0407_SP018_02_20002 SOIL - 2/7/2020 SE208242.015
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_SP018_03_20002 SOIL - 2/7/2020 SE208242.016
Benzene (F0)	mg/kg	0.1	<0.1
TRH C6-C9	mg/kg	20	<20
TRH C6-C10	mg/kg	25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 7/7/2020

PARAMETER	UOM	LOR	0407_SP008_01_20002 SOIL - 2/7/2020 SE208242.001	0407_SP008_02_20002 SOIL - 2/7/2020 SE208242.002	0407_SP008_03_20002 SOIL - 2/7/2020 SE208242.003	0407_SP009_01_20002 SOIL - 2/7/2020 SE208242.004	0407_SP009_02_20002 SOIL - 2/7/2020 SE208242.005
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	**66**	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_SP009_03_20002 SOIL - 2/7/2020 SE208242.006	0407_SP013_01_20002 SOIL - 2/7/2020 SE208242.007	0407_SP013_02_20002 SOIL - 2/7/2020 SE208242.008	0407_SP013_03_20002 SOIL - 2/7/2020 SE208242.009	0407_SP014_01_20002 SOIL - 2/7/2020 SE208242.010
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	**74**
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	**130**
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	**150**
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	**200**
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_SP014_02_20002 SOIL - 2/7/2020 SE208242.011	0407_SP014_03_20002 SOIL - 2/7/2020 SE208242.012	0407_SP008_04_20002 SOIL - 2/7/2020 SE208242.013	0407_SP018_01_20002 SOIL - 2/7/2020 SE208242.014	0407_SP018_02_20002 SOIL - 2/7/2020 SE208242.015
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	**60**	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	**87**	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	**120**	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	**150**	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 7/7/2020 (continued)

PARAMETER	UOM	LOR	0407_SP018_03_20002 SOIL - 2/7/2020 SE208242.016
TRH C10-C14	mg/kg	20	<20
TRH C15-C28	mg/kg	45	<45
TRH C29-C36	mg/kg	45	<45
TRH C37-C40	mg/kg	100	<100
TRH >C10-C16	mg/kg	25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120
TRH C10-C36 Total	mg/kg	110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 7/7/2020

PARAMETER	UOM	LOR	0407_SP008_01_20002 SOIL - 2/7/2020 SE208242.001	0407_SP008_02_20002 SOIL - 2/7/2020 SE208242.002	0407_SP008_03_20002 SOIL - 2/7/2020 SE208242.003	0407_SP009_01_20002 SOIL - 2/7/2020 SE208242.004	0407_SP009_02_20002 SOIL - 2/7/2020 SE208242.005
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	0.2	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	0.1	<0.1
Phenanthrene	mg/kg	0.1	0.1	1.0	0.2	2.7	0.4
Anthracene	mg/kg	0.1	<0.1	0.2	<0.1	0.9	0.1
Fluoranthene	mg/kg	0.1	0.3	3.3	0.8	3.3	0.8
Pyrene	mg/kg	0.1	0.3	3.1	0.9	3.4	0.8
Benzo(a)anthracene	mg/kg	0.1	0.1	1.1	0.3	1.6	0.5
Chrysene	mg/kg	0.1	0.2	1.2	0.4	1.5	0.4
Benzo(b&j)fluoranthene	mg/kg	0.1	0.2	1.2	0.5	1.5	0.5
Benzo(k)fluoranthene	mg/kg	0.1	0.1	1.3	0.3	0.7	0.2
Benzo(a)pyrene	mg/kg	0.1	0.2	1.8	0.5	1.7	0.5
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.1	1.1	0.4	1.0	0.3
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	0.1	<0.1	0.2	<0.1
Benzo(ghi)perylene	mg/kg	0.1	0.1	1.1	0.4	1.1	0.3
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	0.3	2.4	0.7	2.4	0.7
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	0.4	2.4	0.8	2.4	0.8
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	0.3	2.4	0.7	2.4	0.8
Total PAH (18)	mg/kg	0.8	1.9	16	4.6	20	4.9
Total PAH (NEPM/WHO 16)	mg/kg	0.8	1.9	16	4.6	20	4.9

PARAMETER	UOM	LOR	0407_SP009_03_20002 SOIL - 2/7/2020 SE208242.006	0407_SP013_01_20002 SOIL - 2/7/2020 SE208242.007	0407_SP013_02_20002 SOIL - 2/7/2020 SE208242.008	0407_SP013_03_20002 SOIL - 2/7/2020 SE208242.009	0407_SP014_01_20002 SOIL - 2/7/2020 SE208242.010
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	0.2	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	0.4	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	0.4	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	0.2	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	0.2	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	0.2	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	0.2	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	0.3	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.2	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	0.2	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	0.4	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	0.5	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	0.4	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	2.4	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	2.4	<0.8	<0.8	<0.8	<0.8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 7/7/2020 (continued)

PARAMETER	UOM	LOR	0407_SP014_02_20002 SOIL - 2/7/2020 SE208242.011	0407_SP014_03_20002 SOIL - 2/7/2020 SE208242.012	0407_SP008_04_20002 SOIL - 2/7/2020 SE208242.013	0407_SP018_01_20002 SOIL - 2/7/2020 SE208242.014	0407_SP018_02_20002 SOIL - 2/7/2020 SE208242.015
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	0.1	0.1	<0.1	0.5	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	0.1	<0.1
Fluoranthene	mg/kg	0.1	0.3	0.4	0.2	0.8	<0.1
Pyrene	mg/kg	0.1	0.4	0.4	0.3	0.8	<0.1
Benzo(a)anthracene	mg/kg	0.1	0.2	0.2	0.1	0.3	<0.1
Chrysene	mg/kg	0.1	0.2	0.4	0.3	0.7	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	0.2	0.4	0.3	0.6	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	0.1	0.2	0.2	0.2	<0.1
Benzo(a)pyrene	mg/kg	0.1	0.2	0.3	0.2	0.4	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.1	0.1	0.1	0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	0.2	0.2	0.1	0.2	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	0.3	0.3	0.3	0.5	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	0.4	0.4	0.4	0.6	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	0.3	0.4	0.3	0.5	<0.2
Total PAH (18)	mg/kg	0.8	2.1	2.3	1.7	4.6	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	2.1	2.3	1.7	4.6	<0.8

PARAMETER	UOM	LOR	0407_SP018_03_20002 SOIL - 2/7/2020 SE208242.016
Naphthalene	mg/kg	0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1
Fluorene	mg/kg	0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1
Anthracene	mg/kg	0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1
Pyrene	mg/kg	0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1
Chrysene	mg/kg	0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8

Speciated Phenols in Soil [AN420] Tested: 7/7/2020

PARAMETER	UOM	LOR	0407_SP008_01_20002 SOIL - 2/7/2020 SE208242.001	0407_SP008_02_20002 SOIL - 2/7/2020 SE208242.002	0407_SP008_03_20002 SOIL - 2/7/2020 SE208242.003	0407_SP009_01_20002 SOIL - 2/7/2020 SE208242.004	0407_SP009_02_20002 SOIL - 2/7/2020 SE208242.005
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_SP009_03_20002 SOIL - 2/7/2020 SE208242.006	0407_SP013_01_20002 SOIL - 2/7/2020 SE208242.007	0407_SP013_02_20002 SOIL - 2/7/2020 SE208242.008	0407_SP013_03_20002 SOIL - 2/7/2020 SE208242.009	0407_SP014_01_20002 SOIL - 2/7/2020 SE208242.010
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

Speciated Phenols in Soil [AN420] Tested: 7/7/2020 (continued)

PARAMETER	UOM	LOR	0407_SP014_02_20002 SOIL - 2/7/2020 SE208242.011	0407_SP014_03_20002 SOIL - 2/7/2020 SE208242.012	0407_SP008_04_20002 SOIL - 2/7/2020 SE208242.013	0407_SP018_01_20002 SOIL - 2/7/2020 SE208242.014	0407_SP018_02_20002 SOIL - 2/7/2020 SE208242.015
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_SP018_03_20002 SOIL - 2/7/2020 SE208242.016
Phenol	mg/kg	0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
Total Cresol	mg/kg	1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5
4-nitrophenol	mg/kg	1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
Pentachlorophenol	mg/kg	0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2
4-chloro-3-methylphenol	mg/kg	2	<2

OC Pesticides in Soil [AN420] Tested: 7/7/2020

PARAMETER	UOM	LOR	0407_SP008_01_20002 SOIL - 2/7/2020 SE208242.001	0407_SP008_02_20002 SOIL - 2/7/2020 SE208242.002	0407_SP008_03_20002 SOIL - 2/7/2020 SE208242.003	0407_SP009_01_20002 SOIL - 2/7/2020 SE208242.004	0407_SP009_02_20002 SOIL - 2/7/2020 SE208242.005
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 7/7/2020 (continued)

PARAMETER	UOM	LOR	0407_SP009_03_20002 SOIL - 2/7/2020 SE208242.006	0407_SP013_01_20002 SOIL - 2/7/2020 SE208242.007	0407_SP013_02_20002 SOIL - 2/7/2020 SE208242.008	0407_SP013_03_20002 SOIL - 2/7/2020 SE208242.009	0407_SP014_01_20002 SOIL - 2/7/2020 SE208242.010
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 7/7/2020 (continued)

PARAMETER	UOM	LOR	0407_SP014_02_20002 SOIL - 2/7/2020 SE208242.011	0407_SP014_03_20002 SOIL - 2/7/2020 SE208242.012	0407_SP008_04_20002 SOIL - 2/7/2020 SE208242.013	0407_SP018_01_20002 SOIL - 2/7/2020 SE208242.014	0407_SP018_02_20002 SOIL - 2/7/2020 SE208242.015
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 7/7/2020 (continued)

PARAMETER	UOM	LOR	0407_SP018_03_20002 SOIL - 2/7/2020 SE208242.016
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1
Lindane	mg/kg	0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1
Aldrin	mg/kg	0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2
Endrin	mg/kg	0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1
Isodrin	mg/kg	0.1	<0.1
Mirex	mg/kg	0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1

OP Pesticides in Soil [AN420] Tested: 7/7/2020

PARAMETER	UOM	LOR	0407_SP008_01_20002 SOIL - 2/7/2020 SE208242.001	0407_SP008_02_20002 SOIL - 2/7/2020 SE208242.002	0407_SP008_03_20002 SOIL - 2/7/2020 SE208242.003	0407_SP009_01_20002 SOIL - 2/7/2020 SE208242.004	0407_SP009_02_20002 SOIL - 2/7/2020 SE208242.005
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_SP009_03_20002 SOIL - 2/7/2020 SE208242.006	0407_SP013_01_20002 SOIL - 2/7/2020 SE208242.007	0407_SP013_02_20002 SOIL - 2/7/2020 SE208242.008	0407_SP013_03_20002 SOIL - 2/7/2020 SE208242.009	0407_SP014_01_20002 SOIL - 2/7/2020 SE208242.010
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_SP014_02_20002 SOIL - 2/7/2020 SE208242.011	0407_SP014_03_20002 SOIL - 2/7/2020 SE208242.012	0407_SP008_04_20002 SOIL - 2/7/2020 SE208242.013	0407_SP018_01_20002 SOIL - 2/7/2020 SE208242.014	0407_SP018_02_20002 SOIL - 2/7/2020 SE208242.015
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

OP Pesticides in Soil [AN420] Tested: 7/7/2020 (continued)

PARAMETER	UOM	LOR	0407_SP018_03_20002 SOIL - 2/7/2020 SE208242.016
Dichlorvos	mg/kg	0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2
Malathion	mg/kg	0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2
Methidathion	mg/kg	0.5	<0.5
Ethion	mg/kg	0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7

PCBs in Soil [AN420] Tested: 7/7/2020

PARAMETER	UOM	LOR	0407_SP008_01_20002 SOIL - 2/7/2020 SE208242.001	0407_SP008_02_20002 SOIL - 2/7/2020 SE208242.002	0407_SP008_03_20002 SOIL - 2/7/2020 SE208242.003	0407_SP009_01_20002 SOIL - 2/7/2020 SE208242.004	0407_SP009_02_20002 SOIL - 2/7/2020 SE208242.005
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_SP009_03_20002 SOIL - 2/7/2020 SE208242.006	0407_SP013_01_20002 SOIL - 2/7/2020 SE208242.007	0407_SP013_02_20002 SOIL - 2/7/2020 SE208242.008	0407_SP013_03_20002 SOIL - 2/7/2020 SE208242.009	0407_SP014_01_20002 SOIL - 2/7/2020 SE208242.010
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_SP014_02_20002 SOIL - 2/7/2020 SE208242.011	0407_SP014_03_20002 SOIL - 2/7/2020 SE208242.012	0407_SP008_04_20002 SOIL - 2/7/2020 SE208242.013	0407_SP018_01_20002 SOIL - 2/7/2020 SE208242.014	0407_SP018_02_20002 SOIL - 2/7/2020 SE208242.015
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PCBs in Soil [AN420] Tested: 7/7/2020 (continued)

PARAMETER	UOM	LOR	0407_SP018_03_20002 SOIL - 2/7/2020 SE208242.016
Arochlor 1016	mg/kg	0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 7/7/2020

PARAMETER	UOM	LOR	0407_SP008_01_20002 SOIL - 2/7/2020 SE208242.001	0407_SP008_02_20002 SOIL - 2/7/2020 SE208242.002	0407_SP008_03_20002 SOIL - 2/7/2020 SE208242.003	0407_SP009_01_20002 SOIL - 2/7/2020 SE208242.004	0407_SP009_02_20002 SOIL - 2/7/2020 SE208242.005
Arsenic, As	mg/kg	1	2	1	1	2	2
Cadmium, Cd	mg/kg	0.3	0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	5.8	3.2	2.7	6.3	4.3
Copper, Cu	mg/kg	0.5	26	11	19	28	21
Lead, Pb	mg/kg	1	120	49	46	47	54
Nickel, Ni	mg/kg	0.5	11	2.0	3.3	7.8	3.0
Zinc, Zn	mg/kg	2	130	34	66	50	55

PARAMETER	UOM	LOR	0407_SP009_03_20002 SOIL - 2/7/2020 SE208242.006	0407_SP013_01_20002 SOIL - 2/7/2020 SE208242.007	0407_SP013_02_20002 SOIL - 2/7/2020 SE208242.008	0407_SP013_03_20002 SOIL - 2/7/2020 SE208242.009	0407_SP014_01_20002 SOIL - 2/7/2020 SE208242.010
Arsenic, As	mg/kg	1	2	1	1	1	7
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	6.7	4.6	5.5	4.9	11
Copper, Cu	mg/kg	0.5	16	2.0	2.2	2.1	20
Lead, Pb	mg/kg	1	39	4	5	5	22
Nickel, Ni	mg/kg	0.5	4.9	1.9	2.1	2.0	5.1
Zinc, Zn	mg/kg	2	44	5.6	6.4	5.6	70

PARAMETER	UOM	LOR	0407_SP014_02_20002 SOIL - 2/7/2020 SE208242.011	0407_SP014_03_20002 SOIL - 2/7/2020 SE208242.012	0407_SP008_04_20002 SOIL - 2/7/2020 SE208242.013	0407_SP018_01_20002 SOIL - 2/7/2020 SE208242.014	0407_SP018_02_20002 SOIL - 2/7/2020 SE208242.015
Arsenic, As	mg/kg	1	3	2	2	2	2
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	5.6	3.8	2.9	6.6	5.1
Copper, Cu	mg/kg	0.5	29	27	12	12	7.8
Lead, Pb	mg/kg	1	210	74	51	12	8
Nickel, Ni	mg/kg	0.5	3.9	2.9	3.1	4.9	3.3
Zinc, Zn	mg/kg	2	91	64	40	77	31

PARAMETER	UOM	LOR	0407_SP018_03_20002 SOIL - 2/7/2020 SE208242.016
Arsenic, As	mg/kg	1	3
Cadmium, Cd	mg/kg	0.3	<0.3
Chromium, Cr	mg/kg	0.5	7.1
Copper, Cu	mg/kg	0.5	8.3
Lead, Pb	mg/kg	1	13
Nickel, Ni	mg/kg	0.5	4.1
Zinc, Zn	mg/kg	2	23

Mercury in Soil [AN312] Tested: 7/7/2020

PARAMETER	UOM	LOR	0407_SP008_01_20002 SOIL - 2/7/2020 SE208242.001	0407_SP008_02_20002 SOIL - 2/7/2020 SE208242.002	0407_SP008_03_20002 SOIL - 2/7/2020 SE208242.003	0407_SP009_01_20002 SOIL - 2/7/2020 SE208242.004	0407_SP009_02_20002 SOIL - 2/7/2020 SE208242.005
Mercury	mg/kg	0.05	**0.17**	**0.08**	**0.08**	**0.05**	<0.05

PARAMETER	UOM	LOR	0407_SP009_03_20002 SOIL - 2/7/2020 SE208242.006	0407_SP013_01_20002 SOIL - 2/7/2020 SE208242.007	0407_SP013_02_20002 SOIL - 2/7/2020 SE208242.008	0407_SP013_03_20002 SOIL - 2/7/2020 SE208242.009	0407_SP014_01_20002 SOIL - 2/7/2020 SE208242.010
Mercury	mg/kg	0.05	**0.09**	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_SP014_02_20002 SOIL - 2/7/2020 SE208242.011	0407_SP014_03_20002 SOIL - 2/7/2020 SE208242.012	0407_SP008_04_20002 SOIL - 2/7/2020 SE208242.013	0407_SP018_01_20002 SOIL - 2/7/2020 SE208242.014	0407_SP018_02_20002 SOIL - 2/7/2020 SE208242.015
Mercury	mg/kg	0.05	**0.14**	**0.05**	**0.23**	<0.05	<0.05

PARAMETER	UOM	LOR	0407_SP018_03_20002 SOIL - 2/7/2020 SE208242.016
Mercury	mg/kg	0.05	<0.05

Moisture Content [AN002] Tested: 7/7/2020

PARAMETER	UOM	LOR	0407_SP008_01_20002 SOIL - 2/7/2020 SE208242.001	0407_SP008_02_20002 SOIL - 2/7/2020 SE208242.002	0407_SP008_03_20002 SOIL - 2/7/2020 SE208242.003	0407_SP009_01_20002 SOIL - 2/7/2020 SE208242.004	0407_SP009_02_20002 SOIL - 2/7/2020 SE208242.005
% Moisture	%w/w	1	17.7	23.1	12.5	13.6	10.1

PARAMETER	UOM	LOR	0407_SP009_03_20002 SOIL - 2/7/2020 SE208242.006	0407_SP013_01_20002 SOIL - 2/7/2020 SE208242.007	0407_SP013_02_20002 SOIL - 2/7/2020 SE208242.008	0407_SP013_03_20002 SOIL - 2/7/2020 SE208242.009	0407_SP014_01_20002 SOIL - 2/7/2020 SE208242.010
% Moisture	%w/w	1	12.9	10.4	18.6	18.0	11.5

PARAMETER	UOM	LOR	0407_SP014_02_20002 SOIL - 2/7/2020 SE208242.011	0407_SP014_03_20002 SOIL - 2/7/2020 SE208242.012	0407_SP008_04_20002 SOIL - 2/7/2020 SE208242.013	0407_SP018_01_20002 SOIL - 2/7/2020 SE208242.014	0407_SP018_02_20002 SOIL - 2/7/2020 SE208242.015
% Moisture	%w/w	1	13.4	10.6	12.1	43.9	21.7

PARAMETER	UOM	LOR	0407_SP018_03_20002 SOIL - 2/7/2020 SE208242.016
% Moisture	%w/w	1	14.7

Fibre Identification in soil [AN602] Tested: 8/7/2020

PARAMETER	UOM	LOR	0407_SP008_01_20002 SOIL - 2/7/2020 SE208242.001	0407_SP008_02_20002 SOIL - 2/7/2020 SE208242.002	0407_SP008_03_20002 SOIL - 2/7/2020 SE208242.003	0407_SP009_01_20002 SOIL - 2/7/2020 SE208242.004	0407_SP009_02_20002 SOIL - 2/7/2020 SE208242.005
Asbestos Detected	No unit	-	No	No	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	0407_SP009_03_20002 SOIL - 2/7/2020 SE208242.006	0407_SP013_01_20002 SOIL - 2/7/2020 SE208242.007	0407_SP013_02_20002 SOIL - 2/7/2020 SE208242.008	0407_SP013_03_20002 SOIL - 2/7/2020 SE208242.009	0407_SP014_01_20002 SOIL - 2/7/2020 SE208242.010
Asbestos Detected	No unit	-	No	No	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	0407_SP014_02_20002 SOIL - 2/7/2020 SE208242.011	0407_SP014_03_20002 SOIL - 2/7/2020 SE208242.012	0407_SP008_04_20002 SOIL - 2/7/2020 SE208242.013	0407_SP018_01_20002 SOIL - 2/7/2020 SE208242.014	0407_SP018_02_20002 SOIL - 2/7/2020 SE208242.015
Asbestos Detected	No unit	-	No	No	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	0407_SP018_03_20002 SOIL - 2/7/2020 SE208242.016
Asbestos Detected	No unit	-	No
Estimated Fibres*	%w/w	0.01	<0.01

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 8/7/2020

PARAMETER	UOM	LOR	0407_SP008_01_20002 SOIL - 2/7/2020 SE208242.001	0407_SP008_02_20002 SOIL - 2/7/2020 SE208242.002	0407_SP008_03_20002 SOIL - 2/7/2020 SE208242.003	0407_SP009_01_20002 SOIL - 2/7/2020 SE208242.004	0407_SP009_02_20002 SOIL - 2/7/2020 SE208242.005
Total Sample Weight*	g	1	434	639	596	712	804
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_SP009_03_20002 SOIL - 2/7/2020 SE208242.006	0407_SP013_01_20002 SOIL - 2/7/2020 SE208242.007	0407_SP013_02_20002 SOIL - 2/7/2020 SE208242.008	0407_SP013_03_20002 SOIL - 2/7/2020 SE208242.009	0407_SP014_01_20002 SOIL - 2/7/2020 SE208242.010
Total Sample Weight*	g	1	905	623	676	854	527
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_SP014_02_20002 SOIL - 2/7/2020 SE208242.011	0407_SP014_03_20002 SOIL - 2/7/2020 SE208242.012	0407_SP008_04_20002 SOIL - 2/7/2020 SE208242.013	0407_SP018_01_20002 SOIL - 2/7/2020 SE208242.014	0407_SP018_02_20002 SOIL - 2/7/2020 SE208242.015
Total Sample Weight*	g	1	622	599	641	199	579
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_SP018_03_20002 SOIL - 2/7/2020 SE208242.016
Total Sample Weight*	g	1	604
Bonded ACM in >7mm Sample*	g	0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001
Fibre Type*	No unit	-	-

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid , mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser . Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC /MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents .
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup /fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS /ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples, Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable ’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.
AN605	This technique gravimetrically determines the mass of Bonded Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight. Any fibrous asbestos (FA) found in this fraction will be added to the 2-7mm fraction and its mass recorded there.

AN605	This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free/respirable fibres which are only observed by standard trace analysis as per AN602.
AN605	Bonded asbestos containing material (Bonded ACM) comprises asbestos-containing-material which is sound in condition. Fibrous asbestos (FA) comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material. Asbestos fines (AF) includes free fibres, small fibre bundles and also small fragments of bonded ACM that passes through a 7mm sieve - which implies that the bonded ACM fragments have a substantial degree of damage which increases the potential for fibre release.
AN-605	Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009 and NEPM 1999 (2013) schedule B1 section 4..

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000700**
Samples	16

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
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Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208242 R0**
Date Received	02 Jul 2020
Date Reported	13 Jul 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.

Asbestos analysed by Approved Identifier Yusuf Kuthpudin .

SIGNATORIES

[redacted]

Chemist Senior Organic Chemist/Metals Chemis Organic Section Head

[redacted]

Asbestos Analyst

RESULTS

Fibre Identification in soil — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE208242.001	0407_SP008_01 _200702	Soil	434g Sand, Soil, Rocks	02 Jul 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208242.002	0407_SP008_02 _200702	Soil	639g Sand, Soil, Rocks	02 Jul 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208242.003	0407_SP008_03 _200702	Soil	596g Sand, Soil, Rocks	02 Jul 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208242.004	0407_SP009_01 _200702	Soil	712g Sand, Soil, Rocks	02 Jul 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208242.005	0407_SP009_02 _200702	Soil	804g Sand, Soil, Rocks, Plant matter	02 Jul 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208242.006	0407_SP009_03 _200702	Soil	905g Sand, Soil, Rocks	02 Jul 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208242.007	0407_SP013_01 _200702	Soil	623g Sand, Soil	02 Jul 2020	No Asbestos Found	<0.01
SE208242.008	0407_SP013_02 _200702	Soil	676g Sand, Soil	02 Jul 2020	No Asbestos Found	<0.01
SE208242.009	0407_SP013_03 _200702	Soil	854g Sand, Soil, Rocks	02 Jul 2020	No Asbestos Found	<0.01
SE208242.010	0407_SP014_01 _200702	Soil	527g Sand, Soil, Rocks, Plant matter	02 Jul 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208242.011	0407_SP014_02 _200702	Soil	622g Sand, Soil, Rocks	02 Jul 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208242.012	0407_SP014_03 _200702	Soil	599g Sand, Soil, Rocks	02 Jul 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208242.013	0407_SP008_04 _200702	Soil	641g Sand, Soil, Rocks, Plant matter	02 Jul 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208242.014	0407_SP018_01 _200702	Soil	199g Sand, Soil, Rocks, Plant matter	02 Jul 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208242.015	0407_SP018_02 _200702	Soil	579g Sand, Soil, Rocks, Plant matter	02 Jul 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208242.016	0407_SP018_03 _200702	Soil	604g Sand, Soil, Rocks	02 Jul 2020	No Asbestos Found Organic Fibres Detected	<0.01

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 8/7/2020

PARAMETER	UOM	LOR	0407_SP008_01_20000202 SOIL - 2/7/2020 SE208242.001	0407_SP008_02_20000202 SOIL - 2/7/2020 SE208242.002	0407_SP008_03_20000202 SOIL - 2/7/2020 SE208242.003	0407_SP009_01_20000202 SOIL - 2/7/2020 SE208242.004	0407_SP009_02_20000202 SOIL - 2/7/2020 SE208242.005
Total Sample Weight*	g	1	**434**	**639**	**596**	**712**	**804**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_SP009_03_20000202 SOIL - 2/7/2020 SE208242.006	0407_SP013_01_20000202 SOIL - 2/7/2020 SE208242.007	0407_SP013_02_20000202 SOIL - 2/7/2020 SE208242.008	0407_SP013_03_20000202 SOIL - 2/7/2020 SE208242.009	0407_SP014_01_20000202 SOIL - 2/7/2020 SE208242.010
Total Sample Weight*	g	1	**905**	**623**	**676**	**854**	**527**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_SP014_02_20000202 SOIL - 2/7/2020 SE208242.011	0407_SP014_03_20000202 SOIL - 2/7/2020 SE208242.012	0407_SP008_04_20000202 SOIL - 2/7/2020 SE208242.013	0407_SP018_01_20000202 SOIL - 2/7/2020 SE208242.014	0407_SP018_02_20000202 SOIL - 2/7/2020 SE208242.015
Total Sample Weight*	g	1	**622**	**599**	**641**	**199**	**579**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_SP018_03_20002 SOIL - 2/7/2020 SE208242.016
Total Sample Weight*	g	1	**604**
Bonded ACM in >7mm Sample*	g	0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001
Fibre Type*	No unit	-	-

METHOD SUMMARY

METHOD	METHODOLOGY SUMMARY
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples , Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable ’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.
AN605	This technique gravimetrically determines the mass of Bonded Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight. Any fibrous asbestos (FA) found in this fraction will be added to the 2-7mm fraction and its mass recorded there.
AN605	This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free/respirable fibres which are only observed by standard trace analysis as per AN602.
AN605	Bonded asbestos containing material (Bonded ACM) comprises asbestos-containing-material which is sound in condition. Fibrous asbestos (FA) comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material. Asbestos fines (AF) includes free fibres, small fibre bundles and also small fragments of bonded ACM that passes through a 7mm sieve - which implies that the bonded ACM fragments have a substantial degree of damage which increases the potential for fibre release.
AN-605	Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009 and NEPM 1999 (2013) schedule B1 section 4..

FOOTNOTES

Amosite	-	Brown Asbestos	NA	-	Not Analysed
Chrysotile	-	White Asbestos	LNR	-	Listed, Not Required
Crocidolite	-	Blue Asbestos	*	-	NATA accreditation does not cover the performance of this service.
Amphiboles	-	Amosite and/or Crocidolite	**	-	Indicative data, theoretical holding time exceeded.

(In reference to soil samples only) This report does not comply with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment and Remediation and Management of Asbestos Contaminated sites in Western Australia - May 2009.

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.

Where reported: 'Asbestos Detected': Asbestos detected by polarised light microscopy, including dispersion staining.
Where reported: 'No Asbestos Found': No Asbestos Found by polarised light microscopy, including dispersion staining.
Where reported: 'UMF Detected': Mineral fibres of unknown type detected by polarised light microscopy, including dispersion staining. Confirmation by another independent analytical technique may be necessary.

Even after disintegration it can be very difficult, or impossible, to detect the presence of asbestos in some asbestos-containing bulk materials using polarised light microscopy. This is due to the low grade or small length or diameter of asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE208242 R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000700**
Samples	16

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208242 R0**
Date Received	02 Jul 2020
Date Reported	13 Jul 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Matrix Spike	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	5 items
	TRH (Total Recoverable Hydrocarbons) in Soil	2 items
	Volatile Petroleum Hydrocarbons in Soil	1 item

SAMPLE SUMMARY

HOLDING TIME SUMMARY

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SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Fibre Identification in soil

Method: ME-(AU)-[ENV]AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SP008_01_200702	SE208242.001	LB203829	02 Jul 2020	02 Jul 2020	02 Jul 2021	08 Jul 2020	02 Jul 2021	10 Jul 2020
0407_SP008_02_200702	SE208242.002	LB203829	02 Jul 2020	02 Jul 2020	02 Jul 2021	08 Jul 2020	02 Jul 2021	10 Jul 2020
0407_SP008_03_200702	SE208242.003	LB203829	02 Jul 2020	02 Jul 2020	02 Jul 2021	08 Jul 2020	02 Jul 2021	10 Jul 2020
0407_SP009_01_200702	SE208242.004	LB203829	02 Jul 2020	02 Jul 2020	02 Jul 2021	08 Jul 2020	02 Jul 2021	10 Jul 2020
0407_SP009_02_200702	SE208242.005	LB203829	02 Jul 2020	02 Jul 2020	02 Jul 2021	08 Jul 2020	02 Jul 2021	10 Jul 2020
0407_SP009_03_200702	SE208242.006	LB203829	02 Jul 2020	02 Jul 2020	02 Jul 2021	08 Jul 2020	02 Jul 2021	10 Jul 2020
0407_SP013_01_200702	SE208242.007	LB203829	02 Jul 2020	02 Jul 2020	02 Jul 2021	08 Jul 2020	02 Jul 2021	10 Jul 2020
0407_SP013_02_200702	SE208242.008	LB203829	02 Jul 2020	02 Jul 2020	02 Jul 2021	08 Jul 2020	02 Jul 2021	10 Jul 2020
0407_SP013_03_200702	SE208242.009	LB203829	02 Jul 2020	02 Jul 2020	02 Jul 2021	08 Jul 2020	02 Jul 2021	10 Jul 2020
0407_SP014_01_200702	SE208242.010	LB203829	02 Jul 2020	02 Jul 2020	02 Jul 2021	08 Jul 2020	02 Jul 2021	10 Jul 2020
0407_SP014_02_200702	SE208242.011	LB203829	02 Jul 2020	02 Jul 2020	02 Jul 2021	08 Jul 2020	02 Jul 2021	10 Jul 2020
0407_SP014_03_200702	SE208242.012	LB203829	02 Jul 2020	02 Jul 2020	02 Jul 2021	08 Jul 2020	02 Jul 2021	10 Jul 2020
0407_SP008_04_200702	SE208242.013	LB203829	02 Jul 2020	02 Jul 2020	02 Jul 2021	08 Jul 2020	02 Jul 2021	10 Jul 2020
0407_SP018_01_200702	SE208242.014	LB203829	02 Jul 2020	02 Jul 2020	02 Jul 2021	08 Jul 2020	02 Jul 2021	10 Jul 2020
0407_SP018_02_200702	SE208242.015	LB203829	02 Jul 2020	02 Jul 2020	02 Jul 2021	08 Jul 2020	02 Jul 2021	10 Jul 2020
0407_SP018_03_200702	SE208242.016	LB203829	02 Jul 2020	02 Jul 2020	02 Jul 2021	08 Jul 2020	02 Jul 2021	10 Jul 2020

Gravimetric Determination of Asbestos in Soil

Method: ME-(AU)-[ENV]AN605

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SP008_01_200702	SE208242.001	LB203829	02 Jul 2020	02 Jul 2020	29 Dec 2020	08 Jul 2020	29 Dec 2020	10 Jul 2020
0407_SP008_02_200702	SE208242.002	LB203829	02 Jul 2020	02 Jul 2020	29 Dec 2020	08 Jul 2020	29 Dec 2020	10 Jul 2020
0407_SP008_03_200702	SE208242.003	LB203829	02 Jul 2020	02 Jul 2020	29 Dec 2020	08 Jul 2020	29 Dec 2020	10 Jul 2020
0407_SP009_01_200702	SE208242.004	LB203829	02 Jul 2020	02 Jul 2020	29 Dec 2020	08 Jul 2020	29 Dec 2020	10 Jul 2020
0407_SP009_02_200702	SE208242.005	LB203829	02 Jul 2020	02 Jul 2020	29 Dec 2020	08 Jul 2020	29 Dec 2020	10 Jul 2020
0407_SP009_03_200702	SE208242.006	LB203829	02 Jul 2020	02 Jul 2020	29 Dec 2020	08 Jul 2020	29 Dec 2020	10 Jul 2020
0407_SP013_01_200702	SE208242.007	LB203829	02 Jul 2020	02 Jul 2020	29 Dec 2020	08 Jul 2020	29 Dec 2020	10 Jul 2020
0407_SP013_02_200702	SE208242.008	LB203829	02 Jul 2020	02 Jul 2020	29 Dec 2020	08 Jul 2020	29 Dec 2020	10 Jul 2020
0407_SP013_03_200702	SE208242.009	LB203829	02 Jul 2020	02 Jul 2020	29 Dec 2020	08 Jul 2020	29 Dec 2020	10 Jul 2020
0407_SP014_01_200702	SE208242.010	LB203829	02 Jul 2020	02 Jul 2020	29 Dec 2020	08 Jul 2020	29 Dec 2020	10 Jul 2020
0407_SP014_02_200702	SE208242.011	LB203829	02 Jul 2020	02 Jul 2020	29 Dec 2020	08 Jul 2020	29 Dec 2020	10 Jul 2020
0407_SP014_03_200702	SE208242.012	LB203829	02 Jul 2020	02 Jul 2020	29 Dec 2020	08 Jul 2020	29 Dec 2020	10 Jul 2020
0407_SP008_04_200702	SE208242.013	LB203829	02 Jul 2020	02 Jul 2020	29 Dec 2020	08 Jul 2020	29 Dec 2020	10 Jul 2020
0407_SP018_01_200702	SE208242.014	LB203829	02 Jul 2020	02 Jul 2020	29 Dec 2020	08 Jul 2020	29 Dec 2020	10 Jul 2020
0407_SP018_02_200702	SE208242.015	LB203829	02 Jul 2020	02 Jul 2020	29 Dec 2020	08 Jul 2020	29 Dec 2020	10 Jul 2020
0407_SP018_03_200702	SE208242.016	LB203829	02 Jul 2020	02 Jul 2020	29 Dec 2020	08 Jul 2020	29 Dec 2020	10 Jul 2020

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SP008_01_200702	SE208242.001	LB203727	02 Jul 2020	02 Jul 2020	30 Jul 2020	07 Jul 2020	30 Jul 2020	09 Jul 2020
0407_SP008_02_200702	SE208242.002	LB203727	02 Jul 2020	02 Jul 2020	30 Jul 2020	07 Jul 2020	30 Jul 2020	09 Jul 2020
0407_SP008_03_200702	SE208242.003	LB203727	02 Jul 2020	02 Jul 2020	30 Jul 2020	07 Jul 2020	30 Jul 2020	09 Jul 2020
0407_SP009_01_200702	SE208242.004	LB203727	02 Jul 2020	02 Jul 2020	30 Jul 2020	07 Jul 2020	30 Jul 2020	09 Jul 2020
0407_SP009_02_200702	SE208242.005	LB203727	02 Jul 2020	02 Jul 2020	30 Jul 2020	07 Jul 2020	30 Jul 2020	09 Jul 2020
0407_SP009_03_200702	SE208242.006	LB203727	02 Jul 2020	02 Jul 2020	30 Jul 2020	07 Jul 2020	30 Jul 2020	09 Jul 2020
0407_SP013_01_200702	SE208242.007	LB203727	02 Jul 2020	02 Jul 2020	30 Jul 2020	07 Jul 2020	30 Jul 2020	09 Jul 2020
0407_SP013_02_200702	SE208242.008	LB203727	02 Jul 2020	02 Jul 2020	30 Jul 2020	07 Jul 2020	30 Jul 2020	09 Jul 2020
0407_SP013_03_200702	SE208242.009	LB203727	02 Jul 2020	02 Jul 2020	30 Jul 2020	07 Jul 2020	30 Jul 2020	09 Jul 2020
0407_SP014_01_200702	SE208242.010	LB203727	02 Jul 2020	02 Jul 2020	30 Jul 2020	07 Jul 2020	30 Jul 2020	09 Jul 2020
0407_SP014_02_200702	SE208242.011	LB203727	02 Jul 2020	02 Jul 2020	30 Jul 2020	07 Jul 2020	30 Jul 2020	09 Jul 2020
0407_SP014_03_200702	SE208242.012	LB203727	02 Jul 2020	02 Jul 2020	30 Jul 2020	07 Jul 2020	30 Jul 2020	09 Jul 2020
0407_SP008_04_200702	SE208242.013	LB203727	02 Jul 2020	02 Jul 2020	30 Jul 2020	07 Jul 2020	30 Jul 2020	09 Jul 2020
0407_SP018_01_200702	SE208242.014	LB203727	02 Jul 2020	02 Jul 2020	30 Jul 2020	07 Jul 2020	30 Jul 2020	09 Jul 2020
0407_SP018_02_200702	SE208242.015	LB203727	02 Jul 2020	02 Jul 2020	30 Jul 2020	07 Jul 2020	30 Jul 2020	09 Jul 2020
0407_SP018_03_200702	SE208242.016	LB203727	02 Jul 2020	02 Jul 2020	30 Jul 2020	07 Jul 2020	30 Jul 2020	09 Jul 2020

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SP008_01_200702	SE208242.001	LB203663	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	12 Jul 2020	09 Jul 2020
0407_SP008_02_200702	SE208242.002	LB203663	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	12 Jul 2020	09 Jul 2020
0407_SP008_03_200702	SE208242.003	LB203663	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	12 Jul 2020	09 Jul 2020
0407_SP009_01_200702	SE208242.004	LB203663	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	12 Jul 2020	09 Jul 2020

HOLDING TIME SUMMARY

SE208242 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Moisture Content (continued)

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SP009_02_200702	SE208242.005	LB203663	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	12 Jul 2020	09 Jul 2020
0407_SP009_03_200702	SE208242.006	LB203663	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	12 Jul 2020	09 Jul 2020
0407_SP013_01_200702	SE208242.007	LB203663	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	12 Jul 2020	09 Jul 2020
0407_SP013_02_200702	SE208242.008	LB203663	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	12 Jul 2020	09 Jul 2020
0407_SP013_03_200702	SE208242.009	LB203663	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	12 Jul 2020	09 Jul 2020
0407_SP014_01_200702	SE208242.010	LB203663	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	12 Jul 2020	09 Jul 2020
0407_SP014_02_200702	SE208242.011	LB203663	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	12 Jul 2020	09 Jul 2020
0407_SP014_03_200702	SE208242.012	LB203663	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	12 Jul 2020	09 Jul 2020
0407_SP008_04_200702	SE208242.013	LB203663	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	12 Jul 2020	09 Jul 2020
0407_SP018_01_200702	SE208242.014	LB203663	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	12 Jul 2020	09 Jul 2020
0407_SP018_02_200702	SE208242.015	LB203663	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	12 Jul 2020	09 Jul 2020
0407_SP018_03_200702	SE208242.016	LB203663	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	12 Jul 2020	09 Jul 2020

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SP008_01_200702	SE208242.001	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP008_02_200702	SE208242.002	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP008_03_200702	SE208242.003	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP009_01_200702	SE208242.004	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP009_02_200702	SE208242.005	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP009_03_200702	SE208242.006	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP013_01_200702	SE208242.007	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP013_02_200702	SE208242.008	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP013_03_200702	SE208242.009	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP014_01_200702	SE208242.010	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP014_02_200702	SE208242.011	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP014_03_200702	SE208242.012	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP008_04_200702	SE208242.013	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP018_01_200702	SE208242.014	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP018_02_200702	SE208242.015	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP018_03_200702	SE208242.016	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SP008_01_200702	SE208242.001	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP008_02_200702	SE208242.002	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP008_03_200702	SE208242.003	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP009_01_200702	SE208242.004	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP009_02_200702	SE208242.005	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP009_03_200702	SE208242.006	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP013_01_200702	SE208242.007	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP013_02_200702	SE208242.008	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP013_03_200702	SE208242.009	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP014_01_200702	SE208242.010	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP014_02_200702	SE208242.011	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP014_03_200702	SE208242.012	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP008_04_200702	SE208242.013	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP018_01_200702	SE208242.014	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP018_02_200702	SE208242.015	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP018_03_200702	SE208242.016	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SP008_01_200702	SE208242.001	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP008_02_200702	SE208242.002	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP008_03_200702	SE208242.003	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP009_01_200702	SE208242.004	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP009_02_200702	SE208242.005	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP009_03_200702	SE208242.006	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP013_01_200702	SE208242.007	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP013_02_200702	SE208242.008	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020

HOLDING TIME SUMMARY

SE208242 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SP013_03_200702	SE208242.009	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP014_01_200702	SE208242.010	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP014_02_200702	SE208242.011	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP014_03_200702	SE208242.012	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP008_04_200702	SE208242.013	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP018_01_200702	SE208242.014	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP018_02_200702	SE208242.015	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP018_03_200702	SE208242.016	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SP008_01_200702	SE208242.001	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP008_02_200702	SE208242.002	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP008_03_200702	SE208242.003	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP009_01_200702	SE208242.004	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP009_02_200702	SE208242.005	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP009_03_200702	SE208242.006	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP013_01_200702	SE208242.007	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP013_02_200702	SE208242.008	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP013_03_200702	SE208242.009	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP014_01_200702	SE208242.010	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP014_02_200702	SE208242.011	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP014_03_200702	SE208242.012	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP008_04_200702	SE208242.013	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP018_01_200702	SE208242.014	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP018_02_200702	SE208242.015	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020
0407_SP018_03_200702	SE208242.016	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	13 Jul 2020

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SP008_01_200702	SE208242.001	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_SP008_02_200702	SE208242.002	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_SP008_03_200702	SE208242.003	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_SP009_01_200702	SE208242.004	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_SP009_02_200702	SE208242.005	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_SP009_03_200702	SE208242.006	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_SP013_01_200702	SE208242.007	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_SP013_02_200702	SE208242.008	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_SP013_03_200702	SE208242.009	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_SP014_01_200702	SE208242.010	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_SP014_02_200702	SE208242.011	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_SP014_03_200702	SE208242.012	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_SP008_04_200702	SE208242.013	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_SP018_01_200702	SE208242.014	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_SP018_02_200702	SE208242.015	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_SP018_03_200702	SE208242.016	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SP008_01_200702	SE208242.001	LB203725	02 Jul 2020	02 Jul 2020	29 Dec 2020	07 Jul 2020	29 Dec 2020	09 Jul 2020
0407_SP008_02_200702	SE208242.002	LB203725	02 Jul 2020	02 Jul 2020	29 Dec 2020	07 Jul 2020	29 Dec 2020	09 Jul 2020
0407_SP008_03_200702	SE208242.003	LB203725	02 Jul 2020	02 Jul 2020	29 Dec 2020	07 Jul 2020	29 Dec 2020	09 Jul 2020
0407_SP009_01_200702	SE208242.004	LB203725	02 Jul 2020	02 Jul 2020	29 Dec 2020	07 Jul 2020	29 Dec 2020	09 Jul 2020
0407_SP009_02_200702	SE208242.005	LB203725	02 Jul 2020	02 Jul 2020	29 Dec 2020	07 Jul 2020	29 Dec 2020	09 Jul 2020
0407_SP009_03_200702	SE208242.006	LB203725	02 Jul 2020	02 Jul 2020	29 Dec 2020	07 Jul 2020	29 Dec 2020	09 Jul 2020
0407_SP013_01_200702	SE208242.007	LB203725	02 Jul 2020	02 Jul 2020	29 Dec 2020	07 Jul 2020	29 Dec 2020	09 Jul 2020
0407_SP013_02_200702	SE208242.008	LB203725	02 Jul 2020	02 Jul 2020	29 Dec 2020	07 Jul 2020	29 Dec 2020	09 Jul 2020
0407_SP013_03_200702	SE208242.009	LB203725	02 Jul 2020	02 Jul 2020	29 Dec 2020	07 Jul 2020	29 Dec 2020	09 Jul 2020
0407_SP014_01_200702	SE208242.010	LB203725	02 Jul 2020	02 Jul 2020	29 Dec 2020	07 Jul 2020	29 Dec 2020	09 Jul 2020
0407_SP014_02_200702	SE208242.011	LB203725	02 Jul 2020	02 Jul 2020	29 Dec 2020	07 Jul 2020	29 Dec 2020	09 Jul 2020
0407_SP014_03_200702	SE208242.012	LB203725	02 Jul 2020	02 Jul 2020	29 Dec 2020	07 Jul 2020	29 Dec 2020	09 Jul 2020

HOLDING TIME SUMMARY

SE208242 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SP008_04_200702	SE208242.013	LB203725	02 Jul 2020	02 Jul 2020	29 Dec 2020	07 Jul 2020	29 Dec 2020	09 Jul 2020
0407_SP018_01_200702	SE208242.014	LB203725	02 Jul 2020	02 Jul 2020	29 Dec 2020	07 Jul 2020	29 Dec 2020	09 Jul 2020
0407_SP018_02_200702	SE208242.015	LB203725	02 Jul 2020	02 Jul 2020	29 Dec 2020	07 Jul 2020	29 Dec 2020	09 Jul 2020
0407_SP018_03_200702	SE208242.016	LB203725	02 Jul 2020	02 Jul 2020	29 Dec 2020	07 Jul 2020	29 Dec 2020	09 Jul 2020

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SP008_01_200702	SE208242.001	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_SP008_02_200702	SE208242.002	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_SP008_03_200702	SE208242.003	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_SP009_01_200702	SE208242.004	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_SP009_02_200702	SE208242.005	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_SP009_03_200702	SE208242.006	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_SP013_01_200702	SE208242.007	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_SP013_02_200702	SE208242.008	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_SP013_03_200702	SE208242.009	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_SP014_01_200702	SE208242.010	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_SP014_02_200702	SE208242.011	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_SP014_03_200702	SE208242.012	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_SP008_04_200702	SE208242.013	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_SP018_01_200702	SE208242.014	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_SP018_02_200702	SE208242.015	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_SP018_03_200702	SE208242.016	LB203659	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SP008_01_200702	SE208242.001	LB203658	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	10 Jul 2020
0407_SP008_02_200702	SE208242.002	LB203658	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	10 Jul 2020
0407_SP008_03_200702	SE208242.003	LB203658	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	10 Jul 2020
0407_SP009_01_200702	SE208242.004	LB203658	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	10 Jul 2020
0407_SP009_02_200702	SE208242.005	LB203658	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	10 Jul 2020
0407_SP009_03_200702	SE208242.006	LB203658	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	10 Jul 2020
0407_SP013_01_200702	SE208242.007	LB203658	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	10 Jul 2020
0407_SP013_02_200702	SE208242.008	LB203658	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	10 Jul 2020
0407_SP013_03_200702	SE208242.009	LB203658	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	10 Jul 2020
0407_SP014_01_200702	SE208242.010	LB203658	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	10 Jul 2020
0407_SP014_02_200702	SE208242.011	LB203658	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	10 Jul 2020
0407_SP014_03_200702	SE208242.012	LB203658	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	10 Jul 2020
0407_SP008_04_200702	SE208242.013	LB203658	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	10 Jul 2020
0407_SP018_01_200702	SE208242.014	LB203658	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	10 Jul 2020
0407_SP018_02_200702	SE208242.015	LB203658	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	10 Jul 2020
0407_SP018_03_200702	SE208242.016	LB203658	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	10 Jul 2020

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SP008_01_200702	SE208242.001	LB203658	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_SP008_02_200702	SE208242.002	LB203658	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_SP008_03_200702	SE208242.003	LB203658	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_SP009_01_200702	SE208242.004	LB203658	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_SP009_02_200702	SE208242.005	LB203658	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_SP009_03_200702	SE208242.006	LB203658	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_SP013_01_200702	SE208242.007	LB203658	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_SP013_02_200702	SE208242.008	LB203658	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_SP013_03_200702	SE208242.009	LB203658	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_SP014_01_200702	SE208242.010	LB203658	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_SP014_02_200702	SE208242.011	LB203658	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_SP014_03_200702	SE208242.012	LB203658	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_SP008_04_200702	SE208242.013	LB203658	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_SP018_01_200702	SE208242.014	LB203658	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_SP018_02_200702	SE208242.015	LB203658	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_SP018_03_200702	SE208242.016	LB203658	02 Jul 2020	02 Jul 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020

HOLDING TIME SUMMARY

SE208242 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_SP008_01_200702	SE208242.001	%	60 - 130%	96
	0407_SP008_02_200702	SE208242.002	%	60 - 130%	97
	0407_SP008_03_200702	SE208242.003	%	60 - 130%	97
	0407_SP009_01_200702	SE208242.004	%	60 - 130%	99
	0407_SP009_02_200702	SE208242.005	%	60 - 130%	107
	0407_SP009_03_200702	SE208242.006	%	60 - 130%	93
	0407_SP013_01_200702	SE208242.007	%	60 - 130%	93
	0407_SP013_02_200702	SE208242.008	%	60 - 130%	89
	0407_SP013_03_200702	SE208242.009	%	60 - 130%	93
	0407_SP014_01_200702	SE208242.010	%	60 - 130%	95
	0407_SP014_02_200702	SE208242.011	%	60 - 130%	92
	0407_SP014_03_200702	SE208242.012	%	60 - 130%	88
	0407_SP008_04_200702	SE208242.013	%	60 - 130%	89
	0407_SP018_01_200702	SE208242.014	%	60 - 130%	107
	0407_SP018_02_200702	SE208242.015	%	60 - 130%	94
	0407_SP018_03_200702	SE208242.016	%	60 - 130%	102

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_SP008_01_200702	SE208242.001	%	60 - 130%	86
	0407_SP008_02_200702	SE208242.002	%	60 - 130%	80
	0407_SP008_03_200702	SE208242.003	%	60 - 130%	89
	0407_SP009_01_200702	SE208242.004	%	60 - 130%	88
	0407_SP009_02_200702	SE208242.005	%	60 - 130%	86
	0407_SP009_03_200702	SE208242.006	%	60 - 130%	84
	0407_SP013_01_200702	SE208242.007	%	60 - 130%	84
	0407_SP013_02_200702	SE208242.008	%	60 - 130%	96
	0407_SP013_03_200702	SE208242.009	%	60 - 130%	83
	0407_SP014_01_200702	SE208242.010	%	60 - 130%	90
	0407_SP014_02_200702	SE208242.011	%	60 - 130%	93
	0407_SP014_03_200702	SE208242.012	%	60 - 130%	89
	0407_SP008_04_200702	SE208242.013	%	60 - 130%	88
	0407_SP018_01_200702	SE208242.014	%	60 - 130%	93
	0407_SP018_02_200702	SE208242.015	%	60 - 130%	84
	0407_SP018_03_200702	SE208242.016	%	60 - 130%	90
d14-p-terphenyl (Surrogate)	0407_SP008_01_200702	SE208242.001	%	60 - 130%	86
	0407_SP008_02_200702	SE208242.002	%	60 - 130%	82
	0407_SP008_03_200702	SE208242.003	%	60 - 130%	88
	0407_SP009_01_200702	SE208242.004	%	60 - 130%	89
	0407_SP009_02_200702	SE208242.005	%	60 - 130%	90
	0407_SP009_03_200702	SE208242.006	%	60 - 130%	92
	0407_SP013_01_200702	SE208242.007	%	60 - 130%	94
	0407_SP013_02_200702	SE208242.008	%	60 - 130%	96
	0407_SP013_03_200702	SE208242.009	%	60 - 130%	87
	0407_SP014_01_200702	SE208242.010	%	60 - 130%	89
	0407_SP014_02_200702	SE208242.011	%	60 - 130%	97
	0407_SP014_03_200702	SE208242.012	%	60 - 130%	88
	0407_SP008_04_200702	SE208242.013	%	60 - 130%	87
	0407_SP018_01_200702	SE208242.014	%	60 - 130%	92
	0407_SP018_02_200702	SE208242.015	%	60 - 130%	89
	0407_SP018_03_200702	SE208242.016	%	60 - 130%	89

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_SP008_01_200702	SE208242.001	%	70 - 130%	86
	0407_SP008_02_200702	SE208242.002	%	70 - 130%	80
	0407_SP008_03_200702	SE208242.003	%	70 - 130%	89
	0407_SP009_01_200702	SE208242.004	%	70 - 130%	88
	0407_SP009_02_200702	SE208242.005	%	70 - 130%	86
	0407_SP009_03_200702	SE208242.006	%	70 - 130%	84
	0407_SP013_01_200702	SE208242.007	%	70 - 130%	84
	0407_SP013_02_200702	SE208242.008	%	70 - 130%	96

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_SP013_03_200702	SE208242.009	%	70 - 130%	83
	0407_SP014_01_200702	SE208242.010	%	70 - 130%	90
	0407_SP014_02_200702	SE208242.011	%	70 - 130%	93
	0407_SP014_03_200702	SE208242.012	%	70 - 130%	89
	0407_SP008_04_200702	SE208242.013	%	70 - 130%	88
	0407_SP018_01_200702	SE208242.014	%	70 - 130%	93
	0407_SP018_02_200702	SE208242.015	%	70 - 130%	84
	0407_SP018_03_200702	SE208242.016	%	70 - 130%	90
d14-p-terphenyl (Surrogate)	0407_SP008_01_200702	SE208242.001	%	70 - 130%	86
	0407_SP008_02_200702	SE208242.002	%	70 - 130%	82
	0407_SP008_03_200702	SE208242.003	%	70 - 130%	88
	0407_SP009_01_200702	SE208242.004	%	70 - 130%	89
	0407_SP009_02_200702	SE208242.005	%	70 - 130%	90
	0407_SP009_03_200702	SE208242.006	%	70 - 130%	92
	0407_SP013_01_200702	SE208242.007	%	70 - 130%	94
	0407_SP013_02_200702	SE208242.008	%	70 - 130%	96
	0407_SP013_03_200702	SE208242.009	%	70 - 130%	87
	0407_SP014_01_200702	SE208242.010	%	70 - 130%	89
	0407_SP014_02_200702	SE208242.011	%	70 - 130%	97
	0407_SP014_03_200702	SE208242.012	%	70 - 130%	88
	0407_SP008_04_200702	SE208242.013	%	70 - 130%	87
	0407_SP018_01_200702	SE208242.014	%	70 - 130%	92
	0407_SP018_02_200702	SE208242.015	%	70 - 130%	89
	0407_SP018_03_200702	SE208242.016	%	70 - 130%	89
d5-nitrobenzene (Surrogate)	0407_SP008_01_200702	SE208242.001	%	70 - 130%	71
	0407_SP008_02_200702	SE208242.002	%	70 - 130%	77
	0407_SP008_03_200702	SE208242.003	%	70 - 130%	76
	0407_SP009_01_200702	SE208242.004	%	70 - 130%	79
	0407_SP009_02_200702	SE208242.005	%	70 - 130%	84
	0407_SP009_03_200702	SE208242.006	%	70 - 130%	80
	0407_SP013_01_200702	SE208242.007	%	70 - 130%	79
	0407_SP013_02_200702	SE208242.008	%	70 - 130%	91
	0407_SP013_03_200702	SE208242.009	%	70 - 130%	73
	0407_SP014_01_200702	SE208242.010	%	70 - 130%	81
	0407_SP014_02_200702	SE208242.011	%	70 - 130%	85
	0407_SP014_03_200702	SE208242.012	%	70 - 130%	79
	0407_SP008_04_200702	SE208242.013	%	70 - 130%	84
	0407_SP018_01_200702	SE208242.014	%	70 - 130%	83
	0407_SP018_02_200702	SE208242.015	%	70 - 130%	82
	0407_SP018_03_200702	SE208242.016	%	70 - 130%	85

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_SP008_01_200702	SE208242.001	%	60 - 130%	96
	0407_SP008_02_200702	SE208242.002	%	60 - 130%	97
	0407_SP008_03_200702	SE208242.003	%	60 - 130%	97
	0407_SP009_01_200702	SE208242.004	%	60 - 130%	99
	0407_SP009_02_200702	SE208242.005	%	60 - 130%	107
	0407_SP009_03_200702	SE208242.006	%	60 - 130%	93
	0407_SP013_01_200702	SE208242.007	%	60 - 130%	93
	0407_SP013_02_200702	SE208242.008	%	60 - 130%	89
	0407_SP013_03_200702	SE208242.009	%	60 - 130%	93
	0407_SP014_01_200702	SE208242.010	%	60 - 130%	95
	0407_SP014_02_200702	SE208242.011	%	60 - 130%	92
	0407_SP014_03_200702	SE208242.012	%	60 - 130%	88
	0407_SP008_04_200702	SE208242.013	%	60 - 130%	89
	0407_SP018_01_200702	SE208242.014	%	60 - 130%	107
	0407_SP018_02_200702	SE208242.015	%	60 - 130%	94
	0407_SP018_03_200702	SE208242.016	%	60 - 130%	102

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil (continued) — **Method: ME-(AU)-[ENV]AN420**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	0407_SP008_01_200702	SE208242.001	%	70 - 130%	91
	0407_SP008_02_200702	SE208242.002	%	70 - 130%	85
	0407_SP008_03_200702	SE208242.003	%	70 - 130%	83
	0407_SP009_01_200702	SE208242.004	%	70 - 130%	96
	0407_SP009_02_200702	SE208242.005	%	70 - 130%	80
	0407_SP009_03_200702	SE208242.006	%	70 - 130%	98
	0407_SP013_01_200702	SE208242.007	%	70 - 130%	85
	0407_SP013_02_200702	SE208242.008	%	70 - 130%	92
	0407_SP013_03_200702	SE208242.009	%	70 - 130%	92
	0407_SP014_01_200702	SE208242.010	%	70 - 130%	80
	0407_SP014_02_200702	SE208242.011	%	70 - 130%	83
	0407_SP014_03_200702	SE208242.012	%	70 - 130%	83
	0407_SP008_04_200702	SE208242.013	%	70 - 130%	84
	0407_SP018_01_200702	SE208242.014	%	70 - 130%	86
	0407_SP018_02_200702	SE208242.015	%	70 - 130%	83
	0407_SP018_03_200702	SE208242.016	%	70 - 130%	82
d5-phenol (Surrogate)	0407_SP008_01_200702	SE208242.001	%	50 - 130%	80
	0407_SP008_02_200702	SE208242.002	%	50 - 130%	82
	0407_SP008_03_200702	SE208242.003	%	50 - 130%	80
	0407_SP009_01_200702	SE208242.004	%	50 - 130%	79
	0407_SP009_02_200702	SE208242.005	%	50 - 130%	79
	0407_SP009_03_200702	SE208242.006	%	50 - 130%	78
	0407_SP013_01_200702	SE208242.007	%	50 - 130%	78
	0407_SP013_02_200702	SE208242.008	%	50 - 130%	72
	0407_SP013_03_200702	SE208242.009	%	50 - 130%	72
	0407_SP014_01_200702	SE208242.010	%	50 - 130%	76
	0407_SP014_02_200702	SE208242.011	%	50 - 130%	81
	0407_SP014_03_200702	SE208242.012	%	50 - 130%	78
	0407_SP008_04_200702	SE208242.013	%	50 - 130%	80
	0407_SP018_01_200702	SE208242.014	%	50 - 130%	81
	0407_SP018_02_200702	SE208242.015	%	50 - 130%	80
	0407_SP018_03_200702	SE208242.016	%	50 - 130%	76

VOC's in Soil — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_SP008_01_200702	SE208242.001	%	60 - 130%	77
	0407_SP008_02_200702	SE208242.002	%	60 - 130%	93
	0407_SP008_03_200702	SE208242.003	%	60 - 130%	88
	0407_SP009_01_200702	SE208242.004	%	60 - 130%	89
	0407_SP009_02_200702	SE208242.005	%	60 - 130%	88
	0407_SP009_03_200702	SE208242.006	%	60 - 130%	86
	0407_SP013_01_200702	SE208242.007	%	60 - 130%	105
	0407_SP013_02_200702	SE208242.008	%	60 - 130%	89
	0407_SP013_03_200702	SE208242.009	%	60 - 130%	81
	0407_SP014_01_200702	SE208242.010	%	60 - 130%	91
	0407_SP014_02_200702	SE208242.011	%	60 - 130%	89
	0407_SP014_03_200702	SE208242.012	%	60 - 130%	84
	0407_SP008_04_200702	SE208242.013	%	60 - 130%	84
	0407_SP018_01_200702	SE208242.014	%	60 - 130%	76
	0407_SP018_02_200702	SE208242.015	%	60 - 130%	86
	0407_SP018_03_200702	SE208242.016	%	60 - 130%	88
d4-1,2-dichloroethane (Surrogate)	0407_SP008_01_200702	SE208242.001	%	60 - 130%	81
	0407_SP008_02_200702	SE208242.002	%	60 - 130%	84
	0407_SP008_03_200702	SE208242.003	%	60 - 130%	92
	0407_SP009_01_200702	SE208242.004	%	60 - 130%	103
	0407_SP009_02_200702	SE208242.005	%	60 - 130%	91
	0407_SP009_03_200702	SE208242.006	%	60 - 130%	80
	0407_SP013_01_200702	SE208242.007	%	60 - 130%	92
	0407_SP013_02_200702	SE208242.008	%	60 - 130%	77
	0407_SP013_03_200702	SE208242.009	%	60 - 130%	86
	0407_SP014_01_200702	SE208242.010	%	60 - 130%	87

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d4-1,2-dichloroethane (Surrogate)	0407_SP014_02_200702	SE208242.011	%	60 - 130%	97
	0407_SP014_03_200702	SE208242.012	%	60 - 130%	82
	0407_SP008_04_200702	SE208242.013	%	60 - 130%	86
	0407_SP018_01_200702	SE208242.014	%	60 - 130%	74
	0407_SP018_02_200702	SE208242.015	%	60 - 130%	88
	0407_SP018_03_200702	SE208242.016	%	60 - 130%	80
d8-toluene (Surrogate)	0407_SP008_01_200702	SE208242.001	%	60 - 130%	76
	0407_SP008_02_200702	SE208242.002	%	60 - 130%	79
	0407_SP008_03_200702	SE208242.003	%	60 - 130%	82
	0407_SP009_01_200702	SE208242.004	%	60 - 130%	82
	0407_SP009_02_200702	SE208242.005	%	60 - 130%	84
	0407_SP009_03_200702	SE208242.006	%	60 - 130%	78
	0407_SP013_01_200702	SE208242.007	%	60 - 130%	83
	0407_SP013_02_200702	SE208242.008	%	60 - 130%	77
	0407_SP013_03_200702	SE208242.009	%	60 - 130%	77
	0407_SP014_01_200702	SE208242.010	%	60 - 130%	81
	0407_SP014_02_200702	SE208242.011	%	60 - 130%	88
	0407_SP014_03_200702	SE208242.012	%	60 - 130%	72
	0407_SP008_04_200702	SE208242.013	%	60 - 130%	84
	0407_SP018_01_200702	SE208242.014	%	60 - 130%	68
	0407_SP018_02_200702	SE208242.015	%	60 - 130%	78
	0407_SP018_03_200702	SE208242.016	%	60 - 130%	74

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_SP008_01_200702	SE208242.001	%	60 - 130%	77
	0407_SP008_02_200702	SE208242.002	%	60 - 130%	93
	0407_SP008_03_200702	SE208242.003	%	60 - 130%	88
	0407_SP009_01_200702	SE208242.004	%	60 - 130%	89
	0407_SP009_02_200702	SE208242.005	%	60 - 130%	88
	0407_SP009_03_200702	SE208242.006	%	60 - 130%	86
	0407_SP013_01_200702	SE208242.007	%	60 - 130%	105
	0407_SP013_02_200702	SE208242.008	%	60 - 130%	89
	0407_SP013_03_200702	SE208242.009	%	60 - 130%	81
	0407_SP014_01_200702	SE208242.010	%	60 - 130%	91
	0407_SP014_02_200702	SE208242.011	%	60 - 130%	89
	0407_SP014_03_200702	SE208242.012	%	60 - 130%	84
	0407_SP008_04_200702	SE208242.013	%	60 - 130%	84
	0407_SP018_01_200702	SE208242.014	%	60 - 130%	76
	0407_SP018_02_200702	SE208242.015	%	60 - 130%	86
	0407_SP018_03_200702	SE208242.016	%	60 - 130%	88
d4-1,2-dichloroethane (Surrogate)	0407_SP008_01_200702	SE208242.001	%	60 - 130%	81
	0407_SP008_02_200702	SE208242.002	%	60 - 130%	84
	0407_SP008_03_200702	SE208242.003	%	60 - 130%	92
	0407_SP009_01_200702	SE208242.004	%	60 - 130%	103
	0407_SP009_02_200702	SE208242.005	%	60 - 130%	91
	0407_SP009_03_200702	SE208242.006	%	60 - 130%	80
	0407_SP013_01_200702	SE208242.007	%	60 - 130%	92
	0407_SP013_02_200702	SE208242.008	%	60 - 130%	77
	0407_SP013_03_200702	SE208242.009	%	60 - 130%	86
	0407_SP014_01_200702	SE208242.010	%	60 - 130%	87
	0407_SP014_02_200702	SE208242.011	%	60 - 130%	97
	0407_SP014_03_200702	SE208242.012	%	60 - 130%	82
	0407_SP008_04_200702	SE208242.013	%	60 - 130%	86
	0407_SP018_01_200702	SE208242.014	%	60 - 130%	74
	0407_SP018_02_200702	SE208242.015	%	60 - 130%	88
	0407_SP018_03_200702	SE208242.016	%	60 - 130%	80
d8-toluene (Surrogate)	0407_SP008_01_200702	SE208242.001	%	60 - 130%	76
	0407_SP008_02_200702	SE208242.002	%	60 - 130%	79
	0407_SP008_03_200702	SE208242.003	%	60 - 130%	82
	0407_SP009_01_200702	SE208242.004	%	60 - 130%	82

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d8-toluene (Surrogate)	0407_SP009_02_200702	SE208242.005	%	60 - 130%	84
	0407_SP009_03_200702	SE208242.006	%	60 - 130%	78
	0407_SP013_01_200702	SE208242.007	%	60 - 130%	83
	0407_SP013_02_200702	SE208242.008	%	60 - 130%	77
	0407_SP013_03_200702	SE208242.009	%	60 - 130%	77
	0407_SP014_01_200702	SE208242.010	%	60 - 130%	81
	0407_SP014_02_200702	SE208242.011	%	60 - 130%	88
	0407_SP014_03_200702	SE208242.012	%	60 - 130%	72
	0407_SP008_04_200702	SE208242.013	%	60 - 130%	84
	0407_SP018_01_200702	SE208242.014	%	60 - 130%	68
	0407_SP018_02_200702	SE208242.015	%	60 - 130%	78
	0407_SP018_03_200702	SE208242.016	%	60 - 130%	74

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result
LB203727.001	Mercury	mg/kg	0.05	<0.05

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203659.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	85

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203659.001		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	93
		d14-p-terphenyl (Surrogate)	%	-	90

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB203659.001	Naphthalene	mg/kg	0.1	<0.1
	2-methylnaphthalene	mg/kg	0.1	<0.1
	1-methylnaphthalene	mg/kg	0.1	<0.1
	Acenaphthylene	mg/kg	0.1	<0.1
	Acenaphthene	mg/kg	0.1	<0.1
	Fluorene	mg/kg	0.1	<0.1
	Phenanthrene	mg/kg	0.1	<0.1
	Anthracene	mg/kg	0.1	<0.1
	Fluoranthene	mg/kg	0.1	<0.1
	Pyrene	mg/kg	0.1	<0.1
	Benzo(a)anthracene	mg/kg	0.1	<0.1
	Chrysene	mg/kg	0.1	<0.1
	Benzo(a)pyrene	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203659.001		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	85
		2-fluorobiphenyl (Surrogate)	%	-	93
		d14-p-terphenyl (Surrogate)	%	-	90

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203659.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	85

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203659.001		Phenol	mg/kg	0.5	<0.5
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5
		2-nitrophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
		Pentachlorophenol	mg/kg	0.5	<0.5
		2,4-dinitrophenol	mg/kg	2	<2
		4-chloro-3-methylphenol	mg/kg	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	83
		d5-phenol (Surrogate)	%	-	81

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB203725.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB203659.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number	Parameter	Units	LOR

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Sample Number		Parameter	Units	LOR	Result
LB203658.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB203658.001	Oxygenated Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	81
		d8-toluene (Surrogate)	%	-	80
		Bromofluorobenzene (Surrogate)	%	-	88
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB203658.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	81

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208242.008	LB203727.014	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE208242.016	LB203727.023	Mercury	mg/kg	0.05	<0.05	<0.05	200	0

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208242.010	LB203663.011	% Moisture	%w/w	1	11.5	12.6	38	9
SE208242.016	LB203663.018	% Moisture	%w/w	1	14.7	14.1	37	5

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208242.011	LB203659.025		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	0	200	0
			Alpha BHC	mg/kg	0.1	<0.1	0	200	0
			Lindane	mg/kg	0.1	<0.1	0	200	0
			Heptachlor	mg/kg	0.1	<0.1	0	200	0
			Aldrin	mg/kg	0.1	<0.1	0	200	0
			Beta BHC	mg/kg	0.1	<0.1	0	200	0
			Delta BHC	mg/kg	0.1	<0.1	0	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	0	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	0	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	0	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Dieldrin	mg/kg	0.2	<0.2	0	200	0
			Endrin	mg/kg	0.2	<0.2	0	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	0	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	0	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	0	200	0
			Methoxychlor	mg/kg	0.1	<0.1	0	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	0	200	0
			Isodrin	mg/kg	0.1	<0.1	0	200	0
			Mirex	mg/kg	0.1	<0.1	0	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	0.138	30	0
SE208242.016	LB203659.021		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208242.016	LB203659.021		p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.15	30	5

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208242.011	LB203659.023		Dichlorvos	mg/kg	0.5	<0.5	0	200	0
			Dimethoate	mg/kg	0.5	<0.5	0	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	0	200	0
			Fenitrothion	mg/kg	0.2	<0.2	0	200	0
			Malathion	mg/kg	0.2	<0.2	0	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	0	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	0	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	0	200	0
			Methidathion	mg/kg	0.5	<0.5	0	200	0
			Ethion	mg/kg	0.2	<0.2	0	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	0	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	0	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.4234577601	30	10
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.4205249370	30	14
SE208242.016	LB203659.021		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	20
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	30	6

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208242.011	LB203659.023	Naphthalene	mg/kg	0.1	<0.1	0	200	0
		2-methylnaphthalene	mg/kg	0.1	<0.1	0.0166502103	200	0
		1-methylnaphthalene	mg/kg	0.1	<0.1	0.0292124858	200	0
		Acenaphthylene	mg/kg	0.1	<0.1	0.0249772491	200	0
		Acenaphthene	mg/kg	0.1	<0.1	0.0066698940	200	0
		Fluorene	mg/kg	0.1	<0.1	0.0094586303	200	0
		Phenanthrene	mg/kg	0.1	0.1	0.1791655951	94	28
		Anthracene	mg/kg	0.1	<0.1	0.0631069372	200	0
		Fluoranthene	mg/kg	0.1	0.3	0.4001209421	57	15
		Pyrene	mg/kg	0.1	0.4	0.4498137036	54	16
		Benzo(a)anthracene	mg/kg	0.1	0.2	0.1998300033	82	9
		Chrysene	mg/kg	0.1	0.2	0.2127254146	81	16
		Benzo(b&j)fluoranthene	mg/kg	0.1	0.2	0.2428734569	74	12
		Benzo(k)fluoranthene	mg/kg	0.1	0.1	0.1334076039	109	12
		Benzo(a)pyrene	mg/kg	0.1	0.2	0.2429851054	73	10
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.1	0.1379723308	103	0
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	0.0200667801	200	0
		Benzo(ghi)perylene	mg/kg	0.1	0.2	0.1539408339	95	0
		Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	0.3	0.3182446286	76	9

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208242.011	LB203659.023		Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	0.4	0.4182446286	84	7
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	0.3	0.3682446286	66	8
			Total PAH (18)	mg/kg	0.8	2.1	2.3546802027	66	12
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.3801390493	30	11
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.4234577601	30	10
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.4205249370	30	14
SE208242.016	LB203659.021		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	<0.3	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	<0.2	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	30	1
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	20
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	30	6

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208242.011	LB203659.023		Arochlor 1016	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	0	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0.138	30	0
SE208242.016	LB203659.021		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	5

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208242.011	LB203659.022		Phenol	mg/kg	0.5	<0.5	0	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	0	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	0	200	0
			Total Cresol	mg/kg	1.5	<1.5	0	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	0	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	0	200	0
			4-nitrophenol	mg/kg	1	<1	0	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	0	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dinitrophenol	mg/kg	2	<2	0	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	0	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.1	4.12	30	0
			d5-phenol (Surrogate)	mg/kg	-	1.6	1.53	30	5
SE208242.016	LB203659.021		Phenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	200	0
			Total Cresol	mg/kg	1.5	<1.5	<1.5	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	200	0
			4-nitrophenol	mg/kg	1	<1	<1	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dinitrophenol	mg/kg	2	<2	<2	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.1	4.0	30	2
			d5-phenol (Surrogate)	mg/kg	-	1.5	1.5	30	2

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208242.007	LB203725.014	Arsenic, As	mg/kg	1	1	1	126	7
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	4.6	5.1	40	9
		Copper, Cu	mg/kg	0.5	2.0	2.1	55	8
		Nickel, Ni	mg/kg	0.5	1.9	2.0	55	4
		Lead, Pb	mg/kg	1	4	5	53	6
		Zinc, Zn	mg/kg	2	5.6	6.1	64	8
SE208242.016	LB203725.024	Arsenic, As	mg/kg	1	3	2	68	17
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	7.1	6.9	37	2
		Copper, Cu	mg/kg	0.5	8.3	7.1	37	16
		Nickel, Ni	mg/kg	0.5	4.1	3.0	44	32
		Lead, Pb	mg/kg	1	13	11	38	10
		Zinc, Zn	mg/kg	2	23	20	39	15

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208242.011	LB203659.023	TRH C10-C14	mg/kg	20	<20	0	200	0
		TRH C15-C28	mg/kg	45	<45	0	200	0
		TRH C29-C36	mg/kg	45	<45	0	200	0
		TRH C37-C40	mg/kg	100	<100	0	200	0
		TRH C10-C36 Total	mg/kg	110	<110	0	200	0
		TRH >C10-C40 Total (F bands)	mg/kg	210	<210	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208242.011	LB203659.023	TRH F Bands	TRH >C10-C16	mg/kg	25	<25	0	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	0	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	0	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	0	200	0
SE208242.016	LB203659.021		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	53	123	16
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208242.010	LB203658.014	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	174	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208242.010	LB203658.014	Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.7	9.4	50	9
			d8-toluene (Surrogate)	mg/kg	-	8.1	7.9	50	2
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.1	8.8	50	3
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE208242.016	LB203658.021	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208242.016	LB203658.021	Halogenated	Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
		Aliphatics	1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.0	9.9	50	21
			d8-toluene (Surrogate)	mg/kg	-	7.4	8.4	50	12
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.8	8.9	50	1
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate	Parameter	Units	LOR

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208242.010	LB203658.014		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.7	9.4	30	9
			d8-toluene (Surrogate)	mg/kg	-	8.1	7.9	30	2
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.1	8.8	30	3
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE208242.016	LB203658.021		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.0	9.9	30	21
			d8-toluene (Surrogate)	mg/kg	-	7.4	8.4	30	12
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.8	8.9	30	1
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203727.002	Mercury	mg/kg	0.05	0.24	0.2	70 - 130	119

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203659.002		Heptachlor	mg/kg	0.1	0.3	0.2	60 - 140	125
		Aldrin	mg/kg	0.1	0.3	0.2	60 - 140	138
		Delta BHC	mg/kg	0.1	0.3	0.2	60 - 140	135
		Dieldrin	mg/kg	0.2	0.3	0.2	60 - 140	135
		Endrin	mg/kg	0.2	0.3	0.2	60 - 140	134
		p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	110
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	0.15	40 - 130	93

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203659.002		Dichlorvos	mg/kg	0.5	1.3	2	60 - 140	65
		Diazinon (Dimpylate)	mg/kg	0.5	1.9	2	60 - 140	93
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.2	2	60 - 140	108
		Ethion	mg/kg	0.2	2.0	2	60 - 140	98
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	84
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	81

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203659.002		Naphthalene	mg/kg	0.1	3.5	4	60 - 140	87
		Acenaphthylene	mg/kg	0.1	4.1	4	60 - 140	102
		Acenaphthene	mg/kg	0.1	3.8	4	60 - 140	94
		Phenanthrene	mg/kg	0.1	3.7	4	60 - 140	91
		Anthracene	mg/kg	0.1	3.9	4	60 - 140	98
		Fluoranthene	mg/kg	0.1	3.7	4	60 - 140	93
		Pyrene	mg/kg	0.1	3.9	4	60 - 140	97
		Benzo(a)pyrene	mg/kg	0.1	4.2	4	60 - 140	105
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	77
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	84
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	81

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203659.002	Arochlor 1260	mg/kg	0.2	0.5	0.4	60 - 140	116

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203659.002		Phenol	mg/kg	0.5	0.7	1	70 - 130	74
		2,4-dichlorophenol	mg/kg	0.5	0.9	1	70 - 130	86
		2,4,6-trichlorophenol	mg/kg	0.5	0.8	1	70 - 130	82
		Pentachlorophenol	mg/kg	0.5	0.7	1	70 - 130	73
	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.2	5	40 - 130	83
		d5-phenol (Surrogate)	mg/kg	-	1.6	2	40 - 130	81

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203725.002	Arsenic, As	mg/kg	1	330	318.22	80 - 120	104
	Cadmium, Cd	mg/kg	0.3	5.5	5.41	80 - 120	102
	Chromium, Cr	mg/kg	0.5	38	38.31	80 - 120	98
	Copper, Cu	mg/kg	0.5	290	290	80 - 120	101
	Nickel, Ni	mg/kg	0.5	180	187	80 - 120	98
	Lead, Pb	mg/kg	1	91	89.9	80 - 120	102
	Zinc, Zn	mg/kg	2	270	273	80 - 120	100

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203659.002		TRH C10-C14	mg/kg	20	50	40	60 - 140	125
		TRH C15-C28	mg/kg	45	50	40	60 - 140	125
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	95
	TRH F Bands	TRH >C10-C16	mg/kg	25	50	40	60 - 140	125
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	115
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	90

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203658.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	5.1	5	60 - 140	102
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	5.8	5	60 - 140	115
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	6.0	5	60 - 140	120
	Halogenated	Chlorobenzene	mg/kg	0.1	5.9	5	60 - 140	118
	Monocyclic	Benzene	mg/kg	0.1	5.3	5	60 - 140	106
	Aromatic	Toluene	mg/kg	0.1	5.2	5	60 - 140	105
		Ethylbenzene	mg/kg	0.1	5.3	5	60 - 140	105
		m/p-xylene	mg/kg	0.2	11	10	60 - 140	107
		o-xylene	mg/kg	0.1	5.2	5	60 - 140	103
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.8	10	70 - 130	88
		d8-toluene (Surrogate)	mg/kg	-	8.4	10	70 - 130	84
		Bromofluorobenzene (Surrogate)	mg/kg	-	10.0	10	70 - 130	100
	Trihalomethan	Chloroform	mg/kg	0.1	5.6	5	60 - 140	112

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203658.002		TRH C6-C10	mg/kg	25	81	92.5	60 - 140	88
		TRH C6-C9	mg/kg	20	70	80	60 - 140	88
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.8	10	70 - 130	88
		Bromofluorobenzene (Surrogate)	mg/kg	-	10.0	10	70 - 130	100
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	50	62.5	60 - 140	80

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208378.001	LB203727.004	Mercury	mg/kg	0.05	0.24	<0.05	0.2	115

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208242.004	LB203659.024		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	-	-
			Alpha BHC	mg/kg	0.1	<0.1	-	-
			Lindane	mg/kg	0.1	<0.1	-	-
			Heptachlor	mg/kg	0.1	<0.1	0.2	83
			Aldrin	mg/kg	0.1	<0.1	0.2	83
			Beta BHC	mg/kg	0.1	<0.1	-	-
			Delta BHC	mg/kg	0.1	<0.1	0.2	85
			Heptachlor epoxide	mg/kg	0.1	<0.1	-	-
			o,p'-DDE	mg/kg	0.1	<0.1	-	-
			Alpha Endosulfan	mg/kg	0.2	<0.2	-	-
			Gamma Chlordane	mg/kg	0.1	<0.1	-	-
			Alpha Chlordane	mg/kg	0.1	<0.1	-	-
			trans-Nonachlor	mg/kg	0.1	<0.1	-	-
			p,p'-DDE	mg/kg	0.1	<0.1	-	-
			Dieldrin	mg/kg	0.2	<0.2	0.2	85
			Endrin	mg/kg	0.2	<0.2	0.2	86
			o,p'-DDD	mg/kg	0.1	<0.1	-	-
			o,p'-DDT	mg/kg	0.1	<0.1	-	-
			Beta Endosulfan	mg/kg	0.2	<0.2	-	-
			p,p'-DDD	mg/kg	0.1	<0.1	-	-
			p,p'-DDT	mg/kg	0.1	<0.1	0.2	77
			Endosulfan sulphate	mg/kg	0.1	<0.1	-	-
			Endrin Aldehyde	mg/kg	0.1	<0.1	-	-
			Methoxychlor	mg/kg	0.1	<0.1	-	-
			Endrin Ketone	mg/kg	0.1	<0.1	-	-
			Isodrin	mg/kg	0.1	<0.1	-	-
			Mirex	mg/kg	0.1	<0.1	-	-
			Total CLP OC Pesticides	mg/kg	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	-	101

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208242.004	LB203659.022		Dichlorvos	mg/kg	0.5	<0.5	2	80
			Dimethoate	mg/kg	0.5	<0.5	-	-
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	2	93
			Fenitrothion	mg/kg	0.2	<0.2	-	-
			Malathion	mg/kg	0.2	<0.2	-	-
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	2	92
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	-	-
			Bromophos Ethyl	mg/kg	0.2	<0.2	-	-
			Methidathion	mg/kg	0.5	<0.5	-	-
			Ethion	mg/kg	0.2	<0.2	2	83
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	-	-
			Total OP Pesticides*	mg/kg	1.7	<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	-	84
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	-	86

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number	Parameter	Units	LOR	Original	Spike	Recovery%
SE208242.004	LB203659.022	Naphthalene	mg/kg	0.1	<0.1	4	100
		2-methylnaphthalene	mg/kg	0.1	<0.1	-	-
		1-methylnaphthalene	mg/kg	0.1	0.1	-	-
		Acenaphthylene	mg/kg	0.1	0.2	4	148 ⑨
		Acenaphthene	mg/kg	0.1	0.1	4	116
		Fluorene	mg/kg	0.1	0.1	-	-
		Phenanthrene	mg/kg	0.1	2.7	4	238 ⑨

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208242.004	LB203659.022		Anthracene	mg/kg	0.1	0.9	4	131
			Fluoranthene	mg/kg	0.1	3.3	4	187 ⑨
			Pyrene	mg/kg	0.1	3.4	4	168 ⑨
			Benzo(a)anthracene	mg/kg	0.1	1.6	-	-
			Chrysene	mg/kg	0.1	1.5	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1	1.5	-	-
			Benzo(k)fluoranthene	mg/kg	0.1	0.7	-	-
			Benzo(a)pyrene	mg/kg	0.1	1.7	4	145 ⑨
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	1.0	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	0.2	-	-
			Benzo(ghi)perylene	mg/kg	0.1	1.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	2.4	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	2.4	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	2.4	-	-
			Total PAH (18)	mg/kg	0.8	20	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	-	83
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	-	84
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	-	86

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208242.004	LB203659.022		Arochlor 1016	mg/kg	0.2	<0.2	-	-
			Arochlor 1221	mg/kg	0.2	<0.2	-	-
			Arochlor 1232	mg/kg	0.2	<0.2	-	-
			Arochlor 1242	mg/kg	0.2	<0.2	-	-
			Arochlor 1248	mg/kg	0.2	<0.2	-	-
			Arochlor 1254	mg/kg	0.2	<0.2	-	-
			Arochlor 1260	mg/kg	0.2	<0.2	0.4	103
			Arochlor 1262	mg/kg	0.2	<0.2	-	-
			Arochlor 1268	mg/kg	0.2	<0.2	-	-
			Total PCBs (Arochlors)	mg/kg	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	-	95

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208242.005	LB203659.023		Phenol	mg/kg	0.5	<0.5	1	71
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	-	-
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	-	-
			Total Cresol	mg/kg	1.5	<1.5	-	-
			2-chlorophenol	mg/kg	0.5	<0.5	-	-
			2,4-dimethylphenol	mg/kg	0.5	<0.5	-	-
			2,6-dichlorophenol	mg/kg	0.5	<0.5	-	-
			2,4-dichlorophenol	mg/kg	0.5	<0.5	1	87
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	1	71
			2-nitrophenol	mg/kg	0.5	<0.5	-	-
			4-nitrophenol	mg/kg	1	<1	-	-
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	-	-
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	-	-
			Pentachlorophenol	mg/kg	0.5	<0.5	1	78
			2,4-dinitrophenol	mg/kg	2	<2	-	-
			4-chloro-3-methylphenol	mg/kg	2	<2	-	-
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.0	-	79
			d5-phenol (Surrogate)	mg/kg	-	1.6	-	79

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208381.001	LB203725.004	Chromium, Cr	mg/kg	0.5	54	12	50	83
		Copper, Cu	mg/kg	0.5	54	9.1	50	89
		Lead, Pb	mg/kg	1	57	16	50	82
		Zinc, Zn	mg/kg	2	82	38	50	89

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number	Parameter	Units	LOR

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208242.004	LB203659.022		TRH C10-C14	mg/kg	20	<20	40	138
			TRH C15-C28	mg/kg	45	66	40	18 Ⓢ
			TRH C29-C36	mg/kg	45	<45	40	90
			TRH C37-C40	mg/kg	100	<100	-	-
			TRH C10-C36 Total	mg/kg	110	<110	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	40	125
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	<90	40	-45 Ⓢ
			TRH >C34-C40 (F4)	mg/kg	120	<120	-	-

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208242.001	LB203658.004	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	-	-
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	-	-
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	-	-
			Bromomethane	mg/kg	1	<1	<1	-	-
			Chloroethane	mg/kg	1	<1	<1	-	-
			Trichlorofluoromethane	mg/kg	1	<1	<1	-	-
			Iodomethane	mg/kg	5	<5	<5	-	-
			1,1-dichloroethene	mg/kg	0.1	4.5	<0.1	5	90
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	-	-
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloroethane	mg/kg	0.1	4.8	<0.1	5	96
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	-	-
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	4.7	<0.1	5	94
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	-	-
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated	Chlorobenzene	mg/kg	0.1	5.2	<0.1	5	104
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Monocyclic	Benzene	mg/kg	0.1	5.0	<0.1	5	99
		Aromatic	Toluene	mg/kg	0.1	5.0	<0.1	5	100
			Ethylbenzene	mg/kg	0.1	5.0	<0.1	5	99
			m/p-xylene	mg/kg	0.2	10	<0.2	10	101

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208242.001	LB203658.004	Monocyclic Aromatic	o-xylene	mg/kg	0.1	5.0	<0.1	5	99
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	-	-
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	-	-
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	-	-
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	-	-
			2-nitropropane	mg/kg	10	<10	<10	-	-
		Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10	<10	-	-
			MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	-	-
			Vinyl acetate	mg/kg	10	<10	<10	-	-
			MEK (2-butanone)	mg/kg	10	<10	<10	-	-
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	-	-
			2-hexanone (MBK)	mg/kg	5	<5	<5	-	-
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.5	8.1	10	85
			d8-toluene (Surrogate)	mg/kg	-	8.0	7.6	10	80
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.7	7.7	10	77
		Totals	Total Xylenes	mg/kg	0.3	15	<0.3	-	-
			Total BTEX	mg/kg	0.6	30	<0.6	-	-
			Total VOC*	mg/kg	24	54	<24	-	-
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	-	-
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	24	<1.8	-	-
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	24	<1.8	-	-
		Trihalomethanes	Chloroform	mg/kg	0.1	4.7	<0.1	5	94
			Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Bromoform	mg/kg	0.1	<0.1	<0.1	-	-

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208242.001	LB203658.004		TRH C6-C10	mg/kg	25	61	<25	92.5	66
			TRH C6-C9	mg/kg	20	53	<20	80	67
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.5	8.1	10	85
			d8-toluene (Surrogate)	mg/kg	-	8.0	7.6	10	80
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.7	7.7	-	77
		VPH F Bands	Benzene (F0)	mg/kg	0.1	5.0	<0.1	-	-
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	31	<25	62.5	50 ④

MATRIX SPIKE DUPLICATES

SE208242 R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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E-MAILED 29/6 05-32

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Donville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☒ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4810 NZ
- ☐

CLIENT: Defence Housing Australia	LABORATORY: SGS Australia
PROJECT: Randwick Barracks	LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015
PROJECT NUMBER: 610.30041	SAMPLER:
PROJECT MANAGER [redacted]	SAMPLER CONTACT No:
PM CONTACT No [redacted]	Email Reports and Invoices to: LQRSYD@slrconsulting.com ; [redacted]

Turnaround Time (TAT): ☐ Standard TAT ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number: 1 of 4

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: Suite A	Asbestos ONLY	HOLD						Additional Information (Comment on any gross contamination or specific requirements)
1	0407_TP147_0.1_200626	26/06/2020	Soil	jar, pfas, bag ✓	×								Please hold all PFAS Containers
2	0407_TP~~179~~ 47_0.5_200626	26/06/2020	Soil	jar, pfas	×								
	0407_TP~~179~~ 47_0.7_200626	26/06/2020	Soil	jar, pfas			×						no asbestos analysis
3	0407_TP161_0.1_200626	26/06/2020	Soil	jar, pfas, bag ✓	×								
4	0407_TP161_0.5_200626	26/06/2020	Soil	jar, pfas	×								no asbestos analysis
	0407_TP161_0.8_200626	26/06/2020	Soil	jar, pfas			×						
5	0407_TP165_0.1_200626	26/06/2020	Soil	jar, pfas, bag ✓	×								
6	0407_TP165_0.5_200626	26/06/2020	Soil	jar, pfas ✓	×								no asbestos analysis
	0407_TP165_1.0_200626	26/06/2020	Soil	jar, pfas			×						
7	0407_TP175_0.1_200626	26/06/2020	Soil	jar, pfas, bag ✓	×								
8	0407_TP175_0.5_200626	26/06/2020	Soil	jar, pfas, bag ✓	×								
	0407_TP175_1.0_200626	26/06/2020	Soil	jar, pfas			×						

SGS EHS Sydney COC

SE208136

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 18/06/2020	Received by	Sign [redacted]	Date / Time 26/06/20	Temperature Received:
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time @ 4.30	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
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- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
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- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ✱ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Stuart Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: C/A Cambridge Street, F Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 D East, New Plymouth, 4310 NZ

CLIENT: Defence Housing Australia

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGER: [redacted]

PM CONTACT No [redacted]

LABORATORY: SGS Australia

LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015

SAMPLER:

SAMPLER CONTACT No:

Email Reports and Invoices to: LQRSYD@slrconsulting.com ; [redacted]

Turnaround Time (TAT)

☐ Standard TAT

☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number 2 of 4

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	Asbestos ONLY	HOLD					Additional Informat (Comment on any gross conta or specific requirement
	0407_TP175_1.3_200626	26/06/2020	Soil	jar, pfas			x					Please hold all PF Containers
9	0407_TP245_0.1_200626	26/06/2020	Soil	jar, pfas, bag ✓	x							
10	0407_TP245_0.5_200626	26/06/2020	Soil	jar, pfas	x							no asbestos analy
	0407_TP245_1.0_200626	26/06/2020	Soil	jar, pfas			x					
11	0407_TP250_0.1_200626	26/06/2020	Soil	jar, pfas, bag ✓	x							
12	0407_TP250_0.5_200626	26/06/2020	Soil	jar, pfas	x							no asbestos analy
	0407_TP250_1.0_200626	26/06/2020	Soil	jar, pfas			x					
13	0407_TP251_0.1_200626	26/06/2020	Soil	jar, pfas, bag ✓	x							
14	0407_TP251_0.5_200626	26/06/2020	Soil	jar, pfas, bag ✓	x							
	0407_TP251_1.0_200626	26/06/2020	Soil	jar, pfas			x					
15	0407_TP252_0.1_200626	26/06/2020	Soil	jar, pfas, bag ✓	x							
16	0407_TP252_0.5_200626	26/06/2020	Soil	jar, pfas	x							no asbestos analy

Relinquished By Sampler	[redacted]	Date / Time 18/06/2020	**Received by**	Sign [redacted]	Date / Time 26/06/20	**Temperature Rec**
Relinquished By	Sign	Date / Time	**Received by**	Sign [redacted]	Date / Time 04:30	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

SLR

PROJECT OFFICE (Tick one)

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- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ

CLIENT: Defence Housing Australia	**LABORATORY: SGS Australia**	**Turnaround Time (TAT)**
PROJECT: Randwick Barracks	**LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015**	**COC Number** 3 of 4
PROJECT NUMBER: 610.30041	**SAMPLER:**	☐ Standard TAT
PROJECT MANAGER [redacted]	**SAMPLER CONTACT No:**	☐ Non Standard or Urgent TAT
PM CONTACT No [redacted]	**Email Reports and Invoices to: LQRSYD@slrconsulting.com ;** [redacted]	**Required TAT: Standard**

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	Asbestos ONLY	HOLD	Additional Information (Comment on any gross contamination or specific requirements)
	0407_TP252_1.0_200626	26/06/2020	Soil	jar, pfas			x	Please hold all PFAS Containers no asbestos analysis
	0407_TP252_1.2_200626	26/06/2020	Soil	jar, pfas			x	
17	0407_TP253_0.1_200626	26/06/2020	Soil	jar, pfas, bag ✓	x			
18	0407_TP253_0.5_200626	26/06/2020	Soil	jar, pfas	x			no asbestos analysis
	0407_TP253_1.0_200626	26/06/2020	Soil	jar, pfas			x	

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time	18/06/2020	**Received by**	[redacted]	Date / Time	26/06/20
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	4:30
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	

Temperature Received:

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
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- ☐ AUCKLAND: 66 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ

CLIENT: Defence Housing Australia

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGER [redacted]

PM CONTACT No: [redacted]

LABORATORY: SGS Australia

LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015

SAMPLER: GF

SAMPLER CONTACT No: [redacted]

Email Reports and Invoices to: LQRSYD@slrconsulting.com ; [redacted]

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number 4 of 4

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	Asbestos ONLY	HOLD	C6-C10/BETXN					Additional Information (Comment on any gross contamination or specific requirements)
19	0407_QC163_200626 (173)	26/06/2020	Soil	jar, pfas	x								Please hold all PFAS containers
	0407_QC265_200626 (273)	26/06/2020	Soil	jar, pfas	x								Please send to Eurofins
20	0407_QC168_200626	26/06/2020	Soil	jar, pfas	x								
	0407_QC268_200626	26/06/2020	Soil	jar, pfas	x								Please send to Eurofins
21	0407_QC176_200626	26/06/2020	Soil	jar, pfas	x								
	0407_QC276_200626	26/06/2020	Soil	jar, pfas	x								Please send to Eurofins
22	0407_QC169_200626	26/06/2020	Soil	jar, pfas	x								
	0407_QC269_200626	26/06/2020	Soil	jar, pfas	x								Please send to Eurofins
23	0407_QC172_200626	26/06/2020	Soil	jar, pfas	x								
	0407_QC272_200626	26/06/2020	Soil	jar, pfas	x								Please send to Eurofins
24	0407_QC414_200623	23/06/2020	Trip Blank	vial				x					
25	0407_QC514_200623	23/06/2020	Trip Spike	vial				x					

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 18/06/2020	**Received by**	Sign [redacted]	Date / Time 26/06/20	**Temperature Received:**
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time e 4:30	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

SAMPLE RECEIPT ADVICE

SE208136

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	25

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Fri 26/6/2020
Report Due	Wed 8/7/2020
SGS Reference	**SE208136**

SUBMISSION DETAILS

This is to confirm that 25 samples were received on Friday 26/6/2020. Results are expected to be ready by COB Wednesday 8/7/2020. Please quote SGS reference SE208136 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	25 Soil
Date documentation received	29/6/2020@5:32PM	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	3.7°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

11 samples have been placed on hold as no tests have been assigned for them by the client. These samples will not be processed.

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SAMPLE RECEIPT ADVICE

SE208136

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	Speciated Phenols in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
001	0407_TP147_0.1_200626	29	14	26	11	18	10	81	7
002	0407_TP147_0.5_200626	29	14	26	11	18	10	81	7
003	0407_TP161_0.1_200626	29	14	26	11	18	10	81	7
004	0407_TP161_0.5_200626	29	14	26	11	18	10	81	7
005	0407_TP165_0.1_200626	29	14	26	11	18	10	81	7
006	0407_TP165_0.5_200626	29	14	26	11	18	10	81	7
007	0407_TP175_0.1_200626	29	14	26	11	18	10	81	7
008	0407_TP175_0.5_200626	29	14	26	11	18	10	81	7
009	0407_TP245_0.1_200626	29	14	26	11	18	10	81	7
010	0407_TP245_0.5_200626	29	14	26	11	18	10	81	7
011	0407_TP250_0.1_200626	29	14	26	11	18	10	81	7
012	0407_TP250_0.5_200626	29	14	26	11	18	10	81	7
013	0407_TP251_0.1_200626	29	14	26	11	18	10	81	7
014	0407_TP251_0.5_200626	29	14	26	11	18	10	81	7
015	0407_TP252_0.1_200626	29	14	26	11	18	10	81	7
016	0407_TP252_0.5_200626	29	14	26	11	18	10	81	7
017	0407_TP253_0.1_200626	29	14	26	11	18	10	81	7
018	0407_TP253_0.5_200626	29	14	26	11	18	10	81	7
019	0407_QC173_200626	29	14	26	11	18	10	81	7
020	0407_QC168_200626	29	14	26	11	18	10	81	7
021	0407_QC176_200626	29	14	26	11	18	10	81	7
022	0407_QC169_200626	29	14	26	11	18	10	81	7
023	0407_QC172_200626	29	14	26	11	18	10	81	7
024	0407_QC414_200626	-	-	-	-	-	-	11	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE208136

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	VOC's in Soil
025	0407_QC514_200626	11

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE208136

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Fibre Identification in soil	Gravimetric Determination of Asbestos in Soil	Mercury in Soil	Moisture Content	Total Recoverable Elements in Soil/Waste
001	0407_TP147_0.1_200626	2	9	1	1	7
002	0407_TP147_0.5_200626	-	-	1	1	7
003	0407_TP161_0.1_200626	2	9	1	1	7
004	0407_TP161_0.5_200626	-	-	1	1	7
005	0407_TP165_0.1_200626	2	9	1	1	7
006	0407_TP165_0.5_200626	2	9	1	1	7
007	0407_TP175_0.1_200626	2	9	1	1	7
008	0407_TP175_0.5_200626	2	9	1	1	7
009	0407_TP245_0.1_200626	2	9	1	1	7
010	0407_TP245_0.5_200626	-	-	1	1	7
011	0407_TP250_0.1_200626	2	9	1	1	7
012	0407_TP250_0.5_200626	-	-	1	1	7
013	0407_TP251_0.1_200626	2	9	1	1	7
014	0407_TP251_0.5_200626	2	9	1	1	7
015	0407_TP252_0.1_200626	2	9	1	1	7
016	0407_TP252_0.5_200626	-	-	1	1	7
017	0407_TP253_0.1_200626	2	9	1	1	7
018	0407_TP253_0.5_200626	-	-	1	1	7
019	0407_QC173_200626	-	-	1	1	7
020	0407_QC168_200626	-	-	1	1	7
021	0407_QC176_200626	-	-	1	1	7
022	0407_QC169_200626	-	-	1	1	7
023	0407_QC172_200626	-	-	1	1	7
024	0407_QC414_200626	-	-	-	1	-

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
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Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	25

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208136 R0**
Date Received	26/6/2020
Date Reported	10/7/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.

Sample #5: Asbestos found as 10x4x3mm cement sheet fragments x5 in >2mm portion.
Sample #9: Asbestos found as 4x3x2mm cement sheet fragment x2 in >2mm portion.
Sample #11: Approx 5-6x1mm fibre bundles x4 found loose in <2mm portion.
Sample #11: Asbestos found as approx 8x4x2mm cement sheet fragments in >2mm portion.
Sample #13: Asbestos found in approx 6x4x2mm cement sheet fragments in >2mm portion.
Sample #14: Asbestos found in approx 5x3x2mm cement sheet fragments in >2mm portion.

Asbestos analysed by Approved Identifier Ravee Sivasubramaniam .

SIGNATORIES

[redacted]

Chemist | Senior Organic Chemist/Metals Chemist | Metals/Inorganics Team Leader

[redacted]

Organic Section Head | Asbestos Analyst

VOC's in Soil [AN433] Tested: 6/7/2020

PARAMETER	UOM	LOR	0407_TP147_0.1_20(626 SOIL - 26/6/2020 SE208136.001	0407_TP147_0.5_20(626 SOIL - 26/6/2020 SE208136.002	0407_TP161_0.1_20(626 SOIL - 26/6/2020 SE208136.003	0407_TP161_0.5_20(626 SOIL - 26/6/2020 SE208136.004	0407_TP165_0.1_20(626 SOIL - 26/6/2020 SE208136.005
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 6/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP147_0.1_20(626 SOIL - 26/6/2020 SE208136.001	0407_TP147_0.5_20(626 SOIL - 26/6/2020 SE208136.002	0407_TP161_0.1_20(626 SOIL - 26/6/2020 SE208136.003	0407_TP161_0.5_20(626 SOIL - 26/6/2020 SE208136.004	0407_TP165_0.1_20(626 SOIL - 26/6/2020 SE208136.005
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 6/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP165_0.5_20(626 SOIL - 26/6/2020 SE208136.006	0407_TP175_0.1_20(626 SOIL - 26/6/2020 SE208136.007	0407_TP175_0.5_20(626 SOIL - 26/6/2020 SE208136.008	0407_TP245_0.1_20(626 SOIL - 26/6/2020 SE208136.009	0407_TP245_0.5_20(626 SOIL - 26/6/2020 SE208136.010
Benzene	mg/kg	0.1	<0.1	<0.1	**0.2**	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	**6.4**	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	**0.2**	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	**0.8**	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	**0.1**	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	**1.0**	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	**7.7**	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 6/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP165_0.5_20(626 SOIL - 26/6/2020 SE208136.006	0407_TP175_0.1_20(626 SOIL - 26/6/2020 SE208136.007	0407_TP175_0.5_20(626 SOIL - 26/6/2020 SE208136.008	0407_TP245_0.1_20(626 SOIL - 26/6/2020 SE208136.009	0407_TP245_0.5_20(626 SOIL - 26/6/2020 SE208136.010
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 6/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP250_0.1_20(626 SOIL - 26/6/2020 SE208136.011	0407_TP250_0.5_20(626 SOIL - 26/6/2020 SE208136.012	0407_TP251_0.1_20(626 SOIL - 26/6/2020 SE208136.013	0407_TP251_0.5_20(626 SOIL - 26/6/2020 SE208136.014	0407_TP252_0.1_20(626 SOIL - 26/6/2020 SE208136.015
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 6/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP250_0.1_20(626 SOIL - 26/6/2020 SE208136.011	0407_TP250_0.5_20(626 SOIL - 26/6/2020 SE208136.012	0407_TP251_0.1_20(626 SOIL - 26/6/2020 SE208136.013	0407_TP251_0.5_20(626 SOIL - 26/6/2020 SE208136.014	0407_TP252_0.1_20(626 SOIL - 26/6/2020 SE208136.015
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 6/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP252_0.5_20(626 SOIL - 26/6/2020 SE208136.016	0407_TP253_0.1_20(626 SOIL - 26/6/2020 SE208136.017	0407_TP253_0.5_20(626 SOIL - 26/6/2020 SE208136.018	0407_QC173_20062(SOIL - 26/6/2020 SE208136.019	0407_QC168_20062(SOIL - 26/6/2020 SE208136.020
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 6/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP252_0.5_20(626 SOIL - 26/6/2020 SE208136.016	0407_TP253_0.1_20(626 SOIL - 26/6/2020 SE208136.017	0407_TP253_0.5_20(626 SOIL - 26/6/2020 SE208136.018	0407_QC173_20062(SOIL - 26/6/2020 SE208136.019	0407_QC168_20062(SOIL - 26/6/2020 SE208136.020
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 6/7/2020 (continued)

PARAMETER	UOM	LOR	0407_QC176_20062(SOIL - 26/6/2020 SE208136.021	0407_QC169_20062(SOIL - 26/6/2020 SE208136.022	0407_QC172_20062(SOIL - 26/6/2020 SE208136.023	0407_QC414_20062(SOIL - 26/6/2020 SE208136.024	0407_QC514_20062(SOIL - 26/6/2020 SE208136.025
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	[105%]
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	[101%]
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	[102%]
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	[101%]
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	[99%]
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	-
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	-
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	-	-
Chloromethane	mg/kg	1	<1	<1	<1	-	-
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Bromomethane	mg/kg	1	<1	<1	<1	-	-
Chloroethane	mg/kg	1	<1	<1	<1	-	-
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	-	-
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	-	-
Iodomethane	mg/kg	5	<5	<5	<5	-	-
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	-	-
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	-	-
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Vinyl acetate	mg/kg	10	<10	<10	<10	-	-
MEK (2-butanone)	mg/kg	10	<10	<10	<10	-	-
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
2-nitropropane	mg/kg	10	<10	<10	<10	-	-
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	-	-
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	-	-
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	-	-
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	-	-

VOC's in Soil [AN433] Tested: 6/7/2020 (continued)

PARAMETER	UOM	LOR	0407_QC176_20062(SOIL - 26/6/2020 SE208136.021	0407_QC169_20062(SOIL - 26/6/2020 SE208136.022	0407_QC172_20062(SOIL - 26/6/2020 SE208136.023	0407_QC414_20062(SOIL - 26/6/2020 SE208136.024	0407_QC514_20062(SOIL - 26/6/2020 SE208136.025
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Total VOC*	mg/kg	24	<24	<24	<24	-	-
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	-	-
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	-	-
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	-	-

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 6/7/2020

PARAMETER	UOM	LOR	0407_TP147_0.1_20(626 SOIL - 26/6/2020 SE208136.001	0407_TP147_0.5_20(626 SOIL - 26/6/2020 SE208136.002	0407_TP161_0.1_20(626 SOIL - 26/6/2020 SE208136.003	0407_TP161_0.5_20(626 SOIL - 26/6/2020 SE208136.004	0407_TP165_0.1_20(626 SOIL - 26/6/2020 SE208136.005
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP165_0.5_20(626 SOIL - 26/6/2020 SE208136.006	0407_TP175_0.1_20(626 SOIL - 26/6/2020 SE208136.007	0407_TP175_0.5_20(626 SOIL - 26/6/2020 SE208136.008	0407_TP245_0.1_20(626 SOIL - 26/6/2020 SE208136.009	0407_TP245_0.5_20(626 SOIL - 26/6/2020 SE208136.010
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	0.2	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP250_0.1_20(626 SOIL - 26/6/2020 SE208136.011	0407_TP250_0.5_20(626 SOIL - 26/6/2020 SE208136.012	0407_TP251_0.1_20(626 SOIL - 26/6/2020 SE208136.013	0407_TP251_0.5_20(626 SOIL - 26/6/2020 SE208136.014	0407_TP252_0.1_20(626 SOIL - 26/6/2020 SE208136.015
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP252_0.5_20(626 SOIL - 26/6/2020 SE208136.016	0407_TP253_0.1_20(626 SOIL - 26/6/2020 SE208136.017	0407_TP253_0.5_20(626 SOIL - 26/6/2020 SE208136.018	0407_QC173_20062(SOIL - 26/6/2020 SE208136.019	0407_QC168_20062(SOIL - 26/6/2020 SE208136.020
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_QC176_20062(SOIL - 26/6/2020 SE208136.021	0407_QC169_20062(SOIL - 26/6/2020 SE208136.022	0407_QC172_20062(SOIL - 26/6/2020 SE208136.023	0407_QC414_20062(SOIL - 26/6/2020 SE208136.024
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 6/7/2020

PARAMETER	UOM	LOR	0407_TP147_0.1_20(626 SOIL - 26/6/2020 SE208136.001	0407_TP147_0.5_20(626 SOIL - 26/6/2020 SE208136.002	0407_TP161_0.1_20(626 SOIL - 26/6/2020 SE208136.003	0407_TP161_0.5_20(626 SOIL - 26/6/2020 SE208136.004	0407_TP165_0.1_20(626 SOIL - 26/6/2020 SE208136.005
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	78
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP165_0.5_20(626 SOIL - 26/6/2020 SE208136.006	0407_TP175_0.1_20(626 SOIL - 26/6/2020 SE208136.007	0407_TP175_0.5_20(626 SOIL - 26/6/2020 SE208136.008	0407_TP245_0.1_20(626 SOIL - 26/6/2020 SE208136.009	0407_TP245_0.5_20(626 SOIL - 26/6/2020 SE208136.010
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP250_0.1_20(626 SOIL - 26/6/2020 SE208136.011	0407_TP250_0.5_20(626 SOIL - 26/6/2020 SE208136.012	0407_TP251_0.1_20(626 SOIL - 26/6/2020 SE208136.013	0407_TP251_0.5_20(626 SOIL - 26/6/2020 SE208136.014	0407_TP252_0.1_20(626 SOIL - 26/6/2020 SE208136.015
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 6/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP252_0.5_20(626 SOIL - 26/6/2020 SE208136.016	0407_TP253_0.1_20(626 SOIL - 26/6/2020 SE208136.017	0407_TP253_0.5_20(626 SOIL - 26/6/2020 SE208136.018	0407_QC173_20062(SOIL - 26/6/2020 SE208136.019	0407_QC168_20062(SOIL - 26/6/2020 SE208136.020
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_QC176_20062(SOIL - 26/6/2020 SE208136.021	0407_QC169_20062(SOIL - 26/6/2020 SE208136.022	0407_QC172_20062(SOIL - 26/6/2020 SE208136.023
TRH C10-C14	mg/kg	20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	88
TRH C37-C40	mg/kg	100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 6/7/2020

PARAMETER	UOM	LOR	0407_TP147_0.1_20(626 SOIL - 26/6/2020 SE208136.001	0407_TP147_0.5_20(626 SOIL - 26/6/2020 SE208136.002	0407_TP161_0.1_20(626 SOIL - 26/6/2020 SE208136.003	0407_TP161_0.5_20(626 SOIL - 26/6/2020 SE208136.004	0407_TP165_0.1_20(626 SOIL - 26/6/2020 SE208136.005
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	**0.1**	<0.1	**0.1**	<0.1	**0.1**
Pyrene	mg/kg	0.1	**0.1**	<0.1	**0.2**	<0.1	**0.1**
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PARAMETER	UOM	LOR	0407_TP165_0.5_20(626 SOIL - 26/6/2020 SE208136.006	0407_TP175_0.1_20(626 SOIL - 26/6/2020 SE208136.007	0407_TP175_0.5_20(626 SOIL - 26/6/2020 SE208136.008	0407_TP245_0.1_20(626 SOIL - 26/6/2020 SE208136.009	0407_TP245_0.5_20(626 SOIL - 26/6/2020 SE208136.010
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	**0.2**	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	**0.4**	<0.1	**0.2**	<0.1
Pyrene	mg/kg	0.1	<0.1	**0.4**	**0.1**	**0.2**	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	**0.2**	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	**0.2**	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	**0.3**	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	**0.2**	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	**0.2**	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	**0.1**	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	**0.2**	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	**0.3**	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	**0.4**	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	**0.4**	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	**2.4**	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	**2.4**	<0.8	<0.8	<0.8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 6/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP250_0.1_20(626 SOIL - 26/6/2020 SE208136.011	0407_TP250_0.5_20(626 SOIL - 26/6/2020 SE208136.012	0407_TP251_0.1_20(626 SOIL - 26/6/2020 SE208136.013	0407_TP251_0.5_20(626 SOIL - 26/6/2020 SE208136.014	0407_TP252_0.1_20(626 SOIL - 26/6/2020 SE208136.015
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	0.2
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	0.2	<0.1	0.4	0.2	0.4
Anthracene	mg/kg	0.1	<0.1	<0.1	0.1	<0.1	0.1
Fluoranthene	mg/kg	0.1	0.4	<0.1	0.9	0.4	0.9
Pyrene	mg/kg	0.1	0.4	<0.1	1.0	0.3	1.0
Benzo(a)anthracene	mg/kg	0.1	0.2	<0.1	0.4	0.2	0.4
Chrysene	mg/kg	0.1	0.2	<0.1	0.4	0.1	0.5
Benzo(b&j)fluoranthene	mg/kg	0.1	0.2	<0.1	0.4	0.2	0.6
Benzo(k)fluoranthene	mg/kg	0.1	0.1	<0.1	0.2	0.1	0.3
Benzo(a)pyrene	mg/kg	0.1	0.2	<0.1	0.5	0.2	0.6
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	0.3	<0.1	0.4
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	0.1	<0.1	0.4	<0.1	0.4
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	0.2	<0.2	0.7	0.2	0.8
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	0.3	<0.3	0.8	0.3	0.9
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	0.3	<0.2	0.7	0.3	0.8
Total PAH (18)	mg/kg	0.8	1.9	<0.8	5.1	1.6	5.6
Total PAH (NEPM/WHO 16)	mg/kg	0.8	1.9	<0.8	5.1	1.6	5.6

PARAMETER	UOM	LOR	0407_TP252_0.5_20(626 SOIL - 26/6/2020 SE208136.016	0407_TP253_0.1_20(626 SOIL - 26/6/2020 SE208136.017	0407_TP253_0.5_20(626 SOIL - 26/6/2020 SE208136.018	0407_QC173_20062(SOIL - 26/6/2020 SE208136.019	0407_QC168_20062(SOIL - 26/6/2020 SE208136.020
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	0.2	0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	1.2	0.5	<0.1	0.3	<0.1
Anthracene	mg/kg	0.1	0.4	0.2	<0.1	0.1	<0.1
Fluoranthene	mg/kg	0.1	2.4	0.9	<0.1	0.9	<0.1
Pyrene	mg/kg	0.1	2.2	0.9	<0.1	0.8	<0.1
Benzo(a)anthracene	mg/kg	0.1	0.9	0.4	<0.1	0.4	<0.1
Chrysene	mg/kg	0.1	0.8	0.3	<0.1	0.4	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	1.0	0.4	<0.1	0.4	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	0.5	0.2	<0.1	0.2	<0.1
Benzo(a)pyrene	mg/kg	0.1	0.9	0.4	<0.1	0.4	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.6	0.2	<0.1	0.2	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	0.7	0.2	<0.1	0.2	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	1.2	0.5	<0.2	0.5	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	1.3	0.6	<0.3	0.6	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	1.3	0.6	<0.2	0.6	<0.2
Total PAH (18)	mg/kg	0.8	12	4.7	<0.8	4.3	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	12	4.7	<0.8	4.3	<0.8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 6/7/2020 (continued)

PARAMETER	UOM	LOR	0407_QC176_20062(SOIL - 26/6/2020 SE208136.021	0407_QC169_20062(SOIL - 26/6/2020 SE208136.022	0407_QC172_20062(SOIL - 26/6/2020 SE208136.023
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	0.2
Acenaphthene	mg/kg	0.1	<0.1	<0.1	0.2
Fluorene	mg/kg	0.1	<0.1	<0.1	0.2
Phenanthrene	mg/kg	0.1	0.1	0.2	2.9
Anthracene	mg/kg	0.1	<0.1	<0.1	0.7
Fluoranthene	mg/kg	0.1	0.4	0.6	4.4
Pyrene	mg/kg	0.1	0.5	0.5	4.1
Benzo(a)anthracene	mg/kg	0.1	0.2	0.3	1.3
Chrysene	mg/kg	0.1	0.2	0.2	1.4
Benzo(b&j)fluoranthene	mg/kg	0.1	0.3	0.3	1.7
Benzo(k)fluoranthene	mg/kg	0.1	0.1	0.2	0.9
Benzo(a)pyrene	mg/kg	0.1	0.2	0.3	1.7
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.1	0.2	1.2
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	0.1
Benzo(ghi)perylene	mg/kg	0.1	0.2	0.2	1.2
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	0.3	0.4	2.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	0.4	0.5	2.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	0.4	0.4	2.2
Total PAH (18)	mg/kg	0.8	2.3	2.9	21
Total PAH (NEPM/WHO 16)	mg/kg	0.8	2.3	2.9	21

Speciated Phenols in Soil [AN420] Tested: 6/7/2020

PARAMETER	UOM	LOR	0407_TP147_0.1_20(626 SOIL - 26/6/2020 SE208136.001	0407_TP147_0.5_20(626 SOIL - 26/6/2020 SE208136.002	0407_TP161_0.1_20(626 SOIL - 26/6/2020 SE208136.003	0407_TP161_0.5_20(626 SOIL - 26/6/2020 SE208136.004	0407_TP165_0.1_20(626 SOIL - 26/6/2020 SE208136.005
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_TP165_0.5_20(626 SOIL - 26/6/2020 SE208136.006	0407_TP175_0.1_20(626 SOIL - 26/6/2020 SE208136.007	0407_TP175_0.5_20(626 SOIL - 26/6/2020 SE208136.008	0407_TP245_0.1_20(626 SOIL - 26/6/2020 SE208136.009	0407_TP245_0.5_20(626 SOIL - 26/6/2020 SE208136.010
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

Speciated Phenols in Soil [AN420] Tested: 6/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP250_0.1_20(626 SOIL - 26/6/2020 SE208136.011	0407_TP250_0.5_20(626 SOIL - 26/6/2020 SE208136.012	0407_TP251_0.1_20(626 SOIL - 26/6/2020 SE208136.013	0407_TP251_0.5_20(626 SOIL - 26/6/2020 SE208136.014	0407_TP252_0.1_20(626 SOIL - 26/6/2020 SE208136.015
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_TP252_0.5_20(626 SOIL - 26/6/2020 SE208136.016	0407_TP253_0.1_20(626 SOIL - 26/6/2020 SE208136.017	0407_TP253_0.5_20(626 SOIL - 26/6/2020 SE208136.018	0407_QC173_20062(SOIL - 26/6/2020 SE208136.019	0407_QC168_20062(SOIL - 26/6/2020 SE208136.020
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

Speciated Phenols in Soil [AN420] Tested: 6/7/2020 (continued)

PARAMETER	UOM	LOR	0407_QC176_20062(SOIL - 26/6/2020 SE208136.021	0407_QC169_20062(SOIL - 26/6/2020 SE208136.022	0407_QC172_20062(SOIL - 26/6/2020 SE208136.023
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2

OC Pesticides in Soil [AN420] Tested: 6/7/2020

PARAMETER	UOM	LOR	0407_TP147_0.1_20(626 SOIL - 26/6/2020 SE208136.001	0407_TP147_0.5_20(626 SOIL - 26/6/2020 SE208136.002	0407_TP161_0.1_20(626 SOIL - 26/6/2020 SE208136.003	0407_TP161_0.5_20(626 SOIL - 26/6/2020 SE208136.004	0407_TP165_0.1_20(626 SOIL - 26/6/2020 SE208136.005
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 6/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP165_0.5_20(626 SOIL - 26/6/2020 SE208136.006	0407_TP175_0.1_20(626 SOIL - 26/6/2020 SE208136.007	0407_TP175_0.5_20(626 SOIL - 26/6/2020 SE208136.008	0407_TP245_0.1_20(626 SOIL - 26/6/2020 SE208136.009	0407_TP245_0.5_20(626 SOIL - 26/6/2020 SE208136.010
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 6/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP250_0.1_20(626 SOIL - 26/6/2020 SE208136.011	0407_TP250_0.5_20(626 SOIL - 26/6/2020 SE208136.012	0407_TP251_0.1_20(626 SOIL - 26/6/2020 SE208136.013	0407_TP251_0.5_20(626 SOIL - 26/6/2020 SE208136.014	0407_TP252_0.1_20(626 SOIL - 26/6/2020 SE208136.015
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 6/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP252_0.5_20(626 SOIL - 26/6/2020 SE208136.016	0407_TP253_0.1_20(626 SOIL - 26/6/2020 SE208136.017	0407_TP253_0.5_20(626 SOIL - 26/6/2020 SE208136.018	0407_QC173_20062(SOIL - 26/6/2020 SE208136.019	0407_QC168_20062(SOIL - 26/6/2020 SE208136.020
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 6/7/2020 (continued)

PARAMETER	UOM	LOR	0407_QC176_20062(SOIL - 26/6/2020 SE208136.021	0407_QC169_20062(SOIL - 26/6/2020 SE208136.022	0407_QC172_20062(SOIL - 26/6/2020 SE208136.023
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	**0.2**
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1

OP Pesticides in Soil [AN420] Tested: 6/7/2020

PARAMETER	UOM	LOR	0407_TP147_0.1_20(626 SOIL - 26/6/2020 SE208136.001	0407_TP147_0.5_20(626 SOIL - 26/6/2020 SE208136.002	0407_TP161_0.1_20(626 SOIL - 26/6/2020 SE208136.003	0407_TP161_0.5_20(626 SOIL - 26/6/2020 SE208136.004	0407_TP165_0.1_20(626 SOIL - 26/6/2020 SE208136.005
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP165_0.5_20(626 SOIL - 26/6/2020 SE208136.006	0407_TP175_0.1_20(626 SOIL - 26/6/2020 SE208136.007	0407_TP175_0.5_20(626 SOIL - 26/6/2020 SE208136.008	0407_TP245_0.1_20(626 SOIL - 26/6/2020 SE208136.009	0407_TP245_0.5_20(626 SOIL - 26/6/2020 SE208136.010
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP250_0.1_20(626 SOIL - 26/6/2020 SE208136.011	0407_TP250_0.5_20(626 SOIL - 26/6/2020 SE208136.012	0407_TP251_0.1_20(626 SOIL - 26/6/2020 SE208136.013	0407_TP251_0.5_20(626 SOIL - 26/6/2020 SE208136.014	0407_TP252_0.1_20(626 SOIL - 26/6/2020 SE208136.015
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

OP Pesticides in Soil [AN420] Tested: 6/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP252_0.5_20(626 SOIL - 26/6/2020 SE208136.016	0407_TP253_0.1_20(626 SOIL - 26/6/2020 SE208136.017	0407_TP253_0.5_20(626 SOIL - 26/6/2020 SE208136.018	0407_QC173_20062(SOIL - 26/6/2020 SE208136.019	0407_QC168_20062(SOIL - 26/6/2020 SE208136.020
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_QC176_20062(SOIL - 26/6/2020 SE208136.021	0407_QC169_20062(SOIL - 26/6/2020 SE208136.022	0407_QC172_20062(SOIL - 26/6/2020 SE208136.023
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7

PCBs in Soil [AN420] Tested: 6/7/2020

PARAMETER	UOM	LOR	0407_TP147_0.1_20(626 SOIL - 26/6/2020 SE208136.001	0407_TP147_0.5_20(626 SOIL - 26/6/2020 SE208136.002	0407_TP161_0.1_20(626 SOIL - 26/6/2020 SE208136.003	0407_TP161_0.5_20(626 SOIL - 26/6/2020 SE208136.004	0407_TP165_0.1_20(626 SOIL - 26/6/2020 SE208136.005
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP165_0.5_20(626 SOIL - 26/6/2020 SE208136.006	0407_TP175_0.1_20(626 SOIL - 26/6/2020 SE208136.007	0407_TP175_0.5_20(626 SOIL - 26/6/2020 SE208136.008	0407_TP245_0.1_20(626 SOIL - 26/6/2020 SE208136.009	0407_TP245_0.5_20(626 SOIL - 26/6/2020 SE208136.010
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP250_0.1_20(626 SOIL - 26/6/2020 SE208136.011	0407_TP250_0.5_20(626 SOIL - 26/6/2020 SE208136.012	0407_TP251_0.1_20(626 SOIL - 26/6/2020 SE208136.013	0407_TP251_0.5_20(626 SOIL - 26/6/2020 SE208136.014	0407_TP252_0.1_20(626 SOIL - 26/6/2020 SE208136.015
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PCBs in Soil [AN420] Tested: 6/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP252_0.5_20(626 SOIL - 26/6/2020 SE208136.016	0407_TP253_0.1_20(626 SOIL - 26/6/2020 SE208136.017	0407_TP253_0.5_20(626 SOIL - 26/6/2020 SE208136.018	0407_QC173_20062(SOIL - 26/6/2020 SE208136.019	0407_QC168_20062(SOIL - 26/6/2020 SE208136.020
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_QC176_20062(SOIL - 26/6/2020 SE208136.021	0407_QC169_20062(SOIL - 26/6/2020 SE208136.022	0407_QC172_20062(SOIL - 26/6/2020 SE208136.023
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 6/7/2020

PARAMETER	UOM	LOR	0407_TP147_0.1_20(626 SOIL - 26/6/2020 SE208136.001	0407_TP147_0.5_20(626 SOIL - 26/6/2020 SE208136.002	0407_TP161_0.1_20(626 SOIL - 26/6/2020 SE208136.003	0407_TP161_0.5_20(626 SOIL - 26/6/2020 SE208136.004	0407_TP165_0.1_20(626 SOIL - 26/6/2020 SE208136.005
Arsenic, As	mg/kg	1	<1	<1	<1	<1	5
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	0.7	<0.5	2.0	<0.5	12
Copper, Cu	mg/kg	0.5	2.1	<0.5	6.8	<0.5	71
Lead, Pb	mg/kg	1	8	<1	34	<1	87
Nickel, Ni	mg/kg	0.5	<0.5	<0.5	0.7	<0.5	7.5
Zinc, Zn	mg/kg	2	8.2	<2.0	27	<2.0	250

PARAMETER	UOM	LOR	0407_TP165_0.5_20(626 SOIL - 26/6/2020 SE208136.006	0407_TP175_0.1_20(626 SOIL - 26/6/2020 SE208136.007	0407_TP175_0.5_20(626 SOIL - 26/6/2020 SE208136.008	0407_TP245_0.1_20(626 SOIL - 26/6/2020 SE208136.009	0407_TP245_0.5_20(626 SOIL - 26/6/2020 SE208136.010
Arsenic, As	mg/kg	1	<1	4	<1	5	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	<0.5	12	0.7	38	<0.5
Copper, Cu	mg/kg	0.5	<0.5	29	2.0	43	<0.5
Lead, Pb	mg/kg	1	<1	77	10	85	<1
Nickel, Ni	mg/kg	0.5	<0.5	9.9	<0.5	11	<0.5
Zinc, Zn	mg/kg	2	3.9	140	18	220	<2.0

PARAMETER	UOM	LOR	0407_TP250_0.1_20(626 SOIL - 26/6/2020 SE208136.011	0407_TP250_0.5_20(626 SOIL - 26/6/2020 SE208136.012	0407_TP251_0.1_20(626 SOIL - 26/6/2020 SE208136.013	0407_TP251_0.5_20(626 SOIL - 26/6/2020 SE208136.014	0407_TP252_0.1_20(626 SOIL - 26/6/2020 SE208136.015
Arsenic, As	mg/kg	1	7	1	6	<1	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	16	0.7	15	0.6	2.6
Copper, Cu	mg/kg	0.5	59	2.0	29	2.9	7.2
Lead, Pb	mg/kg	1	260	5	80	13	30
Nickel, Ni	mg/kg	0.5	8.7	<0.5	7.9	<0.5	0.8
Zinc, Zn	mg/kg	2	240	7.4	240	11	19

PARAMETER	UOM	LOR	0407_TP252_0.5_20(626 SOIL - 26/6/2020 SE208136.016	0407_TP253_0.1_20(626 SOIL - 26/6/2020 SE208136.017	0407_TP253_0.5_20(626 SOIL - 26/6/2020 SE208136.018	0407_QC173_20062(SOIL - 26/6/2020 SE208136.019	0407_QC168_20062(SOIL - 26/6/2020 SE208136.020
Arsenic, As	mg/kg	1	<1	<1	<1	<1	5
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	0.3
Chromium, Cr	mg/kg	0.5	1.1	7.7	<0.5	5.8	15
Copper, Cu	mg/kg	0.5	6.3	12	0.5	11	43
Lead, Pb	mg/kg	1	15	77	1	60	100
Nickel, Ni	mg/kg	0.5	0.8	2.0	<0.5	1.3	11
Zinc, Zn	mg/kg	2	9.9	60	<2.0	58	270

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 6/7/2020

(continued)

PARAMETER	UOM	LOR	0407_QC176_20062(SOIL - 26/6/2020 SE208136.021	0407_QC169_20062(SOIL - 26/6/2020 SE208136.022	0407_QC172_20062(SOIL - 26/6/2020 SE208136.023
Arsenic, As	mg/kg	1	4	6	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	8.3	17	3.1
Copper, Cu	mg/kg	0.5	21	29	10
Lead, Pb	mg/kg	1	72	65	38
Nickel, Ni	mg/kg	0.5	5.2	9.5	1.9
Zinc, Zn	mg/kg	2	120	210	48

Mercury in Soil [AN312] Tested: 6/7/2020

PARAMETER	UOM	LOR	0407_TP147_0.1_20(626 SOIL - 26/6/2020 SE208136.001	0407_TP147_0.5_20(626 SOIL - 26/6/2020 SE208136.002	0407_TP161_0.1_20(626 SOIL - 26/6/2020 SE208136.003	0407_TP161_0.5_20(626 SOIL - 26/6/2020 SE208136.004	0407_TP165_0.1_20(626 SOIL - 26/6/2020 SE208136.005
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	10

PARAMETER	UOM	LOR	0407_TP165_0.5_20(626 SOIL - 26/6/2020 SE208136.006	0407_TP175_0.1_20(626 SOIL - 26/6/2020 SE208136.007	0407_TP175_0.5_20(626 SOIL - 26/6/2020 SE208136.008	0407_TP245_0.1_20(626 SOIL - 26/6/2020 SE208136.009	0407_TP245_0.5_20(626 SOIL - 26/6/2020 SE208136.010
Mercury	mg/kg	0.05	<0.05	0.43	<0.05	0.17	<0.05

PARAMETER	UOM	LOR	0407_TP250_0.1_20(626 SOIL - 26/6/2020 SE208136.011	0407_TP250_0.5_20(626 SOIL - 26/6/2020 SE208136.012	0407_TP251_0.1_20(626 SOIL - 26/6/2020 SE208136.013	0407_TP251_0.5_20(626 SOIL - 26/6/2020 SE208136.014	0407_TP252_0.1_20(626 SOIL - 26/6/2020 SE208136.015
Mercury	mg/kg	0.05	0.13	<0.05	0.13	<0.05	<0.05

PARAMETER	UOM	LOR	0407_TP252_0.5_20(626 SOIL - 26/6/2020 SE208136.016	0407_TP253_0.1_20(626 SOIL - 26/6/2020 SE208136.017	0407_TP253_0.5_20(626 SOIL - 26/6/2020 SE208136.018	0407_QC173_20062(SOIL - 26/6/2020 SE208136.019	0407_QC168_20062(SOIL - 26/6/2020 SE208136.020
Mercury	mg/kg	0.05	<0.05	0.08	<0.05	0.08	0.57

PARAMETER	UOM	LOR	0407_QC176_20062(SOIL - 26/6/2020 SE208136.021	0407_QC169_20062(SOIL - 26/6/2020 SE208136.022	0407_QC172_20062(SOIL - 26/6/2020 SE208136.023
Mercury	mg/kg	0.05	0.10	0.09	<0.05

Moisture Content [AN002] Tested: 6/7/2020

PARAMETER	UOM	LOR	0407_TP147_0.1_20(626 SOIL - 26/6/2020 SE208136.001	0407_TP147_0.5_20(626 SOIL - 26/6/2020 SE208136.002	0407_TP161_0.1_20(626 SOIL - 26/6/2020 SE208136.003	0407_TP161_0.5_20(626 SOIL - 26/6/2020 SE208136.004	0407_TP165_0.1_20(626 SOIL - 26/6/2020 SE208136.005
% Moisture	%w/w	1	4.0	3.1	6.0	2.4	38.2

PARAMETER	UOM	LOR	0407_TP165_0.5_20(626 SOIL - 26/6/2020 SE208136.006	0407_TP175_0.1_20(626 SOIL - 26/6/2020 SE208136.007	0407_TP175_0.5_20(626 SOIL - 26/6/2020 SE208136.008	0407_TP245_0.1_20(626 SOIL - 26/6/2020 SE208136.009	0407_TP245_0.5_20(626 SOIL - 26/6/2020 SE208136.010
% Moisture	%w/w	1	3.7	13.8	3.7	39.6	3.7

PARAMETER	UOM	LOR	0407_TP250_0.1_20(626 SOIL - 26/6/2020 SE208136.011	0407_TP250_0.5_20(626 SOIL - 26/6/2020 SE208136.012	0407_TP251_0.1_20(626 SOIL - 26/6/2020 SE208136.013	0407_TP251_0.5_20(626 SOIL - 26/6/2020 SE208136.014	0407_TP252_0.1_20(626 SOIL - 26/6/2020 SE208136.015
% Moisture	%w/w	1	19.5	5.0	16.2	4.6	11.5

PARAMETER	UOM	LOR	0407_TP252_0.5_20(626 SOIL - 26/6/2020 SE208136.016	0407_TP253_0.1_20(626 SOIL - 26/6/2020 SE208136.017	0407_TP253_0.5_20(626 SOIL - 26/6/2020 SE208136.018	0407_QC173_20062(SOIL - 26/6/2020 SE208136.019	0407_QC168_20062(SOIL - 26/6/2020 SE208136.020
% Moisture	%w/w	1	5.2	27.7	2.9	24.5	38.4

PARAMETER	UOM	LOR	0407_QC176_20062(SOIL - 26/6/2020 SE208136.021	0407_QC169_20062(SOIL - 26/6/2020 SE208136.022	0407_QC172_20062(SOIL - 26/6/2020 SE208136.023	0407_QC414_20062(SOIL - 26/6/2020 SE208136.024
% Moisture	%w/w	1	11.9	20.8	11.2	17.8

Fibre Identification in soil [AN602] Tested: 7/7/2020

PARAMETER	UOM	LOR	0407_TP147_0.1_20(626 SOIL - 26/6/2020 SE208136.001	0407_TP161_0.1_20(626 SOIL - 26/6/2020 SE208136.003	0407_TP165_0.1_20(626 SOIL - 26/6/2020 SE208136.005	0407_TP165_0.5_20(626 SOIL - 26/6/2020 SE208136.006	0407_TP175_0.1_20(626 SOIL - 26/6/2020 SE208136.007
Asbestos Detected	No unit	-	No	No	Yes	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	**>0.01**	<0.01	<0.01

PARAMETER	UOM	LOR	0407_TP175_0.5_20(626 SOIL - 26/6/2020 SE208136.008	0407_TP245_0.1_20(626 SOIL - 26/6/2020 SE208136.009	0407_TP250_0.1_20(626 SOIL - 26/6/2020 SE208136.011	0407_TP251_0.1_20(626 SOIL - 26/6/2020 SE208136.013	0407_TP251_0.5_20(626 SOIL - 26/6/2020 SE208136.014
Asbestos Detected	No unit	-	No	Yes	Yes	Yes	Yes
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	**>0.01**	<0.01	<0.01

PARAMETER	UOM	LOR	0407_TP252_0.1_20(626 SOIL - 26/6/2020 SE208136.015	0407_TP253_0.1_20(626 SOIL - 26/6/2020 SE208136.017
Asbestos Detected	No unit	-	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 7/7/2020

PARAMETER	UOM	LOR	0407_TP147_0.1_20(626 SOIL - 26/6/2020 SE208136.001	0407_TP161_0.1_20(626 SOIL - 26/6/2020 SE208136.003	0407_TP165_0.1_20(626 SOIL - 26/6/2020 SE208136.005	0407_TP165_0.5_20(626 SOIL - 26/6/2020 SE208136.006	0407_TP175_0.1_20(626 SOIL - 26/6/2020 SE208136.007
Total Sample Weight*	g	1	590	718	397	701	486
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	0.0438	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	0.011	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	0.011	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP175_0.5_20(626 SOIL - 26/6/2020 SE208136.008	0407_TP245_0.1_20(626 SOIL - 26/6/2020 SE208136.009	0407_TP250_0.1_20(626 SOIL - 26/6/2020 SE208136.011	0407_TP251_0.1_20(626 SOIL - 26/6/2020 SE208136.013	0407_TP251_0.5_20(626 SOIL - 26/6/2020 SE208136.014
Total Sample Weight*	g	1	705	387	457	463	692
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	0.0192	0.103	0.0286	0.0320
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	0.0185	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	0.005	0.023	0.006	0.005
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	0.004	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	0.005	0.027	0.006	0.005
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP252_0.1_20(626 SOIL - 26/6/2020 SE208136.015	0407_TP253_0.1_20(626 SOIL - 26/6/2020 SE208136.017
Total Sample Weight*	g	1	732	581
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid, mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents .
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples, Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.
AN605	This technique gravimetrically determines the mass of Bonded Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight. Any fibrous asbestos (FA) found in this fraction will be added to the 2-7mm fraction and its mass recorded there.

AN605	This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free/respirable fibres which are only observed by standard trace analysis as per AN602.
AN605	Bonded asbestos containing material (Bonded ACM) comprises asbestos-containing-material which is sound in condition. Fibrous asbestos (FA) comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material. Asbestos fines (AF) includes free fibres, small fibre bundles and also small fragments of bonded ACM that passes through a 7mm sieve - which implies that the bonded ACM fragments have a substantial degree of damage which increases the potential for fibre release.
AN-605	Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009 and NEPM 1999 (2013) schedule B1 section 4..

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	12

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208136 R0**
Date Received	26 Jun 2020
Date Reported	10 Jul 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.

Sample #5: Asbestos found as 10x4x3mm cement sheet fragments x5 in >2mm portion.
Sample #9: Asbestos found as 4x3x2mm cement sheet fragment x2 in >2mm portion.
Sample #11: Approx 5-6x1mm fibre bundles x4 found loose in <2mm portion.
Sample #11: Asbestos found as approx 8x4x2mm cement sheet fragments in >2mm portion.
Sample #13: Asbestos found in approx 6x4x2mm cement sheet fragments in >2mm portion.
Sample #14: Asbestos found in approx 5x3x2mm cement sheet fragments in >2mm portion.

Asbestos analysed by Approved Identifier Ravee Sivasubramaniam .

SIGNATORIES

[redacted]

Chemist | Senior Organic Chemist/Metals Chemis | Organic Section Head

[redacted]

Asbestos Analyst

RESULTS

Fibre Identification in soil — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE208136.001	0407_TP147_0.1_200626	Soil	590g Sand,Soil	26 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208136.003	0407_TP161_0.1_200626	Soil	718g Sand,Plant Matter	26 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208136.005	0407_TP165_0.1_200626	Soil	397g Sand,Soil,Plant Matter	26 Jun 2020	Chrysotile Asbestos Found Organic Fibres Detected	>0.01
SE208136.006	0407_TP165_0.5_200626	Soil	701g Sand	26 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208136.007	0407_TP175_0.1_200626	Soil	486g Clay,Sand,Plant Matter	26 Jun 2020	No Asbestos Found Synthetic Mineral Fibres Detected Organic Fibres Detected	<0.01
SE208136.008	0407_TP175_0.5_200626	Soil	705g Sand,Soil,Rocks,Plant Matter	26 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208136.009	0407_TP245_0.1_200626	Soil	387g Clay,Sand,Rocks,Plant Matter	26 Jun 2020	Chrysotile Asbestos Found Synthetic Mineral Fibres Detected Organic Fibres Detected	<0.01
SE208136.011	0407_TP250_0.1_200626	Soil	457g Clay,Sand,Rocks,Plant Matter	26 Jun 2020	Chrysotile Asbestos Found Synthetic Mineral Fibres Detected Organic Fibres Detected	>0.01
SE208136.013	0407_TP251_0.1_200626	Soil	463g Sand	26 Jun 2020	Chrysotile Asbestos Found Synthetic Mineral Fibres Detected Organic Fibres Detected	<0.01
SE208136.014	0407_TP251_0.5_200626	Soil	692g Sand,Soil,Plant Matter	26 Jun 2020	Chrysotile Asbestos Found Synthetic Mineral Fibres Detected Organic Fibres Detected	<0.01
SE208136.015	0407_TP252_0.1_200626	Soil	732g Sand,Soil,Rocks	26 Jun 2020	No Asbestos Found	<0.01
SE208136.017	0407_TP253_0.1_200626	Soil	581g Sand,Soil,Plant Matter	26 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 7/7/2020

PARAMETER	UOM	LOR	0407_TP147_0.1_20(626 SOIL - 26/6/2020 SE208136.001	0407_TP161_0.1_20(626 SOIL - 26/6/2020 SE208136.003	0407_TP165_0.1_20(626 SOIL - 26/6/2020 SE208136.005	0407_TP165_0.5_20(626 SOIL - 26/6/2020 SE208136.006	0407_TP175_0.1_20(626 SOIL - 26/6/2020 SE208136.007
Total Sample Weight*	g	1	**590**	**718**	**397**	**701**	**486**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	**0.0438**	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	**0.011**	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	**0.011**	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP175_0.5_20(626 SOIL - 26/6/2020 SE208136.008	0407_TP245_0.1_20(626 SOIL - 26/6/2020 SE208136.009	0407_TP250_0.1_20(626 SOIL - 26/6/2020 SE208136.011	0407_TP251_0.1_20(626 SOIL - 26/6/2020 SE208136.013	0407_TP251_0.5_20(626 SOIL - 26/6/2020 SE208136.014
Total Sample Weight*	g	1	**705**	**387**	**457**	**463**	**692**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	**0.0192**	**0.103**	**0.0286**	**0.0320**
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	**0.0185**	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	**0.005**	**0.023**	**0.006**	**0.005**
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	**0.004**	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	**0.005**	**0.027**	**0.006**	**0.005**
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP252_0.1_20(626 SOIL - 26/6/2020 SE208136.015	0407_TP253_0.1_20(626 SOIL - 26/6/2020 SE208136.017
Total Sample Weight*	g	1	**732**	**581**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-

METHOD SUMMARY

METHOD	METHODOLOGY SUMMARY
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples , Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable ’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.
AN605	This technique gravimetrically determines the mass of Bonded Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight. Any fibrous asbestos (FA) found in this fraction will be added to the 2-7mm fraction and its mass recorded there.
AN605	This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free/respirable fibres which are only observed by standard trace analysis as per AN602.
AN605	Bonded asbestos containing material (Bonded ACM) comprises asbestos-containing-material which is sound in condition. Fibrous asbestos (FA) comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material. Asbestos fines (AF) includes free fibres, small fibre bundles and also small fragments of bonded ACM that passes through a 7mm sieve - which implies that the bonded ACM fragments have a substantial degree of damage which increases the potential for fibre release.
AN-605	Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009 and NEPM 1999 (2013) schedule B1 section 4..

FOOTNOTES

Amosite	-	Brown Asbestos	NA	-	Not Analysed
Chrysotile	-	White Asbestos	LNR	-	Listed, Not Required
Crocidolite	-	Blue Asbestos	*	-	NATA accreditation does not cover the performance of this service.
Amphiboles	-	Amosite and/or Crocidolite	**	-	Indicative data, theoretical holding time exceeded.

(In reference to soil samples only) This report does not comply with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment and Remediation and Management of Asbestos Contaminated sites in Western Australia - May 2009.

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.

Where reported: 'Asbestos Detected': Asbestos detected by polarised light microscopy, including dispersion staining.
Where reported: 'No Asbestos Found': No Asbestos Found by polarised light microscopy, including dispersion staining.
Where reported: 'UMF Detected': Mineral fibres of unknown type detected by polarised light microscopy, including dispersion staining. Confirmation by another independent analytical technique may be necessary.

Even after disintegration it can be very difficult, or impossible, to detect the presence of asbestos in some asbestos-containing bulk materials using polarised light microscopy. This is due to the low grade or small length or diameter of asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE208136 R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	25

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208136 R0**
Date Received	26 Jun 2020
Date Reported	10 Jul 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
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All Data Quality Objectives were met with the exception of the following:

Matrix Spike	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	2 items
	Volatile Petroleum Hydrocarbons in Soil	1 item

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	25 Soil
Date documentation received	29/6/2020@5:32PM	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	3.7°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE208136 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Fibre Identification in soil

Method: ME-(AU)-[ENV]AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP147_0.1_200626	SE208136.001	LB203710	26 Jun 2020	26 Jun 2020	26 Jun 2021	07 Jul 2020	26 Jun 2021	08 Jul 2020
0407_TP161_0.1_200626	SE208136.003	LB203710	26 Jun 2020	26 Jun 2020	26 Jun 2021	07 Jul 2020	26 Jun 2021	08 Jul 2020
0407_TP165_0.1_200626	SE208136.005	LB203710	26 Jun 2020	26 Jun 2020	26 Jun 2021	07 Jul 2020	26 Jun 2021	08 Jul 2020
0407_TP165_0.5_200626	SE208136.006	LB203710	26 Jun 2020	26 Jun 2020	26 Jun 2021	07 Jul 2020	26 Jun 2021	08 Jul 2020
0407_TP175_0.1_200626	SE208136.007	LB203710	26 Jun 2020	26 Jun 2020	26 Jun 2021	07 Jul 2020	26 Jun 2021	08 Jul 2020
0407_TP175_0.5_200626	SE208136.008	LB203710	26 Jun 2020	26 Jun 2020	26 Jun 2021	07 Jul 2020	26 Jun 2021	08 Jul 2020
0407_TP245_0.1_200626	SE208136.009	LB203710	26 Jun 2020	26 Jun 2020	26 Jun 2021	07 Jul 2020	26 Jun 2021	08 Jul 2020
0407_TP250_0.1_200626	SE208136.011	LB203710	26 Jun 2020	26 Jun 2020	26 Jun 2021	07 Jul 2020	26 Jun 2021	08 Jul 2020
0407_TP251_0.1_200626	SE208136.013	LB203710	26 Jun 2020	26 Jun 2020	26 Jun 2021	07 Jul 2020	26 Jun 2021	08 Jul 2020
0407_TP251_0.5_200626	SE208136.014	LB203710	26 Jun 2020	26 Jun 2020	26 Jun 2021	07 Jul 2020	26 Jun 2021	08 Jul 2020
0407_TP252_0.1_200626	SE208136.015	LB203710	26 Jun 2020	26 Jun 2020	26 Jun 2021	07 Jul 2020	26 Jun 2021	08 Jul 2020
0407_TP253_0.1_200626	SE208136.017	LB203710	26 Jun 2020	26 Jun 2020	26 Jun 2021	07 Jul 2020	26 Jun 2021	08 Jul 2020

Gravimetric Determination of Asbestos in Soil

Method: ME-(AU)-[ENV]AN605

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP147_0.1_200626	SE208136.001	LB203710	26 Jun 2020	26 Jun 2020	23 Dec 2020	07 Jul 2020	23 Dec 2020	08 Jul 2020
0407_TP161_0.1_200626	SE208136.003	LB203710	26 Jun 2020	26 Jun 2020	23 Dec 2020	07 Jul 2020	23 Dec 2020	08 Jul 2020
0407_TP165_0.1_200626	SE208136.005	LB203710	26 Jun 2020	26 Jun 2020	23 Dec 2020	07 Jul 2020	23 Dec 2020	08 Jul 2020
0407_TP165_0.5_200626	SE208136.006	LB203710	26 Jun 2020	26 Jun 2020	23 Dec 2020	07 Jul 2020	23 Dec 2020	08 Jul 2020
0407_TP175_0.1_200626	SE208136.007	LB203710	26 Jun 2020	26 Jun 2020	23 Dec 2020	07 Jul 2020	23 Dec 2020	08 Jul 2020
0407_TP175_0.5_200626	SE208136.008	LB203710	26 Jun 2020	26 Jun 2020	23 Dec 2020	07 Jul 2020	23 Dec 2020	08 Jul 2020
0407_TP245_0.1_200626	SE208136.009	LB203710	26 Jun 2020	26 Jun 2020	23 Dec 2020	07 Jul 2020	23 Dec 2020	08 Jul 2020
0407_TP250_0.1_200626	SE208136.011	LB203710	26 Jun 2020	26 Jun 2020	23 Dec 2020	07 Jul 2020	23 Dec 2020	08 Jul 2020
0407_TP251_0.1_200626	SE208136.013	LB203710	26 Jun 2020	26 Jun 2020	23 Dec 2020	07 Jul 2020	23 Dec 2020	08 Jul 2020
0407_TP251_0.5_200626	SE208136.014	LB203710	26 Jun 2020	26 Jun 2020	23 Dec 2020	07 Jul 2020	23 Dec 2020	08 Jul 2020
0407_TP252_0.1_200626	SE208136.015	LB203710	26 Jun 2020	26 Jun 2020	23 Dec 2020	07 Jul 2020	23 Dec 2020	08 Jul 2020
0407_TP253_0.1_200626	SE208136.017	LB203710	26 Jun 2020	26 Jun 2020	23 Dec 2020	07 Jul 2020	23 Dec 2020	08 Jul 2020

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP147_0.1_200626	SE208136.001	LB203605	26 Jun 2020	26 Jun 2020	24 Jul 2020	06 Jul 2020	24 Jul 2020	08 Jul 2020
0407_TP147_0.5_200626	SE208136.002	LB203605	26 Jun 2020	26 Jun 2020	24 Jul 2020	06 Jul 2020	24 Jul 2020	08 Jul 2020
0407_TP161_0.1_200626	SE208136.003	LB203605	26 Jun 2020	26 Jun 2020	24 Jul 2020	06 Jul 2020	24 Jul 2020	08 Jul 2020
0407_TP161_0.5_200626	SE208136.004	LB203605	26 Jun 2020	26 Jun 2020	24 Jul 2020	06 Jul 2020	24 Jul 2020	08 Jul 2020
0407_TP165_0.1_200626	SE208136.005	LB203605	26 Jun 2020	26 Jun 2020	24 Jul 2020	06 Jul 2020	24 Jul 2020	08 Jul 2020
0407_TP165_0.5_200626	SE208136.006	LB203605	26 Jun 2020	26 Jun 2020	24 Jul 2020	06 Jul 2020	24 Jul 2020	08 Jul 2020
0407_TP175_0.1_200626	SE208136.007	LB203605	26 Jun 2020	26 Jun 2020	24 Jul 2020	06 Jul 2020	24 Jul 2020	08 Jul 2020
0407_TP175_0.5_200626	SE208136.008	LB203605	26 Jun 2020	26 Jun 2020	24 Jul 2020	06 Jul 2020	24 Jul 2020	08 Jul 2020
0407_TP245_0.1_200626	SE208136.009	LB203605	26 Jun 2020	26 Jun 2020	24 Jul 2020	06 Jul 2020	24 Jul 2020	08 Jul 2020
0407_TP245_0.5_200626	SE208136.010	LB203605	26 Jun 2020	26 Jun 2020	24 Jul 2020	06 Jul 2020	24 Jul 2020	08 Jul 2020
0407_TP250_0.1_200626	SE208136.011	LB203605	26 Jun 2020	26 Jun 2020	24 Jul 2020	06 Jul 2020	24 Jul 2020	08 Jul 2020
0407_TP250_0.5_200626	SE208136.012	LB203605	26 Jun 2020	26 Jun 2020	24 Jul 2020	06 Jul 2020	24 Jul 2020	08 Jul 2020
0407_TP251_0.1_200626	SE208136.013	LB203605	26 Jun 2020	26 Jun 2020	24 Jul 2020	06 Jul 2020	24 Jul 2020	08 Jul 2020
0407_TP251_0.5_200626	SE208136.014	LB203605	26 Jun 2020	26 Jun 2020	24 Jul 2020	06 Jul 2020	24 Jul 2020	08 Jul 2020
0407_TP252_0.1_200626	SE208136.015	LB203605	26 Jun 2020	26 Jun 2020	24 Jul 2020	06 Jul 2020	24 Jul 2020	08 Jul 2020
0407_TP252_0.5_200626	SE208136.016	LB203605	26 Jun 2020	26 Jun 2020	24 Jul 2020	06 Jul 2020	24 Jul 2020	08 Jul 2020
0407_TP253_0.1_200626	SE208136.017	LB203605	26 Jun 2020	26 Jun 2020	24 Jul 2020	06 Jul 2020	24 Jul 2020	08 Jul 2020
0407_TP253_0.5_200626	SE208136.018	LB203605	26 Jun 2020	26 Jun 2020	24 Jul 2020	06 Jul 2020	24 Jul 2020	08 Jul 2020
0407_QC173_200626	SE208136.019	LB203605	26 Jun 2020	26 Jun 2020	24 Jul 2020	06 Jul 2020	24 Jul 2020	08 Jul 2020
0407_QC168_200626	SE208136.020	LB203607	26 Jun 2020	26 Jun 2020	24 Jul 2020	06 Jul 2020	24 Jul 2020	08 Jul 2020
0407_QC176_200626	SE208136.021	LB203607	26 Jun 2020	26 Jun 2020	24 Jul 2020	06 Jul 2020	24 Jul 2020	08 Jul 2020
0407_QC169_200626	SE208136.022	LB203607	26 Jun 2020	26 Jun 2020	24 Jul 2020	06 Jul 2020	24 Jul 2020	08 Jul 2020
0407_QC172_200626	SE208136.023	LB203607	26 Jun 2020	26 Jun 2020	24 Jul 2020	06 Jul 2020	24 Jul 2020	08 Jul 2020

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP147_0.1_200626	SE208136.001	LB203565	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_TP147_0.5_200626	SE208136.002	LB203565	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_TP161_0.1_200626	SE208136.003	LB203565	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_TP161_0.5_200626	SE208136.004	LB203565	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_TP165_0.1_200626	SE208136.005	LB203565	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020

HOLDING TIME SUMMARY

SE208136 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Moisture Content (continued)

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP165_0.5_200626	SE208136.006	LB203565	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_TP175_0.1_200626	SE208136.007	LB203565	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_TP175_0.5_200626	SE208136.008	LB203565	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_TP245_0.1_200626	SE208136.009	LB203565	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_TP245_0.5_200626	SE208136.010	LB203565	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_TP250_0.1_200626	SE208136.011	LB203565	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_TP250_0.5_200626	SE208136.012	LB203565	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_TP251_0.1_200626	SE208136.013	LB203565	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_TP251_0.5_200626	SE208136.014	LB203565	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_TP252_0.1_200626	SE208136.015	LB203565	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_TP252_0.5_200626	SE208136.016	LB203567	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_TP253_0.1_200626	SE208136.017	LB203567	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_TP253_0.5_200626	SE208136.018	LB203567	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_QC173_200626	SE208136.019	LB203567	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_QC168_200626	SE208136.020	LB203567	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_QC176_200626	SE208136.021	LB203567	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_QC169_200626	SE208136.022	LB203567	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_QC172_200626	SE208136.023	LB203567	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_QC414_200626	SE208136.024	LB203567	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP147_0.1_200626	SE208136.001	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP147_0.5_200626	SE208136.002	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP161_0.1_200626	SE208136.003	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP161_0.5_200626	SE208136.004	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP165_0.1_200626	SE208136.005	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP165_0.5_200626	SE208136.006	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP175_0.1_200626	SE208136.007	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP175_0.5_200626	SE208136.008	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP245_0.1_200626	SE208136.009	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP245_0.5_200626	SE208136.010	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP250_0.1_200626	SE208136.011	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP250_0.5_200626	SE208136.012	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP251_0.1_200626	SE208136.013	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP251_0.5_200626	SE208136.014	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP252_0.1_200626	SE208136.015	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP252_0.5_200626	SE208136.016	LB203560	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP253_0.1_200626	SE208136.017	LB203560	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP253_0.5_200626	SE208136.018	LB203560	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_QC173_200626	SE208136.019	LB203560	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_QC168_200626	SE208136.020	LB203560	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_QC176_200626	SE208136.021	LB203560	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_QC169_200626	SE208136.022	LB203560	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_QC172_200626	SE208136.023	LB203560	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP147_0.1_200626	SE208136.001	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP147_0.5_200626	SE208136.002	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP161_0.1_200626	SE208136.003	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP161_0.5_200626	SE208136.004	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP165_0.1_200626	SE208136.005	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP165_0.5_200626	SE208136.006	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP175_0.1_200626	SE208136.007	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP175_0.5_200626	SE208136.008	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP245_0.1_200626	SE208136.009	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP245_0.5_200626	SE208136.010	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP250_0.1_200626	SE208136.011	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP250_0.5_200626	SE208136.012	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP251_0.1_200626	SE208136.013	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020

HOLDING TIME SUMMARY

SE208136 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP251_0.5_200626	SE208136.014	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP252_0.1_200626	SE208136.015	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP252_0.5_200626	SE208136.016	LB203560	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP253_0.1_200626	SE208136.017	LB203560	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP253_0.5_200626	SE208136.018	LB203560	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_QC173_200626	SE208136.019	LB203560	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_QC168_200626	SE208136.020	LB203560	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_QC176_200626	SE208136.021	LB203560	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_QC169_200626	SE208136.022	LB203560	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_QC172_200626	SE208136.023	LB203560	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP147_0.1_200626	SE208136.001	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP147_0.5_200626	SE208136.002	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP161_0.1_200626	SE208136.003	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP161_0.5_200626	SE208136.004	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP165_0.1_200626	SE208136.005	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP165_0.5_200626	SE208136.006	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP175_0.1_200626	SE208136.007	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP175_0.5_200626	SE208136.008	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP245_0.1_200626	SE208136.009	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP245_0.5_200626	SE208136.010	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP250_0.1_200626	SE208136.011	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP250_0.5_200626	SE208136.012	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP251_0.1_200626	SE208136.013	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP251_0.5_200626	SE208136.014	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP252_0.1_200626	SE208136.015	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP252_0.5_200626	SE208136.016	LB203560	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP253_0.1_200626	SE208136.017	LB203560	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP253_0.5_200626	SE208136.018	LB203560	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_QC173_200626	SE208136.019	LB203560	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_QC168_200626	SE208136.020	LB203560	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_QC176_200626	SE208136.021	LB203560	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_QC169_200626	SE208136.022	LB203560	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_QC172_200626	SE208136.023	LB203560	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP147_0.1_200626	SE208136.001	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP147_0.5_200626	SE208136.002	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP161_0.1_200626	SE208136.003	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP161_0.5_200626	SE208136.004	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP165_0.1_200626	SE208136.005	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP165_0.5_200626	SE208136.006	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP175_0.1_200626	SE208136.007	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP175_0.5_200626	SE208136.008	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP245_0.1_200626	SE208136.009	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP245_0.5_200626	SE208136.010	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP250_0.1_200626	SE208136.011	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP250_0.5_200626	SE208136.012	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP251_0.1_200626	SE208136.013	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP251_0.5_200626	SE208136.014	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP252_0.1_200626	SE208136.015	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP252_0.5_200626	SE208136.016	LB203560	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP253_0.1_200626	SE208136.017	LB203560	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP253_0.5_200626	SE208136.018	LB203560	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_QC173_200626	SE208136.019	LB203560	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_QC168_200626	SE208136.020	LB203560	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_QC176_200626	SE208136.021	LB203560	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_QC169_200626	SE208136.022	LB203560	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020

HOLDING TIME SUMMARY

SE208136 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

PCBs in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC172_200626	SE208136.023	LB203560	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP147_0.1_200626	SE208136.001	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP147_0.5_200626	SE208136.002	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP161_0.1_200626	SE208136.003	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP161_0.5_200626	SE208136.004	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP165_0.1_200626	SE208136.005	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP165_0.5_200626	SE208136.006	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP175_0.1_200626	SE208136.007	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP175_0.5_200626	SE208136.008	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP245_0.1_200626	SE208136.009	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP245_0.5_200626	SE208136.010	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP250_0.1_200626	SE208136.011	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP250_0.5_200626	SE208136.012	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP251_0.1_200626	SE208136.013	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP251_0.5_200626	SE208136.014	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP252_0.1_200626	SE208136.015	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP252_0.5_200626	SE208136.016	LB203560	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP253_0.1_200626	SE208136.017	LB203560	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP253_0.5_200626	SE208136.018	LB203560	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_QC173_200626	SE208136.019	LB203560	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_QC168_200626	SE208136.020	LB203560	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_QC176_200626	SE208136.021	LB203560	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_QC169_200626	SE208136.022	LB203560	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_QC172_200626	SE208136.023	LB203560	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP147_0.1_200626	SE208136.001	LB203597	26 Jun 2020	26 Jun 2020	23 Dec 2020	06 Jul 2020	23 Dec 2020	08 Jul 2020
0407_TP147_0.5_200626	SE208136.002	LB203597	26 Jun 2020	26 Jun 2020	23 Dec 2020	06 Jul 2020	23 Dec 2020	08 Jul 2020
0407_TP161_0.1_200626	SE208136.003	LB203597	26 Jun 2020	26 Jun 2020	23 Dec 2020	06 Jul 2020	23 Dec 2020	08 Jul 2020
0407_TP161_0.5_200626	SE208136.004	LB203597	26 Jun 2020	26 Jun 2020	23 Dec 2020	06 Jul 2020	23 Dec 2020	08 Jul 2020
0407_TP165_0.1_200626	SE208136.005	LB203597	26 Jun 2020	26 Jun 2020	23 Dec 2020	06 Jul 2020	23 Dec 2020	08 Jul 2020
0407_TP165_0.5_200626	SE208136.006	LB203597	26 Jun 2020	26 Jun 2020	23 Dec 2020	06 Jul 2020	23 Dec 2020	08 Jul 2020
0407_TP175_0.1_200626	SE208136.007	LB203597	26 Jun 2020	26 Jun 2020	23 Dec 2020	06 Jul 2020	23 Dec 2020	08 Jul 2020
0407_TP175_0.5_200626	SE208136.008	LB203597	26 Jun 2020	26 Jun 2020	23 Dec 2020	06 Jul 2020	23 Dec 2020	08 Jul 2020
0407_TP245_0.1_200626	SE208136.009	LB203597	26 Jun 2020	26 Jun 2020	23 Dec 2020	06 Jul 2020	23 Dec 2020	08 Jul 2020
0407_TP245_0.5_200626	SE208136.010	LB203597	26 Jun 2020	26 Jun 2020	23 Dec 2020	06 Jul 2020	23 Dec 2020	08 Jul 2020
0407_TP250_0.1_200626	SE208136.011	LB203597	26 Jun 2020	26 Jun 2020	23 Dec 2020	06 Jul 2020	23 Dec 2020	08 Jul 2020
0407_TP250_0.5_200626	SE208136.012	LB203597	26 Jun 2020	26 Jun 2020	23 Dec 2020	06 Jul 2020	23 Dec 2020	08 Jul 2020
0407_TP251_0.1_200626	SE208136.013	LB203597	26 Jun 2020	26 Jun 2020	23 Dec 2020	06 Jul 2020	23 Dec 2020	08 Jul 2020
0407_TP251_0.5_200626	SE208136.014	LB203597	26 Jun 2020	26 Jun 2020	23 Dec 2020	06 Jul 2020	23 Dec 2020	08 Jul 2020
0407_TP252_0.1_200626	SE208136.015	LB203597	26 Jun 2020	26 Jun 2020	23 Dec 2020	06 Jul 2020	23 Dec 2020	08 Jul 2020
0407_TP252_0.5_200626	SE208136.016	LB203597	26 Jun 2020	26 Jun 2020	23 Dec 2020	06 Jul 2020	23 Dec 2020	08 Jul 2020
0407_TP253_0.1_200626	SE208136.017	LB203597	26 Jun 2020	26 Jun 2020	23 Dec 2020	06 Jul 2020	23 Dec 2020	08 Jul 2020
0407_TP253_0.5_200626	SE208136.018	LB203597	26 Jun 2020	26 Jun 2020	23 Dec 2020	06 Jul 2020	23 Dec 2020	08 Jul 2020
0407_QC173_200626	SE208136.019	LB203597	26 Jun 2020	26 Jun 2020	23 Dec 2020	06 Jul 2020	23 Dec 2020	08 Jul 2020
0407_QC168_200626	SE208136.020	LB203601	26 Jun 2020	26 Jun 2020	23 Dec 2020	06 Jul 2020	23 Dec 2020	08 Jul 2020
0407_QC176_200626	SE208136.021	LB203601	26 Jun 2020	26 Jun 2020	23 Dec 2020	06 Jul 2020	23 Dec 2020	08 Jul 2020
0407_QC169_200626	SE208136.022	LB203601	26 Jun 2020	26 Jun 2020	23 Dec 2020	06 Jul 2020	23 Dec 2020	08 Jul 2020
0407_QC172_200626	SE208136.023	LB203601	26 Jun 2020	26 Jun 2020	23 Dec 2020	06 Jul 2020	23 Dec 2020	08 Jul 2020

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP147_0.1_200626	SE208136.001	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP147_0.5_200626	SE208136.002	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP161_0.1_200626	SE208136.003	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP161_0.5_200626	SE208136.004	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP165_0.1_200626	SE208136.005	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP165_0.5_200626	SE208136.006	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP175_0.1_200626	SE208136.007	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP175_0.5_200626	SE208136.008	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP245_0.1_200626	SE208136.009	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP245_0.5_200626	SE208136.010	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP250_0.1_200626	SE208136.011	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP250_0.5_200626	SE208136.012	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP251_0.1_200626	SE208136.013	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP251_0.5_200626	SE208136.014	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP252_0.1_200626	SE208136.015	LB203556	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP252_0.5_200626	SE208136.016	LB203560	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP253_0.1_200626	SE208136.017	LB203560	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP253_0.5_200626	SE208136.018	LB203560	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_QC173_200626	SE208136.019	LB203560	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_QC168_200626	SE208136.020	LB203560	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_QC176_200626	SE208136.021	LB203560	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_QC169_200626	SE208136.022	LB203560	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_QC172_200626	SE208136.023	LB203560	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP147_0.1_200626	SE208136.001	LB203548	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP147_0.5_200626	SE208136.002	LB203548	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP161_0.1_200626	SE208136.003	LB203548	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP161_0.5_200626	SE208136.004	LB203548	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP165_0.1_200626	SE208136.005	LB203548	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP165_0.5_200626	SE208136.006	LB203548	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP175_0.1_200626	SE208136.007	LB203548	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP175_0.5_200626	SE208136.008	LB203548	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP245_0.1_200626	SE208136.009	LB203548	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP245_0.5_200626	SE208136.010	LB203548	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP250_0.1_200626	SE208136.011	LB203548	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP250_0.5_200626	SE208136.012	LB203548	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP251_0.1_200626	SE208136.013	LB203548	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP251_0.5_200626	SE208136.014	LB203548	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP252_0.1_200626	SE208136.015	LB203548	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP252_0.5_200626	SE208136.016	LB203551	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP253_0.1_200626	SE208136.017	LB203551	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP253_0.5_200626	SE208136.018	LB203551	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_QC173_200626	SE208136.019	LB203551	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_QC168_200626	SE208136.020	LB203551	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_QC176_200626	SE208136.021	LB203551	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_QC169_200626	SE208136.022	LB203551	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_QC172_200626	SE208136.023	LB203551	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_QC414_200626	SE208136.024	LB203551	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_QC514_200626	SE208136.025	LB203551	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP147_0.1_200626	SE208136.001	LB203548	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP147_0.5_200626	SE208136.002	LB203548	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP161_0.1_200626	SE208136.003	LB203548	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP161_0.5_200626	SE208136.004	LB203548	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP165_0.1_200626	SE208136.005	LB203548	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP165_0.5_200626	SE208136.006	LB203548	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP175_0.1_200626	SE208136.007	LB203548	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP175_0.5_200626	SE208136.008	LB203548	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP245_0.1_200626	SE208136.009	LB203548	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP245_0.5_200626	SE208136.010	LB203548	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP250_0.1_200626	SE208136.011	LB203548	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP250_0.5_200626	SE208136.012	LB203548	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Volatile Petroleum Hydrocarbons in Soil (continued) **Method: ME-(AU)-[ENV]AN433**

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP251_0.1_200626	SE208136.013	LB203548	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP251_0.5_200626	SE208136.014	LB203548	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP252_0.1_200626	SE208136.015	LB203548	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP252_0.5_200626	SE208136.016	LB203551	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP253_0.1_200626	SE208136.017	LB203551	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP253_0.5_200626	SE208136.018	LB203551	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_QC173_200626	SE208136.019	LB203551	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_QC168_200626	SE208136.020	LB203551	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_QC176_200626	SE208136.021	LB203551	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_QC169_200626	SE208136.022	LB203551	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_QC172_200626	SE208136.023	LB203551	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_QC414_200626	SE208136.024	LB203551	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_QC514_200626	SE208136.025	LB203551	26 Jun 2020	26 Jun 2020	10 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP147_0.1_200626	SE208136.001	%	60 - 130%	104
	0407_TP147_0.5_200626	SE208136.002	%	60 - 130%	96
	0407_TP161_0.1_200626	SE208136.003	%	60 - 130%	101
	0407_TP161_0.5_200626	SE208136.004	%	60 - 130%	97
	0407_TP165_0.1_200626	SE208136.005	%	60 - 130%	109
	0407_TP165_0.5_200626	SE208136.006	%	60 - 130%	99
	0407_TP175_0.1_200626	SE208136.007	%	60 - 130%	106
	0407_TP175_0.5_200626	SE208136.008	%	60 - 130%	103
	0407_TP245_0.1_200626	SE208136.009	%	60 - 130%	112
	0407_TP245_0.5_200626	SE208136.010	%	60 - 130%	107
	0407_TP250_0.1_200626	SE208136.011	%	60 - 130%	110
	0407_TP250_0.5_200626	SE208136.012	%	60 - 130%	107
	0407_TP251_0.1_200626	SE208136.013	%	60 - 130%	113
	0407_TP251_0.5_200626	SE208136.014	%	60 - 130%	104
	0407_TP252_0.1_200626	SE208136.015	%	60 - 130%	107
	0407_TP252_0.5_200626	SE208136.016	%	60 - 130%	118
	0407_TP253_0.1_200626	SE208136.017	%	60 - 130%	112
	0407_TP253_0.5_200626	SE208136.018	%	60 - 130%	111
	0407_QC173_200626	SE208136.019	%	60 - 130%	125
	0407_QC168_200626	SE208136.020	%	60 - 130%	127
	0407_QC176_200626	SE208136.021	%	60 - 130%	115
	0407_QC169_200626	SE208136.022	%	60 - 130%	119
	0407_QC172_200626	SE208136.023	%	60 - 130%	117

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP147_0.1_200626	SE208136.001	%	60 - 130%	79
	0407_TP147_0.5_200626	SE208136.002	%	60 - 130%	93
	0407_TP161_0.1_200626	SE208136.003	%	60 - 130%	77
	0407_TP161_0.5_200626	SE208136.004	%	60 - 130%	91
	0407_TP165_0.1_200626	SE208136.005	%	60 - 130%	92
	0407_TP165_0.5_200626	SE208136.006	%	60 - 130%	82
	0407_TP175_0.1_200626	SE208136.007	%	60 - 130%	85
	0407_TP175_0.5_200626	SE208136.008	%	60 - 130%	84
	0407_TP245_0.1_200626	SE208136.009	%	60 - 130%	111
	0407_TP245_0.5_200626	SE208136.010	%	60 - 130%	94
	0407_TP250_0.1_200626	SE208136.011	%	60 - 130%	85
	0407_TP250_0.5_200626	SE208136.012	%	60 - 130%	72
	0407_TP251_0.1_200626	SE208136.013	%	60 - 130%	91
	0407_TP251_0.5_200626	SE208136.014	%	60 - 130%	87
	0407_TP252_0.1_200626	SE208136.015	%	60 - 130%	89
	0407_TP252_0.5_200626	SE208136.016	%	60 - 130%	77
	0407_TP253_0.1_200626	SE208136.017	%	60 - 130%	74
	0407_TP253_0.5_200626	SE208136.018	%	60 - 130%	77
	0407_QC173_200626	SE208136.019	%	60 - 130%	77
	0407_QC168_200626	SE208136.020	%	60 - 130%	88
	0407_QC176_200626	SE208136.021	%	60 - 130%	82
	0407_QC169_200626	SE208136.022	%	60 - 130%	84
	0407_QC172_200626	SE208136.023	%	60 - 130%	77
d14-p-terphenyl (Surrogate)	0407_TP147_0.1_200626	SE208136.001	%	60 - 130%	86
	0407_TP147_0.5_200626	SE208136.002	%	60 - 130%	88
	0407_TP161_0.1_200626	SE208136.003	%	60 - 130%	90
	0407_TP161_0.5_200626	SE208136.004	%	60 - 130%	84
	0407_TP165_0.1_200626	SE208136.005	%	60 - 130%	94
	0407_TP165_0.5_200626	SE208136.006	%	60 - 130%	87
	0407_TP175_0.1_200626	SE208136.007	%	60 - 130%	90
	0407_TP175_0.5_200626	SE208136.008	%	60 - 130%	85
	0407_TP245_0.1_200626	SE208136.009	%	60 - 130%	106
	0407_TP245_0.5_200626	SE208136.010	%	60 - 130%	86
	0407_TP250_0.1_200626	SE208136.011	%	60 - 130%	99
	0407_TP250_0.5_200626	SE208136.012	%	60 - 130%	98

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d14-p-terphenyl (Surrogate)	0407_TP251_0.1_200626	SE208136.013	%	60 - 130%	92
	0407_TP251_0.5_200626	SE208136.014	%	60 - 130%	86
	0407_TP252_0.1_200626	SE208136.015	%	60 - 130%	83
	0407_TP252_0.5_200626	SE208136.016	%	60 - 130%	85
	0407_TP253_0.1_200626	SE208136.017	%	60 - 130%	85
	0407_TP253_0.5_200626	SE208136.018	%	60 - 130%	94
	0407_QC173_200626	SE208136.019	%	60 - 130%	91
	0407_QC168_200626	SE208136.020	%	60 - 130%	91
	0407_QC176_200626	SE208136.021	%	60 - 130%	93
	0407_QC169_200626	SE208136.022	%	60 - 130%	87
	0407_QC172_200626	SE208136.023	%	60 - 130%	84

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP147_0.1_200626	SE208136.001	%	70 - 130%	79
	0407_TP147_0.5_200626	SE208136.002	%	70 - 130%	93
	0407_TP161_0.1_200626	SE208136.003	%	70 - 130%	77
	0407_TP161_0.5_200626	SE208136.004	%	70 - 130%	91
	0407_TP165_0.1_200626	SE208136.005	%	70 - 130%	92
	0407_TP165_0.5_200626	SE208136.006	%	70 - 130%	82
	0407_TP175_0.1_200626	SE208136.007	%	70 - 130%	85
	0407_TP175_0.5_200626	SE208136.008	%	70 - 130%	84
	0407_TP245_0.1_200626	SE208136.009	%	70 - 130%	111
	0407_TP245_0.5_200626	SE208136.010	%	70 - 130%	94
	0407_TP250_0.1_200626	SE208136.011	%	70 - 130%	85
	0407_TP250_0.5_200626	SE208136.012	%	70 - 130%	72
	0407_TP251_0.1_200626	SE208136.013	%	70 - 130%	91
	0407_TP251_0.5_200626	SE208136.014	%	70 - 130%	87
	0407_TP252_0.1_200626	SE208136.015	%	70 - 130%	89
	0407_TP252_0.5_200626	SE208136.016	%	70 - 130%	77
	0407_TP253_0.1_200626	SE208136.017	%	70 - 130%	74
	0407_TP253_0.5_200626	SE208136.018	%	70 - 130%	77
	0407_QC173_200626	SE208136.019	%	70 - 130%	77
	0407_QC168_200626	SE208136.020	%	70 - 130%	88
	0407_QC176_200626	SE208136.021	%	70 - 130%	82
	0407_QC169_200626	SE208136.022	%	70 - 130%	84
	0407_QC172_200626	SE208136.023	%	70 - 130%	77
d14-p-terphenyl (Surrogate)	0407_TP147_0.1_200626	SE208136.001	%	70 - 130%	86
	0407_TP147_0.5_200626	SE208136.002	%	70 - 130%	88
	0407_TP161_0.1_200626	SE208136.003	%	70 - 130%	90
	0407_TP161_0.5_200626	SE208136.004	%	70 - 130%	84
	0407_TP165_0.1_200626	SE208136.005	%	70 - 130%	94
	0407_TP165_0.5_200626	SE208136.006	%	70 - 130%	87
	0407_TP175_0.1_200626	SE208136.007	%	70 - 130%	90
	0407_TP175_0.5_200626	SE208136.008	%	70 - 130%	85
	0407_TP245_0.1_200626	SE208136.009	%	70 - 130%	106
	0407_TP245_0.5_200626	SE208136.010	%	70 - 130%	86
	0407_TP250_0.1_200626	SE208136.011	%	70 - 130%	99
	0407_TP250_0.5_200626	SE208136.012	%	70 - 130%	98
	0407_TP251_0.1_200626	SE208136.013	%	70 - 130%	92
	0407_TP251_0.5_200626	SE208136.014	%	70 - 130%	86
	0407_TP252_0.1_200626	SE208136.015	%	70 - 130%	83
	0407_TP252_0.5_200626	SE208136.016	%	70 - 130%	85
	0407_TP253_0.1_200626	SE208136.017	%	70 - 130%	85
	0407_TP253_0.5_200626	SE208136.018	%	70 - 130%	94
	0407_QC173_200626	SE208136.019	%	70 - 130%	91
	0407_QC168_200626	SE208136.020	%	70 - 130%	91
	0407_QC176_200626	SE208136.021	%	70 - 130%	93
	0407_QC169_200626	SE208136.022	%	70 - 130%	87
	0407_QC172_200626	SE208136.023	%	70 - 130%	84
d5-nitrobenzene (Surrogate)	0407_TP147_0.1_200626	SE208136.001	%	70 - 130%	89

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d5-nitrobenzene (Surrogate)	0407_TP147_0.5_200626	SE208136.002	%	70 - 130%	94
	0407_TP161_0.1_200626	SE208136.003	%	70 - 130%	90
	0407_TP161_0.5_200626	SE208136.004	%	70 - 130%	84
	0407_TP165_0.1_200626	SE208136.005	%	70 - 130%	94
	0407_TP165_0.5_200626	SE208136.006	%	70 - 130%	89
	0407_TP175_0.1_200626	SE208136.007	%	70 - 130%	89
	0407_TP175_0.5_200626	SE208136.008	%	70 - 130%	86
	0407_TP245_0.1_200626	SE208136.009	%	70 - 130%	110
	0407_TP245_0.5_200626	SE208136.010	%	70 - 130%	91
	0407_TP250_0.1_200626	SE208136.011	%	70 - 130%	87
	0407_TP250_0.5_200626	SE208136.012	%	70 - 130%	88
	0407_TP251_0.1_200626	SE208136.013	%	70 - 130%	88
	0407_TP251_0.5_200626	SE208136.014	%	70 - 130%	91
	0407_TP252_0.1_200626	SE208136.015	%	70 - 130%	88
	0407_TP252_0.5_200626	SE208136.016	%	70 - 130%	85
	0407_TP253_0.1_200626	SE208136.017	%	70 - 130%	83
	0407_TP253_0.5_200626	SE208136.018	%	70 - 130%	90
	0407_QC173_200626	SE208136.019	%	70 - 130%	85
	0407_QC168_200626	SE208136.020	%	70 - 130%	87
	0407_QC176_200626	SE208136.021	%	70 - 130%	84
	0407_QC169_200626	SE208136.022	%	70 - 130%	87
	0407_QC172_200626	SE208136.023	%	70 - 130%	83

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP147_0.1_200626	SE208136.001	%	60 - 130%	104
	0407_TP147_0.5_200626	SE208136.002	%	60 - 130%	96
	0407_TP161_0.1_200626	SE208136.003	%	60 - 130%	101
	0407_TP161_0.5_200626	SE208136.004	%	60 - 130%	97
	0407_TP165_0.1_200626	SE208136.005	%	60 - 130%	109
	0407_TP165_0.5_200626	SE208136.006	%	60 - 130%	99
	0407_TP175_0.1_200626	SE208136.007	%	60 - 130%	106
	0407_TP175_0.5_200626	SE208136.008	%	60 - 130%	103
	0407_TP245_0.1_200626	SE208136.009	%	60 - 130%	112
	0407_TP245_0.5_200626	SE208136.010	%	60 - 130%	107
	0407_TP250_0.1_200626	SE208136.011	%	60 - 130%	110
	0407_TP250_0.5_200626	SE208136.012	%	60 - 130%	107
	0407_TP251_0.1_200626	SE208136.013	%	60 - 130%	113
	0407_TP251_0.5_200626	SE208136.014	%	60 - 130%	104
	0407_TP252_0.1_200626	SE208136.015	%	60 - 130%	107
	0407_TP252_0.5_200626	SE208136.016	%	60 - 130%	118
	0407_TP253_0.1_200626	SE208136.017	%	60 - 130%	112
	0407_TP253_0.5_200626	SE208136.018	%	60 - 130%	111
	0407_QC173_200626	SE208136.019	%	60 - 130%	125
	0407_QC168_200626	SE208136.020	%	60 - 130%	127
	0407_QC176_200626	SE208136.021	%	60 - 130%	115
	0407_QC169_200626	SE208136.022	%	60 - 130%	119
	0407_QC172_200626	SE208136.023	%	60 - 130%	117

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	0407_TP147_0.1_200626	SE208136.001	%	70 - 130%	87
	0407_TP147_0.5_200626	SE208136.002	%	70 - 130%	73
	0407_TP161_0.1_200626	SE208136.003	%	70 - 130%	106
	0407_TP161_0.5_200626	SE208136.004	%	70 - 130%	77
	0407_TP165_0.1_200626	SE208136.005	%	70 - 130%	76
	0407_TP165_0.5_200626	SE208136.006	%	70 - 130%	80
	0407_TP175_0.1_200626	SE208136.007	%	70 - 130%	103
	0407_TP175_0.5_200626	SE208136.008	%	70 - 130%	86
	0407_TP245_0.1_200626	SE208136.009	%	70 - 130%	86
	0407_TP245_0.5_200626	SE208136.010	%	70 - 130%	79
	0407_TP250_0.1_200626	SE208136.011	%	70 - 130%	90

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	0407_TP250_0.5_200626	SE208136.012	%	70 - 130%	82
	0407_TP251_0.1_200626	SE208136.013	%	70 - 130%	71
	0407_TP251_0.5_200626	SE208136.014	%	70 - 130%	85
	0407_TP252_0.1_200626	SE208136.015	%	70 - 130%	86
	0407_TP252_0.5_200626	SE208136.016	%	70 - 130%	86
	0407_TP253_0.1_200626	SE208136.017	%	70 - 130%	88
	0407_TP253_0.5_200626	SE208136.018	%	70 - 130%	85
	0407_QC173_200626	SE208136.019	%	70 - 130%	90
	0407_QC168_200626	SE208136.020	%	70 - 130%	90
	0407_QC176_200626	SE208136.021	%	70 - 130%	84
	0407_QC169_200626	SE208136.022	%	70 - 130%	85
	0407_QC172_200626	SE208136.023	%	70 - 130%	87
d5-phenol (Surrogate)	0407_TP147_0.1_200626	SE208136.001	%	50 - 130%	93
	0407_TP147_0.5_200626	SE208136.002	%	50 - 130%	108
	0407_TP161_0.1_200626	SE208136.003	%	50 - 130%	100
	0407_TP161_0.5_200626	SE208136.004	%	50 - 130%	104
	0407_TP165_0.1_200626	SE208136.005	%	50 - 130%	84
	0407_TP165_0.5_200626	SE208136.006	%	50 - 130%	117
	0407_TP175_0.1_200626	SE208136.007	%	50 - 130%	92
	0407_TP175_0.5_200626	SE208136.008	%	50 - 130%	80
	0407_TP245_0.1_200626	SE208136.009	%	50 - 130%	97
	0407_TP245_0.5_200626	SE208136.010	%	50 - 130%	96
	0407_TP250_0.1_200626	SE208136.011	%	50 - 130%	108
	0407_TP250_0.5_200626	SE208136.012	%	50 - 130%	78
	0407_TP251_0.1_200626	SE208136.013	%	50 - 130%	96
	0407_TP251_0.5_200626	SE208136.014	%	50 - 130%	93
	0407_TP252_0.1_200626	SE208136.015	%	50 - 130%	94
	0407_TP252_0.5_200626	SE208136.016	%	50 - 130%	87
	0407_TP253_0.1_200626	SE208136.017	%	50 - 130%	87
	0407_TP253_0.5_200626	SE208136.018	%	50 - 130%	87
	0407_QC173_200626	SE208136.019	%	50 - 130%	91
	0407_QC168_200626	SE208136.020	%	50 - 130%	91
	0407_QC176_200626	SE208136.021	%	50 - 130%	87
	0407_QC169_200626	SE208136.022	%	50 - 130%	87
	0407_QC172_200626	SE208136.023	%	50 - 130%	85

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP147_0.1_200626	SE208136.001	%	60 - 130%	86
	0407_TP147_0.5_200626	SE208136.002	%	60 - 130%	98
	0407_TP161_0.1_200626	SE208136.003	%	60 - 130%	86
	0407_TP161_0.5_200626	SE208136.004	%	60 - 130%	90
	0407_TP165_0.1_200626	SE208136.005	%	60 - 130%	77
	0407_TP165_0.5_200626	SE208136.006	%	60 - 130%	85
	0407_TP175_0.1_200626	SE208136.007	%	60 - 130%	104
	0407_TP175_0.5_200626	SE208136.008	%	60 - 130%	87
	0407_TP245_0.1_200626	SE208136.009	%	60 - 130%	72
	0407_TP245_0.5_200626	SE208136.010	%	60 - 130%	97
	0407_TP250_0.1_200626	SE208136.011	%	60 - 130%	83
	0407_TP250_0.5_200626	SE208136.012	%	60 - 130%	91
	0407_TP251_0.1_200626	SE208136.013	%	60 - 130%	85
	0407_TP251_0.5_200626	SE208136.014	%	60 - 130%	90
	0407_TP252_0.1_200626	SE208136.015	%	60 - 130%	89
	0407_TP252_0.5_200626	SE208136.016	%	60 - 130%	102
	0407_TP253_0.1_200626	SE208136.017	%	60 - 130%	83
	0407_TP253_0.5_200626	SE208136.018	%	60 - 130%	114
	0407_QC173_200626	SE208136.019	%	60 - 130%	100
	0407_QC168_200626	SE208136.020	%	60 - 130%	96
	0407_QC176_200626	SE208136.021	%	60 - 130%	109
	0407_QC169_200626	SE208136.022	%	60 - 130%	104
	0407_QC172_200626	SE208136.023	%	60 - 130%	101

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_QC414_200626	SE208136.024	%	60 - 130%	109
	0407_QC514_200626	SE208136.025	%	60 - 130%	94
d4-1,2-dichloroethane (Surrogate)	0407_TP147_0.1_200626	SE208136.001	%	60 - 130%	88
	0407_TP147_0.5_200626	SE208136.002	%	60 - 130%	88
	0407_TP161_0.1_200626	SE208136.003	%	60 - 130%	85
	0407_TP161_0.5_200626	SE208136.004	%	60 - 130%	88
	0407_TP165_0.1_200626	SE208136.005	%	60 - 130%	76
	0407_TP165_0.5_200626	SE208136.006	%	60 - 130%	84
	0407_TP175_0.1_200626	SE208136.007	%	60 - 130%	94
	0407_TP175_0.5_200626	SE208136.008	%	60 - 130%	91
	0407_TP245_0.1_200626	SE208136.009	%	60 - 130%	75
	0407_TP245_0.5_200626	SE208136.010	%	60 - 130%	94
	0407_TP250_0.1_200626	SE208136.011	%	60 - 130%	80
	0407_TP250_0.5_200626	SE208136.012	%	60 - 130%	79
	0407_TP251_0.1_200626	SE208136.013	%	60 - 130%	74
	0407_TP251_0.5_200626	SE208136.014	%	60 - 130%	77
	0407_TP252_0.1_200626	SE208136.015	%	60 - 130%	82
	0407_TP252_0.5_200626	SE208136.016	%	60 - 130%	103
	0407_TP253_0.1_200626	SE208136.017	%	60 - 130%	87
	0407_TP253_0.5_200626	SE208136.018	%	60 - 130%	108
	0407_QC173_200626	SE208136.019	%	60 - 130%	111
	0407_QC168_200626	SE208136.020	%	60 - 130%	93
	0407_QC176_200626	SE208136.021	%	60 - 130%	106
	0407_QC169_200626	SE208136.022	%	60 - 130%	114
	0407_QC172_200626	SE208136.023	%	60 - 130%	109
	0407_QC414_200626	SE208136.024	%	60 - 130%	123
	0407_QC514_200626	SE208136.025	%	60 - 130%	119
d8-toluene (Surrogate)	0407_TP147_0.1_200626	SE208136.001	%	60 - 130%	82
	0407_TP147_0.5_200626	SE208136.002	%	60 - 130%	88
	0407_TP161_0.1_200626	SE208136.003	%	60 - 130%	82
	0407_TP161_0.5_200626	SE208136.004	%	60 - 130%	85
	0407_TP165_0.1_200626	SE208136.005	%	60 - 130%	73
	0407_TP165_0.5_200626	SE208136.006	%	60 - 130%	87
	0407_TP175_0.1_200626	SE208136.007	%	60 - 130%	88
	0407_TP175_0.5_200626	SE208136.008	%	60 - 130%	91
	0407_TP245_0.1_200626	SE208136.009	%	60 - 130%	76
	0407_TP245_0.5_200626	SE208136.010	%	60 - 130%	86
	0407_TP250_0.1_200626	SE208136.011	%	60 - 130%	81
	0407_TP250_0.5_200626	SE208136.012	%	60 - 130%	87
	0407_TP251_0.1_200626	SE208136.013	%	60 - 130%	76
	0407_TP251_0.5_200626	SE208136.014	%	60 - 130%	84
	0407_TP252_0.1_200626	SE208136.015	%	60 - 130%	79
	0407_TP252_0.5_200626	SE208136.016	%	60 - 130%	92
	0407_TP253_0.1_200626	SE208136.017	%	60 - 130%	84
	0407_TP253_0.5_200626	SE208136.018	%	60 - 130%	99
	0407_QC173_200626	SE208136.019	%	60 - 130%	102
	0407_QC168_200626	SE208136.020	%	60 - 130%	91
	0407_QC176_200626	SE208136.021	%	60 - 130%	93
	0407_QC169_200626	SE208136.022	%	60 - 130%	99
	0407_QC172_200626	SE208136.023	%	60 - 130%	94
	0407_QC414_200626	SE208136.024	%	60 - 130%	106
	0407_QC514_200626	SE208136.025	%	60 - 130%	102

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP147_0.1_200626	SE208136.001	%	60 - 130%	86
	0407_TP147_0.5_200626	SE208136.002	%	60 - 130%	98
	0407_TP161_0.1_200626	SE208136.003	%	60 - 130%	86
	0407_TP161_0.5_200626	SE208136.004	%	60 - 130%	90
	0407_TP165_0.1_200626	SE208136.005	%	60 - 130%	77
	0407_TP165_0.5_200626	SE208136.006	%	60 - 130%	85

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP175_0.1_200626	SE208136.007	%	60 - 130%	104
	0407_TP175_0.5_200626	SE208136.008	%	60 - 130%	87
	0407_TP245_0.1_200626	SE208136.009	%	60 - 130%	72
	0407_TP245_0.5_200626	SE208136.010	%	60 - 130%	97
	0407_TP250_0.1_200626	SE208136.011	%	60 - 130%	83
	0407_TP250_0.5_200626	SE208136.012	%	60 - 130%	91
	0407_TP251_0.1_200626	SE208136.013	%	60 - 130%	85
	0407_TP251_0.5_200626	SE208136.014	%	60 - 130%	90
	0407_TP252_0.1_200626	SE208136.015	%	60 - 130%	89
	0407_TP252_0.5_200626	SE208136.016	%	60 - 130%	102
	0407_TP253_0.1_200626	SE208136.017	%	60 - 130%	83
	0407_TP253_0.5_200626	SE208136.018	%	60 - 130%	114
	0407_QC173_200626	SE208136.019	%	60 - 130%	100
	0407_QC168_200626	SE208136.020	%	60 - 130%	96
	0407_QC176_200626	SE208136.021	%	60 - 130%	109
	0407_QC169_200626	SE208136.022	%	60 - 130%	104
	0407_QC172_200626	SE208136.023	%	60 - 130%	101
	0407_QC414_200626	SE208136.024	%	60 - 130%	109
d4-1,2-dichloroethane (Surrogate)	0407_TP147_0.1_200626	SE208136.001	%	60 - 130%	88
	0407_TP147_0.5_200626	SE208136.002	%	60 - 130%	88
	0407_TP161_0.1_200626	SE208136.003	%	60 - 130%	85
	0407_TP161_0.5_200626	SE208136.004	%	60 - 130%	88
	0407_TP165_0.1_200626	SE208136.005	%	60 - 130%	76
	0407_TP165_0.5_200626	SE208136.006	%	60 - 130%	84
	0407_TP175_0.1_200626	SE208136.007	%	60 - 130%	94
	0407_TP175_0.5_200626	SE208136.008	%	60 - 130%	91
	0407_TP245_0.1_200626	SE208136.009	%	60 - 130%	75
	0407_TP245_0.5_200626	SE208136.010	%	60 - 130%	94
	0407_TP250_0.1_200626	SE208136.011	%	60 - 130%	80
	0407_TP250_0.5_200626	SE208136.012	%	60 - 130%	79
	0407_TP251_0.1_200626	SE208136.013	%	60 - 130%	74
	0407_TP251_0.5_200626	SE208136.014	%	60 - 130%	77
	0407_TP252_0.1_200626	SE208136.015	%	60 - 130%	82
	0407_TP252_0.5_200626	SE208136.016	%	60 - 130%	103
	0407_TP253_0.1_200626	SE208136.017	%	60 - 130%	87
	0407_TP253_0.5_200626	SE208136.018	%	60 - 130%	108
	0407_QC173_200626	SE208136.019	%	60 - 130%	111
	0407_QC168_200626	SE208136.020	%	60 - 130%	93
	0407_QC176_200626	SE208136.021	%	60 - 130%	106
	0407_QC169_200626	SE208136.022	%	60 - 130%	114
	0407_QC172_200626	SE208136.023	%	60 - 130%	109
	0407_QC414_200626	SE208136.024	%	60 - 130%	123
d8-toluene (Surrogate)	0407_TP147_0.1_200626	SE208136.001	%	60 - 130%	82
	0407_TP147_0.5_200626	SE208136.002	%	60 - 130%	88
	0407_TP161_0.1_200626	SE208136.003	%	60 - 130%	82
	0407_TP161_0.5_200626	SE208136.004	%	60 - 130%	85
	0407_TP165_0.1_200626	SE208136.005	%	60 - 130%	73
	0407_TP165_0.5_200626	SE208136.006	%	60 - 130%	87
	0407_TP175_0.1_200626	SE208136.007	%	60 - 130%	88
	0407_TP175_0.5_200626	SE208136.008	%	60 - 130%	91
	0407_TP245_0.1_200626	SE208136.009	%	60 - 130%	76
	0407_TP245_0.5_200626	SE208136.010	%	60 - 130%	86
	0407_TP250_0.1_200626	SE208136.011	%	60 - 130%	81
	0407_TP250_0.5_200626	SE208136.012	%	60 - 130%	87
	0407_TP251_0.1_200626	SE208136.013	%	60 - 130%	76
	0407_TP251_0.5_200626	SE208136.014	%	60 - 130%	84
	0407_TP252_0.1_200626	SE208136.015	%	60 - 130%	79
	0407_TP252_0.5_200626	SE208136.016	%	60 - 130%	92
	0407_TP253_0.1_200626	SE208136.017	%	60 - 130%	84
	0407_TP253_0.5_200626	SE208136.018	%	60 - 130%	99
	0407_QC173_200626	SE208136.019	%	60 - 130%	102

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d8-toluene (Surrogate)	0407_QC168_200626	SE208136.020	%	60 - 130%	91
	0407_QC176_200626	SE208136.021	%	60 - 130%	93
	0407_QC169_200626	SE208136.022	%	60 - 130%	99
	0407_QC172_200626	SE208136.023	%	60 - 130%	94
	0407_QC414_200626	SE208136.024	%	60 - 130%	106

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result
LB203605.001	Mercury	mg/kg	0.05	<0.05
LB203607.001	Mercury	mg/kg	0.05	<0.05

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203556.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	97
LB203560.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	83

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB203556.001	Dichlorvos	mg/kg	0.5	<0.5
	Dimethoate	mg/kg	0.5	<0.5
	Diazinon (Dimpylate)	mg/kg	0.5	<0.5
	Fenitrothion	mg/kg	0.2	<0.2
	Malathion	mg/kg	0.2	<0.2

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203556.001		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	87
		d14-p-terphenyl (Surrogate)	%	-	92
LB203560.001		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	95
		d14-p-terphenyl (Surrogate)	%	-	86

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203556.001		Naphthalene	mg/kg	0.1	<0.1
		2-methylnaphthalene	mg/kg	0.1	<0.1
		1-methylnaphthalene	mg/kg	0.1	<0.1
		Acenaphthylene	mg/kg	0.1	<0.1
		Acenaphthene	mg/kg	0.1	<0.1
		Fluorene	mg/kg	0.1	<0.1
		Phenanthrene	mg/kg	0.1	<0.1
		Anthracene	mg/kg	0.1	<0.1
		Fluoranthene	mg/kg	0.1	<0.1
		Pyrene	mg/kg	0.1	<0.1
		Benzo(a)anthracene	mg/kg	0.1	<0.1
		Chrysene	mg/kg	0.1	<0.1
		Benzo(a)pyrene	mg/kg	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	96
		2-fluorobiphenyl (Surrogate)	%	-	87
		d14-p-terphenyl (Surrogate)	%	-	92
LB203560.001		Naphthalene	mg/kg	0.1	<0.1
		2-methylnaphthalene	mg/kg	0.1	<0.1
		1-methylnaphthalene	mg/kg	0.1	<0.1
		Acenaphthylene	mg/kg	0.1	<0.1
		Acenaphthene	mg/kg	0.1	<0.1
		Fluorene	mg/kg	0.1	<0.1
		Phenanthrene	mg/kg	0.1	<0.1
		Anthracene	mg/kg	0.1	<0.1
		Fluoranthene	mg/kg	0.1	<0.1
		Pyrene	mg/kg	0.1	<0.1
		Benzo(a)anthracene	mg/kg	0.1	<0.1
		Chrysene	mg/kg	0.1	<0.1
		Benzo(a)pyrene	mg/kg	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203560.001	Surrogates	d5-nitrobenzene (Surrogate)	%	-	93
		2-fluorobiphenyl (Surrogate)	%	-	95
		d14-p-terphenyl (Surrogate)	%	-	86

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203556.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	97
LB203560.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	83

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203556.001		Phenol	mg/kg	0.5	<0.5
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5
		2-nitrophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
		Pentachlorophenol	mg/kg	0.5	<0.5
		2,4-dinitrophenol	mg/kg	2	<2
		4-chloro-3-methylphenol	mg/kg	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	88
		d5-phenol (Surrogate)	%	-	114
LB203560.001		Phenol	mg/kg	0.5	<0.5
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5
		2-nitrophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
		Pentachlorophenol	mg/kg	0.5	<0.5
		2,4-dinitrophenol	mg/kg	2	<2

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Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203560.001		4-chloro-3-methylphenol	mg/kg	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	86
		d5-phenol (Surrogate)	%	-	94

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB203597.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0
LB203601.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB203556.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110
LB203560.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB203548.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1

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Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB203548.001	Halogenated Aliphatics	1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic	Benzene	mg/kg	0.1	<0.1
	Hydrocarbons	Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10
		MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	83
		d8-toluene (Surrogate)	%	-	85
		Bromofluorobenzene (Surrogate)	%	-	95
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1
LB203551.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB203551.001	Halogenated Aliphatics	Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10
		MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	101
		d8-toluene (Surrogate)	%	-	96

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB203551.001	Surrogates	Bromofluorobenzene (Surrogate)	%	-	100
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB203548.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	83
LB203551.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	101

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208136.010	LB203605.014	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE208136.019	LB203605.024	Mercury	mg/kg	0.05	0.08	0.06	97	26
SE208142.005	LB203607.014	Mercury	mg/kg	0.05	0.0830097622	0.08	92	6
SE208142.014	LB203607.024	Mercury	mg/kg	0.05	0.0064360571	<0.05	200	0

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208136.010	LB203565.011	% Moisture	%w/w	1	3.7	3.6	57	5
SE208136.015	LB203565.017	% Moisture	%w/w	1	11.5	11.0	39	5
SE208137.020	LB203567.011	% Moisture	%w/w	1	9.1	8.8	41	3

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208136.011	LB203556.021		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	0	200	0
			Alpha BHC	mg/kg	0.1	<0.1	0	200	0
			Lindane	mg/kg	0.1	<0.1	0	200	0
			Heptachlor	mg/kg	0.1	<0.1	0	200	0
			Aldrin	mg/kg	0.1	<0.1	0	200	0
			Beta BHC	mg/kg	0.1	<0.1	0	200	0
			Delta BHC	mg/kg	0.1	<0.1	0	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	0	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	0	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	0	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Dieldrin	mg/kg	0.2	<0.2	0	200	0
			Endrin	mg/kg	0.2	<0.2	0	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	0	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	0	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	0	200	0
			Methoxychlor	mg/kg	0.1	<0.1	0	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	0	200	0
			Isodrin	mg/kg	0.1	<0.1	0	200	0
			Mirex	mg/kg	0.1	<0.1	0	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.17	0.17	30	3
SE208136.015	LB203556.020		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	90	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil (continued) — Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208136.015	LB203556.020		p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.16	0.16	30	0
SE208137.020	LB203560.020		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	0	200	0
			Alpha BHC	mg/kg	0.1	<0.1	0	200	0
			Lindane	mg/kg	0.1	<0.1	0	200	0
			Heptachlor	mg/kg	0.1	<0.1	0	200	0
			Aldrin	mg/kg	0.1	<0.1	0	200	0
			Beta BHC	mg/kg	0.1	<0.1	0	200	0
			Delta BHC	mg/kg	0.1	<0.1	0	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	0	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	0	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	0	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Dieldrin	mg/kg	0.2	<0.2	0.136	101	0
			Endrin	mg/kg	0.2	<0.2	0	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	0	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	0	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	0	200	0
			Methoxychlor	mg/kg	0.1	<0.1	0	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	0	200	0
			Isodrin	mg/kg	0.1	<0.1	0	200	0
			Mirex	mg/kg	0.1	<0.1	0	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	0.136	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.154	30	2
SE208137.022	LB203560.021		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	0	200	0
			Alpha BHC	mg/kg	0.1	<0.1	0	200	0
			Lindane	mg/kg	0.1	<0.1	0	200	0
			Heptachlor	mg/kg	0.1	<0.1	0	200	0
			Aldrin	mg/kg	0.1	<0.1	0	200	0
			Beta BHC	mg/kg	0.1	<0.1	0	200	0
			Delta BHC	mg/kg	0.1	<0.1	0	200	0
			Heptachlor epoxide	mg/kg	0.1	0.2	0.187	80	15
			o,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	0	200	0
			Gamma Chlordane	mg/kg	0.1	0.4	0.393	55	2
			Alpha Chlordane	mg/kg	0.1	0.2	0.244	74	15
			trans-Nonachlor	mg/kg	0.1	0.2	0.278	69	15
			p,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Dieldrin	mg/kg	0.2	<0.2	0	200	0
			Endrin	mg/kg	0.2	<0.2	0	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	0	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208137.022	LB203560.021		Endrin Aldehyde	mg/kg	0.1	<0.1	0	200	0
			Methoxychlor	mg/kg	0.1	<0.1	0	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	0	200	0
			Isodrin	mg/kg	0.1	<0.1	0	200	0
			Mirex	mg/kg	0.1	<0.1	0	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	0.824	151	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.16	30	4

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208136.010	LB203556.014		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	2
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	3
SE208137.021	LB203560.014		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	2
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	2

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208136.010	LB203556.014	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
		Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
		Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
		Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	<0.2	200	0
		Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	<0.3	134	0
		Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	<0.2	175	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208136.010	LB203556.014		Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	30	1
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	2
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	3
SE208137.021	LB203560.014		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	0.1	<0.1	122	23
			Pyrene	mg/kg	0.1	0.1	0.1	116	24
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	172	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	166	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	194	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	<0.3	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	<0.2	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	30	5
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	2
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	2

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208136.011	LB203556.024		Arochlor 1016	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	0	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0.17	30	3
SE208136.015	LB203556.020		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	3
SE208137.020	LB203560.020		Arochlor 1016	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PCBs in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208137.020	LB203560.020		Arochlor 1262	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	0	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0.154	30	2
SE208137.022	LB203560.021		Arochlor 1016	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	0	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0.16	30	4

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208136.011	LB203556.021		Phenol	mg/kg	0.5	<0.5	0.01	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	0	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	0	200	0
			Total Cresol	mg/kg	1.5	<1.5	0	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	0	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	0	200	0
			4-nitrophenol	mg/kg	1	<1	0	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	0	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dinitrophenol	mg/kg	2	<2	0	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	0	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.5	4.76	30	6
			d5-phenol (Surrogate)	mg/kg	-	2.2	1.84	30	16
SE208136.015	LB203556.020		Phenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	200	0
			Total Cresol	mg/kg	1.5	<1.5	<1.5	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	200	0
			4-nitrophenol	mg/kg	1	<1	<1	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dinitrophenol	mg/kg	2	<2	<2	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.3	3.9	30	10
			d5-phenol (Surrogate)	mg/kg	-	1.9	1.8	30	2
SE208137.021	LB203560.014		Phenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	200	0
			Total Cresol	mg/kg	1.5	<1.5	<1.5	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208137.021	LB203560.014		2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	200	0
			4-nitrophenol	mg/kg	1	<1	<1	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dinitrophenol	mg/kg	2	<2	<2	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.2	4.2	30	1
			d5-phenol (Surrogate)	mg/kg	-	1.7	1.7	30	1
SE208137.023	LB203560.019		Phenol	mg/kg	0.5	<0.5	0	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	0	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	0	200	0
			Total Cresol	mg/kg	1.5	<1.5	0	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	0	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	0	200	0
			4-nitrophenol	mg/kg	1	<1	0	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	0	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dinitrophenol	mg/kg	2	<2	0	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	0	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.2	4.31	30	3
			d5-phenol (Surrogate)	mg/kg	-	1.7	1.74	30	3

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208136.010	LB203597.014	Arsenic, As	mg/kg	1	<1	<1	200	0
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	<0.5	<0.5	200	0
		Copper, Cu	mg/kg	0.5	<0.5	<0.5	181	0
		Nickel, Ni	mg/kg	0.5	<0.5	<0.5	200	0
		Lead, Pb	mg/kg	1	<1	<1	200	0
		Zinc, Zn	mg/kg	2	<2.0	<2.0	200	0
SE208136.019	LB203597.024	Arsenic, As	mg/kg	1	<1	<1	153	0
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	5.8	5.4	39	8
		Copper, Cu	mg/kg	0.5	11	9.5	35	17
		Nickel, Ni	mg/kg	0.5	1.3	1.1	71	18
		Lead, Pb	mg/kg	1	60	57	32	5
		Zinc, Zn	mg/kg	2	58	54	34	6
SE208142.005	LB203601.014	Arsenic, As	mg/kg	1	7.5188152031	9	42	20
		Cadmium, Cd	mg/kg	0.3	0.3963365661	0.3	114	23
		Chromium, Cr	mg/kg	0.5	20.8837263433	22	32	7
		Copper, Cu	mg/kg	0.5	43.6475512450	41	31	6
		Nickel, Ni	mg/kg	0.5	12.5206563564	9.4	35	29
		Lead, Pb	mg/kg	1	20.195774574(	150	31	19
		Zinc, Zn	mg/kg	2	18.037724770(	260	31	21
SE208142.014	LB203601.024	Arsenic, As	mg/kg	1	0.1684131588	<1	200	0
		Cadmium, Cd	mg/kg	0.3	0.3430179780	0.5	104	32
		Chromium, Cr	mg/kg	0.5	0.6286599043	0.5	115	15
		Copper, Cu	mg/kg	0.5	6.0376943013	6.3	38	4
		Nickel, Ni	mg/kg	0.5	0.2489047421	<0.5	200	0
		Lead, Pb	mg/kg	1	18.4949019530	18	35	2
		Zinc, Zn	mg/kg	2	18.4032653813	16	42	12

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208136.010	LB203556.014		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE208136.015	LB203556.020		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE208137.022	LB203560.020		TRH C10-C14	mg/kg	20	<20	0	200	0
			TRH C15-C28	mg/kg	45	<45	0	200	0
			TRH C29-C36	mg/kg	45	<45	0	200	0
			TRH C37-C40	mg/kg	100	<100	0	200	0
			TRH C10-C36 Total	mg/kg	110	<110	0	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	0	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	0	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	0	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	0	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	0	200	0
SE208137.024	LB203560.018		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208136.010	LB203548.014	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208136.010	LB203548.014	Halogenated	Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
		Aliphatics	1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.4	8.1	50	14
			d8-toluene (Surrogate)	mg/kg	-	8.6	8.6	50	0
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.7	8.1	50	17
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208136.010	LB203548.014	Trihalomethanes	Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE208136.015	LB203548.020	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
			Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic Aromatic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
			Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208136.015	LB203548.020	Nitrogenous	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.2	8.6	50	5
			d8-toluene (Surrogate)	mg/kg	-	7.9	8.5	50	8
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.9	8.9	50	0
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE208137.020	LB203551.024	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	0	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	0	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	0	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	0	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	0	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	0	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	0	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	0	200	0
			Bromomethane	mg/kg	1	<1	0	200	0
			Chloroethane	mg/kg	1	<1	0	200	0
			Trichlorofluoromethane	mg/kg	1	<1	0	200	0
			Iodomethane	mg/kg	5	<5	0	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	0	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	0	200	0
			Allyl chloride	mg/kg	0.1	<0.1	0	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	0	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	0	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	0	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	0	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	0	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	0	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	0	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	0	200	0
			Dibromomethane	mg/kg	0.1	<0.1	0	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	0	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	0	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	0	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	0	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	0	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	0	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	0	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	0	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	0	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	0	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	0	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	0	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	0	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	0	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208137.020	LB203551.024	Halogenated	1,3-dichlorobenzene	mg/kg	0.1	<0.1	0	200	0
		Aromatics	1,4-dichlorobenzene	mg/kg	0.1	<0.1	0	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	0	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	0	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	0	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	0	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	0.0745401138	164	0
			Ethylbenzene	mg/kg	0.1	<0.1	0.0221188896	200	0
			m/p-xylene	mg/kg	0.2	<0.2	0.0417555339	200	0
			o-xylene	mg/kg	0.1	<0.1	0	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	0	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	0	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	0	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	0	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	0	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	0	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	0	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	0	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	0	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	0	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	0	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	0	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	0	200	0
			Vinyl acetate	mg/kg	10	<10	0	200	0
			MEK (2-butanone)	mg/kg	10	<10	0	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	0	200	0
			2-hexanone (MBK)	mg/kg	5	<5	0	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	0	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	0	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.5	8.4575251239	50	0
			d8-toluene (Surrogate)	mg/kg	-	8.9	8.2932194530	50	7
			Bromofluorobenzene (Surrogate)	mg/kg	-	10.0	8.9470430557	50	12
		Totals	Total Xylenes	mg/kg	0.3	<0.3	0.0417555339	200	0
			Total BTEX	mg/kg	0.6	<0.6	0	200	0
			Total VOC*	mg/kg	24	<24	0	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	0	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	0	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	0	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	0	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	0	200	0
			Bromoform	mg/kg	0.1	<0.1	0	200	0
SE208137.023	LB203551.025	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	0	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	0	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	0	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	0	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	0	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	0	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	0	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	0	200	0
			Bromomethane	mg/kg	1	<1	0	200	0
			Chloroethane	mg/kg	1	<1	0	200	0
			Trichlorofluoromethane	mg/kg	1	<1	0	200	0
			Iodomethane	mg/kg	5	<5	0	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	0	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	0	200	0
			Allyl chloride	mg/kg	0.1	<0.1	0	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	0	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	0	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	0	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued) — Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208137.023	LB203551.025	Halogenated Aliphatics	1,2-dichloroethane	mg/kg	0.1	<0.1	0	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	0	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	0	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	0	200	0
			Dibromomethane	mg/kg	0.1	<0.1	0	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	0	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	0	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	0	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	0	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	0	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	0	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	0	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	0	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	0	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	0	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	0	200	0
		Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1	0	200	0
			Bromobenzene	mg/kg	0.1	<0.1	0	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	0	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	0	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	0	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	0	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	0	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	0	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	0	200	0
		Monocyclic Aromatic	Benzene	mg/kg	0.1	<0.1	0	200	0
			Toluene	mg/kg	0.1	<0.1	0.0687714655	174	0
			Ethylbenzene	mg/kg	0.1	<0.1	0.0251877153	200	0
			m/p-xylene	mg/kg	0.2	<0.2	0.0457891875	200	0
			o-xylene	mg/kg	0.1	<0.1	0	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	0	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	0	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	0	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	0	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	0	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	0	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	0	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	0	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	0	200	0
		Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1	0	200	0
			2-nitropropane	mg/kg	10	<10	0	200	0
		Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10	0	200	0
			MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	0	200	0
			Vinyl acetate	mg/kg	10	<10	0	200	0
			MEK (2-butanone)	mg/kg	10	<10	0	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	0	200	0
			2-hexanone (MBK)	mg/kg	5	<5	0	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	0.0833192738	152	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	0	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.7	9.2979222834	50	7
			d8-toluene (Surrogate)	mg/kg	-	8.4	8.7530119231	50	4
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.9	9.3771824559	50	5
		Totals	Total Xylenes	mg/kg	0.3	<0.3	0.0457891875	200	0
			Total BTEX	mg/kg	0.6	<0.6	0	200	0
			Total VOC*	mg/kg	24	<24	0.0833192738	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	0	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	0	200	0
		Trihalomethanes	Chloroform	mg/kg	0.1	<0.1	0	200	0
			Bromodichloromethane	mg/kg	0.1	<0.1	0	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208137.023	LB203551.025	Trihalomethan	Bromoform	mg/kg	0.1	<0.1	0	200	0

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208136.010	LB203548.014		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.4	8.1	30	14
			d8-toluene (Surrogate)	mg/kg	-	8.6	8.6	30	0
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.7	8.1	30	17
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE208136.015	LB203548.020		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.2	8.6	30	5
			d8-toluene (Surrogate)	mg/kg	-	7.9	8.5	30	8
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.9	8.9	30	0
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE208137.020	LB203551.024		TRH C6-C10	mg/kg	25	<25	0	200	0
			TRH C6-C9	mg/kg	20	<20	0	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.5	8.4575251239	30	0
			d8-toluene (Surrogate)	mg/kg	-	8.9	8.2932194530	30	7
			Bromofluorobenzene (Surrogate)	mg/kg	-	10.0	8.9470430557	30	12
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	0	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	0	200	0
SE208137.023	LB203551.025		TRH C6-C10	mg/kg	25	<25	0	200	0
			TRH C6-C9	mg/kg	20	<20	0	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.7	9.2979222834	30	7
			d8-toluene (Surrogate)	mg/kg	-	8.4	8.7530119231	30	4
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.9	9.3771824559	30	5
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	0	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	0	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203605.002	Mercury	mg/kg	0.05	0.23	0.2	70 - 130	114
LB203607.002	Mercury	mg/kg	0.05	0.22	0.2	70 - 130	109

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203556.002		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	80
		Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	81
		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	82
		Dieldrin	mg/kg	0.2	<0.2	0.2	60 - 140	81
		Endrin	mg/kg	0.2	0.2	0.2	60 - 140	100
		p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	76
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.15	40 - 130	102
LB203560.002		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	123
		Aldrin	mg/kg	0.1	0.3	0.2	60 - 140	125
		Delta BHC	mg/kg	0.1	0.3	0.2	60 - 140	130
		Dieldrin	mg/kg	0.2	0.3	0.2	60 - 140	128
		Endrin	mg/kg	0.2	0.3	0.2	60 - 140	126
		p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	81
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.13	0.15	40 - 130	89

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203556.002		Dichlorvos	mg/kg	0.5	1.7	2	60 - 140	84
		Diazinon (Dimpylate)	mg/kg	0.5	2.6	2	60 - 140	128
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.7	2	60 - 140	136
		Ethion	mg/kg	0.2	2.2	2	60 - 140	109
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	90
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	82
LB203560.002		Dichlorvos	mg/kg	0.5	1.7	2	60 - 140	86
		Diazinon (Dimpylate)	mg/kg	0.5	2.5	2	60 - 140	124
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.7	2	60 - 140	134
		Ethion	mg/kg	0.2	2.3	2	60 - 140	114
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	86
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	83

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203556.002		Naphthalene	mg/kg	0.1	4.7	4	60 - 140	117
		Acenaphthylene	mg/kg	0.1	5.0	4	60 - 140	124
		Acenaphthene	mg/kg	0.1	4.9	4	60 - 140	122
		Phenanthrene	mg/kg	0.1	4.7	4	60 - 140	118
		Anthracene	mg/kg	0.1	4.6	4	60 - 140	115
		Fluoranthene	mg/kg	0.1	5.0	4	60 - 140	125
		Pyrene	mg/kg	0.1	5.2	4	60 - 140	129
		Benzo(a)pyrene	mg/kg	0.1	4.9	4	60 - 140	123
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	91
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	90
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	82
LB203560.002		Naphthalene	mg/kg	0.1	4.5	4	60 - 140	113
		Acenaphthylene	mg/kg	0.1	5.0	4	60 - 140	125
		Acenaphthene	mg/kg	0.1	4.6	4	60 - 140	114
		Phenanthrene	mg/kg	0.1	4.6	4	60 - 140	115
		Anthracene	mg/kg	0.1	4.7	4	60 - 140	118
		Fluoranthene	mg/kg	0.1	4.8	4	60 - 140	121
		Pyrene	mg/kg	0.1	5.1	4	60 - 140	127
		Benzo(a)pyrene	mg/kg	0.1	5.0	4	60 - 140	126
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	84
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	86
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	83

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PCBs in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203556.002		Arochlor 1260	mg/kg	0.2	0.3	0.4	60 - 140	85
LB203560.002		Arochlor 1260	mg/kg	0.2	0.5	0.4	60 - 140	135

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203556.002		Phenol	mg/kg	0.5	0.7	1	70 - 130	72
		2,4-dichlorophenol	mg/kg	0.5	0.9	1	70 - 130	91
		2,4,6-trichlorophenol	mg/kg	0.5	0.8	1	70 - 130	82
		Pentachlorophenol	mg/kg	0.5	0.8	1	70 - 130	84
	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.8	5	40 - 130	96
		d5-phenol (Surrogate)	mg/kg	-	1.6	2	40 - 130	79
LB203560.002		Phenol	mg/kg	0.5	0.7	1	70 - 130	74
		2,4-dichlorophenol	mg/kg	0.5	0.7	1	70 - 130	74
		2,4,6-trichlorophenol	mg/kg	0.5	0.7	1	70 - 130	70
		Pentachlorophenol	mg/kg	0.5	0.7	1	70 - 130	71
	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.2	5	40 - 130	84
		d5-phenol (Surrogate)	mg/kg	-	1.9	2	40 - 130	93

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203597.002	Arsenic, As	mg/kg	1	360	318.22	80 - 120	112
	Cadmium, Cd	mg/kg	0.3	5.7	5.41	80 - 120	105
	Chromium, Cr	mg/kg	0.5	38	38.31	80 - 120	100
	Copper, Cu	mg/kg	0.5	320	290	80 - 120	110
	Nickel, Ni	mg/kg	0.5	200	187	80 - 120	107
	Lead, Pb	mg/kg	1	98	89.9	80 - 120	109
	Zinc, Zn	mg/kg	2	300	273	80 - 120	109
LB203601.002	Arsenic, As	mg/kg	1	330	318.22	80 - 120	105
	Cadmium, Cd	mg/kg	0.3	5.2	5.41	80 - 120	96
	Chromium, Cr	mg/kg	0.5	37	38.31	80 - 120	97
	Copper, Cu	mg/kg	0.5	300	290	80 - 120	102
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	100
	Lead, Pb	mg/kg	1	93	89.9	80 - 120	103
	Zinc, Zn	mg/kg	2	280	273	80 - 120	102

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203556.002		TRH C10-C14	mg/kg	20	40	40	60 - 140	100
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	93
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	93
	TRH F Bands	TRH >C10-C16	mg/kg	25	39	40	60 - 140	98
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	90
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	100
LB203560.002		TRH C10-C14	mg/kg	20	39	40	60 - 140	98
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	83
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	85
	TRH F Bands	TRH >C10-C16	mg/kg	25	37	40	60 - 140	93
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	108
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	65

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203548.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	4.9	5	60 - 140	97
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	5.5	5	60 - 140	110
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	4.6	5	60 - 140	93
	Halogenated	Chlorobenzene	mg/kg	0.1	5.5	5	60 - 140	110
	Monocyclic	Benzene	mg/kg	0.1	4.9	5	60 - 140	99
	Aromatic	Toluene	mg/kg	0.1	4.9	5	60 - 140	97
		Ethylbenzene	mg/kg	0.1	4.8	5	60 - 140	96
		m/p-xylene	mg/kg	0.2	9.4	10	60 - 140	94
		o-xylene	mg/kg	0.1	4.8	5	60 - 140	96
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.1	10	70 - 130	91

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203548.002	Surrogates	d8-toluene (Surrogate)	mg/kg	-	9.0	10	70 - 130	90
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.8	10	70 - 130	88
	Trihalomethan	Chloroform	mg/kg	0.1	4.8	5	60 - 140	95
LB203551.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	4.3	5	60 - 140	86
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	5.2	5	60 - 140	104
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	5.0	5	60 - 140	99
	Halogenated	Chlorobenzene	mg/kg	0.1	4.6	5	60 - 140	92
	Monocyclic	Benzene	mg/kg	0.1	6.3	5	60 - 140	127
	Aromatic	Toluene	mg/kg	0.1	5.9	5	60 - 140	118
		Ethylbenzene	mg/kg	0.1	5.9	5	60 - 140	117
		m/p-xylene	mg/kg	0.2	12	10	60 - 140	115
		o-xylene	mg/kg	0.1	5.8	5	60 - 140	116
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	11.9	10	70 - 130	119
		d8-toluene (Surrogate)	mg/kg	-	10.5	10	70 - 130	105
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.8	10	70 - 130	98
	Trihalomethan	Chloroform	mg/kg	0.1	4.5	5	60 - 140	91

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203548.002		TRH C6-C10	mg/kg	25	78	92.5	60 - 140	84
		TRH C6-C9	mg/kg	20	71	80	60 - 140	89
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.1	10	70 - 130	91
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.8	10	70 - 130	88
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	49	62.5	60 - 140	79
LB203551.002		TRH C6-C10	mg/kg	25	75	92.5	60 - 140	81
		TRH C6-C9	mg/kg	20	68	80	60 - 140	86
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	11.9	10	70 - 130	119
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.8	10	70 - 130	98
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	39	62.5	60 - 140	63

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208136.001	LB203605.004	Mercury	mg/kg	0.05	0.23	<0.05	0.2	107
SE208136.020	LB203607.004	Mercury	mg/kg	0.05	0.77	0.57	0.2	96

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208136.003	LB203556.024		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	-	-
			Alpha BHC	mg/kg	0.1	<0.1	-	-
			Lindane	mg/kg	0.1	<0.1	-	-
			Heptachlor	mg/kg	0.1	<0.1	0.2	81
			Aldrin	mg/kg	0.1	<0.1	0.2	81
			Beta BHC	mg/kg	0.1	<0.1	-	-
			Delta BHC	mg/kg	0.1	<0.1	0.2	82
			Heptachlor epoxide	mg/kg	0.1	<0.1	-	-
			o,p'-DDE	mg/kg	0.1	<0.1	-	-
			Alpha Endosulfan	mg/kg	0.2	<0.2	-	-
			Gamma Chlordane	mg/kg	0.1	<0.1	-	-
			Alpha Chlordane	mg/kg	0.1	<0.1	-	-
			trans-Nonachlor	mg/kg	0.1	<0.1	-	-
			p,p'-DDE	mg/kg	0.1	<0.1	-	-
			Dieldrin	mg/kg	0.2	<0.2	0.2	81
			Endrin	mg/kg	0.2	<0.2	0.2	102
			o,p'-DDD	mg/kg	0.1	<0.1	-	-
			o,p'-DDT	mg/kg	0.1	<0.1	-	-
			Beta Endosulfan	mg/kg	0.2	<0.2	-	-
			p,p'-DDD	mg/kg	0.1	<0.1	-	-
			p,p'-DDT	mg/kg	0.1	<0.1	0.2	75
			Endosulfan sulphate	mg/kg	0.1	<0.1	-	-
			Endrin Aldehyde	mg/kg	0.1	<0.1	-	-
			Methoxychlor	mg/kg	0.1	<0.1	-	-
			Endrin Ketone	mg/kg	0.1	<0.1	-	-
			Isodrin	mg/kg	0.1	<0.1	-	-
			Mirex	mg/kg	0.1	<0.1	-	-
			Total CLP OC Pesticides	mg/kg	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	-	104
SE208136.018	LB203560.022		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	-	-
			Alpha BHC	mg/kg	0.1	<0.1	-	-
			Lindane	mg/kg	0.1	<0.1	-	-
			Heptachlor	mg/kg	0.1	<0.1	0.2	84
			Aldrin	mg/kg	0.1	<0.1	0.2	86
			Beta BHC	mg/kg	0.1	<0.1	-	-
			Delta BHC	mg/kg	0.1	<0.1	0.2	84
			Heptachlor epoxide	mg/kg	0.1	<0.1	-	-
			o,p'-DDE	mg/kg	0.1	<0.1	-	-
			Alpha Endosulfan	mg/kg	0.2	<0.2	-	-
			Gamma Chlordane	mg/kg	0.1	<0.1	-	-
			Alpha Chlordane	mg/kg	0.1	<0.1	-	-
			trans-Nonachlor	mg/kg	0.1	<0.1	-	-
			p,p'-DDE	mg/kg	0.1	<0.1	-	-
			Dieldrin	mg/kg	0.2	<0.2	0.2	87
			Endrin	mg/kg	0.2	<0.2	0.2	80
			o,p'-DDD	mg/kg	0.1	<0.1	-	-
			o,p'-DDT	mg/kg	0.1	<0.1	-	-
			Beta Endosulfan	mg/kg	0.2	<0.2	-	-
			p,p'-DDD	mg/kg	0.1	<0.1	-	-
			p,p'-DDT	mg/kg	0.1	<0.1	0.2	71
			Endosulfan sulphate	mg/kg	0.1	<0.1	-	-
			Endrin Aldehyde	mg/kg	0.1	<0.1	-	-
			Methoxychlor	mg/kg	0.1	<0.1	-	-
			Endrin Ketone	mg/kg	0.1	<0.1	-	-
			Isodrin	mg/kg	0.1	<0.1	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208136.018	LB203560.022		Mirex	mg/kg	0.1	<0.1	-	-
			Total CLP OC Pesticides	mg/kg	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.17	-	119

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208136.002	LB203556.022		Dichlorvos	mg/kg	0.5		<0.5	2	74
			Dimethoate	mg/kg	0.5		<0.5	-	-
			Diazinon (Dimpylate)	mg/kg	0.5		<0.5	2	120
			Fenitrothion	mg/kg	0.2		<0.2	-	-
			Malathion	mg/kg	0.2		<0.2	-	-
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2		<0.2	2	134
			Parathion-ethyl (Parathion)	mg/kg	0.2		<0.2	-	-
			Bromophos Ethyl	mg/kg	0.2		<0.2	-	-
			Methidathion	mg/kg	0.5		<0.5	-	-
			Ethion	mg/kg	0.2		<0.2	2	106
			Azinphos-methyl (Guthion)	mg/kg	0.2		<0.2	-	-
			Total OP Pesticides*	mg/kg	1.7	NVL	NVL	NVL	NVL
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-		0.5	-	87
			d14-p-terphenyl (Surrogate)	mg/kg	-		0.4	-	84
SE208136.017	LB203560.019		Dichlorvos	mg/kg	0.5		<0.5	2	78
			Dimethoate	mg/kg	0.5		<0.5	-	-
			Diazinon (Dimpylate)	mg/kg	0.5		<0.5	2	137
			Fenitrothion	mg/kg	0.2		<0.2	-	-
			Malathion	mg/kg	0.2		<0.2	-	-
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2		<0.2	2	114
			Parathion-ethyl (Parathion)	mg/kg	0.2		<0.2	-	-
			Bromophos Ethyl	mg/kg	0.2		<0.2	-	-
			Methidathion	mg/kg	0.5		<0.5	-	-
			Ethion	mg/kg	0.2		<0.2	2	128
			Azinphos-methyl (Guthion)	mg/kg	0.2		<0.2	-	-
			Total OP Pesticides*	mg/kg	1.7		<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-		0.4	-	87
			d14-p-terphenyl (Surrogate)	mg/kg	-		0.4	-	84

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208136.002	LB203556.022		Naphthalene	mg/kg	0.1	<0.1	4	121
			2-methylnaphthalene	mg/kg	0.1	<0.1	-	-
			1-methylnaphthalene	mg/kg	0.1	<0.1	-	-
			Acenaphthylene	mg/kg	0.1	<0.1	4	129
			Acenaphthene	mg/kg	0.1	<0.1	4	121
			Fluorene	mg/kg	0.1	<0.1	-	-
			Phenanthrene	mg/kg	0.1	<0.1	4	123
			Anthracene	mg/kg	0.1	<0.1	4	121
			Fluoranthene	mg/kg	0.1	<0.1	4	130
			Pyrene	mg/kg	0.1	<0.1	4	136
			Benzo(a)anthracene	mg/kg	0.1	<0.1	-	-
			Chrysene	mg/kg	0.1	<0.1	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	-	-
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	-	-
			Benzo(a)pyrene	mg/kg	0.1	<0.1	4	114
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	-	-
			Total PAH (18)	mg/kg	0.8	<0.8	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	-	90
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	-	87
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	-	84

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208136.017	LB203560.019		Naphthalene	mg/kg	0.1	<0.1	4	120
			2-methylnaphthalene	mg/kg	0.1	<0.1	-	-
			1-methylnaphthalene	mg/kg	0.1	<0.1	-	-
			Acenaphthylene	mg/kg	0.1	0.1	4	135
			Acenaphthene	mg/kg	0.1	<0.1	4	131
			Fluorene	mg/kg	0.1	<0.1	-	-
			Phenanthrene	mg/kg	0.1	0.5	4	113
			Anthracene	mg/kg	0.1	0.2	4	123
			Fluoranthene	mg/kg	0.1	0.9	4	124
			Pyrene	mg/kg	0.1	0.9	4	128
			Benzo(a)anthracene	mg/kg	0.1	0.4	-	-
			Chrysene	mg/kg	0.1	0.3	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1	0.4	-	-
			Benzo(k)fluoranthene	mg/kg	0.1	0.2	-	-
			Benzo(a)pyrene	mg/kg	0.1	0.4	4	122
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.2	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	0.5	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	0.6	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	0.6	-	-
			Total PAH (18)	mg/kg	0.8	4.7	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	-	86
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	-	87
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	-	88

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208136.003	LB203556.023		Arochlor 1016	mg/kg	0.2	<0.2	-	-
			Arochlor 1221	mg/kg	0.2	<0.2	-	-
			Arochlor 1232	mg/kg	0.2	<0.2	-	-
			Arochlor 1242	mg/kg	0.2	<0.2	-	-
			Arochlor 1248	mg/kg	0.2	<0.2	-	-
			Arochlor 1254	mg/kg	0.2	<0.2	-	-
			Arochlor 1260	mg/kg	0.2	<0.2	0.4	82
			Arochlor 1262	mg/kg	0.2	<0.2	-	-
			Arochlor 1268	mg/kg	0.2	<0.2	-	-
			Total PCBs (Arochlors)	mg/kg	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	-	100
SE208136.018	LB203560.022		Arochlor 1016	mg/kg	0.2	<0.2	-	-
			Arochlor 1221	mg/kg	0.2	<0.2	-	-
			Arochlor 1232	mg/kg	0.2	<0.2	-	-
			Arochlor 1242	mg/kg	0.2	<0.2	-	-
			Arochlor 1248	mg/kg	0.2	<0.2	-	-
			Arochlor 1254	mg/kg	0.2	<0.2	-	-
			Arochlor 1260	mg/kg	0.2	<0.2	0.4	134
			Arochlor 1262	mg/kg	0.2	<0.2	-	-
			Arochlor 1268	mg/kg	0.2	<0.2	-	-
			Total PCBs (Arochlors)	mg/kg	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	-	113

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208136.001	LB203556.004	Phenol	mg/kg	0.5	0.9	<0.5	1	85
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	-	-
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	-	-
		Total Cresol	mg/kg	1.5	<1.5	<1.5	-	-
		2-chlorophenol	mg/kg	0.5	<0.5	<0.5	-	-
		2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	-	-
		2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	-	-
		2,4-dichlorophenol	mg/kg	0.5	0.8	<0.5	1	76
		2,4,6-trichlorophenol	mg/kg	0.5	0.7	<0.5	1	73

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

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Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208136.001	LB203556.004		2-nitrophenol	mg/kg	0.5	<0.5	<0.5	-	-
			4-nitrophenol	mg/kg	1	<1	<1	-	-
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	-	-
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	-	-
			Pentachlorophenol	mg/kg	0.5	0.8	<0.5	1	76
			2,4-dinitrophenol	mg/kg	2	<2	<2	-	-
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	-	-
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.7	4.4	-	73
			d5-phenol (Surrogate)	mg/kg	-	1.9	1.9	-	94
SE208136.016	LB203560.004		Phenol	mg/kg	0.5	0.8	<0.5	1	75
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	-	-
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	-	-
			Total Cresol	mg/kg	1.5	<1.5	<1.5	-	-
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	-	-
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	-	-
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	-	-
			2,4-dichlorophenol	mg/kg	0.5	0.9	<0.5	1	86
			2,4,6-trichlorophenol	mg/kg	0.5	0.7	<0.5	1	72
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	-	-
			4-nitrophenol	mg/kg	1	<1	<1	-	-
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	-	-
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	-	-
			Pentachlorophenol	mg/kg	0.5	0.8	<0.5	1	76
			2,4-dinitrophenol	mg/kg	2	<2	<2	-	-
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	-	-
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.3	4.3	-	85
			d5-phenol (Surrogate)	mg/kg	-	1.8	1.7	-	89

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208136.001	LB203597.004	Arsenic, As	mg/kg	1	53	<1	50	106
		Cadmium, Cd	mg/kg	0.3	45	<0.3	50	89
		Chromium, Cr	mg/kg	0.5	53	0.7	50	104
		Copper, Cu	mg/kg	0.5	54	2.1	50	104
		Nickel, Ni	mg/kg	0.5	53	<0.5	50	105
		Lead, Pb	mg/kg	1	NVL	NVL	NVL	NVL
		Zinc, Zn	mg/kg	2	NVL	NVL	NVL	NVL
SE208136.020	LB203601.004	Arsenic, As	mg/kg	1	51	5	50	92
		Cadmium, Cd	mg/kg	0.3	41	0.3	50	81
		Chromium, Cr	mg/kg	0.5	59	15	50	87
		Copper, Cu	mg/kg	0.5	86	43	50	87
		Nickel, Ni	mg/kg	0.5	53	11	50	83
		Lead, Pb	mg/kg	1	120	100	50	42 ④
		Zinc, Zn	mg/kg	2	260	270	50	-16 ④

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208136.002	LB203556.021		TRH C10-C14	mg/kg	20	<20	40	110
			TRH C15-C28	mg/kg	45	<45	40	108
			TRH C29-C36	mg/kg	45	<45	40	90
			TRH C37-C40	mg/kg	100	<100	-	-
			TRH C10-C36 Total	mg/kg	110	<110	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	40	110
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	<90	40	98
			TRH >C34-C40 (F4)	mg/kg	120	<120	-	-
SE208136.017	LB203560.019		TRH C10-C14	mg/kg	20	<20	40	98
			TRH C15-C28	mg/kg	45	<45	40	110
			TRH C29-C36	mg/kg	45	<45	40	103
			TRH C37-C40	mg/kg	100	<100	-	-
			TRH C10-C36 Total	mg/kg	110	<110	-	-

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TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208136.017	LB203560.019		TRH >C10-C40 Total (F bands)	mg/kg	210	<210	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	40	95
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	<90	40	133
			TRH >C34-C40 (F4)	mg/kg	120	<120	-	-

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208136.001	LB203548.004	Monocyclic Aromatic	Benzene	mg/kg	0.1	4.7	<0.1	5	94
			Toluene	mg/kg	0.1	4.5	<0.1	5	90
			Ethylbenzene	mg/kg	0.1	4.6	<0.1	5	93
			m/p-xylene	mg/kg	0.2	9.0	<0.2	10	90
			o-xylene	mg/kg	0.1	4.6	<0.1	5	91
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.2	8.8	10	92
			d8-toluene (Surrogate)	mg/kg	-	8.3	8.2	10	83
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.2	8.6	10	82
		Totals	Total Xylenes	mg/kg	0.3	14	<0.3	-	-
			Total BTEX	mg/kg	0.6	27	<0.6	-	-
SE208136.002	LB203548.021	Fumigants	2,2-dichloropropane	mg/kg	0.1		<0.1	-	-
			1,2-dichloropropane	mg/kg	0.1		<0.1	-	-
			cis-1,3-dichloropropene	mg/kg	0.1		<0.1	-	-
			trans-1,3-dichloropropene	mg/kg	0.1		<0.1	-	-
			1,2-dibromoethane (EDB)	mg/kg	0.1		<0.1	-	-
		Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1		<1	-	-
			Chloromethane	mg/kg	1		<1	-	-
			Vinyl chloride (Chloroethene)	mg/kg	0.1		<0.1	-	-
			Bromomethane	mg/kg	1		<1	-	-
			Chloroethane	mg/kg	1		<1	-	-
			Trichlorofluoromethane	mg/kg	1		<1	-	-
			Iodomethane	mg/kg	5		<5	-	-
			1,1-dichloroethene	mg/kg	0.1		<0.1	5	106
			Dichloromethane (Methylene chloride)	mg/kg	0.5		<0.5	-	-
			Allyl chloride	mg/kg	0.1		<0.1	-	-
			trans-1,2-dichloroethene	mg/kg	0.1		<0.1	-	-
			1,1-dichloroethane	mg/kg	0.1		<0.1	-	-
			cis-1,2-dichloroethene	mg/kg	0.1		<0.1	-	-
			Bromochloromethane	mg/kg	0.1		<0.1	-	-
			1,2-dichloroethane	mg/kg	0.1		<0.1	5	113
			1,1,1-trichloroethane	mg/kg	0.1		<0.1	-	-
			1,1-dichloropropene	mg/kg	0.1		<0.1	-	-
			Carbon tetrachloride	mg/kg	0.1		<0.1	-	-
			Dibromomethane	mg/kg	0.1		<0.1	-	-
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1		<0.1	5	109
			1,1,2-trichloroethane	mg/kg	0.1		<0.1	-	-
			1,3-dichloropropane	mg/kg	0.1		<0.1	-	-
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1		<0.1	-	-
			1,1,1,2-tetrachloroethane	mg/kg	0.1		<0.1	-	-
			cis-1,4-dichloro-2-butene	mg/kg	1		<1	-	-
			1,1,2,2-tetrachloroethane	mg/kg	0.1		<0.1	-	-
			1,2,3-trichloropropane	mg/kg	0.1		<0.1	-	-
			trans-1,4-dichloro-2-butene	mg/kg	1		<1	-	-
			1,2-dibromo-3-chloropropane	mg/kg	0.1		<0.1	-	-
			Hexachlorobutadiene	mg/kg	0.1		<0.1	-	-
		Halogenated Aromatics	Chlorobenzene	mg/kg	0.1		<0.1	5	123
			Bromobenzene	mg/kg	0.1		<0.1	-	-
			2-chlorotoluene	mg/kg	0.1		<0.1	-	-
			4-chlorotoluene	mg/kg	0.1		<0.1	-	-
			1,3-dichlorobenzene	mg/kg	0.1		<0.1	-	-
			1,4-dichlorobenzene	mg/kg	0.1		<0.1	-	-
			1,2-dichlorobenzene	mg/kg	0.1		<0.1	-	-

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VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208136.002	LB203548.021	Halogenated	1,2,4-trichlorobenzene	mg/kg	0.1		<0.1	-	-
		Aromatics	1,2,3-trichlorobenzene	mg/kg	0.1		<0.1	-	-
		Monocyclic	Benzene	mg/kg	0.1		<0.1	5	102
		Aromatic	Toluene	mg/kg	0.1		<0.1	5	100
			Ethylbenzene	mg/kg	0.1		<0.1	5	97
			m/p-xylene	mg/kg	0.2		<0.2	10	97
			o-xylene	mg/kg	0.1		<0.1	5	98
			Styrene (Vinyl benzene)	mg/kg	0.1		<0.1	-	-
			Isopropylbenzene (Cumene)	mg/kg	0.1		<0.1	-	-
			n-propylbenzene	mg/kg	0.1		<0.1	-	-
			1,3,5-trimethylbenzene	mg/kg	0.1		<0.1	-	-
			tert-butylbenzene	mg/kg	0.1		<0.1	-	-
			1,2,4-trimethylbenzene	mg/kg	0.1		<0.1	-	-
			sec-butylbenzene	mg/kg	0.1		<0.1	-	-
			p-isopropyltoluene	mg/kg	0.1		<0.1	-	-
			n-butylbenzene	mg/kg	0.1		<0.1	-	-
		Nitrogenous	Acrylonitrile	mg/kg	0.1		<0.1	-	-
		Compounds	2-nitropropane	mg/kg	10		<10	-	-
		Oxygenated	Acetone (2-propanone)	mg/kg	10		<10	-	-
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1		<0.1	-	-
			Vinyl acetate	mg/kg	10		<10	-	-
			MEK (2-butanone)	mg/kg	10		<10	-	-
			MIBK (4-methyl-2-pentanone)	mg/kg	1		<1	-	-
			2-hexanone (MBK)	mg/kg	5		<5	-	-
		Polycyclic	Naphthalene	mg/kg	0.1		<0.1	-	-
		Sulphonated	Carbon disulfide	mg/kg	0.5		<0.5	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-		8.8	10	86
			d8-toluene (Surrogate)	mg/kg	-		8.8	10	83
			Bromofluorobenzene (Surrogate)	mg/kg	-		9.8	10	88
		Totals	Total Xylenes	mg/kg	0.3		<0.3	-	-
			Total BTEX	mg/kg	0.6		<0.6	-	-
			Total VOC*	mg/kg	24		<24	-	-
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3		<3.0	-	-
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8		<1.8	-	-
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8		<1.8	-	-
		Trihalometha	Chloroform	mg/kg	0.1		<0.1	5	96
		nes	Bromodichloromethane	mg/kg	0.1		<0.1	-	-
			Chlorodibromomethane	mg/kg	0.1		<0.1	-	-
			Bromoform	mg/kg	0.1		<0.1	-	-
SE208136.016	LB203551.004	Monocyclic	Benzene	mg/kg	0.1	5.6	<0.1	5	112
		Aromatic	Toluene	mg/kg	0.1	5.9	<0.1	5	116
			Ethylbenzene	mg/kg	0.1	5.9	<0.1	5	118
			m/p-xylene	mg/kg	0.2	12	<0.2	10	116
			o-xylene	mg/kg	0.1	5.9	<0.1	5	118
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.9	10.3	10	109
			d8-toluene (Surrogate)	mg/kg	-	10.9	9.2	10	109
			Bromofluorobenzene (Surrogate)	mg/kg	-	12.0	10.2	10	120
		Totals	Total Xylenes	mg/kg	0.3	18	<0.3	-	-
			Total BTEX	mg/kg	0.6	35	<0.6	-	-
SE208136.018	LB203551.023	Fumigants	2,2-dichloropropane	mg/kg	0.1		<0.1	-	-
			1,2-dichloropropane	mg/kg	0.1		<0.1	-	-
			cis-1,3-dichloropropene	mg/kg	0.1		<0.1	-	-
			trans-1,3-dichloropropene	mg/kg	0.1		<0.1	-	-
			1,2-dibromoethane (EDB)	mg/kg	0.1		<0.1	-	-
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1		<1	-	-
		Aliphatics	Chloromethane	mg/kg	1		<1	-	-
			Vinyl chloride (Chloroethene)	mg/kg	0.1		<0.1	-	-
			Bromomethane	mg/kg	1		<1	-	-
			Chloroethane	mg/kg	1		<1	-	-
			Trichlorofluoromethane	mg/kg	1		<1	-	-

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VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208136.018	LB203551.023	Halogenated	Iodomethane	mg/kg	5		<5	-	-
		Aliphatics	1,1-dichloroethene	mg/kg	0.1		<0.1	5	107
			Dichloromethane (Methylene chloride)	mg/kg	0.5		<0.5	-	-
			Allyl chloride	mg/kg	0.1		<0.1	-	-
			trans-1,2-dichloroethene	mg/kg	0.1		<0.1	-	-
			1,1-dichloroethane	mg/kg	0.1		<0.1	-	-
			cis-1,2-dichloroethene	mg/kg	0.1		<0.1	-	-
			Bromochloromethane	mg/kg	0.1		<0.1	-	-
			1,2-dichloroethane	mg/kg	0.1		<0.1	5	129
			1,1,1-trichloroethane	mg/kg	0.1		<0.1	-	-
			1,1-dichloropropene	mg/kg	0.1		<0.1	-	-
			Carbon tetrachloride	mg/kg	0.1		<0.1	-	-
			Dibromomethane	mg/kg	0.1		<0.1	-	-
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1		<0.1	5	105
			1,1,2-trichloroethane	mg/kg	0.1		<0.1	-	-
			1,3-dichloropropane	mg/kg	0.1		<0.1	-	-
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1		<0.1	-	-
			1,1,1,2-tetrachloroethane	mg/kg	0.1		<0.1	-	-
			cis-1,4-dichloro-2-butene	mg/kg	1		<1	-	-
			1,1,2,2-tetrachloroethane	mg/kg	0.1		<0.1	-	-
			1,2,3-trichloropropane	mg/kg	0.1		<0.1	-	-
			trans-1,4-dichloro-2-butene	mg/kg	1		<1	-	-
			1,2-dibromo-3-chloropropane	mg/kg	0.1		<0.1	-	-
			Hexachlorobutadiene	mg/kg	0.1		<0.1	-	-
		Halogenated	Chlorobenzene	mg/kg	0.1		<0.1	5	102
		Aromatics	Bromobenzene	mg/kg	0.1		<0.1	-	-
			2-chlorotoluene	mg/kg	0.1		<0.1	-	-
			4-chlorotoluene	mg/kg	0.1		<0.1	-	-
			1,3-dichlorobenzene	mg/kg	0.1		<0.1	-	-
			1,4-dichlorobenzene	mg/kg	0.1		<0.1	-	-
			1,2-dichlorobenzene	mg/kg	0.1		<0.1	-	-
			1,2,4-trichlorobenzene	mg/kg	0.1		<0.1	-	-
			1,2,3-trichlorobenzene	mg/kg	0.1		<0.1	-	-
		Monocyclic	Benzene	mg/kg	0.1		<0.1	5	136
		Aromatic	Toluene	mg/kg	0.1		<0.1	5	120
			Ethylbenzene	mg/kg	0.1		<0.1	5	121
			m/p-xylene	mg/kg	0.2		<0.2	10	119
			o-xylene	mg/kg	0.1		<0.1	5	122
			Styrene (Vinyl benzene)	mg/kg	0.1		<0.1	-	-
			Isopropylbenzene (Cumene)	mg/kg	0.1		<0.1	-	-
			n-propylbenzene	mg/kg	0.1		<0.1	-	-
			1,3,5-trimethylbenzene	mg/kg	0.1		<0.1	-	-
			tert-butylbenzene	mg/kg	0.1		<0.1	-	-
			1,2,4-trimethylbenzene	mg/kg	0.1		<0.1	-	-
			sec-butylbenzene	mg/kg	0.1		<0.1	-	-
			p-isopropyltoluene	mg/kg	0.1		<0.1	-	-
			n-butylbenzene	mg/kg	0.1		<0.1	-	-
		Nitrogenous	Acrylonitrile	mg/kg	0.1		<0.1	-	-
		Compounds	2-nitropropane	mg/kg	10		<10	-	-
		Oxygenated	Acetone (2-propanone)	mg/kg	10		<10	-	-
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1		<0.1	-	-
			Vinyl acetate	mg/kg	10		<10	-	-
			MEK (2-butanone)	mg/kg	10		<10	-	-
			MIBK (4-methyl-2-pentanone)	mg/kg	1		<1	-	-
			2-hexanone (MBK)	mg/kg	5		<5	-	-
		Polycyclic	Naphthalene	mg/kg	0.1		<0.1	-	-
		Sulphonated	Carbon disulfide	mg/kg	0.5		<0.5	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-		10.8	10	114
			d8-toluene (Surrogate)	mg/kg	-		9.9	10	103
			Bromofluorobenzene (Surrogate)	mg/kg	-		11.4	10	111
		Totals	Total Xylenes	mg/kg	0.3		<0.3	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208136.018	LB203551.023	Totals	Total BTEX	mg/kg	0.6		<0.6	-	-
			Total VOC*	mg/kg	24		<24	-	-
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3		<3.0	-	-
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8		<1.8	-	-
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8		<1.8	-	-
		Trihalometha	Chloroform	mg/kg	0.1		<0.1	5	111
		nes	Bromodichloromethane	mg/kg	0.1		<0.1	-	-
			Chlorodibromomethane	mg/kg	0.1		<0.1	-	-
			Bromoform	mg/kg	0.1		<0.1	-	-

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208136.001	LB203548.004		TRH C6-C10	mg/kg	25	71	<25	92.5	77
			TRH C6-C9	mg/kg	20	65	<20	80	81
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.2	8.8	10	92
			d8-toluene (Surrogate)	mg/kg	-	8.3	8.2	10	83
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.2	8.6	-	82
		VPH F	Benzene (F0)	mg/kg	0.1	4.7	<0.1	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	44	<25	62.5	69
SE208136.016	LB203551.004		TRH C6-C10	mg/kg	25	70	<25	92.5	76
			TRH C6-C9	mg/kg	20	64	<20	80	80
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.9	10.3	10	109
			d8-toluene (Surrogate)	mg/kg	-	10.9	9.2	10	109
			Bromofluorobenzene (Surrogate)	mg/kg	-	12.0	10.2	-	120
		VPH F	Benzene (F0)	mg/kg	0.1	5.6	<0.1	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	35	<25	62.5	57 ④

MATRIX SPIKE DUPLICATES

SE208136 R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client only. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

This test report shall not be reproduced, except in full.

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

SLR

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☐ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT: DHA	LABORATORY: SGS
PROJECT: DHA Randwick	LABORATORY ADDRESS:
PROJECT NUMBER: 610.30941	SAMPLER: [redacted]
PROJECT MANAGER: [redacted]	SAMPLER CONTACT No: [redacted]
PM CONTACT No:	Email Reports and Invoices to: LQRS40@slrconsulting.com [redacted]

Turnaround Time (TAT)

☑ Standard TAT

☐ Non Standard or Urgent TAT

Required TAT:

COC Number 1 of 3

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A + OPAS	Suite B	Suite O	Suite V	Suite C	Suite H	OCOP Pesticides	Hold	Additional Information (Comment on any gross contamination or specific requirements)
1	0407_QC300_200622	22/6	W	4	X								
2	0407_QC302_200623	23/6	W	5	X								
3	0407_QC303_200623	23/6	W	5	X								
4	0407_QC304_200624	24/6	W	5	X								
5	0407_QC305_200624	24/6	W	5	X								
6	0407_BH91_0.0_200625	25/6	S	2		X		X	X	X	X		
7	0407_BH91_0.5_200625	25/6	S	2		X		X	X	X	X		
	0407_BH91_1.0_200625	25/6	S	2								X	
	0407_BH91_2.0_200625	25/6	S	2								X	
	0407_BH91_3.0_200625	25/6	S	2								X	
8	0407_BH92_0.0_200625	25/6	S	2		X			X		X		
9	0407_BH92_0.5_200625	25/6	S	2		X			X		X		

SGS EHS Sydney COC

SE208161

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign [redacted]	Date / Time 26/06/20 1600	Received by	Sign [redacted]	Date / Time 26/06/20	Temperature Received:
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time 04:30	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

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- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
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- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT:	LABORATORY:
PROJECT:	LABORATORY ADDRESS:
PROJECT NUMBER:	SAMPLER:
PROJECT MANAGER:	SAMPLER CONTACT No:
PM CONTACT No:	Email Reports and Invoices to:

Turnaround Time (TAT)

COC Number 2 of 3

☐ Standard TAT

☐ Non Standard or Urgent TAT

Required TAT:

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	A + PFAS	B	D	E	F	H	OC/OP Pesticide	HOLD	Additional Information (Comment on any gross contamination or specific requirements)
	0407_BH42_1.0_200625	25/6	S	2								X	
	0407_BH42_2.0_200625	25/6	S	2								X	
	0407_BH42_3.0_200625	25/6	S	2								X	
10	0407_QC309_200625	25/6	W	5	X								
11	0407_QC310_200625	25/6	W	5	X								
12	0407_BH43_0.25_200626	26/6	~~W~~ S	2			X						
13	0407_BH43_0.5_200626	26/6	~~W~~ S	2			X						
	0407_BH43_1.0_200626	26/6	S	2								X	
	0407_BH43_2.0_200626	26/6	S	2								X	
	0407_BH43_3.0_200626	26/6	S	2								X	
14	0407_BH44_0.25_200626	26/6	S	2			X						
15	0407_BH44_0.5_200626	26/6	S	2			X						

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	Received by	Sign [redacted]	Date / Time 26/06/20	Temperature Received:
Relinquished By	Sign	Date / Time	Received by	Sign [redacted]	Date / Time @ 4:30	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

CHAIN OF CUSTODY DOCUMENTATION

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ABN 29 001 584 612

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- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT:		LABORATORY:	Turnaround Time (TAT)
PROJECT:		LABORATORY ADDRESS:	☐ Standard TAT
PROJECT NUMBER:		SAMPLER:	☐ Non Standard or Urgent TAT
PROJECT MANAGER:		SAMPLER CONTACT No:	Required TAT:
PM CONTACT No:		Email Reports and Invoices to:	COC Number 3 of 3

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	PFAS 4&8 +	PFOS	PFOA	Cr VI	Cr III	Ni	Oxidation	9mg	Additional Information (Comment on any gross contamination or specific requirements)
	0407_BH44_1.0_200626	26/6	S	2								X	
	0407_BH44_2.0_200626	26/6	S	2								X	
	0407_BH44_3.0_200626	26/6	S	2								X	
16	0407_BH45_0.25_200626	26/6	S	2			X						
17	0407_BH45_0.5_200626	26/6	S	2			X						
	0407_BH45_1.0_200626	26/6	S	2								X	
	0407_BH45_2.0_200626	26/6	S	2								X	
	0407_BH45_3.0_20626	26/6	S	2								X	
18	0407_QC311_200626	26/6	EW	2	X								

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	Received by	Sign	[redacted]	Date / Time 26/06/20	Temperature Received:
Relinquished By	Sign	Date / Time	Received by	Sign		Date / Time 04:30	
Relinquished By	Sign	Date / Time	Received by	Sign		Date / Time	

SAMPLE RECEIPT ADVICE

SE208161

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	18

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Fri 26/6/2020
Report Due	Wed 8/7/2020
SGS Reference	**SE208161**

SUBMISSION DETAILS

This is to confirm that 18 samples were received on Friday 26/6/2020. Results are expected to be ready by COB Wednesday 8/7/2020. Please quote SGS reference SE208161 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	10 Soi;, 8 Water
Date documentation received	26/6/2020	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	3.5°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

PFAS and explosives subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420, Report No: ME315557
15 Soil have been placed on hold as no tests have been assigned for them by the client. These samples will not be processed.

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SAMPLE RECEIPT ADVICE

SE208161

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	Speciated Phenols in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
006	0407_BH41_0.0_200625	29	14	26	11	-	10	81	7
007	0407_BH41_0.5_200625	29	14	26	11	-	10	81	7
008	0407_BH42_0.0_200625	29	14	26	11	-	10	81	7
009	0407_BH42_0.5_200625	29	14	26	11	-	10	81	7
012	0407_BH43_0.25_200626	-	-	26	-	18	10	11	7
013	0407_BH43_0.5_200626	-	-	26	-	18	10	11	7
014	0407_BH44_0.25_200626	-	-	26	-	18	10	11	7
015	0407_BH44_0.5_200626	-	-	26	-	18	10	11	7
016	0407_BH45_0.25_200626	-	-	26	-	18	10	11	7
017	0407_BH45_0.5_200625	-	-	26	-	18	10	11	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE208161

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Explosives in Soil	Mercury in Soil	Moisture Content	Per- and Polyfluoroalkyl Substances (PFAS) in	Total Recoverable Elements in Soil/Waste	VOCs in Water
001	0407_QC300_200622	-	-	-	-	-	11
002	0407_QC302_200623	-	-	-	-	-	11
003	0407_QC303_200623	-	-	-	-	-	11
004	0407_QC304_200624	-	-	-	-	-	11
005	0407_QC305_200624	-	-	-	-	-	11
006	0407_BH41_0.0_200625	16	1	1	55	11	-
007	0407_BH41_0.5_200625	16	1	1	55	11	-
008	0407_BH42_0.0_200625	-	1	1	55	7	-
009	0407_BH42_0.5_200625	-	1	1	55	7	-
010	0407_QC309_200625	-	-	-	-	-	11
011	0407_QC310_200625	-	-	-	-	-	11
012	0407_BH43_0.25_200626	-	-	1	-	1	-
013	0407_BH43_0.5_200626	-	-	1	-	1	-
014	0407_BH44_0.25_200626	-	-	1	-	1	-
015	0407_BH44_0.5_200626	-	-	1	-	1	-
016	0407_BH45_0.25_200626	-	-	1	-	1	-
017	0407_BH45_0.5_200625	-	-	1	-	1	-
018	0407_QC311_200626	-	-	-	-	-	11

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
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Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE208161

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Water	OP Pesticides in Water	PAH (Polynuclear Aromatic Hydrocarbons) in Water	PCBs in Water	Speciated Phenols in Water	Trace Metals (Dissolved) in Water by ICPMS	TRH (Total Recoverable Hydrocarbons) in Water	Volatile Petroleum Hydrocarbons in Water
001	0407_QC300_200622	28	13	22	11	18	7	9	7
002	0407_QC302_200623	28	13	22	11	18	7	9	7
003	0407_QC303_200623	28	13	22	11	18	7	9	7
004	0407_QC304_200624	28	13	22	11	18	7	9	7
005	0407_QC305_200624	28	13	22	11	18	7	9	7
010	0407_QC309_200625	28	13	22	11	18	7	9	7
011	0407_QC310_200625	28	13	22	11	18	7	9	7
018	0407_QC311_200626	28	13	22	11	18	7	9	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE208161

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Mercury (dissolved) in Water	Per- and Polyfluoroalkyl Substances (PFAS) in
001	0407_QC300_200622	1	55
002	0407_QC302_200623	1	55
003	0407_QC303_200623	1	55
004	0407_QC304_200624	1	55
005	0407_QC305_200624	1	55
010	0407_QC309_200625	1	55
011	0407_QC310_200625	1	55
018	0407_QC311_200626	1	55

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	18

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208161 R0**
Date Received	26/6/2020
Date Reported	14/7/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

PFAS subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420, Report No: ME315557

Explosives subcontracted to Eurofins/MGT. Report Number 730590

SIGNATORIES

[redacted]

Chemist | Senior Organic Chemist/Metals Chemist | Metals/Inorganics Team Leader

[redacted]

Organic Section Head

VOC's in Soil [AN433] Tested: 7/7/2020

PARAMETER	UOM	LOR	0407_BH41_0.0_20025 SOIL - 25/6/2020 SE208161.006	0407_BH41_0.5_20025 SOIL - 25/6/2020 SE208161.007	0407_BH42_0.0_20025 SOIL - 25/6/2020 SE208161.008	0407_BH42_0.5_20025 SOIL - 25/6/2020 SE208161.009	0407_BH43_0.25_20626 SOIL - 26/6/2020 SE208161.012
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	-
Chloromethane	mg/kg	1	<1	<1	<1	<1	-
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Bromomethane	mg/kg	1	<1	<1	<1	<1	-
Chloroethane	mg/kg	1	<1	<1	<1	<1	-
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	-
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	-
Iodomethane	mg/kg	5	<5	<5	<5	<5	-
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	-
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	-
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	-
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	-
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
2-nitropropane	mg/kg	10	<10	<10	<10	<10	-
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	-
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	-
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	-
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	-

VOC's in Soil [AN433] Tested: 7/7/2020 (continued)

PARAMETER	UOM	LOR	0407_BH41_0.0_20025 SOIL - 25/6/2020 SE208161.006	0407_BH41_0.5_20025 SOIL - 25/6/2020 SE208161.007	0407_BH42_0.0_20025 SOIL - 25/6/2020 SE208161.008	0407_BH42_0.5_20025 SOIL - 25/6/2020 SE208161.009	0407_BH43_0.25_20626 SOIL - 26/6/2020 SE208161.012
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Total VOC*	mg/kg	24	<24	<24	<24	<24	-
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	-
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	-
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	-

VOC's in Soil [AN433] Tested: 7/7/2020 (continued)

PARAMETER	UOM	LOR	0407_BH43_0.5_20026 SOIL - 26/6/2020 SE208161.013	0407_BH44_0.25_20626 SOIL - 26/6/2020 SE208161.014	0407_BH44_0.5_20026 SOIL - 26/6/2020 SE208161.015	0407_BH45_0.25_20626 SOIL - 26/6/2020 SE208161.016	0407_BH45_0.5_20025 SOIL - 26/6/2020 SE208161.017
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	-	-	-	-	-
Chloromethane	mg/kg	1	-	-	-	-	-
Vinyl chloride (Chloroethene)	mg/kg	0.1	-	-	-	-	-
Bromomethane	mg/kg	1	-	-	-	-	-
Chloroethane	mg/kg	1	-	-	-	-	-
Trichlorofluoromethane	mg/kg	1	-	-	-	-	-
Acetone (2-propanone)	mg/kg	10	-	-	-	-	-
Iodomethane	mg/kg	5	-	-	-	-	-
1,1-dichloroethene	mg/kg	0.1	-	-	-	-	-
Acrylonitrile	mg/kg	0.1	-	-	-	-	-
Dichloromethane (Methylene chloride)	mg/kg	0.5	-	-	-	-	-
Allyl chloride	mg/kg	0.1	-	-	-	-	-
Carbon disulfide	mg/kg	0.5	-	-	-	-	-
trans-1,2-dichloroethene	mg/kg	0.1	-	-	-	-	-
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	-	-	-	-	-
1,1-dichloroethane	mg/kg	0.1	-	-	-	-	-
Vinyl acetate	mg/kg	10	-	-	-	-	-
MEK (2-butanone)	mg/kg	10	-	-	-	-	-
cis-1,2-dichloroethene	mg/kg	0.1	-	-	-	-	-
Bromochloromethane	mg/kg	0.1	-	-	-	-	-
Chloroform	mg/kg	0.1	-	-	-	-	-
2,2-dichloropropane	mg/kg	0.1	-	-	-	-	-
1,2-dichloroethane	mg/kg	0.1	-	-	-	-	-
1,1,1-trichloroethane	mg/kg	0.1	-	-	-	-	-
1,1-dichloropropene	mg/kg	0.1	-	-	-	-	-
Carbon tetrachloride	mg/kg	0.1	-	-	-	-	-
Dibromomethane	mg/kg	0.1	-	-	-	-	-
1,2-dichloropropane	mg/kg	0.1	-	-	-	-	-
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	-	-	-	-	-
2-nitropropane	mg/kg	10	-	-	-	-	-
Bromodichloromethane	mg/kg	0.1	-	-	-	-	-
MIBK (4-methyl-2-pentanone)	mg/kg	1	-	-	-	-	-
cis-1,3-dichloropropene	mg/kg	0.1	-	-	-	-	-
trans-1,3-dichloropropene	mg/kg	0.1	-	-	-	-	-
1,1,2-trichloroethane	mg/kg	0.1	-	-	-	-	-
1,3-dichloropropane	mg/kg	0.1	-	-	-	-	-
Chlorodibromomethane	mg/kg	0.1	-	-	-	-	-
2-hexanone (MBK)	mg/kg	5	-	-	-	-	-
1,2-dibromoethane (EDB)	mg/kg	0.1	-	-	-	-	-
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	-	-	-	-	-
1,1,1,2-tetrachloroethane	mg/kg	0.1	-	-	-	-	-
Chlorobenzene	mg/kg	0.1	-	-	-	-	-
Bromoform	mg/kg	0.1	-	-	-	-	-
cis-1,4-dichloro-2-butene	mg/kg	1	-	-	-	-	-
Styrene (Vinyl benzene)	mg/kg	0.1	-	-	-	-	-
1,1,2,2-tetrachloroethane	mg/kg	0.1	-	-	-	-	-
1,2,3-trichloropropane	mg/kg	0.1	-	-	-	-	-
trans-1,4-dichloro-2-butene	mg/kg	1	-	-	-	-	-

VOC's in Soil [AN433] Tested: 7/7/2020 (continued)

PARAMETER	UOM	LOR	0407_BH43_0.5_20026 SOIL - 26/6/2020 SE208161.013	0407_BH44_0.25_20626 SOIL - 26/6/2020 SE208161.014	0407_BH44_0.5_20026 SOIL - 26/6/2020 SE208161.015	0407_BH45_0.25_20626 SOIL - 26/6/2020 SE208161.016	0407_BH45_0.5_20025 SOIL - 26/6/2020 SE208161.017
Isopropylbenzene (Cumene)	mg/kg	0.1	-	-	-	-	-
Bromobenzene	mg/kg	0.1	-	-	-	-	-
n-propylbenzene	mg/kg	0.1	-	-	-	-	-
2-chlorotoluene	mg/kg	0.1	-	-	-	-	-
4-chlorotoluene	mg/kg	0.1	-	-	-	-	-
1,3,5-trimethylbenzene	mg/kg	0.1	-	-	-	-	-
tert-butylbenzene	mg/kg	0.1	-	-	-	-	-
1,2,4-trimethylbenzene	mg/kg	0.1	-	-	-	-	-
sec-butylbenzene	mg/kg	0.1	-	-	-	-	-
1,3-dichlorobenzene	mg/kg	0.1	-	-	-	-	-
1,4-dichlorobenzene	mg/kg	0.1	-	-	-	-	-
p-isopropyltoluene	mg/kg	0.1	-	-	-	-	-
1,2-dichlorobenzene	mg/kg	0.1	-	-	-	-	-
n-butylbenzene	mg/kg	0.1	-	-	-	-	-
1,2-dibromo-3-chloropropane	mg/kg	0.1	-	-	-	-	-
1,2,4-trichlorobenzene	mg/kg	0.1	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	-	-	-	-	-
1,2,3-trichlorobenzene	mg/kg	0.1	-	-	-	-	-
Total VOC*	mg/kg	24	-	-	-	-	-
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	-	-	-	-	-
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	-	-	-	-	-
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	-	-	-	-	-

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 7/7/2020

PARAMETER	UOM	LOR	0407_BH41_0.0_20025 SOIL - 25/6/2020 SE208161.006	0407_BH41_0.5_20025 SOIL - 25/6/2020 SE208161.007	0407_BH42_0.0_20025 SOIL - 25/6/2020 SE208161.008	0407_BH42_0.5_20025 SOIL - 25/6/2020 SE208161.009	0407_BH43_0.25_20626 SOIL - 26/6/2020 SE208161.012
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_BH43_0.5_20026 SOIL - 26/6/2020 SE208161.013	0407_BH44_0.25_20626 SOIL - 26/6/2020 SE208161.014	0407_BH44_0.5_20026 SOIL - 26/6/2020 SE208161.015	0407_BH45_0.25_20626 SOIL - 26/6/2020 SE208161.016	0407_BH45_0.5_20025 SOIL - 26/6/2020 SE208161.017
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 7/7/2020

PARAMETER	UOM	LOR	0407_BH41_0.0_20025 SOIL - 25/6/2020 SE208161.006	0407_BH41_0.5_20025 SOIL - 25/6/2020 SE208161.007	0407_BH42_0.0_20025 SOIL - 25/6/2020 SE208161.008	0407_BH42_0.5_20025 SOIL - 25/6/2020 SE208161.009	0407_BH43_0.25_20626 SOIL - 26/6/2020 SE208161.012
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_BH43_0.5_20026 SOIL - 26/6/2020 SE208161.013	0407_BH44_0.25_20626 SOIL - 26/6/2020 SE208161.014	0407_BH44_0.5_20026 SOIL - 26/6/2020 SE208161.015	0407_BH45_0.25_20626 SOIL - 26/6/2020 SE208161.016	0407_BH45_0.5_20025 SOIL - 26/6/2020 SE208161.017
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 7/7/2020

PARAMETER	UOM	LOR	0407_BH41_0.0_20025 SOIL - 25/6/2020 SE208161.006	0407_BH41_0.5_20025 SOIL - 25/6/2020 SE208161.007	0407_BH42_0.0_20025 SOIL - 25/6/2020 SE208161.008	0407_BH42_0.5_20025 SOIL - 25/6/2020 SE208161.009	0407_BH43_0.25_20626 SOIL - 26/6/2020 SE208161.012
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	**0.1**	**0.1**	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	**0.2**	**0.2**	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	**0.1**	**0.1**	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	**0.1**	**0.1**	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	**0.2**	**0.1**	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	**0.1**	**0.1**	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	**0.2**	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	**0.9**	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	**0.9**	<0.8	<0.8	<0.8	<0.8

PARAMETER	UOM	LOR	0407_BH43_0.5_20026 SOIL - 26/6/2020 SE208161.013	0407_BH44_0.25_20626 SOIL - 26/6/2020 SE208161.014	0407_BH44_0.5_20026 SOIL - 26/6/2020 SE208161.015	0407_BH45_0.25_20626 SOIL - 26/6/2020 SE208161.016	0407_BH45_0.5_20025 SOIL - 26/6/2020 SE208161.017
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

Speciated Phenols in Soil [AN420] Tested: 7/7/2020

PARAMETER	UOM	LOR	0407_BH43_0.25_20626 SOIL - 26/6/2020 SE208161.012	0407_BH43_0.5_20026 SOIL - 26/6/2020 SE208161.013	0407_BH44_0.25_20626 SOIL - 26/6/2020 SE208161.014	0407_BH44_0.5_20026 SOIL - 26/6/2020 SE208161.015	0407_BH45_0.25_20626 SOIL - 26/6/2020 SE208161.016
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_BH45_0.5_20025 SOIL - 26/6/2020 SE208161.017
Phenol	mg/kg	0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
Total Cresol	mg/kg	1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5
4-nitrophenol	mg/kg	1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
Pentachlorophenol	mg/kg	0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2
4-chloro-3-methylphenol	mg/kg	2	<2

OC Pesticides in Soil [AN420] Tested: 7/7/2020

PARAMETER	UOM	LOR	0407_BH41_0.0_20025 SOIL - 25/6/2020 SE208161.006	0407_BH41_0.5_20025 SOIL - 25/6/2020 SE208161.007	0407_BH42_0.0_20025 SOIL - 25/6/2020 SE208161.008	0407_BH42_0.5_20025 SOIL - 25/6/2020 SE208161.009	0407_BH43_0.25_20626 SOIL - 26/6/2020 SE208161.012
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	-
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	-
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	-
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	-
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	-

OC Pesticides in Soil [AN420] Tested: 7/7/2020 (continued)

PARAMETER	UOM	LOR	0407_BH43_0.5_20026 SOIL - 26/6/2020 SE208161.013	0407_BH44_0.25_20626 SOIL - 26/6/2020 SE208161.014	0407_BH44_0.5_20026 SOIL - 26/6/2020 SE208161.015	0407_BH45_0.25_20626 SOIL - 26/6/2020 SE208161.016	0407_BH45_0.5_20025 SOIL - 26/6/2020 SE208161.017
Hexachlorobenzene (HCB)	mg/kg	0.1	-	-	-	-	-
Alpha BHC	mg/kg	0.1	-	-	-	-	-
Lindane	mg/kg	0.1	-	-	-	-	-
Heptachlor	mg/kg	0.1	-	-	-	-	-
Aldrin	mg/kg	0.1	-	-	-	-	-
Beta BHC	mg/kg	0.1	-	-	-	-	-
Delta BHC	mg/kg	0.1	-	-	-	-	-
Heptachlor epoxide	mg/kg	0.1	-	-	-	-	-
o,p'-DDE	mg/kg	0.1	-	-	-	-	-
Alpha Endosulfan	mg/kg	0.2	-	-	-	-	-
Gamma Chlordane	mg/kg	0.1	-	-	-	-	-
Alpha Chlordane	mg/kg	0.1	-	-	-	-	-
trans-Nonachlor	mg/kg	0.1	-	-	-	-	-
p,p'-DDE	mg/kg	0.1	-	-	-	-	-
Dieldrin	mg/kg	0.2	-	-	-	-	-
Endrin	mg/kg	0.2	-	-	-	-	-
o,p'-DDD	mg/kg	0.1	-	-	-	-	-
o,p'-DDT	mg/kg	0.1	-	-	-	-	-
Beta Endosulfan	mg/kg	0.2	-	-	-	-	-
p,p'-DDD	mg/kg	0.1	-	-	-	-	-
p,p'-DDT	mg/kg	0.1	-	-	-	-	-
Endosulfan sulphate	mg/kg	0.1	-	-	-	-	-
Endrin Aldehyde	mg/kg	0.1	-	-	-	-	-
Methoxychlor	mg/kg	0.1	-	-	-	-	-
Endrin Ketone	mg/kg	0.1	-	-	-	-	-
Isodrin	mg/kg	0.1	-	-	-	-	-
Mirex	mg/kg	0.1	-	-	-	-	-
Total CLP OC Pesticides	mg/kg	1	-	-	-	-	-

OP Pesticides in Soil [AN420] Tested: 7/7/2020

PARAMETER	UOM	LOR	0407_BH41_0.0_20025 SOIL - 25/6/2020 SE208161.006	0407_BH41_0.5_20025 SOIL - 25/6/2020 SE208161.007	0407_BH42_0.0_20025 SOIL - 25/6/2020 SE208161.008	0407_BH42_0.5_20025 SOIL - 25/6/2020 SE208161.009	0407_BH43_0.25_20626 SOIL - 26/6/2020 SE208161.012
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	-
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	-
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	-
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	-
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	-
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	-
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	-
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	-
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	-
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	-
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	-
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	-

PARAMETER	UOM	LOR	0407_BH43_0.5_20026 SOIL - 26/6/2020 SE208161.013	0407_BH44_0.25_20626 SOIL - 26/6/2020 SE208161.014	0407_BH44_0.5_20026 SOIL - 26/6/2020 SE208161.015	0407_BH45_0.25_20626 SOIL - 26/6/2020 SE208161.016	0407_BH45_0.5_20025 SOIL - 26/6/2020 SE208161.017
Dichlorvos	mg/kg	0.5	-	-	-	-	-
Dimethoate	mg/kg	0.5	-	-	-	-	-
Diazinon (Dimpylate)	mg/kg	0.5	-	-	-	-	-
Fenitrothion	mg/kg	0.2	-	-	-	-	-
Malathion	mg/kg	0.2	-	-	-	-	-
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	-	-	-	-	-
Parathion-ethyl (Parathion)	mg/kg	0.2	-	-	-	-	-
Bromophos Ethyl	mg/kg	0.2	-	-	-	-	-
Methidathion	mg/kg	0.5	-	-	-	-	-
Ethion	mg/kg	0.2	-	-	-	-	-
Azinphos-methyl (Guthion)	mg/kg	0.2	-	-	-	-	-
Total OP Pesticides*	mg/kg	1.7	-	-	-	-	-

PCBs in Soil [AN420] Tested: 7/7/2020

PARAMETER	UOM	LOR	0407_BH41_0.0_20025 SOIL - 25/6/2020 SE208161.006	0407_BH41_0.5_20025 SOIL - 25/6/2020 SE208161.007	0407_BH42_0.0_20025 SOIL - 25/6/2020 SE208161.008	0407_BH42_0.5_20025 SOIL - 25/6/2020 SE208161.009	0407_BH43_0.25_20626 SOIL - 26/6/2020 SE208161.012
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	-
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	-
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	-
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	-
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	-
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	-
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	-
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	-
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	-
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	-

PARAMETER	UOM	LOR	0407_BH43_0.5_20026 SOIL - 26/6/2020 SE208161.013	0407_BH44_0.25_20626 SOIL - 26/6/2020 SE208161.014	0407_BH44_0.5_20026 SOIL - 26/6/2020 SE208161.015	0407_BH45_0.25_20626 SOIL - 26/6/2020 SE208161.016	0407_BH45_0.5_20025 SOIL - 26/6/2020 SE208161.017
Arochlor 1016	mg/kg	0.2	-	-	-	-	-
Arochlor 1221	mg/kg	0.2	-	-	-	-	-
Arochlor 1232	mg/kg	0.2	-	-	-	-	-
Arochlor 1242	mg/kg	0.2	-	-	-	-	-
Arochlor 1248	mg/kg	0.2	-	-	-	-	-
Arochlor 1254	mg/kg	0.2	-	-	-	-	-
Arochlor 1260	mg/kg	0.2	-	-	-	-	-
Arochlor 1262	mg/kg	0.2	-	-	-	-	-
Arochlor 1268	mg/kg	0.2	-	-	-	-	-
Total PCBs (Arochlors)	mg/kg	1	-	-	-	-	-

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 7/7/2020

PARAMETER	UOM	LOR	0407_BH41_0.0_20025 SOIL - 25/6/2020 SE208161.006	0407_BH41_0.5_20025 SOIL - 25/6/2020 SE208161.007	0407_BH42_0.0_20025 SOIL - 25/6/2020 SE208161.008	0407_BH42_0.5_20025 SOIL - 25/6/2020 SE208161.009	0407_BH43_0.25_20626 SOIL - 26/6/2020 SE208161.012
Arsenic, As	mg/kg	1	2	<1	<1	<1	-
Cadmium, Cd	mg/kg	0.3	<0.3	0.3	<0.3	<0.3	-
Chromium, Cr	mg/kg	0.5	20	8.8	2.2	3.0	-
Copper, Cu	mg/kg	0.5	21	12	3.9	1.0	-
Lead, Pb	mg/kg	1	79	83	11	2	<1
Nickel, Ni	mg/kg	0.5	8.7	4.6	1.2	1.6	-
Zinc, Zn	mg/kg	2	55	57	13	2.3	-
Beryllium, Be	mg/kg	0.5	<0.5	<0.5	-	-	-
Boron, B	mg/kg	5	7	5	-	-	-
Cobalt, Co	mg/kg	0.5	3.8	1.5	-	-	-
Manganese, Mn	mg/kg	1	51	29	-	-	-

PARAMETER	UOM	LOR	0407_BH43_0.5_20026 SOIL - 26/6/2020 SE208161.013	0407_BH44_0.25_20626 SOIL - 26/6/2020 SE208161.014	0407_BH44_0.5_20026 SOIL - 26/6/2020 SE208161.015	0407_BH45_0.25_20626 SOIL - 26/6/2020 SE208161.016	0407_BH45_0.5_20025 SOIL - 26/6/2020 SE208161.017
Arsenic, As	mg/kg	1	-	-	-	-	-
Cadmium, Cd	mg/kg	0.3	-	-	-	-	-
Chromium, Cr	mg/kg	0.5	-	-	-	-	-
Copper, Cu	mg/kg	0.5	-	-	-	-	-
Lead, Pb	mg/kg	1	<1	1	<1	<1	<1
Nickel, Ni	mg/kg	0.5	-	-	-	-	-
Zinc, Zn	mg/kg	2	-	-	-	-	-
Beryllium, Be	mg/kg	0.5	-	-	-	-	-
Boron, B	mg/kg	5	-	-	-	-	-
Cobalt, Co	mg/kg	0.5	-	-	-	-	-
Manganese, Mn	mg/kg	1	-	-	-	-	-

Mercury in Soil [AN312] Tested: 7/7/2020

PARAMETER	UOM	LOR	0407_BH41_0.0_20025 SOIL - 25/6/2020 SE208161.006	0407_BH41_0.5_20025 SOIL - 25/6/2020 SE208161.007	0407_BH42_0.0_20025 SOIL - 25/6/2020 SE208161.008	0407_BH42_0.5_20025 SOIL - 25/6/2020 SE208161.009
Mercury	mg/kg	0.05	**0.10**	**0.10**	**0.36**	<0.05

Moisture Content [AN002] Tested: 7/7/2020

PARAMETER	UOM	LOR	0407_BH41_0.0_20025 SOIL - 25/6/2020 SE208161.006	0407_BH41_0.5_20025 SOIL - 25/6/2020 SE208161.007	0407_BH42_0.0_20025 SOIL - 25/6/2020 SE208161.008	0407_BH42_0.5_20025 SOIL - 25/6/2020 SE208161.009	0407_BH43_0.25_20626 SOIL - 26/6/2020 SE208161.012
% Moisture	%w/w	1	11.9	8.1	6.7	8.6	21.9

PARAMETER	UOM	LOR	0407_BH43_0.5_20026 SOIL - 26/6/2020 SE208161.013	0407_BH44_0.25_20626 SOIL - 26/6/2020 SE208161.014	0407_BH44_0.5_20026 SOIL - 26/6/2020 SE208161.015	0407_BH45_0.25_20626 SOIL - 26/6/2020 SE208161.016	0407_BH45_0.5_20025 SOIL - 26/6/2020 SE208161.017
% Moisture	%w/w	1	18.1	2.1	1.3	1.7	1.3

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level [MA-1523] Tested: 9/7/2020

PARAMETER	UOM	LOR	0407_BH41_0.0_20025 SOIL - 25/6/2020 SE208161.006	0407_BH41_0.5_20025 SOIL - 25/6/2020 SE208161.007	0407_BH42_0.0_20025 SOIL - 25/6/2020 SE208161.008	0407_BH42_0.5_20025 SOIL - 25/6/2020 SE208161.009
Perfluorobutanoic acid (PFBA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorononanoic acid (PFNA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorodecanoic acid (PFDA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0001	**0.0003**	<0.0001	<0.0001	<0.0001
Sum PFOS and PFHXS	mg/kg	0.0001	**0.0003**	<0.0001	<0.0001	<0.0001
Perfluorononane sulfonate (PFNS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.001	<0.001	<0.001	<0.001	<0.001
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.001	<0.001	<0.001	<0.001	<0.001
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.001	<0.001	<0.001	<0.001	<0.001
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.001	<0.001	<0.001	<0.001	<0.001
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.001	<0.001	<0.001	<0.001	<0.001
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.001	<0.001	<0.001	<0.001	<0.001
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002	<0.002	<0.002	<0.002	<0.002
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002	<0.002	<0.002	<0.002	<0.002
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.001	<0.001	<0.001	<0.001	<0.001
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.001	<0.001	<0.001	<0.001	<0.001

VOCs in Water [AN433] Tested: 8/7/2020

PARAMETER	UOM	LOR	0407_QC300_20062 WATER - 22/6/2020 SE208161.001	0407_QC302_20062 WATER - 23/6/2020 SE208161.002	0407_QC303_20062 WATER - 23/6/2020 SE208161.003	0407_QC304_20062 WATER - 24/6/2020 SE208161.004	0407_QC305_20062 WATER - 24/6/2020 SE208161.005
Benzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Toluene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
m/p-xylene	µg/L	1	<1	<1	<1	<1	<1
o-xylene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Total Xylenes	µg/L	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
Total BTEX	µg/L	3	<3	<3	<3	<3	<3

PARAMETER	UOM	LOR	0407_QC309_20062 WATER - 25/6/2020 SE208161.010	0407_QC310_20062 WATER - 25/6/2020 SE208161.011	0407_QC311_20062 WATER - 26/6/2020 SE208161.018
Benzene	µg/L	0.5	<0.5	<0.5	<0.5
Toluene	µg/L	0.5	<0.5	<0.5	<0.5
Ethylbenzene	µg/L	0.5	<0.5	<0.5	<0.5
m/p-xylene	µg/L	1	<1	<1	<1
o-xylene	µg/L	0.5	<0.5	<0.5	<0.5
Naphthalene	µg/L	0.5	<0.5	<0.5	<0.5
Total Xylenes	µg/L	1.5	<1.5	<1.5	<1.5
Total BTEX	µg/L	3	<3	<3	<3

Volatile Petroleum Hydrocarbons in Water [AN433] Tested: 8/7/2020

PARAMETER	UOM	LOR	0407_QC300_20062 WATER - 22/6/2020 SE208161.001	0407_QC302_20062 WATER - 23/6/2020 SE208161.002	0407_QC303_20062 WATER - 23/6/2020 SE208161.003	0407_QC304_20062 WATER - 24/6/2020 SE208161.004	0407_QC305_20062 WATER - 24/6/2020 SE208161.005
Benzene (F0)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TRH C6-C9	µg/L	40	<40	**68**	<40	<40	**63**
TRH C6-C10	µg/L	50	<50	**71**	<50	<50	**65**
TRH C6-C10 minus BTEX (F1)	µg/L	50	<50	**71**	<50	<50	**65**

PARAMETER	UOM	LOR	0407_QC309_20062 WATER - 25/6/2020 SE208161.010	0407_QC310_20062 WATER - 25/6/2020 SE208161.011	0407_QC311_20062 WATER - 26/6/2020 SE208161.018
Benzene (F0)	µg/L	0.5	<0.5	<0.5	<0.5
TRH C6-C9	µg/L	40	<40	<40	<40
TRH C6-C10	µg/L	50	<50	<50	<50
TRH C6-C10 minus BTEX (F1)	µg/L	50	<50	<50	<50

TRH (Total Recoverable Hydrocarbons) in Water [AN403] Tested: 7/7/2020

PARAMETER	UOM	LOR	0407_QC300_20062 WATER - 22/6/2020 SE208161.001	0407_QC302_20062 WATER - 23/6/2020 SE208161.002	0407_QC303_20062 WATER - 23/6/2020 SE208161.003	0407_QC304_20062 WATER - 24/6/2020 SE208161.004	0407_QC305_20062 WATER - 24/6/2020 SE208161.005
TRH C10-C14	µg/L	50	<50	<50	<50	<50	<50
TRH C15-C28	µg/L	200	<200	<200	<200	<200	<200
TRH C29-C36	µg/L	200	<200	<200	<200	<200	<200
TRH C37-C40	µg/L	200	<200	<200	<200	<200	<200
TRH >C10-C16	µg/L	60	<60	<60	<60	<60	<60
TRH >C10-C16 - Naphthalene (F2)	µg/L	60	<60	<60	<60	<60	<60
TRH >C16-C34 (F3)	µg/L	500	<500	<500	<500	<500	<500
TRH >C34-C40 (F4)	µg/L	500	<500	<500	<500	<500	<500
TRH C10-C40	µg/L	320	<320	<320	<320	<320	<320

PARAMETER	UOM	LOR	0407_QC309_20062 WATER - 25/6/2020 SE208161.010	0407_QC310_20062 WATER - 25/6/2020 SE208161.011	0407_QC311_20062 WATER - 26/6/2020 SE208161.018
TRH C10-C14	µg/L	50	<50	<50	<50
TRH C15-C28	µg/L	200	<200	<200	<200
TRH C29-C36	µg/L	200	<200	<200	<200
TRH C37-C40	µg/L	200	<200	<200	<200
TRH >C10-C16	µg/L	60	<60	<60	<60
TRH >C10-C16 - Naphthalene (F2)	µg/L	60	<60	<60	<60
TRH >C16-C34 (F3)	µg/L	500	<500	<500	<500
TRH >C34-C40 (F4)	µg/L	500	<500	<500	<500
TRH C10-C40	µg/L	320	<320	<320	<320

PAH (Polynuclear Aromatic Hydrocarbons) in Water [AN420] Tested: 7/7/2020

PARAMETER	UOM	LOR	0407_QC300_20062 WATER - 22/6/2020 SE208161.001	0407_QC302_20062 WATER - 23/6/2020 SE208161.002	0407_QC303_20062 WATER - 23/6/2020 SE208161.003	0407_QC304_20062 WATER - 24/6/2020 SE208161.004	0407_QC305_20062 WATER - 24/6/2020 SE208161.005
Naphthalene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total PAH (18)	µg/L	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_QC309_20062 WATER - 25/6/2020 SE208161.010	0407_QC310_20062 WATER - 25/6/2020 SE208161.011	0407_QC311_20062 WATER - 26/6/2020 SE208161.018
Naphthalene	µg/L	0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	µg/L	0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	µg/L	0.1	<0.1	<0.1	<0.1
Acenaphthylene	µg/L	0.1	<0.1	<0.1	<0.1
Acenaphthene	µg/L	0.1	<0.1	<0.1	<0.1
Fluorene	µg/L	0.1	<0.1	<0.1	<0.1
Phenanthrene	µg/L	0.1	<0.1	<0.1	<0.1
Anthracene	µg/L	0.1	<0.1	<0.1	<0.1
Fluoranthene	µg/L	0.1	<0.1	<0.1	<0.1
Pyrene	µg/L	0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	µg/L	0.1	<0.1	<0.1	<0.1
Chrysene	µg/L	0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	µg/L	0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	µg/L	0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	µg/L	0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	µg/L	0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	µg/L	0.1	<0.1	<0.1	<0.1
Total PAH (18)	µg/L	1	<1	<1	<1

Speciated Phenols in Water [AN420] Tested: 7/7/2020

PARAMETER	UOM	LOR	0407_QC300_20062 WATER - 22/6/2020 SE208161.001	0407_QC302_20062 WATER - 23/6/2020 SE208161.002	0407_QC303_20062 WATER - 23/6/2020 SE208161.003	0407_QC304_20062 WATER - 24/6/2020 SE208161.004	0407_QC305_20062 WATER - 24/6/2020 SE208161.005
Phenol	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	µg/L	1	<1	<1	<1	<1	<1
Total Cresol	µg/L	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	µg/L	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	µg/L	1	<1	<1	<1	<1	<1
Pentachlorophenol	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	µg/L	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	µg/L	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_QC309_20062 WATER - 25/6/2020 SE208161.010	0407_QC310_20062 WATER - 25/6/2020 SE208161.011	0407_QC311_20062 WATER - 26/6/2020 SE208161.018
Phenol	µg/L	0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	µg/L	0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	µg/L	1	<1	<1	<1
Total Cresol	µg/L	1.5	<1.5	<1.5	<1.5
2-chlorophenol	µg/L	0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	µg/L	0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	µg/L	0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	µg/L	0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	µg/L	0.5	<0.5	<0.5	<0.5
2-nitrophenol	µg/L	0.5	<0.5	<0.5	<0.5
4-nitrophenol	µg/L	1	<1	<1	<1
2,4,5-trichlorophenol	µg/L	0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	µg/L	1	<1	<1	<1
Pentachlorophenol	µg/L	0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	µg/L	2	<2	<2	<2
4-chloro-3-methylphenol	µg/L	2	<2	<2	<2

OC Pesticides in Water [AN420] Tested: 7/7/2020

PARAMETER	UOM	LOR	0407_QC300_20062 WATER - 22/6/2020 SE208161.001	0407_QC302_20062 WATER - 23/6/2020 SE208161.002	0407_QC303_20062 WATER - 23/6/2020 SE208161.003	0407_QC304_20062 WATER - 24/6/2020 SE208161.004	0407_QC305_20062 WATER - 24/6/2020 SE208161.005
Alpha BHC	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobenzene (HCB)	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane (gamma BHC)	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Gamma Chlordane	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDD	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDD	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin ketone	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin aldehyde	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1

OC Pesticides in Water [AN420] Tested: 7/7/2020 (continued)

PARAMETER	UOM	LOR	0407_QC309_20062 WATER - 25/6/2020 SE208161.010	0407_QC310_20062 WATER - 25/6/2020 SE208161.011	0407_QC311_20062 WATER - 26/6/2020 SE208161.018
Alpha BHC	µg/L	0.1	<0.1	<0.1	<0.1
Hexachlorobenzene (HCB)	µg/L	0.1	<0.1	<0.1	<0.1
Beta BHC	µg/L	0.1	<0.1	<0.1	<0.1
Lindane (gamma BHC)	µg/L	0.1	<0.1	<0.1	<0.1
Delta BHC	µg/L	0.1	<0.1	<0.1	<0.1
Heptachlor	µg/L	0.1	<0.1	<0.1	<0.1
Aldrin	µg/L	0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	µg/L	0.1	<0.1	<0.1	<0.1
Gamma Chlordane	µg/L	0.1	<0.1	<0.1	<0.1
Alpha Chlordane	µg/L	0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	µg/L	0.1	<0.1	<0.1	<0.1
o,p'-DDE	µg/L	0.1	<0.1	<0.1	<0.1
p,p'-DDE	µg/L	0.1	<0.1	<0.1	<0.1
Dieldrin	µg/L	0.1	<0.1	<0.1	<0.1
Endrin	µg/L	0.1	<0.1	<0.1	<0.1
Beta Endosulfan	µg/L	0.1	<0.1	<0.1	<0.1
o,p'-DDD	µg/L	0.1	<0.1	<0.1	<0.1
p,p'-DDD	µg/L	0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	µg/L	0.1	<0.1	<0.1	<0.1
o,p'-DDT	µg/L	0.1	<0.1	<0.1	<0.1
p,p'-DDT	µg/L	0.1	<0.1	<0.1	<0.1
Endrin ketone	µg/L	0.1	<0.1	<0.1	<0.1
Methoxychlor	µg/L	0.1	<0.1	<0.1	<0.1
trans-Nonachlor	µg/L	0.1	<0.1	<0.1	<0.1
Endrin aldehyde	µg/L	0.1	<0.1	<0.1	<0.1
Isodrin	µg/L	0.1	<0.1	<0.1	<0.1
Mirex	µg/L	0.1	<0.1	<0.1	<0.1

OP Pesticides in Water [AN420] Tested: 7/7/2020

PARAMETER	UOM	LOR	0407_QC300_20062 WATER - 22/6/2020 SE208161.001	0407_QC302_20062 WATER - 23/6/2020 SE208161.002	0407_QC303_20062 WATER - 23/6/2020 SE208161.003	0407_QC304_20062 WATER - 24/6/2020 SE208161.004	0407_QC305_20062 WATER - 24/6/2020 SE208161.005
Dichlorvos	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	µg/L	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	µg/L	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	µg/L	0.2	<0.2	<0.2	<0.2	<0.2	**0.2**
Parathion-ethyl (Parathion)	µg/L	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	µg/L	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	µg/L	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl	µg/L	0.2	<0.2	<0.2	<0.2	<0.2	<0.2

PARAMETER	UOM	LOR	0407_QC309_20062 WATER - 25/6/2020 SE208161.010	0407_QC310_20062 WATER - 25/6/2020 SE208161.011	0407_QC311_20062 WATER - 26/6/2020 SE208161.018
Dichlorvos	µg/L	0.5	<0.5	<0.5	<0.5
Dimethoate	µg/L	0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	µg/L	0.5	<0.5	<0.5	<0.5
Fenitrothion	µg/L	0.2	<0.2	<0.2	<0.2
Malathion	µg/L	0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	µg/L	0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	µg/L	0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	µg/L	0.2	<0.2	<0.2	<0.2
Methidathion	µg/L	0.5	<0.5	<0.5	<0.5
Ethion	µg/L	0.2	<0.2	<0.2	<0.2
Azinphos-methyl	µg/L	0.2	<0.2	<0.2	<0.2

PCBs in Water [AN420] Tested: 7/7/2020

PARAMETER	UOM	LOR	0407_QC300_20062 WATER - 22/6/2020 SE208161.001	0407_QC302_20062 WATER - 23/6/2020 SE208161.002	0407_QC303_20062 WATER - 23/6/2020 SE208161.003	0407_QC304_20062 WATER - 24/6/2020 SE208161.004	0407_QC305_20062 WATER - 24/6/2020 SE208161.005
Arochlor 1016	µg/L	1	<1	<1	<1	<1	<1
Arochlor 1221	µg/L	1	<1	<1	<1	<1	<1
Arochlor 1232	µg/L	1	<1	<1	<1	<1	<1
Arochlor 1242	µg/L	1	<1	<1	<1	<1	<1
Arochlor 1248	µg/L	1	<1	<1	<1	<1	<1
Arochlor 1254	µg/L	1	<1	<1	<1	<1	<1
Arochlor 1260	µg/L	1	<1	<1	<1	<1	<1
Arochlor 1262	µg/L	1	<1	<1	<1	<1	<1
Arochlor 1268	µg/L	1	<1	<1	<1	<1	<1
Total Arochlors*	µg/L	5	<5	<5	<5	<5	<5

PARAMETER	UOM	LOR	0407_QC309_20062 WATER - 25/6/2020 SE208161.010	0407_QC310_20062 WATER - 25/6/2020 SE208161.011	0407_QC311_20062 WATER - 26/6/2020 SE208161.018
Arochlor 1016	µg/L	1	<1	<1	<1
Arochlor 1221	µg/L	1	<1	<1	<1
Arochlor 1232	µg/L	1	<1	<1	<1
Arochlor 1242	µg/L	1	<1	<1	<1
Arochlor 1248	µg/L	1	<1	<1	<1
Arochlor 1254	µg/L	1	<1	<1	<1
Arochlor 1260	µg/L	1	<1	<1	<1
Arochlor 1262	µg/L	1	<1	<1	<1
Arochlor 1268	µg/L	1	<1	<1	<1
Total Arochlors*	µg/L	5	<5	<5	<5

Trace Metals (Dissolved) in Water by ICPMS [AN318] Tested: 7/7/2020

PARAMETER	UOM	LOR	0407_QC300_20062 WATER - 22/6/2020 SE208161.001	0407_QC302_20062 WATER - 23/6/2020 SE208161.002	0407_QC303_20062 WATER - 23/6/2020 SE208161.003	0407_QC304_20062 WATER - 24/6/2020 SE208161.004	0407_QC305_20062 WATER - 24/6/2020 SE208161.005
Arsenic, As	µg/L	1	<1	<1	<1	<1	<1
Cadmium, Cd	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chromium, Cr	µg/L	1	<1	<1	<1	<1	<1
Copper, Cu	µg/L	1	<1	<1	<1	<1	<1
Lead, Pb	µg/L	1	<1	<1	<1	<1	<1
Nickel, Ni	µg/L	1	<1	<1	<1	<1	<1
Zinc, Zn	µg/L	5	<5	<5	<5	<5	<5

PARAMETER	UOM	LOR	0407_QC309_20062 WATER - 25/6/2020 SE208161.010	0407_QC310_20062 WATER - 25/6/2020 SE208161.011	0407_QC311_20062 WATER - 26/6/2020 SE208161.018
Arsenic, As	µg/L	1	<1	<1	<1
Cadmium, Cd	µg/L	0.1	<0.1	<0.1	<0.1
Chromium, Cr	µg/L	1	<1	<1	<1
Copper, Cu	µg/L	1	<1	<1	<1
Lead, Pb	µg/L	1	<1	<1	<1
Nickel, Ni	µg/L	1	<1	<1	<1
Zinc, Zn	µg/L	5	<5	<5	<5

Mercury (dissolved) in Water [AN311(Perth)/AN312] Tested: 8/7/2020

PARAMETER	UOM	LOR	0407_QC300_20062 WATER - 22/6/2020 SE208161.001	0407_QC302_20062 WATER - 23/6/2020 SE208161.002	0407_QC303_20062 WATER - 23/6/2020 SE208161.003	0407_QC304_20062 WATER - 24/6/2020 SE208161.004	0407_QC305_20062 WATER - 24/6/2020 SE208161.005
Mercury	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001

PARAMETER	UOM	LOR	0407_QC309_20062 WATER - 25/6/2020 SE208161.010	0407_QC310_20062 WATER - 25/6/2020 SE208161.011	0407_QC311_20062 WATER - 26/6/2020 SE208161.018
Mercury	mg/L	0.0001	<0.0001	<0.0001	<0.0001

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples - Low Level [MA-1523] Tested: 9/7/2020

PARAMETER	UOM	LOR	0407_QC300_20062 WATER - 22/6/2020 SE208161.001	0407_QC302_20062 WATER - 23/6/2020 SE208161.002	0407_QC303_20062 WATER - 23/6/2020 SE208161.003	0407_QC304_20062 WATER - 24/6/2020 SE208161.004	0407_QC305_20062 WATER - 24/6/2020 SE208161.005
Perfluorobutanoic acid (PFBA)	µg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Perfluoropentanoic acid (PFPeA)	µg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Perfluorohexanoic acid (PFHxA)	µg/L	0.0005	**0.0006**	**0.0006**	**0.0006**	<0.0005	<0.0005
Perfluoroheptanoic acid (PFHpA)	µg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Perfluorooctanoic Acid (PFOA)	µg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Perfluorononanoic acid (PFNA)	µg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Perfluorodecanoic acid (PFDA)	µg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Perfluoroundecanoic acid (PFUnA)	µg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Perfluorododecanoic acid (PFDoA)	µg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Perfluorohexadecanoic acid (PFHxDA)	µg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Perfluorobutane sulfonate (PFBS)	µg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Perfluoropentane sulfonate (PFPeS)	µg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Perfluorohexane sulfonate (PFHxS)	µg/L	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluoroheptane sulfonate (PFHpS)	µg/L	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorooctane sulfonate (PFOS)	µg/L	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Sum of PFHxS and PFOS	µg/L	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorononane sulfonate (PFNS)	µg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Perfluorodecane sulfonate (PFDS)	µg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Perfluorododecane sulfonate (PFDoS)	µg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	µg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	µg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	µg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	µg/L	0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	µg/L	0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
2-(N-Methylperfluorooctane sulfonamido)-ethanol	µg/L	0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	µg/L	0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
N-Methylperfluorooctanesulfonamidoacetic acid	µg/L	0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
N-Ethylperfluorooctanesulfonamidoacetic Acid	µg/L	0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples - Low Level [MA-1523] Tested: 9/7/2020 (continued)

PARAMETER	UOM	LOR	0407_QC309_20062 WATER - 25/6/2020 SE208161.010	0407_QC310_20062 WATER - 25/6/2020 SE208161.011	0407_QC311_20062 WATER - 26/6/2020 SE208161.018
Perfluorobutanoic acid (PFBA)	µg/L	0.0005	<0.0005	<0.0005	<0.0005
Perfluoropentanoic acid (PFPeA)	µg/L	0.0005	<0.0005	<0.0005	<0.0005
Perfluorohexanoic acid (PFHxA)	µg/L	0.0005	**0.0006**	**0.0005**	<0.0005
Perfluoroheptanoic acid (PFHpA)	µg/L	0.0005	<0.0005	<0.0005	<0.0005
Perfluorooctanoic Acid (PFOA)	µg/L	0.0005	<0.0005	<0.0005	<0.0005
Perfluorononanoic acid (PFNA)	µg/L	0.001	<0.001	<0.001	<0.001
Perfluorodecanoic acid (PFDA)	µg/L	0.001	<0.001	<0.001	<0.001
Perfluoroundecanoic acid (PFUnA)	µg/L	0.001	<0.001	<0.001	<0.001
Perfluorododecanoic acid (PFDoA)	µg/L	0.001	<0.001	<0.001	<0.001
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.001	<0.001	<0.001	<0.001
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.001	<0.001	<0.001	<0.001
Perfluorohexadecanoic acid (PFHxDA)	µg/L	0.002	<0.002	<0.002	<0.002
Perfluorobutane sulfonate (PFBS)	µg/L	0.001	<0.001	<0.001	<0.001
Perfluoropentane sulfonate (PFPeS)	µg/L	0.001	<0.001	<0.001	<0.001
Perfluorohexane sulfonate (PFHxS)	µg/L	0.0002	<0.0002	<0.0002	<0.0002
Perfluoroheptane sulfonate (PFHpS)	µg/L	0.0002	<0.0002	<0.0002	<0.0002
Perfluorooctane sulfonate (PFOS)	µg/L	0.0002	<0.0002	<0.0002	<0.0002
Sum of PFHxS and PFOS	µg/L	0.0002	<0.0002	<0.0002	<0.0002
Perfluorononane sulfonate (PFNS)	µg/L	0.0005	<0.0005	<0.0005	<0.0005
Perfluorodecane sulfonate (PFDS)	µg/L	0.0005	<0.0005	<0.0005	<0.0005
Perfluorododecane sulfonate (PFDoS)	µg/L	0.0005	<0.0005	<0.0005	<0.0005
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	µg/L	0.0005	<0.0005	<0.0005	<0.0005
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	µg/L	0.0005	<0.0005	<0.0005	<0.0005
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	µg/L	0.0005	<0.0005	<0.0005	<0.0005
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.002	<0.002	<0.002	<0.002
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	µg/L	0.0025	<0.0025	<0.0025	<0.0025
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	µg/L	0.0025	<0.0025	<0.0025	<0.0025
2-(N-Methylperfluorooctane sulfonamido)-ethanol	µg/L	0.0025	<0.0025	<0.0025	<0.0025
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	µg/L	0.0025	<0.0025	<0.0025	<0.0025
N-Methylperfluorooctanesulfonamidoacetic acid	µg/L	0.0025	<0.0025	<0.0025	<0.0025
N-Ethylperfluorooctanesulfonamidoacetic Acid	µg/L	0.0025	<0.0025	<0.0025	<0.0025

Sample Subcontracted [] Tested: 14/7/2020

PARAMETER	UOM	LOR	0407_BH41_0.0_20025 SOIL - 25/6/2020 SE208161.006	0407_BH41_0.5_20025 SOIL - 25/6/2020 SE208161.007
Sample Subcontracted*	No unit	-	Subcontracted	Subcontracted

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN020	Unpreserved water sample is filtered through a 0.45µm membrane filter and acidified with nitric acid similar to APHA3030B.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
AN311(Perth)/AN312	Mercury by Cold Vapour AAS in Waters: Mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500.
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid, mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN318	Determination of elements at trace level in waters by ICP-MS technique,, referenced to USEPA 6020B and USEPA 200.8 (5.4).
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents.
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.
MA-1523	This method covers the analysis of per- and polyfluoroalkyl substances (PFAS) in aqueous, solid and biosolid samples and solvent extracts, determined as the total of linear and branched isomers. After spiking with isotopically labelled quantification surrogates and clean-up via SPE cartridges sample extracts are analysed by liquid chromatography/mass spectrometry (LC-MS/MS). PFAS concentrations are determined by isotope dilution quantification.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
**	Indicative data, theoretical holding time exceeded.	NVL	Not validated.	LOR	Limit of Reporting.
		IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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SGS Environmental Services NSW
PO: 50385415
Unit 16/33 Maddox St
Alexandria NSW 2015

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: **Results Environmental**

Report **730590-S**
Project name SE208161
Received Date Jul 08, 2020

Client Sample ID			**SE208161.006 0407_BH41_0.0_200625**	**SE208161.007 0407_BH41_0.5_200625**
Sample Matrix			**Soil**	**Soil**
Eurofins Sample No.			**S20-Jl14697**	**S20-Jl14698**
Date Sampled			**Jun 25, 2020**	**Jun 25, 2020**
Test/Reference	LOR	Unit		
Nitroglycerine (NG)	5	mg/kg	< 5	< 5
% Moisture	1	%	13	8.0
Explosives				
Octahydro-1.3.5.7-tetranitro-1.3.5.7-tetrazocine (HMX)	0.5	mg/kg	< 0.5	< 0.5
Pentaerythritol tetranitrate (PETN)	1	mg/kg	< 1	< 1
1-Chloro-2-nitrobenzene	0.5	mg/kg	< 0.5	< 0.5
1-Chloro-3-nitrobenzene	0.5	mg/kg	< 0.5	< 0.5
1-Chloro-4-nitrobenzene	0.5	mg/kg	< 0.5	< 0.5
1.3-Dinitrobenzene (1.3-DNB)	0.5	mg/kg	< 0.5	< 0.5
1.3.5-Trinitrobenzene (1.3.5-TNB)	1	mg/kg	< 1	< 1
2-Amino-4.6 dinitrotoluene	0.5	mg/kg	< 0.5	< 0.5
2-Nitrotoluene (2-NT)	0.5	mg/kg	< 0.5	< 0.5
2.4- & 2.6-Dinitrotoluene	1	mg/kg	< 1	< 1
3-Nitrotoluene (3-NT)	0.5	mg/kg	< 0.5	< 0.5
4-Amino-2.6-dinitrotoluene (4-Am-DNT)	0.5	mg/kg	< 0.5	< 0.5
4-Nitrotoluene (4-NT)	0.5	mg/kg	< 0.5	< 0.5
Hexahydro-1.3.5-trinitro-1.3.5-triazine (RDX)	0.5	mg/kg	< 0.5	< 0.5
Methyl-2.4.6-trinitrophenylnitramine (Tetryl)	1	mg/kg	< 1	< 1
Nitrobenzene (NB)	0.5	mg/kg	< 0.5	< 0.5
TNT	1	mg/kg	< 1	< 1

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Nitroglycerine (NG)	Melbourne	Jul 10, 2020	14 Days
- Method: USEPA Method 8332			
Explosives	Melbourne	Jul 10, 2020	14 Days
- Method: LTM-ORG-2230 Determination of Explosive by HPLC			
% Moisture	Melbourne	Jul 08, 2020	14 Days
- Method: LTM-GEN-7080 Moisture			

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Site # 1254 & 14271

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Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

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Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

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NATA # 1261
Site # 23736

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IANZ # 1290

Company Name: SGS Environmental Services NSW
Address: PO: 50385415
Unit 16/33 Maddox St
Alexandria NSW 2015

Project Name: SE208161

Order No.:
Report #: 730590
Phone: 02 8594 0400
Fax: 02 8594 0499

Received: Jul 8, 2020 4:31 PM
Due: Jul 13, 2020
Priority: 3 Day
Contact Name: Results Environmental

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Nitroglycerine (NG)	Moisture Set	Explosives
Melbourne Laboratory - NATA Site # 1254 & 14271						X	X	X
Sydney Laboratory - NATA Site # 18217								
Brisbane Laboratory - NATA Site # 20794								
Perth Laboratory - NATA Site # 23736								
External Laboratory								
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**			
1	SE208161.006 0407_BH41_0. 0_200625	Jun 25, 2020		Soil	S20-Jl14697	X	X	X
2	SE208161.007 0407_BH41_0. 5_200625	Jun 25, 2020		Soil	S20-Jl14698	X	X	X
Test Counts						2	2	2

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

****NOTE:** pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram
mg/L: milligrams per litre
ug/L: micrograms per litre
ppm: Parts per million
ppb: Parts per billion
%: Percentage
org/100mL: Organisms per 100 millilitres
NTU: Nephelometric Turbidity Units
MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version 5.3
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling.Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Nitroglycerine (NG)	mg/kg	< 5			5	Pass	
Method Blank							
Explosives							
Octahydro-1.3.5.7-tetranitro-1.3.5.7-tetrazocine (HMX)	mg/kg	< 0.5			0.5	Pass	
Pentaerythritol tetranitrate (PETN)	mg/kg	< 1			1	Pass	
1-Chloro-2-nitrobenzene	mg/kg	< 0.5			0.5	Pass	
1-Chloro-3-nitrobenzene	mg/kg	< 0.5			0.5	Pass	
1-Chloro-4-nitrobenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dinitrobenzene (1.3-DNB)	mg/kg	< 0.5			0.5	Pass	
1.3.5-Trinitrobenzene (1.3.5-TNB)	mg/kg	< 1			1	Pass	
2-Amino-4.6 dinitrotoluene	mg/kg	< 0.5			0.5	Pass	
2-Nitrotoluene (2-NT)	mg/kg	< 0.5			0.5	Pass	
2.4- & 2.6-Dinitrotoluene	mg/kg	< 1			1	Pass	
3-Nitrotoluene (3-NT)	mg/kg	< 0.5			0.5	Pass	
4-Amino-2.6-dinitrotoluene (4-Am-DNT)	mg/kg	< 0.5			0.5	Pass	
4-Nitrotoluene (4-NT)	mg/kg	< 0.5			0.5	Pass	
Hexahydro-1.3.5-trinitro-1.3.5-triazine (RDX)	mg/kg	< 0.5			0.5	Pass	
Methyl-2.4.6-trinitrophenylnitramine (Tetryl)	mg/kg	< 1			1	Pass	
Nitrobenzene (NB)	mg/kg	< 0.5			0.5	Pass	
TNT	mg/kg	< 1			1	Pass	
LCS - % Recovery							
Nitroglycerine (NG)	%	83			75-125	Pass	
LCS - % Recovery							
Explosives							
Octahydro-1.3.5.7-tetranitro-1.3.5.7-tetrazocine (HMX)	%	87			70-130	Pass	
Pentaerythritol tetranitrate (PETN)	%	81			70-130	Pass	
1.3-Dinitrobenzene (1.3-DNB)	%	88			70-130	Pass	
1.3.5-Trinitrobenzene (1.3.5-TNB)	%	96			70-130	Pass	
2-Nitrotoluene (2-NT)	%	78			70-130	Pass	
2.4- & 2.6-Dinitrotoluene	%	84			70-130	Pass	
3-Nitrotoluene (3-NT)	%	86			70-130	Pass	
4-Nitrotoluene (4-NT)	%	73			70-130	Pass	
Hexahydro-1.3.5-trinitro-1.3.5-triazine (RDX)	%	74			70-130	Pass	
Methyl-2.4.6-trinitrophenylnitramine (Tetryl)	%	97			70-130	Pass	
TNT	%	92			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Explosives				Result 1					
Octahydro-1.3.5.7-tetranitro-1.3.5.7-tetrazocine (HMX)	M20-Jl14525	NCP	%	76			70-130	Pass	
Pentaerythritol tetranitrate (PETN)	M20-Jl14525	NCP	%	77			70-130	Pass	
1.3-Dinitrobenzene (1.3-DNB)	M20-Jl14525	NCP	%	77			70-130	Pass	
2-Amino-4.6 dinitrotoluene	M20-Jl14525	NCP	%	73			70-130	Pass	
2-Nitrotoluene (2-NT)	M20-Jl14525	NCP	%	int			70-130	Fail	Q08
2.4- & 2.6-Dinitrotoluene	M20-Jl14525	NCP	%	76			70-130	Pass	
3-Nitrotoluene (3-NT)	M20-Jl14525	NCP	%	86			70-130	Pass	
4-Amino-2.6-dinitrotoluene (4-Am-DNT)	M20-Jl14525	NCP	%	71			70-130	Pass	
4-Nitrotoluene (4-NT)	M20-Jl14525	NCP	%	int			70-130	Fail	Q08
Methyl-2.4.6-trinitrophenylnitramine (Tetryl)	M20-Jl14525	NCP	%	84			70-130	Pass	
Nitrobenzene (NB)	M20-Jl14525	NCP	%	85			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	M20-Jl14555	NCP	%	21	22	5.0	30%	Pass	
Duplicate									
Explosives				Result 1	Result 2	RPD			
Octahydro-1.3.5.7-tetranitro-1.3.5.7-tetrazocine (HMX)	M20-Jl14523	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pentaerythritol tetranitrate (PETN)	M20-Jl14523	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
1-Chloro-2-nitrobenzene	M20-Jl14523	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1-Chloro-3-nitrobenzene	M20-Jl14523	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1-Chloro-4-nitrobenzene	M20-Jl14523	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dinitrobenzene (1.3-DNB)	M20-Jl14523	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3.5-Trinitrobenzene (1.3.5-TNB)	M20-Jl14523	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2-Amino-4.6 dinitrotoluene	M20-Jl14523	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Nitrotoluene (2-NT)	M20-Jl14523	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4- & 2.6-Dinitrotoluene	M20-Jl14523	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
3-Nitrotoluene (3-NT)	M20-Jl14523	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Amino-2.6-dinitrotoluene (4-Am-DNT)	M20-Jl14523	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Nitrotoluene (4-NT)	M20-Jl14523	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Hexahydro-1.3.5-trinitro-1.3.5-triazine (RDX)	M20-Jl14523	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Methyl-2.4.6-trinitrophenylnitramine (Tetryl)	M20-Jl14523	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Nitrobenzene (NB)	M20-Jl14523	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TNT	M20-Jl14523	NCP	mg/kg	< 1	< 1	<1	30%	Pass	

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
Q08	The matrix spike recovery is outside of the recommended acceptance criteria. An acceptable recovery was obtained for the laboratory control sample indicating a sample matrix interference.

Authorised By



Analytical Services Manager
Senior Analyst-Organic (VIC)

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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PO: 50385415
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Attention: **Results Environmental**

Report **730590-S**
Project name SE208161
Received Date Jul 08, 2020

Client Sample ID			**SE208161.006 0407_BH41_0.0_200625**	**SE208161.007 0407_BH41_0.5_200625**
Sample Matrix			**Soil**	**Soil**
Eurofins Sample No.			**S20-Jl14697**	**S20-Jl14698**
Date Sampled			**Jun 25, 2020**	**Jun 25, 2020**
Test/Reference	LOR	Unit		
Nitroglycerine (NG)	5	mg/kg	< 5	< 5
% Moisture	1	%	13	8.0
Explosives				
Octahydro-1.3.5.7-tetranitro-1.3.5.7-tetrazocine (HMX)	0.5	mg/kg	< 0.5	< 0.5
Pentaerythritol tetranitrate (PETN)	1	mg/kg	< 1	< 1
1-Chloro-2-nitrobenzene	0.5	mg/kg	< 0.5	< 0.5
1-Chloro-3-nitrobenzene	0.5	mg/kg	< 0.5	< 0.5
1-Chloro-4-nitrobenzene	0.5	mg/kg	< 0.5	< 0.5
1.3-Dinitrobenzene (1.3-DNB)	0.5	mg/kg	< 0.5	< 0.5
1.3.5-Trinitrobenzene (1.3.5-TNB)	1	mg/kg	< 1	< 1
2-Amino-4.6 dinitrotoluene	0.5	mg/kg	< 0.5	< 0.5
2-Nitrotoluene (2-NT)	0.5	mg/kg	< 0.5	< 0.5
2.4- & 2.6-Dinitrotoluene	1	mg/kg	< 1	< 1
3-Nitrotoluene (3-NT)	0.5	mg/kg	< 0.5	< 0.5
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Methyl-2.4.6-trinitrophenylnitramine (Tetryl)	1	mg/kg	< 1	< 1
Nitrobenzene (NB)	0.5	mg/kg	< 0.5	< 0.5
TNT	1	mg/kg	< 1	< 1

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A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

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Description	Testing Site	Extracted	Holding Time
Nitroglycerine (NG)	Melbourne	Jul 10, 2020	14 Days
- Method: USEPA Method 8332			
Explosives	Melbourne	Jul 10, 2020	14 Days
- Method: LTM-ORG-2230 Determination of Explosive by HPLC			
% Moisture	Melbourne	Jul 08, 2020	14 Days
- Method: LTM-GEN-7080 Moisture			

eurofins | Environment Testing

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IANZ # 1290

Company Name: SGS Environmental Services NSW
Address: PO: 50385415
Unit 16/33 Maddox St
Alexandria NSW 2015

Project Name: SE208161

Order No.:
Report #: 730590
Phone: 02 8594 0400
Fax: 02 8594 0499

Received: Jul 8, 2020 4:31 PM
Due: Jul 13, 2020
Priority: 3 Day
Contact Name: Results Environmental

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Nitroglycerine (NG)	Moisture Set	Explosives
Melbourne Laboratory - NATA Site # 1254 & 14271						X	X	X
Sydney Laboratory - NATA Site # 18217								
Brisbane Laboratory - NATA Site # 20794								
Perth Laboratory - NATA Site # 23736								
External Laboratory								
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**			
1	SE208161.006 0407_BH41_0. 0_200625	Jun 25, 2020		Soil	S20-Jl14697	X	X	X
2	SE208161.007 0407_BH41_0. 5_200625	Jun 25, 2020		Soil	S20-Jl14698	X	X	X
Test Counts						2	2	2

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1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

****NOTE:** pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram
mg/L: milligrams per litre
ug/L: micrograms per litre
ppm: Parts per million
ppb: Parts per billion
%: Percentage
org/100mL: Organisms per 100 millilitres
NTU: Nephelometric Turbidity Units
MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version 5.3
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling.Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Nitroglycerine (NG)	mg/kg	< 5			5	Pass	
Method Blank							
Explosives							
Octahydro-1.3.5.7-tetranitro-1.3.5.7-tetrazocine (HMX)	mg/kg	< 0.5			0.5	Pass	
Pentaerythritol tetranitrate (PETN)	mg/kg	< 1			1	Pass	
1-Chloro-2-nitrobenzene	mg/kg	< 0.5			0.5	Pass	
1-Chloro-3-nitrobenzene	mg/kg	< 0.5			0.5	Pass	
1-Chloro-4-nitrobenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dinitrobenzene (1.3-DNB)	mg/kg	< 0.5			0.5	Pass	
1.3.5-Trinitrobenzene (1.3.5-TNB)	mg/kg	< 1			1	Pass	
2-Amino-4.6 dinitrotoluene	mg/kg	< 0.5			0.5	Pass	
2-Nitrotoluene (2-NT)	mg/kg	< 0.5			0.5	Pass	
2.4- & 2.6-Dinitrotoluene	mg/kg	< 1			1	Pass	
3-Nitrotoluene (3-NT)	mg/kg	< 0.5			0.5	Pass	
4-Amino-2.6-dinitrotoluene (4-Am-DNT)	mg/kg	< 0.5			0.5	Pass	
4-Nitrotoluene (4-NT)	mg/kg	< 0.5			0.5	Pass	
Hexahydro-1.3.5-trinitro-1.3.5-triazine (RDX)	mg/kg	< 0.5			0.5	Pass	
Methyl-2.4.6-trinitrophenylnitramine (Tetryl)	mg/kg	< 1			1	Pass	
Nitrobenzene (NB)	mg/kg	< 0.5			0.5	Pass	
TNT	mg/kg	< 1			1	Pass	
LCS - % Recovery							
Nitroglycerine (NG)	%	83			75-125	Pass	
LCS - % Recovery							
Explosives							
Octahydro-1.3.5.7-tetranitro-1.3.5.7-tetrazocine (HMX)	%	87			70-130	Pass	
Pentaerythritol tetranitrate (PETN)	%	81			70-130	Pass	
1.3-Dinitrobenzene (1.3-DNB)	%	88			70-130	Pass	
1.3.5-Trinitrobenzene (1.3.5-TNB)	%	96			70-130	Pass	
2-Nitrotoluene (2-NT)	%	78			70-130	Pass	
2.4- & 2.6-Dinitrotoluene	%	84			70-130	Pass	
3-Nitrotoluene (3-NT)	%	86			70-130	Pass	
4-Nitrotoluene (4-NT)	%	73			70-130	Pass	
Hexahydro-1.3.5-trinitro-1.3.5-triazine (RDX)	%	74			70-130	Pass	
Methyl-2.4.6-trinitrophenylnitramine (Tetryl)	%	97			70-130	Pass	
TNT	%	92			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Explosives				Result 1					
Octahydro-1.3.5.7-tetranitro-1.3.5.7-tetrazocine (HMX)	M20-Jl14525	NCP	%	76			70-130	Pass	
Pentaerythritol tetranitrate (PETN)	M20-Jl14525	NCP	%	77			70-130	Pass	
1.3-Dinitrobenzene (1.3-DNB)	M20-Jl14525	NCP	%	77			70-130	Pass	
2-Amino-4.6 dinitrotoluene	M20-Jl14525	NCP	%	73			70-130	Pass	
2-Nitrotoluene (2-NT)	M20-Jl14525	NCP	%	int			70-130	Fail	Q08
2.4- & 2.6-Dinitrotoluene	M20-Jl14525	NCP	%	76			70-130	Pass	
3-Nitrotoluene (3-NT)	M20-Jl14525	NCP	%	86			70-130	Pass	
4-Amino-2.6-dinitrotoluene (4-Am-DNT)	M20-Jl14525	NCP	%	71			70-130	Pass	
4-Nitrotoluene (4-NT)	M20-Jl14525	NCP	%	int			70-130	Fail	Q08
Methyl-2.4.6-trinitrophenylnitramine (Tetryl)	M20-Jl14525	NCP	%	84			70-130	Pass	
Nitrobenzene (NB)	M20-Jl14525	NCP	%	85			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	M20-Jl14555	NCP	%	21	22	5.0	30%	Pass	
Duplicate									
Explosives				Result 1	Result 2	RPD			
Octahydro-1.3.5.7-tetranitro-1.3.5.7-tetrazocine (HMX)	M20-Jl14523	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pentaerythritol tetranitrate (PETN)	M20-Jl14523	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
1-Chloro-2-nitrobenzene	M20-Jl14523	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1-Chloro-3-nitrobenzene	M20-Jl14523	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1-Chloro-4-nitrobenzene	M20-Jl14523	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dinitrobenzene (1.3-DNB)	M20-Jl14523	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3.5-Trinitrobenzene (1.3.5-TNB)	M20-Jl14523	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2-Amino-4.6 dinitrotoluene	M20-Jl14523	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Nitrotoluene (2-NT)	M20-Jl14523	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4- & 2.6-Dinitrotoluene	M20-Jl14523	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
3-Nitrotoluene (3-NT)	M20-Jl14523	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Amino-2.6-dinitrotoluene (4-Am-DNT)	M20-Jl14523	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Nitrotoluene (4-NT)	M20-Jl14523	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Hexahydro-1.3.5-trinitro-1.3.5-triazine (RDX)	M20-Jl14523	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Methyl-2.4.6-trinitrophenylnitramine (Tetryl)	M20-Jl14523	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Nitrobenzene (NB)	M20-Jl14523	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TNT	M20-Jl14523	NCP	mg/kg	< 1	< 1	<1	30%	Pass	

Comments

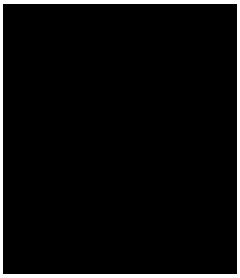
Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
Q08	The matrix spike recovery is outside of the recommended acceptance criteria. An acceptable recovery was obtained for the laboratory control sample indicating a sample matrix interference.

Authorised By



Analytical Services Manager
Senior Analyst-Organic (VIC)

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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STATEMENT OF QA/QC PERFORMANCE

SE208161 R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	18

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208161 R0**
Date Received	26 Jun 2020
Date Reported	14 Jul 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Extraction Date	OC Pesticides in Water	8 items
	OP Pesticides in Water	8 items
	PAH (Polynuclear Aromatic Hydrocarbons) in Water	8 items
	PCBs in Water	8 items
	TRH (Total Recoverable Hydrocarbons) in Water	8 items
	VOCs in Water	8 items
	Volatile Petroleum Hydrocarbons in Water	8 items
Surrogate	Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level	1 item
Duplicate	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	1 item
	VOCs in Water	1 item
	Volatile Petroleum Hydrocarbons in Water	1 item

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	10 Soi;, 8 Water
Date documentation received	26/6/2020	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	3.5°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE208161 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC300_200622	SE208161.001	LB203763	22 Jun 2020	26 Jun 2020	20 Jul 2020	08 Jul 2020	20 Jul 2020	08 Jul 2020
0407_QC302_200623	SE208161.002	LB203763	23 Jun 2020	26 Jun 2020	21 Jul 2020	08 Jul 2020	21 Jul 2020	08 Jul 2020
0407_QC303_200623	SE208161.003	LB203763	23 Jun 2020	26 Jun 2020	21 Jul 2020	08 Jul 2020	21 Jul 2020	08 Jul 2020
0407_QC304_200624	SE208161.004	LB203763	24 Jun 2020	26 Jun 2020	22 Jul 2020	08 Jul 2020	22 Jul 2020	08 Jul 2020
0407_QC305_200624	SE208161.005	LB203763	24 Jun 2020	26 Jun 2020	22 Jul 2020	08 Jul 2020	22 Jul 2020	08 Jul 2020
0407_QC309_200625	SE208161.010	LB203763	25 Jun 2020	26 Jun 2020	23 Jul 2020	08 Jul 2020	23 Jul 2020	08 Jul 2020
0407_QC310_200625	SE208161.011	LB203763	25 Jun 2020	26 Jun 2020	23 Jul 2020	08 Jul 2020	23 Jul 2020	08 Jul 2020
0407_QC311_200626	SE208161.018	LB203763	26 Jun 2020	26 Jun 2020	24 Jul 2020	08 Jul 2020	24 Jul 2020	08 Jul 2020

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH41_0.0_200625	SE208161.006	LB203728	25 Jun 2020	26 Jun 2020	23 Jul 2020	07 Jul 2020	23 Jul 2020	08 Jul 2020
0407_BH41_0.5_200625	SE208161.007	LB203728	25 Jun 2020	26 Jun 2020	23 Jul 2020	07 Jul 2020	23 Jul 2020	08 Jul 2020
0407_BH42_0.0_200625	SE208161.008	LB203728	25 Jun 2020	26 Jun 2020	23 Jul 2020	07 Jul 2020	23 Jul 2020	08 Jul 2020
0407_BH42_0.5_200625	SE208161.009	LB203728	25 Jun 2020	26 Jun 2020	23 Jul 2020	07 Jul 2020	23 Jul 2020	08 Jul 2020

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH41_0.0_200625	SE208161.006	LB203667	25 Jun 2020	26 Jun 2020	09 Jul 2020	07 Jul 2020	12 Jul 2020	08 Jul 2020
0407_BH41_0.5_200625	SE208161.007	LB203667	25 Jun 2020	26 Jun 2020	09 Jul 2020	07 Jul 2020	12 Jul 2020	08 Jul 2020
0407_BH42_0.0_200625	SE208161.008	LB203667	25 Jun 2020	26 Jun 2020	09 Jul 2020	07 Jul 2020	12 Jul 2020	08 Jul 2020
0407_BH42_0.5_200625	SE208161.009	LB203667	25 Jun 2020	26 Jun 2020	09 Jul 2020	07 Jul 2020	12 Jul 2020	08 Jul 2020
0407_BH43_0.25_200626	SE208161.012	LB203667	26 Jun 2020	26 Jun 2020	10 Jul 2020	07 Jul 2020	12 Jul 2020	08 Jul 2020
0407_BH43_0.5_200626	SE208161.013	LB203667	26 Jun 2020	26 Jun 2020	10 Jul 2020	07 Jul 2020	12 Jul 2020	08 Jul 2020
0407_BH44_0.25_200626	SE208161.014	LB203667	26 Jun 2020	26 Jun 2020	10 Jul 2020	07 Jul 2020	12 Jul 2020	08 Jul 2020
0407_BH44_0.5_200626	SE208161.015	LB203667	26 Jun 2020	26 Jun 2020	10 Jul 2020	07 Jul 2020	12 Jul 2020	08 Jul 2020
0407_BH45_0.25_200626	SE208161.016	LB203667	26 Jun 2020	26 Jun 2020	10 Jul 2020	07 Jul 2020	12 Jul 2020	08 Jul 2020
0407_BH45_0.5_200625	SE208161.017	LB203667	26 Jun 2020	26 Jun 2020	10 Jul 2020	07 Jul 2020	12 Jul 2020	08 Jul 2020

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH41_0.0_200625	SE208161.006	LB203666	25 Jun 2020	26 Jun 2020	09 Jul 2020	07 Jul 2020	16 Aug 2020	10 Jul 2020
0407_BH41_0.5_200625	SE208161.007	LB203666	25 Jun 2020	26 Jun 2020	09 Jul 2020	07 Jul 2020	16 Aug 2020	10 Jul 2020
0407_BH42_0.0_200625	SE208161.008	LB203666	25 Jun 2020	26 Jun 2020	09 Jul 2020	07 Jul 2020	16 Aug 2020	10 Jul 2020
0407_BH42_0.5_200625	SE208161.009	LB203666	25 Jun 2020	26 Jun 2020	09 Jul 2020	07 Jul 2020	16 Aug 2020	10 Jul 2020
0407_BH43_0.25_200626	SE208161.012	LB203666	26 Jun 2020	26 Jun 2020	10 Jul 2020	07 Jul 2020	16 Aug 2020	10 Jul 2020
0407_BH43_0.5_200626	SE208161.013	LB203666	26 Jun 2020	26 Jun 2020	10 Jul 2020	07 Jul 2020	16 Aug 2020	10 Jul 2020
0407_BH44_0.25_200626	SE208161.014	LB203666	26 Jun 2020	26 Jun 2020	10 Jul 2020	07 Jul 2020	16 Aug 2020	10 Jul 2020
0407_BH44_0.5_200626	SE208161.015	LB203666	26 Jun 2020	26 Jun 2020	10 Jul 2020	07 Jul 2020	16 Aug 2020	10 Jul 2020
0407_BH45_0.25_200626	SE208161.016	LB203666	26 Jun 2020	26 Jun 2020	10 Jul 2020	07 Jul 2020	16 Aug 2020	10 Jul 2020
0407_BH45_0.5_200625	SE208161.017	LB203666	26 Jun 2020	26 Jun 2020	10 Jul 2020	07 Jul 2020	16 Aug 2020	10 Jul 2020

OC Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC300_200622	SE208161.001	LB203636	22 Jun 2020	26 Jun 2020	29 Jun 2020	07 Jul 2020†	16 Aug 2020	09 Jul 2020
0407_QC302_200623	SE208161.002	LB203636	23 Jun 2020	26 Jun 2020	30 Jun 2020	07 Jul 2020†	16 Aug 2020	09 Jul 2020
0407_QC303_200623	SE208161.003	LB203636	23 Jun 2020	26 Jun 2020	30 Jun 2020	07 Jul 2020†	16 Aug 2020	09 Jul 2020
0407_QC304_200624	SE208161.004	LB203636	24 Jun 2020	26 Jun 2020	01 Jul 2020	07 Jul 2020†	16 Aug 2020	09 Jul 2020
0407_QC305_200624	SE208161.005	LB203636	24 Jun 2020	26 Jun 2020	01 Jul 2020	07 Jul 2020†	16 Aug 2020	09 Jul 2020
0407_QC309_200625	SE208161.010	LB203636	25 Jun 2020	26 Jun 2020	02 Jul 2020	07 Jul 2020†	16 Aug 2020	09 Jul 2020
0407_QC310_200625	SE208161.011	LB203636	25 Jun 2020	26 Jun 2020	02 Jul 2020	07 Jul 2020†	16 Aug 2020	09 Jul 2020
0407_QC311_200626	SE208161.018	LB203636	26 Jun 2020	26 Jun 2020	03 Jul 2020	07 Jul 2020†	16 Aug 2020	09 Jul 2020

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH41_0.0_200625	SE208161.006	LB203666	25 Jun 2020	26 Jun 2020	09 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_BH41_0.5_200625	SE208161.007	LB203666	25 Jun 2020	26 Jun 2020	09 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_BH42_0.0_200625	SE208161.008	LB203666	25 Jun 2020	26 Jun 2020	09 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_BH42_0.5_200625	SE208161.009	LB203666	25 Jun 2020	26 Jun 2020	09 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_BH43_0.25_200626	SE208161.012	LB203666	26 Jun 2020	26 Jun 2020	10 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_BH43_0.5_200626	SE208161.013	LB203666	26 Jun 2020	26 Jun 2020	10 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_BH44_0.25_200626	SE208161.014	LB203666	26 Jun 2020	26 Jun 2020	10 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH44_0.5_200626	SE208161.015	LB203666	26 Jun 2020	26 Jun 2020	10 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_BH45_0.25_200626	SE208161.016	LB203666	26 Jun 2020	26 Jun 2020	10 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_BH45_0.5_200625	SE208161.017	LB203666	26 Jun 2020	26 Jun 2020	10 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020

OP Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC300_200622	SE208161.001	LB203636	22 Jun 2020	26 Jun 2020	29 Jun 2020	07 Jul 2020†	16 Aug 2020	08 Jul 2020
0407_QC302_200623	SE208161.002	LB203636	23 Jun 2020	26 Jun 2020	30 Jun 2020	07 Jul 2020†	16 Aug 2020	08 Jul 2020
0407_QC303_200623	SE208161.003	LB203636	23 Jun 2020	26 Jun 2020	30 Jun 2020	07 Jul 2020†	16 Aug 2020	08 Jul 2020
0407_QC304_200624	SE208161.004	LB203636	24 Jun 2020	26 Jun 2020	01 Jul 2020	07 Jul 2020†	16 Aug 2020	08 Jul 2020
0407_QC305_200624	SE208161.005	LB203636	24 Jun 2020	26 Jun 2020	01 Jul 2020	07 Jul 2020†	16 Aug 2020	08 Jul 2020
0407_QC309_200625	SE208161.010	LB203636	25 Jun 2020	26 Jun 2020	02 Jul 2020	07 Jul 2020†	16 Aug 2020	08 Jul 2020
0407_QC310_200625	SE208161.011	LB203636	25 Jun 2020	26 Jun 2020	02 Jul 2020	07 Jul 2020†	16 Aug 2020	08 Jul 2020
0407_QC311_200626	SE208161.018	LB203636	26 Jun 2020	26 Jun 2020	03 Jul 2020	07 Jul 2020†	16 Aug 2020	08 Jul 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH41_0.0_200625	SE208161.006	LB203666	25 Jun 2020	26 Jun 2020	09 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_BH41_0.5_200625	SE208161.007	LB203666	25 Jun 2020	26 Jun 2020	09 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_BH42_0.0_200625	SE208161.008	LB203666	25 Jun 2020	26 Jun 2020	09 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_BH42_0.5_200625	SE208161.009	LB203666	25 Jun 2020	26 Jun 2020	09 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_BH43_0.25_200626	SE208161.012	LB203666	26 Jun 2020	26 Jun 2020	10 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_BH43_0.5_200626	SE208161.013	LB203666	26 Jun 2020	26 Jun 2020	10 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_BH44_0.25_200626	SE208161.014	LB203666	26 Jun 2020	26 Jun 2020	10 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_BH44_0.5_200626	SE208161.015	LB203666	26 Jun 2020	26 Jun 2020	10 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_BH45_0.25_200626	SE208161.016	LB203666	26 Jun 2020	26 Jun 2020	10 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_BH45_0.5_200625	SE208161.017	LB203666	26 Jun 2020	26 Jun 2020	10 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC300_200622	SE208161.001	LB203636	22 Jun 2020	26 Jun 2020	29 Jun 2020	07 Jul 2020†	16 Aug 2020	08 Jul 2020
0407_QC302_200623	SE208161.002	LB203636	23 Jun 2020	26 Jun 2020	30 Jun 2020	07 Jul 2020†	16 Aug 2020	08 Jul 2020
0407_QC303_200623	SE208161.003	LB203636	23 Jun 2020	26 Jun 2020	30 Jun 2020	07 Jul 2020†	16 Aug 2020	08 Jul 2020
0407_QC304_200624	SE208161.004	LB203636	24 Jun 2020	26 Jun 2020	01 Jul 2020	07 Jul 2020†	16 Aug 2020	08 Jul 2020
0407_QC305_200624	SE208161.005	LB203636	24 Jun 2020	26 Jun 2020	01 Jul 2020	07 Jul 2020†	16 Aug 2020	08 Jul 2020
0407_QC309_200625	SE208161.010	LB203636	25 Jun 2020	26 Jun 2020	02 Jul 2020	07 Jul 2020†	16 Aug 2020	08 Jul 2020
0407_QC310_200625	SE208161.011	LB203636	25 Jun 2020	26 Jun 2020	02 Jul 2020	07 Jul 2020†	16 Aug 2020	08 Jul 2020
0407_QC311_200626	SE208161.018	LB203636	26 Jun 2020	26 Jun 2020	03 Jul 2020	07 Jul 2020†	16 Aug 2020	08 Jul 2020

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH41_0.0_200625	SE208161.006	LB203666	25 Jun 2020	26 Jun 2020	09 Jul 2020	07 Jul 2020	16 Aug 2020	10 Jul 2020
0407_BH41_0.5_200625	SE208161.007	LB203666	25 Jun 2020	26 Jun 2020	09 Jul 2020	07 Jul 2020	16 Aug 2020	10 Jul 2020
0407_BH42_0.0_200625	SE208161.008	LB203666	25 Jun 2020	26 Jun 2020	09 Jul 2020	07 Jul 2020	16 Aug 2020	10 Jul 2020
0407_BH42_0.5_200625	SE208161.009	LB203666	25 Jun 2020	26 Jun 2020	09 Jul 2020	07 Jul 2020	16 Aug 2020	10 Jul 2020
0407_BH43_0.25_200626	SE208161.012	LB203666	26 Jun 2020	26 Jun 2020	10 Jul 2020	07 Jul 2020	16 Aug 2020	10 Jul 2020
0407_BH43_0.5_200626	SE208161.013	LB203666	26 Jun 2020	26 Jun 2020	10 Jul 2020	07 Jul 2020	16 Aug 2020	10 Jul 2020
0407_BH44_0.25_200626	SE208161.014	LB203666	26 Jun 2020	26 Jun 2020	10 Jul 2020	07 Jul 2020	16 Aug 2020	10 Jul 2020
0407_BH44_0.5_200626	SE208161.015	LB203666	26 Jun 2020	26 Jun 2020	10 Jul 2020	07 Jul 2020	16 Aug 2020	10 Jul 2020
0407_BH45_0.25_200626	SE208161.016	LB203666	26 Jun 2020	26 Jun 2020	10 Jul 2020	07 Jul 2020	16 Aug 2020	10 Jul 2020
0407_BH45_0.5_200625	SE208161.017	LB203666	26 Jun 2020	26 Jun 2020	10 Jul 2020	07 Jul 2020	16 Aug 2020	10 Jul 2020

PCBs in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC300_200622	SE208161.001	LB203636	22 Jun 2020	26 Jun 2020	29 Jun 2020	07 Jul 2020†	16 Aug 2020	09 Jul 2020
0407_QC302_200623	SE208161.002	LB203636	23 Jun 2020	26 Jun 2020	30 Jun 2020	07 Jul 2020†	16 Aug 2020	09 Jul 2020
0407_QC303_200623	SE208161.003	LB203636	23 Jun 2020	26 Jun 2020	30 Jun 2020	07 Jul 2020†	16 Aug 2020	09 Jul 2020
0407_QC304_200624	SE208161.004	LB203636	24 Jun 2020	26 Jun 2020	01 Jul 2020	07 Jul 2020†	16 Aug 2020	09 Jul 2020
0407_QC305_200624	SE208161.005	LB203636	24 Jun 2020	26 Jun 2020	01 Jul 2020	07 Jul 2020†	16 Aug 2020	09 Jul 2020
0407_QC309_200625	SE208161.010	LB203636	25 Jun 2020	26 Jun 2020	02 Jul 2020	07 Jul 2020†	16 Aug 2020	09 Jul 2020
0407_QC310_200625	SE208161.011	LB203636	25 Jun 2020	26 Jun 2020	02 Jul 2020	07 Jul 2020†	16 Aug 2020	09 Jul 2020
0407_QC311_200626	SE208161.018	LB203636	26 Jun 2020	26 Jun 2020	03 Jul 2020	07 Jul 2020†	16 Aug 2020	09 Jul 2020

HOLDING TIME SUMMARY

SE208161 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH41_0.0_200625	SE208161.006	LB203666	25 Jun 2020	26 Jun 2020	09 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_BH41_0.5_200625	SE208161.007	LB203666	25 Jun 2020	26 Jun 2020	09 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_BH42_0.0_200625	SE208161.008	LB203666	25 Jun 2020	26 Jun 2020	09 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_BH42_0.5_200625	SE208161.009	LB203666	25 Jun 2020	26 Jun 2020	09 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_BH43_0.25_200626	SE208161.012	LB203666	26 Jun 2020	26 Jun 2020	10 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_BH43_0.5_200626	SE208161.013	LB203666	26 Jun 2020	26 Jun 2020	10 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_BH44_0.25_200626	SE208161.014	LB203666	26 Jun 2020	26 Jun 2020	10 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_BH44_0.5_200626	SE208161.015	LB203666	26 Jun 2020	26 Jun 2020	10 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_BH45_0.25_200626	SE208161.016	LB203666	26 Jun 2020	26 Jun 2020	10 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_BH45_0.5_200625	SE208161.017	LB203666	26 Jun 2020	26 Jun 2020	10 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020

Speciated Phenols in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC300_200622	SE208161.001	LB203636	22 Jun 2020	26 Jun 2020	13 Jul 2020	07 Jul 2020	16 Aug 2020	08 Jul 2020
0407_QC302_200623	SE208161.002	LB203636	23 Jun 2020	26 Jun 2020	14 Jul 2020	07 Jul 2020	16 Aug 2020	08 Jul 2020
0407_QC303_200623	SE208161.003	LB203636	23 Jun 2020	26 Jun 2020	14 Jul 2020	07 Jul 2020	16 Aug 2020	08 Jul 2020
0407_QC304_200624	SE208161.004	LB203636	24 Jun 2020	26 Jun 2020	15 Jul 2020	07 Jul 2020	16 Aug 2020	08 Jul 2020
0407_QC305_200624	SE208161.005	LB203636	24 Jun 2020	26 Jun 2020	15 Jul 2020	07 Jul 2020	16 Aug 2020	08 Jul 2020
0407_QC309_200625	SE208161.010	LB203636	25 Jun 2020	26 Jun 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	08 Jul 2020
0407_QC310_200625	SE208161.011	LB203636	25 Jun 2020	26 Jun 2020	16 Jul 2020	07 Jul 2020	16 Aug 2020	08 Jul 2020
0407_QC311_200626	SE208161.018	LB203636	26 Jun 2020	26 Jun 2020	17 Jul 2020	07 Jul 2020	16 Aug 2020	08 Jul 2020

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH41_0.0_200625	SE208161.006	LB203726	25 Jun 2020	26 Jun 2020	22 Dec 2020	07 Jul 2020	22 Dec 2020	08 Jul 2020
0407_BH41_0.5_200625	SE208161.007	LB203726	25 Jun 2020	26 Jun 2020	22 Dec 2020	07 Jul 2020	22 Dec 2020	08 Jul 2020
0407_BH42_0.0_200625	SE208161.008	LB203726	25 Jun 2020	26 Jun 2020	22 Dec 2020	07 Jul 2020	22 Dec 2020	08 Jul 2020
0407_BH42_0.5_200625	SE208161.009	LB203726	25 Jun 2020	26 Jun 2020	22 Dec 2020	07 Jul 2020	22 Dec 2020	08 Jul 2020
0407_BH43_0.25_200626	SE208161.012	LB203726	26 Jun 2020	26 Jun 2020	23 Dec 2020	07 Jul 2020	23 Dec 2020	08 Jul 2020
0407_BH43_0.5_200626	SE208161.013	LB203726	26 Jun 2020	26 Jun 2020	23 Dec 2020	07 Jul 2020	23 Dec 2020	08 Jul 2020
0407_BH44_0.25_200626	SE208161.014	LB203726	26 Jun 2020	26 Jun 2020	23 Dec 2020	07 Jul 2020	23 Dec 2020	08 Jul 2020
0407_BH44_0.5_200626	SE208161.015	LB203726	26 Jun 2020	26 Jun 2020	23 Dec 2020	07 Jul 2020	23 Dec 2020	08 Jul 2020
0407_BH45_0.25_200626	SE208161.016	LB203726	26 Jun 2020	26 Jun 2020	23 Dec 2020	07 Jul 2020	23 Dec 2020	08 Jul 2020
0407_BH45_0.5_200625	SE208161.017	LB203726	26 Jun 2020	26 Jun 2020	23 Dec 2020	07 Jul 2020	23 Dec 2020	08 Jul 2020

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC300_200622	SE208161.001	LB203653	22 Jun 2020	26 Jun 2020	19 Dec 2020	07 Jul 2020	19 Dec 2020	07 Jul 2020
0407_QC302_200623	SE208161.002	LB203653	23 Jun 2020	26 Jun 2020	20 Dec 2020	07 Jul 2020	20 Dec 2020	07 Jul 2020
0407_QC303_200623	SE208161.003	LB203653	23 Jun 2020	26 Jun 2020	20 Dec 2020	07 Jul 2020	20 Dec 2020	07 Jul 2020
0407_QC304_200624	SE208161.004	LB203653	24 Jun 2020	26 Jun 2020	21 Dec 2020	07 Jul 2020	21 Dec 2020	07 Jul 2020
0407_QC305_200624	SE208161.005	LB203653	24 Jun 2020	26 Jun 2020	21 Dec 2020	07 Jul 2020	21 Dec 2020	07 Jul 2020
0407_QC309_200625	SE208161.010	LB203653	25 Jun 2020	26 Jun 2020	22 Dec 2020	07 Jul 2020	22 Dec 2020	07 Jul 2020
0407_QC310_200625	SE208161.011	LB203653	25 Jun 2020	26 Jun 2020	22 Dec 2020	07 Jul 2020	22 Dec 2020	07 Jul 2020
0407_QC311_200626	SE208161.018	LB203653	26 Jun 2020	26 Jun 2020	23 Dec 2020	07 Jul 2020	23 Dec 2020	07 Jul 2020

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH41_0.0_200625	SE208161.006	LB203666	25 Jun 2020	26 Jun 2020	09 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_BH41_0.5_200625	SE208161.007	LB203666	25 Jun 2020	26 Jun 2020	09 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_BH42_0.0_200625	SE208161.008	LB203666	25 Jun 2020	26 Jun 2020	09 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_BH42_0.5_200625	SE208161.009	LB203666	25 Jun 2020	26 Jun 2020	09 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_BH43_0.25_200626	SE208161.012	LB203666	26 Jun 2020	26 Jun 2020	10 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_BH43_0.5_200626	SE208161.013	LB203666	26 Jun 2020	26 Jun 2020	10 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_BH44_0.25_200626	SE208161.014	LB203666	26 Jun 2020	26 Jun 2020	10 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_BH44_0.5_200626	SE208161.015	LB203666	26 Jun 2020	26 Jun 2020	10 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_BH45_0.25_200626	SE208161.016	LB203666	26 Jun 2020	26 Jun 2020	10 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_BH45_0.5_200625	SE208161.017	LB203666	26 Jun 2020	26 Jun 2020	10 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref

HOLDING TIME SUMMARY

SE208161 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

TRH (Total Recoverable Hydrocarbons) in Water (continued)

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC300_200622	SE208161.001	LB203636	22 Jun 2020	26 Jun 2020	29 Jun 2020	07 Jul 2020†	16 Aug 2020	08 Jul 2020
0407_QC302_200623	SE208161.002	LB203636	23 Jun 2020	26 Jun 2020	30 Jun 2020	07 Jul 2020†	16 Aug 2020	08 Jul 2020
0407_QC303_200623	SE208161.003	LB203636	23 Jun 2020	26 Jun 2020	30 Jun 2020	07 Jul 2020†	16 Aug 2020	08 Jul 2020
0407_QC304_200624	SE208161.004	LB203636	24 Jun 2020	26 Jun 2020	01 Jul 2020	07 Jul 2020†	16 Aug 2020	08 Jul 2020
0407_QC305_200624	SE208161.005	LB203636	24 Jun 2020	26 Jun 2020	01 Jul 2020	07 Jul 2020†	16 Aug 2020	08 Jul 2020
0407_QC309_200625	SE208161.010	LB203636	25 Jun 2020	26 Jun 2020	02 Jul 2020	07 Jul 2020†	16 Aug 2020	08 Jul 2020
0407_QC310_200625	SE208161.011	LB203636	25 Jun 2020	26 Jun 2020	02 Jul 2020	07 Jul 2020†	16 Aug 2020	08 Jul 2020
0407_QC311_200626	SE208161.018	LB203636	26 Jun 2020	26 Jun 2020	03 Jul 2020	07 Jul 2020†	16 Aug 2020	08 Jul 2020

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH41_0.0_200625	SE208161.006	LB203665	25 Jun 2020	26 Jun 2020	09 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_BH41_0.5_200625	SE208161.007	LB203665	25 Jun 2020	26 Jun 2020	09 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_BH42_0.0_200625	SE208161.008	LB203665	25 Jun 2020	26 Jun 2020	09 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_BH42_0.5_200625	SE208161.009	LB203665	25 Jun 2020	26 Jun 2020	09 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_BH43_0.25_200626	SE208161.012	LB203665	26 Jun 2020	26 Jun 2020	10 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_BH43_0.5_200626	SE208161.013	LB203665	26 Jun 2020	26 Jun 2020	10 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_BH44_0.25_200626	SE208161.014	LB203665	26 Jun 2020	26 Jun 2020	10 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_BH44_0.5_200626	SE208161.015	LB203665	26 Jun 2020	26 Jun 2020	10 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_BH45_0.25_200626	SE208161.016	LB203665	26 Jun 2020	26 Jun 2020	10 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_BH45_0.5_200625	SE208161.017	LB203665	26 Jun 2020	26 Jun 2020	10 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC300_200622	SE208161.001	LB203754	22 Jun 2020	26 Jun 2020	29 Jun 2020	08 Jul 2020†	17 Aug 2020	09 Jul 2020
0407_QC302_200623	SE208161.002	LB203754	23 Jun 2020	26 Jun 2020	30 Jun 2020	08 Jul 2020†	17 Aug 2020	09 Jul 2020
0407_QC303_200623	SE208161.003	LB203754	23 Jun 2020	26 Jun 2020	30 Jun 2020	08 Jul 2020†	17 Aug 2020	09 Jul 2020
0407_QC304_200624	SE208161.004	LB203754	24 Jun 2020	26 Jun 2020	01 Jul 2020	08 Jul 2020†	17 Aug 2020	09 Jul 2020
0407_QC305_200624	SE208161.005	LB203754	24 Jun 2020	26 Jun 2020	01 Jul 2020	08 Jul 2020†	17 Aug 2020	09 Jul 2020
0407_QC309_200625	SE208161.010	LB203754	25 Jun 2020	26 Jun 2020	02 Jul 2020	08 Jul 2020†	17 Aug 2020	09 Jul 2020
0407_QC310_200625	SE208161.011	LB203754	25 Jun 2020	26 Jun 2020	02 Jul 2020	08 Jul 2020†	17 Aug 2020	09 Jul 2020
0407_QC311_200626	SE208161.018	LB203754	26 Jun 2020	26 Jun 2020	03 Jul 2020	08 Jul 2020†	17 Aug 2020	09 Jul 2020

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH41_0.0_200625	SE208161.006	LB203665	25 Jun 2020	26 Jun 2020	09 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_BH41_0.5_200625	SE208161.007	LB203665	25 Jun 2020	26 Jun 2020	09 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_BH42_0.0_200625	SE208161.008	LB203665	25 Jun 2020	26 Jun 2020	09 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_BH42_0.5_200625	SE208161.009	LB203665	25 Jun 2020	26 Jun 2020	09 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_BH43_0.25_200626	SE208161.012	LB203665	26 Jun 2020	26 Jun 2020	10 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_BH43_0.5_200626	SE208161.013	LB203665	26 Jun 2020	26 Jun 2020	10 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_BH44_0.25_200626	SE208161.014	LB203665	26 Jun 2020	26 Jun 2020	10 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_BH44_0.5_200626	SE208161.015	LB203665	26 Jun 2020	26 Jun 2020	10 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_BH45_0.25_200626	SE208161.016	LB203665	26 Jun 2020	26 Jun 2020	10 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020
0407_BH45_0.5_200625	SE208161.017	LB203665	26 Jun 2020	26 Jun 2020	10 Jul 2020	07 Jul 2020	16 Aug 2020	09 Jul 2020

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC300_200622	SE208161.001	LB203754	22 Jun 2020	26 Jun 2020	29 Jun 2020	08 Jul 2020†	17 Aug 2020	09 Jul 2020
0407_QC302_200623	SE208161.002	LB203754	23 Jun 2020	26 Jun 2020	30 Jun 2020	08 Jul 2020†	17 Aug 2020	09 Jul 2020
0407_QC303_200623	SE208161.003	LB203754	23 Jun 2020	26 Jun 2020	30 Jun 2020	08 Jul 2020†	17 Aug 2020	09 Jul 2020
0407_QC304_200624	SE208161.004	LB203754	24 Jun 2020	26 Jun 2020	01 Jul 2020	08 Jul 2020†	17 Aug 2020	09 Jul 2020
0407_QC305_200624	SE208161.005	LB203754	24 Jun 2020	26 Jun 2020	01 Jul 2020	08 Jul 2020†	17 Aug 2020	09 Jul 2020
0407_QC309_200625	SE208161.010	LB203754	25 Jun 2020	26 Jun 2020	02 Jul 2020	08 Jul 2020†	17 Aug 2020	09 Jul 2020
0407_QC310_200625	SE208161.011	LB203754	25 Jun 2020	26 Jun 2020	02 Jul 2020	08 Jul 2020†	17 Aug 2020	09 Jul 2020
0407_QC311_200626	SE208161.018	LB203754	26 Jun 2020	26 Jun 2020	03 Jul 2020	08 Jul 2020†	17 Aug 2020	09 Jul 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_BH41_0.0_200625	SE208161.006	%	60 - 130%	107
	0407_BH41_0.5_200625	SE208161.007	%	60 - 130%	107
	0407_BH42_0.0_200625	SE208161.008	%	60 - 130%	100
	0407_BH42_0.5_200625	SE208161.009	%	60 - 130%	103

OC Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_QC300_200622	SE208161.001	%	40 - 130%	107
	0407_QC302_200623	SE208161.002	%	40 - 130%	101
	0407_QC303_200623	SE208161.003	%	40 - 130%	91
	0407_QC304_200624	SE208161.004	%	40 - 130%	88
	0407_QC305_200624	SE208161.005	%	40 - 130%	107
	0407_QC309_200625	SE208161.010	%	40 - 130%	86
	0407_QC310_200625	SE208161.011	%	40 - 130%	97
	0407_QC311_200626	SE208161.018	%	40 - 130%	86

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_BH41_0.0_200625	SE208161.006	%	60 - 130%	80
	0407_BH41_0.5_200625	SE208161.007	%	60 - 130%	92
	0407_BH42_0.0_200625	SE208161.008	%	60 - 130%	82
	0407_BH42_0.5_200625	SE208161.009	%	60 - 130%	87
d14-p-terphenyl (Surrogate)	0407_BH41_0.0_200625	SE208161.006	%	60 - 130%	88
	0407_BH41_0.5_200625	SE208161.007	%	60 - 130%	86
	0407_BH42_0.0_200625	SE208161.008	%	60 - 130%	88
	0407_BH42_0.5_200625	SE208161.009	%	60 - 130%	83

OP Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_QC300_200622	SE208161.001	%	40 - 130%	72
	0407_QC302_200623	SE208161.002	%	40 - 130%	70
	0407_QC303_200623	SE208161.003	%	40 - 130%	66
	0407_QC304_200624	SE208161.004	%	40 - 130%	60
	0407_QC305_200624	SE208161.005	%	40 - 130%	52
	0407_QC309_200625	SE208161.010	%	40 - 130%	48
	0407_QC310_200625	SE208161.011	%	40 - 130%	50
	0407_QC311_200626	SE208161.018	%	40 - 130%	44
d14-p-terphenyl (Surrogate)	0407_QC300_200622	SE208161.001	%	40 - 130%	76
	0407_QC302_200623	SE208161.002	%	40 - 130%	86
	0407_QC303_200623	SE208161.003	%	40 - 130%	72
	0407_QC304_200624	SE208161.004	%	40 - 130%	70
	0407_QC305_200624	SE208161.005	%	40 - 130%	84
	0407_QC309_200625	SE208161.010	%	40 - 130%	54
	0407_QC310_200625	SE208161.011	%	40 - 130%	72
	0407_QC311_200626	SE208161.018	%	40 - 130%	66

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_BH41_0.0_200625	SE208161.006	%	70 - 130%	80
	0407_BH41_0.5_200625	SE208161.007	%	70 - 130%	92
	0407_BH42_0.0_200625	SE208161.008	%	70 - 130%	82
	0407_BH42_0.5_200625	SE208161.009	%	70 - 130%	87
	0407_BH43_0.25_200626	SE208161.012	%	70 - 130%	76
	0407_BH43_0.5_200626	SE208161.013	%	70 - 130%	82
	0407_BH44_0.25_200626	SE208161.014	%	70 - 130%	81
	0407_BH44_0.5_200626	SE208161.015	%	70 - 130%	95
	0407_BH45_0.25_200626	SE208161.016	%	70 - 130%	96
	0407_BH45_0.5_200625	SE208161.017	%	70 - 130%	99
d14-p-terphenyl (Surrogate)	0407_BH41_0.0_200625	SE208161.006	%	70 - 130%	88
	0407_BH41_0.5_200625	SE208161.007	%	70 - 130%	86
	0407_BH42_0.0_200625	SE208161.008	%	70 - 130%	88
	0407_BH42_0.5_200625	SE208161.009	%	70 - 130%	83
	0407_BH43_0.25_200626	SE208161.012	%	70 - 130%	91

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d14-p-terphenyl (Surrogate)	0407_BH43_0.5_200626	SE208161.013	%	70 - 130%	75
	0407_BH44_0.25_200626	SE208161.014	%	70 - 130%	82
	0407_BH44_0.5_200626	SE208161.015	%	70 - 130%	88
	0407_BH45_0.25_200626	SE208161.016	%	70 - 130%	92
	0407_BH45_0.5_200625	SE208161.017	%	70 - 130%	91
d5-nitrobenzene (Surrogate)	0407_BH41_0.0_200625	SE208161.006	%	70 - 130%	75
	0407_BH41_0.5_200625	SE208161.007	%	70 - 130%	77
	0407_BH42_0.0_200625	SE208161.008	%	70 - 130%	77
	0407_BH42_0.5_200625	SE208161.009	%	70 - 130%	73
	0407_BH43_0.25_200626	SE208161.012	%	70 - 130%	71
	0407_BH43_0.5_200626	SE208161.013	%	70 - 130%	70
	0407_BH44_0.25_200626	SE208161.014	%	70 - 130%	79
	0407_BH44_0.5_200626	SE208161.015	%	70 - 130%	79
	0407_BH45_0.25_200626	SE208161.016	%	70 - 130%	90
	0407_BH45_0.5_200625	SE208161.017	%	70 - 130%	84

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_QC300_200622	SE208161.001	%	40 - 130%	72
	0407_QC302_200623	SE208161.002	%	40 - 130%	70
	0407_QC303_200623	SE208161.003	%	40 - 130%	66
	0407_QC304_200624	SE208161.004	%	40 - 130%	60
	0407_QC305_200624	SE208161.005	%	40 - 130%	52
	0407_QC309_200625	SE208161.010	%	40 - 130%	48
	0407_QC310_200625	SE208161.011	%	40 - 130%	50
	0407_QC311_200626	SE208161.018	%	40 - 130%	44
d14-p-terphenyl (Surrogate)	0407_QC300_200622	SE208161.001	%	40 - 130%	76
	0407_QC302_200623	SE208161.002	%	40 - 130%	86
	0407_QC303_200623	SE208161.003	%	40 - 130%	72
	0407_QC304_200624	SE208161.004	%	40 - 130%	70
	0407_QC305_200624	SE208161.005	%	40 - 130%	84
	0407_QC309_200625	SE208161.010	%	40 - 130%	54
	0407_QC310_200625	SE208161.011	%	40 - 130%	72
	0407_QC311_200626	SE208161.018	%	40 - 130%	66
d5-nitrobenzene (Surrogate)	0407_QC300_200622	SE208161.001	%	40 - 130%	58
	0407_QC302_200623	SE208161.002	%	40 - 130%	54
	0407_QC303_200623	SE208161.003	%	40 - 130%	42
	0407_QC304_200624	SE208161.004	%	40 - 130%	48
	0407_QC305_200624	SE208161.005	%	40 - 130%	46
	0407_QC309_200625	SE208161.010	%	40 - 130%	44
	0407_QC310_200625	SE208161.011	%	40 - 130%	46
	0407_QC311_200626	SE208161.018	%	40 - 130%	42

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_BH41_0.0_200625	SE208161.006	%	60 - 130%	107
	0407_BH41_0.5_200625	SE208161.007	%	60 - 130%	107
	0407_BH42_0.0_200625	SE208161.008	%	60 - 130%	100
	0407_BH42_0.5_200625	SE208161.009	%	60 - 130%	103

PCBs in Water

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (Surrogate)	0407_QC300_200622	SE208161.001	%	40 - 130%	107
	0407_QC302_200623	SE208161.002	%	40 - 130%	101
	0407_QC303_200623	SE208161.003	%	40 - 130%	91
	0407_QC304_200624	SE208161.004	%	40 - 130%	88
	0407_QC305_200624	SE208161.005	%	40 - 130%	107
	0407_QC309_200625	SE208161.010	%	40 - 130%	86
	0407_QC310_200625	SE208161.011	%	40 - 130%	97
	0407_QC311_200626	SE208161.018	%	40 - 130%	86

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples - Low Level

Method: MA-1523

Parameter	Sample Name	Sample Number	Units

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples - Low Level (continued) **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C2_PFTeDA) Surrogate	0407_QC300_200622	SE208161.001	%	10 - 150%	99
	0407_QC302_200623	SE208161.002	%	10 - 150%	108
	0407_QC303_200623	SE208161.003	%	10 - 150%	93
	0407_QC304_200624	SE208161.004	%	10 - 150%	77
	0407_QC305_200624	SE208161.005	%	10 - 150%	96
	0407_QC309_200625	SE208161.010	%	10 - 150%	114
	0407_QC310_200625	SE208161.011	%	10 - 150%	107
	0407_QC311_200626	SE208161.018	%	10 - 150%	105
(13C2-4:2 FTS) Surrogate	0407_QC300_200622	SE208161.001	%	10 - 150%	81
	0407_QC302_200623	SE208161.002	%	10 - 150%	77
	0407_QC303_200623	SE208161.003	%	10 - 150%	81
	0407_QC304_200624	SE208161.004	%	10 - 150%	75
	0407_QC305_200624	SE208161.005	%	10 - 150%	81
	0407_QC309_200625	SE208161.010	%	10 - 150%	63
	0407_QC310_200625	SE208161.011	%	10 - 150%	80
	0407_QC311_200626	SE208161.018	%	10 - 150%	86
(13C2-6:2 FTS) Surrogate	0407_QC300_200622	SE208161.001	%	10 - 150%	80
	0407_QC302_200623	SE208161.002	%	10 - 150%	79
	0407_QC303_200623	SE208161.003	%	10 - 150%	89
	0407_QC304_200624	SE208161.004	%	10 - 150%	78
	0407_QC305_200624	SE208161.005	%	10 - 150%	80
	0407_QC309_200625	SE208161.010	%	10 - 150%	71
	0407_QC310_200625	SE208161.011	%	10 - 150%	83
	0407_QC311_200626	SE208161.018	%	10 - 150%	84
(13C2-8:2 FTS) Surrogate	0407_QC300_200622	SE208161.001	%	10 - 150%	87
	0407_QC302_200623	SE208161.002	%	10 - 150%	79
	0407_QC303_200623	SE208161.003	%	10 - 150%	81
	0407_QC304_200624	SE208161.004	%	10 - 150%	72
	0407_QC305_200624	SE208161.005	%	10 - 150%	74
	0407_QC309_200625	SE208161.010	%	10 - 150%	68
	0407_QC310_200625	SE208161.011	%	10 - 150%	88
	0407_QC311_200626	SE208161.018	%	10 - 150%	81
(13C2-PFDoA) Surrogate	0407_QC300_200622	SE208161.001	%	10 - 150%	116
	0407_QC302_200623	SE208161.002	%	10 - 150%	123
	0407_QC303_200623	SE208161.003	%	10 - 150%	106
	0407_QC304_200624	SE208161.004	%	10 - 150%	127
	0407_QC305_200624	SE208161.005	%	10 - 150%	117
	0407_QC309_200625	SE208161.010	%	10 - 150%	124
	0407_QC310_200625	SE208161.011	%	10 - 150%	126
	0407_QC311_200626	SE208161.018	%	10 - 150%	106
(13C2-PFHxDA) Surrogate	0407_QC300_200622	SE208161.001	%	10 - 150%	70
	0407_QC302_200623	SE208161.002	%	10 - 150%	80
	0407_QC303_200623	SE208161.003	%	10 - 150%	70
	0407_QC304_200624	SE208161.004	%	10 - 150%	59
	0407_QC305_200624	SE208161.005	%	10 - 150%	76
	0407_QC309_200625	SE208161.010	%	10 - 150%	83
	0407_QC310_200625	SE208161.011	%	10 - 150%	85
	0407_QC311_200626	SE208161.018	%	10 - 150%	73
(13C3-PFBS) Surrogate	0407_QC300_200622	SE208161.001	%	10 - 150%	86
	0407_QC302_200623	SE208161.002	%	10 - 150%	92
	0407_QC303_200623	SE208161.003	%	10 - 150%	91
	0407_QC304_200624	SE208161.004	%	10 - 150%	89
	0407_QC305_200624	SE208161.005	%	10 - 150%	94
	0407_QC309_200625	SE208161.010	%	10 - 150%	84
	0407_QC310_200625	SE208161.011	%	10 - 150%	95
	0407_QC311_200626	SE208161.018	%	10 - 150%	98
(13C3-PFHxS) Surrogate	0407_QC300_200622	SE208161.001	%	10 - 150%	105
	0407_QC302_200623	SE208161.002	%	10 - 150%	92
	0407_QC303_200623	SE208161.003	%	10 - 150%	113
	0407_QC304_200624	SE208161.004	%	10 - 150%	96
	0407_QC305_200624	SE208161.005	%	10 - 150%	104

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples - Low Level (continued) **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C3-PFHxS) Surrogate	0407_QC309_200625	SE208161.010	%	10 - 150%	96
	0407_QC310_200625	SE208161.011	%	10 - 150%	99
	0407_QC311_200626	SE208161.018	%	10 - 150%	104
(13C4_PFOA) Surrogate	0407_QC300_200622	SE208161.001	%	10 - 150%	100
	0407_QC302_200623	SE208161.002	%	10 - 150%	96
	0407_QC303_200623	SE208161.003	%	10 - 150%	103
	0407_QC304_200624	SE208161.004	%	10 - 150%	100
	0407_QC305_200624	SE208161.005	%	10 - 150%	95
	0407_QC309_200625	SE208161.010	%	10 - 150%	101
	0407_QC310_200625	SE208161.011	%	10 - 150%	105
	0407_QC311_200626	SE208161.018	%	10 - 150%	92
(13C4-PFBA) Surrogate	0407_QC300_200622	SE208161.001	%	10 - 150%	101
	0407_QC302_200623	SE208161.002	%	10 - 150%	102
	0407_QC303_200623	SE208161.003	%	10 - 150%	102
	0407_QC304_200624	SE208161.004	%	10 - 150%	103
	0407_QC305_200624	SE208161.005	%	10 - 150%	99
	0407_QC309_200625	SE208161.010	%	10 - 150%	102
	0407_QC310_200625	SE208161.011	%	10 - 150%	102
	0407_QC311_200626	SE208161.018	%	10 - 150%	102
(13C4-PFHpA) Surrogate	0407_QC300_200622	SE208161.001	%	10 - 150%	105
	0407_QC302_200623	SE208161.002	%	10 - 150%	102
	0407_QC303_200623	SE208161.003	%	10 - 150%	100
	0407_QC304_200624	SE208161.004	%	10 - 150%	104
	0407_QC305_200624	SE208161.005	%	10 - 150%	99
	0407_QC309_200625	SE208161.010	%	10 - 150%	106
	0407_QC310_200625	SE208161.011	%	10 - 150%	102
	0407_QC311_200626	SE208161.018	%	10 - 150%	102
(13C5-PFHxA) Surrogate	0407_QC300_200622	SE208161.001	%	10 - 150%	100
	0407_QC302_200623	SE208161.002	%	10 - 150%	103
	0407_QC303_200623	SE208161.003	%	10 - 150%	99
	0407_QC304_200624	SE208161.004	%	10 - 150%	102
	0407_QC305_200624	SE208161.005	%	10 - 150%	93
	0407_QC309_200625	SE208161.010	%	10 - 150%	92
	0407_QC310_200625	SE208161.011	%	10 - 150%	101
	0407_QC311_200626	SE208161.018	%	10 - 150%	99
(13C5-PFPeA) Surrogate	0407_QC300_200622	SE208161.001	%	10 - 150%	111
	0407_QC302_200623	SE208161.002	%	10 - 150%	113
	0407_QC303_200623	SE208161.003	%	10 - 150%	109
	0407_QC304_200624	SE208161.004	%	10 - 150%	111
	0407_QC305_200624	SE208161.005	%	10 - 150%	107
	0407_QC309_200625	SE208161.010	%	10 - 150%	115
	0407_QC310_200625	SE208161.011	%	10 - 150%	111
	0407_QC311_200626	SE208161.018	%	10 - 150%	118
(13C6-PFDA) Surrogate	0407_QC300_200622	SE208161.001	%	10 - 150%	100
	0407_QC302_200623	SE208161.002	%	10 - 150%	89
	0407_QC303_200623	SE208161.003	%	10 - 150%	82
	0407_QC304_200624	SE208161.004	%	10 - 150%	104
	0407_QC305_200624	SE208161.005	%	10 - 150%	79
	0407_QC309_200625	SE208161.010	%	10 - 150%	96
	0407_QC310_200625	SE208161.011	%	10 - 150%	112
	0407_QC311_200626	SE208161.018	%	10 - 150%	86
(13C7-PFUdA) Surrogate	0407_QC300_200622	SE208161.001	%	10 - 150%	111
	0407_QC302_200623	SE208161.002	%	10 - 150%	123
	0407_QC303_200623	SE208161.003	%	10 - 150%	102
	0407_QC304_200624	SE208161.004	%	10 - 150%	129
	0407_QC305_200624	SE208161.005	%	10 - 150%	114
	0407_QC309_200625	SE208161.010	%	10 - 150%	120
	0407_QC310_200625	SE208161.011	%	10 - 150%	126
	0407_QC311_200626	SE208161.018	%	10 - 150%	113
(13C8-PFOS) Surrogate	0407_QC300_200622	SE208161.001	%	10 - 150%	103
	0407_QC302_200623	SE208161.002	%	10 - 150%	103

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples - Low Level (continued) **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C8-PFOS) Surrogate	0407_QC303_200623	SE208161.003	%	10 - 150%	99
	0407_QC304_200624	SE208161.004	%	10 - 150%	120
	0407_QC305_200624	SE208161.005	%	10 - 150%	97
	0407_QC309_200625	SE208161.010	%	10 - 150%	96
	0407_QC310_200625	SE208161.011	%	10 - 150%	93
	0407_QC311_200626	SE208161.018	%	10 - 150%	97
(13C8-PFOSA) Surrogate	0407_QC300_200622	SE208161.001	%	10 - 150%	53
	0407_QC302_200623	SE208161.002	%	10 - 150%	53
	0407_QC303_200623	SE208161.003	%	10 - 150%	43
	0407_QC304_200624	SE208161.004	%	10 - 150%	65
	0407_QC305_200624	SE208161.005	%	10 - 150%	47
	0407_QC309_200625	SE208161.010	%	10 - 150%	49
	0407_QC310_200625	SE208161.011	%	10 - 150%	46
	0407_QC311_200626	SE208161.018	%	10 - 150%	53
(13C9-PFNA) Surrogate	0407_QC300_200622	SE208161.001	%	10 - 150%	96
	0407_QC302_200623	SE208161.002	%	10 - 150%	99
	0407_QC303_200623	SE208161.003	%	10 - 150%	99
	0407_QC304_200624	SE208161.004	%	10 - 150%	93
	0407_QC305_200624	SE208161.005	%	10 - 150%	102
	0407_QC309_200625	SE208161.010	%	10 - 150%	94
	0407_QC310_200625	SE208161.011	%	10 - 150%	92
	0407_QC311_200626	SE208161.018	%	10 - 150%	92
(D3-N-MeFOSA) Surrogate	0407_QC300_200622	SE208161.001	%	10 - 150%	71
	0407_QC302_200623	SE208161.002	%	10 - 150%	74
	0407_QC303_200623	SE208161.003	%	10 - 150%	56
	0407_QC304_200624	SE208161.004	%	10 - 150%	69
	0407_QC305_200624	SE208161.005	%	10 - 150%	60
	0407_QC309_200625	SE208161.010	%	10 - 150%	62
	0407_QC310_200625	SE208161.011	%	10 - 150%	50
	0407_QC311_200626	SE208161.018	%	10 - 150%	58
(D3-N-MeFOSAA) Surrogate	0407_QC300_200622	SE208161.001	%	10 - 150%	78
	0407_QC302_200623	SE208161.002	%	10 - 150%	95
	0407_QC303_200623	SE208161.003	%	10 - 150%	74
	0407_QC304_200624	SE208161.004	%	10 - 150%	80
	0407_QC305_200624	SE208161.005	%	10 - 150%	75
	0407_QC309_200625	SE208161.010	%	10 - 150%	85
	0407_QC310_200625	SE208161.011	%	10 - 150%	67
	0407_QC311_200626	SE208161.018	%	10 - 150%	94
(D5-N-EtFOSA) Surrogate	0407_QC300_200622	SE208161.001	%	10 - 150%	71
	0407_QC302_200623	SE208161.002	%	10 - 150%	73
	0407_QC303_200623	SE208161.003	%	10 - 150%	63
	0407_QC304_200624	SE208161.004	%	10 - 150%	79
	0407_QC305_200624	SE208161.005	%	10 - 150%	66
	0407_QC309_200625	SE208161.010	%	10 - 150%	65
	0407_QC310_200625	SE208161.011	%	10 - 150%	57
	0407_QC311_200626	SE208161.018	%	10 - 150%	72
(D5-N-EtFOSAA) Surrogate	0407_QC300_200622	SE208161.001	%	10 - 150%	78
	0407_QC302_200623	SE208161.002	%	10 - 150%	90
	0407_QC303_200623	SE208161.003	%	10 - 150%	71
	0407_QC304_200624	SE208161.004	%	10 - 150%	87
	0407_QC305_200624	SE208161.005	%	10 - 150%	75
	0407_QC309_200625	SE208161.010	%	10 - 150%	79
	0407_QC310_200625	SE208161.011	%	10 - 150%	71
	0407_QC311_200626	SE208161.018	%	10 - 150%	98
(D7-N-MeFOSE) Surrogate	0407_QC300_200622	SE208161.001	%	10 - 150%	63
	0407_QC302_200623	SE208161.002	%	10 - 150%	54
	0407_QC303_200623	SE208161.003	%	10 - 150%	48
	0407_QC304_200624	SE208161.004	%	10 - 150%	62
	0407_QC305_200624	SE208161.005	%	10 - 150%	49
	0407_QC309_200625	SE208161.010	%	10 - 150%	48
	0407_QC310_200625	SE208161.011	%	10 - 150%	43

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples - Low Level (continued) — **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(D7-N-MeFOSE) Surrogate	0407_QC311_200626	SE208161.018	%	10 - 150%	57
(D9-N-EtFOSE) Surrogate	0407_QC300_200622	SE208161.001	%	10 - 150%	46
	0407_QC302_200623	SE208161.002	%	10 - 150%	56
	0407_QC303_200623	SE208161.003	%	10 - 150%	45
	0407_QC304_200624	SE208161.004	%	10 - 150%	49
	0407_QC305_200624	SE208161.005	%	10 - 150%	45
	0407_QC309_200625	SE208161.010	%	10 - 150%	47
	0407_QC310_200625	SE208161.011	%	10 - 150%	40
	0407_QC311_200626	SE208161.018	%	10 - 150%	50

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level — **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C2-4:2FTS) Surrogate	0407_BH41_0.0_200625	SE208161.006	%	10 - 150%	57
	0407_BH41_0.5_200625	SE208161.007	%	10 - 150%	68
	0407_BH42_0.0_200625	SE208161.008	%	10 - 150%	61
	0407_BH42_0.5_200625	SE208161.009	%	10 - 150%	60
(13C2-6:2FTS) Surrogate	0407_BH41_0.0_200625	SE208161.006	%	10 - 150%	56
	0407_BH41_0.5_200625	SE208161.007	%	10 - 150%	63
	0407_BH42_0.0_200625	SE208161.008	%	10 - 150%	65
	0407_BH42_0.5_200625	SE208161.009	%	10 - 150%	66
(13C2-8:2FTS) Surrogate	0407_BH41_0.0_200625	SE208161.006	%	10 - 150%	60
	0407_BH41_0.5_200625	SE208161.007	%	10 - 150%	60
	0407_BH42_0.0_200625	SE208161.008	%	10 - 150%	74
	0407_BH42_0.5_200625	SE208161.009	%	10 - 150%	70
(13C2-PFDoA) Surrogate	0407_BH41_0.0_200625	SE208161.006	%	10 - 150%	87
	0407_BH41_0.5_200625	SE208161.007	%	10 - 150%	80
	0407_BH42_0.0_200625	SE208161.008	%	10 - 150%	89
	0407_BH42_0.5_200625	SE208161.009	%	10 - 150%	78
(13C2-PFHxDA) Surrogate	0407_BH41_0.0_200625	SE208161.006	%	10 - 150%	9 †
	0407_BH41_0.5_200625	SE208161.007	%	10 - 150%	17
	0407_BH42_0.0_200625	SE208161.008	%	10 - 150%	11
	0407_BH42_0.5_200625	SE208161.009	%	10 - 150%	13
(13C2-PFTeDA) Surrogate	0407_BH41_0.0_200625	SE208161.006	%	10 - 130%	40
	0407_BH41_0.5_200625	SE208161.007	%	10 - 130%	56
	0407_BH42_0.0_200625	SE208161.008	%	10 - 130%	45
	0407_BH42_0.5_200625	SE208161.009	%	10 - 130%	47
(13C3-PFBS) Surrogate	0407_BH41_0.0_200625	SE208161.006	%	10 - 150%	99
	0407_BH41_0.5_200625	SE208161.007	%	10 - 150%	89
	0407_BH42_0.0_200625	SE208161.008	%	10 - 150%	91
	0407_BH42_0.5_200625	SE208161.009	%	10 - 150%	88
(13C3-PFHxS) Surrogate	0407_BH41_0.0_200625	SE208161.006	%	10 - 150%	105
	0407_BH41_0.5_200625	SE208161.007	%	10 - 150%	99
	0407_BH42_0.0_200625	SE208161.008	%	10 - 150%	98
	0407_BH42_0.5_200625	SE208161.009	%	10 - 150%	102
(13C4-PFBA) Surrogate	0407_BH41_0.0_200625	SE208161.006	%	10 - 150%	103
	0407_BH41_0.5_200625	SE208161.007	%	10 - 150%	101
	0407_BH42_0.0_200625	SE208161.008	%	10 - 150%	104
	0407_BH42_0.5_200625	SE208161.009	%	10 - 150%	100
(13C4-PFHpA) Surrogate	0407_BH41_0.0_200625	SE208161.006	%	10 - 150%	100
	0407_BH41_0.5_200625	SE208161.007	%	10 - 150%	105
	0407_BH42_0.0_200625	SE208161.008	%	10 - 150%	104
	0407_BH42_0.5_200625	SE208161.009	%	10 - 150%	100
(13C4-PFOA) Surrogate	0407_BH41_0.0_200625	SE208161.006	%	10 - 150%	99
	0407_BH41_0.5_200625	SE208161.007	%	10 - 150%	100
	0407_BH42_0.0_200625	SE208161.008	%	10 - 150%	101
	0407_BH42_0.5_200625	SE208161.009	%	10 - 150%	99
(13C5_PFPeA) Surrogate	0407_BH41_0.0_200625	SE208161.006	%	10 - 150%	115
	0407_BH41_0.5_200625	SE208161.007	%	10 - 150%	108
	0407_BH42_0.0_200625	SE208161.008	%	10 - 150%	117
	0407_BH42_0.5_200625	SE208161.009	%	10 - 150%	111
(13C5-PFHxA) Surrogate	0407_BH41_0.0_200625	SE208161.006	%	10 - 150%	94

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level (continued) — **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C5-PFHxA) Surrogate	0407_BH41_0.5_200625	SE208161.007	%	10 - 150%	98
	0407_BH42_0.0_200625	SE208161.008	%	10 - 150%	98
	0407_BH42_0.5_200625	SE208161.009	%	10 - 150%	92
(13C6-PFDA) Surrogate	0407_BH41_0.0_200625	SE208161.006	%	10 - 150%	107
	0407_BH41_0.5_200625	SE208161.007	%	10 - 150%	110
	0407_BH42_0.0_200625	SE208161.008	%	10 - 150%	95
	0407_BH42_0.5_200625	SE208161.009	%	10 - 150%	105
(13C7-PFUdA) Surrogate	0407_BH41_0.0_200625	SE208161.006	%	10 - 150%	95
	0407_BH41_0.5_200625	SE208161.007	%	10 - 150%	94
	0407_BH42_0.0_200625	SE208161.008	%	10 - 150%	98
	0407_BH42_0.5_200625	SE208161.009	%	10 - 150%	80
(13C8-PFOS) Surrogate	0407_BH41_0.0_200625	SE208161.006	%	10 - 150%	105
	0407_BH41_0.5_200625	SE208161.007	%	10 - 150%	120
	0407_BH42_0.0_200625	SE208161.008	%	10 - 150%	107
	0407_BH42_0.5_200625	SE208161.009	%	10 - 150%	88
(13C8-PFOSA) Surrogate	0407_BH41_0.0_200625	SE208161.006	%	10 - 150%	84
	0407_BH41_0.5_200625	SE208161.007	%	10 - 150%	76
	0407_BH42_0.0_200625	SE208161.008	%	10 - 150%	87
	0407_BH42_0.5_200625	SE208161.009	%	10 - 150%	66
(13C9-PFNA) Surrogate	0407_BH41_0.0_200625	SE208161.006	%	10 - 150%	94
	0407_BH41_0.5_200625	SE208161.007	%	10 - 150%	96
	0407_BH42_0.0_200625	SE208161.008	%	10 - 150%	97
	0407_BH42_0.5_200625	SE208161.009	%	10 - 150%	104
(D3-N-MeFOSA) Surrogate	0407_BH41_0.0_200625	SE208161.006	%	10 - 150%	55
	0407_BH41_0.5_200625	SE208161.007	%	10 - 150%	61
	0407_BH42_0.0_200625	SE208161.008	%	10 - 150%	59
	0407_BH42_0.5_200625	SE208161.009	%	10 - 150%	48
(D3-N-MeFOSAA) Surrogate	0407_BH41_0.0_200625	SE208161.006	%	10 - 150%	80
	0407_BH41_0.5_200625	SE208161.007	%	10 - 150%	78
	0407_BH42_0.0_200625	SE208161.008	%	10 - 150%	83
	0407_BH42_0.5_200625	SE208161.009	%	10 - 150%	73
(D5-N-EtFOSA) Surrogate	0407_BH41_0.0_200625	SE208161.006	%	10 - 150%	59
	0407_BH41_0.5_200625	SE208161.007	%	10 - 150%	58
	0407_BH42_0.0_200625	SE208161.008	%	10 - 150%	52
	0407_BH42_0.5_200625	SE208161.009	%	10 - 150%	47
(D5-N-EtFOSAA) Surrogate	0407_BH41_0.0_200625	SE208161.006	%	10 - 150%	85
	0407_BH41_0.5_200625	SE208161.007	%	10 - 150%	73
	0407_BH42_0.0_200625	SE208161.008	%	10 - 150%	76
	0407_BH42_0.5_200625	SE208161.009	%	10 - 150%	71
(D7-N-MeFOSE) Surrogate	0407_BH41_0.0_200625	SE208161.006	%	10 - 150%	68
	0407_BH41_0.5_200625	SE208161.007	%	10 - 150%	76
	0407_BH42_0.0_200625	SE208161.008	%	10 - 150%	64
	0407_BH42_0.5_200625	SE208161.009	%	10 - 150%	56
(D9-N-EtFOSE) Surrogate	0407_BH41_0.0_200625	SE208161.006	%	10 - 150%	55
	0407_BH41_0.5_200625	SE208161.007	%	10 - 150%	58
	0407_BH42_0.0_200625	SE208161.008	%	10 - 150%	70
	0407_BH42_0.5_200625	SE208161.009	%	10 - 150%	51

Speciated Phenols in Soil — **Method: ME-(AU)-[ENV]AN420**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	0407_BH43_0.25_200626	SE208161.012	%	70 - 130%	107
	0407_BH43_0.5_200626	SE208161.013	%	70 - 130%	89
	0407_BH44_0.25_200626	SE208161.014	%	70 - 130%	77
	0407_BH44_0.5_200626	SE208161.015	%	70 - 130%	88
	0407_BH45_0.25_200626	SE208161.016	%	70 - 130%	94
	0407_BH45_0.5_200625	SE208161.017	%	70 - 130%	115
d5-phenol (Surrogate)	0407_BH43_0.25_200626	SE208161.012	%	50 - 130%	85
	0407_BH43_0.5_200626	SE208161.013	%	50 - 130%	84
	0407_BH44_0.25_200626	SE208161.014	%	50 - 130%	82
	0407_BH44_0.5_200626	SE208161.015	%	50 - 130%	84
	0407_BH45_0.25_200626	SE208161.016	%	50 - 130%	82

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d5-phenol (Surrogate)	0407_BH45_0.5_200625	SE208161.017	%	50 - 130%	83

Speciated Phenols in Water

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	0407_QC300_200622	SE208161.001	%	40 - 130%	68
	0407_QC302_200623	SE208161.002	%	40 - 130%	79
	0407_QC303_200623	SE208161.003	%	40 - 130%	65
	0407_QC304_200624	SE208161.004	%	40 - 130%	60
	0407_QC305_200624	SE208161.005	%	40 - 130%	76
	0407_QC309_200625	SE208161.010	%	40 - 130%	43
	0407_QC310_200625	SE208161.011	%	40 - 130%	64
	0407_QC311_200626	SE208161.018	%	40 - 130%	57
d5-phenol (Surrogate)	0407_QC300_200622	SE208161.001	%	20 - 90%	54
	0407_QC302_200623	SE208161.002	%	20 - 90%	61
	0407_QC303_200623	SE208161.003	%	20 - 90%	50
	0407_QC304_200624	SE208161.004	%	20 - 90%	45
	0407_QC305_200624	SE208161.005	%	20 - 90%	50
	0407_QC309_200625	SE208161.010	%	20 - 90%	42
	0407_QC310_200625	SE208161.011	%	20 - 90%	45
	0407_QC311_200626	SE208161.018	%	20 - 90%	41

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_BH41_0.0_200625	SE208161.006	%	60 - 130%	82
	0407_BH41_0.5_200625	SE208161.007	%	60 - 130%	90
	0407_BH42_0.0_200625	SE208161.008	%	60 - 130%	96
	0407_BH42_0.5_200625	SE208161.009	%	60 - 130%	80
	0407_BH43_0.25_200626	SE208161.012	%	60 - 130%	88
	0407_BH43_0.5_200626	SE208161.013	%	60 - 130%	87
	0407_BH44_0.25_200626	SE208161.014	%	60 - 130%	98
	0407_BH44_0.5_200626	SE208161.015	%	60 - 130%	99
	0407_BH45_0.25_200626	SE208161.016	%	60 - 130%	91
	0407_BH45_0.5_200625	SE208161.017	%	60 - 130%	94
d4-1,2-dichloroethane (Surrogate)	0407_BH41_0.0_200625	SE208161.006	%	60 - 130%	74
	0407_BH41_0.5_200625	SE208161.007	%	60 - 130%	85
	0407_BH42_0.0_200625	SE208161.008	%	60 - 130%	82
	0407_BH42_0.5_200625	SE208161.009	%	60 - 130%	86
	0407_BH43_0.25_200626	SE208161.012	%	60 - 130%	73
	0407_BH43_0.5_200626	SE208161.013	%	60 - 130%	74
	0407_BH44_0.25_200626	SE208161.014	%	60 - 130%	81
	0407_BH44_0.5_200626	SE208161.015	%	60 - 130%	95
	0407_BH45_0.25_200626	SE208161.016	%	60 - 130%	95
	0407_BH45_0.5_200625	SE208161.017	%	60 - 130%	93
d8-toluene (Surrogate)	0407_BH41_0.0_200625	SE208161.006	%	60 - 130%	73
	0407_BH41_0.5_200625	SE208161.007	%	60 - 130%	87
	0407_BH42_0.0_200625	SE208161.008	%	60 - 130%	86
	0407_BH42_0.5_200625	SE208161.009	%	60 - 130%	79
	0407_BH43_0.25_200626	SE208161.012	%	60 - 130%	74
	0407_BH43_0.5_200626	SE208161.013	%	60 - 130%	83
	0407_BH44_0.25_200626	SE208161.014	%	60 - 130%	87
	0407_BH44_0.5_200626	SE208161.015	%	60 - 130%	89
	0407_BH45_0.25_200626	SE208161.016	%	60 - 130%	81
	0407_BH45_0.5_200625	SE208161.017	%	60 - 130%	87

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_QC300_200622	SE208161.001	%	40 - 130%	100
	0407_QC302_200623	SE208161.002	%	40 - 130%	97
	0407_QC303_200623	SE208161.003	%	40 - 130%	100
	0407_QC304_200624	SE208161.004	%	40 - 130%	100
	0407_QC305_200624	SE208161.005	%	40 - 130%	103
	0407_QC309_200625	SE208161.010	%	40 - 130%	100

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOCs in Water (continued)

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_QC310_200625	SE208161.011	%	40 - 130%	101
	0407_QC311_200626	SE208161.018	%	40 - 130%	100
d4-1,2-dichloroethane (Surrogate)	0407_QC300_200622	SE208161.001	%	40 - 130%	110
	0407_QC302_200623	SE208161.002	%	40 - 130%	116
	0407_QC303_200623	SE208161.003	%	40 - 130%	105
	0407_QC304_200624	SE208161.004	%	40 - 130%	108
	0407_QC305_200624	SE208161.005	%	40 - 130%	125
	0407_QC309_200625	SE208161.010	%	40 - 130%	105
	0407_QC310_200625	SE208161.011	%	40 - 130%	104
	0407_QC311_200626	SE208161.018	%	40 - 130%	107
d8-toluene (Surrogate)	0407_QC300_200622	SE208161.001	%	40 - 130%	100
	0407_QC302_200623	SE208161.002	%	40 - 130%	72
	0407_QC303_200623	SE208161.003	%	40 - 130%	99
	0407_QC304_200624	SE208161.004	%	40 - 130%	100
	0407_QC305_200624	SE208161.005	%	40 - 130%	102
	0407_QC309_200625	SE208161.010	%	40 - 130%	99
	0407_QC310_200625	SE208161.011	%	40 - 130%	101
	0407_QC311_200626	SE208161.018	%	40 - 130%	99

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_BH41_0.0_200625	SE208161.006	%	60 - 130%	82
	0407_BH41_0.5_200625	SE208161.007	%	60 - 130%	90
	0407_BH42_0.0_200625	SE208161.008	%	60 - 130%	96
	0407_BH42_0.5_200625	SE208161.009	%	60 - 130%	80
	0407_BH43_0.25_200626	SE208161.012	%	60 - 130%	88
	0407_BH43_0.5_200626	SE208161.013	%	60 - 130%	87
	0407_BH44_0.25_200626	SE208161.014	%	60 - 130%	98
	0407_BH44_0.5_200626	SE208161.015	%	60 - 130%	99
	0407_BH45_0.25_200626	SE208161.016	%	60 - 130%	91
	0407_BH45_0.5_200625	SE208161.017	%	60 - 130%	94
d4-1,2-dichloroethane (Surrogate)	0407_BH41_0.0_200625	SE208161.006	%	60 - 130%	74
	0407_BH41_0.5_200625	SE208161.007	%	60 - 130%	85
	0407_BH42_0.0_200625	SE208161.008	%	60 - 130%	82
	0407_BH42_0.5_200625	SE208161.009	%	60 - 130%	86
	0407_BH43_0.25_200626	SE208161.012	%	60 - 130%	73
	0407_BH43_0.5_200626	SE208161.013	%	60 - 130%	74
	0407_BH44_0.25_200626	SE208161.014	%	60 - 130%	81
	0407_BH44_0.5_200626	SE208161.015	%	60 - 130%	95
	0407_BH45_0.25_200626	SE208161.016	%	60 - 130%	95
	0407_BH45_0.5_200625	SE208161.017	%	60 - 130%	93
d8-toluene (Surrogate)	0407_BH41_0.0_200625	SE208161.006	%	60 - 130%	73
	0407_BH41_0.5_200625	SE208161.007	%	60 - 130%	87
	0407_BH42_0.0_200625	SE208161.008	%	60 - 130%	86
	0407_BH42_0.5_200625	SE208161.009	%	60 - 130%	79
	0407_BH43_0.25_200626	SE208161.012	%	60 - 130%	74
	0407_BH43_0.5_200626	SE208161.013	%	60 - 130%	83
	0407_BH44_0.25_200626	SE208161.014	%	60 - 130%	87
	0407_BH44_0.5_200626	SE208161.015	%	60 - 130%	89
	0407_BH45_0.25_200626	SE208161.016	%	60 - 130%	81
	0407_BH45_0.5_200625	SE208161.017	%	60 - 130%	87

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_QC300_200622	SE208161.001	%	40 - 130%	100
	0407_QC302_200623	SE208161.002	%	40 - 130%	97
	0407_QC303_200623	SE208161.003	%	40 - 130%	100
	0407_QC304_200624	SE208161.004	%	40 - 130%	100
	0407_QC305_200624	SE208161.005	%	40 - 130%	103
	0407_QC309_200625	SE208161.010	%	40 - 130%	100
	0407_QC310_200625	SE208161.011	%	40 - 130%	101
	0407_QC311_200626	SE208161.018	%	40 - 130%	100

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Water (continued) — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d4-1,2-dichloroethane (Surrogate)	0407_QC300_200622	SE208161.001	%	60 - 130%	110
	0407_QC302_200623	SE208161.002	%	60 - 130%	116
	0407_QC303_200623	SE208161.003	%	60 - 130%	105
	0407_QC304_200624	SE208161.004	%	60 - 130%	108
	0407_QC305_200624	SE208161.005	%	60 - 130%	125
	0407_QC309_200625	SE208161.010	%	60 - 130%	105
	0407_QC310_200625	SE208161.011	%	60 - 130%	104
	0407_QC311_200626	SE208161.018	%	60 - 130%	107
d8-toluene (Surrogate)	0407_QC300_200622	SE208161.001	%	40 - 130%	100
	0407_QC302_200623	SE208161.002	%	40 - 130%	72
	0407_QC303_200623	SE208161.003	%	40 - 130%	99
	0407_QC304_200624	SE208161.004	%	40 - 130%	100
	0407_QC305_200624	SE208161.005	%	40 - 130%	102
	0407_QC309_200625	SE208161.010	%	40 - 130%	99
	0407_QC310_200625	SE208161.011	%	40 - 130%	101
	0407_QC311_200626	SE208161.018	%	40 - 130%	99

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

Sample Number	Parameter	Units	LOR	Result
LB203763.001	Mercury	mg/L	0.0001	<0.0001

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result
LB203728.001	Mercury	mg/kg	0.05	<0.05

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203666.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	88

OC Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB203636.001	Alpha BHC	µg/L	0.1	<0.1
	Hexachlorobenzene (HCB)	µg/L	0.1	<0.1
	Beta BHC	µg/L	0.1	<0.1
	Lindane (gamma BHC)	µg/L	0.1	<0.1
	Delta BHC	µg/L	0.1	<0.1
	Heptachlor	µg/L	0.1	<0.1
	Aldrin	µg/L	0.1	<0.1
	Heptachlor epoxide	µg/L	0.1	<0.1
	Gamma Chlordane	µg/L	0.1	<0.1
	Alpha Chlordane	µg/L	0.1	<0.1
	Alpha Endosulfan	µg/L	0.1	<0.1
	p,p'-DDE	µg/L	0.1	<0.1
	Dieldrin	µg/L	0.1	<0.1
	Endrin	µg/L	0.1	<0.1
	Beta Endosulfan	µg/L	0.1	<0.1
	p,p'-DDD	µg/L	0.1	<0.1
	Endosulfan sulphate	µg/L	0.1	<0.1
	p,p'-DDT	µg/L	0.1	<0.1
	Endrin ketone	µg/L	0.1	<0.1
	Methoxychlor	µg/L	0.1	<0.1
	Endrin aldehyde	µg/L	0.1	<0.1
	Isodrin	µg/L	0.1	<0.1
	Mirex	µg/L	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

OC Pesticides in Water (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203636.001	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	94

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203666.001		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	94
		d14-p-terphenyl (Surrogate)	%	-	90

OP Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203636.001		Dichlorvos	µg/L	0.5	<0.5
		Dimethoate	µg/L	0.5	<0.5
		Diazinon (Dimpylate)	µg/L	0.5	<0.5
		Fenitrothion	µg/L	0.2	<0.2
		Malathion	µg/L	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	µg/L	0.2	<0.2
		Parathion-ethyl (Parathion)	µg/L	0.2	<0.2
		Bromophos Ethyl	µg/L	0.2	<0.2
		Methidathion	µg/L	0.5	<0.5
		Ethion	µg/L	0.2	<0.2
		Azinphos-methyl	µg/L	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	72
		d14-p-terphenyl (Surrogate)	%	-	98

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203666.001		Naphthalene	mg/kg	0.1	<0.1
		2-methylnaphthalene	mg/kg	0.1	<0.1
		1-methylnaphthalene	mg/kg	0.1	<0.1
		Acenaphthylene	mg/kg	0.1	<0.1
		Acenaphthene	mg/kg	0.1	<0.1
		Fluorene	mg/kg	0.1	<0.1
		Phenanthrene	mg/kg	0.1	<0.1
		Anthracene	mg/kg	0.1	<0.1
		Fluoranthene	mg/kg	0.1	<0.1
		Pyrene	mg/kg	0.1	<0.1
		Benzo(a)anthracene	mg/kg	0.1	<0.1
		Chrysene	mg/kg	0.1	<0.1
		Benzo(a)pyrene	mg/kg	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	80
		2-fluorobiphenyl (Surrogate)	%	-	94
		d14-p-terphenyl (Surrogate)	%	-	90

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203636.001		Naphthalene	µg/L	0.1	<0.1
		2-methylnaphthalene	µg/L	0.1	<0.1
		1-methylnaphthalene	µg/L	0.1	<0.1
		Acenaphthylene	µg/L	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Water (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203636.001		Acenaphthene	µg/L	0.1	<0.1
		Fluorene	µg/L	0.1	<0.1
		Phenanthrene	µg/L	0.1	<0.1
		Anthracene	µg/L	0.1	<0.1
		Fluoranthene	µg/L	0.1	<0.1
		Pyrene	µg/L	0.1	<0.1
		Benzo(a)anthracene	µg/L	0.1	<0.1
		Chrysene	µg/L	0.1	<0.1
		Benzo(a)pyrene	µg/L	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1
		Dibenzo(ah)anthracene	µg/L	0.1	<0.1
		Benzo(ghi)perylene	µg/L	0.1	<0.1
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	64
		2-fluorobiphenyl (Surrogate)	%	-	72
		d14-p-terphenyl (Surrogate)	%	-	98

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203666.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	88

PCBs in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203636.001		Arochlor 1016	µg/L	1	<1
		Arochlor 1221	µg/L	1	<1
		Arochlor 1232	µg/L	1	<1
		Arochlor 1242	µg/L	1	<1
		Arochlor 1248	µg/L	1	<1
		Arochlor 1254	µg/L	1	<1
		Arochlor 1260	µg/L	1	<1
		Arochlor 1262	µg/L	1	<1
		Arochlor 1268	µg/L	1	<1

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203666.001		Phenol	mg/kg	0.5	<0.5
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5
		2-nitrophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
		Pentachlorophenol	mg/kg	0.5	<0.5
		2,4-dinitrophenol	mg/kg	2	<2
		4-chloro-3-methylphenol	mg/kg	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	83
		d5-phenol (Surrogate)	%	-	81

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Speciated Phenols in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203636.001		Phenol	µg/L	0.5	<0.5
		2-methyl phenol (o-cresol)	µg/L	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	µg/L	1	<1
		2-chlorophenol	µg/L	0.5	<0.5
		2,4-dimethylphenol	µg/L	0.5	<0.5
		2,6-dichlorophenol	µg/L	0.5	<0.5
		2,4-dichlorophenol	µg/L	0.5	<0.5
		2,4,6-trichlorophenol	µg/L	0.5	<0.5
		2-nitrophenol	µg/L	0.5	<0.5
		4-nitrophenol	µg/L	1	<1
		2,4,5-trichlorophenol	µg/L	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	µg/L	1	<1
		Pentachlorophenol	µg/L	0.5	<0.5
		2,4-dinitrophenol	µg/L	2	<2
		4-chloro-3-methylphenol	µg/L	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	83
		d5-phenol (Surrogate)	%	-	108

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB203726.001	Arsenic, As	mg/kg	1	<1
	Beryllium, Be	mg/kg	0.5	<0.5
	Cadmium, Cd	mg/kg	0.3	<0.3
	Cobalt, Co	mg/kg	0.5	<0.5
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Manganese, Mn	mg/kg	1	<1
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Sample Number	Parameter	Units	LOR	Result
LB203653.001	Arsenic, As	µg/L	1	<1
	Cadmium, Cd	µg/L	0.1	<0.1
	Chromium, Cr	µg/L	1	<1
	Copper, Cu	µg/L	1	<1
	Lead, Pb	µg/L	1	<1
	Nickel, Ni	µg/L	1	<1
	Zinc, Zn	µg/L	5	<5

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB203666.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB203636.001	TRH C10-C14	µg/L	50	<50
	TRH C15-C28	µg/L	200	<200
	TRH C29-C36	µg/L	200	<200
	TRH C37-C40	µg/L	200	<200

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB203665.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB203665.001	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10
		MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB203665.001	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	99
		d8-toluene (Surrogate)	%	-	88
		Bromofluorobenzene (Surrogate)	%	-	108
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB203754.001	Monocyclic Aromatic	Benzene	µg/L	0.5	<0.5
	Hydrocarbons	Toluene	µg/L	0.5	<0.5
		Ethylbenzene	µg/L	0.5	<0.5
		m/p-xylene	µg/L	1	<1
		o-xylene	µg/L	0.5	<0.5
	Polycyclic VOCs	Naphthalene	µg/L	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	98
		d8-toluene (Surrogate)	%	-	95
		Bromofluorobenzene (Surrogate)	%	-	94

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB203665.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	99

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB203754.001		TRH C6-C9	µg/L	40	<40
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	98
		d8-toluene (Surrogate)	%	-	95
		Bromofluorobenzene (Surrogate)	%	-	94

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208161.018	LB203763.012	Mercury	µg/L	0.0001	<0.0001	0.0000	200	57

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208161.008	LB203728.014	Mercury	mg/kg	0.05	0.36	0.40	43	10
SE208161.009	LB203728.016	Mercury	mg/kg	0.05	<0.05	<0.05	184	0

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208161.007	LB203667.011	% Moisture	%w/w	1	8.1	8.5	42	4
SE208161.017	LB203667.020	% Moisture	%w/w	1	1.3	1.5	103	18

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208161.009	LB203666.025		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	0	200	0
			Alpha BHC	mg/kg	0.1	<0.1	0	200	0
			Lindane	mg/kg	0.1	<0.1	0	200	0
			Heptachlor	mg/kg	0.1	<0.1	0	200	0
			Aldrin	mg/kg	0.1	<0.1	0	200	0
			Beta BHC	mg/kg	0.1	<0.1	0	200	0
			Delta BHC	mg/kg	0.1	<0.1	0	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	0	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	0	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	0	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Dieldrin	mg/kg	0.2	<0.2	0	200	0
			Endrin	mg/kg	0.2	<0.2	0	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	0	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	0	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	0	200	0
			Methoxychlor	mg/kg	0.1	<0.1	0	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	0	200	0
			Isodrin	mg/kg	0.1	<0.1	0	200	0
			Mirex	mg/kg	0.1	<0.1	0	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.159	30	3

OC Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208161.003	LB203636.018	Alpha BHC	µg/L	0.1	<0.1	0	200	0
		Hexachlorobenzene (HCB)	µg/L	0.1	<0.1	0	200	0
		Beta BHC	µg/L	0.1	<0.1	0	200	0
		Lindane (gamma BHC)	µg/L	0.1	<0.1	0	200	0
		Delta BHC	µg/L	0.1	<0.1	0	200	0
		Heptachlor	µg/L	0.1	<0.1	0	200	0
		Aldrin	µg/L	0.1	<0.1	0	200	0
		Heptachlor epoxide	µg/L	0.1	<0.1	0	200	0
		Gamma Chlordane	µg/L	0.1	<0.1	0	200	0
		Alpha Chlordane	µg/L	0.1	<0.1	0	200	0
		Alpha Endosulfan	µg/L	0.1	<0.1	0	200	0
		o,p'-DDE	µg/L	0.1	<0.1	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Water (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208161.003	LB203636.018		p,p'-DDE	µg/L	0.1	<0.1	0.07	163	0
			Dieldrin	µg/L	0.1	<0.1	0.03	200	0
			Endrin	µg/L	0.1	<0.1	0	200	0
			Beta Endosulfan	µg/L	0.1	<0.1	0	200	0
			o,p'-DDD	µg/L	0.1	<0.1	0.01	200	0
			p,p'-DDD	µg/L	0.1	<0.1	0	200	0
			Endosulfan sulphate	µg/L	0.1	<0.1	0.02	200	0
			o,p'-DDT	µg/L	0.1	<0.1	0	200	0
			p,p'-DDT	µg/L	0.1	<0.1	0	200	0
			Endrin ketone	µg/L	0.1	<0.1	0	200	0
			Methoxychlor	µg/L	0.1	<0.1	0	200	0
			trans-Nonachlor	µg/L	0.1	<0.1	0	200	0
			Endrin aldehyde	µg/L	0.1	<0.1	0	200	0
			Isodrin	µg/L	0.1	<0.1	0.07	173	0
			Mirex	µg/L	0.1	<0.1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	µg/L	-	0.14	0.123	30	11

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208161.008	LB203666.024		Dichlorvos	mg/kg	0.5	<0.5	0	200	0
			Dimethoate	mg/kg	0.5	<0.5	0	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	0.0248688355	200	0
			Fenitrothion	mg/kg	0.2	<0.2	0	200	0
			Malathion	mg/kg	0.2	<0.2	0	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	0	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	0	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	0	200	0
			Methidathion	mg/kg	0.5	<0.5	0	200	0
			Ethion	mg/kg	0.2	<0.2	0	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	0	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	0	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4685428487	30	14
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4504373986	30	2

OP Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208161.003	LB203636.018		Dichlorvos	µg/L	0.5	<0.5	0	200	0
			Dimethoate	µg/L	0.5	<0.5	0.3	182	0
			Diazinon (Dimpylate)	µg/L	0.5	<0.5	0.01	200	0
			Fenitrothion	µg/L	0.2	<0.2	0	200	0
			Malathion	µg/L	0.2	<0.2	0	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	µg/L	0.2	<0.2	0.02	200	0
			Parathion-ethyl (Parathion)	µg/L	0.2	<0.2	0	200	0
			Bromophos Ethyl	µg/L	0.2	<0.2	0.01	200	0
			Methidathion	µg/L	0.5	<0.5	0	200	0
			Ethion	µg/L	0.2	<0.2	0	200	0
			Azinphos-methyl	µg/L	0.2	<0.2	0	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	µg/L	-	0.3	0.28	30	16
			d14-p-terphenyl (Surrogate)	µg/L	-	0.4	0.31	30	15

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208161.008	LB203666.024	Naphthalene	mg/kg	0.1	<0.1	0.0017949309	200	0
		2-methylnaphthalene	mg/kg	0.1	<0.1	0	200	0
		1-methylnaphthalene	mg/kg	0.1	<0.1	0	200	0
		Acenaphthylene	mg/kg	0.1	<0.1	0.0042679067	200	0
		Acenaphthene	mg/kg	0.1	<0.1	0.0006975737	200	0
		Fluorene	mg/kg	0.1	<0.1	0	200	0
		Phenanthrene	mg/kg	0.1	<0.1	0.0103466731	200	0
		Anthracene	mg/kg	0.1	<0.1	0.0137019721	200	0
		Fluoranthene	mg/kg	0.1	<0.1	0.0279908947	200	0
		Pyrene	mg/kg	0.1	<0.1	0.0312257719	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208161.008	LB203666.024		Benzo(a)anthracene	mg/kg	0.1	<0.1	0.0470121828	200	0
			Chrysene	mg/kg	0.1	<0.1	0.0388115979	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	0.0565685360	194	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	0.0367953819	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	0	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	0.0101766069	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	0	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	0.0120715315	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	0	200	0
				TEQ (mg/kg)	0.2	<0.2	0	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	0.242	134	0
				TEQ (mg/kg)	0.3	<0.3	0.242	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	0.121	175	0
				TEQ (mg/kg)	0.2	<0.2	0.121	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	0	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.3928305271	30	2
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4685428487	30	14
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4504373986	30	2
SE208161.017	LB203666.023		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	<0.3	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	<0.2	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	30	3
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.4	30	20
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.4	30	3

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208161.003	LB203636.018	Naphthalene	µg/L	0.1	<0.1	0.01	200	0
		2-methylnaphthalene	µg/L	0.1	<0.1	0	200	0
		1-methylnaphthalene	µg/L	0.1	<0.1	0	200	0
		Acenaphthylene	µg/L	0.1	<0.1	0	200	0
		Acenaphthene	µg/L	0.1	<0.1	0	200	0
		Fluorene	µg/L	0.1	<0.1	0.01	200	0
		Phenanthrene	µg/L	0.1	<0.1	0	200	0
		Anthracene	µg/L	0.1	<0.1	0	200	0
		Fluoranthene	µg/L	0.1	<0.1	0	200	0
		Pyrene	µg/L	0.1	<0.1	0	200	0
		Benzo(a)anthracene	µg/L	0.1	<0.1	0.01	200	0
		Chrysene	µg/L	0.1	<0.1	0.01	200	0
		Benzo(b&j)fluoranthene	µg/L	0.1	<0.1	0.01	200	0
		Benzo(k)fluoranthene	µg/L	0.1	<0.1	0.01	200	0
		Benzo(a)pyrene	µg/L	0.1	<0.1	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Water (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208161.003	LB203636.018		Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1	0	200	0
			Dibenzo(ah)anthracene	µg/L	0.1	<0.1	0	200	0
			Benzo(ghi)perylene	µg/L	0.1	<0.1	0	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	µg/L	-	0.2	0.21	30	0
			2-fluorobiphenyl (Surrogate)	µg/L	-	0.3	0.28	30	16
			d14-p-terphenyl (Surrogate)	µg/L	-	0.4	0.31	30	15

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208161.009	LB203666.026		Arochlor 1016	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	0	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0.159	30	3

PCBs in Water

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208161.003	LB203636.018		Arochlor 1016	µg/L	1	<1	0	200	0
			Arochlor 1221	µg/L	1	<1	0	200	0
			Arochlor 1232	µg/L	1	<1	0	200	0
			Arochlor 1242	µg/L	1	<1	0	200	0
			Arochlor 1248	µg/L	1	<1	0	200	0
			Arochlor 1254	µg/L	1	<1	0	200	0
			Arochlor 1260	µg/L	1	<1	0	200	0
			Arochlor 1262	µg/L	1	<1	0	200	0
			Arochlor 1268	µg/L	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (Surrogate)	µg/L	-	0.1	0.123	30	11

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208161.017	LB203666.023		Phenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	200	0
			Total Cresol	mg/kg	1.5	<1.5	<1.5	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	200	0
			4-nitrophenol	mg/kg	1	<1	<1	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dinitrophenol	mg/kg	2	<2	<2	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	5.8	5.5	30	4
			d5-phenol (Surrogate)	mg/kg	-	1.7	1.6	30	4

Speciated Phenols in Water

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208161.003	LB203636.018		Phenol	µg/L	0.5	<0.5	0.02	200	0
			2-methyl phenol (o-cresol)	µg/L	0.5	<0.5	0	200	0
			3/4-methyl phenol (m/p-cresol)	µg/L	1	<1	0	200	0
			Total Cresol	µg/L	1.5	<1.5	0	200	0
			2-chlorophenol	µg/L	0.5	<0.5	0	200	0
			2,4-dimethylphenol	µg/L	0.5	<0.5	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Water (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208161.003	LB203636.018		2,6-dichlorophenol	µg/L	0.5	<0.5	0	200	0
			2,4-dichlorophenol	µg/L	0.5	<0.5	0	200	0
			2,4,6-trichlorophenol	µg/L	0.5	<0.5	0	200	0
			2-nitrophenol	µg/L	0.5	<0.5	0	200	0
			4-nitrophenol	µg/L	1	<1	0	200	0
			2,4,5-trichlorophenol	µg/L	0.5	<0.5	0	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	µg/L	1	<1	0	200	0
			Pentachlorophenol	µg/L	0.5	<0.5	0	200	0
			2,4-dinitrophenol	µg/L	2	<2	0	200	0
			4-chloro-3-methylphenol	µg/L	2	<2	0	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	µg/L	-	3.3	2.81	30	15
			d5-phenol (Surrogate)	µg/L	-	1.0	0.82	30	19

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208161.007	LB203726.014	Arsenic, As	mg/kg	1	<1	<1	139	0
		Boron, B	mg/kg	5	5	6	118	15
		Beryllium, Be	mg/kg	0.5	<0.5	<0.5	200	0
		Cadmium, Cd	mg/kg	0.3	0.3	0.4	117	18
		Cobalt, Co	mg/kg	0.5	1.5	1.2	67	29
		Chromium, Cr	mg/kg	0.5	8.8	8.0	36	10
		Copper, Cu	mg/kg	0.5	12	10	35	17
		Manganese, Mn	mg/kg	1	29	28	34	1
		Nickel, Ni	mg/kg	0.5	4.6	4.6	41	0
		Lead, Pb	mg/kg	1	83	56	31	38 ②
		Zinc, Zn	mg/kg	2	57	59	33	4
SE208161.017	LB203726.023	Lead, Pb	mg/kg	1	<1	<1	200	0

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208256.002	LB203653.014	Arsenic, As	µg/L	1	<1	<1	200	0
		Cadmium, Cd	µg/L	0.1	<0.1	<0.1	200	0
		Chromium, Cr	µg/L	1	<1	<1	200	0
		Copper, Cu	µg/L	1	<1	<1	200	0
		Lead, Pb	µg/L	1	<1	<1	200	0
		Nickel, Ni	µg/L	1	<1	<1	200	0
		Zinc, Zn	µg/L	5	<5	<5	200	0
SE208281.032	LB203653.024	Arsenic, As	µg/L	1	<1	<1	200	0
		Cadmium, Cd	µg/L	0.1	<0.1	<0.1	200	0
		Chromium, Cr	µg/L	1	<1	<1	200	0
		Copper, Cu	µg/L	1	<1	<1	200	0
		Lead, Pb	µg/L	1	<1	<1	200	0
		Nickel, Ni	µg/L	1	<1	<1	200	0
		Zinc, Zn	µg/L	5	<5	<5	200	0

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208161.008	LB203666.024		TRH C10-C14	mg/kg	20	<20	0	200	0
			TRH C15-C28	mg/kg	45	<45	0	200	0
			TRH C29-C36	mg/kg	45	<45	0	200	0
			TRH C37-C40	mg/kg	100	<100	0	200	0
			TRH C10-C36 Total	mg/kg	110	<110	0	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	0	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	0	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	0	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	0	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	0	200	0
SE208161.017	LB203666.023		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208161.017	LB203666.023		TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208161.003	LB203636.018		TRH C10-C14	µg/L	50	<50	0	200	0
			TRH C15-C28	µg/L	200	<200	0	200	0
			TRH C29-C36	µg/L	200	<200	0	200	0
			TRH C37-C40	µg/L	200	<200	0	200	0
			TRH C10-C40	µg/L	320	<320	0	200	0
		TRH F Bands	TRH >C10-C16	µg/L	60	<60	0	200	0
			TRH >C10-C16 - Naphthalene (F2)	µg/L	60	<60	0	200	0
			TRH >C16-C34 (F3)	µg/L	500	<500	0	200	0
			TRH >C34-C40 (F4)	µg/L	500	<500	0	200	0

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208161.007	LB203665.014	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
			Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208161.007	LB203665.014	Halogenated	1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.5	8.6	50	2
			d8-toluene (Surrogate)	mg/kg	-	8.7	7.9	50	9
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.0	8.6	50	5
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE208161.017	LB203665.023	Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.3	9.2	50	1
			d8-toluene (Surrogate)	mg/kg	-	8.7	8.4	50	3
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.4	9.1	50	3
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208260.008	LB203754.019	Monocyclic	Benzene	µg/L	0.5	<0.5	0.0230049884	200	0
		Aromatic	Toluene	µg/L	0.5	<0.5	0.0443878628	200	0
			Ethylbenzene	µg/L	0.5	<0.5	0.0189656083	200	0
			m/p-xylene	µg/L	1	<1	0.0555645640	200	0
			o-xylene	µg/L	0.5	<0.5	0.0201227537	200	0
		Polycyclic	Naphthalene	µg/L	0.5	<0.5	0.0243179561	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	10.3	11.4391856467	30	10
			d8-toluene (Surrogate)	µg/L	-	10.0	10.2516070887	30	3

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOCs in Water (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208260.008	LB203754.019	Surrogates	Bromofluorobenzene (Surrogate)	µg/L	-	9.8	10.1045271671	30	3
SE208355.002	LB203754.020	Monocyclic	Benzene	µg/L	0.5	<0.5	<0.5	145	0
		Aromatic	Toluene	µg/L	0.5	<0.5	<0.5	200	0
			Ethylbenzene	µg/L	0.5	<0.5	<0.5	194	0
			m/p-xylene	µg/L	1	3	3	64	1
			o-xylene	µg/L	0.5	1.6	1.6	62	0
		Polycyclic	Naphthalene	µg/L	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	10.5	11.0	30	5
			d8-toluene (Surrogate)	µg/L	-	10.0	7.3	30	31 ②
			Bromofluorobenzene (Surrogate)	µg/L	-	10.0	10.2	30	1

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208161.007	LB203665.014		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.5	8.6	30	2
			d8-toluene (Surrogate)	mg/kg	-	8.7	7.9	30	9
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.0	8.6	30	5
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE208161.017	LB203665.023		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.3	9.2	30	1
			d8-toluene (Surrogate)	mg/kg	-	8.7	8.4	30	3
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.4	9.1	30	3
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208260.008	LB203754.019		TRH C6-C10	µg/L	50	<50	4.8063608417	200	0
			TRH C6-C9	µg/L	40	<40	1.9664906507	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	10.3	11.4391856467	30	10
			d8-toluene (Surrogate)	µg/L	-	10.0	10.2516070887	30	3
			Bromofluorobenzene (Surrogate)	µg/L	-	9.8	10.1045271671	30	3
		VPH F Bands	Benzene (F0)	µg/L	0.5	<0.5	0.0230049884	200	0
			TRH C6-C10 minus BTEX (F1)	µg/L	50	<50	4.8063608417	200	0
SE208355.002	LB203754.020		TRH C6-C10	µg/L	50	<50	<50	200	0
			TRH C6-C9	µg/L	40	<40	<40	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	10.5	11.0	30	5
			d8-toluene (Surrogate)	µg/L	-	10.0	7.3	30	31 ②
			Bromofluorobenzene (Surrogate)	µg/L	-	10.0	10.2	30	1
		VPH F Bands	Benzene (F0)	µg/L	0.5	<0.5	<0.5	145	0
			TRH C6-C10 minus BTEX (F1)	µg/L	50	<50	<50	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203728.002	Mercury	mg/kg	0.05	0.24	0.2	70 - 130	118

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203666.002		Heptachlor	mg/kg	0.1	0.3	0.2	60 - 140	134
		Aldrin	mg/kg	0.1	0.3	0.2	60 - 140	140
		Delta BHC	mg/kg	0.1	0.3	0.2	60 - 140	140
		Dieldrin	mg/kg	0.2	0.3	0.2	60 - 140	138
		Endrin	mg/kg	0.2	0.3	0.2	60 - 140	133
		p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	112
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	0.15	40 - 130	95

OC Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203636.002		Delta BHC	µg/L	0.1	0.2	0.2	60 - 140	120
		Heptachlor	µg/L	0.1	0.3	0.2	60 - 140	125
		Aldrin	µg/L	0.1	0.3	0.2	60 - 140	126
		Dieldrin	µg/L	0.1	0.3	0.2	60 - 140	127
		Endrin	µg/L	0.1	0.2	0.2	60 - 140	118
		p,p'-DDT	µg/L	0.1	0.2	0.2	60 - 140	106
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	µg/L	-	0.14	0.15	40 - 130	96

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203666.002		Dichlorvos	mg/kg	0.5	1.3	2	60 - 140	66
		Diazinon (Dimpylate)	mg/kg	0.5	1.4	2	60 - 140	69
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.4	2	60 - 140	71
		Ethion	mg/kg	0.2	1.3	2	60 - 140	64
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	83
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	84

OP Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203636.002		Dichlorvos	µg/L	0.5	7.4	8	60 - 140	92
		Diazinon (Dimpylate)	µg/L	0.5	7.1	8	60 - 140	89
		Chlorpyrifos (Chlorpyrifos Ethyl)	µg/L	0.2	7.4	8	60 - 140	93
		Ethion	µg/L	0.2	6.7	8	60 - 140	84
	Surrogates	2-fluorobiphenyl (Surrogate)	µg/L	-	0.3	0.5	40 - 130	64
		d14-p-terphenyl (Surrogate)	µg/L	-	0.4	0.5	40 - 130	88

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203666.002		Naphthalene	mg/kg	0.1	3.8	4	60 - 140	95
		Acenaphthylene	mg/kg	0.1	4.3	4	60 - 140	106
		Acenaphthene	mg/kg	0.1	4.0	4	60 - 140	100
		Phenanthrene	mg/kg	0.1	4.0	4	60 - 140	100
		Anthracene	mg/kg	0.1	4.1	4	60 - 140	104
		Fluoranthene	mg/kg	0.1	4.0	4	60 - 140	100
		Pyrene	mg/kg	0.1	4.1	4	60 - 140	103
		Benzo(a)pyrene	mg/kg	0.1	4.4	4	60 - 140	109
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	81
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	83
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	84

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203636.002	Naphthalene	µg/L	0.1	26	40	60 - 140	66
	Acenaphthylene	µg/L	0.1	32	40	60 - 140	81
	Acenaphthene	µg/L	0.1	31	40	60 - 140	77
	Phenanthrene	µg/L	0.1	31	40	60 - 140	77
	Anthracene	µg/L	0.1	30	40	60 - 140	75
	Fluoranthene	µg/L	0.1	31	40	60 - 140	77

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Water (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203636.002		Pyrene	µg/L	0.1	31	40	60 - 140	77
		Benzo(a)pyrene	µg/L	0.1	34	40	60 - 140	86
	Surrogates	d5-nitrobenzene (Surrogate)	µg/L	-	0.3	0.5	40 - 130	60
		2-fluorobiphenyl (Surrogate)	µg/L	-	0.3	0.5	40 - 130	64
		d14-p-terphenyl (Surrogate)	µg/L	-	0.4	0.5	40 - 130	88

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203666.002	Arochlor 1260	mg/kg	0.2	0.5	0.4	60 - 140	115

PCBs in Water

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203636.002	Arochlor 1260	µg/L	1	<1	0.4	60 - 140	135

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203666.002		Phenol	mg/kg	0.5	0.7	1	70 - 130	74
		2,4-dichlorophenol	mg/kg	0.5	0.9	1	70 - 130	86
		2,4,6-trichlorophenol	mg/kg	0.5	0.8	1	70 - 130	82
		Pentachlorophenol	mg/kg	0.5	0.7	1	70 - 130	73
	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.2	5	40 - 130	83
		d5-phenol (Surrogate)	mg/kg	-	1.6	2	40 - 130	81

Speciated Phenols in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203636.002		Phenol	µg/L	0.5	39	40	60 - 140	96
		2,4-dichlorophenol	µg/L	0.5	48	40	60 - 140	120
		2,4,6-trichlorophenol	µg/L	0.5	42	40	60 - 140	105
		Pentachlorophenol	µg/L	0.5	25	40	60 - 140	63
	Surrogates	2,4,6-Tribromophenol (Surrogate)	µg/L	-	4.6	5	40 - 130	93
		d5-phenol (Surrogate)	µg/L	-	2.4	2	40 - 130	118

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203726.002	Arsenic, As	mg/kg	1	340	318.22	80 - 120	107
	Boron, B	mg/kg	5	42	37.13	80 - 120	112
	Beryllium, Be	mg/kg	0.5	4.4	4.17	80 - 120	105
	Cadmium, Cd	mg/kg	0.3	5.1	5.41	80 - 120	93
	Cobalt, Co	mg/kg	0.5	21	20.71	80 - 120	102
	Chromium, Cr	mg/kg	0.5	39	38.31	80 - 120	102
	Copper, Cu	mg/kg	0.5	300	290	80 - 120	104
	Manganese, Mn	mg/kg	1	710	660	80 - 120	108
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	101
	Lead, Pb	mg/kg	1	94	89.9	80 - 120	104
	Zinc, Zn	mg/kg	2	280	273	80 - 120	102

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203653.002	Arsenic, As	µg/L	1	19	20	80 - 120	96
	Cadmium, Cd	µg/L	0.1	21	20	80 - 120	106
	Chromium, Cr	µg/L	1	21	20	80 - 120	107
	Copper, Cu	µg/L	1	22	20	80 - 120	112
	Lead, Pb	µg/L	1	22	20	80 - 120	108
	Nickel, Ni	µg/L	1	22	20	80 - 120	108
	Zinc, Zn	µg/L	5	22	20	80 - 120	111

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203666.002		TRH C10-C14	mg/kg	20	43	40	60 - 140	108
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	98
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	83
	TRH F Bands	TRH >C10-C16	mg/kg	25	41	40	60 - 140	103
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	90
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	80

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203636.002		TRH C10-C14	µg/L	50	830	1200	60 - 140	69
		TRH C15-C28	µg/L	200	1100	1200	60 - 140	96
		TRH C29-C36	µg/L	200	1000	1200	60 - 140	83
	TRH F Bands	TRH >C10-C16	µg/L	60	980	1200	60 - 140	82
		TRH >C16-C34 (F3)	µg/L	500	1300	1200	60 - 140	104
		TRH >C34-C40 (F4)	µg/L	500	<500	600	60 - 140	65

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203665.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	4.9	5	60 - 140	97
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	5.1	5	60 - 140	102
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	4.9	5	60 - 140	98
	Halogenated	Chlorobenzene	mg/kg	0.1	5.7	5	60 - 140	113
	Monocyclic	Benzene	mg/kg	0.1	5.1	5	60 - 140	103
	Aromatic	Toluene	mg/kg	0.1	5.3	5	60 - 140	105
		Ethylbenzene	mg/kg	0.1	5.3	5	60 - 140	106
		m/p-xylene	mg/kg	0.2	11	10	60 - 140	105
		o-xylene	mg/kg	0.1	5.2	5	60 - 140	105
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.0	10	70 - 130	90
		d8-toluene (Surrogate)	mg/kg	-	8.3	10	70 - 130	83
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.8	10	70 - 130	88
	Trihalomethan	Chloroform	mg/kg	0.1	5.0	5	60 - 140	99

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203754.002	Monocyclic	Benzene	µg/L	0.5	52	45.45	60 - 140	113
	Aromatic	Toluene	µg/L	0.5	50	45.45	60 - 140	110
		Ethylbenzene	µg/L	0.5	52	45.45	60 - 140	114
		m/p-xylene	µg/L	1	100	90.9	60 - 140	112
		o-xylene	µg/L	0.5	51	45.45	60 - 140	112

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203665.002		TRH C6-C10	mg/kg	25	77	92.5	60 - 140	84
		TRH C6-C9	mg/kg	20	71	80	60 - 140	89
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.0	10	70 - 130	90
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.8	10	70 - 130	88
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	46	62.5	60 - 140	73

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203754.002		TRH C6-C10	µg/L	50	900	946.63	60 - 140	95
		TRH C6-C9	µg/L	40	790	818.71	60 - 140	96
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	µg/L	50	600	639.67	60 - 140	93

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208161.001	LB203763.004	Mercury	mg/L	0.0001	0.0073	<0.0001	0.008	91

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208260.002	LB203666.026		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	-	-
			Alpha BHC	mg/kg	0.1	<0.1	-	-
			Lindane	mg/kg	0.1	<0.1	-	-
			Heptachlor	mg/kg	0.1	<0.1	0.2	73
			Aldrin	mg/kg	0.1	<0.1	0.2	74
			Beta BHC	mg/kg	0.1	<0.1	-	-
			Delta BHC	mg/kg	0.1	<0.1	0.2	76
			Heptachlor epoxide	mg/kg	0.1	<0.1	-	-
			o,p'-DDE	mg/kg	0.1	<0.1	-	-
			Alpha Endosulfan	mg/kg	0.2	<0.2	-	-
			Gamma Chlordane	mg/kg	0.1	<0.1	-	-
			Alpha Chlordane	mg/kg	0.1	<0.1	-	-
			trans-Nonachlor	mg/kg	0.1	<0.1	-	-
			p,p'-DDE	mg/kg	0.1	<0.1	-	-
			Dieldrin	mg/kg	0.2	<0.2	0.2	75
			Endrin	mg/kg	0.2	<0.2	0.2	73
			o,p'-DDD	mg/kg	0.1	<0.1	-	-
			o,p'-DDT	mg/kg	0.1	<0.1	-	-
			Beta Endosulfan	mg/kg	0.2	<0.2	-	-
			p,p'-DDD	mg/kg	0.1	<0.1	-	-
			p,p'-DDT	mg/kg	0.1	<0.1	0.2	70
			Endosulfan sulphate	mg/kg	0.1	<0.1	-	-
			Endrin Aldehyde	mg/kg	0.1	<0.1	-	-
			Methoxychlor	mg/kg	0.1	<0.1	-	-
			Endrin Ketone	mg/kg	0.1	<0.1	-	-
			Isodrin	mg/kg	0.1	<0.1	-	-
			Mirex	mg/kg	0.1	<0.1	-	-
			Total CLP OC Pesticides	mg/kg	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	-	94

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208260.001	LB203666.025		Dichlorvos	mg/kg	0.5	<0.5	2	69
			Dimethoate	mg/kg	0.5	<0.5	-	-
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	2	109
			Fenitrothion	mg/kg	0.2	<0.2	-	-
			Malathion	mg/kg	0.2	<0.2	-	-
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	2	101
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	-	-
			Bromophos Ethyl	mg/kg	0.2	<0.2	-	-
			Methidathion	mg/kg	0.5	<0.5	-	-
			Ethion	mg/kg	0.2	<0.2	2	86
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	-	-
			Total OP Pesticides*	mg/kg	1.7	<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	-	77
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	-	78

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number	Parameter	Units	LOR	Original	Spike	Recovery%
SE208260.001	LB203666.025	Naphthalene	mg/kg	0.1	<0.1	4	97
		2-methylnaphthalene	mg/kg	0.1	<0.1	-	-
		1-methylnaphthalene	mg/kg	0.1	<0.1	-	-
		Acenaphthylene	mg/kg	0.1	<0.1	4	99
		Acenaphthene	mg/kg	0.1	<0.1	4	106
		Fluorene	mg/kg	0.1	<0.1	-	-
		Phenanthrene	mg/kg	0.1	0.7	4	91

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208260.001	LB203666.025		Anthracene	mg/kg	0.1	0.2	4	98
			Fluoranthene	mg/kg	0.1	0.9	4	94
			Pyrene	mg/kg	0.1	0.8	4	97
			Benzo(a)anthracene	mg/kg	0.1	0.2	-	-
			Chrysene	mg/kg	0.1	0.2	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1	0.3	-	-
			Benzo(k)fluoranthene	mg/kg	0.1	0.1	-	-
			Benzo(a)pyrene	mg/kg	0.1	0.3	4	99
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.2	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	0.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	0.3	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	0.4	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	0.4	-	-
			Total PAH (18)	mg/kg	0.8	4.0	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	-	90
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	-	77
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	-	78

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208260.002	LB203666.025		Arochlor 1016	mg/kg	0.2	<0.2	-	-
			Arochlor 1221	mg/kg	0.2	<0.2	-	-
			Arochlor 1232	mg/kg	0.2	<0.2	-	-
			Arochlor 1242	mg/kg	0.2	<0.2	-	-
			Arochlor 1248	mg/kg	0.2	<0.2	-	-
			Arochlor 1254	mg/kg	0.2	<0.2	-	-
			Arochlor 1260	mg/kg	0.2	<0.2	0.4	79
			Arochlor 1262	mg/kg	0.2	<0.2	-	-
			Arochlor 1268	mg/kg	0.2	<0.2	-	-
			Total PCBs (Arochlors)	mg/kg	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	-	89

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208380.001	LB203726.004	Chromium, Cr	mg/kg	0.5	56	13	50	86
		Copper, Cu	mg/kg	0.5	52	8.5	50	87
		Lead, Pb	mg/kg	1	56	15	50	84
		Zinc, Zn	mg/kg	2	80	38	50	83

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208161.001	LB203653.004	Arsenic, As	µg/L	1	21	<1	20	104
		Cadmium, Cd	µg/L	0.1	23	<0.1	20	112
		Chromium, Cr	µg/L	1	22	<1	20	109
		Copper, Cu	µg/L	1	23	<1	20	117
		Lead, Pb	µg/L	1	22	<1	20	109
		Nickel, Ni	µg/L	1	22	<1	20	108
		Zinc, Zn	µg/L	5	25	<5	20	117

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208260.001	LB203666.004		TRH C10-C14	mg/kg	20	42	<20	40	105
			TRH C15-C28	mg/kg	45	<45	<45	40	93
			TRH C29-C36	mg/kg	45	<45	<45	40	80
			TRH C37-C40	mg/kg	100	<100	<100	-	-
			TRH C10-C36 Total	mg/kg	110	<110	<110	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	-	-
		TRH F	TRH >C10-C16	mg/kg	25	40	<25	40	100
		Bands	TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	40	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	40	88
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208260.001	LB203665.004	Monocyclic	Benzene	mg/kg	0.1	3.1	<0.1	5	61
		Aromatic	Toluene	mg/kg	0.1	3.4	<0.1	5	68
			Ethylbenzene	mg/kg	0.1	3.3	<0.1	5	66
			m/p-xylene	mg/kg	0.2	6.8	<0.2	10	68
			o-xylene	mg/kg	0.1	3.3	<0.1	5	66
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.0	9.0	10	90
			d8-toluene (Surrogate)	mg/kg	-	9.1	8.9	10	91
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.3	8.1	10	83
		Totals	Total Xylenes	mg/kg	0.3	10	<0.3	-	-
			Total BTEX	mg/kg	0.6	20	<0.6	-	-

VOCs in Water

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208161.001	LB203754.021	Monocyclic	Benzene	µg/L	0.5	54	<0.5	45.45	118
		Aromatic	Toluene	µg/L	0.5	52	<0.5	45.45	115
			Ethylbenzene	µg/L	0.5	52	<0.5	45.45	115
			m/p-xylene	µg/L	1	100	<1	90.9	112
			o-xylene	µg/L	0.5	51	<0.5	45.45	112
		Polycyclic	Naphthalene	µg/L	0.5	58	<0.5	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/L	-	11.1	0.0	-	111
			d8-toluene (Surrogate)	mg/L	-	9.1	0.0	-	91
			Bromofluorobenzene (Surrogate)	mg/L	-	10.2	0.0	-	102

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208260.001	LB203665.004		TRH C6-C10	mg/kg	25	62	<25	92.5	66
			TRH C6-C9	mg/kg	20	56	<20	80	68
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.0	9.0	10	90
			d8-toluene (Surrogate)	mg/kg	-	9.1	8.9	10	91
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.3	8.1	-	83
		VPH F	Benzene (F0)	mg/kg	0.1	3.1	<0.1	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	42	<25	62.5	65

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208161.001	LB203754.021		TRH C6-C10	µg/L	50	740	<50	946.63	77
			TRH C6-C9	µg/L	40	630	<40	818.71	75
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/L	-	11.1	0.0	-	111
			d8-toluene (Surrogate)	mg/L	-	9.1	0.0	-	91
			Bromofluorobenzene (Surrogate)	mg/L	-	10.2	0.0	-	102
		VPH F	Benzene (F0)	µg/L	0.5	54	<0.5	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	µg/L	50	430	<50	639.67	65

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

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- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
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- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT: DHA	LABORATORY: SGS	Turnaround Time (TAT)	COC Number 1 of 4
PROJECT: Randwick Barrack	LABORATORY ADDRESS: SYD	☑ Standard TAT	
PROJECT NUMBER: 610.30041	SAMPLER: [redacted]	☐ Non Standard or Urgent TAT	
PROJECT MANAGER: [redacted]	SAMPLER CONTACT No:	Required TAT:	
PM CONTACT No:	Email Reports and Invoices to: LGRSYD@slrconsulting.com		

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A								Hold	Additional Information (Comment on any gross contamination or specific requirements)
1	0407_TP254_0.1_200626	26620	Soil	✓	X									
2	0407_TP254_0.5_200626				X									
	0407_TP254_1.0_200626												X	
3	0407_TP111_0.1_200626			✓	X									
4	0407_TP111_0.5_200626				X									
	0407_TP111_1.0_200626												X	
5	0407_TP91_0.1_200626			✓	X									
6	0407_TP91_0.5_200626				X									
	0407_TP91_1.0_200626												X	
7	0407_TP81_0.1_200626			✓	X									
8	0407_TP81_0.5_200626			✓	X									
	0407_TP81_1.0_200626												X	

SGS EHS Sydney COC

SE208133

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	Received by	Sign [redacted]	Date / Time 26/06/20	Temperature Received:
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time @ 4:30	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

000687

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CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

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- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT:	DHA
PROJECT:	Randwick Barracks
PROJECT NUMBER:	610.30041
PROJECT MANAGER:	[redacted]
PM CONTACT No:	
LABORATORY:	SGS
LABORATORY ADDRESS:	SYD
SAMPLER:	[redacted]
SAMPLER CONTACT No:	
Email Reports and Invoices to:	LQRSYD@slrconsulting.com

Turnaround Time (TAT): ☑ Standard TAT ☐ Non Standard or Urgent TAT

Required TAT:

COC Number: 2 of 4

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A							Hold	Additional Information (Comment on any gross contamination or specific requirements)
9	0407_TP249_0.1_200626	26620	Soil	✓	X								
10	0407_TP249_0.5_200626			✓	X								
	0407_TP249_1.0_200626											X	
11	0407_TP248_0.1_200626			✓	X								
12	0407_TP248_0.5_200626			✓	X								
	0407_TP248_1.0_200626											X	
13	0407_TP247_0.1_200626			✓	X								
14	0407_TP247_0.5_200626			✓	X								
	0407_TP247_1.0_200626											X	
15	0407_TP246_0.1_200626			✓	X								
16	0407_TP246_0.5_200626			✓	X								
	0407_TP246_1.0_200626											X	

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	Received by	Sign [redacted]	Date / Time	26/06/20
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	@ 4:30
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

Temperature Received:

000688

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CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

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- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT: DHA	LABORATORY: SGS	Turnaround Time (TAT)	COC Number 3 of 4
PROJECT: Randwick Barracks	LABORATORY ADDRESS: SYD	☑ Standard TAT	
PROJECT NUMBER: 610.30041	SAMPLER: JR	☐ Non Standard or Urgent TAT	
PROJECT MANAGER: [redacted]	SAMPLER CONTACT No:	Required TAT:	
PM CONTACT No:	Email Reports and Invoices to: LABSYD@slrconsulting.com		

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS: Suite A; Asbestos; Hold.

Additional Information (Comment on any gross contamination or specific requirements)

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	Asbestos	Hold.
17	0407_TP138_0.1_200626	26/6/20	Soil ✓		X		
18	0407_TP138_0.5_200626		✓		X		
	0407_TP138_1.0_200626						X
19	0407_TP246_A01_200626		ACM		X	X	
20	0407_TP81_A01_200626				X	X	
21	0407_TP81_A02_200626				X	X	
22	0407_TP249_A01_200626				X	X	
	0407_TP249_A02_200626						X
	0407_QC170_200626		Soil				
	0407_QC171_200626						
	0407_QC175_200626						
	0407						

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	Received by	Sign [redacted]	Date / Time	26/06/20	Temperature Received:
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	@ 4:30	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time		

000689

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CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

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- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
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- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT:	DHA	**LABORATORY:**	SGS
PROJECT:	Randwick Barracks	**LABORATORY ADDRESS:**	SYD
PROJECT NUMBER:	610-30041	**SAMPLER:**	JR
PROJECT MANAGER:	[redacted]	**SAMPLER CONTACT No:**	
PM CONTACT No:		**Email Reports and Invoices to:**	LGR3410@slrconsulting.com

Turnaround Time (TAT)

☑ Standard TAT

☐ Non Standard or Urgent TAT

Required TAT:

COC Number 4 of 4

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: Suite A	Additional Information (Comment on any gross contamination or specific requirements)
	0407_QC270_200626	26.6.20	Soil	>	Pleas Forward to Eurofins for Suite A.	
	0407_QC271_200626	|	|			
	0407_QC275_					

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	**Received by**	Sign	Date / Time	**Temperature Received:**
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000686-000689**
Samples	22

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208133 R0**
Date Received	26/6/2020
Date Reported	8/7/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.

Sample #1: Asbestos found as approx 3x2x1mm cement sheet fragments in >2mm portion.
Sample #5: Asbestos found as approx 12x5x3mm cement sheet fragments x5 in >2mm portion.
Sample #9: Asbestos found as approx 4x3x2mm cement sheet fragments in >2mm portion.
Sample #11: Asbestos found as approx 7x4x3mm cement sheet fragments in >2mm portion.
Sample #15: Asbestos found as approx 8x4x3mm cement sheet fragments x3 in >2mm portion.
Sample #17: Asbestos found as approx 5x3x2mm cement sheet fragments in >2mm portion.

Asbestos analysed by Approved Identifiers Ravee Sivasubramaniam and Yusuf Kuthpudin .

SIGNATORIES

[redacted]

Chemist | Senior Organic Chemist/Metals Chemist | Metals/Inorganics Team Leader

[redacted]

Organic Section Head | Hygiene Team Leader | Asbestos Analyst

VOC's in Soil [AN433] Tested: 3/7/2020

PARAMETER	UOM	LOR	0407_TP254_0.1_20(626 SOIL - 26/6/2020 SE208133.001	0407_TP254_0.5_20 626 SOIL - 26/6/2020 SE208133.002	0407_TP111_0.1_200 26 SOIL - 26/6/2020 SE208133.003	0407_TP111_0.5_200 26 SOIL - 26/6/2020 SE208133.004	0407_TP91_0.1_200 26 SOIL - 26/6/2020 SE208133.005
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 3/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP254_0.1_20 626 SOIL - 26/6/2020 SE208133.001	0407_TP254_0.5_20 626 SOIL - 26/6/2020 SE208133.002	0407_TP111_0.1_200 26 SOIL - 26/6/2020 SE208133.003	0407_TP111_0.5_200 26 SOIL - 26/6/2020 SE208133.004	0407_TP91_0.1_200 26 SOIL - 26/6/2020 SE208133.005
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 3/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP91_0.5_200 26 SOIL - 26/6/2020 SE208133.006	0407_TP81_0.1_200 26 SOIL - 26/6/2020 SE208133.007	0407_TP81_0.5_200 26 SOIL - 26/6/2020 SE208133.008	0407_TP249_0.1_20 626 SOIL - 26/6/2020 SE208133.009	0407_TP249_0.5_20 626 SOIL - 26/6/2020 SE208133.010
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 3/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP91_0.5_200 26 SOIL - 26/6/2020 SE208133.006	0407_TP81_0.1_200 26 SOIL - 26/6/2020 SE208133.007	0407_TP81_0.5_200 26 SOIL - 26/6/2020 SE208133.008	0407_TP249_0.1_20 626 SOIL - 26/6/2020 SE208133.009	0407_TP249_0.5_20 626 SOIL - 26/6/2020 SE208133.010
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 3/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP248_0.1_20(626 SOIL - 26/6/2020 SE208133.011	0407_TP248_0.5_20(626 SOIL - 26/6/2020 SE208133.012	0407_TP247_0.1_20(626 SOIL - 26/6/2020 SE208133.013	0407_TP247_0.5_20(626 SOIL - 26/6/2020 SE208133.014	0407_TP246_0.1_20(626 SOIL - 26/6/2020 SE208133.015
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 3/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP248_0.1_20(626 SOIL - 26/6/2020 SE208133.011	0407_TP248_0.5_20(626 SOIL - 26/6/2020 SE208133.012	0407_TP247_0.1_20(626 SOIL - 26/6/2020 SE208133.013	0407_TP247_0.5_20(626 SOIL - 26/6/2020 SE208133.014	0407_TP246_0.1_20(626 SOIL - 26/6/2020 SE208133.015
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 3/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP246_0.5_20(626 SOIL - 26/6/2020 SE208133.016	0407_TP138_0.1_20(626 SOIL - 26/6/2020 SE208133.017	0407_TP138_0.5_20(626 SOIL - 26/6/2020 SE208133.018
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1

VOC's in Soil [AN433] Tested: 3/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP246_0.5_20(626 SOIL - 26/6/2020 SE208133.016	0407_TP138_0.1_20(626 SOIL - 26/6/2020 SE208133.017	0407_TP138_0.5_20(626 SOIL - 26/6/2020 SE208133.018
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 3/7/2020

PARAMETER	UOM	LOR	0407_TP254_0.1_20(626 SOIL - 26/6/2020 SE208133.001	0407_TP254_0.5_20(626 SOIL - 26/6/2020 SE208133.002	0407_TP111_0.1_200(26 SOIL - 26/6/2020 SE208133.003	0407_TP111_0.5_200(26 SOIL - 26/6/2020 SE208133.004	0407_TP91_0.1_200(26 SOIL - 26/6/2020 SE208133.005
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP91_0.5_200(26 SOIL - 26/6/2020 SE208133.006	0407_TP81_0.1_200(26 SOIL - 26/6/2020 SE208133.007	0407_TP81_0.5_200(26 SOIL - 26/6/2020 SE208133.008	0407_TP249_0.1_20(626 SOIL - 26/6/2020 SE208133.009	0407_TP249_0.5_20(626 SOIL - 26/6/2020 SE208133.010
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP248_0.1_20(626 SOIL - 26/6/2020 SE208133.011	0407_TP248_0.5_20(626 SOIL - 26/6/2020 SE208133.012	0407_TP247_0.1_20(626 SOIL - 26/6/2020 SE208133.013	0407_TP247_0.5_20(626 SOIL - 26/6/2020 SE208133.014	0407_TP246_0.1_20(626 SOIL - 26/6/2020 SE208133.015
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP246_0.5_20(626 SOIL - 26/6/2020 SE208133.016	0407_TP138_0.1_20(626 SOIL - 26/6/2020 SE208133.017	0407_TP138_0.5_20(626 SOIL - 26/6/2020 SE208133.018
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 3/7/2020

PARAMETER	UOM	LOR	0407_TP254_0.1_20(626 SOIL - 26/6/2020 SE208133.001	0407_TP254_0.5_20(626 SOIL - 26/6/2020 SE208133.002	0407_TP111_0.1_200(26 SOIL - 26/6/2020 SE208133.003	0407_TP111_0.5_200(26 SOIL - 26/6/2020 SE208133.004	0407_TP91_0.1_200(26 SOIL - 26/6/2020 SE208133.005
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP91_0.5_200(26 SOIL - 26/6/2020 SE208133.006	0407_TP81_0.1_200(26 SOIL - 26/6/2020 SE208133.007	0407_TP81_0.5_200(26 SOIL - 26/6/2020 SE208133.008	0407_TP249_0.1_20(626 SOIL - 26/6/2020 SE208133.009	0407_TP249_0.5_20(626 SOIL - 26/6/2020 SE208133.010
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP248_0.1_20(626 SOIL - 26/6/2020 SE208133.011	0407_TP248_0.5_20(626 SOIL - 26/6/2020 SE208133.012	0407_TP247_0.1_20(626 SOIL - 26/6/2020 SE208133.013	0407_TP247_0.5_20(626 SOIL - 26/6/2020 SE208133.014	0407_TP246_0.1_20(626 SOIL - 26/6/2020 SE208133.015
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 3/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP246_0.5_20(626 SOIL - 26/6/2020 SE208133.016	0407_TP138_0.1_20(626 SOIL - 26/6/2020 SE208133.017	0407_TP138_0.5_20(626 SOIL - 26/6/2020 SE208133.018
TRH C10-C14	mg/kg	20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 3/7/2020

PARAMETER	UOM	LOR	0407_TP254_0.1_20(626 SOIL - 26/6/2020 SE208133.001	0407_TP254_0.5_20(626 SOIL - 26/6/2020 SE208133.002	0407_TP111_0.1_200(26 SOIL - 26/6/2020 SE208133.003	0407_TP111_0.5_200(26 SOIL - 26/6/2020 SE208133.004	0407_TP91_0.1_200(26 SOIL - 26/6/2020 SE208133.005
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	**0.1**	<0.1	**0.1**
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	**0.1**	<0.1	**0.2**	<0.1	**0.2**
Pyrene	mg/kg	0.1	**0.2**	<0.1	**0.3**	<0.1	**0.2**
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	**0.1**	<0.1	**0.1**
Chrysene	mg/kg	0.1	<0.1	<0.1	**0.2**	<0.1	**0.1**
Benzo(b&j)fluoranthene	mg/kg	0.1	**0.1**	<0.1	**0.2**	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	**0.1**	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	**0.2**	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	**0.1**	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	**0.1**	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	**0.2**	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	**0.3**	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	**0.3**	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	**1.5**	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	**1.5**	<0.8	<0.8

PARAMETER	UOM	LOR	0407_TP91_0.5_200(26 SOIL - 26/6/2020 SE208133.006	0407_TP81_0.1_200(26 SOIL - 26/6/2020 SE208133.007	0407_TP81_0.5_200(26 SOIL - 26/6/2020 SE208133.008	0407_TP249_0.1_20(626 SOIL - 26/6/2020 SE208133.009	0407_TP249_0.5_20(626 SOIL - 26/6/2020 SE208133.010
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.8**	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.3**	<0.1
Fluoranthene	mg/kg	0.1	<0.1	**0.1**	<0.1	**0.9**	<0.1
Pyrene	mg/kg	0.1	<0.1	**0.2**	<0.1	**1.1**	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.4**	<0.1
Chrysene	mg/kg	0.1	<0.1	**0.1**	<0.1	**0.4**	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.3**	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.2**	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.3**	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.2**	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.2**	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	**0.4**	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	**0.5**	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	**0.5**	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	**5.0**	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	**5.0**	<0.8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 3/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP248_0.1_20(626 SOIL - 26/6/2020 SE208133.011	0407_TP248_0.5_20(626 SOIL - 26/6/2020 SE208133.012	0407_TP247_0.1_20(626 SOIL - 26/6/2020 SE208133.013	0407_TP247_0.5_20(626 SOIL - 26/6/2020 SE208133.014	0407_TP246_0.1_20(626 SOIL - 26/6/2020 SE208133.015
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	**0.3**	<0.1	**0.2**
Anthracene	mg/kg	0.1	<0.1	<0.1	**0.1**	<0.1	**0.1**
Fluoranthene	mg/kg	0.1	**0.2**	<0.1	**0.4**	**0.2**	**0.4**
Pyrene	mg/kg	0.1	**0.2**	<0.1	**0.5**	**0.2**	**0.5**
Benzo(a)anthracene	mg/kg	0.1	**0.1**	<0.1	**0.2**	<0.1	**0.2**
Chrysene	mg/kg	0.1	**0.1**	<0.1	**0.2**	<0.1	**0.2**
Benzo(b&j)fluoranthene	mg/kg	0.1	**0.1**	<0.1	**0.2**	<0.1	**0.3**
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	**0.1**	**0.1**	**0.2**
Benzo(a)pyrene	mg/kg	0.1	**0.1**	<0.1	**0.2**	<0.1	**0.3**
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	**0.1**	<0.1	**0.2**
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	**0.1**	<0.1	**0.3**
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	**0.2**	<0.2	**0.4**
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	**0.3**	<0.3	**0.5**
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	**0.2**	<0.2	**0.3**	<0.2	**0.4**
Total PAH (18)	mg/kg	0.8	**1.0**	<0.8	**2.4**	<0.8	**2.8**
Total PAH (NEPM/WHO 16)	mg/kg	0.8	**1.0**	<0.8	**2.4**	<0.8	**2.8**

PARAMETER	UOM	LOR	0407_TP246_0.5_20(626 SOIL - 26/6/2020 SE208133.016	0407_TP138_0.1_20(626 SOIL - 26/6/2020 SE208133.017	0407_TP138_0.5_20(626 SOIL - 26/6/2020 SE208133.018
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	**0.2**	<0.1
Pyrene	mg/kg	0.1	<0.1	**0.2**	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	**0.1**	<0.1
Chrysene	mg/kg	0.1	<0.1	**0.1**	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	**0.1**	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	**0.1**	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	**0.1**	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	**0.2**	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	**1.1**	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	**1.1**	<0.8

Speciated Phenols in Soil [AN420] Tested: 3/7/2020

PARAMETER	UOM	LOR	0407_TP254_0.1_20(626 SOIL - 26/6/2020 SE208133.001	0407_TP254_0.5_20(626 SOIL - 26/6/2020 SE208133.002	0407_TP111_0.1_200(26 SOIL - 26/6/2020 SE208133.003	0407_TP111_0.5_200(26 SOIL - 26/6/2020 SE208133.004	0407_TP91_0.1_200(26 SOIL - 26/6/2020 SE208133.005
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_TP91_0.5_200(26 SOIL - 26/6/2020 SE208133.006	0407_TP81_0.1_200(26 SOIL - 26/6/2020 SE208133.007	0407_TP81_0.5_200(26 SOIL - 26/6/2020 SE208133.008	0407_TP249_0.1_20(626 SOIL - 26/6/2020 SE208133.009	0407_TP249_0.5_20(626 SOIL - 26/6/2020 SE208133.010
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

Speciated Phenols in Soil [AN420] Tested: 3/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP248_0.1_20(626 SOIL - 26/6/2020 SE208133.011	0407_TP248_0.5_20(626 SOIL - 26/6/2020 SE208133.012	0407_TP247_0.1_20(626 SOIL - 26/6/2020 SE208133.013	0407_TP247_0.5_20(626 SOIL - 26/6/2020 SE208133.014	0407_TP246_0.1_20(626 SOIL - 26/6/2020 SE208133.015
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_TP246_0.5_20(626 SOIL - 26/6/2020 SE208133.016	0407_TP138_0.1_20(626 SOIL - 26/6/2020 SE208133.017	0407_TP138_0.5_20(626 SOIL - 26/6/2020 SE208133.018
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2

OC Pesticides in Soil [AN420] Tested: 3/7/2020

PARAMETER	UOM	LOR	0407_TP254_0.1_20(626 SOIL - 26/6/2020 SE208133.001	0407_TP254_0.5_20(626 SOIL - 26/6/2020 SE208133.002	0407_TP111_0.1_2000626 SOIL - 26/6/2020 SE208133.003	0407_TP111_0.5_2000626 SOIL - 26/6/2020 SE208133.004	0407_TP91_0.1_200(626 SOIL - 26/6/2020 SE208133.005
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 3/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP91_0.5_200 26 SOIL - 26/6/2020 SE208133.006	0407_TP81_0.1_200 26 SOIL - 26/6/2020 SE208133.007	0407_TP81_0.5_200 26 SOIL - 26/6/2020 SE208133.008	0407_TP249_0.1_20 626 SOIL - 26/6/2020 SE208133.009	0407_TP249_0.5_20 626 SOIL - 26/6/2020 SE208133.010
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 3/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP248_0.1_20(626 SOIL - 26/6/2020 SE208133.011	0407_TP248_0.5_20(626 SOIL - 26/6/2020 SE208133.012	0407_TP247_0.1_20(626 SOIL - 26/6/2020 SE208133.013	0407_TP247_0.5_20(626 SOIL - 26/6/2020 SE208133.014	0407_TP246_0.1_20(626 SOIL - 26/6/2020 SE208133.015
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 3/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP246_0.5_20(626 SOIL - 26/6/2020 SE208133.016	0407_TP138_0.1_20(626 SOIL - 26/6/2020 SE208133.017	0407_TP138_0.5_20(626 SOIL - 26/6/2020 SE208133.018
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1

OP Pesticides in Soil [AN420] Tested: 3/7/2020

PARAMETER	UOM	LOR	0407_TP254_0.1_20(626 SOIL - 26/6/2020 SE208133.001	0407_TP254_0.5_20(626 SOIL - 26/6/2020 SE208133.002	0407_TP111_0.1_200(26 SOIL - 26/6/2020 SE208133.003	0407_TP111_0.5_200(26 SOIL - 26/6/2020 SE208133.004	0407_TP91_0.1_200(26 SOIL - 26/6/2020 SE208133.005
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP91_0.5_200(26 SOIL - 26/6/2020 SE208133.006	0407_TP81_0.1_200(26 SOIL - 26/6/2020 SE208133.007	0407_TP81_0.5_200(26 SOIL - 26/6/2020 SE208133.008	0407_TP249_0.1_20(626 SOIL - 26/6/2020 SE208133.009	0407_TP249_0.5_20(626 SOIL - 26/6/2020 SE208133.010
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP248_0.1_20(626 SOIL - 26/6/2020 SE208133.011	0407_TP248_0.5_20(626 SOIL - 26/6/2020 SE208133.012	0407_TP247_0.1_20(626 SOIL - 26/6/2020 SE208133.013	0407_TP247_0.5_20(626 SOIL - 26/6/2020 SE208133.014	0407_TP246_0.1_20(626 SOIL - 26/6/2020 SE208133.015
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

OP Pesticides in Soil [AN420] Tested: 3/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP246_0.5_20(626 SOIL - 26/6/2020 SE208133.016	0407_TP138_0.1_20(626 SOIL - 26/6/2020 SE208133.017	0407_TP138_0.5_20(626 SOIL - 26/6/2020 SE208133.018
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7

PCBs in Soil [AN420] Tested: 3/7/2020

PARAMETER	UOM	LOR	0407_TP254_0.1_20(626 SOIL - 26/6/2020 SE208133.001	0407_TP254_0.5_20(626 SOIL - 26/6/2020 SE208133.002	0407_TP111_0.1_200(26 SOIL - 26/6/2020 SE208133.003	0407_TP111_0.5_200(26 SOIL - 26/6/2020 SE208133.004	0407_TP91_0.1_200(26 SOIL - 26/6/2020 SE208133.005
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP91_0.5_200(26 SOIL - 26/6/2020 SE208133.006	0407_TP81_0.1_200(26 SOIL - 26/6/2020 SE208133.007	0407_TP81_0.5_200(26 SOIL - 26/6/2020 SE208133.008	0407_TP249_0.1_20(626 SOIL - 26/6/2020 SE208133.009	0407_TP249_0.5_20(626 SOIL - 26/6/2020 SE208133.010
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP248_0.1_20(626 SOIL - 26/6/2020 SE208133.011	0407_TP248_0.5_20(626 SOIL - 26/6/2020 SE208133.012	0407_TP247_0.1_20(626 SOIL - 26/6/2020 SE208133.013	0407_TP247_0.5_20(626 SOIL - 26/6/2020 SE208133.014	0407_TP246_0.1_20(626 SOIL - 26/6/2020 SE208133.015
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PCBs in Soil [AN420] Tested: 3/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP246_0.5_20(626 SOIL - 26/6/2020 SE208133.016	0407_TP138_0.1_20(626 SOIL - 26/6/2020 SE208133.017	0407_TP138_0.5_20(626 SOIL - 26/6/2020 SE208133.018
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 3/7/2020

PARAMETER	UOM	LOR	0407_TP254_0.1_20(626 SOIL - 26/6/2020 SE208133.001	0407_TP254_0.5_20(626 SOIL - 26/6/2020 SE208133.002	0407_TP111_0.1_200(26 SOIL - 26/6/2020 SE208133.003	0407_TP111_0.5_200(26 SOIL - 26/6/2020 SE208133.004	0407_TP91_0.1_200(26 SOIL - 26/6/2020 SE208133.005
Arsenic, As	mg/kg	1	8	<1	8	1	7
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	0.7	<0.3	0.3
Chromium, Cr	mg/kg	0.5	29	<0.5	19	2.8	21
Copper, Cu	mg/kg	0.5	64	0.6	6900	0.6	51
Lead, Pb	mg/kg	1	140	1	150	1	120
Nickel, Ni	mg/kg	0.5	15	<0.5	13	1.1	12
Zinc, Zn	mg/kg	2	280	2.8	450	<2.0	270

PARAMETER	UOM	LOR	0407_TP91_0.5_200(26 SOIL - 26/6/2020 SE208133.006	0407_TP81_0.1_200(26 SOIL - 26/6/2020 SE208133.007	0407_TP81_0.5_200(26 SOIL - 26/6/2020 SE208133.008	0407_TP249_0.1_20(626 SOIL - 26/6/2020 SE208133.009	0407_TP249_0.5_20(626 SOIL - 26/6/2020 SE208133.010
Arsenic, As	mg/kg	1	2	6	<1	6	<1
Cadmium, Cd	mg/kg	0.3	<0.3	0.4	<0.3	0.5	<0.3
Chromium, Cr	mg/kg	0.5	2.2	20	0.8	20	2.5
Copper, Cu	mg/kg	0.5	1.7	69	4.5	110	4.0
Lead, Pb	mg/kg	1	2	130	10	160	23
Nickel, Ni	mg/kg	0.5	0.9	11	<0.5	13	0.9
Zinc, Zn	mg/kg	2	37	300	12	470	18

PARAMETER	UOM	LOR	0407_TP248_0.1_20(626 SOIL - 26/6/2020 SE208133.011	0407_TP248_0.5_20(626 SOIL - 26/6/2020 SE208133.012	0407_TP247_0.1_20(626 SOIL - 26/6/2020 SE208133.013	0407_TP247_0.5_20(626 SOIL - 26/6/2020 SE208133.014	0407_TP246_0.1_20(626 SOIL - 26/6/2020 SE208133.015
Arsenic, As	mg/kg	1	10	<1	8	<1	8
Cadmium, Cd	mg/kg	0.3	0.3	<0.3	0.8	<0.3	0.7
Chromium, Cr	mg/kg	0.5	24	0.5	21	0.8	19
Copper, Cu	mg/kg	0.5	58	2.2	92	7.1	71
Lead, Pb	mg/kg	1	93	6	140	26	180
Nickel, Ni	mg/kg	0.5	9.7	<0.5	12	0.9	13
Zinc, Zn	mg/kg	2	330	5.3	520	20	400

PARAMETER	UOM	LOR	0407_TP246_0.5_20(626 SOIL - 26/6/2020 SE208133.016	0407_TP138_0.1_20(626 SOIL - 26/6/2020 SE208133.017	0407_TP138_0.5_20(626 SOIL - 26/6/2020 SE208133.018
Arsenic, As	mg/kg	1	<1	9	<1
Cadmium, Cd	mg/kg	0.3	<0.3	0.3	<0.3
Chromium, Cr	mg/kg	0.5	<0.5	16	<0.5
Copper, Cu	mg/kg	0.5	1.6	37	2.5
Lead, Pb	mg/kg	1	6	86	11
Nickel, Ni	mg/kg	0.5	<0.5	10	<0.5
Zinc, Zn	mg/kg	2	<2.0	250	11

Mercury in Soil [AN312] Tested: 3/7/2020

PARAMETER	UOM	LOR	0407_TP254_0.1_20(626 SOIL - 26/6/2020 SE208133.001	0407_TP254_0.5_20(626 SOIL - 26/6/2020 SE208133.002	0407_TP111_0.1_200(26 SOIL - 26/6/2020 SE208133.003	0407_TP111_0.5_200(26 SOIL - 26/6/2020 SE208133.004	0407_TP91_0.1_200(26 SOIL - 26/6/2020 SE208133.005
Mercury	mg/kg	0.05	**0.12**	<0.05	**0.15**	<0.05	**0.08**

PARAMETER	UOM	LOR	0407_TP91_0.5_200(26 SOIL - 26/6/2020 SE208133.006	0407_TP81_0.1_200(26 SOIL - 26/6/2020 SE208133.007	0407_TP81_0.5_200(26 SOIL - 26/6/2020 SE208133.008	0407_TP249_0.1_20(626 SOIL - 26/6/2020 SE208133.009	0407_TP249_0.5_20(626 SOIL - 26/6/2020 SE208133.010
Mercury	mg/kg	0.05	<0.05	**0.07**	<0.05	**0.09**	<0.05

PARAMETER	UOM	LOR	0407_TP248_0.1_20(626 SOIL - 26/6/2020 SE208133.011	0407_TP248_0.5_20(626 SOIL - 26/6/2020 SE208133.012	0407_TP247_0.1_20(626 SOIL - 26/6/2020 SE208133.013	0407_TP247_0.5_20(626 SOIL - 26/6/2020 SE208133.014	0407_TP246_0.1_20(626 SOIL - 26/6/2020 SE208133.015
Mercury	mg/kg	0.05	**0.08**	<0.05	**0.07**	**0.08**	**0.12**

PARAMETER	UOM	LOR	0407_TP246_0.5_20(626 SOIL - 26/6/2020 SE208133.016	0407_TP138_0.1_20(626 SOIL - 26/6/2020 SE208133.017	0407_TP138_0.5_20(626 SOIL - 26/6/2020 SE208133.018
Mercury	mg/kg	0.05	<0.05	**0.08**	**0.51**

Moisture Content [AN002] Tested: 3/7/2020

PARAMETER	UOM	LOR	0407_TP254_0.1_20(626 SOIL - 26/6/2020 SE208133.001	0407_TP254_0.5_20(626 SOIL - 26/6/2020 SE208133.002	0407_TP111_0.1_200(26 SOIL - 26/6/2020 SE208133.003	0407_TP111_0.5_200(26 SOIL - 26/6/2020 SE208133.004	0407_TP91_0.1_200(26 SOIL - 26/6/2020 SE208133.005
% Moisture	%w/w	1	19.3	3.0	24.9	5.5	26.0

PARAMETER	UOM	LOR	0407_TP91_0.5_200(26 SOIL - 26/6/2020 SE208133.006	0407_TP81_0.1_200(26 SOIL - 26/6/2020 SE208133.007	0407_TP81_0.5_200(26 SOIL - 26/6/2020 SE208133.008	0407_TP249_0.1_20(626 SOIL - 26/6/2020 SE208133.009	0407_TP249_0.5_20(626 SOIL - 26/6/2020 SE208133.010
% Moisture	%w/w	1	27.7	37.8	5.7	17.8	7.8

PARAMETER	UOM	LOR	0407_TP248_0.1_20(626 SOIL - 26/6/2020 SE208133.011	0407_TP248_0.5_20(626 SOIL - 26/6/2020 SE208133.012	0407_TP247_0.1_20(626 SOIL - 26/6/2020 SE208133.013	0407_TP247_0.5_20(626 SOIL - 26/6/2020 SE208133.014	0407_TP246_0.1_20(626 SOIL - 26/6/2020 SE208133.015
% Moisture	%w/w	1	35.9	3.3	21.3	18.6	20.2

PARAMETER	UOM	LOR	0407_TP246_0.5_20(626 SOIL - 26/6/2020 SE208133.016	0407_TP138_0.1_20(626 SOIL - 26/6/2020 SE208133.017	0407_TP138_0.5_20(626 SOIL - 26/6/2020 SE208133.018
% Moisture	%w/w	1	3.9	19.4	5.1

Fibre Identification in soil [AN602] Tested: 6/7/2020

PARAMETER	UOM	LOR	0407_TP254_0.1_20 626 SOIL - 26/6/2020 SE208133.001	0407_TP111_0.1_200 26 SOIL - 26/6/2020 SE208133.003	0407_TP91_0.1_200 26 SOIL - 26/6/2020 SE208133.005	0407_TP81_0.1_200 26 SOIL - 26/6/2020 SE208133.007	0407_TP81_0.5_200 26 SOIL - 26/6/2020 SE208133.008
Asbestos Detected	No unit	-	Yes	No	Yes	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	**>0.01**	<0.01	<0.01

PARAMETER	UOM	LOR	0407_TP249_0.1_20 626 SOIL - 26/6/2020 SE208133.009	0407_TP249_0.5_20 626 SOIL - 26/6/2020 SE208133.010	0407_TP248_0.1_20 626 SOIL - 26/6/2020 SE208133.011	0407_TP248_0.5_20 626 SOIL - 26/6/2020 SE208133.012	0407_TP247_0.1_20 626 SOIL - 26/6/2020 SE208133.013
Asbestos Detected	No unit	-	Yes	No	Yes	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	**>0.01**	<0.01	<0.01

PARAMETER	UOM	LOR	0407_TP247_0.5_20 626 SOIL - 26/6/2020 SE208133.014	0407_TP246_0.1_20 626 SOIL - 26/6/2020 SE208133.015	0407_TP246_0.5_20 626 SOIL - 26/6/2020 SE208133.016	0407_TP138_0.1_20 626 SOIL - 26/6/2020 SE208133.017	0407_TP138_0.5_20 626 SOIL - 26/6/2020 SE208133.018
Asbestos Detected	No unit	-	No	Yes	No	Yes	No
Estimated Fibres*	%w/w	0.01	<0.01	**>0.01**	<0.01	<0.01	<0.01

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 6/7/2020

PARAMETER	UOM	LOR	0407_TP254_0.1_20 626 SOIL - 26/6/2020 SE208133.001	0407_TP111_0.1_20 26 SOIL - 26/6/2020 SE208133.003	0407_TP91_0.1_200 26 SOIL - 26/6/2020 SE208133.005	0407_TP81_0.1_200 26 SOIL - 26/6/2020 SE208133.007	0407_TP81_0.5_200 26 SOIL - 26/6/2020 SE208133.008
Total Sample Weight*	g	1	**402**	**447**	**428**	**392**	**765**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	**0.0112**	<0.00001	**0.0913**	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	**0.003**	<0.001	**0.021**	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	**0.003**	<0.001	**0.021**	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP249_0.1_20 626 SOIL - 26/6/2020 SE208133.009	0407_TP249_0.5_20 626 SOIL - 26/6/2020 SE208133.010	0407_TP248_0.1_20 626 SOIL - 26/6/2020 SE208133.011	0407_TP248_0.5_20 626 SOIL - 26/6/2020 SE208133.012	0407_TP247_0.1_20 626 SOIL - 26/6/2020 SE208133.013
Total Sample Weight*	g	1	**472**	**634**	**376**	**745**	**522**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	**0.0213**	<0.00001	**0.0636**	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	**0.005**	<0.001	**0.017**	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	**0.005**	<0.001	**0.017**	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP247_0.5_20 626 SOIL - 26/6/2020 SE208133.014	0407_TP246_0.1_20 626 SOIL - 26/6/2020 SE208133.015	0407_TP246_0.5_20 626 SOIL - 26/6/2020 SE208133.016	0407_TP138_0.1_20 626 SOIL - 26/6/2020 SE208133.017	0407_TP138_0.5_20 626 SOIL - 26/6/2020 SE208133.018
Total Sample Weight*	g	1	**728**	**492**	**700**	**423**	**701**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	**0.0723**	<0.00001	**0.0190**	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	**0.015**	<0.001	**0.004**	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	**0.015**	<0.001	**0.004**	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

Fibre ID in bulk materials [AN602] Tested: 7/7/2020

PARAMETER	UOM	LOR	0407_TP246_A01_20626 MATERIAL - 26/6/2020 SE208133.019	0407_TP81_A01_20026 MATERIAL - 26/6/2020 SE208133.020	0407_TP81_A02_20026 MATERIAL - 26/6/2020 SE208133.021	0407_TP249_A01_20626 MATERIAL - 26/6/2020 SE208133.022
Asbestos Detected	No unit	-	Yes	Yes	Yes	Yes

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid , mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser . Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC /MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents .
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup /fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS /ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples, Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable ’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.
AN605	This technique gravimetrically determines the mass of Bonded Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight. Any fibrous asbestos (FA) found in this fraction will be added to the 2-7mm fraction and its mass recorded there.

AN605	This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free/respirable fibres which are only observed by standard trace analysis as per AN602.
AN605	Bonded asbestos containing material (Bonded ACM) comprises asbestos-containing-material which is sound in condition. Fibrous asbestos (FA) comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material. Asbestos fines (AF) includes free fibres, small fibre bundles and also small fragments of bonded ACM that passes through a 7mm sieve - which implies that the bonded ACM fragments have a substantial degree of damage which increases the potential for fibre release.
AN-605	Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009 and NEPM 1999 (2013) schedule B1 section 4..

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000686-000689**
Samples	19

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208133 R0**
Date Received	26 Jun 2020
Date Reported	08 Jul 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.

Sample #1: Asbestos found as approx 3x2x1mm cement sheet fragments in >2mm portion.
Sample #5: Asbestos found as approx 12x5x3mm cement sheet fragments x5 in >2mm portion.
Sample #9: Asbestos found as approx 4x3x2mm cement sheet fragments in >2mm portion.
Sample #11: Asbestos found as approx 7x4x3mm cement sheet fragments in >2mm portion.
Sample #15: Asbestos found as approx 8x4x3mm cement sheet fragments x3 in >2mm portion.
Sample #17: Asbestos found as approx 5x3x2mm cement sheet fragments in >2mm portion.

Asbestos analysed by Approved Identifiers Ravee Sivasubramaniam and Yusuf Kuthpudin .

SIGNATORIES

[redacted]

Chemist | Senior Organic Chemist/Metals Chemis | Organic Section Head

[redacted]

Hygiene Team Leader | Asbestos Analyst

RESULTS

Fibre Identification in soil — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE208133.001	0407_TP254_0.1 _200626	Soil	402g Sand, Soil, Rocks, Plant matter	26 Jun 2020	Chrysotile Asbestos Found Synthetic Mineral Fibres Detected Organic Fibres Detected	<0.01
SE208133.003	0407_TP111_0.1 _200626	Soil	447g Sand, Soil, Rocks, Plant matter	26 Jun 2020	No Asbestos Found Synthetic Mineral Fibres Detected Organic Fibres Detected	<0.01
SE208133.005	0407_TP91_0.1_ 200626	Soil	428g Sand, Soil, Rocks, Plant matter	26 Jun 2020	Chrysotile Asbestos Found Synthetic Mineral Fibres Detected Organic Fibres Detected	>0.01
SE208133.007	0407_TP81_0.1_ 200626	Soil	392g Sand, Soil, Rocks, Plant matter	26 Jun 2020	No Asbestos Found Synthetic Mineral Fibres Detected Organic Fibres Detected	<0.01
SE208133.008	0407_TP81_0.5_ 200626	Soil	765g Sand, Soil	26 Jun 2020	No Asbestos Found	<0.01
SE208133.009	0407_TP249_0.1 _200626	Soil	472g Sand, Soil, Rocks, Plant matter	26 Jun 2020	Chrysotile Asbestos Found Synthetic Mineral Fibres Detected Organic Fibres Detected	<0.01
SE208133.010	0407_TP249_0.5 _200626	Soil	634g Sand, Soil, Rocks, Plant matter	26 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208133.011	0407_TP248_0.1 _200626	Soil	376g Sand, Soil, Rocks, Plant matter	26 Jun 2020	Chrysotile Asbestos Found Synthetic Mineral Fibres Detected Organic Fibres Detected	>0.01
SE208133.012	0407_TP248_0.5 _200626	Soil	745g Sand, Soil	26 Jun 2020	No Asbestos Found	<0.01
SE208133.013	0407_TP247_0.1 _200626	Soil	522g Sand, Soil, Rocks, Plant matter	26 Jun 2020	No Asbestos Found Synthetic Mineral Fibres Detected Organic Fibres Detected	<0.01
SE208133.014	0407_TP247_0.5 _200626	Soil	728g Sand, Soil	26 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208133.015	0407_TP246_0.1 _200626	Soil	492g Sand, Soil, Rocks, Plant matter	26 Jun 2020	Chrysotile Asbestos Found Synthetic Mineral Fibres Detected Organic Fibres Detected	>0.01
SE208133.016	0407_TP246_0.5 _200626	Soil	700g Sand, Soil, Rocks	26 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208133.017	0407_TP138_0.1 _200626	Soil	423g Sand, Soil, Rocks, Plant matter	26 Jun 2020	Chrysotile Asbestos Found Synthetic Mineral Fibres Detected Organic Fibres Detected	<0.01
SE208133.018	0407_TP138_0.5 _200626	Soil	701g Sand, Soil, Rocks	26 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01

RESULTS

Fibre ID in bulk materials — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE208133.019	0407_TP246_A01_200626	Other	15x10x3mm Cement Sheet Fragment	26 Jun 2020	Amosite, Chrysotile & Crocidolite Asbestos Detected	
SE208133.020	0407_TP81_A01_200626	Other	110x60x5mm Cement Sheet Fragment	26 Jun 2020	Chrysotile Asbestos Detected	
SE208133.021	0407_TP81_A02_200626	Other	20x10x4mm Cement Sheet Fragment	26 Jun 2020	Chrysotile Asbestos Detected	
SE208133.022	0407_TP249_A01_200626	Other	80x60x6mm Cement Sheet Fragment	26 Jun 2020	Chrysotile Asbestos Detected	

METHOD SUMMARY

SE208133 R0

METHOD	METHODOLOGY SUMMARY
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples , Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable ’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.

FOOTNOTES

Amosite	-	Brown Asbestos	NA	-	Not Analysed
Chrysotile	-	White Asbestos	LNR	-	Listed, Not Required
Crocidolite	-	Blue Asbestos	*	-	NATA accreditation does not cover the performance of this service .
Amphiboles	-	Amosite and/or Crocidolite	**	-	Indicative data, theoretical holding time exceeded.

(In reference to soil samples only) This report does not comply with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment and Remediation and Management of Asbestos Contaminated sites in Western Australia - May 2009.

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.

Where reported: 'Asbestos Detected': Asbestos detected by polarised light microscopy, including dispersion staining.
Where reported: 'No Asbestos Found': No Asbestos Found by polarised light microscopy , including dispersion staining.
Where reported: 'UMF Detected': Mineral fibres of unknown type detected by polarised light microscopy, including dispersion staining. Confirmation by another independent analytical technique may be necessary.

Even after disintegration it can be very difficult, or impossible, to detect the presence of asbestos in some asbestos -containing bulk materials using polarised light microscopy. This is due to the low grade or small length or diameter of asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety .

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STATEMENT OF QA/QC PERFORMANCE

SE208133 R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000686-000689**
Samples	22

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208133 R0**
Date Received	26 Jun 2020
Date Reported	08 Jul 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Duplicate	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	1 item

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	18 Soi;, 4 Material
Date documentation received	25/6/2020	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	3.7°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE208133 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Fibre ID in bulk materials

Method: ME-(AU)-[ENV]AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP246_A01_200626	SE208133.019	LB203632	26 Jun 2020	26 Jun 2020	26 Jun 2021	07 Jul 2020	26 Jun 2021	07 Jul 2020
0407_TP81_A01_200626	SE208133.020	LB203632	26 Jun 2020	26 Jun 2020	26 Jun 2021	07 Jul 2020	26 Jun 2021	07 Jul 2020
0407_TP81_A02_200626	SE208133.021	LB203632	26 Jun 2020	26 Jun 2020	26 Jun 2021	07 Jul 2020	26 Jun 2021	07 Jul 2020
0407_TP249_A01_200626	SE208133.022	LB203632	26 Jun 2020	26 Jun 2020	26 Jun 2021	07 Jul 2020	26 Jun 2021	07 Jul 2020

Fibre Identification in soil

Method: ME-(AU)-[ENV]AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP254_0.1_200626	SE208133.001	LB203547	26 Jun 2020	26 Jun 2020	26 Jun 2021	06 Jul 2020	26 Jun 2021	07 Jul 2020
0407_TP111_0.1_200626	SE208133.003	LB203547	26 Jun 2020	26 Jun 2020	26 Jun 2021	06 Jul 2020	26 Jun 2021	07 Jul 2020
0407_TP91_0.1_200626	SE208133.005	LB203547	26 Jun 2020	26 Jun 2020	26 Jun 2021	06 Jul 2020	26 Jun 2021	07 Jul 2020
0407_TP81_0.1_200626	SE208133.007	LB203547	26 Jun 2020	26 Jun 2020	26 Jun 2021	06 Jul 2020	26 Jun 2021	07 Jul 2020
0407_TP81_0.5_200626	SE208133.008	LB203547	26 Jun 2020	26 Jun 2020	26 Jun 2021	06 Jul 2020	26 Jun 2021	07 Jul 2020
0407_TP249_0.1_200626	SE208133.009	LB203547	26 Jun 2020	26 Jun 2020	26 Jun 2021	06 Jul 2020	26 Jun 2021	07 Jul 2020
0407_TP249_0.5_200626	SE208133.010	LB203547	26 Jun 2020	26 Jun 2020	26 Jun 2021	06 Jul 2020	26 Jun 2021	07 Jul 2020
0407_TP248_0.1_200626	SE208133.011	LB203547	26 Jun 2020	26 Jun 2020	26 Jun 2021	06 Jul 2020	26 Jun 2021	07 Jul 2020
0407_TP248_0.5_200626	SE208133.012	LB203547	26 Jun 2020	26 Jun 2020	26 Jun 2021	06 Jul 2020	26 Jun 2021	07 Jul 2020
0407_TP247_0.1_200626	SE208133.013	LB203547	26 Jun 2020	26 Jun 2020	26 Jun 2021	06 Jul 2020	26 Jun 2021	07 Jul 2020
0407_TP247_0.5_200626	SE208133.014	LB203547	26 Jun 2020	26 Jun 2020	26 Jun 2021	06 Jul 2020	26 Jun 2021	07 Jul 2020
0407_TP246_0.1_200626	SE208133.015	LB203547	26 Jun 2020	26 Jun 2020	26 Jun 2021	06 Jul 2020	26 Jun 2021	07 Jul 2020
0407_TP246_0.5_200626	SE208133.016	LB203547	26 Jun 2020	26 Jun 2020	26 Jun 2021	06 Jul 2020	26 Jun 2021	07 Jul 2020
0407_TP138_0.1_200626	SE208133.017	LB203547	26 Jun 2020	26 Jun 2020	26 Jun 2021	06 Jul 2020	26 Jun 2021	07 Jul 2020
0407_TP138_0.5_200626	SE208133.018	LB203547	26 Jun 2020	26 Jun 2020	26 Jun 2021	06 Jul 2020	26 Jun 2021	07 Jul 2020

Gravimetric Determination of Asbestos in Soil

Method: ME-(AU)-[ENV]AN605

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP254_0.1_200626	SE208133.001	LB203547	26 Jun 2020	26 Jun 2020	23 Dec 2020	06 Jul 2020	23 Dec 2020	07 Jul 2020
0407_TP111_0.1_200626	SE208133.003	LB203547	26 Jun 2020	26 Jun 2020	23 Dec 2020	06 Jul 2020	23 Dec 2020	07 Jul 2020
0407_TP91_0.1_200626	SE208133.005	LB203547	26 Jun 2020	26 Jun 2020	23 Dec 2020	06 Jul 2020	23 Dec 2020	07 Jul 2020
0407_TP81_0.1_200626	SE208133.007	LB203547	26 Jun 2020	26 Jun 2020	23 Dec 2020	06 Jul 2020	23 Dec 2020	07 Jul 2020
0407_TP81_0.5_200626	SE208133.008	LB203547	26 Jun 2020	26 Jun 2020	23 Dec 2020	06 Jul 2020	23 Dec 2020	07 Jul 2020
0407_TP249_0.1_200626	SE208133.009	LB203547	26 Jun 2020	26 Jun 2020	23 Dec 2020	06 Jul 2020	23 Dec 2020	07 Jul 2020
0407_TP249_0.5_200626	SE208133.010	LB203547	26 Jun 2020	26 Jun 2020	23 Dec 2020	06 Jul 2020	23 Dec 2020	07 Jul 2020
0407_TP248_0.1_200626	SE208133.011	LB203547	26 Jun 2020	26 Jun 2020	23 Dec 2020	06 Jul 2020	23 Dec 2020	07 Jul 2020
0407_TP248_0.5_200626	SE208133.012	LB203547	26 Jun 2020	26 Jun 2020	23 Dec 2020	06 Jul 2020	23 Dec 2020	07 Jul 2020
0407_TP247_0.1_200626	SE208133.013	LB203547	26 Jun 2020	26 Jun 2020	23 Dec 2020	06 Jul 2020	23 Dec 2020	07 Jul 2020
0407_TP247_0.5_200626	SE208133.014	LB203547	26 Jun 2020	26 Jun 2020	23 Dec 2020	06 Jul 2020	23 Dec 2020	07 Jul 2020
0407_TP246_0.1_200626	SE208133.015	LB203547	26 Jun 2020	26 Jun 2020	23 Dec 2020	06 Jul 2020	23 Dec 2020	07 Jul 2020
0407_TP246_0.5_200626	SE208133.016	LB203547	26 Jun 2020	26 Jun 2020	23 Dec 2020	06 Jul 2020	23 Dec 2020	07 Jul 2020
0407_TP138_0.1_200626	SE208133.017	LB203547	26 Jun 2020	26 Jun 2020	23 Dec 2020	06 Jul 2020	23 Dec 2020	07 Jul 2020
0407_TP138_0.5_200626	SE208133.018	LB203547	26 Jun 2020	26 Jun 2020	23 Dec 2020	06 Jul 2020	23 Dec 2020	07 Jul 2020

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP254_0.1_200626	SE208133.001	LB203468	26 Jun 2020	26 Jun 2020	24 Jul 2020	03 Jul 2020	24 Jul 2020	07 Jul 2020
0407_TP254_0.5_200626	SE208133.002	LB203468	26 Jun 2020	26 Jun 2020	24 Jul 2020	03 Jul 2020	24 Jul 2020	07 Jul 2020
0407_TP111_0.1_200626	SE208133.003	LB203468	26 Jun 2020	26 Jun 2020	24 Jul 2020	03 Jul 2020	24 Jul 2020	07 Jul 2020
0407_TP111_0.5_200626	SE208133.004	LB203468	26 Jun 2020	26 Jun 2020	24 Jul 2020	03 Jul 2020	24 Jul 2020	07 Jul 2020
0407_TP91_0.1_200626	SE208133.005	LB203468	26 Jun 2020	26 Jun 2020	24 Jul 2020	03 Jul 2020	24 Jul 2020	07 Jul 2020
0407_TP91_0.5_200626	SE208133.006	LB203468	26 Jun 2020	26 Jun 2020	24 Jul 2020	03 Jul 2020	24 Jul 2020	07 Jul 2020
0407_TP81_0.1_200626	SE208133.007	LB203468	26 Jun 2020	26 Jun 2020	24 Jul 2020	03 Jul 2020	24 Jul 2020	07 Jul 2020
0407_TP81_0.5_200626	SE208133.008	LB203468	26 Jun 2020	26 Jun 2020	24 Jul 2020	03 Jul 2020	24 Jul 2020	07 Jul 2020
0407_TP249_0.1_200626	SE208133.009	LB203468	26 Jun 2020	26 Jun 2020	24 Jul 2020	03 Jul 2020	24 Jul 2020	07 Jul 2020
0407_TP249_0.5_200626	SE208133.010	LB203468	26 Jun 2020	26 Jun 2020	24 Jul 2020	03 Jul 2020	24 Jul 2020	07 Jul 2020
0407_TP248_0.1_200626	SE208133.011	LB203468	26 Jun 2020	26 Jun 2020	24 Jul 2020	03 Jul 2020	24 Jul 2020	07 Jul 2020
0407_TP248_0.5_200626	SE208133.012	LB203468	26 Jun 2020	26 Jun 2020	24 Jul 2020	03 Jul 2020	24 Jul 2020	07 Jul 2020
0407_TP247_0.1_200626	SE208133.013	LB203468	26 Jun 2020	26 Jun 2020	24 Jul 2020	03 Jul 2020	24 Jul 2020	07 Jul 2020
0407_TP247_0.5_200626	SE208133.014	LB203468	26 Jun 2020	26 Jun 2020	24 Jul 2020	03 Jul 2020	24 Jul 2020	07 Jul 2020
0407_TP246_0.1_200626	SE208133.015	LB203468	26 Jun 2020	26 Jun 2020	24 Jul 2020	03 Jul 2020	24 Jul 2020	07 Jul 2020
0407_TP246_0.5_200626	SE208133.016	LB203468	26 Jun 2020	26 Jun 2020	24 Jul 2020	03 Jul 2020	24 Jul 2020	07 Jul 2020
0407_TP138_0.1_200626	SE208133.017	LB203468	26 Jun 2020	26 Jun 2020	24 Jul 2020	03 Jul 2020	24 Jul 2020	07 Jul 2020
0407_TP138_0.5_200626	SE208133.018	LB203468	26 Jun 2020	26 Jun 2020	24 Jul 2020	03 Jul 2020	24 Jul 2020	07 Jul 2020

HOLDING TIME SUMMARY

SE208133 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP254_0.1_200626	SE208133.001	LB203397	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	08 Jul 2020	06 Jul 2020
0407_TP254_0.5_200626	SE208133.002	LB203397	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	08 Jul 2020	06 Jul 2020
0407_TP111_0.1_200626	SE208133.003	LB203397	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	08 Jul 2020	06 Jul 2020
0407_TP111_0.5_200626	SE208133.004	LB203397	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	08 Jul 2020	06 Jul 2020
0407_TP91_0.1_200626	SE208133.005	LB203397	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	08 Jul 2020	06 Jul 2020
0407_TP91_0.5_200626	SE208133.006	LB203397	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	08 Jul 2020	06 Jul 2020
0407_TP81_0.1_200626	SE208133.007	LB203397	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	08 Jul 2020	06 Jul 2020
0407_TP81_0.5_200626	SE208133.008	LB203397	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	08 Jul 2020	06 Jul 2020
0407_TP249_0.1_200626	SE208133.009	LB203397	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	08 Jul 2020	06 Jul 2020
0407_TP249_0.5_200626	SE208133.010	LB203397	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	08 Jul 2020	06 Jul 2020
0407_TP248_0.1_200626	SE208133.011	LB203397	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	08 Jul 2020	06 Jul 2020
0407_TP248_0.5_200626	SE208133.012	LB203397	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	08 Jul 2020	06 Jul 2020
0407_TP247_0.1_200626	SE208133.013	LB203397	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	08 Jul 2020	06 Jul 2020
0407_TP247_0.5_200626	SE208133.014	LB203397	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	08 Jul 2020	06 Jul 2020
0407_TP246_0.1_200626	SE208133.015	LB203397	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	08 Jul 2020	06 Jul 2020
0407_TP246_0.5_200626	SE208133.016	LB203397	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	08 Jul 2020	06 Jul 2020
0407_TP138_0.1_200626	SE208133.017	LB203397	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	08 Jul 2020	06 Jul 2020
0407_TP138_0.5_200626	SE208133.018	LB203397	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	08 Jul 2020	06 Jul 2020

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP254_0.1_200626	SE208133.001	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	08 Jul 2020
0407_TP254_0.5_200626	SE208133.002	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	08 Jul 2020
0407_TP111_0.1_200626	SE208133.003	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	08 Jul 2020
0407_TP111_0.5_200626	SE208133.004	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	08 Jul 2020
0407_TP91_0.1_200626	SE208133.005	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	08 Jul 2020
0407_TP91_0.5_200626	SE208133.006	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	08 Jul 2020
0407_TP81_0.1_200626	SE208133.007	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	08 Jul 2020
0407_TP81_0.5_200626	SE208133.008	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	08 Jul 2020
0407_TP249_0.1_200626	SE208133.009	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	08 Jul 2020
0407_TP249_0.5_200626	SE208133.010	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	08 Jul 2020
0407_TP248_0.1_200626	SE208133.011	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	08 Jul 2020
0407_TP248_0.5_200626	SE208133.012	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	08 Jul 2020
0407_TP247_0.1_200626	SE208133.013	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	08 Jul 2020
0407_TP247_0.5_200626	SE208133.014	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	08 Jul 2020
0407_TP246_0.1_200626	SE208133.015	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	08 Jul 2020
0407_TP246_0.5_200626	SE208133.016	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	08 Jul 2020
0407_TP138_0.1_200626	SE208133.017	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	08 Jul 2020
0407_TP138_0.5_200626	SE208133.018	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	08 Jul 2020

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP254_0.1_200626	SE208133.001	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP254_0.5_200626	SE208133.002	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP111_0.1_200626	SE208133.003	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP111_0.5_200626	SE208133.004	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP91_0.1_200626	SE208133.005	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP91_0.5_200626	SE208133.006	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP81_0.1_200626	SE208133.007	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP81_0.5_200626	SE208133.008	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP249_0.1_200626	SE208133.009	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP249_0.5_200626	SE208133.010	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP248_0.1_200626	SE208133.011	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP248_0.5_200626	SE208133.012	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP247_0.1_200626	SE208133.013	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP247_0.5_200626	SE208133.014	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP246_0.1_200626	SE208133.015	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP246_0.5_200626	SE208133.016	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP138_0.1_200626	SE208133.017	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP138_0.5_200626	SE208133.018	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020

HOLDING TIME SUMMARY

SE208133 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP254_0.1_200626	SE208133.001	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP254_0.5_200626	SE208133.002	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP111_0.1_200626	SE208133.003	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP111_0.5_200626	SE208133.004	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP91_0.1_200626	SE208133.005	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP91_0.5_200626	SE208133.006	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP81_0.1_200626	SE208133.007	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP81_0.5_200626	SE208133.008	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP249_0.1_200626	SE208133.009	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP249_0.5_200626	SE208133.010	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP248_0.1_200626	SE208133.011	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP248_0.5_200626	SE208133.012	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP247_0.1_200626	SE208133.013	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP247_0.5_200626	SE208133.014	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP246_0.1_200626	SE208133.015	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP246_0.5_200626	SE208133.016	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP138_0.1_200626	SE208133.017	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP138_0.5_200626	SE208133.018	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP254_0.1_200626	SE208133.001	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	08 Jul 2020
0407_TP254_0.5_200626	SE208133.002	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	08 Jul 2020
0407_TP111_0.1_200626	SE208133.003	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	08 Jul 2020
0407_TP111_0.5_200626	SE208133.004	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	08 Jul 2020
0407_TP91_0.1_200626	SE208133.005	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	08 Jul 2020
0407_TP91_0.5_200626	SE208133.006	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	08 Jul 2020
0407_TP81_0.1_200626	SE208133.007	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	08 Jul 2020
0407_TP81_0.5_200626	SE208133.008	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	08 Jul 2020
0407_TP249_0.1_200626	SE208133.009	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	08 Jul 2020
0407_TP249_0.5_200626	SE208133.010	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	08 Jul 2020
0407_TP248_0.1_200626	SE208133.011	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	08 Jul 2020
0407_TP248_0.5_200626	SE208133.012	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	08 Jul 2020
0407_TP247_0.1_200626	SE208133.013	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	08 Jul 2020
0407_TP247_0.5_200626	SE208133.014	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	08 Jul 2020
0407_TP246_0.1_200626	SE208133.015	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	08 Jul 2020
0407_TP246_0.5_200626	SE208133.016	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	08 Jul 2020
0407_TP138_0.1_200626	SE208133.017	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	08 Jul 2020
0407_TP138_0.5_200626	SE208133.018	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	08 Jul 2020

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP254_0.1_200626	SE208133.001	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP254_0.5_200626	SE208133.002	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP111_0.1_200626	SE208133.003	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP111_0.5_200626	SE208133.004	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP91_0.1_200626	SE208133.005	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP91_0.5_200626	SE208133.006	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP81_0.1_200626	SE208133.007	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP81_0.5_200626	SE208133.008	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP249_0.1_200626	SE208133.009	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP249_0.5_200626	SE208133.010	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP248_0.1_200626	SE208133.011	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP248_0.5_200626	SE208133.012	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP247_0.1_200626	SE208133.013	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP247_0.5_200626	SE208133.014	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP246_0.1_200626	SE208133.015	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP246_0.5_200626	SE208133.016	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP138_0.1_200626	SE208133.017	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP138_0.5_200626	SE208133.018	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020

HOLDING TIME SUMMARY

SE208133 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP254_0.1_200626	SE208133.001	LB203454	26 Jun 2020	26 Jun 2020	23 Dec 2020	03 Jul 2020	23 Dec 2020	07 Jul 2020
0407_TP254_0.5_200626	SE208133.002	LB203454	26 Jun 2020	26 Jun 2020	23 Dec 2020	03 Jul 2020	23 Dec 2020	07 Jul 2020
0407_TP111_0.1_200626	SE208133.003	LB203454	26 Jun 2020	26 Jun 2020	23 Dec 2020	03 Jul 2020	23 Dec 2020	07 Jul 2020
0407_TP111_0.5_200626	SE208133.004	LB203454	26 Jun 2020	26 Jun 2020	23 Dec 2020	03 Jul 2020	23 Dec 2020	07 Jul 2020
0407_TP91_0.1_200626	SE208133.005	LB203454	26 Jun 2020	26 Jun 2020	23 Dec 2020	03 Jul 2020	23 Dec 2020	07 Jul 2020
0407_TP91_0.5_200626	SE208133.006	LB203454	26 Jun 2020	26 Jun 2020	23 Dec 2020	03 Jul 2020	23 Dec 2020	07 Jul 2020
0407_TP81_0.1_200626	SE208133.007	LB203454	26 Jun 2020	26 Jun 2020	23 Dec 2020	03 Jul 2020	23 Dec 2020	07 Jul 2020
0407_TP81_0.5_200626	SE208133.008	LB203454	26 Jun 2020	26 Jun 2020	23 Dec 2020	03 Jul 2020	23 Dec 2020	07 Jul 2020
0407_TP249_0.1_200626	SE208133.009	LB203454	26 Jun 2020	26 Jun 2020	23 Dec 2020	03 Jul 2020	23 Dec 2020	07 Jul 2020
0407_TP249_0.5_200626	SE208133.010	LB203454	26 Jun 2020	26 Jun 2020	23 Dec 2020	03 Jul 2020	23 Dec 2020	07 Jul 2020
0407_TP248_0.1_200626	SE208133.011	LB203454	26 Jun 2020	26 Jun 2020	23 Dec 2020	03 Jul 2020	23 Dec 2020	07 Jul 2020
0407_TP248_0.5_200626	SE208133.012	LB203454	26 Jun 2020	26 Jun 2020	23 Dec 2020	03 Jul 2020	23 Dec 2020	07 Jul 2020
0407_TP247_0.1_200626	SE208133.013	LB203454	26 Jun 2020	26 Jun 2020	23 Dec 2020	03 Jul 2020	23 Dec 2020	07 Jul 2020
0407_TP247_0.5_200626	SE208133.014	LB203454	26 Jun 2020	26 Jun 2020	23 Dec 2020	03 Jul 2020	23 Dec 2020	07 Jul 2020
0407_TP246_0.1_200626	SE208133.015	LB203454	26 Jun 2020	26 Jun 2020	23 Dec 2020	03 Jul 2020	23 Dec 2020	07 Jul 2020
0407_TP246_0.5_200626	SE208133.016	LB203454	26 Jun 2020	26 Jun 2020	23 Dec 2020	03 Jul 2020	23 Dec 2020	07 Jul 2020
0407_TP138_0.1_200626	SE208133.017	LB203454	26 Jun 2020	26 Jun 2020	23 Dec 2020	03 Jul 2020	23 Dec 2020	07 Jul 2020
0407_TP138_0.5_200626	SE208133.018	LB203454	26 Jun 2020	26 Jun 2020	23 Dec 2020	03 Jul 2020	23 Dec 2020	07 Jul 2020

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP254_0.1_200626	SE208133.001	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	06 Jul 2020
0407_TP254_0.5_200626	SE208133.002	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	06 Jul 2020
0407_TP111_0.1_200626	SE208133.003	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	06 Jul 2020
0407_TP111_0.5_200626	SE208133.004	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	06 Jul 2020
0407_TP91_0.1_200626	SE208133.005	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	06 Jul 2020
0407_TP91_0.5_200626	SE208133.006	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	06 Jul 2020
0407_TP81_0.1_200626	SE208133.007	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	06 Jul 2020
0407_TP81_0.5_200626	SE208133.008	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	06 Jul 2020
0407_TP249_0.1_200626	SE208133.009	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	06 Jul 2020
0407_TP249_0.5_200626	SE208133.010	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	06 Jul 2020
0407_TP248_0.1_200626	SE208133.011	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	06 Jul 2020
0407_TP248_0.5_200626	SE208133.012	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	06 Jul 2020
0407_TP247_0.1_200626	SE208133.013	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	06 Jul 2020
0407_TP247_0.5_200626	SE208133.014	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	06 Jul 2020
0407_TP246_0.1_200626	SE208133.015	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	06 Jul 2020
0407_TP246_0.5_200626	SE208133.016	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	06 Jul 2020
0407_TP138_0.1_200626	SE208133.017	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	06 Jul 2020
0407_TP138_0.5_200626	SE208133.018	LB203394	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	06 Jul 2020

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP254_0.1_200626	SE208133.001	LB203387	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP254_0.5_200626	SE208133.002	LB203387	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP111_0.1_200626	SE208133.003	LB203387	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP111_0.5_200626	SE208133.004	LB203387	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP91_0.1_200626	SE208133.005	LB203387	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP91_0.5_200626	SE208133.006	LB203387	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP81_0.1_200626	SE208133.007	LB203387	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP81_0.5_200626	SE208133.008	LB203387	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP249_0.1_200626	SE208133.009	LB203387	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP249_0.5_200626	SE208133.010	LB203387	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP248_0.1_200626	SE208133.011	LB203387	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP248_0.5_200626	SE208133.012	LB203387	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP247_0.1_200626	SE208133.013	LB203387	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP247_0.5_200626	SE208133.014	LB203387	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP246_0.1_200626	SE208133.015	LB203387	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP246_0.5_200626	SE208133.016	LB203387	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP138_0.1_200626	SE208133.017	LB203387	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020
0407_TP138_0.5_200626	SE208133.018	LB203387	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	07 Jul 2020

HOLDING TIME SUMMARY

SE208133 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Volatile Petroleum Hydrocarbons in Soil — Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP254_0.1_200626	SE208133.001	LB203387	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	06 Jul 2020
0407_TP254_0.5_200626	SE208133.002	LB203387	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	06 Jul 2020
0407_TP111_0.1_200626	SE208133.003	LB203387	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	06 Jul 2020
0407_TP111_0.5_200626	SE208133.004	LB203387	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	06 Jul 2020
0407_TP91_0.1_200626	SE208133.005	LB203387	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	06 Jul 2020
0407_TP91_0.5_200626	SE208133.006	LB203387	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	06 Jul 2020
0407_TP81_0.1_200626	SE208133.007	LB203387	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	06 Jul 2020
0407_TP81_0.5_200626	SE208133.008	LB203387	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	06 Jul 2020
0407_TP249_0.1_200626	SE208133.009	LB203387	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	06 Jul 2020
0407_TP249_0.5_200626	SE208133.010	LB203387	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	06 Jul 2020
0407_TP248_0.1_200626	SE208133.011	LB203387	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	06 Jul 2020
0407_TP248_0.5_200626	SE208133.012	LB203387	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	06 Jul 2020
0407_TP247_0.1_200626	SE208133.013	LB203387	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	06 Jul 2020
0407_TP247_0.5_200626	SE208133.014	LB203387	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	06 Jul 2020
0407_TP246_0.1_200626	SE208133.015	LB203387	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	06 Jul 2020
0407_TP246_0.5_200626	SE208133.016	LB203387	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	06 Jul 2020
0407_TP138_0.1_200626	SE208133.017	LB203387	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	06 Jul 2020
0407_TP138_0.5_200626	SE208133.018	LB203387	26 Jun 2020	26 Jun 2020	10 Jul 2020	03 Jul 2020	12 Aug 2020	06 Jul 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP254_0.1_200626	SE208133.001	%	60 - 130%	103
	0407_TP254_0.5_200626	SE208133.002	%	60 - 130%	99
	0407_TP111_0.1_200626	SE208133.003	%	60 - 130%	100
	0407_TP111_0.5_200626	SE208133.004	%	60 - 130%	103
	0407_TP91_0.1_200626	SE208133.005	%	60 - 130%	109
	0407_TP91_0.5_200626	SE208133.006	%	60 - 130%	99
	0407_TP81_0.1_200626	SE208133.007	%	60 - 130%	87
	0407_TP81_0.5_200626	SE208133.008	%	60 - 130%	92
	0407_TP249_0.1_200626	SE208133.009	%	60 - 130%	101
	0407_TP249_0.5_200626	SE208133.010	%	60 - 130%	91
	0407_TP248_0.1_200626	SE208133.011	%	60 - 130%	107
	0407_TP248_0.5_200626	SE208133.012	%	60 - 130%	97
	0407_TP247_0.1_200626	SE208133.013	%	60 - 130%	101
	0407_TP247_0.5_200626	SE208133.014	%	60 - 130%	102
	0407_TP246_0.1_200626	SE208133.015	%	60 - 130%	97
	0407_TP246_0.5_200626	SE208133.016	%	60 - 130%	94
	0407_TP138_0.1_200626	SE208133.017	%	60 - 130%	102
	0407_TP138_0.5_200626	SE208133.018	%	60 - 130%	95

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP254_0.1_200626	SE208133.001	%	60 - 130%	92
	0407_TP254_0.5_200626	SE208133.002	%	60 - 130%	89
	0407_TP111_0.1_200626	SE208133.003	%	60 - 130%	90
	0407_TP111_0.5_200626	SE208133.004	%	60 - 130%	89
	0407_TP91_0.1_200626	SE208133.005	%	60 - 130%	90
	0407_TP91_0.5_200626	SE208133.006	%	60 - 130%	85
	0407_TP81_0.1_200626	SE208133.007	%	60 - 130%	85
	0407_TP81_0.5_200626	SE208133.008	%	60 - 130%	82
	0407_TP249_0.1_200626	SE208133.009	%	60 - 130%	87
	0407_TP249_0.5_200626	SE208133.010	%	60 - 130%	87
	0407_TP248_0.1_200626	SE208133.011	%	60 - 130%	92
	0407_TP248_0.5_200626	SE208133.012	%	60 - 130%	88
	0407_TP247_0.1_200626	SE208133.013	%	60 - 130%	88
	0407_TP247_0.5_200626	SE208133.014	%	60 - 130%	87
	0407_TP246_0.1_200626	SE208133.015	%	60 - 130%	93
	0407_TP246_0.5_200626	SE208133.016	%	60 - 130%	88
	0407_TP138_0.1_200626	SE208133.017	%	60 - 130%	88
	0407_TP138_0.5_200626	SE208133.018	%	60 - 130%	90
d14-p-terphenyl (Surrogate)	0407_TP254_0.1_200626	SE208133.001	%	60 - 130%	98
	0407_TP254_0.5_200626	SE208133.002	%	60 - 130%	95
	0407_TP111_0.1_200626	SE208133.003	%	60 - 130%	92
	0407_TP111_0.5_200626	SE208133.004	%	60 - 130%	90
	0407_TP91_0.1_200626	SE208133.005	%	60 - 130%	89
	0407_TP91_0.5_200626	SE208133.006	%	60 - 130%	86
	0407_TP81_0.1_200626	SE208133.007	%	60 - 130%	84
	0407_TP81_0.5_200626	SE208133.008	%	60 - 130%	87
	0407_TP249_0.1_200626	SE208133.009	%	60 - 130%	97
	0407_TP249_0.5_200626	SE208133.010	%	60 - 130%	97
	0407_TP248_0.1_200626	SE208133.011	%	60 - 130%	89
	0407_TP248_0.5_200626	SE208133.012	%	60 - 130%	87
	0407_TP247_0.1_200626	SE208133.013	%	60 - 130%	99
	0407_TP247_0.5_200626	SE208133.014	%	60 - 130%	93
	0407_TP246_0.1_200626	SE208133.015	%	60 - 130%	104
	0407_TP246_0.5_200626	SE208133.016	%	60 - 130%	89
	0407_TP138_0.1_200626	SE208133.017	%	60 - 130%	100
	0407_TP138_0.5_200626	SE208133.018	%	60 - 130%	93

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued) — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP254_0.1_200626	SE208133.001	%	70 - 130%	92
	0407_TP254_0.5_200626	SE208133.002	%	70 - 130%	89
	0407_TP111_0.1_200626	SE208133.003	%	70 - 130%	90
	0407_TP111_0.5_200626	SE208133.004	%	70 - 130%	89
	0407_TP91_0.1_200626	SE208133.005	%	70 - 130%	90
	0407_TP91_0.5_200626	SE208133.006	%	70 - 130%	85
	0407_TP81_0.1_200626	SE208133.007	%	70 - 130%	85
	0407_TP81_0.5_200626	SE208133.008	%	70 - 130%	82
	0407_TP249_0.1_200626	SE208133.009	%	70 - 130%	87
	0407_TP249_0.5_200626	SE208133.010	%	70 - 130%	87
	0407_TP248_0.1_200626	SE208133.011	%	70 - 130%	92
	0407_TP248_0.5_200626	SE208133.012	%	70 - 130%	88
	0407_TP247_0.1_200626	SE208133.013	%	70 - 130%	88
	0407_TP247_0.5_200626	SE208133.014	%	70 - 130%	87
	0407_TP246_0.1_200626	SE208133.015	%	70 - 130%	93
	0407_TP246_0.5_200626	SE208133.016	%	70 - 130%	88
	0407_TP138_0.1_200626	SE208133.017	%	70 - 130%	88
	0407_TP138_0.5_200626	SE208133.018	%	70 - 130%	90
d14-p-terphenyl (Surrogate)	0407_TP254_0.1_200626	SE208133.001	%	70 - 130%	98
	0407_TP254_0.5_200626	SE208133.002	%	70 - 130%	95
	0407_TP111_0.1_200626	SE208133.003	%	70 - 130%	92
	0407_TP111_0.5_200626	SE208133.004	%	70 - 130%	90
	0407_TP91_0.1_200626	SE208133.005	%	70 - 130%	89
	0407_TP91_0.5_200626	SE208133.006	%	70 - 130%	86
	0407_TP81_0.1_200626	SE208133.007	%	70 - 130%	84
	0407_TP81_0.5_200626	SE208133.008	%	70 - 130%	87
	0407_TP249_0.1_200626	SE208133.009	%	70 - 130%	97
	0407_TP249_0.5_200626	SE208133.010	%	70 - 130%	97
	0407_TP248_0.1_200626	SE208133.011	%	70 - 130%	89
	0407_TP248_0.5_200626	SE208133.012	%	70 - 130%	87
	0407_TP247_0.1_200626	SE208133.013	%	70 - 130%	99
	0407_TP247_0.5_200626	SE208133.014	%	70 - 130%	93
	0407_TP246_0.1_200626	SE208133.015	%	70 - 130%	104
	0407_TP246_0.5_200626	SE208133.016	%	70 - 130%	89
	0407_TP138_0.1_200626	SE208133.017	%	70 - 130%	100
	0407_TP138_0.5_200626	SE208133.018	%	70 - 130%	93
d5-nitrobenzene (Surrogate)	0407_TP254_0.1_200626	SE208133.001	%	70 - 130%	79
	0407_TP254_0.5_200626	SE208133.002	%	70 - 130%	78
	0407_TP111_0.1_200626	SE208133.003	%	70 - 130%	77
	0407_TP111_0.5_200626	SE208133.004	%	70 - 130%	81
	0407_TP91_0.1_200626	SE208133.005	%	70 - 130%	82
	0407_TP91_0.5_200626	SE208133.006	%	70 - 130%	78
	0407_TP81_0.1_200626	SE208133.007	%	70 - 130%	78
	0407_TP81_0.5_200626	SE208133.008	%	70 - 130%	76
	0407_TP249_0.1_200626	SE208133.009	%	70 - 130%	76
	0407_TP249_0.5_200626	SE208133.010	%	70 - 130%	78
	0407_TP248_0.1_200626	SE208133.011	%	70 - 130%	80
	0407_TP248_0.5_200626	SE208133.012	%	70 - 130%	77
	0407_TP247_0.1_200626	SE208133.013	%	70 - 130%	76
	0407_TP247_0.5_200626	SE208133.014	%	70 - 130%	80
	0407_TP246_0.1_200626	SE208133.015	%	70 - 130%	82
	0407_TP246_0.5_200626	SE208133.016	%	70 - 130%	79
	0407_TP138_0.1_200626	SE208133.017	%	70 - 130%	84
	0407_TP138_0.5_200626	SE208133.018	%	70 - 130%	82

PCBs in Soil — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP254_0.1_200626	SE208133.001	%	60 - 130%	103
	0407_TP254_0.5_200626	SE208133.002	%	60 - 130%	99
	0407_TP111_0.1_200626	SE208133.003	%	60 - 130%	100
	0407_TP111_0.5_200626	SE208133.004	%	60 - 130%	103

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PCBs in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP91_0.1_200626	SE208133.005	%	60 - 130%	109
	0407_TP91_0.5_200626	SE208133.006	%	60 - 130%	99
	0407_TP81_0.1_200626	SE208133.007	%	60 - 130%	87
	0407_TP81_0.5_200626	SE208133.008	%	60 - 130%	92
	0407_TP249_0.1_200626	SE208133.009	%	60 - 130%	101
	0407_TP249_0.5_200626	SE208133.010	%	60 - 130%	91
	0407_TP248_0.1_200626	SE208133.011	%	60 - 130%	107
	0407_TP248_0.5_200626	SE208133.012	%	60 - 130%	97
	0407_TP247_0.1_200626	SE208133.013	%	60 - 130%	101
	0407_TP247_0.5_200626	SE208133.014	%	60 - 130%	102
	0407_TP246_0.1_200626	SE208133.015	%	60 - 130%	97
	0407_TP246_0.5_200626	SE208133.016	%	60 - 130%	94
	0407_TP138_0.1_200626	SE208133.017	%	60 - 130%	102
	0407_TP138_0.5_200626	SE208133.018	%	60 - 130%	95

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	0407_TP254_0.1_200626	SE208133.001	%	70 - 130%	82
	0407_TP254_0.5_200626	SE208133.002	%	70 - 130%	84
	0407_TP111_0.1_200626	SE208133.003	%	70 - 130%	82
	0407_TP111_0.5_200626	SE208133.004	%	70 - 130%	72
	0407_TP91_0.1_200626	SE208133.005	%	70 - 130%	75
	0407_TP91_0.5_200626	SE208133.006	%	70 - 130%	75
	0407_TP81_0.1_200626	SE208133.007	%	70 - 130%	97
	0407_TP81_0.5_200626	SE208133.008	%	70 - 130%	70
	0407_TP249_0.1_200626	SE208133.009	%	70 - 130%	73
	0407_TP249_0.5_200626	SE208133.010	%	70 - 130%	71
	0407_TP248_0.1_200626	SE208133.011	%	70 - 130%	73
	0407_TP248_0.5_200626	SE208133.012	%	70 - 130%	76
	0407_TP247_0.1_200626	SE208133.013	%	70 - 130%	71
	0407_TP247_0.5_200626	SE208133.014	%	70 - 130%	100
	0407_TP246_0.1_200626	SE208133.015	%	70 - 130%	78
	0407_TP246_0.5_200626	SE208133.016	%	70 - 130%	72
	0407_TP138_0.1_200626	SE208133.017	%	70 - 130%	73
	0407_TP138_0.5_200626	SE208133.018	%	70 - 130%	72
d5-phenol (Surrogate)	0407_TP254_0.1_200626	SE208133.001	%	50 - 130%	91
	0407_TP254_0.5_200626	SE208133.002	%	50 - 130%	89
	0407_TP111_0.1_200626	SE208133.003	%	50 - 130%	74
	0407_TP111_0.5_200626	SE208133.004	%	50 - 130%	77
	0407_TP91_0.1_200626	SE208133.005	%	50 - 130%	84
	0407_TP91_0.5_200626	SE208133.006	%	50 - 130%	83
	0407_TP81_0.1_200626	SE208133.007	%	50 - 130%	83
	0407_TP81_0.5_200626	SE208133.008	%	50 - 130%	85
	0407_TP249_0.1_200626	SE208133.009	%	50 - 130%	81
	0407_TP249_0.5_200626	SE208133.010	%	50 - 130%	77
	0407_TP248_0.1_200626	SE208133.011	%	50 - 130%	78
	0407_TP248_0.5_200626	SE208133.012	%	50 - 130%	74
	0407_TP247_0.1_200626	SE208133.013	%	50 - 130%	72
	0407_TP247_0.5_200626	SE208133.014	%	50 - 130%	78
	0407_TP246_0.1_200626	SE208133.015	%	50 - 130%	72
	0407_TP246_0.5_200626	SE208133.016	%	50 - 130%	79
	0407_TP138_0.1_200626	SE208133.017	%	50 - 130%	94
	0407_TP138_0.5_200626	SE208133.018	%	50 - 130%	80

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP254_0.1_200626	SE208133.001	%	60 - 130%	84
	0407_TP254_0.5_200626	SE208133.002	%	60 - 130%	100
	0407_TP111_0.1_200626	SE208133.003	%	60 - 130%	83
	0407_TP111_0.5_200626	SE208133.004	%	60 - 130%	95
	0407_TP91_0.1_200626	SE208133.005	%	60 - 130%	80
	0407_TP91_0.5_200626	SE208133.006	%	60 - 130%	81

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP81_0.1_200626	SE208133.007	%	60 - 130%	90
	0407_TP81_0.5_200626	SE208133.008	%	60 - 130%	103
	0407_TP249_0.1_200626	SE208133.009	%	60 - 130%	92
	0407_TP249_0.5_200626	SE208133.010	%	60 - 130%	94
	0407_TP248_0.1_200626	SE208133.011	%	60 - 130%	80
	0407_TP248_0.5_200626	SE208133.012	%	60 - 130%	95
	0407_TP247_0.1_200626	SE208133.013	%	60 - 130%	87
	0407_TP247_0.5_200626	SE208133.014	%	60 - 130%	95
	0407_TP246_0.1_200626	SE208133.015	%	60 - 130%	90
	0407_TP246_0.5_200626	SE208133.016	%	60 - 130%	94
	0407_TP138_0.1_200626	SE208133.017	%	60 - 130%	94
	0407_TP138_0.5_200626	SE208133.018	%	60 - 130%	92
d4-1,2-dichloroethane (Surrogate)	0407_TP254_0.1_200626	SE208133.001	%	60 - 130%	71
	0407_TP254_0.5_200626	SE208133.002	%	60 - 130%	96
	0407_TP111_0.1_200626	SE208133.003	%	60 - 130%	80
	0407_TP111_0.5_200626	SE208133.004	%	60 - 130%	104
	0407_TP91_0.1_200626	SE208133.005	%	60 - 130%	88
	0407_TP91_0.5_200626	SE208133.006	%	60 - 130%	76
	0407_TP81_0.1_200626	SE208133.007	%	60 - 130%	75
	0407_TP81_0.5_200626	SE208133.008	%	60 - 130%	92
	0407_TP249_0.1_200626	SE208133.009	%	60 - 130%	72
	0407_TP249_0.5_200626	SE208133.010	%	60 - 130%	85
	0407_TP248_0.1_200626	SE208133.011	%	60 - 130%	77
	0407_TP248_0.5_200626	SE208133.012	%	60 - 130%	92
	0407_TP247_0.1_200626	SE208133.013	%	60 - 130%	78
	0407_TP247_0.5_200626	SE208133.014	%	60 - 130%	84
	0407_TP246_0.1_200626	SE208133.015	%	60 - 130%	88
	0407_TP246_0.5_200626	SE208133.016	%	60 - 130%	88
	0407_TP138_0.1_200626	SE208133.017	%	60 - 130%	79
	0407_TP138_0.5_200626	SE208133.018	%	60 - 130%	89
d8-toluene (Surrogate)	0407_TP254_0.1_200626	SE208133.001	%	60 - 130%	74
	0407_TP254_0.5_200626	SE208133.002	%	60 - 130%	86
	0407_TP111_0.1_200626	SE208133.003	%	60 - 130%	76
	0407_TP111_0.5_200626	SE208133.004	%	60 - 130%	82
	0407_TP91_0.1_200626	SE208133.005	%	60 - 130%	76
	0407_TP91_0.5_200626	SE208133.006	%	60 - 130%	79
	0407_TP81_0.1_200626	SE208133.007	%	60 - 130%	79
	0407_TP81_0.5_200626	SE208133.008	%	60 - 130%	92
	0407_TP249_0.1_200626	SE208133.009	%	60 - 130%	79
	0407_TP249_0.5_200626	SE208133.010	%	60 - 130%	82
	0407_TP248_0.1_200626	SE208133.011	%	60 - 130%	80
	0407_TP248_0.5_200626	SE208133.012	%	60 - 130%	90
	0407_TP247_0.1_200626	SE208133.013	%	60 - 130%	82
	0407_TP247_0.5_200626	SE208133.014	%	60 - 130%	85
	0407_TP246_0.1_200626	SE208133.015	%	60 - 130%	79
	0407_TP246_0.5_200626	SE208133.016	%	60 - 130%	84
	0407_TP138_0.1_200626	SE208133.017	%	60 - 130%	82
	0407_TP138_0.5_200626	SE208133.018	%	60 - 130%	87

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP254_0.1_200626	SE208133.001	%	60 - 130%	84
	0407_TP254_0.5_200626	SE208133.002	%	60 - 130%	100
	0407_TP111_0.1_200626	SE208133.003	%	60 - 130%	83
	0407_TP111_0.5_200626	SE208133.004	%	60 - 130%	95
	0407_TP91_0.1_200626	SE208133.005	%	60 - 130%	80
	0407_TP91_0.5_200626	SE208133.006	%	60 - 130%	81
	0407_TP81_0.1_200626	SE208133.007	%	60 - 130%	90
	0407_TP81_0.5_200626	SE208133.008	%	60 - 130%	103
	0407_TP249_0.1_200626	SE208133.009	%	60 - 130%	92
	0407_TP249_0.5_200626	SE208133.010	%	60 - 130%	94

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP248_0.1_200626	SE208133.011	%	60 - 130%	80
	0407_TP248_0.5_200626	SE208133.012	%	60 - 130%	95
	0407_TP247_0.1_200626	SE208133.013	%	60 - 130%	87
	0407_TP247_0.5_200626	SE208133.014	%	60 - 130%	95
	0407_TP246_0.1_200626	SE208133.015	%	60 - 130%	90
	0407_TP246_0.5_200626	SE208133.016	%	60 - 130%	94
	0407_TP138_0.1_200626	SE208133.017	%	60 - 130%	94
	0407_TP138_0.5_200626	SE208133.018	%	60 - 130%	92
d4-1,2-dichloroethane (Surrogate)	0407_TP254_0.1_200626	SE208133.001	%	60 - 130%	71
	0407_TP254_0.5_200626	SE208133.002	%	60 - 130%	96
	0407_TP111_0.1_200626	SE208133.003	%	60 - 130%	80
	0407_TP111_0.5_200626	SE208133.004	%	60 - 130%	104
	0407_TP91_0.1_200626	SE208133.005	%	60 - 130%	88
	0407_TP91_0.5_200626	SE208133.006	%	60 - 130%	76
	0407_TP81_0.1_200626	SE208133.007	%	60 - 130%	75
	0407_TP81_0.5_200626	SE208133.008	%	60 - 130%	92
	0407_TP249_0.1_200626	SE208133.009	%	60 - 130%	72
	0407_TP249_0.5_200626	SE208133.010	%	60 - 130%	85
	0407_TP248_0.1_200626	SE208133.011	%	60 - 130%	77
	0407_TP248_0.5_200626	SE208133.012	%	60 - 130%	92
	0407_TP247_0.1_200626	SE208133.013	%	60 - 130%	78
	0407_TP247_0.5_200626	SE208133.014	%	60 - 130%	84
	0407_TP246_0.1_200626	SE208133.015	%	60 - 130%	88
	0407_TP246_0.5_200626	SE208133.016	%	60 - 130%	88
	0407_TP138_0.1_200626	SE208133.017	%	60 - 130%	79
	0407_TP138_0.5_200626	SE208133.018	%	60 - 130%	89
d8-toluene (Surrogate)	0407_TP254_0.1_200626	SE208133.001	%	60 - 130%	74
	0407_TP254_0.5_200626	SE208133.002	%	60 - 130%	86
	0407_TP111_0.1_200626	SE208133.003	%	60 - 130%	76
	0407_TP111_0.5_200626	SE208133.004	%	60 - 130%	82
	0407_TP91_0.1_200626	SE208133.005	%	60 - 130%	76
	0407_TP91_0.5_200626	SE208133.006	%	60 - 130%	79
	0407_TP81_0.1_200626	SE208133.007	%	60 - 130%	79
	0407_TP81_0.5_200626	SE208133.008	%	60 - 130%	92
	0407_TP249_0.1_200626	SE208133.009	%	60 - 130%	79
	0407_TP249_0.5_200626	SE208133.010	%	60 - 130%	82
	0407_TP248_0.1_200626	SE208133.011	%	60 - 130%	80
	0407_TP248_0.5_200626	SE208133.012	%	60 - 130%	90
	0407_TP247_0.1_200626	SE208133.013	%	60 - 130%	82
	0407_TP247_0.5_200626	SE208133.014	%	60 - 130%	85
	0407_TP246_0.1_200626	SE208133.015	%	60 - 130%	79
	0407_TP246_0.5_200626	SE208133.016	%	60 - 130%	84
	0407_TP138_0.1_200626	SE208133.017	%	60 - 130%	82
	0407_TP138_0.5_200626	SE208133.018	%	60 - 130%	87

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result
LB203468.001	Mercury	mg/kg	0.05	<0.05

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203394.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	104

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203394.001		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	94
		d14-p-terphenyl (Surrogate)	%	-	97

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB203394.001	Naphthalene	mg/kg	0.1	<0.1
	2-methylnaphthalene	mg/kg	0.1	<0.1
	1-methylnaphthalene	mg/kg	0.1	<0.1
	Acenaphthylene	mg/kg	0.1	<0.1
	Acenaphthene	mg/kg	0.1	<0.1
	Fluorene	mg/kg	0.1	<0.1
	Phenanthrene	mg/kg	0.1	<0.1
	Anthracene	mg/kg	0.1	<0.1
	Fluoranthene	mg/kg	0.1	<0.1
	Pyrene	mg/kg	0.1	<0.1
	Benzo(a)anthracene	mg/kg	0.1	<0.1
	Chrysene	mg/kg	0.1	<0.1
	Benzo(a)pyrene	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203394.001		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	81
		2-fluorobiphenyl (Surrogate)	%	-	94
		d14-p-terphenyl (Surrogate)	%	-	97

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203394.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	104

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203394.001		Phenol	mg/kg	0.5	<0.5
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5
		2-nitrophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
		Pentachlorophenol	mg/kg	0.5	<0.5
		2,4-dinitrophenol	mg/kg	2	<2
		4-chloro-3-methylphenol	mg/kg	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	81
		d5-phenol (Surrogate)	%	-	81

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB203454.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB203394.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number	Parameter	Units	LOR

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB203387.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB203387.001	Oxygenated Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	111
		d8-toluene (Surrogate)	%	-	91
		Bromofluorobenzene (Surrogate)	%	-	105
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB203387.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	111

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208133.009	LB203468.014	Mercury	mg/kg	0.05	0.09	0.09	86	2
SE208133.018	LB203468.024	Mercury	mg/kg	0.05	0.51	0.35	42	38

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208133.010	LB203397.011	% Moisture	%w/w	1	7.8	7.2	43	8
SE208133.018	LB203397.020	% Moisture	%w/w	1	5.1	5.0	50	2

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208133.010	LB203394.014		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	0.15	30	9
SE208133.018	LB203394.023		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208133.018	LB203394.023		p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	0.14	30	1

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208133.010	LB203394.014		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	30	4
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	1
SE208133.018	LB203394.023		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.4	30	4
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.4	30	6

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208133.010	LB203394.014	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
		Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
		Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
		Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	<0.2	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208133.010	LB203394.014		Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	<0.3	134	0
				TEQ (mg/kg)	0.3	<0.3	<0.3	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	<0.2	175	0
				TEQ (mg/kg)	0.2	<0.2	<0.2	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	30	0
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	30	4
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	1
SE208133.018	LB203394.023		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	<0.2	200	0
				TEQ (mg/kg)	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	<0.3	134	0
				TEQ (mg/kg)	0.3	<0.3	<0.3	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	<0.2	175	0
				TEQ (mg/kg)	0.2	<0.2	<0.2	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	30	3
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.4	30	4
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.4	30	6

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208133.010	LB203394.014		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	9
SE208133.018	LB203394.023		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PCBs in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208133.018	LB203394.023	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	1

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208133.010	LB203394.014		Phenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	200	0
			Total Cresol	mg/kg	1.5	<1.5	<1.5	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	200	0
			4-nitrophenol	mg/kg	1	<1	<1	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dinitrophenol	mg/kg	2	<2	<2	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.6	3.6	30	1
			d5-phenol (Surrogate)	mg/kg	-	1.5	1.8	30	13
SE208133.018	LB203394.023		Phenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	200	0
			Total Cresol	mg/kg	1.5	<1.5	<1.5	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	200	0
			4-nitrophenol	mg/kg	1	<1	<1	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dinitrophenol	mg/kg	2	<2	<2	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.6	3.9	30	9
			d5-phenol (Surrogate)	mg/kg	-	1.6	1.7	30	5

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208133.009	LB203454.014	Arsenic, As	mg/kg	1	6	7	45	20
		Cadmium, Cd	mg/kg	0.3	0.5	0.5	89	5
		Chromium, Cr	mg/kg	0.5	20	20	33	1
		Copper, Cu	mg/kg	0.5	110	200	30	57 ②
		Nickel, Ni	mg/kg	0.5	13	13	34	0
		Lead, Pb	mg/kg	1	160	170	31	5
		Zinc, Zn	mg/kg	2	470	530	30	13
SE208133.018	LB203454.024	Arsenic, As	mg/kg	1	<1	<1	200	0
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	<0.5	<0.5	200	0
		Copper, Cu	mg/kg	0.5	2.5	2.3	51	6
		Nickel, Ni	mg/kg	0.5	<0.5	<0.5	143	0
		Lead, Pb	mg/kg	1	11	10	40	5
		Zinc, Zn	mg/kg	2	11	11	48	4

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Original	Duplicate	Parameter	Units	LOR

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208133.010	LB203394.014		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE208133.018	LB203394.023		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208133.010	LB203387.014	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208133.010	LB203387.014	Halogenated	4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.5	8.3	50	3
			d8-toluene (Surrogate)	mg/kg	-	8.2	8.8	50	7
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.4	9.0	50	5
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE208133.018	LB203387.023	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued) — Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208133.018	LB203387.023	Halogenated	Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
		Aliphatics	1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.9	8.9	50	0
			d8-toluene (Surrogate)	mg/kg	-	8.7	8.3	50	4
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.2	8.5	50	8
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208133.018	LB203387.023	Trihalomethan	Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromoform	mg/kg	0.1	<0.1	<0.1	200	0

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208133.010	LB203387.014		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.5	8.3	30	3
			d8-toluene (Surrogate)	mg/kg	-	8.2	8.8	30	7
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.4	9.0	30	5
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE208133.018	LB203387.023		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.9	8.9	30	0
			d8-toluene (Surrogate)	mg/kg	-	8.7	8.3	30	4
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.2	8.5	30	8
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203468.002	Mercury	mg/kg	0.05	0.21	0.2	70 - 130	103

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203394.002		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	110
		Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	123
		Delta BHC	mg/kg	0.1	0.3	0.2	60 - 140	127
		Dieldrin	mg/kg	0.2	0.2	0.2	60 - 140	115
		Endrin	mg/kg	0.2	0.2	0.2	60 - 140	108
		p,p'-DDT	mg/kg	0.1	0.1	0.2	60 - 140	74
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.16	0.15	40 - 130	103

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203394.002		Dichlorvos	mg/kg	0.5	1.4	2	60 - 140	68
		Diazinon (Dimpylate)	mg/kg	0.5	1.5	2	60 - 140	77
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.2	2	60 - 140	108
		Ethion	mg/kg	0.2	1.5	2	60 - 140	76
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	85
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	85

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203394.002		Naphthalene	mg/kg	0.1	3.9	4	60 - 140	99
		Acenaphthylene	mg/kg	0.1	4.1	4	60 - 140	103
		Acenaphthene	mg/kg	0.1	4.1	4	60 - 140	102
		Phenanthrene	mg/kg	0.1	4.1	4	60 - 140	103
		Anthracene	mg/kg	0.1	4.2	4	60 - 140	106
		Fluoranthene	mg/kg	0.1	4.0	4	60 - 140	101
		Pyrene	mg/kg	0.1	4.3	4	60 - 140	107
		Benzo(a)pyrene	mg/kg	0.1	4.0	4	60 - 140	100
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	81
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	85
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	85

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203394.002	Arochlor 1260	mg/kg	0.2	0.4	0.4	60 - 140	99

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203394.002		Phenol	mg/kg	0.5	0.8	1	70 - 130	77
		2,4-dichlorophenol	mg/kg	0.5	0.8	1	70 - 130	83
		2,4,6-trichlorophenol	mg/kg	0.5	0.8	1	70 - 130	83
		Pentachlorophenol	mg/kg	0.5	0.9	1	70 - 130	91
	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.8	5	40 - 130	76
		d5-phenol (Surrogate)	mg/kg	-	1.5	2	40 - 130	74

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203454.002	Arsenic, As	mg/kg	1	320	318.22	80 - 120	102
	Cadmium, Cd	mg/kg	0.3	5.1	5.41	80 - 120	95
	Chromium, Cr	mg/kg	0.5	36	38.31	80 - 120	94
	Copper, Cu	mg/kg	0.5	290	290	80 - 120	100
	Nickel, Ni	mg/kg	0.5	180	187	80 - 120	99
	Lead, Pb	mg/kg	1	91	89.9	80 - 120	101
	Zinc, Zn	mg/kg	2	270	273	80 - 120	100

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203394.002		TRH C10-C14	mg/kg	20	40	40	60 - 140	100
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	88
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	80
	TRH F Bands	TRH >C10-C16	mg/kg	25	37	40	60 - 140	93
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	80
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	90

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203387.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	5.2	5	60 - 140	104
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	4.6	5	60 - 140	92
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	4.1	5	60 - 140	83
	Halogenated	Chlorobenzene	mg/kg	0.1	5.0	5	60 - 140	101
	Monocyclic	Benzene	mg/kg	0.1	5.5	5	60 - 140	110
	Aromatic	Toluene	mg/kg	0.1	5.6	5	60 - 140	111
		Ethylbenzene	mg/kg	0.1	5.3	5	60 - 140	107
		m/p-xylene	mg/kg	0.2	11	10	60 - 140	110
		o-xylene	mg/kg	0.1	5.6	5	60 - 140	111
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.5	10	70 - 130	105
		d8-toluene (Surrogate)	mg/kg	-	9.0	10	70 - 130	90
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.7	10	70 - 130	97
	Trihalomethan	Chloroform	mg/kg	0.1	4.5	5	60 - 140	90

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203387.002		TRH C6-C10	mg/kg	25	72	92.5	60 - 140	78
		TRH C6-C9	mg/kg	20	62	80	60 - 140	78
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.5	10	70 - 130	105
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.7	10	70 - 130	97
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	39	62.5	60 - 140	62

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208133.001	LB203394.004		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	-	-
			Lindane	mg/kg	0.1	<0.1	<0.1	-	-
			Heptachlor	mg/kg	0.1	0.2	<0.1	0.2	120
			Aldrin	mg/kg	0.1	0.3	<0.1	0.2	127
			Beta BHC	mg/kg	0.1	<0.1	<0.1	-	-
			Delta BHC	mg/kg	0.1	0.3	<0.1	0.2	130
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	-	-
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	-	-
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	-	-
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	-	-
			Dieldrin	mg/kg	0.2	0.3	<0.2	0.2	128
			Endrin	mg/kg	0.2	0.2	<0.2	0.2	115
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	-	-
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	-	-
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	-	-
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	-	-
			p,p'-DDT	mg/kg	0.1	0.2	<0.1	0.2	76
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	-	-
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	-	-
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	-	-
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	-	-
			Isodrin	mg/kg	0.1	<0.1	<0.1	-	-
			Mirex	mg/kg	0.1	<0.1	<0.1	-	-
			Total CLP OC Pesticides	mg/kg	1	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.16	-	102

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208133.001	LB203394.004		Dichlorvos	mg/kg	0.5	1.6	<0.5	2	80
			Dimethoate	mg/kg	0.5	<0.5	<0.5	-	-
			Diazinon (Dimpylate)	mg/kg	0.5	2.1	<0.5	2	105
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	-	-
			Malathion	mg/kg	0.2	<0.2	<0.2	-	-
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.2	<0.2	2	108
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	-	-
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	-	-
			Methidathion	mg/kg	0.5	<0.5	<0.5	-	-
			Ethion	mg/kg	0.2	2.1	<0.2	2	102
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	-	-
			Total OP Pesticides*	mg/kg	1.7	7.9	<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	-	76
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	-	82

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208133.001	LB203394.004	Naphthalene	mg/kg	0.1	3.8	<0.1	4	95
		2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Acenaphthylene	mg/kg	0.1	4.2	<0.1	4	104
		Acenaphthene	mg/kg	0.1	4.0	<0.1	4	100
		Fluorene	mg/kg	0.1	<0.1	<0.1	-	-
		Phenanthrene	mg/kg	0.1	4.1	<0.1	4	101
		Anthracene	mg/kg	0.1	4.0	<0.1	4	98
		Fluoranthene	mg/kg	0.1	4.0	0.1	4	95
		Pyrene	mg/kg	0.1	4.3	0.2	4	103
		Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
		Chrysene	mg/kg	0.1	<0.1	<0.1	-	-
		Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	0.1	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208133.001	LB203394.004		Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(a)pyrene	mg/kg	0.1	4.3	<0.1	4	104
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	4.3	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	4.4	<0.3	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	4.3	<0.2	-	-
			Total PAH (18)	mg/kg	0.8	33	<0.8	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	-	78
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	-	76
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	-	82

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208133.001	LB203394.004		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1260	mg/kg	0.2	0.4	<0.2	0.4	112
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	-	-
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	-	106

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208133.002	LB203394.024		Phenol	mg/kg	0.5	<0.5	1	73
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	-	-
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	-	-
			Total Cresol	mg/kg	1.5	<1.5	-	-
			2-chlorophenol	mg/kg	0.5	<0.5	-	-
			2,4-dimethylphenol	mg/kg	0.5	<0.5	-	-
			2,6-dichlorophenol	mg/kg	0.5	<0.5	-	-
			2,4-dichlorophenol	mg/kg	0.5	<0.5	1	70
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	1	87
			2-nitrophenol	mg/kg	0.5	<0.5	-	-
			4-nitrophenol	mg/kg	1	<1	-	-
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	-	-
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	-	-
			Pentachlorophenol	mg/kg	0.5	<0.5	1	75
			2,4-dinitrophenol	mg/kg	2	<2	-	-
			4-chloro-3-methylphenol	mg/kg	2	<2	-	-
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.2	-	71
			d5-phenol (Surrogate)	mg/kg	-	1.8	-	77

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208133.001	LB203394.004		TRH C10-C14	mg/kg	20	37	<20	40	93
			TRH C15-C28	mg/kg	45	<45	<45	40	88
			TRH C29-C36	mg/kg	45	<45	<45	40	90
			TRH C37-C40	mg/kg	100	<100	<100	-	-
			TRH C10-C36 Total	mg/kg	110	<110	<110	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25	34	<25	40	85
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	34	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	40	93
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	-	-

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number	Parameter	Units	LOR

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208133.001	LB203387.004	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	-	-
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	-	-
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	-	-
			Bromomethane	mg/kg	1	<1	<1	-	-
			Chloroethane	mg/kg	1	<1	<1	-	-
			Trichlorofluoromethane	mg/kg	1	<1	<1	-	-
			Iodomethane	mg/kg	5	<5	<5	-	-
			1,1-dichloroethene	mg/kg	0.1	4.0	<0.1	5	79
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	-	-
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloroethane	mg/kg	0.1	4.2	<0.1	5	84
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	-	-
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	4.0	<0.1	5	79
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	-	-
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated	Chlorobenzene	mg/kg	0.1	4.9	<0.1	5	98
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Monocyclic	Benzene	mg/kg	0.1	5.0	<0.1	5	101
		Aromatic	Toluene	mg/kg	0.1	5.2	<0.1	5	103
			Ethylbenzene	mg/kg	0.1	5.0	<0.1	5	101
			m/p-xylene	mg/kg	0.2	10	<0.2	10	104
			o-xylene	mg/kg	0.1	5.2	<0.1	5	104
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	-	-
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	-	-
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	-	-
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	-	-
		Compounds	2-nitropropane	mg/kg	10	<10	<10	-	-
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208133.001	LB203387.004	Oxygenated Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	-	-
			Vinyl acetate	mg/kg	10	<10	<10	-	-
			MEK (2-butanone)	mg/kg	10	<10	<10	-	-
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	-	-
			2-hexanone (MBK)	mg/kg	5	<5	<5	-	-
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.6	7.1	10	96
			d8-toluene (Surrogate)	mg/kg	-	8.7	7.4	10	87
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.2	8.4	10	92
		Totals	Total Xylenes	mg/kg	0.3	16	<0.3	-	-
			Total BTEX	mg/kg	0.6	31	<0.6	-	-
			Total VOC*	mg/kg	24	54	<24	-	-
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	-	-
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	21	<1.8	-	-
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	21	<1.8	-	-
		Trihalomethanes	Chloroform	mg/kg	0.1	4.3	<0.1	5	86
			Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Bromoform	mg/kg	0.1	<0.1	<0.1	-	-

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208133.001	LB203387.004		TRH C6-C10	mg/kg	25	72	<25	92.5	78
			TRH C6-C9	mg/kg	20	62	<20	80	78
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.0	7.1	10	100
			d8-toluene (Surrogate)	mg/kg	-	8.7	7.4	10	87
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.2	8.4	-	92
		VPH F Bands	Benzene (F0)	mg/kg	0.1	5.0	<0.1	-	-
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	41	<25	62.5	65

MATRIX SPIKE DUPLICATES

SE208133 R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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This test report shall not be reproduced, except in full.

E-MAILED 29/6 @ 7:32

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
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- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☒ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
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- ☐ NELSON: C/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ

CLIENT: Defence Housing Australia	**LABORATORY: SGS Australia**
PROJECT: Randwick Barracks	**LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015**
PROJECT NUMBER: 610.30041	**SAMPLER:**
PROJECT MANAGER: [redacted]	**SAMPLER CONTACT No:**
PM CONTACT No: [redacted]	**Email Reports and Invoices to: LQRSYD@slrconsulting.com ;** [redacted]

Turnaround Time (TAT)

☐ Standard TAT

☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number of

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	Asbestos ONLY	HOLD
1	0407_TP179_0.1_200625	25/06/2020	Soil	jar, pfas, bag	x		
2	0407_TP179_0.5_200625	25/06/2020	Soil	jar, pfas, bag	x		
	0407_TP179_1.0_200625	25/06/2020	Soil	jar, pfas			x
3	0407_TP179_ACM01_200625	25/06/2020	ACM	bag		x	
4	0407_TP180_0.1_200625	25/06/2020	Soil	jar, pfas, bag	x		
5	0407_TP180_0.5_200625	25/06/2020	Soil	jar, pfas, bag	x		
	0407_TP180_1.0_200625	25/06/2020	Soil	jar, pfas			x
6	0407_TP181_0.1_200625	25/06/2020	Soil	jar, pfas, bag	x		
7	0407_TP181_0.3_200625	25/06/2020	Soil	bag		x	
8	0407_TP181_0.5_200625	25/06/2020	Soil	jar, pfas	x		
	0407_TP181_1.0_200625	25/06/2020	Soil	jar, pfas			x
9	0407_TP183_0.1_200625	25/06/2020	Soil	jar, pfas, bag	x		

Additional Information *(Comment on any gross contamination or specific requirements)*

Please hold all PFAS Containers No 6

SGS EHS Sydney COC

SE208090

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 18/06/2020	**Received by**	Sign	[redacted]	Date / Time 25/06/20	**Temperature Received:**
Relinquished By	Sign	Date / Time	**Received by**	Sign		Date / Time @ 4:30	
Relinquished By	Sign	Date / Time	**Received by**	Sign		Date / Time	

SLR

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SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

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- ☐

CLIENT: Defence Housing Australia

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGE [redacted]

PM CONTACT No: [redacted]

LABORATORY: SGS Australia

LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015

SAMPLER:

SAMPLER CONTACT No:

Email Reports and Invoices to: LQRSYD@slrconsulting.com [redacted]

Turnaround Time (TAT)

☐ Standard TAT

☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number of

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	Asbestos ONLY	HOLD						Additional Information (Comment on any gross contamination or specific requirements)
10	0407_TP183_ACM01_200625	25/06/2020	ACM	bag		×							Please hold all PFAS Containers
11	0407_TP183_0.5_200625	25/06/2020	Soil	jar, pfas, bag	×								
12	0407_TP184_0.1_200625	25/06/2020	Soil	jar, pfas, bag	×								
13	0407_TP184_0.4_200625	25/06/2020	Soil	jar, pfas	×								no asbestos analysis
14	0407_TP192_0.1_200625	25/06/2020	Soil	jar, pfas, bag	×								
15	0407_TP192_0.5_200625	25/06/2020	Soil	jar, pfas, bag	×								
	0407_TP192_1.0_200625	25/06/2020	Soil	jar, pfas			×						
16	0407_TP193_0.1_200625	25/06/2020	Soil	jar, pfas, bag	×								
17	0407_TP193_0.5_200625	25/06/2020	Soil	jar, pfas, bag	×								
	0407_TP193_1.0_200625	25/06/2020	Soil	jar, pfas			×						
	0407_TP193_1.4_200625	25/06/2020	Soil	jar, pfas			×						
18	0407_TP194_0.1_200625	25/06/2020	Soil	jar, pfas	×								

Relinquished By Sampler	[redacted]	Date / Time 18/06/2020	**Received by**	Sig [redacted]	Date / Time 25/6/20
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time @ 4:30
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time

Temperature Received:

CHAIN OF CUSTODY DOCUMENTATION

SLR

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ABN 29 001 584 612

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CLIENT: Defence Housing Australia

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGER: [redacted]

PM CONTACT No: [redacted]

LABORATORY: SGS Australia

LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015

SAMPLER:

SAMPLER CONTACT No:

Email Reports and Invoices to: LQRSYD@slrconsulting.com ; [redacted]

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number of

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	Asbestos ONLY	HOLD						Additional Information (Comment on any gross contamination or specific requirements)
19	0407_TP194_0.5_200625	25/06/2020	Soil	jar, pfas	x								Please hold all PFAS Containers no asbestos analysis
	0407_TP194_1.0_200625	25/06/2020	Soil	jar, pfas			x						

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time	18/06/2020	**Received by**	Sign [redacted]	Date / Time	25/6/20
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	@ 4:30
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	

Temperature Received:

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

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- ☐

CLIENT: Defence Housing Australia

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGER: [redacted]

PM CONTACT No: [redacted]

LABORATORY: SGS Australia

LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015

SAMPLER: GF

SAMPLER CONTACT No [redacted]

Email Reports and Invoices to: LQRSYD@slrconsulting.com ; [redacted]

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number of

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	Asbestos ONLY	HOLD	C6-C10/BETXN					Additional Information (Comment on any gross contamination or specific requirements)
20	0407_QC163_200625	25/06/2020	Soil	jar, pfas	x								Please hold all PFAS containers
	0407_QC263_200625	25/06/2020	Soil	jar, pfas	x								Please send to Eurofins
21	0407_QC167_200625	25/06/2020	Soil	jar, pfas	x								
	0407_QC267_200625	25/06/2020	Soil	jar, pfas	x								Please send to Eurofins
22	0407_QC413_200623	23/06/2020	Trip Blank	vial				x					
23	0407_QC513_200623	23/06/2020	Trip Spike	vial				x					

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time	18/06/2020	**Received by**	Sign [redacted]	Date / Time	25/6/20
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	@ 4:30
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	

Temperature Received:

SAMPLE RECEIPT ADVICE

SE208090

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	23

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Thu 25/6/2020
Report Due	Mon 6/7/2020
SGS Reference	**SE208090**

SUBMISSION DETAILS

This is to confirm that 23 samples were received on Thursday 25/6/2020. Results are expected to be ready by COB Monday 6/7/2020. Please quote SGS reference SE208090 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	21 Soil, 2 Material
Date documentation received	29/6/2020@5:32pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	4.7°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

7 samples have been placed on hold as no tests have been assigned for them by the client. These samples will not be processed.

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SAMPLE RECEIPT ADVICE

SE208090

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	Speciated Phenols in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
001	0407_TP179_0.1_200625	29	14	26	11	18	10	81	7
002	0407_TP179_0.5_200625	29	14	26	11	18	10	81	7
004	0407_TP180_0.1_200625	29	14	26	11	18	10	81	7
005	0407_TP180_0.5_200625	29	14	26	11	18	10	81	7
006	0407_TP181_0.1_200625	29	14	26	11	18	10	81	7
008	0407_TP181_0.5_200625	29	14	26	11	18	10	81	7
009	0407_TP183_0.1_200625	29	14	26	11	18	10	81	7
011	0407_TP183_0.5_200625	29	14	26	11	18	10	81	7
012	0407_TP184_0.1_200625	29	14	26	11	18	10	81	7
013	0407_TP184_0.4_200625	29	14	26	11	18	10	81	7
014	0407_TP192_0.1_200625	29	14	26	11	18	10	81	7
015	0407_TP192_0.5_200625	29	14	26	11	18	10	81	7
016	0407_TP193_0.1_200625	29	14	26	11	18	10	81	7
017	0407_TP193_0.5_200625	29	14	26	11	18	10	81	7
018	0407_TP194_0.1_200625	29	14	26	11	18	10	81	7
019	0407_TP194_0.5_200625	29	14	26	11	18	10	81	7
020	0407_QC163_200625	29	14	26	11	18	10	81	7
021	0407_QC167_200625	29	14	26	11	18	10	81	7
022	0407_QC413_200625	29	14	26	11	18	10	81	7
023	0407_QC513_200625	29	14	26	11	18	10	81	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE208090

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Fibre Identification in soil	Gravimetric Determination of Asbestos in Soil	Mercury in Soil	Moisture Content	Total Recoverable Elements in Soil/Waste
001	0407_TP179_0.1_200625	-	-	1	1	7
002	0407_TP179_0.5_200625	2	9	1	1	7
004	0407_TP180_0.1_200625	2	9	1	1	7
005	0407_TP180_0.5_200625	2	9	1	1	7
006	0407_TP181_0.1_200625	2	9	1	1	7
007	0407_TP181_0.3_200625	2	9	-	-	-
008	0407_TP181_0.5_200625	-	-	1	1	7
009	0407_TP183_0.1_200625	2	9	1	1	7
011	0407_TP183_0.5_200625	2	9	1	1	7
012	0407_TP184_0.1_200625	2	9	1	1	7
013	0407_TP184_0.4_200625	-	-	1	1	7
014	0407_TP192_0.1_200625	2	9	1	1	7
015	0407_TP192_0.5_200625	-	-	1	1	7
016	0407_TP193_0.1_200625	2	9	1	1	7
017	0407_TP193_0.5_200625	2	9	1	1	7
018	0407_TP194_0.1_200625	2	9	1	1	7
019	0407_TP194_0.5_200625	-	-	1	1	7
020	0407_QC163_200625	-	-	1	1	7
021	0407_QC167_200625	-	-	1	1	7
022	0407_QC413_200625	-	-	1	1	7
023	0407_QC513_200625	-	-	1	1	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE208090

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Fibre ID in bulk materials
003	0407_TP179_ACM01_200625	1
010	0407_TP183_ACM01_200625	1

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	23

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208090 R0**
Date Received	25/6/2020
Date Reported	7/7/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.

Sample #4: Asbestos found as 10x3x3mm cement sheet fragment in >2mm portion.

Asbestos analysed by Approved Identifier Ravee Sivasubramaniam .

SIGNATORIES

[redacted]

Chemist | Senior Organic Chemist/Metals Chemist | Metals/Inorganics Team Leader

[redacted]

Organic Section Head | Hygiene Team Leader

VOC's in Soil [AN433] Tested: 1/7/2020

PARAMETER	UOM	LOR	0407_TP179_0.1_20(625 SOIL - 25/6/2020 SE208090.001	0407_TP179_0.5_20(625 SOIL - 25/6/2020 SE208090.002	0407_TP180_0.1_20(625 SOIL - 25/6/2020 SE208090.004	0407_TP180_0.5_20(625 SOIL - 25/6/2020 SE208090.005	0407_TP181_0.1_20(625 SOIL - 25/6/2020 SE208090.006
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP179_0.1_20(625 SOIL - 25/6/2020 SE208090.001	0407_TP179_0.5_20(625 SOIL - 25/6/2020 SE208090.002	0407_TP180_0.1_20(625 SOIL - 25/6/2020 SE208090.004	0407_TP180_0.5_20(625 SOIL - 25/6/2020 SE208090.005	0407_TP181_0.1_20(625 SOIL - 25/6/2020 SE208090.006
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP181_0.5_20(625 SOIL - 25/6/2020 SE208090.008	0407_TP183_0.1_20(625 SOIL - 25/6/2020 SE208090.009	0407_TP183_0.5_20(625 SOIL - 25/6/2020 SE208090.011	0407_TP184_0.1_20(625 SOIL - 25/6/2020 SE208090.012	0407_TP184_0.4_20(625 SOIL - 25/6/2020 SE208090.013
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP181_0.5_20(625 SOIL - 25/6/2020 SE208090.008	0407_TP183_0.1_20(625 SOIL - 25/6/2020 SE208090.009	0407_TP183_0.5_20(625 SOIL - 25/6/2020 SE208090.011	0407_TP184_0.1_20(625 SOIL - 25/6/2020 SE208090.012	0407_TP184_0.4_20(625 SOIL - 25/6/2020 SE208090.013
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP192_0.1_20(625 SOIL - 25/6/2020 SE208090.014	0407_TP192_0.5_20(625 SOIL - 25/6/2020 SE208090.015	0407_TP193_0.1_20(625 SOIL - 25/6/2020 SE208090.016	0407_TP193_0.5_20(625 SOIL - 25/6/2020 SE208090.017	0407_TP194_0.1_20(625 SOIL - 25/6/2020 SE208090.018
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP192_0.1_20(625 SOIL - 25/6/2020 SE208090.014	0407_TP192_0.5_20(625 SOIL - 25/6/2020 SE208090.015	0407_TP193_0.1_20(625 SOIL - 25/6/2020 SE208090.016	0407_TP193_0.5_20(625 SOIL - 25/6/2020 SE208090.017	0407_TP194_0.1_20(625 SOIL - 25/6/2020 SE208090.018
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP194_0.5_20(625 SOIL - 25/6/2020 SE208090.019	0407_QC163_20062! SOIL - 25/6/2020 SE208090.020	0407_QC167_20062! SOIL - 25/6/2020 SE208090.021	0407_QC413_20062! SOIL - 25/6/2020 SE208090.022	0407_QC513_20062! SOIL - 25/6/2020 SE208090.023
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	[95%]
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	[97%]
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	[98%]
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	[97%]
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	[98%]
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	-
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	-
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	-	-
Chloromethane	mg/kg	1	<1	<1	<1	-	-
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Bromomethane	mg/kg	1	<1	<1	<1	-	-
Chloroethane	mg/kg	1	<1	<1	<1	-	-
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	-	-
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	-	-
Iodomethane	mg/kg	5	<5	<5	<5	-	-
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	-	-
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	-	-
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Vinyl acetate	mg/kg	10	<10	<10	<10	-	-
MEK (2-butanone)	mg/kg	10	<10	<10	<10	-	-
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
2-nitropropane	mg/kg	10	<10	<10	<10	-	-
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	-	-
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	-	-
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	-	-
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	-	-

VOC's in Soil [AN433] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP194_0.5_20(625 SOIL - 25/6/2020 SE208090.019	0407_QC163_20062! SOIL - 25/6/2020 SE208090.020	0407_QC167_20062! SOIL - 25/6/2020 SE208090.021	0407_QC413_20062(SOIL - 25/6/2020 SE208090.022	0407_QC513_20062! SOIL - 25/6/2020 SE208090.023
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Total VOC*	mg/kg	24	<24	<24	<24	-	-
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	-	-
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	-	-
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	-	-

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 1/7/2020

PARAMETER	UOM	LOR	0407_TP179_0.1_20(625 SOIL - 25/6/2020 SE208090.001	0407_TP179_0.5_20(625 SOIL - 25/6/2020 SE208090.002	0407_TP180_0.1_20(625 SOIL - 25/6/2020 SE208090.004	0407_TP180_0.5_20(625 SOIL - 25/6/2020 SE208090.005	0407_TP181_0.1_20(625 SOIL - 25/6/2020 SE208090.006
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP181_0.5_20(625 SOIL - 25/6/2020 SE208090.008	0407_TP183_0.1_20(625 SOIL - 25/6/2020 SE208090.009	0407_TP183_0.5_20(625 SOIL - 25/6/2020 SE208090.011	0407_TP184_0.1_20(625 SOIL - 25/6/2020 SE208090.012	0407_TP184_0.4_20(625 SOIL - 25/6/2020 SE208090.013
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP192_0.1_20(625 SOIL - 25/6/2020 SE208090.014	0407_TP192_0.5_20(625 SOIL - 25/6/2020 SE208090.015	0407_TP193_0.1_20(625 SOIL - 25/6/2020 SE208090.016	0407_TP193_0.5_20(625 SOIL - 25/6/2020 SE208090.017	0407_TP194_0.1_20(625 SOIL - 25/6/2020 SE208090.018
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP194_0.5_20(625 SOIL - 25/6/2020 SE208090.019	0407_QC163_20062! SOIL - 25/6/2020 SE208090.020	0407_QC167_20062! SOIL - 25/6/2020 SE208090.021	0407_QC413_20062! SOIL - 25/6/2020 SE208090.022
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 1/7/2020

PARAMETER	UOM	LOR	0407_TP179_0.1_20(625 SOIL - 25/6/2020 SE208090.001	0407_TP179_0.5_20(625 SOIL - 25/6/2020 SE208090.002	0407_TP180_0.1_20(625 SOIL - 25/6/2020 SE208090.004	0407_TP180_0.5_20(625 SOIL - 25/6/2020 SE208090.005	0407_TP181_0.1_20(625 SOIL - 25/6/2020 SE208090.006
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	**96**	<45	**46**
TRH C29-C36	mg/kg	45	<45	<45	**90**	<45	**80**
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	**160**	<90	**100**
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	**190**	<110	**130**
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP181_0.5_20(625 SOIL - 25/6/2020 SE208090.008	0407_TP183_0.1_20(625 SOIL - 25/6/2020 SE208090.009	0407_TP183_0.5_20(625 SOIL - 25/6/2020 SE208090.011	0407_TP184_0.1_20(625 SOIL - 25/6/2020 SE208090.012	0407_TP184_0.4_20(625 SOIL - 25/6/2020 SE208090.013
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	**69**	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	**48**	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	**110**	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	**120**	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP192_0.1_20(625 SOIL - 25/6/2020 SE208090.014	0407_TP192_0.5_20(625 SOIL - 25/6/2020 SE208090.015	0407_TP193_0.1_20(625 SOIL - 25/6/2020 SE208090.016	0407_TP193_0.5_20(625 SOIL - 25/6/2020 SE208090.017	0407_TP194_0.1_20(625 SOIL - 25/6/2020 SE208090.018
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	**57**	<45	**65**	<45	<45
TRH C29-C36	mg/kg	45	**71**	<45	**85**	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	**110**	<90	**130**	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	**130**	<110	**150**	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP194_0.5_20(625 SOIL - 25/6/2020 SE208090.019	0407_QC163_20062! SOIL - 25/6/2020 SE208090.020	0407_QC167_20062! SOIL - 25/6/2020 SE208090.021
TRH C10-C14	mg/kg	20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 1/7/2020

PARAMETER	UOM	LOR	0407_TP179_0.1_20(625 SOIL - 25/6/2020 SE208090.001	0407_TP179_0.5_20(625 SOIL - 25/6/2020 SE208090.002	0407_TP180_0.1_20(625 SOIL - 25/6/2020 SE208090.004	0407_TP180_0.5_20(625 SOIL - 25/6/2020 SE208090.005	0407_TP181_0.1_20(625 SOIL - 25/6/2020 SE208090.006
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	0.2
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	0.2	0.2	<0.1	0.3
Pyrene	mg/kg	0.1	<0.1	0.1	0.2	<0.1	0.3
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	0.1	<0.1	0.2
Chrysene	mg/kg	0.1	<0.1	<0.1	0.1	<0.1	0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	0.2	<0.1	0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	0.2	<0.1	0.2
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	0.3	<0.3	0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	0.2	<0.2	0.3
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	1.1	<0.8	1.5
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	1.1	<0.8	1.5

PARAMETER	UOM	LOR	0407_TP181_0.5_20(625 SOIL - 25/6/2020 SE208090.008	0407_TP183_0.1_20(625 SOIL - 25/6/2020 SE208090.009	0407_TP183_0.5_20(625 SOIL - 25/6/2020 SE208090.011	0407_TP184_0.1_20(625 SOIL - 25/6/2020 SE208090.012	0407_TP184_0.4_20(625 SOIL - 25/6/2020 SE208090.013
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	0.2	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	0.1	0.3	0.8	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	0.6	<0.1
Phenanthrene	mg/kg	0.1	<0.1	0.5	1.6	3.5	0.3
Anthracene	mg/kg	0.1	<0.1	0.2	0.4	0.9	0.1
Fluoranthene	mg/kg	0.1	<0.1	1.5	3.3	3.7	1.4
Pyrene	mg/kg	0.1	<0.1	1.5	3.1	3.2	1.5
Benzo(a)anthracene	mg/kg	0.1	<0.1	0.9	1.4	1.5	0.8
Chrysene	mg/kg	0.1	<0.1	0.7	1.2	1.3	0.8
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	1.0	1.6	1.3	1.3
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	0.8	1.3	0.9	0.8
Benzo(a)pyrene	mg/kg	0.1	<0.1	0.9	1.5	1.5	1.3
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	0.3	0.5	0.5	0.5
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	0.3	0.5	0.5	0.5
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	1.2	2.0	2.0	1.6
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	1.3	2.1	2.1	1.7
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	1.2	2.0	2.0	1.7
Total PAH (18)	mg/kg	0.8	<0.8	8.4	16	21	9.4
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	8.4	16	20	9.4

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP192_0.1_20(625 SOIL - 25/6/2020 SE208090.014	0407_TP192_0.5_20(625 SOIL - 25/6/2020 SE208090.015	0407_TP193_0.1_20(625 SOIL - 25/6/2020 SE208090.016	0407_TP193_0.5_20(625 SOIL - 25/6/2020 SE208090.017	0407_TP194_0.1_20(625 SOIL - 25/6/2020 SE208090.018
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	**0.1**	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	**0.2**	<0.1	**0.1**
Pyrene	mg/kg	0.1	**0.1**	<0.1	**0.2**	<0.1	**0.1**
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	**0.1**	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	**0.1**	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	**0.1**	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PARAMETER	UOM	LOR	0407_TP194_0.5_20(625 SOIL - 25/6/2020 SE208090.019	0407_QC163_20062 SOIL - 25/6/2020 SE208090.020	0407_QC167_20062 SOIL - 25/6/2020 SE208090.021
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	**0.1**	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	**0.8**	<0.1
Anthracene	mg/kg	0.1	<0.1	**0.3**	<0.1
Fluoranthene	mg/kg	0.1	<0.1	**1.5**	**0.1**
Pyrene	mg/kg	0.1	<0.1	**1.6**	**0.1**
Benzo(a)anthracene	mg/kg	0.1	<0.1	**0.8**	**0.1**
Chrysene	mg/kg	0.1	<0.1	**0.8**	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	**0.6**	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	**0.6**	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	**0.9**	**0.1**
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	**0.3**	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	**0.3**	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	**1.1**	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	**1.2**	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	**1.2**	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	**8.5**	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	**8.5**	<0.8

Speciated Phenols in Soil [AN420] Tested: 1/7/2020

PARAMETER	UOM	LOR	0407_TP179_0.1_20(625 SOIL - 25/6/2020 SE208090.001	0407_TP179_0.5_20(625 SOIL - 25/6/2020 SE208090.002	0407_TP180_0.1_20(625 SOIL - 25/6/2020 SE208090.004	0407_TP180_0.5_20(625 SOIL - 25/6/2020 SE208090.005	0407_TP181_0.1_20(625 SOIL - 25/6/2020 SE208090.006
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_TP181_0.5_20(625 SOIL - 25/6/2020 SE208090.008	0407_TP183_0.1_20(625 SOIL - 25/6/2020 SE208090.009	0407_TP183_0.5_20(625 SOIL - 25/6/2020 SE208090.011	0407_TP184_0.1_20(625 SOIL - 25/6/2020 SE208090.012	0407_TP184_0.4_20(625 SOIL - 25/6/2020 SE208090.013
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

Speciated Phenols in Soil [AN420] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP192_0.1_20(625 SOIL - 25/6/2020 SE208090.014	0407_TP192_0.5_20(625 SOIL - 25/6/2020 SE208090.015	0407_TP193_0.1_20(625 SOIL - 25/6/2020 SE208090.016	0407_TP193_0.5_20(625 SOIL - 25/6/2020 SE208090.017	0407_TP194_0.1_20(625 SOIL - 25/6/2020 SE208090.018
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_TP194_0.5_20(625 SOIL - 25/6/2020 SE208090.019	0407_QC163_20062 SOIL - 25/6/2020 SE208090.020	0407_QC167_20062 SOIL - 25/6/2020 SE208090.021
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2

OC Pesticides in Soil [AN420] Tested: 1/7/2020

PARAMETER	UOM	LOR	0407_TP179_0.1_20(625 SOIL - 25/6/2020 SE208090.001	0407_TP179_0.5_20(625 SOIL - 25/6/2020 SE208090.002	0407_TP180_0.1_20(625 SOIL - 25/6/2020 SE208090.004	0407_TP180_0.5_20(625 SOIL - 25/6/2020 SE208090.005	0407_TP181_0.1_20(625 SOIL - 25/6/2020 SE208090.006
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP181_0.5_20(625 SOIL - 25/6/2020 SE208090.008	0407_TP183_0.1_20(625 SOIL - 25/6/2020 SE208090.009	0407_TP183_0.5_20(625 SOIL - 25/6/2020 SE208090.011	0407_TP184_0.1_20(625 SOIL - 25/6/2020 SE208090.012	0407_TP184_0.4_20(625 SOIL - 25/6/2020 SE208090.013
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP192_0.1_20(625 SOIL - 25/6/2020 SE208090.014	0407_TP192_0.5_20(625 SOIL - 25/6/2020 SE208090.015	0407_TP193_0.1_20(625 SOIL - 25/6/2020 SE208090.016	0407_TP193_0.5_20(625 SOIL - 25/6/2020 SE208090.017	0407_TP194_0.1_20(625 SOIL - 25/6/2020 SE208090.018
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP194_0.5_20(625 SOIL - 25/6/2020 SE208090.019	0407_QC163_20062! SOIL - 25/6/2020 SE208090.020	0407_QC167_20062! SOIL - 25/6/2020 SE208090.021	0407_QC413_20062! SOIL - 25/6/2020 SE208090.022
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	-
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	-
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	-
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	-
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	-
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	-
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	-
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	-
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	-
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	-
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	-
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	-
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	-
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	-
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	-
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	-
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	-
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	-
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	-
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	-
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	-
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	-
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	-
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	-
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	-
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	-
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	-
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	-

OP Pesticides in Soil [AN420] Tested: 1/7/2020

PARAMETER	UOM	LOR	0407_TP179_0.1_20(625 SOIL - 25/6/2020 SE208090.001	0407_TP179_0.5_20(625 SOIL - 25/6/2020 SE208090.002	0407_TP180_0.1_20(625 SOIL - 25/6/2020 SE208090.004	0407_TP180_0.5_20(625 SOIL - 25/6/2020 SE208090.005	0407_TP181_0.1_20(625 SOIL - 25/6/2020 SE208090.006
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP181_0.5_20(625 SOIL - 25/6/2020 SE208090.008	0407_TP183_0.1_20(625 SOIL - 25/6/2020 SE208090.009	0407_TP183_0.5_20(625 SOIL - 25/6/2020 SE208090.011	0407_TP184_0.1_20(625 SOIL - 25/6/2020 SE208090.012	0407_TP184_0.4_20(625 SOIL - 25/6/2020 SE208090.013
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP192_0.1_20(625 SOIL - 25/6/2020 SE208090.014	0407_TP192_0.5_20(625 SOIL - 25/6/2020 SE208090.015	0407_TP193_0.1_20(625 SOIL - 25/6/2020 SE208090.016	0407_TP193_0.5_20(625 SOIL - 25/6/2020 SE208090.017	0407_TP194_0.1_20(625 SOIL - 25/6/2020 SE208090.018
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

OP Pesticides in Soil [AN420] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP194_0.5_20625 SOIL - 25/6/2020 SE208090.019	0407_QC163_20062 SOIL - 25/6/2020 SE208090.020	0407_QC167_20062 SOIL - 25/6/2020 SE208090.021
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7

PCBs in Soil [AN420] Tested: 1/7/2020

PARAMETER	UOM	LOR	0407_TP179_0.1_20(625 SOIL - 25/6/2020 SE208090.001	0407_TP179_0.5_20(625 SOIL - 25/6/2020 SE208090.002	0407_TP180_0.1_20(625 SOIL - 25/6/2020 SE208090.004	0407_TP180_0.5_20(625 SOIL - 25/6/2020 SE208090.005	0407_TP181_0.1_20(625 SOIL - 25/6/2020 SE208090.006
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP181_0.5_20(625 SOIL - 25/6/2020 SE208090.008	0407_TP183_0.1_20(625 SOIL - 25/6/2020 SE208090.009	0407_TP183_0.5_20(625 SOIL - 25/6/2020 SE208090.011	0407_TP184_0.1_20(625 SOIL - 25/6/2020 SE208090.012	0407_TP184_0.4_20(625 SOIL - 25/6/2020 SE208090.013
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP192_0.1_20(625 SOIL - 25/6/2020 SE208090.014	0407_TP192_0.5_20(625 SOIL - 25/6/2020 SE208090.015	0407_TP193_0.1_20(625 SOIL - 25/6/2020 SE208090.016	0407_TP193_0.5_20(625 SOIL - 25/6/2020 SE208090.017	0407_TP194_0.1_20(625 SOIL - 25/6/2020 SE208090.018
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PCBs in Soil [AN420] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP194_0.5_20(625 SOIL - 25/6/2020 SE208090.019	0407_QC163_20062! SOIL - 25/6/2020 SE208090.020	0407_QC167_20062! SOIL - 25/6/2020 SE208090.021	0407_QC413_20062(SOIL - 25/6/2020 SE208090.022	0407_QC513_20062! SOIL - 25/6/2020 SE208090.023
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	-	-
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	-	-
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	-	-
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	-	-
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	-	-
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	-	-
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	-	-
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	-	-
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	-	-
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	-	-

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 1/7/2020

PARAMETER	UOM	LOR	0407_TP179_0.1_20(625 SOIL - 25/6/2020 SE208090.001	0407_TP179_0.5_20(625 SOIL - 25/6/2020 SE208090.002	0407_TP180_0.1_20(625 SOIL - 25/6/2020 SE208090.004	0407_TP180_0.5_20(625 SOIL - 25/6/2020 SE208090.005	0407_TP181_0.1_20(625 SOIL - 25/6/2020 SE208090.006
Arsenic, As	mg/kg	1	6	2	8	1	6
Cadmium, Cd	mg/kg	0.3	0.5	<0.3	0.4	<0.3	0.3
Chromium, Cr	mg/kg	0.5	20	3.0	25	1.7	18
Copper, Cu	mg/kg	0.5	38	<0.5	50	<0.5	66
Lead, Pb	mg/kg	1	110	4	110	2	84
Nickel, Ni	mg/kg	0.5	8.8	1.5	15	0.5	9.5
Zinc, Zn	mg/kg	2	260	5.5	330	<2.0	270

PARAMETER	UOM	LOR	0407_TP181_0.5_20(625 SOIL - 25/6/2020 SE208090.008	0407_TP183_0.1_20(625 SOIL - 25/6/2020 SE208090.009	0407_TP183_0.5_20(625 SOIL - 25/6/2020 SE208090.011	0407_TP184_0.1_20(625 SOIL - 25/6/2020 SE208090.012	0407_TP184_0.4_20(625 SOIL - 25/6/2020 SE208090.013
Arsenic, As	mg/kg	1	<1	3	4	2	1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	0.5	9.4	6.1	3.2	1.7
Copper, Cu	mg/kg	0.5	2.2	54	42	11	18
Lead, Pb	mg/kg	1	17	79	94	55	120
Nickel, Ni	mg/kg	0.5	<0.5	5.7	5.5	1.9	0.9
Zinc, Zn	mg/kg	2	7.6	87	97	81	30

PARAMETER	UOM	LOR	0407_TP192_0.1_20(625 SOIL - 25/6/2020 SE208090.014	0407_TP192_0.5_20(625 SOIL - 25/6/2020 SE208090.015	0407_TP193_0.1_20(625 SOIL - 25/6/2020 SE208090.016	0407_TP193_0.5_20(625 SOIL - 25/6/2020 SE208090.017	0407_TP194_0.1_20(625 SOIL - 25/6/2020 SE208090.018
Arsenic, As	mg/kg	1	5	<1	10	<1	8
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	0.7	<0.3	0.4
Chromium, Cr	mg/kg	0.5	14	<0.5	26	1.3	20
Copper, Cu	mg/kg	0.5	28	<0.5	78	<0.5	65
Lead, Pb	mg/kg	1	79	1	100	4	120
Nickel, Ni	mg/kg	0.5	6.4	<0.5	12	0.6	13
Zinc, Zn	mg/kg	2	170	2.3	380	4.1	380

PARAMETER	UOM	LOR	0407_TP194_0.5_20(625 SOIL - 25/6/2020 SE208090.019	0407_QC163_20062(SOIL - 25/6/2020 SE208090.020	0407_QC167_20062(SOIL - 25/6/2020 SE208090.021
Arsenic, As	mg/kg	1	<1	4	12
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	0.7
Chromium, Cr	mg/kg	0.5	<0.5	8.6	27
Copper, Cu	mg/kg	0.5	<0.5	74	87
Lead, Pb	mg/kg	1	2	100	140
Nickel, Ni	mg/kg	0.5	<0.5	6.5	13
Zinc, Zn	mg/kg	2	<2.0	120	470

Mercury in Soil [AN312] Tested: 1/7/2020

PARAMETER	UOM	LOR	0407_TP179_0.1_20(625 SOIL - 25/6/2020 SE208090.001	0407_TP179_0.5_20(625 SOIL - 25/6/2020 SE208090.002	0407_TP180_0.1_20(625 SOIL - 25/6/2020 SE208090.004	0407_TP180_0.5_20(625 SOIL - 25/6/2020 SE208090.005	0407_TP181_0.1_20(625 SOIL - 25/6/2020 SE208090.006
Mercury	mg/kg	0.05	**0.08**	<0.05	**0.23**	<0.05	**0.16**

PARAMETER	UOM	LOR	0407_TP181_0.5_20(625 SOIL - 25/6/2020 SE208090.008	0407_TP183_0.1_20(625 SOIL - 25/6/2020 SE208090.009	0407_TP183_0.5_20(625 SOIL - 25/6/2020 SE208090.011	0407_TP184_0.1_20(625 SOIL - 25/6/2020 SE208090.012	0407_TP184_0.4_20(625 SOIL - 25/6/2020 SE208090.013
Mercury	mg/kg	0.05	<0.05	**0.24**	**0.14**	**0.07**	**0.06**

PARAMETER	UOM	LOR	0407_TP192_0.1_20(625 SOIL - 25/6/2020 SE208090.014	0407_TP192_0.5_20(625 SOIL - 25/6/2020 SE208090.015	0407_TP193_0.1_20(625 SOIL - 25/6/2020 SE208090.016	0407_TP193_0.5_20(625 SOIL - 25/6/2020 SE208090.017	0407_TP194_0.1_20(625 SOIL - 25/6/2020 SE208090.018
Mercury	mg/kg	0.05	**0.08**	<0.05	**0.13**	<0.05	**0.18**

PARAMETER	UOM	LOR	0407_TP194_0.5_20(625 SOIL - 25/6/2020 SE208090.019	0407_QC163_20062! SOIL - 25/6/2020 SE208090.020	0407_QC167_20062! SOIL - 25/6/2020 SE208090.021
Mercury	mg/kg	0.05	<0.05	**0.14**	**0.11**

Moisture Content [AN002] Tested: 1/7/2020

PARAMETER	UOM	LOR	0407_TP179_0.1_20(625 SOIL - 25/6/2020 SE208090.001	0407_TP179_0.5_20(625 SOIL - 25/6/2020 SE208090.002	0407_TP180_0.1_20(625 SOIL - 25/6/2020 SE208090.004	0407_TP180_0.5_20(625 SOIL - 25/6/2020 SE208090.005	0407_TP181_0.1_20(625 SOIL - 25/6/2020 SE208090.006
% Moisture	%w/w	1	51.0	6.9	33.1	3.3	27.0

PARAMETER	UOM	LOR	0407_TP181_0.5_20(625 SOIL - 25/6/2020 SE208090.008	0407_TP183_0.1_20(625 SOIL - 25/6/2020 SE208090.009	0407_TP183_0.5_20(625 SOIL - 25/6/2020 SE208090.011	0407_TP184_0.1_20(625 SOIL - 25/6/2020 SE208090.012	0407_TP184_0.4_20(625 SOIL - 25/6/2020 SE208090.013
% Moisture	%w/w	1	4.9	20.3	15.8	15.6	12.2

PARAMETER	UOM	LOR	0407_TP192_0.1_20(625 SOIL - 25/6/2020 SE208090.014	0407_TP192_0.5_20(625 SOIL - 25/6/2020 SE208090.015	0407_TP193_0.1_20(625 SOIL - 25/6/2020 SE208090.016	0407_TP193_0.5_20(625 SOIL - 25/6/2020 SE208090.017	0407_TP194_0.1_20(625 SOIL - 25/6/2020 SE208090.018
% Moisture	%w/w	1	42.4	3.2	19.4	3.7	23.0

PARAMETER	UOM	LOR	0407_TP194_0.5_20(625 SOIL - 25/6/2020 SE208090.019	0407_QC163_20062 SOIL - 25/6/2020 SE208090.020	0407_QC167_20062 SOIL - 25/6/2020 SE208090.021	0407_QC413_20062 SOIL - 25/6/2020 SE208090.022
% Moisture	%w/w	1	3.1	15.0	20.4	<1.0

Fibre Identification in soil [AN602] Tested: 3/7/2020

PARAMETER	UOM	LOR	0407_TP179_0.5_20(625 SOIL - 25/6/2020 SE208090.002	0407_TP180_0.1_20(625 SOIL - 25/6/2020 SE208090.004	0407_TP180_0.5_20(625 SOIL - 25/6/2020 SE208090.005	0407_TP181_0.1_20(625 SOIL - 25/6/2020 SE208090.006	0407_TP181_0.3_20(625 SOIL - 25/6/2020 SE208090.007
Asbestos Detected	No unit	-	No	Yes	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	**>0.01**	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	0407_TP183_0.1_20(625 SOIL - 25/6/2020 SE208090.009	0407_TP183_0.5_20(625 SOIL - 25/6/2020 SE208090.011	0407_TP184_0.1_20(625 SOIL - 25/6/2020 SE208090.012	0407_TP192_0.1_20(625 SOIL - 25/6/2020 SE208090.014	0407_TP193_0.1_20(625 SOIL - 25/6/2020 SE208090.016
Asbestos Detected	No unit	-	No	No	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	0407_TP193_0.5_20(625 SOIL - 25/6/2020 SE208090.017	0407_TP194_0.1_20(625 SOIL - 25/6/2020 SE208090.018
Asbestos Detected	No unit	-	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 3/7/2020

PARAMETER	UOM	LOR	0407_TP179_0.5_20(625 SOIL - 25/6/2020 SE208090.002	0407_TP180_0.1_20(625 SOIL - 25/6/2020 SE208090.004	0407_TP180_0.5_20(625 SOIL - 25/6/2020 SE208090.005	0407_TP181_0.1_20(625 SOIL - 25/6/2020 SE208090.006	0407_TP181_0.3_20(625 SOIL - 25/6/2020 SE208090.007
Total Sample Weight*	g	1	**679**	**376**	**880**	**397**	**750**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	**0.0863**	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	**0.023**	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	**0.023**	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP183_0.1_20(625 SOIL - 25/6/2020 SE208090.009	0407_TP183_0.5_20(625 SOIL - 25/6/2020 SE208090.011	0407_TP184_0.1_20(625 SOIL - 25/6/2020 SE208090.012	0407_TP192_0.1_20(625 SOIL - 25/6/2020 SE208090.014	0407_TP193_0.1_20(625 SOIL - 25/6/2020 SE208090.016
Total Sample Weight*	g	1	**537**	**828**	**609**	**132**	**481**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP193_0.5_20(625 SOIL - 25/6/2020 SE208090.017	0407_TP194_0.1_20(625 SOIL - 25/6/2020 SE208090.018
Total Sample Weight*	g	1	**946**	**403**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-

Fibre ID in bulk materials [AN602] Tested: 6/7/2020

PARAMETER	UOM	LOR	0407_TP179_ACM01 200625 MATERIAL - 25/6/2020 SE208090.003	0407_TP183_ACM01 200625 MATERIAL - 25/6/2020 SE208090.010
Asbestos Detected	No unit	-	Yes	Yes

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid, mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents.
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples, Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.
AN605	This technique gravimetrically determines the mass of Bonded Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight. Any fibrous asbestos (FA) found in this fraction will be added to the 2-7mm fraction and its mass recorded there.

AN605	This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free/respirable fibres which are only observed by standard trace analysis as per AN602.
AN605	Bonded asbestos containing material (Bonded ACM) comprises asbestos-containing-material which is sound in condition. Fibrous asbestos (FA) comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material. Asbestos fines (AF) includes free fibres, small fibre bundles and also small fragments of bonded ACM that passes through a 7mm sieve - which implies that the bonded ACM fragments have a substantial degree of damage which increases the potential for fibre release.
AN-605	Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009 and NEPM 1999 (2013) schedule B1 section 4..

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	14

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208090 R0**
Date Received	25 Jun 2020
Date Reported	07 Jul 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.

Sample #4: Asbestos found as 10x3x3mm cement sheet fragment in >2mm portion.

Asbestos analysed by Approved Identifier Ravee Sivasubramaniam .

SIGNATORIES

[redacted]

Chemist | Senior Organic Chemist/Metals Chemis | Organic Section Head

[redacted]

Hygiene Team Leader

RESULTS

Fibre Identification in soil — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE208090.002	0407_TP179_0.5 _200625	Soil	679g Sand,Soil	25 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208090.004	0407_TP180_0.1 _200625	Soil	376g Clay,Sand,Soil, Rocks,Plant Matter	25 Jun 2020	Chrysotile Asbestos Found Organic Fibres Detected	>0.01
SE208090.005	0407_TP180_0.5 _200625	Soil	880g Sand,Soil,Rocks ,Plant Matter	25 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208090.006	0407_TP181_0.1 _200625	Soil	397g Clay,Sand,Soil, Rocks,Plant Matter	25 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208090.007	0407_TP181_0.3 _200625	Soil	750g Sand	25 Jun 2020	No Asbestos Found	<0.01
SE208090.009	0407_TP183_0.1 _200625	Soil	537g Sand,Soil,Plant Matter	25 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208090.011	0407_TP183_0.5 _200625	Soil	828g Sand,Soil,Rocks	25 Jun 2020	No Asbestos Found	<0.01
SE208090.012	0407_TP184_0.1 _200625	Soil	609g Sand,Soil	25 Jun 2020	No Asbestos Found	<0.01
SE208090.014	0407_TP192_0.1 _200625	Soil	132g Sand,Soil,Rocks ,Plant Matter	25 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208090.016	0407_TP193_0.1 _200625	Soil	481g Sand,Soil,Rocks ,Plant Matter	25 Jun 2020	No Asbestos Found Synthetic Mineral Fibres Detected Organic Fibres Detected	<0.01
SE208090.017	0407_TP193_0.5 _200625	Soil	946g Sand,Soil,Rocks ,Plant Matter	25 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208090.018	0407_TP194_0.1 _200625	Soil	403g Clay,Sand,Soil, Rocks,Plant Matter	25 Jun 2020	No Asbestos Found Synthetic Mineral Fibres Detected Organic Fibres Detected	<0.01

RESULTS

Fibre ID in bulk materials — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE208090.003	0407_TP179_ACM01_200625	Other	170x20x5mm Cement Sheet Fragments	25 Jun 2020	Chrysotile Asbestos Detected	
SE208090.010	0407_TP183_ACM01_200625	Other	50x40x3mm Cement Sheet Fragment	25 Jun 2020	Chrysotile Asbestos Detected	

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 3/7/2020

PARAMETER	UOM	LOR	0407_TP179_0.5_20(625 SOIL - 25/6/2020 SE208090.002	0407_TP180_0.1_20(625 SOIL - 25/6/2020 SE208090.004	0407_TP180_0.5_20(625 SOIL - 25/6/2020 SE208090.005	0407_TP181_0.1_20(625 SOIL - 25/6/2020 SE208090.006	0407_TP181_0.3_20(625 SOIL - 25/6/2020 SE208090.007
Total Sample Weight*	g	1	**679**	**376**	**880**	**397**	**750**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	**0.0863**	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	**0.023**	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	**0.023**	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP183_0.1_20(625 SOIL - 25/6/2020 SE208090.009	0407_TP183_0.5_20(625 SOIL - 25/6/2020 SE208090.011	0407_TP184_0.1_20(625 SOIL - 25/6/2020 SE208090.012	0407_TP192_0.1_20(625 SOIL - 25/6/2020 SE208090.014	0407_TP193_0.1_20(625 SOIL - 25/6/2020 SE208090.016
Total Sample Weight*	g	1	**537**	**828**	**609**	**132**	**481**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP193_0.5_20(625 SOIL - 25/6/2020 SE208090.017	0407_TP194_0.1_20(625 SOIL - 25/6/2020 SE208090.018
Total Sample Weight*	g	1	**946**	**403**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-

METHOD SUMMARY

METHOD	METHODOLOGY SUMMARY
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples , Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable ’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.
AN605	This technique gravimetrically determines the mass of Bonded Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight. Any fibrous asbestos (FA) found in this fraction will be added to the 2-7mm fraction and its mass recorded there.
AN605	This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free/respirable fibres which are only observed by standard trace analysis as per AN602.
AN605	Bonded asbestos containing material (Bonded ACM) comprises asbestos-containing-material which is sound in condition. Fibrous asbestos (FA) comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material. Asbestos fines (AF) includes free fibres, small fibre bundles and also small fragments of bonded ACM that passes through a 7mm sieve - which implies that the bonded ACM fragments have a substantial degree of damage which increases the potential for fibre release.
AN-605	Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009 and NEPM 1999 (2013) schedule B1 section 4..

FOOTNOTES

Amosite	-	Brown Asbestos	NA	-	Not Analysed
Chrysotile	-	White Asbestos	LNR	-	Listed, Not Required
Crocidolite	-	Blue Asbestos	*	-	NATA accreditation does not cover the performance of this service.
Amphiboles	-	Amosite and/or Crocidolite	**	-	Indicative data, theoretical holding time exceeded.

(In reference to soil samples only) This report does not comply with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment and Remediation and Management of Asbestos Contaminated sites in Western Australia - May 2009.

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.

Where reported: 'Asbestos Detected': Asbestos detected by polarised light microscopy, including dispersion staining.
Where reported: 'No Asbestos Found': No Asbestos Found by polarised light microscopy, including dispersion staining.
Where reported: 'UMF Detected': Mineral fibres of unknown type detected by polarised light microscopy, including dispersion staining. Confirmation by another independent analytical technique may be necessary.

Even after disintegration it can be very difficult, or impossible, to detect the presence of asbestos in some asbestos-containing bulk materials using polarised light microscopy. This is due to the low grade or small length or diameter of asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE208090 R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	23

LABORATORY DETAILS

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Address	Unit 16, 33 Maddox St Alexandria NSW 2015
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Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208090 R0**
Date Received	25 Jun 2020
Date Reported	07 Jul 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Surrogate	VOC's in Soil	3 items
	Volatile Petroleum Hydrocarbons in Soil	3 items
Duplicate	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	3 items
Matrix Spike	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	3 items
	VOC's in Soil	1 item

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	21 Soil, 2 Material
Date documentation received	29/6/2020@5:32pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	4.7°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE208090 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Fibre ID in bulk materials

Method: ME-(AU)-[ENV]AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP179_ACM01_2006	SE208090.003	LB203512	25 Jun 2020	25 Jun 2020	25 Jun 2021	06 Jul 2020	25 Jun 2021	06 Jul 2020
0407_TP183_ACM01_2006	SE208090.010	LB203512	25 Jun 2020	25 Jun 2020	25 Jun 2021	06 Jul 2020	25 Jun 2021	06 Jul 2020

Fibre Identification in soil

Method: ME-(AU)-[ENV]AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP179_0.5_200625	SE208090.002	LB203453	25 Jun 2020	25 Jun 2020	25 Jun 2021	03 Jul 2020	25 Jun 2021	06 Jul 2020
0407_TP180_0.1_200625	SE208090.004	LB203453	25 Jun 2020	25 Jun 2020	25 Jun 2021	03 Jul 2020	25 Jun 2021	06 Jul 2020
0407_TP180_0.5_200625	SE208090.005	LB203453	25 Jun 2020	25 Jun 2020	25 Jun 2021	03 Jul 2020	25 Jun 2021	06 Jul 2020
0407_TP181_0.1_200625	SE208090.006	LB203453	25 Jun 2020	25 Jun 2020	25 Jun 2021	03 Jul 2020	25 Jun 2021	06 Jul 2020
0407_TP181_0.3_200625	SE208090.007	LB203453	25 Jun 2020	25 Jun 2020	25 Jun 2021	03 Jul 2020	25 Jun 2021	06 Jul 2020
0407_TP183_0.1_200625	SE208090.009	LB203453	25 Jun 2020	25 Jun 2020	25 Jun 2021	03 Jul 2020	25 Jun 2021	06 Jul 2020
0407_TP183_0.5_200625	SE208090.011	LB203453	25 Jun 2020	25 Jun 2020	25 Jun 2021	03 Jul 2020	25 Jun 2021	06 Jul 2020
0407_TP184_0.1_200625	SE208090.012	LB203453	25 Jun 2020	25 Jun 2020	25 Jun 2021	03 Jul 2020	25 Jun 2021	06 Jul 2020
0407_TP192_0.1_200625	SE208090.014	LB203453	25 Jun 2020	25 Jun 2020	25 Jun 2021	03 Jul 2020	25 Jun 2021	06 Jul 2020
0407_TP193_0.1_200625	SE208090.016	LB203453	25 Jun 2020	25 Jun 2020	25 Jun 2021	03 Jul 2020	25 Jun 2021	06 Jul 2020
0407_TP193_0.5_200625	SE208090.017	LB203453	25 Jun 2020	25 Jun 2020	25 Jun 2021	03 Jul 2020	25 Jun 2021	06 Jul 2020
0407_TP194_0.1_200625	SE208090.018	LB203453	25 Jun 2020	25 Jun 2020	25 Jun 2021	03 Jul 2020	25 Jun 2021	06 Jul 2020

Gravimetric Determination of Asbestos in Soil

Method: ME-(AU)-[ENV]AN605

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP179_0.5_200625	SE208090.002	LB203453	25 Jun 2020	25 Jun 2020	22 Dec 2020	03 Jul 2020	22 Dec 2020	06 Jul 2020
0407_TP180_0.1_200625	SE208090.004	LB203453	25 Jun 2020	25 Jun 2020	22 Dec 2020	03 Jul 2020	22 Dec 2020	06 Jul 2020
0407_TP180_0.5_200625	SE208090.005	LB203453	25 Jun 2020	25 Jun 2020	22 Dec 2020	03 Jul 2020	22 Dec 2020	06 Jul 2020
0407_TP181_0.1_200625	SE208090.006	LB203453	25 Jun 2020	25 Jun 2020	22 Dec 2020	03 Jul 2020	22 Dec 2020	06 Jul 2020
0407_TP181_0.3_200625	SE208090.007	LB203453	25 Jun 2020	25 Jun 2020	22 Dec 2020	03 Jul 2020	22 Dec 2020	06 Jul 2020
0407_TP183_0.1_200625	SE208090.009	LB203453	25 Jun 2020	25 Jun 2020	22 Dec 2020	03 Jul 2020	22 Dec 2020	06 Jul 2020
0407_TP183_0.5_200625	SE208090.011	LB203453	25 Jun 2020	25 Jun 2020	22 Dec 2020	03 Jul 2020	22 Dec 2020	06 Jul 2020
0407_TP184_0.1_200625	SE208090.012	LB203453	25 Jun 2020	25 Jun 2020	22 Dec 2020	03 Jul 2020	22 Dec 2020	06 Jul 2020
0407_TP192_0.1_200625	SE208090.014	LB203453	25 Jun 2020	25 Jun 2020	22 Dec 2020	03 Jul 2020	22 Dec 2020	06 Jul 2020
0407_TP193_0.1_200625	SE208090.016	LB203453	25 Jun 2020	25 Jun 2020	22 Dec 2020	03 Jul 2020	22 Dec 2020	06 Jul 2020
0407_TP193_0.5_200625	SE208090.017	LB203453	25 Jun 2020	25 Jun 2020	22 Dec 2020	03 Jul 2020	22 Dec 2020	06 Jul 2020
0407_TP194_0.1_200625	SE208090.018	LB203453	25 Jun 2020	25 Jun 2020	22 Dec 2020	03 Jul 2020	22 Dec 2020	06 Jul 2020

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP179_0.1_200625	SE208090.001	LB203241	25 Jun 2020	25 Jun 2020	23 Jul 2020	01 Jul 2020	23 Jul 2020	06 Jul 2020
0407_TP179_0.5_200625	SE208090.002	LB203241	25 Jun 2020	25 Jun 2020	23 Jul 2020	01 Jul 2020	23 Jul 2020	06 Jul 2020
0407_TP180_0.1_200625	SE208090.004	LB203241	25 Jun 2020	25 Jun 2020	23 Jul 2020	01 Jul 2020	23 Jul 2020	06 Jul 2020
0407_TP180_0.5_200625	SE208090.005	LB203241	25 Jun 2020	25 Jun 2020	23 Jul 2020	01 Jul 2020	23 Jul 2020	06 Jul 2020
0407_TP181_0.1_200625	SE208090.006	LB203241	25 Jun 2020	25 Jun 2020	23 Jul 2020	01 Jul 2020	23 Jul 2020	06 Jul 2020
0407_TP181_0.5_200625	SE208090.008	LB203241	25 Jun 2020	25 Jun 2020	23 Jul 2020	01 Jul 2020	23 Jul 2020	06 Jul 2020
0407_TP183_0.1_200625	SE208090.009	LB203241	25 Jun 2020	25 Jun 2020	23 Jul 2020	01 Jul 2020	23 Jul 2020	06 Jul 2020
0407_TP183_0.5_200625	SE208090.011	LB203241	25 Jun 2020	25 Jun 2020	23 Jul 2020	01 Jul 2020	23 Jul 2020	06 Jul 2020
0407_TP184_0.1_200625	SE208090.012	LB203241	25 Jun 2020	25 Jun 2020	23 Jul 2020	01 Jul 2020	23 Jul 2020	06 Jul 2020
0407_TP184_0.4_200625	SE208090.013	LB203241	25 Jun 2020	25 Jun 2020	23 Jul 2020	01 Jul 2020	23 Jul 2020	06 Jul 2020
0407_TP192_0.1_200625	SE208090.014	LB203241	25 Jun 2020	25 Jun 2020	23 Jul 2020	01 Jul 2020	23 Jul 2020	06 Jul 2020
0407_TP192_0.5_200625	SE208090.015	LB203241	25 Jun 2020	25 Jun 2020	23 Jul 2020	01 Jul 2020	23 Jul 2020	06 Jul 2020
0407_TP193_0.1_200625	SE208090.016	LB203241	25 Jun 2020	25 Jun 2020	23 Jul 2020	01 Jul 2020	23 Jul 2020	06 Jul 2020
0407_TP193_0.5_200625	SE208090.017	LB203241	25 Jun 2020	25 Jun 2020	23 Jul 2020	01 Jul 2020	23 Jul 2020	06 Jul 2020
0407_TP194_0.1_200625	SE208090.018	LB203241	25 Jun 2020	25 Jun 2020	23 Jul 2020	01 Jul 2020	23 Jul 2020	06 Jul 2020
0407_TP194_0.5_200625	SE208090.019	LB203241	25 Jun 2020	25 Jun 2020	23 Jul 2020	01 Jul 2020	23 Jul 2020	06 Jul 2020
0407_QC163_200625	SE208090.020	LB203241	25 Jun 2020	25 Jun 2020	23 Jul 2020	01 Jul 2020	23 Jul 2020	06 Jul 2020
0407_QC167_200625	SE208090.021	LB203241	25 Jun 2020	25 Jun 2020	23 Jul 2020	01 Jul 2020	23 Jul 2020	06 Jul 2020
0407_QC413_200625	SE208090.022	LB203241	25 Jun 2020	25 Jun 2020	23 Jul 2020	01 Jul 2020	23 Jul 2020	06 Jul 2020
0407_QC513_200625	SE208090.023	LB203241	25 Jun 2020	25 Jun 2020	23 Jul 2020	01 Jul 2020	23 Jul 2020	06 Jul 2020

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP179_0.1_200625	SE208090.001	LB203257	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	06 Jul 2020	05 Jul 2020
0407_TP179_0.5_200625	SE208090.002	LB203257	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	06 Jul 2020	05 Jul 2020
0407_TP180_0.1_200625	SE208090.004	LB203257	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	06 Jul 2020	05 Jul 2020
0407_TP180_0.5_200625	SE208090.005	LB203257	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	06 Jul 2020	05 Jul 2020

HOLDING TIME SUMMARY

SE208090 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Moisture Content (continued)

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP181_0.1_200625	SE208090.006	LB203257	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	06 Jul 2020	05 Jul 2020
0407_TP181_0.5_200625	SE208090.008	LB203257	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	06 Jul 2020	05 Jul 2020
0407_TP183_0.1_200625	SE208090.009	LB203257	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	06 Jul 2020	05 Jul 2020
0407_TP183_0.5_200625	SE208090.011	LB203257	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	06 Jul 2020	05 Jul 2020
0407_TP184_0.1_200625	SE208090.012	LB203257	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	06 Jul 2020	05 Jul 2020
0407_TP184_0.4_200625	SE208090.013	LB203257	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	06 Jul 2020	05 Jul 2020
0407_TP192_0.1_200625	SE208090.014	LB203257	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	06 Jul 2020	05 Jul 2020
0407_TP192_0.5_200625	SE208090.015	LB203257	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	06 Jul 2020	05 Jul 2020
0407_TP193_0.1_200625	SE208090.016	LB203257	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	06 Jul 2020	05 Jul 2020
0407_TP193_0.5_200625	SE208090.017	LB203257	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	06 Jul 2020	05 Jul 2020
0407_TP194_0.1_200625	SE208090.018	LB203257	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	06 Jul 2020	05 Jul 2020
0407_TP194_0.5_200625	SE208090.019	LB203257	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	06 Jul 2020	05 Jul 2020
0407_QC163_200625	SE208090.020	LB203257	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	06 Jul 2020	05 Jul 2020
0407_QC167_200625	SE208090.021	LB203257	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	06 Jul 2020	05 Jul 2020
0407_QC413_200625	SE208090.022	LB203257	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	06 Jul 2020	05 Jul 2020
0407_QC513_200625	SE208090.023	LB203257	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	06 Jul 2020	03 Jul 2020

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP179_0.1_200625	SE208090.001	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP179_0.5_200625	SE208090.002	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP180_0.1_200625	SE208090.004	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP180_0.5_200625	SE208090.005	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP181_0.1_200625	SE208090.006	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP181_0.5_200625	SE208090.008	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP183_0.1_200625	SE208090.009	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP183_0.5_200625	SE208090.011	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP184_0.1_200625	SE208090.012	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP184_0.4_200625	SE208090.013	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP192_0.1_200625	SE208090.014	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP192_0.5_200625	SE208090.015	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP193_0.1_200625	SE208090.016	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP193_0.5_200625	SE208090.017	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP194_0.1_200625	SE208090.018	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP194_0.5_200625	SE208090.019	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_QC163_200625	SE208090.020	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_QC167_200625	SE208090.021	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_QC413_200625	SE208090.022	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_QC513_200625	SE208090.023	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	07 Jul 2020

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP179_0.1_200625	SE208090.001	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP179_0.5_200625	SE208090.002	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP180_0.1_200625	SE208090.004	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP180_0.5_200625	SE208090.005	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP181_0.1_200625	SE208090.006	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP181_0.5_200625	SE208090.008	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP183_0.1_200625	SE208090.009	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP183_0.5_200625	SE208090.011	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP184_0.1_200625	SE208090.012	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP184_0.4_200625	SE208090.013	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP192_0.1_200625	SE208090.014	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP192_0.5_200625	SE208090.015	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP193_0.1_200625	SE208090.016	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP193_0.5_200625	SE208090.017	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP194_0.1_200625	SE208090.018	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP194_0.5_200625	SE208090.019	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_QC163_200625	SE208090.020	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_QC167_200625	SE208090.021	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_QC413_200625	SE208090.022	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	07 Jul 2020

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC513_200625	SE208090.023	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	07 Jul 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP179_0.1_200625	SE208090.001	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP179_0.5_200625	SE208090.002	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP180_0.1_200625	SE208090.004	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP180_0.5_200625	SE208090.005	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP181_0.1_200625	SE208090.006	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP181_0.5_200625	SE208090.008	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP183_0.1_200625	SE208090.009	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP183_0.5_200625	SE208090.011	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP184_0.1_200625	SE208090.012	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP184_0.4_200625	SE208090.013	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP192_0.1_200625	SE208090.014	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP192_0.5_200625	SE208090.015	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP193_0.1_200625	SE208090.016	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP193_0.5_200625	SE208090.017	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP194_0.1_200625	SE208090.018	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP194_0.5_200625	SE208090.019	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_QC163_200625	SE208090.020	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_QC167_200625	SE208090.021	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_QC413_200625	SE208090.022	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	07 Jul 2020
0407_QC513_200625	SE208090.023	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	07 Jul 2020

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP179_0.1_200625	SE208090.001	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP179_0.5_200625	SE208090.002	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP180_0.1_200625	SE208090.004	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP180_0.5_200625	SE208090.005	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP181_0.1_200625	SE208090.006	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP181_0.5_200625	SE208090.008	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP183_0.1_200625	SE208090.009	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP183_0.5_200625	SE208090.011	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP184_0.1_200625	SE208090.012	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP184_0.4_200625	SE208090.013	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP192_0.1_200625	SE208090.014	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP192_0.5_200625	SE208090.015	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP193_0.1_200625	SE208090.016	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP193_0.5_200625	SE208090.017	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP194_0.1_200625	SE208090.018	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP194_0.5_200625	SE208090.019	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_QC163_200625	SE208090.020	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_QC167_200625	SE208090.021	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_QC413_200625	SE208090.022	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_QC513_200625	SE208090.023	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP179_0.1_200625	SE208090.001	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP179_0.5_200625	SE208090.002	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP180_0.1_200625	SE208090.004	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP180_0.5_200625	SE208090.005	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP181_0.1_200625	SE208090.006	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP181_0.5_200625	SE208090.008	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP183_0.1_200625	SE208090.009	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP183_0.5_200625	SE208090.011	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP184_0.1_200625	SE208090.012	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP184_0.4_200625	SE208090.013	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP192_0.1_200625	SE208090.014	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020

HOLDING TIME SUMMARY

SE208090 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP192_0.5_200625	SE208090.015	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP193_0.1_200625	SE208090.016	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP193_0.5_200625	SE208090.017	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP194_0.1_200625	SE208090.018	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP194_0.5_200625	SE208090.019	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_QC163_200625	SE208090.020	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_QC167_200625	SE208090.021	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_QC413_200625	SE208090.022	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_QC513_200625	SE208090.023	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP179_0.1_200625	SE208090.001	LB203236	25 Jun 2020	25 Jun 2020	22 Dec 2020	01 Jul 2020	22 Dec 2020	06 Jul 2020
0407_TP179_0.5_200625	SE208090.002	LB203236	25 Jun 2020	25 Jun 2020	22 Dec 2020	01 Jul 2020	22 Dec 2020	06 Jul 2020
0407_TP180_0.1_200625	SE208090.004	LB203236	25 Jun 2020	25 Jun 2020	22 Dec 2020	01 Jul 2020	22 Dec 2020	06 Jul 2020
0407_TP180_0.5_200625	SE208090.005	LB203236	25 Jun 2020	25 Jun 2020	22 Dec 2020	01 Jul 2020	22 Dec 2020	06 Jul 2020
0407_TP181_0.1_200625	SE208090.006	LB203236	25 Jun 2020	25 Jun 2020	22 Dec 2020	01 Jul 2020	22 Dec 2020	06 Jul 2020
0407_TP181_0.5_200625	SE208090.008	LB203236	25 Jun 2020	25 Jun 2020	22 Dec 2020	01 Jul 2020	22 Dec 2020	06 Jul 2020
0407_TP183_0.1_200625	SE208090.009	LB203236	25 Jun 2020	25 Jun 2020	22 Dec 2020	01 Jul 2020	22 Dec 2020	06 Jul 2020
0407_TP183_0.5_200625	SE208090.011	LB203236	25 Jun 2020	25 Jun 2020	22 Dec 2020	01 Jul 2020	22 Dec 2020	06 Jul 2020
0407_TP184_0.1_200625	SE208090.012	LB203236	25 Jun 2020	25 Jun 2020	22 Dec 2020	01 Jul 2020	22 Dec 2020	06 Jul 2020
0407_TP184_0.4_200625	SE208090.013	LB203236	25 Jun 2020	25 Jun 2020	22 Dec 2020	01 Jul 2020	22 Dec 2020	06 Jul 2020
0407_TP192_0.1_200625	SE208090.014	LB203236	25 Jun 2020	25 Jun 2020	22 Dec 2020	01 Jul 2020	22 Dec 2020	06 Jul 2020
0407_TP192_0.5_200625	SE208090.015	LB203236	25 Jun 2020	25 Jun 2020	22 Dec 2020	01 Jul 2020	22 Dec 2020	06 Jul 2020
0407_TP193_0.1_200625	SE208090.016	LB203236	25 Jun 2020	25 Jun 2020	22 Dec 2020	01 Jul 2020	22 Dec 2020	06 Jul 2020
0407_TP193_0.5_200625	SE208090.017	LB203236	25 Jun 2020	25 Jun 2020	22 Dec 2020	01 Jul 2020	22 Dec 2020	06 Jul 2020
0407_TP194_0.1_200625	SE208090.018	LB203236	25 Jun 2020	25 Jun 2020	22 Dec 2020	01 Jul 2020	22 Dec 2020	06 Jul 2020
0407_TP194_0.5_200625	SE208090.019	LB203236	25 Jun 2020	25 Jun 2020	22 Dec 2020	01 Jul 2020	22 Dec 2020	06 Jul 2020
0407_QC163_200625	SE208090.020	LB203236	25 Jun 2020	25 Jun 2020	22 Dec 2020	01 Jul 2020	22 Dec 2020	06 Jul 2020
0407_QC167_200625	SE208090.021	LB203236	25 Jun 2020	25 Jun 2020	22 Dec 2020	01 Jul 2020	22 Dec 2020	06 Jul 2020
0407_QC413_200625	SE208090.022	LB203236	25 Jun 2020	25 Jun 2020	22 Dec 2020	01 Jul 2020	22 Dec 2020	06 Jul 2020
0407_QC513_200625	SE208090.023	LB203236	25 Jun 2020	25 Jun 2020	22 Dec 2020	01 Jul 2020	22 Dec 2020	06 Jul 2020

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP179_0.1_200625	SE208090.001	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP179_0.5_200625	SE208090.002	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP180_0.1_200625	SE208090.004	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP180_0.5_200625	SE208090.005	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP181_0.1_200625	SE208090.006	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP181_0.5_200625	SE208090.008	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP183_0.1_200625	SE208090.009	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP183_0.5_200625	SE208090.011	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP184_0.1_200625	SE208090.012	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP184_0.4_200625	SE208090.013	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP192_0.1_200625	SE208090.014	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP192_0.5_200625	SE208090.015	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP193_0.1_200625	SE208090.016	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP193_0.5_200625	SE208090.017	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP194_0.1_200625	SE208090.018	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP194_0.5_200625	SE208090.019	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_QC163_200625	SE208090.020	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_QC167_200625	SE208090.021	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_QC413_200625	SE208090.022	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_QC513_200625	SE208090.023	LB203255	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP179_0.1_200625	SE208090.001	LB203254	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP179_0.5_200625	SE208090.002	LB203254	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP180_0.1_200625	SE208090.004	LB203254	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020

HOLDING TIME SUMMARY

SE208090 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP180_0.5_200625	SE208090.005	LB203254	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP181_0.1_200625	SE208090.006	LB203254	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP181_0.5_200625	SE208090.008	LB203254	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP183_0.1_200625	SE208090.009	LB203254	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP183_0.5_200625	SE208090.011	LB203254	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP184_0.1_200625	SE208090.012	LB203254	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP184_0.4_200625	SE208090.013	LB203254	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP192_0.1_200625	SE208090.014	LB203254	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP192_0.5_200625	SE208090.015	LB203254	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP193_0.1_200625	SE208090.016	LB203254	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP193_0.5_200625	SE208090.017	LB203254	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP194_0.1_200625	SE208090.018	LB203254	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP194_0.5_200625	SE208090.019	LB203254	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_QC163_200625	SE208090.020	LB203254	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_QC167_200625	SE208090.021	LB203254	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_QC413_200625	SE208090.022	LB203254	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_QC513_200625	SE208090.023	LB203254	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP179_0.1_200625	SE208090.001	LB203254	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP179_0.5_200625	SE208090.002	LB203254	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP180_0.1_200625	SE208090.004	LB203254	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP180_0.5_200625	SE208090.005	LB203254	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP181_0.1_200625	SE208090.006	LB203254	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP181_0.5_200625	SE208090.008	LB203254	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP183_0.1_200625	SE208090.009	LB203254	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP183_0.5_200625	SE208090.011	LB203254	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP184_0.1_200625	SE208090.012	LB203254	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP184_0.4_200625	SE208090.013	LB203254	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP192_0.1_200625	SE208090.014	LB203254	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP192_0.5_200625	SE208090.015	LB203254	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP193_0.1_200625	SE208090.016	LB203254	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP193_0.5_200625	SE208090.017	LB203254	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP194_0.1_200625	SE208090.018	LB203254	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP194_0.5_200625	SE208090.019	LB203254	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_QC163_200625	SE208090.020	LB203254	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_QC167_200625	SE208090.021	LB203254	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_QC413_200625	SE208090.022	LB203254	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_QC513_200625	SE208090.023	LB203254	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP179_0.1_200625	SE208090.001	%	60 - 130%	113
	0407_TP179_0.5_200625	SE208090.002	%	60 - 130%	100
	0407_TP180_0.1_200625	SE208090.004	%	60 - 130%	107
	0407_TP180_0.5_200625	SE208090.005	%	60 - 130%	103
	0407_TP181_0.1_200625	SE208090.006	%	60 - 130%	112
	0407_TP181_0.5_200625	SE208090.008	%	60 - 130%	101
	0407_TP183_0.1_200625	SE208090.009	%	60 - 130%	110
	0407_TP183_0.5_200625	SE208090.011	%	60 - 130%	114
	0407_TP184_0.1_200625	SE208090.012	%	60 - 130%	108
	0407_TP184_0.4_200625	SE208090.013	%	60 - 130%	117
	0407_TP192_0.1_200625	SE208090.014	%	60 - 130%	115
	0407_TP192_0.5_200625	SE208090.015	%	60 - 130%	101
	0407_TP193_0.1_200625	SE208090.016	%	60 - 130%	111
	0407_TP193_0.5_200625	SE208090.017	%	60 - 130%	104
	0407_TP194_0.1_200625	SE208090.018	%	60 - 130%	112
	0407_TP194_0.5_200625	SE208090.019	%	60 - 130%	100
	0407_QC163_200625	SE208090.020	%	60 - 130%	111
	0407_QC167_200625	SE208090.021	%	60 - 130%	127

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP179_0.1_200625	SE208090.001	%	60 - 130%	87
	0407_TP179_0.5_200625	SE208090.002	%	60 - 130%	83
	0407_TP180_0.1_200625	SE208090.004	%	60 - 130%	78
	0407_TP180_0.5_200625	SE208090.005	%	60 - 130%	87
	0407_TP181_0.1_200625	SE208090.006	%	60 - 130%	77
	0407_TP181_0.5_200625	SE208090.008	%	60 - 130%	87
	0407_TP183_0.1_200625	SE208090.009	%	60 - 130%	73
	0407_TP183_0.5_200625	SE208090.011	%	60 - 130%	88
	0407_TP184_0.1_200625	SE208090.012	%	60 - 130%	115
	0407_TP184_0.4_200625	SE208090.013	%	60 - 130%	73
	0407_TP192_0.1_200625	SE208090.014	%	60 - 130%	100
	0407_TP192_0.5_200625	SE208090.015	%	60 - 130%	88
	0407_TP193_0.1_200625	SE208090.016	%	60 - 130%	72
	0407_TP193_0.5_200625	SE208090.017	%	60 - 130%	87
	0407_TP194_0.1_200625	SE208090.018	%	60 - 130%	74
	0407_TP194_0.5_200625	SE208090.019	%	60 - 130%	81
	0407_QC163_200625	SE208090.020	%	60 - 130%	73
	0407_QC167_200625	SE208090.021	%	60 - 130%	77
d14-p-terphenyl (Surrogate)	0407_TP179_0.1_200625	SE208090.001	%	60 - 130%	87
	0407_TP179_0.5_200625	SE208090.002	%	60 - 130%	75
	0407_TP180_0.1_200625	SE208090.004	%	60 - 130%	76
	0407_TP180_0.5_200625	SE208090.005	%	60 - 130%	79
	0407_TP181_0.1_200625	SE208090.006	%	60 - 130%	82
	0407_TP181_0.5_200625	SE208090.008	%	60 - 130%	82
	0407_TP183_0.1_200625	SE208090.009	%	60 - 130%	85
	0407_TP183_0.5_200625	SE208090.011	%	60 - 130%	84
	0407_TP184_0.1_200625	SE208090.012	%	60 - 130%	105
	0407_TP184_0.4_200625	SE208090.013	%	60 - 130%	86
	0407_TP192_0.1_200625	SE208090.014	%	60 - 130%	98
	0407_TP192_0.5_200625	SE208090.015	%	60 - 130%	86
	0407_TP193_0.1_200625	SE208090.016	%	60 - 130%	85
	0407_TP193_0.5_200625	SE208090.017	%	60 - 130%	89
	0407_TP194_0.1_200625	SE208090.018	%	60 - 130%	82
	0407_TP194_0.5_200625	SE208090.019	%	60 - 130%	84
	0407_QC163_200625	SE208090.020	%	60 - 130%	78
	0407_QC167_200625	SE208090.021	%	60 - 130%	90

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued) — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP179_0.1_200625	SE208090.001	%	70 - 130%	87
	0407_TP179_0.5_200625	SE208090.002	%	70 - 130%	86
	0407_TP180_0.1_200625	SE208090.004	%	70 - 130%	78
	0407_TP180_0.5_200625	SE208090.005	%	70 - 130%	87
	0407_TP181_0.1_200625	SE208090.006	%	70 - 130%	77
	0407_TP181_0.5_200625	SE208090.008	%	70 - 130%	87
	0407_TP183_0.1_200625	SE208090.009	%	70 - 130%	73
	0407_TP183_0.5_200625	SE208090.011	%	70 - 130%	88
	0407_TP184_0.1_200625	SE208090.012	%	70 - 130%	115
	0407_TP184_0.4_200625	SE208090.013	%	70 - 130%	73
	0407_TP192_0.1_200625	SE208090.014	%	70 - 130%	100
	0407_TP192_0.5_200625	SE208090.015	%	70 - 130%	79
	0407_TP193_0.1_200625	SE208090.016	%	70 - 130%	72
	0407_TP193_0.5_200625	SE208090.017	%	70 - 130%	87
	0407_TP194_0.1_200625	SE208090.018	%	70 - 130%	74
	0407_TP194_0.5_200625	SE208090.019	%	70 - 130%	81
	0407_QC163_200625	SE208090.020	%	70 - 130%	73
	0407_QC167_200625	SE208090.021	%	70 - 130%	77
d14-p-terphenyl (Surrogate)	0407_TP179_0.1_200625	SE208090.001	%	70 - 130%	87
	0407_TP179_0.5_200625	SE208090.002	%	70 - 130%	75
	0407_TP180_0.1_200625	SE208090.004	%	70 - 130%	76
	0407_TP180_0.5_200625	SE208090.005	%	70 - 130%	79
	0407_TP181_0.1_200625	SE208090.006	%	70 - 130%	82
	0407_TP181_0.5_200625	SE208090.008	%	70 - 130%	82
	0407_TP183_0.1_200625	SE208090.009	%	70 - 130%	85
	0407_TP183_0.5_200625	SE208090.011	%	70 - 130%	84
	0407_TP184_0.1_200625	SE208090.012	%	70 - 130%	105
	0407_TP184_0.4_200625	SE208090.013	%	70 - 130%	86
	0407_TP192_0.1_200625	SE208090.014	%	70 - 130%	98
	0407_TP192_0.5_200625	SE208090.015	%	70 - 130%	86
	0407_TP193_0.1_200625	SE208090.016	%	70 - 130%	85
	0407_TP193_0.5_200625	SE208090.017	%	70 - 130%	89
	0407_TP194_0.1_200625	SE208090.018	%	70 - 130%	82
	0407_TP194_0.5_200625	SE208090.019	%	70 - 130%	84
	0407_QC163_200625	SE208090.020	%	70 - 130%	78
	0407_QC167_200625	SE208090.021	%	70 - 130%	90
d5-nitrobenzene (Surrogate)	0407_TP179_0.1_200625	SE208090.001	%	70 - 130%	83
	0407_TP179_0.5_200625	SE208090.002	%	70 - 130%	75
	0407_TP180_0.1_200625	SE208090.004	%	70 - 130%	71
	0407_TP180_0.5_200625	SE208090.005	%	70 - 130%	78
	0407_TP181_0.1_200625	SE208090.006	%	70 - 130%	77
	0407_TP181_0.5_200625	SE208090.008	%	70 - 130%	78
	0407_TP183_0.1_200625	SE208090.009	%	70 - 130%	77
	0407_TP183_0.5_200625	SE208090.011	%	70 - 130%	83
	0407_TP184_0.1_200625	SE208090.012	%	70 - 130%	103
	0407_TP184_0.4_200625	SE208090.013	%	70 - 130%	81
	0407_TP192_0.1_200625	SE208090.014	%	70 - 130%	96
	0407_TP192_0.5_200625	SE208090.015	%	70 - 130%	79
	0407_TP193_0.1_200625	SE208090.016	%	70 - 130%	75
	0407_TP193_0.5_200625	SE208090.017	%	70 - 130%	82
	0407_TP194_0.1_200625	SE208090.018	%	70 - 130%	79
	0407_TP194_0.5_200625	SE208090.019	%	70 - 130%	74
	0407_QC163_200625	SE208090.020	%	70 - 130%	70
	0407_QC167_200625	SE208090.021	%	70 - 130%	81

PCBs in Soil — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP179_0.1_200625	SE208090.001	%	60 - 130%	113
	0407_TP179_0.5_200625	SE208090.002	%	60 - 130%	100
	0407_TP180_0.1_200625	SE208090.004	%	60 - 130%	107
	0407_TP180_0.5_200625	SE208090.005	%	60 - 130%	103

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PCBs in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP181_0.1_200625	SE208090.006	%	60 - 130%	112
	0407_TP181_0.5_200625	SE208090.008	%	60 - 130%	101
	0407_TP183_0.1_200625	SE208090.009	%	60 - 130%	110
	0407_TP183_0.5_200625	SE208090.011	%	60 - 130%	114
	0407_TP184_0.1_200625	SE208090.012	%	60 - 130%	108
	0407_TP184_0.4_200625	SE208090.013	%	60 - 130%	117
	0407_TP192_0.1_200625	SE208090.014	%	60 - 130%	115
	0407_TP192_0.5_200625	SE208090.015	%	60 - 130%	101
	0407_TP193_0.1_200625	SE208090.016	%	60 - 130%	111
	0407_TP193_0.5_200625	SE208090.017	%	60 - 130%	104
	0407_TP194_0.1_200625	SE208090.018	%	60 - 130%	112
	0407_TP194_0.5_200625	SE208090.019	%	60 - 130%	100
	0407_QC163_200625	SE208090.020	%	60 - 130%	111
	0407_QC167_200625	SE208090.021	%	60 - 130%	127

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	0407_TP179_0.1_200625	SE208090.001	%	70 - 130%	93
	0407_TP179_0.5_200625	SE208090.002	%	70 - 130%	92
	0407_TP180_0.1_200625	SE208090.004	%	70 - 130%	87
	0407_TP180_0.5_200625	SE208090.005	%	70 - 130%	91
	0407_TP181_0.1_200625	SE208090.006	%	70 - 130%	91
	0407_TP181_0.5_200625	SE208090.008	%	70 - 130%	93
	0407_TP183_0.1_200625	SE208090.009	%	70 - 130%	93
	0407_TP183_0.5_200625	SE208090.011	%	70 - 130%	89
	0407_TP184_0.1_200625	SE208090.012	%	70 - 130%	91
	0407_TP184_0.4_200625	SE208090.013	%	70 - 130%	90
	0407_TP192_0.1_200625	SE208090.014	%	70 - 130%	93
	0407_TP192_0.5_200625	SE208090.015	%	70 - 130%	89
	0407_TP193_0.1_200625	SE208090.016	%	70 - 130%	85
	0407_TP193_0.5_200625	SE208090.017	%	70 - 130%	89
	0407_TP194_0.1_200625	SE208090.018	%	70 - 130%	88
	0407_TP194_0.5_200625	SE208090.019	%	70 - 130%	93
	0407_QC163_200625	SE208090.020	%	70 - 130%	90
	0407_QC167_200625	SE208090.021	%	70 - 130%	87
d5-phenol (Surrogate)	0407_TP179_0.1_200625	SE208090.001	%	50 - 130%	92
	0407_TP179_0.5_200625	SE208090.002	%	50 - 130%	84
	0407_TP180_0.1_200625	SE208090.004	%	50 - 130%	86
	0407_TP180_0.5_200625	SE208090.005	%	50 - 130%	88
	0407_TP181_0.1_200625	SE208090.006	%	50 - 130%	86
	0407_TP181_0.5_200625	SE208090.008	%	50 - 130%	89
	0407_TP183_0.1_200625	SE208090.009	%	50 - 130%	91
	0407_TP183_0.5_200625	SE208090.011	%	50 - 130%	88
	0407_TP184_0.1_200625	SE208090.012	%	50 - 130%	89
	0407_TP184_0.4_200625	SE208090.013	%	50 - 130%	91
	0407_TP192_0.1_200625	SE208090.014	%	50 - 130%	87
	0407_TP192_0.5_200625	SE208090.015	%	50 - 130%	91
	0407_TP193_0.1_200625	SE208090.016	%	50 - 130%	84
	0407_TP193_0.5_200625	SE208090.017	%	50 - 130%	87
	0407_TP194_0.1_200625	SE208090.018	%	50 - 130%	86
	0407_TP194_0.5_200625	SE208090.019	%	50 - 130%	90
	0407_QC163_200625	SE208090.020	%	50 - 130%	87
	0407_QC167_200625	SE208090.021	%	50 - 130%	85

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP179_0.1_200625	SE208090.001	%	60 - 130%	56 ⓘ
	0407_TP179_0.5_200625	SE208090.002	%	60 - 130%	67
	0407_TP180_0.1_200625	SE208090.004	%	60 - 130%	64
	0407_TP180_0.5_200625	SE208090.005	%	60 - 130%	67
	0407_TP181_0.1_200625	SE208090.006	%	60 - 130%	61
	0407_TP181_0.5_200625	SE208090.008	%	60 - 130%	67

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP183_0.1_200625	SE208090.009	%	60 - 130%	68
	0407_TP183_0.5_200625	SE208090.011	%	60 - 130%	66
	0407_TP184_0.1_200625	SE208090.012	%	60 - 130%	66
	0407_TP184_0.4_200625	SE208090.013	%	60 - 130%	92
	0407_TP192_0.1_200625	SE208090.014	%	60 - 130%	56 ①
	0407_TP192_0.5_200625	SE208090.015	%	60 - 130%	71
	0407_TP193_0.1_200625	SE208090.016	%	60 - 130%	69
	0407_TP193_0.5_200625	SE208090.017	%	60 - 130%	59 ①
	0407_TP194_0.1_200625	SE208090.018	%	60 - 130%	64
	0407_TP194_0.5_200625	SE208090.019	%	60 - 130%	73
	0407_QC163_200625	SE208090.020	%	60 - 130%	67
	0407_QC167_200625	SE208090.021	%	60 - 130%	66
	0407_QC413_200625	SE208090.022	%	60 - 130%	72
	0407_QC513_200625	SE208090.023	%	60 - 130%	73
d4-1,2-dichloroethane (Surrogate)	0407_TP179_0.1_200625	SE208090.001	%	60 - 130%	85
	0407_TP179_0.5_200625	SE208090.002	%	60 - 130%	93
	0407_TP180_0.1_200625	SE208090.004	%	60 - 130%	88
	0407_TP180_0.5_200625	SE208090.005	%	60 - 130%	95
	0407_TP181_0.1_200625	SE208090.006	%	60 - 130%	85
	0407_TP181_0.5_200625	SE208090.008	%	60 - 130%	94
	0407_TP183_0.1_200625	SE208090.009	%	60 - 130%	94
	0407_TP183_0.5_200625	SE208090.011	%	60 - 130%	92
	0407_TP184_0.1_200625	SE208090.012	%	60 - 130%	91
	0407_TP184_0.4_200625	SE208090.013	%	60 - 130%	93
	0407_TP192_0.1_200625	SE208090.014	%	60 - 130%	79
	0407_TP192_0.5_200625	SE208090.015	%	60 - 130%	99
	0407_TP193_0.1_200625	SE208090.016	%	60 - 130%	104
	0407_TP193_0.5_200625	SE208090.017	%	60 - 130%	97
	0407_TP194_0.1_200625	SE208090.018	%	60 - 130%	89
	0407_TP194_0.5_200625	SE208090.019	%	60 - 130%	103
	0407_QC163_200625	SE208090.020	%	60 - 130%	95
	0407_QC167_200625	SE208090.021	%	60 - 130%	95
	0407_QC413_200625	SE208090.022	%	60 - 130%	101
	0407_QC513_200625	SE208090.023	%	60 - 130%	100
d8-toluene (Surrogate)	0407_TP179_0.1_200625	SE208090.001	%	60 - 130%	75
	0407_TP179_0.5_200625	SE208090.002	%	60 - 130%	88
	0407_TP180_0.1_200625	SE208090.004	%	60 - 130%	85
	0407_TP180_0.5_200625	SE208090.005	%	60 - 130%	89
	0407_TP181_0.1_200625	SE208090.006	%	60 - 130%	81
	0407_TP181_0.5_200625	SE208090.008	%	60 - 130%	88
	0407_TP183_0.1_200625	SE208090.009	%	60 - 130%	89
	0407_TP183_0.5_200625	SE208090.011	%	60 - 130%	87
	0407_TP184_0.1_200625	SE208090.012	%	60 - 130%	86
	0407_TP184_0.4_200625	SE208090.013	%	60 - 130%	83
	0407_TP192_0.1_200625	SE208090.014	%	60 - 130%	75
	0407_TP192_0.5_200625	SE208090.015	%	60 - 130%	93
	0407_TP193_0.1_200625	SE208090.016	%	60 - 130%	89
	0407_TP193_0.5_200625	SE208090.017	%	60 - 130%	92
	0407_TP194_0.1_200625	SE208090.018	%	60 - 130%	84
	0407_TP194_0.5_200625	SE208090.019	%	60 - 130%	101
	0407_QC163_200625	SE208090.020	%	60 - 130%	93
	0407_QC167_200625	SE208090.021	%	60 - 130%	92
	0407_QC413_200625	SE208090.022	%	60 - 130%	99
	0407_QC513_200625	SE208090.023	%	60 - 130%	97

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP179_0.1_200625	SE208090.001	%	60 - 130%	56 ①
	0407_TP179_0.5_200625	SE208090.002	%	60 - 130%	67
	0407_TP180_0.1_200625	SE208090.004	%	60 - 130%	64
	0407_TP180_0.5_200625	SE208090.005	%	60 - 130%	67

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP181_0.1_200625	SE208090.006	%	60 - 130%	61
	0407_TP181_0.5_200625	SE208090.008	%	60 - 130%	67
	0407_TP183_0.1_200625	SE208090.009	%	60 - 130%	68
	0407_TP183_0.5_200625	SE208090.011	%	60 - 130%	66
	0407_TP184_0.1_200625	SE208090.012	%	60 - 130%	66
	0407_TP184_0.4_200625	SE208090.013	%	60 - 130%	92
	0407_TP192_0.1_200625	SE208090.014	%	60 - 130%	56 ①
	0407_TP192_0.5_200625	SE208090.015	%	60 - 130%	71
	0407_TP193_0.1_200625	SE208090.016	%	60 - 130%	69
	0407_TP193_0.5_200625	SE208090.017	%	60 - 130%	59 ①
	0407_TP194_0.1_200625	SE208090.018	%	60 - 130%	64
	0407_TP194_0.5_200625	SE208090.019	%	60 - 130%	73
	0407_QC163_200625	SE208090.020	%	60 - 130%	67
	0407_QC167_200625	SE208090.021	%	60 - 130%	66
	0407_QC413_200625	SE208090.022	%	60 - 130%	72
d4-1,2-dichloroethane (Surrogate)	0407_TP179_0.1_200625	SE208090.001	%	60 - 130%	85
	0407_TP179_0.5_200625	SE208090.002	%	60 - 130%	93
	0407_TP180_0.1_200625	SE208090.004	%	60 - 130%	88
	0407_TP180_0.5_200625	SE208090.005	%	60 - 130%	95
	0407_TP181_0.1_200625	SE208090.006	%	60 - 130%	85
	0407_TP181_0.5_200625	SE208090.008	%	60 - 130%	94
	0407_TP183_0.1_200625	SE208090.009	%	60 - 130%	94
	0407_TP183_0.5_200625	SE208090.011	%	60 - 130%	92
	0407_TP184_0.1_200625	SE208090.012	%	60 - 130%	91
	0407_TP184_0.4_200625	SE208090.013	%	60 - 130%	93
	0407_TP192_0.1_200625	SE208090.014	%	60 - 130%	79
	0407_TP192_0.5_200625	SE208090.015	%	60 - 130%	99
	0407_TP193_0.1_200625	SE208090.016	%	60 - 130%	104
	0407_TP193_0.5_200625	SE208090.017	%	60 - 130%	97
	0407_TP194_0.1_200625	SE208090.018	%	60 - 130%	89
	0407_TP194_0.5_200625	SE208090.019	%	60 - 130%	103
	0407_QC163_200625	SE208090.020	%	60 - 130%	95
	0407_QC167_200625	SE208090.021	%	60 - 130%	95
	0407_QC413_200625	SE208090.022	%	60 - 130%	101
d8-toluene (Surrogate)	0407_TP179_0.1_200625	SE208090.001	%	60 - 130%	75
	0407_TP179_0.5_200625	SE208090.002	%	60 - 130%	88
	0407_TP180_0.1_200625	SE208090.004	%	60 - 130%	85
	0407_TP180_0.5_200625	SE208090.005	%	60 - 130%	89
	0407_TP181_0.1_200625	SE208090.006	%	60 - 130%	81
	0407_TP181_0.5_200625	SE208090.008	%	60 - 130%	88
	0407_TP183_0.1_200625	SE208090.009	%	60 - 130%	89
	0407_TP183_0.5_200625	SE208090.011	%	60 - 130%	87
	0407_TP184_0.1_200625	SE208090.012	%	60 - 130%	86
	0407_TP184_0.4_200625	SE208090.013	%	60 - 130%	83
	0407_TP192_0.1_200625	SE208090.014	%	60 - 130%	75
	0407_TP192_0.5_200625	SE208090.015	%	60 - 130%	93
	0407_TP193_0.1_200625	SE208090.016	%	60 - 130%	89
	0407_TP193_0.5_200625	SE208090.017	%	60 - 130%	92
	0407_TP194_0.1_200625	SE208090.018	%	60 - 130%	84
	0407_TP194_0.5_200625	SE208090.019	%	60 - 130%	101
	0407_QC163_200625	SE208090.020	%	60 - 130%	93
	0407_QC167_200625	SE208090.021	%	60 - 130%	92
	0407_QC413_200625	SE208090.022	%	60 - 130%	99

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result
LB203241.001	Mercury	mg/kg	0.05	<0.05

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203255.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	99

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203255.001		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	80
		d14-p-terphenyl (Surrogate)	%	-	86

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB203255.001	Naphthalene	mg/kg	0.1	<0.1
	2-methylnaphthalene	mg/kg	0.1	<0.1
	1-methylnaphthalene	mg/kg	0.1	<0.1
	Acenaphthylene	mg/kg	0.1	<0.1
	Acenaphthene	mg/kg	0.1	<0.1
	Fluorene	mg/kg	0.1	<0.1
	Phenanthrene	mg/kg	0.1	<0.1
	Anthracene	mg/kg	0.1	<0.1
	Fluoranthene	mg/kg	0.1	<0.1
	Pyrene	mg/kg	0.1	<0.1
	Benzo(a)anthracene	mg/kg	0.1	<0.1
	Chrysene	mg/kg	0.1	<0.1
	Benzo(a)pyrene	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203255.001		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	87
		2-fluorobiphenyl (Surrogate)	%	-	80
		d14-p-terphenyl (Surrogate)	%	-	86

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203255.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	99

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203255.001		Phenol	mg/kg	0.5	<0.5
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5
		2-nitrophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
		Pentachlorophenol	mg/kg	0.5	<0.5
		2,4-dinitrophenol	mg/kg	2	<2
		4-chloro-3-methylphenol	mg/kg	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	98
		d5-phenol (Surrogate)	%	-	96

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB203236.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB203255.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number	Parameter	Units	LOR

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB203254.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB203254.001	Oxygenated Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	96
		d8-toluene (Surrogate)	%	-	99
		Bromofluorobenzene (Surrogate)	%	-	107
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB203254.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	96

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208090.013	LB203241.014	Mercury	mg/kg	0.05	0.06	0.05	117	11

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208090.008	LB203255.029		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	0	200	0
			Alpha BHC	mg/kg	0.1	<0.1	0	200	0
			Lindane	mg/kg	0.1	<0.1	0	200	0
			Heptachlor	mg/kg	0.1	<0.1	0	200	0
			Aldrin	mg/kg	0.1	<0.1	0	200	0
			Beta BHC	mg/kg	0.1	<0.1	0	200	0
			Delta BHC	mg/kg	0.1	<0.1	0	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	0	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	0	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	0	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Dieldrin	mg/kg	0.2	<0.2	0	200	0
			Endrin	mg/kg	0.2	<0.2	0	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	0	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	0	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	0	200	0
			Methoxychlor	mg/kg	0.1	<0.1	0	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	0	200	0
			Isodrin	mg/kg	0.1	<0.1	0	200	0
			Mirex	mg/kg	0.1	<0.1	0	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.157	30	3
SE208090.015	LB203255.030		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	0	200	0
			Alpha BHC	mg/kg	0.1	<0.1	0	200	0
			Lindane	mg/kg	0.1	<0.1	0	200	0
			Heptachlor	mg/kg	0.1	<0.1	0	200	0
			Aldrin	mg/kg	0.1	<0.1	0	200	0
			Beta BHC	mg/kg	0.1	<0.1	0	200	0
			Delta BHC	mg/kg	0.1	<0.1	0	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	0	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	0	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	0	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Dieldrin	mg/kg	0.2	<0.2	0	200	0
			Endrin	mg/kg	0.2	<0.2	0	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	0	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	0	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	0	200	0
			Methoxychlor	mg/kg	0.1	<0.1	0	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	0	200	0
			Isodrin	mg/kg	0.1	<0.1	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208090.015	LB203255.030		Mirex	mg/kg	0.1	<0.1	0	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.157	30	4

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208090.008	LB203255.029		Dichlorvos	mg/kg	0.5	<0.5	0	200	0
			Dimethoate	mg/kg	0.5	<0.5	0	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	0.0381050299	200	0
			Fenitrothion	mg/kg	0.2	<0.2	0	200	0
			Malathion	mg/kg	0.2	<0.2	0	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	0	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	0	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	0	200	0
			Methidathion	mg/kg	0.5	<0.5	0	200	0
			Ethion	mg/kg	0.2	<0.2	0	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	0	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	0	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.3586059795	30	19
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4254947542	30	4
SE208090.015	LB203255.030		Dichlorvos	mg/kg	0.5	<0.5	0	200	0
			Dimethoate	mg/kg	0.5	<0.5	0	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	0.0103536709	200	0
			Fenitrothion	mg/kg	0.2	<0.2	0	200	0
			Malathion	mg/kg	0.2	<0.2	0	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	0	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	0	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	0	200	0
			Methidathion	mg/kg	0.5	<0.5	0	200	0
			Ethion	mg/kg	0.2	<0.2	0	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	0.0069721407	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	0	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4251330091	30	3
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4269173185	30	1

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208090.008	LB203255.029		Naphthalene	mg/kg	0.1	<0.1	0	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	0	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	0	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	0	200	0
			Acenaphthene	mg/kg	0.1	<0.1	0.0007348262	200	0
			Fluorene	mg/kg	0.1	<0.1	0	200	0
			Phenanthrene	mg/kg	0.1	<0.1	0.0642416198	200	0
			Anthracene	mg/kg	0.1	<0.1	0.0625009715	200	0
			Fluoranthene	mg/kg	0.1	<0.1	0.0855357256	186	0
			Pyrene	mg/kg	0.1	<0.1	0.0856448503	185	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	0.0967923521	159	0
			Chrysene	mg/kg	0.1	<0.1	0.0794459269	186	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	0.0753188003	191	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	0.0822750971	180	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	0.0641278334	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	0.0177070422	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	0.0026363862	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	0.0151026550	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	0	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	0.242	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	0.121	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	0	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4036059091	30	3
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.3586059795	30	19
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4254947542	30	4

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208090.015	LB203255.030		Naphthalene	mg/kg	0.1	<0.1	0	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	0	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	0	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	0	200	0
			Acenaphthene	mg/kg	0.1	<0.1	0	200	0
			Fluorene	mg/kg	0.1	<0.1	0	200	0
			Phenanthrene	mg/kg	0.1	<0.1	0.0053294893	200	0
			Anthracene	mg/kg	0.1	<0.1	0	200	0
			Fluoranthene	mg/kg	0.1	<0.1	0.0174011882	200	0
			Pyrene	mg/kg	0.1	<0.1	0.0223514760	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	0.0590473618	200	0
			Chrysene	mg/kg	0.1	<0.1	0.0498899094	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	0.0400067818	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	0.0427282067	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	0.0430366506	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	0.0087838357	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	0.0016298842	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	0.0092717276	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	0	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	0.242	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	0.121	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	0	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.3909540509	30	1
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4251330091	30	8
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4269173185	30	1

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208090.008	LB203255.029		Arochlor 1016	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	0	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0.157	30	3
SE208090.015	LB203255.030		Arochlor 1016	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	0	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0.157	30	4

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208090.008	LB203255.029		Phenol	mg/kg	0.5	<0.5	0	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	0	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	0	200	0
			Total Cresol	mg/kg	1.5	<1.5	0	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	0	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208090.008	LB203255.029		2-nitrophenol	mg/kg	0.5	<0.5	0	200	0
			4-nitrophenol	mg/kg	1	<1	0	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	0	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dinitrophenol	mg/kg	2	<2	0	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	0	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.6	4.73	30	2
			d5-phenol (Surrogate)	mg/kg	-	1.8	1.82	30	3
SE208090.015	LB203255.030		Phenol	mg/kg	0.5	<0.5	0	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	0	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	0	200	0
			Total Cresol	mg/kg	1.5	<1.5	0	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	0	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	0	200	0
			4-nitrophenol	mg/kg	1	<1	0	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	0	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dinitrophenol	mg/kg	2	<2	0	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	0	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.5	4.52	30	1
			d5-phenol (Surrogate)	mg/kg	-	1.8	1.77	30	3

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208090.013	LB203236.014	Arsenic, As	mg/kg	1	1	4	72	110 ②
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	1.7	3.1	51	59 ②
		Copper, Cu	mg/kg	0.5	18	17	33	7
		Nickel, Ni	mg/kg	0.5	0.9	6.2	44	150 ②
		Lead, Pb	mg/kg	1	120	130	31	5
		Zinc, Zn	mg/kg	2	30	31	37	2

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208090.008	LB203255.028		TRH C10-C14	mg/kg	20	<20	0	200	0
			TRH C15-C28	mg/kg	45	<45	0	200	0
			TRH C29-C36	mg/kg	45	<45	0	200	0
			TRH C37-C40	mg/kg	100	<100	0	200	0
			TRH C10-C36 Total	mg/kg	110	<110	0	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	0	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	0	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	0	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	0	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	0	200	0
SE208090.015	LB203255.030		TRH C10-C14	mg/kg	20	<20	0	200	0
			TRH C15-C28	mg/kg	45	<45	0	200	0
			TRH C29-C36	mg/kg	45	<45	0	200	0
			TRH C37-C40	mg/kg	100	<100	0	200	0
			TRH C10-C36 Total	mg/kg	110	<110	0	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	0	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	0	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	0	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	0	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208090.013	LB203254.014	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0

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VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208090.013	LB203254.014	Oxygenated	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.3	9.5	50	3
			d8-toluene (Surrogate)	mg/kg	-	8.3	9.0	50	8
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.2	6.9	50	29
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE208090.021	LB203254.028	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	0	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	0.0003670652	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	0.0026042263	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	0.0032804181	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	0	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	0.0006647400	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	0.0819338902	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	0.0087821977	200	0
			Bromomethane	mg/kg	1	<1	0.0779587927	200	0
			Chloroethane	mg/kg	1	<1	0.0096373231	200	0
			Trichlorofluoromethane	mg/kg	1	<1	0.0005732004	200	0
			Iodomethane	mg/kg	5	<5	0.0134453466	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	0	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	0.0427841216	200	0
			Allyl chloride	mg/kg	0.1	<0.1	0.0090226429	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	0	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	0.0022820411	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	0	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	0	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	0.0014381126	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	0	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	0	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	0	200	0
			Dibromomethane	mg/kg	0.1	<0.1	0	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	0.0003540537	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	0	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	0.0245867519	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	0.0001059378	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	0	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	0.0044029653	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	0.0014109558	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	0.0005115521	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	0	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	0	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	0	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	0.0008918229	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	0	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	0	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	0	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	0.0010090235	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	0.0009234156	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208090.021	LB203254.028	Halogenated	1,2-dichlorobenzene	mg/kg	0.1	<0.1	0.0035671915	200	0
		Aromatics	1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	0.0001014879	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	0.0001491541	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	0.0040377823	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	0.0331734939	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	0.0233536382	200	0
			m/p-xylene	mg/kg	0.2	<0.2	0.0416554812	200	0
			o-xylene	mg/kg	0.1	<0.1	0.0088775089	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	0.0006101933	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	0.0007688505	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	0.0007788908	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	0.0010284074	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	0.0002461596	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	0.0015963223	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	0.0015696434	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	0.0041251898	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	0.0018763365	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	0.0017877064	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	0.2572119184	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	0.7887819766	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	0.0264915132	200	0
			Vinyl acetate	mg/kg	10	<10	0.0088364768	200	0
			MEK (2-butanone)	mg/kg	10	<10	0	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	0.0079773831	200	0
			2-hexanone (MBK)	mg/kg	5	<5	0	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	0.0025936001	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	0.0016966777	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.5	8.9780106684	50	5
			d8-toluene (Surrogate)	mg/kg	-	9.2	8.7878468154	50	5
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.6	6.3703678520	50	4
		Totals	Total Xylenes	mg/kg	0.3	<0.3	0.0505329902	200	0
			Total BTEX	mg/kg	0.6	<0.6	0	200	0
			Total VOC*	mg/kg	24	<24	1.1453040929	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	0.1282920161	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	0.0620271941	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	0.0531390585	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	0.0016678965	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	0.0005866917	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	0	200	0
			Bromoform	mg/kg	0.1	<0.1	0	200	0

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208090.013	LB203254.014		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.3	9.5	30	3
			d8-toluene (Surrogate)	mg/kg	-	8.3	9.0	30	8
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.2	6.9	30	29
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE208090.021	LB203254.026		TRH C6-C10	mg/kg	25	<25	0	200	0
			TRH C6-C9	mg/kg	20	<20	0	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.5	8.9780106684	30	5
			d8-toluene (Surrogate)	mg/kg	-	9.2	8.7878468154	30	5
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.6	6.3703678520	30	4
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	0.0040377823	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	0	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203241.002	Mercury	mg/kg	0.05	0.21	0.2	70 - 130	104

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203255.002		Heptachlor	mg/kg	0.1	0.3	0.2	60 - 140	130
		Aldrin	mg/kg	0.1	0.3	0.2	60 - 140	132
		Delta BHC	mg/kg	0.1	0.3	0.2	60 - 140	131
		Dieldrin	mg/kg	0.2	0.3	0.2	60 - 140	129
		Endrin	mg/kg	0.2	0.3	0.2	60 - 140	129
		p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	109
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.16	0.15	40 - 130	104

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203255.002		Dichlorvos	mg/kg	0.5	1.3	2	60 - 140	63
		Diazinon (Dimpylate)	mg/kg	0.5	1.9	2	60 - 140	95
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.7	2	60 - 140	86
		Ethion	mg/kg	0.2	1.8	2	60 - 140	89
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	86
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	83

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203255.002		Naphthalene	mg/kg	0.1	4.0	4	60 - 140	101
		Acenaphthylene	mg/kg	0.1	4.3	4	60 - 140	108
		Acenaphthene	mg/kg	0.1	4.1	4	60 - 140	103
		Phenanthrene	mg/kg	0.1	4.1	4	60 - 140	101
		Anthracene	mg/kg	0.1	4.2	4	60 - 140	104
		Fluoranthene	mg/kg	0.1	4.2	4	60 - 140	105
		Pyrene	mg/kg	0.1	4.3	4	60 - 140	107
		Benzo(a)pyrene	mg/kg	0.1	4.7	4	60 - 140	119
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	91
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	86
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	83

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203255.002	Arochlor 1260	mg/kg	0.2	0.3	0.4	60 - 140	76

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203255.002		Phenol	mg/kg	0.5	1.1	1	70 - 130	106
		2,4-dichlorophenol	mg/kg	0.5	1.3	1	70 - 130	127
		2,4,6-trichlorophenol	mg/kg	0.5	0.9	1	70 - 130	87
		Pentachlorophenol	mg/kg	0.5	0.8	1	70 - 130	76
	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.7	5	40 - 130	94
		d5-phenol (Surrogate)	mg/kg	-	2.0	2	40 - 130	98

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203236.002	Arsenic, As	mg/kg	1	330	318.22	80 - 120	104
	Cadmium, Cd	mg/kg	0.3	5.4	5.41	80 - 120	100
	Chromium, Cr	mg/kg	0.5	39	38.31	80 - 120	102
	Copper, Cu	mg/kg	0.5	300	290	80 - 120	103
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	102
	Lead, Pb	mg/kg	1	93	89.9	80 - 120	104
	Zinc, Zn	mg/kg	2	270	273	80 - 120	100

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203255.002		TRH C10-C14	mg/kg	20	48	40	60 - 140	120
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	98
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	75
	TRH F Bands	TRH >C10-C16	mg/kg	25	46	40	60 - 140	115
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	88
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	70

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203254.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	3.4	5	60 - 140	68
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	4.2	5	60 - 140	84
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	3.9	5	60 - 140	78
	Halogenated	Chlorobenzene	mg/kg	0.1	4.7	5	60 - 140	94
	Monocyclic	Benzene	mg/kg	0.1	3.5	5	60 - 140	69
	Aromatic	Toluene	mg/kg	0.1	3.8	5	60 - 140	77
		Ethylbenzene	mg/kg	0.1	4.2	5	60 - 140	84
		m/p-xylene	mg/kg	0.2	8.4	10	60 - 140	84
		o-xylene	mg/kg	0.1	4.2	5	60 - 140	85
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.6	10	70 - 130	106
		d8-toluene (Surrogate)	mg/kg	-	11.1	10	70 - 130	111
		Bromofluorobenzene (Surrogate)	mg/kg	-	11.2	10	70 - 130	112
	Trihalomethan	Chloroform	mg/kg	0.1	4.2	5	60 - 140	83

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203254.002		TRH C6-C10	mg/kg	25	81	92.5	60 - 140	88
		TRH C6-C9	mg/kg	20	70	80	60 - 140	88
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.6	10	70 - 130	106
		Bromofluorobenzene (Surrogate)	mg/kg	-	11.2	10	70 - 130	112
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	57	62.5	60 - 140	91

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208090.001	LB203241.004	Mercury	mg/kg	0.05	0.24	0.08	0.2	76

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208090.002	LB203255.028		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	-	-
			Alpha BHC	mg/kg	0.1	<0.1	-	-
			Lindane	mg/kg	0.1	<0.1	-	-
			Heptachlor	mg/kg	0.1	<0.1	0.2	127
			Aldrin	mg/kg	0.1	<0.1	0.2	128
			Beta BHC	mg/kg	0.1	<0.1	-	-
			Delta BHC	mg/kg	0.1	<0.1	0.2	129
			Heptachlor epoxide	mg/kg	0.1	<0.1	-	-
			o,p'-DDE	mg/kg	0.1	<0.1	-	-
			Alpha Endosulfan	mg/kg	0.2	<0.2	-	-
			Gamma Chlordane	mg/kg	0.1	<0.1	-	-
			Alpha Chlordane	mg/kg	0.1	<0.1	-	-
			trans-Nonachlor	mg/kg	0.1	<0.1	-	-
			p,p'-DDE	mg/kg	0.1	<0.1	-	-
			Dieldrin	mg/kg	0.2	<0.2	0.2	128
			Endrin	mg/kg	0.2	<0.2	0.2	126
			o,p'-DDD	mg/kg	0.1	<0.1	-	-
			o,p'-DDT	mg/kg	0.1	<0.1	-	-
			Beta Endosulfan	mg/kg	0.2	<0.2	-	-
			p,p'-DDD	mg/kg	0.1	<0.1	-	-
			p,p'-DDT	mg/kg	0.1	<0.1	0.2	108
			Endosulfan sulphate	mg/kg	0.1	<0.1	-	-
			Endrin Aldehyde	mg/kg	0.1	<0.1	-	-
			Methoxychlor	mg/kg	0.1	<0.1	-	-
			Endrin Ketone	mg/kg	0.1	<0.1	-	-
			Isodrin	mg/kg	0.1	<0.1	-	-
			Mirex	mg/kg	0.1	<0.1	-	-
			Total CLP OC Pesticides	mg/kg	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	-	101

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208090.002	LB203255.028		Dichlorvos	mg/kg	0.5	<0.5	2	95
			Dimethoate	mg/kg	0.5	<0.5	-	-
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	2	91
			Fenitrothion	mg/kg	0.2	<0.2	-	-
			Malathion	mg/kg	0.2	<0.2	-	-
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	2	92
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	-	-
			Bromophos Ethyl	mg/kg	0.2	<0.2	-	-
			Methidathion	mg/kg	0.5	<0.5	-	-
			Ethion	mg/kg	0.2	<0.2	2	79
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	-	-
			Total OP Pesticides*	mg/kg	1.7	<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	-	63
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	-	67

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number	Parameter	Units	LOR	Original	Spike	Recovery%
SE208090.002	LB203255.028	Naphthalene	mg/kg	0.1	<0.1	4	105
		2-methylnaphthalene	mg/kg	0.1	<0.1	-	-
		1-methylnaphthalene	mg/kg	0.1	<0.1	-	-
		Acenaphthylene	mg/kg	0.1	<0.1	4	109
		Acenaphthene	mg/kg	0.1	<0.1	4	115
		Fluorene	mg/kg	0.1	<0.1	-	-
		Phenanthrene	mg/kg	0.1	<0.1	4	102

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208090.002	LB203255.028		Anthracene	mg/kg	0.1	<0.1	4	116
			Fluoranthene	mg/kg	0.1	0.2	4	109
			Pyrene	mg/kg	0.1	0.1	4	114
			Benzo(a)anthracene	mg/kg	0.1	<0.1	-	-
			Chrysene	mg/kg	0.1	<0.1	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	-	-
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	-	-
			Benzo(a)pyrene	mg/kg	0.1	<0.1	4	126
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	-	-
			Total PAH (18)	mg/kg	0.8	<0.8	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	-	72
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	-	86
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	-	90

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208090.002	LB203255.028		Arochlor 1016	mg/kg	0.2	<0.2	-	-
			Arochlor 1221	mg/kg	0.2	<0.2	-	-
			Arochlor 1232	mg/kg	0.2	<0.2	-	-
			Arochlor 1242	mg/kg	0.2	<0.2	-	-
			Arochlor 1248	mg/kg	0.2	<0.2	-	-
			Arochlor 1254	mg/kg	0.2	<0.2	-	-
			Arochlor 1260	mg/kg	0.2	<0.2	0.4	91
			Arochlor 1262	mg/kg	0.2	<0.2	-	-
			Arochlor 1268	mg/kg	0.2	<0.2	-	-
			Total PCBs (Arochlors)	mg/kg	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	-	100

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208090.004	LB203255.031		Phenol	mg/kg	0.5	<0.5	1	100
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	-	-
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	-	-
			Total Cresol	mg/kg	1.5	<1.5	-	-
			2-chlorophenol	mg/kg	0.5	<0.5	-	-
			2,4-dimethylphenol	mg/kg	0.5	<0.5	-	-
			2,6-dichlorophenol	mg/kg	0.5	<0.5	-	-
			2,4-dichlorophenol	mg/kg	0.5	<0.5	1	88
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	1	81
			2-nitrophenol	mg/kg	0.5	<0.5	-	-
			4-nitrophenol	mg/kg	1	<1	-	-
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	-	-
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	-	-
			Pentachlorophenol	mg/kg	0.5	<0.5	1	72
			2,4-dinitrophenol	mg/kg	2	<2	-	-
			4-chloro-3-methylphenol	mg/kg	2	<2	-	-
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.4	-	91
			d5-phenol (Surrogate)	mg/kg	-	1.7	-	90

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208090.001	LB203236.004	Arsenic, As	mg/kg	1	50	6	50	88
		Cadmium, Cd	mg/kg	0.3	42	0.5	50	83
		Chromium, Cr	mg/kg	0.5	58	20	50	75
		Copper, Cu	mg/kg	0.5	66	38	50	55 ④
		Nickel, Ni	mg/kg	0.5	51	8.8	50	85
		Lead, Pb	mg/kg	1	100	110	50	-14 ④

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208090.001	LB203236.004	Zinc, Zn	mg/kg	2	190	260	50	-148 ④

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208090.002	LB203255.029		TRH C10-C14	mg/kg	20	<20	40	105
			TRH C15-C28	mg/kg	45	<45	40	98
			TRH C29-C36	mg/kg	45	<45	40	95
			TRH C37-C40	mg/kg	100	<100	-	-
			TRH C10-C36 Total	mg/kg	110	<110	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	40	100
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	<90	40	103
			TRH >C34-C40 (F4)	mg/kg	120	<120	-	-

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208090.001	LB203254.004	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	-	-
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	-	-
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	-	-
			Bromomethane	mg/kg	1	<1	<1	-	-
			Chloroethane	mg/kg	1	<1	<1	-	-
			Trichlorofluoromethane	mg/kg	1	<1	<1	-	-
			Iodomethane	mg/kg	5	<5	<5	-	-
			1,1-dichloroethene	mg/kg	0.1	3.3	<0.1	5	66
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	-	-
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloroethane	mg/kg	0.1	3.4	<0.1	5	68
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	-	-
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	3.2	<0.1	5	64
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	-	-
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated	Chlorobenzene	mg/kg	0.1	3.9	<0.1	5	77
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Monocyclic	Benzene	mg/kg	0.1	3.6	<0.1	5	71

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208090.001	LB203254.004	Monocyclic	Toluene	mg/kg	0.1	4.1	<0.1	5	81
		Aromatic	Ethylbenzene	mg/kg	0.1	4.1	<0.1	5	82
			m/p-xylene	mg/kg	0.2	8.4	<0.2	10	84
			o-xylene	mg/kg	0.1	4.1	<0.1	5	82
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	-	-
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	-	-
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	-	-
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	-	-
		Compounds	2-nitropropane	mg/kg	10	<10	<10	-	-
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	-	-
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	-	-
			Vinyl acetate	mg/kg	10	<10	<10	-	-
			MEK (2-butanone)	mg/kg	10	<10	<10	-	-
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	-	-
			2-hexanone (MBK)	mg/kg	5	<5	<5	-	-
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.2	8.5	10	72
			d8-toluene (Surrogate)	mg/kg	-	7.2	7.5	10	72
			Bromofluorobenzene (Surrogate)	mg/kg	-	5.1	5.6	10	51 ①
		Totals	Total Xylenes	mg/kg	0.3	13	<0.3	-	-
			Total BTEX	mg/kg	0.6	24	<0.6	-	-
			Total VOC*	mg/kg	24	43	<24	-	-
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	-	-
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	17	<1.8	-	-
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	17	<1.8	-	-
		Trihalometha	Chloroform	mg/kg	0.1	3.4	<0.1	5	68
		nes	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Bromoform	mg/kg	0.1	<0.1	<0.1	-	-

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208090.001	LB203254.004		TRH C6-C10	mg/kg	25	85	<25	92.5	92
			TRH C6-C9	mg/kg	20	73	<20	80	92
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.2	8.5	10	72
			d8-toluene (Surrogate)	mg/kg	-	7.2	7.5	10	72
			Bromofluorobenzene (Surrogate)	mg/kg	-	5.1	5.6	-	51
		VPH F	Benzene (F0)	mg/kg	0.1	3.6	<0.1	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	61	<25	62.5	97

MATRIX SPIKE DUPLICATES

SE208090 R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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ABN 29 001 584 612

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- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐

CLIENT: Defence Housing Australia

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGER: [redacted]

PM CONTACT No: [redacted]

LABORATORY: SGS Australia

LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015

SAMPLER:

SAMPLER CONTACT No:

Email Reports and Invoices to: LQRSYD@slrconsulting.com [redacted]

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number of

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: Suite A	Asbestos ONLY	HOLD	Additional Information (Comment on any gross contamination or specific requirements)
22	0407_TP211_0.1_200623	23/06/2020	Soil	jar, pfas, bag	x			Please hold all PFAS Containers
23	0407_TP211_0.5_200623	23/06/2020	Soil	jar, pfas	x			no asbestos analysis
1	0407_TP212_0.1_200623	23/06/2020	Soil	jar, pfas, bag	x			
2	0407_TP212_0.5_200623	23/06/2020	Soil	jar, pfas	x			no asbestos analysis
	0407_TP212_0.7_200623	23/06/2020	Soil	jar, pfas			x	no asbestos analysis
3	0407_TP213_0.1_200623	23/06/2020	Soil	jar, pfas, bag	x			
4	0407_TP213_0.5_200623	23/06/2020	Soil	jar, pfas	x			no asbestos analysis
	0407_TP213_1.0_200623	23/06/2020	Soil	jar, pfas			x	
5	0407_TP214_0.1_200623	23/06/2020	Soil	jar, pfas, bag	x			
6	0407_TP214_0.5_200623	23/06/2020	Soil	jar, pfas, bag	x			
	0407_TP214_1.0_200623	23/06/2020	Soil	jar, pfas, bag			x	
7	0407_TP215_0.1_200623	23/06/2020	Soil	jar, pfas, bag	x			

SGS EHS Sydney COC

SE207999

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time	18/06/2020	**Received by**	Sign [redacted]	Date / Time	23/6
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	4.3
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	

Temperature Received: 5-4

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- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
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- ☐

CLIENT: Defence Housing Australia

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGER: [redacted]

PM CONTACT No: [redacted]

LABORATORY: SGS Australia

LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015

SAMPLER:

SAMPLER CONTACT No:

Email Reports and Invoices to: LQRSYD@slrconsulting.com [redacted]

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number of

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	Asbestos ONLY	HOLD	Additional Information (Comment on any gross contamination or specific requirements)
8	0407_TP215_0.5_200623	23/06/2020	Soil	jar, pfas, bag	x			Please hold all PFAS Containers
	0407_TP215_1.0_200623	23/06/2020	Soil	jar, pfas, bag			x	
	0407_TP215_1.6_200623	23/06/2020	Soil	jar, pfas			x	
9	0407_TP216_0.1_200623	23/06/2020	Soil	jar, pfas, bag	x			
10	0407_TP216_0.3_200623	23/06/2020	Soil	bag		x		
11	0407_TP216_0.5_200623	23/06/2020	Soil	jar, pfas, bag	x			No asbestos analysis
	0407_TP216_1.0_200623	23/06/2020	Soil	jar, pfas			x	
	0407_TP216_1.5_200623	23/06/2020	Soil	jar, pfas			x	
12	0407_TP217_0.1_200623	23/06/2020	Soil	jar, pfas, bag	x			
13	0407_TP217_0.5_200623	23/06/2020	Soil	jar, pfas, bag	x			
	0407_TP217_1.0_200623	23/06/2020	Soil	jar, pfas, bag			x	
	0407_TP217_1.5_200623	23/06/2020	Soil	jar, pfas			x	

Relinquished By Sampler	[redacted]	Date / Time	18/06/2020	**Received by**	Sign [redacted]	Date / Time	23/6 P 4.3	**Temperature Received:** 5.4°C
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time		
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time		

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CLIENT: Defence Housing Australia	**LABORATORY: SGS Australia**	**Turnaround Time (TAT)** / **COC Number**
PROJECT: Randwick Barracks	**LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015**	of
PROJECT NUMBER: 610.30041	**SAMPLER:**	☐ Standard TAT
PROJECT MANAGER [redacted]	**SAMPLER CONTACT No:**	☐ Non Standard or Urgent TAT
PM CONTACT No [redacted]	**Email Reports and Invoices to: LQRSYD@slrconsulting.com ;** [redacted]	**Required TAT: Standard**

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	Asbestos ONLY	HOLD						**Additional Information** *(Comment on any gross contamination or specific requirements)*
	0407_TP217_1.7_200623	23/06/2020	Soil	jar, pfas			x						**Please hold all PFAS Containers**
14	0407_TP218_0.1_200623	23/06/2020	Soil	jar, pfas, bag	x								
15	0407_TP218_0.5_200623	23/06/2020	Soil	jar, pfas, bag	x								
	0407_TP218_1.0_200623	23/06/2020	Soil	jar, pfas, bag (CN 9			x						
	0407_TP218_1.6_200623	23/06/2020	Soil	jar, pfas			x						
16	0407_TP219_0.1_200623	23/06/2020	Soil	jar, pfas, bag	x								
17	0407_TP219_0.5_200623	23/06/2020	Soil	jar, pfas, bag	x								
	0407_TP219_1.0_200623	23/06/2020	Soil	jar, pfas, bag (CN5)			x						

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 18/06/2020	**Received by**	Sign [redacted]	Date / Time 23/6 @	**Temperature Received:** 5.4°
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time 4.30	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

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PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4741
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ✠ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐

CLIENT: Defence Housing Australia	**LABORATORY: SGS Australia**
PROJECT: Randwick Barracks	**LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015**
PROJECT NUMBER: 610.30041	**SAMPLER:** [redacted]
PROJECT MANAGER: [redacted]	**SAMPLER CONTACT No** [redacted]
PM CONTACT No: [redacted]	**Email Reports and Invoices to: LQRSYD@slrconsulting.com ;** [redacted]

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number of

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	Asbestos ONLY	HOLD	C6-C10/BETXN					Additional Information (Comment on any gross contamination or specific requirements)
18	0407_QC141_200623	23/06/2020	Soil	jar, pfas	x								Please hold all PFAS containers
	0407_QC241_200623	23/06/2020	Soil	jar, pfas	x								Please send to Eurofins
19	0407_QC138_200623	23/06/2020	Soil	jar, pfas	x								
	0407_QC238_200623	23/06/2020	Soil	jar, pfas	x								Please send to Eurofins
20	0407_QC411_200623	23/06/2020	Trip Blank	vial				x					
21	0407_QC511_200623	23/06/2020	Trip Spike	vial				x					

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 18/06/2020	**Received by**	Sign	[redacted]	Date / Time 23/6 @ 4:30	**Temperature Received:** 5-4 °C
Relinquished By	Sign	Date / Time	**Received by**	Sign		Date / Time	
Relinquished By	Sign	Date / Time	**Received by**	Sign		Date / Time	

SAMPLE RECEIPT ADVICE

SE207999

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	23

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Tue 23/6/2020
Report Due	Fri 3/7/2020
SGS Reference	**SE207999**

SUBMISSION DETAILS

This is to confirm that 23 samples were received on Tuesday 23/6/2020. Results are expected to be ready by COB Friday 3/7/2020. Please quote SGS reference SE207999 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	23 Soil
Date documentation received	25/6/20@9:45AM	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	5.4°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

13 samples have been placed on hold as no tests have been assigned for them by the client. These samples will not be processed.

This document is issued by the Company under its General Conditions of Service accessible at www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

SAMPLE RECEIPT ADVICE

SE207999

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	Speciated Phenols in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
001	0407_TP212_0.1_200623	29	14	26	11	18	10	81	7
002	0407_TP212_0.5_200623	29	14	26	11	18	10	81	7
003	0407_TP213_0.1_200623	29	14	26	11	18	10	81	7
004	0407_TP213_0.5_200623	29	14	26	11	18	10	81	7
005	0407_TP214_0.1_200623	29	14	26	11	18	10	81	7
006	0407_TP214_0.5_200623	29	14	26	11	18	10	81	7
007	0407_TP215_0.1_200623	29	14	26	11	18	10	81	7
008	0407_TP215_0.5_200623	29	14	26	11	18	10	81	7
009	0407_TP216_0.1_200623	29	14	26	11	18	10	81	7
011	0407_TP216_0.5_200623	29	14	26	11	18	10	81	7
012	0407_TP217_0.1_200623	29	14	26	11	18	10	81	7
013	0407_TP217_0.5_200623	29	14	26	11	18	10	81	7
014	0407_TP218_0.1_200623	29	14	26	11	18	10	81	7
015	0407_TP218_0.5_200623	29	14	26	11	18	10	81	7
016	0407_TP219_0.1_200623	29	14	26	11	18	10	81	7
017	0407_TP219_0.5_200623	29	14	26	11	18	10	81	7
018	0407_QC141_200623	29	14	26	11	18	10	81	7
019	0407_QC138_200623	29	14	26	11	18	10	81	7
020	0407_QC411_200623	29	14	26	11	18	10	81	7
021	0407_QC511_200623	29	14	26	11	18	10	81	7
022	0407_TP211_0.1_200623	29	14	26	11	18	10	81	7
023	0407_TP211_0.5_200623	29	14	26	11	18	10	81	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE207999

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Fibre Identification in soil	Gravimetric Determination of Asbestos in Soil	Mercury in Soil	Moisture Content	Total Recoverable Elements in Soil/Waste
001	0407_TP212_0.1_200623	2	9	1	1	7
002	0407_TP212_0.5_200623	-	-	1	1	7
003	0407_TP213_0.1_200623	2	9	1	1	7
004	0407_TP213_0.5_200623	-	-	1	1	7
005	0407_TP214_0.1_200623	2	9	1	1	7
006	0407_TP214_0.5_200623	2	9	1	1	7
007	0407_TP215_0.1_200623	2	9	1	1	7
008	0407_TP215_0.5_200623	2	9	1	1	7
009	0407_TP216_0.1_200623	2	9	1	1	7
010	0407_TP216_0.3_200623	2	9	-	-	-
011	0407_TP216_0.5_200623	2	9	1	1	7
012	0407_TP217_0.1_200623	2	9	1	1	7
013	0407_TP217_0.5_200623	2	9	1	1	7
014	0407_TP218_0.1_200623	2	9	1	1	7
015	0407_TP218_0.5_200623	2	9	1	1	7
016	0407_TP219_0.1_200623	2	9	1	1	7
017	0407_TP219_0.5_200623	2	9	1	1	7
018	0407_QC141_200623	-	-	1	1	7
019	0407_QC138_200623	-	-	1	1	7
020	0407_QC411_200623	-	-	1	1	7
021	0407_QC511_200623	-	-	1	1	7
022	0407_TP211_0.1_200623	-	-	1	1	7
023	0407_TP211_0.5_200623	-	-	1	1	7

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	23

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207999 R0**
Date Received	23/6/2020
Date Reported	6/7/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.

Sample #1: Asbestos found as 2x2x2mm cement sheet fragment in >2mm portion.
Sample #5: Asbestos found as 8x3x2mm cement sheet fragments in >2mm portion.
Sample #7: Asbestos found as 4x2x2mm cement sheet fragment in >2mm portion.
Sample #12: Asbestos found as 10x4x3mm cement sheet fragments x2 in >2mm portion.

Asbestos analysed by Approved Identifier Ravee Sivasubramaniam

SIGNATORIES

[redacted]

Senior Organic Chemist/Metals Chemist | Metals/Inorganics Team Leader | Organic Section Head

[redacted]

Hygiene Team Leader

VOC's in Soil [AN433] Tested: 1/7/2020

PARAMETER	UOM	LOR	0407_TP212_0.1_20(623 SOIL - 23/3/2020 SE207999.001	0407_TP212_0.5_20(623 SOIL - 23/3/2020 SE207999.002	0407_TP213_0.1_20(623 SOIL - 23/3/2020 SE207999.003	0407_TP213_0.5_20(623 SOIL - 23/3/2020 SE207999.004	0407_TP214_0.1_20(623 SOIL - 23/3/2020 SE207999.005
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP212_0.1_20(623 SOIL - 23/3/2020 SE207999.001	0407_TP212_0.5_20(623 SOIL - 23/3/2020 SE207999.002	0407_TP213_0.1_20(623 SOIL - 23/3/2020 SE207999.003	0407_TP213_0.5_20(623 SOIL - 23/3/2020 SE207999.004	0407_TP214_0.1_20(623 SOIL - 23/3/2020 SE207999.005
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP214_0.5_20(623 SOIL - 23/3/2020 SE207999.006	0407_TP215_0.1_20(623 SOIL - 23/3/2020 SE207999.007	0407_TP215_0.5_20(623 SOIL - 23/3/2020 SE207999.008	0407_TP216_0.1_20(623 SOIL - 23/3/2020 SE207999.009	0407_TP216_0.5_20(623 SOIL - 23/3/2020 SE207999.011
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP214_0.5_20(623 SOIL - 23/3/2020 SE207999.006	0407_TP215_0.1_20(623 SOIL - 23/3/2020 SE207999.007	0407_TP215_0.5_20(623 SOIL - 23/3/2020 SE207999.008	0407_TP216_0.1_20(623 SOIL - 23/3/2020 SE207999.009	0407_TP216_0.5_20(623 SOIL - 23/3/2020 SE207999.011
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP217_0.1_20(623 SOIL - 23/3/2020 SE207999.012	0407_TP217_0.5_20(623 SOIL - 23/3/2020 SE207999.013	0407_TP218_0.1_20(623 SOIL - 23/3/2020 SE207999.014	0407_TP218_0.5_20(623 SOIL - 23/3/2020 SE207999.015	0407_TP219_0.1_20(623 SOIL - 23/3/2020 SE207999.016
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP217_0.1_20(623 SOIL - 23/3/2020 SE207999.012	0407_TP217_0.5_20(623 SOIL - 23/3/2020 SE207999.013	0407_TP218_0.1_20(623 SOIL - 23/3/2020 SE207999.014	0407_TP218_0.5_20(623 SOIL - 23/3/2020 SE207999.015	0407_TP219_0.1_20(623 SOIL - 23/3/2020 SE207999.016
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP219_0.5_20623 SOIL - 23/3/2020 SE207999.017	0407_QC141_20062 SOIL - 23/3/2020 SE207999.018	0407_QC138_20062 SOIL - 23/3/2020 SE207999.019	0407_QC411_20062 SOIL - 23/3/2020 SE207999.020	0407_QC511_20062 SOIL - 23/3/2020 SE207999.021
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	[108%]
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	[101%]
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	[100%]
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	[97%]
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	[96%]
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	-
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	-
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP219_0.5_20623 SOIL - 23/3/2020 SE207999.017	0407_QC141_20062 SOIL - 23/3/2020 SE207999.018	0407_QC138_20062 SOIL - 23/3/2020 SE207999.019	0407_QC411_20062 SOIL - 23/3/2020 SE207999.020	0407_QC511_20062 SOIL - 23/3/2020 SE207999.021
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	-
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP211_0.1_20(623 SOIL - 23/3/2020 SE207999.022	0407_TP211_0.5_20(623 SOIL - 23/3/2020 SE207999.023
Benzene	mg/kg	0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	-	-
Chloromethane	mg/kg	1	-	-
Vinyl chloride (Chloroethene)	mg/kg	0.1	-	-
Bromomethane	mg/kg	1	-	-
Chloroethane	mg/kg	1	-	-
Trichlorofluoromethane	mg/kg	1	-	-
Acetone (2-propanone)	mg/kg	10	-	-
Iodomethane	mg/kg	5	-	-
1,1-dichloroethene	mg/kg	0.1	-	-
Acrylonitrile	mg/kg	0.1	-	-
Dichloromethane (Methylene chloride)	mg/kg	0.5	-	-
Allyl chloride	mg/kg	0.1	-	-
Carbon disulfide	mg/kg	0.5	-	-
trans-1,2-dichloroethene	mg/kg	0.1	-	-
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	-	-
1,1-dichloroethane	mg/kg	0.1	-	-
Vinyl acetate	mg/kg	10	-	-
MEK (2-butanone)	mg/kg	10	-	-
cis-1,2-dichloroethene	mg/kg	0.1	-	-
Bromochloromethane	mg/kg	0.1	-	-
Chloroform	mg/kg	0.1	-	-
2,2-dichloropropane	mg/kg	0.1	-	-
1,2-dichloroethane	mg/kg	0.1	-	-
1,1,1-trichloroethane	mg/kg	0.1	-	-
1,1-dichloropropene	mg/kg	0.1	-	-
Carbon tetrachloride	mg/kg	0.1	-	-
Dibromomethane	mg/kg	0.1	-	-
1,2-dichloropropane	mg/kg	0.1	-	-
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	-	-
2-nitropropane	mg/kg	10	-	-
Bromodichloromethane	mg/kg	0.1	-	-
MIBK (4-methyl-2-pentanone)	mg/kg	1	-	-
cis-1,3-dichloropropene	mg/kg	0.1	-	-
trans-1,3-dichloropropene	mg/kg	0.1	-	-
1,1,2-trichloroethane	mg/kg	0.1	-	-
1,3-dichloropropane	mg/kg	0.1	-	-
Chlorodibromomethane	mg/kg	0.1	-	-
2-hexanone (MBK)	mg/kg	5	-	-
1,2-dibromoethane (EDB)	mg/kg	0.1	-	-
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	-	-
1,1,1,2-tetrachloroethane	mg/kg	0.1	-	-
Chlorobenzene	mg/kg	0.1	-	-
Bromoform	mg/kg	0.1	-	-
cis-1,4-dichloro-2-butene	mg/kg	1	-	-
Styrene (Vinyl benzene)	mg/kg	0.1	-	-
1,1,2,2-tetrachloroethane	mg/kg	0.1	-	-
1,2,3-trichloropropane	mg/kg	0.1	-	-
trans-1,4-dichloro-2-butene	mg/kg	1	-	-

VOC's in Soil [AN433] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP211_0.1_20(623 SOIL - 23/3/2020 SE207999.022	0407_TP211_0.5_20(623 SOIL - 23/3/2020 SE207999.023
Isopropylbenzene (Cumene)	mg/kg	0.1	-	-
Bromobenzene	mg/kg	0.1	-	-
n-propylbenzene	mg/kg	0.1	-	-
2-chlorotoluene	mg/kg	0.1	-	-
4-chlorotoluene	mg/kg	0.1	-	-
1,3,5-trimethylbenzene	mg/kg	0.1	-	-
tert-butylbenzene	mg/kg	0.1	-	-
1,2,4-trimethylbenzene	mg/kg	0.1	-	-
sec-butylbenzene	mg/kg	0.1	-	-
1,3-dichlorobenzene	mg/kg	0.1	-	-
1,4-dichlorobenzene	mg/kg	0.1	-	-
p-isopropyltoluene	mg/kg	0.1	-	-
1,2-dichlorobenzene	mg/kg	0.1	-	-
n-butylbenzene	mg/kg	0.1	-	-
1,2-dibromo-3-chloropropane	mg/kg	0.1	-	-
1,2,4-trichlorobenzene	mg/kg	0.1	-	-
Hexachlorobutadiene	mg/kg	0.1	-	-
1,2,3-trichlorobenzene	mg/kg	0.1	-	-
Total VOC*	mg/kg	24	-	-
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	-	-
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	-	-
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	-	-

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 1/7/2020

PARAMETER	UOM	LOR	0407_TP212_0.1_20(623 SOIL - 23/3/2020 SE207999.001	0407_TP212_0.5_20(623 SOIL - 23/3/2020 SE207999.002	0407_TP213_0.1_20(623 SOIL - 23/3/2020 SE207999.003	0407_TP213_0.5_20(623 SOIL - 23/3/2020 SE207999.004	0407_TP214_0.1_20(623 SOIL - 23/3/2020 SE207999.005
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP214_0.5_20(623 SOIL - 23/3/2020 SE207999.006	0407_TP215_0.1_20(623 SOIL - 23/3/2020 SE207999.007	0407_TP215_0.5_20(623 SOIL - 23/3/2020 SE207999.008	0407_TP216_0.1_20(623 SOIL - 23/3/2020 SE207999.009	0407_TP216_0.5_20(623 SOIL - 23/3/2020 SE207999.011
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP217_0.1_20(623 SOIL - 23/3/2020 SE207999.012	0407_TP217_0.5_20(623 SOIL - 23/3/2020 SE207999.013	0407_TP218_0.1_20(623 SOIL - 23/3/2020 SE207999.014	0407_TP218_0.5_20(623 SOIL - 23/3/2020 SE207999.015	0407_TP219_0.1_20(623 SOIL - 23/3/2020 SE207999.016
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP219_0.5_20(623 SOIL - 23/3/2020 SE207999.017	0407_QC141_20062: SOIL - 23/3/2020 SE207999.018	0407_QC138_20062: SOIL - 23/3/2020 SE207999.019	0407_QC411_20062: SOIL - 23/3/2020 SE207999.020	0407_TP211_0.1_20(623 SOIL - 23/3/2020 SE207999.022
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP211_0.5_20(623 SOIL - 23/3/2020 SE207999.023
Benzene (F0)	mg/kg	0.1	<0.1
TRH C6-C9	mg/kg	20	<20
TRH C6-C10	mg/kg	25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 1/7/2020

PARAMETER	UOM	LOR	0407_TP212_0.1_20(623 SOIL - 23/3/2020 SE207999.001	0407_TP212_0.5_20(623 SOIL - 23/3/2020 SE207999.002	0407_TP213_0.1_20(623 SOIL - 23/3/2020 SE207999.003	0407_TP213_0.5_20(623 SOIL - 23/3/2020 SE207999.004	0407_TP214_0.1_20(623 SOIL - 23/3/2020 SE207999.005
TRH C10-C14	mg/kg	20	<20	<20	**53**	**73**	<20
TRH C15-C28	mg/kg	45	<45	<45	**1100**	**2900**	**61**
TRH C29-C36	mg/kg	45	<45	<45	**590**	**1700**	**52**
TRH C37-C40	mg/kg	100	<100	<100	**130**	**340**	<100
TRH >C10-C16	mg/kg	25	<25	<25	**96**	**180**	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	**96**	**180**	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	**1500**	**4000**	**95**
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	**280**	**780**	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	**1700**	**4600**	**110**
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	**1900**	**5000**	<210

PARAMETER	UOM	LOR	0407_TP214_0.5_20(623 SOIL - 23/3/2020 SE207999.006	0407_TP215_0.1_20(623 SOIL - 23/3/2020 SE207999.007	0407_TP215_0.5_20(623 SOIL - 23/3/2020 SE207999.008	0407_TP216_0.1_20(623 SOIL - 23/3/2020 SE207999.009	0407_TP216_0.5_20(623 SOIL - 23/3/2020 SE207999.011
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP217_0.1_20(623 SOIL - 23/3/2020 SE207999.012	0407_TP217_0.5_20(623 SOIL - 23/3/2020 SE207999.013	0407_TP218_0.1_20(623 SOIL - 23/3/2020 SE207999.014	0407_TP218_0.5_20(623 SOIL - 23/3/2020 SE207999.015	0407_TP219_0.1_20(623 SOIL - 23/3/2020 SE207999.016
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	**72**	<45	**46**
TRH C29-C36	mg/kg	45	<45	<45	**45**	<45	**47**
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	**110**	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	**120**	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP219_0.5_20(623 SOIL - 23/3/2020 SE207999.017	0407_QC141_20062 SOIL - 23/3/2020 SE207999.018	0407_QC138_20062 SOIL - 23/3/2020 SE207999.019	0407_TP211_0.1_20(623 SOIL - 23/3/2020 SE207999.022	0407_TP211_0.5_20(623 SOIL - 23/3/2020 SE207999.023
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	**62**	**56**	**170**	**190**
TRH C29-C36	mg/kg	45	<45	<45	**93**	**490**	**560**
TRH C37-C40	mg/kg	100	<100	<100	<100	**350**	**460**
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	**120**	**430**	**490**
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	**580**	**720**
TRH C10-C36 Total	mg/kg	110	<110	<110	**150**	**660**	**750**
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	**1000**	**1200**

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 1/7/2020

PARAMETER	UOM	LOR	0407_TP212_0.1_20(623 SOIL - 23/3/2020 SE207999.001	0407_TP212_0.5_20(623 SOIL - 23/3/2020 SE207999.002	0407_TP213_0.1_20(623 SOIL - 23/3/2020 SE207999.003	0407_TP213_0.5_20(623 SOIL - 23/3/2020 SE207999.004	0407_TP214_0.1_20(623 SOIL - 23/3/2020 SE207999.005
Naphthalene	mg/kg	0.1	<0.1	<0.1	14	8.9	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	6.9	6.0	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	5.4	6.2	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	14	42	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	1.6	3.7	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	5.9	2.1	<0.1
Phenanthrene	mg/kg	0.1	0.3	<0.1	110	230	0.1
Anthracene	mg/kg	0.1	0.1	<0.1	16	45	0.1
Fluoranthene	mg/kg	0.1	0.6	<0.1	120	300	0.2
Pyrene	mg/kg	0.1	0.6	<0.1	110	280	0.2
Benzo(a)anthracene	mg/kg	0.1	0.3	<0.1	61	150	0.1
Chrysene	mg/kg	0.1	0.3	<0.1	42	120	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	0.4	<0.1	56	110	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	0.2	<0.1	21	100	<0.1
Benzo(a)pyrene	mg/kg	0.1	0.3	<0.1	53	130	0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.2	<0.1	19	56	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	3.8	11	<0.1
Benzo(ghi)perylene	mg/kg	0.1	0.2	<0.1	15	44	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	0.4	<0.2	73	190	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	0.5	<0.3	73	190	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	0.5	<0.2	73	190	<0.2
Total PAH (18)	mg/kg	0.8	3.6	<0.8	680	1600	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	3.6	<0.8	660	1600	<0.8

PARAMETER	UOM	LOR	0407_TP214_0.5_20(623 SOIL - 23/3/2020 SE207999.006	0407_TP215_0.1_20(623 SOIL - 23/3/2020 SE207999.007	0407_TP215_0.5_20(623 SOIL - 23/3/2020 SE207999.008	0407_TP216_0.1_20(623 SOIL - 23/3/2020 SE207999.009	0407_TP216_0.5_20(623 SOIL - 23/3/2020 SE207999.011
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	0.4	0.1	<0.1	0.1	<0.1
Anthracene	mg/kg	0.1	0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	0.9	0.2	0.2	0.2	<0.1
Pyrene	mg/kg	0.1	1.0	0.2	0.2	0.3	<0.1
Benzo(a)anthracene	mg/kg	0.1	0.6	0.1	<0.1	0.2	<0.1
Chrysene	mg/kg	0.1	0.4	0.1	<0.1	0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	0.5	0.1	<0.1	0.2	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	0.5	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	0.6	0.2	<0.1	0.2	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.3	0.1	<0.1	0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	0.3	0.1	<0.1	0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	0.8	0.2	<0.2	0.3	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	0.9	0.3	<0.3	0.4	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	0.9	0.3	<0.2	0.3	<0.2
Total PAH (18)	mg/kg	0.8	5.8	1.4	<0.8	1.6	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	5.8	1.4	<0.8	1.6	<0.8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP217_0.1_20(623 SOIL - 23/3/2020 SE207999.012	0407_TP217_0.5_20(623 SOIL - 23/3/2020 SE207999.013	0407_TP218_0.1_20(623 SOIL - 23/3/2020 SE207999.014	0407_TP218_0.5_20(623 SOIL - 23/3/2020 SE207999.015	0407_TP219_0.1_20(623 SOIL - 23/3/2020 SE207999.016
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	**0.1**	<0.1	**0.2**	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	**0.1**	<0.1	<0.1
Fluoranthene	mg/kg	0.1	**0.2**	<0.1	**0.6**	<0.1	**0.1**
Pyrene	mg/kg	0.1	**0.2**	<0.1	**0.6**	<0.1	**0.1**
Benzo(a)anthracene	mg/kg	0.1	**0.1**	<0.1	**0.4**	<0.1	**0.1**
Chrysene	mg/kg	0.1	**0.1**	<0.1	**0.4**	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	**0.2**	<0.1	**0.4**	<0.1	**0.1**
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	**0.3**	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	**0.2**	<0.1	**0.4**	<0.1	**0.1**
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	**0.2**	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	**0.2**	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	**0.6**	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	**0.3**	<0.3	**0.7**	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	**0.3**	<0.2	**0.6**	<0.2	**0.2**
Total PAH (18)	mg/kg	0.8	**1.2**	<0.8	**3.7**	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	**1.2**	<0.8	**3.7**	<0.8	<0.8

PARAMETER	UOM	LOR	0407_TP219_0.5_20(623 SOIL - 23/3/2020 SE207999.017	0407_QC141_20062 SOIL - 23/3/2020 SE207999.018	0407_QC138_20062 SOIL - 23/3/2020 SE207999.019	0407_TP211_0.1_20(623 SOIL - 23/3/2020 SE207999.022	0407_TP211_0.5_20(623 SOIL - 23/3/2020 SE207999.023
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.2**	**0.2**
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	**0.1**
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.1**	**0.2**
Phenanthrene	mg/kg	0.1	<0.1	<0.1	**0.3**	**1.5**	**2.1**
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.8**	**0.7**
Fluoranthene	mg/kg	0.1	<0.1	**0.1**	**0.4**	**5.4**	**6.1**
Pyrene	mg/kg	0.1	<0.1	**0.1**	**0.3**	**5.8**	**6.2**
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	**0.2**	**2.6**	**2.8**
Chrysene	mg/kg	0.1	<0.1	<0.1	**0.2**	**2.3**	**2.7**
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	**0.2**	**4.1**	**4.0**
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	**0.1**	**1.9**	**1.8**
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	**0.2**	**4.3**	**3.9**
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	**0.1**	**2.3**	**1.9**
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.3**	**0.3**
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	**0.1**	**1.9**	**1.4**
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	**0.3**	**5.8**	**5.3**
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	**0.4**	**5.8**	**5.3**
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	**0.3**	**5.8**	**5.3**
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	**2.2**	**34**	**34**
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	**2.2**	**34**	**34**

Speciated Phenols in Soil [AN420] Tested: 1/7/2020

PARAMETER	UOM	LOR	0407_TP212_0.1_20(623 SOIL - 23/3/2020 SE207999.001	0407_TP212_0.5_20(623 SOIL - 23/3/2020 SE207999.002	0407_TP213_0.1_20(623 SOIL - 23/3/2020 SE207999.003	0407_TP213_0.5_20(623 SOIL - 23/3/2020 SE207999.004	0407_TP214_0.1_20(623 SOIL - 23/3/2020 SE207999.005
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_TP214_0.5_20(623 SOIL - 23/3/2020 SE207999.006	0407_TP215_0.1_20(623 SOIL - 23/3/2020 SE207999.007	0407_TP215_0.5_20(623 SOIL - 23/3/2020 SE207999.008	0407_TP216_0.1_20(623 SOIL - 23/3/2020 SE207999.009	0407_TP216_0.5_20(623 SOIL - 23/3/2020 SE207999.011
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

Speciated Phenols in Soil [AN420] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP217_0.1_20(623 SOIL - 23/3/2020 SE207999.012	0407_TP217_0.5_20(623 SOIL - 23/3/2020 SE207999.013	0407_TP218_0.1_20(623 SOIL - 23/3/2020 SE207999.014	0407_TP218_0.5_20(623 SOIL - 23/3/2020 SE207999.015	0407_TP219_0.1_20(623 SOIL - 23/3/2020 SE207999.016
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_TP219_0.5_20(623 SOIL - 23/3/2020 SE207999.017	0407_QC141_20062 SOIL - 23/3/2020 SE207999.018	0407_QC138_20062 SOIL - 23/3/2020 SE207999.019	0407_TP211_0.1_20(623 SOIL - 23/3/2020 SE207999.022	0407_TP211_0.5_20(623 SOIL - 23/3/2020 SE207999.023
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

OC Pesticides in Soil [AN420] Tested: 1/7/2020

PARAMETER	UOM	LOR	0407_TP212_0.1_20(623 SOIL - 23/3/2020 SE207999.001	0407_TP212_0.5_20(623 SOIL - 23/3/2020 SE207999.002	0407_TP213_0.1_20(623 SOIL - 23/3/2020 SE207999.003	0407_TP213_0.5_20(623 SOIL - 23/3/2020 SE207999.004	0407_TP214_0.1_20(623 SOIL - 23/3/2020 SE207999.005
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP214_0.5_20(623 SOIL - 23/3/2020 SE207999.006	0407_TP215_0.1_20(623 SOIL - 23/3/2020 SE207999.007	0407_TP215_0.5_20(623 SOIL - 23/3/2020 SE207999.008	0407_TP216_0.1_20(623 SOIL - 23/3/2020 SE207999.009	0407_TP216_0.5_20(623 SOIL - 23/3/2020 SE207999.011
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP217_0.1_20(623 SOIL - 23/3/2020 SE207999.012	0407_TP217_0.5_20(623 SOIL - 23/3/2020 SE207999.013	0407_TP218_0.1_20(623 SOIL - 23/3/2020 SE207999.014	0407_TP218_0.5_20(623 SOIL - 23/3/2020 SE207999.015	0407_TP219_0.1_20(623 SOIL - 23/3/2020 SE207999.016
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP219_0.5_20(623 SOIL - 23/3/2020 SE207999.017	0407_QC141_20062 SOIL - 23/3/2020 SE207999.018	0407_QC138_20062 SOIL - 23/3/2020 SE207999.019	0407_TP211_0.1_20(623 SOIL - 23/3/2020 SE207999.022	0407_TP211_0.5_20(623 SOIL - 23/3/2020 SE207999.023
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OP Pesticides in Soil [AN420] Tested: 1/7/2020

PARAMETER	UOM	LOR	0407_TP212_0.1_20(623 SOIL - 23/3/2020 SE207999.001	0407_TP212_0.5_20(623 SOIL - 23/3/2020 SE207999.002	0407_TP213_0.1_20(623 SOIL - 23/3/2020 SE207999.003	0407_TP213_0.5_20(623 SOIL - 23/3/2020 SE207999.004	0407_TP214_0.1_20(623 SOIL - 23/3/2020 SE207999.005
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP214_0.5_20(623 SOIL - 23/3/2020 SE207999.006	0407_TP215_0.1_20(623 SOIL - 23/3/2020 SE207999.007	0407_TP215_0.5_20(623 SOIL - 23/3/2020 SE207999.008	0407_TP216_0.1_20(623 SOIL - 23/3/2020 SE207999.009	0407_TP216_0.5_20(623 SOIL - 23/3/2020 SE207999.011
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP217_0.1_20(623 SOIL - 23/3/2020 SE207999.012	0407_TP217_0.5_20(623 SOIL - 23/3/2020 SE207999.013	0407_TP218_0.1_20(623 SOIL - 23/3/2020 SE207999.014	0407_TP218_0.5_20(623 SOIL - 23/3/2020 SE207999.015	0407_TP219_0.1_20(623 SOIL - 23/3/2020 SE207999.016
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

OP Pesticides in Soil [AN420] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP219_0.5_20(623 SOIL - 23/3/2020 SE207999.017	0407_QC141_20062 SOIL - 23/3/2020 SE207999.018	0407_QC138_20062 SOIL - 23/3/2020 SE207999.019	0407_TP211_0.1_20(623 SOIL - 23/3/2020 SE207999.022	0407_TP211_0.5_20(623 SOIL - 23/3/2020 SE207999.023
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PCBs in Soil [AN420] Tested: 1/7/2020

PARAMETER	UOM	LOR	0407_TP212_0.1_20(623 SOIL - 23/3/2020 SE207999.001	0407_TP212_0.5_20(623 SOIL - 23/3/2020 SE207999.002	0407_TP213_0.1_20(623 SOIL - 23/3/2020 SE207999.003	0407_TP213_0.5_20(623 SOIL - 23/3/2020 SE207999.004	0407_TP214_0.1_20(623 SOIL - 23/3/2020 SE207999.005
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP214_0.5_20(623 SOIL - 23/3/2020 SE207999.006	0407_TP215_0.1_20(623 SOIL - 23/3/2020 SE207999.007	0407_TP215_0.5_20(623 SOIL - 23/3/2020 SE207999.008	0407_TP216_0.1_20(623 SOIL - 23/3/2020 SE207999.009	0407_TP216_0.5_20(623 SOIL - 23/3/2020 SE207999.011
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP217_0.1_20(623 SOIL - 23/3/2020 SE207999.012	0407_TP217_0.5_20(623 SOIL - 23/3/2020 SE207999.013	0407_TP218_0.1_20(623 SOIL - 23/3/2020 SE207999.014	0407_TP218_0.5_20(623 SOIL - 23/3/2020 SE207999.015	0407_TP219_0.1_20(623 SOIL - 23/3/2020 SE207999.016
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PCBs in Soil [AN420] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP219_0.5_20(623 SOIL - 23/3/2020 SE207999.017	0407_QC141_20062 SOIL - 23/3/2020 SE207999.018	0407_QC138_20062 SOIL - 23/3/2020 SE207999.019	0407_QC411_20062 SOIL - 23/3/2020 SE207999.020	0407_QC511_20062 SOIL - 23/3/2020 SE207999.021
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	-	-
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	-	-
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	-	-
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	-	-
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	-	-
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	-	-
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	-	-
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	-	-
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	-	-
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	-	-

PARAMETER	UOM	LOR	0407_TP211_0.1_20(623 SOIL - 23/3/2020 SE207999.022	0407_TP211_0.5_20(623 SOIL - 23/3/2020 SE207999.023
Arochlor 1016	mg/kg	0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 1/7/2020

PARAMETER	UOM	LOR	0407_TP212_0.1_20(623 SOIL - 23/3/2020 SE207999.001	0407_TP212_0.5_20(623 SOIL - 23/3/2020 SE207999.002	0407_TP213_0.1_20(623 SOIL - 23/3/2020 SE207999.003	0407_TP213_0.5_20(623 SOIL - 23/3/2020 SE207999.004	0407_TP214_0.1_20(623 SOIL - 23/3/2020 SE207999.005
Arsenic, As	mg/kg	1	1	<1	3	3	7
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	0.4	0.4	0.4
Chromium, Cr	mg/kg	0.5	11	<0.5	6.4	6.3	19
Copper, Cu	mg/kg	0.5	16	0.6	150	190	58
Lead, Pb	mg/kg	1	45	1	250	170	110
Nickel, Ni	mg/kg	0.5	12	<0.5	14	17	13
Zinc, Zn	mg/kg	2	80	3.1	240	290	360

PARAMETER	UOM	LOR	0407_TP214_0.5_20(623 SOIL - 23/3/2020 SE207999.006	0407_TP215_0.1_20(623 SOIL - 23/3/2020 SE207999.007	0407_TP215_0.5_20(623 SOIL - 23/3/2020 SE207999.008	0407_TP216_0.1_20(623 SOIL - 23/3/2020 SE207999.009	0407_TP216_0.5_20(623 SOIL - 23/3/2020 SE207999.011
Arsenic, As	mg/kg	1	<1	9	1	8	1
Cadmium, Cd	mg/kg	0.3	<0.3	0.3	<0.3	0.3	<0.3
Chromium, Cr	mg/kg	0.5	1.1	21	5.0	19	1.7
Copper, Cu	mg/kg	0.5	730	42	6.1	41	3.4
Lead, Pb	mg/kg	1	43	89	8	110	8
Nickel, Ni	mg/kg	0.5	1.0	12	2.6	17	1.3
Zinc, Zn	mg/kg	2	27	260	19	250	14

PARAMETER	UOM	LOR	0407_TP217_0.1_20(623 SOIL - 23/3/2020 SE207999.012	0407_TP217_0.5_20(623 SOIL - 23/3/2020 SE207999.013	0407_TP218_0.1_20(623 SOIL - 23/3/2020 SE207999.014	0407_TP218_0.5_20(623 SOIL - 23/3/2020 SE207999.015	0407_TP219_0.1_20(623 SOIL - 23/3/2020 SE207999.016
Arsenic, As	mg/kg	1	8	1	7	1	9
Cadmium, Cd	mg/kg	0.3	0.4	<0.3	0.3	<0.3	0.6
Chromium, Cr	mg/kg	0.5	27	2.8	18	1.7	26
Copper, Cu	mg/kg	0.5	48	5.1	64	2.2	140
Lead, Pb	mg/kg	1	110	5	190	13	250
Nickel, Ni	mg/kg	0.5	10	2.2	10	0.9	17
Zinc, Zn	mg/kg	2	340	7.4	280	14	600

PARAMETER	UOM	LOR	0407_TP219_0.5_20(623 SOIL - 23/3/2020 SE207999.017	0407_QC141_20062: SOIL - 23/3/2020 SE207999.018	0407_QC138_20062: SOIL - 23/3/2020 SE207999.019	0407_TP211_0.1_20(623 SOIL - 23/3/2020 SE207999.022	0407_TP211_0.5_20(623 SOIL - 23/3/2020 SE207999.023
Arsenic, As	mg/kg	1	<1	8	8	3	2
Cadmium, Cd	mg/kg	0.3	<0.3	0.5	0.6	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	<0.5	18	21	12	8.9
Copper, Cu	mg/kg	0.5	<0.5	45	120	28	25
Lead, Pb	mg/kg	1	<1	97	160	20	13
Nickel, Ni	mg/kg	0.5	<0.5	8.4	17	12	12
Zinc, Zn	mg/kg	2	<2.0	290	570	53	46

Mercury in Soil [AN312] Tested: 1/7/2020

PARAMETER	UOM	LOR	0407_TP212_0.1_20(623 SOIL - 23/3/2020 SE207999.001	0407_TP212_0.5_20(623 SOIL - 23/3/2020 SE207999.002	0407_TP213_0.1_20(623 SOIL - 23/3/2020 SE207999.003	0407_TP213_0.5_20(623 SOIL - 23/3/2020 SE207999.004	0407_TP214_0.1_20(623 SOIL - 23/3/2020 SE207999.005
Mercury	mg/kg	0.05	0.05	<0.05	0.18	0.17	0.10

PARAMETER	UOM	LOR	0407_TP214_0.5_20(623 SOIL - 23/3/2020 SE207999.006	0407_TP215_0.1_20(623 SOIL - 23/3/2020 SE207999.007	0407_TP215_0.5_20(623 SOIL - 23/3/2020 SE207999.008	0407_TP216_0.1_20(623 SOIL - 23/3/2020 SE207999.009	0407_TP216_0.5_20(623 SOIL - 23/3/2020 SE207999.011
Mercury	mg/kg	0.05	<0.05	0.12	0.09	0.13	0.12

PARAMETER	UOM	LOR	0407_TP217_0.1_20(623 SOIL - 23/3/2020 SE207999.012	0407_TP217_0.5_20(623 SOIL - 23/3/2020 SE207999.013	0407_TP218_0.1_20(623 SOIL - 23/3/2020 SE207999.014	0407_TP218_0.5_20(623 SOIL - 23/3/2020 SE207999.015	0407_TP219_0.1_20(623 SOIL - 23/3/2020 SE207999.016
Mercury	mg/kg	0.05	0.12	<0.05	0.08	<0.05	0.17

PARAMETER	UOM	LOR	0407_TP219_0.5_20(623 SOIL - 23/3/2020 SE207999.017	0407_QC141_20062: SOIL - 23/3/2020 SE207999.018	0407_QC138_20062: SOIL - 23/3/2020 SE207999.019	0407_TP211_0.1_20(623 SOIL - 23/3/2020 SE207999.022	0407_TP211_0.5_20(623 SOIL - 23/3/2020 SE207999.023
Mercury	mg/kg	0.05	<0.05	0.07	0.13	<0.05	<0.05

Moisture Content [AN002] Tested: 1/7/2020

PARAMETER	UOM	LOR	0407_TP212_0.1_20(623 SOIL - 23/3/2020 SE207999.001	0407_TP212_0.5_20(623 SOIL - 23/3/2020 SE207999.002	0407_TP213_0.1_20(623 SOIL - 23/3/2020 SE207999.003	0407_TP213_0.5_20(623 SOIL - 23/3/2020 SE207999.004	0407_TP214_0.1_20(623 SOIL - 23/3/2020 SE207999.005
% Moisture	%w/w	1	14.9	11.5	14.1	10.4	42.4

PARAMETER	UOM	LOR	0407_TP214_0.5_20(623 SOIL - 23/3/2020 SE207999.006	0407_TP215_0.1_20(623 SOIL - 23/3/2020 SE207999.007	0407_TP215_0.5_20(623 SOIL - 23/3/2020 SE207999.008	0407_TP216_0.1_20(623 SOIL - 23/3/2020 SE207999.009	0407_TP216_0.5_20(623 SOIL - 23/3/2020 SE207999.011
% Moisture	%w/w	1	6.1	21.5	5.2	25.1	3.5

PARAMETER	UOM	LOR	0407_TP217_0.1_20(623 SOIL - 23/3/2020 SE207999.012	0407_TP217_0.5_20(623 SOIL - 23/3/2020 SE207999.013	0407_TP218_0.1_20(623 SOIL - 23/3/2020 SE207999.014	0407_TP218_0.5_20(623 SOIL - 23/3/2020 SE207999.015	0407_TP219_0.1_20(623 SOIL - 23/3/2020 SE207999.016
% Moisture	%w/w	1	24.9	5.1	36.0	5.8	23.7

PARAMETER	UOM	LOR	0407_TP219_0.5_20(623 SOIL - 23/3/2020 SE207999.017	0407_QC141_20062: SOIL - 23/3/2020 SE207999.018	0407_QC138_20062: SOIL - 23/3/2020 SE207999.019	0407_QC411_20062: SOIL - 23/3/2020 SE207999.020	0407_TP211_0.1_20(623 SOIL - 23/3/2020 SE207999.022
% Moisture	%w/w	1	3.0	26.5	22.9	<1.0	8.7

PARAMETER	UOM	LOR	0407_TP211_0.5_20(623 SOIL - 23/3/2020 SE207999.023
% Moisture	%w/w	1	8.1

Fibre Identification in soil [AN602] Tested: 2/7/2020

PARAMETER	UOM	LOR	0407_TP212_0.1_20(623 SOIL - 23/3/2020 SE207999.001	0407_TP213_0.1_20(623 SOIL - 23/3/2020 SE207999.003	0407_TP214_0.1_20(623 SOIL - 23/3/2020 SE207999.005	0407_TP214_0.5_20(623 SOIL - 23/3/2020 SE207999.006	0407_TP215_0.1_20(623 SOIL - 23/3/2020 SE207999.007
Asbestos Detected	No unit	-	Yes	No	Yes	No	Yes
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	0407_TP215_0.5_20(623 SOIL - 23/3/2020 SE207999.008	0407_TP216_0.1_20(623 SOIL - 23/3/2020 SE207999.009	0407_TP216_0.3_20(623 SOIL - 23/3/2020 SE207999.010	0407_TP216_0.5_20(623 SOIL - 23/3/2020 SE207999.011	0407_TP217_0.1_20(623 SOIL - 23/3/2020 SE207999.012
Asbestos Detected	No unit	-	No	No	No	No	Yes
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	**>0.01**

PARAMETER	UOM	LOR	0407_TP217_0.5_20(623 SOIL - 23/3/2020 SE207999.013	0407_TP218_0.1_20(623 SOIL - 23/3/2020 SE207999.014	0407_TP218_0.5_20(623 SOIL - 23/3/2020 SE207999.015	0407_TP219_0.1_20(623 SOIL - 23/3/2020 SE207999.016	0407_TP219_0.5_20(623 SOIL - 23/3/2020 SE207999.017
Asbestos Detected	No unit	-	No	No	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 2/7/2020

PARAMETER	UOM	LOR	0407_TP212_0.1_20(623 SOIL - 23/3/2020 SE207999.001	0407_TP213_0.1_20(623 SOIL - 23/3/2020 SE207999.003	0407_TP214_0.1_20(623 SOIL - 23/3/2020 SE207999.005	0407_TP214_0.5_20(623 SOIL - 23/3/2020 SE207999.006	0407_TP215_0.1_20(623 SOIL - 23/3/2020 SE207999.007
Total Sample Weight*	g	1	**529**	**580**	**404**	**695**	**419**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	**0.00183**	<0.00001	**0.0476**	<0.00001	**0.0123**
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	**0.012**	<0.001	**0.003**
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	**0.012**	<0.001	**0.003**
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP215_0.5_20(623 SOIL - 23/3/2020 SE207999.008	0407_TP216_0.1_20(623 SOIL - 23/3/2020 SE207999.009	0407_TP216_0.3_20(623 SOIL - 23/3/2020 SE207999.010	0407_TP216_0.5_20(623 SOIL - 23/3/2020 SE207999.011	0407_TP217_0.1_20(623 SOIL - 23/3/2020 SE207999.012
Total Sample Weight*	g	1	**718**	**429**	**694**	**753**	**435**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	**0.0944**
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	**0.022**
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	**0.022**
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP217_0.5_20(623 SOIL - 23/3/2020 SE207999.013	0407_TP218_0.1_20(623 SOIL - 23/3/2020 SE207999.014	0407_TP218_0.5_20(623 SOIL - 23/3/2020 SE207999.015	0407_TP219_0.1_20(623 SOIL - 23/3/2020 SE207999.016	0407_TP219_0.5_20(623 SOIL - 23/3/2020 SE207999.017
Total Sample Weight*	g	1	**793**	**417**	**771**	**398**	**760**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid, mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents .
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples, Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.
AN605	This technique gravimetrically determines the mass of Bonded Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight. Any fibrous asbestos (FA) found in this fraction will be added to the 2-7mm fraction and its mass recorded there.

AN605	This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free/respirable fibres which are only observed by standard trace analysis as per AN602.
AN605	Bonded asbestos containing material (Bonded ACM) comprises asbestos-containing-material which is sound in condition. Fibrous asbestos (FA) comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material. Asbestos fines (AF) includes free fibres, small fibre bundles and also small fragments of bonded ACM that passes through a 7mm sieve - which implies that the bonded ACM fragments have a substantial degree of damage which increases the potential for fibre release.
AN-605	Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009 and NEPM 1999 (2013) schedule B1 section 4..

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT

Accreditation No. 2562

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Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	15

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SGS Reference	**SE207999 R0**
Date Received	23 Jun 2020
Date Reported	06 Jul 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.

Sample #1: Asbestos found as 2x2x2mm cement sheet fragment in >2mm portion.
Sample #5: Asbestos found as 8x3x2mm cement sheet fragments in >2mm portion.
Sample #7: Asbestos found as 4x2x2mm cement sheet fragment in >2mm portion.
Sample #12: Asbestos found as 10x4x3mm cement sheet fragments x2 in >2mm portion.

Asbestos analysed by Approved Identifier Ravee Sivasubramaniam

SIGNATORIES

[redacted]

Senior Organic Chemist/Metals Chemis | Organic Section Head | Hygiene Team Leader

RESULTS

Fibre Identification in soil — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE207999.001	0407_TP212_0.1 _200623	Soil	529g Sand,Soil,Rocks ,Plant Matter	23 Mar 2020	Chrysotile Asbestos Found Organic Fibres Detected	<0.01
SE207999.003	0407_TP213_0.1 _200623	Soil	580g Sand,Soil,Rocks ,Plant Matter	23 Mar 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE207999.005	0407_TP214_0.1 _200623	Soil	404g Clay,Sand,Soil, Rocks,Plant Matter	23 Mar 2020	Chrysotile Asbestos Found	<0.01
SE207999.006	0407_TP214_0.5 _200623	Soil	695g Sand,Soil	23 Mar 2020	No Asbestos Found Synthetic Mineral Fibres Detected Organic Fibres Detected	<0.01
SE207999.007	0407_TP215_0.1 _200623	Soil	419g Clay,Sand,Soil, Rocks,Plant Matter	23 Mar 2020	Chrysotile Asbestos Found Organic Fibres Detected	<0.01
SE207999.008	0407_TP215_0.5 _200623	Soil	718g Sand,Plant Matter	23 Mar 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE207999.009	0407_TP216_0.1 _200623	Soil	429g Clay,Sand,Soil, Rocks,Plant Matter	23 Mar 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE207999.010	0407_TP216_0.3 _200623	Soil	694g Sand	23 Mar 2020	No Asbestos Found	<0.01
SE207999.011	0407_TP216_0.5 _200623	Soil	753g Sand	23 Mar 2020	No Asbestos Found	<0.01
SE207999.012	0407_TP217_0.1 _200623	Soil	435g Clay,Sand,Soil, Rocks,Plant Matter	23 Mar 2020	Chrysotile Asbestos Found Synthetic Mineral Fibres Detected Organic Fibres Detected	>0.01
SE207999.013	0407_TP217_0.5 _200623	Soil	793g Sand	23 Mar 2020	No Asbestos Found	<0.01
SE207999.014	0407_TP218_0.1 _200623	Soil	417g Clay,Sand,Soil, Rocks,Plant Matter	23 Mar 2020	No Asbestos Found Synthetic Mineral Fibres Detected Organic Fibres Detected	<0.01
SE207999.015	0407_TP218_0.5 _200623	Soil	771g Sand	23 Mar 2020	No Asbestos Found	<0.01
SE207999.016	0407_TP219_0.1 _200623	Soil	398g Clay,Sand,Soil, Rocks,Plant Matter	23 Mar 2020	No Asbestos Found Synthetic Mineral Fibres Detected Organic Fibres Detected	<0.01
SE207999.017	0407_TP219_0.5 _200623	Soil	760g Sand,Plant Matter	23 Mar 2020	No Asbestos Found Organic Fibres Detected	<0.01

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 2/7/2020

PARAMETER	UOM	LOR	0407_TP212_0.1_20(623 SOIL - 23/3/2020 SE207999.001	0407_TP213_0.1_20(623 SOIL - 23/3/2020 SE207999.003	0407_TP214_0.1_20(623 SOIL - 23/3/2020 SE207999.005	0407_TP214_0.5_20(623 SOIL - 23/3/2020 SE207999.006	0407_TP215_0.1_20(623 SOIL - 23/3/2020 SE207999.007
Total Sample Weight*	g	1	**529**	**580**	**404**	**695**	**419**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	**0.00183**	<0.00001	**0.0476**	<0.00001	**0.0123**
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	**0.012**	<0.001	**0.003**
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	**0.012**	<0.001	**0.003**
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP215_0.5_20(623 SOIL - 23/3/2020 SE207999.008	0407_TP216_0.1_20(623 SOIL - 23/3/2020 SE207999.009	0407_TP216_0.3_20(623 SOIL - 23/3/2020 SE207999.010	0407_TP216_0.5_20(623 SOIL - 23/3/2020 SE207999.011	0407_TP217_0.1_20(623 SOIL - 23/3/2020 SE207999.012
Total Sample Weight*	g	1	**718**	**429**	**694**	**753**	**435**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	**0.0944**
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	**0.022**
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	**0.022**
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP217_0.5_20(623 SOIL - 23/3/2020 SE207999.013	0407_TP218_0.1_20(623 SOIL - 23/3/2020 SE207999.014	0407_TP218_0.5_20(623 SOIL - 23/3/2020 SE207999.015	0407_TP219_0.1_20(623 SOIL - 23/3/2020 SE207999.016	0407_TP219_0.5_20(623 SOIL - 23/3/2020 SE207999.017
Total Sample Weight*	g	1	**793**	**417**	**771**	**398**	**760**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

METHOD SUMMARY

METHOD	METHODOLOGY SUMMARY
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples , Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable ’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.
AN605	This technique gravimetrically determines the mass of Bonded Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight. Any fibrous asbestos (FA) found in this fraction will be added to the 2-7mm fraction and its mass recorded there.
AN605	This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free/respirable fibres which are only observed by standard trace analysis as per AN602.
AN605	Bonded asbestos containing material (Bonded ACM) comprises asbestos-containing-material which is sound in condition. Fibrous asbestos (FA) comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material. Asbestos fines (AF) includes free fibres, small fibre bundles and also small fragments of bonded ACM that passes through a 7mm sieve - which implies that the bonded ACM fragments have a substantial degree of damage which increases the potential for fibre release.
AN-605	Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009 and NEPM 1999 (2013) schedule B1 section 4..

FOOTNOTES

Amosite	-	Brown Asbestos	NA	-	Not Analysed
Chrysotile	-	White Asbestos	LNR	-	Listed, Not Required
Crocidolite	-	Blue Asbestos	*	-	NATA accreditation does not cover the performance of this service.
Amphiboles	-	Amosite and/or Crocidolite	**	-	Indicative data, theoretical holding time exceeded.

(In reference to soil samples only) This report does not comply with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment and Remediation and Management of Asbestos Contaminated sites in Western Australia - May 2009.

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.

Where reported: 'Asbestos Detected': Asbestos detected by polarised light microscopy, including dispersion staining.
Where reported: 'No Asbestos Found': No Asbestos Found by polarised light microscopy, including dispersion staining.
Where reported: 'UMF Detected': Mineral fibres of unknown type detected by polarised light microscopy, including dispersion staining. Confirmation by another independent analytical technique may be necessary.

Even after disintegration it can be very difficult, or impossible, to detect the presence of asbestos in some asbestos-containing bulk materials using polarised light microscopy. This is due to the low grade or small length or diameter of asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE207999 R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	23

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
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Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207999 R0**
Date Received	23 Jun 2020
Date Reported	06 Jul 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Extraction Date	Mercury in Soil	20 items
	Moisture Content	21 items
	OC Pesticides in Soil	20 items
	OP Pesticides in Soil	20 items
	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	20 items
	PCBs in Soil	20 items
	Speciated Phenols in Soil	20 items
	TRH (Total Recoverable Hydrocarbons) in Soil	20 items
	VOC's in Soil	22 items
	Volatile Petroleum Hydrocarbons in Soil	21 items
Analysis Date	Mercury in Soil	20 items
Surrogate	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	1 item
Duplicate	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	1 item
	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	1 item

There are more than 15 quality objective exceedences. Please see report for details

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	23 Soil
Date documentation received	25/6/20@9:45AM	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	5.4°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE207999 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Fibre Identification in soil

Method: ME-(AU)-[ENV]AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP212_0.1_200623	SE207999.001	LB203336	23 Mar 2020	23 Jun 2020	23 Mar 2021	02 Jul 2020	23 Mar 2021	03 Jul 2020
0407_TP213_0.1_200623	SE207999.003	LB203336	23 Mar 2020	23 Jun 2020	23 Mar 2021	02 Jul 2020	23 Mar 2021	03 Jul 2020
0407_TP214_0.1_200623	SE207999.005	LB203336	23 Mar 2020	23 Jun 2020	23 Mar 2021	02 Jul 2020	23 Mar 2021	03 Jul 2020
0407_TP214_0.5_200623	SE207999.006	LB203336	23 Mar 2020	23 Jun 2020	23 Mar 2021	02 Jul 2020	23 Mar 2021	03 Jul 2020
0407_TP215_0.1_200623	SE207999.007	LB203336	23 Mar 2020	23 Jun 2020	23 Mar 2021	02 Jul 2020	23 Mar 2021	03 Jul 2020
0407_TP215_0.5_200623	SE207999.008	LB203336	23 Mar 2020	23 Jun 2020	23 Mar 2021	02 Jul 2020	23 Mar 2021	03 Jul 2020
0407_TP216_0.1_200623	SE207999.009	LB203336	23 Mar 2020	23 Jun 2020	23 Mar 2021	02 Jul 2020	23 Mar 2021	03 Jul 2020
0407_TP216_0.3_200623	SE207999.010	LB203336	23 Mar 2020	23 Jun 2020	23 Mar 2021	02 Jul 2020	23 Mar 2021	03 Jul 2020
0407_TP216_0.5_200623	SE207999.011	LB203336	23 Mar 2020	23 Jun 2020	23 Mar 2021	02 Jul 2020	23 Mar 2021	03 Jul 2020
0407_TP217_0.1_200623	SE207999.012	LB203336	23 Mar 2020	23 Jun 2020	23 Mar 2021	02 Jul 2020	23 Mar 2021	03 Jul 2020
0407_TP217_0.5_200623	SE207999.013	LB203336	23 Mar 2020	23 Jun 2020	23 Mar 2021	02 Jul 2020	23 Mar 2021	03 Jul 2020
0407_TP218_0.1_200623	SE207999.014	LB203336	23 Mar 2020	23 Jun 2020	23 Mar 2021	02 Jul 2020	23 Mar 2021	03 Jul 2020
0407_TP218_0.5_200623	SE207999.015	LB203336	23 Mar 2020	23 Jun 2020	23 Mar 2021	02 Jul 2020	23 Mar 2021	03 Jul 2020
0407_TP219_0.1_200623	SE207999.016	LB203336	23 Mar 2020	23 Jun 2020	23 Mar 2021	02 Jul 2020	23 Mar 2021	03 Jul 2020
0407_TP219_0.5_200623	SE207999.017	LB203336	23 Mar 2020	23 Jun 2020	23 Mar 2021	02 Jul 2020	23 Mar 2021	03 Jul 2020

Gravimetric Determination of Asbestos in Soil

Method: ME-(AU)-[ENV]AN605

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP212_0.1_200623	SE207999.001	LB203336	23 Mar 2020	23 Jun 2020	19 Sep 2020	02 Jul 2020	19 Sep 2020	03 Jul 2020
0407_TP213_0.1_200623	SE207999.003	LB203336	23 Mar 2020	23 Jun 2020	19 Sep 2020	02 Jul 2020	19 Sep 2020	03 Jul 2020
0407_TP214_0.1_200623	SE207999.005	LB203336	23 Mar 2020	23 Jun 2020	19 Sep 2020	02 Jul 2020	19 Sep 2020	03 Jul 2020
0407_TP214_0.5_200623	SE207999.006	LB203336	23 Mar 2020	23 Jun 2020	19 Sep 2020	02 Jul 2020	19 Sep 2020	03 Jul 2020
0407_TP215_0.1_200623	SE207999.007	LB203336	23 Mar 2020	23 Jun 2020	19 Sep 2020	02 Jul 2020	19 Sep 2020	03 Jul 2020
0407_TP215_0.5_200623	SE207999.008	LB203336	23 Mar 2020	23 Jun 2020	19 Sep 2020	02 Jul 2020	19 Sep 2020	03 Jul 2020
0407_TP216_0.1_200623	SE207999.009	LB203336	23 Mar 2020	23 Jun 2020	19 Sep 2020	02 Jul 2020	19 Sep 2020	03 Jul 2020
0407_TP216_0.3_200623	SE207999.010	LB203336	23 Mar 2020	23 Jun 2020	19 Sep 2020	02 Jul 2020	19 Sep 2020	03 Jul 2020
0407_TP216_0.5_200623	SE207999.011	LB203336	23 Mar 2020	23 Jun 2020	19 Sep 2020	02 Jul 2020	19 Sep 2020	03 Jul 2020
0407_TP217_0.1_200623	SE207999.012	LB203336	23 Mar 2020	23 Jun 2020	19 Sep 2020	02 Jul 2020	19 Sep 2020	03 Jul 2020
0407_TP217_0.5_200623	SE207999.013	LB203336	23 Mar 2020	23 Jun 2020	19 Sep 2020	02 Jul 2020	19 Sep 2020	03 Jul 2020
0407_TP218_0.1_200623	SE207999.014	LB203336	23 Mar 2020	23 Jun 2020	19 Sep 2020	02 Jul 2020	19 Sep 2020	03 Jul 2020
0407_TP218_0.5_200623	SE207999.015	LB203336	23 Mar 2020	23 Jun 2020	19 Sep 2020	02 Jul 2020	19 Sep 2020	03 Jul 2020
0407_TP219_0.1_200623	SE207999.016	LB203336	23 Mar 2020	23 Jun 2020	19 Sep 2020	02 Jul 2020	19 Sep 2020	03 Jul 2020
0407_TP219_0.5_200623	SE207999.017	LB203336	23 Mar 2020	23 Jun 2020	19 Sep 2020	02 Jul 2020	19 Sep 2020	03 Jul 2020

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP212_0.1_200623	SE207999.001	LB203215	23 Mar 2020	23 Jun 2020	20 Apr 2020	01 Jul 2020†	20 Apr 2020	03 Jul 2020†
0407_TP212_0.5_200623	SE207999.002	LB203215	23 Mar 2020	23 Jun 2020	20 Apr 2020	01 Jul 2020†	20 Apr 2020	03 Jul 2020†
0407_TP213_0.1_200623	SE207999.003	LB203215	23 Mar 2020	23 Jun 2020	20 Apr 2020	01 Jul 2020†	20 Apr 2020	03 Jul 2020†
0407_TP213_0.5_200623	SE207999.004	LB203215	23 Mar 2020	23 Jun 2020	20 Apr 2020	01 Jul 2020†	20 Apr 2020	03 Jul 2020†
0407_TP214_0.1_200623	SE207999.005	LB203215	23 Mar 2020	23 Jun 2020	20 Apr 2020	01 Jul 2020†	20 Apr 2020	03 Jul 2020†
0407_TP214_0.5_200623	SE207999.006	LB203215	23 Mar 2020	23 Jun 2020	20 Apr 2020	01 Jul 2020†	20 Apr 2020	03 Jul 2020†
0407_TP215_0.1_200623	SE207999.007	LB203215	23 Mar 2020	23 Jun 2020	20 Apr 2020	01 Jul 2020†	20 Apr 2020	03 Jul 2020†
0407_TP215_0.5_200623	SE207999.008	LB203215	23 Mar 2020	23 Jun 2020	20 Apr 2020	01 Jul 2020†	20 Apr 2020	03 Jul 2020†
0407_TP216_0.1_200623	SE207999.009	LB203215	23 Mar 2020	23 Jun 2020	20 Apr 2020	01 Jul 2020†	20 Apr 2020	03 Jul 2020†
0407_TP216_0.5_200623	SE207999.011	LB203215	23 Mar 2020	23 Jun 2020	20 Apr 2020	01 Jul 2020†	20 Apr 2020	03 Jul 2020†
0407_TP217_0.1_200623	SE207999.012	LB203215	23 Mar 2020	23 Jun 2020	20 Apr 2020	01 Jul 2020†	20 Apr 2020	03 Jul 2020†
0407_TP217_0.5_200623	SE207999.013	LB203215	23 Mar 2020	23 Jun 2020	20 Apr 2020	01 Jul 2020†	20 Apr 2020	03 Jul 2020†
0407_TP218_0.1_200623	SE207999.014	LB203215	23 Mar 2020	23 Jun 2020	20 Apr 2020	01 Jul 2020†	20 Apr 2020	03 Jul 2020†
0407_TP218_0.5_200623	SE207999.015	LB203215	23 Mar 2020	23 Jun 2020	20 Apr 2020	01 Jul 2020†	20 Apr 2020	03 Jul 2020†
0407_TP219_0.1_200623	SE207999.016	LB203215	23 Mar 2020	23 Jun 2020	20 Apr 2020	01 Jul 2020†	20 Apr 2020	03 Jul 2020†
0407_TP219_0.5_200623	SE207999.017	LB203215	23 Mar 2020	23 Jun 2020	20 Apr 2020	01 Jul 2020†	20 Apr 2020	03 Jul 2020†
0407_QC141_200623	SE207999.018	LB203215	23 Mar 2020	23 Jun 2020	20 Apr 2020	01 Jul 2020†	20 Apr 2020	03 Jul 2020†
0407_QC138_200623	SE207999.019	LB203215	23 Mar 2020	23 Jun 2020	20 Apr 2020	01 Jul 2020†	20 Apr 2020	03 Jul 2020†
0407_QC411_200623	SE207999.020	LB203273	23 Mar 2020	23 Jun 2020	20 Apr 2020	01 Jul 2020†	20 Apr 2020	03 Jul 2020†
0407_QC511_200623	SE207999.021	LB203273	23 Mar 2020	23 Jun 2020	20 Apr 2020	01 Jul 2020†	20 Apr 2020	03 Jul 2020†
0407_TP211_0.1_200623	SE207999.022	LB203273	23 Mar 2020	23 Jun 2020	20 Apr 2020	01 Jul 2020†	20 Apr 2020	03 Jul 2020†
0407_TP211_0.5_200623	SE207999.023	LB203273	23 Mar 2020	23 Jun 2020	20 Apr 2020	01 Jul 2020†	20 Apr 2020	03 Jul 2020†

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Moisture Content (continued)

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP212_0.1_200623	SE207999.001	LB203184	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	06 Jul 2020	03 Jul 2020
0407_TP212_0.5_200623	SE207999.002	LB203184	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	06 Jul 2020	03 Jul 2020
0407_TP213_0.1_200623	SE207999.003	LB203184	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	06 Jul 2020	03 Jul 2020
0407_TP213_0.5_200623	SE207999.004	LB203184	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	06 Jul 2020	03 Jul 2020
0407_TP214_0.1_200623	SE207999.005	LB203184	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	06 Jul 2020	03 Jul 2020
0407_TP214_0.5_200623	SE207999.006	LB203185	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	06 Jul 2020	03 Jul 2020
0407_TP215_0.1_200623	SE207999.007	LB203185	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	06 Jul 2020	03 Jul 2020
0407_TP215_0.5_200623	SE207999.008	LB203185	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	06 Jul 2020	03 Jul 2020
0407_TP216_0.1_200623	SE207999.009	LB203185	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	06 Jul 2020	03 Jul 2020
0407_TP216_0.5_200623	SE207999.011	LB203185	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	06 Jul 2020	03 Jul 2020
0407_TP217_0.1_200623	SE207999.012	LB203185	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	06 Jul 2020	03 Jul 2020
0407_TP217_0.5_200623	SE207999.013	LB203185	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	06 Jul 2020	03 Jul 2020
0407_TP218_0.1_200623	SE207999.014	LB203185	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	06 Jul 2020	03 Jul 2020
0407_TP218_0.5_200623	SE207999.015	LB203185	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	06 Jul 2020	03 Jul 2020
0407_TP219_0.1_200623	SE207999.016	LB203185	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	06 Jul 2020	03 Jul 2020
0407_TP219_0.5_200623	SE207999.017	LB203185	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	06 Jul 2020	03 Jul 2020
0407_QC141_200623	SE207999.018	LB203185	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	06 Jul 2020	03 Jul 2020
0407_QC138_200623	SE207999.019	LB203185	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	06 Jul 2020	03 Jul 2020
0407_QC411_200623	SE207999.020	LB203185	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	06 Jul 2020	03 Jul 2020
0407_QC511_200623	SE207999.021	LB203185	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	06 Jul 2020	03 Jul 2020
0407_TP211_0.1_200623	SE207999.022	LB203185	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	06 Jul 2020	03 Jul 2020
0407_TP211_0.5_200623	SE207999.023	LB203185	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	06 Jul 2020	03 Jul 2020

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP212_0.1_200623	SE207999.001	LB203182	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP212_0.5_200623	SE207999.002	LB203182	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP213_0.1_200623	SE207999.003	LB203182	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP213_0.5_200623	SE207999.004	LB203182	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP214_0.1_200623	SE207999.005	LB203182	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP214_0.5_200623	SE207999.006	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP215_0.1_200623	SE207999.007	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP215_0.5_200623	SE207999.008	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP216_0.1_200623	SE207999.009	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP216_0.5_200623	SE207999.011	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP217_0.1_200623	SE207999.012	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP217_0.5_200623	SE207999.013	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP218_0.1_200623	SE207999.014	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP218_0.5_200623	SE207999.015	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP219_0.1_200623	SE207999.016	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP219_0.5_200623	SE207999.017	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_QC141_200623	SE207999.018	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_QC138_200623	SE207999.019	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_QC411_200623	SE207999.020	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_QC511_200623	SE207999.021	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP211_0.1_200623	SE207999.022	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	04 Jul 2020
0407_TP211_0.5_200623	SE207999.023	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	04 Jul 2020

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP212_0.1_200623	SE207999.001	LB203182	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	05 Jul 2020
0407_TP212_0.5_200623	SE207999.002	LB203182	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	05 Jul 2020
0407_TP213_0.1_200623	SE207999.003	LB203182	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	05 Jul 2020
0407_TP213_0.5_200623	SE207999.004	LB203182	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	05 Jul 2020
0407_TP214_0.1_200623	SE207999.005	LB203182	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	05 Jul 2020
0407_TP214_0.5_200623	SE207999.006	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	05 Jul 2020
0407_TP215_0.1_200623	SE207999.007	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	05 Jul 2020
0407_TP215_0.5_200623	SE207999.008	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	05 Jul 2020
0407_TP216_0.1_200623	SE207999.009	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	05 Jul 2020
0407_TP216_0.5_200623	SE207999.011	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	05 Jul 2020
0407_TP217_0.1_200623	SE207999.012	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	05 Jul 2020

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP217_0.5_200623	SE207999.013	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	05 Jul 2020
0407_TP218_0.1_200623	SE207999.014	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	05 Jul 2020
0407_TP218_0.5_200623	SE207999.015	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	05 Jul 2020
0407_TP219_0.1_200623	SE207999.016	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	05 Jul 2020
0407_TP219_0.5_200623	SE207999.017	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	05 Jul 2020
0407_QC141_200623	SE207999.018	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	05 Jul 2020
0407_QC138_200623	SE207999.019	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	05 Jul 2020
0407_QC411_200623	SE207999.020	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	05 Jul 2020
0407_QC511_200623	SE207999.021	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	06 Jul 2020
0407_TP211_0.1_200623	SE207999.022	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	06 Jul 2020
0407_TP211_0.5_200623	SE207999.023	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	06 Jul 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP212_0.1_200623	SE207999.001	LB203182	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	05 Jul 2020
0407_TP212_0.5_200623	SE207999.002	LB203182	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	05 Jul 2020
0407_TP213_0.1_200623	SE207999.003	LB203182	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	05 Jul 2020
0407_TP213_0.5_200623	SE207999.004	LB203182	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	05 Jul 2020
0407_TP214_0.1_200623	SE207999.005	LB203182	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	05 Jul 2020
0407_TP214_0.5_200623	SE207999.006	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	05 Jul 2020
0407_TP215_0.1_200623	SE207999.007	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	05 Jul 2020
0407_TP215_0.5_200623	SE207999.008	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	05 Jul 2020
0407_TP216_0.1_200623	SE207999.009	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	05 Jul 2020
0407_TP216_0.5_200623	SE207999.011	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	05 Jul 2020
0407_TP217_0.1_200623	SE207999.012	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	05 Jul 2020
0407_TP217_0.5_200623	SE207999.013	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	05 Jul 2020
0407_TP218_0.1_200623	SE207999.014	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	05 Jul 2020
0407_TP218_0.5_200623	SE207999.015	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	05 Jul 2020
0407_TP219_0.1_200623	SE207999.016	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	05 Jul 2020
0407_TP219_0.5_200623	SE207999.017	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	05 Jul 2020
0407_QC141_200623	SE207999.018	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	05 Jul 2020
0407_QC138_200623	SE207999.019	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	05 Jul 2020
0407_QC411_200623	SE207999.020	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	05 Jul 2020
0407_QC511_200623	SE207999.021	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	06 Jul 2020
0407_TP211_0.1_200623	SE207999.022	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	06 Jul 2020
0407_TP211_0.5_200623	SE207999.023	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	06 Jul 2020

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP212_0.1_200623	SE207999.001	LB203182	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP212_0.5_200623	SE207999.002	LB203182	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP213_0.1_200623	SE207999.003	LB203182	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP213_0.5_200623	SE207999.004	LB203182	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP214_0.1_200623	SE207999.005	LB203182	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP214_0.5_200623	SE207999.006	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	04 Jul 2020
0407_TP215_0.1_200623	SE207999.007	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	04 Jul 2020
0407_TP215_0.5_200623	SE207999.008	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	04 Jul 2020
0407_TP216_0.1_200623	SE207999.009	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	04 Jul 2020
0407_TP216_0.5_200623	SE207999.011	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	04 Jul 2020
0407_TP217_0.1_200623	SE207999.012	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	04 Jul 2020
0407_TP217_0.5_200623	SE207999.013	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	04 Jul 2020
0407_TP218_0.1_200623	SE207999.014	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	04 Jul 2020
0407_TP218_0.5_200623	SE207999.015	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	04 Jul 2020
0407_TP219_0.1_200623	SE207999.016	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	04 Jul 2020
0407_TP219_0.5_200623	SE207999.017	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	04 Jul 2020
0407_QC141_200623	SE207999.018	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	04 Jul 2020
0407_QC138_200623	SE207999.019	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	04 Jul 2020
0407_QC411_200623	SE207999.020	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	04 Jul 2020
0407_QC511_200623	SE207999.021	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	04 Jul 2020
0407_TP211_0.1_200623	SE207999.022	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	04 Jul 2020
0407_TP211_0.5_200623	SE207999.023	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	04 Jul 2020

HOLDING TIME SUMMARY

SE207999 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP212_0.1_200623	SE207999.001	LB203182	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP212_0.5_200623	SE207999.002	LB203182	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP213_0.1_200623	SE207999.003	LB203182	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP213_0.5_200623	SE207999.004	LB203182	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP214_0.1_200623	SE207999.005	LB203182	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP214_0.5_200623	SE207999.006	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP215_0.1_200623	SE207999.007	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP215_0.5_200623	SE207999.008	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP216_0.1_200623	SE207999.009	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP216_0.5_200623	SE207999.011	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP217_0.1_200623	SE207999.012	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP217_0.5_200623	SE207999.013	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP218_0.1_200623	SE207999.014	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP218_0.5_200623	SE207999.015	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP219_0.1_200623	SE207999.016	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP219_0.5_200623	SE207999.017	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_QC141_200623	SE207999.018	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_QC138_200623	SE207999.019	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_QC411_200623	SE207999.020	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_QC511_200623	SE207999.021	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP211_0.1_200623	SE207999.022	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	04 Jul 2020
0407_TP211_0.5_200623	SE207999.023	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	04 Jul 2020

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP212_0.1_200623	SE207999.001	LB203209	23 Mar 2020	23 Jun 2020	19 Sep 2020	01 Jul 2020	19 Sep 2020	03 Jul 2020
0407_TP212_0.5_200623	SE207999.002	LB203209	23 Mar 2020	23 Jun 2020	19 Sep 2020	01 Jul 2020	19 Sep 2020	03 Jul 2020
0407_TP213_0.1_200623	SE207999.003	LB203209	23 Mar 2020	23 Jun 2020	19 Sep 2020	01 Jul 2020	19 Sep 2020	03 Jul 2020
0407_TP213_0.5_200623	SE207999.004	LB203209	23 Mar 2020	23 Jun 2020	19 Sep 2020	01 Jul 2020	19 Sep 2020	03 Jul 2020
0407_TP214_0.1_200623	SE207999.005	LB203209	23 Mar 2020	23 Jun 2020	19 Sep 2020	01 Jul 2020	19 Sep 2020	03 Jul 2020
0407_TP214_0.5_200623	SE207999.006	LB203209	23 Mar 2020	23 Jun 2020	19 Sep 2020	01 Jul 2020	19 Sep 2020	03 Jul 2020
0407_TP215_0.1_200623	SE207999.007	LB203209	23 Mar 2020	23 Jun 2020	19 Sep 2020	01 Jul 2020	19 Sep 2020	03 Jul 2020
0407_TP215_0.5_200623	SE207999.008	LB203209	23 Mar 2020	23 Jun 2020	19 Sep 2020	01 Jul 2020	19 Sep 2020	03 Jul 2020
0407_TP216_0.1_200623	SE207999.009	LB203209	23 Mar 2020	23 Jun 2020	19 Sep 2020	01 Jul 2020	19 Sep 2020	03 Jul 2020
0407_TP216_0.5_200623	SE207999.011	LB203209	23 Mar 2020	23 Jun 2020	19 Sep 2020	01 Jul 2020	19 Sep 2020	03 Jul 2020
0407_TP217_0.1_200623	SE207999.012	LB203209	23 Mar 2020	23 Jun 2020	19 Sep 2020	01 Jul 2020	19 Sep 2020	03 Jul 2020
0407_TP217_0.5_200623	SE207999.013	LB203209	23 Mar 2020	23 Jun 2020	19 Sep 2020	01 Jul 2020	19 Sep 2020	03 Jul 2020
0407_TP218_0.1_200623	SE207999.014	LB203209	23 Mar 2020	23 Jun 2020	19 Sep 2020	01 Jul 2020	19 Sep 2020	03 Jul 2020
0407_TP218_0.5_200623	SE207999.015	LB203209	23 Mar 2020	23 Jun 2020	19 Sep 2020	01 Jul 2020	19 Sep 2020	03 Jul 2020
0407_TP219_0.1_200623	SE207999.016	LB203209	23 Mar 2020	23 Jun 2020	19 Sep 2020	01 Jul 2020	19 Sep 2020	03 Jul 2020
0407_TP219_0.5_200623	SE207999.017	LB203209	23 Mar 2020	23 Jun 2020	19 Sep 2020	01 Jul 2020	19 Sep 2020	03 Jul 2020
0407_QC141_200623	SE207999.018	LB203209	23 Mar 2020	23 Jun 2020	19 Sep 2020	01 Jul 2020	19 Sep 2020	03 Jul 2020
0407_QC138_200623	SE207999.019	LB203209	23 Mar 2020	23 Jun 2020	19 Sep 2020	01 Jul 2020	19 Sep 2020	03 Jul 2020
0407_QC411_200623	SE207999.020	LB203270	23 Mar 2020	23 Jun 2020	19 Sep 2020	01 Jul 2020	19 Sep 2020	03 Jul 2020
0407_QC511_200623	SE207999.021	LB203270	23 Mar 2020	23 Jun 2020	19 Sep 2020	01 Jul 2020	19 Sep 2020	03 Jul 2020
0407_TP211_0.1_200623	SE207999.022	LB203270	23 Mar 2020	23 Jun 2020	19 Sep 2020	01 Jul 2020	19 Sep 2020	03 Jul 2020
0407_TP211_0.5_200623	SE207999.023	LB203270	23 Mar 2020	23 Jun 2020	19 Sep 2020	01 Jul 2020	19 Sep 2020	03 Jul 2020

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP212_0.1_200623	SE207999.001	LB203182	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP212_0.5_200623	SE207999.002	LB203182	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP213_0.1_200623	SE207999.003	LB203182	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP213_0.5_200623	SE207999.004	LB203182	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP214_0.1_200623	SE207999.005	LB203182	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP214_0.5_200623	SE207999.006	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP215_0.1_200623	SE207999.007	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP215_0.5_200623	SE207999.008	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP216_0.1_200623	SE207999.009	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP216_0.5_200623	SE207999.011	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP217_0.1_200623	SE207999.012	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP217_0.5_200623	SE207999.013	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP218_0.1_200623	SE207999.014	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP218_0.5_200623	SE207999.015	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP219_0.1_200623	SE207999.016	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP219_0.5_200623	SE207999.017	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_QC141_200623	SE207999.018	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_QC138_200623	SE207999.019	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_QC411_200623	SE207999.020	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_QC511_200623	SE207999.021	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP211_0.1_200623	SE207999.022	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP211_0.5_200623	SE207999.023	LB203183	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP212_0.1_200623	SE207999.001	LB203179	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP212_0.5_200623	SE207999.002	LB203179	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP213_0.1_200623	SE207999.003	LB203179	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP213_0.5_200623	SE207999.004	LB203179	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP214_0.1_200623	SE207999.005	LB203179	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP214_0.5_200623	SE207999.006	LB203181	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP215_0.1_200623	SE207999.007	LB203181	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP215_0.5_200623	SE207999.008	LB203181	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP216_0.1_200623	SE207999.009	LB203181	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP216_0.5_200623	SE207999.011	LB203181	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP217_0.1_200623	SE207999.012	LB203181	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP217_0.5_200623	SE207999.013	LB203181	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP218_0.1_200623	SE207999.014	LB203181	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP218_0.5_200623	SE207999.015	LB203181	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP219_0.1_200623	SE207999.016	LB203181	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP219_0.5_200623	SE207999.017	LB203181	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_QC141_200623	SE207999.018	LB203181	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_QC138_200623	SE207999.019	LB203181	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_QC411_200623	SE207999.020	LB203181	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_QC511_200623	SE207999.021	LB203181	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP211_0.1_200623	SE207999.022	LB203181	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP211_0.5_200623	SE207999.023	LB203181	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP212_0.1_200623	SE207999.001	LB203179	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP212_0.5_200623	SE207999.002	LB203179	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP213_0.1_200623	SE207999.003	LB203179	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP213_0.5_200623	SE207999.004	LB203179	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP214_0.1_200623	SE207999.005	LB203179	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP214_0.5_200623	SE207999.006	LB203181	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP215_0.1_200623	SE207999.007	LB203181	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP215_0.5_200623	SE207999.008	LB203181	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP216_0.1_200623	SE207999.009	LB203181	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP216_0.5_200623	SE207999.011	LB203181	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP217_0.1_200623	SE207999.012	LB203181	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP217_0.5_200623	SE207999.013	LB203181	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP218_0.1_200623	SE207999.014	LB203181	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP218_0.5_200623	SE207999.015	LB203181	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP219_0.1_200623	SE207999.016	LB203181	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP219_0.5_200623	SE207999.017	LB203181	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_QC141_200623	SE207999.018	LB203181	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_QC138_200623	SE207999.019	LB203181	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_QC411_200623	SE207999.020	LB203181	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_QC511_200623	SE207999.021	LB203181	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP211_0.1_200623	SE207999.022	LB203181	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020
0407_TP211_0.5_200623	SE207999.023	LB203181	23 Mar 2020	23 Jun 2020	06 Apr 2020	01 Jul 2020†	10 Aug 2020	03 Jul 2020

HOLDING TIME SUMMARY

SE207999 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP212_0.1_200623	SE207999.001	%	60 - 130%	101
	0407_TP212_0.5_200623	SE207999.002	%	60 - 130%	101
	0407_TP213_0.1_200623	SE207999.003	%	60 - 130%	96
	0407_TP213_0.5_200623	SE207999.004	%	60 - 130%	92
	0407_TP214_0.1_200623	SE207999.005	%	60 - 130%	102
	0407_TP214_0.5_200623	SE207999.006	%	60 - 130%	102
	0407_TP215_0.1_200623	SE207999.007	%	60 - 130%	106
	0407_TP215_0.5_200623	SE207999.008	%	60 - 130%	99
	0407_TP216_0.1_200623	SE207999.009	%	60 - 130%	103
	0407_TP216_0.5_200623	SE207999.011	%	60 - 130%	99
	0407_TP217_0.1_200623	SE207999.012	%	60 - 130%	108
	0407_TP217_0.5_200623	SE207999.013	%	60 - 130%	96
	0407_TP218_0.1_200623	SE207999.014	%	60 - 130%	111
	0407_TP218_0.5_200623	SE207999.015	%	60 - 130%	98
	0407_TP219_0.1_200623	SE207999.016	%	60 - 130%	105
	0407_TP219_0.5_200623	SE207999.017	%	60 - 130%	97
	0407_QC141_200623	SE207999.018	%	60 - 130%	107
	0407_QC138_200623	SE207999.019	%	60 - 130%	105
	0407_TP211_0.1_200623	SE207999.022	%	60 - 130%	103
	0407_TP211_0.5_200623	SE207999.023	%	60 - 130%	113

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP212_0.1_200623	SE207999.001	%	60 - 130%	81
	0407_TP212_0.5_200623	SE207999.002	%	60 - 130%	78
	0407_TP213_0.1_200623	SE207999.003	%	60 - 130%	82
	0407_TP213_0.5_200623	SE207999.004	%	60 - 130%	86
	0407_TP214_0.1_200623	SE207999.005	%	60 - 130%	79
	0407_TP214_0.5_200623	SE207999.006	%	60 - 130%	75
	0407_TP215_0.1_200623	SE207999.007	%	60 - 130%	79
	0407_TP215_0.5_200623	SE207999.008	%	60 - 130%	78
	0407_TP216_0.1_200623	SE207999.009	%	60 - 130%	75
	0407_TP216_0.5_200623	SE207999.011	%	60 - 130%	81
	0407_TP217_0.1_200623	SE207999.012	%	60 - 130%	78
	0407_TP217_0.5_200623	SE207999.013	%	60 - 130%	74
	0407_TP218_0.1_200623	SE207999.014	%	60 - 130%	75
	0407_TP218_0.5_200623	SE207999.015	%	60 - 130%	76
	0407_TP219_0.1_200623	SE207999.016	%	60 - 130%	77
	0407_TP219_0.5_200623	SE207999.017	%	60 - 130%	80
	0407_QC141_200623	SE207999.018	%	60 - 130%	78
	0407_QC138_200623	SE207999.019	%	60 - 130%	86
	0407_TP211_0.1_200623	SE207999.022	%	60 - 130%	86
	0407_TP211_0.5_200623	SE207999.023	%	60 - 130%	94
d14-p-terphenyl (Surrogate)	0407_TP212_0.1_200623	SE207999.001	%	60 - 130%	75
	0407_TP212_0.5_200623	SE207999.002	%	60 - 130%	80
	0407_TP213_0.1_200623	SE207999.003	%	60 - 130%	93
	0407_TP213_0.5_200623	SE207999.004	%	60 - 130%	111
	0407_TP214_0.1_200623	SE207999.005	%	60 - 130%	83
	0407_TP214_0.5_200623	SE207999.006	%	60 - 130%	74
	0407_TP215_0.1_200623	SE207999.007	%	60 - 130%	77
	0407_TP215_0.5_200623	SE207999.008	%	60 - 130%	74
	0407_TP216_0.1_200623	SE207999.009	%	60 - 130%	77
	0407_TP216_0.5_200623	SE207999.011	%	60 - 130%	79
	0407_TP217_0.1_200623	SE207999.012	%	60 - 130%	78
	0407_TP217_0.5_200623	SE207999.013	%	60 - 130%	74
	0407_TP218_0.1_200623	SE207999.014	%	60 - 130%	73
	0407_TP218_0.5_200623	SE207999.015	%	60 - 130%	78
	0407_TP219_0.1_200623	SE207999.016	%	60 - 130%	81
	0407_TP219_0.5_200623	SE207999.017	%	60 - 130%	76
	0407_QC141_200623	SE207999.018	%	60 - 130%	86
	0407_QC138_200623	SE207999.019	%	60 - 130%	86

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d14-p-terphenyl (Surrogate)	0407_TP211_0.1_200623	SE207999.022	%	60 - 130%	92
	0407_TP211_0.5_200623	SE207999.023	%	60 - 130%	98

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP212_0.1_200623	SE207999.001	%	70 - 130%	81
	0407_TP212_0.5_200623	SE207999.002	%	70 - 130%	78
	0407_TP213_0.1_200623	SE207999.003	%	70 - 130%	82
	0407_TP213_0.5_200623	SE207999.004	%	70 - 130%	86
	0407_TP214_0.1_200623	SE207999.005	%	70 - 130%	79
	0407_TP214_0.5_200623	SE207999.006	%	70 - 130%	75
	0407_TP215_0.1_200623	SE207999.007	%	70 - 130%	79
	0407_TP215_0.5_200623	SE207999.008	%	70 - 130%	78
	0407_TP216_0.1_200623	SE207999.009	%	70 - 130%	75
	0407_TP216_0.5_200623	SE207999.011	%	70 - 130%	81
	0407_TP217_0.1_200623	SE207999.012	%	70 - 130%	78
	0407_TP217_0.5_200623	SE207999.013	%	70 - 130%	74
	0407_TP218_0.1_200623	SE207999.014	%	70 - 130%	75
	0407_TP218_0.5_200623	SE207999.015	%	70 - 130%	76
	0407_TP219_0.1_200623	SE207999.016	%	70 - 130%	77
	0407_TP219_0.5_200623	SE207999.017	%	70 - 130%	80
	0407_QC141_200623	SE207999.018	%	70 - 130%	78
	0407_QC138_200623	SE207999.019	%	70 - 130%	86
	0407_TP211_0.1_200623	SE207999.022	%	70 - 130%	86
	0407_TP211_0.5_200623	SE207999.023	%	70 - 130%	94
d14-p-terphenyl (Surrogate)	0407_TP212_0.1_200623	SE207999.001	%	70 - 130%	75
	0407_TP212_0.5_200623	SE207999.002	%	70 - 130%	80
	0407_TP213_0.1_200623	SE207999.003	%	70 - 130%	93
	0407_TP213_0.5_200623	SE207999.004	%	70 - 130%	111
	0407_TP214_0.1_200623	SE207999.005	%	70 - 130%	83
	0407_TP214_0.5_200623	SE207999.006	%	70 - 130%	74
	0407_TP215_0.1_200623	SE207999.007	%	70 - 130%	77
	0407_TP215_0.5_200623	SE207999.008	%	70 - 130%	74
	0407_TP216_0.1_200623	SE207999.009	%	70 - 130%	77
	0407_TP216_0.5_200623	SE207999.011	%	70 - 130%	79
	0407_TP217_0.1_200623	SE207999.012	%	70 - 130%	78
	0407_TP217_0.5_200623	SE207999.013	%	70 - 130%	74
	0407_TP218_0.1_200623	SE207999.014	%	70 - 130%	73
	0407_TP218_0.5_200623	SE207999.015	%	70 - 130%	78
	0407_TP219_0.1_200623	SE207999.016	%	70 - 130%	81
	0407_TP219_0.5_200623	SE207999.017	%	70 - 130%	76
	0407_QC141_200623	SE207999.018	%	70 - 130%	86
	0407_QC138_200623	SE207999.019	%	70 - 130%	86
	0407_TP211_0.1_200623	SE207999.022	%	70 - 130%	92
	0407_TP211_0.5_200623	SE207999.023	%	70 - 130%	98
d5-nitrobenzene (Surrogate)	0407_TP212_0.1_200623	SE207999.001	%	70 - 130%	73
	0407_TP212_0.5_200623	SE207999.002	%	70 - 130%	76
	0407_TP213_0.1_200623	SE207999.003	%	70 - 130%	82
	0407_TP213_0.5_200623	SE207999.004	%	70 - 130%	88
	0407_TP214_0.1_200623	SE207999.005	%	70 - 130%	89
	0407_TP214_0.5_200623	SE207999.006	%	70 - 130%	69 ①
	0407_TP215_0.1_200623	SE207999.007	%	70 - 130%	78
	0407_TP215_0.5_200623	SE207999.008	%	70 - 130%	74
	0407_TP216_0.1_200623	SE207999.009	%	70 - 130%	71
	0407_TP216_0.5_200623	SE207999.011	%	70 - 130%	74
	0407_TP217_0.1_200623	SE207999.012	%	70 - 130%	78
	0407_TP217_0.5_200623	SE207999.013	%	70 - 130%	80
	0407_TP218_0.1_200623	SE207999.014	%	70 - 130%	71
	0407_TP218_0.5_200623	SE207999.015	%	70 - 130%	71
	0407_TP219_0.1_200623	SE207999.016	%	70 - 130%	80
	0407_TP219_0.5_200623	SE207999.017	%	70 - 130%	77

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d5-nitrobenzene (Surrogate)	0407_QC141_200623	SE207999.018	%	70 - 130%	80
	0407_QC138_200623	SE207999.019	%	70 - 130%	74
	0407_TP211_0.1_200623	SE207999.022	%	70 - 130%	78
	0407_TP211_0.5_200623	SE207999.023	%	70 - 130%	90

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP212_0.1_200623	SE207999.001	%	60 - 130%	101
	0407_TP212_0.5_200623	SE207999.002	%	60 - 130%	101
	0407_TP213_0.1_200623	SE207999.003	%	60 - 130%	96
	0407_TP213_0.5_200623	SE207999.004	%	60 - 130%	92
	0407_TP214_0.1_200623	SE207999.005	%	60 - 130%	102
	0407_TP214_0.5_200623	SE207999.006	%	60 - 130%	102
	0407_TP215_0.1_200623	SE207999.007	%	60 - 130%	106
	0407_TP215_0.5_200623	SE207999.008	%	60 - 130%	99
	0407_TP216_0.1_200623	SE207999.009	%	60 - 130%	103
	0407_TP216_0.5_200623	SE207999.011	%	60 - 130%	99
	0407_TP217_0.1_200623	SE207999.012	%	60 - 130%	108
	0407_TP217_0.5_200623	SE207999.013	%	60 - 130%	96
	0407_TP218_0.1_200623	SE207999.014	%	60 - 130%	111
	0407_TP218_0.5_200623	SE207999.015	%	60 - 130%	98
	0407_TP219_0.1_200623	SE207999.016	%	60 - 130%	105
	0407_TP219_0.5_200623	SE207999.017	%	60 - 130%	97
	0407_QC141_200623	SE207999.018	%	60 - 130%	107
	0407_QC138_200623	SE207999.019	%	60 - 130%	105
	0407_TP211_0.1_200623	SE207999.022	%	60 - 130%	103
	0407_TP211_0.5_200623	SE207999.023	%	60 - 130%	113

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	0407_TP212_0.1_200623	SE207999.001	%	70 - 130%	74
	0407_TP212_0.5_200623	SE207999.002	%	70 - 130%	71
	0407_TP213_0.1_200623	SE207999.003	%	70 - 130%	80
	0407_TP213_0.5_200623	SE207999.004	%	70 - 130%	81
	0407_TP214_0.1_200623	SE207999.005	%	70 - 130%	76
	0407_TP214_0.5_200623	SE207999.006	%	70 - 130%	77
	0407_TP215_0.1_200623	SE207999.007	%	70 - 130%	77
	0407_TP215_0.5_200623	SE207999.008	%	70 - 130%	74
	0407_TP216_0.1_200623	SE207999.009	%	70 - 130%	72
	0407_TP216_0.5_200623	SE207999.011	%	70 - 130%	72
	0407_TP217_0.1_200623	SE207999.012	%	70 - 130%	73
	0407_TP217_0.5_200623	SE207999.013	%	70 - 130%	79
	0407_TP218_0.1_200623	SE207999.014	%	70 - 130%	72
	0407_TP218_0.5_200623	SE207999.015	%	70 - 130%	73
	0407_TP219_0.1_200623	SE207999.016	%	70 - 130%	73
	0407_TP219_0.5_200623	SE207999.017	%	70 - 130%	73
	0407_QC141_200623	SE207999.018	%	70 - 130%	76
	0407_QC138_200623	SE207999.019	%	70 - 130%	73
	0407_TP211_0.1_200623	SE207999.022	%	70 - 130%	76
	0407_TP211_0.5_200623	SE207999.023	%	70 - 130%	76
d5-phenol (Surrogate)	0407_TP212_0.1_200623	SE207999.001	%	50 - 130%	75
	0407_TP212_0.5_200623	SE207999.002	%	50 - 130%	73
	0407_TP213_0.1_200623	SE207999.003	%	50 - 130%	74
	0407_TP213_0.5_200623	SE207999.004	%	50 - 130%	76
	0407_TP214_0.1_200623	SE207999.005	%	50 - 130%	72
	0407_TP214_0.5_200623	SE207999.006	%	50 - 130%	77
	0407_TP215_0.1_200623	SE207999.007	%	50 - 130%	75
	0407_TP215_0.5_200623	SE207999.008	%	50 - 130%	76
	0407_TP216_0.1_200623	SE207999.009	%	50 - 130%	77
	0407_TP216_0.5_200623	SE207999.011	%	50 - 130%	78
	0407_TP217_0.1_200623	SE207999.012	%	50 - 130%	78
	0407_TP217_0.5_200623	SE207999.013	%	50 - 130%	74

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil (continued) — **Method: ME-(AU)-[ENV]AN420**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d5-phenol (Surrogate)	0407_TP218_0.1_200623	SE207999.014	%	50 - 130%	77
	0407_TP218_0.5_200623	SE207999.015	%	50 - 130%	77
	0407_TP219_0.1_200623	SE207999.016	%	50 - 130%	78
	0407_TP219_0.5_200623	SE207999.017	%	50 - 130%	71
	0407_QC141_200623	SE207999.018	%	50 - 130%	76
	0407_QC138_200623	SE207999.019	%	50 - 130%	77
	0407_TP211_0.1_200623	SE207999.022	%	50 - 130%	75
	0407_TP211_0.5_200623	SE207999.023	%	50 - 130%	75

VOC's in Soil — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP212_0.1_200623	SE207999.001	%	60 - 130%	66
	0407_TP212_0.5_200623	SE207999.002	%	60 - 130%	63
	0407_TP213_0.1_200623	SE207999.003	%	60 - 130%	69
	0407_TP213_0.5_200623	SE207999.004	%	60 - 130%	66
	0407_TP214_0.1_200623	SE207999.005	%	60 - 130%	61
	0407_TP214_0.5_200623	SE207999.006	%	60 - 130%	86
	0407_TP215_0.1_200623	SE207999.007	%	60 - 130%	87
	0407_TP215_0.5_200623	SE207999.008	%	60 - 130%	90
	0407_TP216_0.1_200623	SE207999.009	%	60 - 130%	87
	0407_TP216_0.5_200623	SE207999.011	%	60 - 130%	92
	0407_TP217_0.1_200623	SE207999.012	%	60 - 130%	82
	0407_TP217_0.5_200623	SE207999.013	%	60 - 130%	89
	0407_TP218_0.1_200623	SE207999.014	%	60 - 130%	83
	0407_TP218_0.5_200623	SE207999.015	%	60 - 130%	80
	0407_TP219_0.1_200623	SE207999.016	%	60 - 130%	82
	0407_TP219_0.5_200623	SE207999.017	%	60 - 130%	95
	0407_QC141_200623	SE207999.018	%	60 - 130%	85
	0407_QC138_200623	SE207999.019	%	60 - 130%	90
	0407_QC411_200623	SE207999.020	%	60 - 130%	92
	0407_QC511_200623	SE207999.021	%	60 - 130%	83
	0407_TP211_0.1_200623	SE207999.022	%	60 - 130%	97
	0407_TP211_0.5_200623	SE207999.023	%	60 - 130%	85
d4-1,2-dichloroethane (Surrogate)	0407_TP212_0.1_200623	SE207999.001	%	60 - 130%	91
	0407_TP212_0.5_200623	SE207999.002	%	60 - 130%	88
	0407_TP213_0.1_200623	SE207999.003	%	60 - 130%	94
	0407_TP213_0.5_200623	SE207999.004	%	60 - 130%	90
	0407_TP214_0.1_200623	SE207999.005	%	60 - 130%	84
	0407_TP214_0.5_200623	SE207999.006	%	60 - 130%	100
	0407_TP215_0.1_200623	SE207999.007	%	60 - 130%	81
	0407_TP215_0.5_200623	SE207999.008	%	60 - 130%	98
	0407_TP216_0.1_200623	SE207999.009	%	60 - 130%	86
	0407_TP216_0.5_200623	SE207999.011	%	60 - 130%	93
	0407_TP217_0.1_200623	SE207999.012	%	60 - 130%	87
	0407_TP217_0.5_200623	SE207999.013	%	60 - 130%	89
	0407_TP218_0.1_200623	SE207999.014	%	60 - 130%	87
	0407_TP218_0.5_200623	SE207999.015	%	60 - 130%	91
	0407_TP219_0.1_200623	SE207999.016	%	60 - 130%	94
	0407_TP219_0.5_200623	SE207999.017	%	60 - 130%	100
	0407_QC141_200623	SE207999.018	%	60 - 130%	95
	0407_QC138_200623	SE207999.019	%	60 - 130%	87
	0407_QC411_200623	SE207999.020	%	60 - 130%	95
	0407_QC511_200623	SE207999.021	%	60 - 130%	95
	0407_TP211_0.1_200623	SE207999.022	%	60 - 130%	115
	0407_TP211_0.5_200623	SE207999.023	%	60 - 130%	97
d8-toluene (Surrogate)	0407_TP212_0.1_200623	SE207999.001	%	60 - 130%	88
	0407_TP212_0.5_200623	SE207999.002	%	60 - 130%	86
	0407_TP213_0.1_200623	SE207999.003	%	60 - 130%	91
	0407_TP213_0.5_200623	SE207999.004	%	60 - 130%	87
	0407_TP214_0.1_200623	SE207999.005	%	60 - 130%	82
	0407_TP214_0.5_200623	SE207999.006	%	60 - 130%	94

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d8-toluene (Surrogate)	0407_TP215_0.1_200623	SE207999.007	%	60 - 130%	85
	0407_TP215_0.5_200623	SE207999.008	%	60 - 130%	85
	0407_TP216_0.1_200623	SE207999.009	%	60 - 130%	88
	0407_TP216_0.5_200623	SE207999.011	%	60 - 130%	88
	0407_TP217_0.1_200623	SE207999.012	%	60 - 130%	90
	0407_TP217_0.5_200623	SE207999.013	%	60 - 130%	90
	0407_TP218_0.1_200623	SE207999.014	%	60 - 130%	83
	0407_TP218_0.5_200623	SE207999.015	%	60 - 130%	85
	0407_TP219_0.1_200623	SE207999.016	%	60 - 130%	88
	0407_TP219_0.5_200623	SE207999.017	%	60 - 130%	91
	0407_QC141_200623	SE207999.018	%	60 - 130%	83
	0407_QC138_200623	SE207999.019	%	60 - 130%	85
	0407_QC411_200623	SE207999.020	%	60 - 130%	90
	0407_QC511_200623	SE207999.021	%	60 - 130%	85
	0407_TP211_0.1_200623	SE207999.022	%	60 - 130%	86
	0407_TP211_0.5_200623	SE207999.023	%	60 - 130%	85

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP212_0.1_200623	SE207999.001	%	60 - 130%	66
	0407_TP212_0.5_200623	SE207999.002	%	60 - 130%	63
	0407_TP213_0.1_200623	SE207999.003	%	60 - 130%	69
	0407_TP213_0.5_200623	SE207999.004	%	60 - 130%	66
	0407_TP214_0.1_200623	SE207999.005	%	60 - 130%	61
	0407_TP214_0.5_200623	SE207999.006	%	60 - 130%	86
	0407_TP215_0.1_200623	SE207999.007	%	60 - 130%	87
	0407_TP215_0.5_200623	SE207999.008	%	60 - 130%	90
	0407_TP216_0.1_200623	SE207999.009	%	60 - 130%	87
	0407_TP216_0.5_200623	SE207999.011	%	60 - 130%	92
	0407_TP217_0.1_200623	SE207999.012	%	60 - 130%	82
	0407_TP217_0.5_200623	SE207999.013	%	60 - 130%	89
	0407_TP218_0.1_200623	SE207999.014	%	60 - 130%	83
	0407_TP218_0.5_200623	SE207999.015	%	60 - 130%	80
	0407_TP219_0.1_200623	SE207999.016	%	60 - 130%	82
	0407_TP219_0.5_200623	SE207999.017	%	60 - 130%	95
	0407_QC141_200623	SE207999.018	%	60 - 130%	85
	0407_QC138_200623	SE207999.019	%	60 - 130%	90
	0407_QC411_200623	SE207999.020	%	60 - 130%	92
	0407_TP211_0.1_200623	SE207999.022	%	60 - 130%	97
	0407_TP211_0.5_200623	SE207999.023	%	60 - 130%	85
d4-1,2-dichloroethane (Surrogate)	0407_TP212_0.1_200623	SE207999.001	%	60 - 130%	91
	0407_TP212_0.5_200623	SE207999.002	%	60 - 130%	88
	0407_TP213_0.1_200623	SE207999.003	%	60 - 130%	94
	0407_TP213_0.5_200623	SE207999.004	%	60 - 130%	90
	0407_TP214_0.1_200623	SE207999.005	%	60 - 130%	84
	0407_TP214_0.5_200623	SE207999.006	%	60 - 130%	100
	0407_TP215_0.1_200623	SE207999.007	%	60 - 130%	81
	0407_TP215_0.5_200623	SE207999.008	%	60 - 130%	98
	0407_TP216_0.1_200623	SE207999.009	%	60 - 130%	86
	0407_TP216_0.5_200623	SE207999.011	%	60 - 130%	93
	0407_TP217_0.1_200623	SE207999.012	%	60 - 130%	87
	0407_TP217_0.5_200623	SE207999.013	%	60 - 130%	89
	0407_TP218_0.1_200623	SE207999.014	%	60 - 130%	87
	0407_TP218_0.5_200623	SE207999.015	%	60 - 130%	91
	0407_TP219_0.1_200623	SE207999.016	%	60 - 130%	94
	0407_TP219_0.5_200623	SE207999.017	%	60 - 130%	100
	0407_QC141_200623	SE207999.018	%	60 - 130%	95
	0407_QC138_200623	SE207999.019	%	60 - 130%	87
	0407_QC411_200623	SE207999.020	%	60 - 130%	95
	0407_TP211_0.1_200623	SE207999.022	%	60 - 130%	115
	0407_TP211_0.5_200623	SE207999.023	%	60 - 130%	97

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d8-toluene (Surrogate)	0407_TP212_0.1_200623	SE207999.001	%	60 - 130%	88
	0407_TP212_0.5_200623	SE207999.002	%	60 - 130%	86
	0407_TP213_0.1_200623	SE207999.003	%	60 - 130%	91
	0407_TP213_0.5_200623	SE207999.004	%	60 - 130%	87
	0407_TP214_0.1_200623	SE207999.005	%	60 - 130%	82
	0407_TP214_0.5_200623	SE207999.006	%	60 - 130%	94
	0407_TP215_0.1_200623	SE207999.007	%	60 - 130%	85
	0407_TP215_0.5_200623	SE207999.008	%	60 - 130%	85
	0407_TP216_0.1_200623	SE207999.009	%	60 - 130%	88
	0407_TP216_0.5_200623	SE207999.011	%	60 - 130%	88
	0407_TP217_0.1_200623	SE207999.012	%	60 - 130%	90
	0407_TP217_0.5_200623	SE207999.013	%	60 - 130%	90
	0407_TP218_0.1_200623	SE207999.014	%	60 - 130%	83
	0407_TP218_0.5_200623	SE207999.015	%	60 - 130%	85
	0407_TP219_0.1_200623	SE207999.016	%	60 - 130%	88
	0407_TP219_0.5_200623	SE207999.017	%	60 - 130%	91
	0407_QC141_200623	SE207999.018	%	60 - 130%	83
	0407_QC138_200623	SE207999.019	%	60 - 130%	85
	0407_QC411_200623	SE207999.020	%	60 - 130%	90
	0407_TP211_0.1_200623	SE207999.022	%	60 - 130%	86
	0407_TP211_0.5_200623	SE207999.023	%	60 - 130%	85

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result
LB203215.001	Mercury	mg/kg	0.05	<0.05
LB203273.001	Mercury	mg/kg	0.05	<0.05

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203182.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	95
LB203183.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	95

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB203182.001	Dichlorvos	mg/kg	0.5	<0.5
	Dimethoate	mg/kg	0.5	<0.5
	Diazinon (Dimpylate)	mg/kg	0.5	<0.5
	Fenitrothion	mg/kg	0.2	<0.2
	Malathion	mg/kg	0.2	<0.2

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203182.001		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	76
		d14-p-terphenyl (Surrogate)	%	-	84
LB203183.001		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	76
		d14-p-terphenyl (Surrogate)	%	-	94

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203182.001		Naphthalene	mg/kg	0.1	<0.1
		2-methylnaphthalene	mg/kg	0.1	<0.1
		1-methylnaphthalene	mg/kg	0.1	<0.1
		Acenaphthylene	mg/kg	0.1	<0.1
		Acenaphthene	mg/kg	0.1	<0.1
		Fluorene	mg/kg	0.1	<0.1
		Phenanthrene	mg/kg	0.1	<0.1
		Anthracene	mg/kg	0.1	<0.1
		Fluoranthene	mg/kg	0.1	<0.1
		Pyrene	mg/kg	0.1	<0.1
		Benzo(a)anthracene	mg/kg	0.1	<0.1
		Chrysene	mg/kg	0.1	<0.1
		Benzo(a)pyrene	mg/kg	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	84
		2-fluorobiphenyl (Surrogate)	%	-	76
		d14-p-terphenyl (Surrogate)	%	-	84
LB203183.001		Naphthalene	mg/kg	0.1	<0.1
		2-methylnaphthalene	mg/kg	0.1	<0.1
		1-methylnaphthalene	mg/kg	0.1	<0.1
		Acenaphthylene	mg/kg	0.1	<0.1
		Acenaphthene	mg/kg	0.1	<0.1
		Fluorene	mg/kg	0.1	<0.1
		Phenanthrene	mg/kg	0.1	<0.1
		Anthracene	mg/kg	0.1	<0.1
		Fluoranthene	mg/kg	0.1	<0.1
		Pyrene	mg/kg	0.1	<0.1
		Benzo(a)anthracene	mg/kg	0.1	<0.1
		Chrysene	mg/kg	0.1	<0.1
		Benzo(a)pyrene	mg/kg	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203183.001	Surrogates	d5-nitrobenzene (Surrogate)	%	-	89
		2-fluorobiphenyl (Surrogate)	%	-	76
		d14-p-terphenyl (Surrogate)	%	-	94

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203182.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	95
LB203183.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	95

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203182.001		Phenol	mg/kg	0.5	<0.5
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5
		2-nitrophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
		Pentachlorophenol	mg/kg	0.5	<0.5
		2,4-dinitrophenol	mg/kg	2	<2
		4-chloro-3-methylphenol	mg/kg	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	79
		d5-phenol (Surrogate)	%	-	78
LB203183.001		Phenol	mg/kg	0.5	<0.5
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5
		2-nitrophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
		Pentachlorophenol	mg/kg	0.5	<0.5
		2,4-dinitrophenol	mg/kg	2	<2

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Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203183.001		4-chloro-3-methylphenol	mg/kg	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	74
		d5-phenol (Surrogate)	%	-	75

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB203209.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0
LB203270.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB203182.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110
LB203183.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB203179.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1

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VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB203179.001	Halogenated Aliphatics	1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic	Benzene	mg/kg	0.1	<0.1
	Hydrocarbons	Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10
		MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	97
		d8-toluene (Surrogate)	%	-	95
		Bromofluorobenzene (Surrogate)	%	-	78
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1
LB203181.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1

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VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB203181.001	Halogenated Aliphatics	Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10
		MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	103
		d8-toluene (Surrogate)	%	-	87

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VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB203181.001	Surrogates	Bromofluorobenzene (Surrogate)	%	-	90
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB203179.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	97
LB203181.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	103

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207999.011	LB203215.014	Mercury	mg/kg	0.05	0.12	0.15	68	21
SE207999.019	LB203215.023	Mercury	mg/kg	0.05	0.13	0.13	68	2
SE207999.023	LB203273.019	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE208031.064	LB203273.014	Mercury	mg/kg	0.05	<0.05	<0.05	200	0

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207999.023	LB203185.019	% Moisture	%w/w	1	8.1	9.1	42	12
SE208124.007	LB203184.011	% Moisture	%w/w	1	14.4	15.4973821989	37	8

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207999.005	LB203182.022		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.15	30	1
SE207999.015	LB203183.024		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	0	200	0
			Alpha BHC	mg/kg	0.1	<0.1	0	200	0
			Lindane	mg/kg	0.1	<0.1	0	200	0
			Heptachlor	mg/kg	0.1	<0.1	0	200	0
			Aldrin	mg/kg	0.1	<0.1	0	200	0
			Beta BHC	mg/kg	0.1	<0.1	0	200	0
			Delta BHC	mg/kg	0.1	<0.1	0	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	0	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	0	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	0	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Dieldrin	mg/kg	0.2	<0.2	0	200	0
			Endrin	mg/kg	0.2	<0.2	0	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207999.015	LB203183.024		p,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	0	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	0	200	0
			Methoxychlor	mg/kg	0.1	<0.1	0	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	0	200	0
			Isodrin	mg/kg	0.1	<0.1	0	200	0
			Mirex	mg/kg	0.1	<0.1	0	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.147	30	0
SE207999.017	LB203183.025		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	0	200	0
			Alpha BHC	mg/kg	0.1	<0.1	0	200	0
			Lindane	mg/kg	0.1	<0.1	0	200	0
			Heptachlor	mg/kg	0.1	<0.1	0	200	0
			Aldrin	mg/kg	0.1	<0.1	0	200	0
			Beta BHC	mg/kg	0.1	<0.1	0	200	0
			Delta BHC	mg/kg	0.1	<0.1	0	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	0	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	0	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	0	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Dieldrin	mg/kg	0.2	<0.2	0	200	0
			Endrin	mg/kg	0.2	<0.2	0	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	0	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	0	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	0	200	0
			Methoxychlor	mg/kg	0.1	<0.1	0	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	0	200	0
			Isodrin	mg/kg	0.1	<0.1	0	200	0
			Mirex	mg/kg	0.1	<0.1	0	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.151	30	3

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207999.005	LB203182.022		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	1
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	0
SE207999.017	LB203183.024		Dichlorvos	mg/kg	0.5	<0.5	0	200	0
			Dimethoate	mg/kg	0.5	<0.5	0	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	0.0151737935	200	0
			Fenitrothion	mg/kg	0.2	<0.2	0	200	0
			Malathion	mg/kg	0.2	<0.2	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207999.017	LB203183.024		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	0	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	0	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	0	200	0
			Methidathion	mg/kg	0.5	<0.5	0	200	0
			Ethion	mg/kg	0.2	<0.2	0	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	0	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	0	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.3593748214	30	11
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.3611830912	30	6
SE208124.007	LB203182.014		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	2
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	4

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207999.005	LB203182.022		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	195	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	0.1	<0.1	146	1
			Anthracene	mg/kg	0.1	0.1	<0.1	147	14
			Fluoranthene	mg/kg	0.1	0.2	0.1	101	20
			Pyrene	mg/kg	0.1	0.2	0.1	98	20
			Benzo(a)anthracene	mg/kg	0.1	0.1	<0.1	131	7
			Chrysene	mg/kg	0.1	<0.1	<0.1	166	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	145	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	150	0
			Benzo(a)pyrene	mg/kg	0.1	0.1	0.1	124	4
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	159	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	162	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	<0.2	188	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	<0.3	130	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	<0.2	121	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	173	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	30	0
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	1
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	0
SE207999.017	LB203183.024		Naphthalene	mg/kg	0.1	<0.1	0	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	0	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	0	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	0	200	0
			Acenaphthene	mg/kg	0.1	<0.1	0	200	0
			Fluorene	mg/kg	0.1	<0.1	0	200	0
			Phenanthrene	mg/kg	0.1	<0.1	0.0032517999	200	0
			Anthracene	mg/kg	0.1	<0.1	0.0052830837	200	0
			Fluoranthene	mg/kg	0.1	<0.1	0.0075922496	200	0
			Pyrene	mg/kg	0.1	<0.1	0.0082689822	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207999.017	LB203183.024		Benzo(a)anthracene	mg/kg	0.1	<0.1	0.0159720172	200	0
			Chrysene	mg/kg	0.1	<0.1	0.0136286515	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	0.0106141730	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	0.0117579695	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	0.0051428413	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	0.0033045520	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	0	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	0.0034535468	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	0	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	0.242	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	0.121	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	0	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.335	30	14
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.3593748214	30	11
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.3611830912	30	6
SE208124.007	LB203182.014		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	<0.3	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	<0.2	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.3	0.3	30	1
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	2
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	4

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207999.005	LB203182.022		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	1
SE207999.015	LB203183.024		Arochlor 1016	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PCBs in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207999.015	LB203183.024		Arochlor 1262	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	0	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0.147	30	0
SE207999.017	LB203183.025		Arochlor 1016	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	0	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0.151	30	3

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207999.015	LB203183.023		Phenol	mg/kg	0.5	<0.5	0	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	0	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	0	200	0
			Total Cresol	mg/kg	1.5	<1.5	0	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	0	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	0	200	0
			4-nitrophenol	mg/kg	1	<1	0	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	0	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dinitrophenol	mg/kg	2	<2	0	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	0	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.6	3.63	30	0
			d5-phenol (Surrogate)	mg/kg	-	1.5	1.54	30	0
SE207999.017	LB203183.024		Phenol	mg/kg	0.5	<0.5	0	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	0	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	0	200	0
			Total Cresol	mg/kg	1.5	<1.5	0	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	0	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	0	200	0
			4-nitrophenol	mg/kg	1	<1	0	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	0	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dinitrophenol	mg/kg	2	<2	0	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	0	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.7	3.66	30	0
			d5-phenol (Surrogate)	mg/kg	-	1.4	1.41	30	0

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207999.011	LB203209.014	Arsenic, As	mg/kg	1	1	<1	128	9
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	1.7	1.5	61	14
		Copper, Cu	mg/kg	0.5	3.4	3.2	45	4
		Nickel, Ni	mg/kg	0.5	1.3	1.4	66	7

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207999.011	LB203209.014	Lead, Pb	mg/kg	1	8	8	43	3
		Zinc, Zn	mg/kg	2	14	13	45	6
SE207999.019	LB203209.023	Arsenic, As	mg/kg	1	8	9	42	10
		Cadmium, Cd	mg/kg	0.3	0.6	0.6	82	3
		Chromium, Cr	mg/kg	0.5	21	63	31	101 ②
		Copper, Cu	mg/kg	0.5	120	160	30	29
		Nickel, Ni	mg/kg	0.5	17	14	33	16
		Lead, Pb	mg/kg	1	160	160	31	4
		Zinc, Zn	mg/kg	2	570	580	30	2
SE207999.023	LB203270.019	Arsenic, As	mg/kg	1	2	2	79	10
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	8.9	7.4	36	19
		Copper, Cu	mg/kg	0.5	25	45	31	58 ②
		Nickel, Ni	mg/kg	0.5	12	11	34	3
		Lead, Pb	mg/kg	1	13	14	37	4
		Zinc, Zn	mg/kg	2	46	43	35	6
SE208031.064	LB203270.014	Arsenic, As	mg/kg	1	8	8	43	1
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	22	17	33	25
		Copper, Cu	mg/kg	0.5	11	8.3	35	28
		Nickel, Ni	mg/kg	0.5	4.2	3.0	44	31
		Lead, Pb	mg/kg	1	21	18	35	14
		Zinc, Zn	mg/kg	2	20	17	41	15

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207999.005	LB203182.022		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	61	82	93	29
			TRH C29-C36	mg/kg	45	52	59	111	13
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	110	140	117	22
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	95	120	114	23
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE207999.015	LB203183.023		TRH C10-C14	mg/kg	20	<20	0	200	0
			TRH C15-C28	mg/kg	45	<45	0	200	0
			TRH C29-C36	mg/kg	45	<45	0	200	0
			TRH C37-C40	mg/kg	100	<100	0	200	0
			TRH C10-C36 Total	mg/kg	110	<110	0	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	0	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	0	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	0	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	0	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	0	200	0
SE207999.017	LB203183.024		TRH C10-C14	mg/kg	20	<20	0	200	0
			TRH C15-C28	mg/kg	45	<45	0	200	0
			TRH C29-C36	mg/kg	45	<45	0	200	0
			TRH C37-C40	mg/kg	100	<100	0	200	0
			TRH C10-C36 Total	mg/kg	110	<110	0	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	0	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	0	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	0	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	0	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	0	200	0
SE208124.007	LB203182.014		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208124.007	LB203182.014		TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207999.005	LB203179.022	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207999.005	LB203179.022	Monocyclic	tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.4	8.1	50	4
			d8-toluene (Surrogate)	mg/kg	-	8.2	8.0	50	2
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.1	6.0	50	2
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE207999.016	LB203181.014	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207999.016	LB203181.014	Halogenated	1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
		Aliphatics	Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.4	9.0	50	5
			d8-toluene (Surrogate)	mg/kg	-	8.8	8.3	50	5
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.2	8.5	50	3
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE207999.023	LB203181.022	Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.7	9.8	50	1
			d8-toluene (Surrogate)	mg/kg	-	8.5	9.1	50	8
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.5	9.1	50	7
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
SE208124.007	LB203179.014	Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208124.007	LB203179.014	Monocyclic	Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.6	9.7	50	2
			d8-toluene (Surrogate)	mg/kg	-	9.2	9.6	50	4
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.6	9.0	50	5
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207999.005	LB203179.022		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.4	8.1	30	4
			d8-toluene (Surrogate)	mg/kg	-	8.2	8.0	30	2
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.1	6.0	30	2
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE207999.016	LB203181.014		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.4	9.0	30	5
			d8-toluene (Surrogate)	mg/kg	-	8.8	8.3	30	5
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.2	8.5	30	3
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE207999.023	LB203181.022		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.7	9.8	30	1
			d8-toluene (Surrogate)	mg/kg	-	8.5	9.1	30	8
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.5	9.1	30	7
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE208124.007	LB203179.014		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.6	9.7	30	2
			d8-toluene (Surrogate)	mg/kg	-	9.2	9.6	30	4
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.6	9.0	30	5
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203215.002	Mercury	mg/kg	0.05	0.22	0.2	70 - 130	110
LB203273.002	Mercury	mg/kg	0.05	0.19	0.2	70 - 130	97

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203182.002		Heptachlor	mg/kg	0.1	0.3	0.2	60 - 140	128
		Aldrin	mg/kg	0.1	0.3	0.2	60 - 140	128
		Delta BHC	mg/kg	0.1	0.3	0.2	60 - 140	128
		Dieldrin	mg/kg	0.2	0.3	0.2	60 - 140	129
		Endrin	mg/kg	0.2	0.3	0.2	60 - 140	131
		p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	118
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	0.15	40 - 130	96
LB203183.002		Heptachlor	mg/kg	0.1	0.3	0.2	60 - 140	134
		Aldrin	mg/kg	0.1	0.3	0.2	60 - 140	133
		Delta BHC	mg/kg	0.1	0.3	0.2	60 - 140	134
		Dieldrin	mg/kg	0.2	0.3	0.2	60 - 140	134
		Endrin	mg/kg	0.2	0.3	0.2	60 - 140	135
		p,p'-DDT	mg/kg	0.1	0.3	0.2	60 - 140	126
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.17	0.15	40 - 130	111

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203182.002		Dichlorvos	mg/kg	0.5	1.8	2	60 - 140	89
		Diazinon (Dimpylate)	mg/kg	0.5	1.6	2	60 - 140	82
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.8	2	60 - 140	92
		Ethion	mg/kg	0.2	1.7	2	60 - 140	87
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	75
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	81
LB203183.002		Dichlorvos	mg/kg	0.5	1.9	2	60 - 140	94
		Diazinon (Dimpylate)	mg/kg	0.5	1.8	2	60 - 140	92
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.8	2	60 - 140	90
		Ethion	mg/kg	0.2	1.7	2	60 - 140	85
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	86
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	82

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203182.002		Naphthalene	mg/kg	0.1	3.9	4	60 - 140	97
		Acenaphthylene	mg/kg	0.1	3.9	4	60 - 140	97
		Acenaphthene	mg/kg	0.1	4.1	4	60 - 140	102
		Phenanthrene	mg/kg	0.1	3.9	4	60 - 140	97
		Anthracene	mg/kg	0.1	4.1	4	60 - 140	101
		Fluoranthene	mg/kg	0.1	3.9	4	60 - 140	97
		Pyrene	mg/kg	0.1	3.9	4	60 - 140	98
		Benzo(a)pyrene	mg/kg	0.1	4.5	4	60 - 140	111
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	79
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	75
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	81
LB203183.002		Naphthalene	mg/kg	0.1	3.8	4	60 - 140	96
		Acenaphthylene	mg/kg	0.1	3.4	4	60 - 140	85
		Acenaphthene	mg/kg	0.1	4.1	4	60 - 140	103
		Phenanthrene	mg/kg	0.1	4.1	4	60 - 140	102
		Anthracene	mg/kg	0.1	4.2	4	60 - 140	104
		Fluoranthene	mg/kg	0.1	4.0	4	60 - 140	101
		Pyrene	mg/kg	0.1	4.2	4	60 - 140	106
		Benzo(a)pyrene	mg/kg	0.1	4.4	4	60 - 140	110
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	87
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	86
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	82

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PCBs in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203182.002		Arochlor 1260	mg/kg	0.2	0.5	0.4	60 - 140	118
LB203183.002		Arochlor 1260	mg/kg	0.2	0.5	0.4	60 - 140	122

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203182.002		Phenol	mg/kg	0.5	0.7	1	70 - 130	70
		2,4-dichlorophenol	mg/kg	0.5	0.7	1	70 - 130	71
		2,4,6-trichlorophenol	mg/kg	0.5	0.8	1	70 - 130	78
		Pentachlorophenol	mg/kg	0.5	0.8	1	70 - 130	77
	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.9	5	40 - 130	78
		d5-phenol (Surrogate)	mg/kg	-	1.6	2	40 - 130	78
LB203183.002		Phenol	mg/kg	0.5	0.7	1	70 - 130	70
		2,4-dichlorophenol	mg/kg	0.5	0.7	1	70 - 130	73
		2,4,6-trichlorophenol	mg/kg	0.5	0.8	1	70 - 130	81
		Pentachlorophenol	mg/kg	0.5	0.7	1	70 - 130	73
	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.8	5	40 - 130	75
		d5-phenol (Surrogate)	mg/kg	-	1.6	2	40 - 130	78

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203209.002	Arsenic, As	mg/kg	1	340	318.22	80 - 120	107
	Cadmium, Cd	mg/kg	0.3	5.3	5.41	80 - 120	99
	Chromium, Cr	mg/kg	0.5	37	38.31	80 - 120	97
	Copper, Cu	mg/kg	0.5	300	290	80 - 120	104
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	103
	Lead, Pb	mg/kg	1	94	89.9	80 - 120	105
	Zinc, Zn	mg/kg	2	280	273	80 - 120	102
LB203270.002	Arsenic, As	mg/kg	1	330	318.22	80 - 120	105
	Cadmium, Cd	mg/kg	0.3	5.4	5.41	80 - 120	100
	Chromium, Cr	mg/kg	0.5	37	38.31	80 - 120	96
	Copper, Cu	mg/kg	0.5	290	290	80 - 120	101
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	100
	Lead, Pb	mg/kg	1	92	89.9	80 - 120	102
	Zinc, Zn	mg/kg	2	270	273	80 - 120	98

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203182.002		TRH C10-C14	mg/kg	20	42	40	60 - 140	105
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	90
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	75
	TRH F Bands	TRH >C10-C16	mg/kg	25	40	40	60 - 140	100
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	83
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	125
LB203183.002		TRH C10-C14	mg/kg	20	39	40	60 - 140	98
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	80
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	75
	TRH F Bands	TRH >C10-C16	mg/kg	25	37	40	60 - 140	93
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	75
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	80

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203179.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	3.5	5	60 - 140	69
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	4.1	5	60 - 140	82
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	3.9	5	60 - 140	77
	Halogenated	Chlorobenzene	mg/kg	0.1	4.6	5	60 - 140	92
	Monocyclic	Benzene	mg/kg	0.1	3.8	5	60 - 140	76
	Aromatic	Toluene	mg/kg	0.1	4.3	5	60 - 140	86
		Ethylbenzene	mg/kg	0.1	4.5	5	60 - 140	90
		m/p-xylene	mg/kg	0.2	9.0	10	60 - 140	90
		o-xylene	mg/kg	0.1	4.5	5	60 - 140	90
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	11.3	10	70 - 130	113

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203179.002	Surrogates	d8-toluene (Surrogate)	mg/kg	-	10.9	10	70 - 130	109
		Bromofluorobenzene (Surrogate)	mg/kg	-	7.7	10	70 - 130	77
	Trihalomethan	Chloroform	mg/kg	0.1	4.0	5	60 - 140	79
LB203181.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	4.7	5	60 - 140	94
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	5.4	5	60 - 140	108
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	4.8	5	60 - 140	97
	Halogenated	Chlorobenzene	mg/kg	0.1	5.8	5	60 - 140	117
	Monocyclic	Benzene	mg/kg	0.1	4.8	5	60 - 140	95
	Aromatic	Toluene	mg/kg	0.1	5.1	5	60 - 140	102
		Ethylbenzene	mg/kg	0.1	5.2	5	60 - 140	104
		m/p-xylene	mg/kg	0.2	10	10	60 - 140	103
		o-xylene	mg/kg	0.1	5.0	5	60 - 140	101
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.9	10	70 - 130	99
		d8-toluene (Surrogate)	mg/kg	-	8.9	10	70 - 130	89
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.8	10	70 - 130	88
	Trihalomethan	Chloroform	mg/kg	0.1	5.1	5	60 - 140	102

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203179.002		TRH C6-C10	mg/kg	25	81	92.5	60 - 140	88
		TRH C6-C9	mg/kg	20	70	80	60 - 140	88
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	11.3	10	70 - 130	113
		Bromofluorobenzene (Surrogate)	mg/kg	-	7.7	10	70 - 130	77
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	55	62.5	60 - 140	88
LB203181.002		TRH C6-C10	mg/kg	25	68	92.5	60 - 140	74
		TRH C6-C9	mg/kg	20	63	80	60 - 140	78
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.9	10	70 - 130	99
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.8	10	70 - 130	88
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	38	62.5	60 - 140	61

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207999.001	LB203215.004	Mercury	mg/kg	0.05	0.22	0.05	0.2	84
SE208125.001	LB203273.004	Mercury	mg/kg	0.05	0.20	<0.05	0.2	79

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE207999.007	LB203183.023		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	-	-
			Alpha BHC	mg/kg	0.1	<0.1	-	-
			Lindane	mg/kg	0.1	<0.1	-	-
			Heptachlor	mg/kg	0.1	<0.1	0.2	72
			Aldrin	mg/kg	0.1	<0.1	0.2	71
			Beta BHC	mg/kg	0.1	<0.1	-	-
			Delta BHC	mg/kg	0.1	<0.1	0.2	71
			Heptachlor epoxide	mg/kg	0.1	<0.1	-	-
			o,p'-DDE	mg/kg	0.1	<0.1	-	-
			Alpha Endosulfan	mg/kg	0.2	<0.2	-	-
			Gamma Chlordane	mg/kg	0.1	<0.1	-	-
			Alpha Chlordane	mg/kg	0.1	<0.1	-	-
			trans-Nonachlor	mg/kg	0.1	<0.1	-	-
			p,p'-DDE	mg/kg	0.1	<0.1	-	-
			Dieldrin	mg/kg	0.2	<0.2	0.2	75
			Endrin	mg/kg	0.2	<0.2	0.2	70
			o,p'-DDD	mg/kg	0.1	<0.1	-	-
			o,p'-DDT	mg/kg	0.1	<0.1	-	-
			Beta Endosulfan	mg/kg	0.2	<0.2	-	-
			p,p'-DDD	mg/kg	0.1	<0.1	-	-
			p,p'-DDT	mg/kg	0.1	<0.1	0.2	72
			Endosulfan sulphate	mg/kg	0.1	<0.1	-	-
			Endrin Aldehyde	mg/kg	0.1	<0.1	-	-
			Methoxychlor	mg/kg	0.1	<0.1	-	-
			Endrin Ketone	mg/kg	0.1	<0.1	-	-
			Isodrin	mg/kg	0.1	<0.1	-	-
			Mirex	mg/kg	0.1	<0.1	-	-
			Total CLP OC Pesticides	mg/kg	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.16	-	106
SE208124.001	LB203182.023		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	-	-
			Alpha BHC	mg/kg	0.1	<0.1	-	-
			Lindane	mg/kg	0.1	<0.1	-	-
			Heptachlor	mg/kg	0.1	<0.1	0.2	133
			Aldrin	mg/kg	0.1	<0.1	0.2	135
			Beta BHC	mg/kg	0.1	<0.1	-	-
			Delta BHC	mg/kg	0.1	<0.1	0.2	134
			Heptachlor epoxide	mg/kg	0.1	<0.1	-	-
			o,p'-DDE	mg/kg	0.1	<0.1	-	-
			Alpha Endosulfan	mg/kg	0.2	<0.2	-	-
			Gamma Chlordane	mg/kg	0.1	<0.1	-	-
			Alpha Chlordane	mg/kg	0.1	<0.1	-	-
			trans-Nonachlor	mg/kg	0.1	<0.1	-	-
			p,p'-DDE	mg/kg	0.1	<0.1	-	-
			Dieldrin	mg/kg	0.2	<0.2	0.2	136
			Endrin	mg/kg	0.2	<0.2	0.2	135
			o,p'-DDD	mg/kg	0.1	<0.1	-	-
			o,p'-DDT	mg/kg	0.1	<0.1	-	-
			Beta Endosulfan	mg/kg	0.2	<0.2	-	-
			p,p'-DDD	mg/kg	0.1	<0.1	-	-
			p,p'-DDT	mg/kg	0.1	<0.1	0.2	125
			Endosulfan sulphate	mg/kg	0.1	<0.1	-	-
			Endrin Aldehyde	mg/kg	0.1	<0.1	-	-
			Methoxychlor	mg/kg	0.1	<0.1	-	-
			Endrin Ketone	mg/kg	0.1	<0.1	-	-
			Isodrin	mg/kg	0.1	<0.1	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208124.001	LB203182.023		Mirex	mg/kg	0.1	<0.1	-	-
			Total CLP OC Pesticides	mg/kg	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	-	97

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207999.006	LB203183.004		Dichlorvos	mg/kg	0.5	1.9	<0.5	2	96
			Dimethoate	mg/kg	0.5	<0.5	<0.5	-	-
			Diazinon (Dimpylate)	mg/kg	0.5	1.8	<0.5	2	89
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	-	-
			Malathion	mg/kg	0.2	<0.2	<0.2	-	-
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.9	<0.2	2	93
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	-	-
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	-	-
			Methidathion	mg/kg	0.5	<0.5	<0.5	-	-
			Ethion	mg/kg	0.2	1.8	<0.2	2	91
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	-	-
			Total OP Pesticides*	mg/kg	1.7	7.4	<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.4	-	101
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.4	-	109

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207999.006	LB203183.004		Naphthalene	mg/kg	0.1	3.9	<0.1	4	95
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
			Acenaphthylene	mg/kg	0.1	3.9	0.1	4	95
			Acenaphthene	mg/kg	0.1	4.1	<0.1	4	101
			Fluorene	mg/kg	0.1	<0.1	<0.1	-	-
			Phenanthrene	mg/kg	0.1	4.5	0.4	4	104
			Anthracene	mg/kg	0.1	4.3	0.1	4	105
			Fluoranthene	mg/kg	0.1	5.5	0.9	4	113
			Pyrene	mg/kg	0.1	5.6	1.0	4	115
			Benzo(a)anthracene	mg/kg	0.1	0.8	0.6	-	-
			Chrysene	mg/kg	0.1	0.7	0.4	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1	0.8	0.5	-	-
			Benzo(k)fluoranthene	mg/kg	0.1	0.4	0.5	-	-
			Benzo(a)pyrene	mg/kg	0.1	5.4	0.6	4	120
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.5	0.3	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	0.4	0.3	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	5.7	0.8	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	5.8	0.9	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	5.8	0.9	-	-
			Total PAH (18)	mg/kg	0.8	41	5.8	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.3	-	110
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.4	-	101
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.4	-	109
SE208129.001	LB203182.004		Naphthalene	mg/kg	0.1	3.8	<0.1	4	94
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
			Acenaphthylene	mg/kg	0.1	3.8	<0.1	4	94
			Acenaphthene	mg/kg	0.1	3.9	<0.1	4	98
			Fluorene	mg/kg	0.1	<0.1	<0.1	-	-
			Phenanthrene	mg/kg	0.1	3.8	<0.1	4	95
			Anthracene	mg/kg	0.1	4.0	<0.1	4	99
			Fluoranthene	mg/kg	0.1	3.8	<0.1	4	95
			Pyrene	mg/kg	0.1	3.9	<0.1	4	98
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Chrysene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208129.001	LB203182.004		Benzo(a)pyrene	mg/kg	0.1	4.4	<0.1	4	110
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	4.4	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	4.6	<0.3	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	4.5	<0.2	-	-
			Total PAH (18)	mg/kg	0.8	31	<0.8	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	-	77
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	80
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	76

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE207999.007	LB203183.023		Arochlor 1016	mg/kg	0.2	<0.2	-	-
			Arochlor 1221	mg/kg	0.2	<0.2	-	-
			Arochlor 1232	mg/kg	0.2	<0.2	-	-
			Arochlor 1242	mg/kg	0.2	<0.2	-	-
			Arochlor 1248	mg/kg	0.2	<0.2	-	-
			Arochlor 1254	mg/kg	0.2	<0.2	-	-
			Arochlor 1260	mg/kg	0.2	<0.2	0.4	89
			Arochlor 1262	mg/kg	0.2	<0.2	-	-
			Arochlor 1268	mg/kg	0.2	<0.2	-	-
			Total PCBs (Arochlors)	mg/kg	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	-	107
SE208124.001	LB203182.023		Arochlor 1016	mg/kg	0.2	<0.2	-	-
			Arochlor 1221	mg/kg	0.2	<0.2	-	-
			Arochlor 1232	mg/kg	0.2	<0.2	-	-
			Arochlor 1242	mg/kg	0.2	<0.2	-	-
			Arochlor 1248	mg/kg	0.2	<0.2	-	-
			Arochlor 1254	mg/kg	0.2	<0.2	-	-
			Arochlor 1260	mg/kg	0.2	<0.2	0.4	118
			Arochlor 1262	mg/kg	0.2	<0.2	-	-
			Arochlor 1268	mg/kg	0.2	<0.2	-	-
			Total PCBs (Arochlors)	mg/kg	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	-	99

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207999.006	LB203183.004		Phenol	mg/kg	0.5	0.7	<0.5	1	70
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	-	-
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	-	-
			Total Cresol	mg/kg	1.5	<1.5	<1.5	-	-
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	-	-
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	-	-
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	-	-
			2,4-dichlorophenol	mg/kg	0.5	0.8	<0.5	1	75
			2,4,6-trichlorophenol	mg/kg	0.5	0.7	<0.5	1	72
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	-	-
			4-nitrophenol	mg/kg	1	<1	<1	-	-
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	-	-
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	-	-
			Pentachlorophenol	mg/kg	0.5	0.7	<0.5	1	72
			2,4-dinitrophenol	mg/kg	2	<2	<2	-	-
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	-	-
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.5	3.9	-	71
			d5-phenol (Surrogate)	mg/kg	-	1.5	1.5	-	73

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207999.001	LB203209.004	Arsenic, As	mg/kg	1	51	1	50	100
		Cadmium, Cd	mg/kg	0.3	45	<0.3	50	90
		Chromium, Cr	mg/kg	0.5	61	11	50	98
		Copper, Cu	mg/kg	0.5	65	16	50	98
		Nickel, Ni	mg/kg	0.5	62	12	50	100
		Lead, Pb	mg/kg	1	92	45	50	94
		Zinc, Zn	mg/kg	2	130	80	50	97
SE208125.001	LB203270.004	Arsenic, As	mg/kg	1	47	3	50	87
		Cadmium, Cd	mg/kg	0.3	40	<0.3	50	80
		Chromium, Cr	mg/kg	0.5	58	12	50	91
		Copper, Cu	mg/kg	0.5	51	6.9	50	88
		Nickel, Ni	mg/kg	0.5	49	5.1	50	88
		Lead, Pb	mg/kg	1	58	12	50	91
		Zinc, Zn	mg/kg	2	75	36	50	79

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207999.006	LB203183.004		TRH C10-C14	mg/kg	20	51	<20	40	128
			TRH C15-C28	mg/kg	45	<45	<45	40	100
			TRH C29-C36	mg/kg	45	<45	<45	40	65
			TRH C37-C40	mg/kg	100	<100	<100	-	-
			TRH C10-C36 Total	mg/kg	110	<110	<110	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25	39	<25	40	98
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	39	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	40	105
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	-	-
SE208129.001	LB203182.004		TRH C10-C14	mg/kg	20	42	<20	40	105
			TRH C15-C28	mg/kg	45	<45	<45	40	83
			TRH C29-C36	mg/kg	45	<45	<45	40	100
			TRH C37-C40	mg/kg	100	<100	<100	-	-
			TRH C10-C36 Total	mg/kg	110	<110	<110	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25	42	<25	40	105
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	42	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	40	110
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	-	-

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207999.006	LB203181.004	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	-	-
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	-	-
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	-	-
			Bromomethane	mg/kg	1	<1	<1	-	-
			Chloroethane	mg/kg	1	<1	<1	-	-
			Trichlorofluoromethane	mg/kg	1	<1	<1	-	-
			Iodomethane	mg/kg	5	<5	<5	-	-
			1,1-dichloroethene	mg/kg	0.1	4.6	<0.1	5	91
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	-	-
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloroethane	mg/kg	0.1	5.2	<0.1	5	103
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207999.006	LB203181.004	Halogenated	Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	-	-
		Aliphatics	Dibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	4.7	<0.1	5	95
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	-	-
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated	Chlorobenzene	mg/kg	0.1	5.3	<0.1	5	105
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Monocyclic	Benzene	mg/kg	0.1	4.8	<0.1	5	97
		Aromatic	Toluene	mg/kg	0.1	5.2	<0.1	5	105
			Ethylbenzene	mg/kg	0.1	5.2	<0.1	5	103
			m/p-xylene	mg/kg	0.2	10	<0.2	10	104
			o-xylene	mg/kg	0.1	5.1	<0.1	5	102
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	-	-
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	-	-
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	-	-
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	-	-
		Compounds	2-nitropropane	mg/kg	10	<10	<10	-	-
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	-	-
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	-	-
			Vinyl acetate	mg/kg	10	<10	<10	-	-
			MEK (2-butanone)	mg/kg	10	<10	<10	-	-
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	-	-
			2-hexanone (MBK)	mg/kg	5	<5	<5	-	-
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.3	10.0	10	93
			d8-toluene (Surrogate)	mg/kg	-	8.9	9.4	10	89
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.5	8.6	10	95
		Totals	Total Xylenes	mg/kg	0.3	15	<0.3	-	-
			Total BTEX	mg/kg	0.6	31	<0.6	-	-
			Total VOC*	mg/kg	24	56	<24	-	-
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	-	-
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	24	<1.8	-	-
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	24	<1.8	-	-
		Trihalometha	Chloroform	mg/kg	0.1	4.6	<0.1	5	93
		nes	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Bromoform	mg/kg	0.1	<0.1	<0.1	-	-
SE208129.001	LB203179.004	Monocyclic	Benzene	mg/kg	0.1	3.0	<0.1	5	60
		Aromatic	Toluene	mg/kg	0.1	3.5	<0.1	5	69

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208129.001	LB203179.004	Monocyclic	Ethylbenzene	mg/kg	0.1	3.5	<0.1	5	70
		Aromatic	m/p-xylene	mg/kg	0.2	7.2	<0.2	10	72
			o-xylene	mg/kg	0.1	3.6	<0.1	5	71
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.9	9.9	10	99
			d8-toluene (Surrogate)	mg/kg	-	9.7	9.6	10	97
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.7	9.1	10	97
		Totals	Total Xylenes	mg/kg	0.3	11	<0.3	-	-
			Total BTEX	mg/kg	0.6	21	<0.6	-	-

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207999.006	LB203181.004		TRH C6-C10	mg/kg	25	66	<25	92.5	71
			TRH C6-C9	mg/kg	20	60	<20	80	75
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.3	10.0	10	93
			d8-toluene (Surrogate)	mg/kg	-	8.9	9.4	10	89
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.5	8.6	-	95
		VPH F	Benzene (F0)	mg/kg	0.1	4.8	<0.1	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	35	<25	62.5	55 ④
SE208129.001	LB203179.004		TRH C6-C10	mg/kg	25	63	<25	92.5	67
			TRH C6-C9	mg/kg	20	57	<20	80	71
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.9	9.9	10	99
			d8-toluene (Surrogate)	mg/kg	-	9.7	9.6	10	97
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.7	9.1	-	97
		VPH F	Benzene (F0)	mg/kg	0.1	3.0	<0.1	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	42	<25	62.5	66

MATRIX SPIKE DUPLICATES

SE207999 R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

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- ☐

CLIENT: Defence Housing Australia	**LABORATORY: SGS Australia**	**Turnaround Time (TAT)**
PROJECT: Randwick Barracks	**LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015**	**COC Number** 1 of 4
PROJECT NUMBER: 610.30041	**SAMPLER:**	☐ Standard TAT
PROJECT MANAGER: [redacted]	**SAMPLER CONTACT No:**	☐ Non Standard or Urgent TAT
PM CONTACT No [redacted]	**Email Reports and Invoices to: LQRSYD@slrconsulting.com** [redacted]	**Required TAT: Standard**

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	Asbestos ONLY	HOLD	Additional Information (Comment on any gross contamination or specific requirements)
1	0407_TP155_0.1_200624	24/06/2020	Soil	jar, pfas, bag ✓	×			Please hold all PFAS Containers
	0407_TP155_0.2_200624	24/06/2020	Soil	jar, pfas	×			no asbestos analysis
2	0407_TP169_0.1_200624	24/06/2020	Soil	jar, pfas, bag ✓	×			
3	0407_TP182_0.1_200624	24/06/2020	Soil	jar, pfas, bag ✓	×			
4	0407_TP182_0.5_200624	24/06/2020	Soil	jar, pfas	×			no asbestos analysis
5	0407_TP185_0.1_200624	24/06/2020	Soil	jar, pfas, bag ✓	×			
6	0407_TP185_0.4_200624	24/06/2020	Soil	jar, pfas	×			no asbestos analysis
7	0407_TP210_0.1_200624	24/06/2020	Soil	jar, pfas, bag ✓	×			
8	0407_TP210_0.5_200624	24/06/2020	Soil	jar, pfas, bag ✓	×			
9	0407_TP210_ACM01_200624	24/06/2020	ACM	bag		×		
	0407_TP210_1.0_200624	24/06/2020	Soil	jar, pfas			×	
10	0407_TP234_0.1_200624	24/06/2020	Soil	jar, pfas, bag ✓	×			

SGS EHS Sydney COC

SE208137

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 18/06/2020	**Received by**	Sign [redacted]	Date / Time 25/06/20	**Temperature Received:**
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time 04:30	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

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- ☐ NELSON: 6/A Cambridge Street, Richmon Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon St East, New Plymouth, 4310 NZ
- ☐

CLIENT: Defence Housing Australia	LABORATORY: SGS Australia
PROJECT: Randwick Barracks	LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015
PROJECT NUMBER: 610.30041	SAMPLER:
PROJECT MANAGER [redacted]	SAMPLER CONTACT No:
PM CONTACT No: [redacted]	Email Reports and invoices to: LQRSYD@slrconsulting.com [redacted]

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number: 2 of 4

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	Asbestos ONLY	HOLD	Additional Information (Comment on any gross contamina or specific requirements)
11	0407_TP234_0.4_200624	24/06/2020	Soil	bag		×		Please hold all PFAS Containers
12	0407_TP234_0.5_200624	24/06/2020	Soil	jar, pfas ✓	×			no asbestos analysis
	0407_TP234_1.0_200624	24/06/2020	Soil	jar, pfas			×	
13	0407_TP235_0.1_200624	24/06/2020	Soil	jar, pfas, bag ✓	×			
	0407_TP235_0.2_200624	24/06/2020	Soil	jar, pfas			×	
14	0407_TP235_0.5_200624	24/06/2020	Soil	jar, pfas, bag ✓	×			
	0407_TP235_1.0_200624	24/06/2020	Soil	jar, pfas			×	
15	0407_TP236_0.1_200624	24/06/2020	Soil	jar, pfas, bag ✓	×			
16	0407_TP236_ACM01_200624	24/06/2020	ACM	bag		×		
17	0407_TP236_ACM02_200624	24/06/2020	ACM	bag		×		
18	0407_TP236_0.4_200624	24/06/2020	Soil	bag		×		
19	0407_TP236_0.5_200624	24/06/2020	Soil	jar, pfas	×			no asbestos analysis

Relinquished By Sampler	[redacted]	Date / Time 18/06/2020	Received by	Sign [redacted]	Date / Time 25/06/20	Temperature Received
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time 4:30	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

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- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Dawin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ❄ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 50 Devon Street East, New Plymouth, 4310 NZ
- ☐

CLIENT: Defence Housing Australia	**LABORATORY: SGS Australia**	**Turnaround Time (TAT)**	**COC Number** 3 of 4
PROJECT: Randwick Barracks	**LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015**	☐ Standard TAT	
PROJECT NUMBER: 610.30041	**SAMPLER:**	☐ Non Standard or Urgent TAT	
PROJECT MANAGER: [redacted]	**SAMPLER CONTACT No:**		
PM CONTACT No: [redacted]	**Email Reports and Invoices to: LQRSYD@slrconsulting.com ;** [redacted]	**Required TAT: Standard**	

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	Asbestos ONLY	HOLD						**Additional Information** *(Comment on any gross contamination or specific requirements)*
	0407_TP236_0.8_200624	24/06/2020	Soil	jar, pfas			x						**Please hold all PFAS Containers**
20	0407_TP241_0.1_200624	24/06/2020	Soil	jar, pfas, bag ✓	x								
21	0407_TP241_0.2_200624	24/06/2020	Soil	jar, pfas	x								no asbestos analysis

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 18/06/2020	**Received by**	Sign [redacted]	Date / Time 25/06/20	**Temperature Received:**
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time @ 4.30	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☒ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 20 Devon Street East, New Plymouth, 4310 NZ

CLIENT: Defence Housing Australia

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGER: [redacted]

PM CONTACT No: [redacted]

LABORATORY: SGS Australia

LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015

SAMPLER: [redacted]

SAMPLER CONTACT No [redacted]

Email Reports and Invoices to: LQRSYD@slrconsulting.com ; [redacted]

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number 4 of 4

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	Asbestos ONLY	HOLD	C6-C10/BETXN					Additional Information (Comment on any gross contamination or specific requirements)
22	0407_QC161_200624	24/06/2020	Soil	jar, pfas	x								Please hold all PFAS containers
	0407_QC261_200624	24/06/2020	Soil	jar, pfas	x								Please send to Eurofins
23	0407_QC148_200624	24/06/2020	Soil	jar, pfas	x								
	0407_QC248_200624	24/06/2020	Soil	jar, pfas	x								Please send to Eurofins
24	0407_QC149_200624	24/06/2020	Soil	jar, pfas	x								
	0407_QC249_200624	24/06/2020	Soil	jar, pfas	x								Please send to Eurofins
25	0407_QC412_200623	23/06/2020	Trip Blank	vial				x					
26	0407_QC512_200623	23/06/2020	Trip Spike	vial				x					

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 18/06/2020	**Received by**	Sign [redacted]	Date / Time 25/06/20	**Temperature Received:**
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time @ 4°30	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

SAMPLE RECEIPT ADVICE

SE208137

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	26

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Thu 25/6/2020
Report Due	Wed 8/7/2020
SGS Reference	**SE208137**

SUBMISSION DETAILS

This is to confirm that 26 samples were received on Thursday 25/6/2020. Results are expected to be ready by COB Wednesday 8/7/2020.
Please quote SGS reference SE208137 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	23 Soil, 3 Material
Date documentation received	29/6/2020@5:32PM	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	5.4°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

5 samples have been placed on hold as no tests have been assigned for them by the client. These samples will not be processed.

This document is issued by the Company under its General Conditions of Service accessible at www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

SAMPLE RECEIPT ADVICE

SE208137

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	Speciated Phenols in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
001	0407_TP155_0.1_200624	29	14	26	11	18	10	81	7
002	0407_TP169_0.1_200624	29	14	26	11	18	10	81	7
003	0407_TP182_0.1_200624	29	14	26	11	18	10	81	7
004	0407_TP182_0.5_200624	29	14	26	11	18	10	81	7
005	0407_TP185_0.1_200624	29	14	26	11	18	10	81	7
006	0407_TP185_0.4_200624	29	14	26	11	18	10	81	7
007	0407_TP210_0.1_200624	29	14	26	11	18	10	81	7
008	0407_TP210_0.5_200624	29	14	26	11	18	10	81	7
010	0407_TP234_0.1_200624	29	14	26	11	18	10	81	7
012	0407_TP235_0.5_200624	29	14	26	11	18	10	81	7
013	0407_TP235_0.1_200624	29	14	26	11	18	10	81	7
014	0407_TP235_0.5_200624	29	14	26	11	18	10	81	7
015	0407_TP236_0.1_200624	29	14	26	11	18	10	81	7
018	0407_TP236_0.4_200624	29	14	26	11	18	10	81	7
019	0407_TP236_0.5_200624	29	14	26	11	18	10	81	7
020	0407_TP241_0.1_200624	29	14	26	11	18	10	81	7
021	0407_TP241_0.2_200624	29	14	26	11	18	10	81	7
022	0407_QC161_200624	29	14	26	11	18	10	81	7
023	0407_QC148_200624	29	14	26	11	18	10	81	7
024	0407_QC149_200624	29	14	26	11	18	10	81	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE208137

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
025	0407_QC412_200624	11	7
026	0407_QC512_200624	11	-

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
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SAMPLE RECEIPT ADVICE

SE208137

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Fibre Identification in soil	Gravimetric Determination of Asbestos in Soil	Mercury in Soil	Moisture Content	Total Recoverable Elements in Soil/Waste
001	0407_TP155_0.1_200624	2	9	1	1	7
002	0407_TP169_0.1_200624	2	9	1	1	7
003	0407_TP182_0.1_200624	2	9	1	1	7
004	0407_TP182_0.5_200624	-	-	1	1	7
005	0407_TP185_0.1_200624	2	9	1	1	7
006	0407_TP185_0.4_200624	-	-	1	1	7
007	0407_TP210_0.1_200624	2	9	1	1	7
008	0407_TP210_0.5_200624	2	9	1	1	7
010	0407_TP234_0.1_200624	2	9	1	1	7
011	0407_TP234_0.4_200624	2	9	-	-	-
012	0407_TP235_0.5_200624	2	9	1	1	7
013	0407_TP235_0.1_200624	2	9	1	1	7
014	0407_TP235_0.5_200624	2	9	1	1	7
015	0407_TP236_0.1_200624	2	9	1	1	7
018	0407_TP236_0.4_200624	2	9	1	1	7
019	0407_TP236_0.5_200624	-	-	1	1	7
020	0407_TP241_0.1_200624	2	9	1	1	7
021	0407_TP241_0.2_200624	-	-	1	1	7
022	0407_QC161_200624	-	-	1	1	7
023	0407_QC148_200624	-	-	1	1	7
024	0407_QC149_200624	-	-	1	1	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
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SAMPLE RECEIPT ADVICE

SE208137

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Moisture Content
025	0407_QC412_200624	1

CONTINUED OVERLEAF

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Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE208137

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Fibre ID in bulk materials
009	0407_TP210_ACM01_200624	1
016	0407_TP236_ACM01_200624	1
017	0407_TP236_ACM02_200624	1

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	26

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208137 R0**
Date Received	25/6/2020
Date Reported	9/7/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.

Sample #2: Asbestos found as 10x3x2mm cement sheet fragments x3 in >2mm portion.

Asbestos analysed by Approved Identifier Ravee Sivasubramaniam .

SIGNATORIES

[redacted]

Chemist | Senior Organic Chemist/Metals Chemist | Metals/Inorganics Team Leader

[redacted]

Organic Section Head | Hygiene Team Leader

VOC's in Soil [AN433] Tested: 6/7/2020

PARAMETER	UOM	LOR	0407_TP155_0.1_20 624 SOIL - 24/6/2020 SE208137.001	0407_TP169_0.1_20 624 SOIL - 24/6/2020 SE208137.002	0407_TP182_0.1_20 624 SOIL - 24/6/2020 SE208137.003	0407_TP182_0.5_20 624 SOIL - 24/6/2020 SE208137.004	0407_TP185_0.1_20 624 SOIL - 24/6/2020 SE208137.005
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 6/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP155_0.1_20(624 SOIL - 24/6/2020 SE208137.001	0407_TP169_0.1_20(624 SOIL - 24/6/2020 SE208137.002	0407_TP182_0.1_20(624 SOIL - 24/6/2020 SE208137.003	0407_TP182_0.5_20(624 SOIL - 24/6/2020 SE208137.004	0407_TP185_0.1_20(624 SOIL - 24/6/2020 SE208137.005
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 6/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP185_0.4_20(624 SOIL - 24/6/2020 SE208137.006	0407_TP210_0.1_20(624 SOIL - 24/6/2020 SE208137.007	0407_TP210_0.5_20(624 SOIL - 24/6/2020 SE208137.008	0407_TP234_0.1_20(624 SOIL - 24/6/2020 SE208137.010	0407_TP235_0.5_20(624 SOIL - 24/6/2020 SE208137.012
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 6/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP185_0.4_20(624 SOIL - 24/6/2020 SE208137.006	0407_TP210_0.1_20(624 SOIL - 24/6/2020 SE208137.007	0407_TP210_0.5_20(624 SOIL - 24/6/2020 SE208137.008	0407_TP234_0.1_20(624 SOIL - 24/6/2020 SE208137.010	0407_TP235_0.5_20(624 SOIL - 24/6/2020 SE208137.012
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 6/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP235_0.1_20(624 SOIL - 24/6/2020 SE208137.013	0407_TP235_0.5_20(624 SOIL - 24/6/2020 SE208137.014	0407_TP236_0.1_20(624 SOIL - 24/6/2020 SE208137.015	0407_TP236_0.5_20(624 SOIL - 24/6/2020 SE208137.019	0407_TP241_0.1_20(624 SOIL - 24/6/2020 SE208137.020
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 6/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP235_0.1_20(624 SOIL - 24/6/2020 SE208137.013	0407_TP235_0.5_20(624 SOIL - 24/6/2020 SE208137.014	0407_TP236_0.1_20(624 SOIL - 24/6/2020 SE208137.015	0407_TP236_0.5_20(624 SOIL - 24/6/2020 SE208137.019	0407_TP241_0.1_20(624 SOIL - 24/6/2020 SE208137.020
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 6/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP241_0.2_20624 SOIL - 24/6/2020 SE208137.021	0407_QC161_20062 SOIL - 24/6/2020 SE208137.022	0407_QC148_20062 SOIL - 24/6/2020 SE208137.023	0407_QC149_20062 SOIL - 24/6/2020 SE208137.024	0407_QC412_20062 SOIL - 24/6/2020 SE208137.025
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	-
Chloromethane	mg/kg	1	<1	<1	<1	<1	-
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Bromomethane	mg/kg	1	<1	<1	<1	<1	-
Chloroethane	mg/kg	1	<1	<1	<1	<1	-
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	-
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	-
Iodomethane	mg/kg	5	<5	<5	<5	<5	-
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	-
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	-
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	-
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	-
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
2-nitropropane	mg/kg	10	<10	<10	<10	<10	-
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	-
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	-
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	-
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	-

VOC's in Soil [AN433] Tested: 6/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP241_0.2_20624 SOIL - 24/6/2020 SE208137.021	0407_QC161_20062 SOIL - 24/6/2020 SE208137.022	0407_QC148_20062 SOIL - 24/6/2020 SE208137.023	0407_QC149_20062 SOIL - 24/6/2020 SE208137.024	0407_QC412_20062 SOIL - 24/6/2020 SE208137.025
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Total VOC*	mg/kg	24	<24	<24	<24	<24	-
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	-
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	-
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	-

VOC's in Soil [AN433] Tested: 6/7/2020 (continued)

PARAMETER	UOM	LOR	0407_QC512_20062 SOIL - 24/6/2020 SE208137.026
Benzene	mg/kg	0.1	[91%]
Toluene	mg/kg	0.1	[108%]
Ethylbenzene	mg/kg	0.1	[105%]
m/p-xylene	mg/kg	0.2	[106%]
o-xylene	mg/kg	0.1	[104%]
Naphthalene	mg/kg	0.1	-
Total Xylenes	mg/kg	0.3	-
Total BTEX	mg/kg	0.6	-
Dichlorodifluoromethane (CFC-12)	mg/kg	1	-
Chloromethane	mg/kg	1	-
Vinyl chloride (Chloroethene)	mg/kg	0.1	-
Bromomethane	mg/kg	1	-
Chloroethane	mg/kg	1	-
Trichlorofluoromethane	mg/kg	1	-
Acetone (2-propanone)	mg/kg	10	-
Iodomethane	mg/kg	5	-
1,1-dichloroethene	mg/kg	0.1	-
Acrylonitrile	mg/kg	0.1	-
Dichloromethane (Methylene chloride)	mg/kg	0.5	-
Allyl chloride	mg/kg	0.1	-
Carbon disulfide	mg/kg	0.5	-
trans-1,2-dichloroethene	mg/kg	0.1	-
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	-
1,1-dichloroethane	mg/kg	0.1	-
Vinyl acetate	mg/kg	10	-
MEK (2-butanone)	mg/kg	10	-
cis-1,2-dichloroethene	mg/kg	0.1	-
Bromochloromethane	mg/kg	0.1	-
Chloroform	mg/kg	0.1	-
2,2-dichloropropane	mg/kg	0.1	-
1,2-dichloroethane	mg/kg	0.1	-
1,1,1-trichloroethane	mg/kg	0.1	-
1,1-dichloropropene	mg/kg	0.1	-
Carbon tetrachloride	mg/kg	0.1	-
Dibromomethane	mg/kg	0.1	-
1,2-dichloropropane	mg/kg	0.1	-
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	-
2-nitropropane	mg/kg	10	-
Bromodichloromethane	mg/kg	0.1	-
MIBK (4-methyl-2-pentanone)	mg/kg	1	-
cis-1,3-dichloropropene	mg/kg	0.1	-
trans-1,3-dichloropropene	mg/kg	0.1	-
1,1,2-trichloroethane	mg/kg	0.1	-
1,3-dichloropropane	mg/kg	0.1	-
Chlorodibromomethane	mg/kg	0.1	-
2-hexanone (MBK)	mg/kg	5	-
1,2-dibromoethane (EDB)	mg/kg	0.1	-
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	-
1,1,1,2-tetrachloroethane	mg/kg	0.1	-
Chlorobenzene	mg/kg	0.1	-
Bromoform	mg/kg	0.1	-
cis-1,4-dichloro-2-butene	mg/kg	1	-
Styrene (Vinyl benzene)	mg/kg	0.1	-
1,1,2,2-tetrachloroethane	mg/kg	0.1	-
1,2,3-trichloropropane	mg/kg	0.1	-
trans-1,4-dichloro-2-butene	mg/kg	1	-

VOC's in Soil [AN433] Tested: 6/7/2020 (continued)

PARAMETER	UOM	LOR	0407_QC512_20062 SOIL - 24/6/2020 SE208137.026
Isopropylbenzene (Cumene)	mg/kg	0.1	-
Bromobenzene	mg/kg	0.1	-
n-propylbenzene	mg/kg	0.1	-
2-chlorotoluene	mg/kg	0.1	-
4-chlorotoluene	mg/kg	0.1	-
1,3,5-trimethylbenzene	mg/kg	0.1	-
tert-butylbenzene	mg/kg	0.1	-
1,2,4-trimethylbenzene	mg/kg	0.1	-
sec-butylbenzene	mg/kg	0.1	-
1,3-dichlorobenzene	mg/kg	0.1	-
1,4-dichlorobenzene	mg/kg	0.1	-
p-isopropyltoluene	mg/kg	0.1	-
1,2-dichlorobenzene	mg/kg	0.1	-
n-butylbenzene	mg/kg	0.1	-
1,2-dibromo-3-chloropropane	mg/kg	0.1	-
1,2,4-trichlorobenzene	mg/kg	0.1	-
Hexachlorobutadiene	mg/kg	0.1	-
1,2,3-trichlorobenzene	mg/kg	0.1	-
Total VOC*	mg/kg	24	-
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	-
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	-
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	-

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 6/7/2020

PARAMETER	UOM	LOR	0407_TP155_0.1_20(624 SOIL - 24/6/2020 SE208137.001	0407_TP169_0.1_20(624 SOIL - 24/6/2020 SE208137.002	0407_TP182_0.1_20(624 SOIL - 24/6/2020 SE208137.003	0407_TP182_0.5_20(624 SOIL - 24/6/2020 SE208137.004	0407_TP185_0.1_20(624 SOIL - 24/6/2020 SE208137.005
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP185_0.4_20(624 SOIL - 24/6/2020 SE208137.006	0407_TP210_0.1_20(624 SOIL - 24/6/2020 SE208137.007	0407_TP210_0.5_20(624 SOIL - 24/6/2020 SE208137.008	0407_TP234_0.1_20(624 SOIL - 24/6/2020 SE208137.010	0407_TP235_0.5_20(624 SOIL - 24/6/2020 SE208137.012
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP235_0.1_20(624 SOIL - 24/6/2020 SE208137.013	0407_TP235_0.5_20(624 SOIL - 24/6/2020 SE208137.014	0407_TP236_0.1_20(624 SOIL - 24/6/2020 SE208137.015	0407_TP236_0.5_20(624 SOIL - 24/6/2020 SE208137.019	0407_TP241_0.1_20(624 SOIL - 24/6/2020 SE208137.020
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP241_0.2_20(624 SOIL - 24/6/2020 SE208137.021	0407_QC161_20062 SOIL - 24/6/2020 SE208137.022	0407_QC148_20062 SOIL - 24/6/2020 SE208137.023	0407_QC149_20062 SOIL - 24/6/2020 SE208137.024	0407_QC412_20062 SOIL - 24/6/2020 SE208137.025
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 6/7/2020

PARAMETER	UOM	LOR	0407_TP155_0.1_20(624 SOIL - 24/6/2020 SE208137.001	0407_TP169_0.1_20(624 SOIL - 24/6/2020 SE208137.002	0407_TP182_0.1_20(624 SOIL - 24/6/2020 SE208137.003	0407_TP182_0.5_20(624 SOIL - 24/6/2020 SE208137.004	0407_TP185_0.1_20(624 SOIL - 24/6/2020 SE208137.005
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP185_0.4_20(624 SOIL - 24/6/2020 SE208137.006	0407_TP210_0.1_20(624 SOIL - 24/6/2020 SE208137.007	0407_TP210_0.5_20(624 SOIL - 24/6/2020 SE208137.008	0407_TP234_0.1_20(624 SOIL - 24/6/2020 SE208137.010	0407_TP235_0.5_20(624 SOIL - 24/6/2020 SE208137.012
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	**160**	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	**150**	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	**270**	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	**310**	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	**270**	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP235_0.1_20(624 SOIL - 24/6/2020 SE208137.013	0407_TP235_0.5_20(624 SOIL - 24/6/2020 SE208137.014	0407_TP236_0.1_20(624 SOIL - 24/6/2020 SE208137.015	0407_TP236_0.5_20(624 SOIL - 24/6/2020 SE208137.019	0407_TP241_0.1_20(624 SOIL - 24/6/2020 SE208137.020
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	**620**	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	**350**	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	**35**	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	**35**	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	**880**	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	**970**	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	**920**	<210	<210	<210	<210

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 6/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP241_0.2_20624 SOIL - 24/6/2020 SE208137.021	0407_QC161_20062 SOIL - 24/6/2020 SE208137.022	0407_QC148_20062 SOIL - 24/6/2020 SE208137.023	0407_QC149_20062 SOIL - 24/6/2020 SE208137.024
TRH C10-C14	mg/kg	20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	**300**	<45
TRH C29-C36	mg/kg	45	<45	<45	**220**	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	**460**	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	**510**	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	**460**	<210

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 6/7/2020

PARAMETER	UOM	LOR	0407_TP155_0.1_20(624 SOIL - 24/6/2020 SE208137.001	0407_TP169_0.1_20(624 SOIL - 24/6/2020 SE208137.002	0407_TP182_0.1_20(624 SOIL - 24/6/2020 SE208137.003	0407_TP182_0.5_20(624 SOIL - 24/6/2020 SE208137.004	0407_TP185_0.1_20(624 SOIL - 24/6/2020 SE208137.005
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	0.1	0.2	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	0.3	0.2	<0.1	<0.1	0.2
Pyrene	mg/kg	0.1	0.4	0.3	<0.1	<0.1	0.2
Benzo(a)anthracene	mg/kg	0.1	0.1	0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	0.2	0.1	<0.1	<0.1	0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	0.2	<0.1	<0.1	<0.1	0.2
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	0.2	<0.1	<0.1	<0.1	0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	0.3	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	1.7	1.0	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	1.7	1.0	<0.8	<0.8	<0.8

PARAMETER	UOM	LOR	0407_TP185_0.4_20(624 SOIL - 24/6/2020 SE208137.006	0407_TP210_0.1_20(624 SOIL - 24/6/2020 SE208137.007	0407_TP210_0.5_20(624 SOIL - 24/6/2020 SE208137.008	0407_TP234_0.1_20(624 SOIL - 24/6/2020 SE208137.010	0407_TP235_0.5_20(624 SOIL - 24/6/2020 SE208137.012
Naphthalene	mg/kg	0.1	<0.1	0.2	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	0.8	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	0.2	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	2.4	<0.1	0.2	<0.1
Anthracene	mg/kg	0.1	<0.1	0.8	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	6.7	<0.1	0.8	<0.1
Pyrene	mg/kg	0.1	<0.1	8.0	<0.1	0.9	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	4.2	<0.1	0.3	<0.1
Chrysene	mg/kg	0.1	<0.1	3.7	<0.1	0.3	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	5.4	<0.1	0.7	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	3.3	<0.1	0.2	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	5.6	<0.1	0.6	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	3.1	<0.1	0.4	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	0.4	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	2.8	<0.1	0.4	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	7.6	<0.2	0.7	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	7.6	<0.3	0.8	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	7.6	<0.2	0.8	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	47	<0.8	4.6	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	47	<0.8	4.6	<0.8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 6/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP235_0.1_20(624 SOIL - 24/6/2020 SE208137.013	0407_TP235_0.5_20(624 SOIL - 24/6/2020 SE208137.014	0407_TP236_0.1_20(624 SOIL - 24/6/2020 SE208137.015	0407_TP236_0.5_20(624 SOIL - 24/6/2020 SE208137.019	0407_TP241_0.1_20(624 SOIL - 24/6/2020 SE208137.020
Naphthalene	mg/kg	0.1	4.7	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	1.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	1.5	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	2.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	4.4	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	7.4	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	81	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	13	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	89	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	86	<0.1	<0.1	<0.1	0.1
Benzo(a)anthracene	mg/kg	0.1	33	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	26	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	41	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	21	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	37	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	27	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	3.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	23	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	52	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	52	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	52	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	490	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	490	<0.8	<0.8	<0.8	<0.8

PARAMETER	UOM	LOR	0407_TP241_0.2_20(624 SOIL - 24/6/2020 SE208137.021	0407_QC161_20062(SOIL - 24/6/2020 SE208137.022	0407_QC148_20062(SOIL - 24/6/2020 SE208137.023	0407_QC149_20062(SOIL - 24/6/2020 SE208137.024
Naphthalene	mg/kg	0.1	<0.1	<0.1	0.4	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	2.0	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	0.5	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	11	0.3
Anthracene	mg/kg	0.1	<0.1	<0.1	3.4	0.1
Fluoranthene	mg/kg	0.1	0.1	0.2	22	1.3
Pyrene	mg/kg	0.1	0.1	0.2	23	1.4
Benzo(a)anthracene	mg/kg	0.1	<0.1	0.1	12	0.4
Chrysene	mg/kg	0.1	<0.1	0.1	12	0.4
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	0.1	13	0.8
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	0.1	6.0	0.3
Benzo(a)pyrene	mg/kg	0.1	<0.1	0.2	13	0.7
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	6.9	0.5
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	1.2	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	6.1	0.5
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	18	0.9
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	0.3	18	1.0
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	0.2	18	0.9
Total PAH (18)	mg/kg	0.8	<0.8	1.1	130	6.7
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	1.1	130	6.7

Speciated Phenols in Soil [AN420] Tested: 6/7/2020

PARAMETER	UOM	LOR	0407_TP155_0.1_20(624 SOIL - 24/6/2020 SE208137.001	0407_TP169_0.1_20(624 SOIL - 24/6/2020 SE208137.002	0407_TP182_0.1_20(624 SOIL - 24/6/2020 SE208137.003	0407_TP182_0.5_20(624 SOIL - 24/6/2020 SE208137.004	0407_TP185_0.1_20(624 SOIL - 24/6/2020 SE208137.005
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_TP185_0.4_20(624 SOIL - 24/6/2020 SE208137.006	0407_TP210_0.1_20(624 SOIL - 24/6/2020 SE208137.007	0407_TP210_0.5_20(624 SOIL - 24/6/2020 SE208137.008	0407_TP234_0.1_20(624 SOIL - 24/6/2020 SE208137.010	0407_TP235_0.5_20(624 SOIL - 24/6/2020 SE208137.012
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

Speciated Phenols in Soil [AN420] Tested: 6/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP235_0.1_20(624 SOIL - 24/6/2020 SE208137.013	0407_TP235_0.5_20(624 SOIL - 24/6/2020 SE208137.014	0407_TP236_0.1_20(624 SOIL - 24/6/2020 SE208137.015	0407_TP236_0.5_20(624 SOIL - 24/6/2020 SE208137.019	0407_TP241_0.1_20(624 SOIL - 24/6/2020 SE208137.020
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_TP241_0.2_20(624 SOIL - 24/6/2020 SE208137.021	0407_QC161_20062 SOIL - 24/6/2020 SE208137.022	0407_QC148_20062 SOIL - 24/6/2020 SE208137.023	0407_QC149_20062 SOIL - 24/6/2020 SE208137.024
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2

OC Pesticides in Soil [AN420] Tested: 6/7/2020

PARAMETER	UOM	LOR	0407_TP155_0.1_20(624 SOIL - 24/6/2020 SE208137.001	0407_TP169_0.1_20(624 SOIL - 24/6/2020 SE208137.002	0407_TP182_0.1_20(624 SOIL - 24/6/2020 SE208137.003	0407_TP182_0.5_20(624 SOIL - 24/6/2020 SE208137.004	0407_TP185_0.1_20(624 SOIL - 24/6/2020 SE208137.005
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	**0.2**	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	**0.2**	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	**0.6**	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	**0.3**	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	**0.3**	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	**0.2**	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	**1**	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 6/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP185_0.4_20(624 SOIL - 24/6/2020 SE208137.006	0407_TP210_0.1_20(624 SOIL - 24/6/2020 SE208137.007	0407_TP210_0.5_20(624 SOIL - 24/6/2020 SE208137.008	0407_TP234_0.1_20(624 SOIL - 24/6/2020 SE208137.010	0407_TP235_0.5_20(624 SOIL - 24/6/2020 SE208137.012
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 6/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP235_0.1_20(624 SOIL - 24/6/2020 SE208137.013	0407_TP235_0.5_20(624 SOIL - 24/6/2020 SE208137.014	0407_TP236_0.1_20(624 SOIL - 24/6/2020 SE208137.015	0407_TP236_0.4_20(624 SOIL - 24/6/2020 SE208137.018	0407_TP236_0.5_20(624 SOIL - 24/6/2020 SE208137.019
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	-	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	-	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	-	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	-	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	-	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	-	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	-	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	-	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	-	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	-	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	-	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	-	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	-	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	-	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	-	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	-	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	-	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	-	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	-	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	-	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	-	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	-	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	-	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	-	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	-	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	-	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	-	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	-	<1

OC Pesticides in Soil [AN420] Tested: 6/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP241_0.1_20624 SOIL - 24/6/2020 SE208137.020	0407_TP241_0.2_20624 SOIL - 24/6/2020 SE208137.021	0407_QC161_20062 SOIL - 24/6/2020 SE208137.022	0407_QC148_20062 SOIL - 24/6/2020 SE208137.023	0407_QC149_20062 SOIL - 24/6/2020 SE208137.024
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	**0.2**	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	**0.4**	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	**0.2**	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	**0.2**	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	**0.2**	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OP Pesticides in Soil [AN420] Tested: 6/7/2020

PARAMETER	UOM	LOR	0407_TP155_0.1_20(624 SOIL - 24/6/2020 SE208137.001	0407_TP169_0.1_20(624 SOIL - 24/6/2020 SE208137.002	0407_TP182_0.1_20(624 SOIL - 24/6/2020 SE208137.003	0407_TP182_0.5_20(624 SOIL - 24/6/2020 SE208137.004	0407_TP185_0.1_20(624 SOIL - 24/6/2020 SE208137.005
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP185_0.4_20(624 SOIL - 24/6/2020 SE208137.006	0407_TP210_0.1_20(624 SOIL - 24/6/2020 SE208137.007	0407_TP210_0.5_20(624 SOIL - 24/6/2020 SE208137.008	0407_TP234_0.1_20(624 SOIL - 24/6/2020 SE208137.010	0407_TP235_0.5_20(624 SOIL - 24/6/2020 SE208137.012
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP235_0.1_20(624 SOIL - 24/6/2020 SE208137.013	0407_TP235_0.5_20(624 SOIL - 24/6/2020 SE208137.014	0407_TP236_0.1_20(624 SOIL - 24/6/2020 SE208137.015	0407_TP236_0.5_20(624 SOIL - 24/6/2020 SE208137.019	0407_TP241_0.1_20(624 SOIL - 24/6/2020 SE208137.020
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

OP Pesticides in Soil [AN420] Tested: 6/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP241_0.2_20624 SOIL - 24/6/2020 SE208137.021	0407_QC161_20062 SOIL - 24/6/2020 SE208137.022	0407_QC148_20062 SOIL - 24/6/2020 SE208137.023	0407_QC149_20062 SOIL - 24/6/2020 SE208137.024
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7

PCBs in Soil [AN420] Tested: 6/7/2020

PARAMETER	UOM	LOR	0407_TP155_0.1_20(624 SOIL - 24/6/2020 SE208137.001	0407_TP169_0.1_20(624 SOIL - 24/6/2020 SE208137.002	0407_TP182_0.1_20(624 SOIL - 24/6/2020 SE208137.003	0407_TP182_0.5_20(624 SOIL - 24/6/2020 SE208137.004	0407_TP185_0.1_20(624 SOIL - 24/6/2020 SE208137.005
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP185_0.4_20(624 SOIL - 24/6/2020 SE208137.006	0407_TP210_0.1_20(624 SOIL - 24/6/2020 SE208137.007	0407_TP210_0.5_20(624 SOIL - 24/6/2020 SE208137.008	0407_TP234_0.1_20(624 SOIL - 24/6/2020 SE208137.010	0407_TP235_0.5_20(624 SOIL - 24/6/2020 SE208137.012
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP235_0.1_20(624 SOIL - 24/6/2020 SE208137.013	0407_TP235_0.5_20(624 SOIL - 24/6/2020 SE208137.014	0407_TP236_0.1_20(624 SOIL - 24/6/2020 SE208137.015	0407_TP236_0.5_20(624 SOIL - 24/6/2020 SE208137.019	0407_TP241_0.1_20(624 SOIL - 24/6/2020 SE208137.020
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PCBs in Soil [AN420] Tested: 6/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP241_0.2_20624 SOIL - 24/6/2020 SE208137.021	0407_QC161_20062 SOIL - 24/6/2020 SE208137.022	0407_QC148_20062 SOIL - 24/6/2020 SE208137.023	0407_QC149_20062 SOIL - 24/6/2020 SE208137.024
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 6/7/2020

PARAMETER	UOM	LOR	0407_TP155_0.1_20(624 SOIL - 24/6/2020 SE208137.001	0407_TP169_0.1_20(624 SOIL - 24/6/2020 SE208137.002	0407_TP182_0.1_20(624 SOIL - 24/6/2020 SE208137.003	0407_TP182_0.5_20(624 SOIL - 24/6/2020 SE208137.004	0407_TP185_0.1_20(624 SOIL - 24/6/2020 SE208137.005
Arsenic, As	mg/kg	1	3	2	2	<1	2
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	6.2	6.1	2.7	0.9	3.2
Copper, Cu	mg/kg	0.5	17	11	16	1.3	23
Lead, Pb	mg/kg	1	210	64	38	2	120
Nickel, Ni	mg/kg	0.5	2.4	2.4	1.6	<0.5	1.7
Zinc, Zn	mg/kg	2	130	99	38	16	34

PARAMETER	UOM	LOR	0407_TP185_0.4_20(624 SOIL - 24/6/2020 SE208137.006	0407_TP210_0.1_20(624 SOIL - 24/6/2020 SE208137.007	0407_TP210_0.5_20(624 SOIL - 24/6/2020 SE208137.008	0407_TP234_0.1_20(624 SOIL - 24/6/2020 SE208137.010	0407_TP235_0.5_20(624 SOIL - 24/6/2020 SE208137.012
Arsenic, As	mg/kg	1	<1	2	5	2	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	0.5	7.0	20	17	<0.5
Copper, Cu	mg/kg	0.5	1.4	25	21	16	1.2
Lead, Pb	mg/kg	1	4	64	230	16	5
Nickel, Ni	mg/kg	0.5	<0.5	7.0	13	23	<0.5
Zinc, Zn	mg/kg	2	6.1	160	120	44	6.7

PARAMETER	UOM	LOR	0407_TP235_0.1_20(624 SOIL - 24/6/2020 SE208137.013	0407_TP235_0.5_20(624 SOIL - 24/6/2020 SE208137.014	0407_TP236_0.1_20(624 SOIL - 24/6/2020 SE208137.015	0407_TP236_0.5_20(624 SOIL - 24/6/2020 SE208137.019	0407_TP241_0.1_20(624 SOIL - 24/6/2020 SE208137.020
Arsenic, As	mg/kg	1	2	<1	2	<1	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	4.9	1.1	29	8.1	2.9
Copper, Cu	mg/kg	0.5	22	<0.5	18	23	6.1
Lead, Pb	mg/kg	1	49	3	13	40	67
Nickel, Ni	mg/kg	0.5	4.1	<0.5	8.0	1.6	1.1
Zinc, Zn	mg/kg	2	79	<2.0	26	19	37

PARAMETER	UOM	LOR	0407_TP241_0.2_20(624 SOIL - 24/6/2020 SE208137.021	0407_QC161_20062(SOIL - 24/6/2020 SE208137.022	0407_QC148_20062(SOIL - 24/6/2020 SE208137.023	0407_QC149_20062(SOIL - 24/6/2020 SE208137.024
Arsenic, As	mg/kg	1	<1	2	2	4
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	0.3	<0.3
Chromium, Cr	mg/kg	0.5	1.9	6.5	6.0	18
Copper, Cu	mg/kg	0.5	4.1	16	25	16
Lead, Pb	mg/kg	1	50	240	110	18
Nickel, Ni	mg/kg	0.5	0.8	3.9	9.3	18
Zinc, Zn	mg/kg	2	18	150	260	43

Mercury in Soil [AN312] Tested: 6/7/2020

PARAMETER	UOM	LOR	0407_TP155_0.1_20(624 SOIL - 24/6/2020 SE208137.001	0407_TP169_0.1_20(624 SOIL - 24/6/2020 SE208137.002	0407_TP182_0.1_20(624 SOIL - 24/6/2020 SE208137.003	0407_TP182_0.5_20(624 SOIL - 24/6/2020 SE208137.004	0407_TP185_0.1_20(624 SOIL - 24/6/2020 SE208137.005
Mercury	mg/kg	0.05	**0.50**	<0.05	**0.25**	<0.05	**0.09**

PARAMETER	UOM	LOR	0407_TP185_0.4_20(624 SOIL - 24/6/2020 SE208137.006	0407_TP210_0.1_20(624 SOIL - 24/6/2020 SE208137.007	0407_TP210_0.5_20(624 SOIL - 24/6/2020 SE208137.008	0407_TP234_0.1_20(624 SOIL - 24/6/2020 SE208137.010	0407_TP235_0.5_20(624 SOIL - 24/6/2020 SE208137.012
Mercury	mg/kg	0.05	<0.05	**0.09**	**0.09**	<0.05	<0.05

PARAMETER	UOM	LOR	0407_TP235_0.1_20(624 SOIL - 24/6/2020 SE208137.013	0407_TP235_0.5_20(624 SOIL - 24/6/2020 SE208137.014	0407_TP236_0.1_20(624 SOIL - 24/6/2020 SE208137.015	0407_TP236_0.5_20(624 SOIL - 24/6/2020 SE208137.019	0407_TP241_0.1_20(624 SOIL - 24/6/2020 SE208137.020
Mercury	mg/kg	0.05	**0.08**	<0.05	<0.05	**0.05**	<0.05

PARAMETER	UOM	LOR	0407_TP241_0.2_20(624 SOIL - 24/6/2020 SE208137.021	0407_QC161_20062(SOIL - 24/6/2020 SE208137.022	0407_QC148_20062(SOIL - 24/6/2020 SE208137.023	0407_QC149_20062(SOIL - 24/6/2020 SE208137.024
Mercury	mg/kg	0.05	<0.05	**0.15**	**0.11**	<0.05

Moisture Content [AN002] Tested: 6/7/2020

PARAMETER	UOM	LOR	0407_TP155_0.1_20(624 SOIL - 24/6/2020 SE208137.001	0407_TP169_0.1_20(624 SOIL - 24/6/2020 SE208137.002	0407_TP182_0.1_20(624 SOIL - 24/6/2020 SE208137.003	0407_TP182_0.5_20(624 SOIL - 24/6/2020 SE208137.004	0407_TP185_0.1_20(624 SOIL - 24/6/2020 SE208137.005
% Moisture	%w/w	1	18.7	23.5	23.7	17.7	37.8

PARAMETER	UOM	LOR	0407_TP185_0.4_20(624 SOIL - 24/6/2020 SE208137.006	0407_TP210_0.1_20(624 SOIL - 24/6/2020 SE208137.007	0407_TP210_0.5_20(624 SOIL - 24/6/2020 SE208137.008	0407_TP234_0.1_20(624 SOIL - 24/6/2020 SE208137.010	0407_TP235_0.5_20(624 SOIL - 24/6/2020 SE208137.012
% Moisture	%w/w	1	18.5	23.2	4.8	14.7	15.7

PARAMETER	UOM	LOR	0407_TP235_0.1_20(624 SOIL - 24/6/2020 SE208137.013	0407_TP235_0.5_20(624 SOIL - 24/6/2020 SE208137.014	0407_TP236_0.1_20(624 SOIL - 24/6/2020 SE208137.015	0407_TP236_0.5_20(624 SOIL - 24/6/2020 SE208137.019	0407_TP241_0.1_20(624 SOIL - 24/6/2020 SE208137.020
% Moisture	%w/w	1	28.2	16.7	18.7	35.3	9.1

PARAMETER	UOM	LOR	0407_TP241_0.2_20(624 SOIL - 24/6/2020 SE208137.021	0407_QC161_20062(SOIL - 24/6/2020 SE208137.022	0407_QC148_20062(SOIL - 24/6/2020 SE208137.023	0407_QC149_20062(SOIL - 24/6/2020 SE208137.024	0407_QC412_20062(SOIL - 24/6/2020 SE208137.025
% Moisture	%w/w	1	9.9	20.3	22.9	9.8	<1.0

Fibre Identification in soil [AN602] Tested: 7/7/2020

PARAMETER	UOM	LOR	0407_TP155_0.1_20(624 SOIL - 24/6/2020 SE208137.001	0407_TP169_0.1_20(624 SOIL - 24/6/2020 SE208137.002	0407_TP182_0.1_20(624 SOIL - 24/6/2020 SE208137.003	0407_TP185_0.1_20(624 SOIL - 24/6/2020 SE208137.005	0407_TP210_0.1_20(624 SOIL - 24/6/2020 SE208137.007
Asbestos Detected	No unit	-	No	Yes	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	>0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	0407_TP210_0.5_20(624 SOIL - 24/6/2020 SE208137.008	0407_TP234_0.1_20(624 SOIL - 24/6/2020 SE208137.010	0407_TP234_0.4_20(624 SOIL - 24/6/2020 SE208137.011	0407_TP235_0.5_20(624 SOIL - 24/6/2020 SE208137.012	0407_TP235_0.1_20(624 SOIL - 24/6/2020 SE208137.013
Asbestos Detected	No unit	-	No	No	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	0407_TP235_0.5_20(624 SOIL - 24/6/2020 SE208137.014	0407_TP236_0.1_20(624 SOIL - 24/6/2020 SE208137.015	0407_TP236_0.4_20(624 SOIL - 24/6/2020 SE208137.018	0407_TP241_0.1_20(624 SOIL - 24/6/2020 SE208137.020
Asbestos Detected	No unit	-	No	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 7/7/2020

PARAMETER	UOM	LOR	0407_TP155_0.1_20(624 SOIL - 24/6/2020 SE208137.001	0407_TP169_0.1_20(624 SOIL - 24/6/2020 SE208137.002	0407_TP182_0.1_20(624 SOIL - 24/6/2020 SE208137.003	0407_TP185_0.1_20(624 SOIL - 24/6/2020 SE208137.005	0407_TP210_0.1_20(624 SOIL - 24/6/2020 SE208137.007
Total Sample Weight*	g	1	**516**	**464**	**717**	**611**	**591**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	**0.0581**	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	**0.013**	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	**0.013**	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP210_0.5_20(624 SOIL - 24/6/2020 SE208137.008	0407_TP234_0.1_20(624 SOIL - 24/6/2020 SE208137.010	0407_TP234_0.4_20(624 SOIL - 24/6/2020 SE208137.011	0407_TP235_0.5_20(624 SOIL - 24/6/2020 SE208137.012	0407_TP235_0.1_20(624 SOIL - 24/6/2020 SE208137.013
Total Sample Weight*	g	1	**695**	**561**	**543**	**680**	**610**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP235_0.5_20(624 SOIL - 24/6/2020 SE208137.014	0407_TP236_0.1_20(624 SOIL - 24/6/2020 SE208137.015	0407_TP236_0.4_20(624 SOIL - 24/6/2020 SE208137.018	0407_TP241_0.1_20(624 SOIL - 24/6/2020 SE208137.020
Total Sample Weight*	g	1	**670**	**612**	**663**	**466**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-

Fibre ID in bulk materials [AN602] Tested: 8/7/2020

PARAMETER	UOM	LOR	0407_TP210_ACM01 200624 MATERIAL - 24/6/2020 SE208137.009	0407_TP236_ACM01 200624 MATERIAL - 24/6/2020 SE208137.016	0407_TP236_ACM02 200624 MATERIAL - 24/6/2020 SE208137.017
Asbestos Detected	No unit	-	Yes	Yes	Yes

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid , mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser . Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC /MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents .
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup /fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS /ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples, Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable ’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.
AN605	This technique gravimetrically determines the mass of Bonded Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight. Any fibrous asbestos (FA) found in this fraction will be added to the 2-7mm fraction and its mass recorded there.

AN605	This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free/respirable fibres which are only observed by standard trace analysis as per AN602.
AN605	Bonded asbestos containing material (Bonded ACM) comprises asbestos-containing-material which is sound in condition. Fibrous asbestos (FA) comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material. Asbestos fines (AF) includes free fibres, small fibre bundles and also small fragments of bonded ACM that passes through a 7mm sieve - which implies that the bonded ACM fragments have a substantial degree of damage which increases the potential for fibre release.
AN-605	Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009 and NEPM 1999 (2013) schedule B1 section 4..

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
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Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
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Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	17

LABORATORY DETAILS

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SGS Reference	**SE208137 R0**
Date Received	25 Jun 2020
Date Reported	09 Jul 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.

Sample #2: Asbestos found as 10x3x2mm cement sheet fragments x3 in >2mm portion.

Asbestos analysed by Approved Identifier Ravee Sivasubramaniam .

SIGNATORIES

[redacted]

Chemist Senior Organic Chemist/Metals Chemis Organic Section Head

[redacted]

Hygiene Team Leader

RESULTS

Fibre Identification in soil — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE208137.001	0407_TP155_0.1 _200624	Soil	516g Sand,Soil	24 Jun 2020	No Asbestos Found	<0.01
SE208137.002	0407_TP169_0.1 _200624	Soil	464g Sand,Soil	24 Jun 2020	Chrysotile Asbestos Found	>0.01
SE208137.003	0407_TP182_0.1 _200624	Soil	717g Sand,Soil,Plant Matter	24 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208137.005	0407_TP185_0.1 _200624	Soil	611g Sand,Soil,Plant Matter	24 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208137.007	0407_TP210_0.1 _200624	Soil	591g Sand,Soil,Plant Matter	24 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208137.008	0407_TP210_0.5 _200624	Soil	695g Sand,Soil,Plant Matter	24 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208137.010	0407_TP234_0.1 _200624	Soil	561g Clay,Sand,Soil	24 Jun 2020	No Asbestos Found	<0.01
SE208137.011	0407_TP234_0.4 _200624	Soil	543g Sand,Soil	24 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208137.012	0407_TP235_0.5 _200624	Soil	680g Sand	24 Jun 2020	No Asbestos Found	<0.01
SE208137.013	0407_TP235_0.1 _200624	Soil	610g Sand,Soil,Rocks	24 Jun 2020	No Asbestos Found	<0.01
SE208137.014	0407_TP235_0.5 _200624	Soil	670g Sand	24 Jun 2020	No Asbestos Found	<0.01
SE208137.015	0407_TP236_0.1 _200624	Soil	612g Sand,Soil,Plant Matter	24 Jun 2020	No Asbestos Found	<0.01
SE208137.018	0407_TP236_0.4 _200624	Soil	663g Sand,Soil	24 Jun 2020	No Asbestos Found	<0.01
SE208137.020	0407_TP241_0.1 _200624	Soil		24 Jun 2020	No Asbestos Found	<0.01

RESULTS

Fibre ID in bulk materials — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE208137.009	0407_TP210_ACM01_200624	Other	50x30x5mm Cement Sheet Fragment	24 Jun 2020	Chrysotile Asbestos Detected	
SE208137.016	0407_TP236_ACM01_200624	Other	300x80x5mm Cement Sheet Fragments	24 Jun 2020	Chrysotile Asbestos Detected	
SE208137.017	0407_TP236_ACM02_200624	Other	350x150x5mm Cement Sheet Fragments	24 Jun 2020	Chrysotile Asbestos Detected	

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 7/7/2020

PARAMETER	UOM	LOR	0407_TP155_0.1_20(624 SOIL - 24/6/2020 SE208137.001	0407_TP169_0.1_20(624 SOIL - 24/6/2020 SE208137.002	0407_TP182_0.1_20(624 SOIL - 24/6/2020 SE208137.003	0407_TP185_0.1_20(624 SOIL - 24/6/2020 SE208137.005	0407_TP210_0.1_20(624 SOIL - 24/6/2020 SE208137.007
Total Sample Weight*	g	1	**516**	**464**	**717**	**611**	**591**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	**0.0581**	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	**0.013**	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	**0.013**	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP210_0.5_20(624 SOIL - 24/6/2020 SE208137.008	0407_TP234_0.1_20(624 SOIL - 24/6/2020 SE208137.010	0407_TP234_0.4_20(624 SOIL - 24/6/2020 SE208137.011	0407_TP235_0.5_20(624 SOIL - 24/6/2020 SE208137.012	0407_TP235_0.1_20(624 SOIL - 24/6/2020 SE208137.013
Total Sample Weight*	g	1	**695**	**561**	**543**	**680**	**610**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP235_0.5_20(624 SOIL - 24/6/2020 SE208137.014	0407_TP236_0.1_20(624 SOIL - 24/6/2020 SE208137.015	0407_TP236_0.4_20(624 SOIL - 24/6/2020 SE208137.018	0407_TP241_0.1_20(624 SOIL - 24/6/2020 SE208137.020
Total Sample Weight*	g	1	**670**	**612**	**663**	**466**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-

METHOD SUMMARY

METHOD	METHODOLOGY SUMMARY
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples , Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable ’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.
AN605	This technique gravimetrically determines the mass of Bonded Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight. Any fibrous asbestos (FA) found in this fraction will be added to the 2-7mm fraction and its mass recorded there.
AN605	This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free/respirable fibres which are only observed by standard trace analysis as per AN602.
AN605	Bonded asbestos containing material (Bonded ACM) comprises asbestos-containing-material which is sound in condition. Fibrous asbestos (FA) comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material. Asbestos fines (AF) includes free fibres, small fibre bundles and also small fragments of bonded ACM that passes through a 7mm sieve - which implies that the bonded ACM fragments have a substantial degree of damage which increases the potential for fibre release.
AN-605	Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009 and NEPM 1999 (2013) schedule B1 section 4..

FOOTNOTES

Amosite	-	Brown Asbestos	NA	-	Not Analysed
Chrysotile	-	White Asbestos	LNR	-	Listed, Not Required
Crocidolite	-	Blue Asbestos	*	-	NATA accreditation does not cover the performance of this service.
Amphiboles	-	Amosite and/or Crocidolite	**	-	Indicative data, theoretical holding time exceeded.

(In reference to soil samples only) This report does not comply with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment and Remediation and Management of Asbestos Contaminated sites in Western Australia - May 2009.

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.

Where reported: 'Asbestos Detected': Asbestos detected by polarised light microscopy, including dispersion staining.
Where reported: 'No Asbestos Found': No Asbestos Found by polarised light microscopy, including dispersion staining.
Where reported: 'UMF Detected': Mineral fibres of unknown type detected by polarised light microscopy, including dispersion staining. Confirmation by another independent analytical technique may be necessary.

Even after disintegration it can be very difficult, or impossible, to detect the presence of asbestos in some asbestos-containing bulk materials using polarised light microscopy. This is due to the low grade or small length or diameter of asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE208137 R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	26

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
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Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208137 R0**
Date Received	25 Jun 2020
Date Reported	09 Jul 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Matrix Spike	OC Pesticides in Soil	1 item
	PCBs in Soil	1 item
	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	1 item
	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	2 items
	Volatile Petroleum Hydrocarbons in Soil	1 item

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	23 Soil, 3 Material
Date documentation received	29/6/2020@5:32PM	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	5.4°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE208137 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Fibre ID in bulk materials

Method: ME-(AU)-[ENV]AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP210_ACM01_2006	SE208137.009	LB203742	24 Jun 2020	25 Jun 2020	24 Jun 2021	08 Jul 2020	24 Jun 2021	08 Jul 2020
0407_TP236_ACM01_2006	SE208137.016	LB203742	24 Jun 2020	25 Jun 2020	24 Jun 2021	08 Jul 2020	24 Jun 2021	08 Jul 2020
0407_TP236_ACM02_2006	SE208137.017	LB203742	24 Jun 2020	25 Jun 2020	24 Jun 2021	08 Jul 2020	24 Jun 2021	08 Jul 2020

Fibre Identification in soil

Method: ME-(AU)-[ENV]AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP155_0.1_200624	SE208137.001	LB203710	24 Jun 2020	25 Jun 2020	24 Jun 2021	07 Jul 2020	24 Jun 2021	08 Jul 2020
0407_TP169_0.1_200624	SE208137.002	LB203710	24 Jun 2020	25 Jun 2020	24 Jun 2021	07 Jul 2020	24 Jun 2021	08 Jul 2020
0407_TP182_0.1_200624	SE208137.003	LB203710	24 Jun 2020	25 Jun 2020	24 Jun 2021	07 Jul 2020	24 Jun 2021	08 Jul 2020
0407_TP185_0.1_200624	SE208137.005	LB203710	24 Jun 2020	25 Jun 2020	24 Jun 2021	07 Jul 2020	24 Jun 2021	08 Jul 2020
0407_TP210_0.1_200624	SE208137.007	LB203710	24 Jun 2020	25 Jun 2020	24 Jun 2021	07 Jul 2020	24 Jun 2021	08 Jul 2020
0407_TP210_0.5_200624	SE208137.008	LB203710	24 Jun 2020	25 Jun 2020	24 Jun 2021	07 Jul 2020	24 Jun 2021	08 Jul 2020
0407_TP234_0.1_200624	SE208137.010	LB203710	24 Jun 2020	25 Jun 2020	24 Jun 2021	07 Jul 2020	24 Jun 2021	08 Jul 2020
0407_TP234_0.4_200624	SE208137.011	LB203710	24 Jun 2020	25 Jun 2020	24 Jun 2021	07 Jul 2020	24 Jun 2021	08 Jul 2020
0407_TP235_0.5_200624	SE208137.012	LB203710	24 Jun 2020	25 Jun 2020	24 Jun 2021	07 Jul 2020	24 Jun 2021	08 Jul 2020
0407_TP235_0.1_200624	SE208137.013	LB203710	24 Jun 2020	25 Jun 2020	24 Jun 2021	07 Jul 2020	24 Jun 2021	08 Jul 2020
0407_TP235_0.5_200624	SE208137.014	LB203710	24 Jun 2020	25 Jun 2020	24 Jun 2021	07 Jul 2020	24 Jun 2021	08 Jul 2020
0407_TP236_0.1_200624	SE208137.015	LB203710	24 Jun 2020	25 Jun 2020	24 Jun 2021	07 Jul 2020	24 Jun 2021	08 Jul 2020
0407_TP236_0.4_200624	SE208137.018	LB203710	24 Jun 2020	25 Jun 2020	24 Jun 2021	07 Jul 2020	24 Jun 2021	08 Jul 2020
0407_TP241_0.1_200624	SE208137.020	LB203710	24 Jun 2020	25 Jun 2020	24 Jun 2021	07 Jul 2020	24 Jun 2021	08 Jul 2020

Gravimetric Determination of Asbestos in Soil

Method: ME-(AU)-[ENV]AN605

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP155_0.1_200624	SE208137.001	LB203710	24 Jun 2020	25 Jun 2020	21 Dec 2020	07 Jul 2020	21 Dec 2020	08 Jul 2020
0407_TP169_0.1_200624	SE208137.002	LB203710	24 Jun 2020	25 Jun 2020	21 Dec 2020	07 Jul 2020	21 Dec 2020	08 Jul 2020
0407_TP182_0.1_200624	SE208137.003	LB203710	24 Jun 2020	25 Jun 2020	21 Dec 2020	07 Jul 2020	21 Dec 2020	08 Jul 2020
0407_TP185_0.1_200624	SE208137.005	LB203710	24 Jun 2020	25 Jun 2020	21 Dec 2020	07 Jul 2020	21 Dec 2020	08 Jul 2020
0407_TP210_0.1_200624	SE208137.007	LB203710	24 Jun 2020	25 Jun 2020	21 Dec 2020	07 Jul 2020	21 Dec 2020	08 Jul 2020
0407_TP210_0.5_200624	SE208137.008	LB203710	24 Jun 2020	25 Jun 2020	21 Dec 2020	07 Jul 2020	21 Dec 2020	08 Jul 2020
0407_TP234_0.1_200624	SE208137.010	LB203710	24 Jun 2020	25 Jun 2020	21 Dec 2020	07 Jul 2020	21 Dec 2020	08 Jul 2020
0407_TP234_0.4_200624	SE208137.011	LB203710	24 Jun 2020	25 Jun 2020	21 Dec 2020	07 Jul 2020	21 Dec 2020	08 Jul 2020
0407_TP235_0.5_200624	SE208137.012	LB203710	24 Jun 2020	25 Jun 2020	21 Dec 2020	07 Jul 2020	21 Dec 2020	08 Jul 2020
0407_TP235_0.1_200624	SE208137.013	LB203710	24 Jun 2020	25 Jun 2020	21 Dec 2020	07 Jul 2020	21 Dec 2020	08 Jul 2020
0407_TP235_0.5_200624	SE208137.014	LB203710	24 Jun 2020	25 Jun 2020	21 Dec 2020	07 Jul 2020	21 Dec 2020	08 Jul 2020
0407_TP236_0.1_200624	SE208137.015	LB203710	24 Jun 2020	25 Jun 2020	21 Dec 2020	07 Jul 2020	21 Dec 2020	08 Jul 2020
0407_TP236_0.4_200624	SE208137.018	LB203710	24 Jun 2020	25 Jun 2020	21 Dec 2020	07 Jul 2020	21 Dec 2020	08 Jul 2020
0407_TP241_0.1_200624	SE208137.020	LB203710	24 Jun 2020	25 Jun 2020	21 Dec 2020	07 Jul 2020	21 Dec 2020	08 Jul 2020

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP155_0.1_200624	SE208137.001	LB203606	24 Jun 2020	25 Jun 2020	22 Jul 2020	06 Jul 2020	22 Jul 2020	08 Jul 2020
0407_TP169_0.1_200624	SE208137.002	LB203606	24 Jun 2020	25 Jun 2020	22 Jul 2020	06 Jul 2020	22 Jul 2020	08 Jul 2020
0407_TP182_0.1_200624	SE208137.003	LB203606	24 Jun 2020	25 Jun 2020	22 Jul 2020	06 Jul 2020	22 Jul 2020	08 Jul 2020
0407_TP182_0.5_200624	SE208137.004	LB203606	24 Jun 2020	25 Jun 2020	22 Jul 2020	06 Jul 2020	22 Jul 2020	08 Jul 2020
0407_TP185_0.1_200624	SE208137.005	LB203606	24 Jun 2020	25 Jun 2020	22 Jul 2020	06 Jul 2020	22 Jul 2020	08 Jul 2020
0407_TP185_0.4_200624	SE208137.006	LB203606	24 Jun 2020	25 Jun 2020	22 Jul 2020	06 Jul 2020	22 Jul 2020	08 Jul 2020
0407_TP210_0.1_200624	SE208137.007	LB203606	24 Jun 2020	25 Jun 2020	22 Jul 2020	06 Jul 2020	22 Jul 2020	08 Jul 2020
0407_TP210_0.5_200624	SE208137.008	LB203606	24 Jun 2020	25 Jun 2020	22 Jul 2020	06 Jul 2020	22 Jul 2020	08 Jul 2020
0407_TP234_0.1_200624	SE208137.010	LB203606	24 Jun 2020	25 Jun 2020	22 Jul 2020	06 Jul 2020	22 Jul 2020	08 Jul 2020
0407_TP235_0.5_200624	SE208137.012	LB203606	24 Jun 2020	25 Jun 2020	22 Jul 2020	06 Jul 2020	22 Jul 2020	08 Jul 2020
0407_TP235_0.1_200624	SE208137.013	LB203606	24 Jun 2020	25 Jun 2020	22 Jul 2020	06 Jul 2020	22 Jul 2020	08 Jul 2020
0407_TP235_0.5_200624	SE208137.014	LB203606	24 Jun 2020	25 Jun 2020	22 Jul 2020	06 Jul 2020	22 Jul 2020	08 Jul 2020
0407_TP236_0.1_200624	SE208137.015	LB203606	24 Jun 2020	25 Jun 2020	22 Jul 2020	06 Jul 2020	22 Jul 2020	08 Jul 2020
0407_TP236_0.4_200624	SE208137.018	LB203606	24 Jun 2020	25 Jun 2020	22 Jul 2020	06 Jul 2020	22 Jul 2020	08 Jul 2020
0407_TP236_0.5_200624	SE208137.019	LB203606	24 Jun 2020	25 Jun 2020	22 Jul 2020	06 Jul 2020	22 Jul 2020	08 Jul 2020
0407_TP241_0.1_200624	SE208137.020	LB203606	24 Jun 2020	25 Jun 2020	22 Jul 2020	06 Jul 2020	22 Jul 2020	08 Jul 2020
0407_TP241_0.2_200624	SE208137.021	LB203606	24 Jun 2020	25 Jun 2020	22 Jul 2020	06 Jul 2020	22 Jul 2020	08 Jul 2020
0407_QC161_200624	SE208137.022	LB203606	24 Jun 2020	25 Jun 2020	22 Jul 2020	06 Jul 2020	22 Jul 2020	08 Jul 2020
0407_QC148_200624	SE208137.023	LB203606	24 Jun 2020	25 Jun 2020	22 Jul 2020	06 Jul 2020	22 Jul 2020	08 Jul 2020
0407_QC149_200624	SE208137.024	LB203607	24 Jun 2020	25 Jun 2020	22 Jul 2020	06 Jul 2020	22 Jul 2020	08 Jul 2020

HOLDING TIME SUMMARY

SE208137 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP155_0.1_200624	SE208137.001	LB203566	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_TP169_0.1_200624	SE208137.002	LB203566	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_TP182_0.1_200624	SE208137.003	LB203566	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_TP182_0.5_200624	SE208137.004	LB203566	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_TP185_0.1_200624	SE208137.005	LB203566	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_TP185_0.4_200624	SE208137.006	LB203566	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_TP210_0.1_200624	SE208137.007	LB203566	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_TP210_0.5_200624	SE208137.008	LB203566	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_TP234_0.1_200624	SE208137.010	LB203566	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_TP235_0.5_200624	SE208137.012	LB203566	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_TP235_0.1_200624	SE208137.013	LB203566	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_TP235_0.5_200624	SE208137.014	LB203566	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_TP236_0.1_200624	SE208137.015	LB203566	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_TP236_0.4_200624	SE208137.018	LB203566	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	11 Jul 2020	07 Jul 2020
0407_TP236_0.5_200624	SE208137.019	LB203566	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_TP241_0.1_200624	SE208137.020	LB203567	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_TP241_0.2_200624	SE208137.021	LB203567	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_QC161_200624	SE208137.022	LB203567	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_QC148_200624	SE208137.023	LB203567	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_QC149_200624	SE208137.024	LB203567	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_QC412_200624	SE208137.025	LB203567	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP155_0.1_200624	SE208137.001	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP169_0.1_200624	SE208137.002	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP182_0.1_200624	SE208137.003	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP182_0.5_200624	SE208137.004	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP185_0.1_200624	SE208137.005	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP185_0.4_200624	SE208137.006	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP210_0.1_200624	SE208137.007	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP210_0.5_200624	SE208137.008	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP234_0.1_200624	SE208137.010	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP235_0.5_200624	SE208137.012	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP235_0.1_200624	SE208137.013	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP235_0.5_200624	SE208137.014	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP236_0.1_200624	SE208137.015	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP236_0.4_200624	SE208137.018	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP236_0.5_200624	SE208137.019	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP241_0.1_200624	SE208137.020	LB203560	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP241_0.2_200624	SE208137.021	LB203560	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_QC161_200624	SE208137.022	LB203560	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_QC148_200624	SE208137.023	LB203560	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_QC149_200624	SE208137.024	LB203560	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP155_0.1_200624	SE208137.001	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP169_0.1_200624	SE208137.002	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP182_0.1_200624	SE208137.003	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP182_0.5_200624	SE208137.004	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP185_0.1_200624	SE208137.005	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP185_0.4_200624	SE208137.006	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP210_0.1_200624	SE208137.007	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP210_0.5_200624	SE208137.008	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP234_0.1_200624	SE208137.010	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP235_0.5_200624	SE208137.012	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP235_0.1_200624	SE208137.013	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP235_0.5_200624	SE208137.014	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP236_0.1_200624	SE208137.015	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP236_0.4_200624	SE208137.018	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020

HOLDING TIME SUMMARY

SE208137 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP236_0.5_200624	SE208137.019	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP241_0.1_200624	SE208137.020	LB203560	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP241_0.2_200624	SE208137.021	LB203560	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_QC161_200624	SE208137.022	LB203560	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_QC148_200624	SE208137.023	LB203560	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_QC149_200624	SE208137.024	LB203560	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP155_0.1_200624	SE208137.001	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP169_0.1_200624	SE208137.002	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP182_0.1_200624	SE208137.003	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP182_0.5_200624	SE208137.004	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP185_0.1_200624	SE208137.005	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP185_0.4_200624	SE208137.006	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP210_0.1_200624	SE208137.007	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP210_0.5_200624	SE208137.008	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP234_0.1_200624	SE208137.010	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP235_0.5_200624	SE208137.012	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP235_0.1_200624	SE208137.013	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP235_0.5_200624	SE208137.014	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP236_0.1_200624	SE208137.015	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP236_0.4_200624	SE208137.018	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP236_0.5_200624	SE208137.019	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP241_0.1_200624	SE208137.020	LB203560	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP241_0.2_200624	SE208137.021	LB203560	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_QC161_200624	SE208137.022	LB203560	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_QC148_200624	SE208137.023	LB203560	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_QC149_200624	SE208137.024	LB203560	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP155_0.1_200624	SE208137.001	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP169_0.1_200624	SE208137.002	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP182_0.1_200624	SE208137.003	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP182_0.5_200624	SE208137.004	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP185_0.1_200624	SE208137.005	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP185_0.4_200624	SE208137.006	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP210_0.1_200624	SE208137.007	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP210_0.5_200624	SE208137.008	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP234_0.1_200624	SE208137.010	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP235_0.5_200624	SE208137.012	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP235_0.1_200624	SE208137.013	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP235_0.5_200624	SE208137.014	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP236_0.1_200624	SE208137.015	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP236_0.4_200624	SE208137.018	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP236_0.5_200624	SE208137.019	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP241_0.1_200624	SE208137.020	LB203560	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP241_0.2_200624	SE208137.021	LB203560	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_QC161_200624	SE208137.022	LB203560	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_QC148_200624	SE208137.023	LB203560	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_QC149_200624	SE208137.024	LB203560	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP155_0.1_200624	SE208137.001	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP169_0.1_200624	SE208137.002	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP182_0.1_200624	SE208137.003	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP182_0.5_200624	SE208137.004	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP185_0.1_200624	SE208137.005	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP185_0.4_200624	SE208137.006	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP210_0.1_200624	SE208137.007	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP210_0.5_200624	SE208137.008	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP234_0.1_200624	SE208137.010	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP235_0.5_200624	SE208137.012	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP235_0.1_200624	SE208137.013	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP235_0.5_200624	SE208137.014	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP236_0.1_200624	SE208137.015	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP236_0.4_200624	SE208137.018	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP236_0.5_200624	SE208137.019	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP241_0.1_200624	SE208137.020	LB203560	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP241_0.2_200624	SE208137.021	LB203560	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_QC161_200624	SE208137.022	LB203560	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_QC148_200624	SE208137.023	LB203560	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_QC149_200624	SE208137.024	LB203560	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP155_0.1_200624	SE208137.001	LB203600	24 Jun 2020	25 Jun 2020	21 Dec 2020	06 Jul 2020	21 Dec 2020	08 Jul 2020
0407_TP169_0.1_200624	SE208137.002	LB203600	24 Jun 2020	25 Jun 2020	21 Dec 2020	06 Jul 2020	21 Dec 2020	08 Jul 2020
0407_TP182_0.1_200624	SE208137.003	LB203600	24 Jun 2020	25 Jun 2020	21 Dec 2020	06 Jul 2020	21 Dec 2020	08 Jul 2020
0407_TP182_0.5_200624	SE208137.004	LB203600	24 Jun 2020	25 Jun 2020	21 Dec 2020	06 Jul 2020	21 Dec 2020	08 Jul 2020
0407_TP185_0.1_200624	SE208137.005	LB203600	24 Jun 2020	25 Jun 2020	21 Dec 2020	06 Jul 2020	21 Dec 2020	08 Jul 2020
0407_TP185_0.4_200624	SE208137.006	LB203600	24 Jun 2020	25 Jun 2020	21 Dec 2020	06 Jul 2020	21 Dec 2020	08 Jul 2020
0407_TP210_0.1_200624	SE208137.007	LB203600	24 Jun 2020	25 Jun 2020	21 Dec 2020	06 Jul 2020	21 Dec 2020	08 Jul 2020
0407_TP210_0.5_200624	SE208137.008	LB203600	24 Jun 2020	25 Jun 2020	21 Dec 2020	06 Jul 2020	21 Dec 2020	08 Jul 2020
0407_TP234_0.1_200624	SE208137.010	LB203600	24 Jun 2020	25 Jun 2020	21 Dec 2020	06 Jul 2020	21 Dec 2020	08 Jul 2020
0407_TP235_0.5_200624	SE208137.012	LB203600	24 Jun 2020	25 Jun 2020	21 Dec 2020	06 Jul 2020	21 Dec 2020	08 Jul 2020
0407_TP235_0.1_200624	SE208137.013	LB203600	24 Jun 2020	25 Jun 2020	21 Dec 2020	06 Jul 2020	21 Dec 2020	08 Jul 2020
0407_TP235_0.5_200624	SE208137.014	LB203600	24 Jun 2020	25 Jun 2020	21 Dec 2020	06 Jul 2020	21 Dec 2020	08 Jul 2020
0407_TP236_0.1_200624	SE208137.015	LB203600	24 Jun 2020	25 Jun 2020	21 Dec 2020	06 Jul 2020	21 Dec 2020	08 Jul 2020
0407_TP236_0.4_200624	SE208137.018	LB203600	24 Jun 2020	25 Jun 2020	21 Dec 2020	06 Jul 2020	21 Dec 2020	08 Jul 2020
0407_TP236_0.5_200624	SE208137.019	LB203600	24 Jun 2020	25 Jun 2020	21 Dec 2020	06 Jul 2020	21 Dec 2020	08 Jul 2020
0407_TP241_0.1_200624	SE208137.020	LB203600	24 Jun 2020	25 Jun 2020	21 Dec 2020	06 Jul 2020	21 Dec 2020	08 Jul 2020
0407_TP241_0.2_200624	SE208137.021	LB203600	24 Jun 2020	25 Jun 2020	21 Dec 2020	06 Jul 2020	21 Dec 2020	08 Jul 2020
0407_QC161_200624	SE208137.022	LB203600	24 Jun 2020	25 Jun 2020	21 Dec 2020	06 Jul 2020	21 Dec 2020	08 Jul 2020
0407_QC148_200624	SE208137.023	LB203600	24 Jun 2020	25 Jun 2020	21 Dec 2020	06 Jul 2020	21 Dec 2020	08 Jul 2020
0407_QC149_200624	SE208137.024	LB203601	24 Jun 2020	25 Jun 2020	21 Dec 2020	06 Jul 2020	21 Dec 2020	08 Jul 2020

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP155_0.1_200624	SE208137.001	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP169_0.1_200624	SE208137.002	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP182_0.1_200624	SE208137.003	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP182_0.5_200624	SE208137.004	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP185_0.1_200624	SE208137.005	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP185_0.4_200624	SE208137.006	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP210_0.1_200624	SE208137.007	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP210_0.5_200624	SE208137.008	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP234_0.1_200624	SE208137.010	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP235_0.5_200624	SE208137.012	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP235_0.1_200624	SE208137.013	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP235_0.5_200624	SE208137.014	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP236_0.1_200624	SE208137.015	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP236_0.4_200624	SE208137.018	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP236_0.5_200624	SE208137.019	LB203557	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP241_0.1_200624	SE208137.020	LB203560	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP241_0.2_200624	SE208137.021	LB203560	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_QC161_200624	SE208137.022	LB203560	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_QC148_200624	SE208137.023	LB203560	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_QC149_200624	SE208137.024	LB203560	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020

HOLDING TIME SUMMARY

SE208137 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP155_0.1_200624	SE208137.001	LB203550	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP169_0.1_200624	SE208137.002	LB203550	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP182_0.1_200624	SE208137.003	LB203550	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP182_0.5_200624	SE208137.004	LB203550	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP185_0.1_200624	SE208137.005	LB203550	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP185_0.4_200624	SE208137.006	LB203550	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP210_0.1_200624	SE208137.007	LB203550	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP210_0.5_200624	SE208137.008	LB203550	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP234_0.1_200624	SE208137.010	LB203550	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP235_0.5_200624	SE208137.012	LB203550	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP235_0.1_200624	SE208137.013	LB203550	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP235_0.5_200624	SE208137.014	LB203550	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP236_0.1_200624	SE208137.015	LB203550	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP236_0.4_200624	SE208137.018	LB203550	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP236_0.5_200624	SE208137.019	LB203550	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP241_0.1_200624	SE208137.020	LB203551	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP241_0.2_200624	SE208137.021	LB203551	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_QC161_200624	SE208137.022	LB203551	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_QC148_200624	SE208137.023	LB203551	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_QC149_200624	SE208137.024	LB203551	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_QC412_200624	SE208137.025	LB203551	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_QC512_200624	SE208137.026	LB203551	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP155_0.1_200624	SE208137.001	LB203550	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP169_0.1_200624	SE208137.002	LB203550	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP182_0.1_200624	SE208137.003	LB203550	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP182_0.5_200624	SE208137.004	LB203550	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP185_0.1_200624	SE208137.005	LB203550	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP185_0.4_200624	SE208137.006	LB203550	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP210_0.1_200624	SE208137.007	LB203550	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP210_0.5_200624	SE208137.008	LB203550	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP234_0.1_200624	SE208137.010	LB203550	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP235_0.5_200624	SE208137.012	LB203550	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP235_0.1_200624	SE208137.013	LB203550	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP235_0.5_200624	SE208137.014	LB203550	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP236_0.1_200624	SE208137.015	LB203550	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP236_0.4_200624	SE208137.018	LB203550	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP236_0.5_200624	SE208137.019	LB203550	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP241_0.1_200624	SE208137.020	LB203551	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_TP241_0.2_200624	SE208137.021	LB203551	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_QC161_200624	SE208137.022	LB203551	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_QC148_200624	SE208137.023	LB203551	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_QC149_200624	SE208137.024	LB203551	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_QC412_200624	SE208137.025	LB203551	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	08 Jul 2020
0407_QC512_200624	SE208137.026	LB203551	24 Jun 2020	25 Jun 2020	08 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP155_0.1_200624	SE208137.001	%	60 - 130%	101
	0407_TP169_0.1_200624	SE208137.002	%	60 - 130%	98
	0407_TP182_0.1_200624	SE208137.003	%	60 - 130%	99
	0407_TP182_0.5_200624	SE208137.004	%	60 - 130%	95
	0407_TP185_0.1_200624	SE208137.005	%	60 - 130%	95
	0407_TP185_0.4_200624	SE208137.006	%	60 - 130%	93
	0407_TP210_0.1_200624	SE208137.007	%	60 - 130%	111
	0407_TP210_0.5_200624	SE208137.008	%	60 - 130%	99
	0407_TP234_0.1_200624	SE208137.010	%	60 - 130%	109
	0407_TP235_0.5_200624	SE208137.012	%	60 - 130%	101
	0407_TP235_0.1_200624	SE208137.013	%	60 - 130%	112
	0407_TP235_0.5_200624	SE208137.014	%	60 - 130%	104
	0407_TP236_0.1_200624	SE208137.015	%	60 - 130%	111
	0407_TP236_0.5_200624	SE208137.019	%	60 - 130%	114
	0407_TP241_0.1_200624	SE208137.020	%	60 - 130%	101
	0407_TP241_0.2_200624	SE208137.021	%	60 - 130%	99
	0407_QC161_200624	SE208137.022	%	60 - 130%	103
	0407_QC148_200624	SE208137.023	%	60 - 130%	111
	0407_QC149_200624	SE208137.024	%	60 - 130%	106

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP155_0.1_200624	SE208137.001	%	60 - 130%	99
	0407_TP169_0.1_200624	SE208137.002	%	60 - 130%	76
	0407_TP182_0.1_200624	SE208137.003	%	60 - 130%	84
	0407_TP182_0.5_200624	SE208137.004	%	60 - 130%	87
	0407_TP185_0.1_200624	SE208137.005	%	60 - 130%	73
	0407_TP185_0.4_200624	SE208137.006	%	60 - 130%	75
	0407_TP210_0.1_200624	SE208137.007	%	60 - 130%	78
	0407_TP210_0.5_200624	SE208137.008	%	60 - 130%	73
	0407_TP234_0.1_200624	SE208137.010	%	60 - 130%	88
	0407_TP235_0.5_200624	SE208137.012	%	60 - 130%	73
	0407_TP235_0.1_200624	SE208137.013	%	60 - 130%	84
	0407_TP235_0.5_200624	SE208137.014	%	60 - 130%	71
	0407_TP236_0.1_200624	SE208137.015	%	60 - 130%	79
	0407_TP236_0.5_200624	SE208137.019	%	60 - 130%	80
	0407_TP241_0.1_200624	SE208137.020	%	60 - 130%	86
	0407_TP241_0.2_200624	SE208137.021	%	60 - 130%	76
	0407_QC161_200624	SE208137.022	%	60 - 130%	93
	0407_QC148_200624	SE208137.023	%	60 - 130%	88
	0407_QC149_200624	SE208137.024	%	60 - 130%	73
d14-p-terphenyl (Surrogate)	0407_TP155_0.1_200624	SE208137.001	%	60 - 130%	88
	0407_TP169_0.1_200624	SE208137.002	%	60 - 130%	74
	0407_TP182_0.1_200624	SE208137.003	%	60 - 130%	74
	0407_TP182_0.5_200624	SE208137.004	%	60 - 130%	79
	0407_TP185_0.1_200624	SE208137.005	%	60 - 130%	81
	0407_TP185_0.4_200624	SE208137.006	%	60 - 130%	80
	0407_TP210_0.1_200624	SE208137.007	%	60 - 130%	82
	0407_TP210_0.5_200624	SE208137.008	%	60 - 130%	87
	0407_TP234_0.1_200624	SE208137.010	%	60 - 130%	81
	0407_TP235_0.5_200624	SE208137.012	%	60 - 130%	80
	0407_TP235_0.1_200624	SE208137.013	%	60 - 130%	85
	0407_TP235_0.5_200624	SE208137.014	%	60 - 130%	85
	0407_TP236_0.1_200624	SE208137.015	%	60 - 130%	86
	0407_TP236_0.5_200624	SE208137.019	%	60 - 130%	92
	0407_TP241_0.1_200624	SE208137.020	%	60 - 130%	88
	0407_TP241_0.2_200624	SE208137.021	%	60 - 130%	94
	0407_QC161_200624	SE208137.022	%	60 - 130%	84
	0407_QC148_200624	SE208137.023	%	60 - 130%	88
	0407_QC149_200624	SE208137.024	%	60 - 130%	84

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP155_0.1_200624	SE208137.001	%	70 - 130%	99
	0407_TP169_0.1_200624	SE208137.002	%	70 - 130%	76
	0407_TP182_0.1_200624	SE208137.003	%	70 - 130%	84
	0407_TP182_0.5_200624	SE208137.004	%	70 - 130%	87
	0407_TP185_0.1_200624	SE208137.005	%	70 - 130%	73
	0407_TP185_0.4_200624	SE208137.006	%	70 - 130%	75
	0407_TP210_0.1_200624	SE208137.007	%	70 - 130%	78
	0407_TP210_0.5_200624	SE208137.008	%	70 - 130%	73
	0407_TP234_0.1_200624	SE208137.010	%	70 - 130%	88
	0407_TP235_0.5_200624	SE208137.012	%	70 - 130%	73
	0407_TP235_0.1_200624	SE208137.013	%	70 - 130%	84
	0407_TP235_0.5_200624	SE208137.014	%	70 - 130%	71
	0407_TP236_0.1_200624	SE208137.015	%	70 - 130%	79
	0407_TP236_0.5_200624	SE208137.019	%	70 - 130%	80
	0407_TP241_0.1_200624	SE208137.020	%	70 - 130%	86
	0407_TP241_0.2_200624	SE208137.021	%	70 - 130%	76
	0407_QC161_200624	SE208137.022	%	70 - 130%	93
	0407_QC148_200624	SE208137.023	%	70 - 130%	88
	0407_QC149_200624	SE208137.024	%	70 - 130%	73
d14-p-terphenyl (Surrogate)	0407_TP155_0.1_200624	SE208137.001	%	70 - 130%	88
	0407_TP169_0.1_200624	SE208137.002	%	70 - 130%	74
	0407_TP182_0.1_200624	SE208137.003	%	70 - 130%	74
	0407_TP182_0.5_200624	SE208137.004	%	70 - 130%	79
	0407_TP185_0.1_200624	SE208137.005	%	70 - 130%	81
	0407_TP185_0.4_200624	SE208137.006	%	70 - 130%	80
	0407_TP210_0.1_200624	SE208137.007	%	70 - 130%	82
	0407_TP210_0.5_200624	SE208137.008	%	70 - 130%	87
	0407_TP234_0.1_200624	SE208137.010	%	70 - 130%	81
	0407_TP235_0.5_200624	SE208137.012	%	70 - 130%	80
	0407_TP235_0.1_200624	SE208137.013	%	70 - 130%	85
	0407_TP235_0.5_200624	SE208137.014	%	70 - 130%	85
	0407_TP236_0.1_200624	SE208137.015	%	70 - 130%	86
	0407_TP236_0.5_200624	SE208137.019	%	70 - 130%	92
	0407_TP241_0.1_200624	SE208137.020	%	70 - 130%	88
	0407_TP241_0.2_200624	SE208137.021	%	70 - 130%	94
	0407_QC161_200624	SE208137.022	%	70 - 130%	84
	0407_QC148_200624	SE208137.023	%	70 - 130%	88
	0407_QC149_200624	SE208137.024	%	70 - 130%	84
d5-nitrobenzene (Surrogate)	0407_TP155_0.1_200624	SE208137.001	%	70 - 130%	87
	0407_TP169_0.1_200624	SE208137.002	%	70 - 130%	86
	0407_TP182_0.1_200624	SE208137.003	%	70 - 130%	85
	0407_TP182_0.5_200624	SE208137.004	%	70 - 130%	87
	0407_TP185_0.1_200624	SE208137.005	%	70 - 130%	73
	0407_TP185_0.4_200624	SE208137.006	%	70 - 130%	71
	0407_TP210_0.1_200624	SE208137.007	%	70 - 130%	72
	0407_TP210_0.5_200624	SE208137.008	%	70 - 130%	76
	0407_TP234_0.1_200624	SE208137.010	%	70 - 130%	74
	0407_TP235_0.5_200624	SE208137.012	%	70 - 130%	74
	0407_TP235_0.1_200624	SE208137.013	%	70 - 130%	82
	0407_TP235_0.5_200624	SE208137.014	%	70 - 130%	75
	0407_TP236_0.1_200624	SE208137.015	%	70 - 130%	78
	0407_TP236_0.5_200624	SE208137.019	%	70 - 130%	86
	0407_TP241_0.1_200624	SE208137.020	%	70 - 130%	86
	0407_TP241_0.2_200624	SE208137.021	%	70 - 130%	87
	0407_QC161_200624	SE208137.022	%	70 - 130%	86
	0407_QC148_200624	SE208137.023	%	70 - 130%	83
	0407_QC149_200624	SE208137.024	%	70 - 130%	82

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PCBs in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP155_0.1_200624	SE208137.001	%	60 - 130%	101
	0407_TP169_0.1_200624	SE208137.002	%	60 - 130%	98
	0407_TP182_0.1_200624	SE208137.003	%	60 - 130%	99
	0407_TP182_0.5_200624	SE208137.004	%	60 - 130%	95
	0407_TP185_0.1_200624	SE208137.005	%	60 - 130%	95
	0407_TP185_0.4_200624	SE208137.006	%	60 - 130%	93
	0407_TP210_0.1_200624	SE208137.007	%	60 - 130%	111
	0407_TP210_0.5_200624	SE208137.008	%	60 - 130%	99
	0407_TP234_0.1_200624	SE208137.010	%	60 - 130%	109
	0407_TP235_0.5_200624	SE208137.012	%	60 - 130%	101
	0407_TP235_0.1_200624	SE208137.013	%	60 - 130%	112
	0407_TP235_0.5_200624	SE208137.014	%	60 - 130%	104
	0407_TP236_0.1_200624	SE208137.015	%	60 - 130%	111
	0407_TP236_0.5_200624	SE208137.019	%	60 - 130%	114
	0407_TP241_0.1_200624	SE208137.020	%	60 - 130%	101
	0407_TP241_0.2_200624	SE208137.021	%	60 - 130%	99
	0407_QC161_200624	SE208137.022	%	60 - 130%	103
	0407_QC148_200624	SE208137.023	%	60 - 130%	111
	0407_QC149_200624	SE208137.024	%	60 - 130%	106

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	0407_TP155_0.1_200624	SE208137.001	%	70 - 130%	84
	0407_TP169_0.1_200624	SE208137.002	%	70 - 130%	82
	0407_TP182_0.1_200624	SE208137.003	%	70 - 130%	85
	0407_TP182_0.5_200624	SE208137.004	%	70 - 130%	85
	0407_TP185_0.1_200624	SE208137.005	%	70 - 130%	87
	0407_TP185_0.4_200624	SE208137.006	%	70 - 130%	88
	0407_TP210_0.1_200624	SE208137.007	%	70 - 130%	89
	0407_TP210_0.5_200624	SE208137.008	%	70 - 130%	86
	0407_TP234_0.1_200624	SE208137.010	%	70 - 130%	86
	0407_TP235_0.5_200624	SE208137.012	%	70 - 130%	84
	0407_TP235_0.1_200624	SE208137.013	%	70 - 130%	85
	0407_TP235_0.5_200624	SE208137.014	%	70 - 130%	83
	0407_TP236_0.1_200624	SE208137.015	%	70 - 130%	82
	0407_TP236_0.5_200624	SE208137.019	%	70 - 130%	87
	0407_TP241_0.1_200624	SE208137.020	%	70 - 130%	85
	0407_TP241_0.2_200624	SE208137.021	%	70 - 130%	84
	0407_QC161_200624	SE208137.022	%	70 - 130%	81
	0407_QC148_200624	SE208137.023	%	70 - 130%	84
	0407_QC149_200624	SE208137.024	%	70 - 130%	82
d5-phenol (Surrogate)	0407_TP155_0.1_200624	SE208137.001	%	50 - 130%	82
	0407_TP169_0.1_200624	SE208137.002	%	50 - 130%	82
	0407_TP182_0.1_200624	SE208137.003	%	50 - 130%	83
	0407_TP182_0.5_200624	SE208137.004	%	50 - 130%	83
	0407_TP185_0.1_200624	SE208137.005	%	50 - 130%	82
	0407_TP185_0.4_200624	SE208137.006	%	50 - 130%	82
	0407_TP210_0.1_200624	SE208137.007	%	50 - 130%	82
	0407_TP210_0.5_200624	SE208137.008	%	50 - 130%	85
	0407_TP234_0.1_200624	SE208137.010	%	50 - 130%	81
	0407_TP235_0.5_200624	SE208137.012	%	50 - 130%	53
	0407_TP235_0.1_200624	SE208137.013	%	50 - 130%	82
	0407_TP235_0.5_200624	SE208137.014	%	50 - 130%	81
	0407_TP236_0.1_200624	SE208137.015	%	50 - 130%	80
	0407_TP236_0.5_200624	SE208137.019	%	50 - 130%	84
	0407_TP241_0.1_200624	SE208137.020	%	50 - 130%	86
	0407_TP241_0.2_200624	SE208137.021	%	50 - 130%	85
	0407_QC161_200624	SE208137.022	%	50 - 130%	84
	0407_QC148_200624	SE208137.023	%	50 - 130%	85
	0407_QC149_200624	SE208137.024	%	50 - 130%	85

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP155_0.1_200624	SE208137.001	%	60 - 130%	81
	0407_TP169_0.1_200624	SE208137.002	%	60 - 130%	81
	0407_TP182_0.1_200624	SE208137.003	%	60 - 130%	94
	0407_TP182_0.5_200624	SE208137.004	%	60 - 130%	88
	0407_TP185_0.1_200624	SE208137.005	%	60 - 130%	85
	0407_TP185_0.4_200624	SE208137.006	%	60 - 130%	95
	0407_TP210_0.1_200624	SE208137.007	%	60 - 130%	85
	0407_TP210_0.5_200624	SE208137.008	%	60 - 130%	89
	0407_TP234_0.1_200624	SE208137.010	%	60 - 130%	84
	0407_TP235_0.5_200624	SE208137.012	%	60 - 130%	94
	0407_TP235_0.1_200624	SE208137.013	%	60 - 130%	84
	0407_TP235_0.5_200624	SE208137.014	%	60 - 130%	86
	0407_TP236_0.1_200624	SE208137.015	%	60 - 130%	96
	0407_TP236_0.5_200624	SE208137.019	%	60 - 130%	76
	0407_TP241_0.1_200624	SE208137.020	%	60 - 130%	100
	0407_TP241_0.2_200624	SE208137.021	%	60 - 130%	94
	0407_QC161_200624	SE208137.022	%	60 - 130%	101
	0407_QC148_200624	SE208137.023	%	60 - 130%	99
	0407_QC149_200624	SE208137.024	%	60 - 130%	87
	0407_QC412_200624	SE208137.025	%	60 - 130%	93
	0407_QC512_200624	SE208137.026	%	60 - 130%	101
d4-1,2-dichloroethane (Surrogate)	0407_TP155_0.1_200624	SE208137.001	%	60 - 130%	81
	0407_TP169_0.1_200624	SE208137.002	%	60 - 130%	80
	0407_TP182_0.1_200624	SE208137.003	%	60 - 130%	82
	0407_TP182_0.5_200624	SE208137.004	%	60 - 130%	87
	0407_TP185_0.1_200624	SE208137.005	%	60 - 130%	78
	0407_TP185_0.4_200624	SE208137.006	%	60 - 130%	89
	0407_TP210_0.1_200624	SE208137.007	%	60 - 130%	85
	0407_TP210_0.5_200624	SE208137.008	%	60 - 130%	83
	0407_TP234_0.1_200624	SE208137.010	%	60 - 130%	76
	0407_TP235_0.5_200624	SE208137.012	%	60 - 130%	88
	0407_TP235_0.1_200624	SE208137.013	%	60 - 130%	81
	0407_TP235_0.5_200624	SE208137.014	%	60 - 130%	82
	0407_TP236_0.1_200624	SE208137.015	%	60 - 130%	83
	0407_TP236_0.5_200624	SE208137.019	%	60 - 130%	76
	0407_TP241_0.1_200624	SE208137.020	%	60 - 130%	85
	0407_TP241_0.2_200624	SE208137.021	%	60 - 130%	87
	0407_QC161_200624	SE208137.022	%	60 - 130%	81
	0407_QC148_200624	SE208137.023	%	60 - 130%	87
	0407_QC149_200624	SE208137.024	%	60 - 130%	94
	0407_QC412_200624	SE208137.025	%	60 - 130%	92
	0407_QC512_200624	SE208137.026	%	60 - 130%	91
d8-toluene (Surrogate)	0407_TP155_0.1_200624	SE208137.001	%	60 - 130%	78
	0407_TP169_0.1_200624	SE208137.002	%	60 - 130%	75
	0407_TP182_0.1_200624	SE208137.003	%	60 - 130%	76
	0407_TP182_0.5_200624	SE208137.004	%	60 - 130%	83
	0407_TP185_0.1_200624	SE208137.005	%	60 - 130%	74
	0407_TP185_0.4_200624	SE208137.006	%	60 - 130%	86
	0407_TP210_0.1_200624	SE208137.007	%	60 - 130%	84
	0407_TP210_0.5_200624	SE208137.008	%	60 - 130%	77
	0407_TP234_0.1_200624	SE208137.010	%	60 - 130%	77
	0407_TP235_0.5_200624	SE208137.012	%	60 - 130%	79
	0407_TP235_0.1_200624	SE208137.013	%	60 - 130%	78
	0407_TP235_0.5_200624	SE208137.014	%	60 - 130%	85
	0407_TP236_0.1_200624	SE208137.015	%	60 - 130%	81
	0407_TP236_0.5_200624	SE208137.019	%	60 - 130%	73
	0407_TP241_0.1_200624	SE208137.020	%	60 - 130%	89
	0407_TP241_0.2_200624	SE208137.021	%	60 - 130%	84
	0407_QC161_200624	SE208137.022	%	60 - 130%	80
	0407_QC148_200624	SE208137.023	%	60 - 130%	84
	0407_QC149_200624	SE208137.024	%	60 - 130%	80

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d8-toluene (Surrogate)	0407_QC412_200624	SE208137.025	%	60 - 130%	87
	0407_QC512_200624	SE208137.026	%	60 - 130%	94

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP155_0.1_200624	SE208137.001	%	60 - 130%	81
	0407_TP169_0.1_200624	SE208137.002	%	60 - 130%	81
	0407_TP182_0.1_200624	SE208137.003	%	60 - 130%	94
	0407_TP182_0.5_200624	SE208137.004	%	60 - 130%	88
	0407_TP185_0.1_200624	SE208137.005	%	60 - 130%	85
	0407_TP185_0.4_200624	SE208137.006	%	60 - 130%	95
	0407_TP210_0.1_200624	SE208137.007	%	60 - 130%	85
	0407_TP210_0.5_200624	SE208137.008	%	60 - 130%	89
	0407_TP234_0.1_200624	SE208137.010	%	60 - 130%	84
	0407_TP235_0.5_200624	SE208137.012	%	60 - 130%	94
	0407_TP235_0.1_200624	SE208137.013	%	60 - 130%	84
	0407_TP235_0.5_200624	SE208137.014	%	60 - 130%	86
	0407_TP236_0.1_200624	SE208137.015	%	60 - 130%	96
	0407_TP236_0.5_200624	SE208137.019	%	60 - 130%	76
	0407_TP241_0.1_200624	SE208137.020	%	60 - 130%	100
	0407_TP241_0.2_200624	SE208137.021	%	60 - 130%	94
	0407_QC161_200624	SE208137.022	%	60 - 130%	101
	0407_QC148_200624	SE208137.023	%	60 - 130%	99
	0407_QC149_200624	SE208137.024	%	60 - 130%	87
	0407_QC412_200624	SE208137.025	%	60 - 130%	93
d4-1,2-dichloroethane (Surrogate)	0407_TP155_0.1_200624	SE208137.001	%	60 - 130%	81
	0407_TP169_0.1_200624	SE208137.002	%	60 - 130%	80
	0407_TP182_0.1_200624	SE208137.003	%	60 - 130%	82
	0407_TP182_0.5_200624	SE208137.004	%	60 - 130%	87
	0407_TP185_0.1_200624	SE208137.005	%	60 - 130%	78
	0407_TP185_0.4_200624	SE208137.006	%	60 - 130%	89
	0407_TP210_0.1_200624	SE208137.007	%	60 - 130%	85
	0407_TP210_0.5_200624	SE208137.008	%	60 - 130%	83
	0407_TP234_0.1_200624	SE208137.010	%	60 - 130%	76
	0407_TP235_0.5_200624	SE208137.012	%	60 - 130%	88
	0407_TP235_0.1_200624	SE208137.013	%	60 - 130%	81
	0407_TP235_0.5_200624	SE208137.014	%	60 - 130%	82
	0407_TP236_0.1_200624	SE208137.015	%	60 - 130%	83
	0407_TP236_0.5_200624	SE208137.019	%	60 - 130%	76
	0407_TP241_0.1_200624	SE208137.020	%	60 - 130%	85
	0407_TP241_0.2_200624	SE208137.021	%	60 - 130%	87
	0407_QC161_200624	SE208137.022	%	60 - 130%	81
	0407_QC148_200624	SE208137.023	%	60 - 130%	87
	0407_QC149_200624	SE208137.024	%	60 - 130%	94
	0407_QC412_200624	SE208137.025	%	60 - 130%	92
d8-toluene (Surrogate)	0407_TP155_0.1_200624	SE208137.001	%	60 - 130%	78
	0407_TP169_0.1_200624	SE208137.002	%	60 - 130%	75
	0407_TP182_0.1_200624	SE208137.003	%	60 - 130%	76
	0407_TP182_0.5_200624	SE208137.004	%	60 - 130%	83
	0407_TP185_0.1_200624	SE208137.005	%	60 - 130%	74
	0407_TP185_0.4_200624	SE208137.006	%	60 - 130%	86
	0407_TP210_0.1_200624	SE208137.007	%	60 - 130%	84
	0407_TP210_0.5_200624	SE208137.008	%	60 - 130%	77
	0407_TP234_0.1_200624	SE208137.010	%	60 - 130%	77
	0407_TP235_0.5_200624	SE208137.012	%	60 - 130%	79
	0407_TP235_0.1_200624	SE208137.013	%	60 - 130%	78
	0407_TP235_0.5_200624	SE208137.014	%	60 - 130%	85
	0407_TP236_0.1_200624	SE208137.015	%	60 - 130%	81
	0407_TP236_0.5_200624	SE208137.019	%	60 - 130%	73
	0407_TP241_0.1_200624	SE208137.020	%	60 - 130%	89
	0407_TP241_0.2_200624	SE208137.021	%	60 - 130%	84

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d8-toluene (Surrogate)	0407_QC161_200624	SE208137.022	%	60 - 130%	80
	0407_QC148_200624	SE208137.023	%	60 - 130%	84
	0407_QC149_200624	SE208137.024	%	60 - 130%	80
	0407_QC412_200624	SE208137.025	%	60 - 130%	87

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result
LB203606.001	Mercury	mg/kg	0.05	<0.05
LB203607.001	Mercury	mg/kg	0.05	<0.05

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203557.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	83
LB203560.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	83

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB203557.001	Dichlorvos	mg/kg	0.5	<0.5
	Dimethoate	mg/kg	0.5	<0.5
	Diazinon (Dimpylate)	mg/kg	0.5	<0.5
	Fenitrothion	mg/kg	0.2	<0.2
	Malathion	mg/kg	0.2	<0.2

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203557.001		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	85
		d14-p-terphenyl (Surrogate)	%	-	98
LB203560.001		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	95
		d14-p-terphenyl (Surrogate)	%	-	86

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203557.001		Naphthalene	mg/kg	0.1	<0.1
		2-methylnaphthalene	mg/kg	0.1	<0.1
		1-methylnaphthalene	mg/kg	0.1	<0.1
		Acenaphthylene	mg/kg	0.1	<0.1
		Acenaphthene	mg/kg	0.1	<0.1
		Fluorene	mg/kg	0.1	<0.1
		Phenanthrene	mg/kg	0.1	<0.1
		Anthracene	mg/kg	0.1	<0.1
		Fluoranthene	mg/kg	0.1	<0.1
		Pyrene	mg/kg	0.1	<0.1
		Benzo(a)anthracene	mg/kg	0.1	<0.1
		Chrysene	mg/kg	0.1	<0.1
		Benzo(a)pyrene	mg/kg	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	88
		2-fluorobiphenyl (Surrogate)	%	-	85
		d14-p-terphenyl (Surrogate)	%	-	98
LB203560.001		Naphthalene	mg/kg	0.1	<0.1
		2-methylnaphthalene	mg/kg	0.1	<0.1
		1-methylnaphthalene	mg/kg	0.1	<0.1
		Acenaphthylene	mg/kg	0.1	<0.1
		Acenaphthene	mg/kg	0.1	<0.1
		Fluorene	mg/kg	0.1	<0.1
		Phenanthrene	mg/kg	0.1	<0.1
		Anthracene	mg/kg	0.1	<0.1
		Fluoranthene	mg/kg	0.1	<0.1
		Pyrene	mg/kg	0.1	<0.1
		Benzo(a)anthracene	mg/kg	0.1	<0.1
		Chrysene	mg/kg	0.1	<0.1
		Benzo(a)pyrene	mg/kg	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203560.001	Surrogates	d5-nitrobenzene (Surrogate)	%	-	93
		2-fluorobiphenyl (Surrogate)	%	-	95
		d14-p-terphenyl (Surrogate)	%	-	86

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203557.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	83
LB203560.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	83

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203557.001		Phenol	mg/kg	0.5	<0.5
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5
		2-nitrophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
		Pentachlorophenol	mg/kg	0.5	<0.5
		2,4-dinitrophenol	mg/kg	2	<2
		4-chloro-3-methylphenol	mg/kg	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	83
		d5-phenol (Surrogate)	%	-	87
LB203560.001		Phenol	mg/kg	0.5	<0.5
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5
		2-nitrophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
		Pentachlorophenol	mg/kg	0.5	<0.5
		2,4-dinitrophenol	mg/kg	2	<2

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203560.001		4-chloro-3-methylphenol	mg/kg	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	86
		d5-phenol (Surrogate)	%	-	94

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB203600.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0
LB203601.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB203557.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110
LB203560.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB203550.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB203550.001	Halogenated Aliphatics	1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10
		MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	97
		d8-toluene (Surrogate)	%	-	81
		Bromofluorobenzene (Surrogate)	%	-	84
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1
LB203551.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB203551.001	Halogenated Aliphatics	Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic	Benzene	mg/kg	0.1	<0.1
	Hydrocarbons	Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10
		MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	101
		d8-toluene (Surrogate)	%	-	96

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB203551.001	Surrogates	Bromofluorobenzene (Surrogate)	%	-	100
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB203550.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	97
LB203551.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	101

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208137.012	LB203606.014	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE208137.023	LB203606.024	Mercury	mg/kg	0.05	0.11	0.09	80	21
SE208142.005	LB203607.014	Mercury	mg/kg	0.05	0.0830097622	0.08	92	6
SE208142.014	LB203607.024	Mercury	mg/kg	0.05	0.0064360571	<0.05	200	0

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208137.012	LB203566.011	% Moisture	%w/w	1	15.7	17.0	36	8
SE208137.019	LB203566.017	% Moisture	%w/w	1	35.3	35.8	33	1
SE208137.020	LB203567.011	% Moisture	%w/w	1	9.1	8.8	41	3

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208137.008	LB203557.022		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	0	200	0
			Alpha BHC	mg/kg	0.1	<0.1	0	200	0
			Lindane	mg/kg	0.1	<0.1	0	200	0
			Heptachlor	mg/kg	0.1	<0.1	0	200	0
			Aldrin	mg/kg	0.1	<0.1	0	200	0
			Beta BHC	mg/kg	0.1	<0.1	0	200	0
			Delta BHC	mg/kg	0.1	<0.1	0	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	0	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	0	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	0	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Dieldrin	mg/kg	0.2	<0.2	0	200	0
			Endrin	mg/kg	0.2	<0.2	0	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	0	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	0	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	0	200	0
			Methoxychlor	mg/kg	0.1	<0.1	0	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	0	200	0
			Isodrin	mg/kg	0.1	<0.1	0	200	0
			Mirex	mg/kg	0.1	<0.1	0	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.151	30	2
SE208137.020	LB203560.020		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	0	200	0
			Alpha BHC	mg/kg	0.1	<0.1	0	200	0
			Lindane	mg/kg	0.1	<0.1	0	200	0
			Heptachlor	mg/kg	0.1	<0.1	0	200	0
			Aldrin	mg/kg	0.1	<0.1	0	200	0
			Beta BHC	mg/kg	0.1	<0.1	0	200	0
			Delta BHC	mg/kg	0.1	<0.1	0	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	0	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	0	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	0	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Dieldrin	mg/kg	0.2	<0.2	0.136	101	0
			Endrin	mg/kg	0.2	<0.2	0	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208137.020	LB203560.020		p,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	0	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	0	200	0
			Methoxychlor	mg/kg	0.1	<0.1	0	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	0	200	0
			Isodrin	mg/kg	0.1	<0.1	0	200	0
			Mirex	mg/kg	0.1	<0.1	0	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	0.136	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.154	30	2
SE208137.022	LB203560.021		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	0	200	0
			Alpha BHC	mg/kg	0.1	<0.1	0	200	0
			Lindane	mg/kg	0.1	<0.1	0	200	0
			Heptachlor	mg/kg	0.1	<0.1	0	200	0
			Aldrin	mg/kg	0.1	<0.1	0	200	0
			Beta BHC	mg/kg	0.1	<0.1	0	200	0
			Delta BHC	mg/kg	0.1	<0.1	0	200	0
			Heptachlor epoxide	mg/kg	0.1	0.2	0.187	80	15
			o,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	0	200	0
			Gamma Chlordane	mg/kg	0.1	0.4	0.393	55	2
			Alpha Chlordane	mg/kg	0.1	0.2	0.244	74	15
			trans-Nonachlor	mg/kg	0.1	0.2	0.278	69	15
			p,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Dieldrin	mg/kg	0.2	<0.2	0	200	0
			Endrin	mg/kg	0.2	<0.2	0	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	0	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	0	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	0	200	0
			Methoxychlor	mg/kg	0.1	<0.1	0	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	0	200	0
			Isodrin	mg/kg	0.1	<0.1	0	200	0
			Mirex	mg/kg	0.1	<0.1	0	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	0.824	151	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.16	30	4

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208137.008	LB203557.022		Dichlorvos	mg/kg	0.5	<0.5	0	200	0
			Dimethoate	mg/kg	0.5	<0.5	0	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	0.0361535642	200	0
			Fenitrothion	mg/kg	0.2	<0.2	0	200	0
			Malathion	mg/kg	0.2	<0.2	0	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	0	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	0	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	0	200	0
			Methidathion	mg/kg	0.5	<0.5	0	200	0
			Ethion	mg/kg	0.2	<0.2	0	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	0	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	0	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.362	30	1
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.448	30	3
SE208137.021	LB203560.014		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208137.021	LB203560.014		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	2
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	2

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208137.008	LB203557.022		Naphthalene	mg/kg	0.1	<0.1	0.0019996848	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	0	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	0	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	0.0073027691	200	0
			Acenaphthene	mg/kg	0.1	<0.1	0	200	0
			Fluorene	mg/kg	0.1	<0.1	0	200	0
			Phenanthrene	mg/kg	0.1	<0.1	0.0194470891	200	0
			Anthracene	mg/kg	0.1	<0.1	0.0075108112	200	0
			Fluoranthene	mg/kg	0.1	<0.1	0.0694684971	169	0
			Pyrene	mg/kg	0.1	<0.1	0.0796772555	155	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	0.0401513774	200	0
			Chrysene	mg/kg	0.1	<0.1	0.0846780700	147	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	0.0840788119	153	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	0.0875275372	143	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	0.0505698680	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	0.0319920907	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	0.0054276469	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	0.0349914382	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	0	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	0.242	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	0.121	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	0	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.3788363537	30	1
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.3615971820	30	1
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4475110582	30	3
SE208137.021	LB203560.014		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	0.1	<0.1	122	23
			Pyrene	mg/kg	0.1	0.1	0.1	116	24
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	172	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	166	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	194	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	<0.3	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	<0.2	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	30	5
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	2

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208137.021	LB203560.014	Surrogates	d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	2

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208137.008	LB203557.022		Arochlor 1016	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	0	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0.151	30	2
SE208137.020	LB203560.020		Arochlor 1016	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	0	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0.154	30	2
SE208137.022	LB203560.021		Arochlor 1016	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	0	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0.16	30	4

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208137.008	LB203557.022		Phenol	mg/kg	0.5	<0.5	0	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	0	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	0	200	0
			Total Cresol	mg/kg	1.5	<1.5	0	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	0	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	0	200	0
			4-nitrophenol	mg/kg	1	<1	0	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	0	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dinitrophenol	mg/kg	2	<2	0	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	0	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.3	4.35	30	2
			d5-phenol (Surrogate)	mg/kg	-	1.7	1.73	30	2
SE208137.021	LB203560.014		Phenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	200	0
			Total Cresol	mg/kg	1.5	<1.5	<1.5	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208137.021	LB203560.014		2-chlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	200	0
			4-nitrophenol	mg/kg	1	<1	<1	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dinitrophenol	mg/kg	2	<2	<2	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.2	4.2	30	1
			d5-phenol (Surrogate)	mg/kg	-	1.7	1.7	30	1
SE208137.023	LB203560.019		Phenol	mg/kg	0.5	<0.5	0	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	0	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	0	200	0
			Total Cresol	mg/kg	1.5	<1.5	0	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	0	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	0	200	0
			4-nitrophenol	mg/kg	1	<1	0	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	0	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dinitrophenol	mg/kg	2	<2	0	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	0	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.2	4.31	30	3
			d5-phenol (Surrogate)	mg/kg	-	1.7	1.74	30	3

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208137.012	LB203600.014	Arsenic, As	mg/kg	1	<1	<1	200	0
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	<0.5	<0.5	197	0
		Copper, Cu	mg/kg	0.5	1.2	1.6	65	30
		Nickel, Ni	mg/kg	0.5	<0.5	<0.5	200	0
		Lead, Pb	mg/kg	1	5	5	49	11
		Zinc, Zn	mg/kg	2	6.7	5.7	62	16
SE208137.023	LB203600.024	Arsenic, As	mg/kg	1	2	2	78	5
		Cadmium, Cd	mg/kg	0.3	0.3	0.3	118	2
		Chromium, Cr	mg/kg	0.5	6.0	7.0	38	14
		Copper, Cu	mg/kg	0.5	25	26	32	4
		Nickel, Ni	mg/kg	0.5	9.3	10	35	7
		Lead, Pb	mg/kg	1	110	110	31	4
		Zinc, Zn	mg/kg	2	260	260	31	1
SE208142.005	LB203601.014	Arsenic, As	mg/kg	1	7.5188152031	9	42	20
		Cadmium, Cd	mg/kg	0.3	0.3963365661	0.3	114	23
		Chromium, Cr	mg/kg	0.5	20.8837263433	22	32	7
		Copper, Cu	mg/kg	0.5	43.647551245(	41	31	6
		Nickel, Ni	mg/kg	0.5	12.5206563564	9.4	35	29
		Lead, Pb	mg/kg	1	20.195774574(	150	31	19
		Zinc, Zn	mg/kg	2	18.037724770	260	31	21
SE208142.014	LB203601.024	Arsenic, As	mg/kg	1	0.1684131588	<1	200	0
		Cadmium, Cd	mg/kg	0.3	0.3430179780	0.5	104	32
		Chromium, Cr	mg/kg	0.5	0.6286599043	0.5	115	15
		Copper, Cu	mg/kg	0.5	6.0376943013	6.3	38	4
		Nickel, Ni	mg/kg	0.5	0.2489047421	<0.5	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208142.014	LB203601.024	Lead, Pb	mg/kg	1	18.4949019530	18	35	2
		Zinc, Zn	mg/kg	2	18.4032653813	16	42	12

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208137.008	LB203557.022		TRH C10-C14	mg/kg	20	<20	0	200	0
			TRH C15-C28	mg/kg	45	<45	0	200	0
			TRH C29-C36	mg/kg	45	<45	0	200	0
			TRH C37-C40	mg/kg	100	<100	0	200	0
			TRH C10-C36 Total	mg/kg	110	<110	0	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	0	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	0	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	0	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	0	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	0	200	0
SE208137.022	LB203560.020		TRH C10-C14	mg/kg	20	<20	0	200	0
			TRH C15-C28	mg/kg	45	<45	0	200	0
			TRH C29-C36	mg/kg	45	<45	0	200	0
			TRH C37-C40	mg/kg	100	<100	0	200	0
			TRH C10-C36 Total	mg/kg	110	<110	0	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	0	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	0	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	0	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	0	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	0	200	0
SE208137.024	LB203560.018		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208137.012	LB203550.014	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208137.012	LB203550.014	Halogenated	Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
		Aliphatics	1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.8	8.9	50	2
			d8-toluene (Surrogate)	mg/kg	-	7.9	7.5	50	5
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.4	9.3	50	1
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE208137.020	LB203551.024	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	0	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	0	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	0	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued) — Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208137.020	LB203551.024	Fumigants	1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	0	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	0	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	0	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	0	200	0
			Bromomethane	mg/kg	1	<1	0	200	0
			Chloroethane	mg/kg	1	<1	0	200	0
			Trichlorofluoromethane	mg/kg	1	<1	0	200	0
			Iodomethane	mg/kg	5	<5	0	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	0	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	0	200	0
			Allyl chloride	mg/kg	0.1	<0.1	0	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	0	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	0	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	0	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	0	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	0	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	0	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	0	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	0	200	0
			Dibromomethane	mg/kg	0.1	<0.1	0	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	0	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	0	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	0	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	0	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	0	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	0	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	0	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	0	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	0	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	0	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	0	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	0	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	0	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	0	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	0	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	0	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	0	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	0	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	0	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	0	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	0	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	0.0745401138	164	0
			Ethylbenzene	mg/kg	0.1	<0.1	0.0221188896	200	0
			m/p-xylene	mg/kg	0.2	<0.2	0.0417555339	200	0
			o-xylene	mg/kg	0.1	<0.1	0	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	0	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	0	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	0	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	0	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	0	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	0	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	0	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	0	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	0	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	0	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	0	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	0	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	0	200	0
			Vinyl acetate	mg/kg	10	<10	0	200	0
			MEK (2-butanone)	mg/kg	10	<10	0	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208137.020	LB203551.024	Oxygenated	2-hexanone (MBK)	mg/kg	5	<5	0	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	0	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	0	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.5	8.4575251239	50	0
			d8-toluene (Surrogate)	mg/kg	-	8.9	8.2932194530	50	7
			Bromofluorobenzene (Surrogate)	mg/kg	-	10.0	8.9470430557	50	12
		Totals	Total Xylenes	mg/kg	0.3	<0.3	0.0417555339	200	0
			Total BTEX	mg/kg	0.6	<0.6	0	200	0
			Total VOC*	mg/kg	24	<24	0	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	0	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	0	200	0
		Trihalomethanes	Chloroform	mg/kg	0.1	<0.1	0	200	0
			Bromodichloromethane	mg/kg	0.1	<0.1	0	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	0	200	0
			Bromoform	mg/kg	0.1	<0.1	0	200	0
SE208137.023	LB203551.025	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	0	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	0	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	0	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	0	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	0	200	0
		Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	0	200	0
			Chloromethane	mg/kg	1	<1	0	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	0	200	0
			Bromomethane	mg/kg	1	<1	0	200	0
			Chloroethane	mg/kg	1	<1	0	200	0
			Trichlorofluoromethane	mg/kg	1	<1	0	200	0
			Iodomethane	mg/kg	5	<5	0	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	0	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	0	200	0
			Allyl chloride	mg/kg	0.1	<0.1	0	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	0	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	0	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	0	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	0	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	0	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	0	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	0	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	0	200	0
			Dibromomethane	mg/kg	0.1	<0.1	0	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	0	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	0	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	0	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	0	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	0	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	0	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	0	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	0	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	0	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	0	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	0	200	0
		Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1	0	200	0
			Bromobenzene	mg/kg	0.1	<0.1	0	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	0	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	0	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	0	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	0	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	0	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	0	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	0	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208137.023	LB203551.025	Monocyclic	Toluene	mg/kg	0.1	<0.1	0.0687714655	174	0
		Aromatic	Ethylbenzene	mg/kg	0.1	<0.1	0.0251877153	200	0
			m/p-xylene	mg/kg	0.2	<0.2	0.0457891875	200	0
			o-xylene	mg/kg	0.1	<0.1	0	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	0	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	0	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	0	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	0	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	0	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	0	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	0	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	0	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	0	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	0	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	0	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	0	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	0	200	0
			Vinyl acetate	mg/kg	10	<10	0	200	0
			MEK (2-butanone)	mg/kg	10	<10	0	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	0	200	0
			2-hexanone (MBK)	mg/kg	5	<5	0	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	0.0833192738	152	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	0	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.7	9.2979222834	50	7
			d8-toluene (Surrogate)	mg/kg	-	8.4	8.7530119231	50	4
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.9	9.3771824559	50	5
		Totals	Total Xylenes	mg/kg	0.3	<0.3	0.0457891875	200	0
			Total BTEX	mg/kg	0.6	<0.6	0	200	0
			Total VOC*	mg/kg	24	<24	0.0833192738	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	0	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	0	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	0	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	0	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	0	200	0
			Bromoform	mg/kg	0.1	<0.1	0	200	0

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208137.012	LB203550.014		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.8	8.9	30	2
			d8-toluene (Surrogate)	mg/kg	-	7.9	7.5	30	5
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.4	9.3	30	1
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE208137.020	LB203551.024		TRH C6-C10	mg/kg	25	<25	0	200	0
			TRH C6-C9	mg/kg	20	<20	0	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.5	8.4575251239	30	0
			d8-toluene (Surrogate)	mg/kg	-	8.9	8.2932194530	30	7
			Bromofluorobenzene (Surrogate)	mg/kg	-	10.0	8.9470430557	30	12
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	0	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	0	200	0
SE208137.023	LB203551.025		TRH C6-C10	mg/kg	25	<25	0	200	0
			TRH C6-C9	mg/kg	20	<20	0	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.7	9.2979222834	30	7
			d8-toluene (Surrogate)	mg/kg	-	8.4	8.7530119231	30	4
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.9	9.3771824559	30	5
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	0	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	0	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203606.002	Mercury	mg/kg	0.05	0.23	0.2	70 - 130	116
LB203607.002	Mercury	mg/kg	0.05	0.22	0.2	70 - 130	109

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203557.002		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	123
		Aldrin	mg/kg	0.1	0.3	0.2	60 - 140	126
		Delta BHC	mg/kg	0.1	0.3	0.2	60 - 140	132
		Dieldrin	mg/kg	0.2	0.3	0.2	60 - 140	128
		Endrin	mg/kg	0.2	0.3	0.2	60 - 140	126
		p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	81
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.13	0.15	40 - 130	89
LB203560.002		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	123
		Aldrin	mg/kg	0.1	0.3	0.2	60 - 140	125
		Delta BHC	mg/kg	0.1	0.3	0.2	60 - 140	130
		Dieldrin	mg/kg	0.2	0.3	0.2	60 - 140	128
		Endrin	mg/kg	0.2	0.3	0.2	60 - 140	126
		p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	81
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.13	0.15	40 - 130	89

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203557.002		Dichlorvos	mg/kg	0.5	1.8	2	60 - 140	90
		Diazinon (Dimpylate)	mg/kg	0.5	1.7	2	60 - 140	87
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.5	2	60 - 140	77
		Ethion	mg/kg	0.2	1.8	2	60 - 140	90
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	76
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	76
LB203560.002		Dichlorvos	mg/kg	0.5	1.7	2	60 - 140	86
		Diazinon (Dimpylate)	mg/kg	0.5	2.5	2	60 - 140	124
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.7	2	60 - 140	134
		Ethion	mg/kg	0.2	2.3	2	60 - 140	114
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	86
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	83

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203557.002		Naphthalene	mg/kg	0.1	4.2	4	60 - 140	104
		Acenaphthylene	mg/kg	0.1	4.4	4	60 - 140	111
		Acenaphthene	mg/kg	0.1	3.7	4	60 - 140	93
		Phenanthrene	mg/kg	0.1	4.1	4	60 - 140	102
		Anthracene	mg/kg	0.1	4.3	4	60 - 140	107
		Fluoranthene	mg/kg	0.1	4.0	4	60 - 140	100
		Pyrene	mg/kg	0.1	4.2	4	60 - 140	105
		Benzo(a)pyrene	mg/kg	0.1	4.6	4	60 - 140	116
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	77
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	76
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	76
LB203560.002		Naphthalene	mg/kg	0.1	4.5	4	60 - 140	113
		Acenaphthylene	mg/kg	0.1	5.0	4	60 - 140	125
		Acenaphthene	mg/kg	0.1	4.6	4	60 - 140	114
		Phenanthrene	mg/kg	0.1	4.6	4	60 - 140	115
		Anthracene	mg/kg	0.1	4.7	4	60 - 140	118
		Fluoranthene	mg/kg	0.1	4.8	4	60 - 140	121
		Pyrene	mg/kg	0.1	5.1	4	60 - 140	127
		Benzo(a)pyrene	mg/kg	0.1	5.0	4	60 - 140	126
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	84
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	86
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	83

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PCBs in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203557.002		Arochlor 1260	mg/kg	0.2	0.5	0.4	60 - 140	135
LB203560.002		Arochlor 1260	mg/kg	0.2	0.5	0.4	60 - 140	135

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203557.002		Phenol	mg/kg	0.5	0.7	1	70 - 130	73
		2,4-dichlorophenol	mg/kg	0.5	0.8	1	70 - 130	75
		2,4,6-trichlorophenol	mg/kg	0.5	0.7	1	70 - 130	71
		Pentachlorophenol	mg/kg	0.5	0.8	1	70 - 130	76
	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.2	5	40 - 130	84
		d5-phenol (Surrogate)	mg/kg	-	1.8	2	40 - 130	90
LB203560.002		Phenol	mg/kg	0.5	0.7	1	70 - 130	74
		2,4-dichlorophenol	mg/kg	0.5	0.7	1	70 - 130	74
		2,4,6-trichlorophenol	mg/kg	0.5	0.7	1	70 - 130	70
		Pentachlorophenol	mg/kg	0.5	0.7	1	70 - 130	71
	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.2	5	40 - 130	84
		d5-phenol (Surrogate)	mg/kg	-	1.9	2	40 - 130	93

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203600.002	Arsenic, As	mg/kg	1	340	318.22	80 - 120	105
	Cadmium, Cd	mg/kg	0.3	5.2	5.41	80 - 120	96
	Chromium, Cr	mg/kg	0.5	38	38.31	80 - 120	98
	Copper, Cu	mg/kg	0.5	300	290	80 - 120	104
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	102
	Lead, Pb	mg/kg	1	93	89.9	80 - 120	103
	Zinc, Zn	mg/kg	2	280	273	80 - 120	103
LB203601.002	Arsenic, As	mg/kg	1	330	318.22	80 - 120	105
	Cadmium, Cd	mg/kg	0.3	5.2	5.41	80 - 120	96
	Chromium, Cr	mg/kg	0.5	37	38.31	80 - 120	97
	Copper, Cu	mg/kg	0.5	300	290	80 - 120	102
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	100
	Lead, Pb	mg/kg	1	93	89.9	80 - 120	103
	Zinc, Zn	mg/kg	2	280	273	80 - 120	102

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203557.002		TRH C10-C14	mg/kg	20	49	40	60 - 140	123
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	103
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	78
	TRH F Bands	TRH >C10-C16	mg/kg	25	46	40	60 - 140	115
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	95
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	65
LB203560.002		TRH C10-C14	mg/kg	20	39	40	60 - 140	98
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	83
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	85
	TRH F Bands	TRH >C10-C16	mg/kg	25	37	40	60 - 140	93
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	108
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	65

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203550.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	5.4	5	60 - 140	107
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	5.5	5	60 - 140	110
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	5.9	5	60 - 140	118
	Halogenated	Chlorobenzene	mg/kg	0.1	6.1	5	60 - 140	121
	Monocyclic	Benzene	mg/kg	0.1	5.1	5	60 - 140	102
	Aromatic	Toluene	mg/kg	0.1	5.3	5	60 - 140	106
		Ethylbenzene	mg/kg	0.1	5.3	5	60 - 140	106
		m/p-xylene	mg/kg	0.2	11	10	60 - 140	107
		o-xylene	mg/kg	0.1	5.2	5	60 - 140	104
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.2	10	70 - 130	92

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203550.002	Surrogates	d8-toluene (Surrogate)	mg/kg	-	8.3	10	70 - 130	84
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.2	10	70 - 130	92
	Trihalomethan	Chloroform	mg/kg	0.1	5.6	5	60 - 140	113
LB203551.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	4.3	5	60 - 140	86
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	5.2	5	60 - 140	104
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	5.0	5	60 - 140	99
	Halogenated	Chlorobenzene	mg/kg	0.1	4.6	5	60 - 140	92
	Monocyclic	Benzene	mg/kg	0.1	6.3	5	60 - 140	127
	Aromatic	Toluene	mg/kg	0.1	5.9	5	60 - 140	118
		Ethylbenzene	mg/kg	0.1	5.9	5	60 - 140	117
		m/p-xylene	mg/kg	0.2	12	10	60 - 140	115
		o-xylene	mg/kg	0.1	5.8	5	60 - 140	116
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	11.9	10	70 - 130	119
		d8-toluene (Surrogate)	mg/kg	-	10.5	10	70 - 130	105
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.8	10	70 - 130	98
	Trihalomethan	Chloroform	mg/kg	0.1	4.5	5	60 - 140	91

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203550.002		TRH C6-C10	mg/kg	25	70	92.5	60 - 140	76
		TRH C6-C9	mg/kg	20	61	80	60 - 140	77
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.2	10	70 - 130	92
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.2	10	70 - 130	92
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	39	62.5	60 - 140	62
LB203551.002		TRH C6-C10	mg/kg	25	75	92.5	60 - 140	81
		TRH C6-C9	mg/kg	20	68	80	60 - 140	86
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	11.9	10	70 - 130	119
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.8	10	70 - 130	98
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	39	62.5	60 - 140	63

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

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Mercury in Soil

Method: ME-(AU)-[ENV]AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208136.020	LB203607.004	Mercury	mg/kg	0.05	0.77	0.57491909385	0.2	96

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208136.018	LB203560.022		Hexachlorobenzene (HCB)	mg/kg	0.1	0	-	-
			Alpha BHC	mg/kg	0.1	0	-	-
			Lindane	mg/kg	0.1	0	-	-
			Heptachlor	mg/kg	0.1	0	0.2	84
			Aldrin	mg/kg	0.1	0	0.2	86
			Beta BHC	mg/kg	0.1	0	-	-
			Delta BHC	mg/kg	0.1	0	0.2	84
			Heptachlor epoxide	mg/kg	0.1	0	-	-
			o,p'-DDE	mg/kg	0.1	0	-	-
			Alpha Endosulfan	mg/kg	0.2	0	-	-
			Gamma Chlordane	mg/kg	0.1	0	-	-
			Alpha Chlordane	mg/kg	0.1	0	-	-
			trans-Nonachlor	mg/kg	0.1	0	-	-
			p,p'-DDE	mg/kg	0.1	0	-	-
			Dieldrin	mg/kg	0.2	0	0.2	87
			Endrin	mg/kg	0.2	0	0.2	80
			o,p'-DDD	mg/kg	0.1	0	-	-
			o,p'-DDT	mg/kg	0.1	0	-	-
			Beta Endosulfan	mg/kg	0.2	0	-	-
			p,p'-DDD	mg/kg	0.1	0	-	-
			p,p'-DDT	mg/kg	0.1	0	0.2	71
			Endosulfan sulphate	mg/kg	0.1	0	-	-
			Endrin Aldehyde	mg/kg	0.1	0	-	-
			Methoxychlor	mg/kg	0.1	0	-	-
			Endrin Ketone	mg/kg	0.1	0	-	-
			Isodrin	mg/kg	0.1	0	-	-
			Mirex	mg/kg	0.1	0	-	-
			Total CLP OC Pesticides	mg/kg	1	0	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.167	-	119
SE208137.002	LB203557.021		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	-	-
			Alpha BHC	mg/kg	0.1	<0.1	-	-
			Lindane	mg/kg	0.1	<0.1	-	-
			Heptachlor	mg/kg	0.1	<0.1	0.2	76
			Aldrin	mg/kg	0.1	<0.1	0.2	76
			Beta BHC	mg/kg	0.1	<0.1	-	-
			Delta BHC	mg/kg	0.1	<0.1	0.2	81
			Heptachlor epoxide	mg/kg	0.1	<0.1	-	-
			o,p'-DDE	mg/kg	0.1	<0.1	-	-
			Alpha Endosulfan	mg/kg	0.2	<0.2	-	-
			Gamma Chlordane	mg/kg	0.1	<0.1	-	-
			Alpha Chlordane	mg/kg	0.1	<0.1	-	-
			trans-Nonachlor	mg/kg	0.1	<0.1	-	-
			p,p'-DDE	mg/kg	0.1	<0.1	-	-
			Dieldrin	mg/kg	0.2	<0.2	0.2	8 ⑤
			Endrin	mg/kg	0.2	<0.2	0.2	76
			o,p'-DDD	mg/kg	0.1	<0.1	-	-
			o,p'-DDT	mg/kg	0.1	<0.1	-	-
			Beta Endosulfan	mg/kg	0.2	<0.2	-	-
			p,p'-DDD	mg/kg	0.1	<0.1	-	-
			p,p'-DDT	mg/kg	0.1	<0.1	0.2	78
			Endosulfan sulphate	mg/kg	0.1	<0.1	-	-
			Endrin Aldehyde	mg/kg	0.1	<0.1	-	-
			Methoxychlor	mg/kg	0.1	<0.1	-	-
			Endrin Ketone	mg/kg	0.1	<0.1	-	-
			Isodrin	mg/kg	0.1	<0.1	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208137.002	LB203557.021		Mirex	mg/kg	0.1	<0.1	-	-
			Total CLP OC Pesticides	mg/kg	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	-	100

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208136.017	LB203560.019		Dichlorvos	mg/kg	0.5	0	2	78
			Dimethoate	mg/kg	0.5	0.00278585667	-	-
			Diazinon (Dimpylate)	mg/kg	0.5	0.00555521019	2	137
			Fenitrothion	mg/kg	0.2	0.01507670542	-	-
			Malathion	mg/kg	0.2	0.02298958359	-	-
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	0.00435063768	2	114
			Parathion-ethyl (Parathion)	mg/kg	0.2	0.11798792093	-	-
			Bromophos Ethyl	mg/kg	0.2	0	-	-
			Methidathion	mg/kg	0.5	0	-	-
			Ethion	mg/kg	0.2	0.06369488498	2	128
			Azinphos-methyl (Guthion)	mg/kg	0.2	0	-	-
			Total OP Pesticides*	mg/kg	1.7	0	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.37191551492	-	87
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.42416740967	-	84
SE208137.002	LB203557.021		Dichlorvos	mg/kg	0.5	<0.5	2	85
			Dimethoate	mg/kg	0.5	<0.5	-	-
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	2	111
			Fenitrothion	mg/kg	0.2	<0.2	-	-
			Malathion	mg/kg	0.2	<0.2	-	-
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	2	86
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	-	-
			Bromophos Ethyl	mg/kg	0.2	<0.2	-	-
			Methidathion	mg/kg	0.5	<0.5	-	-
			Ethion	mg/kg	0.2	<0.2	2	110
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	-	-
			Total OP Pesticides*	mg/kg	1.7	<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	-	77
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	-	76

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208136.017	LB203560.019		Naphthalene	mg/kg	0.1	0.01886119561	4	120
			2-methylnaphthalene	mg/kg	0.1	0.00642769886	-	-
			1-methylnaphthalene	mg/kg	0.1	0.01289066428	-	-
			Acenaphthylene	mg/kg	0.1	0.10876851009	4	135
			Acenaphthene	mg/kg	0.1	0.00754081704	4	131
			Fluorene	mg/kg	0.1	0.05294766823	-	-
			Phenanthrene	mg/kg	0.1	0.50013619269	4	113
			Anthracene	mg/kg	0.1	0.15905586297	4	123
			Fluoranthene	mg/kg	0.1	0.92089704290	4	124
			Pyrene	mg/kg	0.1	0.89289508587	4	128
			Benzo(a)anthracene	mg/kg	0.1	0.37330532892	-	-
			Chrysene	mg/kg	0.1	0.34051526492	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1	0.40029591700	-	-
			Benzo(k)fluoranthene	mg/kg	0.1	0.20657255484	-	-
			Benzo(a)pyrene	mg/kg	0.1	0.38305830884	4	122
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.19708231440	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	0.00874619479	-	-
			Benzo(ghi)perylene	mg/kg	0.1	0.19297229333	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	0.50633879890	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	0.60633879890	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	0.55633879890	-	-
			Total PAH (18)	mg/kg	0.8	4.67775470641	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.41309673100	-	86
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.37191551492	-	87
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.42416740967	-	88

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

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PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208137.002	LB203557.021		Naphthalene	mg/kg	0.1	<0.1	4	108
			2-methylnaphthalene	mg/kg	0.1	<0.1	-	-
			1-methylnaphthalene	mg/kg	0.1	<0.1	-	-
			Acenaphthylene	mg/kg	0.1	<0.1	4	111
			Acenaphthene	mg/kg	0.1	<0.1	4	115
			Fluorene	mg/kg	0.1	<0.1	-	-
			Phenanthrene	mg/kg	0.1	0.2	4	105
			Anthracene	mg/kg	0.1	<0.1	4	114
			Fluoranthene	mg/kg	0.1	0.2	4	109
			Pyrene	mg/kg	0.1	0.3	4	115
			Benzo(a)anthracene	mg/kg	0.1	0.1	-	-
			Chrysene	mg/kg	0.1	0.1	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	-	-
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	-	-
			Benzo(a)pyrene	mg/kg	0.1	<0.1	4	129
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	-	-
			Total PAH (18)	mg/kg	0.8	1.0	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	-	78
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	-	77
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	-	76

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208136.018	LB203560.022		Arochlor 1016	mg/kg	0.2	NVL	NVL	NVL	NVL
			Arochlor 1221	mg/kg	0.2	NVL	NVL	NVL	NVL
			Arochlor 1232	mg/kg	0.2	NVL	NVL	NVL	NVL
			Arochlor 1242	mg/kg	0.2	NVL	NVL	NVL	NVL
			Arochlor 1248	mg/kg	0.2	NVL	NVL	NVL	NVL
			Arochlor 1254	mg/kg	0.2	NVL	NVL	NVL	NVL
			Arochlor 1260	mg/kg	0.2		0	0.4	0 †
			Arochlor 1262	mg/kg	0.2	NVL	NVL	NVL	NVL
			Arochlor 1268	mg/kg	0.2	NVL	NVL	NVL	NVL
			Total PCBs (Arochlors)	mg/kg	1	NVL	NVL	NVL	NVL
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	NVL	NVL	NVL	NVL
SE208137.002	LB203557.021		Arochlor 1016	mg/kg	0.2		<0.2	-	-
			Arochlor 1221	mg/kg	0.2		<0.2	-	-
			Arochlor 1232	mg/kg	0.2		<0.2	-	-
			Arochlor 1242	mg/kg	0.2		<0.2	-	-
			Arochlor 1248	mg/kg	0.2		<0.2	-	-
			Arochlor 1254	mg/kg	0.2		<0.2	-	-
			Arochlor 1260	mg/kg	0.2		<0.2	0.4	79
			Arochlor 1262	mg/kg	0.2		<0.2	-	-
			Arochlor 1268	mg/kg	0.2		<0.2	-	-
			Total PCBs (Arochlors)	mg/kg	1		<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-		0	-	99

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208136.016	LB203560.004	Phenol	mg/kg	0.5	0.8	0	1	75
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	0	-	-
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	0	-	-
		Total Cresol	mg/kg	1.5	<1.5	0	-	-
		2-chlorophenol	mg/kg	0.5	<0.5	0	-	-
		2,4-dimethylphenol	mg/kg	0.5	<0.5	0	-	-
		2,6-dichlorophenol	mg/kg	0.5	<0.5	0	-	-
		2,4-dichlorophenol	mg/kg	0.5	0.9	0	1	86
		2,4,6-trichlorophenol	mg/kg	0.5	0.7	0	1	72

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

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Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208136.016	LB203560.004		2-nitrophenol	mg/kg	0.5	<0.5	0	-	-
			4-nitrophenol	mg/kg	1	<1	0	-	-
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	0	-	-
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	0	-	-
			Pentachlorophenol	mg/kg	0.5	0.8	0	1	76
			2,4-dinitrophenol	mg/kg	2	<2	0	-	-
			4-chloro-3-methylphenol	mg/kg	2	<2	0	-	-
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.3	4.32	-	85
			d5-phenol (Surrogate)	mg/kg	-	1.8	1.74	-	89
SE208137.003	LB203557.023		Phenol	mg/kg	0.5		<0.5	1	75
			2-methyl phenol (o-cresol)	mg/kg	0.5		<0.5	-	-
			3/4-methyl phenol (m/p-cresol)	mg/kg	1		<1	-	-
			Total Cresol	mg/kg	1.5		<1.5	-	-
			2-chlorophenol	mg/kg	0.5		<0.5	-	-
			2,4-dimethylphenol	mg/kg	0.5		<0.5	-	-
			2,6-dichlorophenol	mg/kg	0.5		<0.5	-	-
			2,4-dichlorophenol	mg/kg	0.5		<0.5	1	86
			2,4,6-trichlorophenol	mg/kg	0.5		<0.5	1	71
			2-nitrophenol	mg/kg	0.5		<0.5	-	-
			4-nitrophenol	mg/kg	1		<1	-	-
			2,4,5-trichlorophenol	mg/kg	0.5		<0.5	-	-
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1		<1	-	-
			Pentachlorophenol	mg/kg	0.5		<0.5	1	72
			2,4-dinitrophenol	mg/kg	2		<2	-	-
			4-chloro-3-methylphenol	mg/kg	2		<2	-	-
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-		4.3	-	82
			d5-phenol (Surrogate)	mg/kg	-		1.7	-	83

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208136.020	LB203601.004		Arsenic, As	mg/kg	1	51	5.48836716681	50	92
			Cadmium, Cd	mg/kg	0.3	41	0.34746690203	50	81
			Chromium, Cr	mg/kg	0.5	59	15.4555692850	50	87
			Copper, Cu	mg/kg	0.5	86	42.76593115622	50	87
			Nickel, Ni	mg/kg	0.5	53	11.36377758164	50	83
			Lead, Pb	mg/kg	1	120	02.5563989408	50	42 ④
			Zinc, Zn	mg/kg	2	260	67.6970873786	50	-16 ④
SE208137.001	LB203600.004		Arsenic, As	mg/kg	1	53	3	50	101
			Cadmium, Cd	mg/kg	0.3	45	<0.3	50	89
			Chromium, Cr	mg/kg	0.5	58	6.2	50	103
			Copper, Cu	mg/kg	0.5	NVL	NVL	NVL	NVL
			Nickel, Ni	mg/kg	0.5	56	2.4	50	108
			Lead, Pb	mg/kg	1	790	210	50	1144 ④
			Zinc, Zn	mg/kg	2	170	130	50	88

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208136.017	LB203560.019		TRH C10-C14	mg/kg	20	0	40	98
			TRH C15-C28	mg/kg	45	0	40	110
			TRH C29-C36	mg/kg	45	0	40	103
			TRH C37-C40	mg/kg	100	0	-	-
			TRH C10-C36 Total	mg/kg	110	0	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	0	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25	0	40	95
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	0	-	-
			TRH >C16-C34 (F3)	mg/kg	90	0	40	133
			TRH >C34-C40 (F4)	mg/kg	120	0	-	-
SE208137.002	LB203557.021		TRH C10-C14	mg/kg	20	<20	40	120
			TRH C15-C28	mg/kg	45	<45	40	108
			TRH C29-C36	mg/kg	45	<45	40	100
			TRH C37-C40	mg/kg	100	<100	-	-
			TRH C10-C36 Total	mg/kg	110	<110	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

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TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208137.002	LB203557.021		TRH >C10-C40 Total (F bands)	mg/kg	210	<210	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	40	113
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	<90	40	110
			TRH >C34-C40 (F4)	mg/kg	120	<120	-	-

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208136.016	LB203551.004	Monocyclic	Benzene	mg/kg	0.1	5.6	0	5	112
		Aromatic	Toluene	mg/kg	0.1	5.9	0.08729762843	5	116
			Ethylbenzene	mg/kg	0.1	5.9	0.02742963334	5	118
			m/p-xylene	mg/kg	0.2	12	0.05714354337	10	116
			o-xylene	mg/kg	0.1	5.9	0.02511791340	5	118
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	0.07861384379	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.9	10.2909720893(	10	109
			d8-toluene (Surrogate)	mg/kg	-	10.9	9.16354457375	10	109
			Bromofluorobenzene (Surrogate)	mg/kg	-	12.0	10.2251203332(	10	120
		Totals	Total Xylenes	mg/kg	0.3	18	0.08226145677	-	-
			Total BTEX	mg/kg	0.6	35	0	-	-
SE208136.018	LB203551.023	Fumigants	2,2-dichloropropane	mg/kg	0.1		0	-	-
			1,2-dichloropropane	mg/kg	0.1		0	-	-
			cis-1,3-dichloropropene	mg/kg	0.1		0	-	-
			trans-1,3-dichloropropene	mg/kg	0.1		0	-	-
			1,2-dibromoethane (EDB)	mg/kg	0.1		0	-	-
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1		0	-	-
		Aliphatics	Chloromethane	mg/kg	1		0	-	-
			Vinyl chloride (Chloroethene)	mg/kg	0.1		0	-	-
			Bromomethane	mg/kg	1		0	-	-
			Chloroethane	mg/kg	1		0	-	-
			Trichlorofluoromethane	mg/kg	1		0	-	-
			Iodomethane	mg/kg	5		0	-	-
			1,1-dichloroethene	mg/kg	0.1		0	5	107
			Dichloromethane (Methylene chloride)	mg/kg	0.5		0.03979295527	-	-
			Allyl chloride	mg/kg	0.1		0	-	-
			trans-1,2-dichloroethene	mg/kg	0.1		0	-	-
			1,1-dichloroethane	mg/kg	0.1		0	-	-
			cis-1,2-dichloroethene	mg/kg	0.1		0	-	-
			Bromochloromethane	mg/kg	0.1		0	-	-
			1,2-dichloroethane	mg/kg	0.1		0.01825274938	5	129
			1,1,1-trichloroethane	mg/kg	0.1		0	-	-
			1,1-dichloropropene	mg/kg	0.1		0	-	-
			Carbon tetrachloride	mg/kg	0.1		0	-	-
			Dibromomethane	mg/kg	0.1		0	-	-
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1		0	5	105
			1,1,2-trichloroethane	mg/kg	0.1		0.04960931063	-	-
			1,3-dichloropropane	mg/kg	0.1		0.05846454390	-	-
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1		0	-	-
			1,1,1,2-tetrachloroethane	mg/kg	0.1		0	-	-
			cis-1,4-dichloro-2-butene	mg/kg	1		0	-	-
			1,1,2,2-tetrachloroethane	mg/kg	0.1		0	-	-
			1,2,3-trichloropropane	mg/kg	0.1		0	-	-
			trans-1,4-dichloro-2-butene	mg/kg	1		0	-	-
			1,2-dibromo-3-chloropropane	mg/kg	0.1		0	-	-
			Hexachlorobutadiene	mg/kg	0.1		0	-	-
		Halogenated	Chlorobenzene	mg/kg	0.1		0.02636296798	5	102
		Aromatics	Bromobenzene	mg/kg	0.1		0	-	-
			2-chlorotoluene	mg/kg	0.1		0	-	-
			4-chlorotoluene	mg/kg	0.1		0	-	-
			1,3-dichlorobenzene	mg/kg	0.1		0	-	-
			1,4-dichlorobenzene	mg/kg	0.1		0.01081222613	-	-
			1,2-dichlorobenzene	mg/kg	0.1		0.00996108981	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208136.018	LB203551.023	Halogenated	1,2,4-trichlorobenzene	mg/kg	0.1		0	-	-
		Aromatics	1,2,3-trichlorobenzene	mg/kg	0.1		0	-	-
		Monocyclic	Benzene	mg/kg	0.1		0	5	136
		Aromatic	Toluene	mg/kg	0.1		0.08442279267	5	120
			Ethylbenzene	mg/kg	0.1		0.02339125956	5	121
			m/p-xylene	mg/kg	0.2		0.04342793241	10	119
			o-xylene	mg/kg	0.1		0	5	122
			Styrene (Vinyl benzene)	mg/kg	0.1		0	-	-
			Isopropylbenzene (Cumene)	mg/kg	0.1		0	-	-
			n-propylbenzene	mg/kg	0.1		0	-	-
			1,3,5-trimethylbenzene	mg/kg	0.1		0	-	-
			tert-butylbenzene	mg/kg	0.1		0	-	-
			1,2,4-trimethylbenzene	mg/kg	0.1		0	-	-
			sec-butylbenzene	mg/kg	0.1		0	-	-
			p-isopropyltoluene	mg/kg	0.1		0	-	-
			n-butylbenzene	mg/kg	0.1		0	-	-
		Nitrogenous	Acrylonitrile	mg/kg	0.1		0	-	-
		Compounds	2-nitropropane	mg/kg	10		0	-	-
		Oxygenated	Acetone (2-propanone)	mg/kg	10		0.70229580368	-	-
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1		0	-	-
			Vinyl acetate	mg/kg	10		0	-	-
			MEK (2-butanone)	mg/kg	10		0	-	-
			MIBK (4-methyl-2-pentanone)	mg/kg	1		0	-	-
			2-hexanone (MBK)	mg/kg	5		0	-	-
		Polycyclic	Naphthalene	mg/kg	0.1		0	-	-
		Sulphonated	Carbon disulfide	mg/kg	0.5		0	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-		10.79085225282	10	114
			d8-toluene (Surrogate)	mg/kg	-		9.88687401199	10	103
			Bromofluorobenzene (Surrogate)	mg/kg	-		11.39200670145	10	111
		Totals	Total Xylenes	mg/kg	0.3		0.04342793241	-	-
			Total BTEX	mg/kg	0.6		0	-	-
			Total VOC*	mg/kg	24		0.91555164682	-	-
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3		0.05846454390	-	-
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8		0.15479129923	-	-
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8		0.15479129923	-	-
		Trihalometha	Chloroform	mg/kg	0.1		0	5	111
		nes	Bromodichloromethane	mg/kg	0.1		0	-	-
			Chlorodibromomethane	mg/kg	0.1		0	-	-
			Bromoform	mg/kg	0.1		0	-	-
SE208137.001	LB203550.004	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	-	-
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	-	-
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	-	-
			Bromomethane	mg/kg	1	<1	<1	-	-
			Chloroethane	mg/kg	1	<1	<1	-	-
			Trichlorofluoromethane	mg/kg	1	<1	<1	-	-
			Iodomethane	mg/kg	5	<5	<5	-	-
			1,1-dichloroethene	mg/kg	0.1	4.5	<0.1	5	89
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	-	-
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloroethane	mg/kg	0.1	4.8	<0.1	5	96
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208137.001	LB203550.004	Halogenated Aliphatics	Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	-	-
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	4.7	<0.1	5	94
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	-	-
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	5.0	<0.1	5	100
			Bromobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Monocyclic Aromatic	Benzene	mg/kg	0.1	4.8	<0.1	5	95
			Toluene	mg/kg	0.1	4.7	<0.1	5	93
			Ethylbenzene	mg/kg	0.1	4.7	<0.1	5	94
			m/p-xylene	mg/kg	0.2	9.6	<0.2	10	96
			o-xylene	mg/kg	0.1	4.7	<0.1	5	94
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	-	-
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	-	-
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	-	-
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	-	-
			2-nitropropane	mg/kg	10	<10	<10	-	-
		Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10	<10	-	-
			MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	-	-
			Vinyl acetate	mg/kg	10	<10	<10	-	-
			MEK (2-butanone)	mg/kg	10	<10	<10	-	-
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	-	-
			2-hexanone (MBK)	mg/kg	5	<5	<5	-	-
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.3	8.1	10	83
			d8-toluene (Surrogate)	mg/kg	-	7.4	7.8	10	74
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.6	8.1	10	76
		Totals	Total Xylenes	mg/kg	0.3	14	<0.3	-	-
			Total BTEX	mg/kg	0.6	28	<0.6	-	-
			Total VOC*	mg/kg	24	53	<24	-	-
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	-	-
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	24	<1.8	-	-
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	24	<1.8	-	-
		Trihalomethanes	Chloroform	mg/kg	0.1	4.8	<0.1	5	95
			Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Bromoform	mg/kg	0.1	<0.1	<0.1	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil — **Method: ME-(AU)-[ENV]AN433**

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208136.016	LB203551.004		TRH C6-C10	mg/kg	25	70	0	92.5	76
			TRH C6-C9	mg/kg	20	64	0	80	80
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.9	10.2909720893(	10	109
			d8-toluene (Surrogate)	mg/kg	-	10.9	9.16354457375	10	109
			Bromofluorobenzene (Surrogate)	mg/kg	-	12.0	10.2251203332(	-	120
		VPH F	Benzene (F0)	mg/kg	0.1	5.6	0	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	35	0	62.5	57 ④
SE208137.001	LB203550.004		TRH C6-C10	mg/kg	25	79	<25	92.5	86
			TRH C6-C9	mg/kg	20	71	<20	80	89
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.3	8.1	10	83
			d8-toluene (Surrogate)	mg/kg	-	7.4	7.8	10	74
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.6	8.1	-	76
		VPH F	Benzene (F0)	mg/kg	0.1	4.8	<0.1	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	51	<25	62.5	81

MATRIX SPIKE DUPLICATES

SE208137 R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

SLR

PROJECT OFFICE (Tick one)

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- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
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- ☐

CLIENT: Defence Housing Australia	**LABORATORY: SGS Australia**	**Turnaround Time (TAT)**	**COC Number** 1 of 9
PROJECT: Randwick Barracks	**LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015**	☐ Standard TAT	
PROJECT NUMBER: 610.30041	**SAMPLER: MR**	☐ Non Standard or Urgent TAT	
PROJECT MANAGER: [redacted]	**SAMPLER CONTACT No** [redacted]		
PM CONTACT No: [redacted]	**Email Reports and Invoices to: LQRSYD@slrconsulting.com ;** [redacted]	**Required TAT: Standard**	

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only	HOLD				**Additional Information** *(Comment on any gross contamination or specific requirements)*
1	0407_BH0029_0.1_200622	22-06-2020	Soil		x								Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
2	0407_BH0029_0.5_200622	22-06-2020	Soil		x								
	0407_BH0029_1.0_200622	22-06-2020	Soil						x				
	0407_BH0029_2.0_200622	22-06-2020	Soil						x				
	0407_BH0029_3.0_200622	22-06-2020	Soil						x				
3	0407_BH0029_0.1-0.3_200622	22-06-2020	Soil					x					
4	0407_BH0029_0.3-0.5_200622	22-06-2020	Soil					x					
5	0407_BH0030_0.1_200622	22-06-2020	Soil		x								
6	0407_BH0030_0.5_200622	22-06-2020	Soil		x								
	0407_BH0030_1.0_200622	22-06-2020	Soil						x				
	0407_BH0030_2.0_200622	22-06-2020	Soil						x				
	0407_BH0030_3.0_200622	22-06-2020	Soil						x				

SGS EHS Sydney COC

SE207912

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 22-06-2020	**Received by**	[redacted]	Date / Time 23/06/20	**Temperature Received:**
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time 0430	5.4°C
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

SLR

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
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- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☒ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Stuart Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ

CLIENT: Defence Housing Australia	**LABORATORY:** SGS Australia
PROJECT: Randwick Barracks	**LABORATORY ADDRESS:** Unit 16/33 Maddox St, Alexandria NSW 2015
PROJECT NUMBER: 610.30041	**SAMPLER:** MR
PROJECT MANAGER [redacted]	**SAMPLER CONTACT No** [redacted]
PM CONTACT No: [redacted]	**Email Reports and Invoices to:** LQRSYD@slrconsulting.com [redacted]
COMMENTS OR ADDITIONAL DIRECTIONS	

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number 2 of 9

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only	HOLD				Additional Information (Comment on any gross contamination or specific requirements)
7	0407_BH0030_0.1-0.2_200622	22-06-2020	Soil					x					Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
8	0407_BH0030_0.4-0.5_200622	22-06-2020	Soil					x					
9	0407_TP010_0.1_200622	22-06-2020	Soil		x								
10	0407_TP010_0.5_200622	22-06-2020	Soil		x								
	0407_TP010_1.0_200622	22-06-2020	Soil						x				
11	0407_TP010_0.1-0.2_200622	22-06-2020	Soil					x					
12	0407_TP011_0.1_200622	22-06-2020	Soil		x								
	0407_TP011_0.5_200622	22-06-2020	Soil						x				
13	0407_TP011_1.0_200622	22-06-2020	Soil		x								
14	0407_TP011_0.1-0.2_200622	22-06-2020	Soil					x					
15	0407_QC136_200622	22-06-2020	Soil		x								
	0407_QC236_200622	22-06-2020	Soil										Please send to Eurofins for Suite A analysis

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 22-06-2020	**Received by**	Sign [redacted]	Date / Time 23/06/20	**Temperature Received:**
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time 0830	5.4°C
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

SLR

PROJECT OFFICE (Tick one)

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- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐

CLIENT: Defence Housing Australia	**LABORATORY:** SGS Australia
PROJECT: Randwick Barracks	**LABORATORY ADDRESS:** Unit 16/33 Maddox St, Alexandria NSW 2015
PROJECT NUMBER: 610.30041	**SAMPLER:** MR
PROJECT MANAGER: [redacted]	**SAMPLER CONTACT No:** [redacted]
PM CONTACT No: [redacted]	**Email Reports and Invoices to:** LQRSYD@slrconsulting.com ; [redacted]

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number: 3 of 9

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only	HOLD				Additional Information (Comment on any gross contamination or specific requirements)
16	0407_TP012_0.1_200622	22-06-2020	Soil		x								Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
17	0407_TP012_0.5_200622	22-06-2020	Soil		x								
	0407_TP012_1.0_200622	22-06-2020	Soil						x				
18	0407_TP012_0.1-0.2_200622	22-06-2020	Soil					x					
19	0407_TP019_0.1_200622	22-06-2020	Soil		x								
	0407_TP019_0.5_200622	22-06-2020	Soil						x				
20	0407_TP019_1.0_200622	22-06-2020	Soil		x								
21	0407_TP019_0.1-0.2_200622	22-06-2020	Soil					x					
22	0407_TP020_0.1_200622	22-06-2020	Soil		x								
23	0407_TP020_0.5_200622	22-06-2020	Soil		x								
	0407_TP020_1.0_200622	22-06-2020	Soil						x				
24	0407_TP020_0.1-0.2_200622	22-06-2020	Soil					x					

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 22-06-2020	**Received by**	Sign [redacted]	Date / Time 23/06/20	**Temperature Received:**	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time 09:30	7.4 °C	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time		

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

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PROJECT OFFICE (Tick one)

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- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ

CLIENT: Defence Housing Australia	**LABORATORY: SGS Australia**
PROJECT: Randwick Barracks	**LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015**
PROJECT NUMBER: 610.30041	**SAMPLER: MR**
PROJECT MANAGER: [redacted]	**SAMPLER CONTACT No: [redacted]**
PM CONTACT No: [redacted]	**Email Reports and Invoices to: LQRSYD@slrconsulting.com [redacted]**

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number 4 of 9

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only	HOLD				**Additional Information** *(Comment on any gross contamination or specific requirements)*
25	0407_TP022_0.1_200622	22-06-2020	Soil		x								Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
26	0407_TP022_0.5_200622	22-06-2020	Soil		x								
	0407_TP022_1.0_200622	22-06-2020	Soil						x				
27	0407_TP022_0.1-0.2_200622	22-06-2020	Soil					x					
28	0407_TP028_0.1_200622	22-06-2020	Soil		x								
	0407_TP028_0.5_200622	22-06-2020	Soil						x				
29	0407_TP028_1.0_200622	22-06-2020	Soil		x								
30	0407_TP028_0.1-0.2_200622	22-06-2020	Soil					x					
31	0407_TP029_0.1_200622	22-06-2020	Soil		x								
32	0407_TP029_0.5_200622	22-06-2020	Soil		x								
	0407_TP029_1.0_200622	22-06-2020	Soil						x				
33	0407_TP029_0.1-0.2_200622	22-06-2020	Soil					x					

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 22-06-2020	**Received by**	Sign [redacted]	Date / Time 23/6/20	**Temperature Received:** 5.4°C
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

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PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
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- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐

CLIENT: Defence Housing Australia	LABORATORY: SGS Australia
PROJECT: Randwick Barracks	LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015
PROJECT NUMBER: 610.30041	SAMPLER [redacted]
PROJECT MANAGER: [redacted]	SAMPLER CONTACT No [redacted]
PM CONTACT No [redacted]	Email Reports and Invoices to: LQRSYD@slrconsulting.com ; [redacted]

Turnaround Time (TAT): ☐ Standard TAT ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number: 5 of 9

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only	HOLD	Suite D	Asbestos, MTBEs		Additional Information (Comment on any gross contamination or specific requirements)
34	0407_TP030_0.1_200622	22-06-2020	Soil							x	x		Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
35	0407_TP030_0.5_200622	22-06-2020	Soil							x	x		
	0407_TP030_1.0_200622	22-06-2020	Soil						x				
36	0407_TP030_0.1-0.2_200622	22-06-2020	Soil					x					
37	0407_TP060_0.1_200622	22-06-2020	Soil							x	x		
	0407_TP060_0.5_200622	22-06-2020	Soil						x				
38	0407_TP060_1.0_200622	22-06-2020	Soil							x	x		
39	0407_TP060_0.1-0.2_200622	22-06-2020	Soil					x					
40	0407_TP061_0.1_200622	22-06-2020	Soil							x	x		
41	0407_TP061_0.5_200622	22-06-2020	Soil							x	x		
	0407_TP061_1.0_200622	22-06-2020	Soil						x				
42	0407_TP061_0.1-0.2_200622	22-06-2020	Soil					x					

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time	22-06-2020	Received by	Sign [redacted]	Date / Time	23/06/20
Relinquished By	Sign	Date / Time		Received by	Sign	Date / Time	[illegible]
Relinquished By	Sign	Date / Time		Received by	Sign	Date / Time	

Temperature Received: 5-4°C

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

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PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
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- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ

CLIENT: Defence Housing Australia	**LABORATORY: SGS Australia**
PROJECT: Randwick Barracks	**LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015**
PROJECT NUMBER: 610.30041	**SAMPLER:** [redacted]
PROJECT MANAGER: [redacted]	**SAMPLER CONTACT No:** [redacted]
PM CONTACT No [redacted]	**Email Reports and Invoices to: LQRSYD@slrconsulting.com** [redacted]

Turnaround Time (TAT)

COC Number 6 of 9

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only	HOLD	Suite D	Asbestos, MTBEs		Additional Information (Comment on any gross contamination or specific requirements)
43	0407_TP062_0.1_200622	22-06-2020	Soil							x	x		Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
44	0407_TP062_0.5_200622	22-06-2020	Soil							x	x		
	0407_TP062_1.0_200622	22-06-2020	Soil						x				
45	0407_TP062_0.1-0.2_200622	22-06-2020	Soil					x					
46	0407_TP144_0.1_200622	22-06-2020	Soil		x								
47	0407_TP144_0.5_200622	22-06-2020	Soil		x								
	0407_TP144_1.0_200622	22-06-2020	Soil						x				
48	0407_TP144_0.1-0.2_200622	22-06-2020	Soil					x					
49	0407_TP144_0.4-0.5_200622	22-06-2020	Soil					x					
50	0407_TP145_0.1_200622	22-06-2020	Soil		x								
51	0407_TP145_0.5_200622	22-06-2020	Soil		x								
	0407_TP145_1.0_200622	22-06-2020	Soil						x				

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 22-06-2020	**Received by**	Sign [redacted]	Date / Time 23/06/20	**Temperature Received:**	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time 0930	5.4°C	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time		

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

SLR

PROJECT OFFICE (Tick one)

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- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ

CLIENT: Defence Housing Australia

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGER: [redacted]

PM CONTACT No: [redacted]

LABORATORY: SGS Australia

LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015

SAMPLER: [redacted]

SAMPLER CONTACT No: [redacted]

Email Reports and Invoices to: LQRSYD@slrconsulting.com [redacted]

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number: 7 of 9

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only	HOLD	Suite D	Asbestos, MTBEs		Additional Information (Comment on any gross contamination or specific requirements)
52	0407_QC128_200622	22-06-2020	Soil		x								Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
	0407_QC228_200622	22-06-2020	Soil										Please send to Eurofins for Suite A
53	0407_TP145_0.1-0.2_200622	22-06-2020	Soil					x					
54	0407_TP146_0.1_200622	22-06-2020	Soil		x								
55	0407_TP146_0.5_200622	22-06-2020	Soil		x								
	0407_TP146_1.0_200622	22-06-2020	Soil						x				
56	0407_TP146_0.1-0.2_200622	22-06-2020	Soil					x					
57	0407_QC129_200622	22-06-2020	Soil		x								
	0407_QC229_200622	22-06-2020	Soil										Please send to Eurofins for Suite A
58	0407_TP158_0.1_200622	22-06-2020	Soil		x								
	0407_TP158_0.5_200622	22-06-2020	Soil						x				
59	0407_TP158_1.0_200622	22-06-2020	Soil		x								

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 22-06-2020	**Received by**	Sign [redacted]	Date / Time 23/6/20	**Temperature Received:**	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time		
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time		

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

SLR

PROJECT OFFICE (Tick one)

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- ☐ NELSON: C/A Carnbridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 30 Devon Street East, New Plymouth, 4310 NZ
- ☐

CLIENT: Defence Housing Australia	**LABORATORY: SGS Australia**
PROJECT: Randwick Barracks	**LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015**
PROJECT NUMBER: 610.30041	**SAMPLER:** [redacted]
PROJECT MANAGER: [redacted]	**SAMPLER CONTACT No:** [redacted]
PM CONTACT No [redacted]	**Email Reports and Invoices to: LQRSYD@slrconsulting.com** [redacted]

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number 8 of 9

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only	HOLD	Suite D	Asbestos, MTBEs		Additional Information (Comment on any gross contamination or specific requirements)
60	0407_QC132_200622	22-06-2020	Soil		x								Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
	0407_QC232_200622	22-06-2020	Soil										Please send to Eurofins for Suite A
61	0407_TP158_0.1-0.2_200622	22-06-2020	Soil					x					
62	0407_TP159_0.1_200622	22-06-2020	Soil		x								
	0407_TP159_0.5_200622	22-06-2020	Soil						x				
63	0407_TP159_1.0_200622	22-06-2020	Soil		x								
64	0407_TP159_0.1-0.2_200622	22-06-2020	Soil					x					
65	0407_TP160_0.1_200622	22-06-2020	Soil		x								
66	0407_TP160_0.5_200622	22-06-2020	Soil		x								
	0407_TP160_1.0_200622	22-06-2020	Soil						x				
67	0407_QC131_200622	22-06-2020	Soil		x								
	0407_QC231_200622	22-06-2020	Soil										Please send to Eurofins for Suite A

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 22-06-2020	**Received by**	Sign [redacted]	Date / Time 23/06/20	**Temperature Received:**	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	4.4	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time		

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, Qld 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☒ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Stuart Street, Townsville, QLD 4810
- ☐ AUCKLAND: 6A Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ

SLR

CLIENT: Defence Housing Australia	**LABORATORY: SGS Australia**
PROJECT: Randwick Barracks	**LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015**
PROJECT NUMBER: 610.30041	**SAMPLER** [redacted]
PROJECT MANAGER [redacted]	**SAMPLER CONTACT No:** [redacted]
PM CONTACT No [redacted]	**Email Reports and Invoices to: LQRSYD@slrconsulting.com ;** [redacted]

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number 9 of 9

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only	HOLD	Suite D	Asbestos, MTBEs		Additional Information (Comment on any gross contamination or specific requirements)
68	0407_TP160_0.1-0.2_200622	22-06-2020	Soil					x					Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time	22-06-2020	**Received by**	Sign [redacted]	Date / Time	23/6/20	**Temperature Received:**
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	0945	5.4
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time		

SAMPLE RECEIPT ADVICE

SE207912

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	69

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Tue 23/6/2020
Report Due	Thu 2/7/2020
SGS Reference	**SE207912**

SUBMISSION DETAILS

This is to confirm that 69 samples were received on Tuesday 23/6/2020. Results are expected to be ready by COB Thursday 2/7/2020. Please quote SGS reference SE207912 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	69 Soil
Date documentation received	23/6/2020	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	5.4°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

24 soil have been placed on hold as no tests have been assigned for them by the client. These samples will not be processed.

This document is issued by the Company under its General Conditions of Service accessible at www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

SAMPLE RECEIPT ADVICE

SE207912

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	Speciated Phenols in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
001	0407_BH0029_0.1_200622	29	14	26	11	18	10	81	7
002	0407_BH0029_0.5_200622	29	14	26	11	18	10	81	7
005	0407_BH0030_0.1_200622	29	14	26	11	18	10	81	7
006	0407_BH0030_0.5_200622	29	14	26	11	18	10	81	7
009	0407_TP10_0.1_200622	29	14	26	11	18	10	81	7
010	0407_TP10_0.5_200622	29	14	26	11	18	10	81	7
012	0407_TP11_0.1_200622	29	14	26	11	18	10	81	7
013	0407_TP11_1.0_200622	29	14	26	11	18	10	81	7
015	0407_QC136_200622	29	14	26	11	18	10	81	7
016	0407_TP12_0.1_200622	29	14	26	11	18	10	81	7
017	0407_TP12_0.5_200622	29	14	26	11	18	10	81	7
019	0407_TP19_0.1_200622	29	14	26	11	18	10	81	7
020	0407_TP19_1.0_200622	29	14	26	11	18	10	81	7
022	0407_TP20_0.1_200622	29	14	26	11	18	10	81	7
023	0407_TP20_0.5_200622	29	14	26	11	18	10	81	7

CONTINUED OVERLEAF

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Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE207912

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	Speciated Phenols in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
025	0407_TP22_0.1_200622	29	14	26	11	18	10	81	7
026	0407_TP22_0.5_200622	29	14	26	11	18	10	81	7
028	0407_TP28_0.1_200622	29	14	26	11	18	10	81	7
029	0407_TP28_1.0_200622	29	14	26	11	18	10	81	7
031	0407_TP29_0.1_200622	29	14	26	11	18	10	81	7
032	0407_TP29_0.5_200622	29	14	26	11	18	10	81	7
034	0407_TP30_0.1_200622	-	-	26	-	18	10	11	7
035	0407_TP30_0.5_200622	-	-	26	-	18	10	11	7
037	0407_TP60_0.1_200622	-	-	26	-	18	10	11	7
038	0407_TP60_1.0_200622	-	-	26	-	18	10	11	7
040	0407_TP61_0.1_200622	-	-	26	-	18	10	11	7
041	0407_TP61_0.5_200622	-	-	26	-	18	10	11	7
043	0407_TP62_0.1_200622	-	-	26	-	18	10	11	7
044	0407_TP62_0.5_200622	-	-	26	-	18	10	11	7
046	0407_TP144_0.1_200622	29	14	26	11	18	10	81	7
047	0407_TP144_0.5_200622	29	14	26	11	18	10	81	7

CONTINUED OVERLEAF

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SAMPLE RECEIPT ADVICE

SE207912

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	Speciated Phenols in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
050	0407_TP145_0.1_200622	29	14	26	11	18	10	81	7
051	0407_TP145_0.5_200622	29	14	26	11	18	10	81	7
052	0407_QC128_200622	29	14	26	11	18	10	81	7
054	0407_TP146_0.1_200622	29	14	26	11	18	10	81	7
055	0407_TP146_0.5_200622	29	14	26	11	18	10	81	7
057	0407_QC129_200622	29	14	26	11	18	10	81	7
058	0407_TP158_0.1_200622	29	14	26	11	18	10	81	7
059	0407_TP158_1.0_200622	29	14	26	11	18	10	81	7
060	0407_QC132_200622	29	14	26	11	18	10	81	7
062	0407_TP159_0.1_200622	29	14	26	11	18	10	81	7
063	0407_TP159_1.0_200622	29	14	26	11	18	10	81	7
065	0407_TP160_0.1_200622	29	14	26	11	18	10	81	7
066	0407_TP160_0.5_200622	29	14	26	11	18	10	81	7
067	0407_QC131_200622	29	14	26	11	18	10	81	7
069	0407_QC133_200622	29	14	26	11	18	10	81	7

CONTINUED OVERLEAF

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SAMPLE RECEIPT ADVICE

SE207912

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Fibre Identification in soil	Gravimetric Determination of Asbestos in Soil	Mercury in Soil	Moisture Content	Total Recoverable Elements in Soil/Waste
001	0407_BH0029_0.1_200622	-	-	1	1	7
002	0407_BH0029_0.5_200622	-	-	1	1	7
003	0407_BH0029_0.1-0.3_200622	2	9	-	-	-
004	0407_BH0029_0.3-0.5_200622	2	9	-	-	-
005	0407_BH0030_0.1_200622	-	-	1	1	7
006	0407_BH0030_0.5_200622	-	-	1	1	7
007	0407_BH0030_0.1-0.2_200622	2	9	-	-	-
008	0407_BH0030_0.4-0.5_200622	2	9	-	-	-
009	0407_TP10_0.1_200622	-	-	1	1	7
010	0407_TP10_0.5_200622	-	-	1	1	7
011	0407_TP10_0.1-0.2_200622	2	9	-	-	-
012	0407_TP11_0.1_200622	-	-	1	1	7
013	0407_TP11_1.0_200622	-	-	1	1	7
014	0407_TP11_0.1-0.2_200622	2	9	-	-	-
015	0407_QC136_200622	-	-	1	1	7
016	0407_TP12_0.1_200622	-	-	1	1	7
017	0407_TP12_0.5_200622	-	-	1	1	7
018	0407_TP12_0.1-0.2_200622	2	9	-	-	-
019	0407_TP19_0.1_200622	-	-	1	1	7
020	0407_TP19_1.0_200622	-	-	1	1	7
021	0407_TP19_0.1-0.2_200622	2	9	-	-	-
022	0407_TP20_0.1_200622	-	-	1	1	7
023	0407_TP20_0.5_200622	-	-	1	1	7
024	0407_TP20_0.1-0.2_200622	2	9	-	-	-

CONTINUED OVERLEAF

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SAMPLE RECEIPT ADVICE

SE207912

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Fibre Identification in soil	Gravimetric Determination of Asbestos in Soil	Mercury in Soil	Moisture Content	Total Recoverable Elements in Soil/Waste
025	0407_TP22_0.1_200622	-	-	1	1	7
026	0407_TP22_0.5_200622	-	-	1	1	7
027	0407_TP22_0.1-0.2_200622	2	9	-	-	-
028	0407_TP28_0.1_200622	-	-	1	1	7
029	0407_TP28_1.0_200622	-	-	1	1	7
030	0407_TP28_0.1-0.2_200622	2	9	-	-	-
031	0407_TP29_0.1_200622	-	-	1	1	7
032	0407_TP29_0.5_200622	-	-	1	1	7
033	0407_TP29_0.1-0.2_200622	2	9	-	-	-
034	0407_TP30_0.1_200622	-	-	-	1	1
035	0407_TP30_0.5_200622	-	-	-	1	1
036	0407_TP30_0.1-0.2_200622	2	9	-	-	-
037	0407_TP60_0.1_200622	-	-	-	1	1
038	0407_TP60_1.0_200622	-	-	-	1	1
039	0407_TP60_0.1-0.2_200622	2	9	-	-	-
040	0407_TP61_0.1_200622	-	-	-	1	1
041	0407_TP61_0.5_200622	-	-	-	1	1
042	0407_TP61_0.1-0.2_200622	2	9	-	-	-
043	0407_TP62_0.1_200622	-	-	-	1	1
044	0407_TP62_0.5_200622	-	-	-	1	1
045	0407_TP62_0.1-0.2_200622	2	9	-	-	-
046	0407_TP144_0.1_200622	-	-	1	1	7
047	0407_TP144_0.5_200622	-	-	1	1	7
048	0407_TP144_0.1-0.2_200622	2	9	-	-	-

CONTINUED OVERLEAF

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SAMPLE RECEIPT ADVICE

SE207912

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Fibre Identification in soil	Gravimetric Determination of Asbestos in Soil	Mercury in Soil	Moisture Content	Total Recoverable Elements in Soil/Waste
049	0407_TP144_0.4-0.5_200622	2	9	-	-	-
050	0407_TP145_0.1_200622	-	-	1	1	7
051	0407_TP145_0.5_200622	-	-	1	1	7
052	0407_QC128_200622	-	-	1	1	7
053	0407_TP145_0.1-0.2_200622	2	9	-	-	-
054	0407_TP146_0.1_200622	-	-	1	1	7
055	0407_TP146_0.5_200622	-	-	1	1	7
056	0407_TP146_0.1-0.2_200622	2	9	-	-	-
057	0407_QC129_200622	-	-	1	1	7
058	0407_TP158_0.1_200622	-	-	1	1	7
059	0407_TP158_1.0_200622	-	-	1	1	7
060	0407_QC132_200622	-	-	1	1	7
061	0407_TP158_0.1-0.2_200622	2	9	-	-	-
062	0407_TP159_0.1_200622	-	-	1	1	7
063	0407_TP159_1.0_200622	-	-	1	1	7
064	0407_TP159_0.1-0.2_200622	2	9	-	-	-
065	0407_TP160_0.1_200622	-	-	1	1	7
066	0407_TP160_0.5_200622	-	-	1	1	7
067	0407_QC131_200622	-	-	1	1	7
068	0407_TP160_0.1-0.2_200622	2	9	-	-	-
069	0407_QC133_200622	-	-	1	1	7

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	69

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207912 R0**
Date Received	23/6/2020
Date Reported	6/7/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.

Asbestos analysed by Approved Identifier Ravee Sivasubramaniam .

SIGNATORIES

[redacted]

Chemist | Senior Organic Chemist/Metals Chemist | Senior Chemist

[redacted]

Organic Section Head | Hygiene Team Leader

VOC's in Soil [AN433] Tested: 29/6/2020

PARAMETER	UOM	LOR	0407_BH0029_0.1_20622 SOIL - 22/6/2020 SE207912.001	0407_BH0029_0.5_20622 SOIL - 22/6/2020 SE207912.002	0407_BH0030_0.1_20622 SOIL - 22/6/2020 SE207912.005	0407_BH0030_0.5_20622 SOIL - 22/6/2020 SE207912.006	0407_TP10_0.1_20022 SOIL - 22/6/2020 SE207912.009
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_BH0029_0.1_20622 SOIL - 22/6/2020 SE207912.001	0407_BH0029_0.5_20622 SOIL - 22/6/2020 SE207912.002	0407_BH0030_0.1_20622 SOIL - 22/6/2020 SE207912.005	0407_BH0030_0.5_20622 SOIL - 22/6/2020 SE207912.006	0407_TP10_0.1_20022 SOIL - 22/6/2020 SE207912.009
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP10_0.5_200(22 SOIL - 22/6/2020 SE207912.010	0407_TP11_0.1_200(22 SOIL - 22/6/2020 SE207912.012	0407_TP11_1.0_200(22 SOIL - 22/6/2020 SE207912.013	0407_QC136_20062(SOIL - 22/6/2020 SE207912.015	0407_TP12_0.1_200(22 SOIL - 22/6/2020 SE207912.016
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP10_0.5_200(22 SOIL - 22/6/2020 SE207912.010	0407_TP11_0.1_200(22 SOIL - 22/6/2020 SE207912.012	0407_TP11_1.0_200(22 SOIL - 22/6/2020 SE207912.013	0407_QC136_20062(SOIL - 22/6/2020 SE207912.015	0407_TP12_0.1_200(22 SOIL - 22/6/2020 SE207912.016
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP12_0.5_200(22 SOIL - 22/6/2020 SE207912.017	0407_TP19_0.1_200(22 SOIL - 22/6/2020 SE207912.019	0407_TP19_1.0_200(22 SOIL - 22/6/2020 SE207912.020	0407_TP20_0.1_200(22 SOIL - 22/6/2020 SE207912.022	0407_TP20_0.5_200(22 SOIL - 22/6/2020 SE207912.023
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP12_0.5_200(22 SOIL - 22/6/2020 SE207912.017	0407_TP19_0.1_200(22 SOIL - 22/6/2020 SE207912.019	0407_TP19_1.0_200(22 SOIL - 22/6/2020 SE207912.020	0407_TP20_0.1_200(22 SOIL - 22/6/2020 SE207912.022	0407_TP20_0.5_200(22 SOIL - 22/6/2020 SE207912.023
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP22_0.1_200(22 SOIL - 22/6/2020 SE207912.025	0407_TP22_0.5_200(22 SOIL - 22/6/2020 SE207912.026	0407_TP28_0.1_200(22 SOIL - 22/6/2020 SE207912.028	0407_TP28_1.0_200(22 SOIL - 22/6/2020 SE207912.029	0407_TP29_0.1_200(22 SOIL - 22/6/2020 SE207912.031
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP22_0.1_200(22 SOIL - 22/6/2020 SE207912.025	0407_TP22_0.5_200(22 SOIL - 22/6/2020 SE207912.026	0407_TP28_0.1_200(22 SOIL - 22/6/2020 SE207912.028	0407_TP28_1.0_200(22 SOIL - 22/6/2020 SE207912.029	0407_TP29_0.1_200(22 SOIL - 22/6/2020 SE207912.031
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP29_0.5_200(22 SOIL - 22/6/2020 SE207912.032	0407_TP30_0.1_200(22 SOIL - 22/6/2020 SE207912.034	0407_TP30_0.5_200(22 SOIL - 22/6/2020 SE207912.035	0407_TP60_0.1_200(22 SOIL - 22/6/2020 SE207912.037	0407_TP60_1.0_200(22 SOIL - 22/6/2020 SE207912.038
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	-	-	-	-
Chloromethane	mg/kg	1	<1	-	-	-	-
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	-	-	-	-
Bromomethane	mg/kg	1	<1	-	-	-	-
Chloroethane	mg/kg	1	<1	-	-	-	-
Trichlorofluoromethane	mg/kg	1	<1	-	-	-	-
Acetone (2-propanone)	mg/kg	10	<10	-	-	-	-
Iodomethane	mg/kg	5	<5	-	-	-	-
1,1-dichloroethene	mg/kg	0.1	<0.1	-	-	-	-
Acrylonitrile	mg/kg	0.1	<0.1	-	-	-	-
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	-	-	-	-
Allyl chloride	mg/kg	0.1	<0.1	-	-	-	-
Carbon disulfide	mg/kg	0.5	<0.5	-	-	-	-
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	-	-	-	-
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	-	-	-	-
1,1-dichloroethane	mg/kg	0.1	<0.1	-	-	-	-
Vinyl acetate	mg/kg	10	<10	-	-	-	-
MEK (2-butanone)	mg/kg	10	<10	-	-	-	-
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	-	-	-	-
Bromochloromethane	mg/kg	0.1	<0.1	-	-	-	-
Chloroform	mg/kg	0.1	<0.1	-	-	-	-
2,2-dichloropropane	mg/kg	0.1	<0.1	-	-	-	-
1,2-dichloroethane	mg/kg	0.1	<0.1	-	-	-	-
1,1,1-trichloroethane	mg/kg	0.1	<0.1	-	-	-	-
1,1-dichloropropene	mg/kg	0.1	<0.1	-	-	-	-
Carbon tetrachloride	mg/kg	0.1	<0.1	-	-	-	-
Dibromomethane	mg/kg	0.1	<0.1	-	-	-	-
1,2-dichloropropane	mg/kg	0.1	<0.1	-	-	-	-
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	-	-	-	-
2-nitropropane	mg/kg	10	<10	-	-	-	-
Bromodichloromethane	mg/kg	0.1	<0.1	-	-	-	-
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	-	-	-	-
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	-	-	-	-
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	-	-	-	-
1,1,2-trichloroethane	mg/kg	0.1	<0.1	-	-	-	-
1,3-dichloropropane	mg/kg	0.1	<0.1	-	-	-	-
Chlorodibromomethane	mg/kg	0.1	<0.1	-	-	-	-
2-hexanone (MBK)	mg/kg	5	<5	-	-	-	-
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	-	-	-	-
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	-	-	-	-
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	-	-	-	-
Chlorobenzene	mg/kg	0.1	<0.1	-	-	-	-
Bromoform	mg/kg	0.1	<0.1	-	-	-	-
cis-1,4-dichloro-2-butene	mg/kg	1	<1	-	-	-	-
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	-	-	-	-
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	-	-	-	-
1,2,3-trichloropropane	mg/kg	0.1	<0.1	-	-	-	-
trans-1,4-dichloro-2-butene	mg/kg	1	<1	-	-	-	-

VOC's in Soil [AN433] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP29_0.5_200(22 SOIL - 22/6/2020 SE207912.032	0407_TP30_0.1_200(22 SOIL - 22/6/2020 SE207912.034	0407_TP30_0.5_200(22 SOIL - 22/6/2020 SE207912.035	0407_TP60_0.1_200(22 SOIL - 22/6/2020 SE207912.037	0407_TP60_1.0_200(22 SOIL - 22/6/2020 SE207912.038
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	-	-	-	-
Bromobenzene	mg/kg	0.1	<0.1	-	-	-	-
n-propylbenzene	mg/kg	0.1	<0.1	-	-	-	-
2-chlorotoluene	mg/kg	0.1	<0.1	-	-	-	-
4-chlorotoluene	mg/kg	0.1	<0.1	-	-	-	-
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	-	-	-	-
tert-butylbenzene	mg/kg	0.1	<0.1	-	-	-	-
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	-	-	-	-
sec-butylbenzene	mg/kg	0.1	<0.1	-	-	-	-
1,3-dichlorobenzene	mg/kg	0.1	<0.1	-	-	-	-
1,4-dichlorobenzene	mg/kg	0.1	<0.1	-	-	-	-
p-isopropyltoluene	mg/kg	0.1	<0.1	-	-	-	-
1,2-dichlorobenzene	mg/kg	0.1	<0.1	-	-	-	-
n-butylbenzene	mg/kg	0.1	<0.1	-	-	-	-
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	-	-	-	-
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	<0.1	-	-	-	-
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	-	-	-	-
Total VOC*	mg/kg	24	<24	-	-	-	-
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	-	-	-	-
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	-	-	-	-
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	-	-	-	-

VOC's in Soil [AN433] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP61_0.1_200(22 SOIL - 22/6/2020 SE207912.040	0407_TP61_0.5_200(22 SOIL - 22/6/2020 SE207912.041	0407_TP62_0.1_200(22 SOIL - 22/6/2020 SE207912.043	0407_TP62_0.5_200(22 SOIL - 22/6/2020 SE207912.044	0407_TP144_0.1_20(622 SOIL - 22/6/2020 SE207912.046
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	-	-	-	-	<1
Chloromethane	mg/kg	1	-	-	-	-	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	-	-	-	-	<0.1
Bromomethane	mg/kg	1	-	-	-	-	<1
Chloroethane	mg/kg	1	-	-	-	-	<1
Trichlorofluoromethane	mg/kg	1	-	-	-	-	<1
Acetone (2-propanone)	mg/kg	10	-	-	-	-	<10
Iodomethane	mg/kg	5	-	-	-	-	<5
1,1-dichloroethene	mg/kg	0.1	-	-	-	-	<0.1
Acrylonitrile	mg/kg	0.1	-	-	-	-	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	-	-	-	-	<0.5
Allyl chloride	mg/kg	0.1	-	-	-	-	<0.1
Carbon disulfide	mg/kg	0.5	-	-	-	-	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	-	-	-	-	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	-	-	-	-	<0.1
1,1-dichloroethane	mg/kg	0.1	-	-	-	-	<0.1
Vinyl acetate	mg/kg	10	-	-	-	-	<10
MEK (2-butanone)	mg/kg	10	-	-	-	-	<10
cis-1,2-dichloroethene	mg/kg	0.1	-	-	-	-	<0.1
Bromochloromethane	mg/kg	0.1	-	-	-	-	<0.1
Chloroform	mg/kg	0.1	-	-	-	-	<0.1
2,2-dichloropropane	mg/kg	0.1	-	-	-	-	<0.1
1,2-dichloroethane	mg/kg	0.1	-	-	-	-	<0.1
1,1,1-trichloroethane	mg/kg	0.1	-	-	-	-	<0.1
1,1-dichloropropene	mg/kg	0.1	-	-	-	-	<0.1
Carbon tetrachloride	mg/kg	0.1	-	-	-	-	<0.1
Dibromomethane	mg/kg	0.1	-	-	-	-	<0.1
1,2-dichloropropane	mg/kg	0.1	-	-	-	-	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	-	-	-	-	<0.1
2-nitropropane	mg/kg	10	-	-	-	-	<10
Bromodichloromethane	mg/kg	0.1	-	-	-	-	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	-	-	-	-	<1
cis-1,3-dichloropropene	mg/kg	0.1	-	-	-	-	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	-	-	-	-	<0.1
1,1,2-trichloroethane	mg/kg	0.1	-	-	-	-	<0.1
1,3-dichloropropane	mg/kg	0.1	-	-	-	-	<0.1
Chlorodibromomethane	mg/kg	0.1	-	-	-	-	<0.1
2-hexanone (MBK)	mg/kg	5	-	-	-	-	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	-	-	-	-	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	-	-	-	-	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	-	-	-	-	<0.1
Chlorobenzene	mg/kg	0.1	-	-	-	-	<0.1
Bromoform	mg/kg	0.1	-	-	-	-	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	-	-	-	-	<1
Styrene (Vinyl benzene)	mg/kg	0.1	-	-	-	-	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	-	-	-	-	<0.1
1,2,3-trichloropropane	mg/kg	0.1	-	-	-	-	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	-	-	-	-	<1

VOC's in Soil [AN433] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP61_0.1_200(22 SOIL - 22/6/2020 SE207912.040	0407_TP61_0.5_200(22 SOIL - 22/6/2020 SE207912.041	0407_TP62_0.1_200(22 SOIL - 22/6/2020 SE207912.043	0407_TP62_0.5_200(22 SOIL - 22/6/2020 SE207912.044	0407_TP144_0.1_20(622 SOIL - 22/6/2020 SE207912.046
Isopropylbenzene (Cumene)	mg/kg	0.1	-	-	-	-	<0.1
Bromobenzene	mg/kg	0.1	-	-	-	-	<0.1
n-propylbenzene	mg/kg	0.1	-	-	-	-	<0.1
2-chlorotoluene	mg/kg	0.1	-	-	-	-	<0.1
4-chlorotoluene	mg/kg	0.1	-	-	-	-	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	-	-	-	-	<0.1
tert-butylbenzene	mg/kg	0.1	-	-	-	-	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	-	-	-	-	<0.1
sec-butylbenzene	mg/kg	0.1	-	-	-	-	<0.1
1,3-dichlorobenzene	mg/kg	0.1	-	-	-	-	<0.1
1,4-dichlorobenzene	mg/kg	0.1	-	-	-	-	<0.1
p-isopropyltoluene	mg/kg	0.1	-	-	-	-	<0.1
1,2-dichlorobenzene	mg/kg	0.1	-	-	-	-	<0.1
n-butylbenzene	mg/kg	0.1	-	-	-	-	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	-	-	-	-	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	-	-	-	-	<0.1
Hexachlorobutadiene	mg/kg	0.1	-	-	-	-	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	-	-	-	-	<0.1
Total VOC*	mg/kg	24	-	-	-	-	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	-	-	-	-	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	-	-	-	-	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	-	-	-	-	<1.8

VOC's in Soil [AN433] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP144_0.5_20(622 SOIL - 22/6/2020 SE207912.047	0407_TP145_0.1_20(622 SOIL - 22/6/2020 SE207912.050	0407_TP145_0.5_20(622 SOIL - 22/6/2020 SE207912.051	0407_QC128_20062(SOIL - 22/6/2020 SE207912.052	0407_TP146_0.1_20(622 SOIL - 22/6/2020 SE207912.054
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP144_0.5_20(622 SOIL - 22/6/2020 SE207912.047	0407_TP145_0.1_20(622 SOIL - 22/6/2020 SE207912.050	0407_TP145_0.5_20(622 SOIL - 22/6/2020 SE207912.051	0407_QC128_20062(SOIL - 22/6/2020 SE207912.052	0407_TP146_0.1_20(622 SOIL - 22/6/2020 SE207912.054
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP146_0.5_20(622 SOIL - 22/6/2020 SE207912.055	0407_QC129_20062(SOIL - 22/6/2020 SE207912.057	0407_TP158_0.1_20(622 SOIL - 22/6/2020 SE207912.058	0407_TP158_1.0_20(622 SOIL - 22/6/2020 SE207912.059	0407_QC132_20062(SOIL - 22/6/2020 SE207912.060
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP146_0.5_20(622 SOIL - 22/6/2020 SE207912.055	0407_QC129_20062 SOIL - 22/6/2020 SE207912.057	0407_TP158_0.1_20(622 SOIL - 22/6/2020 SE207912.058	0407_TP158_1.0_20(622 SOIL - 22/6/2020 SE207912.059	0407_QC132_20062 SOIL - 22/6/2020 SE207912.060
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP159_0.1_20(622 SOIL - 22/6/2020 SE207912.062	0407_TP159_1.0_20(622 SOIL - 22/6/2020 SE207912.063	0407_TP160_0.1_20(622 SOIL - 22/6/2020 SE207912.065	0407_TP160_0.5_20(622 SOIL - 22/6/2020 SE207912.066	0407_QC131_20062: SOIL - 22/6/2020 SE207912.067
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP159_0.1_20(622 SOIL - 22/6/2020 SE207912.062	0407_TP159_1.0_20(622 SOIL - 22/6/2020 SE207912.063	0407_TP160_0.1_20(622 SOIL - 22/6/2020 SE207912.065	0407_TP160_0.5_20(622 SOIL - 22/6/2020 SE207912.066	0407_QC131_20062: SOIL - 22/6/2020 SE207912.067
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_QC133_20062 SOIL - 22/6/2020 SE207912.069
Benzene	mg/kg	0.1	<0.1
Toluene	mg/kg	0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2
o-xylene	mg/kg	0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
Chloromethane	mg/kg	1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
Bromomethane	mg/kg	1	<1
Chloroethane	mg/kg	1	<1
Trichlorofluoromethane	mg/kg	1	<1
Acetone (2-propanone)	mg/kg	10	<10
Iodomethane	mg/kg	5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1
Vinyl acetate	mg/kg	10	<10
MEK (2-butanone)	mg/kg	10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1
Chloroform	mg/kg	0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
2-nitropropane	mg/kg	10	<10
Bromodichloromethane	mg/kg	0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1
Bromoform	mg/kg	0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1

VOC's in Soil [AN433] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_QC133_20062 SOIL - 22/6/2020 SE207912.069
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
Total VOC*	mg/kg	24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 29/6/2020

PARAMETER	UOM	LOR	0407_BH0029_0.1_20622 SOIL - 22/6/2020 SE207912.001	0407_BH0029_0.5_20622 SOIL - 22/6/2020 SE207912.002	0407_BH0030_0.1_20622 SOIL - 22/6/2020 SE207912.005	0407_BH0030_0.5_20622 SOIL - 22/6/2020 SE207912.006	0407_TP10_0.1_20022 SOIL - 22/6/2020 SE207912.009
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP10_0.5_20022 SOIL - 22/6/2020 SE207912.010	0407_TP11_0.1_20022 SOIL - 22/6/2020 SE207912.012	0407_TP11_1.0_20022 SOIL - 22/6/2020 SE207912.013	0407_QC136_20062 SOIL - 22/6/2020 SE207912.015	0407_TP12_0.1_20022 SOIL - 22/6/2020 SE207912.016
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP12_0.5_20022 SOIL - 22/6/2020 SE207912.017	0407_TP19_0.1_20022 SOIL - 22/6/2020 SE207912.019	0407_TP19_1.0_20022 SOIL - 22/6/2020 SE207912.020	0407_TP20_0.1_20022 SOIL - 22/6/2020 SE207912.022	0407_TP20_0.5_20022 SOIL - 22/6/2020 SE207912.023
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP22_0.1_20022 SOIL - 22/6/2020 SE207912.025	0407_TP22_0.5_20022 SOIL - 22/6/2020 SE207912.026	0407_TP28_0.1_20022 SOIL - 22/6/2020 SE207912.028	0407_TP28_1.0_20022 SOIL - 22/6/2020 SE207912.029	0407_TP29_0.1_20022 SOIL - 22/6/2020 SE207912.031
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP29_0.5_20022 SOIL - 22/6/2020 SE207912.032	0407_TP30_0.1_20022 SOIL - 22/6/2020 SE207912.034	0407_TP30_0.5_20022 SOIL - 22/6/2020 SE207912.035	0407_TP60_0.1_20022 SOIL - 22/6/2020 SE207912.037	0407_TP60_1.0_20022 SOIL - 22/6/2020 SE207912.038
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP61_0.1_20022 SOIL - 22/6/2020 SE207912.040	0407_TP61_0.5_20022 SOIL - 22/6/2020 SE207912.041	0407_TP62_0.1_20022 SOIL - 22/6/2020 SE207912.043	0407_TP62_0.5_20022 SOIL - 22/6/2020 SE207912.044	0407_TP144_0.1_20622 SOIL - 22/6/2020 SE207912.046
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP144_0.5_20(622 SOIL - 22/6/2020 SE207912.047	0407_TP145_0.1_20(622 SOIL - 22/6/2020 SE207912.050	0407_TP145_0.5_20(622 SOIL - 22/6/2020 SE207912.051	0407_QC128_20062(SOIL - 22/6/2020 SE207912.052	0407_TP146_0.1_20(622 SOIL - 22/6/2020 SE207912.054
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP146_0.5_20(622 SOIL - 22/6/2020 SE207912.055	0407_QC129_20062(SOIL - 22/6/2020 SE207912.057	0407_TP158_0.1_20(622 SOIL - 22/6/2020 SE207912.058	0407_TP158_1.0_20(622 SOIL - 22/6/2020 SE207912.059	0407_QC132_20062(SOIL - 22/6/2020 SE207912.060
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP159_0.1_20(622 SOIL - 22/6/2020 SE207912.062	0407_TP159_1.0_20(622 SOIL - 22/6/2020 SE207912.063	0407_TP160_0.1_20(622 SOIL - 22/6/2020 SE207912.065	0407_TP160_0.5_20(622 SOIL - 22/6/2020 SE207912.066	0407_QC131_20062(SOIL - 22/6/2020 SE207912.067
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_QC133_20062(SOIL - 22/6/2020 SE207912.069
Benzene (F0)	mg/kg	0.1	<0.1
TRH C6-C9	mg/kg	20	<20
TRH C6-C10	mg/kg	25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 29/6/2020

PARAMETER	UOM	LOR	0407_BH0029_0.1_20622 SOIL - 22/6/2020 SE207912.001	0407_BH0029_0.5_20622 SOIL - 22/6/2020 SE207912.002	0407_BH0030_0.1_20622 SOIL - 22/6/2020 SE207912.005	0407_BH0030_0.5_20622 SOIL - 22/6/2020 SE207912.006	0407_TP10_0.1_20022 SOIL - 22/6/2020 SE207912.009
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	**61**	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	**58**	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	**110**	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	**120**	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP10_0.5_20022 SOIL - 22/6/2020 SE207912.010	0407_TP11_0.1_20022 SOIL - 22/6/2020 SE207912.012	0407_TP11_1.0_20022 SOIL - 22/6/2020 SE207912.013	0407_QC136_20062 SOIL - 22/6/2020 SE207912.015	0407_TP12_0.1_20022 SOIL - 22/6/2020 SE207912.016
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP12_0.5_20022 SOIL - 22/6/2020 SE207912.017	0407_TP19_0.1_20022 SOIL - 22/6/2020 SE207912.019	0407_TP19_1.0_20022 SOIL - 22/6/2020 SE207912.020	0407_TP20_0.1_20022 SOIL - 22/6/2020 SE207912.022	0407_TP20_0.5_20022 SOIL - 22/6/2020 SE207912.023
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP22_0.1_20022 SOIL - 22/6/2020 SE207912.025	0407_TP22_0.5_20022 SOIL - 22/6/2020 SE207912.026	0407_TP28_0.1_20022 SOIL - 22/6/2020 SE207912.028	0407_TP28_1.0_20022 SOIL - 22/6/2020 SE207912.029	0407_TP29_0.1_20022 SOIL - 22/6/2020 SE207912.031
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP29_0.5_20022 SOIL - 22/6/2020 SE207912.032	0407_TP30_0.1_20022 SOIL - 22/6/2020 SE207912.034	0407_TP30_0.5_20022 SOIL - 22/6/2020 SE207912.035	0407_TP60_0.1_20022 SOIL - 22/6/2020 SE207912.037	0407_TP60_1.0_20022 SOIL - 22/6/2020 SE207912.038
TRH C10-C14	mg/kg	20	<20	<20	<20	**34**	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	**420**	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	**1700**	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	**990**	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	**57**	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	**57**	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	**1300**	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	**1800**	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	**2100**	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	**3100**	<210

PARAMETER	UOM	LOR	0407_TP61_0.1_20022 SOIL - 22/6/2020 SE207912.040	0407_TP61_0.5_20022 SOIL - 22/6/2020 SE207912.041	0407_TP62_0.1_20022 SOIL - 22/6/2020 SE207912.043	0407_TP62_0.5_20022 SOIL - 22/6/2020 SE207912.044	0407_TP144_0.1_20622 SOIL - 22/6/2020 SE207912.046
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	**65**
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	**63**
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	**120**
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	**130**
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP144_0.5_20(622 SOIL - 22/6/2020 SE207912.047	0407_TP145_0.1_20(622 SOIL - 22/6/2020 SE207912.050	0407_TP145_0.5_20(622 SOIL - 22/6/2020 SE207912.051	0407_QC128_20062(SOIL - 22/6/2020 SE207912.052	0407_TP146_0.1_20(622 SOIL - 22/6/2020 SE207912.054
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP146_0.5_20(622 SOIL - 22/6/2020 SE207912.055	0407_QC129_20062(SOIL - 22/6/2020 SE207912.057	0407_TP158_0.1_20(622 SOIL - 22/6/2020 SE207912.058	0407_TP158_1.0_20(622 SOIL - 22/6/2020 SE207912.059	0407_QC132_20062(SOIL - 22/6/2020 SE207912.060
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP159_0.1_20(622 SOIL - 22/6/2020 SE207912.062	0407_TP159_1.0_20(622 SOIL - 22/6/2020 SE207912.063	0407_TP160_0.1_20(622 SOIL - 22/6/2020 SE207912.065	0407_TP160_0.5_20(622 SOIL - 22/6/2020 SE207912.066	0407_QC131_20062(SOIL - 22/6/2020 SE207912.067
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_QC133_20062 SOIL - 22/6/2020 SE207912.069
TRH C10-C14	mg/kg	20	<20
TRH C15-C28	mg/kg	45	<45
TRH C29-C36	mg/kg	45	<45
TRH C37-C40	mg/kg	100	<100
TRH >C10-C16	mg/kg	25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120
TRH C10-C36 Total	mg/kg	110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 29/6/2020

PARAMETER	UOM	LOR	0407_BH0029_0.1_2(0622 SOIL - 22/6/2020 SE207912.001	0407_BH0029_0.5_2(0622 SOIL - 22/6/2020 SE207912.002	0407_BH0030_0.1_2(0622 SOIL - 22/6/2020 SE207912.005	0407_BH0030_0.5_2(0622 SOIL - 22/6/2020 SE207912.006	0407_TP10_0.1_200(22 SOIL - 22/6/2020 SE207912.009
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	0.4	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	2.4	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	2.6	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	1.2	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	1.6	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	2.5	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	1.2	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	1.7	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	1.2	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	0.2	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	1.2	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	2.5	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	2.5	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	2.5	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	16	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	16	<0.8

PARAMETER	UOM	LOR	0407_TP10_0.5_200(22 SOIL - 22/6/2020 SE207912.010	0407_TP11_0.1_200(22 SOIL - 22/6/2020 SE207912.012	0407_TP11_1.0_200(22 SOIL - 22/6/2020 SE207912.013	0407_QC136_20062(SOIL - 22/6/2020 SE207912.015	0407_TP12_0.1_200(22 SOIL - 22/6/2020 SE207912.016
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP12_0.5_20022 SOIL - 22/6/2020 SE207912.017	0407_TP19_0.1_20022 SOIL - 22/6/2020 SE207912.019	0407_TP19_1.0_20022 SOIL - 22/6/2020 SE207912.020	0407_TP20_0.1_20022 SOIL - 22/6/2020 SE207912.022	0407_TP20_0.5_20022 SOIL - 22/6/2020 SE207912.023
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PARAMETER	UOM	LOR	0407_TP22_0.1_20022 SOIL - 22/6/2020 SE207912.025	0407_TP22_0.5_20022 SOIL - 22/6/2020 SE207912.026	0407_TP28_0.1_20022 SOIL - 22/6/2020 SE207912.028	0407_TP28_1.0_20022 SOIL - 22/6/2020 SE207912.029	0407_TP29_0.1_20022 SOIL - 22/6/2020 SE207912.031
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP29_0.5_20022 SOIL - 22/6/2020 SE207912.032	0407_TP30_0.1_20022 SOIL - 22/6/2020 SE207912.034	0407_TP30_0.5_20022 SOIL - 22/6/2020 SE207912.035	0407_TP60_0.1_20022 SOIL - 22/6/2020 SE207912.037	0407_TP60_1.0_20022 SOIL - 22/6/2020 SE207912.038
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.6**	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.5**	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.1**	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.3**	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	**0.2**	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	**0.2**	<0.1	**0.1**	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	**0.2**	<0.1	**0.2**	<0.1
Chrysene	mg/kg	0.1	<0.1	**0.2**	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	**0.2**	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	**0.1**	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	**0.2**	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	**1.2**	<0.8	**1.9**	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	**1.2**	<0.8	<0.8	<0.8

PARAMETER	UOM	LOR	0407_TP61_0.1_20022 SOIL - 22/6/2020 SE207912.040	0407_TP61_0.5_20022 SOIL - 22/6/2020 SE207912.041	0407_TP62_0.1_20022 SOIL - 22/6/2020 SE207912.043	0407_TP62_0.5_20022 SOIL - 22/6/2020 SE207912.044	0407_TP144_0.1_20622 SOIL - 22/6/2020 SE207912.046
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP144_0.5_20(622 SOIL - 22/6/2020 SE207912.047	0407_TP145_0.1_20(622 SOIL - 22/6/2020 SE207912.050	0407_TP145_0.5_20(622 SOIL - 22/6/2020 SE207912.051	0407_QC128_20062(SOIL - 22/6/2020 SE207912.052	0407_TP146_0.1_20(622 SOIL - 22/6/2020 SE207912.054
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	**0.3**	<0.1	<0.1	<0.1	**0.1**
Pyrene	mg/kg	0.1	**0.3**	<0.1	<0.1	<0.1	**0.1**
Benzo(a)anthracene	mg/kg	0.1	**0.1**	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	**0.2**	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	**0.2**	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	**0.1**	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	**0.2**	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	**0.2**	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	**0.3**	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	**0.3**	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	**1.4**	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	**1.4**	<0.8	<0.8	<0.8	<0.8

PARAMETER	UOM	LOR	0407_TP146_0.5_20(622 SOIL - 22/6/2020 SE207912.055	0407_QC129_20062(SOIL - 22/6/2020 SE207912.057	0407_TP158_0.1_20(622 SOIL - 22/6/2020 SE207912.058	0407_TP158_1.0_20(622 SOIL - 22/6/2020 SE207912.059	0407_QC132_20062(SOIL - 22/6/2020 SE207912.060
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	**0.2**	<0.1	**0.2**
Pyrene	mg/kg	0.1	<0.1	<0.1	**0.2**	<0.1	**0.2**
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	**0.1**	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	**0.1**	<0.1	**0.1**
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	**0.2**	<0.1	**0.1**
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	**0.1**	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	**0.1**	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	**0.2**	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	**1.1**	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	**1.1**	<0.8	<0.8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP159_0.1_20(622 SOIL - 22/6/2020 SE207912.062	0407_TP159_1.0_20(622 SOIL - 22/6/2020 SE207912.063	0407_TP160_0.1_20(622 SOIL - 22/6/2020 SE207912.065	0407_TP160_0.5_20(622 SOIL - 22/6/2020 SE207912.066	0407_QC131_20062: SOIL - 22/6/2020 SE207912.067
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	**0.1**	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	**0.1**	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	**0.1**	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PARAMETER	UOM	LOR	0407_QC133_20062: SOIL - 22/6/2020 SE207912.069
Naphthalene	mg/kg	0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1
Fluorene	mg/kg	0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1
Anthracene	mg/kg	0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1
Pyrene	mg/kg	0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1
Chrysene	mg/kg	0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8

Speciated Phenols in Soil [AN420] Tested: 29/6/2020

PARAMETER	UOM	LOR	0407_BH0029_0.1_2(0622 SOIL - 22/6/2020 SE207912.001	0407_BH0029_0.5_2(0622 SOIL - 22/6/2020 SE207912.002	0407_BH0030_0.1_2(0622 SOIL - 22/6/2020 SE207912.005	0407_BH0030_0.5_2(0622 SOIL - 22/6/2020 SE207912.006	0407_TP10_0.1_200(22 SOIL - 22/6/2020 SE207912.009
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_TP10_0.5_200(22 SOIL - 22/6/2020 SE207912.010	0407_TP11_0.1_200(22 SOIL - 22/6/2020 SE207912.012	0407_TP11_1.0_200(22 SOIL - 22/6/2020 SE207912.013	0407_QC136_20062(SOIL - 22/6/2020 SE207912.015	0407_TP12_0.1_200(22 SOIL - 22/6/2020 SE207912.016
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

Speciated Phenols in Soil [AN420] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP12_0.5_200(22 SOIL - 22/6/2020 SE207912.017	0407_TP19_0.1_200(22 SOIL - 22/6/2020 SE207912.019	0407_TP19_1.0_200(22 SOIL - 22/6/2020 SE207912.020	0407_TP20_0.1_200(22 SOIL - 22/6/2020 SE207912.022	0407_TP20_0.5_200(22 SOIL - 22/6/2020 SE207912.023
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_TP22_0.1_200(22 SOIL - 22/6/2020 SE207912.025	0407_TP22_0.5_200(22 SOIL - 22/6/2020 SE207912.026	0407_TP28_0.1_200(22 SOIL - 22/6/2020 SE207912.028	0407_TP28_1.0_200(22 SOIL - 22/6/2020 SE207912.029	0407_TP29_0.1_200(22 SOIL - 22/6/2020 SE207912.031
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

Speciated Phenols in Soil [AN420] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP29_0.5_200(22 SOIL - 22/6/2020 SE207912.032	0407_TP30_0.1_200(22 SOIL - 22/6/2020 SE207912.034	0407_TP30_0.5_200(22 SOIL - 22/6/2020 SE207912.035	0407_TP60_0.1_200(22 SOIL - 22/6/2020 SE207912.037	0407_TP60_1.0_200(22 SOIL - 22/6/2020 SE207912.038
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_TP61_0.1_200(22 SOIL - 22/6/2020 SE207912.040	0407_TP61_0.5_200(22 SOIL - 22/6/2020 SE207912.041	0407_TP62_0.1_200(22 SOIL - 22/6/2020 SE207912.043	0407_TP62_0.5_200(22 SOIL - 22/6/2020 SE207912.044	0407_TP144_0.1_20(622 SOIL - 22/6/2020 SE207912.046
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

Speciated Phenols in Soil [AN420] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP144_0.5_20(622 SOIL - 22/6/2020 SE207912.047	0407_TP145_0.1_20(622 SOIL - 22/6/2020 SE207912.050	0407_TP145_0.5_20(622 SOIL - 22/6/2020 SE207912.051	0407_QC128_20062(SOIL - 22/6/2020 SE207912.052	0407_TP146_0.1_20(622 SOIL - 22/6/2020 SE207912.054
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_TP146_0.5_20(622 SOIL - 22/6/2020 SE207912.055	0407_QC129_20062(SOIL - 22/6/2020 SE207912.057	0407_TP158_0.1_20(622 SOIL - 22/6/2020 SE207912.058	0407_TP158_1.0_20(622 SOIL - 22/6/2020 SE207912.059	0407_QC132_20062(SOIL - 22/6/2020 SE207912.060
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

Speciated Phenols in Soil [AN420] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP159_0.1_20(622 SOIL - 22/6/2020 SE207912.062	0407_TP159_1.0_20(622 SOIL - 22/6/2020 SE207912.063	0407_TP160_0.1_20(622 SOIL - 22/6/2020 SE207912.065	0407_TP160_0.5_20(622 SOIL - 22/6/2020 SE207912.066	0407_QC131_20062 SOIL - 22/6/2020 SE207912.067
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_QC133_20062 SOIL - 22/6/2020 SE207912.069
Phenol	mg/kg	0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
Total Cresol	mg/kg	1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5
4-nitrophenol	mg/kg	1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
Pentachlorophenol	mg/kg	0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2
4-chloro-3-methylphenol	mg/kg	2	<2

OC Pesticides in Soil [AN420] Tested: 29/6/2020

PARAMETER	UOM	LOR	0407_BH0029_0.1_20622 SOIL - 22/6/2020 SE207912.001	0407_BH0029_0.5_20622 SOIL - 22/6/2020 SE207912.002	0407_BH0030_0.1_20622 SOIL - 22/6/2020 SE207912.005	0407_BH0030_0.5_20622 SOIL - 22/6/2020 SE207912.006	0407_TP10_0.1_20022 SOIL - 22/6/2020 SE207912.009
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP10_0.5_200(22 SOIL - 22/6/2020 SE207912.010	0407_TP11_0.1_200(22 SOIL - 22/6/2020 SE207912.012	0407_TP11_1.0_200(22 SOIL - 22/6/2020 SE207912.013	0407_QC136_20062(SOIL - 22/6/2020 SE207912.015	0407_TP12_0.1_200(22 SOIL - 22/6/2020 SE207912.016
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP12_0.5_200(22 SOIL - 22/6/2020 SE207912.017	0407_TP19_0.1_200(22 SOIL - 22/6/2020 SE207912.019	0407_TP19_1.0_200(22 SOIL - 22/6/2020 SE207912.020	0407_TP20_0.1_200(22 SOIL - 22/6/2020 SE207912.022	0407_TP20_0.5_200(22 SOIL - 22/6/2020 SE207912.023
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP22_0.1_200(22 SOIL - 22/6/2020 SE207912.025	0407_TP22_0.5_200(22 SOIL - 22/6/2020 SE207912.026	0407_TP28_0.1_200(22 SOIL - 22/6/2020 SE207912.028	0407_TP28_1.0_200(22 SOIL - 22/6/2020 SE207912.029	0407_TP29_0.1_200(22 SOIL - 22/6/2020 SE207912.031
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	**0.4**	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP29_0.5_200(22 SOIL - 22/6/2020 SE207912.032	0407_TP30_0.1_200(22 SOIL - 22/6/2020 SE207912.034	0407_TP30_0.5_200(22 SOIL - 22/6/2020 SE207912.035	0407_TP60_0.1_200(22 SOIL - 22/6/2020 SE207912.037	0407_TP60_1.0_200(22 SOIL - 22/6/2020 SE207912.038
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	-	-	-	-
Alpha BHC	mg/kg	0.1	<0.1	-	-	-	-
Lindane	mg/kg	0.1	<0.1	-	-	-	-
Heptachlor	mg/kg	0.1	<0.1	-	-	-	-
Aldrin	mg/kg	0.1	<0.1	-	-	-	-
Beta BHC	mg/kg	0.1	<0.1	-	-	-	-
Delta BHC	mg/kg	0.1	<0.1	-	-	-	-
Heptachlor epoxide	mg/kg	0.1	<0.1	-	-	-	-
o,p'-DDE	mg/kg	0.1	<0.1	-	-	-	-
Alpha Endosulfan	mg/kg	0.2	<0.2	-	-	-	-
Gamma Chlordane	mg/kg	0.1	<0.1	-	-	-	-
Alpha Chlordane	mg/kg	0.1	<0.1	-	-	-	-
trans-Nonachlor	mg/kg	0.1	<0.1	-	-	-	-
p,p'-DDE	mg/kg	0.1	<0.1	-	-	-	-
Dieldrin	mg/kg	0.2	<0.2	-	-	-	-
Endrin	mg/kg	0.2	<0.2	-	-	-	-
o,p'-DDD	mg/kg	0.1	<0.1	-	-	-	-
o,p'-DDT	mg/kg	0.1	<0.1	-	-	-	-
Beta Endosulfan	mg/kg	0.2	<0.2	-	-	-	-
p,p'-DDD	mg/kg	0.1	<0.1	-	-	-	-
p,p'-DDT	mg/kg	0.1	<0.1	-	-	-	-
Endosulfan sulphate	mg/kg	0.1	<0.1	-	-	-	-
Endrin Aldehyde	mg/kg	0.1	<0.1	-	-	-	-
Methoxychlor	mg/kg	0.1	<0.1	-	-	-	-
Endrin Ketone	mg/kg	0.1	<0.1	-	-	-	-
Isodrin	mg/kg	0.1	<0.1	-	-	-	-
Mirex	mg/kg	0.1	<0.1	-	-	-	-
Total CLP OC Pesticides	mg/kg	1	<1	-	-	-	-

OC Pesticides in Soil [AN420] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP61_0.1_200(22 SOIL - 22/6/2020 SE207912.040	0407_TP61_0.5_200(22 SOIL - 22/6/2020 SE207912.041	0407_TP62_0.1_200(22 SOIL - 22/6/2020 SE207912.043	0407_TP62_0.5_200(22 SOIL - 22/6/2020 SE207912.044	0407_TP144_0.1_20(622 SOIL - 22/6/2020 SE207912.046
Hexachlorobenzene (HCB)	mg/kg	0.1	-	-	-	-	<0.1
Alpha BHC	mg/kg	0.1	-	-	-	-	<0.1
Lindane	mg/kg	0.1	-	-	-	-	<0.1
Heptachlor	mg/kg	0.1	-	-	-	-	<0.1
Aldrin	mg/kg	0.1	-	-	-	-	<0.1
Beta BHC	mg/kg	0.1	-	-	-	-	<0.1
Delta BHC	mg/kg	0.1	-	-	-	-	<0.1
Heptachlor epoxide	mg/kg	0.1	-	-	-	-	<0.1
o,p'-DDE	mg/kg	0.1	-	-	-	-	<0.1
Alpha Endosulfan	mg/kg	0.2	-	-	-	-	<0.2
Gamma Chlordane	mg/kg	0.1	-	-	-	-	<0.1
Alpha Chlordane	mg/kg	0.1	-	-	-	-	<0.1
trans-Nonachlor	mg/kg	0.1	-	-	-	-	<0.1
p,p'-DDE	mg/kg	0.1	-	-	-	-	<0.1
Dieldrin	mg/kg	0.2	-	-	-	-	<0.2
Endrin	mg/kg	0.2	-	-	-	-	<0.2
o,p'-DDD	mg/kg	0.1	-	-	-	-	<0.1
o,p'-DDT	mg/kg	0.1	-	-	-	-	<0.1
Beta Endosulfan	mg/kg	0.2	-	-	-	-	<0.2
p,p'-DDD	mg/kg	0.1	-	-	-	-	<0.1
p,p'-DDT	mg/kg	0.1	-	-	-	-	<0.1
Endosulfan sulphate	mg/kg	0.1	-	-	-	-	<0.1
Endrin Aldehyde	mg/kg	0.1	-	-	-	-	<0.1
Methoxychlor	mg/kg	0.1	-	-	-	-	<0.1
Endrin Ketone	mg/kg	0.1	-	-	-	-	<0.1
Isodrin	mg/kg	0.1	-	-	-	-	<0.1
Mirex	mg/kg	0.1	-	-	-	-	<0.1
Total CLP OC Pesticides	mg/kg	1	-	-	-	-	<1

OC Pesticides in Soil [AN420] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP144_0.5_20(622 SOIL - 22/6/2020 SE207912.047	0407_TP145_0.1_20(622 SOIL - 22/6/2020 SE207912.050	0407_TP145_0.5_20(622 SOIL - 22/6/2020 SE207912.051	0407_QC128_20062(SOIL - 22/6/2020 SE207912.052	0407_TP146_0.1_20(622 SOIL - 22/6/2020 SE207912.054
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP146_0.5_20(622 SOIL - 22/6/2020 SE207912.055	0407_QC129_20062(SOIL - 22/6/2020 SE207912.057	0407_TP158_0.1_20(622 SOIL - 22/6/2020 SE207912.058	0407_TP158_1.0_20(622 SOIL - 22/6/2020 SE207912.059	0407_QC132_20062(SOIL - 22/6/2020 SE207912.060
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP159_0.1_20(622 SOIL - 22/6/2020 SE207912.062	0407_TP159_1.0_20(622 SOIL - 22/6/2020 SE207912.063	0407_TP160_0.1_20(622 SOIL - 22/6/2020 SE207912.065	0407_TP160_0.5_20(622 SOIL - 22/6/2020 SE207912.066	0407_QC131_20062: SOIL - 22/6/2020 SE207912.067
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_QC133_20062 SOIL - 22/6/2020 SE207912.069
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1
Lindane	mg/kg	0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1
Aldrin	mg/kg	0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2
Endrin	mg/kg	0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1
Isodrin	mg/kg	0.1	<0.1
Mirex	mg/kg	0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1

OP Pesticides in Soil [AN420] Tested: 29/6/2020

PARAMETER	UOM	LOR	0407_BH0029_0.1_2(0622 SOIL - 22/6/2020 SE207912.001	0407_BH0029_0.5_2(0622 SOIL - 22/6/2020 SE207912.002	0407_BH0030_0.1_2(0622 SOIL - 22/6/2020 SE207912.005	0407_BH0030_0.5_2(0622 SOIL - 22/6/2020 SE207912.006	0407_TP10_0.1_200(22 SOIL - 22/6/2020 SE207912.009
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP10_0.5_200(22 SOIL - 22/6/2020 SE207912.010	0407_TP11_0.1_200(22 SOIL - 22/6/2020 SE207912.012	0407_TP11_1.0_200(22 SOIL - 22/6/2020 SE207912.013	0407_QC136_20062(SOIL - 22/6/2020 SE207912.015	0407_TP12_0.1_200(22 SOIL - 22/6/2020 SE207912.016
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP12_0.5_200(22 SOIL - 22/6/2020 SE207912.017	0407_TP19_0.1_200(22 SOIL - 22/6/2020 SE207912.019	0407_TP19_1.0_200(22 SOIL - 22/6/2020 SE207912.020	0407_TP20_0.1_200(22 SOIL - 22/6/2020 SE207912.022	0407_TP20_0.5_200(22 SOIL - 22/6/2020 SE207912.023
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

OP Pesticides in Soil [AN420] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP22_0.1_20022 SOIL - 22/6/2020 SE207912.025	0407_TP22_0.5_20022 SOIL - 22/6/2020 SE207912.026	0407_TP28_0.1_20022 SOIL - 22/6/2020 SE207912.028	0407_TP28_1.0_20022 SOIL - 22/6/2020 SE207912.029	0407_TP29_0.1_20022 SOIL - 22/6/2020 SE207912.031
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP29_0.5_20022 SOIL - 22/6/2020 SE207912.032	0407_TP144_0.1_20622 SOIL - 22/6/2020 SE207912.046	0407_TP144_0.5_20622 SOIL - 22/6/2020 SE207912.047	0407_TP145_0.1_20622 SOIL - 22/6/2020 SE207912.050	0407_TP145_0.5_20622 SOIL - 22/6/2020 SE207912.051
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_QC128_20062 SOIL - 22/6/2020 SE207912.052	0407_TP146_0.1_20622 SOIL - 22/6/2020 SE207912.054	0407_TP146_0.5_20622 SOIL - 22/6/2020 SE207912.055	0407_QC129_20062 SOIL - 22/6/2020 SE207912.057	0407_TP158_0.1_20622 SOIL - 22/6/2020 SE207912.058
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

OP Pesticides in Soil [AN420] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP158_1.0_20(622 SOIL - 22/6/2020 SE207912.059	0407_QC132_20062 SOIL - 22/6/2020 SE207912.060	0407_TP159_0.1_20(622 SOIL - 22/6/2020 SE207912.062	0407_TP159_1.0_20(622 SOIL - 22/6/2020 SE207912.063	0407_TP160_0.1_20(622 SOIL - 22/6/2020 SE207912.065
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP160_0.5_20(622 SOIL - 22/6/2020 SE207912.066	0407_QC131_20062 SOIL - 22/6/2020 SE207912.067	0407_QC133_20062 SOIL - 22/6/2020 SE207912.069
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7

PCBs in Soil [AN420] Tested: 29/6/2020

PARAMETER	UOM	LOR	0407_BH0029_0.1_2(0622 SOIL - 22/6/2020 SE207912.001	0407_BH0029_0.5_2(0622 SOIL - 22/6/2020 SE207912.002	0407_BH0030_0.1_2(0622 SOIL - 22/6/2020 SE207912.005	0407_BH0030_0.5_2(0622 SOIL - 22/6/2020 SE207912.006	0407_TP10_0.1_200(22 SOIL - 22/6/2020 SE207912.009
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP10_0.5_200(22 SOIL - 22/6/2020 SE207912.010	0407_TP11_0.1_200(22 SOIL - 22/6/2020 SE207912.012	0407_TP11_1.0_200(22 SOIL - 22/6/2020 SE207912.013	0407_QC136_20062(SOIL - 22/6/2020 SE207912.015	0407_TP12_0.1_200(22 SOIL - 22/6/2020 SE207912.016
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP12_0.5_200(22 SOIL - 22/6/2020 SE207912.017	0407_TP19_0.1_200(22 SOIL - 22/6/2020 SE207912.019	0407_TP19_1.0_200(22 SOIL - 22/6/2020 SE207912.020	0407_TP20_0.1_200(22 SOIL - 22/6/2020 SE207912.022	0407_TP20_0.5_200(22 SOIL - 22/6/2020 SE207912.023
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PCBs in Soil [AN420] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP22_0.1_200(22 SOIL - 22/6/2020 SE207912.025	0407_TP22_0.5_200(22 SOIL - 22/6/2020 SE207912.026	0407_TP28_0.1_200(22 SOIL - 22/6/2020 SE207912.028	0407_TP28_1.0_200(22 SOIL - 22/6/2020 SE207912.029	0407_TP29_0.1_200(22 SOIL - 22/6/2020 SE207912.031
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP29_0.5_200(22 SOIL - 22/6/2020 SE207912.032	0407_TP30_0.1_200(22 SOIL - 22/6/2020 SE207912.034	0407_TP30_0.5_200(22 SOIL - 22/6/2020 SE207912.035	0407_TP60_0.1_200(22 SOIL - 22/6/2020 SE207912.037	0407_TP60_1.0_200(22 SOIL - 22/6/2020 SE207912.038
Arochlor 1016	mg/kg	0.2	<0.2	-	-	-	-
Arochlor 1221	mg/kg	0.2	<0.2	-	-	-	-
Arochlor 1232	mg/kg	0.2	<0.2	-	-	-	-
Arochlor 1242	mg/kg	0.2	<0.2	-	-	-	-
Arochlor 1248	mg/kg	0.2	<0.2	-	-	-	-
Arochlor 1254	mg/kg	0.2	<0.2	-	-	-	-
Arochlor 1260	mg/kg	0.2	<0.2	-	-	-	-
Arochlor 1262	mg/kg	0.2	<0.2	-	-	-	-
Arochlor 1268	mg/kg	0.2	<0.2	-	-	-	-
Total PCBs (Arochlors)	mg/kg	1	<1	-	-	-	-

PARAMETER	UOM	LOR	0407_TP61_0.1_200(22 SOIL - 22/6/2020 SE207912.040	0407_TP61_0.5_200(22 SOIL - 22/6/2020 SE207912.041	0407_TP62_0.1_200(22 SOIL - 22/6/2020 SE207912.043	0407_TP62_0.5_200(22 SOIL - 22/6/2020 SE207912.044	0407_TP144_0.1_20(622 SOIL - 22/6/2020 SE207912.046
Arochlor 1016	mg/kg	0.2	-	-	-	-	<0.2
Arochlor 1221	mg/kg	0.2	-	-	-	-	<0.2
Arochlor 1232	mg/kg	0.2	-	-	-	-	<0.2
Arochlor 1242	mg/kg	0.2	-	-	-	-	<0.2
Arochlor 1248	mg/kg	0.2	-	-	-	-	<0.2
Arochlor 1254	mg/kg	0.2	-	-	-	-	<0.2
Arochlor 1260	mg/kg	0.2	-	-	-	-	<0.2
Arochlor 1262	mg/kg	0.2	-	-	-	-	<0.2
Arochlor 1268	mg/kg	0.2	-	-	-	-	<0.2
Total PCBs (Arochlors)	mg/kg	1	-	-	-	-	<1

PCBs in Soil [AN420] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP144_0.5_20(622 SOIL - 22/6/2020 SE207912.047	0407_TP145_0.1_20(622 SOIL - 22/6/2020 SE207912.050	0407_TP145_0.5_20(622 SOIL - 22/6/2020 SE207912.051	0407_QC128_20062(SOIL - 22/6/2020 SE207912.052	0407_TP146_0.1_20(622 SOIL - 22/6/2020 SE207912.054
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP146_0.5_20(622 SOIL - 22/6/2020 SE207912.055	0407_QC129_20062(SOIL - 22/6/2020 SE207912.057	0407_TP158_0.1_20(622 SOIL - 22/6/2020 SE207912.058	0407_TP158_1.0_20(622 SOIL - 22/6/2020 SE207912.059	0407_QC132_20062(SOIL - 22/6/2020 SE207912.060
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP159_0.1_20(622 SOIL - 22/6/2020 SE207912.062	0407_TP159_1.0_20(622 SOIL - 22/6/2020 SE207912.063	0407_TP160_0.1_20(622 SOIL - 22/6/2020 SE207912.065	0407_TP160_0.5_20(622 SOIL - 22/6/2020 SE207912.066	0407_QC131_20062(SOIL - 22/6/2020 SE207912.067
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PCBs in Soil [AN420] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_QC133_20062 SOIL - 22/6/2020 SE207912.069
Arochlor 1016	mg/kg	0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 30/6/2020

PARAMETER	UOM	LOR	0407_BH0029_0.1_2 0622 SOIL - 22/6/2020 SE207912.001	0407_BH0029_0.5_2 0622 SOIL - 22/6/2020 SE207912.002	0407_BH0030_0.1_2 0622 SOIL - 22/6/2020 SE207912.005	0407_BH0030_0.5_2 0622 SOIL - 22/6/2020 SE207912.006	0407_TP10_0.1_200 22 SOIL - 22/6/2020 SE207912.009
Arsenic, As	mg/kg	1	<1	<1	2	2	1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	1.5	0.5	7.5	2.3	2.1
Copper, Cu	mg/kg	0.5	0.8	4.3	22	8.1	2.1
Lead, Pb	mg/kg	1	1	30	2	37	1
Nickel, Ni	mg/kg	0.5	0.7	0.8	29	1.1	7.0
Zinc, Zn	mg/kg	2	3.0	16	35	37	2.1

PARAMETER	UOM	LOR	0407_TP10_0.5_200 22 SOIL - 22/6/2020 SE207912.010	0407_TP11_0.1_200 22 SOIL - 22/6/2020 SE207912.012	0407_TP11_1.0_200 22 SOIL - 22/6/2020 SE207912.013	0407_QC136_20062 SOIL - 22/6/2020 SE207912.015	0407_TP12_0.1_200 22 SOIL - 22/6/2020 SE207912.016
Arsenic, As	mg/kg	1	<1	<1	<1	<1	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	<0.5	1.0	<0.5	1.0	0.8
Copper, Cu	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	1.0
Lead, Pb	mg/kg	1	1	1	<1	1	1
Nickel, Ni	mg/kg	0.5	<0.5	0.8	<0.5	1.1	0.8
Zinc, Zn	mg/kg	2	<2.0	<2.0	<2.0	<2.0	<2.0

PARAMETER	UOM	LOR	0407_TP12_0.5_200 22 SOIL - 22/6/2020 SE207912.017	0407_TP19_0.1_200 22 SOIL - 22/6/2020 SE207912.019	0407_TP19_1.0_200 22 SOIL - 22/6/2020 SE207912.020	0407_TP20_0.1_200 22 SOIL - 22/6/2020 SE207912.022	0407_TP20_0.5_200 22 SOIL - 22/6/2020 SE207912.023
Arsenic, As	mg/kg	1	<1	<1	<1	<1	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	<0.5	0.8	1.0	1.5	1.8
Copper, Cu	mg/kg	0.5	<0.5	0.9	<0.5	1.2	<0.5
Lead, Pb	mg/kg	1	<1	4	<1	2	1
Nickel, Ni	mg/kg	0.5	<0.5	0.6	0.7	1.2	0.6
Zinc, Zn	mg/kg	2	<2.0	2.9	<2.0	2.6	<2.0

PARAMETER	UOM	LOR	0407_TP22_0.1_200 22 SOIL - 22/6/2020 SE207912.025	0407_TP22_0.5_200 22 SOIL - 22/6/2020 SE207912.026	0407_TP28_0.1_200 22 SOIL - 22/6/2020 SE207912.028	0407_TP28_1.0_200 22 SOIL - 22/6/2020 SE207912.029	0407_TP29_0.1_200 22 SOIL - 22/6/2020 SE207912.031
Arsenic, As	mg/kg	1	<1	<1	<1	<1	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	0.6	0.6	<0.5	<0.5	<0.5
Copper, Cu	mg/kg	0.5	2.3	1.4	1.1	<0.5	<0.5
Lead, Pb	mg/kg	1	4	3	2	<1	<1
Nickel, Ni	mg/kg	0.5	1.8	<0.5	<0.5	<0.5	1.6
Zinc, Zn	mg/kg	2	5.7	<2.0	6.8	<2.0	<2.0

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 30/6/2020

(continued)

PARAMETER	UOM	LOR	0407_TP29_0.5_20022 SOIL - 22/6/2020 SE207912.032	0407_TP30_0.1_20022 SOIL - 22/6/2020 SE207912.034	0407_TP30_0.5_20022 SOIL - 22/6/2020 SE207912.035	0407_TP60_0.1_20022 SOIL - 22/6/2020 SE207912.037	0407_TP60_1.0_20022 SOIL - 22/6/2020 SE207912.038
Arsenic, As	mg/kg	1	<1	-	-	-	-
Cadmium, Cd	mg/kg	0.3	<0.3	-	-	-	-
Chromium, Cr	mg/kg	0.5	<0.5	-	-	-	-
Copper, Cu	mg/kg	0.5	**0.6**	-	-	-	-
Lead, Pb	mg/kg	1	<1	**2**	**14**	**2**	<1
Nickel, Ni	mg/kg	0.5	<0.5	-	-	-	-
Zinc, Zn	mg/kg	2	<2.0	-	-	-	-

PARAMETER	UOM	LOR	0407_TP61_0.1_20022 SOIL - 22/6/2020 SE207912.040	0407_TP61_0.5_20022 SOIL - 22/6/2020 SE207912.041	0407_TP62_0.1_20022 SOIL - 22/6/2020 SE207912.043	0407_TP62_0.5_20022 SOIL - 22/6/2020 SE207912.044	0407_TP144_0.1_20622 SOIL - 22/6/2020 SE207912.046
Arsenic, As	mg/kg	1	-	-	-	-	<1
Cadmium, Cd	mg/kg	0.3	-	-	-	-	<0.3
Chromium, Cr	mg/kg	0.5	-	-	-	-	<0.5
Copper, Cu	mg/kg	0.5	-	-	-	-	**0.8**
Lead, Pb	mg/kg	1	<1	<1	<1	<1	**2**
Nickel, Ni	mg/kg	0.5	-	-	-	-	**1.0**
Zinc, Zn	mg/kg	2	-	-	-	-	**25**

PARAMETER	UOM	LOR	0407_TP144_0.5_20622 SOIL - 22/6/2020 SE207912.047	0407_TP145_0.1_20622 SOIL - 22/6/2020 SE207912.050	0407_TP145_0.5_20622 SOIL - 22/6/2020 SE207912.051	0407_QC128_20062 SOIL - 22/6/2020 SE207912.052	0407_TP146_0.1_20622 SOIL - 22/6/2020 SE207912.054
Arsenic, As	mg/kg	1	**2**	<1	<1	<1	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	**2.9**	<0.5	<0.5	<0.5	<0.5
Copper, Cu	mg/kg	0.5	**13**	**1.3**	**0.7**	**1.3**	**0.6**
Lead, Pb	mg/kg	1	**41**	**4**	**4**	**4**	**2**
Nickel, Ni	mg/kg	0.5	**0.9**	**2.5**	<0.5	**0.6**	<0.5
Zinc, Zn	mg/kg	2	**23**	**7.0**	**6.4**	**6.7**	<2.0

PARAMETER	UOM	LOR	0407_TP146_0.5_20622 SOIL - 22/6/2020 SE207912.055	0407_QC129_20062 SOIL - 22/6/2020 SE207912.057	0407_TP158_0.1_20622 SOIL - 22/6/2020 SE207912.058	0407_TP158_1.0_20622 SOIL - 22/6/2020 SE207912.059	0407_QC132_20062 SOIL - 22/6/2020 SE207912.060
Arsenic, As	mg/kg	1	<1	<1	<1	<1	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	<0.5	<0.5	**1.4**	**6.3**	**1.5**
Copper, Cu	mg/kg	0.5	<0.5	<0.5	**7.2**	**0.6**	**6.6**
Lead, Pb	mg/kg	1	<1	<1	**24**	**7**	**22**
Nickel, Ni	mg/kg	0.5	<0.5	<0.5	**1.0**	**0.5**	**1.7**
Zinc, Zn	mg/kg	2	<2.0	<2.0	**8.4**	**2.0**	**15**

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 30/6/2020

(continued)

PARAMETER	UOM	LOR	0407_TP159_0.1_20(622 SOIL - 22/6/2020 SE207912.062	0407_TP159_1.0_20(622 SOIL - 22/6/2020 SE207912.063	0407_TP160_0.1_20(622 SOIL - 22/6/2020 SE207912.065	0407_TP160_0.5_20(622 SOIL - 22/6/2020 SE207912.066	0407_QC131_20062: SOIL - 22/6/2020 SE207912.067
Arsenic, As	mg/kg	1	<1	2	<1	<1	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	0.6	15	<0.5	2.1	<0.5
Copper, Cu	mg/kg	0.5	1.4	<0.5	<0.5	<0.5	0.7
Lead, Pb	mg/kg	1	5	14	<1	3	2
Nickel, Ni	mg/kg	0.5	5.1	3.7	0.9	0.7	1.6
Zinc, Zn	mg/kg	2	7.2	<2.0	<2.0	<2.0	<2.0

PARAMETER	UOM	LOR	0407_QC133_20062: SOIL - 22/6/2020 SE207912.069
Arsenic, As	mg/kg	1	<1
Cadmium, Cd	mg/kg	0.3	<0.3
Chromium, Cr	mg/kg	0.5	<0.5
Copper, Cu	mg/kg	0.5	<0.5
Lead, Pb	mg/kg	1	<1
Nickel, Ni	mg/kg	0.5	<0.5
Zinc, Zn	mg/kg	2	<2.0

Mercury in Soil [AN312] Tested: 30/6/2020

PARAMETER	UOM	LOR	0407_BH0029_0.1_20622 SOIL - 22/6/2020 SE207912.001	0407_BH0029_0.5_20622 SOIL - 22/6/2020 SE207912.002	0407_BH0030_0.1_20622 SOIL - 22/6/2020 SE207912.005	0407_BH0030_0.5_20622 SOIL - 22/6/2020 SE207912.006	0407_TP10_0.1_20022 SOIL - 22/6/2020 SE207912.009
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	**0.05**	<0.05

PARAMETER	UOM	LOR	0407_TP10_0.5_20022 SOIL - 22/6/2020 SE207912.010	0407_TP11_0.1_20022 SOIL - 22/6/2020 SE207912.012	0407_TP11_1.0_20022 SOIL - 22/6/2020 SE207912.013	0407_QC136_20062 SOIL - 22/6/2020 SE207912.015	0407_TP12_0.1_20022 SOIL - 22/6/2020 SE207912.016
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_TP12_0.5_20022 SOIL - 22/6/2020 SE207912.017	0407_TP19_0.1_20022 SOIL - 22/6/2020 SE207912.019	0407_TP19_1.0_20022 SOIL - 22/6/2020 SE207912.020	0407_TP20_0.1_20022 SOIL - 22/6/2020 SE207912.022	0407_TP20_0.5_20022 SOIL - 22/6/2020 SE207912.023
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_TP22_0.1_20022 SOIL - 22/6/2020 SE207912.025	0407_TP22_0.5_20022 SOIL - 22/6/2020 SE207912.026	0407_TP28_0.1_20022 SOIL - 22/6/2020 SE207912.028	0407_TP28_1.0_20022 SOIL - 22/6/2020 SE207912.029	0407_TP29_0.1_20022 SOIL - 22/6/2020 SE207912.031
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_TP29_0.5_20022 SOIL - 22/6/2020 SE207912.032	0407_TP144_0.1_20622 SOIL - 22/6/2020 SE207912.046	0407_TP144_0.5_20622 SOIL - 22/6/2020 SE207912.047	0407_TP145_0.1_20622 SOIL - 22/6/2020 SE207912.050	0407_TP145_0.5_20622 SOIL - 22/6/2020 SE207912.051
Mercury	mg/kg	0.05	<0.05	<0.05	**0.09**	**0.07**	<0.05

PARAMETER	UOM	LOR	0407_QC128_20062 SOIL - 22/6/2020 SE207912.052	0407_TP146_0.1_20622 SOIL - 22/6/2020 SE207912.054	0407_TP146_0.5_20622 SOIL - 22/6/2020 SE207912.055	0407_QC129_20062 SOIL - 22/6/2020 SE207912.057	0407_TP158_0.1_20622 SOIL - 22/6/2020 SE207912.058
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	**0.08**

PARAMETER	UOM	LOR	0407_TP158_1.0_20622 SOIL - 22/6/2020 SE207912.059	0407_QC132_20062 SOIL - 22/6/2020 SE207912.060	0407_TP159_0.1_20622 SOIL - 22/6/2020 SE207912.062	0407_TP159_1.0_20622 SOIL - 22/6/2020 SE207912.063	0407_TP160_0.1_20622 SOIL - 22/6/2020 SE207912.065
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

Mercury in Soil [AN312] Tested: 30/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP160_0.5_20(622 SOIL - 22/6/2020 SE207912.066	0407_QC131_20062: SOIL - 22/6/2020 SE207912.067	0407_QC133_20062: SOIL - 22/6/2020 SE207912.069
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05

Moisture Content [AN002] Tested: 29/6/2020

PARAMETER	UOM	LOR	0407_BH0029_0.1_2 0622 SOIL - 22/6/2020 SE207912.001	0407_BH0029_0.5_2 0622 SOIL - 22/6/2020 SE207912.002	0407_BH0030_0.1_2 0622 SOIL - 22/6/2020 SE207912.005	0407_BH0030_0.5_2 0622 SOIL - 22/6/2020 SE207912.006	0407_TP10_0.1_200 22 SOIL - 22/6/2020 SE207912.009
% Moisture	%w/w	1	16.3	22.2	11.8	10.8	5.9

PARAMETER	UOM	LOR	0407_TP10_0.5_200 22 SOIL - 22/6/2020 SE207912.010	0407_TP11_0.1_200 22 SOIL - 22/6/2020 SE207912.012	0407_TP11_1.0_200 22 SOIL - 22/6/2020 SE207912.013	0407_QC136_20062 SOIL - 22/6/2020 SE207912.015	0407_TP12_0.1_200 22 SOIL - 22/6/2020 SE207912.016
% Moisture	%w/w	1	5.7	4.8	6.2	4.2	4.3

PARAMETER	UOM	LOR	0407_TP12_0.5_200 22 SOIL - 22/6/2020 SE207912.017	0407_TP19_0.1_200 22 SOIL - 22/6/2020 SE207912.019	0407_TP19_1.0_200 22 SOIL - 22/6/2020 SE207912.020	0407_TP20_0.1_200 22 SOIL - 22/6/2020 SE207912.022	0407_TP20_0.5_200 22 SOIL - 22/6/2020 SE207912.023
% Moisture	%w/w	1	4.3	3.0	3.2	3.4	3.6

PARAMETER	UOM	LOR	0407_TP22_0.1_200 22 SOIL - 22/6/2020 SE207912.025	0407_TP22_0.5_200 22 SOIL - 22/6/2020 SE207912.026	0407_TP28_0.1_200 22 SOIL - 22/6/2020 SE207912.028	0407_TP28_1.0_200 22 SOIL - 22/6/2020 SE207912.029	0407_TP29_0.1_200 22 SOIL - 22/6/2020 SE207912.031
% Moisture	%w/w	1	7.8	<1.0	4.0	5.1	3.9

PARAMETER	UOM	LOR	0407_TP29_0.5_200 22 SOIL - 22/6/2020 SE207912.032	0407_TP30_0.1_200 22 SOIL - 22/6/2020 SE207912.034	0407_TP30_0.5_200 22 SOIL - 22/6/2020 SE207912.035	0407_TP60_0.1_200 22 SOIL - 22/6/2020 SE207912.037	0407_TP60_1.0_200 22 SOIL - 22/6/2020 SE207912.038
% Moisture	%w/w	1	4.1	4.4	8.4	4.1	1.0

PARAMETER	UOM	LOR	0407_TP61_0.1_200 22 SOIL - 22/6/2020 SE207912.040	0407_TP61_0.5_200 22 SOIL - 22/6/2020 SE207912.041	0407_TP62_0.1_200 22 SOIL - 22/6/2020 SE207912.043	0407_TP62_0.5_200 22 SOIL - 22/6/2020 SE207912.044	0407_TP144_0.1_20 622 SOIL - 22/6/2020 SE207912.046
% Moisture	%w/w	1	3.4	2.1	4.7	2.8	8.2

PARAMETER	UOM	LOR	0407_TP144_0.5_20 622 SOIL - 22/6/2020 SE207912.047	0407_TP145_0.1_20 622 SOIL - 22/6/2020 SE207912.050	0407_TP145_0.5_20 622 SOIL - 22/6/2020 SE207912.051	0407_QC128_20062 SOIL - 22/6/2020 SE207912.052	0407_TP146_0.1_20 622 SOIL - 22/6/2020 SE207912.054
% Moisture	%w/w	1	22.4	2.6	6.0	1.8	20.5

Moisture Content [AN002] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP146_0.5_20(622 SOIL - 22/6/2020 SE207912.055	0407_QC129_20062: SOIL - 22/6/2020 SE207912.057	0407_TP158_0.1_20(622 SOIL - 22/6/2020 SE207912.058	0407_TP158_1.0_20(622 SOIL - 22/6/2020 SE207912.059	0407_QC132_20062: SOIL - 22/6/2020 SE207912.060
% Moisture	%w/w	1	2.9	2.8	19.2	16.5	18.7

PARAMETER	UOM	LOR	0407_TP159_0.1_20(622 SOIL - 22/6/2020 SE207912.062	0407_TP159_1.0_20(622 SOIL - 22/6/2020 SE207912.063	0407_TP160_0.1_20(622 SOIL - 22/6/2020 SE207912.065	0407_TP160_0.5_20(622 SOIL - 22/6/2020 SE207912.066	0407_QC131_20062: SOIL - 22/6/2020 SE207912.067
% Moisture	%w/w	1	5.0	12.3	4.6	9.5	4.1

PARAMETER	UOM	LOR	0407_QC133_20062: SOIL - 22/6/2020 SE207912.069
% Moisture	%w/w	1	1.2

Fibre Identification in soil [AN602] Tested: 1/7/2020

PARAMETER	UOM	LOR	0407_BH0029_0.1-0._200622 SOIL - 22/6/2020 SE207912.003	0407_BH0029_0.3-0._200622 SOIL - 22/6/2020 SE207912.004	0407_BH0030_0.1-0._200622 SOIL - 22/6/2020 SE207912.007	0407_BH0030_0.4-0._200622 SOIL - 22/6/2020 SE207912.008	0407_TP10_0.1-0.2_00622 SOIL - 22/6/2020 SE207912.011
Asbestos Detected	No unit	-	No	No	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	0407_TP11_0.1-0.2_00622 SOIL - 22/6/2020 SE207912.014	0407_TP12_0.1-0.2_00622 SOIL - 22/6/2020 SE207912.018	0407_TP19_0.1-0.2_00622 SOIL - 22/6/2020 SE207912.021	0407_TP20_0.1-0.2_00622 SOIL - 22/6/2020 SE207912.024	0407_TP22_0.1-0.2_00622 SOIL - 22/6/2020 SE207912.027
Asbestos Detected	No unit	-	No	No	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	0407_TP28_0.1-0.2_00622 SOIL - 22/6/2020 SE207912.030	0407_TP29_0.1-0.2_00622 SOIL - 22/6/2020 SE207912.033	0407_TP30_0.1-0.2_00622 SOIL - 22/6/2020 SE207912.036	0407_TP60_0.1-0.2_00622 SOIL - 22/6/2020 SE207912.039	0407_TP61_0.1-0.2_00622 SOIL - 22/6/2020 SE207912.042
Asbestos Detected	No unit	-	No	No	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	0407_TP62_0.1-0.2_00622 SOIL - 22/6/2020 SE207912.045	0407_TP144_0.1-0.2_200622 SOIL - 22/6/2020 SE207912.048	0407_TP144_0.4-0.5_200622 SOIL - 22/6/2020 SE207912.049	0407_TP145_0.1-0.2_200622 SOIL - 22/6/2020 SE207912.053	0407_TP146_0.1-0.2_200622 SOIL - 22/6/2020 SE207912.056
Asbestos Detected	No unit	-	No	No	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	0407_TP158_0.1-0.2_200622 SOIL - 22/6/2020 SE207912.061	0407_TP159_0.1-0.2_200622 SOIL - 22/6/2020 SE207912.064	0407_TP160_0.1-0.2_200622 SOIL - 22/6/2020 SE207912.068
Asbestos Detected	No unit	-	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 1/7/2020

PARAMETER	UOM	LOR	0407_BH0029_0.1-0._200622 SOIL - 22/6/2020 SE207912.003	0407_BH0029_0.3-0._200622 SOIL - 22/6/2020 SE207912.004	0407_BH0030_0.1-0._200622 SOIL - 22/6/2020 SE207912.007	0407_BH0030_0.4-0._200622 SOIL - 22/6/2020 SE207912.008	0407_TP10_0.1-0.2_00622 SOIL - 22/6/2020 SE207912.011
Total Sample Weight*	g	1	685	725	843	699	628
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP11_0.1-0.2_00622 SOIL - 22/6/2020 SE207912.014	0407_TP12_0.1-0.2_00622 SOIL - 22/6/2020 SE207912.018	0407_TP19_0.1-0.2_00622 SOIL - 22/6/2020 SE207912.021	0407_TP20_0.1-0.2_00622 SOIL - 22/6/2020 SE207912.024	0407_TP22_0.1-0.2_00622 SOIL - 22/6/2020 SE207912.027
Total Sample Weight*	g	1	781	712	761	826	701
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP28_0.1-0.2_00622 SOIL - 22/6/2020 SE207912.030	0407_TP29_0.1-0.2_00622 SOIL - 22/6/2020 SE207912.033	0407_TP30_0.1-0.2_00622 SOIL - 22/6/2020 SE207912.036	0407_TP60_0.1-0.2_00622 SOIL - 22/6/2020 SE207912.039	0407_TP61_0.1-0.2_00622 SOIL - 22/6/2020 SE207912.042
Total Sample Weight*	g	1	778	712	778	850	781
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP62_0.1-0.2_00622 SOIL - 22/6/2020 SE207912.045	0407_TP144_0.1-0.2_200622 SOIL - 22/6/2020 SE207912.048	0407_TP144_0.4-0.5_200622 SOIL - 22/6/2020 SE207912.049	0407_TP145_0.1-0.2_200622 SOIL - 22/6/2020 SE207912.053	0407_TP146_0.1-0.2_200622 SOIL - 22/6/2020 SE207912.056
Total Sample Weight*	g	1	745	761	669	764	790
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP158_0.1-0.2 200622 SOIL - 22/6/2020 SE207912.061	0407_TP159_0.1-0.2 200622 SOIL - 22/6/2020 SE207912.064	0407_TP160_0.1-0.2 200622 SOIL - 22/6/2020 SE207912.068
Total Sample Weight*	g	1	**628**	**713**	**659**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid, mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents .
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples, Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.
AN605	This technique gravimetrically determines the mass of Bonded Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight. Any fibrous asbestos (FA) found in this fraction will be added to the 2-7mm fraction and its mass recorded there.

AN605	This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free/respirable fibres which are only observed by standard trace analysis as per AN602.
AN605	Bonded asbestos containing material (Bonded ACM) comprises asbestos-containing-material which is sound in condition. Fibrous asbestos (FA) comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material. Asbestos fines (AF) includes free fibres, small fibre bundles and also small fragments of bonded ACM that passes through a 7mm sieve - which implies that the bonded ACM fragments have a substantial degree of damage which increases the potential for fibre release.
AN-605	Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009 and NEPM 1999 (2013) schedule B1 section 4..

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

This document is issued by the Company under its General Conditions of Service accessible at www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

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STATEMENT OF QA/QC PERFORMANCE

SE207912 R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	69

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207912 R0**
Date Received	23 Jun 2020
Date Reported	06 Jul 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Duplicate	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	1 item
Matrix Spike	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	1 item
	VOC's in Soil	1 item
	Volatile Petroleum Hydrocarbons in Soil	1 item

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	69 Soil
Date documentation received	23/6/2020	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	5.4°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE207912 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Fibre Identification in soil

Method: ME-(AU)-[ENV]AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH0029_0.1-0.3_200	SE207912.003	LB203178	22 Jun 2020	23 Jun 2020	22 Jun 2021	01 Jul 2020	22 Jun 2021	02 Jul 2020
0407_BH0029_0.3-0.5_200	SE207912.004	LB203178	22 Jun 2020	23 Jun 2020	22 Jun 2021	01 Jul 2020	22 Jun 2021	02 Jul 2020
0407_BH0030_0.1-0.2_200	SE207912.007	LB203178	22 Jun 2020	23 Jun 2020	22 Jun 2021	01 Jul 2020	22 Jun 2021	02 Jul 2020
0407_BH0030_0.4-0.5_200	SE207912.008	LB203178	22 Jun 2020	23 Jun 2020	22 Jun 2021	01 Jul 2020	22 Jun 2021	02 Jul 2020
0407_TP10_0.1-0.2_200622	SE207912.011	LB203178	22 Jun 2020	23 Jun 2020	22 Jun 2021	01 Jul 2020	22 Jun 2021	02 Jul 2020
0407_TP11_0.1-0.2_200622	SE207912.014	LB203178	22 Jun 2020	23 Jun 2020	22 Jun 2021	01 Jul 2020	22 Jun 2021	02 Jul 2020
0407_TP12_0.1-0.2_200622	SE207912.018	LB203178	22 Jun 2020	23 Jun 2020	22 Jun 2021	01 Jul 2020	22 Jun 2021	02 Jul 2020
0407_TP19_0.1-0.2_200622	SE207912.021	LB203178	22 Jun 2020	23 Jun 2020	22 Jun 2021	01 Jul 2020	22 Jun 2021	02 Jul 2020
0407_TP20_0.1-0.2_200622	SE207912.024	LB203178	22 Jun 2020	23 Jun 2020	22 Jun 2021	01 Jul 2020	22 Jun 2021	02 Jul 2020
0407_TP22_0.1-0.2_200622	SE207912.027	LB203178	22 Jun 2020	23 Jun 2020	22 Jun 2021	01 Jul 2020	22 Jun 2021	02 Jul 2020
0407_TP28_0.1-0.2_200622	SE207912.030	LB203178	22 Jun 2020	23 Jun 2020	22 Jun 2021	01 Jul 2020	22 Jun 2021	02 Jul 2020
0407_TP29_0.1-0.2_200622	SE207912.033	LB203178	22 Jun 2020	23 Jun 2020	22 Jun 2021	01 Jul 2020	22 Jun 2021	02 Jul 2020
0407_TP30_0.1-0.2_200622	SE207912.036	LB203178	22 Jun 2020	23 Jun 2020	22 Jun 2021	01 Jul 2020	22 Jun 2021	02 Jul 2020
0407_TP60_0.1-0.2_200622	SE207912.039	LB203178	22 Jun 2020	23 Jun 2020	22 Jun 2021	01 Jul 2020	22 Jun 2021	02 Jul 2020
0407_TP61_0.1-0.2_200622	SE207912.042	LB203178	22 Jun 2020	23 Jun 2020	22 Jun 2021	01 Jul 2020	22 Jun 2021	02 Jul 2020
0407_TP62_0.1-0.2_200622	SE207912.045	LB203178	22 Jun 2020	23 Jun 2020	22 Jun 2021	01 Jul 2020	22 Jun 2021	02 Jul 2020
0407_TP144_0.1-0.2_20062	SE207912.048	LB203178	22 Jun 2020	23 Jun 2020	22 Jun 2021	01 Jul 2020	22 Jun 2021	02 Jul 2020
0407_TP144_0.4-0.5_20062	SE207912.049	LB203178	22 Jun 2020	23 Jun 2020	22 Jun 2021	01 Jul 2020	22 Jun 2021	02 Jul 2020
0407_TP145_0.1-0.2_20062	SE207912.053	LB203178	22 Jun 2020	23 Jun 2020	22 Jun 2021	01 Jul 2020	22 Jun 2021	02 Jul 2020
0407_TP146_0.1-0.2_20062	SE207912.056	LB203178	22 Jun 2020	23 Jun 2020	22 Jun 2021	01 Jul 2020	22 Jun 2021	02 Jul 2020
0407_TP158_0.1-0.2_20062	SE207912.061	LB203178	22 Jun 2020	23 Jun 2020	22 Jun 2021	01 Jul 2020	22 Jun 2021	02 Jul 2020
0407_TP159_0.1-0.2_20062	SE207912.064	LB203178	22 Jun 2020	23 Jun 2020	22 Jun 2021	01 Jul 2020	22 Jun 2021	02 Jul 2020
0407_TP160_0.1-0.2_20062	SE207912.068	LB203178	22 Jun 2020	23 Jun 2020	22 Jun 2021	01 Jul 2020	22 Jun 2021	02 Jul 2020

Gravimetric Determination of Asbestos in Soil

Method: ME-(AU)-[ENV]AN605

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH0029_0.1-0.3_200	SE207912.003	LB203178	22 Jun 2020	23 Jun 2020	19 Dec 2020	01 Jul 2020	19 Dec 2020	02 Jul 2020
0407_BH0029_0.3-0.5_200	SE207912.004	LB203178	22 Jun 2020	23 Jun 2020	19 Dec 2020	01 Jul 2020	19 Dec 2020	02 Jul 2020
0407_BH0030_0.1-0.2_200	SE207912.007	LB203178	22 Jun 2020	23 Jun 2020	19 Dec 2020	01 Jul 2020	19 Dec 2020	02 Jul 2020
0407_BH0030_0.4-0.5_200	SE207912.008	LB203178	22 Jun 2020	23 Jun 2020	19 Dec 2020	01 Jul 2020	19 Dec 2020	02 Jul 2020
0407_TP10_0.1-0.2_200622	SE207912.011	LB203178	22 Jun 2020	23 Jun 2020	19 Dec 2020	01 Jul 2020	19 Dec 2020	02 Jul 2020
0407_TP11_0.1-0.2_200622	SE207912.014	LB203178	22 Jun 2020	23 Jun 2020	19 Dec 2020	01 Jul 2020	19 Dec 2020	02 Jul 2020
0407_TP12_0.1-0.2_200622	SE207912.018	LB203178	22 Jun 2020	23 Jun 2020	19 Dec 2020	01 Jul 2020	19 Dec 2020	02 Jul 2020
0407_TP19_0.1-0.2_200622	SE207912.021	LB203178	22 Jun 2020	23 Jun 2020	19 Dec 2020	01 Jul 2020	19 Dec 2020	02 Jul 2020
0407_TP20_0.1-0.2_200622	SE207912.024	LB203178	22 Jun 2020	23 Jun 2020	19 Dec 2020	01 Jul 2020	19 Dec 2020	02 Jul 2020
0407_TP22_0.1-0.2_200622	SE207912.027	LB203178	22 Jun 2020	23 Jun 2020	19 Dec 2020	01 Jul 2020	19 Dec 2020	02 Jul 2020
0407_TP28_0.1-0.2_200622	SE207912.030	LB203178	22 Jun 2020	23 Jun 2020	19 Dec 2020	01 Jul 2020	19 Dec 2020	02 Jul 2020
0407_TP29_0.1-0.2_200622	SE207912.033	LB203178	22 Jun 2020	23 Jun 2020	19 Dec 2020	01 Jul 2020	19 Dec 2020	02 Jul 2020
0407_TP30_0.1-0.2_200622	SE207912.036	LB203178	22 Jun 2020	23 Jun 2020	19 Dec 2020	01 Jul 2020	19 Dec 2020	02 Jul 2020
0407_TP60_0.1-0.2_200622	SE207912.039	LB203178	22 Jun 2020	23 Jun 2020	19 Dec 2020	01 Jul 2020	19 Dec 2020	02 Jul 2020
0407_TP61_0.1-0.2_200622	SE207912.042	LB203178	22 Jun 2020	23 Jun 2020	19 Dec 2020	01 Jul 2020	19 Dec 2020	02 Jul 2020
0407_TP62_0.1-0.2_200622	SE207912.045	LB203178	22 Jun 2020	23 Jun 2020	19 Dec 2020	01 Jul 2020	19 Dec 2020	02 Jul 2020
0407_TP144_0.1-0.2_20062	SE207912.048	LB203178	22 Jun 2020	23 Jun 2020	19 Dec 2020	01 Jul 2020	19 Dec 2020	02 Jul 2020
0407_TP144_0.4-0.5_20062	SE207912.049	LB203178	22 Jun 2020	23 Jun 2020	19 Dec 2020	01 Jul 2020	19 Dec 2020	02 Jul 2020
0407_TP145_0.1-0.2_20062	SE207912.053	LB203178	22 Jun 2020	23 Jun 2020	19 Dec 2020	01 Jul 2020	19 Dec 2020	02 Jul 2020
0407_TP146_0.1-0.2_20062	SE207912.056	LB203178	22 Jun 2020	23 Jun 2020	19 Dec 2020	01 Jul 2020	19 Dec 2020	02 Jul 2020
0407_TP158_0.1-0.2_20062	SE207912.061	LB203178	22 Jun 2020	23 Jun 2020	19 Dec 2020	01 Jul 2020	19 Dec 2020	02 Jul 2020
0407_TP159_0.1-0.2_20062	SE207912.064	LB203178	22 Jun 2020	23 Jun 2020	19 Dec 2020	01 Jul 2020	19 Dec 2020	02 Jul 2020
0407_TP160_0.1-0.2_20062	SE207912.068	LB203178	22 Jun 2020	23 Jun 2020	19 Dec 2020	01 Jul 2020	19 Dec 2020	02 Jul 2020

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH0029_0.1_200622	SE207912.001	LB203111	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020
0407_BH0029_0.5_200622	SE207912.002	LB203111	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020
0407_BH0030_0.1_200622	SE207912.005	LB203111	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020
0407_BH0030_0.5_200622	SE207912.006	LB203111	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020
0407_TP10_0.1_200622	SE207912.009	LB203111	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020
0407_TP10_0.5_200622	SE207912.010	LB203111	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020
0407_TP11_0.1_200622	SE207912.012	LB203111	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020
0407_TP11_1.0_200622	SE207912.013	LB203111	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020
0407_QC136_200622	SE207912.015	LB203111	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Mercury in Soil (continued)

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP12_0.1_200622	SE207912.016	LB203111	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020
0407_TP12_0.5_200622	SE207912.017	LB203111	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020
0407_TP19_0.1_200622	SE207912.019	LB203111	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020
0407_TP19_1.0_200622	SE207912.020	LB203111	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020
0407_TP20_0.1_200622	SE207912.022	LB203111	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020
0407_TP20_0.5_200622	SE207912.023	LB203111	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020
0407_TP22_0.1_200622	SE207912.025	LB203111	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020
0407_TP22_0.5_200622	SE207912.026	LB203111	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020
0407_TP28_0.1_200622	SE207912.028	LB203111	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020
0407_TP28_1.0_200622	SE207912.029	LB203111	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020
0407_TP29_0.1_200622	SE207912.031	LB203112	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020
0407_TP29_0.5_200622	SE207912.032	LB203112	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020
0407_TP144_0.1_200622	SE207912.046	LB203112	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020
0407_TP144_0.5_200622	SE207912.047	LB203112	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020
0407_TP145_0.1_200622	SE207912.050	LB203112	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020
0407_TP145_0.5_200622	SE207912.051	LB203112	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020
0407_QC128_200622	SE207912.052	LB203112	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020
0407_TP146_0.1_200622	SE207912.054	LB203112	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020
0407_TP146_0.5_200622	SE207912.055	LB203112	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020
0407_QC129_200622	SE207912.057	LB203112	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020
0407_TP158_0.1_200622	SE207912.058	LB203112	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020
0407_TP158_1.0_200622	SE207912.059	LB203118	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020
0407_QC132_200622	SE207912.060	LB203118	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020
0407_TP159_0.1_200622	SE207912.062	LB203118	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020
0407_TP159_1.0_200622	SE207912.063	LB203118	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020
0407_TP160_0.1_200622	SE207912.065	LB203118	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020
0407_TP160_0.5_200622	SE207912.066	LB203118	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020
0407_QC131_200622	SE207912.067	LB203118	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020
0407_QC133_200622	SE207912.069	LB203118	22 Jun 2020	23 Jun 2020	20 Jul 2020	30 Jun 2020	20 Jul 2020	02 Jul 2020

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH0029_0.1_200622	SE207912.001	LB202977	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	01 Jul 2020
0407_BH0029_0.5_200622	SE207912.002	LB202977	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	01 Jul 2020
0407_BH0030_0.1_200622	SE207912.005	LB202977	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	01 Jul 2020
0407_BH0030_0.5_200622	SE207912.006	LB202977	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	01 Jul 2020
0407_TP10_0.1_200622	SE207912.009	LB202977	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	01 Jul 2020
0407_TP10_0.5_200622	SE207912.010	LB202977	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	01 Jul 2020
0407_TP11_0.1_200622	SE207912.012	LB202977	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	01 Jul 2020
0407_TP11_1.0_200622	SE207912.013	LB202977	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	01 Jul 2020
0407_QC136_200622	SE207912.015	LB202977	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	01 Jul 2020
0407_TP12_0.1_200622	SE207912.016	LB202977	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	01 Jul 2020
0407_TP12_0.5_200622	SE207912.017	LB202977	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	01 Jul 2020
0407_TP19_0.1_200622	SE207912.019	LB202977	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	01 Jul 2020
0407_TP19_1.0_200622	SE207912.020	LB202977	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	01 Jul 2020
0407_TP20_0.1_200622	SE207912.022	LB202977	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	01 Jul 2020
0407_TP20_0.5_200622	SE207912.023	LB202977	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	01 Jul 2020
0407_TP22_0.1_200622	SE207912.025	LB202977	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	01 Jul 2020
0407_TP22_0.5_200622	SE207912.026	LB202977	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	01 Jul 2020
0407_TP28_0.1_200622	SE207912.028	LB202978	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	02 Jul 2020
0407_TP28_1.0_200622	SE207912.029	LB202978	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	02 Jul 2020
0407_TP29_0.1_200622	SE207912.031	LB202978	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	02 Jul 2020
0407_TP29_0.5_200622	SE207912.032	LB202978	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	02 Jul 2020
0407_TP30_0.1_200622	SE207912.034	LB202978	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	02 Jul 2020
0407_TP30_0.5_200622	SE207912.035	LB202978	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	02 Jul 2020
0407_TP60_0.1_200622	SE207912.037	LB202978	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	02 Jul 2020
0407_TP60_1.0_200622	SE207912.038	LB202978	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	02 Jul 2020
0407_TP61_0.1_200622	SE207912.040	LB202978	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	02 Jul 2020
0407_TP61_0.5_200622	SE207912.041	LB202978	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	02 Jul 2020
0407_TP62_0.1_200622	SE207912.043	LB202978	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	02 Jul 2020

HOLDING TIME SUMMARY

SE207912 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Moisture Content (continued)

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP62_0.5_200622	SE207912.044	LB202978	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	02 Jul 2020
0407_TP144_0.1_200622	SE207912.046	LB202978	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	02 Jul 2020
0407_TP144_0.5_200622	SE207912.047	LB202978	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	02 Jul 2020
0407_TP145_0.1_200622	SE207912.050	LB202978	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	02 Jul 2020
0407_TP145_0.5_200622	SE207912.051	LB202978	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	02 Jul 2020
0407_QC128_200622	SE207912.052	LB202978	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	02 Jul 2020
0407_TP146_0.1_200622	SE207912.054	LB202979	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	02 Jul 2020
0407_TP146_0.5_200622	SE207912.055	LB202979	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	02 Jul 2020
0407_QC129_200622	SE207912.057	LB202979	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	02 Jul 2020
0407_TP158_0.1_200622	SE207912.058	LB202979	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	02 Jul 2020
0407_TP158_1.0_200622	SE207912.059	LB202979	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	02 Jul 2020
0407_QC132_200622	SE207912.060	LB202979	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	02 Jul 2020
0407_TP159_0.1_200622	SE207912.062	LB202979	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	02 Jul 2020
0407_TP159_1.0_200622	SE207912.063	LB202979	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	02 Jul 2020
0407_TP160_0.1_200622	SE207912.065	LB202979	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	02 Jul 2020
0407_TP160_0.5_200622	SE207912.066	LB202979	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	02 Jul 2020
0407_QC131_200622	SE207912.067	LB202979	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	02 Jul 2020
0407_QC133_200622	SE207912.069	LB202979	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	04 Jul 2020	02 Jul 2020

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH0029_0.1_200622	SE207912.001	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_BH0029_0.5_200622	SE207912.002	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_BH0030_0.1_200622	SE207912.005	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_BH0030_0.5_200622	SE207912.006	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP10_0.1_200622	SE207912.009	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP10_0.5_200622	SE207912.010	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP11_0.1_200622	SE207912.012	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP11_1.0_200622	SE207912.013	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_QC136_200622	SE207912.015	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP12_0.1_200622	SE207912.016	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP12_0.5_200622	SE207912.017	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP19_0.1_200622	SE207912.019	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP19_1.0_200622	SE207912.020	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP20_0.1_200622	SE207912.022	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP20_0.5_200622	SE207912.023	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP22_0.1_200622	SE207912.025	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP22_0.5_200622	SE207912.026	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP28_0.1_200622	SE207912.028	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP28_1.0_200622	SE207912.029	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP29_0.1_200622	SE207912.031	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP29_0.5_200622	SE207912.032	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP30_0.1_200622	SE207912.034	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP30_0.5_200622	SE207912.035	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP60_0.1_200622	SE207912.037	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP60_1.0_200622	SE207912.038	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP61_0.1_200622	SE207912.040	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP61_0.5_200622	SE207912.041	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP62_0.1_200622	SE207912.043	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP62_0.5_200622	SE207912.044	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP144_0.1_200622	SE207912.046	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP144_0.5_200622	SE207912.047	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP145_0.1_200622	SE207912.050	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP145_0.5_200622	SE207912.051	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_QC128_200622	SE207912.052	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP146_0.1_200622	SE207912.054	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP146_0.5_200622	SE207912.055	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_QC129_200622	SE207912.057	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP158_0.1_200622	SE207912.058	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP158_1.0_200622	SE207912.059	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020

HOLDING TIME SUMMARY

SE207912 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC132_200622	SE207912.060	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP159_0.1_200622	SE207912.062	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP159_1.0_200622	SE207912.063	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP160_0.1_200622	SE207912.065	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP160_0.5_200622	SE207912.066	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_QC131_200622	SE207912.067	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_QC133_200622	SE207912.069	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH0029_0.1_200622	SE207912.001	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_BH0029_0.5_200622	SE207912.002	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_BH0030_0.1_200622	SE207912.005	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_BH0030_0.5_200622	SE207912.006	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP10_0.1_200622	SE207912.009	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP10_0.5_200622	SE207912.010	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP11_0.1_200622	SE207912.012	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP11_1.0_200622	SE207912.013	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_QC136_200622	SE207912.015	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP12_0.1_200622	SE207912.016	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP12_0.5_200622	SE207912.017	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP19_0.1_200622	SE207912.019	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP19_1.0_200622	SE207912.020	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP20_0.1_200622	SE207912.022	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP20_0.5_200622	SE207912.023	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP22_0.1_200622	SE207912.025	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP22_0.5_200622	SE207912.026	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP28_0.1_200622	SE207912.028	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP28_1.0_200622	SE207912.029	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP29_0.1_200622	SE207912.031	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP29_0.5_200622	SE207912.032	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP30_0.1_200622	SE207912.034	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP30_0.5_200622	SE207912.035	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP60_0.1_200622	SE207912.037	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP60_1.0_200622	SE207912.038	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP61_0.1_200622	SE207912.040	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP61_0.5_200622	SE207912.041	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP62_0.1_200622	SE207912.043	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP62_0.5_200622	SE207912.044	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP144_0.1_200622	SE207912.046	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP144_0.5_200622	SE207912.047	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP145_0.1_200622	SE207912.050	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP145_0.5_200622	SE207912.051	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_QC128_200622	SE207912.052	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP146_0.1_200622	SE207912.054	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP146_0.5_200622	SE207912.055	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_QC129_200622	SE207912.057	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP158_0.1_200622	SE207912.058	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP158_1.0_200622	SE207912.059	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_QC132_200622	SE207912.060	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP159_0.1_200622	SE207912.062	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP159_1.0_200622	SE207912.063	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP160_0.1_200622	SE207912.065	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP160_0.5_200622	SE207912.066	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_QC131_200622	SE207912.067	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_QC133_200622	SE207912.069	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH0029_0.1_200622	SE207912.001	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_BH0029_0.5_200622	SE207912.002	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020

HOLDING TIME SUMMARY

SE207912 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH0030_0.1_200622	SE207912.005	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_BH0030_0.5_200622	SE207912.006	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP10_0.1_200622	SE207912.009	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP10_0.5_200622	SE207912.010	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP11_0.1_200622	SE207912.012	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP11_1.0_200622	SE207912.013	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_QC136_200622	SE207912.015	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP12_0.1_200622	SE207912.016	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP12_0.5_200622	SE207912.017	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP19_0.1_200622	SE207912.019	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP19_1.0_200622	SE207912.020	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP20_0.1_200622	SE207912.022	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP20_0.5_200622	SE207912.023	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP22_0.1_200622	SE207912.025	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP22_0.5_200622	SE207912.026	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP28_0.1_200622	SE207912.028	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP28_1.0_200622	SE207912.029	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP29_0.1_200622	SE207912.031	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP29_0.5_200622	SE207912.032	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP30_0.1_200622	SE207912.034	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP30_0.5_200622	SE207912.035	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP60_0.1_200622	SE207912.037	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP60_1.0_200622	SE207912.038	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP61_0.1_200622	SE207912.040	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP61_0.5_200622	SE207912.041	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP62_0.1_200622	SE207912.043	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP62_0.5_200622	SE207912.044	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP144_0.1_200622	SE207912.046	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP144_0.5_200622	SE207912.047	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP145_0.1_200622	SE207912.050	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP145_0.5_200622	SE207912.051	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_QC128_200622	SE207912.052	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP146_0.1_200622	SE207912.054	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP146_0.5_200622	SE207912.055	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_QC129_200622	SE207912.057	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP158_0.1_200622	SE207912.058	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP158_1.0_200622	SE207912.059	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_QC132_200622	SE207912.060	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP159_0.1_200622	SE207912.062	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP159_1.0_200622	SE207912.063	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP160_0.1_200622	SE207912.065	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_TP160_0.5_200622	SE207912.066	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_QC131_200622	SE207912.067	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020
0407_QC133_200622	SE207912.069	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	05 Jul 2020

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH0029_0.1_200622	SE207912.001	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_BH0029_0.5_200622	SE207912.002	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_BH0030_0.1_200622	SE207912.005	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_BH0030_0.5_200622	SE207912.006	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP10_0.1_200622	SE207912.009	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP10_0.5_200622	SE207912.010	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP11_0.1_200622	SE207912.012	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP11_1.0_200622	SE207912.013	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_QC136_200622	SE207912.015	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP12_0.1_200622	SE207912.016	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP12_0.5_200622	SE207912.017	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP19_0.1_200622	SE207912.019	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP19_1.0_200622	SE207912.020	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020

HOLDING TIME SUMMARY

SE207912 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

PCBs in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP20_0.1_200622	SE207912.022	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP20_0.5_200622	SE207912.023	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP22_0.1_200622	SE207912.025	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP22_0.5_200622	SE207912.026	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP28_0.1_200622	SE207912.028	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP28_1.0_200622	SE207912.029	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP29_0.1_200622	SE207912.031	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP29_0.5_200622	SE207912.032	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP30_0.1_200622	SE207912.034	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP30_0.5_200622	SE207912.035	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP60_0.1_200622	SE207912.037	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP60_1.0_200622	SE207912.038	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP61_0.1_200622	SE207912.040	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP61_0.5_200622	SE207912.041	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP62_0.1_200622	SE207912.043	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP62_0.5_200622	SE207912.044	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP144_0.1_200622	SE207912.046	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP144_0.5_200622	SE207912.047	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP145_0.1_200622	SE207912.050	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP145_0.5_200622	SE207912.051	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_QC128_200622	SE207912.052	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP146_0.1_200622	SE207912.054	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP146_0.5_200622	SE207912.055	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_QC129_200622	SE207912.057	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP158_0.1_200622	SE207912.058	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP158_1.0_200622	SE207912.059	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_QC132_200622	SE207912.060	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP159_0.1_200622	SE207912.062	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP159_1.0_200622	SE207912.063	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP160_0.1_200622	SE207912.065	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP160_0.5_200622	SE207912.066	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_QC131_200622	SE207912.067	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_QC133_200622	SE207912.069	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH0029_0.1_200622	SE207912.001	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_BH0029_0.5_200622	SE207912.002	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_BH0030_0.1_200622	SE207912.005	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_BH0030_0.5_200622	SE207912.006	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP10_0.1_200622	SE207912.009	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP10_0.5_200622	SE207912.010	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP11_0.1_200622	SE207912.012	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP11_1.0_200622	SE207912.013	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_QC136_200622	SE207912.015	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP12_0.1_200622	SE207912.016	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP12_0.5_200622	SE207912.017	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP19_0.1_200622	SE207912.019	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP19_1.0_200622	SE207912.020	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP20_0.1_200622	SE207912.022	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP20_0.5_200622	SE207912.023	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP22_0.1_200622	SE207912.025	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP22_0.5_200622	SE207912.026	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP28_0.1_200622	SE207912.028	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP28_1.0_200622	SE207912.029	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP29_0.1_200622	SE207912.031	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP29_0.5_200622	SE207912.032	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP30_0.1_200622	SE207912.034	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP30_0.5_200622	SE207912.035	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP60_0.1_200622	SE207912.037	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP60_1.0_200622	SE207912.038	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP61_0.1_200622	SE207912.040	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP61_0.5_200622	SE207912.041	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP62_0.1_200622	SE207912.043	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP62_0.5_200622	SE207912.044	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP144_0.1_200622	SE207912.046	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP144_0.5_200622	SE207912.047	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP145_0.1_200622	SE207912.050	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP145_0.5_200622	SE207912.051	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_QC128_200622	SE207912.052	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP146_0.1_200622	SE207912.054	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP146_0.5_200622	SE207912.055	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_QC129_200622	SE207912.057	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP158_0.1_200622	SE207912.058	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP158_1.0_200622	SE207912.059	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_QC132_200622	SE207912.060	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP159_0.1_200622	SE207912.062	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP159_1.0_200622	SE207912.063	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP160_0.1_200622	SE207912.065	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP160_0.5_200622	SE207912.066	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_QC131_200622	SE207912.067	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_QC133_200622	SE207912.069	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH0029_0.1_200622	SE207912.001	LB203099	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	01 Jul 2020
0407_BH0029_0.5_200622	SE207912.002	LB203099	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	01 Jul 2020
0407_BH0030_0.1_200622	SE207912.005	LB203099	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	01 Jul 2020
0407_BH0030_0.5_200622	SE207912.006	LB203099	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	01 Jul 2020
0407_TP10_0.1_200622	SE207912.009	LB203099	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	01 Jul 2020
0407_TP10_0.5_200622	SE207912.010	LB203099	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	01 Jul 2020
0407_TP11_0.1_200622	SE207912.012	LB203099	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	01 Jul 2020
0407_TP11_1.0_200622	SE207912.013	LB203099	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	01 Jul 2020
0407_QC136_200622	SE207912.015	LB203099	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	01 Jul 2020
0407_TP12_0.1_200622	SE207912.016	LB203099	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	01 Jul 2020
0407_TP12_0.5_200622	SE207912.017	LB203099	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	01 Jul 2020
0407_TP19_0.1_200622	SE207912.019	LB203099	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	01 Jul 2020
0407_TP19_1.0_200622	SE207912.020	LB203099	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	01 Jul 2020
0407_TP20_0.1_200622	SE207912.022	LB203099	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	01 Jul 2020
0407_TP20_0.5_200622	SE207912.023	LB203099	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	01 Jul 2020
0407_TP22_0.1_200622	SE207912.025	LB203099	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	01 Jul 2020
0407_TP22_0.5_200622	SE207912.026	LB203099	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	01 Jul 2020
0407_TP28_0.1_200622	SE207912.028	LB203099	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	02 Jul 2020
0407_TP28_1.0_200622	SE207912.029	LB203099	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	02 Jul 2020
0407_TP29_0.1_200622	SE207912.031	LB203100	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	02 Jul 2020
0407_TP29_0.5_200622	SE207912.032	LB203100	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	02 Jul 2020
0407_TP30_0.1_200622	SE207912.034	LB203100	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	02 Jul 2020
0407_TP30_0.5_200622	SE207912.035	LB203100	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	02 Jul 2020
0407_TP60_0.1_200622	SE207912.037	LB203100	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	02 Jul 2020
0407_TP60_1.0_200622	SE207912.038	LB203100	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	02 Jul 2020
0407_TP61_0.1_200622	SE207912.040	LB203100	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	02 Jul 2020
0407_TP61_0.5_200622	SE207912.041	LB203100	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	02 Jul 2020
0407_TP62_0.1_200622	SE207912.043	LB203100	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	02 Jul 2020
0407_TP62_0.5_200622	SE207912.044	LB203100	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	02 Jul 2020
0407_TP144_0.1_200622	SE207912.046	LB203100	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	02 Jul 2020
0407_TP144_0.5_200622	SE207912.047	LB203100	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	02 Jul 2020
0407_TP145_0.1_200622	SE207912.050	LB203100	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	02 Jul 2020
0407_TP145_0.5_200622	SE207912.051	LB203100	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	02 Jul 2020
0407_QC128_200622	SE207912.052	LB203100	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	02 Jul 2020
0407_TP146_0.1_200622	SE207912.054	LB203100	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	02 Jul 2020

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP146_0.5_200622	SE207912.055	LB203100	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	02 Jul 2020
0407_QC129_200622	SE207912.057	LB203100	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	02 Jul 2020
0407_TP158_0.1_200622	SE207912.058	LB203100	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	02 Jul 2020
0407_TP158_1.0_200622	SE207912.059	LB203102	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	02 Jul 2020
0407_QC132_200622	SE207912.060	LB203102	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	02 Jul 2020
0407_TP159_0.1_200622	SE207912.062	LB203102	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	02 Jul 2020
0407_TP159_1.0_200622	SE207912.063	LB203102	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	02 Jul 2020
0407_TP160_0.1_200622	SE207912.065	LB203102	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	02 Jul 2020
0407_TP160_0.5_200622	SE207912.066	LB203102	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	02 Jul 2020
0407_QC131_200622	SE207912.067	LB203102	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	02 Jul 2020
0407_QC133_200622	SE207912.069	LB203102	22 Jun 2020	23 Jun 2020	19 Dec 2020	30 Jun 2020	19 Dec 2020	02 Jul 2020

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH0029_0.1_200622	SE207912.001	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_BH0029_0.5_200622	SE207912.002	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_BH0030_0.1_200622	SE207912.005	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_BH0030_0.5_200622	SE207912.006	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP10_0.1_200622	SE207912.009	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP10_0.5_200622	SE207912.010	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP11_0.1_200622	SE207912.012	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP11_1.0_200622	SE207912.013	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_QC136_200622	SE207912.015	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP12_0.1_200622	SE207912.016	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP12_0.5_200622	SE207912.017	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP19_0.1_200622	SE207912.019	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP19_1.0_200622	SE207912.020	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP20_0.1_200622	SE207912.022	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP20_0.5_200622	SE207912.023	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP22_0.1_200622	SE207912.025	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP22_0.5_200622	SE207912.026	LB202972	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP28_0.1_200622	SE207912.028	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP28_1.0_200622	SE207912.029	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP29_0.1_200622	SE207912.031	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP29_0.5_200622	SE207912.032	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP30_0.1_200622	SE207912.034	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP30_0.5_200622	SE207912.035	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP60_0.1_200622	SE207912.037	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP60_1.0_200622	SE207912.038	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP61_0.1_200622	SE207912.040	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP61_0.5_200622	SE207912.041	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP62_0.1_200622	SE207912.043	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP62_0.5_200622	SE207912.044	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP144_0.1_200622	SE207912.046	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP144_0.5_200622	SE207912.047	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP145_0.1_200622	SE207912.050	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP145_0.5_200622	SE207912.051	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_QC128_200622	SE207912.052	LB202973	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP146_0.1_200622	SE207912.054	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP146_0.5_200622	SE207912.055	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_QC129_200622	SE207912.057	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP158_0.1_200622	SE207912.058	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP158_1.0_200622	SE207912.059	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_QC132_200622	SE207912.060	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP159_0.1_200622	SE207912.062	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP159_1.0_200622	SE207912.063	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP160_0.1_200622	SE207912.065	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_TP160_0.5_200622	SE207912.066	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_QC131_200622	SE207912.067	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020
0407_QC133_200622	SE207912.069	LB202975	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	02 Jul 2020

HOLDING TIME SUMMARY

SE207912 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH0029_0.1_200622	SE207912.001	LB202967	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	01 Jul 2020
0407_BH0029_0.5_200622	SE207912.002	LB202967	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	01 Jul 2020
0407_BH0030_0.1_200622	SE207912.005	LB202967	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	01 Jul 2020
0407_BH0030_0.5_200622	SE207912.006	LB202967	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	01 Jul 2020
0407_TP10_0.1_200622	SE207912.009	LB202967	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	01 Jul 2020
0407_TP10_0.5_200622	SE207912.010	LB202967	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	01 Jul 2020
0407_TP11_0.1_200622	SE207912.012	LB202967	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	01 Jul 2020
0407_TP11_1.0_200622	SE207912.013	LB202967	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	01 Jul 2020
0407_QC136_200622	SE207912.015	LB202967	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	01 Jul 2020
0407_TP12_0.1_200622	SE207912.016	LB202967	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	01 Jul 2020
0407_TP12_0.5_200622	SE207912.017	LB202967	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	01 Jul 2020
0407_TP19_0.1_200622	SE207912.019	LB202967	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	01 Jul 2020
0407_TP19_1.0_200622	SE207912.020	LB202967	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	01 Jul 2020
0407_TP20_0.1_200622	SE207912.022	LB202967	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	01 Jul 2020
0407_TP20_0.5_200622	SE207912.023	LB202967	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	01 Jul 2020
0407_TP22_0.1_200622	SE207912.025	LB202967	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	01 Jul 2020
0407_TP22_0.5_200622	SE207912.026	LB202967	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	01 Jul 2020
0407_TP28_0.1_200622	SE207912.028	LB202968	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP28_1.0_200622	SE207912.029	LB202968	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP29_0.1_200622	SE207912.031	LB202968	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP29_0.5_200622	SE207912.032	LB202968	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP30_0.1_200622	SE207912.034	LB202968	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP30_0.5_200622	SE207912.035	LB202968	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP60_0.1_200622	SE207912.037	LB202968	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP60_1.0_200622	SE207912.038	LB202968	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP61_0.1_200622	SE207912.040	LB202968	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP61_0.5_200622	SE207912.041	LB202968	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP62_0.1_200622	SE207912.043	LB202968	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP62_0.5_200622	SE207912.044	LB202968	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP144_0.1_200622	SE207912.046	LB202968	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP144_0.5_200622	SE207912.047	LB202968	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP145_0.1_200622	SE207912.050	LB202968	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP145_0.5_200622	SE207912.051	LB202968	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_QC128_200622	SE207912.052	LB202968	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP146_0.1_200622	SE207912.054	LB202969	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP146_0.5_200622	SE207912.055	LB202969	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_QC129_200622	SE207912.057	LB202969	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP158_0.1_200622	SE207912.058	LB202969	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP158_1.0_200622	SE207912.059	LB202969	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_QC132_200622	SE207912.060	LB202969	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP159_0.1_200622	SE207912.062	LB202969	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP159_1.0_200622	SE207912.063	LB202969	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP160_0.1_200622	SE207912.065	LB202969	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP160_0.5_200622	SE207912.066	LB202969	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_QC131_200622	SE207912.067	LB202969	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_QC133_200622	SE207912.069	LB202969	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH0029_0.1_200622	SE207912.001	LB202967	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	01 Jul 2020
0407_BH0029_0.5_200622	SE207912.002	LB202967	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	01 Jul 2020
0407_BH0030_0.1_200622	SE207912.005	LB202967	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	01 Jul 2020
0407_BH0030_0.5_200622	SE207912.006	LB202967	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	01 Jul 2020
0407_TP10_0.1_200622	SE207912.009	LB202967	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	01 Jul 2020
0407_TP10_0.5_200622	SE207912.010	LB202967	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	01 Jul 2020
0407_TP11_0.1_200622	SE207912.012	LB202967	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	01 Jul 2020
0407_TP11_1.0_200622	SE207912.013	LB202967	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	01 Jul 2020
0407_QC136_200622	SE207912.015	LB202967	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	01 Jul 2020
0407_TP12_0.1_200622	SE207912.016	LB202967	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	01 Jul 2020
0407_TP12_0.5_200622	SE207912.017	LB202967	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	01 Jul 2020

HOLDING TIME SUMMARY

SE207912 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Volatile Petroleum Hydrocarbons in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP19_0.1_200622	SE207912.019	LB202967	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	01 Jul 2020
0407_TP19_1.0_200622	SE207912.020	LB202967	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	01 Jul 2020
0407_TP20_0.1_200622	SE207912.022	LB202967	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	01 Jul 2020
0407_TP20_0.5_200622	SE207912.023	LB202967	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	01 Jul 2020
0407_TP22_0.1_200622	SE207912.025	LB202967	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	01 Jul 2020
0407_TP22_0.5_200622	SE207912.026	LB202967	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	01 Jul 2020
0407_TP28_0.1_200622	SE207912.028	LB202968	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP28_1.0_200622	SE207912.029	LB202968	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP29_0.1_200622	SE207912.031	LB202968	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP29_0.5_200622	SE207912.032	LB202968	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP30_0.1_200622	SE207912.034	LB202968	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP30_0.5_200622	SE207912.035	LB202968	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP60_0.1_200622	SE207912.037	LB202968	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP60_1.0_200622	SE207912.038	LB202968	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP61_0.1_200622	SE207912.040	LB202968	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP61_0.5_200622	SE207912.041	LB202968	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP62_0.1_200622	SE207912.043	LB202968	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP62_0.5_200622	SE207912.044	LB202968	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP144_0.1_200622	SE207912.046	LB202968	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP144_0.5_200622	SE207912.047	LB202968	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP145_0.1_200622	SE207912.050	LB202968	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP145_0.5_200622	SE207912.051	LB202968	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_QC128_200622	SE207912.052	LB202968	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP146_0.1_200622	SE207912.054	LB202969	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP146_0.5_200622	SE207912.055	LB202969	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_QC129_200622	SE207912.057	LB202969	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP158_0.1_200622	SE207912.058	LB202969	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP158_1.0_200622	SE207912.059	LB202969	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_QC132_200622	SE207912.060	LB202969	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP159_0.1_200622	SE207912.062	LB202969	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP159_1.0_200622	SE207912.063	LB202969	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP160_0.1_200622	SE207912.065	LB202969	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_TP160_0.5_200622	SE207912.066	LB202969	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_QC131_200622	SE207912.067	LB202969	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020
0407_QC133_200622	SE207912.069	LB202969	22 Jun 2020	23 Jun 2020	06 Jul 2020	29 Jun 2020	08 Aug 2020	03 Jul 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_BH0029_0.1_200622	SE207912.001	%	60 - 130%	97
	0407_BH0029_0.5_200622	SE207912.002	%	60 - 130%	95
	0407_BH0030_0.1_200622	SE207912.005	%	60 - 130%	94
	0407_BH0030_0.5_200622	SE207912.006	%	60 - 130%	126
	0407_TP10_0.1_200622	SE207912.009	%	60 - 130%	95
	0407_TP10_0.5_200622	SE207912.010	%	60 - 130%	95
	0407_TP11_0.1_200622	SE207912.012	%	60 - 130%	100
	0407_TP11_1.0_200622	SE207912.013	%	60 - 130%	98
	0407_QC136_200622	SE207912.015	%	60 - 130%	97
	0407_TP12_0.1_200622	SE207912.016	%	60 - 130%	99
	0407_TP12_0.5_200622	SE207912.017	%	60 - 130%	99
	0407_TP19_0.1_200622	SE207912.019	%	60 - 130%	97
	0407_TP19_1.0_200622	SE207912.020	%	60 - 130%	97
	0407_TP20_0.1_200622	SE207912.022	%	60 - 130%	99
	0407_TP20_0.5_200622	SE207912.023	%	60 - 130%	102
	0407_TP22_0.1_200622	SE207912.025	%	60 - 130%	90
	0407_TP22_0.5_200622	SE207912.026	%	60 - 130%	90
	0407_TP28_0.1_200622	SE207912.028	%	60 - 130%	95
	0407_TP28_1.0_200622	SE207912.029	%	60 - 130%	98
	0407_TP29_0.1_200622	SE207912.031	%	60 - 130%	90
	0407_TP29_0.5_200622	SE207912.032	%	60 - 130%	98
	0407_TP144_0.1_200622	SE207912.046	%	60 - 130%	100
	0407_TP144_0.5_200622	SE207912.047	%	60 - 130%	105
	0407_TP145_0.1_200622	SE207912.050	%	60 - 130%	99
	0407_TP145_0.5_200622	SE207912.051	%	60 - 130%	102
	0407_QC128_200622	SE207912.052	%	60 - 130%	94
	0407_TP146_0.1_200622	SE207912.054	%	60 - 130%	101
	0407_TP146_0.5_200622	SE207912.055	%	60 - 130%	99
	0407_QC129_200622	SE207912.057	%	60 - 130%	92
	0407_TP158_0.1_200622	SE207912.058	%	60 - 130%	104
	0407_TP158_1.0_200622	SE207912.059	%	60 - 130%	102
	0407_QC132_200622	SE207912.060	%	60 - 130%	100
	0407_TP159_0.1_200622	SE207912.062	%	60 - 130%	97
	0407_TP159_1.0_200622	SE207912.063	%	60 - 130%	97
	0407_TP160_0.1_200622	SE207912.065	%	60 - 130%	94
	0407_TP160_0.5_200622	SE207912.066	%	60 - 130%	99
	0407_QC131_200622	SE207912.067	%	60 - 130%	95
	0407_QC133_200622	SE207912.069	%	60 - 130%	93

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_BH0029_0.1_200622	SE207912.001	%	60 - 130%	79
	0407_BH0029_0.5_200622	SE207912.002	%	60 - 130%	77
	0407_BH0030_0.1_200622	SE207912.005	%	60 - 130%	77
	0407_BH0030_0.5_200622	SE207912.006	%	60 - 130%	76
	0407_TP10_0.1_200622	SE207912.009	%	60 - 130%	80
	0407_TP10_0.5_200622	SE207912.010	%	60 - 130%	78
	0407_TP11_0.1_200622	SE207912.012	%	60 - 130%	82
	0407_TP11_1.0_200622	SE207912.013	%	60 - 130%	78
	0407_QC136_200622	SE207912.015	%	60 - 130%	80
	0407_TP12_0.1_200622	SE207912.016	%	60 - 130%	86
	0407_TP12_0.5_200622	SE207912.017	%	60 - 130%	87
	0407_TP19_0.1_200622	SE207912.019	%	60 - 130%	84
	0407_TP19_1.0_200622	SE207912.020	%	60 - 130%	81
	0407_TP20_0.1_200622	SE207912.022	%	60 - 130%	82
	0407_TP20_0.5_200622	SE207912.023	%	60 - 130%	87
	0407_TP22_0.1_200622	SE207912.025	%	60 - 130%	88
	0407_TP22_0.5_200622	SE207912.026	%	60 - 130%	86
	0407_TP28_0.1_200622	SE207912.028	%	60 - 130%	82
	0407_TP28_1.0_200622	SE207912.029	%	60 - 130%	85
	0407_TP29_0.1_200622	SE207912.031	%	60 - 130%	88

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP29_0.5_200622	SE207912.032	%	60 - 130%	82
	0407_TP144_0.1_200622	SE207912.046	%	60 - 130%	90
	0407_TP144_0.5_200622	SE207912.047	%	60 - 130%	91
	0407_TP145_0.1_200622	SE207912.050	%	60 - 130%	91
	0407_TP145_0.5_200622	SE207912.051	%	60 - 130%	85
	0407_QC128_200622	SE207912.052	%	60 - 130%	81
	0407_TP146_0.1_200622	SE207912.054	%	60 - 130%	76
	0407_TP146_0.5_200622	SE207912.055	%	60 - 130%	83
	0407_QC129_200622	SE207912.057	%	60 - 130%	80
	0407_TP158_0.1_200622	SE207912.058	%	60 - 130%	81
	0407_TP158_1.0_200622	SE207912.059	%	60 - 130%	88
	0407_QC132_200622	SE207912.060	%	60 - 130%	90
	0407_TP159_0.1_200622	SE207912.062	%	60 - 130%	78
	0407_TP159_1.0_200622	SE207912.063	%	60 - 130%	79
	0407_TP160_0.1_200622	SE207912.065	%	60 - 130%	79
	0407_TP160_0.5_200622	SE207912.066	%	60 - 130%	77
	0407_QC131_200622	SE207912.067	%	60 - 130%	82
	0407_QC133_200622	SE207912.069	%	60 - 130%	88
d14-p-terphenyl (Surrogate)	0407_BH0029_0.1_200622	SE207912.001	%	60 - 130%	91
	0407_BH0029_0.5_200622	SE207912.002	%	60 - 130%	87
	0407_BH0030_0.1_200622	SE207912.005	%	60 - 130%	94
	0407_BH0030_0.5_200622	SE207912.006	%	60 - 130%	90
	0407_TP10_0.1_200622	SE207912.009	%	60 - 130%	87
	0407_TP10_0.5_200622	SE207912.010	%	60 - 130%	84
	0407_TP11_0.1_200622	SE207912.012	%	60 - 130%	83
	0407_TP11_1.0_200622	SE207912.013	%	60 - 130%	85
	0407_QC136_200622	SE207912.015	%	60 - 130%	90
	0407_TP12_0.1_200622	SE207912.016	%	60 - 130%	87
	0407_TP12_0.5_200622	SE207912.017	%	60 - 130%	84
	0407_TP19_0.1_200622	SE207912.019	%	60 - 130%	93
	0407_TP19_1.0_200622	SE207912.020	%	60 - 130%	86
	0407_TP20_0.1_200622	SE207912.022	%	60 - 130%	81
	0407_TP20_0.5_200622	SE207912.023	%	60 - 130%	83
	0407_TP22_0.1_200622	SE207912.025	%	60 - 130%	86
	0407_TP22_0.5_200622	SE207912.026	%	60 - 130%	86
	0407_TP28_0.1_200622	SE207912.028	%	60 - 130%	82
	0407_TP28_1.0_200622	SE207912.029	%	60 - 130%	90
	0407_TP29_0.1_200622	SE207912.031	%	60 - 130%	87
	0407_TP29_0.5_200622	SE207912.032	%	60 - 130%	76
	0407_TP144_0.1_200622	SE207912.046	%	60 - 130%	96
	0407_TP144_0.5_200622	SE207912.047	%	60 - 130%	96
	0407_TP145_0.1_200622	SE207912.050	%	60 - 130%	94
	0407_TP145_0.5_200622	SE207912.051	%	60 - 130%	92
	0407_QC128_200622	SE207912.052	%	60 - 130%	83
	0407_TP146_0.1_200622	SE207912.054	%	60 - 130%	94
	0407_TP146_0.5_200622	SE207912.055	%	60 - 130%	83
	0407_QC129_200622	SE207912.057	%	60 - 130%	88
	0407_TP158_0.1_200622	SE207912.058	%	60 - 130%	82
	0407_TP158_1.0_200622	SE207912.059	%	60 - 130%	94
	0407_QC132_200622	SE207912.060	%	60 - 130%	91
	0407_TP159_0.1_200622	SE207912.062	%	60 - 130%	87
	0407_TP159_1.0_200622	SE207912.063	%	60 - 130%	80
	0407_TP160_0.1_200622	SE207912.065	%	60 - 130%	84
	0407_TP160_0.5_200622	SE207912.066	%	60 - 130%	82
	0407_QC131_200622	SE207912.067	%	60 - 130%	82
	0407_QC133_200622	SE207912.069	%	60 - 130%	84

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_BH0029_0.1_200622	SE207912.001	%	70 - 130%	79
	0407_BH0029_0.5_200622	SE207912.002	%	70 - 130%	77

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued) — **Method: ME-(AU)-[ENV]AN420**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_BH0030_0.1_200622	SE207912.005	%	70 - 130%	77
	0407_BH0030_0.5_200622	SE207912.006	%	70 - 130%	76
	0407_TP10_0.1_200622	SE207912.009	%	70 - 130%	80
	0407_TP10_0.5_200622	SE207912.010	%	70 - 130%	78
	0407_TP11_0.1_200622	SE207912.012	%	70 - 130%	82
	0407_TP11_1.0_200622	SE207912.013	%	70 - 130%	78
	0407_QC136_200622	SE207912.015	%	70 - 130%	80
	0407_TP12_0.1_200622	SE207912.016	%	70 - 130%	86
	0407_TP12_0.5_200622	SE207912.017	%	70 - 130%	87
	0407_TP19_0.1_200622	SE207912.019	%	70 - 130%	84
	0407_TP19_1.0_200622	SE207912.020	%	70 - 130%	81
	0407_TP20_0.1_200622	SE207912.022	%	70 - 130%	82
	0407_TP20_0.5_200622	SE207912.023	%	70 - 130%	87
	0407_TP22_0.1_200622	SE207912.025	%	70 - 130%	88
	0407_TP22_0.5_200622	SE207912.026	%	70 - 130%	86
	0407_TP28_0.1_200622	SE207912.028	%	70 - 130%	82
	0407_TP28_1.0_200622	SE207912.029	%	70 - 130%	85
	0407_TP29_0.1_200622	SE207912.031	%	70 - 130%	88
	0407_TP29_0.5_200622	SE207912.032	%	70 - 130%	82
	0407_TP30_0.1_200622	SE207912.034	%	70 - 130%	84
	0407_TP30_0.5_200622	SE207912.035	%	70 - 130%	79
	0407_TP60_0.1_200622	SE207912.037	%	70 - 130%	96
	0407_TP60_1.0_200622	SE207912.038	%	70 - 130%	88
	0407_TP61_0.1_200622	SE207912.040	%	70 - 130%	87
	0407_TP61_0.5_200622	SE207912.041	%	70 - 130%	85
	0407_TP62_0.1_200622	SE207912.043	%	70 - 130%	81
	0407_TP62_0.5_200622	SE207912.044	%	70 - 130%	82
	0407_TP144_0.1_200622	SE207912.046	%	70 - 130%	90
	0407_TP144_0.5_200622	SE207912.047	%	70 - 130%	91
	0407_TP145_0.1_200622	SE207912.050	%	70 - 130%	91
	0407_TP145_0.5_200622	SE207912.051	%	70 - 130%	85
	0407_QC128_200622	SE207912.052	%	70 - 130%	81
	0407_TP146_0.1_200622	SE207912.054	%	70 - 130%	76
	0407_TP146_0.5_200622	SE207912.055	%	70 - 130%	83
	0407_QC129_200622	SE207912.057	%	70 - 130%	80
	0407_TP158_0.1_200622	SE207912.058	%	70 - 130%	81
	0407_TP158_1.0_200622	SE207912.059	%	70 - 130%	88
	0407_QC132_200622	SE207912.060	%	70 - 130%	90
	0407_TP159_0.1_200622	SE207912.062	%	70 - 130%	78
	0407_TP159_1.0_200622	SE207912.063	%	70 - 130%	79
	0407_TP160_0.1_200622	SE207912.065	%	70 - 130%	79
	0407_TP160_0.5_200622	SE207912.066	%	70 - 130%	77
	0407_QC131_200622	SE207912.067	%	70 - 130%	82
	0407_QC133_200622	SE207912.069	%	70 - 130%	88
d14-p-terphenyl (Surrogate)	0407_BH0029_0.1_200622	SE207912.001	%	70 - 130%	91
	0407_BH0029_0.5_200622	SE207912.002	%	70 - 130%	87
	0407_BH0030_0.1_200622	SE207912.005	%	70 - 130%	94
	0407_BH0030_0.5_200622	SE207912.006	%	70 - 130%	90
	0407_TP10_0.1_200622	SE207912.009	%	70 - 130%	87
	0407_TP10_0.5_200622	SE207912.010	%	70 - 130%	84
	0407_TP11_0.1_200622	SE207912.012	%	70 - 130%	83
	0407_TP11_1.0_200622	SE207912.013	%	70 - 130%	85
	0407_QC136_200622	SE207912.015	%	70 - 130%	90
	0407_TP12_0.1_200622	SE207912.016	%	70 - 130%	87
	0407_TP12_0.5_200622	SE207912.017	%	70 - 130%	84
	0407_TP19_0.1_200622	SE207912.019	%	70 - 130%	93
	0407_TP19_1.0_200622	SE207912.020	%	70 - 130%	86
	0407_TP20_0.1_200622	SE207912.022	%	70 - 130%	81
	0407_TP20_0.5_200622	SE207912.023	%	70 - 130%	83
	0407_TP22_0.1_200622	SE207912.025	%	70 - 130%	86
	0407_TP22_0.5_200622	SE207912.026	%	70 - 130%	86

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued) — **Method: ME-(AU)-[ENV]AN420**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d14-p-terphenyl (Surrogate)	0407_TP28_0.1_200622	SE207912.028	%	70 - 130%	82
	0407_TP28_1.0_200622	SE207912.029	%	70 - 130%	90
	0407_TP29_0.1_200622	SE207912.031	%	70 - 130%	87
	0407_TP29_0.5_200622	SE207912.032	%	70 - 130%	76
	0407_TP30_0.1_200622	SE207912.034	%	70 - 130%	89
	0407_TP30_0.5_200622	SE207912.035	%	70 - 130%	77
	0407_TP60_0.1_200622	SE207912.037	%	70 - 130%	90
	0407_TP60_1.0_200622	SE207912.038	%	70 - 130%	87
	0407_TP61_0.1_200622	SE207912.040	%	70 - 130%	84
	0407_TP61_0.5_200622	SE207912.041	%	70 - 130%	103
	0407_TP62_0.1_200622	SE207912.043	%	70 - 130%	91
	0407_TP62_0.5_200622	SE207912.044	%	70 - 130%	82
	0407_TP144_0.1_200622	SE207912.046	%	70 - 130%	96
	0407_TP144_0.5_200622	SE207912.047	%	70 - 130%	96
	0407_TP145_0.1_200622	SE207912.050	%	70 - 130%	94
	0407_TP145_0.5_200622	SE207912.051	%	70 - 130%	92
	0407_QC128_200622	SE207912.052	%	70 - 130%	83
	0407_TP146_0.1_200622	SE207912.054	%	70 - 130%	94
	0407_TP146_0.5_200622	SE207912.055	%	70 - 130%	83
	0407_QC129_200622	SE207912.057	%	70 - 130%	88
	0407_TP158_0.1_200622	SE207912.058	%	70 - 130%	82
	0407_TP158_1.0_200622	SE207912.059	%	70 - 130%	94
	0407_QC132_200622	SE207912.060	%	70 - 130%	91
	0407_TP159_0.1_200622	SE207912.062	%	70 - 130%	87
	0407_TP159_1.0_200622	SE207912.063	%	70 - 130%	80
	0407_TP160_0.1_200622	SE207912.065	%	70 - 130%	84
	0407_TP160_0.5_200622	SE207912.066	%	70 - 130%	82
	0407_QC131_200622	SE207912.067	%	70 - 130%	82
	0407_QC133_200622	SE207912.069	%	70 - 130%	84
d5-nitrobenzene (Surrogate)	0407_BH0029_0.1_200622	SE207912.001	%	70 - 130%	83
	0407_BH0029_0.5_200622	SE207912.002	%	70 - 130%	85
	0407_BH0030_0.1_200622	SE207912.005	%	70 - 130%	83
	0407_BH0030_0.5_200622	SE207912.006	%	70 - 130%	83
	0407_TP10_0.1_200622	SE207912.009	%	70 - 130%	87
	0407_TP10_0.5_200622	SE207912.010	%	70 - 130%	84
	0407_TP11_0.1_200622	SE207912.012	%	70 - 130%	83
	0407_TP11_1.0_200622	SE207912.013	%	70 - 130%	84
	0407_QC136_200622	SE207912.015	%	70 - 130%	82
	0407_TP12_0.1_200622	SE207912.016	%	70 - 130%	84
	0407_TP12_0.5_200622	SE207912.017	%	70 - 130%	84
	0407_TP19_0.1_200622	SE207912.019	%	70 - 130%	87
	0407_TP19_1.0_200622	SE207912.020	%	70 - 130%	84
	0407_TP20_0.1_200622	SE207912.022	%	70 - 130%	81
	0407_TP20_0.5_200622	SE207912.023	%	70 - 130%	84
	0407_TP22_0.1_200622	SE207912.025	%	70 - 130%	90
	0407_TP22_0.5_200622	SE207912.026	%	70 - 130%	84
	0407_TP28_0.1_200622	SE207912.028	%	70 - 130%	87
	0407_TP28_1.0_200622	SE207912.029	%	70 - 130%	88
	0407_TP29_0.1_200622	SE207912.031	%	70 - 130%	84
	0407_TP29_0.5_200622	SE207912.032	%	70 - 130%	80
	0407_TP30_0.1_200622	SE207912.034	%	70 - 130%	85
	0407_TP30_0.5_200622	SE207912.035	%	70 - 130%	79
	0407_TP60_0.1_200622	SE207912.037	%	70 - 130%	85
	0407_TP60_1.0_200622	SE207912.038	%	70 - 130%	102
	0407_TP61_0.1_200622	SE207912.040	%	70 - 130%	99
	0407_TP61_0.5_200622	SE207912.041	%	70 - 130%	102
	0407_TP62_0.1_200622	SE207912.043	%	70 - 130%	100
	0407_TP62_0.5_200622	SE207912.044	%	70 - 130%	89
	0407_TP144_0.1_200622	SE207912.046	%	70 - 130%	91
	0407_TP144_0.5_200622	SE207912.047	%	70 - 130%	98
	0407_TP145_0.1_200622	SE207912.050	%	70 - 130%	96

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d5-nitrobenzene (Surrogate)	0407_TP145_0.5_200622	SE207912.051	%	70 - 130%	97
	0407_QC128_200622	SE207912.052	%	70 - 130%	89
	0407_TP146_0.1_200622	SE207912.054	%	70 - 130%	80
	0407_TP146_0.5_200622	SE207912.055	%	70 - 130%	82
	0407_QC129_200622	SE207912.057	%	70 - 130%	87
	0407_TP158_0.1_200622	SE207912.058	%	70 - 130%	82
	0407_TP158_1.0_200622	SE207912.059	%	70 - 130%	87
	0407_QC132_200622	SE207912.060	%	70 - 130%	83
	0407_TP159_0.1_200622	SE207912.062	%	70 - 130%	84
	0407_TP159_1.0_200622	SE207912.063	%	70 - 130%	80
	0407_TP160_0.1_200622	SE207912.065	%	70 - 130%	82
	0407_TP160_0.5_200622	SE207912.066	%	70 - 130%	79
	0407_QC131_200622	SE207912.067	%	70 - 130%	84
	0407_QC133_200622	SE207912.069	%	70 - 130%	84

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_BH0029_0.1_200622	SE207912.001	%	60 - 130%	97
	0407_BH0029_0.5_200622	SE207912.002	%	60 - 130%	95
	0407_BH0030_0.1_200622	SE207912.005	%	60 - 130%	94
	0407_BH0030_0.5_200622	SE207912.006	%	60 - 130%	126
	0407_TP10_0.1_200622	SE207912.009	%	60 - 130%	95
	0407_TP10_0.5_200622	SE207912.010	%	60 - 130%	95
	0407_TP11_0.1_200622	SE207912.012	%	60 - 130%	100
	0407_TP11_1.0_200622	SE207912.013	%	60 - 130%	98
	0407_QC136_200622	SE207912.015	%	60 - 130%	97
	0407_TP12_0.1_200622	SE207912.016	%	60 - 130%	99
	0407_TP12_0.5_200622	SE207912.017	%	60 - 130%	99
	0407_TP19_0.1_200622	SE207912.019	%	60 - 130%	97
	0407_TP19_1.0_200622	SE207912.020	%	60 - 130%	97
	0407_TP20_0.1_200622	SE207912.022	%	60 - 130%	99
	0407_TP20_0.5_200622	SE207912.023	%	60 - 130%	102
	0407_TP22_0.1_200622	SE207912.025	%	60 - 130%	90
	0407_TP22_0.5_200622	SE207912.026	%	60 - 130%	90
	0407_TP28_0.1_200622	SE207912.028	%	60 - 130%	95
	0407_TP28_1.0_200622	SE207912.029	%	60 - 130%	98
	0407_TP29_0.1_200622	SE207912.031	%	60 - 130%	90
	0407_TP29_0.5_200622	SE207912.032	%	60 - 130%	98
	0407_TP144_0.1_200622	SE207912.046	%	60 - 130%	100
	0407_TP144_0.5_200622	SE207912.047	%	60 - 130%	105
	0407_TP145_0.1_200622	SE207912.050	%	60 - 130%	99
	0407_TP145_0.5_200622	SE207912.051	%	60 - 130%	102
	0407_QC128_200622	SE207912.052	%	60 - 130%	94
	0407_TP146_0.1_200622	SE207912.054	%	60 - 130%	101
	0407_TP146_0.5_200622	SE207912.055	%	60 - 130%	99
	0407_QC129_200622	SE207912.057	%	60 - 130%	92
	0407_TP158_0.1_200622	SE207912.058	%	60 - 130%	104
	0407_TP158_1.0_200622	SE207912.059	%	60 - 130%	102
	0407_QC132_200622	SE207912.060	%	60 - 130%	100
	0407_TP159_0.1_200622	SE207912.062	%	60 - 130%	97
	0407_TP159_1.0_200622	SE207912.063	%	60 - 130%	97
	0407_TP160_0.1_200622	SE207912.065	%	60 - 130%	94
	0407_TP160_0.5_200622	SE207912.066	%	60 - 130%	99
	0407_QC131_200622	SE207912.067	%	60 - 130%	95
	0407_QC133_200622	SE207912.069	%	60 - 130%	93

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	0407_BH0029_0.1_200622	SE207912.001	%	70 - 130%	74
	0407_BH0029_0.5_200622	SE207912.002	%	70 - 130%	79
	0407_BH0030_0.1_200622	SE207912.005	%	70 - 130%	71
	0407_BH0030_0.5_200622	SE207912.006	%	70 - 130%	74

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil (continued) — **Method: ME-(AU)-[ENV]AN420**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	0407_TP10_0.1_200622	SE207912.009	%	70 - 130%	77
	0407_TP10_0.5_200622	SE207912.010	%	70 - 130%	79
	0407_TP11_0.1_200622	SE207912.012	%	70 - 130%	79
	0407_TP11_1.0_200622	SE207912.013	%	70 - 130%	80
	0407_QC136_200622	SE207912.015	%	70 - 130%	79
	0407_TP12_0.1_200622	SE207912.016	%	70 - 130%	80
	0407_TP12_0.5_200622	SE207912.017	%	70 - 130%	80
	0407_TP19_0.1_200622	SE207912.019	%	70 - 130%	81
	0407_TP19_1.0_200622	SE207912.020	%	70 - 130%	78
	0407_TP20_0.1_200622	SE207912.022	%	70 - 130%	78
	0407_TP20_0.5_200622	SE207912.023	%	70 - 130%	79
	0407_TP22_0.1_200622	SE207912.025	%	70 - 130%	77
	0407_TP22_0.5_200622	SE207912.026	%	70 - 130%	84
	0407_TP28_0.1_200622	SE207912.028	%	70 - 130%	90
	0407_TP28_1.0_200622	SE207912.029	%	70 - 130%	89
	0407_TP29_0.1_200622	SE207912.031	%	70 - 130%	88
	0407_TP29_0.5_200622	SE207912.032	%	70 - 130%	87
	0407_TP30_0.1_200622	SE207912.034	%	70 - 130%	85
	0407_TP30_0.5_200622	SE207912.035	%	70 - 130%	90
	0407_TP60_0.1_200622	SE207912.037	%	70 - 130%	87
	0407_TP60_1.0_200622	SE207912.038	%	70 - 130%	86
	0407_TP61_0.1_200622	SE207912.040	%	70 - 130%	86
	0407_TP61_0.5_200622	SE207912.041	%	70 - 130%	85
	0407_TP62_0.1_200622	SE207912.043	%	70 - 130%	84
	0407_TP62_0.5_200622	SE207912.044	%	70 - 130%	82
	0407_TP144_0.1_200622	SE207912.046	%	70 - 130%	83
	0407_TP144_0.5_200622	SE207912.047	%	70 - 130%	84
	0407_TP145_0.1_200622	SE207912.050	%	70 - 130%	85
	0407_TP145_0.5_200622	SE207912.051	%	70 - 130%	85
	0407_QC128_200622	SE207912.052	%	70 - 130%	76
	0407_TP146_0.1_200622	SE207912.054	%	70 - 130%	77
	0407_TP146_0.5_200622	SE207912.055	%	70 - 130%	76
	0407_QC129_200622	SE207912.057	%	70 - 130%	77
	0407_TP158_0.1_200622	SE207912.058	%	70 - 130%	77
	0407_TP158_1.0_200622	SE207912.059	%	70 - 130%	80
	0407_QC132_200622	SE207912.060	%	70 - 130%	78
	0407_TP159_0.1_200622	SE207912.062	%	70 - 130%	78
	0407_TP159_1.0_200622	SE207912.063	%	70 - 130%	80
	0407_TP160_0.1_200622	SE207912.065	%	70 - 130%	78
	0407_TP160_0.5_200622	SE207912.066	%	70 - 130%	82
	0407_QC131_200622	SE207912.067	%	70 - 130%	80
	0407_QC133_200622	SE207912.069	%	70 - 130%	80
d5-phenol (Surrogate)	0407_BH0029_0.1_200622	SE207912.001	%	50 - 130%	78
	0407_BH0029_0.5_200622	SE207912.002	%	50 - 130%	78
	0407_BH0030_0.1_200622	SE207912.005	%	50 - 130%	75
	0407_BH0030_0.5_200622	SE207912.006	%	50 - 130%	76
	0407_TP10_0.1_200622	SE207912.009	%	50 - 130%	78
	0407_TP10_0.5_200622	SE207912.010	%	50 - 130%	78
	0407_TP11_0.1_200622	SE207912.012	%	50 - 130%	77
	0407_TP11_1.0_200622	SE207912.013	%	50 - 130%	77
	0407_QC136_200622	SE207912.015	%	50 - 130%	77
	0407_TP12_0.1_200622	SE207912.016	%	50 - 130%	77
	0407_TP12_0.5_200622	SE207912.017	%	50 - 130%	78
	0407_TP19_0.1_200622	SE207912.019	%	50 - 130%	75
	0407_TP19_1.0_200622	SE207912.020	%	50 - 130%	75
	0407_TP20_0.1_200622	SE207912.022	%	50 - 130%	76
	0407_TP20_0.5_200622	SE207912.023	%	50 - 130%	75
	0407_TP22_0.1_200622	SE207912.025	%	50 - 130%	76
	0407_TP22_0.5_200622	SE207912.026	%	50 - 130%	77
	0407_TP28_0.1_200622	SE207912.028	%	50 - 130%	80
	0407_TP28_1.0_200622	SE207912.029	%	50 - 130%	82

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d5-phenol (Surrogate)	0407_TP29_0.1_200622	SE207912.031	%	50 - 130%	81
	0407_TP29_0.5_200622	SE207912.032	%	50 - 130%	82
	0407_TP30_0.1_200622	SE207912.034	%	50 - 130%	80
	0407_TP30_0.5_200622	SE207912.035	%	50 - 130%	77
	0407_TP60_0.1_200622	SE207912.037	%	50 - 130%	79
	0407_TP60_1.0_200622	SE207912.038	%	50 - 130%	82
	0407_TP61_0.1_200622	SE207912.040	%	50 - 130%	82
	0407_TP61_0.5_200622	SE207912.041	%	50 - 130%	80
	0407_TP62_0.1_200622	SE207912.043	%	50 - 130%	80
	0407_TP62_0.5_200622	SE207912.044	%	50 - 130%	79
	0407_TP144_0.1_200622	SE207912.046	%	50 - 130%	77
	0407_TP144_0.5_200622	SE207912.047	%	50 - 130%	80
	0407_TP145_0.1_200622	SE207912.050	%	50 - 130%	82
	0407_TP145_0.5_200622	SE207912.051	%	50 - 130%	80
	0407_QC128_200622	SE207912.052	%	50 - 130%	76
	0407_TP146_0.1_200622	SE207912.054	%	50 - 130%	74
	0407_TP146_0.5_200622	SE207912.055	%	50 - 130%	76
	0407_QC129_200622	SE207912.057	%	50 - 130%	78
	0407_TP158_0.1_200622	SE207912.058	%	50 - 130%	77
	0407_TP158_1.0_200622	SE207912.059	%	50 - 130%	70
	0407_QC132_200622	SE207912.060	%	50 - 130%	74
	0407_TP159_0.1_200622	SE207912.062	%	50 - 130%	76
	0407_TP159_1.0_200622	SE207912.063	%	50 - 130%	72
	0407_TP160_0.1_200622	SE207912.065	%	50 - 130%	76
	0407_TP160_0.5_200622	SE207912.066	%	50 - 130%	76
	0407_QC131_200622	SE207912.067	%	50 - 130%	78
	0407_QC133_200622	SE207912.069	%	50 - 130%	78

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_BH0029_0.1_200622	SE207912.001	%	60 - 130%	80
	0407_BH0029_0.5_200622	SE207912.002	%	60 - 130%	83
	0407_BH0030_0.1_200622	SE207912.005	%	60 - 130%	89
	0407_BH0030_0.5_200622	SE207912.006	%	60 - 130%	88
	0407_TP10_0.1_200622	SE207912.009	%	60 - 130%	86
	0407_TP10_0.5_200622	SE207912.010	%	60 - 130%	89
	0407_TP11_0.1_200622	SE207912.012	%	60 - 130%	98
	0407_TP11_1.0_200622	SE207912.013	%	60 - 130%	83
	0407_QC136_200622	SE207912.015	%	60 - 130%	84
	0407_TP12_0.1_200622	SE207912.016	%	60 - 130%	86
	0407_TP12_0.5_200622	SE207912.017	%	60 - 130%	83
	0407_TP19_0.1_200622	SE207912.019	%	60 - 130%	86
	0407_TP19_1.0_200622	SE207912.020	%	60 - 130%	83
	0407_TP20_0.1_200622	SE207912.022	%	60 - 130%	84
	0407_TP20_0.5_200622	SE207912.023	%	60 - 130%	79
	0407_TP22_0.1_200622	SE207912.025	%	60 - 130%	87
	0407_TP22_0.5_200622	SE207912.026	%	60 - 130%	81
	0407_TP28_0.1_200622	SE207912.028	%	60 - 130%	70
	0407_TP28_1.0_200622	SE207912.029	%	60 - 130%	69
	0407_TP29_0.1_200622	SE207912.031	%	60 - 130%	69
	0407_TP29_0.5_200622	SE207912.032	%	60 - 130%	69
	0407_TP30_0.1_200622	SE207912.034	%	60 - 130%	71
	0407_TP30_0.5_200622	SE207912.035	%	60 - 130%	67
	0407_TP60_0.1_200622	SE207912.037	%	60 - 130%	71
	0407_TP60_1.0_200622	SE207912.038	%	60 - 130%	72
	0407_TP61_0.1_200622	SE207912.040	%	60 - 130%	70
	0407_TP61_0.5_200622	SE207912.041	%	60 - 130%	74
	0407_TP62_0.1_200622	SE207912.043	%	60 - 130%	69
	0407_TP62_0.5_200622	SE207912.044	%	60 - 130%	66
	0407_TP144_0.1_200622	SE207912.046	%	60 - 130%	67
	0407_TP144_0.5_200622	SE207912.047	%	60 - 130%	64

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP145_0.1_200622	SE207912.050	%	60 - 130%	70
	0407_TP145_0.5_200622	SE207912.051	%	60 - 130%	68
	0407_QC128_200622	SE207912.052	%	60 - 130%	74
	0407_TP146_0.1_200622	SE207912.054	%	60 - 130%	104
	0407_TP146_0.5_200622	SE207912.055	%	60 - 130%	98
	0407_QC129_200622	SE207912.057	%	60 - 130%	110
	0407_TP158_0.1_200622	SE207912.058	%	60 - 130%	102
	0407_TP158_1.0_200622	SE207912.059	%	60 - 130%	85
	0407_QC132_200622	SE207912.060	%	60 - 130%	91
	0407_TP159_0.1_200622	SE207912.062	%	60 - 130%	91
	0407_TP159_1.0_200622	SE207912.063	%	60 - 130%	85
	0407_TP160_0.1_200622	SE207912.065	%	60 - 130%	101
	0407_TP160_0.5_200622	SE207912.066	%	60 - 130%	88
	0407_QC131_200622	SE207912.067	%	60 - 130%	102
	0407_QC133_200622	SE207912.069	%	60 - 130%	92
d4-1,2-dichloroethane (Surrogate)	0407_BH0029_0.1_200622	SE207912.001	%	60 - 130%	80
	0407_BH0029_0.5_200622	SE207912.002	%	60 - 130%	77
	0407_BH0030_0.1_200622	SE207912.005	%	60 - 130%	87
	0407_BH0030_0.5_200622	SE207912.006	%	60 - 130%	91
	0407_TP10_0.1_200622	SE207912.009	%	60 - 130%	87
	0407_TP10_0.5_200622	SE207912.010	%	60 - 130%	94
	0407_TP11_0.1_200622	SE207912.012	%	60 - 130%	108
	0407_TP11_1.0_200622	SE207912.013	%	60 - 130%	91
	0407_QC136_200622	SE207912.015	%	60 - 130%	93
	0407_TP12_0.1_200622	SE207912.016	%	60 - 130%	92
	0407_TP12_0.5_200622	SE207912.017	%	60 - 130%	86
	0407_TP19_0.1_200622	SE207912.019	%	60 - 130%	83
	0407_TP19_1.0_200622	SE207912.020	%	60 - 130%	91
	0407_TP20_0.1_200622	SE207912.022	%	60 - 130%	94
	0407_TP20_0.5_200622	SE207912.023	%	60 - 130%	92
	0407_TP22_0.1_200622	SE207912.025	%	60 - 130%	92
	0407_TP22_0.5_200622	SE207912.026	%	60 - 130%	88
	0407_TP28_0.1_200622	SE207912.028	%	60 - 130%	97
	0407_TP28_1.0_200622	SE207912.029	%	60 - 130%	96
	0407_TP29_0.1_200622	SE207912.031	%	60 - 130%	97
	0407_TP29_0.5_200622	SE207912.032	%	60 - 130%	95
	0407_TP30_0.1_200622	SE207912.034	%	60 - 130%	99
	0407_TP30_0.5_200622	SE207912.035	%	60 - 130%	94
	0407_TP60_0.1_200622	SE207912.037	%	60 - 130%	100
	0407_TP60_1.0_200622	SE207912.038	%	60 - 130%	98
	0407_TP61_0.1_200622	SE207912.040	%	60 - 130%	96
	0407_TP61_0.5_200622	SE207912.041	%	60 - 130%	100
	0407_TP62_0.1_200622	SE207912.043	%	60 - 130%	94
	0407_TP62_0.5_200622	SE207912.044	%	60 - 130%	93
	0407_TP144_0.1_200622	SE207912.046	%	60 - 130%	92
	0407_TP144_0.5_200622	SE207912.047	%	60 - 130%	89
	0407_TP145_0.1_200622	SE207912.050	%	60 - 130%	96
	0407_TP145_0.5_200622	SE207912.051	%	60 - 130%	93
	0407_QC128_200622	SE207912.052	%	60 - 130%	104
	0407_TP146_0.1_200622	SE207912.054	%	60 - 130%	109
	0407_TP146_0.5_200622	SE207912.055	%	60 - 130%	106
	0407_QC129_200622	SE207912.057	%	60 - 130%	119
	0407_TP158_0.1_200622	SE207912.058	%	60 - 130%	106
	0407_TP158_1.0_200622	SE207912.059	%	60 - 130%	91
	0407_QC132_200622	SE207912.060	%	60 - 130%	114
	0407_TP159_0.1_200622	SE207912.062	%	60 - 130%	106
	0407_TP159_1.0_200622	SE207912.063	%	60 - 130%	100
	0407_TP160_0.1_200622	SE207912.065	%	60 - 130%	114
	0407_TP160_0.5_200622	SE207912.066	%	60 - 130%	114
	0407_QC131_200622	SE207912.067	%	60 - 130%	106
	0407_QC133_200622	SE207912.069	%	60 - 130%	108

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d8-toluene (Surrogate)	0407_BH0029_0.1_200622	SE207912.001	%	60 - 130%	81
	0407_BH0029_0.5_200622	SE207912.002	%	60 - 130%	74
	0407_BH0030_0.1_200622	SE207912.005	%	60 - 130%	79
	0407_BH0030_0.5_200622	SE207912.006	%	60 - 130%	76
	0407_TP10_0.1_200622	SE207912.009	%	60 - 130%	78
	0407_TP10_0.5_200622	SE207912.010	%	60 - 130%	82
	0407_TP11_0.1_200622	SE207912.012	%	60 - 130%	94
	0407_TP11_1.0_200622	SE207912.013	%	60 - 130%	79
	0407_QC136_200622	SE207912.015	%	60 - 130%	83
	0407_TP12_0.1_200622	SE207912.016	%	60 - 130%	85
	0407_TP12_0.5_200622	SE207912.017	%	60 - 130%	77
	0407_TP19_0.1_200622	SE207912.019	%	60 - 130%	84
	0407_TP19_1.0_200622	SE207912.020	%	60 - 130%	78
	0407_TP20_0.1_200622	SE207912.022	%	60 - 130%	86
	0407_TP20_0.5_200622	SE207912.023	%	60 - 130%	78
	0407_TP22_0.1_200622	SE207912.025	%	60 - 130%	86
	0407_TP22_0.5_200622	SE207912.026	%	60 - 130%	86
	0407_TP28_0.1_200622	SE207912.028	%	60 - 130%	93
	0407_TP28_1.0_200622	SE207912.029	%	60 - 130%	92
	0407_TP29_0.1_200622	SE207912.031	%	60 - 130%	95
	0407_TP29_0.5_200622	SE207912.032	%	60 - 130%	94
	0407_TP30_0.1_200622	SE207912.034	%	60 - 130%	96
	0407_TP30_0.5_200622	SE207912.035	%	60 - 130%	90
	0407_TP60_0.1_200622	SE207912.037	%	60 - 130%	96
	0407_TP60_1.0_200622	SE207912.038	%	60 - 130%	96
	0407_TP61_0.1_200622	SE207912.040	%	60 - 130%	95
	0407_TP61_0.5_200622	SE207912.041	%	60 - 130%	99
	0407_TP62_0.1_200622	SE207912.043	%	60 - 130%	93
	0407_TP62_0.5_200622	SE207912.044	%	60 - 130%	90
	0407_TP144_0.1_200622	SE207912.046	%	60 - 130%	90
	0407_TP144_0.5_200622	SE207912.047	%	60 - 130%	87
	0407_TP145_0.1_200622	SE207912.050	%	60 - 130%	94
	0407_TP145_0.5_200622	SE207912.051	%	60 - 130%	91
	0407_QC128_200622	SE207912.052	%	60 - 130%	101
	0407_TP146_0.1_200622	SE207912.054	%	60 - 130%	102
	0407_TP146_0.5_200622	SE207912.055	%	60 - 130%	96
	0407_QC129_200622	SE207912.057	%	60 - 130%	114
	0407_TP158_0.1_200622	SE207912.058	%	60 - 130%	104
	0407_TP158_1.0_200622	SE207912.059	%	60 - 130%	82
	0407_QC132_200622	SE207912.060	%	60 - 130%	96
	0407_TP159_0.1_200622	SE207912.062	%	60 - 130%	94
	0407_TP159_1.0_200622	SE207912.063	%	60 - 130%	88
	0407_TP160_0.1_200622	SE207912.065	%	60 - 130%	106
	0407_TP160_0.5_200622	SE207912.066	%	60 - 130%	93
	0407_QC131_200622	SE207912.067	%	60 - 130%	96
	0407_QC133_200622	SE207912.069	%	60 - 130%	92

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_BH0029_0.1_200622	SE207912.001	%	60 - 130%	80
	0407_BH0029_0.5_200622	SE207912.002	%	60 - 130%	83
	0407_BH0030_0.1_200622	SE207912.005	%	60 - 130%	89
	0407_BH0030_0.5_200622	SE207912.006	%	60 - 130%	88
	0407_TP10_0.1_200622	SE207912.009	%	60 - 130%	86
	0407_TP10_0.5_200622	SE207912.010	%	60 - 130%	89
	0407_TP11_0.1_200622	SE207912.012	%	60 - 130%	98
	0407_TP11_1.0_200622	SE207912.013	%	60 - 130%	83
	0407_QC136_200622	SE207912.015	%	60 - 130%	84
	0407_TP12_0.1_200622	SE207912.016	%	60 - 130%	86
	0407_TP12_0.5_200622	SE207912.017	%	60 - 130%	83
	0407_TP19_0.1_200622	SE207912.019	%	60 - 130%	86

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP19_1.0_200622	SE207912.020	%	60 - 130%	83
	0407_TP20_0.1_200622	SE207912.022	%	60 - 130%	84
	0407_TP20_0.5_200622	SE207912.023	%	60 - 130%	79
	0407_TP22_0.1_200622	SE207912.025	%	60 - 130%	87
	0407_TP22_0.5_200622	SE207912.026	%	60 - 130%	81
	0407_TP28_0.1_200622	SE207912.028	%	60 - 130%	70
	0407_TP28_1.0_200622	SE207912.029	%	60 - 130%	69
	0407_TP29_0.1_200622	SE207912.031	%	60 - 130%	69
	0407_TP29_0.5_200622	SE207912.032	%	60 - 130%	69
	0407_TP30_0.1_200622	SE207912.034	%	60 - 130%	71
	0407_TP30_0.5_200622	SE207912.035	%	60 - 130%	67
	0407_TP60_0.1_200622	SE207912.037	%	60 - 130%	71
	0407_TP60_1.0_200622	SE207912.038	%	60 - 130%	72
	0407_TP61_0.1_200622	SE207912.040	%	60 - 130%	70
	0407_TP61_0.5_200622	SE207912.041	%	60 - 130%	74
	0407_TP62_0.1_200622	SE207912.043	%	60 - 130%	69
	0407_TP62_0.5_200622	SE207912.044	%	60 - 130%	66
	0407_TP144_0.1_200622	SE207912.046	%	60 - 130%	67
	0407_TP144_0.5_200622	SE207912.047	%	60 - 130%	64
	0407_TP145_0.1_200622	SE207912.050	%	60 - 130%	70
	0407_TP145_0.5_200622	SE207912.051	%	60 - 130%	68
	0407_QC128_200622	SE207912.052	%	60 - 130%	74
	0407_TP146_0.1_200622	SE207912.054	%	60 - 130%	104
	0407_TP146_0.5_200622	SE207912.055	%	60 - 130%	98
	0407_QC129_200622	SE207912.057	%	60 - 130%	110
	0407_TP158_0.1_200622	SE207912.058	%	60 - 130%	102
	0407_TP158_1.0_200622	SE207912.059	%	60 - 130%	85
	0407_QC132_200622	SE207912.060	%	60 - 130%	91
	0407_TP159_0.1_200622	SE207912.062	%	60 - 130%	91
	0407_TP159_1.0_200622	SE207912.063	%	60 - 130%	85
	0407_TP160_0.1_200622	SE207912.065	%	60 - 130%	101
	0407_TP160_0.5_200622	SE207912.066	%	60 - 130%	88
	0407_QC131_200622	SE207912.067	%	60 - 130%	102
	0407_QC133_200622	SE207912.069	%	60 - 130%	92
d4-1,2-dichloroethane (Surrogate)	0407_BH0029_0.1_200622	SE207912.001	%	60 - 130%	80
	0407_BH0029_0.5_200622	SE207912.002	%	60 - 130%	77
	0407_BH0030_0.1_200622	SE207912.005	%	60 - 130%	87
	0407_BH0030_0.5_200622	SE207912.006	%	60 - 130%	91
	0407_TP10_0.1_200622	SE207912.009	%	60 - 130%	87
	0407_TP10_0.5_200622	SE207912.010	%	60 - 130%	94
	0407_TP11_0.1_200622	SE207912.012	%	60 - 130%	108
	0407_TP11_1.0_200622	SE207912.013	%	60 - 130%	91
	0407_QC136_200622	SE207912.015	%	60 - 130%	93
	0407_TP12_0.1_200622	SE207912.016	%	60 - 130%	92
	0407_TP12_0.5_200622	SE207912.017	%	60 - 130%	86
	0407_TP19_0.1_200622	SE207912.019	%	60 - 130%	83
	0407_TP19_1.0_200622	SE207912.020	%	60 - 130%	91
	0407_TP20_0.1_200622	SE207912.022	%	60 - 130%	94
	0407_TP20_0.5_200622	SE207912.023	%	60 - 130%	92
	0407_TP22_0.1_200622	SE207912.025	%	60 - 130%	92
	0407_TP22_0.5_200622	SE207912.026	%	60 - 130%	88
	0407_TP28_0.1_200622	SE207912.028	%	60 - 130%	97
	0407_TP28_1.0_200622	SE207912.029	%	60 - 130%	96
	0407_TP29_0.1_200622	SE207912.031	%	60 - 130%	97
	0407_TP29_0.5_200622	SE207912.032	%	60 - 130%	95
	0407_TP30_0.1_200622	SE207912.034	%	60 - 130%	99
	0407_TP30_0.5_200622	SE207912.035	%	60 - 130%	94
	0407_TP60_0.1_200622	SE207912.037	%	60 - 130%	100
	0407_TP60_1.0_200622	SE207912.038	%	60 - 130%	98
	0407_TP61_0.1_200622	SE207912.040	%	60 - 130%	96
	0407_TP61_0.5_200622	SE207912.041	%	60 - 130%	100

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d4-1,2-dichloroethane (Surrogate)	0407_TP62_0.1_200622	SE207912.043	%	60 - 130%	94
	0407_TP62_0.5_200622	SE207912.044	%	60 - 130%	93
	0407_TP144_0.1_200622	SE207912.046	%	60 - 130%	92
	0407_TP144_0.5_200622	SE207912.047	%	60 - 130%	89
	0407_TP145_0.1_200622	SE207912.050	%	60 - 130%	96
	0407_TP145_0.5_200622	SE207912.051	%	60 - 130%	93
	0407_QC128_200622	SE207912.052	%	60 - 130%	104
	0407_TP146_0.1_200622	SE207912.054	%	60 - 130%	109
	0407_TP146_0.5_200622	SE207912.055	%	60 - 130%	106
	0407_QC129_200622	SE207912.057	%	60 - 130%	119
	0407_TP158_0.1_200622	SE207912.058	%	60 - 130%	106
	0407_TP158_1.0_200622	SE207912.059	%	60 - 130%	91
	0407_QC132_200622	SE207912.060	%	60 - 130%	114
	0407_TP159_0.1_200622	SE207912.062	%	60 - 130%	106
	0407_TP159_1.0_200622	SE207912.063	%	60 - 130%	100
	0407_TP160_0.1_200622	SE207912.065	%	60 - 130%	114
	0407_TP160_0.5_200622	SE207912.066	%	60 - 130%	114
	0407_QC131_200622	SE207912.067	%	60 - 130%	106
	0407_QC133_200622	SE207912.069	%	60 - 130%	108
d8-toluene (Surrogate)	0407_BH0029_0.1_200622	SE207912.001	%	60 - 130%	81
	0407_BH0029_0.5_200622	SE207912.002	%	60 - 130%	74
	0407_BH0030_0.1_200622	SE207912.005	%	60 - 130%	79
	0407_BH0030_0.5_200622	SE207912.006	%	60 - 130%	76
	0407_TP10_0.1_200622	SE207912.009	%	60 - 130%	78
	0407_TP10_0.5_200622	SE207912.010	%	60 - 130%	82
	0407_TP11_0.1_200622	SE207912.012	%	60 - 130%	94
	0407_TP11_1.0_200622	SE207912.013	%	60 - 130%	79
	0407_QC136_200622	SE207912.015	%	60 - 130%	83
	0407_TP12_0.1_200622	SE207912.016	%	60 - 130%	85
	0407_TP12_0.5_200622	SE207912.017	%	60 - 130%	77
	0407_TP19_0.1_200622	SE207912.019	%	60 - 130%	84
	0407_TP19_1.0_200622	SE207912.020	%	60 - 130%	78
	0407_TP20_0.1_200622	SE207912.022	%	60 - 130%	86
	0407_TP20_0.5_200622	SE207912.023	%	60 - 130%	78
	0407_TP22_0.1_200622	SE207912.025	%	60 - 130%	86
	0407_TP22_0.5_200622	SE207912.026	%	60 - 130%	86
	0407_TP28_0.1_200622	SE207912.028	%	60 - 130%	93
	0407_TP28_1.0_200622	SE207912.029	%	60 - 130%	92
	0407_TP29_0.1_200622	SE207912.031	%	60 - 130%	95
	0407_TP29_0.5_200622	SE207912.032	%	60 - 130%	94
	0407_TP30_0.1_200622	SE207912.034	%	60 - 130%	96
	0407_TP30_0.5_200622	SE207912.035	%	60 - 130%	90
	0407_TP60_0.1_200622	SE207912.037	%	60 - 130%	96
	0407_TP60_1.0_200622	SE207912.038	%	60 - 130%	96
	0407_TP61_0.1_200622	SE207912.040	%	60 - 130%	95
	0407_TP61_0.5_200622	SE207912.041	%	60 - 130%	99
	0407_TP62_0.1_200622	SE207912.043	%	60 - 130%	93
	0407_TP62_0.5_200622	SE207912.044	%	60 - 130%	90
	0407_TP144_0.1_200622	SE207912.046	%	60 - 130%	90
	0407_TP144_0.5_200622	SE207912.047	%	60 - 130%	87
	0407_TP145_0.1_200622	SE207912.050	%	60 - 130%	94
	0407_TP145_0.5_200622	SE207912.051	%	60 - 130%	91
	0407_QC128_200622	SE207912.052	%	60 - 130%	101
	0407_TP146_0.1_200622	SE207912.054	%	60 - 130%	102
	0407_TP146_0.5_200622	SE207912.055	%	60 - 130%	96
	0407_QC129_200622	SE207912.057	%	60 - 130%	114
	0407_TP158_0.1_200622	SE207912.058	%	60 - 130%	104
	0407_TP158_1.0_200622	SE207912.059	%	60 - 130%	82
	0407_QC132_200622	SE207912.060	%	60 - 130%	96
	0407_TP159_0.1_200622	SE207912.062	%	60 - 130%	94
	0407_TP159_1.0_200622	SE207912.063	%	60 - 130%	88

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d8-toluene (Surrogate)	0407_TP160_0.1_200622	SE207912.065	%	60 - 130%	106
	0407_TP160_0.5_200622	SE207912.066	%	60 - 130%	93
	0407_QC131_200622	SE207912.067	%	60 - 130%	96
	0407_QC133_200622	SE207912.069	%	60 - 130%	92

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result
LB203111.001	Mercury	mg/kg	0.05	<0.05
LB203112.001	Mercury	mg/kg	0.05	<0.05
LB203118.001	Mercury	mg/kg	0.05	<0.05

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202972.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	104
LB202973.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	95
LB202975.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202975.001		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	84

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202972.001		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	91
		d14-p-terphenyl (Surrogate)	%	-	100
LB202973.001		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	84
		d14-p-terphenyl (Surrogate)	%	-	96
LB202975.001		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	73
		d14-p-terphenyl (Surrogate)	%	-	77

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued) — Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202972.001		Naphthalene	mg/kg	0.1	<0.1
		2-methylnaphthalene	mg/kg	0.1	<0.1
		1-methylnaphthalene	mg/kg	0.1	<0.1
		Acenaphthylene	mg/kg	0.1	<0.1
		Acenaphthene	mg/kg	0.1	<0.1
		Fluorene	mg/kg	0.1	<0.1
		Phenanthrene	mg/kg	0.1	<0.1
		Anthracene	mg/kg	0.1	<0.1
		Fluoranthene	mg/kg	0.1	<0.1
		Pyrene	mg/kg	0.1	<0.1
		Benzo(a)anthracene	mg/kg	0.1	<0.1
		Chrysene	mg/kg	0.1	<0.1
		Benzo(a)pyrene	mg/kg	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	90
		2-fluorobiphenyl (Surrogate)	%	-	91
		d14-p-terphenyl (Surrogate)	%	-	100
LB202973.001		Naphthalene	mg/kg	0.1	<0.1
		2-methylnaphthalene	mg/kg	0.1	<0.1
		1-methylnaphthalene	mg/kg	0.1	<0.1
		Acenaphthylene	mg/kg	0.1	<0.1
		Acenaphthene	mg/kg	0.1	<0.1
		Fluorene	mg/kg	0.1	<0.1
		Phenanthrene	mg/kg	0.1	<0.1
		Anthracene	mg/kg	0.1	<0.1
		Fluoranthene	mg/kg	0.1	<0.1
		Pyrene	mg/kg	0.1	<0.1
		Benzo(a)anthracene	mg/kg	0.1	<0.1
		Chrysene	mg/kg	0.1	<0.1
		Benzo(a)pyrene	mg/kg	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	88
		2-fluorobiphenyl (Surrogate)	%	-	84
		d14-p-terphenyl (Surrogate)	%	-	96
LB202975.001		Naphthalene	mg/kg	0.1	<0.1
		2-methylnaphthalene	mg/kg	0.1	<0.1
		1-methylnaphthalene	mg/kg	0.1	<0.1
		Acenaphthylene	mg/kg	0.1	<0.1
		Acenaphthene	mg/kg	0.1	<0.1
		Fluorene	mg/kg	0.1	<0.1
		Phenanthrene	mg/kg	0.1	<0.1
		Anthracene	mg/kg	0.1	<0.1
		Fluoranthene	mg/kg	0.1	<0.1
		Pyrene	mg/kg	0.1	<0.1
		Benzo(a)anthracene	mg/kg	0.1	<0.1
		Chrysene	mg/kg	0.1	<0.1
		Benzo(a)pyrene	mg/kg	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	78
		2-fluorobiphenyl (Surrogate)	%	-	73
		d14-p-terphenyl (Surrogate)	%	-	77

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202972.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	104
LB202973.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	95
LB202975.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	84

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202972.001		Phenol	mg/kg	0.5	<0.5
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5
		2-nitrophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
		Pentachlorophenol	mg/kg	0.5	<0.5
		2,4-dinitrophenol	mg/kg	2	<2
		4-chloro-3-methylphenol	mg/kg	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	82
		d5-phenol (Surrogate)	%	-	82
LB202973.001		Phenol	mg/kg	0.5	<0.5
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5

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Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202973.001		2-nitrophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
		Pentachlorophenol	mg/kg	0.5	<0.5
		2,4-dinitrophenol	mg/kg	2	<2
		4-chloro-3-methylphenol	mg/kg	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	92
		d5-phenol (Surrogate)	%	-	82
LB202975.001		Phenol	mg/kg	0.5	<0.5
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5
		2-nitrophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
		Pentachlorophenol	mg/kg	0.5	<0.5
		2,4-dinitrophenol	mg/kg	2	<2
		4-chloro-3-methylphenol	mg/kg	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	85
		d5-phenol (Surrogate)	%	-	77

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB203099.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0
LB203100.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0
LB203102.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB202972.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110
LB202973.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100

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TRH (Total Recoverable Hydrocarbons) in Soil (continued) — Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB202973.001	TRH C10-C36 Total	mg/kg	110	<110
LB202975.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

VOC's in Soil — Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB202967.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB202967.001	Monocyclic Aromatic Hydrocarbons	1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10
		MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	85
		d8-toluene (Surrogate)	%	-	81
		Bromofluorobenzene (Surrogate)	%	-	82
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1
LB202968.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB202968.001	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic	Benzene	mg/kg	0.1	<0.1
	Hydrocarbons	Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10
		MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	101
		d8-toluene (Surrogate)	%	-	98
		Bromofluorobenzene (Surrogate)	%	-	72
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1
LB202969.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

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VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB202969.001	Halogenated Aliphatics	Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10
		MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	97
		d8-toluene (Surrogate)	%	-	90
		Bromofluorobenzene (Surrogate)	%	-	87
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

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Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB202967.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	85
LB202968.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	101
LB202969.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	97

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207912.016	LB203111.014	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE207912.029	LB203111.024	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE207912.057	LB203112.014	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE207912.058	LB203112.016	Mercury	mg/kg	0.05	0.08	<0.05	113	41
SE207912.063	LB203118.014	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE207998.023	LB203118.021	Mercury	mg/kg	0.05	0.08	0.07	97	10

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207912.016	LB202977.011	% Moisture	%w/w	1	4.3	5.1	51	18
SE207912.026	LB202977.019	% Moisture	%w/w	1	<1.0	1.1	133	10
SE207912.041	LB202978.011	% Moisture	%w/w	1	2.1	1.4	88	36
SE207912.052	LB202978.019	% Moisture	%w/w	1	1.8	1.4	91	26
SE207912.066	LB202979.011	% Moisture	%w/w	1	9.5	10.2	40	8

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207912.016	LB202972.014		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.15	30	3
SE207912.026	LB202972.022		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil (continued) — Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207912.026	LB202972.022		o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	0.14	30	1
SE207912.052	LB202973.022		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	0.15	30	3
SE207912.063	LB202975.024		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	0	200	0
			Alpha BHC	mg/kg	0.1	<0.1	0	200	0
			Lindane	mg/kg	0.1	<0.1	0	200	0
			Heptachlor	mg/kg	0.1	<0.1	0	200	0
			Aldrin	mg/kg	0.1	<0.1	0	200	0
			Beta BHC	mg/kg	0.1	<0.1	0	200	0
			Delta BHC	mg/kg	0.1	<0.1	0	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	0	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	0	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	0	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Dieldrin	mg/kg	0.2	<0.2	0	200	0
			Endrin	mg/kg	0.2	<0.2	0	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207912.063	LB202975.024		p,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	0	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	0	200	0
			Methoxychlor	mg/kg	0.1	<0.1	0	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	0	200	0
			Isodrin	mg/kg	0.1	<0.1	0	200	0
			Mirex	mg/kg	0.1	<0.1	0	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.141	30	3
SE207912.066	LB202975.014		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.16	30	4

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207912.016	LB202972.014		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	3
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	1
SE207912.026	LB202972.022		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207912.026	LB202972.022		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	30	5
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	2
SE207912.052	LB202973.022		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	30	11
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	30	15
SE207912.063	LB202975.024		Dichlorvos	mg/kg	0.5	<0.5	0	200	0
			Dimethoate	mg/kg	0.5	<0.5	0	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	0.0087432075	200	0
			Fenitrothion	mg/kg	0.2	<0.2	0	200	0
			Malathion	mg/kg	0.2	<0.2	0.0021229627	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	0	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	0	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	0	200	0
			Methidathion	mg/kg	0.5	<0.5	0	200	0
			Ethion	mg/kg	0.2	<0.2	0	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	0	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	0	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.3991058866	30	1
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.3913355522	30	2

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207912.016	LB202972.014	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
		Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
		Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
		Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	<0.2	200	0
		Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	<0.3	134	0
		Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	<0.2	175	0
		Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207912.016	LB202972.014	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	30	0
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	3
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	1
SE207912.026	LB202972.022		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	<0.3	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	<0.2	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	30	2
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	30	5
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	2
SE207912.041	LB202973.014		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	<0.3	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	<0.2	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	30	5
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	7
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	13
SE207912.052	LB202973.022		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207912.052	LB202973.022		Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	<0.3	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	<0.2	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	30	11
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	30	11
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	30	15
SE207912.063	LB202975.024		Naphthalene	mg/kg	0.1	<0.1	0	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	0	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	0	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	0.0004740979	200	0
			Acenaphthene	mg/kg	0.1	<0.1	0.0005566879	200	0
			Fluorene	mg/kg	0.1	<0.1	0	200	0
			Phenanthrene	mg/kg	0.1	<0.1	0.0008076375	200	0
			Anthracene	mg/kg	0.1	<0.1	0.0007670780	200	0
			Fluoranthene	mg/kg	0.1	<0.1	0	200	0
			Pyrene	mg/kg	0.1	<0.1	0	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	0.0056187229	200	0
			Chrysene	mg/kg	0.1	<0.1	0.0046487547	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	0	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	0	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	0.0046903981	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	0	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	0	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	0	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	0	200	0
				TEQ (mg/kg)	0.2	<0.2	0	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	0.242	134	0
				TEQ (mg/kg)	0.3	<0.3	0.242	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	0.121	175	0
				TEQ (mg/kg)	0.2	<0.2	0.121	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	0	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.3990749523	30	0
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.3991058866	30	1
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.3913355522	30	2

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207912.016	LB202972.014		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	3
SE207912.026	LB202972.022		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PCBs in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207912.026	LB202972.022		Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	1
SE207912.052	LB202973.022		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	3
SE207912.063	LB202975.024		Arochlor 1016	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	0	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0.141	30	3
SE207912.066	LB202975.014		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	4

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207912.016	LB202972.014	Phenol	mg/kg	0.5	<0.5	<0.5	200	0
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	200	0
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	200	0
		Total Cresol	mg/kg	1.5	<1.5	<1.5	200	0
		2-chlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
		2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	200	0
		2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
		2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
		2-nitrophenol	mg/kg	0.5	<0.5	<0.5	200	0
		4-nitrophenol	mg/kg	1	<1	<1	200	0
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	200	0
		Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
		2,4-dinitrophenol	mg/kg	2	<2	<2	200	0
		4-chloro-3-methylphenol	mg/kg	2	<2	<2	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil (continued) — **Method: ME-(AU)-[ENV]AN420**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207912.016	LB202972.014	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.0	4.0	30	1
			d5-phenol (Surrogate)	mg/kg	-	1.5	1.5	30	1
SE207912.026	LB202972.022		Phenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	200	0
			Total Cresol	mg/kg	1.5	<1.5	<1.5	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	200	0
			4-nitrophenol	mg/kg	1	<1	<1	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dinitrophenol	mg/kg	2	<2	<2	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.2	4.2	30	0
			d5-phenol (Surrogate)	mg/kg	-	1.5	1.6	30	1
SE207912.041	LB202973.014		Phenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	200	0
			Total Cresol	mg/kg	1.5	<1.5	<1.5	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	200	0
			4-nitrophenol	mg/kg	1	<1	<1	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dinitrophenol	mg/kg	2	<2	<2	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.2	4.2	30	0
			d5-phenol (Surrogate)	mg/kg	-	1.6	1.6	30	0
SE207912.052	LB202973.022		Phenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	200	0
			Total Cresol	mg/kg	1.5	<1.5	<1.5	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	200	0
			4-nitrophenol	mg/kg	1	<1	<1	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dinitrophenol	mg/kg	2	<2	<2	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.8	3.8	30	1
			d5-phenol (Surrogate)	mg/kg	-	1.5	1.5	30	0
SE207912.063	LB202975.024		Phenol	mg/kg	0.5	<0.5	0	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	0	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	0	200	0
			Total Cresol	mg/kg	1.5	<1.5	0	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207912.063	LB202975.024		2,4-dimethylphenol	mg/kg	0.5	<0.5	0	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	0	200	0
			4-nitrophenol	mg/kg	1	<1	0	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	0	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dinitrophenol	mg/kg	2	<2	0	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	0	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.0	3.66	30	9
			d5-phenol (Surrogate)	mg/kg	-	1.4	1.44	30	1
SE207912.066	LB202975.014		Phenol	mg/kg	0.5	NVL	NVL	NVL	NVL
			2-methyl phenol (o-cresol)	mg/kg	0.5	NVL	NVL	NVL	NVL
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	NVL	NVL	NVL	NVL
			Total Cresol	mg/kg	1.5	<1.5	<1.5	200	0
			2-chlorophenol	mg/kg	0.5	NVL	NVL	NVL	NVL
			2,4-dimethylphenol	mg/kg	0.5	NVL	NVL	NVL	NVL
			2,6-dichlorophenol	mg/kg	0.5	NVL	NVL	NVL	NVL
			2,4-dichlorophenol	mg/kg	0.5	NVL	NVL	NVL	NVL
			2,4,6-trichlorophenol	mg/kg	0.5	NVL	NVL	NVL	NVL
			2-nitrophenol	mg/kg	0.5	NVL	NVL	NVL	NVL
			4-nitrophenol	mg/kg	1	NVL	NVL	NVL	NVL
			2,4,5-trichlorophenol	mg/kg	0.5	NVL	NVL	NVL	NVL
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	NVL	NVL	NVL	NVL
			Pentachlorophenol	mg/kg	0.5	NVL	NVL	NVL	NVL
			2,4-dinitrophenol	mg/kg	2	NVL	NVL	NVL	NVL
			4-chloro-3-methylphenol	mg/kg	2	NVL	NVL	NVL	NVL
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.1	4.2	30	2
			d5-phenol (Surrogate)	mg/kg	-	1.5	1.6	30	2

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207912.016	LB203099.014	Arsenic, As	mg/kg	1	<1	<1	173	0
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	0.8	0.7	95	16
		Copper, Cu	mg/kg	0.5	1.0	<0.5	110	69
		Nickel, Ni	mg/kg	0.5	0.8	<0.5	122	42
		Lead, Pb	mg/kg	1	1	<1	117	26
		Zinc, Zn	mg/kg	2	<2.0	<2.0	149	0
SE207912.029	LB203099.024	Arsenic, As	mg/kg	1	<1	<1	200	0
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	<0.5	<0.5	200	0
		Copper, Cu	mg/kg	0.5	<0.5	<0.5	200	0
		Nickel, Ni	mg/kg	0.5	<0.5	<0.5	200	0
		Lead, Pb	mg/kg	1	<1	<1	200	0
		Zinc, Zn	mg/kg	2	<2.0	<2.0	200	0
SE207912.044	LB203100.014	Lead, Pb	mg/kg	1	<1	<1	200	0
SE207912.058	LB203100.024	Arsenic, As	mg/kg	1	<1	<1	158	0
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	1.4	1.2	68	14
		Copper, Cu	mg/kg	0.5	7.2	5.7	38	23
		Nickel, Ni	mg/kg	0.5	1.0	1.5	70	41
		Lead, Pb	mg/kg	1	24	18	35	29
		Zinc, Zn	mg/kg	2	8.4	10	51	21
SE207912.060	LB203102.014	Arsenic, As	mg/kg	1	<1	<1	153	0
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	1.5	1.4	64	10
		Copper, Cu	mg/kg	0.5	6.6	5.5	38	17
		Nickel, Ni	mg/kg	0.5	1.7	2.0	57	13

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207912.060	LB203102.014		Lead, Pb	mg/kg	1	22	19	35	17
			Zinc, Zn	mg/kg	2	15	23	41	45 ②
SE207998.023	LB203102.023		Arsenic, As	mg/kg	1	4	4	57	6
			Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	152	0
			Chromium, Cr	mg/kg	0.5	11	12	34	3
			Copper, Cu	mg/kg	0.5	32	33	32	3
			Nickel, Ni	mg/kg	0.5	NVL	NVL	NVL	NVL
			Lead, Pb	mg/kg	1	59	61	32	3
			Zinc, Zn	mg/kg	2	200	210	31	3

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207912.016	LB202972.014		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	49	144	9
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE207912.026	LB202972.022		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE207912.041	LB202973.014		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE207912.052	LB202973.022		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE207912.063	LB202975.024		TRH C10-C14	mg/kg	20	<20	0	200	0
			TRH C15-C28	mg/kg	45	<45	0	200	0
			TRH C29-C36	mg/kg	45	<45	0	200	0
			TRH C37-C40	mg/kg	100	<100	0	200	0
			TRH C10-C36 Total	mg/kg	110	<110	0	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	0	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	0	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	0	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207912.063	LB202975.024	TRH F Bands	TRH >C34-C40 (F4)	mg/kg	120	<120	0	200	0
SE207912.066	LB202975.014		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207912.016	LB202967.014	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0

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Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207912.016	LB202967.014	Monocyclic	m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
		Aromatic	o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.2	8.5	50	9
			d8-toluene (Surrogate)	mg/kg	-	8.5	8.1	50	5
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.6	8.6	50	0
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE207912.026	LB202967.022	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207912.026	LB202967.022	Halogenated	Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
		Aliphatics	1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.8	8.7	50	1
			d8-toluene (Surrogate)	mg/kg	-	8.6	8.6	50	0
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.1	8.7	50	7
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE207912.041	LB202968.014	Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.0	9.9	50	1

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207912.041	LB202968.014	Surrogates	d8-toluene (Surrogate)	mg/kg	-	9.9	9.5	50	3
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.4	7.0	50	5
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
SE207912.052	LB202968.022	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207912.052	LB202968.022	Monocyclic	n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.4	9.9	50	5
			d8-toluene (Surrogate)	mg/kg	-	10.1	9.7	50	4
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.4	7.2	50	4
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE207912.066	LB202969.014	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207912.066	LB202969.014	Halogenated	2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	11.4	11.3	50	0
			d8-toluene (Surrogate)	mg/kg	-	9.3	10.1	50	8
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.8	10.5	50	18
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE207998.005	LB202969.022	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207998.005	LB202969.022	Halogenated	cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
		Aliphatics	Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.8	10.9	50	10
			d8-toluene (Surrogate)	mg/kg	-	8.9	9.9	50	10
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.3	7.1	50	11
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207998.005	LB202969.022	Trihalomethan	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
		es	Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207912.016	LB202967.014		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.2	8.5	30	9
			d8-toluene (Surrogate)	mg/kg	-	8.5	8.1	30	5
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.6	8.6	30	0
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE207912.026	LB202967.022		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.8	8.7	30	1
			d8-toluene (Surrogate)	mg/kg	-	8.6	8.6	30	0
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.1	8.7	30	7
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE207912.041	LB202968.014		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.0	9.9	30	1
			d8-toluene (Surrogate)	mg/kg	-	9.9	9.5	30	3
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.4	7.0	30	5
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE207912.052	LB202968.022		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.4	9.9	30	5
			d8-toluene (Surrogate)	mg/kg	-	10.1	9.7	30	4
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.4	7.2	30	4
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE207912.066	LB202969.014		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	11.4	11.3	30	0
			d8-toluene (Surrogate)	mg/kg	-	9.3	10.1	30	8
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.8	10.5	30	18
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE207998.005	LB202969.022		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.8	10.9	30	10
			d8-toluene (Surrogate)	mg/kg	-	8.9	9.9	30	10
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.3	7.1	30	11
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203111.002	Mercury	mg/kg	0.05	0.18	0.2	70 - 130	90
LB203112.002	Mercury	mg/kg	0.05	0.22	0.2	70 - 130	111
LB203118.002	Mercury	mg/kg	0.05	0.18	0.2	70 - 130	90

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202972.002		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	118
		Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	116
		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	119
		Dieldrin	mg/kg	0.2	0.2	0.2	60 - 140	117
		Endrin	mg/kg	0.2	0.2	0.2	60 - 140	118
		p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	103
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.15	40 - 130	99
LB202973.002		Heptachlor	mg/kg	0.1	0.3	0.2	60 - 140	133
		Aldrin	mg/kg	0.1	0.3	0.2	60 - 140	129
		Delta BHC	mg/kg	0.1	0.3	0.2	60 - 140	125
		Dieldrin	mg/kg	0.2	0.3	0.2	60 - 140	132
		Endrin	mg/kg	0.2	0.3	0.2	60 - 140	129
		p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	118
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.16	0.15	40 - 130	105
LB202975.002		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	108
		Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	111
		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	112
		Dieldrin	mg/kg	0.2	0.2	0.2	60 - 140	112
		Endrin	mg/kg	0.2	0.2	0.2	60 - 140	110
		p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	83
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	0.15	40 - 130	93

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202972.002		Dichlorvos	mg/kg	0.5	2.0	2	60 - 140	100
		Diazinon (Dimpylate)	mg/kg	0.5	2.1	2	60 - 140	105
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.0	2	60 - 140	102
		Ethion	mg/kg	0.2	1.7	2	60 - 140	84
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	83
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	81
LB202973.002		Dichlorvos	mg/kg	0.5	1.9	2	60 - 140	96
		Diazinon (Dimpylate)	mg/kg	0.5	1.9	2	60 - 140	96
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.9	2	60 - 140	95
		Ethion	mg/kg	0.2	1.5	2	60 - 140	74
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	86
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	78
LB202975.002		Dichlorvos	mg/kg	0.5	1.7	2	60 - 140	85
		Diazinon (Dimpylate)	mg/kg	0.5	2.0	2	60 - 140	101
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.2	2	60 - 140	111
		Ethion	mg/kg	0.2	1.5	2	60 - 140	74
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	83
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	89

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202972.002		Naphthalene	mg/kg	0.1	3.9	4	60 - 140	97
		Acenaphthylene	mg/kg	0.1	4.0	4	60 - 140	99
		Acenaphthene	mg/kg	0.1	4.0	4	60 - 140	101
		Phenanthrene	mg/kg	0.1	4.0	4	60 - 140	101
		Anthracene	mg/kg	0.1	4.2	4	60 - 140	104
		Fluoranthene	mg/kg	0.1	4.3	4	60 - 140	107
		Pyrene	mg/kg	0.1	4.5	4	60 - 140	112
		Benzo(a)pyrene	mg/kg	0.1	4.1	4	60 - 140	104
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	85
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	83
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	81

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202973.002		Naphthalene	mg/kg	0.1	4.1	4	60 - 140	103
		Acenaphthylene	mg/kg	0.1	4.1	4	60 - 140	102
		Acenaphthene	mg/kg	0.1	4.1	4	60 - 140	103
		Phenanthrene	mg/kg	0.1	3.9	4	60 - 140	97
		Anthracene	mg/kg	0.1	4.1	4	60 - 140	102
		Fluoranthene	mg/kg	0.1	4.2	4	60 - 140	104
		Pyrene	mg/kg	0.1	4.3	4	60 - 140	108
		Benzo(a)pyrene	mg/kg	0.1	3.7	4	60 - 140	93
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	82
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	86
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	78
LB202975.002		Naphthalene	mg/kg	0.1	4.3	4	60 - 140	107
		Acenaphthylene	mg/kg	0.1	4.2	4	60 - 140	104
		Acenaphthene	mg/kg	0.1	4.4	4	60 - 140	111
		Phenanthrene	mg/kg	0.1	4.4	4	60 - 140	111
		Anthracene	mg/kg	0.1	4.5	4	60 - 140	111
		Fluoranthene	mg/kg	0.1	4.5	4	60 - 140	114
		Pyrene	mg/kg	0.1	4.7	4	60 - 140	118
		Benzo(a)pyrene	mg/kg	0.1	4.2	4	60 - 140	105
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	90
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	83
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	89

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202972.002	Arochlor 1260	mg/kg	0.2	0.5	0.4	60 - 140	121
LB202973.002	Arochlor 1260	mg/kg	0.2	0.5	0.4	60 - 140	131
LB202975.002	Arochlor 1260	mg/kg	0.2	0.5	0.4	60 - 140	117

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202972.002		Phenol	mg/kg	0.5	0.7	1	70 - 130	73
		2,4-dichlorophenol	mg/kg	0.5	0.8	1	70 - 130	81
		2,4,6-trichlorophenol	mg/kg	0.5	0.8	1	70 - 130	75
		Pentachlorophenol	mg/kg	0.5	0.8	1	70 - 130	79
	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.1	5	40 - 130	82
		d5-phenol (Surrogate)	mg/kg	-	1.6	2	40 - 130	82
LB202973.002		Phenol	mg/kg	0.5	0.7	1	70 - 130	73
		2,4-dichlorophenol	mg/kg	0.5	1.2	1	70 - 130	119
		2,4,6-trichlorophenol	mg/kg	0.5	1.2	1	70 - 130	123
		Pentachlorophenol	mg/kg	0.5	0.7	1	70 - 130	71
	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.3	5	40 - 130	86
		d5-phenol (Surrogate)	mg/kg	-	1.7	2	40 - 130	84
LB202975.002		Phenol	mg/kg	0.5	0.8	1	70 - 130	75
		2,4-dichlorophenol	mg/kg	0.5	0.7	1	70 - 130	72
		2,4,6-trichlorophenol	mg/kg	0.5	0.7	1	70 - 130	72
		Pentachlorophenol	mg/kg	0.5	0.8	1	70 - 130	79
	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.1	5	40 - 130	82
		d5-phenol (Surrogate)	mg/kg	-	1.5	2	40 - 130	76

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203099.002	Arsenic, As	mg/kg	1	330	318.22	80 - 120	104
	Cadmium, Cd	mg/kg	0.3	4.9	5.41	80 - 120	91
	Chromium, Cr	mg/kg	0.5	39	38.31	80 - 120	102
	Copper, Cu	mg/kg	0.5	300	290	80 - 120	103
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	102
	Lead, Pb	mg/kg	1	93	89.9	80 - 120	103
	Zinc, Zn	mg/kg	2	270	273	80 - 120	101
LB203100.002	Arsenic, As	mg/kg	1	330	318.22	80 - 120	104
	Cadmium, Cd	mg/kg	0.3	4.9	5.41	80 - 120	90
	Chromium, Cr	mg/kg	0.5	39	38.31	80 - 120	103

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203100.002	Copper, Cu	mg/kg	0.5	300	290	80 - 120	104
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	102
	Lead, Pb	mg/kg	1	93	89.9	80 - 120	104
	Zinc, Zn	mg/kg	2	280	273	80 - 120	102
LB203102.002	Arsenic, As	mg/kg	1	340	318.22	80 - 120	106
	Cadmium, Cd	mg/kg	0.3	5.1	5.41	80 - 120	94
	Chromium, Cr	mg/kg	0.5	40	38.31	80 - 120	105
	Copper, Cu	mg/kg	0.5	300	290	80 - 120	104
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	103
	Lead, Pb	mg/kg	1	94	89.9	80 - 120	105
	Zinc, Zn	mg/kg	2	270	273	80 - 120	101

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202972.002		TRH C10-C14	mg/kg	20	42	40	60 - 140	105
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	98
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	85
	TRH F Bands	TRH >C10-C16	mg/kg	25	42	40	60 - 140	105
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	93
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	80
LB202973.002		TRH C10-C14	mg/kg	20	41	40	60 - 140	103
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	83
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	75
	TRH F Bands	TRH >C10-C16	mg/kg	25	39	40	60 - 140	98
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	85
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	65
LB202975.002		TRH C10-C14	mg/kg	20	41	40	60 - 140	103
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	83
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	75
	TRH F Bands	TRH >C10-C16	mg/kg	25	39	40	60 - 140	98
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	88
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	65

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202967.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	5.1	5	60 - 140	102
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	5.9	5	60 - 140	119
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	5.4	5	60 - 140	107
	Halogenated	Chlorobenzene	mg/kg	0.1	5.7	5	60 - 140	113
	Monocyclic	Benzene	mg/kg	0.1	4.9	5	60 - 140	98
	Aromatic	Toluene	mg/kg	0.1	5.4	5	60 - 140	109
		Ethylbenzene	mg/kg	0.1	5.4	5	60 - 140	108
		m/p-xylene	mg/kg	0.2	11	10	60 - 140	108
		o-xylene	mg/kg	0.1	5.4	5	60 - 140	108
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.5	10	70 - 130	95
		d8-toluene (Surrogate)	mg/kg	-	8.9	10	70 - 130	89
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.7	10	70 - 130	87
	Trihalomethan	Chloroform	mg/kg	0.1	5.5	5	60 - 140	110
LB202968.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	3.4	5	60 - 140	68
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	3.9	5	60 - 140	79
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	3.8	5	60 - 140	75
	Halogenated	Chlorobenzene	mg/kg	0.1	4.4	5	60 - 140	88
	Monocyclic	Benzene	mg/kg	0.1	3.9	5	60 - 140	79
	Aromatic	Toluene	mg/kg	0.1	4.1	5	60 - 140	82
		Ethylbenzene	mg/kg	0.1	4.2	5	60 - 140	84
		m/p-xylene	mg/kg	0.2	8.4	10	60 - 140	84
		o-xylene	mg/kg	0.1	4.2	5	60 - 140	84
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.0	10	70 - 130	100
		d8-toluene (Surrogate)	mg/kg	-	9.9	10	70 - 130	99
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.3	10	70 - 130	83
	Trihalomethan	Chloroform	mg/kg	0.1	4.0	5	60 - 140	80
LB202969.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	3.8	5	60 - 140	76

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202969.002	Halogenated	1,2-dichloroethane	mg/kg	0.1	4.5	5	60 - 140	90
	Aliphatics	Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	3.8	5	60 - 140	77
	Halogenated	Chlorobenzene	mg/kg	0.1	4.3	5	60 - 140	87
	Monocyclic	Benzene	mg/kg	0.1	3.6	5	60 - 140	73
	Aromatic	Toluene	mg/kg	0.1	4.2	5	60 - 140	84
		Ethylbenzene	mg/kg	0.1	4.3	5	60 - 140	85
		m/p-xylene	mg/kg	0.2	8.2	10	60 - 140	82
		o-xylene	mg/kg	0.1	4.1	5	60 - 140	81
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.2	10	70 - 130	82
		d8-toluene (Surrogate)	mg/kg	-	7.8	10	70 - 130	78
		Bromofluorobenzene (Surrogate)	mg/kg	-	7.6	10	70 - 130	76
	Trihalomethan	Chloroform	mg/kg	0.1	4.3	5	60 - 140	85

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202967.002		TRH C6-C10	mg/kg	25	100	92.5	60 - 140	108
		TRH C6-C9	mg/kg	20	86	80	60 - 140	108
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.5	10	70 - 130	95
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.7	10	70 - 130	87
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	68	62.5	60 - 140	109
LB202968.002		TRH C6-C10	mg/kg	25	78	92.5	60 - 140	85
		TRH C6-C9	mg/kg	20	68	80	60 - 140	85
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.0	10	70 - 130	100
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.3	10	70 - 130	83
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	53	62.5	60 - 140	86
LB202969.002		TRH C6-C10	mg/kg	25	63	92.5	60 - 140	68
		TRH C6-C9	mg/kg	20	54	80	60 - 140	68
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.2	10	70 - 130	82
		Bromofluorobenzene (Surrogate)	mg/kg	-	7.6	10	70 - 130	76
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	38	62.5	60 - 140	62

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207912.001	LB203111.004	Mercury	mg/kg	0.05	0.19	<0.05	0.2	93
SE207912.031	LB203112.004	Mercury	mg/kg	0.05	0.19	<0.05	0.2	93
SE208074.001	LB203118.004	Mercury	mg/kg	0.05	0.19	<0.05	0.2	91

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207912.001	LB202972.004		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	-	-
			Lindane	mg/kg	0.1	<0.1	<0.1	-	-
			Heptachlor	mg/kg	0.1	0.2	<0.1	0.2	119
			Aldrin	mg/kg	0.1	0.2	<0.1	0.2	116
			Beta BHC	mg/kg	0.1	<0.1	<0.1	-	-
			Delta BHC	mg/kg	0.1	0.2	<0.1	0.2	124
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	-	-
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	-	-
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	-	-
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	-	-
			Dieldrin	mg/kg	0.2	0.2	<0.2	0.2	117
			Endrin	mg/kg	0.2	0.2	<0.2	0.2	118
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	-	-
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	-	-
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	-	-
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	-	-
			p,p'-DDT	mg/kg	0.1	0.2	<0.1	0.2	101
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	-	-
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	-	-
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	-	-
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	-	-
			Isodrin	mg/kg	0.1	<0.1	<0.1	-	-
			Mirex	mg/kg	0.1	<0.1	<0.1	-	-
			Total CLP OC Pesticides	mg/kg	1	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.15	-	101
SE207912.055	LB202975.023		Hexachlorobenzene (HCB)	mg/kg	0.1		<0.1	-	-
			Alpha BHC	mg/kg	0.1		<0.1	-	-
			Lindane	mg/kg	0.1		<0.1	-	-
			Heptachlor	mg/kg	0.1		<0.1	0.2	114
			Aldrin	mg/kg	0.1		<0.1	0.2	115
			Beta BHC	mg/kg	0.1		<0.1	-	-
			Delta BHC	mg/kg	0.1		<0.1	0.2	119
			Heptachlor epoxide	mg/kg	0.1		<0.1	-	-
			o,p'-DDE	mg/kg	0.1		<0.1	-	-
			Alpha Endosulfan	mg/kg	0.2		<0.2	-	-
			Gamma Chlordane	mg/kg	0.1		<0.1	-	-
			Alpha Chlordane	mg/kg	0.1		<0.1	-	-
			trans-Nonachlor	mg/kg	0.1		<0.1	-	-
			p,p'-DDE	mg/kg	0.1		<0.1	-	-
			Dieldrin	mg/kg	0.2		<0.2	0.2	113
			Endrin	mg/kg	0.2		<0.2	0.2	108
			o,p'-DDD	mg/kg	0.1		<0.1	-	-
			o,p'-DDT	mg/kg	0.1		<0.1	-	-
			Beta Endosulfan	mg/kg	0.2		<0.2	-	-
			p,p'-DDD	mg/kg	0.1		<0.1	-	-
			p,p'-DDT	mg/kg	0.1		<0.1	0.2	84
			Endosulfan sulphate	mg/kg	0.1		<0.1	-	-
			Endrin Aldehyde	mg/kg	0.1		<0.1	-	-
			Methoxychlor	mg/kg	0.1		<0.1	-	-
			Endrin Ketone	mg/kg	0.1		<0.1	-	-
			Isodrin	mg/kg	0.1		<0.1	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207912.055	LB202975.023		Mirex	mg/kg	0.1		<0.1	-	-
			Total CLP OC Pesticides	mg/kg	1		<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-		0.15	-	101

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207912.001	LB202972.004		Dichlorvos	mg/kg	0.5	1.8	<0.5	2	91
			Dimethoate	mg/kg	0.5	<0.5	<0.5	-	-
			Diazinon (Dimpylate)	mg/kg	0.5	2.0	<0.5	2	98
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	-	-
			Malathion	mg/kg	0.2	<0.2	<0.2	-	-
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.1	<0.2	2	107
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	-	-
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	-	-
			Methidathion	mg/kg	0.5	<0.5	<0.5	-	-
			Ethion	mg/kg	0.2	1.8	<0.2	2	90
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	-	-
			Total OP Pesticides*	mg/kg	1.7	7.7	<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	85
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	-	84
SE207912.029	LB202973.024		Dichlorvos	mg/kg	0.5		<0.5	2	94
			Dimethoate	mg/kg	0.5		<0.5	-	-
			Diazinon (Dimpylate)	mg/kg	0.5		<0.5	2	90
			Fenitrothion	mg/kg	0.2		<0.2	-	-
			Malathion	mg/kg	0.2		<0.2	-	-
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2		<0.2	2	96
			Parathion-ethyl (Parathion)	mg/kg	0.2		<0.2	-	-
			Bromophos Ethyl	mg/kg	0.2		<0.2	-	-
			Methidathion	mg/kg	0.5		<0.5	-	-
			Ethion	mg/kg	0.2		<0.2	2	70
			Azinphos-methyl (Guthion)	mg/kg	0.2		<0.2	-	-
			Total OP Pesticides*	mg/kg	1.7		<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-		0.4	-	86
			d14-p-terphenyl (Surrogate)	mg/kg	-		0.4	-	78
SE207912.055	LB202975.023		Dichlorvos	mg/kg	0.5		<0.5	2	92
			Dimethoate	mg/kg	0.5		<0.5	-	-
			Diazinon (Dimpylate)	mg/kg	0.5		<0.5	2	96
			Fenitrothion	mg/kg	0.2		<0.2	-	-
			Malathion	mg/kg	0.2		<0.2	-	-
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2		<0.2	2	98
			Parathion-ethyl (Parathion)	mg/kg	0.2		<0.2	-	-
			Bromophos Ethyl	mg/kg	0.2		<0.2	-	-
			Methidathion	mg/kg	0.5		<0.5	-	-
			Ethion	mg/kg	0.2		<0.2	2	80
			Azinphos-methyl (Guthion)	mg/kg	0.2		<0.2	-	-
			Total OP Pesticides*	mg/kg	1.7		<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-		0.4	-	83
			d14-p-terphenyl (Surrogate)	mg/kg	-		0.4	-	78

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207912.001	LB202972.004	Naphthalene	mg/kg	0.1	3.9	<0.1	4	98
		2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Acenaphthylene	mg/kg	0.1	4.0	<0.1	4	99
		Acenaphthene	mg/kg	0.1	4.1	<0.1	4	102
		Fluorene	mg/kg	0.1	<0.1	<0.1	-	-
		Phenanthrene	mg/kg	0.1	4.1	<0.1	4	102
		Anthracene	mg/kg	0.1	4.2	<0.1	4	105
		Fluoranthene	mg/kg	0.1	4.4	<0.1	4	111
		Pyrene	mg/kg	0.1	4.6	<0.1	4	114
		Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued) — **Method: ME-(AU)-[ENV]AN420**

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207912.001	LB202972.004		Chrysene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(a)pyrene	mg/kg	0.1	4.1	<0.1	4	102
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	4.1	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	4.2	<0.3	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	4.1	<0.2	-	-
			Total PAH (18)	mg/kg	0.8	33	<0.8	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	-	86
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	85
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	-	84
SE207912.029	LB202973.024		Naphthalene	mg/kg	0.1		<0.1	4	111
			2-methylnaphthalene	mg/kg	0.1		<0.1	-	-
			1-methylnaphthalene	mg/kg	0.1		<0.1	-	-
			Acenaphthylene	mg/kg	0.1		<0.1	4	104
			Acenaphthene	mg/kg	0.1		<0.1	4	108
			Fluorene	mg/kg	0.1		<0.1	-	-
			Phenanthrene	mg/kg	0.1		<0.1	4	102
			Anthracene	mg/kg	0.1		<0.1	4	105
			Fluoranthene	mg/kg	0.1		<0.1	4	106
			Pyrene	mg/kg	0.1		<0.1	4	112
			Benzo(a)anthracene	mg/kg	0.1		<0.1	-	-
			Chrysene	mg/kg	0.1		<0.1	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1		<0.1	-	-
			Benzo(k)fluoranthene	mg/kg	0.1		<0.1	-	-
			Benzo(a)pyrene	mg/kg	0.1		<0.1	4	95
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1		<0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1		<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1		<0.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2		<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3		<0.3	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2		<0.2	-	-
			Total PAH (18)	mg/kg	0.8		<0.8	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-		0.4	-	82
			2-fluorobiphenyl (Surrogate)	mg/kg	-		0.4	-	86
			d14-p-terphenyl (Surrogate)	mg/kg	-		0.4	-	78
SE207912.055	LB202975.023		Naphthalene	mg/kg	0.1		<0.1	4	95
			2-methylnaphthalene	mg/kg	0.1		<0.1	-	-
			1-methylnaphthalene	mg/kg	0.1		<0.1	-	-
			Acenaphthylene	mg/kg	0.1		<0.1	4	99
			Acenaphthene	mg/kg	0.1		<0.1	4	96
			Fluorene	mg/kg	0.1		<0.1	-	-
			Phenanthrene	mg/kg	0.1		<0.1	4	92
			Anthracene	mg/kg	0.1		<0.1	4	99
			Fluoranthene	mg/kg	0.1		<0.1	4	102
			Pyrene	mg/kg	0.1		<0.1	4	104
			Benzo(a)anthracene	mg/kg	0.1		<0.1	-	-
			Chrysene	mg/kg	0.1		<0.1	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1		<0.1	-	-
			Benzo(k)fluoranthene	mg/kg	0.1		<0.1	-	-
			Benzo(a)pyrene	mg/kg	0.1		<0.1	4	90
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1		<0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1		<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1		<0.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2		<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3		<0.3	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2		<0.2	-	-
			Total PAH (18)	mg/kg	0.8		<0.8	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207912.055	LB202975.023	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-		0.4	-	82
			2-fluorobiphenyl (Surrogate)	mg/kg	-		0.4	-	83
			d14-p-terphenyl (Surrogate)	mg/kg	-		0.4	-	78

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207912.001	LB202972.004		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1260	mg/kg	0.2	0.3	<0.2	0.4	75
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	-	-
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	-	103
SE207912.055	LB202975.023		Arochlor 1016	mg/kg	0.2		<0.2	-	-
			Arochlor 1221	mg/kg	0.2		<0.2	-	-
			Arochlor 1232	mg/kg	0.2		<0.2	-	-
			Arochlor 1242	mg/kg	0.2		<0.2	-	-
			Arochlor 1248	mg/kg	0.2		<0.2	-	-
			Arochlor 1254	mg/kg	0.2		<0.2	-	-
			Arochlor 1260	mg/kg	0.2		<0.2	0.4	77
			Arochlor 1262	mg/kg	0.2		<0.2	-	-
			Arochlor 1268	mg/kg	0.2		<0.2	-	-
			Total PCBs (Arochlors)	mg/kg	1		<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-		0	-	97

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207912.001	LB202972.004		Phenol	mg/kg	0.5	0.7	<0.5	1	73
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	-	-
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	-	-
			Total Cresol	mg/kg	1.5	<1.5	<1.5	-	-
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	-	-
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	-	-
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	-	-
			2,4-dichlorophenol	mg/kg	0.5	0.7	<0.5	1	71
			2,4,6-trichlorophenol	mg/kg	0.5	0.7	<0.5	1	70
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	-	-
			4-nitrophenol	mg/kg	1	<1	<1	-	-
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	-	-
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	-	-
			Pentachlorophenol	mg/kg	0.5	0.8	<0.5	1	77
			2,4-dinitrophenol	mg/kg	2	<2	<2	-	-
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	-	-
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.8	3.7	-	76
			d5-phenol (Surrogate)	mg/kg	-	1.5	1.6	-	76
SE207912.029	LB202973.023		Phenol	mg/kg	0.5		<0.5	1	76
			2-methyl phenol (o-cresol)	mg/kg	0.5		<0.5	-	-
			3/4-methyl phenol (m/p-cresol)	mg/kg	1		<1	-	-
			Total Cresol	mg/kg	1.5		<1.5	-	-
			2-chlorophenol	mg/kg	0.5		<0.5	-	-
			2,4-dimethylphenol	mg/kg	0.5		<0.5	-	-
			2,6-dichlorophenol	mg/kg	0.5		<0.5	-	-
			2,4-dichlorophenol	mg/kg	0.5		<0.5	1	81
			2,4,6-trichlorophenol	mg/kg	0.5		<0.5	1	122
			2-nitrophenol	mg/kg	0.5		<0.5	-	-
			4-nitrophenol	mg/kg	1		<1	-	-
			2,4,5-trichlorophenol	mg/kg	0.5		<0.5	-	-
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1		<1	-	-

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Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207912.029	LB202973.023		Pentachlorophenol	mg/kg	0.5		<0.5	1	75
			2,4-dinitrophenol	mg/kg	2		<2	-	-
			4-chloro-3-methylphenol	mg/kg	2		<2	-	-
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-		4.4	-	85
			d5-phenol (Surrogate)	mg/kg	-		1.6	-	82
SE207912.055	LB202975.023		Phenol	mg/kg	0.5		<0.5	1	73
			2-methyl phenol (o-cresol)	mg/kg	0.5		<0.5	-	-
			3/4-methyl phenol (m/p-cresol)	mg/kg	1		<1	-	-
			Total Cresol	mg/kg	1.5		<1.5	-	-
			2-chlorophenol	mg/kg	0.5		<0.5	-	-
			2,4-dimethylphenol	mg/kg	0.5		<0.5	-	-
			2,6-dichlorophenol	mg/kg	0.5		<0.5	-	-
			2,4-dichlorophenol	mg/kg	0.5		<0.5	1	72
			2,4,6-trichlorophenol	mg/kg	0.5		<0.5	1	71
			2-nitrophenol	mg/kg	0.5		<0.5	-	-
			4-nitrophenol	mg/kg	1		<1	-	-
			2,4,5-trichlorophenol	mg/kg	0.5		<0.5	-	-
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1		<1	-	-
			Pentachlorophenol	mg/kg	0.5		<0.5	1	79
			2,4-dinitrophenol	mg/kg	2		<2	-	-
			4-chloro-3-methylphenol	mg/kg	2		<2	-	-
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-		3.8	-	79
			d5-phenol (Surrogate)	mg/kg	-		1.5	-	77

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207912.001	LB203099.004	Arsenic, As	mg/kg	1	49	<1	50	98
		Cadmium, Cd	mg/kg	0.3	45	<0.3	50	89
		Chromium, Cr	mg/kg	0.5	50	1.5	50	97
		Copper, Cu	mg/kg	0.5	49	0.8	50	96
		Nickel, Ni	mg/kg	0.5	49	0.7	50	97
		Lead, Pb	mg/kg	1	49	1	50	95
		Zinc, Zn	mg/kg	2	51	3.0	50	96
SE207912.031	LB203100.004	Arsenic, As	mg/kg	1	48	<1	50	95
		Cadmium, Cd	mg/kg	0.3	44	<0.3	50	89
		Chromium, Cr	mg/kg	0.5	49	<0.5	50	97
		Copper, Cu	mg/kg	0.5	48	<0.5	50	96
		Nickel, Ni	mg/kg	0.5	50	1.6	50	96
		Lead, Pb	mg/kg	1	49	<1	50	97
		Zinc, Zn	mg/kg	2	49	<2.0	50	96
SE208073.001	LB203102.004	Chromium, Cr	mg/kg	0.5	54	6.5	50	96
		Copper, Cu	mg/kg	0.5	57	9.9	50	94
		Lead, Pb	mg/kg	1	59	13	50	93
		Zinc, Zn	mg/kg	2	67	64	50	6 ④

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207912.001	LB202972.004		TRH C10-C14	mg/kg	20	45	<20	40	113
			TRH C15-C28	mg/kg	45	<45	<45	40	105
			TRH C29-C36	mg/kg	45	<45	<45	40	93
			TRH C37-C40	mg/kg	100	<100	<100	-	-
			TRH C10-C36 Total	mg/kg	110	<110	<110	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25	43	<25	40	108
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	43	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	40	100
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	-	-
SE207912.029	LB202973.023		TRH C10-C14	mg/kg	20		<20	40	100
			TRH C15-C28	mg/kg	45		<45	40	93
			TRH C29-C36	mg/kg	45		<45	40	60
			TRH C37-C40	mg/kg	100		<100	-	-
			TRH C10-C36 Total	mg/kg	110		<110	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

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TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207912.029	LB202973.023		TRH >C10-C40 Total (F bands)	mg/kg	210		<210	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25		<25	40	100
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25		<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90		<90	40	78
			TRH >C34-C40 (F4)	mg/kg	120		<120	-	-
SE207912.055	LB202975.023		TRH C10-C14	mg/kg	20		<20	40	113
			TRH C15-C28	mg/kg	45		<45	40	103
			TRH C29-C36	mg/kg	45		<45	40	65
			TRH C37-C40	mg/kg	100		<100	-	-
			TRH C10-C36 Total	mg/kg	110		<110	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210		<210	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25		<25	40	110
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25		<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90		<90	40	85
			TRH >C34-C40 (F4)	mg/kg	120		<120	-	-

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207912.001	LB202967.004	Monocyclic	Benzene	mg/kg	0.1	4.8	<0.1	5	97
		Aromatic	Toluene	mg/kg	0.1	4.7	<0.1	5	93
			Ethylbenzene	mg/kg	0.1	4.5	<0.1	5	91
			m/p-xylene	mg/kg	0.2	9.3	<0.2	10	93
			o-xylene	mg/kg	0.1	4.7	<0.1	5	95
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.3	8.0	10	93
			d8-toluene (Surrogate)	mg/kg	-	7.7	8.1	10	77
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.0	8.0	10	80
		Totals	Total Xylenes	mg/kg	0.3	14	<0.3	-	-
			Total BTEX	mg/kg	0.6	28	<0.6	-	-
SE207912.026	LB202967.025	Fumigants	2,2-dichloropropane	mg/kg	0.1		<0.1	-	-
			1,2-dichloropropane	mg/kg	0.1		<0.1	-	-
			cis-1,3-dichloropropene	mg/kg	0.1		<0.1	-	-
			trans-1,3-dichloropropene	mg/kg	0.1		<0.1	-	-
			1,2-dibromoethane (EDB)	mg/kg	0.1		<0.1	-	-
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1		<1	-	-
		Aliphatics	Chloromethane	mg/kg	1		<1	-	-
			Vinyl chloride (Chloroethene)	mg/kg	0.1		<0.1	-	-
			Bromomethane	mg/kg	1		<1	-	-
			Chloroethane	mg/kg	1		<1	-	-
			Trichlorofluoromethane	mg/kg	1		<1	-	-
			Iodomethane	mg/kg	5		<5	-	-
			1,1-dichloroethene	mg/kg	0.1		<0.1	5	95
			Dichloromethane (Methylene chloride)	mg/kg	0.5		<0.5	-	-
			Allyl chloride	mg/kg	0.1		<0.1	-	-
			trans-1,2-dichloroethene	mg/kg	0.1		<0.1	-	-
			1,1-dichloroethane	mg/kg	0.1		<0.1	-	-
			cis-1,2-dichloroethene	mg/kg	0.1		<0.1	-	-
			Bromochloromethane	mg/kg	0.1		<0.1	-	-
			1,2-dichloroethane	mg/kg	0.1		<0.1	5	117
			1,1,1-trichloroethane	mg/kg	0.1		<0.1	-	-
			1,1-dichloropropene	mg/kg	0.1		<0.1	-	-
			Carbon tetrachloride	mg/kg	0.1		<0.1	-	-
			Dibromomethane	mg/kg	0.1		<0.1	-	-
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1		<0.1	5	112
			1,1,2-trichloroethane	mg/kg	0.1		<0.1	-	-
			1,3-dichloropropane	mg/kg	0.1		<0.1	-	-
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1		<0.1	-	-
			1,1,1,2-tetrachloroethane	mg/kg	0.1		<0.1	-	-
			cis-1,4-dichloro-2-butene	mg/kg	1		<1	-	-
			1,1,2,2-tetrachloroethane	mg/kg	0.1		<0.1	-	-
			1,2,3-trichloropropane	mg/kg	0.1		<0.1	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

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VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207912.026	LB202967.025	Halogenated Aliphatics	trans-1,4-dichloro-2-butene	mg/kg	1		<1	-	-
			1,2-dibromo-3-chloropropane	mg/kg	0.1		<0.1	-	-
			Hexachlorobutadiene	mg/kg	0.1		<0.1	-	-
		Halogenated Aromatics	Chlorobenzene	mg/kg	0.1		<0.1	5	119
			Bromobenzene	mg/kg	0.1		<0.1	-	-
			2-chlorotoluene	mg/kg	0.1		<0.1	-	-
			4-chlorotoluene	mg/kg	0.1		<0.1	-	-
			1,3-dichlorobenzene	mg/kg	0.1		<0.1	-	-
			1,4-dichlorobenzene	mg/kg	0.1		<0.1	-	-
			1,2-dichlorobenzene	mg/kg	0.1		<0.1	-	-
			1,2,4-trichlorobenzene	mg/kg	0.1		<0.1	-	-
			1,2,3-trichlorobenzene	mg/kg	0.1		<0.1	-	-
		Monocyclic Aromatic	Benzene	mg/kg	0.1		<0.1	5	106
			Toluene	mg/kg	0.1		<0.1	5	96
			Ethylbenzene	mg/kg	0.1		<0.1	5	93
			m/p-xylene	mg/kg	0.2		<0.2	10	92
			o-xylene	mg/kg	0.1		<0.1	5	95
			Styrene (Vinyl benzene)	mg/kg	0.1		<0.1	-	-
			Isopropylbenzene (Cumene)	mg/kg	0.1		<0.1	-	-
			n-propylbenzene	mg/kg	0.1		<0.1	-	-
			1,3,5-trimethylbenzene	mg/kg	0.1		<0.1	-	-
			tert-butylbenzene	mg/kg	0.1		<0.1	-	-
			1,2,4-trimethylbenzene	mg/kg	0.1		<0.1	-	-
			sec-butylbenzene	mg/kg	0.1		<0.1	-	-
			p-isopropyltoluene	mg/kg	0.1		<0.1	-	-
			n-butylbenzene	mg/kg	0.1		<0.1	-	-
		Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1		<0.1	-	-
			2-nitropropane	mg/kg	10		<10	-	-
		Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10		<10	-	-
			MtBE (Methyl-tert-butyl ether)	mg/kg	0.1		<0.1	-	-
			Vinyl acetate	mg/kg	10		<10	-	-
			MEK (2-butanone)	mg/kg	10		<10	-	-
			MIBK (4-methyl-2-pentanone)	mg/kg	1		<1	-	-
			2-hexanone (MBK)	mg/kg	5		<5	-	-
		Polycyclic	Naphthalene	mg/kg	0.1		<0.1	-	-
		Sulphonated	Carbon disulfide	mg/kg	0.5		<0.5	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-		8.8	10	90
			d8-toluene (Surrogate)	mg/kg	-		8.6	10	79
			Bromofluorobenzene (Surrogate)	mg/kg	-		8.1	10	84
		Totals	Total Xylenes	mg/kg	0.3		<0.3	-	-
			Total BTEX	mg/kg	0.6		<0.6	-	-
			Total VOC*	mg/kg	24		<24	-	-
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3		<3.0	-	-
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8		<1.8	-	-
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8		<1.8	-	-
		Trihalomethanes	Chloroform	mg/kg	0.1		<0.1	5	97
			Bromodichloromethane	mg/kg	0.1		<0.1	-	-
			Chlorodibromomethane	mg/kg	0.1		<0.1	-	-
			Bromoform	mg/kg	0.1		<0.1	-	-
SE207912.028	LB202968.004	Monocyclic Aromatic	Benzene	mg/kg	0.1	3.8	<0.1	5	75
			Toluene	mg/kg	0.1	4.0	<0.1	5	79
			Ethylbenzene	mg/kg	0.1	4.1	<0.1	5	82
			m/p-xylene	mg/kg	0.2	8.2	<0.2	10	82
			o-xylene	mg/kg	0.1	4.2	<0.1	5	83
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.3	9.7	10	103
			d8-toluene (Surrogate)	mg/kg	-	9.9	9.3	10	99
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.8	7.0	10	68 ①
		Totals	Total Xylenes	mg/kg	0.3	12	<0.3	-	-
			Total BTEX	mg/kg	0.6	24	<0.6	-	-
SE207912.029	LB202968.025	Fumigants	2,2-dichloropropane	mg/kg	0.1		<0.1	-	-

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VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207912.029	LB202968.025	Fumigants	1,2-dichloropropane	mg/kg	0.1		<0.1	-	-
			cis-1,3-dichloropropene	mg/kg	0.1		<0.1	-	-
			trans-1,3-dichloropropene	mg/kg	0.1		<0.1	-	-
			1,2-dibromoethane (EDB)	mg/kg	0.1		<0.1	-	-
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1		<1	-	-
		Aliphatics	Chloromethane	mg/kg	1		<1	-	-
			Vinyl chloride (Chloroethene)	mg/kg	0.1		<0.1	-	-
			Bromomethane	mg/kg	1		<1	-	-
			Chloroethane	mg/kg	1		<1	-	-
			Trichlorofluoromethane	mg/kg	1		<1	-	-
			Iodomethane	mg/kg	5		<5	-	-
			1,1-dichloroethene	mg/kg	0.1		<0.1	5	76
			Dichloromethane (Methylene chloride)	mg/kg	0.5		<0.5	-	-
			Allyl chloride	mg/kg	0.1		<0.1	-	-
			trans-1,2-dichloroethene	mg/kg	0.1		<0.1	-	-
			1,1-dichloroethane	mg/kg	0.1		<0.1	-	-
			cis-1,2-dichloroethene	mg/kg	0.1		<0.1	-	-
			Bromochloromethane	mg/kg	0.1		<0.1	-	-
			1,2-dichloroethane	mg/kg	0.1		<0.1	5	79
			1,1,1-trichloroethane	mg/kg	0.1		<0.1	-	-
			1,1-dichloropropene	mg/kg	0.1		<0.1	-	-
			Carbon tetrachloride	mg/kg	0.1		<0.1	-	-
			Dibromomethane	mg/kg	0.1		<0.1	-	-
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1		<0.1	5	75
			1,1,2-trichloroethane	mg/kg	0.1		<0.1	-	-
			1,3-dichloropropane	mg/kg	0.1		<0.1	-	-
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1		<0.1	-	-
			1,1,1,2-tetrachloroethane	mg/kg	0.1		<0.1	-	-
			cis-1,4-dichloro-2-butene	mg/kg	1		<1	-	-
			1,1,2,2-tetrachloroethane	mg/kg	0.1		<0.1	-	-
			1,2,3-trichloropropane	mg/kg	0.1		<0.1	-	-
			trans-1,4-dichloro-2-butene	mg/kg	1		<1	-	-
			1,2-dibromo-3-chloropropane	mg/kg	0.1		<0.1	-	-
			Hexachlorobutadiene	mg/kg	0.1		<0.1	-	-
		Halogenated	Chlorobenzene	mg/kg	0.1		<0.1	5	88
		Aromatics	Bromobenzene	mg/kg	0.1		<0.1	-	-
			2-chlorotoluene	mg/kg	0.1		<0.1	-	-
			4-chlorotoluene	mg/kg	0.1		<0.1	-	-
			1,3-dichlorobenzene	mg/kg	0.1		<0.1	-	-
			1,4-dichlorobenzene	mg/kg	0.1		<0.1	-	-
			1,2-dichlorobenzene	mg/kg	0.1		<0.1	-	-
			1,2,4-trichlorobenzene	mg/kg	0.1		<0.1	-	-
			1,2,3-trichlorobenzene	mg/kg	0.1		<0.1	-	-
		Monocyclic	Benzene	mg/kg	0.1		<0.1	5	80
		Aromatic	Toluene	mg/kg	0.1		<0.1	5	79
			Ethylbenzene	mg/kg	0.1		<0.1	5	75
			m/p-xylene	mg/kg	0.2		<0.2	10	76
			o-xylene	mg/kg	0.1		<0.1	5	77
			Styrene (Vinyl benzene)	mg/kg	0.1		<0.1	-	-
			Isopropylbenzene (Cumene)	mg/kg	0.1		<0.1	-	-
			n-propylbenzene	mg/kg	0.1		<0.1	-	-
			1,3,5-trimethylbenzene	mg/kg	0.1		<0.1	-	-
			tert-butylbenzene	mg/kg	0.1		<0.1	-	-
			1,2,4-trimethylbenzene	mg/kg	0.1		<0.1	-	-
			sec-butylbenzene	mg/kg	0.1		<0.1	-	-
			p-isopropyltoluene	mg/kg	0.1		<0.1	-	-
			n-butylbenzene	mg/kg	0.1		<0.1	-	-
		Nitrogenous	Acrylonitrile	mg/kg	0.1		<0.1	-	-
		Compounds	2-nitropropane	mg/kg	10		<10	-	-
		Oxygenated	Acetone (2-propanone)	mg/kg	10		<10	-	-
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1		<0.1	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

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VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207912.029	LB202968.025	Oxygenated Compounds	Vinyl acetate	mg/kg	10		<10	-	-
			MEK (2-butanone)	mg/kg	10		<10	-	-
			MIBK (4-methyl-2-pentanone)	mg/kg	1		<1	-	-
			2-hexanone (MBK)	mg/kg	5		<5	-	-
		Polycyclic	Naphthalene	mg/kg	0.1		<0.1	-	-
		Sulphonated	Carbon disulfide	mg/kg	0.5		<0.5	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-		9.6	10	93
			d8-toluene (Surrogate)	mg/kg	-		9.2	10	90
			Bromofluorobenzene (Surrogate)	mg/kg	-		6.9	10	61
		Totals	Total Xylenes	mg/kg	0.3		<0.3	-	-
			Total BTEX	mg/kg	0.6		<0.6	-	-
			Total VOC*	mg/kg	24		<24	-	-
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3		<3.0	-	-
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8		<1.8	-	-
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8		<1.8	-	-
		Trihalomethanes	Chloroform	mg/kg	0.1		<0.1	5	78
			Bromodichloromethane	mg/kg	0.1		<0.1	-	-
			Chlorodibromomethane	mg/kg	0.1		<0.1	-	-
			Bromoform	mg/kg	0.1		<0.1	-	-
SE207912.054	LB202969.004	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	-	-
			Chloromethane	mg/kg	1	<1	<1	-	-
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	-	-
			Bromomethane	mg/kg	1	<1	<1	-	-
			Chloroethane	mg/kg	1	<1	<1	-	-
			Trichlorofluoromethane	mg/kg	1	<1	<1	-	-
			Iodomethane	mg/kg	5	<5	<5	-	-
			1,1-dichloroethene	mg/kg	0.1	5.3	<0.1	5	105
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	-	-
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloroethane	mg/kg	0.1	5.8	<0.1	5	116
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	-	-
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	5.8	<0.1	5	116
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	-	-
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	5.4	<0.1	5	108
			Bromobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-

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VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207912.054	LB202969.004	Halogenated	1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Aromatics	1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Monocyclic	Benzene	mg/kg	0.1	5.6	<0.1	5	112
		Aromatic	Toluene	mg/kg	0.1	5.4	<0.1	5	107
			Ethylbenzene	mg/kg	0.1	5.4	<0.1	5	107
			m/p-xylene	mg/kg	0.2	11	<0.2	10	106
			o-xylene	mg/kg	0.1	5.2	<0.1	5	105
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	-	-
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	-	-
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	-	-
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	-	-
		Compounds	2-nitropropane	mg/kg	10	<10	<10	-	-
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	-	-
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	-	-
			Vinyl acetate	mg/kg	10	<10	<10	-	-
			MEK (2-butanone)	mg/kg	10	<10	<10	-	-
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	-	-
			2-hexanone (MBK)	mg/kg	5	<5	<5	-	-
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.9	10.9	10	99
			d8-toluene (Surrogate)	mg/kg	-	9.6	10.2	10	96
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.4	10.4	10	94
		Totals	Total Xylenes	mg/kg	0.3	16	<0.3	-	-
			Total BTEX	mg/kg	0.6	32	<0.6	-	-
			Total VOC*	mg/kg	24	62	<24	-	-
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	-	-
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	28	<1.8	-	-
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	28	<1.8	-	-
		Trihalometha	Chloroform	mg/kg	0.1	5.6	<0.1	5	112
		nes	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Bromoform	mg/kg	0.1	<0.1	<0.1	-	-

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207912.001	LB202967.004		TRH C6-C10	mg/kg	25	97	<25	92.5	105
			TRH C6-C9	mg/kg	20	84	<20	80	105
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.3	8.0	10	93
			d8-toluene (Surrogate)	mg/kg	-	7.7	8.1	10	77
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.0	8.0	-	80
		VPH F	Benzene (F0)	mg/kg	0.1	4.8	<0.1	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	69	<25	62.5	111
SE207912.028	LB202968.004		TRH C6-C10	mg/kg	25	74	<25	92.5	79
			TRH C6-C9	mg/kg	20	64	<20	80	79
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.3	9.7	10	103
			d8-toluene (Surrogate)	mg/kg	-	9.9	9.3	10	99
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.8	7.0	-	68
		VPH F	Benzene (F0)	mg/kg	0.1	3.8	<0.1	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	49	<25	62.5	78
SE207912.029	LB202968.024		TRH C6-C10	mg/kg	25		<25	92.5	78
			TRH C6-C9	mg/kg	20		<20	80	77
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-		9.6	10	93
			d8-toluene (Surrogate)	mg/kg	-		9.2	10	90
			Bromofluorobenzene (Surrogate)	mg/kg	-		6.9	-	61

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207912.029	LB202968.024	VPH F	Benzene (F0)	mg/kg	0.1		<0.1	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25		<25	62.5	77
SE207912.054	LB202969.004		TRH C6-C10	mg/kg	25	64	<25	92.5	69
			TRH C6-C9	mg/kg	20	59	<20	80	74
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.9	10.9	10	99
			d8-toluene (Surrogate)	mg/kg	-	9.6	10.2	10	96
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.4	10.4	-	94
		VPH F	Benzene (F0)	mg/kg	0.1	5.6	<0.1	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	32	<25	62.5	51 ④

MATRIX SPIKE DUPLICATES

SE207912 R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client only. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

This test report shall not be reproduced, except in full.

000677

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☑ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ AUCKLAND: 69 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2500

CLIENT:	CHA
PROJECT:	Randwick Barracks
PROJECT NUMBER:	610.30041
PROJECT MANAGER:	[redacted]
PM CONTACT No:	
LABORATORY:	SGS
LABORATORY ADDRESS:	SYD
SAMPLER:	[redacted]
SAMPLER CONTACT No:	
Email Reports and Invoices to:	LGR340@slrconsulting.com

Turnaround Time (TAT)

☑ Standard TAT

☐ Non Standard or Urgent TAT

Required TAT:

COC Number 1 of 3

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	Hold	Additional Information (Comment on any gross contamination or specific requirements)
1	0407_TP06_0.1_200623	23/6/20	Soil	bag	X		
2	0407_TP06_0.5_200623				X		
	0407_TP06_1.0_200623					X	
3	0407_TP05_0.1_200623			bag	X		
	0407_TP105_0.5_200623					X	
4	0407_TP105_1.0_200623				X		
	0407_TP104_0.1_200623			bag		X	
5	0407_TP104_0.5_200623				X		
6	0407_TP104_1.0_200623				X		
7	0407_TP94_0.1_200623			bag	X		
8	0407_TP94_0.5_200623				X		
	0407_TP94_1.0_200623					X	

SGS EHS Sydney COC

SE207911

[redacted]

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	**Received by**	Sign [redacted]	Date / Time 23/06/20	**Temperature Received:**
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time @ 1430	5.4 C
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

000678

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

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- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4749
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☑ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Stuart Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT:	DHA	LABORATORY:	SGS
PROJECT:	Randwick Barracks	LABORATORY ADDRESS:	540
PROJECT NUMBER:	610.30041	SAMPLER:	[redacted]
PROJECT MANAGER:	[redacted]	SAMPLER CONTACT No:	
PM CONTACT No:		Email Reports and Invoices to:	LABSYD@slrconsulting.com

Turnaround Time (TAT): ☑ Standard TAT ☐ Non Standard or Urgent TAT — Required TAT:

COC Number: 2 of 3

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: Suite A	Hold	Additional Information (Comment on any gross contamination or specific requirements)
9	C407_TP95_0.1_200623	23.6.20	Soil	bag	X		
	C407_TP95_0.5_200623					X	
10	C407_TP95_1.0_200623				X		
11	C407_TP96_0.1_200623			bag	X		
12	C407_TP96_0.5_200623				X		
	C407_TP96_1.0_200623					X	
13	C407_TP97_0.1_200623			bag	X	X	
14	C407_TP97_0.5_200623				X	X	
	C407_TP97_1.0_200623					X	
15	C407_TP85_0.1_200623			bag	X		
16	C407_TP85_0.5_200623				X		
17	C407_TP85_1.0_200623					X	

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	Received by	Sign [redacted]	Date / Time	23/06/20	Temperature Received:
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	16:30	5.4°C
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time		

000679

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CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

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- ☐ NELSON: 8/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT:	DHA	LABORATORY:	SGS
PROJECT:	Randwick Barracks	LABORATORY ADDRESS:	340
PROJECT NUMBER:	610.30041	SAMPLER:	[redacted]
PROJECT MANAGER:	[redacted]	SAMPLER CONTACT No:	
PM CONTACT No:		Email Reports and Invoices to:	LGA34D@slrconsulting.com

Turnaround Time (TAT): ☑ Standard TAT ☐ Non Standard or Urgent TAT — Required TAT:

COC Number: 3 of 3

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	PFAS	Hold	Additional Information (Comment on any gross contamination or specific requirements)
17	0407_TP86-0.1_200623	23/6/20	soil	bag	X			
18	0407_TP86_0.5_200623				X			
	0407_TP86_1.0_200623						X	
19	0407_TP87_0.1_200623			bag	X			
20	0407_TP87_0.5_200623				X			
	0407_TP87_1.0_200623						X	
21	0407_QC139_200623				X	X		
22	0407_QC144_200623				X	X		
23	0407_QC147_200623				X	X		
	0407_QC239_200623 *							
	0407_QC244_200623 *			*				
	0407_QC247_200623 *							

Please forward to Eurofins for Suite A and PFAS

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	Received by	Sign [redacted]	Date / Time 23/06/20	Temperature Received:
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time @ 11:50	5.4
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

SAMPLE RECEIPT ADVICE

SE207911

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000677--00679**
Samples	23

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Tue 23/6/2020
Report Due	Wed 1/7/2020
SGS Reference	**SE207911**

SUBMISSION DETAILS

This is to confirm that 23 samples were received on Tuesday 23/6/2020. Results are expected to be ready by COB Wednesday 1/7/2020.
Please quote SGS reference SE207911 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	23 Soil
Date documentation received	23/6/2020	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	5.4°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

10 samples have been placed on hold as no tests have been assigned for them by the client. These samples will not be processed.
PFAS subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420.

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SAMPLE RECEIPT ADVICE

SE207911

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	Speciated Phenols in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
001	0407_TP106_0.1_200623	29	14	26	11	18	10	81	7
002	0407_TP106_0.5_200623	29	14	26	11	18	10	81	7
003	0407_TP105_0.1_200623	29	14	26	11	18	10	81	7
004	0407_TP105_1.0_200623	29	14	26	11	18	10	81	7
005	0407_TP104_0.5_200623	29	14	26	11	18	10	81	7
006	0407_TP104_1.0_200623	29	14	26	11	18	10	81	7
007	0407_TP94_0.1_200623	29	14	26	11	18	10	81	7
008	0407_TP94_0.5_200623	29	14	26	11	18	10	81	7
009	0407_TP95_0.1_200623	29	14	26	11	18	10	81	7
010	0407_TP95_1.0_200623	29	14	26	11	18	10	81	7
011	0407_TP96_0.1_200623	29	14	26	11	18	10	81	7
012	0407_TP96_0.5_200623	29	14	26	11	18	10	81	7
013	0407_TP97_0.1_200623	29	14	26	11	18	10	81	7
014	0407_TP97_0.5_200623	29	14	26	11	18	10	81	7
015	0407_TP85_0.1_200623	29	14	26	11	18	10	81	7
016	0407_TP85_0.5_200623	29	14	26	11	18	10	81	7
017	0407_TP86_0.1_200623	29	14	26	11	18	10	81	7
018	0407_TP86_0.5_200623	29	14	26	11	18	10	81	7
019	0407_TP87_0.1_200623	29	14	26	11	18	10	81	7
020	0407_TP87_0.5_200623	29	14	26	11	18	10	81	7
021	0407_QC139_200623	29	14	26	11	18	10	81	7
022	0407_QC144_200623	29	14	26	11	18	10	81	7
023	0407_QC147_200623	29	14	26	11	18	10	81	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE207911

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Fibre Identification in soil	Gravimetric Determination of Asbestos in Soil	Mercury in Soil	Moisture Content	Per- and Polyfluoroalkyl Substances (PFAS) in	Total Recoverable Elements in Soil/Waste
001	0407_TP106_0.1_200623	2	9	1	1	-	7
002	0407_TP106_0.5_200623	-	-	1	1	-	7
003	0407_TP105_0.1_200623	2	9	1	1	-	7
004	0407_TP105_1.0_200623	-	-	1	1	-	7
005	0407_TP104_0.5_200623	-	-	1	1	-	7
006	0407_TP104_1.0_200623	-	-	1	1	-	7
007	0407_TP94_0.1_200623	2	9	1	1	-	7
008	0407_TP94_0.5_200623	-	-	1	1	-	7
009	0407_TP95_0.1_200623	2	9	1	1	-	7
010	0407_TP95_1.0_200623	-	-	1	1	-	7
011	0407_TP96_0.1_200623	2	9	1	1	-	7
012	0407_TP96_0.5_200623	-	-	1	1	-	7
013	0407_TP97_0.1_200623	2	9	1	1	-	7
014	0407_TP97_0.5_200623	-	-	1	1	-	7
015	0407_TP85_0.1_200623	2	9	1	1	-	7
016	0407_TP85_0.5_200623	-	-	1	1	-	7
017	0407_TP86_0.1_200623	2	9	1	1	-	7
018	0407_TP86_0.5_200623	-	-	1	1	-	7
019	0407_TP87_0.1_200623	2	9	1	1	-	7
020	0407_TP87_0.5_200623	-	-	1	1	-	7
021	0407_QC139_200623	-	-	1	1	55	7
022	0407_QC144_200623	-	-	1	1	55	7
023	0407_QC147_200623	-	-	1	1	55	7

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000677--00679**
Samples	23

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207911 R0**
Date Received	23/6/2020
Date Reported	1/7/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.

Asbestos analysed by Approved Identifier Ravee Sivasubramaniam .

SIGNATORIES

[redacted]

Chemist | Senior Organic Chemist/Metals Chemist | Metals/Inorganics Team Leader

[redacted]

Organic Section Head | Hygiene Team Leader

VOC's in Soil [AN433] Tested: 26/6/2020

PARAMETER	UOM	LOR	0407_TP106_0.1_20(623 SOIL - 23/6/2020 SE207911.001	0407_TP106_0.5_20(623 SOIL - 23/6/2020 SE207911.002	0407_TP105_0.1_20(623 SOIL - 23/6/2020 SE207911.003	0407_TP105_1.0_20(623 SOIL - 23/6/2020 SE207911.004	0407_TP104_0.5_20(623 SOIL - 23/6/2020 SE207911.005
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 26/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP106_0.1_20(623 SOIL - 23/6/2020 SE207911.001	0407_TP106_0.5_20(623 SOIL - 23/6/2020 SE207911.002	0407_TP105_0.1_20(623 SOIL - 23/6/2020 SE207911.003	0407_TP105_1.0_20(623 SOIL - 23/6/2020 SE207911.004	0407_TP104_0.5_20(623 SOIL - 23/6/2020 SE207911.005
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 26/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP104_1.0_20(623 SOIL - 23/6/2020 SE207911.006	0407_TP94_0.1_200(23 SOIL - 23/6/2020 SE207911.007	0407_TP94_0.5_200(23 SOIL - 23/6/2020 SE207911.008	0407_TP95_0.1_200(23 SOIL - 23/6/2020 SE207911.009	0407_TP95_1.0_200(23 SOIL - 23/6/2020 SE207911.010
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 26/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP104_1.0_20(623 SOIL - 23/6/2020 SE207911.006	0407_TP94_0.1_200(23 SOIL - 23/6/2020 SE207911.007	0407_TP94_0.5_200(23 SOIL - 23/6/2020 SE207911.008	0407_TP95_0.1_200(23 SOIL - 23/6/2020 SE207911.009	0407_TP95_1.0_200(23 SOIL - 23/6/2020 SE207911.010
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 26/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP96_0.1_200(23 SOIL - 23/6/2020 SE207911.011	0407_TP96_0.5_200(23 SOIL - 23/6/2020 SE207911.012	0407_TP97_0.1_200(23 SOIL - 23/6/2020 SE207911.013	0407_TP97_0.5_200(23 SOIL - 23/6/2020 SE207911.014	0407_TP85_0.1_200(23 SOIL - 23/6/2020 SE207911.015
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 26/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP96_0.1_200(23 SOIL - 23/6/2020 SE207911.011	0407_TP96_0.5_200(23 SOIL - 23/6/2020 SE207911.012	0407_TP97_0.1_200(23 SOIL - 23/6/2020 SE207911.013	0407_TP97_0.5_200(23 SOIL - 23/6/2020 SE207911.014	0407_TP85_0.1_200(23 SOIL - 23/6/2020 SE207911.015
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 26/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP85_0.5_200(23 SOIL - 23/6/2020 SE207911.016	0407_TP86_0.1_200(23 SOIL - 23/6/2020 SE207911.017	0407_TP86_0.5_200(23 SOIL - 23/6/2020 SE207911.018	0407_TP87_0.1_200(23 SOIL - 23/6/2020 SE207911.019	0407_TP87_0.5_200(23 SOIL - 23/6/2020 SE207911.020
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 26/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP85_0.5_200(23 SOIL - 23/6/2020 SE207911.016	0407_TP86_0.1_200(23 SOIL - 23/6/2020 SE207911.017	0407_TP86_0.5_200(23 SOIL - 23/6/2020 SE207911.018	0407_TP87_0.1_200(23 SOIL - 23/6/2020 SE207911.019	0407_TP87_0.5_200(23 SOIL - 23/6/2020 SE207911.020
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 26/6/2020 (continued)

PARAMETER	UOM	LOR	0407_QC139_20062 SOIL - 23/6/2020 SE207911.021	0407_QC144_20062 SOIL - 23/6/2020 SE207911.022	0407_QC147_20062 SOIL - 23/6/2020 SE207911.023
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1

VOC's in Soil [AN433] Tested: 26/6/2020 (continued)

PARAMETER	UOM	LOR	0407_QC139_20062 SOIL - 23/6/2020 SE207911.021	0407_QC144_20062 SOIL - 23/6/2020 SE207911.022	0407_QC147_20062 SOIL - 23/6/2020 SE207911.023
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 26/6/2020

PARAMETER	UOM	LOR	0407_TP106_0.1_20(623 SOIL - 23/6/2020 SE207911.001	0407_TP106_0.5_20(623 SOIL - 23/6/2020 SE207911.002	0407_TP105_0.1_20(623 SOIL - 23/6/2020 SE207911.003	0407_TP105_1.0_20(623 SOIL - 23/6/2020 SE207911.004	0407_TP104_0.5_20(623 SOIL - 23/6/2020 SE207911.005
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP104_1.0_20(623 SOIL - 23/6/2020 SE207911.006	0407_TP94_0.1_200(23 SOIL - 23/6/2020 SE207911.007	0407_TP94_0.5_200(23 SOIL - 23/6/2020 SE207911.008	0407_TP95_0.1_200(23 SOIL - 23/6/2020 SE207911.009	0407_TP95_1.0_200(23 SOIL - 23/6/2020 SE207911.010
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP96_0.1_200(23 SOIL - 23/6/2020 SE207911.011	0407_TP96_0.5_200(23 SOIL - 23/6/2020 SE207911.012	0407_TP97_0.1_200(23 SOIL - 23/6/2020 SE207911.013	0407_TP97_0.5_200(23 SOIL - 23/6/2020 SE207911.014	0407_TP85_0.1_200(23 SOIL - 23/6/2020 SE207911.015
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP85_0.5_200(23 SOIL - 23/6/2020 SE207911.016	0407_TP86_0.1_200(23 SOIL - 23/6/2020 SE207911.017	0407_TP86_0.5_200(23 SOIL - 23/6/2020 SE207911.018	0407_TP87_0.1_200(23 SOIL - 23/6/2020 SE207911.019	0407_TP87_0.5_200(23 SOIL - 23/6/2020 SE207911.020
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_QC139_20062 SOIL - 23/6/2020 SE207911.021	0407_QC144_20062 SOIL - 23/6/2020 SE207911.022	0407_QC147_20062 SOIL - 23/6/2020 SE207911.023
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 26/6/2020

PARAMETER	UOM	LOR	0407_TP106_0.1_20(623 SOIL - 23/6/2020 SE207911.001	0407_TP106_0.5_20(623 SOIL - 23/6/2020 SE207911.002	0407_TP105_0.1_20(623 SOIL - 23/6/2020 SE207911.003	0407_TP105_1.0_20(623 SOIL - 23/6/2020 SE207911.004	0407_TP104_0.5_20(623 SOIL - 23/6/2020 SE207911.005
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP104_1.0_20(623 SOIL - 23/6/2020 SE207911.006	0407_TP94_0.1_200 23 SOIL - 23/6/2020 SE207911.007	0407_TP94_0.5_200 23 SOIL - 23/6/2020 SE207911.008	0407_TP95_0.1_200 23 SOIL - 23/6/2020 SE207911.009	0407_TP95_1.0_200 23 SOIL - 23/6/2020 SE207911.010
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP96_0.1_200 23 SOIL - 23/6/2020 SE207911.011	0407_TP96_0.5_200 23 SOIL - 23/6/2020 SE207911.012	0407_TP97_0.1_200 23 SOIL - 23/6/2020 SE207911.013	0407_TP97_0.5_200 23 SOIL - 23/6/2020 SE207911.014	0407_TP85_0.1_200 23 SOIL - 23/6/2020 SE207911.015
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 26/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP85_0.5_200(23 SOIL - 23/6/2020 SE207911.016	0407_TP86_0.1_200(23 SOIL - 23/6/2020 SE207911.017	0407_TP86_0.5_200(23 SOIL - 23/6/2020 SE207911.018	0407_TP87_0.1_200(23 SOIL - 23/6/2020 SE207911.019	0407_TP87_0.5_200(23 SOIL - 23/6/2020 SE207911.020
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_QC139_20062: SOIL - 23/6/2020 SE207911.021	0407_QC144_20062: SOIL - 23/6/2020 SE207911.022	0407_QC147_20062: SOIL - 23/6/2020 SE207911.023
TRH C10-C14	mg/kg	20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 26/6/2020

PARAMETER	UOM	LOR	0407_TP106_0.1_20(623 SOIL - 23/6/2020 SE207911.001	0407_TP106_0.5_20(623 SOIL - 23/6/2020 SE207911.002	0407_TP105_0.1_20(623 SOIL - 23/6/2020 SE207911.003	0407_TP105_1.0_20(623 SOIL - 23/6/2020 SE207911.004	0407_TP104_0.5_20(623 SOIL - 23/6/2020 SE207911.005
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PARAMETER	UOM	LOR	0407_TP104_1.0_20(623 SOIL - 23/6/2020 SE207911.006	0407_TP94_0.1_200(23 SOIL - 23/6/2020 SE207911.007	0407_TP94_0.5_200(23 SOIL - 23/6/2020 SE207911.008	0407_TP95_0.1_200(23 SOIL - 23/6/2020 SE207911.009	0407_TP95_1.0_200(23 SOIL - 23/6/2020 SE207911.010
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 26/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP96_0.1_200(23 SOIL - 23/6/2020 SE207911.011	0407_TP96_0.5_200(23 SOIL - 23/6/2020 SE207911.012	0407_TP97_0.1_200(23 SOIL - 23/6/2020 SE207911.013	0407_TP97_0.5_200(23 SOIL - 23/6/2020 SE207911.014	0407_TP85_0.1_200(23 SOIL - 23/6/2020 SE207911.015
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PARAMETER	UOM	LOR	0407_TP85_0.5_200(23 SOIL - 23/6/2020 SE207911.016	0407_TP86_0.1_200(23 SOIL - 23/6/2020 SE207911.017	0407_TP86_0.5_200(23 SOIL - 23/6/2020 SE207911.018	0407_TP87_0.1_200(23 SOIL - 23/6/2020 SE207911.019	0407_TP87_0.5_200(23 SOIL - 23/6/2020 SE207911.020
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 26/6/2020 (continued)

PARAMETER	UOM	LOR	0407_QC139_20062 SOIL - 23/6/2020 SE207911.021	0407_QC144_20062 SOIL - 23/6/2020 SE207911.022	0407_QC147_20062 SOIL - 23/6/2020 SE207911.023
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8

Speciated Phenols in Soil [AN420] Tested: 26/6/2020

PARAMETER	UOM	LOR	0407_TP106_0.1_20(623 SOIL - 23/6/2020 SE207911.001	0407_TP106_0.5_20(623 SOIL - 23/6/2020 SE207911.002	0407_TP105_0.1_20(623 SOIL - 23/6/2020 SE207911.003	0407_TP105_1.0_20(623 SOIL - 23/6/2020 SE207911.004	0407_TP104_0.5_20(623 SOIL - 23/6/2020 SE207911.005
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_TP104_1.0_20(623 SOIL - 23/6/2020 SE207911.006	0407_TP94_0.1_200(23 SOIL - 23/6/2020 SE207911.007	0407_TP94_0.5_200(23 SOIL - 23/6/2020 SE207911.008	0407_TP95_0.1_200(23 SOIL - 23/6/2020 SE207911.009	0407_TP95_1.0_200(23 SOIL - 23/6/2020 SE207911.010
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

Speciated Phenols in Soil [AN420] Tested: 26/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP96_0.1_200(23 SOIL - 23/6/2020 SE207911.011	0407_TP96_0.5_200(23 SOIL - 23/6/2020 SE207911.012	0407_TP97_0.1_200(23 SOIL - 23/6/2020 SE207911.013	0407_TP97_0.5_200(23 SOIL - 23/6/2020 SE207911.014	0407_TP85_0.1_200(23 SOIL - 23/6/2020 SE207911.015
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_TP85_0.5_200(23 SOIL - 23/6/2020 SE207911.016	0407_TP86_0.1_200(23 SOIL - 23/6/2020 SE207911.017	0407_TP86_0.5_200(23 SOIL - 23/6/2020 SE207911.018	0407_TP87_0.1_200(23 SOIL - 23/6/2020 SE207911.019	0407_TP87_0.5_200(23 SOIL - 23/6/2020 SE207911.020
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

Speciated Phenols in Soil [AN420] Tested: 26/6/2020 (continued)

PARAMETER	UOM	LOR	0407_QC139_20062 SOIL - 23/6/2020 SE207911.021	0407_QC144_20062 SOIL - 23/6/2020 SE207911.022	0407_QC147_20062 SOIL - 23/6/2020 SE207911.023
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2

OC Pesticides in Soil [AN420] Tested: 26/6/2020

PARAMETER	UOM	LOR	0407_TP106_0.1_20(623 SOIL - 23/6/2020 SE207911.001	0407_TP106_0.5_20(623 SOIL - 23/6/2020 SE207911.002	0407_TP105_0.1_20(623 SOIL - 23/6/2020 SE207911.003	0407_TP105_1.0_20(623 SOIL - 23/6/2020 SE207911.004	0407_TP104_0.5_20(623 SOIL - 23/6/2020 SE207911.005
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 26/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP104_1.0_20(623 SOIL - 23/6/2020 SE207911.006	0407_TP94_0.1_200(23 SOIL - 23/6/2020 SE207911.007	0407_TP94_0.5_200(23 SOIL - 23/6/2020 SE207911.008	0407_TP95_0.1_200(23 SOIL - 23/6/2020 SE207911.009	0407_TP95_1.0_200(23 SOIL - 23/6/2020 SE207911.010
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 26/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP96_0.1_200(23 SOIL - 23/6/2020 SE207911.011	0407_TP96_0.5_200(23 SOIL - 23/6/2020 SE207911.012	0407_TP97_0.1_200(23 SOIL - 23/6/2020 SE207911.013	0407_TP97_0.5_200(23 SOIL - 23/6/2020 SE207911.014	0407_TP85_0.1_200(23 SOIL - 23/6/2020 SE207911.015
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 26/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP85_0.5_200(23 SOIL - 23/6/2020 SE207911.016	0407_TP86_0.1_200(23 SOIL - 23/6/2020 SE207911.017	0407_TP86_0.5_200(23 SOIL - 23/6/2020 SE207911.018	0407_TP87_0.1_200(23 SOIL - 23/6/2020 SE207911.019	0407_TP87_0.5_200(23 SOIL - 23/6/2020 SE207911.020
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 26/6/2020 (continued)

PARAMETER	UOM	LOR	0407_QC139_20062 SOIL - 23/6/2020 SE207911.021	0407_QC144_20062 SOIL - 23/6/2020 SE207911.022	0407_QC147_20062 SOIL - 23/6/2020 SE207911.023
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1

OP Pesticides in Soil [AN420] Tested: 26/6/2020

PARAMETER	UOM	LOR	0407_TP106_0.1_20(623 SOIL - 23/6/2020 SE207911.001	0407_TP106_0.5_20(623 SOIL - 23/6/2020 SE207911.002	0407_TP105_0.1_20(623 SOIL - 23/6/2020 SE207911.003	0407_TP105_1.0_20(623 SOIL - 23/6/2020 SE207911.004	0407_TP104_0.5_20(623 SOIL - 23/6/2020 SE207911.005
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP104_1.0_20(623 SOIL - 23/6/2020 SE207911.006	0407_TP94_0.1_200(23 SOIL - 23/6/2020 SE207911.007	0407_TP94_0.5_200(23 SOIL - 23/6/2020 SE207911.008	0407_TP95_0.1_200(23 SOIL - 23/6/2020 SE207911.009	0407_TP95_1.0_200(23 SOIL - 23/6/2020 SE207911.010
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP96_0.1_200(23 SOIL - 23/6/2020 SE207911.011	0407_TP96_0.5_200(23 SOIL - 23/6/2020 SE207911.012	0407_TP97_0.1_200(23 SOIL - 23/6/2020 SE207911.013	0407_TP97_0.5_200(23 SOIL - 23/6/2020 SE207911.014	0407_TP85_0.1_200(23 SOIL - 23/6/2020 SE207911.015
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

OP Pesticides in Soil [AN420] Tested: 26/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP85_0.5_200(23 SOIL - 23/6/2020 SE207911.016	0407_TP86_0.1_200(23 SOIL - 23/6/2020 SE207911.017	0407_TP86_0.5_200(23 SOIL - 23/6/2020 SE207911.018	0407_TP87_0.1_200(23 SOIL - 23/6/2020 SE207911.019	0407_TP87_0.5_200(23 SOIL - 23/6/2020 SE207911.020
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_QC139_20062 SOIL - 23/6/2020 SE207911.021	0407_QC144_20062 SOIL - 23/6/2020 SE207911.022	0407_QC147_20062 SOIL - 23/6/2020 SE207911.023
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7

PCBs in Soil [AN420] Tested: 26/6/2020

PARAMETER	UOM	LOR	0407_TP106_0.1_20(623 SOIL - 23/6/2020 SE207911.001	0407_TP106_0.5_20(623 SOIL - 23/6/2020 SE207911.002	0407_TP105_0.1_20(623 SOIL - 23/6/2020 SE207911.003	0407_TP105_1.0_20(623 SOIL - 23/6/2020 SE207911.004	0407_TP104_0.5_20(623 SOIL - 23/6/2020 SE207911.005
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP104_1.0_20(623 SOIL - 23/6/2020 SE207911.006	0407_TP94_0.1_200(23 SOIL - 23/6/2020 SE207911.007	0407_TP94_0.5_200(23 SOIL - 23/6/2020 SE207911.008	0407_TP95_0.1_200(23 SOIL - 23/6/2020 SE207911.009	0407_TP95_1.0_200(23 SOIL - 23/6/2020 SE207911.010
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP96_0.1_200(23 SOIL - 23/6/2020 SE207911.011	0407_TP96_0.5_200(23 SOIL - 23/6/2020 SE207911.012	0407_TP97_0.1_200(23 SOIL - 23/6/2020 SE207911.013	0407_TP97_0.5_200(23 SOIL - 23/6/2020 SE207911.014	0407_TP85_0.1_200(23 SOIL - 23/6/2020 SE207911.015
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PCBs in Soil [AN420] Tested: 26/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP85_0.5_200(23 SOIL - 23/6/2020 SE207911.016	0407_TP86_0.1_200(23 SOIL - 23/6/2020 SE207911.017	0407_TP86_0.5_200(23 SOIL - 23/6/2020 SE207911.018	0407_TP87_0.1_200(23 SOIL - 23/6/2020 SE207911.019	0407_TP87_0.5_200(23 SOIL - 23/6/2020 SE207911.020
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_QC139_20062 SOIL - 23/6/2020 SE207911.021	0407_QC144_20062 SOIL - 23/6/2020 SE207911.022	0407_QC147_20062 SOIL - 23/6/2020 SE207911.023
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 26/6/2020

PARAMETER	UOM	LOR	0407_TP106_0.1_20(623 SOIL - 23/6/2020 SE207911.001	0407_TP106_0.5_20(623 SOIL - 23/6/2020 SE207911.002	0407_TP105_0.1_20(623 SOIL - 23/6/2020 SE207911.003	0407_TP105_1.0_20(623 SOIL - 23/6/2020 SE207911.004	0407_TP104_0.5_20(623 SOIL - 23/6/2020 SE207911.005
Arsenic, As	mg/kg	1	2	<1	<1	2	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	6.7	1.1	1.3	1.8	0.9
Copper, Cu	mg/kg	0.5	4.8	<0.5	<0.5	<0.5	<0.5
Lead, Pb	mg/kg	1	14	<1	<1	<1	<1
Nickel, Ni	mg/kg	0.5	4.6	0.9	0.7	1.0	0.6
Zinc, Zn	mg/kg	2	31	<2.0	<2.0	<2.0	<2.0

PARAMETER	UOM	LOR	0407_TP104_1.0_20(623 SOIL - 23/6/2020 SE207911.006	0407_TP94_0.1_200(23 SOIL - 23/6/2020 SE207911.007	0407_TP94_0.5_200(23 SOIL - 23/6/2020 SE207911.008	0407_TP95_0.1_200(23 SOIL - 23/6/2020 SE207911.009	0407_TP95_1.0_200(23 SOIL - 23/6/2020 SE207911.010
Arsenic, As	mg/kg	1	2	<1	1	<1	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	2.4	1.0	1.1	0.9	1.1
Copper, Cu	mg/kg	0.5	<0.5	<0.5	<0.5	3.0	<0.5
Lead, Pb	mg/kg	1	<1	<1	1	8	<1
Nickel, Ni	mg/kg	0.5	1.3	0.9	0.9	<0.5	1.1
Zinc, Zn	mg/kg	2	<2.0	<2.0	<2.0	41	<2.0

PARAMETER	UOM	LOR	0407_TP96_0.1_200(23 SOIL - 23/6/2020 SE207911.011	0407_TP96_0.5_200(23 SOIL - 23/6/2020 SE207911.012	0407_TP97_0.1_200(23 SOIL - 23/6/2020 SE207911.013	0407_TP97_0.5_200(23 SOIL - 23/6/2020 SE207911.014	0407_TP85_0.1_200(23 SOIL - 23/6/2020 SE207911.015
Arsenic, As	mg/kg	1	<1	1	1	<1	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	0.6	1.2	3.9	<0.5	0.6
Copper, Cu	mg/kg	0.5	2.3	<0.5	18	0.5	5.9
Lead, Pb	mg/kg	1	6	<1	78	1	7
Nickel, Ni	mg/kg	0.5	<0.5	1.2	1.9	<0.5	<0.5
Zinc, Zn	mg/kg	2	33	<2.0	45	3.2	43

PARAMETER	UOM	LOR	0407_TP85_0.5_200(23 SOIL - 23/6/2020 SE207911.016	0407_TP86_0.1_200(23 SOIL - 23/6/2020 SE207911.017	0407_TP86_0.5_200(23 SOIL - 23/6/2020 SE207911.018	0407_TP87_0.1_200(23 SOIL - 23/6/2020 SE207911.019	0407_TP87_0.5_200(23 SOIL - 23/6/2020 SE207911.020
Arsenic, As	mg/kg	1	<1	<1	<1	<1	2
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	4.0
Copper, Cu	mg/kg	0.5	<0.5	<0.5	<0.5	0.5	<0.5
Lead, Pb	mg/kg	1	<1	<1	<1	2	1
Nickel, Ni	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	1.3
Zinc, Zn	mg/kg	2	<2.0	<2.0	<2.0	2.8	<2.0

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 26/6/2020

(continued)

PARAMETER	UOM	LOR	0407_QC139_20062 SOIL - 23/6/2020 SE207911.021	0407_QC144_20062 SOIL - 23/6/2020 SE207911.022	0407_QC147_20062 SOIL - 23/6/2020 SE207911.023
Arsenic, As	mg/kg	1	<1	<1	**1**
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	**0.7**	**0.9**	**1.0**
Copper, Cu	mg/kg	0.5	<0.5	**3.0**	<0.5
Lead, Pb	mg/kg	1	<1	**8**	<1
Nickel, Ni	mg/kg	0.5	<0.5	<0.5	**0.8**
Zinc, Zn	mg/kg	2	<2.0	**38**	<2.0

Mercury in Soil [AN312] Tested: 26/6/2020

PARAMETER	UOM	LOR	0407_TP106_0.1_20(623 SOIL - 23/6/2020 SE207911.001	0407_TP106_0.5_20(623 SOIL - 23/6/2020 SE207911.002	0407_TP105_0.1_20(623 SOIL - 23/6/2020 SE207911.003	0407_TP105_1.0_20(623 SOIL - 23/6/2020 SE207911.004	0407_TP104_0.5_20(623 SOIL - 23/6/2020 SE207911.005
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_TP104_1.0_20(623 SOIL - 23/6/2020 SE207911.006	0407_TP94_0.1_200(23 SOIL - 23/6/2020 SE207911.007	0407_TP94_0.5_200(23 SOIL - 23/6/2020 SE207911.008	0407_TP95_0.1_200(23 SOIL - 23/6/2020 SE207911.009	0407_TP95_1.0_200(23 SOIL - 23/6/2020 SE207911.010
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_TP96_0.1_200(23 SOIL - 23/6/2020 SE207911.011	0407_TP96_0.5_200(23 SOIL - 23/6/2020 SE207911.012	0407_TP97_0.1_200(23 SOIL - 23/6/2020 SE207911.013	0407_TP97_0.5_200(23 SOIL - 23/6/2020 SE207911.014	0407_TP85_0.1_200(23 SOIL - 23/6/2020 SE207911.015
Mercury	mg/kg	0.05	<0.05	<0.05	**0.52**	<0.05	<0.05

PARAMETER	UOM	LOR	0407_TP85_0.5_200(23 SOIL - 23/6/2020 SE207911.016	0407_TP86_0.1_200(23 SOIL - 23/6/2020 SE207911.017	0407_TP86_0.5_200(23 SOIL - 23/6/2020 SE207911.018	0407_TP87_0.1_200(23 SOIL - 23/6/2020 SE207911.019	0407_TP87_0.5_200(23 SOIL - 23/6/2020 SE207911.020
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_QC139_20062 SOIL - 23/6/2020 SE207911.021	0407_QC144_20062 SOIL - 23/6/2020 SE207911.022	0407_QC147_20062 SOIL - 23/6/2020 SE207911.023
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05

Moisture Content [AN002] Tested: 26/6/2020

PARAMETER	UOM	LOR	0407_TP106_0.1_20(623 SOIL - 23/6/2020 SE207911.001	0407_TP106_0.5_20(623 SOIL - 23/6/2020 SE207911.002	0407_TP105_0.1_20(623 SOIL - 23/6/2020 SE207911.003	0407_TP105_1.0_20(623 SOIL - 23/6/2020 SE207911.004	0407_TP104_0.5_20(623 SOIL - 23/6/2020 SE207911.005
% Moisture	%w/w	1	9.3	2.5	3.5	6.2	2.3

PARAMETER	UOM	LOR	0407_TP104_1.0_20(623 SOIL - 23/6/2020 SE207911.006	0407_TP94_0.1_200(23 SOIL - 23/6/2020 SE207911.007	0407_TP94_0.5_200(23 SOIL - 23/6/2020 SE207911.008	0407_TP95_0.1_200(23 SOIL - 23/6/2020 SE207911.009	0407_TP95_1.0_200(23 SOIL - 23/6/2020 SE207911.010
% Moisture	%w/w	1	5.4	3.6	2.8	4.1	3.8

PARAMETER	UOM	LOR	0407_TP96_0.1_200(23 SOIL - 23/6/2020 SE207911.011	0407_TP96_0.5_200(23 SOIL - 23/6/2020 SE207911.012	0407_TP97_0.1_200(23 SOIL - 23/6/2020 SE207911.013	0407_TP97_0.5_200(23 SOIL - 23/6/2020 SE207911.014	0407_TP85_0.1_200(23 SOIL - 23/6/2020 SE207911.015
% Moisture	%w/w	1	<1.0	2.2	6.1	3.5	4.3

PARAMETER	UOM	LOR	0407_TP85_0.5_200(23 SOIL - 23/6/2020 SE207911.016	0407_TP86_0.1_200(23 SOIL - 23/6/2020 SE207911.017	0407_TP86_0.5_200(23 SOIL - 23/6/2020 SE207911.018	0407_TP87_0.1_200(23 SOIL - 23/6/2020 SE207911.019	0407_TP87_0.5_200(23 SOIL - 23/6/2020 SE207911.020
% Moisture	%w/w	1	2.7	4.8	4.7	14.2	3.5

PARAMETER	UOM	LOR	0407_QC139_20062: SOIL - 23/6/2020 SE207911.021	0407_QC144_20062: SOIL - 23/6/2020 SE207911.022	0407_QC147_20062: SOIL - 23/6/2020 SE207911.023
% Moisture	%w/w	1	3.2	4.2	2.6

Fibre Identification in soil [AN602] Tested: 30/6/2020

PARAMETER	UOM	LOR	0407_TP106_0.1_20(623 SOIL - 23/6/2020 SE207911.001	0407_TP105_0.1_20(623 SOIL - 23/6/2020 SE207911.003	0407_TP94_0.1_200(23 SOIL - 23/6/2020 SE207911.007	0407_TP95_0.1_200(23 SOIL - 23/6/2020 SE207911.009	0407_TP96_0.1_200(23 SOIL - 23/6/2020 SE207911.011
Asbestos Detected	No unit	-	No	No	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	0407_TP97_0.1_200(23 SOIL - 23/6/2020 SE207911.013	0407_TP85_0.1_200(23 SOIL - 23/6/2020 SE207911.015	0407_TP86_0.1_200(23 SOIL - 23/6/2020 SE207911.017	0407_TP87_0.1_200(23 SOIL - 23/6/2020 SE207911.019
Asbestos Detected	No unit	-	No	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 30/6/2020

PARAMETER	UOM	LOR	0407_TP106_0.1_20(623 SOIL - 23/6/2020 SE207911.001	0407_TP105_0.1_20(623 SOIL - 23/6/2020 SE207911.003	0407_TP94_0.1_200(23 SOIL - 23/6/2020 SE207911.007	0407_TP95_0.1_200(23 SOIL - 23/6/2020 SE207911.009	0407_TP96_0.1_200(23 SOIL - 23/6/2020 SE207911.011
Total Sample Weight*	g	1	**687**	**629**	**712**	**813**	**740**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP97_0.1_200(23 SOIL - 23/6/2020 SE207911.013	0407_TP85_0.1_200(23 SOIL - 23/6/2020 SE207911.015	0407_TP86_0.1_200(23 SOIL - 23/6/2020 SE207911.017	0407_TP87_0.1_200(23 SOIL - 23/6/2020 SE207911.019
Total Sample Weight*	g	1	**605**	**695**	**732**	**750**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level [MA-1523] Tested: 1/7/2020

PARAMETER	UOM	LOR	0407_QC139_20062 SOIL - 23/6/2020 SE207911.021	0407_QC144_20062 SOIL - 23/6/2020 SE207911.022	0407_QC147_20062 SOIL - 23/6/2020 SE207911.023
Perfluorobutanoic acid (PFBA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0005	<0.0005	<0.0005	<0.0005
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluorononanoic acid (PFNA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluorodecanoic acid (PFDA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Sum PFOS and PFHXS	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluorononane sulfonate (PFNS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.001	<0.001	<0.001	<0.001
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.001	<0.001	<0.001	<0.001
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.001	<0.001	<0.001	<0.001
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.001	<0.001	<0.001	<0.001
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.001	<0.001	<0.001	<0.001
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.001	<0.001	<0.001	<0.001
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002	<0.002	<0.002	<0.002
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002	<0.002	<0.002	<0.002
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.001	<0.001	<0.001	<0.001
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.001	<0.001	<0.001	<0.001

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid, mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents .
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples, Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.
AN605	This technique gravimetrically determines the mass of Bonded Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight. Any fibrous asbestos (FA) found in this fraction will be added to the 2-7mm fraction and its mass recorded there.

AN605	This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free/respirable fibres which are only observed by standard trace analysis as per AN602.
AN605	Bonded asbestos containing material (Bonded ACM) comprises asbestos-containing-material which is sound in condition. Fibrous asbestos (FA) comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material. Asbestos fines (AF) includes free fibres, small fibre bundles and also small fragments of bonded ACM that passes through a 7mm sieve - which implies that the bonded ACM fragments have a substantial degree of damage which increases the potential for fibre release.
AN-605	Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009 and NEPM 1999 (2013) schedule B1 section 4..
MA-1523	This method covers the analysis of per- and polyfluoroalkyl substances (PFAS) in aqueous, solid and biosolid samples and solvent extracts, determined as the total of linear and branched isomers. After spiking with isotopically labelled quantification surrogates and clean-up via SPE cartridges sample extracts are analysed by liquid chromatography/mass spectrometry (LC-MS/MS). PFAS concentrations are determined by isotope dilution quantification.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000677--00679**
Samples	9

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207911 R0**
Date Received	23 Jun 2020
Date Reported	01 Jul 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.

Asbestos analysed by Approved Identifier Ravee Sivasubramaniam .

SIGNATORIES

[redacted]

Chemist Senior Organic Chemist/Metals Chemis Organic Section Head

[redacted]

Hygiene Team Leader

RESULTS

Fibre Identification in soil — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE207911.001	0407_TP106_0.1_200623	Soil	687g Clay,Sand,Cement Mixture	23 Jun 2020	No Asbestos Found	<0.01
SE207911.003	0407_TP105_0.1_200623	Soil	629g Sand	23 Jun 2020	No Asbestos Found	<0.01
SE207911.007	0407_TP94_0.1_200623	Soil	712g Sand	23 Jun 2020	No Asbestos Found	<0.01
SE207911.009	0407_TP95_0.1_200623	Soil	813g Sand	23 Jun 2020	No Asbestos Found	<0.01
SE207911.011	0407_TP96_0.1_200623	Soil	740g Sand	23 Jun 2020	No Asbestos Found	<0.01
SE207911.013	0407_TP97_0.1_200623	Soil	605g Sand,Soil,Plant Matter	23 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE207911.015	0407_TP85_0.1_200623	Soil	695g Sand	23 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE207911.017	0407_TP86_0.1_200623	Soil	732g Sand	23 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE207911.019	0407_TP87_0.1_200623	Soil	750g Sand	23 Jun 2020	No Asbestos Found	<0.01

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 30/6/2020

PARAMETER	UOM	LOR	0407_TP106_0.1_20(623 SOIL - 23/6/2020 SE207911.001	0407_TP105_0.1_20(623 SOIL - 23/6/2020 SE207911.003	0407_TP94_0.1_200(23 SOIL - 23/6/2020 SE207911.007	0407_TP95_0.1_200(23 SOIL - 23/6/2020 SE207911.009	0407_TP96_0.1_200(23 SOIL - 23/6/2020 SE207911.011
Total Sample Weight*	g	1	**687**	**629**	**712**	**813**	**740**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP97_0.1_200(23 SOIL - 23/6/2020 SE207911.013	0407_TP85_0.1_200(23 SOIL - 23/6/2020 SE207911.015	0407_TP86_0.1_200(23 SOIL - 23/6/2020 SE207911.017	0407_TP87_0.1_200(23 SOIL - 23/6/2020 SE207911.019
Total Sample Weight*	g	1	**605**	**695**	**732**	**750**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-

METHOD SUMMARY

METHOD	METHODOLOGY SUMMARY
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples , Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable ’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.
AN605	This technique gravimetrically determines the mass of Bonded Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight. Any fibrous asbestos (FA) found in this fraction will be added to the 2-7mm fraction and its mass recorded there.
AN605	This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free/respirable fibres which are only observed by standard trace analysis as per AN602.
AN605	Bonded asbestos containing material (Bonded ACM) comprises asbestos-containing-material which is sound in condition. Fibrous asbestos (FA) comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material. Asbestos fines (AF) includes free fibres, small fibre bundles and also small fragments of bonded ACM that passes through a 7mm sieve - which implies that the bonded ACM fragments have a substantial degree of damage which increases the potential for fibre release.
AN-605	Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009 and NEPM 1999 (2013) schedule B1 section 4..

FOOTNOTES

Amosite	-	Brown Asbestos	NA	-	Not Analysed
Chrysotile	-	White Asbestos	LNR	-	Listed, Not Required
Crocidolite	-	Blue Asbestos	*	-	NATA accreditation does not cover the performance of this service.
Amphiboles	-	Amosite and/or Crocidolite	**	-	Indicative data, theoretical holding time exceeded.

(In reference to soil samples only) This report does not comply with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment and Remediation and Management of Asbestos Contaminated sites in Western Australia - May 2009.

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.

Where reported: 'Asbestos Detected': Asbestos detected by polarised light microscopy, including dispersion staining.
Where reported: 'No Asbestos Found': No Asbestos Found by polarised light microscopy, including dispersion staining.
Where reported: 'UMF Detected': Mineral fibres of unknown type detected by polarised light microscopy, including dispersion staining. Confirmation by another independent analytical technique may be necessary.

Even after disintegration it can be very difficult, or impossible, to detect the presence of asbestos in some asbestos-containing bulk materials using polarised light microscopy. This is due to the low grade or small length or diameter of asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE207911 R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000677--00679**
Samples	23

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207911 R0**
Date Received	23 Jun 2020
Date Reported	01 Jul 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Surrogate	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	1 item
	Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level	3 items
Matrix Spike	VOC's in Soil	1 item

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	23 Soil
Date documentation received	23/6/2020	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	5.4°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE207911 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Fibre Identification in soil

Method: ME-(AU)-[ENV]AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP106_0.1_200623	SE207911.001	LB203077	23 Jun 2020	23 Jun 2020	23 Jun 2021	30 Jun 2020	23 Jun 2021	01 Jul 2020
0407_TP105_0.1_200623	SE207911.003	LB203077	23 Jun 2020	23 Jun 2020	23 Jun 2021	30 Jun 2020	23 Jun 2021	01 Jul 2020
0407_TP94_0.1_200623	SE207911.007	LB203077	23 Jun 2020	23 Jun 2020	23 Jun 2021	30 Jun 2020	23 Jun 2021	01 Jul 2020
0407_TP95_0.1_200623	SE207911.009	LB203077	23 Jun 2020	23 Jun 2020	23 Jun 2021	30 Jun 2020	23 Jun 2021	01 Jul 2020
0407_TP96_0.1_200623	SE207911.011	LB203077	23 Jun 2020	23 Jun 2020	23 Jun 2021	30 Jun 2020	23 Jun 2021	01 Jul 2020
0407_TP97_0.1_200623	SE207911.013	LB203077	23 Jun 2020	23 Jun 2020	23 Jun 2021	30 Jun 2020	23 Jun 2021	01 Jul 2020
0407_TP85_0.1_200623	SE207911.015	LB203077	23 Jun 2020	23 Jun 2020	23 Jun 2021	30 Jun 2020	23 Jun 2021	01 Jul 2020
0407_TP86_0.1_200623	SE207911.017	LB203077	23 Jun 2020	23 Jun 2020	23 Jun 2021	30 Jun 2020	23 Jun 2021	01 Jul 2020
0407_TP87_0.1_200623	SE207911.019	LB203077	23 Jun 2020	23 Jun 2020	23 Jun 2021	30 Jun 2020	23 Jun 2021	01 Jul 2020

Gravimetric Determination of Asbestos in Soil

Method: ME-(AU)-[ENV]AN605

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP106_0.1_200623	SE207911.001	LB203077	23 Jun 2020	23 Jun 2020	20 Dec 2020	30 Jun 2020	20 Dec 2020	01 Jul 2020
0407_TP105_0.1_200623	SE207911.003	LB203077	23 Jun 2020	23 Jun 2020	20 Dec 2020	30 Jun 2020	20 Dec 2020	01 Jul 2020
0407_TP94_0.1_200623	SE207911.007	LB203077	23 Jun 2020	23 Jun 2020	20 Dec 2020	30 Jun 2020	20 Dec 2020	01 Jul 2020
0407_TP95_0.1_200623	SE207911.009	LB203077	23 Jun 2020	23 Jun 2020	20 Dec 2020	30 Jun 2020	20 Dec 2020	01 Jul 2020
0407_TP96_0.1_200623	SE207911.011	LB203077	23 Jun 2020	23 Jun 2020	20 Dec 2020	30 Jun 2020	20 Dec 2020	01 Jul 2020
0407_TP97_0.1_200623	SE207911.013	LB203077	23 Jun 2020	23 Jun 2020	20 Dec 2020	30 Jun 2020	20 Dec 2020	01 Jul 2020
0407_TP85_0.1_200623	SE207911.015	LB203077	23 Jun 2020	23 Jun 2020	20 Dec 2020	30 Jun 2020	20 Dec 2020	01 Jul 2020
0407_TP86_0.1_200623	SE207911.017	LB203077	23 Jun 2020	23 Jun 2020	20 Dec 2020	30 Jun 2020	20 Dec 2020	01 Jul 2020
0407_TP87_0.1_200623	SE207911.019	LB203077	23 Jun 2020	23 Jun 2020	20 Dec 2020	30 Jun 2020	20 Dec 2020	01 Jul 2020

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP106_0.1_200623	SE207911.001	LB202879	23 Jun 2020	23 Jun 2020	21 Jul 2020	26 Jun 2020	21 Jul 2020	01 Jul 2020
0407_TP106_0.5_200623	SE207911.002	LB202879	23 Jun 2020	23 Jun 2020	21 Jul 2020	26 Jun 2020	21 Jul 2020	01 Jul 2020
0407_TP105_0.1_200623	SE207911.003	LB202879	23 Jun 2020	23 Jun 2020	21 Jul 2020	26 Jun 2020	21 Jul 2020	01 Jul 2020
0407_TP105_1.0_200623	SE207911.004	LB202879	23 Jun 2020	23 Jun 2020	21 Jul 2020	26 Jun 2020	21 Jul 2020	01 Jul 2020
0407_TP104_0.5_200623	SE207911.005	LB202879	23 Jun 2020	23 Jun 2020	21 Jul 2020	26 Jun 2020	21 Jul 2020	01 Jul 2020
0407_TP104_1.0_200623	SE207911.006	LB202879	23 Jun 2020	23 Jun 2020	21 Jul 2020	26 Jun 2020	21 Jul 2020	01 Jul 2020
0407_TP94_0.1_200623	SE207911.007	LB202879	23 Jun 2020	23 Jun 2020	21 Jul 2020	26 Jun 2020	21 Jul 2020	01 Jul 2020
0407_TP94_0.5_200623	SE207911.008	LB202879	23 Jun 2020	23 Jun 2020	21 Jul 2020	26 Jun 2020	21 Jul 2020	01 Jul 2020
0407_TP95_0.1_200623	SE207911.009	LB202879	23 Jun 2020	23 Jun 2020	21 Jul 2020	26 Jun 2020	21 Jul 2020	01 Jul 2020
0407_TP95_1.0_200623	SE207911.010	LB202879	23 Jun 2020	23 Jun 2020	21 Jul 2020	26 Jun 2020	21 Jul 2020	01 Jul 2020
0407_TP96_0.1_200623	SE207911.011	LB202879	23 Jun 2020	23 Jun 2020	21 Jul 2020	26 Jun 2020	21 Jul 2020	01 Jul 2020
0407_TP96_0.5_200623	SE207911.012	LB202879	23 Jun 2020	23 Jun 2020	21 Jul 2020	26 Jun 2020	21 Jul 2020	01 Jul 2020
0407_TP97_0.1_200623	SE207911.013	LB202879	23 Jun 2020	23 Jun 2020	21 Jul 2020	26 Jun 2020	21 Jul 2020	01 Jul 2020
0407_TP97_0.5_200623	SE207911.014	LB202879	23 Jun 2020	23 Jun 2020	21 Jul 2020	26 Jun 2020	21 Jul 2020	01 Jul 2020
0407_TP85_0.1_200623	SE207911.015	LB202879	23 Jun 2020	23 Jun 2020	21 Jul 2020	26 Jun 2020	21 Jul 2020	01 Jul 2020
0407_TP85_0.5_200623	SE207911.016	LB202879	23 Jun 2020	23 Jun 2020	21 Jul 2020	26 Jun 2020	21 Jul 2020	01 Jul 2020
0407_TP86_0.1_200623	SE207911.017	LB202879	23 Jun 2020	23 Jun 2020	21 Jul 2020	26 Jun 2020	21 Jul 2020	01 Jul 2020
0407_TP86_0.5_200623	SE207911.018	LB202879	23 Jun 2020	23 Jun 2020	21 Jul 2020	26 Jun 2020	21 Jul 2020	01 Jul 2020
0407_TP87_0.1_200623	SE207911.019	LB202879	23 Jun 2020	23 Jun 2020	21 Jul 2020	26 Jun 2020	21 Jul 2020	01 Jul 2020
0407_TP87_0.5_200623	SE207911.020	LB202988	23 Jun 2020	23 Jun 2020	21 Jul 2020	29 Jun 2020	21 Jul 2020	01 Jul 2020
0407_QC139_200623	SE207911.021	LB202988	23 Jun 2020	23 Jun 2020	21 Jul 2020	29 Jun 2020	21 Jul 2020	01 Jul 2020
0407_QC144_200623	SE207911.022	LB202988	23 Jun 2020	23 Jun 2020	21 Jul 2020	29 Jun 2020	21 Jul 2020	01 Jul 2020
0407_QC147_200623	SE207911.023	LB202988	23 Jun 2020	23 Jun 2020	21 Jul 2020	29 Jun 2020	21 Jul 2020	01 Jul 2020

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP106_0.1_200623	SE207911.001	LB202850	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	01 Jul 2020	30 Jun 2020
0407_TP106_0.5_200623	SE207911.002	LB202850	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	01 Jul 2020	30 Jun 2020
0407_TP105_0.1_200623	SE207911.003	LB202850	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	01 Jul 2020	30 Jun 2020
0407_TP105_1.0_200623	SE207911.004	LB202850	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	01 Jul 2020	30 Jun 2020
0407_TP104_0.5_200623	SE207911.005	LB202850	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	01 Jul 2020	30 Jun 2020
0407_TP104_1.0_200623	SE207911.006	LB202850	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	01 Jul 2020	30 Jun 2020
0407_TP94_0.1_200623	SE207911.007	LB202850	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	01 Jul 2020	30 Jun 2020
0407_TP94_0.5_200623	SE207911.008	LB202850	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	01 Jul 2020	30 Jun 2020
0407_TP95_0.1_200623	SE207911.009	LB202850	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	01 Jul 2020	30 Jun 2020
0407_TP95_1.0_200623	SE207911.010	LB202850	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	01 Jul 2020	30 Jun 2020
0407_TP96_0.1_200623	SE207911.011	LB202850	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	01 Jul 2020	30 Jun 2020

HOLDING TIME SUMMARY

SE207911 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Moisture Content (continued)

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP96_0.5_200623	SE207911.012	LB202850	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	01 Jul 2020	30 Jun 2020
0407_TP97_0.1_200623	SE207911.013	LB202850	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	01 Jul 2020	30 Jun 2020
0407_TP97_0.5_200623	SE207911.014	LB202850	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	01 Jul 2020	30 Jun 2020
0407_TP85_0.1_200623	SE207911.015	LB202850	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	01 Jul 2020	30 Jun 2020
0407_TP85_0.5_200623	SE207911.016	LB202850	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	01 Jul 2020	30 Jun 2020
0407_TP86_0.1_200623	SE207911.017	LB202850	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	01 Jul 2020	30 Jun 2020
0407_TP86_0.5_200623	SE207911.018	LB202850	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	01 Jul 2020	30 Jun 2020
0407_TP87_0.1_200623	SE207911.019	LB202850	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	01 Jul 2020	30 Jun 2020
0407_TP87_0.5_200623	SE207911.020	LB202850	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	01 Jul 2020	30 Jun 2020
0407_QC139_200623	SE207911.021	LB202850	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	01 Jul 2020	30 Jun 2020
0407_QC144_200623	SE207911.022	LB202850	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	01 Jul 2020	30 Jun 2020
0407_QC147_200623	SE207911.023	LB202850	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	01 Jul 2020	30 Jun 2020

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP106_0.1_200623	SE207911.001	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP106_0.5_200623	SE207911.002	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP105_0.1_200623	SE207911.003	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP105_1.0_200623	SE207911.004	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP104_0.5_200623	SE207911.005	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP104_1.0_200623	SE207911.006	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP94_0.1_200623	SE207911.007	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP94_0.5_200623	SE207911.008	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP95_0.1_200623	SE207911.009	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP95_1.0_200623	SE207911.010	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP96_0.1_200623	SE207911.011	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP96_0.5_200623	SE207911.012	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP97_0.1_200623	SE207911.013	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP97_0.5_200623	SE207911.014	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP85_0.1_200623	SE207911.015	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP85_0.5_200623	SE207911.016	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP86_0.1_200623	SE207911.017	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP86_0.5_200623	SE207911.018	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP87_0.1_200623	SE207911.019	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP87_0.5_200623	SE207911.020	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_QC139_200623	SE207911.021	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_QC144_200623	SE207911.022	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_QC147_200623	SE207911.023	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP106_0.1_200623	SE207911.001	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP106_0.5_200623	SE207911.002	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP105_0.1_200623	SE207911.003	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP105_1.0_200623	SE207911.004	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP104_0.5_200623	SE207911.005	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP104_1.0_200623	SE207911.006	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP94_0.1_200623	SE207911.007	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP94_0.5_200623	SE207911.008	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP95_0.1_200623	SE207911.009	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP95_1.0_200623	SE207911.010	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP96_0.1_200623	SE207911.011	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP96_0.5_200623	SE207911.012	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP97_0.1_200623	SE207911.013	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP97_0.5_200623	SE207911.014	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP85_0.1_200623	SE207911.015	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP85_0.5_200623	SE207911.016	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP86_0.1_200623	SE207911.017	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP86_0.5_200623	SE207911.018	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP87_0.1_200623	SE207911.019	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP87_0.5_200623	SE207911.020	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020

HOLDING TIME SUMMARY

SE207911 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC139_200623	SE207911.021	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_QC144_200623	SE207911.022	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_QC147_200623	SE207911.023	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP106_0.1_200623	SE207911.001	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP106_0.5_200623	SE207911.002	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP105_0.1_200623	SE207911.003	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP105_1.0_200623	SE207911.004	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP104_0.5_200623	SE207911.005	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP104_1.0_200623	SE207911.006	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP94_0.1_200623	SE207911.007	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP94_0.5_200623	SE207911.008	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP95_0.1_200623	SE207911.009	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP95_1.0_200623	SE207911.010	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP96_0.1_200623	SE207911.011	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP96_0.5_200623	SE207911.012	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP97_0.1_200623	SE207911.013	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP97_0.5_200623	SE207911.014	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP85_0.1_200623	SE207911.015	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP85_0.5_200623	SE207911.016	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP86_0.1_200623	SE207911.017	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP86_0.5_200623	SE207911.018	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP87_0.1_200623	SE207911.019	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP87_0.5_200623	SE207911.020	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_QC139_200623	SE207911.021	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_QC144_200623	SE207911.022	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_QC147_200623	SE207911.023	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP106_0.1_200623	SE207911.001	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP106_0.5_200623	SE207911.002	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP105_0.1_200623	SE207911.003	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP105_1.0_200623	SE207911.004	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP104_0.5_200623	SE207911.005	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP104_1.0_200623	SE207911.006	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP94_0.1_200623	SE207911.007	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP94_0.5_200623	SE207911.008	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP95_0.1_200623	SE207911.009	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP95_1.0_200623	SE207911.010	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP96_0.1_200623	SE207911.011	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP96_0.5_200623	SE207911.012	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP97_0.1_200623	SE207911.013	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP97_0.5_200623	SE207911.014	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP85_0.1_200623	SE207911.015	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP85_0.5_200623	SE207911.016	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP86_0.1_200623	SE207911.017	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP86_0.5_200623	SE207911.018	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP87_0.1_200623	SE207911.019	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP87_0.5_200623	SE207911.020	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_QC139_200623	SE207911.021	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_QC144_200623	SE207911.022	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_QC147_200623	SE207911.023	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP106_0.1_200623	SE207911.001	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP106_0.5_200623	SE207911.002	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP105_0.1_200623	SE207911.003	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020

HOLDING TIME SUMMARY

SE207911 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP105_1.0_200623	SE207911.004	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP104_0.5_200623	SE207911.005	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP104_1.0_200623	SE207911.006	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP94_0.1_200623	SE207911.007	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP94_0.5_200623	SE207911.008	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP95_0.1_200623	SE207911.009	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP95_1.0_200623	SE207911.010	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP96_0.1_200623	SE207911.011	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP96_0.5_200623	SE207911.012	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP97_0.1_200623	SE207911.013	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP97_0.5_200623	SE207911.014	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP85_0.1_200623	SE207911.015	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP85_0.5_200623	SE207911.016	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP86_0.1_200623	SE207911.017	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP86_0.5_200623	SE207911.018	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP87_0.1_200623	SE207911.019	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP87_0.5_200623	SE207911.020	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_QC139_200623	SE207911.021	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_QC144_200623	SE207911.022	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_QC147_200623	SE207911.023	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP106_0.1_200623	SE207911.001	LB202864	23 Jun 2020	23 Jun 2020	20 Dec 2020	26 Jun 2020	20 Dec 2020	30 Jun 2020
0407_TP106_0.5_200623	SE207911.002	LB202864	23 Jun 2020	23 Jun 2020	20 Dec 2020	26 Jun 2020	20 Dec 2020	30 Jun 2020
0407_TP105_0.1_200623	SE207911.003	LB202864	23 Jun 2020	23 Jun 2020	20 Dec 2020	26 Jun 2020	20 Dec 2020	30 Jun 2020
0407_TP105_1.0_200623	SE207911.004	LB202864	23 Jun 2020	23 Jun 2020	20 Dec 2020	26 Jun 2020	20 Dec 2020	30 Jun 2020
0407_TP104_0.5_200623	SE207911.005	LB202864	23 Jun 2020	23 Jun 2020	20 Dec 2020	26 Jun 2020	20 Dec 2020	30 Jun 2020
0407_TP104_1.0_200623	SE207911.006	LB202864	23 Jun 2020	23 Jun 2020	20 Dec 2020	26 Jun 2020	20 Dec 2020	30 Jun 2020
0407_TP94_0.1_200623	SE207911.007	LB202864	23 Jun 2020	23 Jun 2020	20 Dec 2020	26 Jun 2020	20 Dec 2020	30 Jun 2020
0407_TP94_0.5_200623	SE207911.008	LB202864	23 Jun 2020	23 Jun 2020	20 Dec 2020	26 Jun 2020	20 Dec 2020	30 Jun 2020
0407_TP95_0.1_200623	SE207911.009	LB202864	23 Jun 2020	23 Jun 2020	20 Dec 2020	26 Jun 2020	20 Dec 2020	30 Jun 2020
0407_TP95_1.0_200623	SE207911.010	LB202864	23 Jun 2020	23 Jun 2020	20 Dec 2020	26 Jun 2020	20 Dec 2020	30 Jun 2020
0407_TP96_0.1_200623	SE207911.011	LB202864	23 Jun 2020	23 Jun 2020	20 Dec 2020	26 Jun 2020	20 Dec 2020	30 Jun 2020
0407_TP96_0.5_200623	SE207911.012	LB202864	23 Jun 2020	23 Jun 2020	20 Dec 2020	26 Jun 2020	20 Dec 2020	30 Jun 2020
0407_TP97_0.1_200623	SE207911.013	LB202864	23 Jun 2020	23 Jun 2020	20 Dec 2020	26 Jun 2020	20 Dec 2020	30 Jun 2020
0407_TP97_0.5_200623	SE207911.014	LB202864	23 Jun 2020	23 Jun 2020	20 Dec 2020	26 Jun 2020	20 Dec 2020	30 Jun 2020
0407_TP85_0.1_200623	SE207911.015	LB202864	23 Jun 2020	23 Jun 2020	20 Dec 2020	26 Jun 2020	20 Dec 2020	30 Jun 2020
0407_TP85_0.5_200623	SE207911.016	LB202864	23 Jun 2020	23 Jun 2020	20 Dec 2020	26 Jun 2020	20 Dec 2020	30 Jun 2020
0407_TP86_0.1_200623	SE207911.017	LB202864	23 Jun 2020	23 Jun 2020	20 Dec 2020	26 Jun 2020	20 Dec 2020	30 Jun 2020
0407_TP86_0.5_200623	SE207911.018	LB202864	23 Jun 2020	23 Jun 2020	20 Dec 2020	26 Jun 2020	20 Dec 2020	30 Jun 2020
0407_TP87_0.1_200623	SE207911.019	LB202864	23 Jun 2020	23 Jun 2020	20 Dec 2020	26 Jun 2020	20 Dec 2020	30 Jun 2020
0407_TP87_0.5_200623	SE207911.020	LB202986	23 Jun 2020	23 Jun 2020	20 Dec 2020	29 Jun 2020	20 Dec 2020	01 Jul 2020
0407_QC139_200623	SE207911.021	LB202986	23 Jun 2020	23 Jun 2020	20 Dec 2020	29 Jun 2020	20 Dec 2020	01 Jul 2020
0407_QC144_200623	SE207911.022	LB202986	23 Jun 2020	23 Jun 2020	20 Dec 2020	29 Jun 2020	20 Dec 2020	01 Jul 2020
0407_QC147_200623	SE207911.023	LB202986	23 Jun 2020	23 Jun 2020	20 Dec 2020	29 Jun 2020	20 Dec 2020	01 Jul 2020

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP106_0.1_200623	SE207911.001	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP106_0.5_200623	SE207911.002	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP105_0.1_200623	SE207911.003	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP105_1.0_200623	SE207911.004	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP104_0.5_200623	SE207911.005	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP104_1.0_200623	SE207911.006	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP94_0.1_200623	SE207911.007	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP94_0.5_200623	SE207911.008	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP95_0.1_200623	SE207911.009	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP95_1.0_200623	SE207911.010	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP96_0.1_200623	SE207911.011	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP96_0.5_200623	SE207911.012	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020

HOLDING TIME SUMMARY

SE207911 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP97_0.1_200623	SE207911.013	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP97_0.5_200623	SE207911.014	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP85_0.1_200623	SE207911.015	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP85_0.5_200623	SE207911.016	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP86_0.1_200623	SE207911.017	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP86_0.5_200623	SE207911.018	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP87_0.1_200623	SE207911.019	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_TP87_0.5_200623	SE207911.020	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_QC139_200623	SE207911.021	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_QC144_200623	SE207911.022	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020
0407_QC147_200623	SE207911.023	LB202843	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	01 Jul 2020

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP106_0.1_200623	SE207911.001	LB202833	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	30 Jun 2020
0407_TP106_0.5_200623	SE207911.002	LB202833	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	30 Jun 2020
0407_TP105_0.1_200623	SE207911.003	LB202833	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	30 Jun 2020
0407_TP105_1.0_200623	SE207911.004	LB202833	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	30 Jun 2020
0407_TP104_0.5_200623	SE207911.005	LB202833	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	30 Jun 2020
0407_TP104_1.0_200623	SE207911.006	LB202833	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	30 Jun 2020
0407_TP94_0.1_200623	SE207911.007	LB202833	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	30 Jun 2020
0407_TP94_0.5_200623	SE207911.008	LB202833	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	30 Jun 2020
0407_TP95_0.1_200623	SE207911.009	LB202833	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	30 Jun 2020
0407_TP95_1.0_200623	SE207911.010	LB202833	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	30 Jun 2020
0407_TP96_0.1_200623	SE207911.011	LB202833	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	30 Jun 2020
0407_TP96_0.5_200623	SE207911.012	LB202833	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	30 Jun 2020
0407_TP97_0.1_200623	SE207911.013	LB202833	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	30 Jun 2020
0407_TP97_0.5_200623	SE207911.014	LB202833	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	30 Jun 2020
0407_TP85_0.1_200623	SE207911.015	LB202833	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	30 Jun 2020
0407_TP85_0.5_200623	SE207911.016	LB202833	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	30 Jun 2020
0407_TP86_0.1_200623	SE207911.017	LB202833	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	30 Jun 2020
0407_TP86_0.5_200623	SE207911.018	LB202833	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	30 Jun 2020
0407_TP87_0.1_200623	SE207911.019	LB202833	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	30 Jun 2020
0407_TP87_0.5_200623	SE207911.020	LB202833	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	30 Jun 2020
0407_QC139_200623	SE207911.021	LB202833	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	30 Jun 2020
0407_QC144_200623	SE207911.022	LB202833	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	30 Jun 2020
0407_QC147_200623	SE207911.023	LB202833	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	30 Jun 2020

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP106_0.1_200623	SE207911.001	LB202833	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	30 Jun 2020
0407_TP106_0.5_200623	SE207911.002	LB202833	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	30 Jun 2020
0407_TP105_0.1_200623	SE207911.003	LB202833	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	30 Jun 2020
0407_TP105_1.0_200623	SE207911.004	LB202833	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	30 Jun 2020
0407_TP104_0.5_200623	SE207911.005	LB202833	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	30 Jun 2020
0407_TP104_1.0_200623	SE207911.006	LB202833	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	30 Jun 2020
0407_TP94_0.1_200623	SE207911.007	LB202833	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	30 Jun 2020
0407_TP94_0.5_200623	SE207911.008	LB202833	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	30 Jun 2020
0407_TP95_0.1_200623	SE207911.009	LB202833	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	30 Jun 2020
0407_TP95_1.0_200623	SE207911.010	LB202833	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	30 Jun 2020
0407_TP96_0.1_200623	SE207911.011	LB202833	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	30 Jun 2020
0407_TP96_0.5_200623	SE207911.012	LB202833	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	30 Jun 2020
0407_TP97_0.1_200623	SE207911.013	LB202833	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	30 Jun 2020
0407_TP97_0.5_200623	SE207911.014	LB202833	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	30 Jun 2020
0407_TP85_0.1_200623	SE207911.015	LB202833	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	30 Jun 2020
0407_TP85_0.5_200623	SE207911.016	LB202833	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	30 Jun 2020
0407_TP86_0.1_200623	SE207911.017	LB202833	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	30 Jun 2020
0407_TP86_0.5_200623	SE207911.018	LB202833	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	30 Jun 2020
0407_TP87_0.1_200623	SE207911.019	LB202833	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	30 Jun 2020
0407_TP87_0.5_200623	SE207911.020	LB202833	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	30 Jun 2020
0407_QC139_200623	SE207911.021	LB202833	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	30 Jun 2020

HOLDING TIME SUMMARY

SE207911 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC144_200623	SE207911.022	LB202833	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	30 Jun 2020
0407_QC147_200623	SE207911.023	LB202833	23 Jun 2020	23 Jun 2020	07 Jul 2020	26 Jun 2020	05 Aug 2020	30 Jun 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP106_0.1_200623	SE207911.001	%	60 - 130%	95
	0407_TP106_0.5_200623	SE207911.002	%	60 - 130%	87
	0407_TP105_0.1_200623	SE207911.003	%	60 - 130%	88
	0407_TP105_1.0_200623	SE207911.004	%	60 - 130%	90
	0407_TP104_0.5_200623	SE207911.005	%	60 - 130%	85
	0407_TP104_1.0_200623	SE207911.006	%	60 - 130%	92
	0407_TP94_0.1_200623	SE207911.007	%	60 - 130%	80
	0407_TP94_0.5_200623	SE207911.008	%	60 - 130%	90
	0407_TP95_0.1_200623	SE207911.009	%	60 - 130%	85
	0407_TP95_1.0_200623	SE207911.010	%	60 - 130%	93
	0407_TP96_0.1_200623	SE207911.011	%	60 - 130%	93
	0407_TP96_0.5_200623	SE207911.012	%	60 - 130%	85
	0407_TP97_0.1_200623	SE207911.013	%	60 - 130%	94
	0407_TP97_0.5_200623	SE207911.014	%	60 - 130%	93
	0407_TP85_0.1_200623	SE207911.015	%	60 - 130%	94
	0407_TP85_0.5_200623	SE207911.016	%	60 - 130%	85
	0407_TP86_0.1_200623	SE207911.017	%	60 - 130%	92
	0407_TP86_0.5_200623	SE207911.018	%	60 - 130%	87
	0407_TP87_0.1_200623	SE207911.019	%	60 - 130%	95
	0407_TP87_0.5_200623	SE207911.020	%	60 - 130%	91
	0407_QC139_200623	SE207911.021	%	60 - 130%	77
	0407_QC144_200623	SE207911.022	%	60 - 130%	83
	0407_QC147_200623	SE207911.023	%	60 - 130%	77

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP106_0.1_200623	SE207911.001	%	60 - 130%	75
	0407_TP106_0.5_200623	SE207911.002	%	60 - 130%	90
	0407_TP105_0.1_200623	SE207911.003	%	60 - 130%	79
	0407_TP105_1.0_200623	SE207911.004	%	60 - 130%	79
	0407_TP104_0.5_200623	SE207911.005	%	60 - 130%	77
	0407_TP104_1.0_200623	SE207911.006	%	60 - 130%	71
	0407_TP94_0.1_200623	SE207911.007	%	60 - 130%	90
	0407_TP94_0.5_200623	SE207911.008	%	60 - 130%	76
	0407_TP95_0.1_200623	SE207911.009	%	60 - 130%	75
	0407_TP95_1.0_200623	SE207911.010	%	60 - 130%	78
	0407_TP96_0.1_200623	SE207911.011	%	60 - 130%	77
	0407_TP96_0.5_200623	SE207911.012	%	60 - 130%	74
	0407_TP97_0.1_200623	SE207911.013	%	60 - 130%	86
	0407_TP97_0.5_200623	SE207911.014	%	60 - 130%	76
	0407_TP85_0.1_200623	SE207911.015	%	60 - 130%	73
	0407_TP85_0.5_200623	SE207911.016	%	60 - 130%	75
	0407_TP86_0.1_200623	SE207911.017	%	60 - 130%	76
	0407_TP86_0.5_200623	SE207911.018	%	60 - 130%	78
	0407_TP87_0.1_200623	SE207911.019	%	60 - 130%	75
	0407_TP87_0.5_200623	SE207911.020	%	60 - 130%	87
	0407_QC139_200623	SE207911.021	%	60 - 130%	86
	0407_QC144_200623	SE207911.022	%	60 - 130%	78
	0407_QC147_200623	SE207911.023	%	60 - 130%	87
d14-p-terphenyl (Surrogate)	0407_TP106_0.1_200623	SE207911.001	%	60 - 130%	83
	0407_TP106_0.5_200623	SE207911.002	%	60 - 130%	77
	0407_TP105_0.1_200623	SE207911.003	%	60 - 130%	78
	0407_TP105_1.0_200623	SE207911.004	%	60 - 130%	79
	0407_TP104_0.5_200623	SE207911.005	%	60 - 130%	80
	0407_TP104_1.0_200623	SE207911.006	%	60 - 130%	84
	0407_TP94_0.1_200623	SE207911.007	%	60 - 130%	73
	0407_TP94_0.5_200623	SE207911.008	%	60 - 130%	77
	0407_TP95_0.1_200623	SE207911.009	%	60 - 130%	82
	0407_TP95_1.0_200623	SE207911.010	%	60 - 130%	79
	0407_TP96_0.1_200623	SE207911.011	%	60 - 130%	78
	0407_TP96_0.5_200623	SE207911.012	%	60 - 130%	70

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d14-p-terphenyl (Surrogate)	0407_TP97_0.1_200623	SE207911.013	%	60 - 130%	72
	0407_TP97_0.5_200623	SE207911.014	%	60 - 130%	86
	0407_TP85_0.1_200623	SE207911.015	%	60 - 130%	78
	0407_TP85_0.5_200623	SE207911.016	%	60 - 130%	72
	0407_TP86_0.1_200623	SE207911.017	%	60 - 130%	76
	0407_TP86_0.5_200623	SE207911.018	%	60 - 130%	81
	0407_TP87_0.1_200623	SE207911.019	%	60 - 130%	75
	0407_TP87_0.5_200623	SE207911.020	%	60 - 130%	85
	0407_QC139_200623	SE207911.021	%	60 - 130%	86
	0407_QC144_200623	SE207911.022	%	60 - 130%	78
	0407_QC147_200623	SE207911.023	%	60 - 130%	72

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP106_0.1_200623	SE207911.001	%	70 - 130%	75
	0407_TP106_0.5_200623	SE207911.002	%	70 - 130%	90
	0407_TP105_0.1_200623	SE207911.003	%	70 - 130%	79
	0407_TP105_1.0_200623	SE207911.004	%	70 - 130%	79
	0407_TP104_0.5_200623	SE207911.005	%	70 - 130%	77
	0407_TP104_1.0_200623	SE207911.006	%	70 - 130%	71
	0407_TP94_0.1_200623	SE207911.007	%	70 - 130%	90
	0407_TP94_0.5_200623	SE207911.008	%	70 - 130%	76
	0407_TP95_0.1_200623	SE207911.009	%	70 - 130%	75
	0407_TP95_1.0_200623	SE207911.010	%	70 - 130%	78
	0407_TP96_0.1_200623	SE207911.011	%	70 - 130%	77
	0407_TP96_0.5_200623	SE207911.012	%	70 - 130%	74
	0407_TP97_0.1_200623	SE207911.013	%	70 - 130%	86
	0407_TP97_0.5_200623	SE207911.014	%	70 - 130%	76
	0407_TP85_0.1_200623	SE207911.015	%	70 - 130%	73
	0407_TP85_0.5_200623	SE207911.016	%	70 - 130%	75
	0407_TP86_0.1_200623	SE207911.017	%	70 - 130%	76
	0407_TP86_0.5_200623	SE207911.018	%	70 - 130%	78
	0407_TP87_0.1_200623	SE207911.019	%	70 - 130%	75
	0407_TP87_0.5_200623	SE207911.020	%	70 - 130%	87
	0407_QC139_200623	SE207911.021	%	70 - 130%	86
	0407_QC144_200623	SE207911.022	%	70 - 130%	78
	0407_QC147_200623	SE207911.023	%	70 - 130%	87
d14-p-terphenyl (Surrogate)	0407_TP106_0.1_200623	SE207911.001	%	70 - 130%	83
	0407_TP106_0.5_200623	SE207911.002	%	70 - 130%	77
	0407_TP105_0.1_200623	SE207911.003	%	70 - 130%	78
	0407_TP105_1.0_200623	SE207911.004	%	70 - 130%	79
	0407_TP104_0.5_200623	SE207911.005	%	70 - 130%	80
	0407_TP104_1.0_200623	SE207911.006	%	70 - 130%	84
	0407_TP94_0.1_200623	SE207911.007	%	70 - 130%	73
	0407_TP94_0.5_200623	SE207911.008	%	70 - 130%	77
	0407_TP95_0.1_200623	SE207911.009	%	70 - 130%	82
	0407_TP95_1.0_200623	SE207911.010	%	70 - 130%	79
	0407_TP96_0.1_200623	SE207911.011	%	70 - 130%	78
	0407_TP96_0.5_200623	SE207911.012	%	70 - 130%	70 †
	0407_TP97_0.1_200623	SE207911.013	%	70 - 130%	72
	0407_TP97_0.5_200623	SE207911.014	%	70 - 130%	86
	0407_TP85_0.1_200623	SE207911.015	%	70 - 130%	78
	0407_TP85_0.5_200623	SE207911.016	%	70 - 130%	72
	0407_TP86_0.1_200623	SE207911.017	%	70 - 130%	76
	0407_TP86_0.5_200623	SE207911.018	%	70 - 130%	81
	0407_TP87_0.1_200623	SE207911.019	%	70 - 130%	75
	0407_TP87_0.5_200623	SE207911.020	%	70 - 130%	85
	0407_QC139_200623	SE207911.021	%	70 - 130%	86
	0407_QC144_200623	SE207911.022	%	70 - 130%	78
	0407_QC147_200623	SE207911.023	%	70 - 130%	72
d5-nitrobenzene (Surrogate)	0407_TP106_0.1_200623	SE207911.001	%	70 - 130%	84

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d5-nitrobenzene (Surrogate)	0407_TP106_0.5_200623	SE207911.002	%	70 - 130%	79
	0407_TP105_0.1_200623	SE207911.003	%	70 - 130%	77
	0407_TP105_1.0_200623	SE207911.004	%	70 - 130%	76
	0407_TP104_0.5_200623	SE207911.005	%	70 - 130%	77
	0407_TP104_1.0_200623	SE207911.006	%	70 - 130%	75
	0407_TP94_0.1_200623	SE207911.007	%	70 - 130%	78
	0407_TP94_0.5_200623	SE207911.008	%	70 - 130%	74
	0407_TP95_0.1_200623	SE207911.009	%	70 - 130%	74
	0407_TP95_1.0_200623	SE207911.010	%	70 - 130%	76
	0407_TP96_0.1_200623	SE207911.011	%	70 - 130%	76
	0407_TP96_0.5_200623	SE207911.012	%	70 - 130%	76
	0407_TP97_0.1_200623	SE207911.013	%	70 - 130%	73
	0407_TP97_0.5_200623	SE207911.014	%	70 - 130%	78
	0407_TP85_0.1_200623	SE207911.015	%	70 - 130%	77
	0407_TP85_0.5_200623	SE207911.016	%	70 - 130%	76
	0407_TP86_0.1_200623	SE207911.017	%	70 - 130%	76
	0407_TP86_0.5_200623	SE207911.018	%	70 - 130%	77
	0407_TP87_0.1_200623	SE207911.019	%	70 - 130%	76
	0407_TP87_0.5_200623	SE207911.020	%	70 - 130%	76
	0407_QC139_200623	SE207911.021	%	70 - 130%	74
	0407_QC144_200623	SE207911.022	%	70 - 130%	78
	0407_QC147_200623	SE207911.023	%	70 - 130%	77

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP106_0.1_200623	SE207911.001	%	60 - 130%	95
	0407_TP106_0.5_200623	SE207911.002	%	60 - 130%	87
	0407_TP105_0.1_200623	SE207911.003	%	60 - 130%	88
	0407_TP105_1.0_200623	SE207911.004	%	60 - 130%	90
	0407_TP104_0.5_200623	SE207911.005	%	60 - 130%	85
	0407_TP104_1.0_200623	SE207911.006	%	60 - 130%	92
	0407_TP94_0.1_200623	SE207911.007	%	60 - 130%	80
	0407_TP94_0.5_200623	SE207911.008	%	60 - 130%	90
	0407_TP95_0.1_200623	SE207911.009	%	60 - 130%	85
	0407_TP95_1.0_200623	SE207911.010	%	60 - 130%	93
	0407_TP96_0.1_200623	SE207911.011	%	60 - 130%	93
	0407_TP96_0.5_200623	SE207911.012	%	60 - 130%	85
	0407_TP97_0.1_200623	SE207911.013	%	60 - 130%	94
	0407_TP97_0.5_200623	SE207911.014	%	60 - 130%	93
	0407_TP85_0.1_200623	SE207911.015	%	60 - 130%	94
	0407_TP85_0.5_200623	SE207911.016	%	60 - 130%	85
	0407_TP86_0.1_200623	SE207911.017	%	60 - 130%	92
	0407_TP86_0.5_200623	SE207911.018	%	60 - 130%	87
	0407_TP87_0.1_200623	SE207911.019	%	60 - 130%	95
	0407_TP87_0.5_200623	SE207911.020	%	60 - 130%	91
	0407_QC139_200623	SE207911.021	%	60 - 130%	77
	0407_QC144_200623	SE207911.022	%	60 - 130%	83
	0407_QC147_200623	SE207911.023	%	60 - 130%	77

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level

Method: MA-1523

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C2-4:2FTS) Surrogate	0407_QC139_200623	SE207911.021	%	10 - 150%	66
	0407_QC144_200623	SE207911.022	%	10 - 150%	68
	0407_QC147_200623	SE207911.023	%	10 - 150%	75
(13C2-6:2FTS) Surrogate	0407_QC139_200623	SE207911.021	%	10 - 150%	69
	0407_QC144_200623	SE207911.022	%	10 - 150%	71
	0407_QC147_200623	SE207911.023	%	10 - 150%	69
(13C2-8:2FTS) Surrogate	0407_QC139_200623	SE207911.021	%	10 - 150%	74
	0407_QC144_200623	SE207911.022	%	10 - 150%	69
	0407_QC147_200623	SE207911.023	%	10 - 150%	79
(13C2-PFDoA) Surrogate	0407_QC139_200623	SE207911.021	%	10 - 150%	84
	0407_QC144_200623	SE207911.022	%	10 - 150%	85

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level (continued) **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C2-PFDoA) Surrogate	0407_QC147_200623	SE207911.023	%	10 - 150%	89
(13C2-PFHxDA) Surrogate	0407_QC139_200623	SE207911.021	%	10 - 150%	8 †
	0407_QC144_200623	SE207911.022	%	10 - 150%	5 †
	0407_QC147_200623	SE207911.023	%	10 - 150%	5 †
(13C2-PFTeDA) Surrogate	0407_QC139_200623	SE207911.021	%	10 - 130%	43
	0407_QC144_200623	SE207911.022	%	10 - 130%	45
	0407_QC147_200623	SE207911.023	%	10 - 130%	42
(13C3-PFBS) Surrogate	0407_QC139_200623	SE207911.021	%	10 - 150%	76
	0407_QC144_200623	SE207911.022	%	10 - 150%	79
	0407_QC147_200623	SE207911.023	%	10 - 150%	88
(13C3-PFHxS) Surrogate	0407_QC139_200623	SE207911.021	%	10 - 150%	89
	0407_QC144_200623	SE207911.022	%	10 - 150%	96
	0407_QC147_200623	SE207911.023	%	10 - 150%	99
(13C4-PFBA) Surrogate	0407_QC139_200623	SE207911.021	%	10 - 150%	102
	0407_QC144_200623	SE207911.022	%	10 - 150%	100
	0407_QC147_200623	SE207911.023	%	10 - 150%	100
(13C4-PFHpA) Surrogate	0407_QC139_200623	SE207911.021	%	10 - 150%	104
	0407_QC144_200623	SE207911.022	%	10 - 150%	106
	0407_QC147_200623	SE207911.023	%	10 - 150%	108
(13C4-PFOA) Surrogate	0407_QC139_200623	SE207911.021	%	10 - 150%	98
	0407_QC144_200623	SE207911.022	%	10 - 150%	96
	0407_QC147_200623	SE207911.023	%	10 - 150%	92
(13C5_PFPeA) Surrogate	0407_QC139_200623	SE207911.021	%	10 - 150%	95
	0407_QC144_200623	SE207911.022	%	10 - 150%	96
	0407_QC147_200623	SE207911.023	%	10 - 150%	96
(13C5-PFHxA) Surrogate	0407_QC139_200623	SE207911.021	%	10 - 150%	88
	0407_QC144_200623	SE207911.022	%	10 - 150%	89
	0407_QC147_200623	SE207911.023	%	10 - 150%	88
(13C6-PFDA) Surrogate	0407_QC139_200623	SE207911.021	%	10 - 150%	99
	0407_QC144_200623	SE207911.022	%	10 - 150%	93
	0407_QC147_200623	SE207911.023	%	10 - 150%	97
(13C7-PFUdA) Surrogate	0407_QC139_200623	SE207911.021	%	10 - 150%	116
	0407_QC144_200623	SE207911.022	%	10 - 150%	100
	0407_QC147_200623	SE207911.023	%	10 - 150%	102
(13C8-PFOS) Surrogate	0407_QC139_200623	SE207911.021	%	10 - 150%	121
	0407_QC144_200623	SE207911.022	%	10 - 150%	105
	0407_QC147_200623	SE207911.023	%	10 - 150%	108
(13C8-PFOSA) Surrogate	0407_QC139_200623	SE207911.021	%	10 - 150%	42
	0407_QC144_200623	SE207911.022	%	10 - 150%	37
	0407_QC147_200623	SE207911.023	%	10 - 150%	48
(13C9-PFNA) Surrogate	0407_QC139_200623	SE207911.021	%	10 - 150%	92
	0407_QC144_200623	SE207911.022	%	10 - 150%	89
	0407_QC147_200623	SE207911.023	%	10 - 150%	102
(D3-N-MeFOSA) Surrogate	0407_QC139_200623	SE207911.021	%	10 - 150%	40
	0407_QC144_200623	SE207911.022	%	10 - 150%	38
	0407_QC147_200623	SE207911.023	%	10 - 150%	47
(D3-N-MeFOSAA) Surrogate	0407_QC139_200623	SE207911.021	%	10 - 150%	77
	0407_QC144_200623	SE207911.022	%	10 - 150%	65
	0407_QC147_200623	SE207911.023	%	10 - 150%	69
(D5-N-EtFOSA) Surrogate	0407_QC139_200623	SE207911.021	%	10 - 150%	36
	0407_QC144_200623	SE207911.022	%	10 - 150%	30
	0407_QC147_200623	SE207911.023	%	10 - 150%	36
(D5-N-EtFOSAA) Surrogate	0407_QC139_200623	SE207911.021	%	10 - 150%	58
	0407_QC144_200623	SE207911.022	%	10 - 150%	57
	0407_QC147_200623	SE207911.023	%	10 - 150%	55
(D7-N-MeFOSE) Surrogate	0407_QC139_200623	SE207911.021	%	10 - 150%	32
	0407_QC144_200623	SE207911.022	%	10 - 150%	32
	0407_QC147_200623	SE207911.023	%	10 - 150%	32
(D9-N-EtFOSE) Surrogate	0407_QC139_200623	SE207911.021	%	10 - 150%	27
	0407_QC144_200623	SE207911.022	%	10 - 150%	25
	0407_QC147_200623	SE207911.023	%	10 - 150%	32

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	0407_TP106_0.1_200623	SE207911.001	%	70 - 130%	71
	0407_TP106_0.5_200623	SE207911.002	%	70 - 130%	71
	0407_TP105_0.1_200623	SE207911.003	%	70 - 130%	70
	0407_TP105_1.0_200623	SE207911.004	%	70 - 130%	70
	0407_TP104_0.5_200623	SE207911.005	%	70 - 130%	74
	0407_TP104_1.0_200623	SE207911.006	%	70 - 130%	76
	0407_TP94_0.1_200623	SE207911.007	%	70 - 130%	76
	0407_TP94_0.5_200623	SE207911.008	%	70 - 130%	76
	0407_TP95_0.1_200623	SE207911.009	%	70 - 130%	79
	0407_TP95_1.0_200623	SE207911.010	%	70 - 130%	78
	0407_TP96_0.1_200623	SE207911.011	%	70 - 130%	78
	0407_TP96_0.5_200623	SE207911.012	%	70 - 130%	78
	0407_TP97_0.1_200623	SE207911.013	%	70 - 130%	77
	0407_TP97_0.5_200623	SE207911.014	%	70 - 130%	77
	0407_TP85_0.1_200623	SE207911.015	%	70 - 130%	79
	0407_TP85_0.5_200623	SE207911.016	%	70 - 130%	76
	0407_TP86_0.1_200623	SE207911.017	%	70 - 130%	80
	0407_TP86_0.5_200623	SE207911.018	%	70 - 130%	80
	0407_TP87_0.1_200623	SE207911.019	%	70 - 130%	78
	0407_TP87_0.5_200623	SE207911.020	%	70 - 130%	79
	0407_QC139_200623	SE207911.021	%	70 - 130%	78
	0407_QC144_200623	SE207911.022	%	70 - 130%	78
	0407_QC147_200623	SE207911.023	%	70 - 130%	78
d5-phenol (Surrogate)	0407_TP106_0.1_200623	SE207911.001	%	50 - 130%	77
	0407_TP106_0.5_200623	SE207911.002	%	50 - 130%	76
	0407_TP105_0.1_200623	SE207911.003	%	50 - 130%	76
	0407_TP105_1.0_200623	SE207911.004	%	50 - 130%	75
	0407_TP104_0.5_200623	SE207911.005	%	50 - 130%	75
	0407_TP104_1.0_200623	SE207911.006	%	50 - 130%	72
	0407_TP94_0.1_200623	SE207911.007	%	50 - 130%	75
	0407_TP94_0.5_200623	SE207911.008	%	50 - 130%	72
	0407_TP95_0.1_200623	SE207911.009	%	50 - 130%	72
	0407_TP95_1.0_200623	SE207911.010	%	50 - 130%	72
	0407_TP96_0.1_200623	SE207911.011	%	50 - 130%	70
	0407_TP96_0.5_200623	SE207911.012	%	50 - 130%	79
	0407_TP97_0.1_200623	SE207911.013	%	50 - 130%	71
	0407_TP97_0.5_200623	SE207911.014	%	50 - 130%	71
	0407_TP85_0.1_200623	SE207911.015	%	50 - 130%	73
	0407_TP85_0.5_200623	SE207911.016	%	50 - 130%	74
	0407_TP86_0.1_200623	SE207911.017	%	50 - 130%	81
	0407_TP86_0.5_200623	SE207911.018	%	50 - 130%	82
	0407_TP87_0.1_200623	SE207911.019	%	50 - 130%	81
	0407_TP87_0.5_200623	SE207911.020	%	50 - 130%	79
	0407_QC139_200623	SE207911.021	%	50 - 130%	79
	0407_QC144_200623	SE207911.022	%	50 - 130%	81
	0407_QC147_200623	SE207911.023	%	50 - 130%	76

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP106_0.1_200623	SE207911.001	%	60 - 130%	69
	0407_TP106_0.5_200623	SE207911.002	%	60 - 130%	68
	0407_TP105_0.1_200623	SE207911.003	%	60 - 130%	68
	0407_TP105_1.0_200623	SE207911.004	%	60 - 130%	68
	0407_TP104_0.5_200623	SE207911.005	%	60 - 130%	68
	0407_TP104_1.0_200623	SE207911.006	%	60 - 130%	71
	0407_TP94_0.1_200623	SE207911.007	%	60 - 130%	69
	0407_TP94_0.5_200623	SE207911.008	%	60 - 130%	68
	0407_TP95_0.1_200623	SE207911.009	%	60 - 130%	71
	0407_TP95_1.0_200623	SE207911.010	%	60 - 130%	68
	0407_TP96_0.1_200623	SE207911.011	%	60 - 130%	70
	0407_TP96_0.5_200623	SE207911.012	%	60 - 130%	70

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP97_0.1_200623	SE207911.013	%	60 - 130%	70
	0407_TP97_0.5_200623	SE207911.014	%	60 - 130%	72
	0407_TP85_0.1_200623	SE207911.015	%	60 - 130%	69
	0407_TP85_0.5_200623	SE207911.016	%	60 - 130%	70
	0407_TP86_0.1_200623	SE207911.017	%	60 - 130%	72
	0407_TP86_0.5_200623	SE207911.018	%	60 - 130%	68
	0407_TP87_0.1_200623	SE207911.019	%	60 - 130%	64
	0407_TP87_0.5_200623	SE207911.020	%	60 - 130%	70
	0407_QC139_200623	SE207911.021	%	60 - 130%	62
	0407_QC144_200623	SE207911.022	%	60 - 130%	68
	0407_QC147_200623	SE207911.023	%	60 - 130%	64
d4-1,2-dichloroethane (Surrogate)	0407_TP106_0.1_200623	SE207911.001	%	60 - 130%	92
	0407_TP106_0.5_200623	SE207911.002	%	60 - 130%	94
	0407_TP105_0.1_200623	SE207911.003	%	60 - 130%	92
	0407_TP105_1.0_200623	SE207911.004	%	60 - 130%	94
	0407_TP104_0.5_200623	SE207911.005	%	60 - 130%	92
	0407_TP104_1.0_200623	SE207911.006	%	60 - 130%	97
	0407_TP94_0.1_200623	SE207911.007	%	60 - 130%	95
	0407_TP94_0.5_200623	SE207911.008	%	60 - 130%	94
	0407_TP95_0.1_200623	SE207911.009	%	60 - 130%	97
	0407_TP95_1.0_200623	SE207911.010	%	60 - 130%	94
	0407_TP96_0.1_200623	SE207911.011	%	60 - 130%	98
	0407_TP96_0.5_200623	SE207911.012	%	60 - 130%	96
	0407_TP97_0.1_200623	SE207911.013	%	60 - 130%	97
	0407_TP97_0.5_200623	SE207911.014	%	60 - 130%	100
	0407_TP85_0.1_200623	SE207911.015	%	60 - 130%	97
	0407_TP85_0.5_200623	SE207911.016	%	60 - 130%	96
	0407_TP86_0.1_200623	SE207911.017	%	60 - 130%	99
	0407_TP86_0.5_200623	SE207911.018	%	60 - 130%	95
	0407_TP87_0.1_200623	SE207911.019	%	60 - 130%	90
	0407_TP87_0.5_200623	SE207911.020	%	60 - 130%	97
	0407_QC139_200623	SE207911.021	%	60 - 130%	85
	0407_QC144_200623	SE207911.022	%	60 - 130%	95
	0407_QC147_200623	SE207911.023	%	60 - 130%	92
d8-toluene (Surrogate)	0407_TP106_0.1_200623	SE207911.001	%	60 - 130%	91
	0407_TP106_0.5_200623	SE207911.002	%	60 - 130%	92
	0407_TP105_0.1_200623	SE207911.003	%	60 - 130%	92
	0407_TP105_1.0_200623	SE207911.004	%	60 - 130%	92
	0407_TP104_0.5_200623	SE207911.005	%	60 - 130%	90
	0407_TP104_1.0_200623	SE207911.006	%	60 - 130%	94
	0407_TP94_0.1_200623	SE207911.007	%	60 - 130%	92
	0407_TP94_0.5_200623	SE207911.008	%	60 - 130%	91
	0407_TP95_0.1_200623	SE207911.009	%	60 - 130%	95
	0407_TP95_1.0_200623	SE207911.010	%	60 - 130%	92
	0407_TP96_0.1_200623	SE207911.011	%	60 - 130%	96
	0407_TP96_0.5_200623	SE207911.012	%	60 - 130%	93
	0407_TP97_0.1_200623	SE207911.013	%	60 - 130%	95
	0407_TP97_0.5_200623	SE207911.014	%	60 - 130%	97
	0407_TP85_0.1_200623	SE207911.015	%	60 - 130%	93
	0407_TP85_0.5_200623	SE207911.016	%	60 - 130%	94
	0407_TP86_0.1_200623	SE207911.017	%	60 - 130%	95
	0407_TP86_0.5_200623	SE207911.018	%	60 - 130%	90
	0407_TP87_0.1_200623	SE207911.019	%	60 - 130%	86
	0407_TP87_0.5_200623	SE207911.020	%	60 - 130%	94
	0407_QC139_200623	SE207911.021	%	60 - 130%	78
	0407_QC144_200623	SE207911.022	%	60 - 130%	91
	0407_QC147_200623	SE207911.023	%	60 - 130%	87

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP106_0.1_200623	SE207911.001	%	60 - 130%	69
	0407_TP106_0.5_200623	SE207911.002	%	60 - 130%	68
	0407_TP105_0.1_200623	SE207911.003	%	60 - 130%	68
	0407_TP105_1.0_200623	SE207911.004	%	60 - 130%	68
	0407_TP104_0.5_200623	SE207911.005	%	60 - 130%	68
	0407_TP104_1.0_200623	SE207911.006	%	60 - 130%	71
	0407_TP94_0.1_200623	SE207911.007	%	60 - 130%	69
	0407_TP94_0.5_200623	SE207911.008	%	60 - 130%	68
	0407_TP95_0.1_200623	SE207911.009	%	60 - 130%	71
	0407_TP95_1.0_200623	SE207911.010	%	60 - 130%	68
	0407_TP96_0.1_200623	SE207911.011	%	60 - 130%	70
	0407_TP96_0.5_200623	SE207911.012	%	60 - 130%	70
	0407_TP97_0.1_200623	SE207911.013	%	60 - 130%	70
	0407_TP97_0.5_200623	SE207911.014	%	60 - 130%	72
	0407_TP85_0.1_200623	SE207911.015	%	60 - 130%	69
	0407_TP85_0.5_200623	SE207911.016	%	60 - 130%	70
	0407_TP86_0.1_200623	SE207911.017	%	60 - 130%	72
	0407_TP86_0.5_200623	SE207911.018	%	60 - 130%	68
	0407_TP87_0.1_200623	SE207911.019	%	60 - 130%	64
	0407_TP87_0.5_200623	SE207911.020	%	60 - 130%	70
	0407_QC139_200623	SE207911.021	%	60 - 130%	62
	0407_QC144_200623	SE207911.022	%	60 - 130%	68
	0407_QC147_200623	SE207911.023	%	60 - 130%	64
d4-1,2-dichloroethane (Surrogate)	0407_TP106_0.1_200623	SE207911.001	%	60 - 130%	92
	0407_TP106_0.5_200623	SE207911.002	%	60 - 130%	94
	0407_TP105_0.1_200623	SE207911.003	%	60 - 130%	92
	0407_TP105_1.0_200623	SE207911.004	%	60 - 130%	94
	0407_TP104_0.5_200623	SE207911.005	%	60 - 130%	92
	0407_TP104_1.0_200623	SE207911.006	%	60 - 130%	97
	0407_TP94_0.1_200623	SE207911.007	%	60 - 130%	95
	0407_TP94_0.5_200623	SE207911.008	%	60 - 130%	94
	0407_TP95_0.1_200623	SE207911.009	%	60 - 130%	97
	0407_TP95_1.0_200623	SE207911.010	%	60 - 130%	94
	0407_TP96_0.1_200623	SE207911.011	%	60 - 130%	98
	0407_TP96_0.5_200623	SE207911.012	%	60 - 130%	96
	0407_TP97_0.1_200623	SE207911.013	%	60 - 130%	97
	0407_TP97_0.5_200623	SE207911.014	%	60 - 130%	100
	0407_TP85_0.1_200623	SE207911.015	%	60 - 130%	97
	0407_TP85_0.5_200623	SE207911.016	%	60 - 130%	96
	0407_TP86_0.1_200623	SE207911.017	%	60 - 130%	99
	0407_TP86_0.5_200623	SE207911.018	%	60 - 130%	95
	0407_TP87_0.1_200623	SE207911.019	%	60 - 130%	90
	0407_TP87_0.5_200623	SE207911.020	%	60 - 130%	97
	0407_QC139_200623	SE207911.021	%	60 - 130%	85
	0407_QC144_200623	SE207911.022	%	60 - 130%	95
	0407_QC147_200623	SE207911.023	%	60 - 130%	92
d8-toluene (Surrogate)	0407_TP106_0.1_200623	SE207911.001	%	60 - 130%	91
	0407_TP106_0.5_200623	SE207911.002	%	60 - 130%	92
	0407_TP105_0.1_200623	SE207911.003	%	60 - 130%	92
	0407_TP105_1.0_200623	SE207911.004	%	60 - 130%	92
	0407_TP104_0.5_200623	SE207911.005	%	60 - 130%	90
	0407_TP104_1.0_200623	SE207911.006	%	60 - 130%	94
	0407_TP94_0.1_200623	SE207911.007	%	60 - 130%	92
	0407_TP94_0.5_200623	SE207911.008	%	60 - 130%	91
	0407_TP95_0.1_200623	SE207911.009	%	60 - 130%	95
	0407_TP95_1.0_200623	SE207911.010	%	60 - 130%	92
	0407_TP96_0.1_200623	SE207911.011	%	60 - 130%	96
	0407_TP96_0.5_200623	SE207911.012	%	60 - 130%	93
	0407_TP97_0.1_200623	SE207911.013	%	60 - 130%	95
	0407_TP97_0.5_200623	SE207911.014	%	60 - 130%	97
	0407_TP85_0.1_200623	SE207911.015	%	60 - 130%	93

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d8-toluene (Surrogate)	0407_TP85_0.5_200623	SE207911.016	%	60 - 130%	94
	0407_TP86_0.1_200623	SE207911.017	%	60 - 130%	95
	0407_TP86_0.5_200623	SE207911.018	%	60 - 130%	90
	0407_TP87_0.1_200623	SE207911.019	%	60 - 130%	86
	0407_TP87_0.5_200623	SE207911.020	%	60 - 130%	94
	0407_QC139_200623	SE207911.021	%	60 - 130%	78
	0407_QC144_200623	SE207911.022	%	60 - 130%	91
	0407_QC147_200623	SE207911.023	%	60 - 130%	87

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result
LB202879.001	Mercury	mg/kg	0.05	<0.05
LB202988.001	Mercury	mg/kg	0.05	<0.05

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202843.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	91

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202843.001		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	87
		d14-p-terphenyl (Surrogate)	%	-	92

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB202843.001	Naphthalene	mg/kg	0.1	<0.1
	2-methylnaphthalene	mg/kg	0.1	<0.1
	1-methylnaphthalene	mg/kg	0.1	<0.1
	Acenaphthylene	mg/kg	0.1	<0.1
	Acenaphthene	mg/kg	0.1	<0.1
	Fluorene	mg/kg	0.1	<0.1
	Phenanthrene	mg/kg	0.1	<0.1
	Anthracene	mg/kg	0.1	<0.1
	Fluoranthene	mg/kg	0.1	<0.1
	Pyrene	mg/kg	0.1	<0.1
	Benzo(a)anthracene	mg/kg	0.1	<0.1
	Chrysene	mg/kg	0.1	<0.1
	Benzo(a)pyrene	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202843.001		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	84
		2-fluorobiphenyl (Surrogate)	%	-	87
		d14-p-terphenyl (Surrogate)	%	-	92

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202843.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	91

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202843.001		Phenol	mg/kg	0.5	<0.5
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5
		2-nitrophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
		Pentachlorophenol	mg/kg	0.5	<0.5
		2,4-dinitrophenol	mg/kg	2	<2
		4-chloro-3-methylphenol	mg/kg	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	79
		d5-phenol (Surrogate)	%	-	84

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB202864.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0
LB202986.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB202843.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB202833.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB202833.001	Monocyclic Aromatic Hydrocarbons	tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10
		MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	100
		d8-toluene (Surrogate)	%	-	100
		Bromofluorobenzene (Surrogate)	%	-	72
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB202833.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	100

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207876.034	LB202988.020	Mercury	mg/kg	0.05	8.78442545104.6194462103		200	0
SE207911.010	LB202879.014	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE207911.019	LB202879.024	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE207911.021	LB202988.014	Mercury	mg/kg	0.05	<0.05	<0.05	200	0

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207911.010	LB202850.011	% Moisture	%w/w	1	3.8	3.9	56	0
SE207911.020	LB202850.022	% Moisture	%w/w	1	3.5	3.1	60	10
SE207911.023	LB202850.026	% Moisture	%w/w	1	2.6	2.6	68	2

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207911.010	LB202843.014		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	0.13	30	4
SE207911.023	LB202843.032		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207911.023	LB202843.032		p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.12	0.12	30	5

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207911.010	LB202843.014		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	4
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	1
SE207911.023	LB202843.032		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	10
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	11

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207911.010	LB202843.014	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
		Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
		Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207911.010	LB202843.014		Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	<0.3	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	<0.2	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	30	3
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	4
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	1
SE207911.023	LB202843.032		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	<0.3	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	<0.2	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	30	1
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	10
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	11

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207911.010	LB202843.014		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	4
SE207911.023	LB202843.032		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	5

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207911.010	LB202843.014		Phenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	200	0
			Total Cresol	mg/kg	1.5	<1.5	<1.5	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	200	0
			4-nitrophenol	mg/kg	1	<1	<1	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dinitrophenol	mg/kg	2	<2	<2	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.9	4.1	30	4
			d5-phenol (Surrogate)	mg/kg	-	1.4	1.4	30	1
SE207911.023	LB202843.032		Phenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	200	0
			Total Cresol	mg/kg	1.5	<1.5	<1.5	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	200	0
			4-nitrophenol	mg/kg	1	<1	<1	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dinitrophenol	mg/kg	2	<2	<2	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.9	4.0	30	2
			d5-phenol (Surrogate)	mg/kg	-	1.5	1.6	30	3

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207876.034	LB202986.022	Arsenic, As	mg/kg	1	0.4170206336	0.3945742	200	0
		Cadmium, Cd	mg/kg	0.3	-0.0095031511	-0.005534	200	0
		Chromium, Cr	mg/kg	0.5	0.0726711560	0.096845	200	0
		Copper, Cu	mg/kg	0.5	0.0419256669	0.0409516	200	0
		Nickel, Ni	mg/kg	0.5	0.0452797202	0.024903	200	0
		Lead, Pb	mg/kg	1	0.1330441163	0.0951848	200	0
		Zinc, Zn	mg/kg	2	0.1514914098	0.9191974	200	0
SE207911.010	LB202864.014	Arsenic, As	mg/kg	1	<1	<1	154	0
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	1.1	1.2	73	5
		Copper, Cu	mg/kg	0.5	<0.5	<0.5	200	0
		Nickel, Ni	mg/kg	0.5	1.1	1.1	75	2
		Lead, Pb	mg/kg	1	<1	<1	160	0
		Zinc, Zn	mg/kg	2	<2.0	<2.0	200	0
SE207911.019	LB202864.024	Arsenic, As	mg/kg	1	<1	<1	200	0
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	<0.5	<0.5	146	0
		Copper, Cu	mg/kg	0.5	0.5	0.6	123	13
		Nickel, Ni	mg/kg	0.5	<0.5	<0.5	200	0
		Lead, Pb	mg/kg	1	2	2	72	2
		Zinc, Zn	mg/kg	2	2.8	3.5	93	25
SE208016.010	LB202986.014	Copper, Cu	mg/kg	0.5	11	11	35	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207911.010	LB202843.014		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE207911.023	LB202843.032		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207911.010	LB202833.015	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207911.010	LB202833.015	Halogenated	4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.4	9.6	50	2
			d8-toluene (Surrogate)	mg/kg	-	9.2	9.3	50	2
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.8	6.9	50	1
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE207911.023	LB202833.032	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

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RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207911.023	LB202833.032	Halogenated	Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
		Aliphatics	1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.2	9.2	50	0
			d8-toluene (Surrogate)	mg/kg	-	8.7	8.8	50	1
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.4	6.5	50	1
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207911.023	LB202833.032	Trihalomethan	Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromoform	mg/kg	0.1	<0.1	<0.1	200	0

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207911.010	LB202833.015		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.4	9.6	30	2
			d8-toluene (Surrogate)	mg/kg	-	9.2	9.3	30	2
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.8	6.9	30	1
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE207911.023	LB202833.032		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.2	9.2	30	0
			d8-toluene (Surrogate)	mg/kg	-	8.7	8.8	30	1
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.4	6.5	30	1
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202879.002	Mercury	mg/kg	0.05	0.18	0.2	70 - 130	89
LB202988.002	Mercury	mg/kg	0.05	0.18	0.2	70 - 130	88

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202843.002		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	102
		Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	103
		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	103
		Dieldrin	mg/kg	0.2	0.2	0.2	60 - 140	109
		Endrin	mg/kg	0.2	0.2	0.2	60 - 140	110
		p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	101
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.12	0.15	40 - 130	81

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202843.002		Dichlorvos	mg/kg	0.5	1.8	2	60 - 140	92
		Diazinon (Dimpylate)	mg/kg	0.5	2.5	2	60 - 140	127
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.8	2	60 - 140	139
		Ethion	mg/kg	0.2	2.3	2	60 - 140	116
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	87
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	80

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202843.002		Naphthalene	mg/kg	0.1	3.9	4	60 - 140	98
		Acenaphthylene	mg/kg	0.1	4.2	4	60 - 140	106
		Acenaphthene	mg/kg	0.1	4.1	4	60 - 140	103
		Phenanthrene	mg/kg	0.1	4.3	4	60 - 140	109
		Anthracene	mg/kg	0.1	4.5	4	60 - 140	112
		Fluoranthene	mg/kg	0.1	4.6	4	60 - 140	114
		Pyrene	mg/kg	0.1	4.7	4	60 - 140	118
		Benzo(a)pyrene	mg/kg	0.1	4.4	4	60 - 140	110
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	81
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	87
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	80

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202843.002	Arochlor 1260	mg/kg	0.2	0.4	0.4	60 - 140	109

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202843.002		Phenol	mg/kg	0.5	0.7	1	70 - 130	73
		2,4-dichlorophenol	mg/kg	0.5	0.8	1	70 - 130	77
		2,4,6-trichlorophenol	mg/kg	0.5	1.1	1	70 - 130	106
		Pentachlorophenol	mg/kg	0.5	0.8	1	70 - 130	76
	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.8	5	40 - 130	77
		d5-phenol (Surrogate)	mg/kg	-	1.6	2	40 - 130	79

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202864.002	Arsenic, As	mg/kg	1	340	318.22	80 - 120	106
	Cadmium, Cd	mg/kg	0.3	5.2	5.41	80 - 120	96
	Chromium, Cr	mg/kg	0.5	40	38.31	80 - 120	104
	Copper, Cu	mg/kg	0.5	310	290	80 - 120	105
	Nickel, Ni	mg/kg	0.5	200	187	80 - 120	106
	Lead, Pb	mg/kg	1	93	89.9	80 - 120	104
	Zinc, Zn	mg/kg	2	280	273	80 - 120	103
LB202986.002	Arsenic, As	mg/kg	1	340	318.22	80 - 120	107
	Cadmium, Cd	mg/kg	0.3	4.9	5.41	80 - 120	90
	Chromium, Cr	mg/kg	0.5	42	38.31	80 - 120	110

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202986.002		Copper, Cu	mg/kg	0.5	300	290	80 - 120	105
		Nickel, Ni	mg/kg	0.5	200	187	80 - 120	106
		Lead, Pb	mg/kg	1	94	89.9	80 - 120	104
		Zinc, Zn	mg/kg	2	280	273	80 - 120	103

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202843.002		TRH C10-C14	mg/kg	20	40	40	60 - 140	100
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	78
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	100
	TRH F Bands	TRH >C10-C16	mg/kg	25	37	40	60 - 140	93
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	75
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	110

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202833.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	3.8	5	60 - 140	76
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	4.2	5	60 - 140	84
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	4.0	5	60 - 140	80
	Halogenated	Chlorobenzene	mg/kg	0.1	4.6	5	60 - 140	93
	Monocyclic	Benzene	mg/kg	0.1	3.7	5	60 - 140	74
	Aromatic	Toluene	mg/kg	0.1	3.9	5	60 - 140	78
		Ethylbenzene	mg/kg	0.1	4.0	5	60 - 140	81
		m/p-xylene	mg/kg	0.2	8.0	10	60 - 140	80
		o-xylene	mg/kg	0.1	4.0	5	60 - 140	79
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.6	10	70 - 130	96
		d8-toluene (Surrogate)	mg/kg	-	10.1	10	70 - 130	101
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.7	10	70 - 130	87
	Trihalomethan	Chloroform	mg/kg	0.1	4.2	5	60 - 140	85

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202833.002		TRH C6-C10	mg/kg	25	71	92.5	60 - 140	76
		TRH C6-C9	mg/kg	20	61	80	60 - 140	76
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.6	10	70 - 130	96
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.7	10	70 - 130	87
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	47	62.5	60 - 140	75

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207911.001	LB202879.004	Mercury	mg/kg	0.05	0.18	<0.05	0.2	79
SE208016.001	LB202988.004	Mercury	mg/kg	0.05	0.15	<0.05	0.2	72

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE207911.002	LB202843.033		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	-	-
			Alpha BHC	mg/kg	0.1	<0.1	-	-
			Lindane	mg/kg	0.1	<0.1	-	-
			Heptachlor	mg/kg	0.1	<0.1	0.2	116
			Aldrin	mg/kg	0.1	<0.1	0.2	115
			Beta BHC	mg/kg	0.1	<0.1	-	-
			Delta BHC	mg/kg	0.1	<0.1	0.2	118
			Heptachlor epoxide	mg/kg	0.1	<0.1	-	-
			o,p'-DDE	mg/kg	0.1	<0.1	-	-
			Alpha Endosulfan	mg/kg	0.2	<0.2	-	-
			Gamma Chlordane	mg/kg	0.1	<0.1	-	-
			Alpha Chlordane	mg/kg	0.1	<0.1	-	-
			trans-Nonachlor	mg/kg	0.1	<0.1	-	-
			p,p'-DDE	mg/kg	0.1	<0.1	-	-
			Dieldrin	mg/kg	0.2	<0.2	0.2	121
			Endrin	mg/kg	0.2	<0.2	0.2	122
			o,p'-DDD	mg/kg	0.1	<0.1	-	-
			o,p'-DDT	mg/kg	0.1	<0.1	-	-
			Beta Endosulfan	mg/kg	0.2	<0.2	-	-
			p,p'-DDD	mg/kg	0.1	<0.1	-	-
			p,p'-DDT	mg/kg	0.1	<0.1	0.2	114
			Endosulfan sulphate	mg/kg	0.1	<0.1	-	-
			Endrin Aldehyde	mg/kg	0.1	<0.1	-	-
			Methoxychlor	mg/kg	0.1	<0.1	-	-
			Endrin Ketone	mg/kg	0.1	<0.1	-	-
			Isodrin	mg/kg	0.1	<0.1	-	-
			Mirex	mg/kg	0.1	<0.1	-	-
			Total CLP OC Pesticides	mg/kg	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.13	-	93

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE207911.002	LB202843.033		Dichlorvos	mg/kg	0.5	<0.5	2	74
			Dimethoate	mg/kg	0.5	<0.5	-	-
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	2	118
			Fenitrothion	mg/kg	0.2	<0.2	-	-
			Malathion	mg/kg	0.2	<0.2	-	-
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	2	121
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	-	-
			Bromophos Ethyl	mg/kg	0.2	<0.2	-	-
			Methidathion	mg/kg	0.5	<0.5	-	-
			Ethion	mg/kg	0.2	<0.2	2	96
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	-	-
			Total OP Pesticides*	mg/kg	1.7	<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	-	83
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	-	73

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number	Parameter	Units	LOR	Original	Spike	Recovery%
SE207911.002	LB202843.033	Naphthalene	mg/kg	0.1	<0.1	4	95
		2-methylnaphthalene	mg/kg	0.1	<0.1	-	-
		1-methylnaphthalene	mg/kg	0.1	<0.1	-	-
		Acenaphthylene	mg/kg	0.1	<0.1	4	100
		Acenaphthene	mg/kg	0.1	<0.1	4	103
		Fluorene	mg/kg	0.1	<0.1	-	-
		Phenanthrene	mg/kg	0.1	<0.1	4	104

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE207911.002	LB202843.033		Anthracene	mg/kg	0.1	<0.1	4	101
			Fluoranthene	mg/kg	0.1	<0.1	4	107
			Pyrene	mg/kg	0.1	<0.1	4	106
			Benzo(a)anthracene	mg/kg	0.1	<0.1	-	-
			Chrysene	mg/kg	0.1	<0.1	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	-	-
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	-	-
			Benzo(a)pyrene	mg/kg	0.1	<0.1	4	110
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	-	-
			Total PAH (18)	mg/kg	0.8	<0.8	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	-	76
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	-	83
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	-	73

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE207911.002	LB202843.033		Arochlor 1016	mg/kg	0.2	<0.2	-	-
			Arochlor 1221	mg/kg	0.2	<0.2	-	-
			Arochlor 1232	mg/kg	0.2	<0.2	-	-
			Arochlor 1242	mg/kg	0.2	<0.2	-	-
			Arochlor 1248	mg/kg	0.2	<0.2	-	-
			Arochlor 1254	mg/kg	0.2	<0.2	-	-
			Arochlor 1260	mg/kg	0.2	<0.2	0.4	76
			Arochlor 1262	mg/kg	0.2	<0.2	-	-
			Arochlor 1268	mg/kg	0.2	<0.2	-	-
			Total PCBs (Arochlors)	mg/kg	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	-	85

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207911.001	LB202843.004		Phenol	mg/kg	0.5	0.7	<0.5	1	70
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	-	-
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	-	-
			Total Cresol	mg/kg	1.5	<1.5	<1.5	-	-
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	-	-
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	-	-
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	-	-
			2,4-dichlorophenol	mg/kg	0.5	0.9	<0.5	1	88
			2,4,6-trichlorophenol	mg/kg	0.5	1.2	<0.5	1	117
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	-	-
			4-nitrophenol	mg/kg	1	<1	<1	-	-
			2,4,5-trichlorophenol	mg/kg	0.5	1.0	<0.5	-	-
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	-	-
			Pentachlorophenol	mg/kg	0.5	0.8	<0.5	1	75
			2,4-dinitrophenol	mg/kg	2	<2	<2	-	-
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	-	-
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.6	3.6	-	71
			d5-phenol (Surrogate)	mg/kg	-	1.6	1.5	-	78

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207911.001	LB202864.004	Arsenic, As	mg/kg	1	51	2	50	97
		Cadmium, Cd	mg/kg	0.3	43	<0.3	50	85
		Chromium, Cr	mg/kg	0.5	54	6.7	50	94
		Copper, Cu	mg/kg	0.5	52	4.8	50	94
		Nickel, Ni	mg/kg	0.5	52	4.6	50	95
		Lead, Pb	mg/kg	1	59	14	50	90

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207911.001	LB202864.004	Zinc, Zn	mg/kg	2	77	31	50	93
SE208016.001	LB202986.004	Arsenic, As	mg/kg	1	58	7	50	103
		Cadmium, Cd	mg/kg	0.3	47	<0.3	50	94
		Chromium, Cr	mg/kg	0.5	63	8.4	50	109
		Copper, Cu	mg/kg	0.5	66	10	50	112
		Nickel, Ni	mg/kg	0.5	56	1.0	50	110
		Lead, Pb	mg/kg	1	61	7	50	107
		Zinc, Zn	mg/kg	2	68	11	50	114

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE207911.002	LB202843.033		TRH C10-C14	mg/kg	20	<20	40	98
			TRH C15-C28	mg/kg	45	<45	40	90
			TRH C29-C36	mg/kg	45	<45	40	73
			TRH C37-C40	mg/kg	100	<100	-	-
			TRH C10-C36 Total	mg/kg	110	<110	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	40	95
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	<90	40	80
			TRH >C34-C40 (F4)	mg/kg	120	<120	-	-

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207911.001	LB202833.005	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	-	-
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	-	-
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	-	-
			Bromomethane	mg/kg	1	<1	<1	-	-
			Chloroethane	mg/kg	1	<1	<1	-	-
			Trichlorofluoromethane	mg/kg	1	<1	<1	-	-
			Iodomethane	mg/kg	5	<5	<5	-	-
			1,1-dichloroethene	mg/kg	0.1	3.6	<0.1	5	73
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	-	-
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloroethane	mg/kg	0.1	4.1	<0.1	5	81
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	-	-
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	3.9	<0.1	5	77
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	-	-
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated	Chlorobenzene	mg/kg	0.1	4.5	<0.1	5	90
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207911.001	LB202833.005	Halogenated	4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-
		Aromatics	1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Monocyclic	Benzene	mg/kg	0.1	3.2	<0.1	5	63
		Aromatic	Toluene	mg/kg	0.1	3.5	<0.1	5	68
			Ethylbenzene	mg/kg	0.1	3.6	<0.1	5	71
			m/p-xylene	mg/kg	0.2	7.2	<0.2	10	71
			o-xylene	mg/kg	0.1	3.6	<0.1	5	72
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	-	-
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	-	-
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	-	-
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	-	-
		Compounds	2-nitropropane	mg/kg	10	<10	<10	-	-
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	-	-
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	-	-
			Vinyl acetate	mg/kg	10	<10	<10	-	-
			MEK (2-butanone)	mg/kg	10	<10	<10	-	-
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	-	-
			2-hexanone (MBK)	mg/kg	5	<5	<5	-	-
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.0	9.2	10	90
			d8-toluene (Surrogate)	mg/kg	-	8.8	9.1	10	88
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.1	6.9	10	61 ①
		Totals	Total Xylenes	mg/kg	0.3	11	<0.3	-	-
			Total BTEX	mg/kg	0.6	21	<0.6	-	-
			Total VOC*	mg/kg	24	41	<24	-	-
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	-	-
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	20	<1.8	-	-
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	20	<1.8	-	-
		Trihalometha	Chloroform	mg/kg	0.1	4.0	<0.1	5	80
		nes	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Bromoform	mg/kg	0.1	<0.1	<0.1	-	-

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207911.001	LB202833.005		TRH C6-C10	mg/kg	25	60	<25	92.5	65
			TRH C6-C9	mg/kg	20	54	<20	80	67
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.0	9.2	10	90
			d8-toluene (Surrogate)	mg/kg	-	8.8	9.1	10	88
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.1	6.9	-	61
		VPH F	Benzene (F0)	mg/kg	0.1	3.2	<0.1	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	39	<25	62.5	62

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

QC Sample	Sample Number	Parameter	Units	LOR

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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000552

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CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

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- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
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- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
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- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT: ~~RTA~~ SLR	LABORATORY: SGS	Turnaround Time (TAT)	COC Number 1 of 6
PROJECT: 610.30041.0000	LABORATORY ADDRESS: Sydney	☐ Standard TAT	
PROJECT ~~NUMBER~~: Name: Contamination Investigation	SAMPLER: [redacted]	☐ Non Standard or Urgent TAT	
PROJECT MANAGER: [redacted]	SAMPLER CONTACT No: [redacted]	Required TAT:	
PM CONTACT No:	Email Reports and Invoices to:		

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS: Suite A; HOLD; Asbestos ID

Additional Information *(Comment on any gross contamination or specific requirements)*

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives
1	RWBB_TP001_0.1_200615	15.6.20	Soil	1 x PFAS, 1 x G.jar, 1 x Asbestos
2	RWBB_TP001_0.5_200615			
	RWBB_TP002_0.1_200615			
3	RWBB_TP002_0.5_200615			
	RWBB_TP002_1.0_200615			
4	RWBB_TP002_1.5_200615			
	RWBB_TP003_0.1_200616	16.6.20		
5	RWBB_TP003_0.5_200616			
6	RWBB_TP003_1.0_200616			
	RWBB_TP003_1.5_200616			1 x g.jar, 1 x pfas
	RWBB_TP04_0.1_200616			1 x g.jar, 1 x pfas, 1 x asbestos
7	RWBB_TP04_0.5_200616			

SGS Alexandria Environmental

SE207695 COC

Received: 17 – Jun – 2020

I attest that the proper field sampling procedures w[redacted]g the collection of these samples.

Relinquished By Sampler	Sign [redacted]	Date / Time 17.6.20 1540	Received by	Sign [redacted]	Date / Time	Temperature Received:
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time 17/6 @ 4.3p	4 °C
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

source: [Untitled].pdf page: 1 SGS Ref: SE207695_COC

000553

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CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)				
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☐ CANBERRA: GPO Box 410, Canberra, ACT 2600	☐ MACKAY: 21 River Street, Mackay, QLD 4740	☐ PERTH: 503 Murray Street, Perth, WA 6000	☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810	☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
☐ DARWIN: 21 Parap Rd, Darwin, NT 0820	☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122	☐ ROCKHAMPTON: rockhampton@slrconsulting.com	☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ	☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT: ~~DHA~~ SLR	LABORATORY: SGS	Turnaround Time (TAT)	COC Number 2 of 6
PROJECT: 610.30041	LABORATORY ADDRESS: Sydney	☐ Standard TAT	
PROJECT NUMBER:	SAMPLER: [redacted]	☐ Non Standard or Urgent TAT	
PROJECT MANAGER: [redacted]	SAMPLER CONTACT No:	Required TAT:	
PM CONTACT No:	Email Reports and Invoices to:		

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, Water, PCM, etc)	Containers and Preservatives	Suite A	HOCD							Additional Information (Comment on any gross contamination or specific requirements)
8	RWBB_QC100_200616	16.6.20	~~1x g.jar~~ SOIL ~~1x PFAS~~ QF	1 x g.jar 1 x pfas	/								
9	RWBB_QC200_200616				/								send to eurofins
	RWBB_TP004_1.0_200616			jar, PFAS, asbestos		/							
9	RWBB_TP005_0.1_200616			jar, PFAS, Asbestos	/								
	RWBB_TP005_0.5_200616					/							
10	RWBB_TP005_1.0_200616				/								
	RWBB_TP005_1.5_200616			jar, PFAS		/							
11	RWBB_TP013_0.1_200616			1 x jar, PFAS Asbestos	/								
	RWBB_TP013_0.5_200616					/							
12	RWBB_TP013_1.0_200616			1 x jar 1 x pfas	/								
13	RWBB_TP031_0.1_200616			1 jar, PFAS asbestos	/								
14	RWBB_TP031_0.5_200616				/								

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign ~~1540~~ [redacted] ~~17.6.20~~	Date / Time 1540 17.6.20	Received by	Sign [redacted]	Date / Time	Temperature Received:
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time 17/6/04.30	14°C
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

000554

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CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
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- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
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- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT: ~~DHA~~ SLR	LABORATORY: SGS	Turnaround Time (TAT)	COC Number 3 of 6
PROJECT: 610.30041	LABORATORY ADDRESS: Sydney		
PROJECT NUMBER: [redacted]	SAMPLER: [redacted]	☐ Standard TAT	
PROJECT MANAGER:	SAMPLER CONTACT No:	☐ Non Standard or Urgent TAT	
PM CONTACT No:	Email Reports and Invoices to:	Required TAT:	

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS: Suite A; HOCD; Asbestos ID

Additional Information (Comment on any gross contamination or specific requirements)

No.	Sample ID	Date & Time	Matrix (Soil, water, SCM, etc)	Containers and Preservatives	Suite A	HOCD	Asbestos ID	Additional Information
1	RWBB_QC104_200616	16.6.20	Soil	jar	/			send to eurofins
	RWBB_QC204_200616			jar	/			
	RWBB_TP031_1.0_200616			jar, PFAS	/	/		
	RWBB_TP040_0.1_200616			jar, PFAS, ASBestos	/	/		
4	RWBB_TP040_0.5_200616			↓	/	/		
6	RWBB_TP040_1.0_200616			jar, PFAS	/	/		
	RWBB_TP039_0.1_200616			jar, PFAS, ACM	/	/	/	
17	RWBB_TP039_0.5_200616			↓	/	/	/	
18	RWBB_TP039_1.0_200616			jar, pfas.	/	/		
19	RWBB_TP039_0.1_ACM_200616		ACM	~~PFAS~~ Asbestos			/	
20	RWBB_TP039_0.2_ACM1_200616		ACM	Asbestos			/	
27	RWBB_TP039_0.2_ACM2_200616		ACM	Asbestos			/	

I attest that the proper field sampling procedures wer[redacted] the collection of these samples.

Relinquished By Sampler	Sign [redacted]	Date / Time 17.6.20 1540	Received by	Sign [redacted]	Date / Time	Temperature Received:
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time 17/6 4.30	14 °C
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

000555

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☐ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 19 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT: ~~DT~~ SLR	**LABORATORY:** SGS	**Turnaround Time (TAT)**	**COC Number** 4 of 6
PROJECT:	**LABORATORY ADDRESS:** Sydney		
PROJECT NUMBER: 610.30041	**SAMPLER:** [redacted]	☐ Standard TAT	
PROJECT MANAGER: [redacted]	**SAMPLER CONTACT No:**	☐ Non Standard or Urgent TAT	
PM CONTACT No:	**Email Reports and Invoices to:**	**Required TAT:**	

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	HOCD	Asbestos ID	Additional Information (Comment on any gross contamination or specific requirements)
22	RWBB_TP039_0.2_ACM3_200616	16.6.20	~~Soil~~ ACM	1 bag			✓	
40	RWBB_QC402_200616	16.6.20	Soil	1 vial				Trip blank
41	RWBB_QC502_200616	↓	Soil	vial				Trip Spike.
23	RWBB_TP038_0.1_200617	17.6.20		1 ajar, 1x PFAS, 1x ABS	✓			
	RWBB_TP038_0.5_200617				✓			
24	RWBB_TP038_1.0_200617				✓			
25	RWBB_TP037_0.1_200617				✓			
26	RWBB_QC107_200617				✓			
27	_QC207_200617		↓	↓	✓			
28	RWBB_TP037_0.1_ACM_200617		ACM	1 x bag	✓			
29	RWBB_TP037_0.5_200617		↓	1 jar, PFAS, ABS	✓			
30	RWBB_TP037_0.5_ACM_200617		ACM	bag x 2	✓			

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign [redacted]	Date / Time 17.6.20 15:40	**Received by**	Sign	Date / Time	**Temperature Received:**	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time 17/6 @ 4.3	14 °C	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time		

[redacted]

000556

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☐ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
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- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT: SLR	LABORATORY: SGS Sydney	Turnaround Time (TAT)	COC Number 5 of 6
PROJECT:	LABORATORY ADDRESS:	☐ Standard TAT	
PROJECT NUMBER: 610.30041	SAMPLER: [redacted]	☐ Non Standard or Urgent TAT	
PROJECT MANAGER: [redacted]	SAMPLER CONTACT No:	Required TAT:	
PM CONTACT No:	Email Reports and Invoices to:		

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS: Suite A; HOLD

Additional Information *(Comment on any gross contamination or specific requirements)*

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives
	RWBB_TP038_1.0_200617	17.6.20	Soil	1 jar 1 PFAS
31	RWBB_TP049_0.1_200617		Soil	1 jar, 1 PFAS, 1 Asbestos
32	RWBB_TP049_0.5_200617			1 jar, 1 PFAS
	RWBB_TP049_1.0_200617			
33	RWBB_TP51_0.1_200617			1 jar, 1 PFAS 1 x asbestos
	RWBB_TP51_0.5_200617			
34	RWBB_TP51_1.0_200617			
	RWBB_TP51_1.5_200617			
35	RWBB_TP51_0.1_ACM_200617		ACM	1 bag
36	RWBB_TP51_0.5_ACM_200617		ACM	1 bag
37	RWBB_TP51_0.8_ACM_200617		ACM	1 bag
38	RWBB_TP51_1.0_ACM_200617		ACM	1 bag

I attest that the proper field sampling procedures were [redacted] collection of these samples.

Relinquished By Sampler	Sign [redacted]	Date / Time 17.6.20 15:45	Received by	Sign [redacted]	Date / Time	Temperature Received:
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time 17/6 @ 4.1	14°C
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

000557

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☐ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT: SLR	LABORATORY: SGS Sydney	Turnaround Time (TAT)	COC Number 6 of 6
PROJECT:	LABORATORY ADDRESS:	☐ Standard TAT	
PROJECT NUMBER: 610.30041	SAMPLER: [redacted]	☐ Non Standard or Urgent TAT	
PROJECT MANAGER: [redacted]	SAMPLER CONTACT No: [redacted]	Required TAT:	
PM CONTACT No:	Email Reports and Invoices to:		

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS: Suite A; HOLD

Additional Information (Comment on any gross contamination or specific requirements)

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	HOLD	Additional Information
39	RWBB_TP52_0.1_200617	17.6.20	Soil	1 jar, PFAS, 1 Asbestos	/		
40	RWBB_[redacted]_QC111_200617			jar, PFAS,	/		
	RWBB_[redacted]_QC211_200617				/		duplicate
41	RWBB_TP52_0.1_ACM_200617		ACM	bag	/		
42	RWBB_TP52_0.5_200617		Soil	jar, PFAS, Asbestos	/		
	RWBB_TP52_1.0_200617			jar, PFAS		/	
43	RWBB_TP53_0.1_200617			jar, PFAS, Asb	/		
44	RWBB_TP53_0.5_200617			jar, PFAS.	/		
50	RWBB_TP53_0.5_ACM_200617						

I attest that the proper field sampling procedures [redacted] the collection of these samples.

Relinquished By Sampler	Sign [redacted]	Date / Time 17.6.20 1540	Received by	Sign [redacted]	Date / Time	Temperature Received:	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	14°C	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time 18/6 PM	3°	

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610_30041 Randwick Barrack**
Order Number	**000552--000557**
Samples	50

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207695 R1**
Date Received	17/6/2020
Date Reported	2/7/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.

Sample #34: Approx 6-7x2mm fibre bundles found loose in sample and asbestos found in approx 20x10x2mm cement sheet fragments in >2mm and <2mm portions.
Sample #42: Approx 7-8x2mm fibre bundles found loose in <2mm portion.
Sample #43: Asbestos found in approx 3x2x1mm cement sheet fragment.

Asbestos analysed by Approved Identifier Ravee Sivasubramaniam .

This report cancels and supersedes the report No.SE207695 R0 dated 25th June 2020 issued by SGS Environment, Health and Safety due to amendment of sample id's.

SIGNATORIES

[redacted]

Chemist | Senior Organic Chemist/Metals Chemist | Metals/Inorganics Team Leader

[redacted]

Organic Section Head | Asbestos Analyst

VOC's in Soil [AN433] Tested: 22/6/2020

PARAMETER	UOM	LOR	0407_TP001_0.1_20(615 SOIL - 15/6/2020 SE207695.001	0407_TP001_0.5_20(615 SOIL - 15/6/2020 SE207695.002	0407_TP002_0.5_20(615 SOIL - 15/6/2020 SE207695.003	0407_TP002_1.5_20(615 SOIL - 15/6/2020 SE207695.004	0407_TP003_0.5_20(616 SOIL - 16/6/2020 SE207695.005
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 22/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP001_0.1_20(615 SOIL - 15/6/2020 SE207695.001	0407_TP001_0.5_20(615 SOIL - 15/6/2020 SE207695.002	0407_TP002_0.5_20(615 SOIL - 15/6/2020 SE207695.003	0407_TP002_1.5_20(615 SOIL - 15/6/2020 SE207695.004	0407_TP003_0.5_20(616 SOIL - 16/6/2020 SE207695.005
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 22/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP003_1.0_20(616 SOIL - 16/6/2020 SE207695.006	0407_TP004_0.5_20(616 SOIL - 16/6/2020 SE207695.007	0407_QC100_20061(SOIL - 16/6/2020 SE207695.008	0407_TP005_0.1_20(616 SOIL - 16/6/2020 SE207695.009	0407_TP005_1.0_20(616 SOIL - 16/6/2020 SE207695.010
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 22/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP003_1.0_20(616 SOIL - 16/6/2020 SE207695.006	0407_TP004_0.5_20(616 SOIL - 16/6/2020 SE207695.007	0407_QC100_20061(SOIL - 16/6/2020 SE207695.008	0407_TP005_0.1_20(616 SOIL - 16/6/2020 SE207695.009	0407_TP005_1.0_20(616 SOIL - 16/6/2020 SE207695.010
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 22/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP013_0.1_20(616 SOIL - 16/6/2020 SE207695.011	0407_TP013_1.0_20(616 SOIL - 16/6/2020 SE207695.012	0407_TP031_0.1_20(616 SOIL - 16/6/2020 SE207695.013	0407_TP031_0.5_20(616 SOIL - 16/6/2020 SE207695.014	0407_QC104_20061(SOIL - 16/6/2020 SE207695.015
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 22/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP013_0.1_20(616 SOIL - 16/6/2020 SE207695.011	0407_TP013_1.0_20(616 SOIL - 16/6/2020 SE207695.012	0407_TP031_0.1_20(616 SOIL - 16/6/2020 SE207695.013	0407_TP031_0.5_20(616 SOIL - 16/6/2020 SE207695.014	0407_QC104_20061(SOIL - 16/6/2020 SE207695.015
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 22/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP040_1.0_20(616 SOIL - 16/6/2020 SE207695.016	0407_TP039_0.5_20(616 SOIL - 16/6/2020 SE207695.017	0407_TP039_1.0_20(616 SOIL - 16/6/2020 SE207695.018	0407_TP038_0.1_20(617 SOIL - 17/6/2020 SE207695.023	0407_TP038_1.0_20(617 SOIL - 17/6/2020 SE207695.024
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 22/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP040_1.0_20(616 SOIL - 16/6/2020 SE207695.016	0407_TP039_0.5_20(616 SOIL - 16/6/2020 SE207695.017	0407_TP039_1.0_20(616 SOIL - 16/6/2020 SE207695.018	0407_TP038_0.1_20(617 SOIL - 17/6/2020 SE207695.023	0407_TP038_1.0_20(617 SOIL - 17/6/2020 SE207695.024
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 22/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP037_0.1_20(617 SOIL - 17/6/2020 SE207695.025	0407_QC107_20061 SOIL - 17/6/2020 SE207695.026	0407_QC207_20061 SOIL - 17/6/2020 SE207695.027	0407_TP037_0.5_20(617 SOIL - 17/6/2020 SE207695.029	0407_TP049_0.1_20(617 SOIL - 17/6/2020 SE207695.031
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 22/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP037_0.1_20(617 SOIL - 17/6/2020 SE207695.025	0407_QC107_20061 SOIL - 17/6/2020 SE207695.026	0407_QC207_20061 SOIL - 17/6/2020 SE207695.027	0407_TP037_0.5_20(617 SOIL - 17/6/2020 SE207695.029	0407_TP049_0.1_20(617 SOIL - 17/6/2020 SE207695.031
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 22/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP049_0.5_20617 SOIL - 17/6/2020 SE207695.032	0407_TP051_0.1_20617 SOIL - 17/6/2020 SE207695.033	0407_TP051_1.0_20617 SOIL - 17/6/2020 SE207695.034	0407_TP052_0.1_20617 SOIL - 17/6/2020 SE207695.039	0407_QC111_200617 SOIL - 17/6/2020 SE207695.040
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 22/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP049_0.5_20617 SOIL - 17/6/2020 SE207695.032	0407_TP051_0.1_20617 SOIL - 17/6/2020 SE207695.033	0407_TP051_1.0_20617 SOIL - 17/6/2020 SE207695.034	0407_TP052_0.1_20617 SOIL - 17/6/2020 SE207695.039	0407_QC111_200617 SOIL - 17/6/2020 SE207695.040
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 22/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP052_0.5_20(617 SOIL - 17/6/2020 SE207695.042	0407_TP053_0.1_20(617 SOIL - 17/6/2020 SE207695.043	0407_TP053_0.5_20(617 SOIL - 17/6/2020 SE207695.044	0407_TP040_0.5_20(616 SOIL - 16/6/2020 SE207695.045	0407_QC402_20061(SOIL - 17/6/2020 SE207695.046
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	-
Chloromethane	mg/kg	1	<1	<1	<1	<1	-
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Bromomethane	mg/kg	1	<1	<1	<1	<1	-
Chloroethane	mg/kg	1	<1	<1	<1	<1	-
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	-
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	-
Iodomethane	mg/kg	5	<5	<5	<5	<5	-
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	-
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	-
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	-
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	-
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
2-nitropropane	mg/kg	10	<10	<10	<10	<10	-
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	-
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	-
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	-
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	-

VOC's in Soil [AN433] Tested: 22/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP052_0.5_20(617 SOIL - 17/6/2020 SE207695.042	0407_TP053_0.1_20(617 SOIL - 17/6/2020 SE207695.043	0407_TP053_0.5_20(617 SOIL - 17/6/2020 SE207695.044	0407_TP040_0.5_20(616 SOIL - 16/6/2020 SE207695.045	0407_QC402_20061(SOIL - 17/6/2020 SE207695.046
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Total VOC*	mg/kg	24	<24	<24	<24	<24	-
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	-
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	-
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	-

VOC's in Soil [AN433] Tested: 22/6/2020 (continued)

PARAMETER	UOM	LOR	0407_QC502_200616 SOIL - 17/6/2020 SE207695.047
Benzene	mg/kg	0.1	[100%]
Toluene	mg/kg	0.1	[90%]
Ethylbenzene	mg/kg	0.1	[90%]
m/p-xylene	mg/kg	0.2	[91%]
o-xylene	mg/kg	0.1	[87%]
Naphthalene	mg/kg	0.1	-
Total Xylenes	mg/kg	0.3	-
Total BTEX	mg/kg	0.6	-
Dichlorodifluoromethane (CFC-12)	mg/kg	1	-
Chloromethane	mg/kg	1	-
Vinyl chloride (Chloroethene)	mg/kg	0.1	-
Bromomethane	mg/kg	1	-
Chloroethane	mg/kg	1	-
Trichlorofluoromethane	mg/kg	1	-
Acetone (2-propanone)	mg/kg	10	-
Iodomethane	mg/kg	5	-
1,1-dichloroethene	mg/kg	0.1	-
Acrylonitrile	mg/kg	0.1	-
Dichloromethane (Methylene chloride)	mg/kg	0.5	-
Allyl chloride	mg/kg	0.1	-
Carbon disulfide	mg/kg	0.5	-
trans-1,2-dichloroethene	mg/kg	0.1	-
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	-
1,1-dichloroethane	mg/kg	0.1	-
Vinyl acetate	mg/kg	10	-
MEK (2-butanone)	mg/kg	10	-
cis-1,2-dichloroethene	mg/kg	0.1	-
Bromochloromethane	mg/kg	0.1	-
Chloroform	mg/kg	0.1	-
2,2-dichloropropane	mg/kg	0.1	-
1,2-dichloroethane	mg/kg	0.1	-
1,1,1-trichloroethane	mg/kg	0.1	-
1,1-dichloropropene	mg/kg	0.1	-
Carbon tetrachloride	mg/kg	0.1	-
Dibromomethane	mg/kg	0.1	-
1,2-dichloropropane	mg/kg	0.1	-
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	-
2-nitropropane	mg/kg	10	-
Bromodichloromethane	mg/kg	0.1	-
MIBK (4-methyl-2-pentanone)	mg/kg	1	-
cis-1,3-dichloropropene	mg/kg	0.1	-
trans-1,3-dichloropropene	mg/kg	0.1	-
1,1,2-trichloroethane	mg/kg	0.1	-
1,3-dichloropropane	mg/kg	0.1	-
Chlorodibromomethane	mg/kg	0.1	-
2-hexanone (MBK)	mg/kg	5	-
1,2-dibromoethane (EDB)	mg/kg	0.1	-
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	-
1,1,1,2-tetrachloroethane	mg/kg	0.1	-
Chlorobenzene	mg/kg	0.1	-
Bromoform	mg/kg	0.1	-
cis-1,4-dichloro-2-butene	mg/kg	1	-
Styrene (Vinyl benzene)	mg/kg	0.1	-
1,1,2,2-tetrachloroethane	mg/kg	0.1	-
1,2,3-trichloropropane	mg/kg	0.1	-
trans-1,4-dichloro-2-butene	mg/kg	1	-

VOC's in Soil [AN433] Tested: 22/6/2020 (continued)

PARAMETER	UOM	LOR	0407_QC502_200616 SOIL - 17/6/2020 SE207695.047
Isopropylbenzene (Cumene)	mg/kg	0.1	-
Bromobenzene	mg/kg	0.1	-
n-propylbenzene	mg/kg	0.1	-
2-chlorotoluene	mg/kg	0.1	-
4-chlorotoluene	mg/kg	0.1	-
1,3,5-trimethylbenzene	mg/kg	0.1	-
tert-butylbenzene	mg/kg	0.1	-
1,2,4-trimethylbenzene	mg/kg	0.1	-
sec-butylbenzene	mg/kg	0.1	-
1,3-dichlorobenzene	mg/kg	0.1	-
1,4-dichlorobenzene	mg/kg	0.1	-
p-isopropyltoluene	mg/kg	0.1	-
1,2-dichlorobenzene	mg/kg	0.1	-
n-butylbenzene	mg/kg	0.1	-
1,2-dibromo-3-chloropropane	mg/kg	0.1	-
1,2,4-trichlorobenzene	mg/kg	0.1	-
Hexachlorobutadiene	mg/kg	0.1	-
1,2,3-trichlorobenzene	mg/kg	0.1	-
Total VOC*	mg/kg	24	-
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	-
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	-
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	-

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 22/6/2020

PARAMETER	UOM	LOR	0407_TP001_0.1_20(615 SOIL - 15/6/2020 SE207695.001	0407_TP001_0.5_20(615 SOIL - 15/6/2020 SE207695.002	0407_TP002_0.5_20(615 SOIL - 15/6/2020 SE207695.003	0407_TP002_1.5_20(615 SOIL - 15/6/2020 SE207695.004	0407_TP003_0.5_20(616 SOIL - 16/6/2020 SE207695.005
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP003_1.0_20(616 SOIL - 16/6/2020 SE207695.006	0407_TP004_0.5_20(616 SOIL - 16/6/2020 SE207695.007	0407_QC100_20061(SOIL - 16/6/2020 SE207695.008	0407_TP005_0.1_20(616 SOIL - 16/6/2020 SE207695.009	0407_TP005_1.0_20(616 SOIL - 16/6/2020 SE207695.010
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP013_0.1_20(616 SOIL - 16/6/2020 SE207695.011	0407_TP013_1.0_20(616 SOIL - 16/6/2020 SE207695.012	0407_TP031_0.1_20(616 SOIL - 16/6/2020 SE207695.013	0407_TP031_0.5_20(616 SOIL - 16/6/2020 SE207695.014	0407_QC104_20061(SOIL - 16/6/2020 SE207695.015
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP040_1.0_20(616 SOIL - 16/6/2020 SE207695.016	0407_TP039_0.5_20(616 SOIL - 16/6/2020 SE207695.017	0407_TP039_1.0_20(616 SOIL - 16/6/2020 SE207695.018	0407_TP038_0.1_20(617 SOIL - 17/6/2020 SE207695.023	0407_TP038_1.0_20(617 SOIL - 17/6/2020 SE207695.024
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP037_0.1_20(617 SOIL - 17/6/2020 SE207695.025	0407_QC107_20061(SOIL - 17/6/2020 SE207695.026	0407_QC207_20061(SOIL - 17/6/2020 SE207695.027	0407_TP037_0.5_20(617 SOIL - 17/6/2020 SE207695.029	0407_TP049_0.1_20(617 SOIL - 17/6/2020 SE207695.031
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP049_0.5_20(617 SOIL - 17/6/2020 SE207695.032	0407_TP051_0.1_20(617 SOIL - 17/6/2020 SE207695.033	0407_TP051_1.0_20(617 SOIL - 17/6/2020 SE207695.034	0407_TP052_0.1_20(617 SOIL - 17/6/2020 SE207695.039	0407_QC111_200617 SOIL - 17/6/2020 SE207695.040
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 22/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP052_0.5_20(617 SOIL - 17/6/2020 SE207695.042	0407_TP053_0.1_20(617 SOIL - 17/6/2020 SE207695.043	0407_TP053_0.5_20(617 SOIL - 17/6/2020 SE207695.044	0407_TP040_0.5_20(616 SOIL - 16/6/2020 SE207695.045
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 22/6/2020

PARAMETER	UOM	LOR	0407_TP001_0.1_20(615 SOIL - 15/6/2020 SE207695.001	0407_TP001_0.5_20(615 SOIL - 15/6/2020 SE207695.002	0407_TP002_0.5_20(615 SOIL - 15/6/2020 SE207695.003	0407_TP002_1.5_20(615 SOIL - 15/6/2020 SE207695.004	0407_TP003_0.5_20(616 SOIL - 16/6/2020 SE207695.005
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	**26**	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	**26**	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP003_1.0_20(616 SOIL - 16/6/2020 SE207695.006	0407_TP004_0.5_20(616 SOIL - 16/6/2020 SE207695.007	0407_QC100_20061 SOIL - 16/6/2020 SE207695.008	0407_TP005_0.1_20(616 SOIL - 16/6/2020 SE207695.009	0407_TP005_1.0_20(616 SOIL - 16/6/2020 SE207695.010
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	**73**	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	**95**	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP013_0.1_20(616 SOIL - 16/6/2020 SE207695.011	0407_TP013_1.0_20(616 SOIL - 16/6/2020 SE207695.012	0407_TP031_0.1_20(616 SOIL - 16/6/2020 SE207695.013	0407_TP031_0.5_20(616 SOIL - 16/6/2020 SE207695.014	0407_QC104_20061(SOIL - 16/6/2020 SE207695.015
TRH C10-C14	mg/kg	20	**95**	<20	**22**	<20	<20
TRH C15-C28	mg/kg	45	**280**	<45	**85**	<45	<45
TRH C29-C36	mg/kg	45	**83**	<45	**190**	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	**130**	<25	**28**	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	**130**	<25	**28**	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	**270**	<90	**160**	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	**460**	<110	**300**	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	**400**	<210	<210	<210	<210

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 22/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP040_1.0_20(616 SOIL - 16/6/2020 SE207695.016	0407_TP039_0.5_20(616 SOIL - 16/6/2020 SE207695.017	0407_TP039_1.0_20(616 SOIL - 16/6/2020 SE207695.018	0407_TP038_0.1_20(617 SOIL - 17/6/2020 SE207695.023	0407_TP038_1.0_20(617 SOIL - 17/6/2020 SE207695.024
TRH C10-C14	mg/kg	20	<20	<20	<20	**69**	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	**92**	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	**77**	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	**77**	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	**160**	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP037_0.1_20(617 SOIL - 17/6/2020 SE207695.025	0407_QC107_20061 SOIL - 17/6/2020 SE207695.026	0407_QC207_20061 SOIL - 17/6/2020 SE207695.027	0407_TP037_0.5_20(617 SOIL - 17/6/2020 SE207695.029	0407_TP049_0.1_20(617 SOIL - 17/6/2020 SE207695.031
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP049_0.5_20(617 SOIL - 17/6/2020 SE207695.032	0407_TP051_0.1_20(617 SOIL - 17/6/2020 SE207695.033	0407_TP051_1.0_20(617 SOIL - 17/6/2020 SE207695.034	0407_TP052_0.1_20(617 SOIL - 17/6/2020 SE207695.039	0407_QC111_200617 SOIL - 17/6/2020 SE207695.040
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	**83**	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	**200**	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	**200**	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	**280**	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 22/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP052_0.5_20(617 SOIL - 17/6/2020 SE207695.042	0407_TP053_0.1_20(617 SOIL - 17/6/2020 SE207695.043	0407_TP053_0.5_20(617 SOIL - 17/6/2020 SE207695.044	0407_TP040_0.5_20(616 SOIL - 16/6/2020 SE207695.045
TRH C10-C14	mg/kg	20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 22/6/2020

PARAMETER	UOM	LOR	0407_TP001_0.1_20(615 SOIL - 15/6/2020 SE207695.001	0407_TP001_0.5_20(615 SOIL - 15/6/2020 SE207695.002	0407_TP002_0.5_20(615 SOIL - 15/6/2020 SE207695.003	0407_TP002_1.5_20(615 SOIL - 15/6/2020 SE207695.004	0407_TP003_0.5_20(616 SOIL - 16/6/2020 SE207695.005
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	**0.5**	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	**0.1**	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	**0.7**	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	**0.7**	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	**0.2**	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	**0.3**	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	**0.2**	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	**0.1**	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	**0.2**	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	**0.2**	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	**0.3**	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	**0.3**	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	**2.8**	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	**2.8**	<0.8	<0.8

PARAMETER	UOM	LOR	0407_TP003_1.0_20(616 SOIL - 16/6/2020 SE207695.006	0407_TP004_0.5_20(616 SOIL - 16/6/2020 SE207695.007	0407_QC100_20061(SOIL - 16/6/2020 SE207695.008	0407_TP005_0.1_20(616 SOIL - 16/6/2020 SE207695.009	0407_TP005_1.0_20(616 SOIL - 16/6/2020 SE207695.010
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 22/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP013_0.1_20(616 SOIL - 16/6/2020 SE207695.011	0407_TP013_1.0_20(616 SOIL - 16/6/2020 SE207695.012	0407_TP031_0.1_20(616 SOIL - 16/6/2020 SE207695.013	0407_TP031_0.5_20(616 SOIL - 16/6/2020 SE207695.014	0407_QC104_20061(SOIL - 16/6/2020 SE207695.015
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	**0.1**	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	**0.2**	**0.1**	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	**0.1**	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	**0.1**	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PARAMETER	UOM	LOR	0407_TP040_1.0_20(616 SOIL - 16/6/2020 SE207695.016	0407_TP039_0.5_20(616 SOIL - 16/6/2020 SE207695.017	0407_TP039_1.0_20(616 SOIL - 16/6/2020 SE207695.018	0407_TP038_0.1_20(617 SOIL - 17/6/2020 SE207695.023	0407_TP038_1.0_20(617 SOIL - 17/6/2020 SE207695.024
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.1**	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.2**	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.2**	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 22/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP037_0.1_20(617 SOIL - 17/6/2020 SE207695.025	0407_QC107_20061 SOIL - 17/6/2020 SE207695.026	0407_QC207_20061 SOIL - 17/6/2020 SE207695.027	0407_TP037_0.5_20(617 SOIL - 17/6/2020 SE207695.029	0407_TP049_0.1_20(617 SOIL - 17/6/2020 SE207695.031
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	**0.1**	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	**0.1**	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PARAMETER	UOM	LOR	0407_TP049_0.5_20(617 SOIL - 17/6/2020 SE207695.032	0407_TP051_0.1_20(617 SOIL - 17/6/2020 SE207695.033	0407_TP051_1.0_20(617 SOIL - 17/6/2020 SE207695.034	0407_TP052_0.1_20(617 SOIL - 17/6/2020 SE207695.039	0407_QC111_200617 SOIL - 17/6/2020 SE207695.040
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 22/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP052_0.5_20(617 SOIL - 17/6/2020 SE207695.042	0407_TP053_0.1_20(617 SOIL - 17/6/2020 SE207695.043	0407_TP053_0.5_20(617 SOIL - 17/6/2020 SE207695.044	0407_TP040_0.5_20(616 SOIL - 16/6/2020 SE207695.045
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	**0.2**	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	**0.1**	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8

Speciated Phenols in Soil [AN420] Tested: 22/6/2020

PARAMETER	UOM	LOR	0407_TP001_0.1_20(615 SOIL - 15/6/2020 SE207695.001	0407_TP001_0.5_20(615 SOIL - 15/6/2020 SE207695.002	0407_TP002_0.5_20(615 SOIL - 15/6/2020 SE207695.003	0407_TP002_1.5_20(615 SOIL - 15/6/2020 SE207695.004	0407_TP003_0.5_20(616 SOIL - 16/6/2020 SE207695.005
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_TP003_1.0_20(616 SOIL - 16/6/2020 SE207695.006	0407_TP004_0.5_20(616 SOIL - 16/6/2020 SE207695.007	0407_QC100_20061(SOIL - 16/6/2020 SE207695.008	0407_TP005_0.1_20(616 SOIL - 16/6/2020 SE207695.009	0407_TP005_1.0_20(616 SOIL - 16/6/2020 SE207695.010
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

Speciated Phenols in Soil [AN420] Tested: 22/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP013_0.1_20(616 SOIL - 16/6/2020 SE207695.011	0407_TP013_1.0_20(616 SOIL - 16/6/2020 SE207695.012	0407_TP031_0.1_20(616 SOIL - 16/6/2020 SE207695.013	0407_TP031_0.5_20(616 SOIL - 16/6/2020 SE207695.014	0407_QC104_20061(SOIL - 16/6/2020 SE207695.015
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_TP040_1.0_20(616 SOIL - 16/6/2020 SE207695.016	0407_TP039_0.5_20(616 SOIL - 16/6/2020 SE207695.017	0407_TP039_1.0_20(616 SOIL - 16/6/2020 SE207695.018	0407_TP038_0.1_20(617 SOIL - 17/6/2020 SE207695.023	0407_TP038_1.0_20(617 SOIL - 17/6/2020 SE207695.024
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

Speciated Phenols in Soil [AN420] Tested: 22/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP037_0.1_20(617 SOIL - 17/6/2020 SE207695.025	0407_QC107_20061 SOIL - 17/6/2020 SE207695.026	0407_QC207_20061 SOIL - 17/6/2020 SE207695.027	0407_TP037_0.5_20(617 SOIL - 17/6/2020 SE207695.029	0407_TP049_0.1_20(617 SOIL - 17/6/2020 SE207695.031
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_TP049_0.5_20(617 SOIL - 17/6/2020 SE207695.032	0407_TP051_0.1_20(617 SOIL - 17/6/2020 SE207695.033	0407_TP051_1.0_20(617 SOIL - 17/6/2020 SE207695.034	0407_TP052_0.1_20(617 SOIL - 17/6/2020 SE207695.039	0407_QC111_200617 SOIL - 17/6/2020 SE207695.040
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

Speciated Phenols in Soil [AN420] Tested: 22/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP052_0.5_20(617 SOIL - 17/6/2020 SE207695.042	0407_TP053_0.1_20(617 SOIL - 17/6/2020 SE207695.043	0407_TP053_0.5_20(617 SOIL - 17/6/2020 SE207695.044	0407_TP040_0.5_20(616 SOIL - 16/6/2020 SE207695.045
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2

OC Pesticides in Soil [AN420] Tested: 22/6/2020

PARAMETER	UOM	LOR	0407_TP001_0.1_20(615 SOIL - 15/6/2020 SE207695.001	0407_TP001_0.5_20(615 SOIL - 15/6/2020 SE207695.002	0407_TP002_0.5_20(615 SOIL - 15/6/2020 SE207695.003	0407_TP002_1.5_20(615 SOIL - 15/6/2020 SE207695.004	0407_TP003_0.5_20(616 SOIL - 16/6/2020 SE207695.005
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 22/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP003_1.0_20(616 SOIL - 16/6/2020 SE207695.006	0407_TP004_0.5_20(616 SOIL - 16/6/2020 SE207695.007	0407_QC100_20061(SOIL - 16/6/2020 SE207695.008	0407_TP005_0.1_20(616 SOIL - 16/6/2020 SE207695.009	0407_TP005_1.0_20(616 SOIL - 16/6/2020 SE207695.010
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 22/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP013_0.1_20(616 SOIL - 16/6/2020 SE207695.011	0407_TP013_1.0_20(616 SOIL - 16/6/2020 SE207695.012	0407_TP031_0.1_20(616 SOIL - 16/6/2020 SE207695.013	0407_TP031_0.5_20(616 SOIL - 16/6/2020 SE207695.014	0407_QC104_20061(SOIL - 16/6/2020 SE207695.015
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 22/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP040_1.0_20(616 SOIL - 16/6/2020 SE207695.016	0407_TP039_0.5_20(616 SOIL - 16/6/2020 SE207695.017	0407_TP039_1.0_20(616 SOIL - 16/6/2020 SE207695.018	0407_TP038_0.1_20(617 SOIL - 17/6/2020 SE207695.023	0407_TP038_1.0_20(617 SOIL - 17/6/2020 SE207695.024
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 22/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP037_0.1_20(617 SOIL - 17/6/2020 SE207695.025	0407_QC107_20061 SOIL - 17/6/2020 SE207695.026	0407_QC207_20061 SOIL - 17/6/2020 SE207695.027	0407_TP037_0.5_20(617 SOIL - 17/6/2020 SE207695.029	0407_TP049_0.1_20(617 SOIL - 17/6/2020 SE207695.031
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 22/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP049_0.5_20(617 SOIL - 17/6/2020 SE207695.032	0407_TP051_0.1_20(617 SOIL - 17/6/2020 SE207695.033	0407_TP051_1.0_20(617 SOIL - 17/6/2020 SE207695.034	0407_TP052_0.1_20(617 SOIL - 17/6/2020 SE207695.039	0407_QC111_200617 SOIL - 17/6/2020 SE207695.040
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 22/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP052_0.5_20(617 SOIL - 17/6/2020 SE207695.042	0407_TP053_0.1_20(617 SOIL - 17/6/2020 SE207695.043	0407_TP053_0.5_20(617 SOIL - 17/6/2020 SE207695.044	0407_TP040_0.5_20(616 SOIL - 16/6/2020 SE207695.045
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	**0.7**	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1

OP Pesticides in Soil [AN420] Tested: 22/6/2020

PARAMETER	UOM	LOR	0407_TP001_0.1_20(615 SOIL - 15/6/2020 SE207695.001	0407_TP001_0.5_20(615 SOIL - 15/6/2020 SE207695.002	0407_TP002_0.5_20(615 SOIL - 15/6/2020 SE207695.003	0407_TP002_1.5_20(615 SOIL - 15/6/2020 SE207695.004	0407_TP003_0.5_20(616 SOIL - 16/6/2020 SE207695.005
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP003_1.0_20(616 SOIL - 16/6/2020 SE207695.006	0407_TP004_0.5_20(616 SOIL - 16/6/2020 SE207695.007	0407_QC100_20061(SOIL - 16/6/2020 SE207695.008	0407_TP005_0.1_20(616 SOIL - 16/6/2020 SE207695.009	0407_TP005_1.0_20(616 SOIL - 16/6/2020 SE207695.010
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP013_0.1_20(616 SOIL - 16/6/2020 SE207695.011	0407_TP013_1.0_20(616 SOIL - 16/6/2020 SE207695.012	0407_TP031_0.1_20(616 SOIL - 16/6/2020 SE207695.013	0407_TP031_0.5_20(616 SOIL - 16/6/2020 SE207695.014	0407_QC104_20061(SOIL - 16/6/2020 SE207695.015
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

OP Pesticides in Soil [AN420] Tested: 22/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP040_1.0_20(616 SOIL - 16/6/2020 SE207695.016	0407_TP039_0.5_20(616 SOIL - 16/6/2020 SE207695.017	0407_TP039_1.0_20(616 SOIL - 16/6/2020 SE207695.018	0407_TP038_0.1_20(617 SOIL - 17/6/2020 SE207695.023	0407_TP038_1.0_20(617 SOIL - 17/6/2020 SE207695.024
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP037_0.1_20(617 SOIL - 17/6/2020 SE207695.025	0407_QC107_20061 SOIL - 17/6/2020 SE207695.026	0407_QC207_20061 SOIL - 17/6/2020 SE207695.027	0407_TP037_0.5_20(617 SOIL - 17/6/2020 SE207695.029	0407_TP049_0.1_20(617 SOIL - 17/6/2020 SE207695.031
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP049_0.5_20(617 SOIL - 17/6/2020 SE207695.032	0407_TP051_0.1_20(617 SOIL - 17/6/2020 SE207695.033	0407_TP051_1.0_20(617 SOIL - 17/6/2020 SE207695.034	0407_TP052_0.1_20(617 SOIL - 17/6/2020 SE207695.039	0407_QC111_200617 SOIL - 17/6/2020 SE207695.040
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

OP Pesticides in Soil [AN420] Tested: 22/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP052_0.5_20(617 SOIL - 17/6/2020 SE207695.042	0407_TP053_0.1_20(617 SOIL - 17/6/2020 SE207695.043	0407_TP053_0.5_20(617 SOIL - 17/6/2020 SE207695.044	0407_TP040_0.5_20(616 SOIL - 16/6/2020 SE207695.045
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7

PCBs in Soil [AN420] Tested: 22/6/2020

PARAMETER	UOM	LOR	0407_TP001_0.1_20(615 SOIL - 15/6/2020 SE207695.001	0407_TP001_0.5_20(615 SOIL - 15/6/2020 SE207695.002	0407_TP002_0.5_20(615 SOIL - 15/6/2020 SE207695.003	0407_TP002_1.5_20(615 SOIL - 15/6/2020 SE207695.004	0407_TP003_0.5_20(616 SOIL - 16/6/2020 SE207695.005
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP003_1.0_20(616 SOIL - 16/6/2020 SE207695.006	0407_TP004_0.5_20(616 SOIL - 16/6/2020 SE207695.007	0407_QC100_20061(SOIL - 16/6/2020 SE207695.008	0407_TP005_0.1_20(616 SOIL - 16/6/2020 SE207695.009	0407_TP005_1.0_20(616 SOIL - 16/6/2020 SE207695.010
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP013_0.1_20(616 SOIL - 16/6/2020 SE207695.011	0407_TP013_1.0_20(616 SOIL - 16/6/2020 SE207695.012	0407_TP031_0.1_20(616 SOIL - 16/6/2020 SE207695.013	0407_TP031_0.5_20(616 SOIL - 16/6/2020 SE207695.014	0407_QC104_20061(SOIL - 16/6/2020 SE207695.015
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PCBs in Soil [AN420] Tested: 22/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP040_1.0_20(616 SOIL - 16/6/2020 SE207695.016	0407_TP039_0.5_20(616 SOIL - 16/6/2020 SE207695.017	0407_TP039_1.0_20(616 SOIL - 16/6/2020 SE207695.018	0407_TP038_0.1_20(617 SOIL - 17/6/2020 SE207695.023	0407_TP038_1.0_20(617 SOIL - 17/6/2020 SE207695.024
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP037_0.1_20(617 SOIL - 17/6/2020 SE207695.025	0407_QC107_20061 SOIL - 17/6/2020 SE207695.026	0407_QC207_20061 SOIL - 17/6/2020 SE207695.027	0407_TP037_0.5_20(617 SOIL - 17/6/2020 SE207695.029	0407_TP049_0.1_20(617 SOIL - 17/6/2020 SE207695.031
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP049_0.5_20(617 SOIL - 17/6/2020 SE207695.032	0407_TP051_0.1_20(617 SOIL - 17/6/2020 SE207695.033	0407_TP051_1.0_20(617 SOIL - 17/6/2020 SE207695.034	0407_TP052_0.1_20(617 SOIL - 17/6/2020 SE207695.039	0407_QC111_200617 SOIL - 17/6/2020 SE207695.040
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PCBs in Soil [AN420] Tested: 22/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP052_0.5_20(617 SOIL - 17/6/2020 SE207695.042	0407_TP053_0.1_20(617 SOIL - 17/6/2020 SE207695.043	0407_TP053_0.5_20(617 SOIL - 17/6/2020 SE207695.044	0407_TP040_0.5_20(616 SOIL - 16/6/2020 SE207695.045
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 22/6/2020

PARAMETER	UOM	LOR	0407_TP001_0.1_20(615 SOIL - 15/6/2020 SE207695.001	0407_TP001_0.5_20(615 SOIL - 15/6/2020 SE207695.002	0407_TP002_0.5_20(615 SOIL - 15/6/2020 SE207695.003	0407_TP002_1.5_20(615 SOIL - 15/6/2020 SE207695.004	0407_TP003_0.5_20(616 SOIL - 16/6/2020 SE207695.005
Arsenic, As	mg/kg	1	<1	<1	<1	<1	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	1.1	0.6	0.6	<0.5	0.8
Copper, Cu	mg/kg	0.5	13	<0.5	3.4	<0.5	0.8
Lead, Pb	mg/kg	1	10	1	4	<1	3
Nickel, Ni	mg/kg	0.5	0.9	<0.5	<0.5	<0.5	<0.5
Zinc, Zn	mg/kg	2	93	<2.0	38	<2.0	4.9

PARAMETER	UOM	LOR	0407_TP003_1.0_20(616 SOIL - 16/6/2020 SE207695.006	0407_TP004_0.5_20(616 SOIL - 16/6/2020 SE207695.007	0407_QC100_20061(SOIL - 16/6/2020 SE207695.008	0407_TP005_0.1_20(616 SOIL - 16/6/2020 SE207695.009	0407_TP005_1.0_20(616 SOIL - 16/6/2020 SE207695.010
Arsenic, As	mg/kg	1	<1	<1	<1	<1	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	0.4	<0.3
Chromium, Cr	mg/kg	0.5	1.1	0.6	0.5	1.4	<0.5
Copper, Cu	mg/kg	0.5	<0.5	1.9	3.2	12	0.5
Lead, Pb	mg/kg	1	<1	5	6	14	2
Nickel, Ni	mg/kg	0.5	<0.5	<0.5	<0.5	1.5	<0.5
Zinc, Zn	mg/kg	2	<2.0	7.1	5.2	88	2.9

PARAMETER	UOM	LOR	0407_TP013_0.1_20(616 SOIL - 16/6/2020 SE207695.011	0407_TP013_1.0_20(616 SOIL - 16/6/2020 SE207695.012	0407_TP031_0.1_20(616 SOIL - 16/6/2020 SE207695.013	0407_TP031_0.5_20(616 SOIL - 16/6/2020 SE207695.014	0407_QC104_20061(SOIL - 16/6/2020 SE207695.015
Arsenic, As	mg/kg	1	<1	<1	<1	1	2
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	1.2	1.2	1.3	8.9	9.2
Copper, Cu	mg/kg	0.5	13	<0.5	18	15	13
Lead, Pb	mg/kg	1	9	1	21	19	24
Nickel, Ni	mg/kg	0.5	1.6	0.8	1.8	5.9	7.0
Zinc, Zn	mg/kg	2	71	2.0	70	40	37

PARAMETER	UOM	LOR	0407_TP040_1.0_20(616 SOIL - 16/6/2020 SE207695.016	0407_TP039_0.5_20(616 SOIL - 16/6/2020 SE207695.017	0407_TP039_1.0_20(616 SOIL - 16/6/2020 SE207695.018	0407_TP038_0.1_20(617 SOIL - 17/6/2020 SE207695.023	0407_TP038_1.0_20(617 SOIL - 17/6/2020 SE207695.024
Arsenic, As	mg/kg	1	<1	<1	<1	<1	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	0.3	<0.3
Chromium, Cr	mg/kg	0.5	0.7	<0.5	<0.5	5.2	1.1
Copper, Cu	mg/kg	0.5	0.9	<0.5	<0.5	13	2.0
Lead, Pb	mg/kg	1	3	<1	<1	38	12
Nickel, Ni	mg/kg	0.5	<0.5	<0.5	<0.5	1.7	<0.5
Zinc, Zn	mg/kg	2	6.8	<2.0	<2.0	91	14

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 22/6/2020

(continued)

PARAMETER	UOM	LOR	0407_TP037_0.1_20(617 SOIL - 17/6/2020 SE207695.025	0407_QC107_20061 SOIL - 17/6/2020 SE207695.026	0407_QC207_20061 SOIL - 17/6/2020 SE207695.027	0407_TP037_0.5_20(617 SOIL - 17/6/2020 SE207695.029	0407_TP049_0.1_20(617 SOIL - 17/6/2020 SE207695.031
Arsenic, As	mg/kg	1	<1	<1	<1	1	2
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	0.4	<0.3
Chromium, Cr	mg/kg	0.5	2.3	1.6	2.7	3.2	10
Copper, Cu	mg/kg	0.5	4.4	4.1	4.1	4.9	14
Lead, Pb	mg/kg	1	24	21	21	32	28
Nickel, Ni	mg/kg	0.5	1.2	0.9	1.2	1.3	5.9
Zinc, Zn	mg/kg	2	28	25	27	32	210

PARAMETER	UOM	LOR	0407_TP049_0.5_20(617 SOIL - 17/6/2020 SE207695.032	0407_TP051_0.1_20(617 SOIL - 17/6/2020 SE207695.033	0407_TP051_1.0_20(617 SOIL - 17/6/2020 SE207695.034	0407_TP052_0.1_20(617 SOIL - 17/6/2020 SE207695.039	0407_QC111_200617 SOIL - 17/6/2020 SE207695.040
Arsenic, As	mg/kg	1	<1	<1	<1	1	1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	<0.5	6.1	1.1	4.4	3.4
Copper, Cu	mg/kg	0.5	<0.5	14	2.8	7.4	4.1
Lead, Pb	mg/kg	1	<1	18	18	22	24
Nickel, Ni	mg/kg	0.5	<0.5	2.7	<0.5	2.1	1.9
Zinc, Zn	mg/kg	2	<2.0	170	16	39	27

PARAMETER	UOM	LOR	0407_TP052_0.5_20(617 SOIL - 17/6/2020 SE207695.042	0407_TP053_0.1_20(617 SOIL - 17/6/2020 SE207695.043	0407_TP053_0.5_20(617 SOIL - 17/6/2020 SE207695.044	0407_TP040_0.5_20(616 SOIL - 16/6/2020 SE207695.045
Arsenic, As	mg/kg	1	<1	2	2	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	1.0	8.4	3.7	<0.5
Copper, Cu	mg/kg	0.5	4.2	13	4.2	<0.5
Lead, Pb	mg/kg	1	22	72	7	1
Nickel, Ni	mg/kg	0.5	0.6	4.6	1.2	<0.5
Zinc, Zn	mg/kg	2	20	77	18	<2.0

Mercury in Soil [AN312] Tested: 22/6/2020

PARAMETER	UOM	LOR	0407_TP001_0.1_20(615 SOIL - 15/6/2020 SE207695.001	0407_TP001_0.5_20(615 SOIL - 15/6/2020 SE207695.002	0407_TP002_0.5_20(615 SOIL - 15/6/2020 SE207695.003	0407_TP002_1.5_20(615 SOIL - 15/6/2020 SE207695.004	0407_TP003_0.5_20(616 SOIL - 16/6/2020 SE207695.005
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_TP003_1.0_20(616 SOIL - 16/6/2020 SE207695.006	0407_TP004_0.5_20(616 SOIL - 16/6/2020 SE207695.007	0407_QC100_20061(SOIL - 16/6/2020 SE207695.008	0407_TP005_0.1_20(616 SOIL - 16/6/2020 SE207695.009	0407_TP005_1.0_20(616 SOIL - 16/6/2020 SE207695.010
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_TP013_0.1_20(616 SOIL - 16/6/2020 SE207695.011	0407_TP013_1.0_20(616 SOIL - 16/6/2020 SE207695.012	0407_TP031_0.1_20(616 SOIL - 16/6/2020 SE207695.013	0407_TP031_0.5_20(616 SOIL - 16/6/2020 SE207695.014	0407_QC104_20061(SOIL - 16/6/2020 SE207695.015
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_TP040_1.0_20(616 SOIL - 16/6/2020 SE207695.016	0407_TP039_0.5_20(616 SOIL - 16/6/2020 SE207695.017	0407_TP039_1.0_20(616 SOIL - 16/6/2020 SE207695.018	0407_TP038_0.1_20(617 SOIL - 17/6/2020 SE207695.023	0407_TP038_1.0_20(617 SOIL - 17/6/2020 SE207695.024
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_TP037_0.1_20(617 SOIL - 17/6/2020 SE207695.025	0407_QC107_20061 SOIL - 17/6/2020 SE207695.026	0407_QC207_20061 SOIL - 17/6/2020 SE207695.027	0407_TP037_0.5_20(617 SOIL - 17/6/2020 SE207695.029	0407_TP049_0.1_20(617 SOIL - 17/6/2020 SE207695.031
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_TP049_0.5_20(617 SOIL - 17/6/2020 SE207695.032	0407_TP051_0.1_20(617 SOIL - 17/6/2020 SE207695.033	0407_TP051_1.0_20(617 SOIL - 17/6/2020 SE207695.034	0407_TP052_0.1_20(617 SOIL - 17/6/2020 SE207695.039	0407_QC111_200617 SOIL - 17/6/2020 SE207695.040
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_TP052_0.5_20(617 SOIL - 17/6/2020 SE207695.042	0407_TP053_0.1_20(617 SOIL - 17/6/2020 SE207695.043	0407_TP053_0.5_20(617 SOIL - 17/6/2020 SE207695.044	0407_TP040_0.5_20(616 SOIL - 16/6/2020 SE207695.045
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05

Moisture Content [AN002] Tested: 22/6/2020

PARAMETER	UOM	LOR	0407_TP001_0.1_20(615 SOIL - 15/6/2020 SE207695.001	0407_TP001_0.5_20(615 SOIL - 15/6/2020 SE207695.002	0407_TP002_0.5_20(615 SOIL - 15/6/2020 SE207695.003	0407_TP002_1.5_20(615 SOIL - 15/6/2020 SE207695.004	0407_TP003_0.5_20(616 SOIL - 16/6/2020 SE207695.005
% Moisture	%w/w	1	28.9	4.3	25.9	5.7	3.8

PARAMETER	UOM	LOR	0407_TP003_1.0_20(616 SOIL - 16/6/2020 SE207695.006	0407_TP004_0.5_20(616 SOIL - 16/6/2020 SE207695.007	0407_QC100_20061(SOIL - 16/6/2020 SE207695.008	0407_TP005_0.1_20(616 SOIL - 16/6/2020 SE207695.009	0407_TP005_1.0_20(616 SOIL - 16/6/2020 SE207695.010
% Moisture	%w/w	1	5.9	5.2	4.6	62.2	18.7

PARAMETER	UOM	LOR	0407_TP013_0.1_20(616 SOIL - 16/6/2020 SE207695.011	0407_TP013_1.0_20(616 SOIL - 16/6/2020 SE207695.012	0407_TP031_0.1_20(616 SOIL - 16/6/2020 SE207695.013	0407_TP031_0.5_20(616 SOIL - 16/6/2020 SE207695.014	0407_QC104_20061(SOIL - 16/6/2020 SE207695.015
% Moisture	%w/w	1	47.8	5.2	66.6	12.9	11.2

PARAMETER	UOM	LOR	0407_TP040_1.0_20(616 SOIL - 16/6/2020 SE207695.016	0407_TP039_0.5_20(616 SOIL - 16/6/2020 SE207695.017	0407_TP039_1.0_20(616 SOIL - 16/6/2020 SE207695.018	0407_TP038_0.1_20(617 SOIL - 17/6/2020 SE207695.023	0407_TP038_1.0_20(617 SOIL - 17/6/2020 SE207695.024
% Moisture	%w/w	1	4.1	2.6	15.6	65.5	8.8

PARAMETER	UOM	LOR	0407_TP037_0.1_20(617 SOIL - 17/6/2020 SE207695.025	0407_QC107_20061 SOIL - 17/6/2020 SE207695.026	0407_QC207_20061 SOIL - 17/6/2020 SE207695.027	0407_TP037_0.5_20(617 SOIL - 17/6/2020 SE207695.029	0407_TP049_0.1_20(617 SOIL - 17/6/2020 SE207695.031
% Moisture	%w/w	1	16.0	10.5	14.8	9.4	11.1

PARAMETER	UOM	LOR	0407_TP049_0.5_20(617 SOIL - 17/6/2020 SE207695.032	0407_TP051_0.1_20(617 SOIL - 17/6/2020 SE207695.033	0407_TP051_1.0_20(617 SOIL - 17/6/2020 SE207695.034	0407_TP052_0.1_20(617 SOIL - 17/6/2020 SE207695.039	0407_QC111_200617 SOIL - 17/6/2020 SE207695.040
% Moisture	%w/w	1	2.9	51.2	3.1	6.5	5.9

PARAMETER	UOM	LOR	0407_TP052_0.5_20(617 SOIL - 17/6/2020 SE207695.042	0407_TP053_0.1_20(617 SOIL - 17/6/2020 SE207695.043	0407_TP053_0.5_20(617 SOIL - 17/6/2020 SE207695.044	0407_TP040_0.5_20(616 SOIL - 16/6/2020 SE207695.045	0407_QC402_20061(SOIL - 17/6/2020 SE207695.046
% Moisture	%w/w	1	3.6	11.9	9.8	4.2	<1.0

Fibre Identification in soil [AN602] Tested: 23/6/2020

PARAMETER	UOM	LOR	0407_TP001_0.1_20(615 SOIL - 15/6/2020 SE207695.001	0407_TP001_0.5_20(615 SOIL - 15/6/2020 SE207695.002	0407_TP002_0.5_20(615 SOIL - 15/6/2020 SE207695.003	0407_TP002_1.5_20(615 SOIL - 15/6/2020 SE207695.004	0407_TP003_0.5_20(616 SOIL - 16/6/2020 SE207695.005
Asbestos Detected	No unit	-	No	No	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	0407_TP003_1.0_20(616 SOIL - 16/6/2020 SE207695.006	0407_TP004_0.5_20(616 SOIL - 16/6/2020 SE207695.007	0407_TP005_0.1_20(616 SOIL - 16/6/2020 SE207695.009	0407_TP005_1.0_20(616 SOIL - 16/6/2020 SE207695.010	0407_TP013_0.1_20(616 SOIL - 16/6/2020 SE207695.011
Asbestos Detected	No unit	-	No	No	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	0407_TP031_0.1_20(616 SOIL - 16/6/2020 SE207695.013	0407_TP031_0.5_20(616 SOIL - 16/6/2020 SE207695.014	0407_TP040_1.0_20(616 SOIL - 16/6/2020 SE207695.016	0407_TP039_0.5_20(616 SOIL - 16/6/2020 SE207695.017	0407_TP038_0.1_20(617 SOIL - 17/6/2020 SE207695.023
Asbestos Detected	No unit	-	No	No	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	0407_TP037_0.1_20(617 SOIL - 17/6/2020 SE207695.025	0407_TP037_0.5_20(617 SOIL - 17/6/2020 SE207695.029	0407_TP049_0.1_20(617 SOIL - 17/6/2020 SE207695.031	0407_TP051_0.1_20(617 SOIL - 17/6/2020 SE207695.033	0407_TP051_1.0_20(617 SOIL - 17/6/2020 SE207695.034
Asbestos Detected	No unit	-	No	No	No	No	Yes
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	**>0.01**

PARAMETER	UOM	LOR	0407_TP052_0.1_20(617 SOIL - 17/6/2020 SE207695.039	0407_TP052_0.5_20(617 SOIL - 17/6/2020 SE207695.042	0407_TP053_0.1_20(617 SOIL - 17/6/2020 SE207695.043	0407_TP040_0.5_20(616 SOIL - 16/6/2020 SE207695.045
Asbestos Detected	No unit	-	No	Yes	Yes	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 23/6/2020

PARAMETER	UOM	LOR	0407_TP001_0.1_20(615 SOIL - 15/6/2020 SE207695.001	0407_TP001_0.5_20(615 SOIL - 15/6/2020 SE207695.002	0407_TP002_0.5_20(615 SOIL - 15/6/2020 SE207695.003	0407_TP002_1.5_20(615 SOIL - 15/6/2020 SE207695.004	0407_TP003_0.5_20(616 SOIL - 16/6/2020 SE207695.005
Total Sample Weight*	g	1	658	1067	743	720	818
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP003_1.0_20(616 SOIL - 16/6/2020 SE207695.006	0407_TP004_0.5_20(616 SOIL - 16/6/2020 SE207695.007	0407_TP005_0.1_20(616 SOIL - 16/6/2020 SE207695.009	0407_TP005_1.0_20(616 SOIL - 16/6/2020 SE207695.010	0407_TP013_0.1_20(616 SOIL - 16/6/2020 SE207695.011
Total Sample Weight*	g	1	927	1222	356	1298	248
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP031_0.1_20(616 SOIL - 16/6/2020 SE207695.013	0407_TP031_0.5_20(616 SOIL - 16/6/2020 SE207695.014	0407_TP040_1.0_20(616 SOIL - 16/6/2020 SE207695.016	0407_TP039_0.5_20(616 SOIL - 16/6/2020 SE207695.017	0407_TP038_0.1_20(617 SOIL - 17/6/2020 SE207695.023
Total Sample Weight*	g	1	187	851	705	1224	276
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP037_0.1_20(617 SOIL - 17/6/2020 SE207695.025	0407_TP037_0.5_20(617 SOIL - 17/6/2020 SE207695.029	0407_TP049_0.1_20(617 SOIL - 17/6/2020 SE207695.031	0407_TP051_0.1_20(617 SOIL - 17/6/2020 SE207695.033	0407_TP051_1.0_20(617 SOIL - 17/6/2020 SE207695.034
Total Sample Weight*	g	1	897	747	772	172	1067
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.117
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.0460
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	0.011
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	0.004
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	0.015
Fibre Type*	No unit	-	-	-	-	-	-

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 23/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP052_0.1_20(617 SOIL - 17/6/2020 SE207695.039	0407_TP052_0.5_20(617 SOIL - 17/6/2020 SE207695.042	0407_TP053_0.1_20(617 SOIL - 17/6/2020 SE207695.043	0407_TP040_0.5_20(616 SOIL - 16/6/2020 SE207695.045
Total Sample Weight*	g	1	**1115**	**1146**	**904**	**963**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	**0.0101**	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	**0.0382**	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	**0.001**	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	**0.003**	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	**0.003**	**0.001**	<0.001
Fibre Type*	No unit	-	-	-	-	-

Fibre ID in bulk materials [AN602] Tested: 24/6/2020

PARAMETER	UOM	LOR	0407_TP039_0.1_ACM_200616 MATERIAL - 16/6/2020 SE207695.019	0407_TP039_0.2_ACM1_200616 MATERIAL - 16/6/2020 SE207695.020	0407_TP039_0.2_ACM2_200616 MATERIAL - 16/6/2020 SE207695.021	0407_TP039_0.2_ACM3_200616 MATERIAL - 16/6/2020 SE207695.022	0407_TP037_0.1_ACM_200617 MATERIAL - 17/6/2020 SE207695.028
Asbestos Detected	No unit	-	Yes	Yes	Yes	Yes	Yes

PARAMETER	UOM	LOR	0407_TP037_0.5_ACM_200617 MATERIAL - 17/6/2020 SE207695.030	0407_TP051_0.1_ACM_200617 MATERIAL - 17/6/2020 SE207695.035	0407_TP051_0.5_ACM_200617 MATERIAL - 17/6/2020 SE207695.036	0407_TP051_0.8_ACM_200617 MATERIAL - 17/6/2020 SE207695.037	0407_TP051_1.0_ACM_200617 MATERIAL - 17/6/2020 SE207695.038
Asbestos Detected	No unit	-	Yes	Yes	Yes	Yes	Yes

PARAMETER	UOM	LOR	0407_TP052_0.1__ACM_200617 MATERIAL - 17/6/2020 SE207695.041	0407_TP005_0.5_ACM_200616 MATERIAL - 16/6/2020 SE207695.048	0407_TP053_0.1_ACM_200617 MATERIAL - 17/6/2020 SE207695.049	0407_TP037_0.1_ACM1_200617 MATERIAL - 17/6/2020 SE207695.050
Asbestos Detected	No unit	-	Yes	Yes	Yes	Yes

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid, mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents .
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples, Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.
AN605	This technique gravimetrically determines the mass of Bonded Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight. Any fibrous asbestos (FA) found in this fraction will be added to the 2-7mm fraction and its mass recorded there.

AN605	This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free/respirable fibres which are only observed by standard trace analysis as per AN602.
AN605	Bonded asbestos containing material (Bonded ACM) comprises asbestos-containing-material which is sound in condition. Fibrous asbestos (FA) comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material. Asbestos fines (AF) includes free fibres, small fibre bundles and also small fragments of bonded ACM that passes through a 7mm sieve - which implies that the bonded ACM fragments have a substantial degree of damage which increases the potential for fibre release.
AN-605	Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009 and NEPM 1999 (2013) schedule B1 section 4..

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610_30041 Randwick Barrack**
Order Number	**000552--000557**
Samples	38

LABORATORY DETAILS

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Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207695 R1**
Date Received	17 Jun 2020
Date Reported	02 Jul 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.

Sample #34: Approx 6-7x2mm fibre bundles found loose in sample and asbestos found in approx 20x10x2mm cement sheet fragments in >2mm and <2mm portions.
Sample #42: Approx 7-8x2mm fibre bundles found loose in <2mm portion.
Sample #43: Asbestos found in approx 3x2x1mm cement sheet fragment.

Asbestos analysed by Approved Identifier Ravee Sivasubramaniam .

This report cancels and supersedes the report No.SE207695 R0 dated 25th June 2020 issued by SGS Environment, Health and Safety due to amendment of sample id's.

SIGNATORIES

[redacted]

Chemist | Senior Organic Chemist/Metals Chemis | Organic Section Head

[redacted]

Asbestos Analyst

RESULTS

Fibre Identification in soil

Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE207695.001	0407_TP001_0.1 _200615	Soil	658g Sand, Soil, Rocks, Plant matter	15 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE207695.002	0407_TP001_0.5 _200615	Soil	1067g Sand, Soil	15 Jun 2020	No Asbestos Found	<0.01
SE207695.003	0407_TP002_0.5 _200615	Soil	743g Sand, Soil, Rocks, Plant matter	15 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE207695.004	0407_TP002_1.5 _200615	Soil	720g Sand, Soil	15 Jun 2020	No Asbestos Found	<0.01
SE207695.005	0407_TP003_0.5 _200616	Soil	818g Sand, Soil, Rocks, Plant matter	16 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE207695.006	0407_TP003_1.0 _200616	Soil	927g Sand, Soil	16 Jun 2020	No Asbestos Found	<0.01
SE207695.007	0407_TP004_0.5 _200616	Soil	1222g Sand, Soil, Plant matter	16 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE207695.009	0407_TP005_0.1 _200616	Soil	356g Sand, Soil, Rocks, Plant matter	16 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE207695.010	0407_TP005_1.0 _200616	Soil	1298g Sand, Soil, Plant matter	16 Jun 2020	No Asbestos Found	<0.01
SE207695.011	0407_TP013_0.1 _200616	Soil	248g Sand, Soil, Rocks, Plant matter	16 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE207695.013	0407_TP031_0.1 _200616	Soil	187g Sand, Soil, Rocks, Plant matter	16 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE207695.014	0407_TP031_0.5 _200616	Soil	851g Sand, Soil, Rocks, Plant matter	16 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE207695.016	0407_TP040_1.0 _200616	Soil	705g Sand, Soil, Rocks, Plant matter	16 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE207695.017	0407_TP039_0.5 _200616	Soil	1224g Sand, Soil, Rocks	16 Jun 2020	No Asbestos Found	<0.01
SE207695.023	0407_TP038_0.1 _200617	Soil	276g Sand, Soil, Rocks, Plant matter	17 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE207695.025	0407_TP037_0.1 _200617	Soil	897g Sand, Soil, Rocks, Plant matter	17 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE207695.029	0407_TP037_0.5 _200617	Soil	747g Sand, Soil, Rocks, Plant matter	17 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE207695.031	0407_TP049_0.1 _200617	Soil	772g Sand, Rocks	17 Jun 2020	No Asbestos Found	<0.01
SE207695.033	0407_TP051_0.1 _200617	Soil	172g Sand, Soil, Rocks, Plant matter	17 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE207695.034	0407_TP051_1.0 _200617	Soil	1067g Sand, Soil, Rocks	17 Jun 2020	Amosite & Chrysotile Asbestos Found Organic Fibres Detected	>0.01
SE207695.039	0407_TP052_0.1 _200617	Soil	1115g Sand, Soil, Rocks	17 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01

RESULTS

Fibre Identification in soil — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE207695.042	0407_TP052_0.5_200617	Soil	1146g Sand, Soil	17 Jun 2020	Chrysotile Asbestos Found	<0.01
SE207695.043	0407_TP053_0.1_200617	Soil	904g Clay, Sand, Rocks	17 Jun 2020	Chrysotile Asbestos Found Organic Fibres Detected	<0.01
SE207695.045	0407_TP040_0.5_200616	Soil	963g Sand, Soil, Rocks	16 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01

RESULTS

Fibre ID in bulk materials — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE207695.019	0407_TP039_0.1 _ACM_200616	Other	60x60x10mm Cement sheet fragment	16 Jun 2020	Chrysotile Asbestos Detected	
SE207695.020	0407_TP039_0.2 _ACM1_200616	Other	50x40x10mm Cement sheet fragments	16 Jun 2020	Chrysotile Asbestos Detected	
SE207695.021	0407_TP039_0.2 _ACM2_200616	Other	80x50x6mm Cement sheet fragments x2	16 Jun 2020	Chrysotile Asbestos Detected	
SE207695.022	0407_TP039_0.2 _ACM3_200616	Other	110x80x6mm Cement sheet fragment	16 Jun 2020	Chrysotile Asbestos Detected	
SE207695.028	0407_TP037_0.1 _ACM_200617	Other	100x60x6mm Cement sheet fragments x2	17 Jun 2020	Chrysotile Asbestos Detected	
SE207695.030	0407_TP037_0.5 _ACM_200617	Other	300x120x6mm Cement sheet fragments x4	17 Jun 2020	Amosite, Chrysotile & Crocidolite Asbestos Detected	
SE207695.035	0407_TP051_0.1 _ACM_200617	Other	180x60x10mm Cement sheet fragment	17 Jun 2020	Chrysotile Asbestos Detected	
SE207695.036	0407_TP051_0.5 _ACM_200617	Other	30x25x6mm Cement sheet fragment	17 Jun 2020	Chrysotile Asbestos Detected	
SE207695.037	0407_TP051_0.8 _ACM_200617	Other	300x140x5mm Cement sheet fragment x4	17 Jun 2020	Chrysotile Asbestos Detected	
SE207695.038	0407_TP051_1.0 _ACM_200617	Other	Approx 100g Cement sheet fragments x10	17 Jun 2020	Chrysotile Asbestos Detected	
SE207695.041	0407_TP052_0.1 __ACM_200617	Other	25x20x4mm Cement sheet fragment	17 Jun 2020	Chrysotile Asbestos Detected	
SE207695.048	0407_TP005_0.5 _ACM_200616	Other	100x50x5mm Cement sheet fragment	16 Jun 2020	Chrysotile Asbestos Detected	
SE207695.049	0407_TP053_0.1 _ACM_200617	Other	150x130x5mm Cement sheet fragments	17 Jun 2020	Chrysotile Asbestos Detected	
SE207695.050	0407_TP037_0.1 _ACM1_200617	Other	240x90x5mm Cement sheet fragments x2	17 Jun 2020	Chrysotile Asbestos Detected	

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 23/6/2020

PARAMETER	UOM	LOR	0407_TP001_0.1_20(615 SOIL - 15/6/2020 SE207695.001	0407_TP001_0.5_20(615 SOIL - 15/6/2020 SE207695.002	0407_TP002_0.5_20(615 SOIL - 15/6/2020 SE207695.003	0407_TP002_1.5_20(615 SOIL - 15/6/2020 SE207695.004	0407_TP003_0.5_20(616 SOIL - 16/6/2020 SE207695.005
Total Sample Weight*	g	1	**658**	**1067**	**743**	**720**	**818**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP003_1.0_20(616 SOIL - 16/6/2020 SE207695.006	0407_TP004_0.5_20(616 SOIL - 16/6/2020 SE207695.007	0407_TP005_0.1_20(616 SOIL - 16/6/2020 SE207695.009	0407_TP005_1.0_20(616 SOIL - 16/6/2020 SE207695.010	0407_TP013_0.1_20(616 SOIL - 16/6/2020 SE207695.011
Total Sample Weight*	g	1	**927**	**1222**	**356**	**1298**	**248**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP031_0.1_20(616 SOIL - 16/6/2020 SE207695.013	0407_TP031_0.5_20(616 SOIL - 16/6/2020 SE207695.014	0407_TP040_1.0_20(616 SOIL - 16/6/2020 SE207695.016	0407_TP039_0.5_20(616 SOIL - 16/6/2020 SE207695.017	0407_TP038_0.1_20(617 SOIL - 17/6/2020 SE207695.023
Total Sample Weight*	g	1	**187**	**851**	**705**	**1224**	**276**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP037_0.1_20(617 SOIL - 17/6/2020 SE207695.025	0407_TP037_0.5_20(617 SOIL - 17/6/2020 SE207695.029	0407_TP049_0.1_20(617 SOIL - 17/6/2020 SE207695.031	0407_TP051_0.1_20(617 SOIL - 17/6/2020 SE207695.033	0407_TP051_1.0_20(617 SOIL - 17/6/2020 SE207695.034
Total Sample Weight*	g	1	**897**	**747**	**772**	**172**	**1067**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	**0.117**
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	**0.0460**
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	**0.011**
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	**0.004**
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	**0.015**
Fibre Type*	No unit	-	-	-	-	-	-

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 23/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP052_0.1_20(617 SOIL - 17/6/2020 SE207695.039	0407_TP052_0.5_20(617 SOIL - 17/6/2020 SE207695.042	0407_TP053_0.1_20(617 SOIL - 17/6/2020 SE207695.043	0407_TP040_0.5_20(616 SOIL - 16/6/2020 SE207695.045
Total Sample Weight*	g	1	**1115**	**1146**	**904**	**963**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	**0.0101**	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	**0.0382**	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	**0.001**	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	**0.003**	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	**0.003**	**0.001**	<0.001
Fibre Type*	No unit	-	-	-	-	-

METHOD SUMMARY

METHOD	METHODOLOGY SUMMARY
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples , Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable ’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.
AN605	This technique gravimetrically determines the mass of Bonded Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight. Any fibrous asbestos (FA) found in this fraction will be added to the 2-7mm fraction and its mass recorded there.
AN605	This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free/respirable fibres which are only observed by standard trace analysis as per AN602.
AN605	Bonded asbestos containing material (Bonded ACM) comprises asbestos-containing-material which is sound in condition. Fibrous asbestos (FA) comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material. Asbestos fines (AF) includes free fibres, small fibre bundles and also small fragments of bonded ACM that passes through a 7mm sieve - which implies that the bonded ACM fragments have a substantial degree of damage which increases the potential for fibre release.
AN-605	Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009 and NEPM 1999 (2013) schedule B1 section 4..

FOOTNOTES

Amosite	-	Brown Asbestos	NA	-	Not Analysed
Chrysotile	-	White Asbestos	LNR	-	Listed, Not Required
Crocidolite	-	Blue Asbestos	*	-	NATA accreditation does not cover the performance of this service.
Amphiboles	-	Amosite and/or Crocidolite	**	-	Indicative data, theoretical holding time exceeded.

(In reference to soil samples only) This report does not comply with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment and Remediation and Management of Asbestos Contaminated sites in Western Australia - May 2009.

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.

Where reported: 'Asbestos Detected': Asbestos detected by polarised light microscopy, including dispersion staining.
Where reported: 'No Asbestos Found': No Asbestos Found by polarised light microscopy, including dispersion staining.
Where reported: 'UMF Detected': Mineral fibres of unknown type detected by polarised light microscopy, including dispersion staining. Confirmation by another independent analytical technique may be necessary.

Even after disintegration it can be very difficult, or impossible, to detect the presence of asbestos in some asbestos-containing bulk materials using polarised light microscopy. This is due to the low grade or small length or diameter of asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE207695 R1

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610_30041 Randwick Barrack**
Order Number	**000552--000557**
Samples	50

LABORATORY DETAILS

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Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207695 R1**
Date Received	17 Jun 2020
Date Reported	02 Jul 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Surrogate	VOC's in Soil	1 item
	Volatile Petroleum Hydrocarbons in Soil	1 item
Duplicate	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	1 item
Matrix Spike	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	1 item
	Volatile Petroleum Hydrocarbons in Soil	1 item

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	36 Soil, 14 Material
Date documentation received	17/6/2020	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	14°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE207695 R1

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Fibre ID in bulk materials

Method: ME-(AU)-[ENV]AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP039_0.1_ACM_200	SE207695.019	LB202595	16 Jun 2020	17 Jun 2020	16 Jun 2021	24 Jun 2020	16 Jun 2021	24 Jun 2020
0407_TP039_0.2_ACM1_20	SE207695.020	LB202595	16 Jun 2020	17 Jun 2020	16 Jun 2021	24 Jun 2020	16 Jun 2021	24 Jun 2020
0407_TP039_0.2_ACM2_20	SE207695.021	LB202595	16 Jun 2020	17 Jun 2020	16 Jun 2021	24 Jun 2020	16 Jun 2021	24 Jun 2020
0407_TP039_0.2_ACM3_20	SE207695.022	LB202595	16 Jun 2020	17 Jun 2020	16 Jun 2021	24 Jun 2020	16 Jun 2021	24 Jun 2020
0407_TP037_0.1_ACM_200	SE207695.028	LB202595	17 Jun 2020	17 Jun 2020	17 Jun 2021	24 Jun 2020	17 Jun 2021	24 Jun 2020
0407_TP037_0.5_ACM_200	SE207695.030	LB202595	17 Jun 2020	17 Jun 2020	17 Jun 2021	24 Jun 2020	17 Jun 2021	24 Jun 2020
0407_TP051_0.1_ACM_200	SE207695.035	LB202595	17 Jun 2020	17 Jun 2020	17 Jun 2021	24 Jun 2020	17 Jun 2021	24 Jun 2020
0407_TP051_0.5_ACM_200	SE207695.036	LB202595	17 Jun 2020	17 Jun 2020	17 Jun 2021	24 Jun 2020	17 Jun 2021	24 Jun 2020
0407_TP051_0.8_ACM_200	SE207695.037	LB202595	17 Jun 2020	17 Jun 2020	17 Jun 2021	24 Jun 2020	17 Jun 2021	24 Jun 2020
0407_TP051_1.0_ACM_200	SE207695.038	LB202595	17 Jun 2020	17 Jun 2020	17 Jun 2021	24 Jun 2020	17 Jun 2021	24 Jun 2020
0407_TP052_0.1__ACM_20	SE207695.041	LB202595	17 Jun 2020	17 Jun 2020	17 Jun 2021	24 Jun 2020	17 Jun 2021	24 Jun 2020
0407_TP005_0.5_ACM_200	SE207695.048	LB202595	16 Jun 2020	17 Jun 2020	16 Jun 2021	24 Jun 2020	16 Jun 2021	24 Jun 2020
0407_TP053_0.1_ACM_200	SE207695.049	LB202595	17 Jun 2020	17 Jun 2020	17 Jun 2021	24 Jun 2020	17 Jun 2021	24 Jun 2020
0407_TP037_0.1_ACM1_20	SE207695.050	LB202595	17 Jun 2020	17 Jun 2020	17 Jun 2021	24 Jun 2020	17 Jun 2021	24 Jun 2020

Fibre Identification in soil

Method: ME-(AU)-[ENV]AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP001_0.1_200615	SE207695.001	LB202537	15 Jun 2020	17 Jun 2020	15 Jun 2021	23 Jun 2020	15 Jun 2021	24 Jun 2020
0407_TP001_0.5_200615	SE207695.002	LB202537	15 Jun 2020	17 Jun 2020	15 Jun 2021	23 Jun 2020	15 Jun 2021	24 Jun 2020
0407_TP002_0.5_200615	SE207695.003	LB202537	15 Jun 2020	17 Jun 2020	15 Jun 2021	23 Jun 2020	15 Jun 2021	24 Jun 2020
0407_TP002_1.5_200615	SE207695.004	LB202537	15 Jun 2020	17 Jun 2020	15 Jun 2021	23 Jun 2020	15 Jun 2021	24 Jun 2020
0407_TP003_0.5_200616	SE207695.005	LB202537	16 Jun 2020	17 Jun 2020	16 Jun 2021	23 Jun 2020	16 Jun 2021	24 Jun 2020
0407_TP003_1.0_200616	SE207695.006	LB202537	16 Jun 2020	17 Jun 2020	16 Jun 2021	23 Jun 2020	16 Jun 2021	24 Jun 2020
0407_TP004_0.5_200616	SE207695.007	LB202537	16 Jun 2020	17 Jun 2020	16 Jun 2021	23 Jun 2020	16 Jun 2021	24 Jun 2020
0407_TP005_0.1_200616	SE207695.009	LB202537	16 Jun 2020	17 Jun 2020	16 Jun 2021	23 Jun 2020	16 Jun 2021	24 Jun 2020
0407_TP005_1.0_200616	SE207695.010	LB202537	16 Jun 2020	17 Jun 2020	16 Jun 2021	23 Jun 2020	16 Jun 2021	24 Jun 2020
0407_TP013_0.1_200616	SE207695.011	LB202537	16 Jun 2020	17 Jun 2020	16 Jun 2021	23 Jun 2020	16 Jun 2021	24 Jun 2020
0407_TP031_0.1_200616	SE207695.013	LB202537	16 Jun 2020	17 Jun 2020	16 Jun 2021	23 Jun 2020	16 Jun 2021	24 Jun 2020
0407_TP031_0.5_200616	SE207695.014	LB202537	16 Jun 2020	17 Jun 2020	16 Jun 2021	23 Jun 2020	16 Jun 2021	24 Jun 2020
0407_TP040_1.0_200616	SE207695.016	LB202537	16 Jun 2020	17 Jun 2020	16 Jun 2021	23 Jun 2020	16 Jun 2021	24 Jun 2020
0407_TP039_0.5_200616	SE207695.017	LB202537	16 Jun 2020	17 Jun 2020	16 Jun 2021	23 Jun 2020	16 Jun 2021	24 Jun 2020
0407_TP038_0.1_200617	SE207695.023	LB202537	17 Jun 2020	17 Jun 2020	17 Jun 2021	23 Jun 2020	17 Jun 2021	24 Jun 2020
0407_TP037_0.1_200617	SE207695.025	LB202537	17 Jun 2020	17 Jun 2020	17 Jun 2021	23 Jun 2020	17 Jun 2021	24 Jun 2020
0407_TP037_0.5_200617	SE207695.029	LB202537	17 Jun 2020	17 Jun 2020	17 Jun 2021	23 Jun 2020	17 Jun 2021	24 Jun 2020
0407_TP049_0.1_200617	SE207695.031	LB202537	17 Jun 2020	17 Jun 2020	17 Jun 2021	23 Jun 2020	17 Jun 2021	24 Jun 2020
0407_TP051_0.1_200617	SE207695.033	LB202537	17 Jun 2020	17 Jun 2020	17 Jun 2021	23 Jun 2020	17 Jun 2021	24 Jun 2020
0407_TP051_1.0_200617	SE207695.034	LB202537	17 Jun 2020	17 Jun 2020	17 Jun 2021	23 Jun 2020	17 Jun 2021	24 Jun 2020
0407_TP052_0.1_200617	SE207695.039	LB202537	17 Jun 2020	17 Jun 2020	17 Jun 2021	23 Jun 2020	17 Jun 2021	24 Jun 2020
0407_TP052_0.5_200617	SE207695.042	LB202537	17 Jun 2020	17 Jun 2020	17 Jun 2021	23 Jun 2020	17 Jun 2021	24 Jun 2020
0407_TP053_0.1_200617	SE207695.043	LB202537	17 Jun 2020	17 Jun 2020	17 Jun 2021	23 Jun 2020	17 Jun 2021	24 Jun 2020
0407_TP040_0.5_200616	SE207695.045	LB202537	16 Jun 2020	17 Jun 2020	16 Jun 2021	23 Jun 2020	16 Jun 2021	24 Jun 2020

Gravimetric Determination of Asbestos in Soil

Method: ME-(AU)-[ENV]AN605

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP001_0.1_200615	SE207695.001	LB202537	15 Jun 2020	17 Jun 2020	12 Dec 2020	23 Jun 2020	12 Dec 2020	24 Jun 2020
0407_TP001_0.5_200615	SE207695.002	LB202537	15 Jun 2020	17 Jun 2020	12 Dec 2020	23 Jun 2020	12 Dec 2020	24 Jun 2020
0407_TP002_0.5_200615	SE207695.003	LB202537	15 Jun 2020	17 Jun 2020	12 Dec 2020	23 Jun 2020	12 Dec 2020	24 Jun 2020
0407_TP002_1.5_200615	SE207695.004	LB202537	15 Jun 2020	17 Jun 2020	12 Dec 2020	23 Jun 2020	12 Dec 2020	24 Jun 2020
0407_TP003_0.5_200616	SE207695.005	LB202537	16 Jun 2020	17 Jun 2020	13 Dec 2020	23 Jun 2020	13 Dec 2020	24 Jun 2020
0407_TP003_1.0_200616	SE207695.006	LB202537	16 Jun 2020	17 Jun 2020	13 Dec 2020	23 Jun 2020	13 Dec 2020	24 Jun 2020
0407_TP004_0.5_200616	SE207695.007	LB202537	16 Jun 2020	17 Jun 2020	13 Dec 2020	23 Jun 2020	13 Dec 2020	24 Jun 2020
0407_TP005_0.1_200616	SE207695.009	LB202537	16 Jun 2020	17 Jun 2020	13 Dec 2020	23 Jun 2020	13 Dec 2020	24 Jun 2020
0407_TP005_1.0_200616	SE207695.010	LB202537	16 Jun 2020	17 Jun 2020	13 Dec 2020	23 Jun 2020	13 Dec 2020	24 Jun 2020
0407_TP013_0.1_200616	SE207695.011	LB202537	16 Jun 2020	17 Jun 2020	13 Dec 2020	23 Jun 2020	13 Dec 2020	24 Jun 2020
0407_TP031_0.1_200616	SE207695.013	LB202537	16 Jun 2020	17 Jun 2020	13 Dec 2020	23 Jun 2020	13 Dec 2020	24 Jun 2020
0407_TP031_0.5_200616	SE207695.014	LB202537	16 Jun 2020	17 Jun 2020	13 Dec 2020	23 Jun 2020	13 Dec 2020	24 Jun 2020
0407_TP040_1.0_200616	SE207695.016	LB202537	16 Jun 2020	17 Jun 2020	13 Dec 2020	23 Jun 2020	13 Dec 2020	24 Jun 2020
0407_TP039_0.5_200616	SE207695.017	LB202537	16 Jun 2020	17 Jun 2020	13 Dec 2020	23 Jun 2020	13 Dec 2020	24 Jun 2020
0407_TP038_0.1_200617	SE207695.023	LB202537	17 Jun 2020	17 Jun 2020	14 Dec 2020	23 Jun 2020	14 Dec 2020	24 Jun 2020
0407_TP037_0.1_200617	SE207695.025	LB202537	17 Jun 2020	17 Jun 2020	14 Dec 2020	23 Jun 2020	14 Dec 2020	24 Jun 2020
0407_TP037_0.5_200617	SE207695.029	LB202537	17 Jun 2020	17 Jun 2020	14 Dec 2020	23 Jun 2020	14 Dec 2020	24 Jun 2020

HOLDING TIME SUMMARY

SE207695 R1

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Gravimetric Determination of Asbestos in Soil (continued)

Method: ME-(AU)-[ENV]AN605

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP049_0.1_200617	SE207695.031	LB202537	17 Jun 2020	17 Jun 2020	14 Dec 2020	23 Jun 2020	14 Dec 2020	24 Jun 2020
0407_TP051_0.1_200617	SE207695.033	LB202537	17 Jun 2020	17 Jun 2020	14 Dec 2020	23 Jun 2020	14 Dec 2020	24 Jun 2020
0407_TP051_1.0_200617	SE207695.034	LB202537	17 Jun 2020	17 Jun 2020	14 Dec 2020	23 Jun 2020	14 Dec 2020	24 Jun 2020
0407_TP052_0.1_200617	SE207695.039	LB202537	17 Jun 2020	17 Jun 2020	14 Dec 2020	23 Jun 2020	14 Dec 2020	24 Jun 2020
0407_TP052_0.5_200617	SE207695.042	LB202537	17 Jun 2020	17 Jun 2020	14 Dec 2020	23 Jun 2020	14 Dec 2020	24 Jun 2020
0407_TP053_0.1_200617	SE207695.043	LB202537	17 Jun 2020	17 Jun 2020	14 Dec 2020	23 Jun 2020	14 Dec 2020	24 Jun 2020
0407_TP040_0.5_200616	SE207695.045	LB202537	16 Jun 2020	17 Jun 2020	13 Dec 2020	23 Jun 2020	13 Dec 2020	24 Jun 2020

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP001_0.1_200615	SE207695.001	LB202486	15 Jun 2020	17 Jun 2020	13 Jul 2020	22 Jun 2020	13 Jul 2020	24 Jun 2020
0407_TP001_0.5_200615	SE207695.002	LB202486	15 Jun 2020	17 Jun 2020	13 Jul 2020	22 Jun 2020	13 Jul 2020	24 Jun 2020
0407_TP002_0.5_200615	SE207695.003	LB202486	15 Jun 2020	17 Jun 2020	13 Jul 2020	22 Jun 2020	13 Jul 2020	24 Jun 2020
0407_TP002_1.5_200615	SE207695.004	LB202486	15 Jun 2020	17 Jun 2020	13 Jul 2020	22 Jun 2020	13 Jul 2020	24 Jun 2020
0407_TP003_0.5_200616	SE207695.005	LB202486	16 Jun 2020	17 Jun 2020	14 Jul 2020	22 Jun 2020	14 Jul 2020	24 Jun 2020
0407_TP003_1.0_200616	SE207695.006	LB202486	16 Jun 2020	17 Jun 2020	14 Jul 2020	22 Jun 2020	14 Jul 2020	24 Jun 2020
0407_TP004_0.5_200616	SE207695.007	LB202486	16 Jun 2020	17 Jun 2020	14 Jul 2020	22 Jun 2020	14 Jul 2020	24 Jun 2020
0407_QC100_200616	SE207695.008	LB202486	16 Jun 2020	17 Jun 2020	14 Jul 2020	22 Jun 2020	14 Jul 2020	24 Jun 2020
0407_TP005_0.1_200616	SE207695.009	LB202486	16 Jun 2020	17 Jun 2020	14 Jul 2020	22 Jun 2020	14 Jul 2020	24 Jun 2020
0407_TP005_1.0_200616	SE207695.010	LB202486	16 Jun 2020	17 Jun 2020	14 Jul 2020	22 Jun 2020	14 Jul 2020	24 Jun 2020
0407_TP013_0.1_200616	SE207695.011	LB202486	16 Jun 2020	17 Jun 2020	14 Jul 2020	22 Jun 2020	14 Jul 2020	24 Jun 2020
0407_TP013_1.0_200616	SE207695.012	LB202486	16 Jun 2020	17 Jun 2020	14 Jul 2020	22 Jun 2020	14 Jul 2020	24 Jun 2020
0407_TP031_0.1_200616	SE207695.013	LB202486	16 Jun 2020	17 Jun 2020	14 Jul 2020	22 Jun 2020	14 Jul 2020	24 Jun 2020
0407_TP031_0.5_200616	SE207695.014	LB202486	16 Jun 2020	17 Jun 2020	14 Jul 2020	22 Jun 2020	14 Jul 2020	24 Jun 2020
0407_QC104_200616	SE207695.015	LB202486	16 Jun 2020	17 Jun 2020	14 Jul 2020	22 Jun 2020	14 Jul 2020	24 Jun 2020
0407_TP040_1.0_200616	SE207695.016	LB202486	16 Jun 2020	17 Jun 2020	14 Jul 2020	22 Jun 2020	14 Jul 2020	24 Jun 2020
0407_TP039_0.5_200616	SE207695.017	LB202486	16 Jun 2020	17 Jun 2020	14 Jul 2020	22 Jun 2020	14 Jul 2020	24 Jun 2020
0407_TP039_1.0_200616	SE207695.018	LB202486	16 Jun 2020	17 Jun 2020	14 Jul 2020	22 Jun 2020	14 Jul 2020	24 Jun 2020
0407_TP038_0.1_200617	SE207695.023	LB202486	17 Jun 2020	17 Jun 2020	15 Jul 2020	22 Jun 2020	15 Jul 2020	24 Jun 2020
0407_TP038_1.0_200617	SE207695.024	LB202487	17 Jun 2020	17 Jun 2020	15 Jul 2020	22 Jun 2020	15 Jul 2020	24 Jun 2020
0407_TP037_0.1_200617	SE207695.025	LB202487	17 Jun 2020	17 Jun 2020	15 Jul 2020	22 Jun 2020	15 Jul 2020	24 Jun 2020
0407_QC107_200617	SE207695.026	LB202487	17 Jun 2020	17 Jun 2020	15 Jul 2020	22 Jun 2020	15 Jul 2020	24 Jun 2020
0407_QC207_200617	SE207695.027	LB202487	17 Jun 2020	17 Jun 2020	15 Jul 2020	22 Jun 2020	15 Jul 2020	24 Jun 2020
0407_TP037_0.5_200617	SE207695.029	LB202487	17 Jun 2020	17 Jun 2020	15 Jul 2020	22 Jun 2020	15 Jul 2020	24 Jun 2020
0407_TP049_0.1_200617	SE207695.031	LB202487	17 Jun 2020	17 Jun 2020	15 Jul 2020	22 Jun 2020	15 Jul 2020	24 Jun 2020
0407_TP049_0.5_200617	SE207695.032	LB202487	17 Jun 2020	17 Jun 2020	15 Jul 2020	22 Jun 2020	15 Jul 2020	24 Jun 2020
0407_TP051_0.1_200617	SE207695.033	LB202487	17 Jun 2020	17 Jun 2020	15 Jul 2020	22 Jun 2020	15 Jul 2020	24 Jun 2020
0407_TP051_1.0_200617	SE207695.034	LB202487	17 Jun 2020	17 Jun 2020	15 Jul 2020	22 Jun 2020	15 Jul 2020	24 Jun 2020
0407_TP052_0.1_200617	SE207695.039	LB202487	17 Jun 2020	17 Jun 2020	15 Jul 2020	22 Jun 2020	15 Jul 2020	24 Jun 2020
0407_QC111_200617	SE207695.040	LB202487	17 Jun 2020	17 Jun 2020	15 Jul 2020	22 Jun 2020	15 Jul 2020	24 Jun 2020
0407_TP052_0.5_200617	SE207695.042	LB202487	17 Jun 2020	17 Jun 2020	15 Jul 2020	22 Jun 2020	15 Jul 2020	24 Jun 2020
0407_TP053_0.1_200617	SE207695.043	LB202487	17 Jun 2020	17 Jun 2020	15 Jul 2020	22 Jun 2020	15 Jul 2020	24 Jun 2020
0407_TP053_0.5_200617	SE207695.044	LB202487	17 Jun 2020	17 Jun 2020	15 Jul 2020	22 Jun 2020	15 Jul 2020	24 Jun 2020
0407_TP040_0.5_200616	SE207695.045	LB202487	16 Jun 2020	17 Jun 2020	14 Jul 2020	22 Jun 2020	14 Jul 2020	24 Jun 2020

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP001_0.1_200615	SE207695.001	LB202454	15 Jun 2020	17 Jun 2020	29 Jun 2020	22 Jun 2020	27 Jun 2020	24 Jun 2020
0407_TP001_0.5_200615	SE207695.002	LB202454	15 Jun 2020	17 Jun 2020	29 Jun 2020	22 Jun 2020	27 Jun 2020	24 Jun 2020
0407_TP002_0.5_200615	SE207695.003	LB202454	15 Jun 2020	17 Jun 2020	29 Jun 2020	22 Jun 2020	27 Jun 2020	24 Jun 2020
0407_TP002_1.5_200615	SE207695.004	LB202454	15 Jun 2020	17 Jun 2020	29 Jun 2020	22 Jun 2020	27 Jun 2020	24 Jun 2020
0407_TP003_0.5_200616	SE207695.005	LB202454	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	27 Jun 2020	24 Jun 2020
0407_TP003_1.0_200616	SE207695.006	LB202454	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	27 Jun 2020	24 Jun 2020
0407_TP004_0.5_200616	SE207695.007	LB202454	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	27 Jun 2020	24 Jun 2020
0407_QC100_200616	SE207695.008	LB202454	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	27 Jun 2020	24 Jun 2020
0407_TP005_0.1_200616	SE207695.009	LB202454	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	27 Jun 2020	24 Jun 2020
0407_TP005_1.0_200616	SE207695.010	LB202454	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	27 Jun 2020	24 Jun 2020
0407_TP013_0.1_200616	SE207695.011	LB202454	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	27 Jun 2020	24 Jun 2020
0407_TP013_1.0_200616	SE207695.012	LB202454	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	27 Jun 2020	24 Jun 2020
0407_TP031_0.1_200616	SE207695.013	LB202454	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	27 Jun 2020	24 Jun 2020
0407_TP031_0.5_200616	SE207695.014	LB202454	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	27 Jun 2020	24 Jun 2020

HOLDING TIME SUMMARY

SE207695 R1

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Moisture Content (continued)

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC104_200616	SE207695.015	LB202454	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	27 Jun 2020	24 Jun 2020
0407_TP040_1.0_200616	SE207695.016	LB202454	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	27 Jun 2020	24 Jun 2020
0407_TP039_0.5_200616	SE207695.017	LB202454	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	27 Jun 2020	24 Jun 2020
0407_TP039_1.0_200616	SE207695.018	LB202454	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	27 Jun 2020	24 Jun 2020
0407_TP038_0.1_200617	SE207695.023	LB202454	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	27 Jun 2020	24 Jun 2020
0407_TP038_1.0_200617	SE207695.024	LB202454	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	27 Jun 2020	24 Jun 2020
0407_TP037_0.1_200617	SE207695.025	LB202455	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	27 Jun 2020	24 Jun 2020
0407_QC107_200617	SE207695.026	LB202455	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	27 Jun 2020	24 Jun 2020
0407_QC207_200617	SE207695.027	LB202455	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	27 Jun 2020	24 Jun 2020
0407_TP037_0.5_200617	SE207695.029	LB202455	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	27 Jun 2020	24 Jun 2020
0407_TP049_0.1_200617	SE207695.031	LB202455	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	27 Jun 2020	24 Jun 2020
0407_TP049_0.5_200617	SE207695.032	LB202455	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	27 Jun 2020	24 Jun 2020
0407_TP051_0.1_200617	SE207695.033	LB202455	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	27 Jun 2020	24 Jun 2020
0407_TP051_1.0_200617	SE207695.034	LB202455	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	27 Jun 2020	24 Jun 2020
0407_TP052_0.1_200617	SE207695.039	LB202455	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	27 Jun 2020	24 Jun 2020
0407_QC111_200617	SE207695.040	LB202455	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	27 Jun 2020	24 Jun 2020
0407_TP052_0.5_200617	SE207695.042	LB202455	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	27 Jun 2020	24 Jun 2020
0407_TP053_0.1_200617	SE207695.043	LB202455	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	27 Jun 2020	24 Jun 2020
0407_TP053_0.5_200617	SE207695.044	LB202455	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	27 Jun 2020	24 Jun 2020
0407_TP040_0.5_200616	SE207695.045	LB202455	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	27 Jun 2020	24 Jun 2020
0407_QC402_200616	SE207695.046	LB202455	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	27 Jun 2020	24 Jun 2020

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP001_0.1_200615	SE207695.001	LB202452	15 Jun 2020	17 Jun 2020	29 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP001_0.5_200615	SE207695.002	LB202452	15 Jun 2020	17 Jun 2020	29 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP002_0.5_200615	SE207695.003	LB202452	15 Jun 2020	17 Jun 2020	29 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP002_1.5_200615	SE207695.004	LB202452	15 Jun 2020	17 Jun 2020	29 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP003_0.5_200616	SE207695.005	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP003_1.0_200616	SE207695.006	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP004_0.5_200616	SE207695.007	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_QC100_200616	SE207695.008	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP005_0.1_200616	SE207695.009	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP005_1.0_200616	SE207695.010	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP013_0.1_200616	SE207695.011	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP013_1.0_200616	SE207695.012	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP031_0.1_200616	SE207695.013	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP031_0.5_200616	SE207695.014	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_QC104_200616	SE207695.015	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP040_1.0_200616	SE207695.016	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP039_0.5_200616	SE207695.017	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP039_1.0_200616	SE207695.018	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP038_0.1_200617	SE207695.023	LB202452	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP038_1.0_200617	SE207695.024	LB202452	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP037_0.1_200617	SE207695.025	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_QC107_200617	SE207695.026	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_QC207_200617	SE207695.027	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP037_0.5_200617	SE207695.029	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP049_0.1_200617	SE207695.031	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP049_0.5_200617	SE207695.032	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP051_0.1_200617	SE207695.033	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP051_1.0_200617	SE207695.034	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP052_0.1_200617	SE207695.039	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_QC111_200617	SE207695.040	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP052_0.5_200617	SE207695.042	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP053_0.1_200617	SE207695.043	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP053_0.5_200617	SE207695.044	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP040_0.5_200616	SE207695.045	LB202453	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP001_0.1_200615	SE207695.001	LB202452	15 Jun 2020	17 Jun 2020	29 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP001_0.5_200615	SE207695.002	LB202452	15 Jun 2020	17 Jun 2020	29 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP002_0.5_200615	SE207695.003	LB202452	15 Jun 2020	17 Jun 2020	29 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP002_1.5_200615	SE207695.004	LB202452	15 Jun 2020	17 Jun 2020	29 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP003_0.5_200616	SE207695.005	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP003_1.0_200616	SE207695.006	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP004_0.5_200616	SE207695.007	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_QC100_200616	SE207695.008	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP005_0.1_200616	SE207695.009	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP005_1.0_200616	SE207695.010	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP013_0.1_200616	SE207695.011	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP013_1.0_200616	SE207695.012	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP031_0.1_200616	SE207695.013	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP031_0.5_200616	SE207695.014	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_QC104_200616	SE207695.015	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP040_1.0_200616	SE207695.016	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP039_0.5_200616	SE207695.017	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP039_1.0_200616	SE207695.018	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP038_0.1_200617	SE207695.023	LB202452	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP038_1.0_200617	SE207695.024	LB202452	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP037_0.1_200617	SE207695.025	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_QC107_200617	SE207695.026	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_QC207_200617	SE207695.027	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP037_0.5_200617	SE207695.029	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP049_0.1_200617	SE207695.031	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP049_0.5_200617	SE207695.032	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP051_0.1_200617	SE207695.033	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP051_1.0_200617	SE207695.034	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP052_0.1_200617	SE207695.039	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_QC111_200617	SE207695.040	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP052_0.5_200617	SE207695.042	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP053_0.1_200617	SE207695.043	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP053_0.5_200617	SE207695.044	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP040_0.5_200616	SE207695.045	LB202453	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP001_0.1_200615	SE207695.001	LB202452	15 Jun 2020	17 Jun 2020	29 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP001_0.5_200615	SE207695.002	LB202452	15 Jun 2020	17 Jun 2020	29 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP002_0.5_200615	SE207695.003	LB202452	15 Jun 2020	17 Jun 2020	29 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP002_1.5_200615	SE207695.004	LB202452	15 Jun 2020	17 Jun 2020	29 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP003_0.5_200616	SE207695.005	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP003_1.0_200616	SE207695.006	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP004_0.5_200616	SE207695.007	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_QC100_200616	SE207695.008	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP005_0.1_200616	SE207695.009	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP005_1.0_200616	SE207695.010	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP013_0.1_200616	SE207695.011	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP013_1.0_200616	SE207695.012	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP031_0.1_200616	SE207695.013	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP031_0.5_200616	SE207695.014	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_QC104_200616	SE207695.015	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP040_1.0_200616	SE207695.016	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP039_0.5_200616	SE207695.017	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP039_1.0_200616	SE207695.018	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP038_0.1_200617	SE207695.023	LB202452	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP038_1.0_200617	SE207695.024	LB202452	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP037_0.1_200617	SE207695.025	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_QC107_200617	SE207695.026	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_QC207_200617	SE207695.027	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP037_0.5_200617	SE207695.029	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP049_0.1_200617	SE207695.031	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP049_0.5_200617	SE207695.032	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP051_0.1_200617	SE207695.033	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP051_1.0_200617	SE207695.034	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP052_0.1_200617	SE207695.039	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_QC111_200617	SE207695.040	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP052_0.5_200617	SE207695.042	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP053_0.1_200617	SE207695.043	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP053_0.5_200617	SE207695.044	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP040_0.5_200616	SE207695.045	LB202453	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP001_0.1_200615	SE207695.001	LB202452	15 Jun 2020	17 Jun 2020	29 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP001_0.5_200615	SE207695.002	LB202452	15 Jun 2020	17 Jun 2020	29 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP002_0.5_200615	SE207695.003	LB202452	15 Jun 2020	17 Jun 2020	29 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP002_1.5_200615	SE207695.004	LB202452	15 Jun 2020	17 Jun 2020	29 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP003_0.5_200616	SE207695.005	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP003_1.0_200616	SE207695.006	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP004_0.5_200616	SE207695.007	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_QC100_200616	SE207695.008	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP005_0.1_200616	SE207695.009	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP005_1.0_200616	SE207695.010	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP013_0.1_200616	SE207695.011	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP013_1.0_200616	SE207695.012	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP031_0.1_200616	SE207695.013	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP031_0.5_200616	SE207695.014	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_QC104_200616	SE207695.015	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP040_1.0_200616	SE207695.016	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP039_0.5_200616	SE207695.017	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP039_1.0_200616	SE207695.018	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP038_0.1_200617	SE207695.023	LB202452	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP038_1.0_200617	SE207695.024	LB202452	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP037_0.1_200617	SE207695.025	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_QC107_200617	SE207695.026	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_QC207_200617	SE207695.027	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP037_0.5_200617	SE207695.029	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP049_0.1_200617	SE207695.031	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP049_0.5_200617	SE207695.032	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP051_0.1_200617	SE207695.033	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP051_1.0_200617	SE207695.034	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP052_0.1_200617	SE207695.039	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_QC111_200617	SE207695.040	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP052_0.5_200617	SE207695.042	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP053_0.1_200617	SE207695.043	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP053_0.5_200617	SE207695.044	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP040_0.5_200616	SE207695.045	LB202453	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP001_0.1_200615	SE207695.001	LB202452	15 Jun 2020	17 Jun 2020	29 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP001_0.5_200615	SE207695.002	LB202452	15 Jun 2020	17 Jun 2020	29 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP002_0.5_200615	SE207695.003	LB202452	15 Jun 2020	17 Jun 2020	29 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP002_1.5_200615	SE207695.004	LB202452	15 Jun 2020	17 Jun 2020	29 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP003_0.5_200616	SE207695.005	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP003_1.0_200616	SE207695.006	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP004_0.5_200616	SE207695.007	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_QC100_200616	SE207695.008	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP005_0.1_200616	SE207695.009	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP005_1.0_200616	SE207695.010	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP013_0.1_200616	SE207695.011	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP013_1.0_200616	SE207695.012	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP031_0.1_200616	SE207695.013	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP031_0.5_200616	SE207695.014	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_QC104_200616	SE207695.015	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP040_1.0_200616	SE207695.016	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP039_0.5_200616	SE207695.017	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP039_1.0_200616	SE207695.018	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP038_0.1_200617	SE207695.023	LB202452	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP038_1.0_200617	SE207695.024	LB202452	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP037_0.1_200617	SE207695.025	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_QC107_200617	SE207695.026	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_QC207_200617	SE207695.027	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP037_0.5_200617	SE207695.029	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP049_0.1_200617	SE207695.031	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP049_0.5_200617	SE207695.032	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP051_0.1_200617	SE207695.033	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP051_1.0_200617	SE207695.034	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP052_0.1_200617	SE207695.039	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_QC111_200617	SE207695.040	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP052_0.5_200617	SE207695.042	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP053_0.1_200617	SE207695.043	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP053_0.5_200617	SE207695.044	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP040_0.5_200616	SE207695.045	LB202453	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP001_0.1_200615	SE207695.001	LB202482	15 Jun 2020	17 Jun 2020	12 Dec 2020	22 Jun 2020	12 Dec 2020	24 Jun 2020
0407_TP001_0.5_200615	SE207695.002	LB202482	15 Jun 2020	17 Jun 2020	12 Dec 2020	22 Jun 2020	12 Dec 2020	24 Jun 2020
0407_TP002_0.5_200615	SE207695.003	LB202482	15 Jun 2020	17 Jun 2020	12 Dec 2020	22 Jun 2020	12 Dec 2020	24 Jun 2020
0407_TP002_1.5_200615	SE207695.004	LB202482	15 Jun 2020	17 Jun 2020	12 Dec 2020	22 Jun 2020	12 Dec 2020	24 Jun 2020
0407_TP003_0.5_200616	SE207695.005	LB202482	16 Jun 2020	17 Jun 2020	13 Dec 2020	22 Jun 2020	13 Dec 2020	24 Jun 2020
0407_TP003_1.0_200616	SE207695.006	LB202482	16 Jun 2020	17 Jun 2020	13 Dec 2020	22 Jun 2020	13 Dec 2020	24 Jun 2020
0407_TP004_0.5_200616	SE207695.007	LB202482	16 Jun 2020	17 Jun 2020	13 Dec 2020	22 Jun 2020	13 Dec 2020	24 Jun 2020
0407_QC100_200616	SE207695.008	LB202482	16 Jun 2020	17 Jun 2020	13 Dec 2020	22 Jun 2020	13 Dec 2020	24 Jun 2020
0407_TP005_0.1_200616	SE207695.009	LB202482	16 Jun 2020	17 Jun 2020	13 Dec 2020	22 Jun 2020	13 Dec 2020	24 Jun 2020
0407_TP005_1.0_200616	SE207695.010	LB202482	16 Jun 2020	17 Jun 2020	13 Dec 2020	22 Jun 2020	13 Dec 2020	24 Jun 2020
0407_TP013_0.1_200616	SE207695.011	LB202482	16 Jun 2020	17 Jun 2020	13 Dec 2020	22 Jun 2020	13 Dec 2020	24 Jun 2020
0407_TP013_1.0_200616	SE207695.012	LB202482	16 Jun 2020	17 Jun 2020	13 Dec 2020	22 Jun 2020	13 Dec 2020	24 Jun 2020
0407_TP031_0.1_200616	SE207695.013	LB202482	16 Jun 2020	17 Jun 2020	13 Dec 2020	22 Jun 2020	13 Dec 2020	24 Jun 2020
0407_TP031_0.5_200616	SE207695.014	LB202482	16 Jun 2020	17 Jun 2020	13 Dec 2020	22 Jun 2020	13 Dec 2020	24 Jun 2020
0407_QC104_200616	SE207695.015	LB202482	16 Jun 2020	17 Jun 2020	13 Dec 2020	22 Jun 2020	13 Dec 2020	24 Jun 2020
0407_TP040_1.0_200616	SE207695.016	LB202482	16 Jun 2020	17 Jun 2020	13 Dec 2020	22 Jun 2020	13 Dec 2020	24 Jun 2020
0407_TP039_0.5_200616	SE207695.017	LB202482	16 Jun 2020	17 Jun 2020	13 Dec 2020	22 Jun 2020	13 Dec 2020	24 Jun 2020
0407_TP039_1.0_200616	SE207695.018	LB202482	16 Jun 2020	17 Jun 2020	13 Dec 2020	22 Jun 2020	13 Dec 2020	24 Jun 2020
0407_TP038_0.1_200617	SE207695.023	LB202482	17 Jun 2020	17 Jun 2020	14 Dec 2020	22 Jun 2020	14 Dec 2020	24 Jun 2020
0407_TP038_1.0_200617	SE207695.024	LB202483	17 Jun 2020	17 Jun 2020	14 Dec 2020	22 Jun 2020	14 Dec 2020	24 Jun 2020
0407_TP037_0.1_200617	SE207695.025	LB202483	17 Jun 2020	17 Jun 2020	14 Dec 2020	22 Jun 2020	14 Dec 2020	24 Jun 2020
0407_QC107_200617	SE207695.026	LB202483	17 Jun 2020	17 Jun 2020	14 Dec 2020	22 Jun 2020	14 Dec 2020	24 Jun 2020
0407_QC207_200617	SE207695.027	LB202483	17 Jun 2020	17 Jun 2020	14 Dec 2020	22 Jun 2020	14 Dec 2020	24 Jun 2020
0407_TP037_0.5_200617	SE207695.029	LB202483	17 Jun 2020	17 Jun 2020	14 Dec 2020	22 Jun 2020	14 Dec 2020	24 Jun 2020
0407_TP049_0.1_200617	SE207695.031	LB202483	17 Jun 2020	17 Jun 2020	14 Dec 2020	22 Jun 2020	14 Dec 2020	24 Jun 2020
0407_TP049_0.5_200617	SE207695.032	LB202483	17 Jun 2020	17 Jun 2020	14 Dec 2020	22 Jun 2020	14 Dec 2020	24 Jun 2020
0407_TP051_0.1_200617	SE207695.033	LB202483	17 Jun 2020	17 Jun 2020	14 Dec 2020	22 Jun 2020	14 Dec 2020	24 Jun 2020
0407_TP051_1.0_200617	SE207695.034	LB202483	17 Jun 2020	17 Jun 2020	14 Dec 2020	22 Jun 2020	14 Dec 2020	24 Jun 2020
0407_TP052_0.1_200617	SE207695.039	LB202483	17 Jun 2020	17 Jun 2020	14 Dec 2020	22 Jun 2020	14 Dec 2020	24 Jun 2020
0407_QC111_200617	SE207695.040	LB202483	17 Jun 2020	17 Jun 2020	14 Dec 2020	22 Jun 2020	14 Dec 2020	24 Jun 2020
0407_TP052_0.5_200617	SE207695.042	LB202483	17 Jun 2020	17 Jun 2020	14 Dec 2020	22 Jun 2020	14 Dec 2020	24 Jun 2020
0407_TP053_0.1_200617	SE207695.043	LB202483	17 Jun 2020	17 Jun 2020	14 Dec 2020	22 Jun 2020	14 Dec 2020	24 Jun 2020
0407_TP053_0.5_200617	SE207695.044	LB202483	17 Jun 2020	17 Jun 2020	14 Dec 2020	22 Jun 2020	14 Dec 2020	24 Jun 2020

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP040_0.5_200616	SE207695.045	LB202483	16 Jun 2020	17 Jun 2020	13 Dec 2020	22 Jun 2020	13 Dec 2020	24 Jun 2020

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP001_0.1_200615	SE207695.001	LB202452	15 Jun 2020	17 Jun 2020	29 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP001_0.5_200615	SE207695.002	LB202452	15 Jun 2020	17 Jun 2020	29 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP002_0.5_200615	SE207695.003	LB202452	15 Jun 2020	17 Jun 2020	29 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP002_1.5_200615	SE207695.004	LB202452	15 Jun 2020	17 Jun 2020	29 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP003_0.5_200616	SE207695.005	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP003_1.0_200616	SE207695.006	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP004_0.5_200616	SE207695.007	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_QC100_200616	SE207695.008	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP005_0.1_200616	SE207695.009	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP005_1.0_200616	SE207695.010	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP013_0.1_200616	SE207695.011	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP013_1.0_200616	SE207695.012	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP031_0.1_200616	SE207695.013	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP031_0.5_200616	SE207695.014	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_QC104_200616	SE207695.015	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP040_1.0_200616	SE207695.016	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP039_0.5_200616	SE207695.017	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP039_1.0_200616	SE207695.018	LB202452	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP038_0.1_200617	SE207695.023	LB202452	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP038_1.0_200617	SE207695.024	LB202452	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP037_0.1_200617	SE207695.025	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_QC107_200617	SE207695.026	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_QC207_200617	SE207695.027	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP037_0.5_200617	SE207695.029	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP049_0.1_200617	SE207695.031	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP049_0.5_200617	SE207695.032	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP051_0.1_200617	SE207695.033	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP051_1.0_200617	SE207695.034	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP052_0.1_200617	SE207695.039	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_QC111_200617	SE207695.040	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP052_0.5_200617	SE207695.042	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP053_0.1_200617	SE207695.043	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP053_0.5_200617	SE207695.044	LB202453	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP040_0.5_200616	SE207695.045	LB202453	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP001_0.1_200615	SE207695.001	LB202450	15 Jun 2020	17 Jun 2020	29 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP001_0.5_200615	SE207695.002	LB202450	15 Jun 2020	17 Jun 2020	29 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP002_0.5_200615	SE207695.003	LB202450	15 Jun 2020	17 Jun 2020	29 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP002_1.5_200615	SE207695.004	LB202450	15 Jun 2020	17 Jun 2020	29 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP003_0.5_200616	SE207695.005	LB202450	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP003_1.0_200616	SE207695.006	LB202450	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP004_0.5_200616	SE207695.007	LB202450	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_QC100_200616	SE207695.008	LB202450	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP005_0.1_200616	SE207695.009	LB202450	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP005_1.0_200616	SE207695.010	LB202450	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP013_0.1_200616	SE207695.011	LB202450	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP013_1.0_200616	SE207695.012	LB202450	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP031_0.1_200616	SE207695.013	LB202450	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP031_0.5_200616	SE207695.014	LB202450	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_QC104_200616	SE207695.015	LB202450	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP040_1.0_200616	SE207695.016	LB202450	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP039_0.5_200616	SE207695.017	LB202450	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP039_1.0_200616	SE207695.018	LB202450	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP038_0.1_200617	SE207695.023	LB202450	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP038_1.0_200617	SE207695.024	LB202450	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020

HOLDING TIME SUMMARY

SE207695 R1

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP037_0.1_200617	SE207695.025	LB202451	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_QC107_200617	SE207695.026	LB202451	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_QC207_200617	SE207695.027	LB202451	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP037_0.5_200617	SE207695.029	LB202451	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP049_0.1_200617	SE207695.031	LB202451	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP049_0.5_200617	SE207695.032	LB202451	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP051_0.1_200617	SE207695.033	LB202451	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP051_1.0_200617	SE207695.034	LB202451	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP052_0.1_200617	SE207695.039	LB202451	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_QC111_200617	SE207695.040	LB202451	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP052_0.5_200617	SE207695.042	LB202451	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP053_0.1_200617	SE207695.043	LB202451	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP053_0.5_200617	SE207695.044	LB202451	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP040_0.5_200616	SE207695.045	LB202451	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_QC402_200616	SE207695.046	LB202451	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_QC502_200616	SE207695.047	LB202451	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP001_0.1_200615	SE207695.001	LB202450	15 Jun 2020	17 Jun 2020	29 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP001_0.5_200615	SE207695.002	LB202450	15 Jun 2020	17 Jun 2020	29 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP002_0.5_200615	SE207695.003	LB202450	15 Jun 2020	17 Jun 2020	29 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP002_1.5_200615	SE207695.004	LB202450	15 Jun 2020	17 Jun 2020	29 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP003_0.5_200616	SE207695.005	LB202450	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP003_1.0_200616	SE207695.006	LB202450	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP004_0.5_200616	SE207695.007	LB202450	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_QC100_200616	SE207695.008	LB202450	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP005_0.1_200616	SE207695.009	LB202450	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP005_1.0_200616	SE207695.010	LB202450	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP013_0.1_200616	SE207695.011	LB202450	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP013_1.0_200616	SE207695.012	LB202450	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP031_0.1_200616	SE207695.013	LB202450	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP031_0.5_200616	SE207695.014	LB202450	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_QC104_200616	SE207695.015	LB202450	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP040_1.0_200616	SE207695.016	LB202450	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP039_0.5_200616	SE207695.017	LB202450	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP039_1.0_200616	SE207695.018	LB202450	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP038_0.1_200617	SE207695.023	LB202450	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP038_1.0_200617	SE207695.024	LB202450	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP037_0.1_200617	SE207695.025	LB202451	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_QC107_200617	SE207695.026	LB202451	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_QC207_200617	SE207695.027	LB202451	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP037_0.5_200617	SE207695.029	LB202451	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP049_0.1_200617	SE207695.031	LB202451	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP049_0.5_200617	SE207695.032	LB202451	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP051_0.1_200617	SE207695.033	LB202451	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP051_1.0_200617	SE207695.034	LB202451	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP052_0.1_200617	SE207695.039	LB202451	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_QC111_200617	SE207695.040	LB202451	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP052_0.5_200617	SE207695.042	LB202451	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP053_0.1_200617	SE207695.043	LB202451	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP053_0.5_200617	SE207695.044	LB202451	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_TP040_0.5_200616	SE207695.045	LB202451	16 Jun 2020	17 Jun 2020	30 Jun 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_QC402_200616	SE207695.046	LB202451	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020
0407_QC502_200616	SE207695.047	LB202451	17 Jun 2020	17 Jun 2020	01 Jul 2020	22 Jun 2020	01 Aug 2020	24 Jun 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP001_0.1_200615	SE207695.001	%	60 - 130%	109
	0407_TP001_0.5_200615	SE207695.002	%	60 - 130%	97
	0407_TP002_0.5_200615	SE207695.003	%	60 - 130%	115
	0407_TP002_1.5_200615	SE207695.004	%	60 - 130%	102
	0407_TP003_0.5_200616	SE207695.005	%	60 - 130%	89
	0407_TP003_1.0_200616	SE207695.006	%	60 - 130%	95
	0407_TP004_0.5_200616	SE207695.007	%	60 - 130%	98
	0407_QC100_200616	SE207695.008	%	60 - 130%	97
	0407_TP005_0.1_200616	SE207695.009	%	60 - 130%	112
	0407_TP005_1.0_200616	SE207695.010	%	60 - 130%	106
	0407_TP013_0.1_200616	SE207695.011	%	60 - 130%	107
	0407_TP013_1.0_200616	SE207695.012	%	60 - 130%	95
	0407_TP031_0.1_200616	SE207695.013	%	60 - 130%	107
	0407_TP031_0.5_200616	SE207695.014	%	60 - 130%	111
	0407_QC104_200616	SE207695.015	%	60 - 130%	105
	0407_TP040_1.0_200616	SE207695.016	%	60 - 130%	107
	0407_TP039_0.5_200616	SE207695.017	%	60 - 130%	99
	0407_TP039_1.0_200616	SE207695.018	%	60 - 130%	107
	0407_TP038_0.1_200617	SE207695.023	%	60 - 130%	114
	0407_TP038_1.0_200617	SE207695.024	%	60 - 130%	108
	0407_TP037_0.1_200617	SE207695.025	%	60 - 130%	123
	0407_QC107_200617	SE207695.026	%	60 - 130%	106
	0407_QC207_200617	SE207695.027	%	60 - 130%	118
	0407_TP037_0.5_200617	SE207695.029	%	60 - 130%	95
	0407_TP049_0.1_200617	SE207695.031	%	60 - 130%	113
	0407_TP049_0.5_200617	SE207695.032	%	60 - 130%	105
	0407_TP051_0.1_200617	SE207695.033	%	60 - 130%	121
	0407_TP051_1.0_200617	SE207695.034	%	60 - 130%	111
	0407_TP052_0.1_200617	SE207695.039	%	60 - 130%	105
	0407_QC111_200617	SE207695.040	%	60 - 130%	107
	0407_TP052_0.5_200617	SE207695.042	%	60 - 130%	106
	0407_TP053_0.1_200617	SE207695.043	%	60 - 130%	107
	0407_TP053_0.5_200617	SE207695.044	%	60 - 130%	107
	0407_TP040_0.5_200616	SE207695.045	%	60 - 130%	115

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP001_0.1_200615	SE207695.001	%	60 - 130%	93
	0407_TP001_0.5_200615	SE207695.002	%	60 - 130%	89
	0407_TP002_0.5_200615	SE207695.003	%	60 - 130%	84
	0407_TP002_1.5_200615	SE207695.004	%	60 - 130%	98
	0407_TP003_0.5_200616	SE207695.005	%	60 - 130%	84
	0407_TP003_1.0_200616	SE207695.006	%	60 - 130%	87
	0407_TP004_0.5_200616	SE207695.007	%	60 - 130%	98
	0407_QC100_200616	SE207695.008	%	60 - 130%	78
	0407_TP005_0.1_200616	SE207695.009	%	60 - 130%	105
	0407_TP005_1.0_200616	SE207695.010	%	60 - 130%	77
	0407_TP013_0.1_200616	SE207695.011	%	60 - 130%	101
	0407_TP013_1.0_200616	SE207695.012	%	60 - 130%	78
	0407_TP031_0.1_200616	SE207695.013	%	60 - 130%	102
	0407_TP031_0.5_200616	SE207695.014	%	60 - 130%	84
	0407_QC104_200616	SE207695.015	%	60 - 130%	90
	0407_TP040_1.0_200616	SE207695.016	%	60 - 130%	87
	0407_TP039_0.5_200616	SE207695.017	%	60 - 130%	85
	0407_TP039_1.0_200616	SE207695.018	%	60 - 130%	88
	0407_TP038_0.1_200617	SE207695.023	%	60 - 130%	101
	0407_TP038_1.0_200617	SE207695.024	%	60 - 130%	93
	0407_TP037_0.1_200617	SE207695.025	%	60 - 130%	85
	0407_QC107_200617	SE207695.026	%	60 - 130%	88
	0407_QC207_200617	SE207695.027	%	60 - 130%	92
	0407_TP037_0.5_200617	SE207695.029	%	60 - 130%	76

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP049_0.1_200617	SE207695.031	%	60 - 130%	85
	0407_TP049_0.5_200617	SE207695.032	%	60 - 130%	89
	0407_TP051_0.1_200617	SE207695.033	%	60 - 130%	86
	0407_TP051_1.0_200617	SE207695.034	%	60 - 130%	86
	0407_TP052_0.1_200617	SE207695.039	%	60 - 130%	87
	0407_QC111_200617	SE207695.040	%	60 - 130%	88
	0407_TP052_0.5_200617	SE207695.042	%	60 - 130%	91
	0407_TP053_0.1_200617	SE207695.043	%	60 - 130%	83
	0407_TP053_0.5_200617	SE207695.044	%	60 - 130%	92
	0407_TP040_0.5_200616	SE207695.045	%	60 - 130%	87
d14-p-terphenyl (Surrogate)	0407_TP001_0.1_200615	SE207695.001	%	60 - 130%	90
	0407_TP001_0.5_200615	SE207695.002	%	60 - 130%	87
	0407_TP002_0.5_200615	SE207695.003	%	60 - 130%	91
	0407_TP002_1.5_200615	SE207695.004	%	60 - 130%	87
	0407_TP003_0.5_200616	SE207695.005	%	60 - 130%	81
	0407_TP003_1.0_200616	SE207695.006	%	60 - 130%	90
	0407_TP004_0.5_200616	SE207695.007	%	60 - 130%	91
	0407_QC100_200616	SE207695.008	%	60 - 130%	88
	0407_TP005_0.1_200616	SE207695.009	%	60 - 130%	97
	0407_TP005_1.0_200616	SE207695.010	%	60 - 130%	86
	0407_TP013_0.1_200616	SE207695.011	%	60 - 130%	99
	0407_TP013_1.0_200616	SE207695.012	%	60 - 130%	90
	0407_TP031_0.1_200616	SE207695.013	%	60 - 130%	102
	0407_TP031_0.5_200616	SE207695.014	%	60 - 130%	87
	0407_QC104_200616	SE207695.015	%	60 - 130%	86
	0407_TP040_1.0_200616	SE207695.016	%	60 - 130%	92
	0407_TP039_0.5_200616	SE207695.017	%	60 - 130%	81
	0407_TP039_1.0_200616	SE207695.018	%	60 - 130%	87
	0407_TP038_0.1_200617	SE207695.023	%	60 - 130%	97
	0407_TP038_1.0_200617	SE207695.024	%	60 - 130%	87
	0407_TP037_0.1_200617	SE207695.025	%	60 - 130%	83
	0407_QC107_200617	SE207695.026	%	60 - 130%	85
	0407_QC207_200617	SE207695.027	%	60 - 130%	88
	0407_TP037_0.5_200617	SE207695.029	%	60 - 130%	82
	0407_TP049_0.1_200617	SE207695.031	%	60 - 130%	90
	0407_TP049_0.5_200617	SE207695.032	%	60 - 130%	89
	0407_TP051_0.1_200617	SE207695.033	%	60 - 130%	78
	0407_TP051_1.0_200617	SE207695.034	%	60 - 130%	90
	0407_TP052_0.1_200617	SE207695.039	%	60 - 130%	85
	0407_QC111_200617	SE207695.040	%	60 - 130%	88
	0407_TP052_0.5_200617	SE207695.042	%	60 - 130%	86
	0407_TP053_0.1_200617	SE207695.043	%	60 - 130%	86
	0407_TP053_0.5_200617	SE207695.044	%	60 - 130%	94
	0407_TP040_0.5_200616	SE207695.045	%	60 - 130%	86

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP001_0.1_200615	SE207695.001	%	70 - 130%	93
	0407_TP001_0.5_200615	SE207695.002	%	70 - 130%	89
	0407_TP002_0.5_200615	SE207695.003	%	70 - 130%	84
	0407_TP002_1.5_200615	SE207695.004	%	70 - 130%	98
	0407_TP003_0.5_200616	SE207695.005	%	70 - 130%	84
	0407_TP003_1.0_200616	SE207695.006	%	70 - 130%	87
	0407_TP004_0.5_200616	SE207695.007	%	70 - 130%	98
	0407_QC100_200616	SE207695.008	%	70 - 130%	78
	0407_TP005_0.1_200616	SE207695.009	%	70 - 130%	105
	0407_TP005_1.0_200616	SE207695.010	%	70 - 130%	77
	0407_TP013_0.1_200616	SE207695.011	%	70 - 130%	101
	0407_TP013_1.0_200616	SE207695.012	%	70 - 130%	78
	0407_TP031_0.1_200616	SE207695.013	%	70 - 130%	102
	0407_TP031_0.5_200616	SE207695.014	%	70 - 130%	84

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued) — **Method: ME-(AU)-[ENV]AN420**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_QC104_200616	SE207695.015	%	70 - 130%	90
	0407_TP040_1.0_200616	SE207695.016	%	70 - 130%	87
	0407_TP039_0.5_200616	SE207695.017	%	70 - 130%	85
	0407_TP039_1.0_200616	SE207695.018	%	70 - 130%	88
	0407_TP038_0.1_200617	SE207695.023	%	70 - 130%	101
	0407_TP038_1.0_200617	SE207695.024	%	70 - 130%	93
	0407_TP037_0.1_200617	SE207695.025	%	70 - 130%	85
	0407_QC107_200617	SE207695.026	%	70 - 130%	88
	0407_QC207_200617	SE207695.027	%	70 - 130%	92
	0407_TP037_0.5_200617	SE207695.029	%	70 - 130%	76
	0407_TP049_0.1_200617	SE207695.031	%	70 - 130%	85
	0407_TP049_0.5_200617	SE207695.032	%	70 - 130%	89
	0407_TP051_0.1_200617	SE207695.033	%	70 - 130%	86
	0407_TP051_1.0_200617	SE207695.034	%	70 - 130%	86
	0407_TP052_0.1_200617	SE207695.039	%	70 - 130%	87
	0407_QC111_200617	SE207695.040	%	70 - 130%	88
	0407_TP052_0.5_200617	SE207695.042	%	70 - 130%	91
	0407_TP053_0.1_200617	SE207695.043	%	70 - 130%	83
	0407_TP053_0.5_200617	SE207695.044	%	70 - 130%	92
	0407_TP040_0.5_200616	SE207695.045	%	70 - 130%	87
d14-p-terphenyl (Surrogate)	0407_TP001_0.1_200615	SE207695.001	%	70 - 130%	90
	0407_TP001_0.5_200615	SE207695.002	%	70 - 130%	87
	0407_TP002_0.5_200615	SE207695.003	%	70 - 130%	91
	0407_TP002_1.5_200615	SE207695.004	%	70 - 130%	87
	0407_TP003_0.5_200616	SE207695.005	%	70 - 130%	81
	0407_TP003_1.0_200616	SE207695.006	%	70 - 130%	90
	0407_TP004_0.5_200616	SE207695.007	%	70 - 130%	91
	0407_QC100_200616	SE207695.008	%	70 - 130%	88
	0407_TP005_0.1_200616	SE207695.009	%	70 - 130%	97
	0407_TP005_1.0_200616	SE207695.010	%	70 - 130%	86
	0407_TP013_0.1_200616	SE207695.011	%	70 - 130%	99
	0407_TP013_1.0_200616	SE207695.012	%	70 - 130%	90
	0407_TP031_0.1_200616	SE207695.013	%	70 - 130%	102
	0407_TP031_0.5_200616	SE207695.014	%	70 - 130%	87
	0407_QC104_200616	SE207695.015	%	70 - 130%	86
	0407_TP040_1.0_200616	SE207695.016	%	70 - 130%	92
	0407_TP039_0.5_200616	SE207695.017	%	70 - 130%	81
	0407_TP039_1.0_200616	SE207695.018	%	70 - 130%	87
	0407_TP038_0.1_200617	SE207695.023	%	70 - 130%	97
	0407_TP038_1.0_200617	SE207695.024	%	70 - 130%	87
	0407_TP037_0.1_200617	SE207695.025	%	70 - 130%	83
	0407_QC107_200617	SE207695.026	%	70 - 130%	85
	0407_QC207_200617	SE207695.027	%	70 - 130%	88
	0407_TP037_0.5_200617	SE207695.029	%	70 - 130%	82
	0407_TP049_0.1_200617	SE207695.031	%	70 - 130%	90
	0407_TP049_0.5_200617	SE207695.032	%	70 - 130%	89
	0407_TP051_0.1_200617	SE207695.033	%	70 - 130%	78
	0407_TP051_1.0_200617	SE207695.034	%	70 - 130%	90
	0407_TP052_0.1_200617	SE207695.039	%	70 - 130%	85
	0407_QC111_200617	SE207695.040	%	70 - 130%	88
	0407_TP052_0.5_200617	SE207695.042	%	70 - 130%	86
	0407_TP053_0.1_200617	SE207695.043	%	70 - 130%	86
	0407_TP053_0.5_200617	SE207695.044	%	70 - 130%	94
	0407_TP040_0.5_200616	SE207695.045	%	70 - 130%	86
d5-nitrobenzene (Surrogate)	0407_TP001_0.1_200615	SE207695.001	%	70 - 130%	90
	0407_TP001_0.5_200615	SE207695.002	%	70 - 130%	87
	0407_TP002_0.5_200615	SE207695.003	%	70 - 130%	91
	0407_TP002_1.5_200615	SE207695.004	%	70 - 130%	87
	0407_TP003_0.5_200616	SE207695.005	%	70 - 130%	82
	0407_TP003_1.0_200616	SE207695.006	%	70 - 130%	88
	0407_TP004_0.5_200616	SE207695.007	%	70 - 130%	87

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued) — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d5-nitrobenzene (Surrogate)	0407_QC100_200616	SE207695.008	%	70 - 130%	88
	0407_TP005_0.1_200616	SE207695.009	%	70 - 130%	102
	0407_TP005_1.0_200616	SE207695.010	%	70 - 130%	88
	0407_TP013_0.1_200616	SE207695.011	%	70 - 130%	97
	0407_TP013_1.0_200616	SE207695.012	%	70 - 130%	90
	0407_TP031_0.1_200616	SE207695.013	%	70 - 130%	97
	0407_TP031_0.5_200616	SE207695.014	%	70 - 130%	87
	0407_QC104_200616	SE207695.015	%	70 - 130%	92
	0407_TP040_1.0_200616	SE207695.016	%	70 - 130%	88
	0407_TP039_0.5_200616	SE207695.017	%	70 - 130%	87
	0407_TP039_1.0_200616	SE207695.018	%	70 - 130%	86
	0407_TP038_0.1_200617	SE207695.023	%	70 - 130%	100
	0407_TP038_1.0_200617	SE207695.024	%	70 - 130%	92
	0407_TP037_0.1_200617	SE207695.025	%	70 - 130%	88
	0407_QC107_200617	SE207695.026	%	70 - 130%	89
	0407_QC207_200617	SE207695.027	%	70 - 130%	90
	0407_TP037_0.5_200617	SE207695.029	%	70 - 130%	78
	0407_TP049_0.1_200617	SE207695.031	%	70 - 130%	92
	0407_TP049_0.5_200617	SE207695.032	%	70 - 130%	88
	0407_TP051_0.1_200617	SE207695.033	%	70 - 130%	83
	0407_TP051_1.0_200617	SE207695.034	%	70 - 130%	92
	0407_TP052_0.1_200617	SE207695.039	%	70 - 130%	87
	0407_QC111_200617	SE207695.040	%	70 - 130%	87
	0407_TP052_0.5_200617	SE207695.042	%	70 - 130%	96
	0407_TP053_0.1_200617	SE207695.043	%	70 - 130%	89
	0407_TP053_0.5_200617	SE207695.044	%	70 - 130%	95
	0407_TP040_0.5_200616	SE207695.045	%	70 - 130%	96

PCBs in Soil — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP001_0.1_200615	SE207695.001	%	60 - 130%	109
	0407_TP001_0.5_200615	SE207695.002	%	60 - 130%	97
	0407_TP002_0.5_200615	SE207695.003	%	60 - 130%	115
	0407_TP002_1.5_200615	SE207695.004	%	60 - 130%	102
	0407_TP003_0.5_200616	SE207695.005	%	60 - 130%	89
	0407_TP003_1.0_200616	SE207695.006	%	60 - 130%	95
	0407_TP004_0.5_200616	SE207695.007	%	60 - 130%	98
	0407_QC100_200616	SE207695.008	%	60 - 130%	97
	0407_TP005_0.1_200616	SE207695.009	%	60 - 130%	112
	0407_TP005_1.0_200616	SE207695.010	%	60 - 130%	106
	0407_TP013_0.1_200616	SE207695.011	%	60 - 130%	107
	0407_TP013_1.0_200616	SE207695.012	%	60 - 130%	95
	0407_TP031_0.1_200616	SE207695.013	%	60 - 130%	107
	0407_TP031_0.5_200616	SE207695.014	%	60 - 130%	111
	0407_QC104_200616	SE207695.015	%	60 - 130%	105
	0407_TP040_1.0_200616	SE207695.016	%	60 - 130%	107
	0407_TP039_0.5_200616	SE207695.017	%	60 - 130%	99
	0407_TP039_1.0_200616	SE207695.018	%	60 - 130%	107
	0407_TP038_0.1_200617	SE207695.023	%	60 - 130%	114
	0407_TP038_1.0_200617	SE207695.024	%	60 - 130%	108
	0407_TP037_0.1_200617	SE207695.025	%	60 - 130%	123
	0407_QC107_200617	SE207695.026	%	60 - 130%	106
	0407_QC207_200617	SE207695.027	%	60 - 130%	118
	0407_TP037_0.5_200617	SE207695.029	%	60 - 130%	95
	0407_TP049_0.1_200617	SE207695.031	%	60 - 130%	113
	0407_TP049_0.5_200617	SE207695.032	%	60 - 130%	105
	0407_TP051_0.1_200617	SE207695.033	%	60 - 130%	121
	0407_TP051_1.0_200617	SE207695.034	%	60 - 130%	111
	0407_TP052_0.1_200617	SE207695.039	%	60 - 130%	105
	0407_QC111_200617	SE207695.040	%	60 - 130%	107
	0407_TP052_0.5_200617	SE207695.042	%	60 - 130%	106

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PCBs in Soil (continued) — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP053_0.1_200617	SE207695.043	%	60 - 130%	107
	0407_TP053_0.5_200617	SE207695.044	%	60 - 130%	107
	0407_TP040_0.5_200616	SE207695.045	%	60 - 130%	115

Speciated Phenols in Soil — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	0407_TP001_0.1_200615	SE207695.001	%	70 - 130%	97
	0407_TP001_0.5_200615	SE207695.002	%	70 - 130%	94
	0407_TP002_0.5_200615	SE207695.003	%	70 - 130%	98
	0407_TP002_1.5_200615	SE207695.004	%	70 - 130%	88
	0407_TP003_0.5_200616	SE207695.005	%	70 - 130%	90
	0407_TP003_1.0_200616	SE207695.006	%	70 - 130%	86
	0407_TP004_0.5_200616	SE207695.007	%	70 - 130%	90
	0407_QC100_200616	SE207695.008	%	70 - 130%	89
	0407_TP005_0.1_200616	SE207695.009	%	70 - 130%	114
	0407_TP005_1.0_200616	SE207695.010	%	70 - 130%	90
	0407_TP013_0.1_200616	SE207695.011	%	70 - 130%	104
	0407_TP013_1.0_200616	SE207695.012	%	70 - 130%	95
	0407_TP031_0.1_200616	SE207695.013	%	70 - 130%	124
	0407_TP031_0.5_200616	SE207695.014	%	70 - 130%	118
	0407_QC104_200616	SE207695.015	%	70 - 130%	116
	0407_TP040_1.0_200616	SE207695.016	%	70 - 130%	104
	0407_TP039_0.5_200616	SE207695.017	%	70 - 130%	103
	0407_TP039_1.0_200616	SE207695.018	%	70 - 130%	110
	0407_TP038_0.1_200617	SE207695.023	%	70 - 130%	116
	0407_TP038_1.0_200617	SE207695.024	%	70 - 130%	110
	0407_TP037_0.1_200617	SE207695.025	%	70 - 130%	83
	0407_QC107_200617	SE207695.026	%	70 - 130%	71
	0407_QC207_200617	SE207695.027	%	70 - 130%	92
	0407_TP037_0.5_200617	SE207695.029	%	70 - 130%	91
	0407_TP049_0.1_200617	SE207695.031	%	70 - 130%	86
	0407_TP049_0.5_200617	SE207695.032	%	70 - 130%	85
	0407_TP051_0.1_200617	SE207695.033	%	70 - 130%	101
	0407_TP051_1.0_200617	SE207695.034	%	70 - 130%	90
	0407_TP052_0.1_200617	SE207695.039	%	70 - 130%	92
	0407_QC111_200617	SE207695.040	%	70 - 130%	92
	0407_TP052_0.5_200617	SE207695.042	%	70 - 130%	89
	0407_TP053_0.1_200617	SE207695.043	%	70 - 130%	92
	0407_TP053_0.5_200617	SE207695.044	%	70 - 130%	90
	0407_TP040_0.5_200616	SE207695.045	%	70 - 130%	89
d5-phenol (Surrogate)	0407_TP001_0.1_200615	SE207695.001	%	50 - 130%	88
	0407_TP001_0.5_200615	SE207695.002	%	50 - 130%	86
	0407_TP002_0.5_200615	SE207695.003	%	50 - 130%	87
	0407_TP002_1.5_200615	SE207695.004	%	50 - 130%	82
	0407_TP003_0.5_200616	SE207695.005	%	50 - 130%	84
	0407_TP003_1.0_200616	SE207695.006	%	50 - 130%	80
	0407_TP004_0.5_200616	SE207695.007	%	50 - 130%	85
	0407_QC100_200616	SE207695.008	%	50 - 130%	84
	0407_TP005_0.1_200616	SE207695.009	%	50 - 130%	117
	0407_TP005_1.0_200616	SE207695.010	%	50 - 130%	86
	0407_TP013_0.1_200616	SE207695.011	%	50 - 130%	106
	0407_TP013_1.0_200616	SE207695.012	%	50 - 130%	87
	0407_TP031_0.1_200616	SE207695.013	%	50 - 130%	107
	0407_TP031_0.5_200616	SE207695.014	%	50 - 130%	106
	0407_QC104_200616	SE207695.015	%	50 - 130%	107
	0407_TP040_1.0_200616	SE207695.016	%	50 - 130%	98
	0407_TP039_0.5_200616	SE207695.017	%	50 - 130%	98
	0407_TP039_1.0_200616	SE207695.018	%	50 - 130%	106
	0407_TP038_0.1_200617	SE207695.023	%	50 - 130%	113
	0407_TP038_1.0_200617	SE207695.024	%	50 - 130%	103
	0407_TP037_0.1_200617	SE207695.025	%	50 - 130%	75

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d5-phenol (Surrogate)	0407_QC107_200617	SE207695.026	%	50 - 130%	76
	0407_QC207_200617	SE207695.027	%	50 - 130%	81
	0407_TP037_0.5_200617	SE207695.029	%	50 - 130%	81
	0407_TP049_0.1_200617	SE207695.031	%	50 - 130%	79
	0407_TP049_0.5_200617	SE207695.032	%	50 - 130%	78
	0407_TP051_0.1_200617	SE207695.033	%	50 - 130%	88
	0407_TP051_1.0_200617	SE207695.034	%	50 - 130%	83
	0407_TP052_0.1_200617	SE207695.039	%	50 - 130%	82
	0407_QC111_200617	SE207695.040	%	50 - 130%	83
	0407_TP052_0.5_200617	SE207695.042	%	50 - 130%	80
	0407_TP053_0.1_200617	SE207695.043	%	50 - 130%	82
	0407_TP053_0.5_200617	SE207695.044	%	50 - 130%	80
	0407_TP040_0.5_200616	SE207695.045	%	50 - 130%	82

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP001_0.1_200615	SE207695.001	%	60 - 130%	66
	0407_TP001_0.5_200615	SE207695.002	%	60 - 130%	74
	0407_TP002_0.5_200615	SE207695.003	%	60 - 130%	68
	0407_TP002_1.5_200615	SE207695.004	%	60 - 130%	79
	0407_TP003_0.5_200616	SE207695.005	%	60 - 130%	79
	0407_TP003_1.0_200616	SE207695.006	%	60 - 130%	79
	0407_TP004_0.5_200616	SE207695.007	%	60 - 130%	79
	0407_QC100_200616	SE207695.008	%	60 - 130%	79
	0407_TP005_0.1_200616	SE207695.009	%	60 - 130%	55 ①
	0407_TP005_1.0_200616	SE207695.010	%	60 - 130%	73
	0407_TP013_0.1_200616	SE207695.011	%	60 - 130%	79
	0407_TP013_1.0_200616	SE207695.012	%	60 - 130%	105
	0407_TP031_0.1_200616	SE207695.013	%	60 - 130%	82
	0407_TP031_0.5_200616	SE207695.014	%	60 - 130%	99
	0407_QC104_200616	SE207695.015	%	60 - 130%	106
	0407_TP040_1.0_200616	SE207695.016	%	60 - 130%	101
	0407_TP039_0.5_200616	SE207695.017	%	60 - 130%	105
	0407_TP039_1.0_200616	SE207695.018	%	60 - 130%	96
	0407_TP038_0.1_200617	SE207695.023	%	60 - 130%	77
	0407_TP038_1.0_200617	SE207695.024	%	60 - 130%	102
	0407_TP037_0.1_200617	SE207695.025	%	60 - 130%	93
	0407_QC107_200617	SE207695.026	%	60 - 130%	97
	0407_QC207_200617	SE207695.027	%	60 - 130%	91
	0407_TP037_0.5_200617	SE207695.029	%	60 - 130%	97
	0407_TP049_0.1_200617	SE207695.031	%	60 - 130%	91
	0407_TP049_0.5_200617	SE207695.032	%	60 - 130%	102
	0407_TP051_0.1_200617	SE207695.033	%	60 - 130%	74
	0407_TP051_1.0_200617	SE207695.034	%	60 - 130%	95
	0407_TP052_0.1_200617	SE207695.039	%	60 - 130%	91
	0407_QC111_200617	SE207695.040	%	60 - 130%	101
	0407_TP052_0.5_200617	SE207695.042	%	60 - 130%	90
	0407_TP053_0.1_200617	SE207695.043	%	60 - 130%	88
	0407_TP053_0.5_200617	SE207695.044	%	60 - 130%	97
	0407_TP040_0.5_200616	SE207695.045	%	60 - 130%	93
	0407_QC402_200616	SE207695.046	%	60 - 130%	105
	0407_QC502_200616	SE207695.047	%	60 - 130%	84
d4-1,2-dichloroethane (Surrogate)	0407_TP001_0.1_200615	SE207695.001	%	60 - 130%	85
	0407_TP001_0.5_200615	SE207695.002	%	60 - 130%	96
	0407_TP002_0.5_200615	SE207695.003	%	60 - 130%	89
	0407_TP002_1.5_200615	SE207695.004	%	60 - 130%	103
	0407_TP003_0.5_200616	SE207695.005	%	60 - 130%	103
	0407_TP003_1.0_200616	SE207695.006	%	60 - 130%	104
	0407_TP004_0.5_200616	SE207695.007	%	60 - 130%	105
	0407_QC100_200616	SE207695.008	%	60 - 130%	104
	0407_TP005_0.1_200616	SE207695.009	%	60 - 130%	74

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d4-1,2-dichloroethane (Surrogate)	0407_TP005_1.0_200616	SE207695.010	%	60 - 130%	98
	0407_TP013_0.1_200616	SE207695.011	%	60 - 130%	80
	0407_TP013_1.0_200616	SE207695.012	%	60 - 130%	106
	0407_TP031_0.1_200616	SE207695.013	%	60 - 130%	84
	0407_TP031_0.5_200616	SE207695.014	%	60 - 130%	95
	0407_QC104_200616	SE207695.015	%	60 - 130%	98
	0407_TP040_1.0_200616	SE207695.016	%	60 - 130%	104
	0407_TP039_0.5_200616	SE207695.017	%	60 - 130%	108
	0407_TP039_1.0_200616	SE207695.018	%	60 - 130%	106
	0407_TP038_0.1_200617	SE207695.023	%	60 - 130%	84
	0407_TP038_1.0_200617	SE207695.024	%	60 - 130%	107
	0407_TP037_0.1_200617	SE207695.025	%	60 - 130%	91
	0407_QC107_200617	SE207695.026	%	60 - 130%	97
	0407_QC207_200617	SE207695.027	%	60 - 130%	74
	0407_TP037_0.5_200617	SE207695.029	%	60 - 130%	80
	0407_TP049_0.1_200617	SE207695.031	%	60 - 130%	91
	0407_TP049_0.5_200617	SE207695.032	%	60 - 130%	100
	0407_TP051_0.1_200617	SE207695.033	%	60 - 130%	76
	0407_TP051_1.0_200617	SE207695.034	%	60 - 130%	81
	0407_TP052_0.1_200617	SE207695.039	%	60 - 130%	103
	0407_QC111_200617	SE207695.040	%	60 - 130%	88
	0407_TP052_0.5_200617	SE207695.042	%	60 - 130%	96
	0407_TP053_0.1_200617	SE207695.043	%	60 - 130%	85
	0407_TP053_0.5_200617	SE207695.044	%	60 - 130%	84
	0407_TP040_0.5_200616	SE207695.045	%	60 - 130%	88
	0407_QC402_200616	SE207695.046	%	60 - 130%	103
	0407_QC502_200616	SE207695.047	%	60 - 130%	89
d8-toluene (Surrogate)	0407_TP001_0.1_200615	SE207695.001	%	60 - 130%	85
	0407_TP001_0.5_200615	SE207695.002	%	60 - 130%	97
	0407_TP002_0.5_200615	SE207695.003	%	60 - 130%	90
	0407_TP002_1.5_200615	SE207695.004	%	60 - 130%	103
	0407_TP003_0.5_200616	SE207695.005	%	60 - 130%	104
	0407_TP003_1.0_200616	SE207695.006	%	60 - 130%	104
	0407_TP004_0.5_200616	SE207695.007	%	60 - 130%	104
	0407_QC100_200616	SE207695.008	%	60 - 130%	104
	0407_TP005_0.1_200616	SE207695.009	%	60 - 130%	72
	0407_TP005_1.0_200616	SE207695.010	%	60 - 130%	95
	0407_TP013_0.1_200616	SE207695.011	%	60 - 130%	77
	0407_TP013_1.0_200616	SE207695.012	%	60 - 130%	93
	0407_TP031_0.1_200616	SE207695.013	%	60 - 130%	78
	0407_TP031_0.5_200616	SE207695.014	%	60 - 130%	83
	0407_QC104_200616	SE207695.015	%	60 - 130%	93
	0407_TP040_1.0_200616	SE207695.016	%	60 - 130%	95
	0407_TP039_0.5_200616	SE207695.017	%	60 - 130%	94
	0407_TP039_1.0_200616	SE207695.018	%	60 - 130%	98
	0407_TP038_0.1_200617	SE207695.023	%	60 - 130%	81
	0407_TP038_1.0_200617	SE207695.024	%	60 - 130%	101
	0407_TP037_0.1_200617	SE207695.025	%	60 - 130%	84
	0407_QC107_200617	SE207695.026	%	60 - 130%	83
	0407_QC207_200617	SE207695.027	%	60 - 130%	84
	0407_TP037_0.5_200617	SE207695.029	%	60 - 130%	93
	0407_TP049_0.1_200617	SE207695.031	%	60 - 130%	86
	0407_TP049_0.5_200617	SE207695.032	%	60 - 130%	97
	0407_TP051_0.1_200617	SE207695.033	%	60 - 130%	70
	0407_TP051_1.0_200617	SE207695.034	%	60 - 130%	83
	0407_TP052_0.1_200617	SE207695.039	%	60 - 130%	86
	0407_QC111_200617	SE207695.040	%	60 - 130%	91
	0407_TP052_0.5_200617	SE207695.042	%	60 - 130%	92
	0407_TP053_0.1_200617	SE207695.043	%	60 - 130%	84
	0407_TP053_0.5_200617	SE207695.044	%	60 - 130%	87
	0407_TP040_0.5_200616	SE207695.045	%	60 - 130%	86

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d8-toluene (Surrogate)	0407_QC402_200616	SE207695.046	%	60 - 130%	87
	0407_QC502_200616	SE207695.047	%	60 - 130%	81

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP001_0.1_200615	SE207695.001	%	60 - 130%	66
	0407_TP001_0.5_200615	SE207695.002	%	60 - 130%	74
	0407_TP002_0.5_200615	SE207695.003	%	60 - 130%	68
	0407_TP002_1.5_200615	SE207695.004	%	60 - 130%	79
	0407_TP003_0.5_200616	SE207695.005	%	60 - 130%	79
	0407_TP003_1.0_200616	SE207695.006	%	60 - 130%	79
	0407_TP004_0.5_200616	SE207695.007	%	60 - 130%	79
	0407_QC100_200616	SE207695.008	%	60 - 130%	79
	0407_TP005_0.1_200616	SE207695.009	%	60 - 130%	55 ①
	0407_TP005_1.0_200616	SE207695.010	%	60 - 130%	73
	0407_TP013_0.1_200616	SE207695.011	%	60 - 130%	79
	0407_TP013_1.0_200616	SE207695.012	%	60 - 130%	105
	0407_TP031_0.1_200616	SE207695.013	%	60 - 130%	82
	0407_TP031_0.5_200616	SE207695.014	%	60 - 130%	99
	0407_QC104_200616	SE207695.015	%	60 - 130%	106
	0407_TP040_1.0_200616	SE207695.016	%	60 - 130%	101
	0407_TP039_0.5_200616	SE207695.017	%	60 - 130%	105
	0407_TP039_1.0_200616	SE207695.018	%	60 - 130%	96
	0407_TP038_0.1_200617	SE207695.023	%	60 - 130%	77
	0407_TP038_1.0_200617	SE207695.024	%	60 - 130%	102
	0407_TP037_0.1_200617	SE207695.025	%	60 - 130%	93
	0407_QC107_200617	SE207695.026	%	60 - 130%	97
	0407_QC207_200617	SE207695.027	%	60 - 130%	91
	0407_TP037_0.5_200617	SE207695.029	%	60 - 130%	97
	0407_TP049_0.1_200617	SE207695.031	%	60 - 130%	91
	0407_TP049_0.5_200617	SE207695.032	%	60 - 130%	102
	0407_TP051_0.1_200617	SE207695.033	%	60 - 130%	74
	0407_TP051_1.0_200617	SE207695.034	%	60 - 130%	95
	0407_TP052_0.1_200617	SE207695.039	%	60 - 130%	91
	0407_QC111_200617	SE207695.040	%	60 - 130%	101
	0407_TP052_0.5_200617	SE207695.042	%	60 - 130%	90
	0407_TP053_0.1_200617	SE207695.043	%	60 - 130%	88
	0407_TP053_0.5_200617	SE207695.044	%	60 - 130%	97
	0407_TP040_0.5_200616	SE207695.045	%	60 - 130%	93
d4-1,2-dichloroethane (Surrogate)	0407_TP001_0.1_200615	SE207695.001	%	60 - 130%	85
	0407_TP001_0.5_200615	SE207695.002	%	60 - 130%	96
	0407_TP002_0.5_200615	SE207695.003	%	60 - 130%	89
	0407_TP002_1.5_200615	SE207695.004	%	60 - 130%	103
	0407_TP003_0.5_200616	SE207695.005	%	60 - 130%	103
	0407_TP003_1.0_200616	SE207695.006	%	60 - 130%	104
	0407_TP004_0.5_200616	SE207695.007	%	60 - 130%	105
	0407_QC100_200616	SE207695.008	%	60 - 130%	104
	0407_TP005_0.1_200616	SE207695.009	%	60 - 130%	74
	0407_TP005_1.0_200616	SE207695.010	%	60 - 130%	98
	0407_TP013_0.1_200616	SE207695.011	%	60 - 130%	80
	0407_TP013_1.0_200616	SE207695.012	%	60 - 130%	106
	0407_TP031_0.1_200616	SE207695.013	%	60 - 130%	84
	0407_TP031_0.5_200616	SE207695.014	%	60 - 130%	95
	0407_QC104_200616	SE207695.015	%	60 - 130%	98
	0407_TP040_1.0_200616	SE207695.016	%	60 - 130%	104
	0407_TP039_0.5_200616	SE207695.017	%	60 - 130%	108
	0407_TP039_1.0_200616	SE207695.018	%	60 - 130%	106
	0407_TP038_0.1_200617	SE207695.023	%	60 - 130%	84
	0407_TP038_1.0_200617	SE207695.024	%	60 - 130%	107
	0407_TP037_0.1_200617	SE207695.025	%	60 - 130%	91
	0407_QC107_200617	SE207695.026	%	60 - 130%	97

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d4-1,2-dichloroethane (Surrogate)	0407_QC207_200617	SE207695.027	%	60 - 130%	74
	0407_TP037_0.5_200617	SE207695.029	%	60 - 130%	80
	0407_TP049_0.1_200617	SE207695.031	%	60 - 130%	91
	0407_TP049_0.5_200617	SE207695.032	%	60 - 130%	100
	0407_TP051_0.1_200617	SE207695.033	%	60 - 130%	76
	0407_TP051_1.0_200617	SE207695.034	%	60 - 130%	81
	0407_TP052_0.1_200617	SE207695.039	%	60 - 130%	103
	0407_QC111_200617	SE207695.040	%	60 - 130%	88
	0407_TP052_0.5_200617	SE207695.042	%	60 - 130%	96
	0407_TP053_0.1_200617	SE207695.043	%	60 - 130%	85
	0407_TP053_0.5_200617	SE207695.044	%	60 - 130%	84
	0407_TP040_0.5_200616	SE207695.045	%	60 - 130%	88
d8-toluene (Surrogate)	0407_TP001_0.1_200615	SE207695.001	%	60 - 130%	85
	0407_TP001_0.5_200615	SE207695.002	%	60 - 130%	97
	0407_TP002_0.5_200615	SE207695.003	%	60 - 130%	90
	0407_TP002_1.5_200615	SE207695.004	%	60 - 130%	103
	0407_TP003_0.5_200616	SE207695.005	%	60 - 130%	104
	0407_TP003_1.0_200616	SE207695.006	%	60 - 130%	104
	0407_TP004_0.5_200616	SE207695.007	%	60 - 130%	104
	0407_QC100_200616	SE207695.008	%	60 - 130%	104
	0407_TP005_0.1_200616	SE207695.009	%	60 - 130%	72
	0407_TP005_1.0_200616	SE207695.010	%	60 - 130%	95
	0407_TP013_0.1_200616	SE207695.011	%	60 - 130%	77
	0407_TP013_1.0_200616	SE207695.012	%	60 - 130%	93
	0407_TP031_0.1_200616	SE207695.013	%	60 - 130%	78
	0407_TP031_0.5_200616	SE207695.014	%	60 - 130%	83
	0407_QC104_200616	SE207695.015	%	60 - 130%	93
	0407_TP040_1.0_200616	SE207695.016	%	60 - 130%	95
	0407_TP039_0.5_200616	SE207695.017	%	60 - 130%	94
	0407_TP039_1.0_200616	SE207695.018	%	60 - 130%	98
	0407_TP038_0.1_200617	SE207695.023	%	60 - 130%	81
	0407_TP038_1.0_200617	SE207695.024	%	60 - 130%	101
	0407_TP037_0.1_200617	SE207695.025	%	60 - 130%	84
	0407_QC107_200617	SE207695.026	%	60 - 130%	83
	0407_QC207_200617	SE207695.027	%	60 - 130%	84
	0407_TP037_0.5_200617	SE207695.029	%	60 - 130%	93
	0407_TP049_0.1_200617	SE207695.031	%	60 - 130%	86
	0407_TP049_0.5_200617	SE207695.032	%	60 - 130%	97
	0407_TP051_0.1_200617	SE207695.033	%	60 - 130%	70
	0407_TP051_1.0_200617	SE207695.034	%	60 - 130%	83
	0407_TP052_0.1_200617	SE207695.039	%	60 - 130%	86
	0407_QC111_200617	SE207695.040	%	60 - 130%	91
	0407_TP052_0.5_200617	SE207695.042	%	60 - 130%	92
	0407_TP053_0.1_200617	SE207695.043	%	60 - 130%	84
	0407_TP053_0.5_200617	SE207695.044	%	60 - 130%	87
	0407_TP040_0.5_200616	SE207695.045	%	60 - 130%	86

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result
LB202486.001	Mercury	mg/kg	0.05	<0.05
LB202487.001	Mercury	mg/kg	0.05	<0.05

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202452.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	117
LB202453.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	107

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB202452.001	Dichlorvos	mg/kg	0.5	<0.5
	Dimethoate	mg/kg	0.5	<0.5
	Diazinon (Dimpylate)	mg/kg	0.5	<0.5
	Fenitrothion	mg/kg	0.2	<0.2
	Malathion	mg/kg	0.2	<0.2

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202452.001		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	90
		d14-p-terphenyl (Surrogate)	%	-	94
LB202453.001		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	86
		d14-p-terphenyl (Surrogate)	%	-	93

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202452.001		Naphthalene	mg/kg	0.1	<0.1
		2-methylnaphthalene	mg/kg	0.1	<0.1
		1-methylnaphthalene	mg/kg	0.1	<0.1
		Acenaphthylene	mg/kg	0.1	<0.1
		Acenaphthene	mg/kg	0.1	<0.1
		Fluorene	mg/kg	0.1	<0.1
		Phenanthrene	mg/kg	0.1	<0.1
		Anthracene	mg/kg	0.1	<0.1
		Fluoranthene	mg/kg	0.1	<0.1
		Pyrene	mg/kg	0.1	<0.1
		Benzo(a)anthracene	mg/kg	0.1	<0.1
		Chrysene	mg/kg	0.1	<0.1
		Benzo(a)pyrene	mg/kg	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	91
		2-fluorobiphenyl (Surrogate)	%	-	90
		d14-p-terphenyl (Surrogate)	%	-	94
LB202453.001		Naphthalene	mg/kg	0.1	<0.1
		2-methylnaphthalene	mg/kg	0.1	<0.1
		1-methylnaphthalene	mg/kg	0.1	<0.1
		Acenaphthylene	mg/kg	0.1	<0.1
		Acenaphthene	mg/kg	0.1	<0.1
		Fluorene	mg/kg	0.1	<0.1
		Phenanthrene	mg/kg	0.1	<0.1
		Anthracene	mg/kg	0.1	<0.1
		Fluoranthene	mg/kg	0.1	<0.1
		Pyrene	mg/kg	0.1	<0.1
		Benzo(a)anthracene	mg/kg	0.1	<0.1
		Chrysene	mg/kg	0.1	<0.1
		Benzo(a)pyrene	mg/kg	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202453.001	Surrogates	d5-nitrobenzene (Surrogate)	%	-	88
		2-fluorobiphenyl (Surrogate)	%	-	86
		d14-p-terphenyl (Surrogate)	%	-	93

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202452.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	117
LB202453.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	107

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202452.001		Phenol	mg/kg	0.5	<0.5
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5
		2-nitrophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
		Pentachlorophenol	mg/kg	0.5	<0.5
		2,4-dinitrophenol	mg/kg	2	<2
		4-chloro-3-methylphenol	mg/kg	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	98
		d5-phenol (Surrogate)	%	-	90
LB202453.001		Phenol	mg/kg	0.5	<0.5
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5
		2-nitrophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
		Pentachlorophenol	mg/kg	0.5	<0.5
		2,4-dinitrophenol	mg/kg	2	<2

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202453.001		4-chloro-3-methylphenol	mg/kg	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	82
		d5-phenol (Surrogate)	%	-	77

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB202482.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0
LB202483.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB202452.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110
LB202453.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB202450.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1

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Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB202450.001	Halogenated Aliphatics	1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic	Benzene	mg/kg	0.1	<0.1
	Hydrocarbons	Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10
		MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	107
		d8-toluene (Surrogate)	%	-	107
		Bromofluorobenzene (Surrogate)	%	-	81
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1
LB202451.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB202451.001	Halogenated Aliphatics	Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10
		MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	97
		d8-toluene (Surrogate)	%	-	84

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB202451.001	Surrogates	Bromofluorobenzene (Surrogate)	%	-	90
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB202450.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	107
LB202451.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	97

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207695.010	LB202486.014	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE207695.023	LB202486.024	Mercury	mg/kg	0.05	<0.05	0.05	135	3
SE207695.039	LB202487.014	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE207695.045	LB202487.020	Mercury	mg/kg	0.05	<0.05	<0.05	200	0

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207695.010	LB202454.011	% Moisture	%w/w	1	18.7	19.5	35	4
SE207695.024	LB202454.022	% Moisture	%w/w	1	8.8	8.5	42	4
SE207695.040	LB202455.011	% Moisture	%w/w	1	5.9	5.6	47	4
SE207695.046	LB202455.017	% Moisture	%w/w	1	<1.0	<1.0	200	0

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207695.010	LB202452.014		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.16	0.15	30	3
SE207695.024	LB202452.027		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207695.024	LB202452.027		p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.16	0.17	30	2
SE207695.032	LB202453.020		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	0	200	0
			Alpha BHC	mg/kg	0.1	<0.1	0	200	0
			Lindane	mg/kg	0.1	<0.1	0	200	0
			Heptachlor	mg/kg	0.1	<0.1	0	200	0
			Aldrin	mg/kg	0.1	<0.1	0	200	0
			Beta BHC	mg/kg	0.1	<0.1	0	200	0
			Delta BHC	mg/kg	0.1	<0.1	0	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	0	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	0	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	0	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Dieldrin	mg/kg	0.2	<0.2	0	200	0
			Endrin	mg/kg	0.2	<0.2	0	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	0	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	0	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	0	200	0
			Methoxychlor	mg/kg	0.1	<0.1	0	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	0	200	0
			Isodrin	mg/kg	0.1	<0.1	0	200	0
			Mirex	mg/kg	0.1	<0.1	0	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.16	0.166	30	6

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207695.010	LB202452.014		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	10
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	0
SE207695.024	LB202452.027		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207695.024	LB202452.027		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	0
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	30	8
SE207695.032	LB202453.020		Dichlorvos	mg/kg	0.5	<0.5	0	200	0
			Dimethoate	mg/kg	0.5	<0.5	0	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	0.0125351151	200	0
			Fenitrothion	mg/kg	0.2	<0.2	0	200	0
			Malathion	mg/kg	0.2	<0.2	6.9505361524	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	0	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	0	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	0	200	0
			Methidathion	mg/kg	0.5	<0.5	0	200	0
			Ethion	mg/kg	0.2	<0.2	0	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	0	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	0	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4513357067	30	2
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4585281117	30	3

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207695.010	LB202452.014		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	<0.3	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	<0.2	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	30	5
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	10
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	0
SE207695.024	LB202452.027		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Pyrene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207695.024	LB202452.027		Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	<0.3	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	<0.2	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	30	10
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	0
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	30	8
SE207695.032	LB202453.020		Naphthalene	mg/kg	0.1	<0.1	0	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	0	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	0	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	0.0003174650	200	0
			Acenaphthene	mg/kg	0.1	<0.1	0.0001559924	200	0
			Fluorene	mg/kg	0.1	<0.1	0	200	0
			Phenanthrene	mg/kg	0.1	<0.1	0.0008402046	200	0
			Anthracene	mg/kg	0.1	<0.1	0.0009132742	200	0
			Fluoranthene	mg/kg	0.1	<0.1	0	200	0
			Pyrene	mg/kg	0.1	<0.1	0	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	0.0048537802	200	0
			Chrysene	mg/kg	0.1	<0.1	0.0049361735	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	0	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	0	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	0	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	0	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	0	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	0	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	0	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	0.242	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	0.121	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	0	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4572659418	30	4
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4513357067	30	2
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4585281117	30	3

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207695.010	LB202452.014		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	3
SE207695.024	LB202452.027		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PCBs in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207695.024	LB202452.027		Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	2
SE207695.032	LB202453.020		Arochlor 1016	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	0	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0.166	30	6

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207695.010	LB202452.014		Phenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	200	0
			Total Cresol	mg/kg	1.5	<1.5	<1.5	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	200	0
			4-nitrophenol	mg/kg	1	<1	<1	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dinitrophenol	mg/kg	2	<2	<2	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.5	4.5	30	0
			d5-phenol (Surrogate)	mg/kg	-	1.7	1.7	30	1
SE207695.024	LB202452.027		Phenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	200	0
			Total Cresol	mg/kg	1.5	<1.5	<1.5	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	200	0
			4-nitrophenol	mg/kg	1	<1	<1	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dinitrophenol	mg/kg	2	<2	<2	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	5.5	5.5	30	0
			d5-phenol (Surrogate)	mg/kg	-	2.1	2.1	30	1
SE207695.032	LB202453.020		Phenol	mg/kg	0.5	<0.5	0	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	0	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	0	200	0
			Total Cresol	mg/kg	1.5	<1.5	0	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	0	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207695.032	LB202453.020		2,4-dichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	0	200	0
			4-nitrophenol	mg/kg	1	<1	0	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	0	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dinitrophenol	mg/kg	2	<2	0	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	0	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.2	4.41	30	4
			d5-phenol (Surrogate)	mg/kg	-	1.6	1.62	30	4

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207695.010	LB202482.014		Arsenic, As	mg/kg	1	<1	<1	200	0
			Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
			Chromium, Cr	mg/kg	0.5	<0.5	<0.5	200	0
			Copper, Cu	mg/kg	0.5	0.5	<0.5	154	8
			Nickel, Ni	mg/kg	0.5	<0.5	<0.5	200	0
			Lead, Pb	mg/kg	1	2	<1	119	56
			Zinc, Zn	mg/kg	2	2.9	<2.0	123	38
SE207695.023	LB202482.024		Arsenic, As	mg/kg	1	<1	<1	185	0
			Cadmium, Cd	mg/kg	0.3	0.3	<0.3	138	3
			Chromium, Cr	mg/kg	0.5	5.2	4.8	40	7
			Copper, Cu	mg/kg	0.5	13	11	34	22
			Nickel, Ni	mg/kg	0.5	1.7	1.4	62	15
			Lead, Pb	mg/kg	1	38	35	33	7
			Zinc, Zn	mg/kg	2	91	73	32	23
SE207695.039	LB202483.014		Arsenic, As	mg/kg	1	1	1	102	11
			Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
			Chromium, Cr	mg/kg	0.5	4.4	3.6	42	20
			Copper, Cu	mg/kg	0.5	7.4	4.2	39	56 ②
			Nickel, Ni	mg/kg	0.5	2.1	1.6	57	28
			Lead, Pb	mg/kg	1	22	19	35	17
			Zinc, Zn	mg/kg	2	39	28	36	33
SE207695.045	LB202483.020		Arsenic, As	mg/kg	1	<1	<1	200	0
			Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
			Chromium, Cr	mg/kg	0.5	<0.5	<0.5	200	0
			Copper, Cu	mg/kg	0.5	<0.5	<0.5	162	0
			Nickel, Ni	mg/kg	0.5	<0.5	<0.5	200	0
			Lead, Pb	mg/kg	1	1	1	107	2
			Zinc, Zn	mg/kg	2	<2.0	<2.0	200	0

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207695.010	LB202452.014		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE207695.024	LB202452.027		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207695.024	LB202452.027	TRH F Bands	TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE207695.032	LB202453.020		TRH C10-C14	mg/kg	20	<20	0	200	0
			TRH C15-C28	mg/kg	45	<45	0	200	0
			TRH C29-C36	mg/kg	45	<45	0	200	0
			TRH C37-C40	mg/kg	100	<100	0	200	0
			TRH C10-C36 Total	mg/kg	110	<110	0	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	0	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	0	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	0	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	0	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	0	200	0

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207695.010	LB202450.014	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207695.010	LB202450.014	Monocyclic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.8	9.5	50	4
			d8-toluene (Surrogate)	mg/kg	-	9.5	9.2	50	4
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.3	7.1	50	4
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE207695.024	LB202450.025	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207695.024	LB202450.025	Halogenated	1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
		Aliphatics	1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.7	11.6	50	7
			d8-toluene (Surrogate)	mg/kg	-	10.1	10.0	50	1
			Bromofluorobenzene (Surrogate)	mg/kg	-	10.2	11.1	50	9
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE207695.040	LB202451.014	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207695.040	LB202451.014	Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207695.040	LB202451.014	Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.8	9.7	50	10
			d8-toluene (Surrogate)	mg/kg	-	9.1	9.2	50	0
			Bromofluorobenzene (Surrogate)	mg/kg	-	10.1	9.9	50	2
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethanes	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
			Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE207695.045	LB202451.023	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	0	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	0	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	0	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	0	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	0	200	0
		Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	0	200	0
			Chloromethane	mg/kg	1	<1	0	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	0	200	0
			Bromomethane	mg/kg	1	<1	0.3601720688	200	0
			Chloroethane	mg/kg	1	<1	0	200	0
			Trichlorofluoromethane	mg/kg	1	<1	0	200	0
			Iodomethane	mg/kg	5	<5	0	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	0	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	0.0716207101	200	0
			Allyl chloride	mg/kg	0.1	<0.1	0	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	0	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	0	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	0	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	0	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	0	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	0	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	0	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	0	200	0
			Dibromomethane	mg/kg	0.1	<0.1	0	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	0	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	0	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	0	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	0	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	0	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	0	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	0	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	0	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	0	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	0	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	0	200	0
		Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1	0	200	0
			Bromobenzene	mg/kg	0.1	<0.1	0	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	0	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	0	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	0	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	0	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	0.0060197681	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	0	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	0	200	0
		Monocyclic Aromatic	Benzene	mg/kg	0.1	<0.1	0	200	0
			Toluene	mg/kg	0.1	<0.1	0.0220149385	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207695.045	LB202451.023	Monocyclic	Ethylbenzene	mg/kg	0.1	<0.1	0	200	0
		Aromatic	m/p-xylene	mg/kg	0.2	<0.2	0	200	0
			o-xylene	mg/kg	0.1	<0.1	0	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	0	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	0	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	0	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	0	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	0	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	0	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	0	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	0	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	0	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	0	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	0	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	0.7086006294	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	0	200	0
			Vinyl acetate	mg/kg	10	<10	0	200	0
			MEK (2-butanone)	mg/kg	10	<10	0	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	0	200	0
			2-hexanone (MBK)	mg/kg	5	<5	0	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	0	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	0	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.8	9.3146448681	50	6
			d8-toluene (Surrogate)	mg/kg	-	8.6	8.8669489203	50	3
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.3	9.6639180366	50	4
		Totals	Total Xylenes	mg/kg	0.3	<0.3	0	200	0
			Total BTEX	mg/kg	0.6	<0.6	0	200	0
			Total VOC*	mg/kg	24	<24	1.1464131766	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	0.0776404782	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	0.0776404782	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	0	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	0	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	0	200	0
			Bromoform	mg/kg	0.1	<0.1	0	200	0

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207695.010	LB202450.014		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.8	9.5	30	4
			d8-toluene (Surrogate)	mg/kg	-	9.5	9.2	30	4
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.3	7.1	30	4
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE207695.024	LB202450.025		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.7	11.6	30	7
			d8-toluene (Surrogate)	mg/kg	-	10.1	10.0	30	1
			Bromofluorobenzene (Surrogate)	mg/kg	-	10.2	11.1	30	9
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE207695.040	LB202451.014		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.8	9.7	30	10
			d8-toluene (Surrogate)	mg/kg	-	9.1	9.2	30	0
			Bromofluorobenzene (Surrogate)	mg/kg	-	10.1	9.9	30	2
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE207695.045	LB202451.023		TRH C6-C10	mg/kg	25	<25	0	200	0
			TRH C6-C9	mg/kg	20	<20	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207695.045	LB202451.023	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.8	9.3146448681	30	6
			d8-toluene (Surrogate)	mg/kg	-	8.6	8.8669489203	30	3
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.3	9.6639180366	30	4
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	0	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	0	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202486.002	Mercury	mg/kg	0.05	0.21	0.2	70 - 130	107
LB202487.002	Mercury	mg/kg	0.05	0.22	0.2	70 - 130	112

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202452.002		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	75
		Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	77
		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	77
		Dieldrin	mg/kg	0.2	<0.2	0.2	60 - 140	73
		Endrin	mg/kg	0.2	<0.2	0.2	60 - 140	72
		p,p'-DDT	mg/kg	0.1	0.1	0.2	60 - 140	74
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.17	0.15	40 - 130	110
LB202453.002		Heptachlor	mg/kg	0.1	0.3	0.2	60 - 140	130
		Aldrin	mg/kg	0.1	0.3	0.2	60 - 140	132
		Delta BHC	mg/kg	0.1	0.3	0.2	60 - 140	138
		Dieldrin	mg/kg	0.2	0.3	0.2	60 - 140	139
		Endrin	mg/kg	0.2	0.3	0.2	60 - 140	138
		p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	108
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.17	0.15	40 - 130	114

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202452.002		Dichlorvos	mg/kg	0.5	1.7	2	60 - 140	83
		Diazinon (Dimpylate)	mg/kg	0.5	2.0	2	60 - 140	100
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.0	2	60 - 140	101
		Ethion	mg/kg	0.2	1.6	2	60 - 140	80
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	90
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	90
LB202453.002		Dichlorvos	mg/kg	0.5	1.7	2	60 - 140	85
		Diazinon (Dimpylate)	mg/kg	0.5	2.0	2	60 - 140	102
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.9	2	60 - 140	95
		Ethion	mg/kg	0.2	1.6	2	60 - 140	81
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	81
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	80

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202452.002		Naphthalene	mg/kg	0.1	5.1	4	60 - 140	127
		Acenaphthylene	mg/kg	0.1	4.9	4	60 - 140	123
		Acenaphthene	mg/kg	0.1	4.7	4	60 - 140	117
		Phenanthrene	mg/kg	0.1	4.9	4	60 - 140	123
		Anthracene	mg/kg	0.1	5.0	4	60 - 140	125
		Fluoranthene	mg/kg	0.1	5.0	4	60 - 140	125
		Pyrene	mg/kg	0.1	5.1	4	60 - 140	128
		Benzo(a)pyrene	mg/kg	0.1	5.0	4	60 - 140	125
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	89
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	90
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	90
LB202453.002		Naphthalene	mg/kg	0.1	4.9	4	60 - 140	123
		Acenaphthylene	mg/kg	0.1	4.8	4	60 - 140	120
		Acenaphthene	mg/kg	0.1	4.8	4	60 - 140	121
		Phenanthrene	mg/kg	0.1	4.8	4	60 - 140	119
		Anthracene	mg/kg	0.1	4.7	4	60 - 140	118
		Fluoranthene	mg/kg	0.1	4.6	4	60 - 140	116
		Pyrene	mg/kg	0.1	4.7	4	60 - 140	118
		Benzo(a)pyrene	mg/kg	0.1	4.9	4	60 - 140	123
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	83
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	81
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	80

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PCBs in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202452.002		Arochlor 1260	mg/kg	0.2	0.4	0.4	60 - 140	108
LB202453.002		Arochlor 1260	mg/kg	0.2	0.4	0.4	60 - 140	104

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202452.002		Phenol	mg/kg	0.5	0.8	1	70 - 130	77
		2,4-dichlorophenol	mg/kg	0.5	0.7	1	70 - 130	70
		2,4,6-trichlorophenol	mg/kg	0.5	0.8	1	70 - 130	81
		Pentachlorophenol	mg/kg	0.5	0.7	1	70 - 130	71
	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.6	5	40 - 130	93
		d5-phenol (Surrogate)	mg/kg	-	1.7	2	40 - 130	86
LB202453.002		Phenol	mg/kg	0.5	0.7	1	70 - 130	74
		2,4-dichlorophenol	mg/kg	0.5	0.9	1	70 - 130	89
		2,4,6-trichlorophenol	mg/kg	0.5	0.8	1	70 - 130	78
		Pentachlorophenol	mg/kg	0.5	0.7	1	70 - 130	71
	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.4	5	40 - 130	87
		d5-phenol (Surrogate)	mg/kg	-	1.7	2	40 - 130	84

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202482.002	Arsenic, As	mg/kg	1	330	318.22	80 - 120	104
	Cadmium, Cd	mg/kg	0.3	4.9	5.41	80 - 120	91
	Chromium, Cr	mg/kg	0.5	38	38.31	80 - 120	100
	Copper, Cu	mg/kg	0.5	330	290	80 - 120	113
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	100
	Lead, Pb	mg/kg	1	96	89.9	80 - 120	106
	Zinc, Zn	mg/kg	2	280	273	80 - 120	102
LB202483.002	Arsenic, As	mg/kg	1	330	318.22	80 - 120	105
	Cadmium, Cd	mg/kg	0.3	5.0	5.41	80 - 120	93
	Chromium, Cr	mg/kg	0.5	40	38.31	80 - 120	104
	Copper, Cu	mg/kg	0.5	300	290	80 - 120	103
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	101
	Lead, Pb	mg/kg	1	94	89.9	80 - 120	105
	Zinc, Zn	mg/kg	2	280	273	80 - 120	102

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202452.002		TRH C10-C14	mg/kg	20	38	40	60 - 140	95
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	78
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	75
	TRH F Bands	TRH >C10-C16	mg/kg	25	36	40	60 - 140	90
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	80
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	100
LB202453.002		TRH C10-C14	mg/kg	20	46	40	60 - 140	115
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	105
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	83
	TRH F Bands	TRH >C10-C16	mg/kg	25	46	40	60 - 140	115
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	95
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	75

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202450.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	3.5	5	60 - 140	69
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	4.1	5	60 - 140	83
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	4.0	5	60 - 140	80
	Halogenated	Chlorobenzene	mg/kg	0.1	4.7	5	60 - 140	94
	Monocyclic	Benzene	mg/kg	0.1	4.6	5	60 - 140	92
	Aromatic	Toluene	mg/kg	0.1	4.4	5	60 - 140	88
		Ethylbenzene	mg/kg	0.1	4.5	5	60 - 140	90
		m/p-xylene	mg/kg	0.2	9.0	10	60 - 140	90
		o-xylene	mg/kg	0.1	4.5	5	60 - 140	90
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.0	10	70 - 130	100

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202450.002	Surrogates	d8-toluene (Surrogate)	mg/kg	-	9.5	10	70 - 130	95
		Bromofluorobenzene (Surrogate)	mg/kg	-	10.4	10	70 - 130	104
	Trihalomethan	Chloroform	mg/kg	0.1	4.1	5	60 - 140	81
LB202451.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	3.9	5	60 - 140	78
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	5.1	5	60 - 140	102
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	4.2	5	60 - 140	85
	Halogenated	Chlorobenzene	mg/kg	0.1	5.2	5	60 - 140	103
	Monocyclic	Benzene	mg/kg	0.1	4.7	5	60 - 140	93
	Aromatic	Toluene	mg/kg	0.1	4.7	5	60 - 140	93
		Ethylbenzene	mg/kg	0.1	4.5	5	60 - 140	90
		m/p-xylene	mg/kg	0.2	9.0	10	60 - 140	90
		o-xylene	mg/kg	0.1	4.5	5	60 - 140	89
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.4	10	70 - 130	94
		d8-toluene (Surrogate)	mg/kg	-	8.7	10	70 - 130	87
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.1	10	70 - 130	91
	Trihalomethan	Chloroform	mg/kg	0.1	4.6	5	60 - 140	92

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202450.002		TRH C6-C10	mg/kg	25	72	92.5	60 - 140	78
		TRH C6-C9	mg/kg	20	65	80	60 - 140	81
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.0	10	70 - 130	100
		Bromofluorobenzene (Surrogate)	mg/kg	-	10.4	10	70 - 130	104
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	45	62.5	60 - 140	73
LB202451.002		TRH C6-C10	mg/kg	25	69	92.5	60 - 140	74
		TRH C6-C9	mg/kg	20	62	80	60 - 140	78
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.4	10	70 - 130	94
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.1	10	70 - 130	91
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	41	62.5	60 - 140	66

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207695.001	LB202486.004	Mercury	mg/kg	0.05	0.19	<0.05	0.2	88
SE207695.024	LB202487.004	Mercury	mg/kg	0.05	0.21	<0.05	0.2	100

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207695.002	LB202452.028		Hexachlorobenzene (HCB)	mg/kg	0.1		<0.1	-	-
			Alpha BHC	mg/kg	0.1		<0.1	-	-
			Lindane	mg/kg	0.1		<0.1	-	-
			Heptachlor	mg/kg	0.1		<0.1	0.2	72
			Aldrin	mg/kg	0.1		<0.1	0.2	73
			Beta BHC	mg/kg	0.1		<0.1	-	-
			Delta BHC	mg/kg	0.1		<0.1	0.2	75
			Heptachlor epoxide	mg/kg	0.1		<0.1	-	-
			o,p'-DDE	mg/kg	0.1		<0.1	-	-
			Alpha Endosulfan	mg/kg	0.2		<0.2	-	-
			Gamma Chlordane	mg/kg	0.1		<0.1	-	-
			Alpha Chlordane	mg/kg	0.1		<0.1	-	-
			trans-Nonachlor	mg/kg	0.1		<0.1	-	-
			p,p'-DDE	mg/kg	0.1		<0.1	-	-
			Dieldrin	mg/kg	0.2		<0.2	0.2	71
			Endrin	mg/kg	0.2		<0.2	0.2	72
			o,p'-DDD	mg/kg	0.1		<0.1	-	-
			o,p'-DDT	mg/kg	0.1		<0.1	-	-
			Beta Endosulfan	mg/kg	0.2		<0.2	-	-
			p,p'-DDD	mg/kg	0.1		<0.1	-	-
			p,p'-DDT	mg/kg	0.1		<0.1	0.2	70
			Endosulfan sulphate	mg/kg	0.1		<0.1	-	-
			Endrin Aldehyde	mg/kg	0.1		<0.1	-	-
			Methoxychlor	mg/kg	0.1		<0.1	-	-
			Endrin Ketone	mg/kg	0.1		<0.1	-	-
			Isodrin	mg/kg	0.1		<0.1	-	-
			Mirex	mg/kg	0.1		<0.1	-	-
			Total CLP OC Pesticides	mg/kg	1		<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-		0.15	-	99
SE207695.025	LB202453.004		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	-	-
			Lindane	mg/kg	0.1	<0.1	<0.1	-	-
			Heptachlor	mg/kg	0.1	0.2	<0.1	0.2	87
			Aldrin	mg/kg	0.1	0.2	<0.1	0.2	88
			Beta BHC	mg/kg	0.1	<0.1	<0.1	-	-
			Delta BHC	mg/kg	0.1	0.2	<0.1	0.2	89
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	-	-
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	-	-
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	-	-
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	-	-
			Dieldrin	mg/kg	0.2	<0.2	<0.2	0.2	96
			Endrin	mg/kg	0.2	<0.2	<0.2	0.2	90
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	-	-
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	-	-
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	-	-
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	-	-
			p,p'-DDT	mg/kg	0.1	0.2	<0.1	0.2	81
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	-	-
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	-	-
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	-	-
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	-	-
			Isodrin	mg/kg	0.1	<0.1	<0.1	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207695.025	LB202453.004		Mirex	mg/kg	0.1	<0.1	<0.1	-	-
			Total CLP OC Pesticides	mg/kg	1	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.17	0.18	-	116

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207695.002	LB202452.028		Dichlorvos	mg/kg	0.5		<0.5	2	78
			Dimethoate	mg/kg	0.5		<0.5	-	-
			Diazinon (Dimpylate)	mg/kg	0.5		<0.5	2	91
			Fenitrothion	mg/kg	0.2		<0.2	-	-
			Malathion	mg/kg	0.2		<0.2	-	-
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2		<0.2	2	93
			Parathion-ethyl (Parathion)	mg/kg	0.2		<0.2	-	-
			Bromophos Ethyl	mg/kg	0.2		<0.2	-	-
			Methidathion	mg/kg	0.5		<0.5	-	-
			Ethion	mg/kg	0.2		<0.2	2	69
			Azinphos-methyl (Guthion)	mg/kg	0.2		<0.2	-	-
			Total OP Pesticides*	mg/kg	1.7		<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-		0.4	-	88
			d14-p-terphenyl (Surrogate)	mg/kg	-		0.4	-	76
SE207695.025	LB202453.004		Dichlorvos	mg/kg	0.5	1.8	<0.5	2	88
			Dimethoate	mg/kg	0.5	<0.5	<0.5	-	-
			Diazinon (Dimpylate)	mg/kg	0.5	2.1	<0.5	2	103
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	-	-
			Malathion	mg/kg	0.2	<0.2	<0.2	-	-
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.1	<0.2	2	103
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	-	-
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	-	-
			Methidathion	mg/kg	0.5	<0.5	<0.5	-	-
			Ethion	mg/kg	0.2	1.8	<0.2	2	92
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	-	-
			Total OP Pesticides*	mg/kg	1.7	7.8	<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	90
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	85

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207695.002	LB202452.028		Naphthalene	mg/kg	0.1		<0.1	4	121
			2-methylnaphthalene	mg/kg	0.1		<0.1	-	-
			1-methylnaphthalene	mg/kg	0.1		<0.1	-	-
			Acenaphthylene	mg/kg	0.1		<0.1	4	120
			Acenaphthene	mg/kg	0.1		<0.1	4	118
			Fluorene	mg/kg	0.1		<0.1	-	-
			Phenanthrene	mg/kg	0.1		<0.1	4	114
			Anthracene	mg/kg	0.1		<0.1	4	119
			Fluoranthene	mg/kg	0.1		<0.1	4	121
			Pyrene	mg/kg	0.1		<0.1	4	120
			Benzo(a)anthracene	mg/kg	0.1		<0.1	-	-
			Chrysene	mg/kg	0.1		<0.1	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1		<0.1	-	-
			Benzo(k)fluoranthene	mg/kg	0.1		<0.1	-	-
			Benzo(a)pyrene	mg/kg	0.1		<0.1	4	117
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1		<0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1		<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1		<0.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2		<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3		<0.3	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2		<0.2	-	-
			Total PAH (18)	mg/kg	0.8		<0.8	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-		0.4	-	84
			2-fluorobiphenyl (Surrogate)	mg/kg	-		0.4	-	88
			d14-p-terphenyl (Surrogate)	mg/kg	-		0.4	-	76

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207695.025	LB202453.004		Naphthalene	mg/kg	0.1	4.9	<0.1	4	124
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
			Acenaphthylene	mg/kg	0.1	5.1	<0.1	4	127
			Acenaphthene	mg/kg	0.1	4.8	<0.1	4	120
			Fluorene	mg/kg	0.1	<0.1	<0.1	-	-
			Phenanthrene	mg/kg	0.1	5.1	<0.1	4	128
			Anthracene	mg/kg	0.1	3.8	<0.1	4	94
			Fluoranthene	mg/kg	0.1	5.2	<0.1	4	128
			Pyrene	mg/kg	0.1	5.2	<0.1	4	129
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Chrysene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(a)pyrene	mg/kg	0.1	4.9	<0.1	4	123
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	4.9	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	5.1	<0.3	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	5.0	<0.2	-	-
			Total PAH (18)	mg/kg	0.8	39	<0.8	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	-	84
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	90
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	85

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207695.002	LB202452.028		Arochlor 1016	mg/kg	0.2		<0.2	-	-
			Arochlor 1221	mg/kg	0.2		<0.2	-	-
			Arochlor 1232	mg/kg	0.2		<0.2	-	-
			Arochlor 1242	mg/kg	0.2		<0.2	-	-
			Arochlor 1248	mg/kg	0.2		<0.2	-	-
			Arochlor 1254	mg/kg	0.2		<0.2	-	-
			Arochlor 1260	mg/kg	0.2		<0.2	0.4	103
			Arochlor 1262	mg/kg	0.2		<0.2	-	-
			Arochlor 1268	mg/kg	0.2		<0.2	-	-
			Total PCBs (Arochlors)	mg/kg	1		<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-		0	-	92
SE207695.025	LB202453.004		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1260	mg/kg	0.2	0.4	<0.2	0.4	95
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	-	-
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	-	117

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207695.001	LB202452.004	Phenol	mg/kg	0.5	0.8	<0.5	1	77
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	-	-
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	-	-
		Total Cresol	mg/kg	1.5	<1.5	<1.5	-	-
		2-chlorophenol	mg/kg	0.5	<0.5	<0.5	-	-
		2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	-	-
		2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	-	-
		2,4-dichlorophenol	mg/kg	0.5	0.9	<0.5	1	88
		2,4,6-trichlorophenol	mg/kg	0.5	0.9	<0.5	1	92

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207695.001	LB202452.004		2-nitrophenol	mg/kg	0.5	<0.5	<0.5	-	-
			4-nitrophenol	mg/kg	1	<1	<1	-	-
			2,4,5-trichlorophenol	mg/kg	0.5	0.8	<0.5	-	-
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	-	-
			Pentachlorophenol	mg/kg	0.5	0.7	<0.5	1	74
			2,4-dinitrophenol	mg/kg	2	<2	<2	-	-
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	-	-
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	5.0	4.8	-	99
			d5-phenol (Surrogate)	mg/kg	-	1.8	1.8	-	91
SE207695.025	LB202453.004		Phenol	mg/kg	0.5	0.7	<0.5	1	73
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	-	-
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	-	-
			Total Cresol	mg/kg	1.5	<1.5	<1.5	-	-
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	-	-
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	-	-
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	-	-
			2,4-dichlorophenol	mg/kg	0.5	0.9	<0.5	1	86
			2,4,6-trichlorophenol	mg/kg	0.5	0.8	<0.5	1	76
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	-	-
			4-nitrophenol	mg/kg	1	<1	<1	-	-
			2,4,5-trichlorophenol	mg/kg	0.5	0.6	<0.5	-	-
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	-	-
			Pentachlorophenol	mg/kg	0.5	0.7	<0.5	1	70
			2,4-dinitrophenol	mg/kg	2	<2	<2	-	-
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	-	-
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.8	4.1	-	76
			d5-phenol (Surrogate)	mg/kg	-	1.4	1.5	-	70

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207695.001	LB202482.004	Arsenic, As	mg/kg	1	50	<1	50	100
		Cadmium, Cd	mg/kg	0.3	44	<0.3	50	87
		Chromium, Cr	mg/kg	0.5	50	1.1	50	99
		Copper, Cu	mg/kg	0.5	59	13	50	91
		Nickel, Ni	mg/kg	0.5	49	0.9	50	97
		Lead, Pb	mg/kg	1	57	10	50	94
		Zinc, Zn	mg/kg	2	110	93	50	38 ④
SE207695.024	LB202483.004	Arsenic, As	mg/kg	1	49	<1	50	98
		Cadmium, Cd	mg/kg	0.3	43	<0.3	50	86
		Chromium, Cr	mg/kg	0.5	50	1.1	50	97
		Copper, Cu	mg/kg	0.5	51	2.0	50	98
		Nickel, Ni	mg/kg	0.5	49	<0.5	50	98
		Lead, Pb	mg/kg	1	55	12	50	87
		Zinc, Zn	mg/kg	2	56	14	50	84

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207695.002	LB202452.028		TRH C10-C14	mg/kg	20		<20	40	133
			TRH C15-C28	mg/kg	45		<45	40	118
			TRH C29-C36	mg/kg	45		<45	40	65
			TRH C37-C40	mg/kg	100		<100	-	-
			TRH C10-C36 Total	mg/kg	110		<110	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210		<210	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25		<25	40	130
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25		<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90		<90	40	95
			TRH >C34-C40 (F4)	mg/kg	120		<120	-	-
SE207695.025	LB202453.004		TRH C10-C14	mg/kg	20	52	<20	40	130
			TRH C15-C28	mg/kg	45	52	<45	40	130
			TRH C29-C36	mg/kg	45	<45	<45	40	78
			TRH C37-C40	mg/kg	100	<100	<100	-	-
			TRH C10-C36 Total	mg/kg	110	<110	<110	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207695.025	LB202453.004		TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25	53	<25	40	133
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	53	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	40	115
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	-	-

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207695.001	LB202450.004	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	-	-
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	-	-
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	-	-
			Bromomethane	mg/kg	1	<1	<1	-	-
			Chloroethane	mg/kg	1	<1	<1	-	-
			Trichlorofluoromethane	mg/kg	1	<1	<1	-	-
			Iodomethane	mg/kg	5	<5	<5	-	-
			1,1-dichloroethene	mg/kg	0.1	3.0	<0.1	5	60
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	-	-
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloroethane	mg/kg	0.1	3.6	<0.1	5	72
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	-	-
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	3.5	<0.1	5	70
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	-	-
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated	Chlorobenzene	mg/kg	0.1	4.1	<0.1	5	83
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Monocyclic	Benzene	mg/kg	0.1	3.7	<0.1	5	74
		Aromatic	Toluene	mg/kg	0.1	3.6	<0.1	5	72
			Ethylbenzene	mg/kg	0.1	3.6	<0.1	5	70
			m/p-xylene	mg/kg	0.2	7.2	<0.2	10	71
			o-xylene	mg/kg	0.1	3.6	<0.1	5	72
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	-	-
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	-	-
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207695.001	LB202450.004	Monocyclic Aromatic	tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	-	-
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	-	-
			2-nitropropane	mg/kg	10	<10	<10	-	-
		Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10	<10	-	-
			MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	-	-
			Vinyl acetate	mg/kg	10	<10	<10	-	-
			MEK (2-butanone)	mg/kg	10	<10	<10	-	-
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	-	-
			2-hexanone (MBK)	mg/kg	5	<5	<5	-	-
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.6	8.5	10	86
			d8-toluene (Surrogate)	mg/kg	-	7.6	8.5	10	76
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.7	6.6	10	77
		Totals	Total Xylenes	mg/kg	0.3	11	<0.3	-	-
			Total BTEX	mg/kg	0.6	22	<0.6	-	-
			Total VOC*	mg/kg	24	41	<24	-	-
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	-	-
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	18	<1.8	-	-
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	18	<1.8	-	-
		Trihalomethanes	Chloroform	mg/kg	0.1	3.6	<0.1	5	72
			Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Bromoform	mg/kg	0.1	<0.1	<0.1	-	-
SE207695.025	LB202451.004	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	-	-
			Chloromethane	mg/kg	1	<1	<1	-	-
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	-	-
			Bromomethane	mg/kg	1	<1	<1	-	-
			Chloroethane	mg/kg	1	<1	<1	-	-
			Trichlorofluoromethane	mg/kg	1	<1	<1	-	-
			Iodomethane	mg/kg	5	<5	<5	-	-
			1,1-dichloroethene	mg/kg	0.1	4.5	<0.1	5	90
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	-	-
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloroethane	mg/kg	0.1	5.1	<0.1	5	102
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	-	-
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	4.4	<0.1	5	88
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	-	-
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207695.025	LB202451.004	Halogenated Aliphatics	1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	5.0	<0.1	5	101
			Bromobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Monocyclic Aromatic	Benzene	mg/kg	0.1	4.7	<0.1	5	95
			Toluene	mg/kg	0.1	4.4	<0.1	5	88
			Ethylbenzene	mg/kg	0.1	4.3	<0.1	5	85
			m/p-xylene	mg/kg	0.2	8.4	<0.2	10	83
			o-xylene	mg/kg	0.1	4.2	<0.1	5	85
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	-	-
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	-	-
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	-	-
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	-	-
			2-nitropropane	mg/kg	10	<10	<10	-	-
		Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10	<10	-	-
			MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	-	-
			Vinyl acetate	mg/kg	10	<10	<10	-	-
			MEK (2-butanone)	mg/kg	10	<10	<10	-	-
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	-	-
			2-hexanone (MBK)	mg/kg	5	<5	<5	-	-
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.8	9.1	10	88
			d8-toluene (Surrogate)	mg/kg	-	8.1	8.4	10	81
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.6	9.3	10	86
		Totals	Total Xylenes	mg/kg	0.3	13	<0.3	-	-
			Total BTEX	mg/kg	0.6	26	<0.6	-	-
			Total VOC*	mg/kg	24	51	<24	-	-
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	-	-
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	24	<1.8	-	-
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	24	<1.8	-	-
		Trihalomethanes	Chloroform	mg/kg	0.1	4.4	<0.1	5	87
			Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Bromoform	mg/kg	0.1	<0.1	<0.1	-	-

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207695.001	LB202450.004		TRH C6-C10	mg/kg	25	56	<25	92.5	61
			TRH C6-C9	mg/kg	20	50	<20	80	62
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.6	8.5	10	86
			d8-toluene (Surrogate)	mg/kg	-	7.6	8.5	10	76
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.7	6.6	-	77
		VPH F Bands	Benzene (F0)	mg/kg	0.1	3.7	<0.1	-	-
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	34	<25	62.5	55 ④
SE207695.025	LB202451.004		TRH C6-C10	mg/kg	25	70	<25	92.5	75
			TRH C6-C9	mg/kg	20	63	<20	80	79
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.8	9.1	10	88

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207695.025	LB202451.004	Surrogates	d8-toluene (Surrogate)	mg/kg	-	8.1	8.4	10	81
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.6	9.3	-	86
		VPH F	Benzene (F0)	mg/kg	0.1	4.7	<0.1	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	44	<25	62.5	70

MATRIX SPIKE DUPLICATES

SE207695 R1

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

E-MAILED 9/7 @ 1:07 pm

SLR

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 430, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☒ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 19 Devon Street East, New Plymouth, 4310 NZ

CLIENT: Defence Housing Australia

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGE [redacted]

PM CONTACT No [redacted]

LABORATORY: SGS Australia

LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015

SAMPLER [redacted]

SAMPLER CONTACT No: [redacted]

Email Reports and Invoices to: LQRSYD@slrconsulting.com ; [redacted]

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number of

COMMENTS OR ADDITIONAL DIRECTIONS

SGS EHS Sydney COC

SE208577

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS	Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only (for asbestos bags)	HOLD	Suite E and H	Suite B	C6-C10, BTEX for TRIPBLANK and TRIP SPIKE	Additional Information (Comment on any gross contamination or specific requirements)
1	0407_SH031_0.1_200706	06-07-2020	Soil							x				
2	0407_SH032_0.1_200706	06-07-2020	Soil									x		
3	0407_SH032_0.1_ACM_200706	06-07-2020	Soil						x					
4	0407_SH033_0.1_200706	06-07-2020	Soil							x				
5	0407_SH033_0.1_ACM_200706	06-07-2020	Soil							x				
6	0407_SH034_0.1_200706	06-07-2020	Soil									x		
7	0407_SH034_0.1_ACM_200706	06-07-2020	Soil						x					
8	0407_SH035_0.1_200706	06-07-2020	Soil									x		
9	0407_SH035_0.1_ACM_200706	06-07-2020	Soil						x					
10	0407_SH036_0.1_200706	06-07-2020	Soil							x				
11	0407_QC419_200702	06-07-2020	Soil										x	
12	0407_QC519_200702	06-07-2020	Soil										x	

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 06-07-2020	**Received by**	Sig [redacted]	Date / Time 06/07/20	**Temperature Received:**
Relinquished By	Sign	Date / Time	**Received by**	Sig	Date / Time @4:30	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

SAMPLE RECEIPT ADVICE

SE208577

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	8

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Mon 6/7/2020
Report Due	Mon 20/7/2020
SGS Reference	**SE208577**

SUBMISSION DETAILS

This is to confirm that 8 samples were received on Monday 6/7/2020. Results are expected to be ready by COB Monday 20/7/2020. Please quote SGS reference SE208577 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	5 Soil, 3 Material
Date documentation received	9/7/2020@11:07am	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	4.7°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

3 Soil and 1 Material have been placed on hold as no tests have been assigned for them by the client. These samples will not be processed.

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SAMPLE RECEIPT ADVICE

SE208577

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Mercury in Soil	PCBs in Soil	Total Recoverable Elements in Soil/Waste	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
001	0407_SH032_0.1_200706	1	11	11	10	11	7
003	0407_SH034_0.1_200706	1	11	11	10	11	7
005	0407_SH035_0.1_200706	1	11	11	10	11	7
007	0407_QC419_200706	-	-	-	-	11	7
008	0407_QC519_200706	-	-	-	-	11	-

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE208577

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Fibre ID in bulk materials	Fibre Identification in soil	Gravimetric Determination of Asbestos in Soil	Moisture Content
001	0407_SH032_0.1_200706	-	2	9	1
002	0407_SH032_0.1_ACM_200706	1	-	-	-
003	0407_SH034_0.1_200706	-	2	9	1
004	0407_SH034_0.1_ACM_200706	1	-	-	-
005	0407_SH035_0.1_200706	-	2	9	1
006	0407_SH035_0.1_ACM_200706	1	-	-	-
007	0407_QC419_200706	-	-	-	1

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	8

LABORATORY DETAILS

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SGS Reference	**SE208577 R0**
Date Received	6/7/2020
Date Reported	20/7/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.

Sample #1: Asbestos found in approx 5x3x2mm cement sheet fragments in >2mm portion.
Sample #3: Asbestos found in approx 8x4x3mm cement sheet fragments x3 in >2mm portion.
Sample #5: Approx 6-7x2mm fibre bundles found loose in sample and asbestos found in approx 10x5x3mm cement sheet fragments x5.

Asbestos analysed by Approved Identifiers Ravee Sivasubramaniam and Yusuf Kuthpudin .

SIGNATORIES

[redacted]

Senior Organic Chemist/Metals Chemist | Metals/Inorganics Team Leader | Organic Section Head

[redacted]

Hygiene Team Leader | Asbestos Analyst

VOC's in Soil [AN433] Tested: 16/7/2020

PARAMETER	UOM	LOR	0407_SH032_0.1_20706 SOIL - 6/7/2020 SE208577.001	0407_SH034_0.1_20706 SOIL - 6/7/2020 SE208577.003	0407_SH035_0.1_20706 SOIL - 6/7/2020 SE208577.005	0407_QC419_20070(SOIL - 6/7/2020 SE208577.007	0407_QC519_20070(SOIL - 6/7/2020 SE208577.008
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	[109%]
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	[101%]
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	[96%]
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	[96%]
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	[96%]
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	-
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	-
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	-

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 16/7/2020

PARAMETER	UOM	LOR	0407_SH032_0.1_20706 SOIL - 6/7/2020 SE208577.001	0407_SH034_0.1_20706 SOIL - 6/7/2020 SE208577.003	0407_SH035_0.1_20706 SOIL - 6/7/2020 SE208577.005	0407_QC419_20070(SOIL - 6/7/2020 SE208577.007
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 16/7/2020

PARAMETER	UOM	LOR	0407_SH032_0.1_20706 SOIL - 6/7/2020 SE208577.001	0407_SH034_0.1_20706 SOIL - 6/7/2020 SE208577.003	0407_SH035_0.1_20706 SOIL - 6/7/2020 SE208577.005
TRH C10-C14	mg/kg	20	<20	<20	**21**
TRH C15-C28	mg/kg	45	<45	<45	**94**
TRH C29-C36	mg/kg	45	<45	<45	**74**
TRH C37-C40	mg/kg	100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	**35**
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	**35**
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	**120**
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	**190**
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210

PCBs in Soil [AN420] Tested: 16/7/2020

PARAMETER	UOM	LOR	0407_SH032_0.1_20706 SOIL - 6/7/2020 SE208577.001	0407_SH034_0.1_20706 SOIL - 6/7/2020 SE208577.003	0407_SH035_0.1_20706 SOIL - 6/7/2020 SE208577.005
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 16/7/2020

PARAMETER	UOM	LOR	0407_SH032_0.1_20706 SOIL - 6/7/2020 SE208577.001	0407_SH034_0.1_20706 SOIL - 6/7/2020 SE208577.003	0407_SH035_0.1_20706 SOIL - 6/7/2020 SE208577.005
Arsenic, As	mg/kg	1	<1	1	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	0.5
Chromium, Cr	mg/kg	0.5	4.1	5.3	4.2
Copper, Cu	mg/kg	0.5	21	9.8	16
Lead, Pb	mg/kg	1	71	55	62
Nickel, Ni	mg/kg	0.5	4.5	1.5	7.6
Zinc, Zn	mg/kg	2	260	88	220
Beryllium, Be	mg/kg	0.5	<0.5	<0.5	<0.5
Boron, B	mg/kg	5	6	7	8
Cobalt, Co	mg/kg	0.5	1.6	0.7	3.5
Manganese, Mn	mg/kg	1	46	28	130

Mercury in Soil [AN312] Tested: 16/7/2020

PARAMETER	UOM	LOR	0407_SH032_0.1_20706 SOIL - 6/7/2020 SE208577.001	0407_SH034_0.1_20706 SOIL - 6/7/2020 SE208577.003	0407_SH035_0.1_20706 SOIL - 6/7/2020 SE208577.005
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05

Moisture Content [AN002] Tested: 16/7/2020

PARAMETER	UOM	LOR	0407_SH032_0.1_20706 SOIL - 6/7/2020 SE208577.001	0407_SH034_0.1_20706 SOIL - 6/7/2020 SE208577.003	0407_SH035_0.1_20706 SOIL - 6/7/2020 SE208577.005	0407_QC419_20070(SOIL - 6/7/2020 SE208577.007
% Moisture	%w/w	1	<1.0	**2.2**	**3.0**	<1.0

Fibre Identification in soil [AN602] Tested: 17/7/2020

PARAMETER	UOM	LOR	0407_SH032_0.1_20706 SOIL - 6/7/2020 SE208577.001	0407_SH034_0.1_20706 SOIL - 6/7/2020 SE208577.003	0407_SH035_0.1_20706 SOIL - 6/7/2020 SE208577.005
Asbestos Detected	No unit	-	Yes	Yes	Yes
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	**>0.01**

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 17/7/2020

PARAMETER	UOM	LOR	0407_SH032_0.1_20706 SOIL - 6/7/2020 SE208577.001	0407_SH034_0.1_20706 SOIL - 6/7/2020 SE208577.003	0407_SH035_0.1_20706 SOIL - 6/7/2020 SE208577.005
Total Sample Weight*	g	1	**955**	**568**	**767**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	**0.0189**	**0.0545**	**0.0973**
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	**0.00709**
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	**0.002**	**0.010**	**0.013**
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	**0.002**	**0.010**	**0.014**
Fibre Type*	No unit	-	-	-	-

Fibre ID in bulk materials [AN602] Tested: 20/7/2020

PARAMETER	UOM	LOR	0407_SH032_0.1_AC _200706 MATERIAL - 6/7/2020 SE208577.002	0407_SH034_0.1_AC _200706 MATERIAL - 6/7/2020 SE208577.004	0407_SH035_0.1_AC _200706 MATERIAL - 6/7/2020 SE208577.006
Asbestos Detected	No unit	-	Yes	Yes	Yes

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid, mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents.
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples, Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.

AN605	This technique gravimetrically determines the mass of Bonded Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight. Any fibrous asbestos (FA) found in this fraction will be added to the 2-7mm fraction and its mass recorded there.
AN605	This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free/respirable fibres which are only observed by standard trace analysis as per AN602.
AN605	Bonded asbestos containing material (Bonded ACM) comprises asbestos-containing-material which is sound in condition. Fibrous asbestos (FA) comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material. Asbestos fines (AF) includes free fibres, small fibre bundles and also small fragments of bonded ACM that passes through a 7mm sieve - which implies that the bonded ACM fragments have a substantial degree of damage which increases the potential for fibre release.
AN-605	Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009 and NEPM 1999 (2013) schedule B1 section 4..

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
**	Indicative data, theoretical holding time exceeded.	NVL	Not validated.	LOR	Limit of Reporting.
		IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

This document is issued by the Company under its General Conditions of Service accessible at www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

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Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	6

LABORATORY DETAILS

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SGS Reference	**SE208577 R0**
Date Received	06 Jul 2020
Date Reported	20 Jul 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.

Sample #1: Asbestos found in approx 5x3x2mm cement sheet fragments in >2mm portion.
Sample #3: Asbestos found in approx 8x4x3mm cement sheet fragments x3 in >2mm portion.
Sample #5: Approx 6-7x2mm fibre bundles found loose in sample and asbestos found in approx 10x5x3mm cement sheet fragments x5.

Asbestos analysed by Approved Identifiers Ravee Sivasubramaniam and Yusuf Kuthpudin .

SIGNATORIES

[redacted]

Senior Organic Chemist/Metals Chemis Organic Section Head Hygiene Team Leader

[redacted]

Asbestos Analyst

RESULTS

Fibre Identification in soil — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE208577.001	0407_SH032_0.1 _200706	Soil	955g Sand, Soil, Rocks, Plant matter	06 Jul 2020	Chrysotile Asbestos Found Organic Fibres Detected	<0.01
SE208577.003	0407_SH034_0.1 _200706	Soil	568g Sand, Soil, Rocks, Plant matter	06 Jul 2020	Chrysotile Asbestos Found Organic Fibres Detected	<0.01
SE208577.005	0407_SH035_0.1 _200706	Soil	767g Sand, Soil, Rocks, Plant matter	06 Jul 2020	Chrysotile Asbestos Found Organic Fibres Detected	>0.01

RESULTS

Fibre ID in bulk materials — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE208577.002	0407_SH032_0.1 _ACM_200706	Other	70x40x4mm Cement Sheet Fragments	06 Jul 2020	Chrysotile Asbestos Detected	
SE208577.004	0407_SH034_0.1 _ACM_200706	Other	100x50x10mm Cement Sheet Fragments	06 Jul 2020	Amosite, Chrysotile & Crocidolite Asbestos Detected	
SE208577.006	0407_SH035_0.1 _ACM_200706	Other	80x70x8mm Cement Sheet Fragment	06 Jul 2020	Chrysotile Asbestos Detected	

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 17/7/2020

PARAMETER	UOM	LOR	0407_SH032_0.1_20706 SOIL - 6/7/2020 SE208577.001	0407_SH034_0.1_20706 SOIL - 6/7/2020 SE208577.003	0407_SH035_0.1_20706 SOIL - 6/7/2020 SE208577.005
Total Sample Weight*	g	1	**955**	**568**	**767**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	**0.0189**	**0.0545**	**0.0973**
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	**0.00709**
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	**0.002**	**0.010**	**0.013**
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	**0.002**	**0.010**	**0.014**
Fibre Type*	No unit	-	-	-	-

METHOD SUMMARY

METHOD	METHODOLOGY SUMMARY
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples , Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable ’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.
AN605	This technique gravimetrically determines the mass of Bonded Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight. Any fibrous asbestos (FA) found in this fraction will be added to the 2-7mm fraction and its mass recorded there.
AN605	This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free/respirable fibres which are only observed by standard trace analysis as per AN602.
AN605	Bonded asbestos containing material (Bonded ACM) comprises asbestos-containing-material which is sound in condition. Fibrous asbestos (FA) comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material. Asbestos fines (AF) includes free fibres, small fibre bundles and also small fragments of bonded ACM that passes through a 7mm sieve - which implies that the bonded ACM fragments have a substantial degree of damage which increases the potential for fibre release.
AN-605	Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009 and NEPM 1999 (2013) schedule B1 section 4..

FOOTNOTES

Amosite	-	Brown Asbestos	NA	-	Not Analysed
Chrysotile	-	White Asbestos	LNR	-	Listed, Not Required
Crocidolite	-	Blue Asbestos	*	-	NATA accreditation does not cover the performance of this service.
Amphiboles	-	Amosite and/or Crocidolite	**	-	Indicative data, theoretical holding time exceeded.

(In reference to soil samples only) This report does not comply with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment and Remediation and Management of Asbestos Contaminated sites in Western Australia - May 2009.

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.

Where reported: 'Asbestos Detected': Asbestos detected by polarised light microscopy, including dispersion staining.
Where reported: 'No Asbestos Found': No Asbestos Found by polarised light microscopy, including dispersion staining.
Where reported: 'UMF Detected': Mineral fibres of unknown type detected by polarised light microscopy, including dispersion staining. Confirmation by another independent analytical technique may be necessary.

Even after disintegration it can be very difficult, or impossible, to detect the presence of asbestos in some asbestos-containing bulk materials using polarised light microscopy. This is due to the low grade or small length or diameter of asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE208577 R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	8

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208577 R0**
Date Received	06 Jul 2020
Date Reported	20 Jul 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Duplicate	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	1 item

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	5 Soil, 3 Material
Date documentation received	9/7/2020@11:07am	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	4.7°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE208577 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

Fibre ID in bulk materials

Method: ME-(AU)-[ENV]AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SH032_0.1_ACM_20	SE208577.002	LB204626	06 Jul 2020	06 Jul 2020	06 Jul 2021	20 Jul 2020	06 Jul 2021	20 Jul 2020
0407_SH034_0.1_ACM_20	SE208577.004	LB204626	06 Jul 2020	06 Jul 2020	06 Jul 2021	20 Jul 2020	06 Jul 2021	20 Jul 2020
0407_SH035_0.1_ACM_20	SE208577.006	LB204626	06 Jul 2020	06 Jul 2020	06 Jul 2021	20 Jul 2020	06 Jul 2021	20 Jul 2020

Fibre Identification in soil

Method: ME-(AU)-[ENV]AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SH032_0.1_200706	SE208577.001	LB204563	06 Jul 2020	06 Jul 2020	06 Jul 2021	17 Jul 2020	06 Jul 2021	20 Jul 2020
0407_SH034_0.1_200706	SE208577.003	LB204563	06 Jul 2020	06 Jul 2020	06 Jul 2021	17 Jul 2020	06 Jul 2021	20 Jul 2020
0407_SH035_0.1_200706	SE208577.005	LB204563	06 Jul 2020	06 Jul 2020	06 Jul 2021	17 Jul 2020	06 Jul 2021	20 Jul 2020

Gravimetric Determination of Asbestos in Soil

Method: ME-(AU)-[ENV]AN605

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SH032_0.1_200706	SE208577.001	LB204563	06 Jul 2020	06 Jul 2020	02 Jan 2021	17 Jul 2020	02 Jan 2021	20 Jul 2020
0407_SH034_0.1_200706	SE208577.003	LB204563	06 Jul 2020	06 Jul 2020	02 Jan 2021	17 Jul 2020	02 Jan 2021	20 Jul 2020
0407_SH035_0.1_200706	SE208577.005	LB204563	06 Jul 2020	06 Jul 2020	02 Jan 2021	17 Jul 2020	02 Jan 2021	20 Jul 2020

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SH032_0.1_200706	SE208577.001	LB204501	06 Jul 2020	06 Jul 2020	03 Aug 2020	16 Jul 2020	03 Aug 2020	20 Jul 2020
0407_SH034_0.1_200706	SE208577.003	LB204501	06 Jul 2020	06 Jul 2020	03 Aug 2020	16 Jul 2020	03 Aug 2020	20 Jul 2020
0407_SH035_0.1_200706	SE208577.005	LB204501	06 Jul 2020	06 Jul 2020	03 Aug 2020	16 Jul 2020	03 Aug 2020	20 Jul 2020

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SH032_0.1_200706	SE208577.001	LB204464	06 Jul 2020	06 Jul 2020	20 Jul 2020	16 Jul 2020	21 Jul 2020	17 Jul 2020
0407_SH034_0.1_200706	SE208577.003	LB204464	06 Jul 2020	06 Jul 2020	20 Jul 2020	16 Jul 2020	21 Jul 2020	17 Jul 2020
0407_SH035_0.1_200706	SE208577.005	LB204464	06 Jul 2020	06 Jul 2020	20 Jul 2020	16 Jul 2020	21 Jul 2020	17 Jul 2020
0407_QC419_200706	SE208577.007	LB204464	06 Jul 2020	06 Jul 2020	20 Jul 2020	16 Jul 2020	21 Jul 2020	17 Jul 2020

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SH032_0.1_200706	SE208577.001	LB204461	06 Jul 2020	06 Jul 2020	20 Jul 2020	16 Jul 2020	25 Aug 2020	20 Jul 2020
0407_SH034_0.1_200706	SE208577.003	LB204461	06 Jul 2020	06 Jul 2020	20 Jul 2020	16 Jul 2020	25 Aug 2020	20 Jul 2020
0407_SH035_0.1_200706	SE208577.005	LB204461	06 Jul 2020	06 Jul 2020	20 Jul 2020	16 Jul 2020	25 Aug 2020	20 Jul 2020

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SH032_0.1_200706	SE208577.001	LB204493	06 Jul 2020	06 Jul 2020	02 Jan 2021	16 Jul 2020	02 Jan 2021	17 Jul 2020
0407_SH034_0.1_200706	SE208577.003	LB204493	06 Jul 2020	06 Jul 2020	02 Jan 2021	16 Jul 2020	02 Jan 2021	17 Jul 2020
0407_SH035_0.1_200706	SE208577.005	LB204493	06 Jul 2020	06 Jul 2020	02 Jan 2021	16 Jul 2020	02 Jan 2021	17 Jul 2020

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SH032_0.1_200706	SE208577.001	LB204461	06 Jul 2020	06 Jul 2020	20 Jul 2020	16 Jul 2020	25 Aug 2020	17 Jul 2020
0407_SH034_0.1_200706	SE208577.003	LB204461	06 Jul 2020	06 Jul 2020	20 Jul 2020	16 Jul 2020	25 Aug 2020	17 Jul 2020
0407_SH035_0.1_200706	SE208577.005	LB204461	06 Jul 2020	06 Jul 2020	20 Jul 2020	16 Jul 2020	25 Aug 2020	17 Jul 2020

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SH032_0.1_200706	SE208577.001	LB204460	06 Jul 2020	06 Jul 2020	20 Jul 2020	16 Jul 2020	25 Aug 2020	17 Jul 2020
0407_SH034_0.1_200706	SE208577.003	LB204460	06 Jul 2020	06 Jul 2020	20 Jul 2020	16 Jul 2020	25 Aug 2020	17 Jul 2020
0407_SH035_0.1_200706	SE208577.005	LB204460	06 Jul 2020	06 Jul 2020	20 Jul 2020	16 Jul 2020	25 Aug 2020	17 Jul 2020
0407_QC419_200706	SE208577.007	LB204460	06 Jul 2020	06 Jul 2020	20 Jul 2020	16 Jul 2020	25 Aug 2020	17 Jul 2020
0407_QC519_200706	SE208577.008	LB204460	06 Jul 2020	06 Jul 2020	20 Jul 2020	16 Jul 2020	25 Aug 2020	17 Jul 2020

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SH032_0.1_200706	SE208577.001	LB204460	06 Jul 2020	06 Jul 2020	20 Jul 2020	16 Jul 2020	25 Aug 2020	17 Jul 2020
0407_SH034_0.1_200706	SE208577.003	LB204460	06 Jul 2020	06 Jul 2020	20 Jul 2020	16 Jul 2020	25 Aug 2020	17 Jul 2020
0407_SH035_0.1_200706	SE208577.005	LB204460	06 Jul 2020	06 Jul 2020	20 Jul 2020	16 Jul 2020	25 Aug 2020	17 Jul 2020
0407_QC419_200706	SE208577.007	LB204460	06 Jul 2020	06 Jul 2020	20 Jul 2020	16 Jul 2020	25 Aug 2020	17 Jul 2020
0407_QC519_200706	SE208577.008	LB204460	06 Jul 2020	06 Jul 2020	20 Jul 2020	16 Jul 2020	25 Aug 2020	17 Jul 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_SH032_0.1_200706	SE208577.001	%	60 - 130%	105
	0407_SH034_0.1_200706	SE208577.003	%	60 - 130%	103
	0407_SH035_0.1_200706	SE208577.005	%	60 - 130%	105

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_SH032_0.1_200706	SE208577.001	%	60 - 130%	75
	0407_SH034_0.1_200706	SE208577.003	%	60 - 130%	75
	0407_SH035_0.1_200706	SE208577.005	%	60 - 130%	73
	0407_QC419_200706	SE208577.007	%	60 - 130%	82
	0407_QC519_200706	SE208577.008	%	60 - 130%	77
d4-1,2-dichloroethane (Surrogate)	0407_SH032_0.1_200706	SE208577.001	%	60 - 130%	85
	0407_SH034_0.1_200706	SE208577.003	%	60 - 130%	87
	0407_SH035_0.1_200706	SE208577.005	%	60 - 130%	83
	0407_QC419_200706	SE208577.007	%	60 - 130%	92
	0407_QC519_200706	SE208577.008	%	60 - 130%	85
d8-toluene (Surrogate)	0407_SH032_0.1_200706	SE208577.001	%	60 - 130%	86
	0407_SH034_0.1_200706	SE208577.003	%	60 - 130%	86
	0407_SH035_0.1_200706	SE208577.005	%	60 - 130%	84
	0407_QC419_200706	SE208577.007	%	60 - 130%	92
	0407_QC519_200706	SE208577.008	%	60 - 130%	87

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_SH032_0.1_200706	SE208577.001	%	60 - 130%	75
	0407_SH034_0.1_200706	SE208577.003	%	60 - 130%	75
	0407_SH035_0.1_200706	SE208577.005	%	60 - 130%	73
	0407_QC419_200706	SE208577.007	%	60 - 130%	82
d4-1,2-dichloroethane (Surrogate)	0407_SH032_0.1_200706	SE208577.001	%	60 - 130%	85
	0407_SH034_0.1_200706	SE208577.003	%	60 - 130%	87
	0407_SH035_0.1_200706	SE208577.005	%	60 - 130%	83
	0407_QC419_200706	SE208577.007	%	60 - 130%	92
d8-toluene (Surrogate)	0407_SH032_0.1_200706	SE208577.001	%	60 - 130%	86
	0407_SH034_0.1_200706	SE208577.003	%	60 - 130%	86
	0407_SH035_0.1_200706	SE208577.005	%	60 - 130%	84
	0407_QC419_200706	SE208577.007	%	60 - 130%	92

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result
LB204501.001	Mercury	mg/kg	0.05	<0.05

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB204461.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	88

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB204493.001	Arsenic, As	mg/kg	1	<1
	Beryllium, Be	mg/kg	0.5	<0.5
	Cadmium, Cd	mg/kg	0.3	<0.3
	Cobalt, Co	mg/kg	0.5	<0.5
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Manganese, Mn	mg/kg	1	<1
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB204461.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB204460.001	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	88
		d8-toluene (Surrogate)	%	-	87
		Bromofluorobenzene (Surrogate)	%	-	80
	Totals	Total BTEX	mg/kg	0.6	<0.6

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB204460.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	88

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208577.005	LB204501.018	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE208626.004	LB204501.014	Mercury	mg/kg	0.05	<0.05	<0.05	200	0

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208577.007	LB204464.021	% Moisture	%w/w	1	<1.0	<1.0	200	0
SE208760.002	LB204464.011	% Moisture	%w/w	1	14.9	13.4	37	11

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208737.003	LB204461.025		Arochlor 1016	mg/kg	0.2	0	0	200	0
			Arochlor 1221	mg/kg	0.2	0	0	200	0
			Arochlor 1232	mg/kg	0.2	0	0	200	0
			Arochlor 1242	mg/kg	0.2	0	0	200	0
			Arochlor 1248	mg/kg	0.2	0	0	200	0
			Arochlor 1254	mg/kg	0.2	0	0	200	0
			Arochlor 1260	mg/kg	0.2	0	0	200	0
			Arochlor 1262	mg/kg	0.2	0	0	200	0
			Arochlor 1268	mg/kg	0.2	0	0	200	0
			Total PCBs (Arochlors)	mg/kg	1	0	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.163	0.158	30	3

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208577.005	LB204493.024	Arsenic, As	mg/kg	1	<1	<1	149	0
		Boron, B	mg/kg	5	8	8	91	2
		Beryllium, Be	mg/kg	0.5	<0.5	<0.5	200	0
		Cadmium, Cd	mg/kg	0.3	0.5	0.4	94	14
		Cobalt, Co	mg/kg	0.5	3.5	2.4	47	35
		Chromium, Cr	mg/kg	0.5	4.2	3.9	42	8
		Copper, Cu	mg/kg	0.5	16	19	33	18
		Manganese, Mn	mg/kg	1	130	69	31	64 ②
		Nickel, Ni	mg/kg	0.5	7.6	5.9	37	26
		Lead, Pb	mg/kg	1	62	69	32	11
		Zinc, Zn	mg/kg	2	220	230	31	5
SE208622.005	LB204493.014	Lead, Pb	mg/kg	1	2	2	91	0

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208577.005	LB204461.023		TRH C10-C14	mg/kg	20	21	23	121	9
			TRH C15-C28	mg/kg	45	94	120	72	23
			TRH C29-C36	mg/kg	45	74	130	73	58
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	190	280	77	37
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	220	143	2
		TRH F Bands	TRH >C10-C16	mg/kg	25	35	39	98	11
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	35	39	98	11
			TRH >C16-C34 (F3)	mg/kg	90	120	180	90	36
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE208760.002	LB204461.014		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208577.005	LB204460.027	Monocyclic	Benzene	mg/kg	0.1	<0.1	0	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	0.0488593378	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	0.0005587374	200	0
			m/p-xylene	mg/kg	0.2	<0.2	0.0011493082	200	0
			o-xylene	mg/kg	0.1	<0.1	0	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	0.0018326448	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.3	9.1304499490	50	10
			d8-toluene (Surrogate)	mg/kg	-	8.4	9.3589473890	50	11
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.3	7.9845715704	50	8
		Totals	Total Xylenes	mg/kg	0.3	<0.3	0.0011493082	200	0
			Total BTEX	mg/kg	0.6	<0.6	0	200	0
SE208760.002	LB204460.014	Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.3	8.2	50	1
			d8-toluene (Surrogate)	mg/kg	-	8.4	8.2	50	3
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.5	7.2	50	4
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208577.005	LB204460.027		TRH C6-C10	mg/kg	25	<25	1.6693204310	200	0
			TRH C6-C9	mg/kg	20	<20	1.6054014535	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.3	9.1304499490	30	10
			d8-toluene (Surrogate)	mg/kg	-	8.4	9.3589473890	30	11
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.3	7.9845715704	30	8
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	0	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	1.6693204310	200	0
SE208760.002	LB204460.014		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.3	8.2	30	1
			d8-toluene (Surrogate)	mg/kg	-	8.4	8.2	30	3
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.5	7.2	30	4
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204501.002	Mercury	mg/kg	0.05	0.24	0.2	70 - 130	122

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204461.002	Arochlor 1260	mg/kg	0.2	0.4	0.4	60 - 140	103

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204493.002	Arsenic, As	mg/kg	1	310	318.22	80 - 120	98
	Boron, B	mg/kg	5	34	37.13	80 - 120	91
	Beryllium, Be	mg/kg	0.5	4.2	4.17	80 - 120	100
	Cadmium, Cd	mg/kg	0.3	5.0	5.41	80 - 120	93
	Cobalt, Co	mg/kg	0.5	21	20.71	80 - 120	99
	Chromium, Cr	mg/kg	0.5	37	38.31	80 - 120	97
	Copper, Cu	mg/kg	0.5	290	290	80 - 120	102
	Manganese, Mn	mg/kg	1	670	660	80 - 120	102
	Nickel, Ni	mg/kg	0.5	180	187	80 - 120	98
	Lead, Pb	mg/kg	1	89	89.9	80 - 120	99
	Zinc, Zn	mg/kg	2	270	273	80 - 120	98

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204461.002		TRH C10-C14	mg/kg	20	45	40	60 - 140	113
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	103
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	88
	TRH F Bands	TRH >C10-C16	mg/kg	25	45	40	60 - 140	113
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	95
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	85

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204460.002	Monocyclic	Benzene	mg/kg	0.1	3.2	5	60 - 140	63
	Aromatic	Toluene	mg/kg	0.1	3.2	5	60 - 140	64
		Ethylbenzene	mg/kg	0.1	3.2	5	60 - 140	64
		m/p-xylene	mg/kg	0.2	6.6	10	60 - 140	66
		o-xylene	mg/kg	0.1	3.3	5	60 - 140	65
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.5	10	70 - 130	85
		d8-toluene (Surrogate)	mg/kg	-	8.7	10	70 - 130	87
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.0	10	70 - 130	80

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204460.002		TRH C6-C10	mg/kg	25	70	92.5	60 - 140	75
		TRH C6-C9	mg/kg	20	64	80	60 - 140	80
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.5	10	70 - 130	85
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.0	10	70 - 130	80
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	50	62.5	60 - 140	81

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208769.001	LB204461.004		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1260	mg/kg	0.2	0.4	<0.2	0.4	111
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	-	-
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	-	105

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208737.001	LB204493.004		Arsenic, As	mg/kg	1	47	0.09102528480	50	94
			Cadmium, Cd	mg/kg	0.3	43	0.01269102528	50	86
			Chromium, Cr	mg/kg	0.5	48	0.02231869963	50	96
			Copper, Cu	mg/kg	0.5	48	0.10590441789	50	96
			Nickel, Ni	mg/kg	0.5	48	0.09408863573	50	97
			Lead, Pb	mg/kg	1	48	0.02144345651	50	96
			Zinc, Zn	mg/kg	2	47	0.27438871908	50	94

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208769.001	LB204461.004		TRH C10-C14	mg/kg	20	35	<20	40	88
			TRH C15-C28	mg/kg	45	<45	<45	40	80
			TRH C29-C36	mg/kg	45	<45	<45	40	93
			TRH C37-C40	mg/kg	100	<100	<100	-	-
			TRH C10-C36 Total	mg/kg	110	<110	<110	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	-	-
		TRH F	TRH >C10-C16	mg/kg	25	35	<25	40	88
		Bands	TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	35	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	40	85
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	-	-

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208769.001	LB204460.004	Monocyclic	Benzene	mg/kg	0.1	3.6	<0.1	5	72
		Aromatic	Toluene	mg/kg	0.1	3.8	<0.1	5	76
			Ethylbenzene	mg/kg	0.1	3.8	<0.1	5	76
			m/p-xylene	mg/kg	0.2	7.8	<0.2	10	78
			o-xylene	mg/kg	0.1	3.9	<0.1	5	77
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.5	8.0	10	85
			d8-toluene (Surrogate)	mg/kg	-	8.7	7.9	10	87
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.9	6.9	10	79
		Totals	Total Xylenes	mg/kg	0.3	12	<0.3	-	-
			Total BTEX	mg/kg	0.6	23	<0.6	-	-

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208769.001	LB204460.004		TRH C6-C10	mg/kg	25	78	<25	92.5	84
			TRH C6-C9	mg/kg	20	71	<20	80	89
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.5	8.0	10	85
			d8-toluene (Surrogate)	mg/kg	-	8.7	7.9	10	87
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.9	6.9	-	79
		VPH F	Benzene (F0)	mg/kg	0.1	3.6	<0.1	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	55	<25	62.5	88

MATRIX SPIKE DUPLICATES

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

E-MAILED 9/7/20 11:07

SLR

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 23 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 7, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☒ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Stuart Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ

CLIENT: Defence Housing Australia

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGER: [redacted]

PM CONTACT No: [redacted]

LABORATORY: SGS Australia

LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015

SAMPLER: [redacted]

SAMPLER CONTACT No: [redacted]

Email Reports and Invoices to: LQRSYD@slrconsulting.com ; [redacted]

COMMENTS OR ADDITIONAL DIRECTIONS

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number: of

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only (for asbestos bags)	HOLD	Suite E and H	Suite B	C6-C10, BTEX for TRIPBLANK and TRIP SPIKE	Additional Information (Comment on any gross contamination or specific requirements)
1	0407_BH036_0.1_200702	02-07-2020	Soil								x		
2	0407_BH036_0.3_200702	02-07-2020	Soil								x		
3	0407_QC417_200701	01-07-2020	Soil									x	
4	0407_QC517_200701	01-07-2020	Soil									x	
•	0407_QC418_200702	02-07-2020	Soil									x	
•	0407_QC518_200702	02-07-2020	Soil									x	
5	0407_BH035_0.1_200702	02-07-2020	Soil								x		
6	0407_BH035_0.4_200702	02-07-2020	Soil								x		

SGS EHS Sydney COC

SE208578

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	MR	Date / Time	02-07-2020
Relinquished By	Sign	Date / Time	
Relinquished By	Sign	Date / Time	

Received by	Sign [redacted]	Date / Time	02/07/20
Received by	Sign	Date / Time	@ 4:30
Received by	Sign	Date / Time	

Temperature Received:

SAMPLE RECEIPT ADVICE

SE208578

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	6

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Thu 2/7/2020
Report Due	Mon 20/7/2020
SGS Reference	**SE208578**

SUBMISSION DETAILS

This is to confirm that 6 samples were received on Thursday 2/7/2020. Results are expected to be ready by COB Monday 20/7/2020. Please quote SGS reference SE208578 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	6 Soil
Date documentation received	9/7/2020@11:07am	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	4.7°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

0407_QC418_200702 and 0407_QC518_200702 not received.

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SAMPLE RECEIPT ADVICE

SE208578

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Mercury in Soil	PCBs in Soil	Total Recoverable Elements in Soil/Waste	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
001	0407_BH036_0.1_200702	1	11	7	10	11	7
002	0407_BH036_0.3_200702	1	11	7	10	11	7
003	0407_QC417_200702	-	-	-	-	11	7
004	0407_QC517_200702	-	-	-	-	11	-
005	0407_BH035_0.1_200702	1	11	7	10	11	7
006	0407_BH035_0.4_200702	1	11	7	10	11	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE208578

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Moisture Content
001	0407_BH036_0.1_200702	1
002	0407_BH036_0.3_200702	1
003	0407_QC417_200702	1
005	0407_BH035_0.1_200702	1
006	0407_BH035_0.4_200702	1

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	6

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208578 R0**
Date Received	2/7/2020
Date Reported	20/7/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

SIGNATORIES

[redacted]

Senior Organic Chemist/Metals Chemist | Metals/Inorganics Team Leader | Organic Section Head

VOC's in Soil [AN433] Tested: 16/7/2020

PARAMETER	UOM	LOR	0407_BH036_0.1_20702 SOIL - 2/7/2020 SE208578.001	0407_BH036_0.3_20702 SOIL - 2/7/2020 SE208578.002	0407_QC417_20070 SOIL - 1/7/2020 SE208578.003	0407_QC517_20070 SOIL - 1/7/2020 SE208578.004	0407_BH035_0.1_20702 SOIL - 2/7/2020 SE208578.005
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	[95%]	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	[82%]	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	[83%]	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	[85%]	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	[84%]	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	-	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	-	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	-	<0.6

PARAMETER	UOM	LOR	0407_BH035_0.4_20702 SOIL - 2/7/2020 SE208578.006
Benzene	mg/kg	0.1	<0.1
Toluene	mg/kg	0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2
o-xylene	mg/kg	0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 16/7/2020

PARAMETER	UOM	LOR	0407_BH036_0.1_20702 SOIL - 2/7/2020 SE208578.001	0407_BH036_0.3_20702 SOIL - 2/7/2020 SE208578.002	0407_QC417_20070 SOIL - 1/7/2020 SE208578.003	0407_BH035_0.1_20702 SOIL - 2/7/2020 SE208578.005	0407_BH035_0.4_20702 SOIL - 2/7/2020 SE208578.006
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 16/7/2020

PARAMETER	UOM	LOR	0407_BH036_0.1_20702 SOIL - 2/7/2020 SE208578.001	0407_BH036_0.3_20702 SOIL - 2/7/2020 SE208578.002	0407_BH035_0.1_20702 SOIL - 2/7/2020 SE208578.005	0407_BH035_0.4_20702 SOIL - 2/7/2020 SE208578.006
TRH C10-C14	mg/kg	20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210

PCBs in Soil [AN420] Tested: 16/7/2020

PARAMETER	UOM	LOR	0407_BH036_0.1_20702 SOIL - 2/7/2020 SE208578.001	0407_BH036_0.3_20702 SOIL - 2/7/2020 SE208578.002	0407_BH035_0.1_20702 SOIL - 2/7/2020 SE208578.005	0407_BH035_0.4_20702 SOIL - 2/7/2020 SE208578.006
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 17/7/2020

PARAMETER	UOM	LOR	0407_BH036_0.1_20 702 SOIL - 2/7/2020 SE208578.001	0407_BH036_0.3_20 702 SOIL - 2/7/2020 SE208578.002	0407_BH035_0.1_20 702 SOIL - 2/7/2020 SE208578.005	0407_BH035_0.4_20 702 SOIL - 2/7/2020 SE208578.006
Arsenic, As	mg/kg	1	1	<1	<1	<1
Cadmium, Cd	mg/kg	0.3	0.7	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	3.2	<0.5	1.8	<0.5
Copper, Cu	mg/kg	0.5	16	1.0	6.9	<0.5
Lead, Pb	mg/kg	1	58	2	32	<1
Nickel, Ni	mg/kg	0.5	4.0	<0.5	1.6	<0.5
Zinc, Zn	mg/kg	2	72	8.8	41	<2.0

Mercury in Soil [AN312] Tested: 17/7/2020

PARAMETER	UOM	LOR	0407_BH036_0.1_20702 SOIL - 2/7/2020 SE208578.001	0407_BH036_0.3_20702 SOIL - 2/7/2020 SE208578.002	0407_BH035_0.1_20702 SOIL - 2/7/2020 SE208578.005	0407_BH035_0.4_20702 SOIL - 2/7/2020 SE208578.006
Mercury	mg/kg	0.05	**0.12**	<0.05	**0.31**	<0.05

Moisture Content [AN002] Tested: 16/7/2020

PARAMETER	UOM	LOR	0407_BH036_0.1_20702 SOIL - 2/7/2020 SE208578.001	0407_BH036_0.3_20702 SOIL - 2/7/2020 SE208578.002	0407_QC417_20070 SOIL - 1/7/2020 SE208578.003	0407_BH035_0.1_20702 SOIL - 2/7/2020 SE208578.005	0407_BH035_0.4_20702 SOIL - 2/7/2020 SE208578.006
% Moisture	%w/w	1	**26.3**	**20.0**	<1.0	**28.1**	**17.0**

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid , mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser . Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC /MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents .
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup /fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS /ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE208578 R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	6

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208578 R0**
Date Received	02 Jul 2020
Date Reported	20 Jul 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Extraction Date	Moisture Content	1 item
	VOC's in Soil	2 items
	Volatile Petroleum Hydrocarbons in Soil	1 item
Duplicate	Volatile Petroleum Hydrocarbons in Soil	1 item

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	6 Soil
Date documentation received	9/7/2020@11:07am	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	4.7°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE208578 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH036_0.1_200702	SE208578.001	LB204567	02 Jul 2020	02 Jul 2020	30 Jul 2020	17 Jul 2020	30 Jul 2020	20 Jul 2020
0407_BH036_0.3_200702	SE208578.002	LB204567	02 Jul 2020	02 Jul 2020	30 Jul 2020	17 Jul 2020	30 Jul 2020	20 Jul 2020
0407_BH035_0.1_200702	SE208578.005	LB204567	02 Jul 2020	02 Jul 2020	30 Jul 2020	17 Jul 2020	30 Jul 2020	20 Jul 2020
0407_BH035_0.4_200702	SE208578.006	LB204567	02 Jul 2020	02 Jul 2020	30 Jul 2020	17 Jul 2020	30 Jul 2020	20 Jul 2020

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH036_0.1_200702	SE208578.001	LB204488	02 Jul 2020	02 Jul 2020	16 Jul 2020	16 Jul 2020	21 Jul 2020	20 Jul 2020
0407_BH036_0.3_200702	SE208578.002	LB204488	02 Jul 2020	02 Jul 2020	16 Jul 2020	16 Jul 2020	21 Jul 2020	20 Jul 2020
0407_QC417_200702	SE208578.003	LB204488	01 Jul 2020	02 Jul 2020	15 Jul 2020	16 Jul 2020†	21 Jul 2020	20 Jul 2020
0407_BH035_0.1_200702	SE208578.005	LB204488	02 Jul 2020	02 Jul 2020	16 Jul 2020	16 Jul 2020	21 Jul 2020	20 Jul 2020
0407_BH035_0.4_200702	SE208578.006	LB204488	02 Jul 2020	02 Jul 2020	16 Jul 2020	16 Jul 2020	21 Jul 2020	20 Jul 2020

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH036_0.1_200702	SE208578.001	LB204483	02 Jul 2020	02 Jul 2020	16 Jul 2020	16 Jul 2020	25 Aug 2020	20 Jul 2020
0407_BH036_0.3_200702	SE208578.002	LB204483	02 Jul 2020	02 Jul 2020	16 Jul 2020	16 Jul 2020	25 Aug 2020	20 Jul 2020
0407_BH035_0.1_200702	SE208578.005	LB204483	02 Jul 2020	02 Jul 2020	16 Jul 2020	16 Jul 2020	25 Aug 2020	20 Jul 2020
0407_BH035_0.4_200702	SE208578.006	LB204483	02 Jul 2020	02 Jul 2020	16 Jul 2020	16 Jul 2020	25 Aug 2020	20 Jul 2020

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH036_0.1_200702	SE208578.001	LB204566	02 Jul 2020	02 Jul 2020	29 Dec 2020	17 Jul 2020	29 Dec 2020	20 Jul 2020
0407_BH036_0.3_200702	SE208578.002	LB204566	02 Jul 2020	02 Jul 2020	29 Dec 2020	17 Jul 2020	29 Dec 2020	20 Jul 2020
0407_BH035_0.1_200702	SE208578.005	LB204566	02 Jul 2020	02 Jul 2020	29 Dec 2020	17 Jul 2020	29 Dec 2020	20 Jul 2020
0407_BH035_0.4_200702	SE208578.006	LB204566	02 Jul 2020	02 Jul 2020	29 Dec 2020	17 Jul 2020	29 Dec 2020	20 Jul 2020

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH036_0.1_200702	SE208578.001	LB204483	02 Jul 2020	02 Jul 2020	16 Jul 2020	16 Jul 2020	25 Aug 2020	20 Jul 2020
0407_BH036_0.3_200702	SE208578.002	LB204483	02 Jul 2020	02 Jul 2020	16 Jul 2020	16 Jul 2020	25 Aug 2020	20 Jul 2020
0407_BH035_0.1_200702	SE208578.005	LB204483	02 Jul 2020	02 Jul 2020	16 Jul 2020	16 Jul 2020	25 Aug 2020	20 Jul 2020
0407_BH035_0.4_200702	SE208578.006	LB204483	02 Jul 2020	02 Jul 2020	16 Jul 2020	16 Jul 2020	25 Aug 2020	20 Jul 2020

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH036_0.1_200702	SE208578.001	LB204478	02 Jul 2020	02 Jul 2020	16 Jul 2020	16 Jul 2020	25 Aug 2020	20 Jul 2020
0407_BH036_0.3_200702	SE208578.002	LB204478	02 Jul 2020	02 Jul 2020	16 Jul 2020	16 Jul 2020	25 Aug 2020	20 Jul 2020
0407_QC417_200702	SE208578.003	LB204478	01 Jul 2020	02 Jul 2020	15 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_QC517_200702	SE208578.004	LB204478	01 Jul 2020	02 Jul 2020	15 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_BH035_0.1_200702	SE208578.005	LB204478	02 Jul 2020	02 Jul 2020	16 Jul 2020	16 Jul 2020	25 Aug 2020	20 Jul 2020
0407_BH035_0.4_200702	SE208578.006	LB204478	02 Jul 2020	02 Jul 2020	16 Jul 2020	16 Jul 2020	25 Aug 2020	20 Jul 2020

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH036_0.1_200702	SE208578.001	LB204478	02 Jul 2020	02 Jul 2020	16 Jul 2020	16 Jul 2020	25 Aug 2020	20 Jul 2020
0407_BH036_0.3_200702	SE208578.002	LB204478	02 Jul 2020	02 Jul 2020	16 Jul 2020	16 Jul 2020	25 Aug 2020	20 Jul 2020
0407_QC417_200702	SE208578.003	LB204478	01 Jul 2020	02 Jul 2020	15 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_QC517_200702	SE208578.004	LB204478	01 Jul 2020	02 Jul 2020	15 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_BH035_0.1_200702	SE208578.005	LB204478	02 Jul 2020	02 Jul 2020	16 Jul 2020	16 Jul 2020	25 Aug 2020	20 Jul 2020
0407_BH035_0.4_200702	SE208578.006	LB204478	02 Jul 2020	02 Jul 2020	16 Jul 2020	16 Jul 2020	25 Aug 2020	20 Jul 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_BH036_0.1_200702	SE208578.001	%	60 - 130%	97
	0407_BH036_0.3_200702	SE208578.002	%	60 - 130%	99
	0407_BH035_0.1_200702	SE208578.005	%	60 - 130%	80
	0407_BH035_0.4_200702	SE208578.006	%	60 - 130%	82

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_BH036_0.1_200702	SE208578.001	%	60 - 130%	85
	0407_BH036_0.3_200702	SE208578.002	%	60 - 130%	81
	0407_QC417_200702	SE208578.003	%	60 - 130%	79
	0407_QC517_200702	SE208578.004	%	60 - 130%	84
	0407_BH035_0.1_200702	SE208578.005	%	60 - 130%	77
	0407_BH035_0.4_200702	SE208578.006	%	60 - 130%	83
d4-1,2-dichloroethane (Surrogate)	0407_BH036_0.1_200702	SE208578.001	%	60 - 130%	92
	0407_BH036_0.3_200702	SE208578.002	%	60 - 130%	118
	0407_QC417_200702	SE208578.003	%	60 - 130%	81
	0407_QC517_200702	SE208578.004	%	60 - 130%	86
	0407_BH035_0.1_200702	SE208578.005	%	60 - 130%	80
	0407_BH035_0.4_200702	SE208578.006	%	60 - 130%	86
d8-toluene (Surrogate)	0407_BH036_0.1_200702	SE208578.001	%	60 - 130%	79
	0407_BH036_0.3_200702	SE208578.002	%	60 - 130%	79
	0407_QC417_200702	SE208578.003	%	60 - 130%	80
	0407_QC517_200702	SE208578.004	%	60 - 130%	83
	0407_BH035_0.1_200702	SE208578.005	%	60 - 130%	73
	0407_BH035_0.4_200702	SE208578.006	%	60 - 130%	80

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_BH036_0.1_200702	SE208578.001	%	60 - 130%	85
	0407_BH036_0.3_200702	SE208578.002	%	60 - 130%	81
	0407_QC417_200702	SE208578.003	%	60 - 130%	79
	0407_BH035_0.1_200702	SE208578.005	%	60 - 130%	77
	0407_BH035_0.4_200702	SE208578.006	%	60 - 130%	83
d4-1,2-dichloroethane (Surrogate)	0407_BH036_0.1_200702	SE208578.001	%	60 - 130%	92
	0407_BH036_0.3_200702	SE208578.002	%	60 - 130%	118
	0407_QC417_200702	SE208578.003	%	60 - 130%	81
	0407_BH035_0.1_200702	SE208578.005	%	60 - 130%	80
	0407_BH035_0.4_200702	SE208578.006	%	60 - 130%	86
d8-toluene (Surrogate)	0407_BH036_0.1_200702	SE208578.001	%	60 - 130%	79
	0407_BH036_0.3_200702	SE208578.002	%	60 - 130%	79
	0407_QC417_200702	SE208578.003	%	60 - 130%	80
	0407_BH035_0.1_200702	SE208578.005	%	60 - 130%	73
	0407_BH035_0.4_200702	SE208578.006	%	60 - 130%	80

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result
LB204567.001	Mercury	mg/kg	0.05	<0.05

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB204483.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	81

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB204566.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB204483.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB204478.001	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	108
		d8-toluene (Surrogate)	%	-	74
		Bromofluorobenzene (Surrogate)	%	-	82
	Totals	Total BTEX	mg/kg	0.6	<0.6

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB204478.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	108

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208578.006	LB204567.011	Mercury	mg/kg	0.05	<0.05	<0.05	200	0

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208768.002	LB204488.011	% Moisture	%w/w	1	9.906213364510.2603369065		40	4
SE208768.006	LB204488.016	% Moisture	%w/w	1	11.8842364532	12.265625	38	3

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208767.003	LB204483.019		Arochlor 1016	mg/kg	0.2	0	0	200	0
			Arochlor 1221	mg/kg	0.2	0	0	200	0
			Arochlor 1232	mg/kg	0.2	0	0	200	0
			Arochlor 1242	mg/kg	0.2	0	0	200	0
			Arochlor 1248	mg/kg	0.2	0	0	200	0
			Arochlor 1254	mg/kg	0.2	0	0	200	0
			Arochlor 1260	mg/kg	0.2	0	0	200	0
			Arochlor 1262	mg/kg	0.2	0	0	200	0
			Arochlor 1268	mg/kg	0.2	0	0	200	0
			Total PCBs (Arochlors)	mg/kg	1	0	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.149	0.142	30	5

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208578.006	LB204566.014	Arsenic, As	mg/kg	1	<1	<1	200	0
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	<0.5	<0.5	159	0
		Copper, Cu	mg/kg	0.5	<0.5	<0.5	200	0
		Nickel, Ni	mg/kg	0.5	<0.5	<0.5	200	0
		Lead, Pb	mg/kg	1	<1	<1	149	0
		Zinc, Zn	mg/kg	2	<2.0	<2.0	163	0

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208767.003	LB204483.021		TRH C10-C14	mg/kg	20	0	0	200	0
			TRH C15-C28	mg/kg	45	0	0	200	0
			TRH C29-C36	mg/kg	45	0	0	200	0
			TRH C37-C40	mg/kg	100	0	0	200	0
			TRH C10-C36 Total	mg/kg	110	0	0	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	0	0	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	0	0	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	0	0	200	0
			TRH >C16-C34 (F3)	mg/kg	90	0	0	200	0
			TRH >C34-C40 (F4)	mg/kg	120	0	0	200	0

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208768.001	LB204478.014	Monocyclic	Benzene	mg/kg	0.1	0	0	200	0
		Aromatic	Toluene	mg/kg	0.1	0	0	200	0
			Ethylbenzene	mg/kg	0.1	0	0	200	0
			m/p-xylene	mg/kg	0.2	0	0	200	0
			o-xylene	mg/kg	0.1	0	0	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	0.060303070100.0598920854		196	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.314727099568.8750632121		50	30
			d8-toluene (Surrogate)	mg/kg	-	8.643973918	8.9363233296	50	3
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.880103865	48.8929037349	50	0
		Totals	Total Xylenes	mg/kg	0.3	0	0	200	0
			Total BTEX	mg/kg	0.6	0	0	200	0
SE208768.006	LB204478.020	Monocyclic	Benzene	mg/kg	0.1	0	0	200	0
		Aromatic	Toluene	mg/kg	0.1	0	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208768.006	LB204478.020	Monocyclic	Ethylbenzene	mg/kg	0.1	0	0	200	0
		Aromatic	m/p-xylene	mg/kg	0.2	0	0	200	0
			o-xylene	mg/kg	0.1	0	0	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	0.060305351	50.0600758852	196	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.317163696	48.8973941148	50	7
			d8-toluene (Surrogate)	mg/kg	-	7.844927190	28.2939581805	50	6
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.269856601	28.6011640969	50	4
		Totals	Total Xylenes	mg/kg	0.3	0	0	200	0
			Total BTEX	mg/kg	0.6	0	0	200	0

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208768.001	LB204478.014		TRH C6-C10	mg/kg	25	0.585434955	50.9476883940	200	0
			TRH C6-C9	mg/kg	20	0.586115961	51.1435673839	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.314727099	56.8750632121	30	30 ①
			d8-toluene (Surrogate)	mg/kg	-	8.643939181	88.9363233296	30	3
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.880103865	48.8929037349	30	0
		VPH F Bands	Benzene (F0)	mg/kg	0.1	0	0	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	0.585434955	50.9476883940	200	0
SE208768.006	LB204478.020		TRH C6-C10	mg/kg	25	0.870202130	40.4896154028	200	0
			TRH C6-C9	mg/kg	20	0.878175813	10.7042543689	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.317163696	48.8973941148	30	7
			d8-toluene (Surrogate)	mg/kg	-	7.844927190	28.2939581805	30	6
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.269856601	28.6011640969	30	4
		VPH F Bands	Benzene (F0)	mg/kg	0.1	0	0	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	0.870202130	40.4896154028	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204567.002	Mercury	mg/kg	0.05	0.24	0.2	70 - 130	121

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204483.002	Arochlor 1260	mg/kg	0.2	0.3	0.4	60 - 140	71

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204566.002	Arsenic, As	mg/kg	1	350	318.22	80 - 120	110
	Cadmium, Cd	mg/kg	0.3	5.4	5.41	80 - 120	99
	Chromium, Cr	mg/kg	0.5	44	38.31	80 - 120	115
	Copper, Cu	mg/kg	0.5	300	290	80 - 120	105
	Nickel, Ni	mg/kg	0.5	200	187	80 - 120	104
	Lead, Pb	mg/kg	1	93	89.9	80 - 120	103
	Zinc, Zn	mg/kg	2	280	273	80 - 120	102

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204483.002		TRH C10-C14	mg/kg	20	33	40	60 - 140	83
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	75
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	78
	TRH F Bands	TRH >C10-C16	mg/kg	25	32	40	60 - 140	80
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	75
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	75

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204478.002	Monocyclic	Benzene	mg/kg	0.1	5.1	5	60 - 140	102
	Aromatic	Toluene	mg/kg	0.1	3.7	5	60 - 140	74
		Ethylbenzene	mg/kg	0.1	3.9	5	60 - 140	77
		m/p-xylene	mg/kg	0.2	7.6	10	60 - 140	76
		o-xylene	mg/kg	0.1	3.8	5	60 - 140	76
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.8	10	70 - 130	98
		d8-toluene (Surrogate)	mg/kg	-	8.9	10	70 - 130	89
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.2	10	70 - 130	92

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204478.002		TRH C6-C10	mg/kg	25	68	92.5	60 - 140	73
		TRH C6-C9	mg/kg	20	63	80	60 - 140	78
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.8	10	70 - 130	98
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.2	10	70 - 130	92
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	44	62.5	60 - 140	70

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208799.001	LB204567.004	Mercury	mg/kg	0.05	0.24	0.02873259775	0.2	106

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208767.001	LB204483.020		Arochlor 1016	mg/kg	0.2	0	-	-
			Arochlor 1221	mg/kg	0.2	0	-	-
			Arochlor 1232	mg/kg	0.2	0	-	-
			Arochlor 1242	mg/kg	0.2	0	-	-
			Arochlor 1248	mg/kg	0.2	0	-	-
			Arochlor 1254	mg/kg	0.2	0	-	-
			Arochlor 1260	mg/kg	0.2	0	0.4	89
			Arochlor 1262	mg/kg	0.2	0	-	-
			Arochlor 1268	mg/kg	0.2	0	-	-
			Total PCBs (Arochlors)	mg/kg	1	0	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.133	-	89

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208799.001	LB204566.004	Arsenic, As	mg/kg	1	49	4.04073138011	50	91
		Cadmium, Cd	mg/kg	0.3	41	0.03455191580	50	82
		Chromium, Cr	mg/kg	0.5	56	11.5177659599(	50	89
		Copper, Cu	mg/kg	0.5	53	8.49470367323	50	89
		Nickel, Ni	mg/kg	0.5	52	9.07886139641	50	86
		Lead, Pb	mg/kg	1	60	15.3779059934(	50	88
		Zinc, Zn	mg/kg	2	69	33.6457342246(	50	72

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208767.001	LB204483.020		TRH C10-C14	mg/kg	20	0	40	88
			TRH C15-C28	mg/kg	45	0	40	103
			TRH C29-C36	mg/kg	45	0	40	93
			TRH C37-C40	mg/kg	100	0	-	-
			TRH C10-C36 Total	mg/kg	110	0	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	0	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25	0	40	93
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	0	-	-
			TRH >C16-C34 (F3)	mg/kg	90	0	40	110
			TRH >C34-C40 (F4)	mg/kg	120	0	-	-

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208578.001	LB204478.004	Monocyclic	Benzene	mg/kg	0.1	4.4	<0.1	5	88
		Aromatic	Toluene	mg/kg	0.1	3.2	<0.1	5	64
			Ethylbenzene	mg/kg	0.1	3.3	<0.1	5	67
			m/p-xylene	mg/kg	0.2	6.6	<0.2	10	66
			o-xylene	mg/kg	0.1	3.3	<0.1	5	66
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.3	9.2	10	93
			d8-toluene (Surrogate)	mg/kg	-	7.6	7.9	10	76
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.9	8.5	10	79
		Totals	Total Xylenes	mg/kg	0.3	9.9	<0.3	-	-
			Total BTEX	mg/kg	0.6	21	<0.6	-	-

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208578.001	LB204478.004		TRH C6-C10	mg/kg	25	63	<25	92.5	67
			TRH C6-C9	mg/kg	20	57	<20	80	71
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.3	9.2	10	93
			d8-toluene (Surrogate)	mg/kg	-	7.6	7.9	10	76
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.9	8.5	-	79
		VPH F	Benzene (F0)	mg/kg	0.1	4.4	<0.1	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208578.001	LB204478.004	VPH F	TRH C6-C10 minus BTEX (F1)	mg/kg	25	42	<25	62.5	66

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☑ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT:	DHA
PROJECT:	Randwick Barracks
PROJECT NUMBER:	610_30041
PROJECT MANAGER:	[redacted]
PM CONTACT No:	
LABORATORY:	SGS
LABORATORY ADDRESS:	Sydney
SAMPLER:	[redacted]
SAMPLER CONTACT	[redacted]
Email Reports and Invoices to:	LGRSYD@slrconsulting.com

Turnaround Time (TAT): ☑ Standard TAT ☐ Non Standard or Urgent TAT

Required TAT:

COC Number: 1 of 3

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	Hold	Additional Information (Comment on any gross contamination or specific requirements)
1	RWBB_TP44_0.1_200617	17.6.20	Soil		X		
2	RWBB_TP44_0.5_200617				X		
3	RWBB_TP45_0.1_200617			bag	X		
4	RWBB_TP45_0.5_200617			bag	X		
	RWBB_TP45_1.0_200617					X	
5	RWBB_TP54_0.1_200617			bag	X		
6	RWBB_TP54_0.5_200617			bag	X		
	RWBB_TP54_1.0_200617					X	
7	RWBB_TP63_0.1_200617				X		
8	RWBB_TP63_0.5_200617				X		
9	RWBB_QC109_200617				X		
	RWBB_QC209_200617				* Forward to Eurofins for Suite A		

SGS EHS Sydney COC

SE207657

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	Received by	Sign [redacted]	Date / Time 17/06/20	Temperature Received:
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time @ 3.40	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

000665

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Dawin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☑ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT: DHA	**LABORATORY:** SGS	**Turnaround Time (TAT)**	**COC Number** 2 of 3
PROJECT: Randwick Barracks	**LABORATORY ADDRESS:** Sydney	☑ Standard TAT	
PROJECT NUMBER: 610_30041	**SAMPLER:** [redacted]	☐ Non Standard or Urgent TAT	
PROJECT MANAGER: [redacted]	**SAMPLER CONTACT No:**	**Required TAT:**	
PM CONTACT No:	**Email Reports and Invoices to:** L6R540@stroconsulting.com		

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	Hold	Additional Information (Comment on any gross contamination or specific requirements)
10	RWBB_TP68_0.1_200617	17-6-20	Soil	bag	X		
11	RWBB-TP68_0.5_200617				X		
	RWBB_TP68_1.0_200617					X	
12	RWBB_TP69_0.1_200617			bag	X		
	RWBB_TP69_0.5_200617					X	
13	RWBB_TP69_1.0_200617				X		
14	RWBB_TP70_0.1_200617			bag	X		
15	RWBB_TP70_0.5_200617				X		
	RWBB_TP70_1.0_200617					X	
16	RWBB_TP71_0.1_200617			bag	X		
17	RWBB_TP71_0.5_200617				X		
	RWBB_TP71_1.0_200617					X	

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	**Received by**	Sign [redacted]	Date / Time 17/06/20	**Temperature Received:**
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time @ 3.40	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

000666

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Dawin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☑ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT: DHA	**LABORATORY:** SGS
PROJECT: Randwick Barracks	**LABORATORY ADDRESS:** Sydney
PROJECT NUMBER: 610-30041	**SAMPLER:** [redacted]
PROJECT MANAGER: [redacted]	**SAMPLER CONTACT No:**
PM CONTACT No:	**Email Reports and Invoices to:** LABS1@eshconsulting.com

Turnaround Time (TAT)

☑ Standard TAT

☐ Non Standard or Urgent TAT

Required TAT:

COC Number 3 of 3

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	Asbestos	Hold	Additional Information (Comment on any gross contamination or specific requirements)
18	RWBB_TP72_0.1_200617	17.6.20	Soil	bag	X			
	RWBB_TP72_0.5_200617						X	
19	RWBB_TP72_1.0_200617				X			
20	RWBB_QC13_200617				X			
	RWBB_QC13_200617				*Please forward to Eurofins for Suite A.			
21	RWBB_TP71_A01_200617		ACM			X		

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	**Received by**	Sign [redacted]	Date / Time 17/6/20	**Temperature Received:**
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time @ 3:40	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

SAMPLE RECEIPT ADVICE

SE207657

CLIENT DETAILS

Contact	LQRSYD
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	02 9427 8100
Facsimile	02 9427 8200
Email	lqrsyd@slrconsulting.com
Project	**610_30041 Randwick Barrack**
Order Number	**610_30041**
Samples	21

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Wed 17/6/2020
Report Due	Wed 24/6/2020
SGS Reference	**SE207657**

SUBMISSION DETAILS

This is to confirm that 21 samples were received on Wednesday 17/6/2020. Results are expected to be ready by COB Wednesday 24/6/2020.
Please quote SGS reference SE207657 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	20 Soil, 1 Material
Date documentation received	17/6/2020	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	10.3°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

7 soil samples have been placed on hold as no tests have been assigned for them by the client. These samples will not be processed.

This document is issued by the Company under its General Conditions of Service accessible at www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

SAMPLE RECEIPT ADVICE

SE207657

CLIENT DETAILS

Client SLR CONSULTING AUSTRALIA PTY LTD

Project 610_30041 Randwick Barrack

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	Speciated Phenols in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
001	RWBB_TP44_0.1_200617	29	14	26	11	18	10	81	7
002	RWBB_TP44_0.5_200617	29	14	26	11	18	10	81	7
003	RWBB_TP45_0.1_200617	29	14	26	11	18	10	81	7
004	RWBB_TP45_0.5_200617	29	14	26	11	18	10	81	7
005	RWBB_TP54_0.1_200617	29	14	26	11	18	10	81	7
006	RWBB_TP54_0.5_200617	29	14	26	11	18	10	81	7
007	RWBB_TP63_0.1_200617	29	14	26	11	18	10	81	7
008	RWBB_TP63_0.5_200617	29	14	26	11	18	10	81	7
009	RWBB_QC109_200617	29	14	26	11	18	10	81	7
010	RWBB_TP68_0.1_200617	29	14	26	11	18	10	81	7
011	RWBB_TP68_0.5_200617	29	14	26	11	18	10	81	7
012	RWBB_TP69_0.1_200617	29	14	26	11	18	10	81	7
013	RWBB_TP69_1.0_200617	29	14	26	11	18	10	81	7
014	RWBB_TP70_0.1_200617	29	14	26	11	18	10	81	7
015	RWBB_TP70_0.5_200617	29	14	26	11	18	10	81	7
016	RWBB_TP71_0.1_200617	29	14	26	11	18	10	81	7
017	RWBB_TP71_0.5_200617	29	14	26	11	18	10	81	7
018	RWBB_TP72_0.1_200617	29	14	26	11	18	10	81	7
019	RWBB_TP72_1.0_200617	29	14	26	11	18	10	81	7
020	RWBB_QC113_200617	29	14	26	11	18	10	81	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE207657

CLIENT DETAILS

Client SLR CONSULTING AUSTRALIA PTY LTD

Project 610_30041 Randwick Barrack

SUMMARY OF ANALYSIS

No.	Sample ID	Fibre ID in bulk materials	Fibre Identification in soil	Gravimetric Determination of Asbestos in Soil	Mercury in Soil	Moisture Content	Total Recoverable Elements in Soil/Waste
001	RWBB_TP44_0.1_200617	-	2	9	1	1	7
002	RWBB_TP44_0.5_200617	-	2	9	1	1	7
003	RWBB_TP45_0.1_200617	-	2	9	1	1	7
004	RWBB_TP45_0.5_200617	-	2	9	1	1	7
005	RWBB_TP54_0.1_200617	-	2	9	1	1	7
006	RWBB_TP54_0.5_200617	-	2	9	1	1	7
007	RWBB_TP63_0.1_200617	-	2	9	1	1	7
008	RWBB_TP63_0.5_200617	-	2	9	1	1	7
009	RWBB_QC109_200617	-	2	9	1	1	7
010	RWBB_TP68_0.1_200617	-	2	9	1	1	7
011	RWBB_TP68_0.5_200617	-	2	9	1	1	7
012	RWBB_TP69_0.1_200617	-	2	9	1	1	7
013	RWBB_TP69_1.0_200617	-	2	9	1	1	7
014	RWBB_TP70_0.1_200617	-	2	9	1	1	7
015	RWBB_TP70_0.5_200617	-	2	9	1	1	7
016	RWBB_TP71_0.1_200617	-	2	9	1	1	7
017	RWBB_TP71_0.5_200617	-	2	9	1	1	7
018	RWBB_TP72_0.1_200617	-	2	9	1	1	7
019	RWBB_TP72_1.0_200617	-	2	9	1	1	7
020	RWBB_QC113_200617	-	2	9	1	1	7
021	RWBB_TP71_A01_200617	1	-	-	-	-	-

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610_30041 Randwick Barrack**
Order Number	**000664--000666**
Samples	21

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207657 R1**
Date Received	17/6/2020
Date Reported	1/7/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.

Sample #10: Asbestos found in approx 6x4x2mm cement sheet fragments in >2mm portion.
Sample #14: Asbestos found in approx 8x5x3mm cement sheet fragments in >2mm portion.

Asbestos analysed by Approved Identifiers Ravee Sivasubramaniam and Yusuf Kuthpudin .

This report cancels and supersedes the report No.SE207657 R0 dated 24th June 2020 issued by SGS Environment, Health and Safety due to amendment of sample id's.

SIGNATORIES

[redacted]

Chemist | Senior Organic Chemist/Metals Chemist | Metals/Inorganics Team Leader

[redacted]

Organic Section Head | Asbestos Analyst

VOC's in Soil [AN433] Tested: 18/6/2020

PARAMETER	UOM	LOR	0407_TP44_0.1_200(17 SOIL - 17/6/2020 SE207657.001	0407_TP44_0.5_200(17 SOIL - 17/6/2020 SE207657.002	0407_TP45_0.1_200(17 SOIL - 17/6/2020 SE207657.003	0407_TP45_0.5_200(17 SOIL - 17/6/2020 SE207657.004	0407_TP54_0.1_200(17 SOIL - 17/6/2020 SE207657.005
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 18/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP44_0.1_200(17 SOIL - 17/6/2020 SE207657.001	0407_TP44_0.5_200(17 SOIL - 17/6/2020 SE207657.002	0407_TP45_0.1_200(17 SOIL - 17/6/2020 SE207657.003	0407_TP45_0.5_200(17 SOIL - 17/6/2020 SE207657.004	0407_TP54_0.1_200(17 SOIL - 17/6/2020 SE207657.005
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 18/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP54_0.5_200(17 SOIL - 17/6/2020 SE207657.006	0407_TP63_0.1_200(17 SOIL - 17/6/2020 SE207657.007	0407_TP63_0.5_200(17 SOIL - 17/6/2020 SE207657.008	0407_QC109_20061 SOIL - 17/6/2020 SE207657.009	0407_TP68_0.1_200(17 SOIL - 17/6/2020 SE207657.010
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 18/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP54_0.5_200(17 SOIL - 17/6/2020 SE207657.006	0407_TP63_0.1_200(17 SOIL - 17/6/2020 SE207657.007	0407_TP63_0.5_200(17 SOIL - 17/6/2020 SE207657.008	0407_QC109_20061 SOIL - 17/6/2020 SE207657.009	0407_TP68_0.1_200(17 SOIL - 17/6/2020 SE207657.010
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 18/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP68_0.5_200(17 SOIL - 17/6/2020 SE207657.011	0407_TP69_0.1_200(17 SOIL - 17/6/2020 SE207657.012	0407_TP69_1.0_200(17 SOIL - 17/6/2020 SE207657.013	0407_TP70_0.1_200(17 SOIL - 17/6/2020 SE207657.014	0407_TP70_0.5_200(17 SOIL - 17/6/2020 SE207657.015
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 18/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP68_0.5_200(17 SOIL - 17/6/2020 SE207657.011	0407_TP69_0.1_200(17 SOIL - 17/6/2020 SE207657.012	0407_TP69_1.0_200(17 SOIL - 17/6/2020 SE207657.013	0407_TP70_0.1_200(17 SOIL - 17/6/2020 SE207657.014	0407_TP70_0.5_200(17 SOIL - 17/6/2020 SE207657.015
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 18/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP71_0.1_20017 SOIL - 17/6/2020 SE207657.016	0407_TP71_0.5_20017 SOIL - 17/6/2020 SE207657.017	0407_TP72_0.1_20017 SOIL - 17/6/2020 SE207657.018	0407_TP72_1.0_20017 SOIL - 17/6/2020 SE207657.019	0407_QC113_200617 SOIL - 17/6/2020 SE207657.020
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 18/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP71_0.1_20017 SOIL - 17/6/2020 SE207657.016	0407_TP71_0.5_20017 SOIL - 17/6/2020 SE207657.017	0407_TP72_0.1_20017 SOIL - 17/6/2020 SE207657.018	0407_TP72_1.0_20017 SOIL - 17/6/2020 SE207657.019	0407_QC113_200617 SOIL - 17/6/2020 SE207657.020
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 18/6/2020

PARAMETER	UOM	LOR	0407_TP44_0.1_200(17 SOIL - 17/6/2020 SE207657.001	0407_TP44_0.5_200(17 SOIL - 17/6/2020 SE207657.002	0407_TP45_0.1_200(17 SOIL - 17/6/2020 SE207657.003	0407_TP45_0.5_200(17 SOIL - 17/6/2020 SE207657.004	0407_TP54_0.1_200(17 SOIL - 17/6/2020 SE207657.005
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP54_0.5_200(17 SOIL - 17/6/2020 SE207657.006	0407_TP63_0.1_200(17 SOIL - 17/6/2020 SE207657.007	0407_TP63_0.5_200(17 SOIL - 17/6/2020 SE207657.008	0407_QC109_20061(SOIL - 17/6/2020 SE207657.009	0407_TP68_0.1_200(17 SOIL - 17/6/2020 SE207657.010
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP68_0.5_200(17 SOIL - 17/6/2020 SE207657.011	0407_TP69_0.1_200(17 SOIL - 17/6/2020 SE207657.012	0407_TP69_1.0_200(17 SOIL - 17/6/2020 SE207657.013	0407_TP70_0.1_200(17 SOIL - 17/6/2020 SE207657.014	0407_TP70_0.5_200(17 SOIL - 17/6/2020 SE207657.015
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP71_0.1_200(17 SOIL - 17/6/2020 SE207657.016	0407_TP71_0.5_200(17 SOIL - 17/6/2020 SE207657.017	0407_TP72_0.1_200(17 SOIL - 17/6/2020 SE207657.018	0407_TP72_1.0_200(17 SOIL - 17/6/2020 SE207657.019	0407_QC113_20061(SOIL - 17/6/2020 SE207657.020
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 18/6/2020

PARAMETER	UOM	LOR	0407_TP44_0.1_200(17 SOIL - 17/6/2020 SE207657.001	0407_TP44_0.5_200(17 SOIL - 17/6/2020 SE207657.002	0407_TP45_0.1_200(17 SOIL - 17/6/2020 SE207657.003	0407_TP45_0.5_200(17 SOIL - 17/6/2020 SE207657.004	0407_TP54_0.1_200(17 SOIL - 17/6/2020 SE207657.005
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP54_0.5_200(17 SOIL - 17/6/2020 SE207657.006	0407_TP63_0.1_200(17 SOIL - 17/6/2020 SE207657.007	0407_TP63_0.5_200(17 SOIL - 17/6/2020 SE207657.008	0407_QC109_20061 SOIL - 17/6/2020 SE207657.009	0407_TP68_0.1_200(17 SOIL - 17/6/2020 SE207657.010
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP68_0.5_200(17 SOIL - 17/6/2020 SE207657.011	0407_TP69_0.1_200(17 SOIL - 17/6/2020 SE207657.012	0407_TP69_1.0_200(17 SOIL - 17/6/2020 SE207657.013	0407_TP70_0.1_200(17 SOIL - 17/6/2020 SE207657.014	0407_TP70_0.5_200(17 SOIL - 17/6/2020 SE207657.015
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 18/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP71_0.1_20017 SOIL - 17/6/2020 SE207657.016	0407_TP71_0.5_20017 SOIL - 17/6/2020 SE207657.017	0407_TP72_0.1_20017 SOIL - 17/6/2020 SE207657.018	0407_TP72_1.0_20017 SOIL - 17/6/2020 SE207657.019	0407_QC113_200617 SOIL - 17/6/2020 SE207657.020
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 18/6/2020

PARAMETER	UOM	LOR	0407_TP44_0.1_200(17 SOIL - 17/6/2020 SE207657.001	0407_TP44_0.5_200(17 SOIL - 17/6/2020 SE207657.002	0407_TP45_0.1_200(17 SOIL - 17/6/2020 SE207657.003	0407_TP45_0.5_200(17 SOIL - 17/6/2020 SE207657.004	0407_TP54_0.1_200(17 SOIL - 17/6/2020 SE207657.005
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	0.2	0.2	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	0.7	0.6	0.2
Pyrene	mg/kg	0.1	<0.1	<0.1	0.7	0.6	0.2
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	0.3	0.3	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	0.3	0.3	0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	0.3	0.3	0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	0.2	0.2	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	0.3	0.3	0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	0.1	0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	0.1	0.2	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	0.4	0.4	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	0.5	0.5	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	0.5	0.5	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	3.2	3.2	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	3.2	3.2	<0.8

PARAMETER	UOM	LOR	0407_TP54_0.5_200(17 SOIL - 17/6/2020 SE207657.006	0407_TP63_0.1_200(17 SOIL - 17/6/2020 SE207657.007	0407_TP63_0.5_200(17 SOIL - 17/6/2020 SE207657.008	0407_QC109_20061 SOIL - 17/6/2020 SE207657.009	0407_TP68_0.1_200(17 SOIL - 17/6/2020 SE207657.010
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	0.2
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	0.1	<0.1	<0.1	<0.1	0.5
Pyrene	mg/kg	0.1	0.2	<0.1	<0.1	<0.1	0.5
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	0.2
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	0.2
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	0.3
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	0.2
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	0.3
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	0.2
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	0.4
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	0.5
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	0.4
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	2.7
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	2.7

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 18/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP68_0.5_20017 SOIL - 17/6/2020 SE207657.011	0407_TP69_0.1_20017 SOIL - 17/6/2020 SE207657.012	0407_TP69_1.0_20017 SOIL - 17/6/2020 SE207657.013	0407_TP70_0.1_20017 SOIL - 17/6/2020 SE207657.014	0407_TP70_0.5_20017 SOIL - 17/6/2020 SE207657.015
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	0.2	<0.1	0.4	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	0.4	<0.1	0.9	<0.1
Pyrene	mg/kg	0.1	<0.1	0.5	<0.1	0.9	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	0.2	<0.1	0.4	<0.1
Chrysene	mg/kg	0.1	<0.1	0.3	<0.1	0.4	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	0.3	<0.1	0.5	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	0.2	<0.1	0.2	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	0.4	<0.1	0.5	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	0.2	<0.1	0.2	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	0.2	<0.1	0.2	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	0.5	<0.2	0.6	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	0.6	<0.3	0.7	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	0.5	<0.2	0.6	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	2.8	<0.8	4.7	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	2.8	<0.8	4.7	<0.8

PARAMETER	UOM	LOR	0407_TP71_0.1_20017 SOIL - 17/6/2020 SE207657.016	0407_TP71_0.5_20017 SOIL - 17/6/2020 SE207657.017	0407_TP72_0.1_20017 SOIL - 17/6/2020 SE207657.018	0407_TP72_1.0_20017 SOIL - 17/6/2020 SE207657.019	0407_QC113_200617 SOIL - 17/6/2020 SE207657.020
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	0.5	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	0.9	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	0.9	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	0.4	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	0.4	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	0.5	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	0.3	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	0.5	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.2	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	0.3	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	0.6	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	0.7	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	0.7	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	5.1	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	5.1	<0.8	<0.8	<0.8	<0.8

Speciated Phenols in Soil [AN420] Tested: 18/6/2020

PARAMETER	UOM	LOR	0407_TP44_0.1_200(17 SOIL - 17/6/2020 SE207657.001	0407_TP44_0.5_200(17 SOIL - 17/6/2020 SE207657.002	0407_TP45_0.1_200(17 SOIL - 17/6/2020 SE207657.003	0407_TP45_0.5_200(17 SOIL - 17/6/2020 SE207657.004	0407_TP54_0.1_200(17 SOIL - 17/6/2020 SE207657.005
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_TP54_0.5_200(17 SOIL - 17/6/2020 SE207657.006	0407_TP63_0.1_200(17 SOIL - 17/6/2020 SE207657.007	0407_TP63_0.5_200(17 SOIL - 17/6/2020 SE207657.008	0407_QC109_20061 SOIL - 17/6/2020 SE207657.009	0407_TP68_0.1_200(17 SOIL - 17/6/2020 SE207657.010
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

Speciated Phenols in Soil [AN420] Tested: 18/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP68_0.5_200(17 SOIL - 17/6/2020 SE207657.011	0407_TP69_0.1_200(17 SOIL - 17/6/2020 SE207657.012	0407_TP69_1.0_200(17 SOIL - 17/6/2020 SE207657.013	0407_TP70_0.1_200(17 SOIL - 17/6/2020 SE207657.014	0407_TP70_0.5_200(17 SOIL - 17/6/2020 SE207657.015
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_TP71_0.1_200(17 SOIL - 17/6/2020 SE207657.016	0407_TP71_0.5_200(17 SOIL - 17/6/2020 SE207657.017	0407_TP72_0.1_200(17 SOIL - 17/6/2020 SE207657.018	0407_TP72_1.0_200(17 SOIL - 17/6/2020 SE207657.019	0407_QC113_200617 SOIL - 17/6/2020 SE207657.020
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

OC Pesticides in Soil [AN420] Tested: 18/6/2020

PARAMETER	UOM	LOR	0407_TP44_0.1_200(17 SOIL - 17/6/2020 SE207657.001	0407_TP44_0.5_200(17 SOIL - 17/6/2020 SE207657.002	0407_TP45_0.1_200(17 SOIL - 17/6/2020 SE207657.003	0407_TP45_0.5_200(17 SOIL - 17/6/2020 SE207657.004	0407_TP54_0.1_200(17 SOIL - 17/6/2020 SE207657.005
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 18/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP54_0.5_200(17 SOIL - 17/6/2020 SE207657.006	0407_TP63_0.1_200(17 SOIL - 17/6/2020 SE207657.007	0407_TP63_0.5_200(17 SOIL - 17/6/2020 SE207657.008	0407_QC109_20061 SOIL - 17/6/2020 SE207657.009	0407_TP68_0.1_200(17 SOIL - 17/6/2020 SE207657.010
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 18/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP68_0.5_200(17 SOIL - 17/6/2020 SE207657.011	0407_TP69_0.1_200(17 SOIL - 17/6/2020 SE207657.012	0407_TP69_1.0_200(17 SOIL - 17/6/2020 SE207657.013	0407_TP70_0.1_200(17 SOIL - 17/6/2020 SE207657.014	0407_TP70_0.5_200(17 SOIL - 17/6/2020 SE207657.015
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 18/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP71_0.1_20017 SOIL - 17/6/2020 SE207657.016	0407_TP71_0.5_20017 SOIL - 17/6/2020 SE207657.017	0407_TP72_0.1_20017 SOIL - 17/6/2020 SE207657.018	0407_TP72_1.0_20017 SOIL - 17/6/2020 SE207657.019	0407_QC113_200617 SOIL - 17/6/2020 SE207657.020
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OP Pesticides in Soil [AN420] Tested: 18/6/2020

PARAMETER	UOM	LOR	0407_TP44_0.1_200(17 SOIL - 17/6/2020 SE207657.001	0407_TP44_0.5_200(17 SOIL - 17/6/2020 SE207657.002	0407_TP45_0.1_200(17 SOIL - 17/6/2020 SE207657.003	0407_TP45_0.5_200(17 SOIL - 17/6/2020 SE207657.004	0407_TP54_0.1_200(17 SOIL - 17/6/2020 SE207657.005
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP54_0.5_200(17 SOIL - 17/6/2020 SE207657.006	0407_TP63_0.1_200(17 SOIL - 17/6/2020 SE207657.007	0407_TP63_0.5_200(17 SOIL - 17/6/2020 SE207657.008	0407_QC109_20061 SOIL - 17/6/2020 SE207657.009	0407_TP68_0.1_200(17 SOIL - 17/6/2020 SE207657.010
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP68_0.5_200(17 SOIL - 17/6/2020 SE207657.011	0407_TP69_0.1_200(17 SOIL - 17/6/2020 SE207657.012	0407_TP69_1.0_200(17 SOIL - 17/6/2020 SE207657.013	0407_TP70_0.1_200(17 SOIL - 17/6/2020 SE207657.014	0407_TP70_0.5_200(17 SOIL - 17/6/2020 SE207657.015
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

OP Pesticides in Soil [AN420] Tested: 18/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP71_0.1_200(17 SOIL - 17/6/2020 SE207657.016	0407_TP71_0.5_200(17 SOIL - 17/6/2020 SE207657.017	0407_TP72_0.1_200(17 SOIL - 17/6/2020 SE207657.018	0407_TP72_1.0_200(17 SOIL - 17/6/2020 SE207657.019	0407_QC113_200617 SOIL - 17/6/2020 SE207657.020
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PCBs in Soil [AN420] Tested: 18/6/2020

PARAMETER	UOM	LOR	0407_TP44_0.1_200(17 SOIL - 17/6/2020 SE207657.001	0407_TP44_0.5_200(17 SOIL - 17/6/2020 SE207657.002	0407_TP45_0.1_200(17 SOIL - 17/6/2020 SE207657.003	0407_TP45_0.5_200(17 SOIL - 17/6/2020 SE207657.004	0407_TP54_0.1_200(17 SOIL - 17/6/2020 SE207657.005
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP54_0.5_200(17 SOIL - 17/6/2020 SE207657.006	0407_TP63_0.1_200(17 SOIL - 17/6/2020 SE207657.007	0407_TP63_0.5_200(17 SOIL - 17/6/2020 SE207657.008	0407_QC109_20061 SOIL - 17/6/2020 SE207657.009	0407_TP68_0.1_200(17 SOIL - 17/6/2020 SE207657.010
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP68_0.5_200(17 SOIL - 17/6/2020 SE207657.011	0407_TP69_0.1_200(17 SOIL - 17/6/2020 SE207657.012	0407_TP69_1.0_200(17 SOIL - 17/6/2020 SE207657.013	0407_TP70_0.1_200(17 SOIL - 17/6/2020 SE207657.014	0407_TP70_0.5_200(17 SOIL - 17/6/2020 SE207657.015
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PCBs in Soil [AN420] Tested: 18/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP71_0.1_200(17 SOIL - 17/6/2020 SE207657.016	0407_TP71_0.5_200(17 SOIL - 17/6/2020 SE207657.017	0407_TP72_0.1_200(17 SOIL - 17/6/2020 SE207657.018	0407_TP72_1.0_200(17 SOIL - 17/6/2020 SE207657.019	0407_QC113_200617 SOIL - 17/6/2020 SE207657.020
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 18/6/2020

PARAMETER	UOM	LOR	0407_TP44_0.1_200(17 SOIL - 17/6/2020 SE207657.001	0407_TP44_0.5_200(17 SOIL - 17/6/2020 SE207657.002	0407_TP45_0.1_200(17 SOIL - 17/6/2020 SE207657.003	0407_TP45_0.5_200(17 SOIL - 17/6/2020 SE207657.004	0407_TP54_0.1_200(17 SOIL - 17/6/2020 SE207657.005
Arsenic, As	mg/kg	1	<1	<1	1	<1	1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	<0.5	<0.5	3.3	2.2	18
Copper, Cu	mg/kg	0.5	3.3	1.1	46	7.6	20
Lead, Pb	mg/kg	1	5	<1	26	33	47
Nickel, Ni	mg/kg	0.5	0.6	<0.5	2.4	1.0	8.4
Zinc, Zn	mg/kg	2	12	13	33	25	49

PARAMETER	UOM	LOR	0407_TP54_0.5_200(17 SOIL - 17/6/2020 SE207657.006	0407_TP63_0.1_200(17 SOIL - 17/6/2020 SE207657.007	0407_TP63_0.5_200(17 SOIL - 17/6/2020 SE207657.008	0407_QC109_20061(SOIL - 17/6/2020 SE207657.009	0407_TP68_0.1_200(17 SOIL - 17/6/2020 SE207657.010
Arsenic, As	mg/kg	1	<1	<1	<1	<1	9
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	0.6
Chromium, Cr	mg/kg	0.5	2.4	1.0	0.8	1.1	23
Copper, Cu	mg/kg	0.5	4.6	2.7	1.6	2.0	66
Lead, Pb	mg/kg	1	15	8	2	2	160
Nickel, Ni	mg/kg	0.5	0.9	1.1	1.0	1.0	13
Zinc, Zn	mg/kg	2	11	29	5.9	6.9	340

PARAMETER	UOM	LOR	0407_TP68_0.5_200(17 SOIL - 17/6/2020 SE207657.011	0407_TP69_0.1_200(17 SOIL - 17/6/2020 SE207657.012	0407_TP69_1.0_200(17 SOIL - 17/6/2020 SE207657.013	0407_TP70_0.1_200(17 SOIL - 17/6/2020 SE207657.014	0407_TP70_0.5_200(17 SOIL - 17/6/2020 SE207657.015
Arsenic, As	mg/kg	1	<1	11	<1	6	<1
Cadmium, Cd	mg/kg	0.3	<0.3	4.7	<0.3	0.4	<0.3
Chromium, Cr	mg/kg	0.5	<0.5	51	<0.5	17	<0.5
Copper, Cu	mg/kg	0.5	0.5	69	<0.5	70	0.8
Lead, Pb	mg/kg	1	<1	210	<1	160	<1
Nickel, Ni	mg/kg	0.5	<0.5	10	<0.5	10	<0.5
Zinc, Zn	mg/kg	2	<2.0	250	<2.0	320	<2.0

PARAMETER	UOM	LOR	0407_TP71_0.1_200(17 SOIL - 17/6/2020 SE207657.016	0407_TP71_0.5_200(17 SOIL - 17/6/2020 SE207657.017	0407_TP72_0.1_200(17 SOIL - 17/6/2020 SE207657.018	0407_TP72_1.0_200(17 SOIL - 17/6/2020 SE207657.019	0407_QC113_20061(SOIL - 17/6/2020 SE207657.020
Arsenic, As	mg/kg	1	6	2	<1	<1	<1
Cadmium, Cd	mg/kg	0.3	0.4	1.1	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	27	1.9	<0.5	<0.5	<0.5
Copper, Cu	mg/kg	0.5	50	4.4	1.4	<0.5	<0.5
Lead, Pb	mg/kg	1	110	4	3	<1	<1
Nickel, Ni	mg/kg	0.5	19	0.8	<0.5	<0.5	<0.5
Zinc, Zn	mg/kg	2	280	120	6.6	<2.0	<2.0

Mercury in Soil [AN312] Tested: 18/6/2020

PARAMETER	UOM	LOR	0407_TP44_0.1_20017 SOIL - 17/6/2020 SE207657.001	0407_TP44_0.5_20017 SOIL - 17/6/2020 SE207657.002	0407_TP45_0.1_20017 SOIL - 17/6/2020 SE207657.003	0407_TP45_0.5_20017 SOIL - 17/6/2020 SE207657.004	0407_TP54_0.1_20017 SOIL - 17/6/2020 SE207657.005
Mercury	mg/kg	0.05	<0.05	<0.05	**0.05**	<0.05	**0.46**

PARAMETER	UOM	LOR	0407_TP54_0.5_20017 SOIL - 17/6/2020 SE207657.006	0407_TP63_0.1_20017 SOIL - 17/6/2020 SE207657.007	0407_TP63_0.5_20017 SOIL - 17/6/2020 SE207657.008	0407_QC109_20061 SOIL - 17/6/2020 SE207657.009	0407_TP68_0.1_20017 SOIL - 17/6/2020 SE207657.010
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	**0.12**

PARAMETER	UOM	LOR	0407_TP68_0.5_20017 SOIL - 17/6/2020 SE207657.011	0407_TP69_0.1_20017 SOIL - 17/6/2020 SE207657.012	0407_TP69_1.0_20017 SOIL - 17/6/2020 SE207657.013	0407_TP70_0.1_20017 SOIL - 17/6/2020 SE207657.014	0407_TP70_0.5_20017 SOIL - 17/6/2020 SE207657.015
Mercury	mg/kg	0.05	<0.05	**0.12**	<0.05	**0.14**	<0.05

PARAMETER	UOM	LOR	0407_TP71_0.1_20017 SOIL - 17/6/2020 SE207657.016	0407_TP71_0.5_20017 SOIL - 17/6/2020 SE207657.017	0407_TP72_0.1_20017 SOIL - 17/6/2020 SE207657.018	0407_TP72_1.0_20017 SOIL - 17/6/2020 SE207657.019	0407_QC113_200617 SOIL - 17/6/2020 SE207657.020
Mercury	mg/kg	0.05	**0.13**	<0.05	<0.05	<0.05	<0.05

Moisture Content [AN002] Tested: 18/6/2020

PARAMETER	UOM	LOR	0407_TP44_0.1_200(17 SOIL - 17/6/2020 SE207657.001	0407_TP44_0.5_200(17 SOIL - 17/6/2020 SE207657.002	0407_TP45_0.1_200(17 SOIL - 17/6/2020 SE207657.003	0407_TP45_0.5_200(17 SOIL - 17/6/2020 SE207657.004	0407_TP54_0.1_200(17 SOIL - 17/6/2020 SE207657.005
% Moisture	%w/w	1	3.2	3.8	7.7	8.5	10.6

PARAMETER	UOM	LOR	0407_TP54_0.5_200(17 SOIL - 17/6/2020 SE207657.006	0407_TP63_0.1_200(17 SOIL - 17/6/2020 SE207657.007	0407_TP63_0.5_200(17 SOIL - 17/6/2020 SE207657.008	0407_QC109_20061(SOIL - 17/6/2020 SE207657.009	0407_TP68_0.1_200(17 SOIL - 17/6/2020 SE207657.010
% Moisture	%w/w	1	7.9	3.6	4.0	4.2	19.1

PARAMETER	UOM	LOR	0407_TP68_0.5_200(17 SOIL - 17/6/2020 SE207657.011	0407_TP69_0.1_200(17 SOIL - 17/6/2020 SE207657.012	0407_TP69_1.0_200(17 SOIL - 17/6/2020 SE207657.013	0407_TP70_0.1_200(17 SOIL - 17/6/2020 SE207657.014	0407_TP70_0.5_200(17 SOIL - 17/6/2020 SE207657.015
% Moisture	%w/w	1	3.3	18.0	4.0	20.3	3.2

PARAMETER	UOM	LOR	0407_TP71_0.1_200(17 SOIL - 17/6/2020 SE207657.016	0407_TP71_0.5_200(17 SOIL - 17/6/2020 SE207657.017	0407_TP72_0.1_200(17 SOIL - 17/6/2020 SE207657.018	0407_TP72_1.0_200(17 SOIL - 17/6/2020 SE207657.019	0407_QC113_200617 SOIL - 17/6/2020 SE207657.020
% Moisture	%w/w	1	16.4	8.1	3.3	4.4	3.3

Fibre Identification in soil [AN602] Tested: 23/6/2020

PARAMETER	UOM	LOR	0407_TP45_0.1_200(17 SOIL - 17/6/2020 SE207657.003	0407_TP45_0.5_200(17 SOIL - 17/6/2020 SE207657.004	0407_TP54_0.1_200(17 SOIL - 17/6/2020 SE207657.005	0407_TP54_0.5_200(17 SOIL - 17/6/2020 SE207657.006	0407_TP68_0.1_200(17 SOIL - 17/6/2020 SE207657.010
Asbestos Detected	No unit	-	No	No	No	No	Yes
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	**>0.01**

PARAMETER	UOM	LOR	0407_TP69_0.1_200(17 SOIL - 17/6/2020 SE207657.012	0407_TP70_0.1_200(17 SOIL - 17/6/2020 SE207657.014	0407_TP71_0.1_200(17 SOIL - 17/6/2020 SE207657.016	0407_TP72_0.1_200(17 SOIL - 17/6/2020 SE207657.018
Asbestos Detected	No unit	-	No	Yes	No	No
Estimated Fibres*	%w/w	0.01	<0.01	**>0.01**	<0.01	<0.01

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 23/6/2020

PARAMETER	UOM	LOR	0407_TP45_0.1_200(17 SOIL - 17/6/2020 SE207657.003	0407_TP45_0.5_200(17 SOIL - 17/6/2020 SE207657.004	0407_TP54_0.1_200(17 SOIL - 17/6/2020 SE207657.005	0407_TP54_0.5_200(17 SOIL - 17/6/2020 SE207657.006	0407_TP68_0.1_200(17 SOIL - 17/6/2020 SE207657.010
Total Sample Weight*	g	1	**652**	**681**	**783**	**637**	**628**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	**0.0711**
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	**0.011**
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	**0.011**
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP69_0.1_200(17 SOIL - 17/6/2020 SE207657.012	0407_TP70_0.1_200(17 SOIL - 17/6/2020 SE207657.014	0407_TP71_0.1_200(17 SOIL - 17/6/2020 SE207657.016	0407_TP72_0.1_200(17 SOIL - 17/6/2020 SE207657.018
Total Sample Weight*	g	1	**634**	**505**	**659**	**655**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	**0.0832**	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	**0.016**	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	**0.016**	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-

Fibre ID in bulk materials [AN602] Tested: 24/6/2020

PARAMETER	UOM	LOR	0407_TP71_A01_20017 MATERIAL - 17/6/2020 SE207657.021
Asbestos Detected	No unit	-	Yes

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid, mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents .
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples, Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.
AN605	This technique gravimetrically determines the mass of Bonded Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight. Any fibrous asbestos (FA) found in this fraction will be added to the 2-7mm fraction and its mass recorded there.

AN605	This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free/respirable fibres which are only observed by standard trace analysis as per AN602.
AN605	Bonded asbestos containing material (Bonded ACM) comprises asbestos-containing-material which is sound in condition. Fibrous asbestos (FA) comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material. Asbestos fines (AF) includes free fibres, small fibre bundles and also small fragments of bonded ACM that passes through a 7mm sieve - which implies that the bonded ACM fragments have a substantial degree of damage which increases the potential for fibre release.
AN-605	Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009 and NEPM 1999 (2013) schedule B1 section 4..

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

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Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
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Project	**610_30041 Randwick Barrack**
Order Number	**000664--000666**
Samples	10

LABORATORY DETAILS

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SGS Reference	**SE207657 R1**
Date Received	17 Jun 2020
Date Reported	01 Jul 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.

Sample #10: Asbestos found in approx 6x4x2mm cement sheet fragments in >2mm portion.
Sample #14: Asbestos found in approx 8x5x3mm cement sheet fragments in >2mm portion.

Asbestos analysed by Approved Identifiers Ravee Sivasubramaniam and Yusuf Kuthpudin .

This report cancels and supersedes the report No.SE207657 R0 dated 24th June 2020 issued by SGS Environment, Health and Safety due to amendment of sample id's.

SIGNATORIES

[redacted]

Chemist | Senior Organic Chemist/Metals Chemis | Organic Section Head

[redacted]

Asbestos Analyst

RESULTS

Fibre Identification in soil — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE207657.003	0407_TP45_0.1_200617	Soil	652g Sand, Soil, Rocks	17 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE207657.004	0407_TP45_0.5_200617	Soil	681g Sand, Soil, Rocks	17 Jun 2020	No Asbestos Found Synthetic Mineral Fibres Detected	<0.01
SE207657.005	0407_TP54_0.1_200617	Soil	783g Sand, Soil, Rocks	17 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE207657.006	0407_TP54_0.5_200617	Soil	637g Sand, Soil, Rocks	17 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE207657.010	0407_TP68_0.1_200617	Soil	628g Sand, Soil, Rocks, Plant matter	17 Jun 2020	Chrysotile Asbestos Found Synthetic Mineral Fibres Detected Organic Fibres Detected	>0.01
SE207657.012	0407_TP69_0.1_200617	Soil	634g Sand, Soil, Rocks	17 Jun 2020	No Asbestos Found Synthetic Mineral Fibres Detected Organic Fibres Detected	<0.01
SE207657.014	0407_TP70_0.1_200617	Soil	505g Sand, Soil, Rocks, Plant matter	17 Jun 2020	Chrysotile Asbestos Found Synthetic Mineral Fibres Detected Organic Fibres Detected	>0.01
SE207657.016	0407_TP71_0.1_200617	Soil	659g Sand, Soil, Rocks, Plant matter	17 Jun 2020	No Asbestos Found Synthetic Mineral Fibres Detected Organic Fibres Detected	<0.01
SE207657.018	0407_TP72_0.1_200617	Soil	655g Sand, Soil, Rocks, Plant matter	17 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01

RESULTS

Fibre ID in bulk materials — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE207657.021	0407_TP71_A01 _200617	Other	50x30x6mm Cement sheet fragment	17 Jun 2020	Chrysotile Asbestos Detected	

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 23/6/2020

PARAMETER	UOM	LOR	0407_TP45_0.1_200(17 SOIL - 17/6/2020 SE207657.003	0407_TP45_0.5_200(17 SOIL - 17/6/2020 SE207657.004	0407_TP54_0.1_200(17 SOIL - 17/6/2020 SE207657.005	0407_TP54_0.5_200(17 SOIL - 17/6/2020 SE207657.006	0407_TP68_0.1_200(17 SOIL - 17/6/2020 SE207657.010
Total Sample Weight*	g	1	**652**	**681**	**783**	**637**	**628**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	**0.0711**
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	**0.011**
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	**0.011**
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP69_0.1_200(17 SOIL - 17/6/2020 SE207657.012	0407_TP70_0.1_200(17 SOIL - 17/6/2020 SE207657.014	0407_TP71_0.1_200(17 SOIL - 17/6/2020 SE207657.016	0407_TP72_0.1_200(17 SOIL - 17/6/2020 SE207657.018
Total Sample Weight*	g	1	**634**	**505**	**659**	**655**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	**0.0832**	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	**0.016**	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	**0.016**	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-

METHOD SUMMARY

METHOD	METHODOLOGY SUMMARY
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples , Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable ’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.
AN605	This technique gravimetrically determines the mass of Bonded Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight. Any fibrous asbestos (FA) found in this fraction will be added to the 2-7mm fraction and its mass recorded there.
AN605	This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free/respirable fibres which are only observed by standard trace analysis as per AN602.
AN605	Bonded asbestos containing material (Bonded ACM) comprises asbestos-containing-material which is sound in condition. Fibrous asbestos (FA) comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material. Asbestos fines (AF) includes free fibres, small fibre bundles and also small fragments of bonded ACM that passes through a 7mm sieve - which implies that the bonded ACM fragments have a substantial degree of damage which increases the potential for fibre release.
AN-605	Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009 and NEPM 1999 (2013) schedule B1 section 4..

FOOTNOTES

Amosite	-	Brown Asbestos	NA	-	Not Analysed
Chrysotile	-	White Asbestos	LNR	-	Listed, Not Required
Crocidolite	-	Blue Asbestos	*	-	NATA accreditation does not cover the performance of this service.
Amphiboles	-	Amosite and/or Crocidolite	**	-	Indicative data, theoretical holding time exceeded.

(In reference to soil samples only) This report does not comply with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment and Remediation and Management of Asbestos Contaminated sites in Western Australia - May 2009.

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.

Where reported: 'Asbestos Detected': Asbestos detected by polarised light microscopy, including dispersion staining.
Where reported: 'No Asbestos Found': No Asbestos Found by polarised light microscopy, including dispersion staining.
Where reported: 'UMF Detected': Mineral fibres of unknown type detected by polarised light microscopy, including dispersion staining. Confirmation by another independent analytical technique may be necessary.

Even after disintegration it can be very difficult, or impossible, to detect the presence of asbestos in some asbestos-containing bulk materials using polarised light microscopy. This is due to the low grade or small length or diameter of asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE207657 R1

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610_30041 Randwick Barrack**
Order Number	**000664--000666**
Samples	21

LABORATORY DETAILS

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Laboratory	SGS Alexandria Environmental
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Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207657 R1**
Date Received	17 Jun 2020
Date Reported	01 Jul 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Duplicate	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	1 item
Matrix Spike	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	3 items

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	20 Soil, 1 Material
Date documentation received	17/6/2020	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	10.3°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE207657 R1

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Fibre ID in bulk materials

Method: ME-(AU)-[ENV]AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP71_A01_200617	SE207657.021	LB202595	17 Jun 2020	17 Jun 2020	17 Jun 2021	24 Jun 2020	17 Jun 2021	24 Jun 2020

Fibre Identification in soil

Method: ME-(AU)-[ENV]AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP44_0.1_200617	SE207657.001	LB202537	17 Jun 2020	17 Jun 2020	17 Jun 2021	23 Jun 2020	17 Jun 2021	24 Jun 2020
0407_TP44_0.5_200617	SE207657.002	LB202537	17 Jun 2020	17 Jun 2020	17 Jun 2021	23 Jun 2020	17 Jun 2021	24 Jun 2020
0407_TP45_0.1_200617	SE207657.003	LB202537	17 Jun 2020	17 Jun 2020	17 Jun 2021	23 Jun 2020	17 Jun 2021	24 Jun 2020
0407_TP45_0.5_200617	SE207657.004	LB202537	17 Jun 2020	17 Jun 2020	17 Jun 2021	23 Jun 2020	17 Jun 2021	24 Jun 2020
0407_TP54_0.1_200617	SE207657.005	LB202537	17 Jun 2020	17 Jun 2020	17 Jun 2021	23 Jun 2020	17 Jun 2021	24 Jun 2020
0407_TP54_0.5_200617	SE207657.006	LB202537	17 Jun 2020	17 Jun 2020	17 Jun 2021	23 Jun 2020	17 Jun 2021	24 Jun 2020
0407_TP63_0.1_200617	SE207657.007	LB202537	17 Jun 2020	17 Jun 2020	17 Jun 2021	23 Jun 2020	17 Jun 2021	24 Jun 2020
0407_TP63_0.5_200617	SE207657.008	LB202537	17 Jun 2020	17 Jun 2020	17 Jun 2021	23 Jun 2020	17 Jun 2021	24 Jun 2020
0407_QC109_200617	SE207657.009	LB202537	17 Jun 2020	17 Jun 2020	17 Jun 2021	23 Jun 2020	17 Jun 2021	24 Jun 2020
0407_TP68_0.1_200617	SE207657.010	LB202537	17 Jun 2020	17 Jun 2020	17 Jun 2021	23 Jun 2020	17 Jun 2021	24 Jun 2020
0407_TP68_0.5_200617	SE207657.011	LB202537	17 Jun 2020	17 Jun 2020	17 Jun 2021	23 Jun 2020	17 Jun 2021	24 Jun 2020
0407_TP69_0.1_200617	SE207657.012	LB202537	17 Jun 2020	17 Jun 2020	17 Jun 2021	23 Jun 2020	17 Jun 2021	24 Jun 2020
0407_TP69_1.0_200617	SE207657.013	LB202537	17 Jun 2020	17 Jun 2020	17 Jun 2021	23 Jun 2020	17 Jun 2021	24 Jun 2020
0407_TP70_0.1_200617	SE207657.014	LB202537	17 Jun 2020	17 Jun 2020	17 Jun 2021	23 Jun 2020	17 Jun 2021	24 Jun 2020
0407_TP70_0.5_200617	SE207657.015	LB202537	17 Jun 2020	17 Jun 2020	17 Jun 2021	23 Jun 2020	17 Jun 2021	24 Jun 2020
0407_TP71_0.1_200617	SE207657.016	LB202537	17 Jun 2020	17 Jun 2020	17 Jun 2021	23 Jun 2020	17 Jun 2021	24 Jun 2020
0407_TP71_0.5_200617	SE207657.017	LB202537	17 Jun 2020	17 Jun 2020	17 Jun 2021	23 Jun 2020	17 Jun 2021	24 Jun 2020
0407_TP72_0.1_200617	SE207657.018	LB202537	17 Jun 2020	17 Jun 2020	17 Jun 2021	23 Jun 2020	17 Jun 2021	24 Jun 2020
0407_TP72_1.0_200617	SE207657.019	LB202537	17 Jun 2020	17 Jun 2020	17 Jun 2021	23 Jun 2020	17 Jun 2021	24 Jun 2020
0407_QC113_200617	SE207657.020	LB202537	17 Jun 2020	17 Jun 2020	17 Jun 2021	23 Jun 2020	17 Jun 2021	24 Jun 2020

Gravimetric Determination of Asbestos in Soil

Method: ME-(AU)-[ENV]AN605

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP44_0.1_200617	SE207657.001	LB202537	17 Jun 2020	17 Jun 2020	14 Dec 2020	23 Jun 2020	14 Dec 2020	24 Jun 2020
0407_TP44_0.5_200617	SE207657.002	LB202537	17 Jun 2020	17 Jun 2020	14 Dec 2020	23 Jun 2020	14 Dec 2020	24 Jun 2020
0407_TP45_0.1_200617	SE207657.003	LB202537	17 Jun 2020	17 Jun 2020	14 Dec 2020	23 Jun 2020	14 Dec 2020	24 Jun 2020
0407_TP45_0.5_200617	SE207657.004	LB202537	17 Jun 2020	17 Jun 2020	14 Dec 2020	23 Jun 2020	14 Dec 2020	24 Jun 2020
0407_TP54_0.1_200617	SE207657.005	LB202537	17 Jun 2020	17 Jun 2020	14 Dec 2020	23 Jun 2020	14 Dec 2020	24 Jun 2020
0407_TP54_0.5_200617	SE207657.006	LB202537	17 Jun 2020	17 Jun 2020	14 Dec 2020	23 Jun 2020	14 Dec 2020	24 Jun 2020
0407_TP63_0.1_200617	SE207657.007	LB202537	17 Jun 2020	17 Jun 2020	14 Dec 2020	23 Jun 2020	14 Dec 2020	24 Jun 2020
0407_TP63_0.5_200617	SE207657.008	LB202537	17 Jun 2020	17 Jun 2020	14 Dec 2020	23 Jun 2020	14 Dec 2020	24 Jun 2020
0407_QC109_200617	SE207657.009	LB202537	17 Jun 2020	17 Jun 2020	14 Dec 2020	23 Jun 2020	14 Dec 2020	24 Jun 2020
0407_TP68_0.1_200617	SE207657.010	LB202537	17 Jun 2020	17 Jun 2020	14 Dec 2020	23 Jun 2020	14 Dec 2020	24 Jun 2020
0407_TP68_0.5_200617	SE207657.011	LB202537	17 Jun 2020	17 Jun 2020	14 Dec 2020	23 Jun 2020	14 Dec 2020	24 Jun 2020
0407_TP69_0.1_200617	SE207657.012	LB202537	17 Jun 2020	17 Jun 2020	14 Dec 2020	23 Jun 2020	14 Dec 2020	24 Jun 2020
0407_TP69_1.0_200617	SE207657.013	LB202537	17 Jun 2020	17 Jun 2020	14 Dec 2020	23 Jun 2020	14 Dec 2020	24 Jun 2020
0407_TP70_0.1_200617	SE207657.014	LB202537	17 Jun 2020	17 Jun 2020	14 Dec 2020	23 Jun 2020	14 Dec 2020	24 Jun 2020
0407_TP70_0.5_200617	SE207657.015	LB202537	17 Jun 2020	17 Jun 2020	14 Dec 2020	23 Jun 2020	14 Dec 2020	24 Jun 2020
0407_TP71_0.1_200617	SE207657.016	LB202537	17 Jun 2020	17 Jun 2020	14 Dec 2020	23 Jun 2020	14 Dec 2020	24 Jun 2020
0407_TP71_0.5_200617	SE207657.017	LB202537	17 Jun 2020	17 Jun 2020	14 Dec 2020	23 Jun 2020	14 Dec 2020	24 Jun 2020
0407_TP72_0.1_200617	SE207657.018	LB202537	17 Jun 2020	17 Jun 2020	14 Dec 2020	23 Jun 2020	14 Dec 2020	24 Jun 2020
0407_TP72_1.0_200617	SE207657.019	LB202537	17 Jun 2020	17 Jun 2020	14 Dec 2020	23 Jun 2020	14 Dec 2020	24 Jun 2020
0407_QC113_200617	SE207657.020	LB202537	17 Jun 2020	17 Jun 2020	14 Dec 2020	23 Jun 2020	14 Dec 2020	24 Jun 2020

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP44_0.1_200617	SE207657.001	LB202256	17 Jun 2020	17 Jun 2020	15 Jul 2020	18 Jun 2020	15 Jul 2020	24 Jun 2020
0407_TP44_0.5_200617	SE207657.002	LB202256	17 Jun 2020	17 Jun 2020	15 Jul 2020	18 Jun 2020	15 Jul 2020	24 Jun 2020
0407_TP45_0.1_200617	SE207657.003	LB202256	17 Jun 2020	17 Jun 2020	15 Jul 2020	18 Jun 2020	15 Jul 2020	24 Jun 2020
0407_TP45_0.5_200617	SE207657.004	LB202257	17 Jun 2020	17 Jun 2020	15 Jul 2020	18 Jun 2020	15 Jul 2020	24 Jun 2020
0407_TP54_0.1_200617	SE207657.005	LB202257	17 Jun 2020	17 Jun 2020	15 Jul 2020	18 Jun 2020	15 Jul 2020	24 Jun 2020
0407_TP54_0.5_200617	SE207657.006	LB202257	17 Jun 2020	17 Jun 2020	15 Jul 2020	18 Jun 2020	15 Jul 2020	24 Jun 2020
0407_TP63_0.1_200617	SE207657.007	LB202257	17 Jun 2020	17 Jun 2020	15 Jul 2020	18 Jun 2020	15 Jul 2020	24 Jun 2020
0407_TP63_0.5_200617	SE207657.008	LB202257	17 Jun 2020	17 Jun 2020	15 Jul 2020	18 Jun 2020	15 Jul 2020	24 Jun 2020
0407_QC109_200617	SE207657.009	LB202257	17 Jun 2020	17 Jun 2020	15 Jul 2020	18 Jun 2020	15 Jul 2020	24 Jun 2020
0407_TP68_0.1_200617	SE207657.010	LB202257	17 Jun 2020	17 Jun 2020	15 Jul 2020	18 Jun 2020	15 Jul 2020	24 Jun 2020

HOLDING TIME SUMMARY

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SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Mercury in Soil (continued)

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP68_0.5_200617	SE207657.011	LB202257	17 Jun 2020	17 Jun 2020	15 Jul 2020	18 Jun 2020	15 Jul 2020	24 Jun 2020
0407_TP69_0.1_200617	SE207657.012	LB202257	17 Jun 2020	17 Jun 2020	15 Jul 2020	18 Jun 2020	15 Jul 2020	24 Jun 2020
0407_TP69_1.0_200617	SE207657.013	LB202257	17 Jun 2020	17 Jun 2020	15 Jul 2020	18 Jun 2020	15 Jul 2020	24 Jun 2020
0407_TP70_0.1_200617	SE207657.014	LB202257	17 Jun 2020	17 Jun 2020	15 Jul 2020	18 Jun 2020	15 Jul 2020	24 Jun 2020
0407_TP70_0.5_200617	SE207657.015	LB202257	17 Jun 2020	17 Jun 2020	15 Jul 2020	18 Jun 2020	15 Jul 2020	24 Jun 2020
0407_TP71_0.1_200617	SE207657.016	LB202257	17 Jun 2020	17 Jun 2020	15 Jul 2020	18 Jun 2020	15 Jul 2020	24 Jun 2020
0407_TP71_0.5_200617	SE207657.017	LB202257	17 Jun 2020	17 Jun 2020	15 Jul 2020	18 Jun 2020	15 Jul 2020	24 Jun 2020
0407_TP72_0.1_200617	SE207657.018	LB202257	17 Jun 2020	17 Jun 2020	15 Jul 2020	18 Jun 2020	15 Jul 2020	24 Jun 2020
0407_TP72_1.0_200617	SE207657.019	LB202257	17 Jun 2020	17 Jun 2020	15 Jul 2020	18 Jun 2020	15 Jul 2020	24 Jun 2020
0407_QC113_200617	SE207657.020	LB202257	17 Jun 2020	17 Jun 2020	15 Jul 2020	18 Jun 2020	15 Jul 2020	24 Jun 2020

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP44_0.1_200617	SE207657.001	LB202241	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	23 Jun 2020	22 Jun 2020
0407_TP44_0.5_200617	SE207657.002	LB202241	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	23 Jun 2020	22 Jun 2020
0407_TP45_0.1_200617	SE207657.003	LB202241	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	23 Jun 2020	22 Jun 2020
0407_TP45_0.5_200617	SE207657.004	LB202241	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	23 Jun 2020	22 Jun 2020
0407_TP54_0.1_200617	SE207657.005	LB202241	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	23 Jun 2020	22 Jun 2020
0407_TP54_0.5_200617	SE207657.006	LB202241	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	23 Jun 2020	22 Jun 2020
0407_TP63_0.1_200617	SE207657.007	LB202241	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	23 Jun 2020	22 Jun 2020
0407_TP63_0.5_200617	SE207657.008	LB202241	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	23 Jun 2020	22 Jun 2020
0407_QC109_200617	SE207657.009	LB202241	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	23 Jun 2020	22 Jun 2020
0407_TP68_0.1_200617	SE207657.010	LB202241	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	23 Jun 2020	22 Jun 2020
0407_TP68_0.5_200617	SE207657.011	LB202241	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	23 Jun 2020	22 Jun 2020
0407_TP69_0.1_200617	SE207657.012	LB202241	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	23 Jun 2020	22 Jun 2020
0407_TP69_1.0_200617	SE207657.013	LB202241	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	23 Jun 2020	22 Jun 2020
0407_TP70_0.1_200617	SE207657.014	LB202241	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	23 Jun 2020	22 Jun 2020
0407_TP70_0.5_200617	SE207657.015	LB202241	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	23 Jun 2020	22 Jun 2020
0407_TP71_0.1_200617	SE207657.016	LB202241	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	23 Jun 2020	22 Jun 2020
0407_TP71_0.5_200617	SE207657.017	LB202241	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	23 Jun 2020	22 Jun 2020
0407_TP72_0.1_200617	SE207657.018	LB202241	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	23 Jun 2020	22 Jun 2020
0407_TP72_1.0_200617	SE207657.019	LB202241	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	23 Jun 2020	22 Jun 2020
0407_QC113_200617	SE207657.020	LB202241	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	23 Jun 2020	22 Jun 2020

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP44_0.1_200617	SE207657.001	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	24 Jun 2020
0407_TP44_0.5_200617	SE207657.002	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	24 Jun 2020
0407_TP45_0.1_200617	SE207657.003	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	24 Jun 2020
0407_TP45_0.5_200617	SE207657.004	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	24 Jun 2020
0407_TP54_0.1_200617	SE207657.005	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	24 Jun 2020
0407_TP54_0.5_200617	SE207657.006	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	24 Jun 2020
0407_TP63_0.1_200617	SE207657.007	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	24 Jun 2020
0407_TP63_0.5_200617	SE207657.008	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	24 Jun 2020
0407_QC109_200617	SE207657.009	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	24 Jun 2020
0407_TP68_0.1_200617	SE207657.010	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	24 Jun 2020
0407_TP68_0.5_200617	SE207657.011	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	24 Jun 2020
0407_TP69_0.1_200617	SE207657.012	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	24 Jun 2020
0407_TP69_1.0_200617	SE207657.013	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	24 Jun 2020
0407_TP70_0.1_200617	SE207657.014	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	24 Jun 2020
0407_TP70_0.5_200617	SE207657.015	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	24 Jun 2020
0407_TP71_0.1_200617	SE207657.016	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	24 Jun 2020
0407_TP71_0.5_200617	SE207657.017	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	24 Jun 2020
0407_TP72_0.1_200617	SE207657.018	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	24 Jun 2020
0407_TP72_1.0_200617	SE207657.019	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	24 Jun 2020
0407_QC113_200617	SE207657.020	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	24 Jun 2020

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP44_0.1_200617	SE207657.001	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP44_0.5_200617	SE207657.002	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020

HOLDING TIME SUMMARY

SE207657 R1

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP45_0.1_200617	SE207657.003	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP45_0.5_200617	SE207657.004	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP54_0.1_200617	SE207657.005	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP54_0.5_200617	SE207657.006	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP63_0.1_200617	SE207657.007	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP63_0.5_200617	SE207657.008	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_QC109_200617	SE207657.009	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP68_0.1_200617	SE207657.010	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP68_0.5_200617	SE207657.011	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP69_0.1_200617	SE207657.012	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP69_1.0_200617	SE207657.013	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP70_0.1_200617	SE207657.014	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP70_0.5_200617	SE207657.015	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP71_0.1_200617	SE207657.016	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP71_0.5_200617	SE207657.017	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP72_0.1_200617	SE207657.018	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP72_1.0_200617	SE207657.019	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_QC113_200617	SE207657.020	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP44_0.1_200617	SE207657.001	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP44_0.5_200617	SE207657.002	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP45_0.1_200617	SE207657.003	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP45_0.5_200617	SE207657.004	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP54_0.1_200617	SE207657.005	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP54_0.5_200617	SE207657.006	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP63_0.1_200617	SE207657.007	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP63_0.5_200617	SE207657.008	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_QC109_200617	SE207657.009	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP68_0.1_200617	SE207657.010	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP68_0.5_200617	SE207657.011	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP69_0.1_200617	SE207657.012	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP69_1.0_200617	SE207657.013	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP70_0.1_200617	SE207657.014	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP70_0.5_200617	SE207657.015	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP71_0.1_200617	SE207657.016	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP71_0.5_200617	SE207657.017	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP72_0.1_200617	SE207657.018	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP72_1.0_200617	SE207657.019	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_QC113_200617	SE207657.020	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP44_0.1_200617	SE207657.001	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	24 Jun 2020
0407_TP44_0.5_200617	SE207657.002	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	24 Jun 2020
0407_TP45_0.1_200617	SE207657.003	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	24 Jun 2020
0407_TP45_0.5_200617	SE207657.004	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	24 Jun 2020
0407_TP54_0.1_200617	SE207657.005	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	24 Jun 2020
0407_TP54_0.5_200617	SE207657.006	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	24 Jun 2020
0407_TP63_0.1_200617	SE207657.007	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	24 Jun 2020
0407_TP63_0.5_200617	SE207657.008	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	24 Jun 2020
0407_QC109_200617	SE207657.009	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	24 Jun 2020
0407_TP68_0.1_200617	SE207657.010	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	24 Jun 2020
0407_TP68_0.5_200617	SE207657.011	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	24 Jun 2020
0407_TP69_0.1_200617	SE207657.012	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	24 Jun 2020
0407_TP69_1.0_200617	SE207657.013	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	24 Jun 2020
0407_TP70_0.1_200617	SE207657.014	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	24 Jun 2020
0407_TP70_0.5_200617	SE207657.015	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	24 Jun 2020
0407_TP71_0.1_200617	SE207657.016	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	24 Jun 2020
0407_TP71_0.5_200617	SE207657.017	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	24 Jun 2020

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

PCBs in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP72_0.1_200617	SE207657.018	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	24 Jun 2020
0407_TP72_1.0_200617	SE207657.019	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	24 Jun 2020
0407_QC113_200617	SE207657.020	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	24 Jun 2020

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP44_0.1_200617	SE207657.001	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP44_0.5_200617	SE207657.002	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP45_0.1_200617	SE207657.003	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP45_0.5_200617	SE207657.004	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP54_0.1_200617	SE207657.005	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP54_0.5_200617	SE207657.006	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP63_0.1_200617	SE207657.007	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP63_0.5_200617	SE207657.008	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_QC109_200617	SE207657.009	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP68_0.1_200617	SE207657.010	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP68_0.5_200617	SE207657.011	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP69_0.1_200617	SE207657.012	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP69_1.0_200617	SE207657.013	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP70_0.1_200617	SE207657.014	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP70_0.5_200617	SE207657.015	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP71_0.1_200617	SE207657.016	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP71_0.5_200617	SE207657.017	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP72_0.1_200617	SE207657.018	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP72_1.0_200617	SE207657.019	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_QC113_200617	SE207657.020	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP44_0.1_200617	SE207657.001	LB202249	17 Jun 2020	17 Jun 2020	14 Dec 2020	18 Jun 2020	14 Dec 2020	23 Jun 2020
0407_TP44_0.5_200617	SE207657.002	LB202249	17 Jun 2020	17 Jun 2020	14 Dec 2020	18 Jun 2020	14 Dec 2020	23 Jun 2020
0407_TP45_0.1_200617	SE207657.003	LB202249	17 Jun 2020	17 Jun 2020	14 Dec 2020	18 Jun 2020	14 Dec 2020	23 Jun 2020
0407_TP45_0.5_200617	SE207657.004	LB202250	17 Jun 2020	17 Jun 2020	14 Dec 2020	18 Jun 2020	14 Dec 2020	23 Jun 2020
0407_TP54_0.1_200617	SE207657.005	LB202250	17 Jun 2020	17 Jun 2020	14 Dec 2020	18 Jun 2020	14 Dec 2020	23 Jun 2020
0407_TP54_0.5_200617	SE207657.006	LB202250	17 Jun 2020	17 Jun 2020	14 Dec 2020	18 Jun 2020	14 Dec 2020	23 Jun 2020
0407_TP63_0.1_200617	SE207657.007	LB202250	17 Jun 2020	17 Jun 2020	14 Dec 2020	18 Jun 2020	14 Dec 2020	23 Jun 2020
0407_TP63_0.5_200617	SE207657.008	LB202250	17 Jun 2020	17 Jun 2020	14 Dec 2020	18 Jun 2020	14 Dec 2020	23 Jun 2020
0407_QC109_200617	SE207657.009	LB202250	17 Jun 2020	17 Jun 2020	14 Dec 2020	18 Jun 2020	14 Dec 2020	23 Jun 2020
0407_TP68_0.1_200617	SE207657.010	LB202250	17 Jun 2020	17 Jun 2020	14 Dec 2020	18 Jun 2020	14 Dec 2020	23 Jun 2020
0407_TP68_0.5_200617	SE207657.011	LB202250	17 Jun 2020	17 Jun 2020	14 Dec 2020	18 Jun 2020	14 Dec 2020	23 Jun 2020
0407_TP69_0.1_200617	SE207657.012	LB202250	17 Jun 2020	17 Jun 2020	14 Dec 2020	18 Jun 2020	14 Dec 2020	23 Jun 2020
0407_TP69_1.0_200617	SE207657.013	LB202250	17 Jun 2020	17 Jun 2020	14 Dec 2020	18 Jun 2020	14 Dec 2020	23 Jun 2020
0407_TP70_0.1_200617	SE207657.014	LB202250	17 Jun 2020	17 Jun 2020	14 Dec 2020	18 Jun 2020	14 Dec 2020	23 Jun 2020
0407_TP70_0.5_200617	SE207657.015	LB202250	17 Jun 2020	17 Jun 2020	14 Dec 2020	18 Jun 2020	14 Dec 2020	23 Jun 2020
0407_TP71_0.1_200617	SE207657.016	LB202250	17 Jun 2020	17 Jun 2020	14 Dec 2020	18 Jun 2020	14 Dec 2020	23 Jun 2020
0407_TP71_0.5_200617	SE207657.017	LB202250	17 Jun 2020	17 Jun 2020	14 Dec 2020	18 Jun 2020	14 Dec 2020	23 Jun 2020
0407_TP72_0.1_200617	SE207657.018	LB202250	17 Jun 2020	17 Jun 2020	14 Dec 2020	18 Jun 2020	14 Dec 2020	23 Jun 2020
0407_TP72_1.0_200617	SE207657.019	LB202250	17 Jun 2020	17 Jun 2020	14 Dec 2020	18 Jun 2020	14 Dec 2020	23 Jun 2020
0407_QC113_200617	SE207657.020	LB202250	17 Jun 2020	17 Jun 2020	14 Dec 2020	18 Jun 2020	14 Dec 2020	23 Jun 2020

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP44_0.1_200617	SE207657.001	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP44_0.5_200617	SE207657.002	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP45_0.1_200617	SE207657.003	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP45_0.5_200617	SE207657.004	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP54_0.1_200617	SE207657.005	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP54_0.5_200617	SE207657.006	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP63_0.1_200617	SE207657.007	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP63_0.5_200617	SE207657.008	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_QC109_200617	SE207657.009	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020

HOLDING TIME SUMMARY

SE207657 R1

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP68_0.1_200617	SE207657.010	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP68_0.5_200617	SE207657.011	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP69_0.1_200617	SE207657.012	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP69_1.0_200617	SE207657.013	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP70_0.1_200617	SE207657.014	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP70_0.5_200617	SE207657.015	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP71_0.1_200617	SE207657.016	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP71_0.5_200617	SE207657.017	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP72_0.1_200617	SE207657.018	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP72_1.0_200617	SE207657.019	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_QC113_200617	SE207657.020	LB202244	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP44_0.1_200617	SE207657.001	LB202233	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP44_0.5_200617	SE207657.002	LB202233	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP45_0.1_200617	SE207657.003	LB202233	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP45_0.5_200617	SE207657.004	LB202233	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP54_0.1_200617	SE207657.005	LB202233	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP54_0.5_200617	SE207657.006	LB202233	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP63_0.1_200617	SE207657.007	LB202233	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP63_0.5_200617	SE207657.008	LB202233	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_QC109_200617	SE207657.009	LB202233	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP68_0.1_200617	SE207657.010	LB202233	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP68_0.5_200617	SE207657.011	LB202233	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP69_0.1_200617	SE207657.012	LB202233	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP69_1.0_200617	SE207657.013	LB202233	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP70_0.1_200617	SE207657.014	LB202233	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP70_0.5_200617	SE207657.015	LB202233	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP71_0.1_200617	SE207657.016	LB202233	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP71_0.5_200617	SE207657.017	LB202233	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP72_0.1_200617	SE207657.018	LB202233	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP72_1.0_200617	SE207657.019	LB202233	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_QC113_200617	SE207657.020	LB202233	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP44_0.1_200617	SE207657.001	LB202233	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP44_0.5_200617	SE207657.002	LB202233	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP45_0.1_200617	SE207657.003	LB202233	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP45_0.5_200617	SE207657.004	LB202233	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP54_0.1_200617	SE207657.005	LB202233	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP54_0.5_200617	SE207657.006	LB202233	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP63_0.1_200617	SE207657.007	LB202233	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP63_0.5_200617	SE207657.008	LB202233	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_QC109_200617	SE207657.009	LB202233	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP68_0.1_200617	SE207657.010	LB202233	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP68_0.5_200617	SE207657.011	LB202233	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP69_0.1_200617	SE207657.012	LB202233	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP69_1.0_200617	SE207657.013	LB202233	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP70_0.1_200617	SE207657.014	LB202233	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP70_0.5_200617	SE207657.015	LB202233	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP71_0.1_200617	SE207657.016	LB202233	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP71_0.5_200617	SE207657.017	LB202233	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP72_0.1_200617	SE207657.018	LB202233	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP72_1.0_200617	SE207657.019	LB202233	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_QC113_200617	SE207657.020	LB202233	17 Jun 2020	17 Jun 2020	01 Jul 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP44_0.1_200617	SE207657.001	%	60 - 130%	95
	0407_TP44_0.5_200617	SE207657.002	%	60 - 130%	91
	0407_TP45_0.1_200617	SE207657.003	%	60 - 130%	102
	0407_TP45_0.5_200617	SE207657.004	%	60 - 130%	96
	0407_TP54_0.1_200617	SE207657.005	%	60 - 130%	105
	0407_TP54_0.5_200617	SE207657.006	%	60 - 130%	105
	0407_TP63_0.1_200617	SE207657.007	%	60 - 130%	103
	0407_TP63_0.5_200617	SE207657.008	%	60 - 130%	103
	0407_QC109_200617	SE207657.009	%	60 - 130%	101
	0407_TP68_0.1_200617	SE207657.010	%	60 - 130%	109
	0407_TP68_0.5_200617	SE207657.011	%	60 - 130%	107
	0407_TP69_0.1_200617	SE207657.012	%	60 - 130%	115
	0407_TP69_1.0_200617	SE207657.013	%	60 - 130%	99
	0407_TP70_0.1_200617	SE207657.014	%	60 - 130%	116
	0407_TP70_0.5_200617	SE207657.015	%	60 - 130%	109
	0407_TP71_0.1_200617	SE207657.016	%	60 - 130%	107
	0407_TP71_0.5_200617	SE207657.017	%	60 - 130%	109
	0407_TP72_0.1_200617	SE207657.018	%	60 - 130%	101
	0407_TP72_1.0_200617	SE207657.019	%	60 - 130%	102
	0407_QC113_200617	SE207657.020	%	60 - 130%	101

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP44_0.1_200617	SE207657.001	%	60 - 130%	76
	0407_TP44_0.5_200617	SE207657.002	%	60 - 130%	83
	0407_TP45_0.1_200617	SE207657.003	%	60 - 130%	80
	0407_TP45_0.5_200617	SE207657.004	%	60 - 130%	87
	0407_TP54_0.1_200617	SE207657.005	%	60 - 130%	91
	0407_TP54_0.5_200617	SE207657.006	%	60 - 130%	84
	0407_TP63_0.1_200617	SE207657.007	%	60 - 130%	84
	0407_TP63_0.5_200617	SE207657.008	%	60 - 130%	82
	0407_QC109_200617	SE207657.009	%	60 - 130%	85
	0407_TP68_0.1_200617	SE207657.010	%	60 - 130%	83
	0407_TP68_0.5_200617	SE207657.011	%	60 - 130%	87
	0407_TP69_0.1_200617	SE207657.012	%	60 - 130%	83
	0407_TP69_1.0_200617	SE207657.013	%	60 - 130%	86
	0407_TP70_0.1_200617	SE207657.014	%	60 - 130%	92
	0407_TP70_0.5_200617	SE207657.015	%	60 - 130%	88
	0407_TP71_0.1_200617	SE207657.016	%	60 - 130%	86
	0407_TP71_0.5_200617	SE207657.017	%	60 - 130%	81
	0407_TP72_0.1_200617	SE207657.018	%	60 - 130%	89
	0407_TP72_1.0_200617	SE207657.019	%	60 - 130%	81
	0407_QC113_200617	SE207657.020	%	60 - 130%	87
d14-p-terphenyl (Surrogate)	0407_TP44_0.1_200617	SE207657.001	%	60 - 130%	82
	0407_TP44_0.5_200617	SE207657.002	%	60 - 130%	84
	0407_TP45_0.1_200617	SE207657.003	%	60 - 130%	83
	0407_TP45_0.5_200617	SE207657.004	%	60 - 130%	86
	0407_TP54_0.1_200617	SE207657.005	%	60 - 130%	82
	0407_TP54_0.5_200617	SE207657.006	%	60 - 130%	83
	0407_TP63_0.1_200617	SE207657.007	%	60 - 130%	80
	0407_TP63_0.5_200617	SE207657.008	%	60 - 130%	81
	0407_QC109_200617	SE207657.009	%	60 - 130%	84
	0407_TP68_0.1_200617	SE207657.010	%	60 - 130%	86
	0407_TP68_0.5_200617	SE207657.011	%	60 - 130%	94
	0407_TP69_0.1_200617	SE207657.012	%	60 - 130%	88
	0407_TP69_1.0_200617	SE207657.013	%	60 - 130%	83
	0407_TP70_0.1_200617	SE207657.014	%	60 - 130%	90
	0407_TP70_0.5_200617	SE207657.015	%	60 - 130%	89
	0407_TP71_0.1_200617	SE207657.016	%	60 - 130%	83
	0407_TP71_0.5_200617	SE207657.017	%	60 - 130%	86
	0407_TP72_0.1_200617	SE207657.018	%	60 - 130%	87

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d14-p-terphenyl (Surrogate)	0407_TP72_1.0_200617	SE207657.019	%	60 - 130%	85
	0407_QC113_200617	SE207657.020	%	60 - 130%	89

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP44_0.1_200617	SE207657.001	%	70 - 130%	76
	0407_TP44_0.5_200617	SE207657.002	%	70 - 130%	83
	0407_TP45_0.1_200617	SE207657.003	%	70 - 130%	80
	0407_TP45_0.5_200617	SE207657.004	%	70 - 130%	87
	0407_TP54_0.1_200617	SE207657.005	%	70 - 130%	91
	0407_TP54_0.5_200617	SE207657.006	%	70 - 130%	84
	0407_TP63_0.1_200617	SE207657.007	%	70 - 130%	84
	0407_TP63_0.5_200617	SE207657.008	%	70 - 130%	82
	0407_QC109_200617	SE207657.009	%	70 - 130%	85
	0407_TP68_0.1_200617	SE207657.010	%	70 - 130%	83
	0407_TP68_0.5_200617	SE207657.011	%	70 - 130%	87
	0407_TP69_0.1_200617	SE207657.012	%	70 - 130%	83
	0407_TP69_1.0_200617	SE207657.013	%	70 - 130%	86
	0407_TP70_0.1_200617	SE207657.014	%	70 - 130%	92
	0407_TP70_0.5_200617	SE207657.015	%	70 - 130%	88
	0407_TP71_0.1_200617	SE207657.016	%	70 - 130%	86
	0407_TP71_0.5_200617	SE207657.017	%	70 - 130%	81
	0407_TP72_0.1_200617	SE207657.018	%	70 - 130%	89
	0407_TP72_1.0_200617	SE207657.019	%	70 - 130%	81
	0407_QC113_200617	SE207657.020	%	70 - 130%	87
d14-p-terphenyl (Surrogate)	0407_TP44_0.1_200617	SE207657.001	%	70 - 130%	82
	0407_TP44_0.5_200617	SE207657.002	%	70 - 130%	84
	0407_TP45_0.1_200617	SE207657.003	%	70 - 130%	83
	0407_TP45_0.5_200617	SE207657.004	%	70 - 130%	86
	0407_TP54_0.1_200617	SE207657.005	%	70 - 130%	82
	0407_TP54_0.5_200617	SE207657.006	%	70 - 130%	83
	0407_TP63_0.1_200617	SE207657.007	%	70 - 130%	80
	0407_TP63_0.5_200617	SE207657.008	%	70 - 130%	81
	0407_QC109_200617	SE207657.009	%	70 - 130%	84
	0407_TP68_0.1_200617	SE207657.010	%	70 - 130%	86
	0407_TP68_0.5_200617	SE207657.011	%	70 - 130%	94
	0407_TP69_0.1_200617	SE207657.012	%	70 - 130%	88
	0407_TP69_1.0_200617	SE207657.013	%	70 - 130%	83
	0407_TP70_0.1_200617	SE207657.014	%	70 - 130%	90
	0407_TP70_0.5_200617	SE207657.015	%	70 - 130%	89
	0407_TP71_0.1_200617	SE207657.016	%	70 - 130%	83
	0407_TP71_0.5_200617	SE207657.017	%	70 - 130%	86
	0407_TP72_0.1_200617	SE207657.018	%	70 - 130%	87
	0407_TP72_1.0_200617	SE207657.019	%	70 - 130%	85
	0407_QC113_200617	SE207657.020	%	70 - 130%	89
d5-nitrobenzene (Surrogate)	0407_TP44_0.1_200617	SE207657.001	%	70 - 130%	83
	0407_TP44_0.5_200617	SE207657.002	%	70 - 130%	79
	0407_TP45_0.1_200617	SE207657.003	%	70 - 130%	85
	0407_TP45_0.5_200617	SE207657.004	%	70 - 130%	85
	0407_TP54_0.1_200617	SE207657.005	%	70 - 130%	83
	0407_TP54_0.5_200617	SE207657.006	%	70 - 130%	85
	0407_TP63_0.1_200617	SE207657.007	%	70 - 130%	84
	0407_TP63_0.5_200617	SE207657.008	%	70 - 130%	83
	0407_QC109_200617	SE207657.009	%	70 - 130%	84
	0407_TP68_0.1_200617	SE207657.010	%	70 - 130%	87
	0407_TP68_0.5_200617	SE207657.011	%	70 - 130%	88
	0407_TP69_0.1_200617	SE207657.012	%	70 - 130%	88
	0407_TP69_1.0_200617	SE207657.013	%	70 - 130%	86
	0407_TP70_0.1_200617	SE207657.014	%	70 - 130%	91
	0407_TP70_0.5_200617	SE207657.015	%	70 - 130%	91
	0407_TP71_0.1_200617	SE207657.016	%	70 - 130%	83

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d5-nitrobenzene (Surrogate)	0407_TP71_0.5_200617	SE207657.017	%	70 - 130%	86
	0407_TP72_0.1_200617	SE207657.018	%	70 - 130%	89
	0407_TP72_1.0_200617	SE207657.019	%	70 - 130%	82
	0407_QC113_200617	SE207657.020	%	70 - 130%	83

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP44_0.1_200617	SE207657.001	%	60 - 130%	95
	0407_TP44_0.5_200617	SE207657.002	%	60 - 130%	91
	0407_TP45_0.1_200617	SE207657.003	%	60 - 130%	102
	0407_TP45_0.5_200617	SE207657.004	%	60 - 130%	96
	0407_TP54_0.1_200617	SE207657.005	%	60 - 130%	105
	0407_TP54_0.5_200617	SE207657.006	%	60 - 130%	105
	0407_TP63_0.1_200617	SE207657.007	%	60 - 130%	103
	0407_TP63_0.5_200617	SE207657.008	%	60 - 130%	103
	0407_QC109_200617	SE207657.009	%	60 - 130%	101
	0407_TP68_0.1_200617	SE207657.010	%	60 - 130%	109
	0407_TP68_0.5_200617	SE207657.011	%	60 - 130%	107
	0407_TP69_0.1_200617	SE207657.012	%	60 - 130%	115
	0407_TP69_1.0_200617	SE207657.013	%	60 - 130%	99
	0407_TP70_0.1_200617	SE207657.014	%	60 - 130%	116
	0407_TP70_0.5_200617	SE207657.015	%	60 - 130%	109
	0407_TP71_0.1_200617	SE207657.016	%	60 - 130%	107
	0407_TP71_0.5_200617	SE207657.017	%	60 - 130%	109
	0407_TP72_0.1_200617	SE207657.018	%	60 - 130%	101
	0407_TP72_1.0_200617	SE207657.019	%	60 - 130%	102
	0407_QC113_200617	SE207657.020	%	60 - 130%	101

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	0407_TP44_0.1_200617	SE207657.001	%	70 - 130%	89
	0407_TP44_0.5_200617	SE207657.002	%	70 - 130%	88
	0407_TP45_0.1_200617	SE207657.003	%	70 - 130%	90
	0407_TP45_0.5_200617	SE207657.004	%	70 - 130%	89
	0407_TP54_0.1_200617	SE207657.005	%	70 - 130%	89
	0407_TP54_0.5_200617	SE207657.006	%	70 - 130%	88
	0407_TP63_0.1_200617	SE207657.007	%	70 - 130%	87
	0407_TP63_0.5_200617	SE207657.008	%	70 - 130%	86
	0407_QC109_200617	SE207657.009	%	70 - 130%	87
	0407_TP68_0.1_200617	SE207657.010	%	70 - 130%	88
	0407_TP68_0.5_200617	SE207657.011	%	70 - 130%	90
	0407_TP69_0.1_200617	SE207657.012	%	70 - 130%	93
	0407_TP69_1.0_200617	SE207657.013	%	70 - 130%	92
	0407_TP70_0.1_200617	SE207657.014	%	70 - 130%	88
	0407_TP70_0.5_200617	SE207657.015	%	70 - 130%	89
	0407_TP71_0.1_200617	SE207657.016	%	70 - 130%	90
	0407_TP71_0.5_200617	SE207657.017	%	70 - 130%	94
	0407_TP72_0.1_200617	SE207657.018	%	70 - 130%	90
	0407_TP72_1.0_200617	SE207657.019	%	70 - 130%	90
	0407_QC113_200617	SE207657.020	%	70 - 130%	88
d5-phenol (Surrogate)	0407_TP44_0.1_200617	SE207657.001	%	50 - 130%	80
	0407_TP44_0.5_200617	SE207657.002	%	50 - 130%	80
	0407_TP45_0.1_200617	SE207657.003	%	50 - 130%	79
	0407_TP45_0.5_200617	SE207657.004	%	50 - 130%	78
	0407_TP54_0.1_200617	SE207657.005	%	50 - 130%	78
	0407_TP54_0.5_200617	SE207657.006	%	50 - 130%	76
	0407_TP63_0.1_200617	SE207657.007	%	50 - 130%	76
	0407_TP63_0.5_200617	SE207657.008	%	50 - 130%	75
	0407_QC109_200617	SE207657.009	%	50 - 130%	75
	0407_TP68_0.1_200617	SE207657.010	%	50 - 130%	75
	0407_TP68_0.5_200617	SE207657.011	%	50 - 130%	77
	0407_TP69_0.1_200617	SE207657.012	%	50 - 130%	77

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil (continued) — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d5-phenol (Surrogate)	0407_TP69_1.0_200617	SE207657.013	%	50 - 130%	80
	0407_TP70_0.1_200617	SE207657.014	%	50 - 130%	76
	0407_TP70_0.5_200617	SE207657.015	%	50 - 130%	77
	0407_TP71_0.1_200617	SE207657.016	%	50 - 130%	76
	0407_TP71_0.5_200617	SE207657.017	%	50 - 130%	79
	0407_TP72_0.1_200617	SE207657.018	%	50 - 130%	76
	0407_TP72_1.0_200617	SE207657.019	%	50 - 130%	76
	0407_QC113_200617	SE207657.020	%	50 - 130%	75

VOC's in Soil — Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP44_0.1_200617	SE207657.001	%	60 - 130%	72
	0407_TP44_0.5_200617	SE207657.002	%	60 - 130%	74
	0407_TP45_0.1_200617	SE207657.003	%	60 - 130%	73
	0407_TP45_0.5_200617	SE207657.004	%	60 - 130%	72
	0407_TP54_0.1_200617	SE207657.005	%	60 - 130%	71
	0407_TP54_0.5_200617	SE207657.006	%	60 - 130%	75
	0407_TP63_0.1_200617	SE207657.007	%	60 - 130%	77
	0407_TP63_0.5_200617	SE207657.008	%	60 - 130%	74
	0407_QC109_200617	SE207657.009	%	60 - 130%	77
	0407_TP68_0.1_200617	SE207657.010	%	60 - 130%	68
	0407_TP68_0.5_200617	SE207657.011	%	60 - 130%	76
	0407_TP69_0.1_200617	SE207657.012	%	60 - 130%	73
	0407_TP69_1.0_200617	SE207657.013	%	60 - 130%	77
	0407_TP70_0.1_200617	SE207657.014	%	60 - 130%	73
	0407_TP70_0.5_200617	SE207657.015	%	60 - 130%	75
	0407_TP71_0.1_200617	SE207657.016	%	60 - 130%	70
	0407_TP71_0.5_200617	SE207657.017	%	60 - 130%	75
	0407_TP72_0.1_200617	SE207657.018	%	60 - 130%	78
	0407_TP72_1.0_200617	SE207657.019	%	60 - 130%	76
	0407_QC113_200617	SE207657.020	%	60 - 130%	73
d4-1,2-dichloroethane (Surrogate)	0407_TP44_0.1_200617	SE207657.001	%	60 - 130%	97
	0407_TP44_0.5_200617	SE207657.002	%	60 - 130%	94
	0407_TP45_0.1_200617	SE207657.003	%	60 - 130%	94
	0407_TP45_0.5_200617	SE207657.004	%	60 - 130%	97
	0407_TP54_0.1_200617	SE207657.005	%	60 - 130%	94
	0407_TP54_0.5_200617	SE207657.006	%	60 - 130%	101
	0407_TP63_0.1_200617	SE207657.007	%	60 - 130%	102
	0407_TP63_0.5_200617	SE207657.008	%	60 - 130%	100
	0407_QC109_200617	SE207657.009	%	60 - 130%	104
	0407_TP68_0.1_200617	SE207657.010	%	60 - 130%	91
	0407_TP68_0.5_200617	SE207657.011	%	60 - 130%	102
	0407_TP69_0.1_200617	SE207657.012	%	60 - 130%	98
	0407_TP69_1.0_200617	SE207657.013	%	60 - 130%	101
	0407_TP70_0.1_200617	SE207657.014	%	60 - 130%	97
	0407_TP70_0.5_200617	SE207657.015	%	60 - 130%	100
	0407_TP71_0.1_200617	SE207657.016	%	60 - 130%	93
	0407_TP71_0.5_200617	SE207657.017	%	60 - 130%	102
	0407_TP72_0.1_200617	SE207657.018	%	60 - 130%	105
	0407_TP72_1.0_200617	SE207657.019	%	60 - 130%	102
	0407_QC113_200617	SE207657.020	%	60 - 130%	99
d8-toluene (Surrogate)	0407_TP44_0.1_200617	SE207657.001	%	60 - 130%	98
	0407_TP44_0.5_200617	SE207657.002	%	60 - 130%	94
	0407_TP45_0.1_200617	SE207657.003	%	60 - 130%	92
	0407_TP45_0.5_200617	SE207657.004	%	60 - 130%	96
	0407_TP54_0.1_200617	SE207657.005	%	60 - 130%	93
	0407_TP54_0.5_200617	SE207657.006	%	60 - 130%	99
	0407_TP63_0.1_200617	SE207657.007	%	60 - 130%	103
	0407_TP63_0.5_200617	SE207657.008	%	60 - 130%	99
	0407_QC109_200617	SE207657.009	%	60 - 130%	103
	0407_TP68_0.1_200617	SE207657.010	%	60 - 130%	89

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d8-toluene (Surrogate)	0407_TP68_0.5_200617	SE207657.011	%	60 - 130%	101
	0407_TP69_0.1_200617	SE207657.012	%	60 - 130%	97
	0407_TP69_1.0_200617	SE207657.013	%	60 - 130%	101
	0407_TP70_0.1_200617	SE207657.014	%	60 - 130%	94
	0407_TP70_0.5_200617	SE207657.015	%	60 - 130%	101
	0407_TP71_0.1_200617	SE207657.016	%	60 - 130%	92
	0407_TP71_0.5_200617	SE207657.017	%	60 - 130%	99
	0407_TP72_0.1_200617	SE207657.018	%	60 - 130%	103
	0407_TP72_1.0_200617	SE207657.019	%	60 - 130%	100
	0407_QC113_200617	SE207657.020	%	60 - 130%	97

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP44_0.1_200617	SE207657.001	%	60 - 130%	72
	0407_TP44_0.5_200617	SE207657.002	%	60 - 130%	74
	0407_TP45_0.1_200617	SE207657.003	%	60 - 130%	73
	0407_TP45_0.5_200617	SE207657.004	%	60 - 130%	72
	0407_TP54_0.1_200617	SE207657.005	%	60 - 130%	71
	0407_TP54_0.5_200617	SE207657.006	%	60 - 130%	75
	0407_TP63_0.1_200617	SE207657.007	%	60 - 130%	77
	0407_TP63_0.5_200617	SE207657.008	%	60 - 130%	74
	0407_QC109_200617	SE207657.009	%	60 - 130%	77
	0407_TP68_0.1_200617	SE207657.010	%	60 - 130%	68
	0407_TP68_0.5_200617	SE207657.011	%	60 - 130%	76
	0407_TP69_0.1_200617	SE207657.012	%	60 - 130%	73
	0407_TP69_1.0_200617	SE207657.013	%	60 - 130%	77
	0407_TP70_0.1_200617	SE207657.014	%	60 - 130%	73
	0407_TP70_0.5_200617	SE207657.015	%	60 - 130%	75
	0407_TP71_0.1_200617	SE207657.016	%	60 - 130%	70
	0407_TP71_0.5_200617	SE207657.017	%	60 - 130%	75
	0407_TP72_0.1_200617	SE207657.018	%	60 - 130%	78
	0407_TP72_1.0_200617	SE207657.019	%	60 - 130%	76
	0407_QC113_200617	SE207657.020	%	60 - 130%	73
d4-1,2-dichloroethane (Surrogate)	0407_TP44_0.1_200617	SE207657.001	%	60 - 130%	97
	0407_TP44_0.5_200617	SE207657.002	%	60 - 130%	94
	0407_TP45_0.1_200617	SE207657.003	%	60 - 130%	94
	0407_TP45_0.5_200617	SE207657.004	%	60 - 130%	97
	0407_TP54_0.1_200617	SE207657.005	%	60 - 130%	94
	0407_TP54_0.5_200617	SE207657.006	%	60 - 130%	101
	0407_TP63_0.1_200617	SE207657.007	%	60 - 130%	102
	0407_TP63_0.5_200617	SE207657.008	%	60 - 130%	100
	0407_QC109_200617	SE207657.009	%	60 - 130%	104
	0407_TP68_0.1_200617	SE207657.010	%	60 - 130%	91
	0407_TP68_0.5_200617	SE207657.011	%	60 - 130%	102
	0407_TP69_0.1_200617	SE207657.012	%	60 - 130%	98
	0407_TP69_1.0_200617	SE207657.013	%	60 - 130%	101
	0407_TP70_0.1_200617	SE207657.014	%	60 - 130%	97
	0407_TP70_0.5_200617	SE207657.015	%	60 - 130%	100
	0407_TP71_0.1_200617	SE207657.016	%	60 - 130%	93
	0407_TP71_0.5_200617	SE207657.017	%	60 - 130%	102
	0407_TP72_0.1_200617	SE207657.018	%	60 - 130%	105
	0407_TP72_1.0_200617	SE207657.019	%	60 - 130%	102
	0407_QC113_200617	SE207657.020	%	60 - 130%	99
d8-toluene (Surrogate)	0407_TP44_0.1_200617	SE207657.001	%	60 - 130%	98
	0407_TP44_0.5_200617	SE207657.002	%	60 - 130%	94
	0407_TP45_0.1_200617	SE207657.003	%	60 - 130%	92
	0407_TP45_0.5_200617	SE207657.004	%	60 - 130%	96
	0407_TP54_0.1_200617	SE207657.005	%	60 - 130%	93
	0407_TP54_0.5_200617	SE207657.006	%	60 - 130%	99
	0407_TP63_0.1_200617	SE207657.007	%	60 - 130%	103
	0407_TP63_0.5_200617	SE207657.008	%	60 - 130%	99

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d8-toluene (Surrogate)	0407_QC109_200617	SE207657.009	%	60 - 130%	103
	0407_TP68_0.1_200617	SE207657.010	%	60 - 130%	89
	0407_TP68_0.5_200617	SE207657.011	%	60 - 130%	101
	0407_TP69_0.1_200617	SE207657.012	%	60 - 130%	97
	0407_TP69_1.0_200617	SE207657.013	%	60 - 130%	101
	0407_TP70_0.1_200617	SE207657.014	%	60 - 130%	94
	0407_TP70_0.5_200617	SE207657.015	%	60 - 130%	101
	0407_TP71_0.1_200617	SE207657.016	%	60 - 130%	92
	0407_TP71_0.5_200617	SE207657.017	%	60 - 130%	99
	0407_TP72_0.1_200617	SE207657.018	%	60 - 130%	103
	0407_TP72_1.0_200617	SE207657.019	%	60 - 130%	100
	0407_QC113_200617	SE207657.020	%	60 - 130%	97

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result
LB202256.001	Mercury	mg/kg	0.05	<0.05
LB202257.001	Mercury	mg/kg	0.05	<0.05

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202244.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	93

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202244.001		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	87
		d14-p-terphenyl (Surrogate)	%	-	90

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB202244.001	Naphthalene	mg/kg	0.1	<0.1
	2-methylnaphthalene	mg/kg	0.1	<0.1
	1-methylnaphthalene	mg/kg	0.1	<0.1
	Acenaphthylene	mg/kg	0.1	<0.1
	Acenaphthene	mg/kg	0.1	<0.1
	Fluorene	mg/kg	0.1	<0.1
	Phenanthrene	mg/kg	0.1	<0.1
	Anthracene	mg/kg	0.1	<0.1
	Fluoranthene	mg/kg	0.1	<0.1
	Pyrene	mg/kg	0.1	<0.1
	Benzo(a)anthracene	mg/kg	0.1	<0.1
	Chrysene	mg/kg	0.1	<0.1
	Benzo(a)pyrene	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202244.001		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	88
		2-fluorobiphenyl (Surrogate)	%	-	87
		d14-p-terphenyl (Surrogate)	%	-	90

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202244.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	93

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202244.001		Phenol	mg/kg	0.5	<0.5
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5
		2-nitrophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
		Pentachlorophenol	mg/kg	0.5	<0.5
		2,4-dinitrophenol	mg/kg	2	<2
		4-chloro-3-methylphenol	mg/kg	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	93
		d5-phenol (Surrogate)	%	-	81

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB202249.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0
LB202250.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB202244.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB202233.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB202233.001	Monocyclic Aromatic Hydrocarbons	tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10
		MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	102
		d8-toluene (Surrogate)	%	-	103
		Bromofluorobenzene (Surrogate)	%	-	76
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB202233.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	102

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207647.004	LB202256.014	Mercury	mg/kg	0.05	<0.05	0.07	117	28
SE207657.003	LB202256.024	Mercury	mg/kg	0.05	0.05	0.06	122	14
SE207657.013	LB202257.014	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE207657.020	LB202257.022	Mercury	mg/kg	0.05	<0.05	<0.05	200	0

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207657.010	LB202241.011	% Moisture	%w/w	1	19.1	18.6	35	3
SE207657.020	LB202241.022	% Moisture	%w/w	1	3.3	3.2	61	1

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207657.010	LB202244.014		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.16	0.16	30	0
SE207657.020	LB202244.027		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207657.020	LB202244.027		p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.16	30	3

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207657.010	LB202244.014		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	1
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	5
SE207657.020	LB202244.027		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	2
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	30	7

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207657.010	LB202244.014	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
		Phenanthrene	mg/kg	0.1	0.2	0.2	80	27
		Anthracene	mg/kg	0.1	<0.1	<0.1	148	0
		Fluoranthene	mg/kg	0.1	0.5	0.5	51	4
		Pyrene	mg/kg	0.1	0.5	0.5	50	2
		Benzo(a)anthracene	mg/kg	0.1	0.2	0.2	72	3
		Chrysene	mg/kg	0.1	0.2	0.3	69	5
		Benzo(b&j)fluoranthene	mg/kg	0.1	0.3	0.4	61	24
		Benzo(k)fluoranthene	mg/kg	0.1	0.2	0.2	91	7
		Benzo(a)pyrene	mg/kg	0.1	0.3	0.3	62	15
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.1	0.1	104	16
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(ghi)perylene	mg/kg	0.1	0.2	0.2	88	11

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207657.010	LB202244.014		Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	0.4	0.4	60	14
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	0.5	0.5	70	11
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	0.4	0.5	54	13
			Total PAH (18)	mg/kg	0.8	2.7	2.8	59	5
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	30	2
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	1
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	5
SE207657.020	LB202244.027		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	<0.3	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	<0.2	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	30	7
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	2
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	30	7

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207657.010	LB202244.014		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	0
SE207657.020	LB202244.027		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	3

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207657.010	LB202244.014		Phenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	200	0
			Total Cresol	mg/kg	1.5	<1.5	<1.5	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	200	0
			4-nitrophenol	mg/kg	1	<1	<1	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dinitrophenol	mg/kg	2	<2	<2	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.4	4.4	30	1
			d5-phenol (Surrogate)	mg/kg	-	1.5	1.5	30	1
SE207657.020	LB202244.027		Phenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	200	0
			Total Cresol	mg/kg	1.5	<1.5	<1.5	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	200	0
			4-nitrophenol	mg/kg	1	<1	<1	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dinitrophenol	mg/kg	2	<2	<2	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.4	4.3	30	1
			d5-phenol (Surrogate)	mg/kg	-	1.5	1.5	30	2

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207647.004	LB202249.014	Arsenic, As	mg/kg	1	4	5	51	18
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	14	20	33	34 ②
		Copper, Cu	mg/kg	0.5	6.9	6.1	38	12
		Nickel, Ni	mg/kg	0.5	4.7	4.6	41	2
		Lead, Pb	mg/kg	1	13	14	37	13
		Zinc, Zn	mg/kg	2	37	45	35	19
SE207657.003	LB202249.024	Arsenic, As	mg/kg	1	1	1	110	0
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	3.3	3.9	44	16
		Copper, Cu	mg/kg	0.5	46	41	31	11
		Nickel, Ni	mg/kg	0.5	2.4	2.4	51	2
		Lead, Pb	mg/kg	1	26	27	34	5
		Zinc, Zn	mg/kg	2	33	33	36	1
SE207657.013	LB202250.014	Arsenic, As	mg/kg	1	<1	<1	200	0
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	<0.5	<0.5	200	0
		Copper, Cu	mg/kg	0.5	<0.5	<0.5	200	0
		Nickel, Ni	mg/kg	0.5	<0.5	<0.5	200	0
		Lead, Pb	mg/kg	1	<1	<1	200	0
		Zinc, Zn	mg/kg	2	<2.0	<2.0	166	0
SE207657.020	LB202250.022	Arsenic, As	mg/kg	1	<1	<1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207657.020	LB202250.022	Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	<0.5	<0.5	200	0
		Copper, Cu	mg/kg	0.5	<0.5	<0.5	136	0
		Nickel, Ni	mg/kg	0.5	<0.5	<0.5	200	0
		Lead, Pb	mg/kg	1	<1	<1	184	0
		Zinc, Zn	mg/kg	2	<2.0	<2.0	200	0

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207657.010	LB202244.014		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE207657.020	LB202244.027		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207657.010	LB202233.014	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued) — Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207657.010	LB202233.014	Halogenated Aliphatics	1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic Aromatic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
			Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
			2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
			MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.1	9.3	50	3
			d8-toluene (Surrogate)	mg/kg	-	8.9	9.3	50	4
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.8	7.1	50	5
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethanes	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
			Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE207657.020	LB202233.025	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
			Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207657.020	LB202233.025	Halogenated	Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
		Aliphatics	Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.9	10.3	50	5
			d8-toluene (Surrogate)	mg/kg	-	9.7	10.2	50	5
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.3	7.8	50	7

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207657.020	LB202233.025	Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethanes	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
			Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207657.010	LB202233.014		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.1	9.3	30	3
			d8-toluene (Surrogate)	mg/kg	-	8.9	9.3	30	4
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.8	7.1	30	5
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE207657.020	LB202233.025		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.9	10.3	30	5
			d8-toluene (Surrogate)	mg/kg	-	9.7	10.2	30	5
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.3	7.8	30	7
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202256.002	Mercury	mg/kg	0.05	0.18	0.2	70 - 130	90
LB202257.002	Mercury	mg/kg	0.05	0.20	0.2	70 - 130	102

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202244.002		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	115
		Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	119
		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	118
		Dieldrin	mg/kg	0.2	0.2	0.2	60 - 140	121
		Endrin	mg/kg	0.2	0.2	0.2	60 - 140	119
		p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	88
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	0.15	40 - 130	91

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202244.002		Dichlorvos	mg/kg	0.5	1.5	2	60 - 140	76
		Diazinon (Dimpylate)	mg/kg	0.5	1.9	2	60 - 140	94
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.0	2	60 - 140	98
		Ethion	mg/kg	0.2	1.7	2	60 - 140	87
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	85
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	81

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202244.002		Naphthalene	mg/kg	0.1	4.4	4	60 - 140	111
		Acenaphthylene	mg/kg	0.1	4.3	4	60 - 140	109
		Acenaphthene	mg/kg	0.1	4.4	4	60 - 140	110
		Phenanthrene	mg/kg	0.1	4.6	4	60 - 140	115
		Anthracene	mg/kg	0.1	4.0	4	60 - 140	101
		Fluoranthene	mg/kg	0.1	4.6	4	60 - 140	115
		Pyrene	mg/kg	0.1	4.7	4	60 - 140	116
		Benzo(a)pyrene	mg/kg	0.1	4.3	4	60 - 140	109
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	84
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	85
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	81

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202244.002	Arochlor 1260	mg/kg	0.2	0.4	0.4	60 - 140	92

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202244.002		Phenol	mg/kg	0.5	0.7	1	70 - 130	70
		2,4-dichlorophenol	mg/kg	0.5	0.8	1	70 - 130	84
		2,4,6-trichlorophenol	mg/kg	0.5	0.8	1	70 - 130	77
		Pentachlorophenol	mg/kg	0.5	0.8	1	70 - 130	77
	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.5	5	40 - 130	91
		d5-phenol (Surrogate)	mg/kg	-	1.6	2	40 - 130	79

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202249.002	Arsenic, As	mg/kg	1	340	318.22	80 - 120	105
	Cadmium, Cd	mg/kg	0.3	5.0	5.41	80 - 120	93
	Chromium, Cr	mg/kg	0.5	39	38.31	80 - 120	101
	Copper, Cu	mg/kg	0.5	310	290	80 - 120	105
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	102
	Lead, Pb	mg/kg	1	96	89.9	80 - 120	107
	Zinc, Zn	mg/kg	2	280	273	80 - 120	103
LB202250.002	Arsenic, As	mg/kg	1	330	318.22	80 - 120	103
	Cadmium, Cd	mg/kg	0.3	4.9	5.41	80 - 120	91
	Chromium, Cr	mg/kg	0.5	34	38.31	80 - 120	89

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202250.002		Copper, Cu	mg/kg	0.5	300	290	80 - 120	102
		Nickel, Ni	mg/kg	0.5	180	187	80 - 120	97
		Lead, Pb	mg/kg	1	94	89.9	80 - 120	104
		Zinc, Zn	mg/kg	2	270	273	80 - 120	100

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202244.002		TRH C10-C14	mg/kg	20	45	40	60 - 140	113
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	105
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	80
	TRH F Bands	TRH >C10-C16	mg/kg	25	44	40	60 - 140	110
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	95
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	80

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202233.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	3.7	5	60 - 140	75
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	4.1	5	60 - 140	81
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	4.0	5	60 - 140	79
	Halogenated	Chlorobenzene	mg/kg	0.1	4.5	5	60 - 140	91
	Monocyclic	Benzene	mg/kg	0.1	4.0	5	60 - 140	80
	Aromatic	Toluene	mg/kg	0.1	4.0	5	60 - 140	81
		Ethylbenzene	mg/kg	0.1	4.1	5	60 - 140	83
		m/p-xylene	mg/kg	0.2	8.2	10	60 - 140	82
		o-xylene	mg/kg	0.1	4.2	5	60 - 140	84
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.4	10	70 - 130	104
		d8-toluene (Surrogate)	mg/kg	-	10.3	10	70 - 130	103
		Bromofluorobenzene (Surrogate)	mg/kg	-	7.0	10	70 - 130	70
	Trihalomethan	Chloroform	mg/kg	0.1	4.3	5	60 - 140	85

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202233.002		TRH C6-C10	mg/kg	25	63	92.5	60 - 140	68
		TRH C6-C9	mg/kg	20	55	80	60 - 140	68
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.4	10	70 - 130	104
		Bromofluorobenzene (Surrogate)	mg/kg	-	7.0	10	70 - 130	70
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	39	62.5	60 - 140	62

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207648.005	LB202256.004	Mercury	mg/kg	0.05	0.21	<0.05	0.2	87
SE207657.004	LB202257.004	Mercury	mg/kg	0.05	0.23	<0.05	0.2	95

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207657.001	LB202244.004		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	-	-
			Lindane	mg/kg	0.1	<0.1	<0.1	-	-
			Heptachlor	mg/kg	0.1	0.3	<0.1	0.2	126
			Aldrin	mg/kg	0.1	0.3	<0.1	0.2	125
			Beta BHC	mg/kg	0.1	<0.1	<0.1	-	-
			Delta BHC	mg/kg	0.1	0.3	<0.1	0.2	126
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	-	-
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	-	-
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	-	-
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	-	-
			Dieldrin	mg/kg	0.2	0.2	<0.2	0.2	124
			Endrin	mg/kg	0.2	0.2	<0.2	0.2	123
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	-	-
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	-	-
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	-	-
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	-	-
			p,p'-DDT	mg/kg	0.1	0.2	<0.1	0.2	98
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	-	-
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	-	-
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	-	-
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	-	-
			Isodrin	mg/kg	0.1	<0.1	<0.1	-	-
			Mirex	mg/kg	0.1	<0.1	<0.1	-	-
			Total CLP OC Pesticides	mg/kg	1	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	0.14	-	96

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207657.001	LB202244.004		Dichlorvos	mg/kg	0.5	1.5	<0.5	2	72
			Dimethoate	mg/kg	0.5	<0.5	<0.5	-	-
			Diazinon (Dimpylate)	mg/kg	0.5	1.9	<0.5	2	95
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	-	-
			Malathion	mg/kg	0.2	<0.2	<0.2	-	-
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.9	<0.2	2	95
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	-	-
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	-	-
			Methidathion	mg/kg	0.5	<0.5	<0.5	-	-
			Ethion	mg/kg	0.2	1.8	<0.2	2	90
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	-	-
			Total OP Pesticides*	mg/kg	1.7	7.1	<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	84
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	82

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207657.001	LB202244.004	Naphthalene	mg/kg	0.1	4.5	<0.1	4	111
		2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Acenaphthylene	mg/kg	0.1	4.4	<0.1	4	110
		Acenaphthene	mg/kg	0.1	4.4	<0.1	4	109
		Fluorene	mg/kg	0.1	<0.1	<0.1	-	-
		Phenanthrene	mg/kg	0.1	4.6	<0.1	4	115

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207657.001	LB202244.004		Anthracene	mg/kg	0.1	4.0	<0.1	4	100
			Fluoranthene	mg/kg	0.1	4.6	<0.1	4	115
			Pyrene	mg/kg	0.1	4.6	<0.1	4	116
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Chrysene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(a)pyrene	mg/kg	0.1	4.4	<0.1	4	111
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	4.4	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	4.6	<0.3	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	4.5	<0.2	-	-
			Total PAH (18)	mg/kg	0.8	36	<0.8	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	-	82
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	84
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	82

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207657.001	LB202244.004		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1260	mg/kg	0.2	0.4	<0.2	0.4	100
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	-	-
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	-	95

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207657.001	LB202244.004		Phenol	mg/kg	0.5	0.7	<0.5	1	70
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	-	-
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	-	-
			Total Cresol	mg/kg	1.5	<1.5	<1.5	-	-
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	-	-
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	-	-
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	-	-
			2,4-dichlorophenol	mg/kg	0.5	0.9	<0.5	1	89
			2,4,6-trichlorophenol	mg/kg	0.5	0.8	<0.5	1	77
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	-	-
			4-nitrophenol	mg/kg	1	<1	<1	-	-
			2,4,5-trichlorophenol	mg/kg	0.5	0.7	<0.5	-	-
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	-	-
			Pentachlorophenol	mg/kg	0.5	0.7	<0.5	1	73
			2,4-dinitrophenol	mg/kg	2	<2	<2	-	-
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	-	-
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.4	4.4	-	88
			d5-phenol (Surrogate)	mg/kg	-	1.6	1.6	-	78

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207648.005	LB202249.004	Arsenic, As	mg/kg	1	40	5	50	69 ④
		Cadmium, Cd	mg/kg	0.3	37	<0.3	50	73
		Chromium, Cr	mg/kg	0.5	56	25	50	63 ④
		Copper, Cu	mg/kg	0.5	49	5.7	50	87
		Nickel, Ni	mg/kg	0.5	45	4.1	50	82
		Lead, Pb	mg/kg	1	60	19	50	81

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207648.005	LB202249.004	Zinc, Zn	mg/kg	2	62	36	50	52 ④
SE207657.004	LB202250.004	Arsenic, As	mg/kg	1	48	<1	50	95
		Cadmium, Cd	mg/kg	0.3	42	<0.3	50	84
		Chromium, Cr	mg/kg	0.5	48	2.2	50	92
		Copper, Cu	mg/kg	0.5	54	7.6	50	93
		Nickel, Ni	mg/kg	0.5	48	1.0	50	95
		Lead, Pb	mg/kg	1	73	33	50	79
		Zinc, Zn	mg/kg	2	73	25	50	96

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207657.001	LB202244.004		TRH C10-C14	mg/kg	20	36	<20	40	90
			TRH C15-C28	mg/kg	45	<45	<45	40	85
			TRH C29-C36	mg/kg	45	<45	<45	40	80
			TRH C37-C40	mg/kg	100	<100	<100	-	-
			TRH C10-C36 Total	mg/kg	110	<110	<110	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25	36	<25	40	90
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	36	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	40	80
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	-	-

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207657.001	LB202233.004	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	-	-
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	-	-
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	-	-
			Bromomethane	mg/kg	1	<1	<1	-	-
			Chloroethane	mg/kg	1	<1	<1	-	-
			Trichlorofluoromethane	mg/kg	1	<1	<1	-	-
			Iodomethane	mg/kg	5	<5	<5	-	-
			1,1-dichloroethene	mg/kg	0.1	3.4	<0.1	5	68
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	-	-
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloroethane	mg/kg	0.1	4.0	<0.1	5	80
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	-	-
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	3.8	<0.1	5	77
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	-	-
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated	Chlorobenzene	mg/kg	0.1	4.5	<0.1	5	90
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207657.001	LB202233.004	Halogenated	4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-
		Aromatics	1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Monocyclic	Benzene	mg/kg	0.1	3.9	<0.1	5	77
		Aromatic	Toluene	mg/kg	0.1	4.0	<0.1	5	79
			Ethylbenzene	mg/kg	0.1	4.0	<0.1	5	80
			m/p-xylene	mg/kg	0.2	8.1	<0.2	10	80
			o-xylene	mg/kg	0.1	4.1	<0.1	5	81
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	-	-
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	-	-
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	-	-
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	-	-
		Compounds	2-nitropropane	mg/kg	10	<10	<10	-	-
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	-	-
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	-	-
			Vinyl acetate	mg/kg	10	<10	<10	-	-
			MEK (2-butanone)	mg/kg	10	<10	<10	-	-
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	-	-
			2-hexanone (MBK)	mg/kg	5	<5	<5	-	-
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.9	9.7	10	109
			d8-toluene (Surrogate)	mg/kg	-	10.8	9.8	10	108
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.3	7.2	10	73
		Totals	Total Xylenes	mg/kg	0.3	12	<0.3	-	-
			Total BTEX	mg/kg	0.6	24	<0.6	-	-
			Total VOC*	mg/kg	24	45	<24	-	-
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	-	-
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	20	<1.8	-	-
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	20	<1.8	-	-
		Trihalometha	Chloroform	mg/kg	0.1	4.0	<0.1	5	80
		nes	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Bromoform	mg/kg	0.1	<0.1	<0.1	-	-

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207657.001	LB202233.004		TRH C6-C10	mg/kg	25	71	<25	92.5	77
			TRH C6-C9	mg/kg	20	64	<20	80	80
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.9	9.7	10	109
			d8-toluene (Surrogate)	mg/kg	-	10.8	9.8	10	108
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.3	7.2	-	73
		VPH F	Benzene (F0)	mg/kg	0.1	3.9	<0.1	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	47	<25	62.5	75

MATRIX SPIKE DUPLICATES

SE207657 R1

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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SAMPLE RECEIPT ADVICE

SE207850

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	36

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Fri 19/6/2020
Report Due	Mon 29/6/2020
SGS Reference	**SE207850**

SUBMISSION DETAILS

This is to confirm that 36 samples were received on Friday 19/6/2020. Results are expected to be ready by COB Monday 29/6/2020. Please quote SGS reference SE207850 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	36 Soil
Date documentation received	22/6/2020	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	1.4°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

21 samples have been placed on hold as no tests have been assigned for them by the client. These samples will not be processed.
PFAS subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420.
Asbestos samples not received.
PFAS containers not received for QC samples.

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SAMPLE RECEIPT ADVICE

SE207850

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	Speciated Phenols in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
001	0407_TP118_0.1_200617	29	14	26	11	18	10	81	7
002	0407_TP118_0.5_200617	29	14	26	11	18	10	81	7
003	0407_TP119_0.1_200617	29	14	26	11	18	10	81	7
004	0407_TP119_1.0_200617	29	14	26	11	18	10	81	7
005	0407_TP120_0.1_200617	29	14	26	11	18	10	81	7
006	0407_TP120_0.8_200617	29	14	26	11	18	10	81	7
007	0407_QC114_200617	29	14	26	11	18	10	81	7
008	0407_TP121_0.2_200617	29	14	26	11	18	10	81	7
009	0407_TP121_0.5_200617	29	14	26	11	18	10	81	7
010	0407_TP148_0.1_200617	29	14	26	11	18	10	81	7
011	0407_TP148_0.5_200617	29	14	26	11	18	10	81	7
012	0407_TP149_0.1_200617	29	14	26	11	18	10	81	7
013	0407_TP149_0.5_200617	29	14	26	11	18	10	81	7
014	0407_TP150_0.1_200617	29	14	26	11	18	10	81	7
015	0407_TP150_0.5_200617	29	14	26	11	18	10	81	7
016	0407_TP162_0.1_200617	29	14	26	11	18	10	81	7
017	0407_TP162_0.3_200617	29	14	26	11	18	10	81	7
018	0407_TP163_0.1_200617	29	14	26	11	18	10	81	7
019	0407_TP163_0.4_200617	29	14	26	11	18	10	81	7
020	0407_QC108_200617	29	14	26	11	18	10	81	7
021	0407_TP164_0.1_200617	29	14	26	11	18	10	81	7
022	0407_TP164_0.5_200617	29	14	26	11	18	10	81	7
023	0407_TP176_0.2_200617	29	14	26	11	18	10	81	7
024	0407_TP176_0.5_200617	29	14	26	11	18	10	81	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE207850

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	Speciated Phenols in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
025	0407_TP177_0.1_200617	29	14	26	11	18	10	81	7
026	0407_TP177_0.5_200617	29	14	26	11	18	10	81	7
027	0407_TP178_0.1_200617	29	14	26	11	18	10	81	7
028	0407_TP178_0.3_200617	29	14	26	11	18	10	81	7
029	0407_TP189_0.1_200617	29	14	26	11	18	10	81	7
030	0407_TP189_0.4_200617	29	14	26	11	18	10	81	7
031	0407_QC112_200617	29	14	26	11	18	10	81	7
032	0407_TP190_0.1_200617	29	14	26	11	18	10	81	7
033	0407_TP190_0.5_200617	29	14	26	11	18	10	81	7
034	0407_TP191_0.1_200617	29	14	26	11	18	10	81	7
035	0407_TP191_0.4_200617	29	14	26	11	18	10	81	7
036	0407_QC110_200617	29	14	26	11	18	10	81	7

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SAMPLE RECEIPT ADVICE

SE207850

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Mercury in Soil	Moisture Content	Per- and Polyfluoroalkyl Substances (PFAS) in	Total Recoverable Elements in Soil/Waste
001	0407_TP118_0.1_200617	1	1	55	7
002	0407_TP118_0.5_200617	1	1	55	7
003	0407_TP119_0.1_200617	1	1	55	7
004	0407_TP119_1.0_200617	1	1	55	7
005	0407_TP120_0.1_200617	1	1	55	7
006	0407_TP120_0.8_200617	1	1	55	7
007	0407_QC114_200617	1	1	-	7
008	0407_TP121_0.2_200617	1	1	55	7
009	0407_TP121_0.5_200617	1	1	55	7
010	0407_TP148_0.1_200617	1	1	55	7
011	0407_TP148_0.5_200617	1	1	55	7
012	0407_TP149_0.1_200617	1	1	55	7
013	0407_TP149_0.5_200617	1	1	55	7
014	0407_TP150_0.1_200617	1	1	55	7
015	0407_TP150_0.5_200617	1	1	55	7
016	0407_TP162_0.1_200617	1	1	55	7
017	0407_TP162_0.3_200617	1	1	55	7
018	0407_TP163_0.1_200617	1	1	55	7
019	0407_TP163_0.4_200617	1	1	55	7
020	0407_QC108_200617	1	1	-	7
021	0407_TP164_0.1_200617	1	1	55	7
022	0407_TP164_0.5_200617	1	1	55	7
023	0407_TP176_0.2_200617	1	1	55	7
024	0407_TP176_0.5_200617	1	1	55	7

CONTINUED OVERLEAF

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SAMPLE RECEIPT ADVICE

SE207850

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Mercury in Soil	Moisture Content	Per- and Polyfluoroalkyl Substances (PFAS) in	Total Recoverable Elements in Soil/Waste
025	0407_TP177_0.1_200617	1	1	55	7
026	0407_TP177_0.5_200617	1	1	55	7
027	0407_TP178_0.1_200617	1	1	55	7
028	0407_TP178_0.3_200617	1	1	55	7
029	0407_TP189_0.1_200617	1	1	55	7
030	0407_TP189_0.4_200617	1	1	55	7
031	0407_QC112_200617	1	1	-	7
032	0407_TP190_0.1_200617	1	1	55	7
033	0407_TP190_0.5_200617	1	1	55	7
034	0407_TP191_0.1_200617	1	1	55	7
035	0407_TP191_0.4_200617	1	1	55	7
036	0407_QC110_200617	1	1	-	7

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Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS		LABORATORY DETAILS	
Contact	[redacted]	Manager	[redacted]
Client	SGS EHS SYDNEY	Laboratory	SGS Melbourne EH&S
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Project	**610.30041 Randwick Barrack**	SGS Reference	**ME315404 R0**
Order Number	**SE207850**	Date Received	25 Jun 2020
Samples	36	Date Reported	29 Jun 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(14420).

SIGNATORIES

[redacted]

Australian Chemistry Manager

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315404.001 Soil 17 Jun 2020 SE207850.001	ME315404.002 Soil 17 Jun 2020 SE207850.002	ME315404.003 Soil 17 Jun 2020 SE207850.003	ME315404.004 Soil 17 Jun 2020 SE207850.004
Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level	**Method: MA-1523**	**Tested: 26/6/2020**					
Perfluorobutanoic acid (PFBA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0005		<0.0005	<0.0005	<0.0005	<0.0005
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorononanoic acid (PFNA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorodecanoic acid (PFDA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Sum PFOS and PFHXS	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorononane sulfonate (PFNS)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002		<0.002	<0.002	<0.002	<0.002
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002		<0.002	<0.002	<0.002	<0.002
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001
(13C4-PFBA) Surrogate	%	-		**102**	**101**	**102**	**99**
(13C5_PFPeA) Surrogate	%	-		**99**	**95**	**103**	**95**
(13C5-PFHxA) Surrogate	%	-		**100**	**92**	**103**	**97**
(13C4-PFHpA) Surrogate	%	-		**122**	**106**	**114**	**115**
(13C4-PFOA) Surrogate	%	-		**106**	**93**	**101**	**102**
(13C9-PFNA) Surrogate	%	-		**98**	**86**	**105**	**99**
(13C6-PFDA) Surrogate	%	-		**80**	**110**	**96**	**94**
(13C7-PFUdA) Surrogate	%	-		**93**	**105**	**91**	**88**
(13C2-PFDoA) Surrogate	%	-		**87**	**96**	**84**	**76**
(13C2-PFTeDA) Surrogate	%	-		**48**	**54**	**54**	**26**
(13C2-PFHxDA) Surrogate	%	-		**8**	**8**	**5**	**3**
(13C3-PFBS) Surrogate	%	-		**91**	**91**	**110**	**93**
(13C3-PFHxS) Surrogate	%	-		**94**	**100**	**109**	**97**
(13C8-PFOS) Surrogate	%	-		**104**	**91**	**88**	**95**
(13C2-4:2FTS) Surrogate	%	-		**59**	**71**	**68**	**65**
(13C2-6:2FTS) Surrogate	%	-		**62**	**78**	**56**	**72**
(13C2-8:2FTS) Surrogate	%	-		**68**	**76**	**57**	**74**
(13C8-PFOSA) Surrogate	%	-		**53**	**47**	**49**	**42**
(D3-N-MeFOSA) Surrogate	%	-		**46**	**29**	**25**	**29**
(D5-N-EtFOSA) Surrogate	%	-		**37**	**29**	**21**	**19**
(D7-N-MeFOSE) Surrogate	%	-		**48**	**36**	**35**	**34**
(D9-N-EtFOSE) Surrogate	%	-		**52**	**38**	**54**	**44**
(D3-N-MeFOSAA) Surrogate	%	-		**80**	**80**	**81**	**66**
(D5-N-EtFOSAA) Surrogate	%	-		**74**	**62**	**62**	**48**
Moisture Content	**Method: AN002**	**Tested: 26/6/2020**					

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315404.001 Soil 17 Jun 2020 SE207850.001	ME315404.002 Soil 17 Jun 2020 SE207850.002	ME315404.003 Soil 17 Jun 2020 SE207850.003	ME315404.004 Soil 17 Jun 2020 SE207850.004
Moisture Content Method: AN002 Tested: 26/6/2020 (continued)							
% Moisture*	%w/w	1		**4.2**	**20.0**	**8.1**	**13.8**

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name ME315404.005 Soil 17 Jun 2020 SE207850.005	ME315404.006 Soil 17 Jun 2020 SE207850.006	ME315404.007 Soil 17 Jun 2020 SE207850.007	ME315404.008 Soil 17 Jun 2020 SE207850.008
Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level Method: MA-1523 Tested: 26/6/2020						
Perfluorobutanoic acid (PFBA)	mg/kg	0.0001	<0.0001	<0.0001	-	<0.0001
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0005	<0.0005	<0.0005	-	<0.0005
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0001	<0.0001	<0.0001	-	<0.0001
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0001	<0.0001	<0.0001	-	<0.0001
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0001	<0.0001	<0.0001	-	<0.0001
Perfluorononanoic acid (PFNA)	mg/kg	0.0001	<0.0001	<0.0001	-	<0.0001
Perfluorodecanoic acid (PFDA)	mg/kg	0.0001	<0.0001	<0.0001	-	<0.0001
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0001	<0.0001	<0.0001	-	<0.0001
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0001	<0.0001	<0.0001	-	<0.0001
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0001	<0.0001	<0.0001	-	<0.0001
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0001	<0.0001	<0.0001	-	<0.0001
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0001	<0.0001	<0.0001	-	<0.0001
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0001	<0.0001	<0.0001	-	<0.0001
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0001	<0.0001	<0.0001	-	<0.0001
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0001	<0.0001	<0.0001	-	<0.0001
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0001	<0.0001	<0.0001	-	<0.0001
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0001	<0.0001	<0.0001	-	<0.0001
Sum PFOS and PFHXS	mg/kg	0.0001	<0.0001	<0.0001	-	<0.0001
Perfluorononane sulfonate (PFNS)	mg/kg	0.0001	<0.0001	<0.0001	-	<0.0001
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0001	<0.0001	<0.0001	-	<0.0001
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0001	<0.0001	<0.0001	-	<0.0001
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.001	<0.001	<0.001	-	<0.001
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.001	<0.001	<0.001	-	<0.001
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.001	<0.001	<0.001	-	<0.001
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.001	<0.001	<0.001	-	<0.001
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.001	<0.001	<0.001	-	<0.001
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.001	<0.001	<0.001	-	<0.001
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002	<0.002	<0.002	-	<0.002
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002	<0.002	<0.002	-	<0.002
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.001	<0.001	<0.001	-	<0.001
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.001	<0.001	<0.001	-	<0.001
(13C4-PFBA) Surrogate	%	-	**100**	**100**	-	**103**
(13C5_PFPeA) Surrogate	%	-	**101**	**92**	-	**97**
(13C5-PFHxA) Surrogate	%	-	**90**	**86**	-	**94**
(13C4-PFHpA) Surrogate	%	-	**101**	**99**	-	**107**
(13C4-PFOA) Surrogate	%	-	**101**	**92**	-	**103**
(13C9-PFNA) Surrogate	%	-	**100**	**102**	-	**86**
(13C6-PFDA) Surrogate	%	-	**96**	**115**	-	**100**
(13C7-PFUdA) Surrogate	%	-	**98**	**88**	-	**101**
(13C2-PFDoA) Surrogate	%	-	**96**	**58**	-	**85**
(13C2-PFTeDA) Surrogate	%	-	**39**	**18**	-	**29**
(13C2-PFHxDA) Surrogate	%	-	**5**	**2**	-	**3**
(13C3-PFBS) Surrogate	%	-	**85**	**80**	-	**93**
(13C3-PFHxS) Surrogate	%	-	**95**	**99**	-	**96**
(13C8-PFOS) Surrogate	%	-	**88**	**89**	-	**92**
(13C2-4:2FTS) Surrogate	%	-	**70**	**65**	-	**77**
(13C2-6:2FTS) Surrogate	%	-	**73**	**69**	-	**81**
(13C2-8:2FTS) Surrogate	%	-	**71**	**77**	-	**72**
(13C8-PFOSA) Surrogate	%	-	**44**	**60**	-	**56**
(D3-N-MeFOSA) Surrogate	%	-	**37**	**36**	-	**33**
(D5-N-EtFOSA) Surrogate	%	-	**25**	**24**	-	**27**
(D7-N-MeFOSE) Surrogate	%	-	**34**	**44**	-	**38**
(D9-N-EtFOSE) Surrogate	%	-	**39**	**40**	-	**34**
(D3-N-MeFOSAA) Surrogate	%	-	**81**	**77**	-	**71**
(D5-N-EtFOSAA) Surrogate	%	-	**63**	**83**	-	**82**

Moisture Content Method: AN002 Tested: 26/6/2020

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name ME315404.005 Soil 17 Jun 2020 SE207850.005	ME315404.006 Soil 17 Jun 2020 SE207850.006	ME315404.007 Soil 17 Jun 2020 SE207850.007	ME315404.008 Soil 17 Jun 2020 SE207850.008
Moisture Content Method: AN002 Tested: 26/6/2020 (continued)						
% Moisture*	%w/w	1	**1.1**	**28.8**	-	<1.0

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315404.009 Soil 17 Jun 2020 SE207850.009	ME315404.010 Soil 17 Jun 2020 SE207850.010	ME315404.011 Soil 17 Jun 2020 SE207850.011	ME315404.012 Soil 17 Jun 2020 SE207850.012
Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level	**Method: MA-1523**	**Tested: 26/6/2020**					
Perfluorobutanoic acid (PFBA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0005		<0.0005	<0.0005	<0.0005	<0.0005
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorononanoic acid (PFNA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorodecanoic acid (PFDA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Sum PFOS and PFHXS	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorononane sulfonate (PFNS)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002		<0.002	<0.002	<0.002	<0.002
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002		<0.002	<0.002	<0.002	<0.002
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001
(13C4-PFBA) Surrogate	%	-		**100**	**102**	**101**	**100**
(13C5_PFPeA) Surrogate	%	-		**97**	**102**	**93**	**97**
(13C5-PFHxA) Surrogate	%	-		**94**	**115**	**117**	**103**
(13C4-PFHpA) Surrogate	%	-		**107**	**117**	**123**	**115**
(13C4-PFOA) Surrogate	%	-		**102**	**103**	**106**	**101**
(13C9-PFNA) Surrogate	%	-		**104**	**106**	**108**	**96**
(13C6-PFDA) Surrogate	%	-		**79**	**120**	**103**	**97**
(13C7-PFUdA) Surrogate	%	-		**90**	**115**	**99**	**97**
(13C2-PFDoA) Surrogate	%	-		**71**	**100**	**88**	**94**
(13C2-PFTeDA) Surrogate	%	-		**26**	**35**	**24**	**55**
(13C2-PFHxDA) Surrogate	%	-		**4**	**3**	**2**	**10**
(13C3-PFBS) Surrogate	%	-		**94**	**117**	**107**	**102**
(13C3-PFHxS) Surrogate	%	-		**93**	**90**	**99**	**113**
(13C8-PFOS) Surrogate	%	-		**92**	**112**	**106**	**101**
(13C2-4:2FTS) Surrogate	%	-		**85**	**57**	**68**	**82**
(13C2-6:2FTS) Surrogate	%	-		**86**	**61**	**81**	**83**
(13C2-8:2FTS) Surrogate	%	-		**75**	**55**	**76**	**71**
(13C8-PFOSA) Surrogate	%	-		**54**	**60**	**62**	**48**
(D3-N-MeFOSA) Surrogate	%	-		**36**	**41**	**41**	**38**
(D5-N-EtFOSA) Surrogate	%	-		**36**	**33**	**23**	**31**
(D7-N-MeFOSE) Surrogate	%	-		**47**	**54**	**43**	**36**
(D9-N-EtFOSE) Surrogate	%	-		**44**	**57**	**45**	**41**
(D3-N-MeFOSAA) Surrogate	%	-		**83**	**87**	**87**	**97**
(D5-N-EtFOSAA) Surrogate	%	-		**67**	**82**	**82**	**79**
Moisture Content	**Method: AN002**	**Tested: 26/6/2020**					

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315404.009 Soil 17 Jun 2020 SE207850.009	ME315404.010 Soil 17 Jun 2020 SE207850.010	ME315404.011 Soil 17 Jun 2020 SE207850.011	ME315404.012 Soil 17 Jun 2020 SE207850.012
Moisture Content Method: AN002 Tested: 26/6/2020 (continued)							
% Moisture*	%w/w	1		**4.8**	**5.6**	**3.6**	**1.9**

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315404.013 Soil 17 Jun 2020 SE207850.013	ME315404.014 Soil 17 Jun 2020 SE207850.014	ME315404.015 Soil 17 Jun 2020 SE207850.015	ME315404.016 Soil 17 Jun 2020 SE207850.016
Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level	**Method: MA-1523**	**Tested: 26/6/2020**					
Perfluorobutanoic acid (PFBA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0005		<0.0005	<0.0005	<0.0005	<0.0005
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorononanoic acid (PFNA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorodecanoic acid (PFDA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Sum PFOS and PFHXS	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorononane sulfonate (PFNS)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002		<0.002	<0.002	<0.002	<0.002
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002		<0.002	<0.002	<0.002	<0.002
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001
(13C4-PFBA) Surrogate	%	-		**98**	**100**	**101**	**113**
(13C5_PFPeA) Surrogate	%	-		**91**	**101**	**90**	**115**
(13C5-PFHxA) Surrogate	%	-		**92**	**90**	**95**	**102**
(13C4-PFHpA) Surrogate	%	-		**105**	**106**	**107**	**121**
(13C4-PFOA) Surrogate	%	-		**97**	**94**	**96**	**101**
(13C9-PFNA) Surrogate	%	-		**102**	**93**	**90**	**93**
(13C6-PFDA) Surrogate	%	-		**107**	**116**	**97**	**86**
(13C7-PFUdA) Surrogate	%	-		**116**	**103**	**112**	**83**
(13C2-PFDoA) Surrogate	%	-		**101**	**82**	**88**	**72**
(13C2-PFTeDA) Surrogate	%	-		**36**	**26**	**34**	**22**
(13C2-PFHxDA) Surrogate	%	-		**7**	**4**	**4**	**2**
(13C3-PFBS) Surrogate	%	-		**90**	**96**	**101**	**114**
(13C3-PFHxS) Surrogate	%	-		**89**	**105**	**101**	**92**
(13C8-PFOS) Surrogate	%	-		**112**	**114**	**100**	**104**
(13C2-4:2FTS) Surrogate	%	-		**78**	**69**	**88**	**42**
(13C2-6:2FTS) Surrogate	%	-		**79**	**77**	**89**	**35**
(13C2-8:2FTS) Surrogate	%	-		**67**	**71**	**71**	**31**
(13C8-PFOSA) Surrogate	%	-		**46**	**59**	**53**	**57**
(D3-N-MeFOSA) Surrogate	%	-		**23**	**26**	**26**	**24**
(D5-N-EtFOSA) Surrogate	%	-		**14**	**12**	**15**	**13**
(D7-N-MeFOSE) Surrogate	%	-		**36**	**36**	**39**	**36**
(D9-N-EtFOSE) Surrogate	%	-		**33**	**52**	**35**	**49**
(D3-N-MeFOSAA) Surrogate	%	-		**84**	**84**	**72**	**81**
(D5-N-EtFOSAA) Surrogate	%	-		**84**	**86**	**74**	**51**
Moisture Content	**Method: AN002**	**Tested: 26/6/2020**					

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name ME315404.013 Soil 17 Jun 2020 SE207850.013	ME315404.014 Soil 17 Jun 2020 SE207850.014	ME315404.015 Soil 17 Jun 2020 SE207850.015	ME315404.016 Soil 17 Jun 2020 SE207850.016
Moisture Content Method: AN002 Tested: 26/6/2020 (continued)						
% Moisture*	%w/w	1	**2.4**	**3.5**	**2.7**	**4.6**

Parameter	Units	LOR	Sample Number: ME315404.017 Sample Matrix: Soil Sample Date: 17 Jun 2020 Sample Name: SE207850.017	ME315404.018 Soil 17 Jun 2020 SE207850.018	ME315404.019 Soil 17 Jun 2020 SE207850.019	ME315404.020 Soil 17 Jun 2020 SE207850.020
Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level **Method: MA-1523** **Tested: 26/6/2020**						
Perfluorobutanoic acid (PFBA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	-
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0005	<0.0005	<0.0005	<0.0005	-
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	-
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	-
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	-
Perfluorononanoic acid (PFNA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	-
Perfluorodecanoic acid (PFDA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	-
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	-
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	-
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	-
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	-
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	-
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	-
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	-
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	-
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	-
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	-
Sum PFOS and PFHXS	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	-
Perfluorononane sulfonate (PFNS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	-
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	-
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.001	<0.001	<0.001	<0.001	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.001	<0.001	<0.001	<0.001	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.001	<0.001	<0.001	<0.001	-
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.001	<0.001	<0.001	<0.001	-
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.001	<0.001	<0.001	<0.001	-
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.001	<0.001	<0.001	<0.001	-
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002	<0.002	<0.002	<0.002	-
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002	<0.002	<0.002	<0.002	-
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.001	<0.001	<0.001	<0.001	-
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.001	<0.001	<0.001	<0.001	-
(13C4-PFBA) Surrogate	%	-	**104**	**106**	**99**	-
(13C5_PFPeA) Surrogate	%	-	**104**	**97**	**101**	-
(13C5-PFHxA) Surrogate	%	-	**109**	**97**	**91**	-
(13C4-PFHpA) Surrogate	%	-	**128**	**110**	**108**	-
(13C4-PFOA) Surrogate	%	-	**111**	**95**	**104**	-
(13C9-PFNA) Surrogate	%	-	**104**	**102**	**96**	-
(13C6-PFDA) Surrogate	%	-	**87**	**98**	**94**	-
(13C7-PFUdA) Surrogate	%	-	**99**	**87**	**125**	-
(13C2-PFDoA) Surrogate	%	-	**96**	**69**	**105**	-
(13C2-PFTeDA) Surrogate	%	-	**74**	**32**	**70**	-
(13C2-PFHxDA) Surrogate	%	-	**10**	**8**	**15**	-
(13C3-PFBS) Surrogate	%	-	**106**	**93**	**83**	-
(13C3-PFHxS) Surrogate	%	-	**96**	**97**	**96**	-
(13C8-PFOS) Surrogate	%	-	**97**	**79**	**109**	-
(13C2-4:2FTS) Surrogate	%	-	**53**	**61**	**66**	-
(13C2-6:2FTS) Surrogate	%	-	**59**	**60**	**74**	-
(13C2-8:2FTS) Surrogate	%	-	**50**	**70**	**82**	-
(13C8-PFOSA) Surrogate	%	-	**54**	**39**	**52**	-
(D3-N-MeFOSA) Surrogate	%	-	**30**	**19**	**33**	-
(D5-N-EtFOSA) Surrogate	%	-	**22**	**14**	**26**	-
(D7-N-MeFOSE) Surrogate	%	-	**42**	**29**	**37**	-
(D9-N-EtFOSE) Surrogate	%	-	**57**	**38**	**40**	-
(D3-N-MeFOSAA) Surrogate	%	-	**72**	**59**	**75**	-
(D5-N-EtFOSAA) Surrogate	%	-	**58**	**50**	**68**	-

Moisture Content **Method: AN002** **Tested: 26/6/2020**

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315404.017 Soil 17 Jun 2020 SE207850.017	ME315404.018 Soil 17 Jun 2020 SE207850.018	ME315404.019 Soil 17 Jun 2020 SE207850.019	ME315404.020 Soil 17 Jun 2020 SE207850.020
Moisture Content Method: AN002 Tested: 28/6/2020 (continued)							
% Moisture*	%w/w	1		**4.7**	<1.0	**2.3**	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315404.021 Soil 17 Jun 2020 SE207850.021	ME315404.022 Soil 17 Jun 2020 SE207850.022	ME315404.023 Soil 17 Jun 2020 SE207850.023	ME315404.024 Soil 17 Jun 2020 SE207850.024
Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level	**Method: MA-1523**	**Tested: 26/6/2020**					
Perfluorobutanoic acid (PFBA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0005		<0.0005	<0.0005	<0.0005	<0.0005
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorononanoic acid (PFNA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorodecanoic acid (PFDA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Sum PFOS and PFHXS	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorononane sulfonate (PFNS)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002		<0.002	<0.002	<0.002	<0.002
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002		<0.002	<0.002	<0.002	<0.002
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001
(13C4-PFBA) Surrogate	%	-		**99**	**101**	**103**	**101**
(13C5_PFPeA) Surrogate	%	-		**83**	**85**	**89**	**93**
(13C5-PFHxA) Surrogate	%	-		**88**	**86**	**96**	**92**
(13C4-PFHpA) Surrogate	%	-		**102**	**99**	**104**	**106**
(13C4-PFOA) Surrogate	%	-		**101**	**95**	**104**	**96**
(13C9-PFNA) Surrogate	%	-		**92**	**95**	**91**	**91**
(13C6-PFDA) Surrogate	%	-		**87**	**94**	**90**	**93**
(13C7-PFUdA) Surrogate	%	-		**114**	**96**	**95**	**102**
(13C2-PFDoA) Surrogate	%	-		**105**	**101**	**101**	**85**
(13C2-PFTeDA) Surrogate	%	-		**66**	**94**	**82**	**58**
(13C2-PFHxDA) Surrogate	%	-		**21**	**54**	**43**	**15**
(13C3-PFBS) Surrogate	%	-		**82**	**82**	**97**	**87**
(13C3-PFHxS) Surrogate	%	-		**89**	**98**	**94**	**93**
(13C8-PFOS) Surrogate	%	-		**92**	**90**	**90**	**109**
(13C2-4:2FTS) Surrogate	%	-		**65**	**59**	**61**	**67**
(13C2-6:2FTS) Surrogate	%	-		**66**	**60**	**59**	**64**
(13C2-8:2FTS) Surrogate	%	-		**71**	**66**	**74**	**64**
(13C8-PFOSA) Surrogate	%	-		**48**	**50**	**53**	**44**
(D3-N-MeFOSA) Surrogate	%	-		**41**	**37**	**43**	**32**
(D5-N-EtFOSA) Surrogate	%	-		**43**	**43**	**51**	**33**
(D7-N-MeFOSE) Surrogate	%	-		**42**	**38**	**46**	**42**
(D9-N-EtFOSE) Surrogate	%	-		**42**	**43**	**77**	**44**
(D3-N-MeFOSAA) Surrogate	%	-		**79**	**71**	**94**	**77**
(D5-N-EtFOSAA) Surrogate	%	-		**73**	**58**	**62**	**76**
Moisture Content	**Method: AN002**	**Tested: 26/6/2020**					

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315404.021 Soil 17 Jun 2020 SE207850.021	ME315404.022 Soil 17 Jun 2020 SE207850.022	ME315404.023 Soil 17 Jun 2020 SE207850.023	ME315404.024 Soil 17 Jun 2020 SE207850.024
Moisture Content Method: AN002 Tested: 26/6/2020 (continued)							
% Moisture*	%w/w	1		**2.4**	**4.2**	**5.5**	**4.1**

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315404.025 Soil 17 Jun 2020 SE207850.025	ME315404.026 Soil 17 Jun 2020 SE207850.026	ME315404.027 Soil 17 Jun 2020 SE207850.027	ME315404.028 Soil 17 Jun 2020 SE207850.028
Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level	**Method: MA-1523**	**Tested: 26/6/2020**					
Perfluorobutanoic acid (PFBA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0005		<0.0005	<0.0005	<0.0005	<0.0005
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorononanoic acid (PFNA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorodecanoic acid (PFDA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Sum PFOS and PFHXS	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorononane sulfonate (PFNS)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	<0.0001
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002		<0.002	<0.002	<0.002	<0.002
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002		<0.002	<0.002	<0.002	<0.002
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001
(13C4-PFBA) Surrogate	%	-		**101**	**101**	**98**	**98**
(13C5_PFPeA) Surrogate	%	-		**100**	**102**	**95**	**87**
(13C5-PFHxA) Surrogate	%	-		**101**	**91**	**99**	**98**
(13C4-PFHpA) Surrogate	%	-		**117**	**109**	**104**	**106**
(13C4-PFOA) Surrogate	%	-		**100**	**103**	**95**	**95**
(13C9-PFNA) Surrogate	%	-		**90**	**108**	**99**	**106**
(13C6-PFDA) Surrogate	%	-		**93**	**92**	**91**	**117**
(13C7-PFUdA) Surrogate	%	-		**99**	**96**	**109**	**99**
(13C2-PFDoA) Surrogate	%	-		**100**	**93**	**113**	**82**
(13C2-PFTeDA) Surrogate	%	-		**92**	**66**	**76**	**60**
(13C2-PFHxDA) Surrogate	%	-		**50**	**22**	**21**	**16**
(13C3-PFBS) Surrogate	%	-		**109**	**96**	**96**	**92**
(13C3-PFHxS) Surrogate	%	-		**95**	**93**	**99**	**96**
(13C8-PFOS) Surrogate	%	-		**135**	**88**	**91**	**116**
(13C2-4:2FTS) Surrogate	%	-		**50**	**60**	**66**	**71**
(13C2-6:2FTS) Surrogate	%	-		**50**	**58**	**65**	**72**
(13C2-8:2FTS) Surrogate	%	-		**54**	**60**	**75**	**72**
(13C8-PFOSA) Surrogate	%	-		**49**	**41**	**53**	**54**
(D3-N-MeFOSA) Surrogate	%	-		**48**	**35**	**41**	**26**
(D5-N-EtFOSA) Surrogate	%	-		**57**	**32**	**44**	**27**
(D7-N-MeFOSE) Surrogate	%	-		**54**	**38**	**45**	**45**
(D9-N-EtFOSE) Surrogate	%	-		**79**	**43**	**46**	**34**
(D3-N-MeFOSAA) Surrogate	%	-		**77**	**58**	**74**	**77**
(D5-N-EtFOSAA) Surrogate	%	-		**77**	**51**	**67**	**70**
Moisture Content	**Method: AN002**	**Tested: 26/6/2020**					

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name ME315404.025 Soil 17 Jun 2020 SE207850.025	ME315404.026 Soil 17 Jun 2020 SE207850.026	ME315404.027 Soil 17 Jun 2020 SE207850.027	ME315404.028 Soil 17 Jun 2020 SE207850.028
Moisture Content Method: AN002 Tested: 26/6/2020 (continued)						
% Moisture*	%w/w	1	**6.9**	**3.4**	**3.4**	**3.0**

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name ME315404.029 Soil 17 Jun 2020 SE207850.029	ME315404.030 Soil 17 Jun 2020 SE207850.030	ME315404.031 Soil 17 Jun 2020 SE207850.031	ME315404.032 Soil 17 Jun 2020 SE207850.032
Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level Method: MA-1523 Tested: 26/6/2020						
Perfluorobutanoic acid (PFBA)	mg/kg	0.0001	<0.0001	<0.0001	-	<0.0001
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0005	<0.0005	<0.0005	-	<0.0005
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0001	<0.0001	<0.0001	-	<0.0001
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0001	<0.0001	<0.0001	-	<0.0001
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0001	<0.0001	<0.0001	-	<0.0001
Perfluorononanoic acid (PFNA)	mg/kg	0.0001	<0.0001	<0.0001	-	<0.0001
Perfluorodecanoic acid (PFDA)	mg/kg	0.0001	<0.0001	<0.0001	-	<0.0001
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0001	<0.0001	<0.0001	-	<0.0001
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0001	<0.0001	<0.0001	-	<0.0001
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0001	<0.0001	<0.0001	-	<0.0001
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0001	<0.0001	<0.0001	-	<0.0001
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0001	<0.0001	<0.0001	-	<0.0001
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0001	<0.0001	<0.0001	-	<0.0001
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0001	<0.0001	<0.0001	-	<0.0001
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0001	<0.0001	<0.0001	-	<0.0001
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0001	<0.0001	<0.0001	-	<0.0001
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0001	<0.0001	<0.0001	-	<0.0001
Sum PFOS and PFHXS	mg/kg	0.0001	<0.0001	<0.0001	-	<0.0001
Perfluorononane sulfonate (PFNS)	mg/kg	0.0001	<0.0001	<0.0001	-	<0.0001
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0001	<0.0001	<0.0001	-	<0.0001
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0001	<0.0001	<0.0001	-	<0.0001
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.001	<0.001	<0.001	-	<0.001
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.001	<0.001	<0.001	-	<0.001
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.001	<0.001	<0.001	-	<0.001
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.001	<0.001	<0.001	-	<0.001
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.001	<0.001	<0.001	-	<0.001
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.001	<0.001	<0.001	-	<0.001
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002	<0.002	<0.002	-	<0.002
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002	<0.002	<0.002	-	<0.002
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.001	<0.001	<0.001	-	<0.001
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.001	<0.001	<0.001	-	<0.001
(13C4-PFBA) Surrogate	%	-	**99**	**101**	-	**100**
(13C5_PFPeA) Surrogate	%	-	**96**	**93**	-	**95**
(13C5-PFHxA) Surrogate	%	-	**93**	**88**	-	**108**
(13C4-PFHpA) Surrogate	%	-	**117**	**99**	-	**124**
(13C4-PFOA) Surrogate	%	-	**108**	**102**	-	**99**
(13C9-PFNA) Surrogate	%	-	**105**	**95**	-	**98**
(13C6-PFDA) Surrogate	%	-	**96**	**112**	-	**98**
(13C7-PFUdA) Surrogate	%	-	**105**	**112**	-	**107**
(13C2-PFDoA) Surrogate	%	-	**105**	**104**	-	**100**
(13C2-PFTeDA) Surrogate	%	-	**68**	**78**	-	**77**
(13C2-PFHxDA) Surrogate	%	-	**26**	**21**	-	**24**
(13C3-PFBS) Surrogate	%	-	**99**	**91**	-	**103**
(13C3-PFHxS) Surrogate	%	-	**100**	**101**	-	**105**
(13C8-PFOS) Surrogate	%	-	**111**	**103**	-	**109**
(13C2-4:2FTS) Surrogate	%	-	**60**	**72**	-	**60**
(13C2-6:2FTS) Surrogate	%	-	**67**	**68**	-	**62**
(13C2-8:2FTS) Surrogate	%	-	**77**	**77**	-	**77**
(13C8-PFOSA) Surrogate	%	-	**63**	**50**	-	**57**
(D3-N-MeFOSA) Surrogate	%	-	**45**	**36**	-	**58**
(D5-N-EtFOSA) Surrogate	%	-	**39**	**37**	-	**45**
(D7-N-MeFOSE) Surrogate	%	-	**44**	**46**	-	**50**
(D9-N-EtFOSE) Surrogate	%	-	**49**	**42**	-	**51**
(D3-N-MeFOSAA) Surrogate	%	-	**90**	**91**	-	**70**
(D5-N-EtFOSAA) Surrogate	%	-	**73**	**74**	-	**67**

Moisture Content Method: AN002 Tested: 26/6/2020

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315404.029 Soil 17 Jun 2020 SE207850.029	ME315404.030 Soil 17 Jun 2020 SE207850.030	ME315404.031 Soil 17 Jun 2020 SE207850.031	ME315404.032 Soil 17 Jun 2020 SE207850.032
Moisture Content Method: AN002 Tested: 26/6/2020 (continued)							
% Moisture*	%w/w	1		**6.3**	**3.6**	-	**5.2**

Parameter	Units	LOR	Sample Number: ME315404.033 Sample Matrix: Soil Sample Date: 17 Jun 2020 Sample Name: SE207850.033	ME315404.034 Soil 17 Jun 2020 SE207850.034	ME315404.035 Soil 17 Jun 2020 SE207850.035	ME315404.036 Soil 17 Jun 2020 SE207850.036
Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level **Method: MA-1523** **Tested: 26/6/2020**						
Perfluorobutanoic acid (PFBA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	-
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0005	<0.0005	<0.0005	<0.0005	-
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	-
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	-
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	-
Perfluorononanoic acid (PFNA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	-
Perfluorodecanoic acid (PFDA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	-
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	-
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	-
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	-
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	-
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	-
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	-
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	-
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	-
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	-
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	-
Sum PFOS and PFHXS	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	-
Perfluorononane sulfonate (PFNS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	-
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	-
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.001	<0.001	<0.001	<0.001	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.001	<0.001	<0.001	<0.001	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.001	<0.001	<0.001	<0.001	-
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.001	<0.001	<0.001	<0.001	-
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.001	<0.001	<0.001	<0.001	-
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.001	<0.001	<0.001	<0.001	-
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002	<0.002	<0.002	<0.002	-
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002	<0.002	<0.002	<0.002	-
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.001	<0.001	<0.001	<0.001	-
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.001	<0.001	<0.001	<0.001	-
(13C4-PFBA) Surrogate	%	-	**99**	**100**	**100**	-
(13C5_PFPeA) Surrogate	%	-	**88**	**99**	**94**	-
(13C5-PFHxA) Surrogate	%	-	**106**	**93**	**109**	-
(13C4-PFHpA) Surrogate	%	-	**115**	**109**	**126**	-
(13C4-PFOA) Surrogate	%	-	**98**	**98**	**109**	-
(13C9-PFNA) Surrogate	%	-	**102**	**96**	**106**	-
(13C6-PFDA) Surrogate	%	-	**86**	**85**	**103**	-
(13C7-PFUdA) Surrogate	%	-	**110**	**105**	**95**	-
(13C2-PFDoA) Surrogate	%	-	**101**	**97**	**83**	-
(13C2-PFTeDA) Surrogate	%	-	**68**	**79**	**71**	-
(13C2-PFHxDA) Surrogate	%	-	**20**	**26**	**18**	-
(13C3-PFBS) Surrogate	%	-	**96**	**89**	**99**	-
(13C3-PFHxS) Surrogate	%	-	**96**	**91**	**102**	-
(13C8-PFOS) Surrogate	%	-	**96**	**91**	**86**	-
(13C2-4:2FTS) Surrogate	%	-	**77**	**53**	**66**	-
(13C2-6:2FTS) Surrogate	%	-	**72**	**60**	**64**	-
(13C2-8:2FTS) Surrogate	%	-	**83**	**66**	**67**	-
(13C8-PFOSA) Surrogate	%	-	**51**	**46**	**48**	-
(D3-N-MeFOSA) Surrogate	%	-	**40**	**35**	**45**	-
(D5-N-EtFOSA) Surrogate	%	-	**41**	**31**	**42**	-
(D7-N-MeFOSE) Surrogate	%	-	**45**	**37**	**42**	-
(D9-N-EtFOSE) Surrogate	%	-	**44**	**49**	**43**	-
(D3-N-MeFOSAA) Surrogate	%	-	**74**	**74**	**56**	-
(D5-N-EtFOSAA) Surrogate	%	-	**67**	**53**	**53**	-
Moisture Content **Method: AN002** **Tested: 26/6/2020**						

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315404.033 Soil 17 Jun 2020 SE207850.033	ME315404.034 Soil 17 Jun 2020 SE207850.034	ME315404.035 Soil 17 Jun 2020 SE207850.035	ME315404.036 Soil 17 Jun 2020 SE207850.036
Moisture Content Method: AN002 Tested: 28/6/2020 (continued)							
% Moisture*	%w/w	1		**4.5**	**5.0**	**8.5**	-

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Moisture Content Method: ME-(AU)-[ENV]AN002

Parameter	QC Reference	Units	LOR	DUP %RPD
% Moisture*	LB033808	%w/w	1	1 - 13%
	LB033811	%w/w	1	7 - 12%

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level Method: MA-1523

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Perfluorobutanoic acid (PFBA)	LB033806	mg/kg	0.0001	<0.0001	0%	NA
	LB033814	mg/kg	0.0001	<0.0001	0%	NA
Perfluoropentanoic acid (PFPeA)	LB033806	mg/kg	0.0005	<0.0005	0%	NA
	LB033814	mg/kg	0.0005	<0.0005	0%	NA
Perfluorohexanoic acid (PFHxA)	LB033806	mg/kg	0.0001	<0.0001	0%	NA
	LB033814	mg/kg	0.0001	<0.0001	0%	NA
Perfluoroheptanoic acid (PFHpA)	LB033806	mg/kg	0.0001	<0.0001	0%	88%
	LB033814	mg/kg	0.0001	<0.0001	0%	87%
Perfluorooctanoic Acid (PFOA)	LB033806	mg/kg	0.0001	<0.0001	0%	95%
	LB033814	mg/kg	0.0001	<0.0001	0%	95%
Perfluorononanoic acid (PFNA)	LB033806	mg/kg	0.0001	<0.0001	0%	111%
	LB033814	mg/kg	0.0001	<0.0001	0%	114%
Perfluorodecanoic acid (PFDA)	LB033806	mg/kg	0.0001	<0.0001	0%	92%
	LB033814	mg/kg	0.0001	<0.0001	0%	121%
Perfluoroundecanoic acid (PFUnA)	LB033806	mg/kg	0.0001	<0.0001	0%	85%
	LB033814	mg/kg	0.0001	<0.0001	0%	83%
Perfluorododecanoic acid (PFDoA)	LB033806	mg/kg	0.0001	<0.0001	0%	87%
	LB033814	mg/kg	0.0001	<0.0001	0%	93%
Perfluorotridecanoic acid (PFTrDA)	LB033806	mg/kg	0.0001	<0.0001	0%	116%
	LB033814	mg/kg	0.0001	<0.0001	0%	129%
Perfluorotetradecanoic acid (PFTeDA)	LB033806	mg/kg	0.0001	<0.0001	0%	75%
	LB033814	mg/kg	0.0001	<0.0001	0%	91%
Perfluorohexadecanoic acid (PFHxDA)	LB033806	mg/kg	0.0001	<0.0001	0%	NA
	LB033814	mg/kg	0.0001	<0.0001	0%	NA
Perfluorobutane sulfonate (PFBS)	LB033806	mg/kg	0.0001	<0.0001	0%	NA
	LB033814	mg/kg	0.0001	<0.0001	0%	NA
Perfluoropentane sulfonate (PFPeS)	LB033806	mg/kg	0.0001	<0.0001	0%	NA
	LB033814	mg/kg	0.0001	<0.0001	0%	NA
Perfluorohexane sulfonate (PFHxS)	LB033806	mg/kg	0.0001	<0.0001	0%	NA
	LB033814	mg/kg	0.0001	<0.0001	0%	NA
Perfluoroheptane sulfonate (PFHpS)	LB033806	mg/kg	0.0001	<0.0001	0%	NA
	LB033814	mg/kg	0.0001	<0.0001	0%	NA
Perfluorooctane sulfonate (PFOS)	LB033806	mg/kg	0.0001	<0.0001	0%	66%
	LB033814	mg/kg	0.0001	<0.0001	0%	81%
Sum PFOS and PFHXS	LB033806	mg/kg	0.0001	<0.0001	0%	NA
	LB033814	mg/kg	0.0001	<0.0001	0%	NA
Perfluorononane sulfonate (PFNS)	LB033806	mg/kg	0.0001	<0.0001	0%	NA
	LB033814	mg/kg	0.0001	<0.0001	0%	NA
Perfluorodecane sulfonate (PFDS)	LB033806	mg/kg	0.0001	<0.0001	0%	NA
	LB033814	mg/kg	0.0001	<0.0001	0%	NA
Perfluorododecane sulfonate (PFDoS)	LB033806	mg/kg	0.0001	<0.0001	0%	NA
	LB033814	mg/kg	0.0001	<0.0001	0%	NA
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	LB033806	mg/kg	0.001	<0.001	0%	NA
	LB033814	mg/kg	0.001	<0.001	0%	NA
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	LB033806	mg/kg	0.001	<0.001	0%	NA
	LB033814	mg/kg	0.001	<0.001	0%	NA
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	LB033806	mg/kg	0.001	<0.001	0%	NA
	LB033814	mg/kg	0.001	<0.001	0%	NA
Perfluorooctane sulfonamide (PFOSA)	LB033806	mg/kg	0.001	<0.001	0%	63%
	LB033814	mg/kg	0.001	<0.001	0%	63%
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	LB033806	mg/kg	0.001	<0.001	0%	NA

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level Method: MA-1523 (continued)

				MB	DUP %RPD	LCS %Recovery
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	LB033814	mg/kg	0.001	<0.001	0%	NA
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	LB033806	mg/kg	0.001	<0.001	0%	NA
	LB033814	mg/kg	0.001	<0.001	0%	NA
2-(N-Methylperfluorooctane sulfonamido)-ethanol (N-MeFOSE)	LB033806	mg/kg	0.002	<0.002	0%	NA
	LB033814	mg/kg	0.002	<0.002	0%	NA
2-(N-Ethylperfluorooctane sulfonamido)-ethanol (N-EtFOSE)	LB033806	mg/kg	0.002	<0.002	0%	NA
	LB033814	mg/kg	0.002	<0.002	0%	NA
N-Methylperfluorooctanesulfonamidoacetic acid (N_MeFOSAA)	LB033806	mg/kg	0.001	<0.001	0%	NA
	LB033814	mg/kg	0.001	<0.001	0%	NA
N-Ethylperfluorooctanesulfonamidoacetic Acid (N-EtFOSAA)	LB033806	mg/kg	0.001	<0.001	0%	NA
	LB033814	mg/kg	0.001	<0.001	0%	NA
(13C4-PFBA) Surrogate	LB033806	%	-	100%	1%	99%
	LB033814	%	-	101%	1%	102%
(13C5_PFPeA) Surrogate	LB033806	%	-	86%	4%	96%
	LB033814	%	-	79%	2 - 3%	95%
(13C5-PFHxA) Surrogate	LB033806	%	-	100%	3 - 8%	86%
	LB033814	%	-	112%	0 - 18%	89%
(13C4-PFHpA) Surrogate	LB033806	%	-	96%	7%	100%
	LB033814	%	-	107%	6 - 10%	103%
(13C4-PFOA) Surrogate	LB033806	%	-	93%	4 - 10%	97%
	LB033814	%	-	107%	0 - 2%	108%
(13C9-PFNA) Surrogate	LB033806	%	-	99%	5 - 7%	93%
	LB033814	%	-	109%	0 - 3%	100%
(13C6-PFDA) Surrogate	LB033806	%	-	115%	5 - 7%	109%
	LB033814	%	-	102%	0 - 3%	90%
(13C7-PFUdA) Surrogate	LB033806	%	-	119%	1 - 15%	110%
	LB033814	%	-	98%	8 - 25%	117%
(13C2-PFDoA) Surrogate	LB033806	%	-	90%	2 - 23%	115%
	LB033814	%	-	81%	9 - 10%	121%
(13C2-PFTeDA) Surrogate	LB033806	%	-	8%	8 - 23%	119%
	LB033814	%	-	36%	1 - 22%	132%
(13C2-PFHxDA) Surrogate	LB033806	%	-	0%	11 - 23%	46%
	LB033814	%	-	9%	25 - 45%	126%
(13C3-PFBS) Surrogate	LB033806	%	-	103%	8 - 14%	82%
	LB033814	%	-	102%	16 - 19%	77%
(13C3-PFHxS) Surrogate	LB033806	%	-	100%	2 - 17%	99%
	LB033814	%	-	96%	19 - 20%	91%
(13C8-PFOS) Surrogate	LB033806	%	-	104%	10 - 21%	83%
	LB033814	%	-	106%	5 - 35%	92%
(13C2-4:2FTS) Surrogate	LB033806	%	-	106%	3 - 14%	74%
	LB033814	%	-	106%	18 - 19%	65%
(13C2-6:2FTS) Surrogate	LB033806	%	-	100%	2 - 9%	79%
	LB033814	%	-	95%	9 - 12%	66%
(13C2-8:2FTS) Surrogate	LB033806	%	-	94%	5 - 14%	98%
	LB033814	%	-	87%	1 - 8%	75%
(13C8-PFOSA) Surrogate	LB033806	%	-	50%	17 - 18%	52%
	LB033814	%	-	66%	18 - 33%	55%
(D3-N-MeFOSA) Surrogate	LB033806	%	-	37%	15 - 29%	41%
	LB033814	%	-	44%	34 - 55%	57%
(D5-N-EtFOSA) Surrogate	LB033806	%	-	17%	2 - 20%	47%
	LB033814	%	-	44%	30 - 46%	60%
(D7-N-MeFOSE) Surrogate	LB033806	%	-	50%	12 - 22%	49%
	LB033814	%	-	58%	17 - 34%	48%
(D9-N-EtFOSE) Surrogate	LB033806	%	-	34%	3 - 5%	46%
	LB033814	%	-	47%	15 - 37%	45%
(D3-N-MeFOSAA) Surrogate	LB033806	%	-	77%	10 - 14%	55%

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level Method: MA-1523 (continued)

				MB	DUP %RPD	LCS %Recovery
(D3-N-MeFOSAA) Surrogate	LB033814	%	-	77%	3 - 10%	80%
(D5-N-EtFOSAA) Surrogate	LB033806	%	-	76%	2 - 24%	93%
	LB033814	%	-	76%	9 - 13%	73%

METHOD SUMMARY

ME315404 R0

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
MA-1523	This method covers the analysis of per- and polyfluoroalkyl substances (PFAS) in aqueous, solid and biosolid samples and solvent extracts, determined as the total of linear and branched isomers. After spiking with isotopically labelled quantification surrogates and clean-up via SPE cartridges sample extracts are analysed by liquid chromatography/mass spectrometry (LC-MS/MS). PFAS concentrations are determined by isotope dilution quantification.

FOOTNOTES

IS	Insufficient sample for analysis.	LOR	Limit of Reporting
LNR	Sample listed, but not received.	↑↓	Raised or Lowered Limit of Reporting
*	NATA accreditation does not cover the performance of this service.	QFH	QC result is above the upper tolerance
		QFL	QC result is below the lower tolerance
**	Indicative data, theoretical holding time exceeded.	-	The sample was not analysed for this analyte
		NVL	Not Validated

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calcuated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE207850 R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	36

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207850 R0**
Date Received	19 Jun 2020
Date Reported	30 Jun 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Surrogate	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	4 items
	Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level	16 items
Duplicate	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	30 items
	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	1 item
Matrix Spike	VOC's in Soil	1 item

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	36 Soil
Date documentation received	22/6/2020	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	1.4°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE207850 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP118_0.1_200617	SE207850.001	LB202697	17 Jun 2020	19 Jun 2020	15 Jul 2020	24 Jun 2020	15 Jul 2020	26 Jun 2020
0407_TP118_0.5_200617	SE207850.002	LB202697	17 Jun 2020	19 Jun 2020	15 Jul 2020	24 Jun 2020	15 Jul 2020	26 Jun 2020
0407_TP119_0.1_200617	SE207850.003	LB202697	17 Jun 2020	19 Jun 2020	15 Jul 2020	24 Jun 2020	15 Jul 2020	26 Jun 2020
0407_TP119_1.0_200617	SE207850.004	LB202697	17 Jun 2020	19 Jun 2020	15 Jul 2020	24 Jun 2020	15 Jul 2020	26 Jun 2020
0407_TP120_0.1_200617	SE207850.005	LB202697	17 Jun 2020	19 Jun 2020	15 Jul 2020	24 Jun 2020	15 Jul 2020	26 Jun 2020
0407_TP120_0.8_200617	SE207850.006	LB202697	17 Jun 2020	19 Jun 2020	15 Jul 2020	24 Jun 2020	15 Jul 2020	26 Jun 2020
0407_QC114_200617	SE207850.007	LB202697	17 Jun 2020	19 Jun 2020	15 Jul 2020	24 Jun 2020	15 Jul 2020	26 Jun 2020
0407_TP121_0.2_200617	SE207850.008	LB202697	17 Jun 2020	19 Jun 2020	15 Jul 2020	24 Jun 2020	15 Jul 2020	26 Jun 2020
0407_TP121_0.5_200617	SE207850.009	LB202697	17 Jun 2020	19 Jun 2020	15 Jul 2020	24 Jun 2020	15 Jul 2020	26 Jun 2020
0407_TP148_0.1_200617	SE207850.010	LB202697	17 Jun 2020	19 Jun 2020	15 Jul 2020	24 Jun 2020	15 Jul 2020	26 Jun 2020
0407_TP148_0.5_200617	SE207850.011	LB202697	17 Jun 2020	19 Jun 2020	15 Jul 2020	24 Jun 2020	15 Jul 2020	26 Jun 2020
0407_TP149_0.1_200617	SE207850.012	LB202697	17 Jun 2020	19 Jun 2020	15 Jul 2020	24 Jun 2020	15 Jul 2020	26 Jun 2020
0407_TP149_0.5_200617	SE207850.013	LB202697	17 Jun 2020	19 Jun 2020	15 Jul 2020	24 Jun 2020	15 Jul 2020	26 Jun 2020
0407_TP150_0.1_200617	SE207850.014	LB202697	17 Jun 2020	19 Jun 2020	15 Jul 2020	24 Jun 2020	15 Jul 2020	26 Jun 2020
0407_TP150_0.5_200617	SE207850.015	LB202697	17 Jun 2020	19 Jun 2020	15 Jul 2020	24 Jun 2020	15 Jul 2020	26 Jun 2020
0407_TP162_0.1_200617	SE207850.016	LB202697	17 Jun 2020	19 Jun 2020	15 Jul 2020	24 Jun 2020	15 Jul 2020	26 Jun 2020
0407_TP162_0.3_200617	SE207850.017	LB202697	17 Jun 2020	19 Jun 2020	15 Jul 2020	24 Jun 2020	15 Jul 2020	26 Jun 2020
0407_TP163_0.1_200617	SE207850.018	LB202697	17 Jun 2020	19 Jun 2020	15 Jul 2020	24 Jun 2020	15 Jul 2020	26 Jun 2020
0407_TP163_0.4_200617	SE207850.019	LB202699	17 Jun 2020	19 Jun 2020	15 Jul 2020	24 Jun 2020	15 Jul 2020	26 Jun 2020
0407_QC108_200617	SE207850.020	LB202699	17 Jun 2020	19 Jun 2020	15 Jul 2020	24 Jun 2020	15 Jul 2020	26 Jun 2020
0407_TP164_0.1_200617	SE207850.021	LB202699	17 Jun 2020	19 Jun 2020	15 Jul 2020	24 Jun 2020	15 Jul 2020	26 Jun 2020
0407_TP164_0.5_200617	SE207850.022	LB202699	17 Jun 2020	19 Jun 2020	15 Jul 2020	24 Jun 2020	15 Jul 2020	26 Jun 2020
0407_TP176_0.2_200617	SE207850.023	LB202699	17 Jun 2020	19 Jun 2020	15 Jul 2020	24 Jun 2020	15 Jul 2020	26 Jun 2020
0407_TP176_0.5_200617	SE207850.024	LB202699	17 Jun 2020	19 Jun 2020	15 Jul 2020	24 Jun 2020	15 Jul 2020	26 Jun 2020
0407_TP177_0.1_200617	SE207850.025	LB202699	17 Jun 2020	19 Jun 2020	15 Jul 2020	24 Jun 2020	15 Jul 2020	26 Jun 2020
0407_TP177_0.5_200617	SE207850.026	LB202699	17 Jun 2020	19 Jun 2020	15 Jul 2020	24 Jun 2020	15 Jul 2020	26 Jun 2020
0407_TP178_0.1_200617	SE207850.027	LB202699	17 Jun 2020	19 Jun 2020	15 Jul 2020	24 Jun 2020	15 Jul 2020	26 Jun 2020
0407_TP178_0.3_200617	SE207850.028	LB202699	17 Jun 2020	19 Jun 2020	15 Jul 2020	24 Jun 2020	15 Jul 2020	26 Jun 2020
0407_TP189_0.1_200617	SE207850.029	LB202699	17 Jun 2020	19 Jun 2020	15 Jul 2020	24 Jun 2020	15 Jul 2020	26 Jun 2020
0407_TP189_0.4_200617	SE207850.030	LB202699	17 Jun 2020	19 Jun 2020	15 Jul 2020	24 Jun 2020	15 Jul 2020	26 Jun 2020
0407_QC112_200617	SE207850.031	LB202699	17 Jun 2020	19 Jun 2020	15 Jul 2020	24 Jun 2020	15 Jul 2020	26 Jun 2020
0407_TP190_0.1_200617	SE207850.032	LB202699	17 Jun 2020	19 Jun 2020	15 Jul 2020	24 Jun 2020	15 Jul 2020	26 Jun 2020
0407_TP190_0.5_200617	SE207850.033	LB202699	17 Jun 2020	19 Jun 2020	15 Jul 2020	24 Jun 2020	15 Jul 2020	26 Jun 2020
0407_TP191_0.1_200617	SE207850.034	LB202699	17 Jun 2020	19 Jun 2020	15 Jul 2020	24 Jun 2020	15 Jul 2020	26 Jun 2020
0407_TP191_0.4_200617	SE207850.035	LB202699	17 Jun 2020	19 Jun 2020	15 Jul 2020	24 Jun 2020	15 Jul 2020	26 Jun 2020
0407_QC110_200617	SE207850.036	LB202699	17 Jun 2020	19 Jun 2020	15 Jul 2020	24 Jun 2020	15 Jul 2020	26 Jun 2020

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP118_0.1_200617	SE207850.001	LB202649	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP118_0.5_200617	SE207850.002	LB202649	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP119_0.1_200617	SE207850.003	LB202649	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP119_1.0_200617	SE207850.004	LB202649	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP120_0.1_200617	SE207850.005	LB202649	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP120_0.8_200617	SE207850.006	LB202649	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_QC114_200617	SE207850.007	LB202649	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP121_0.2_200617	SE207850.008	LB202649	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP121_0.5_200617	SE207850.009	LB202649	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP148_0.1_200617	SE207850.010	LB202649	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP148_0.5_200617	SE207850.011	LB202649	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP149_0.1_200617	SE207850.012	LB202649	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP149_0.5_200617	SE207850.013	LB202649	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP150_0.1_200617	SE207850.014	LB202649	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP150_0.5_200617	SE207850.015	LB202649	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP162_0.1_200617	SE207850.016	LB202649	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP162_0.3_200617	SE207850.017	LB202649	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP163_0.1_200617	SE207850.018	LB202649	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP163_0.4_200617	SE207850.019	LB202650	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_QC108_200617	SE207850.020	LB202650	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP164_0.1_200617	SE207850.021	LB202650	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020

HOLDING TIME SUMMARY

SE207850 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Moisture Content (continued)

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP164_0.5_200617	SE207850.022	LB202650	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP176_0.2_200617	SE207850.023	LB202650	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP176_0.5_200617	SE207850.024	LB202650	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP177_0.1_200617	SE207850.025	LB202650	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP177_0.5_200617	SE207850.026	LB202650	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP178_0.1_200617	SE207850.027	LB202650	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP178_0.3_200617	SE207850.028	LB202650	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP189_0.1_200617	SE207850.029	LB202650	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP189_0.4_200617	SE207850.030	LB202650	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_QC112_200617	SE207850.031	LB202650	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP190_0.1_200617	SE207850.032	LB202650	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP190_0.5_200617	SE207850.033	LB202650	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP191_0.1_200617	SE207850.034	LB202650	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP191_0.4_200617	SE207850.035	LB202650	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_QC110_200617	SE207850.036	LB202650	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP118_0.1_200617	SE207850.001	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP118_0.5_200617	SE207850.002	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP119_0.1_200617	SE207850.003	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP119_1.0_200617	SE207850.004	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP120_0.1_200617	SE207850.005	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP120_0.8_200617	SE207850.006	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_QC114_200617	SE207850.007	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP121_0.2_200617	SE207850.008	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP121_0.5_200617	SE207850.009	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP148_0.1_200617	SE207850.010	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP148_0.5_200617	SE207850.011	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP149_0.1_200617	SE207850.012	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP149_0.5_200617	SE207850.013	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP150_0.1_200617	SE207850.014	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP150_0.5_200617	SE207850.015	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP162_0.1_200617	SE207850.016	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP162_0.3_200617	SE207850.017	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP163_0.1_200617	SE207850.018	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP163_0.4_200617	SE207850.019	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_QC108_200617	SE207850.020	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP164_0.1_200617	SE207850.021	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP164_0.5_200617	SE207850.022	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP176_0.2_200617	SE207850.023	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP176_0.5_200617	SE207850.024	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP177_0.1_200617	SE207850.025	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP177_0.5_200617	SE207850.026	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP178_0.1_200617	SE207850.027	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP178_0.3_200617	SE207850.028	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP189_0.1_200617	SE207850.029	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP189_0.4_200617	SE207850.030	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_QC112_200617	SE207850.031	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP190_0.1_200617	SE207850.032	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP190_0.5_200617	SE207850.033	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP191_0.1_200617	SE207850.034	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP191_0.4_200617	SE207850.035	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_QC110_200617	SE207850.036	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP118_0.1_200617	SE207850.001	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP118_0.5_200617	SE207850.002	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP119_0.1_200617	SE207850.003	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP119_1.0_200617	SE207850.004	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020

HOLDING TIME SUMMARY

SE207850 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP120_0.1_200617	SE207850.005	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP120_0.8_200617	SE207850.006	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_QC114_200617	SE207850.007	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP121_0.2_200617	SE207850.008	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP121_0.5_200617	SE207850.009	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP148_0.1_200617	SE207850.010	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP148_0.5_200617	SE207850.011	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP149_0.1_200617	SE207850.012	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP149_0.5_200617	SE207850.013	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP150_0.1_200617	SE207850.014	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP150_0.5_200617	SE207850.015	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP162_0.1_200617	SE207850.016	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP162_0.3_200617	SE207850.017	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP163_0.1_200617	SE207850.018	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP163_0.4_200617	SE207850.019	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_QC108_200617	SE207850.020	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP164_0.1_200617	SE207850.021	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP164_0.5_200617	SE207850.022	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP176_0.2_200617	SE207850.023	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP176_0.5_200617	SE207850.024	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP177_0.1_200617	SE207850.025	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP177_0.5_200617	SE207850.026	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP178_0.1_200617	SE207850.027	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP178_0.3_200617	SE207850.028	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP189_0.1_200617	SE207850.029	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP189_0.4_200617	SE207850.030	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_QC112_200617	SE207850.031	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP190_0.1_200617	SE207850.032	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP190_0.5_200617	SE207850.033	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP191_0.1_200617	SE207850.034	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP191_0.4_200617	SE207850.035	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_QC110_200617	SE207850.036	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP118_0.1_200617	SE207850.001	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP118_0.5_200617	SE207850.002	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP119_0.1_200617	SE207850.003	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP119_1.0_200617	SE207850.004	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP120_0.1_200617	SE207850.005	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP120_0.8_200617	SE207850.006	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_QC114_200617	SE207850.007	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP121_0.2_200617	SE207850.008	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP121_0.5_200617	SE207850.009	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP148_0.1_200617	SE207850.010	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP148_0.5_200617	SE207850.011	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP149_0.1_200617	SE207850.012	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP149_0.5_200617	SE207850.013	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP150_0.1_200617	SE207850.014	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP150_0.5_200617	SE207850.015	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP162_0.1_200617	SE207850.016	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP162_0.3_200617	SE207850.017	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP163_0.1_200617	SE207850.018	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP163_0.4_200617	SE207850.019	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_QC108_200617	SE207850.020	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP164_0.1_200617	SE207850.021	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP164_0.5_200617	SE207850.022	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP176_0.2_200617	SE207850.023	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP176_0.5_200617	SE207850.024	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP177_0.1_200617	SE207850.025	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP177_0.5_200617	SE207850.026	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP178_0.1_200617	SE207850.027	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP178_0.3_200617	SE207850.028	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP189_0.1_200617	SE207850.029	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP189_0.4_200617	SE207850.030	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_QC112_200617	SE207850.031	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP190_0.1_200617	SE207850.032	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP190_0.5_200617	SE207850.033	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP191_0.1_200617	SE207850.034	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP191_0.4_200617	SE207850.035	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_QC110_200617	SE207850.036	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP118_0.1_200617	SE207850.001	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP118_0.5_200617	SE207850.002	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP119_0.1_200617	SE207850.003	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP119_1.0_200617	SE207850.004	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP120_0.1_200617	SE207850.005	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP120_0.8_200617	SE207850.006	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_QC114_200617	SE207850.007	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP121_0.2_200617	SE207850.008	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP121_0.5_200617	SE207850.009	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP148_0.1_200617	SE207850.010	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP148_0.5_200617	SE207850.011	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP149_0.1_200617	SE207850.012	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP149_0.5_200617	SE207850.013	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP150_0.1_200617	SE207850.014	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP150_0.5_200617	SE207850.015	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP162_0.1_200617	SE207850.016	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP162_0.3_200617	SE207850.017	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP163_0.1_200617	SE207850.018	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP163_0.4_200617	SE207850.019	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_QC108_200617	SE207850.020	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP164_0.1_200617	SE207850.021	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP164_0.5_200617	SE207850.022	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP176_0.2_200617	SE207850.023	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP176_0.5_200617	SE207850.024	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP177_0.1_200617	SE207850.025	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP177_0.5_200617	SE207850.026	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP178_0.1_200617	SE207850.027	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP178_0.3_200617	SE207850.028	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP189_0.1_200617	SE207850.029	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP189_0.4_200617	SE207850.030	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_QC112_200617	SE207850.031	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP190_0.1_200617	SE207850.032	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP190_0.5_200617	SE207850.033	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP191_0.1_200617	SE207850.034	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP191_0.4_200617	SE207850.035	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_QC110_200617	SE207850.036	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP118_0.1_200617	SE207850.001	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP118_0.5_200617	SE207850.002	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP119_0.1_200617	SE207850.003	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP119_1.0_200617	SE207850.004	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP120_0.1_200617	SE207850.005	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP120_0.8_200617	SE207850.006	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_QC114_200617	SE207850.007	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP121_0.2_200617	SE207850.008	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020

HOLDING TIME SUMMARY

SE207850 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP121_0.5_200617	SE207850.009	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP148_0.1_200617	SE207850.010	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP148_0.5_200617	SE207850.011	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP149_0.1_200617	SE207850.012	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP149_0.5_200617	SE207850.013	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP150_0.1_200617	SE207850.014	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP150_0.5_200617	SE207850.015	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP162_0.1_200617	SE207850.016	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP162_0.3_200617	SE207850.017	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP163_0.1_200617	SE207850.018	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP163_0.4_200617	SE207850.019	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_QC108_200617	SE207850.020	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP164_0.1_200617	SE207850.021	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP164_0.5_200617	SE207850.022	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP176_0.2_200617	SE207850.023	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP176_0.5_200617	SE207850.024	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP177_0.1_200617	SE207850.025	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP177_0.5_200617	SE207850.026	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP178_0.1_200617	SE207850.027	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP178_0.3_200617	SE207850.028	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP189_0.1_200617	SE207850.029	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP189_0.4_200617	SE207850.030	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_QC112_200617	SE207850.031	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP190_0.1_200617	SE207850.032	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP190_0.5_200617	SE207850.033	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP191_0.1_200617	SE207850.034	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP191_0.4_200617	SE207850.035	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_QC110_200617	SE207850.036	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP118_0.1_200617	SE207850.001	LB202685	17 Jun 2020	19 Jun 2020	14 Dec 2020	24 Jun 2020	14 Dec 2020	26 Jun 2020
0407_TP118_0.5_200617	SE207850.002	LB202685	17 Jun 2020	19 Jun 2020	14 Dec 2020	24 Jun 2020	14 Dec 2020	26 Jun 2020
0407_TP119_0.1_200617	SE207850.003	LB202685	17 Jun 2020	19 Jun 2020	14 Dec 2020	24 Jun 2020	14 Dec 2020	26 Jun 2020
0407_TP119_1.0_200617	SE207850.004	LB202685	17 Jun 2020	19 Jun 2020	14 Dec 2020	24 Jun 2020	14 Dec 2020	26 Jun 2020
0407_TP120_0.1_200617	SE207850.005	LB202685	17 Jun 2020	19 Jun 2020	14 Dec 2020	24 Jun 2020	14 Dec 2020	26 Jun 2020
0407_TP120_0.8_200617	SE207850.006	LB202685	17 Jun 2020	19 Jun 2020	14 Dec 2020	24 Jun 2020	14 Dec 2020	26 Jun 2020
0407_QC114_200617	SE207850.007	LB202685	17 Jun 2020	19 Jun 2020	14 Dec 2020	24 Jun 2020	14 Dec 2020	26 Jun 2020
0407_TP121_0.2_200617	SE207850.008	LB202685	17 Jun 2020	19 Jun 2020	14 Dec 2020	24 Jun 2020	14 Dec 2020	26 Jun 2020
0407_TP121_0.5_200617	SE207850.009	LB202685	17 Jun 2020	19 Jun 2020	14 Dec 2020	24 Jun 2020	14 Dec 2020	26 Jun 2020
0407_TP148_0.1_200617	SE207850.010	LB202685	17 Jun 2020	19 Jun 2020	14 Dec 2020	24 Jun 2020	14 Dec 2020	26 Jun 2020
0407_TP148_0.5_200617	SE207850.011	LB202685	17 Jun 2020	19 Jun 2020	14 Dec 2020	24 Jun 2020	14 Dec 2020	26 Jun 2020
0407_TP149_0.1_200617	SE207850.012	LB202685	17 Jun 2020	19 Jun 2020	14 Dec 2020	24 Jun 2020	14 Dec 2020	26 Jun 2020
0407_TP149_0.5_200617	SE207850.013	LB202685	17 Jun 2020	19 Jun 2020	14 Dec 2020	24 Jun 2020	14 Dec 2020	26 Jun 2020
0407_TP150_0.1_200617	SE207850.014	LB202685	17 Jun 2020	19 Jun 2020	14 Dec 2020	24 Jun 2020	14 Dec 2020	26 Jun 2020
0407_TP150_0.5_200617	SE207850.015	LB202685	17 Jun 2020	19 Jun 2020	14 Dec 2020	24 Jun 2020	14 Dec 2020	26 Jun 2020
0407_TP162_0.1_200617	SE207850.016	LB202685	17 Jun 2020	19 Jun 2020	14 Dec 2020	24 Jun 2020	14 Dec 2020	26 Jun 2020
0407_TP162_0.3_200617	SE207850.017	LB202685	17 Jun 2020	19 Jun 2020	14 Dec 2020	24 Jun 2020	14 Dec 2020	26 Jun 2020
0407_TP163_0.1_200617	SE207850.018	LB202685	17 Jun 2020	19 Jun 2020	14 Dec 2020	24 Jun 2020	14 Dec 2020	26 Jun 2020
0407_TP163_0.4_200617	SE207850.019	LB202686	17 Jun 2020	19 Jun 2020	14 Dec 2020	24 Jun 2020	14 Dec 2020	26 Jun 2020
0407_QC108_200617	SE207850.020	LB202686	17 Jun 2020	19 Jun 2020	14 Dec 2020	24 Jun 2020	14 Dec 2020	26 Jun 2020
0407_TP164_0.1_200617	SE207850.021	LB202686	17 Jun 2020	19 Jun 2020	14 Dec 2020	24 Jun 2020	14 Dec 2020	26 Jun 2020
0407_TP164_0.5_200617	SE207850.022	LB202686	17 Jun 2020	19 Jun 2020	14 Dec 2020	24 Jun 2020	14 Dec 2020	26 Jun 2020
0407_TP176_0.2_200617	SE207850.023	LB202686	17 Jun 2020	19 Jun 2020	14 Dec 2020	24 Jun 2020	14 Dec 2020	26 Jun 2020
0407_TP176_0.5_200617	SE207850.024	LB202686	17 Jun 2020	19 Jun 2020	14 Dec 2020	24 Jun 2020	14 Dec 2020	26 Jun 2020
0407_TP177_0.1_200617	SE207850.025	LB202686	17 Jun 2020	19 Jun 2020	14 Dec 2020	24 Jun 2020	14 Dec 2020	26 Jun 2020
0407_TP177_0.5_200617	SE207850.026	LB202686	17 Jun 2020	19 Jun 2020	14 Dec 2020	24 Jun 2020	14 Dec 2020	26 Jun 2020
0407_TP178_0.1_200617	SE207850.027	LB202686	17 Jun 2020	19 Jun 2020	14 Dec 2020	24 Jun 2020	14 Dec 2020	26 Jun 2020
0407_TP178_0.3_200617	SE207850.028	LB202686	17 Jun 2020	19 Jun 2020	14 Dec 2020	24 Jun 2020	14 Dec 2020	26 Jun 2020
0407_TP189_0.1_200617	SE207850.029	LB202686	17 Jun 2020	19 Jun 2020	14 Dec 2020	24 Jun 2020	14 Dec 2020	26 Jun 2020

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP189_0.4_200617	SE207850.030	LB202686	17 Jun 2020	19 Jun 2020	14 Dec 2020	24 Jun 2020	14 Dec 2020	26 Jun 2020
0407_QC112_200617	SE207850.031	LB202686	17 Jun 2020	19 Jun 2020	14 Dec 2020	24 Jun 2020	14 Dec 2020	26 Jun 2020
0407_TP190_0.1_200617	SE207850.032	LB202686	17 Jun 2020	19 Jun 2020	14 Dec 2020	24 Jun 2020	14 Dec 2020	26 Jun 2020
0407_TP190_0.5_200617	SE207850.033	LB202686	17 Jun 2020	19 Jun 2020	14 Dec 2020	24 Jun 2020	14 Dec 2020	26 Jun 2020
0407_TP191_0.1_200617	SE207850.034	LB202686	17 Jun 2020	19 Jun 2020	14 Dec 2020	24 Jun 2020	14 Dec 2020	26 Jun 2020
0407_TP191_0.4_200617	SE207850.035	LB202686	17 Jun 2020	19 Jun 2020	14 Dec 2020	24 Jun 2020	14 Dec 2020	26 Jun 2020
0407_QC110_200617	SE207850.036	LB202686	17 Jun 2020	19 Jun 2020	14 Dec 2020	24 Jun 2020	14 Dec 2020	26 Jun 2020

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP118_0.1_200617	SE207850.001	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP118_0.5_200617	SE207850.002	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP119_0.1_200617	SE207850.003	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP119_1.0_200617	SE207850.004	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP120_0.1_200617	SE207850.005	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP120_0.8_200617	SE207850.006	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_QC114_200617	SE207850.007	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP121_0.2_200617	SE207850.008	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP121_0.5_200617	SE207850.009	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP148_0.1_200617	SE207850.010	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP148_0.5_200617	SE207850.011	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP149_0.1_200617	SE207850.012	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP149_0.5_200617	SE207850.013	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP150_0.1_200617	SE207850.014	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP150_0.5_200617	SE207850.015	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP162_0.1_200617	SE207850.016	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP162_0.3_200617	SE207850.017	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP163_0.1_200617	SE207850.018	LB202633	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP163_0.4_200617	SE207850.019	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_QC108_200617	SE207850.020	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP164_0.1_200617	SE207850.021	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP164_0.5_200617	SE207850.022	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP176_0.2_200617	SE207850.023	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP176_0.5_200617	SE207850.024	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP177_0.1_200617	SE207850.025	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP177_0.5_200617	SE207850.026	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP178_0.1_200617	SE207850.027	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP178_0.3_200617	SE207850.028	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP189_0.1_200617	SE207850.029	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP189_0.4_200617	SE207850.030	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_QC112_200617	SE207850.031	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP190_0.1_200617	SE207850.032	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP190_0.5_200617	SE207850.033	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP191_0.1_200617	SE207850.034	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP191_0.4_200617	SE207850.035	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_QC110_200617	SE207850.036	LB202635	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP118_0.1_200617	SE207850.001	LB202636	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP118_0.5_200617	SE207850.002	LB202636	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP119_0.1_200617	SE207850.003	LB202636	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP119_1.0_200617	SE207850.004	LB202636	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP120_0.1_200617	SE207850.005	LB202636	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP120_0.8_200617	SE207850.006	LB202636	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_QC114_200617	SE207850.007	LB202636	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP121_0.2_200617	SE207850.008	LB202636	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP121_0.5_200617	SE207850.009	LB202636	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP148_0.1_200617	SE207850.010	LB202636	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP148_0.5_200617	SE207850.011	LB202636	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP149_0.1_200617	SE207850.012	LB202636	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020

HOLDING TIME SUMMARY

SE207850 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP149_0.5_200617	SE207850.013	LB202636	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP150_0.1_200617	SE207850.014	LB202636	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP150_0.5_200617	SE207850.015	LB202636	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP162_0.1_200617	SE207850.016	LB202636	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP162_0.3_200617	SE207850.017	LB202636	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP163_0.1_200617	SE207850.018	LB202636	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP163_0.4_200617	SE207850.019	LB202637	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_QC108_200617	SE207850.020	LB202637	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP164_0.1_200617	SE207850.021	LB202637	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP164_0.5_200617	SE207850.022	LB202637	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP176_0.2_200617	SE207850.023	LB202637	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP176_0.5_200617	SE207850.024	LB202637	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP177_0.1_200617	SE207850.025	LB202637	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP177_0.5_200617	SE207850.026	LB202637	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP178_0.1_200617	SE207850.027	LB202637	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP178_0.3_200617	SE207850.028	LB202637	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP189_0.1_200617	SE207850.029	LB202637	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP189_0.4_200617	SE207850.030	LB202637	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_QC112_200617	SE207850.031	LB202637	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP190_0.1_200617	SE207850.032	LB202637	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP190_0.5_200617	SE207850.033	LB202637	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP191_0.1_200617	SE207850.034	LB202637	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP191_0.4_200617	SE207850.035	LB202637	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_QC110_200617	SE207850.036	LB202637	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP118_0.1_200617	SE207850.001	LB202636	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP118_0.5_200617	SE207850.002	LB202636	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP119_0.1_200617	SE207850.003	LB202636	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP119_1.0_200617	SE207850.004	LB202636	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP120_0.1_200617	SE207850.005	LB202636	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP120_0.8_200617	SE207850.006	LB202636	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_QC114_200617	SE207850.007	LB202636	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP121_0.2_200617	SE207850.008	LB202636	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP121_0.5_200617	SE207850.009	LB202636	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP148_0.1_200617	SE207850.010	LB202636	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP148_0.5_200617	SE207850.011	LB202636	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP149_0.1_200617	SE207850.012	LB202636	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP149_0.5_200617	SE207850.013	LB202636	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP150_0.1_200617	SE207850.014	LB202636	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP150_0.5_200617	SE207850.015	LB202636	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP162_0.1_200617	SE207850.016	LB202636	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP162_0.3_200617	SE207850.017	LB202636	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP163_0.1_200617	SE207850.018	LB202636	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP163_0.4_200617	SE207850.019	LB202637	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_QC108_200617	SE207850.020	LB202637	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP164_0.1_200617	SE207850.021	LB202637	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP164_0.5_200617	SE207850.022	LB202637	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP176_0.2_200617	SE207850.023	LB202637	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP176_0.5_200617	SE207850.024	LB202637	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP177_0.1_200617	SE207850.025	LB202637	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP177_0.5_200617	SE207850.026	LB202637	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP178_0.1_200617	SE207850.027	LB202637	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP178_0.3_200617	SE207850.028	LB202637	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP189_0.1_200617	SE207850.029	LB202637	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP189_0.4_200617	SE207850.030	LB202637	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_QC112_200617	SE207850.031	LB202637	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP190_0.1_200617	SE207850.032	LB202637	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP190_0.5_200617	SE207850.033	LB202637	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020

HOLDING TIME SUMMARY

SE207850 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Volatile Petroleum Hydrocarbons in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP191_0.1_200617	SE207850.034	LB202637	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP191_0.4_200617	SE207850.035	LB202637	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_QC110_200617	SE207850.036	LB202637	17 Jun 2020	19 Jun 2020	01 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP118_0.1_200617	SE207850.001	%	60 - 130%	93
	0407_TP118_0.5_200617	SE207850.002	%	60 - 130%	94
	0407_TP119_0.1_200617	SE207850.003	%	60 - 130%	97
	0407_TP119_1.0_200617	SE207850.004	%	60 - 130%	93
	0407_TP120_0.1_200617	SE207850.005	%	60 - 130%	98
	0407_TP120_0.8_200617	SE207850.006	%	60 - 130%	87
	0407_QC114_200617	SE207850.007	%	60 - 130%	97
	0407_TP121_0.2_200617	SE207850.008	%	60 - 130%	102
	0407_TP121_0.5_200617	SE207850.009	%	60 - 130%	93
	0407_TP148_0.1_200617	SE207850.010	%	60 - 130%	93
	0407_TP148_0.5_200617	SE207850.011	%	60 - 130%	90
	0407_TP149_0.1_200617	SE207850.012	%	60 - 130%	89
	0407_TP149_0.5_200617	SE207850.013	%	60 - 130%	93
	0407_TP150_0.1_200617	SE207850.014	%	60 - 130%	93
	0407_TP150_0.5_200617	SE207850.015	%	60 - 130%	94
	0407_TP162_0.1_200617	SE207850.016	%	60 - 130%	91
	0407_TP162_0.3_200617	SE207850.017	%	60 - 130%	103
	0407_TP163_0.1_200617	SE207850.018	%	60 - 130%	93
	0407_TP163_0.4_200617	SE207850.019	%	60 - 130%	94
	0407_QC108_200617	SE207850.020	%	60 - 130%	84
	0407_TP164_0.1_200617	SE207850.021	%	60 - 130%	89
	0407_TP164_0.5_200617	SE207850.022	%	60 - 130%	98
	0407_TP176_0.2_200617	SE207850.023	%	60 - 130%	95
	0407_TP176_0.5_200617	SE207850.024	%	60 - 130%	94
	0407_TP177_0.1_200617	SE207850.025	%	60 - 130%	101
	0407_TP177_0.5_200617	SE207850.026	%	60 - 130%	95
	0407_TP178_0.1_200617	SE207850.027	%	60 - 130%	99
	0407_TP178_0.3_200617	SE207850.028	%	60 - 130%	95
	0407_TP189_0.1_200617	SE207850.029	%	60 - 130%	94
	0407_TP189_0.4_200617	SE207850.030	%	60 - 130%	93
	0407_QC112_200617	SE207850.031	%	60 - 130%	95
	0407_TP190_0.1_200617	SE207850.032	%	60 - 130%	101
	0407_TP190_0.5_200617	SE207850.033	%	60 - 130%	94
	0407_TP191_0.1_200617	SE207850.034	%	60 - 130%	98
	0407_TP191_0.4_200617	SE207850.035	%	60 - 130%	100
	0407_QC110_200617	SE207850.036	%	60 - 130%	111

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP118_0.1_200617	SE207850.001	%	60 - 130%	84
	0407_TP118_0.5_200617	SE207850.002	%	60 - 130%	89
	0407_TP119_0.1_200617	SE207850.003	%	60 - 130%	81
	0407_TP119_1.0_200617	SE207850.004	%	60 - 130%	73
	0407_TP120_0.1_200617	SE207850.005	%	60 - 130%	88
	0407_TP120_0.8_200617	SE207850.006	%	60 - 130%	74
	0407_QC114_200617	SE207850.007	%	60 - 130%	84
	0407_TP121_0.2_200617	SE207850.008	%	60 - 130%	92
	0407_TP121_0.5_200617	SE207850.009	%	60 - 130%	88
	0407_TP148_0.1_200617	SE207850.010	%	60 - 130%	81
	0407_TP148_0.5_200617	SE207850.011	%	60 - 130%	84
	0407_TP149_0.1_200617	SE207850.012	%	60 - 130%	86
	0407_TP149_0.5_200617	SE207850.013	%	60 - 130%	76
	0407_TP150_0.1_200617	SE207850.014	%	60 - 130%	73
	0407_TP150_0.5_200617	SE207850.015	%	60 - 130%	75
	0407_TP162_0.1_200617	SE207850.016	%	60 - 130%	113
	0407_TP162_0.3_200617	SE207850.017	%	60 - 130%	92
	0407_TP163_0.1_200617	SE207850.018	%	60 - 130%	110
	0407_TP163_0.4_200617	SE207850.019	%	60 - 130%	88
	0407_QC108_200617	SE207850.020	%	60 - 130%	92
	0407_TP164_0.1_200617	SE207850.021	%	60 - 130%	76
	0407_TP164_0.5_200617	SE207850.022	%	60 - 130%	85

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP176_0.2_200617	SE207850.023	%	60 - 130%	82
	0407_TP176_0.5_200617	SE207850.024	%	60 - 130%	82
	0407_TP177_0.1_200617	SE207850.025	%	60 - 130%	85
	0407_TP177_0.5_200617	SE207850.026	%	60 - 130%	84
	0407_TP178_0.1_200617	SE207850.027	%	60 - 130%	90
	0407_TP178_0.3_200617	SE207850.028	%	60 - 130%	93
	0407_TP189_0.1_200617	SE207850.029	%	60 - 130%	90
	0407_TP189_0.4_200617	SE207850.030	%	60 - 130%	79
	0407_QC112_200617	SE207850.031	%	60 - 130%	91
	0407_TP190_0.1_200617	SE207850.032	%	60 - 130%	82
	0407_TP190_0.5_200617	SE207850.033	%	60 - 130%	87
	0407_TP191_0.1_200617	SE207850.034	%	60 - 130%	83
	0407_TP191_0.4_200617	SE207850.035	%	60 - 130%	101
	0407_QC110_200617	SE207850.036	%	60 - 130%	94
d14-p-terphenyl (Surrogate)	0407_TP118_0.1_200617	SE207850.001	%	60 - 130%	88
	0407_TP118_0.5_200617	SE207850.002	%	60 - 130%	92
	0407_TP119_0.1_200617	SE207850.003	%	60 - 130%	81
	0407_TP119_1.0_200617	SE207850.004	%	60 - 130%	91
	0407_TP120_0.1_200617	SE207850.005	%	60 - 130%	100
	0407_TP120_0.8_200617	SE207850.006	%	60 - 130%	85
	0407_QC114_200617	SE207850.007	%	60 - 130%	88
	0407_TP121_0.2_200617	SE207850.008	%	60 - 130%	84
	0407_TP121_0.5_200617	SE207850.009	%	60 - 130%	92
	0407_TP148_0.1_200617	SE207850.010	%	60 - 130%	90
	0407_TP148_0.5_200617	SE207850.011	%	60 - 130%	92
	0407_TP149_0.1_200617	SE207850.012	%	60 - 130%	91
	0407_TP149_0.5_200617	SE207850.013	%	60 - 130%	87
	0407_TP150_0.1_200617	SE207850.014	%	60 - 130%	85
	0407_TP150_0.5_200617	SE207850.015	%	60 - 130%	96
	0407_TP162_0.1_200617	SE207850.016	%	60 - 130%	102
	0407_TP162_0.3_200617	SE207850.017	%	60 - 130%	88
	0407_TP163_0.1_200617	SE207850.018	%	60 - 130%	96
	0407_TP163_0.4_200617	SE207850.019	%	60 - 130%	81
	0407_QC108_200617	SE207850.020	%	60 - 130%	88
	0407_TP164_0.1_200617	SE207850.021	%	60 - 130%	83
	0407_TP164_0.5_200617	SE207850.022	%	60 - 130%	86
	0407_TP176_0.2_200617	SE207850.023	%	60 - 130%	86
	0407_TP176_0.5_200617	SE207850.024	%	60 - 130%	85
	0407_TP177_0.1_200617	SE207850.025	%	60 - 130%	82
	0407_TP177_0.5_200617	SE207850.026	%	60 - 130%	86
	0407_TP178_0.1_200617	SE207850.027	%	60 - 130%	89
	0407_TP178_0.3_200617	SE207850.028	%	60 - 130%	90
	0407_TP189_0.1_200617	SE207850.029	%	60 - 130%	83
	0407_TP189_0.4_200617	SE207850.030	%	60 - 130%	83
	0407_QC112_200617	SE207850.031	%	60 - 130%	76
	0407_TP190_0.1_200617	SE207850.032	%	60 - 130%	79
	0407_TP190_0.5_200617	SE207850.033	%	60 - 130%	76
	0407_TP191_0.1_200617	SE207850.034	%	60 - 130%	78
	0407_TP191_0.4_200617	SE207850.035	%	60 - 130%	90
	0407_QC110_200617	SE207850.036	%	60 - 130%	86

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP118_0.1_200617	SE207850.001	%	70 - 130%	84
	0407_TP118_0.5_200617	SE207850.002	%	70 - 130%	89
	0407_TP119_0.1_200617	SE207850.003	%	70 - 130%	81
	0407_TP119_1.0_200617	SE207850.004	%	70 - 130%	73
	0407_TP120_0.1_200617	SE207850.005	%	70 - 130%	88
	0407_TP120_0.8_200617	SE207850.006	%	70 - 130%	74
	0407_QC114_200617	SE207850.007	%	70 - 130%	84
	0407_TP121_0.2_200617	SE207850.008	%	70 - 130%	92

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued) — **Method: ME-(AU)-[ENV]AN420**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP121_0.5_200617	SE207850.009	%	70 - 130%	88
	0407_TP148_0.1_200617	SE207850.010	%	70 - 130%	81
	0407_TP148_0.5_200617	SE207850.011	%	70 - 130%	84
	0407_TP149_0.1_200617	SE207850.012	%	70 - 130%	86
	0407_TP149_0.5_200617	SE207850.013	%	70 - 130%	76
	0407_TP150_0.1_200617	SE207850.014	%	70 - 130%	73
	0407_TP150_0.5_200617	SE207850.015	%	70 - 130%	75
	0407_TP162_0.1_200617	SE207850.016	%	70 - 130%	113
	0407_TP162_0.3_200617	SE207850.017	%	70 - 130%	92
	0407_TP163_0.1_200617	SE207850.018	%	70 - 130%	110
	0407_TP163_0.4_200617	SE207850.019	%	70 - 130%	88
	0407_QC108_200617	SE207850.020	%	70 - 130%	92
	0407_TP164_0.1_200617	SE207850.021	%	70 - 130%	76
	0407_TP164_0.5_200617	SE207850.022	%	70 - 130%	85
	0407_TP176_0.2_200617	SE207850.023	%	70 - 130%	82
	0407_TP176_0.5_200617	SE207850.024	%	70 - 130%	82
	0407_TP177_0.1_200617	SE207850.025	%	70 - 130%	85
	0407_TP177_0.5_200617	SE207850.026	%	70 - 130%	84
	0407_TP178_0.1_200617	SE207850.027	%	70 - 130%	90
	0407_TP178_0.3_200617	SE207850.028	%	70 - 130%	93
	0407_TP189_0.1_200617	SE207850.029	%	70 - 130%	90
	0407_TP189_0.4_200617	SE207850.030	%	70 - 130%	79
	0407_QC112_200617	SE207850.031	%	70 - 130%	91
	0407_TP190_0.1_200617	SE207850.032	%	70 - 130%	82
	0407_TP190_0.5_200617	SE207850.033	%	70 - 130%	87
	0407_TP191_0.1_200617	SE207850.034	%	70 - 130%	83
	0407_TP191_0.4_200617	SE207850.035	%	70 - 130%	101
	0407_QC110_200617	SE207850.036	%	70 - 130%	94
d14-p-terphenyl (Surrogate)	0407_TP118_0.1_200617	SE207850.001	%	70 - 130%	88
	0407_TP118_0.5_200617	SE207850.002	%	70 - 130%	92
	0407_TP119_0.1_200617	SE207850.003	%	70 - 130%	81
	0407_TP119_1.0_200617	SE207850.004	%	70 - 130%	91
	0407_TP120_0.1_200617	SE207850.005	%	70 - 130%	100
	0407_TP120_0.8_200617	SE207850.006	%	70 - 130%	85
	0407_QC114_200617	SE207850.007	%	70 - 130%	88
	0407_TP121_0.2_200617	SE207850.008	%	70 - 130%	84
	0407_TP121_0.5_200617	SE207850.009	%	70 - 130%	92
	0407_TP148_0.1_200617	SE207850.010	%	70 - 130%	90
	0407_TP148_0.5_200617	SE207850.011	%	70 - 130%	92
	0407_TP149_0.1_200617	SE207850.012	%	70 - 130%	91
	0407_TP149_0.5_200617	SE207850.013	%	70 - 130%	87
	0407_TP150_0.1_200617	SE207850.014	%	70 - 130%	85
	0407_TP150_0.5_200617	SE207850.015	%	70 - 130%	96
	0407_TP162_0.1_200617	SE207850.016	%	70 - 130%	102
	0407_TP162_0.3_200617	SE207850.017	%	70 - 130%	88
	0407_TP163_0.1_200617	SE207850.018	%	70 - 130%	96
	0407_TP163_0.4_200617	SE207850.019	%	70 - 130%	81
	0407_QC108_200617	SE207850.020	%	70 - 130%	88
	0407_TP164_0.1_200617	SE207850.021	%	70 - 130%	83
	0407_TP164_0.5_200617	SE207850.022	%	70 - 130%	86
	0407_TP176_0.2_200617	SE207850.023	%	70 - 130%	86
	0407_TP176_0.5_200617	SE207850.024	%	70 - 130%	85
	0407_TP177_0.1_200617	SE207850.025	%	70 - 130%	82
	0407_TP177_0.5_200617	SE207850.026	%	70 - 130%	86
	0407_TP178_0.1_200617	SE207850.027	%	70 - 130%	89
	0407_TP178_0.3_200617	SE207850.028	%	70 - 130%	90
	0407_TP189_0.1_200617	SE207850.029	%	70 - 130%	83
	0407_TP189_0.4_200617	SE207850.030	%	70 - 130%	83
	0407_QC112_200617	SE207850.031	%	70 - 130%	76
	0407_TP190_0.1_200617	SE207850.032	%	70 - 130%	79
	0407_TP190_0.5_200617	SE207850.033	%	70 - 130%	76

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d14-p-terphenyl (Surrogate)	0407_TP191_0.1_200617	SE207850.034	%	70 - 130%	78
	0407_TP191_0.4_200617	SE207850.035	%	70 - 130%	90
	0407_QC110_200617	SE207850.036	%	70 - 130%	86
d5-nitrobenzene (Surrogate)	0407_TP118_0.1_200617	SE207850.001	%	70 - 130%	82
	0407_TP118_0.5_200617	SE207850.002	%	70 - 130%	72
	0407_TP119_0.1_200617	SE207850.003	%	70 - 130%	70
	0407_TP119_1.0_200617	SE207850.004	%	70 - 130%	76
	0407_TP120_0.1_200617	SE207850.005	%	70 - 130%	73
	0407_TP120_0.8_200617	SE207850.006	%	70 - 130%	78
	0407_QC114_200617	SE207850.007	%	70 - 130%	68 ①
	0407_TP121_0.2_200617	SE207850.008	%	70 - 130%	71
	0407_TP121_0.5_200617	SE207850.009	%	70 - 130%	70 ①
	0407_TP148_0.1_200617	SE207850.010	%	70 - 130%	71
	0407_TP148_0.5_200617	SE207850.011	%	70 - 130%	76
	0407_TP149_0.1_200617	SE207850.012	%	70 - 130%	70 ①
	0407_TP149_0.5_200617	SE207850.013	%	70 - 130%	74
	0407_TP150_0.1_200617	SE207850.014	%	70 - 130%	69 ①
	0407_TP150_0.5_200617	SE207850.015	%	70 - 130%	71
	0407_TP162_0.1_200617	SE207850.016	%	70 - 130%	76
	0407_TP162_0.3_200617	SE207850.017	%	70 - 130%	77
	0407_TP163_0.1_200617	SE207850.018	%	70 - 130%	85
	0407_TP163_0.4_200617	SE207850.019	%	70 - 130%	87
	0407_QC108_200617	SE207850.020	%	70 - 130%	88
	0407_TP164_0.1_200617	SE207850.021	%	70 - 130%	83
	0407_TP164_0.5_200617	SE207850.022	%	70 - 130%	86
	0407_TP176_0.2_200617	SE207850.023	%	70 - 130%	83
	0407_TP176_0.5_200617	SE207850.024	%	70 - 130%	88
	0407_TP177_0.1_200617	SE207850.025	%	70 - 130%	85
	0407_TP177_0.5_200617	SE207850.026	%	70 - 130%	89
	0407_TP178_0.1_200617	SE207850.027	%	70 - 130%	92
	0407_TP178_0.3_200617	SE207850.028	%	70 - 130%	91
	0407_TP189_0.1_200617	SE207850.029	%	70 - 130%	99
	0407_TP189_0.4_200617	SE207850.030	%	70 - 130%	87
	0407_QC112_200617	SE207850.031	%	70 - 130%	90
	0407_TP190_0.1_200617	SE207850.032	%	70 - 130%	87
	0407_TP190_0.5_200617	SE207850.033	%	70 - 130%	89
	0407_TP191_0.1_200617	SE207850.034	%	70 - 130%	85
	0407_TP191_0.4_200617	SE207850.035	%	70 - 130%	101
	0407_QC110_200617	SE207850.036	%	70 - 130%	102

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP118_0.1_200617	SE207850.001	%	60 - 130%	93
	0407_TP118_0.5_200617	SE207850.002	%	60 - 130%	94
	0407_TP119_0.1_200617	SE207850.003	%	60 - 130%	97
	0407_TP119_1.0_200617	SE207850.004	%	60 - 130%	93
	0407_TP120_0.1_200617	SE207850.005	%	60 - 130%	98
	0407_TP120_0.8_200617	SE207850.006	%	60 - 130%	87
	0407_QC114_200617	SE207850.007	%	60 - 130%	97
	0407_TP121_0.2_200617	SE207850.008	%	60 - 130%	102
	0407_TP121_0.5_200617	SE207850.009	%	60 - 130%	93
	0407_TP148_0.1_200617	SE207850.010	%	60 - 130%	93
	0407_TP148_0.5_200617	SE207850.011	%	60 - 130%	90
	0407_TP149_0.1_200617	SE207850.012	%	60 - 130%	89
	0407_TP149_0.5_200617	SE207850.013	%	60 - 130%	93
	0407_TP150_0.1_200617	SE207850.014	%	60 - 130%	93
	0407_TP150_0.5_200617	SE207850.015	%	60 - 130%	94
	0407_TP162_0.1_200617	SE207850.016	%	60 - 130%	91
	0407_TP162_0.3_200617	SE207850.017	%	60 - 130%	103
	0407_TP163_0.1_200617	SE207850.018	%	60 - 130%	93
	0407_TP163_0.4_200617	SE207850.019	%	60 - 130%	94

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PCBs in Soil (continued) — **Method: ME-(AU)-[ENV]AN420**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_QC108_200617	SE207850.020	%	60 - 130%	84
	0407_TP164_0.1_200617	SE207850.021	%	60 - 130%	89
	0407_TP164_0.5_200617	SE207850.022	%	60 - 130%	98
	0407_TP176_0.2_200617	SE207850.023	%	60 - 130%	95
	0407_TP176_0.5_200617	SE207850.024	%	60 - 130%	94
	0407_TP177_0.1_200617	SE207850.025	%	60 - 130%	101
	0407_TP177_0.5_200617	SE207850.026	%	60 - 130%	95
	0407_TP178_0.1_200617	SE207850.027	%	60 - 130%	99
	0407_TP178_0.3_200617	SE207850.028	%	60 - 130%	95
	0407_TP189_0.1_200617	SE207850.029	%	60 - 130%	94
	0407_TP189_0.4_200617	SE207850.030	%	60 - 130%	93
	0407_QC112_200617	SE207850.031	%	60 - 130%	95
	0407_TP190_0.1_200617	SE207850.032	%	60 - 130%	101
	0407_TP190_0.5_200617	SE207850.033	%	60 - 130%	94
	0407_TP191_0.1_200617	SE207850.034	%	60 - 130%	98
	0407_TP191_0.4_200617	SE207850.035	%	60 - 130%	100
	0407_QC110_200617	SE207850.036	%	60 - 130%	111

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level — **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C2-4:2FTS) Surrogate	0407_TP118_0.1_200617	SE207850.001	%	10 - 150%	59
	0407_TP118_0.5_200617	SE207850.002	%	10 - 150%	71
	0407_TP119_0.1_200617	SE207850.003	%	10 - 150%	68
	0407_TP119_1.0_200617	SE207850.004	%	10 - 150%	65
	0407_TP120_0.1_200617	SE207850.005	%	10 - 150%	70
	0407_TP120_0.8_200617	SE207850.006	%	10 - 150%	65
	0407_TP121_0.2_200617	SE207850.008	%	10 - 150%	77
	0407_TP121_0.5_200617	SE207850.009	%	10 - 150%	85
	0407_TP148_0.1_200617	SE207850.010	%	10 - 150%	57
	0407_TP148_0.5_200617	SE207850.011	%	10 - 150%	68
	0407_TP149_0.1_200617	SE207850.012	%	10 - 150%	82
	0407_TP149_0.5_200617	SE207850.013	%	10 - 150%	78
	0407_TP150_0.1_200617	SE207850.014	%	10 - 150%	69
	0407_TP150_0.5_200617	SE207850.015	%	10 - 150%	88
	0407_TP162_0.1_200617	SE207850.016	%	10 - 150%	42
	0407_TP162_0.3_200617	SE207850.017	%	10 - 150%	53
	0407_TP163_0.1_200617	SE207850.018	%	10 - 150%	61
	0407_TP163_0.4_200617	SE207850.019	%	10 - 150%	66
	0407_TP164_0.1_200617	SE207850.021	%	10 - 150%	65
	0407_TP164_0.5_200617	SE207850.022	%	10 - 150%	59
	0407_TP176_0.2_200617	SE207850.023	%	10 - 150%	61
	0407_TP176_0.5_200617	SE207850.024	%	10 - 150%	67
	0407_TP177_0.1_200617	SE207850.025	%	10 - 150%	50
	0407_TP177_0.5_200617	SE207850.026	%	10 - 150%	60
	0407_TP178_0.1_200617	SE207850.027	%	10 - 150%	66
	0407_TP178_0.3_200617	SE207850.028	%	10 - 150%	71
	0407_TP189_0.1_200617	SE207850.029	%	10 - 150%	60
	0407_TP189_0.4_200617	SE207850.030	%	10 - 150%	72
	0407_TP190_0.1_200617	SE207850.032	%	10 - 150%	60
	0407_TP190_0.5_200617	SE207850.033	%	10 - 150%	77
	0407_TP191_0.1_200617	SE207850.034	%	10 - 150%	53
	0407_TP191_0.4_200617	SE207850.035	%	10 - 150%	66
(13C2-6:2FTS) Surrogate	0407_TP118_0.1_200617	SE207850.001	%	10 - 150%	62
	0407_TP118_0.5_200617	SE207850.002	%	10 - 150%	78
	0407_TP119_0.1_200617	SE207850.003	%	10 - 150%	56
	0407_TP119_1.0_200617	SE207850.004	%	10 - 150%	72
	0407_TP120_0.1_200617	SE207850.005	%	10 - 150%	73
	0407_TP120_0.8_200617	SE207850.006	%	10 - 150%	69
	0407_TP121_0.2_200617	SE207850.008	%	10 - 150%	81
	0407_TP121_0.5_200617	SE207850.009	%	10 - 150%	86
	0407_TP148_0.1_200617	SE207850.010	%	10 - 150%	61

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level (continued) **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C2-6:2FTS) Surrogate	0407_TP148_0.5_200617	SE207850.011	%	10 - 150%	81
	0407_TP149_0.1_200617	SE207850.012	%	10 - 150%	83
	0407_TP149_0.5_200617	SE207850.013	%	10 - 150%	79
	0407_TP150_0.1_200617	SE207850.014	%	10 - 150%	77
	0407_TP150_0.5_200617	SE207850.015	%	10 - 150%	89
	0407_TP162_0.1_200617	SE207850.016	%	10 - 150%	35
	0407_TP162_0.3_200617	SE207850.017	%	10 - 150%	59
	0407_TP163_0.1_200617	SE207850.018	%	10 - 150%	60
	0407_TP163_0.4_200617	SE207850.019	%	10 - 150%	74
	0407_TP164_0.1_200617	SE207850.021	%	10 - 150%	66
	0407_TP164_0.5_200617	SE207850.022	%	10 - 150%	60
	0407_TP176_0.2_200617	SE207850.023	%	10 - 150%	59
	0407_TP176_0.5_200617	SE207850.024	%	10 - 150%	64
	0407_TP177_0.1_200617	SE207850.025	%	10 - 150%	50
	0407_TP177_0.5_200617	SE207850.026	%	10 - 150%	58
	0407_TP178_0.1_200617	SE207850.027	%	10 - 150%	65
	0407_TP178_0.3_200617	SE207850.028	%	10 - 150%	72
	0407_TP189_0.1_200617	SE207850.029	%	10 - 150%	67
	0407_TP189_0.4_200617	SE207850.030	%	10 - 150%	68
	0407_TP190_0.1_200617	SE207850.032	%	10 - 150%	62
	0407_TP190_0.5_200617	SE207850.033	%	10 - 150%	72
	0407_TP191_0.1_200617	SE207850.034	%	10 - 150%	60
	0407_TP191_0.4_200617	SE207850.035	%	10 - 150%	64
(13C2-8:2FTS) Surrogate	0407_TP118_0.1_200617	SE207850.001	%	10 - 150%	68
	0407_TP118_0.5_200617	SE207850.002	%	10 - 150%	76
	0407_TP119_0.1_200617	SE207850.003	%	10 - 150%	57
	0407_TP119_1.0_200617	SE207850.004	%	10 - 150%	74
	0407_TP120_0.1_200617	SE207850.005	%	10 - 150%	71
	0407_TP120_0.8_200617	SE207850.006	%	10 - 150%	77
	0407_TP121_0.2_200617	SE207850.008	%	10 - 150%	72
	0407_TP121_0.5_200617	SE207850.009	%	10 - 150%	75
	0407_TP148_0.1_200617	SE207850.010	%	10 - 150%	55
	0407_TP148_0.5_200617	SE207850.011	%	10 - 150%	76
	0407_TP149_0.1_200617	SE207850.012	%	10 - 150%	71
	0407_TP149_0.5_200617	SE207850.013	%	10 - 150%	67
	0407_TP150_0.1_200617	SE207850.014	%	10 - 150%	71
	0407_TP150_0.5_200617	SE207850.015	%	10 - 150%	71
	0407_TP162_0.1_200617	SE207850.016	%	10 - 150%	31
	0407_TP162_0.3_200617	SE207850.017	%	10 - 150%	50
	0407_TP163_0.1_200617	SE207850.018	%	10 - 150%	70
	0407_TP163_0.4_200617	SE207850.019	%	10 - 150%	82
	0407_TP164_0.1_200617	SE207850.021	%	10 - 150%	71
	0407_TP164_0.5_200617	SE207850.022	%	10 - 150%	66
	0407_TP176_0.2_200617	SE207850.023	%	10 - 150%	74
	0407_TP176_0.5_200617	SE207850.024	%	10 - 150%	64
	0407_TP177_0.1_200617	SE207850.025	%	10 - 150%	54
	0407_TP177_0.5_200617	SE207850.026	%	10 - 150%	60
	0407_TP178_0.1_200617	SE207850.027	%	10 - 150%	75
	0407_TP178_0.3_200617	SE207850.028	%	10 - 150%	72
	0407_TP189_0.1_200617	SE207850.029	%	10 - 150%	77
	0407_TP189_0.4_200617	SE207850.030	%	10 - 150%	77
	0407_TP190_0.1_200617	SE207850.032	%	10 - 150%	77
	0407_TP190_0.5_200617	SE207850.033	%	10 - 150%	83
	0407_TP191_0.1_200617	SE207850.034	%	10 - 150%	66
	0407_TP191_0.4_200617	SE207850.035	%	10 - 150%	67
(13C2-PFDoA) Surrogate	0407_TP118_0.1_200617	SE207850.001	%	10 - 150%	87
	0407_TP118_0.5_200617	SE207850.002	%	10 - 150%	96
	0407_TP119_0.1_200617	SE207850.003	%	10 - 150%	84
	0407_TP119_1.0_200617	SE207850.004	%	10 - 150%	76
	0407_TP120_0.1_200617	SE207850.005	%	10 - 150%	96
	0407_TP120_0.8_200617	SE207850.006	%	10 - 150%	58

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level (continued) **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C2-PFDoA) Surrogate	0407_TP121_0.2_200617	SE207850.008	%	10 - 150%	85
	0407_TP121_0.5_200617	SE207850.009	%	10 - 150%	71
	0407_TP148_0.1_200617	SE207850.010	%	10 - 150%	100
	0407_TP148_0.5_200617	SE207850.011	%	10 - 150%	88
	0407_TP149_0.1_200617	SE207850.012	%	10 - 150%	94
	0407_TP149_0.5_200617	SE207850.013	%	10 - 150%	101
	0407_TP150_0.1_200617	SE207850.014	%	10 - 150%	82
	0407_TP150_0.5_200617	SE207850.015	%	10 - 150%	88
	0407_TP162_0.1_200617	SE207850.016	%	10 - 150%	72
	0407_TP162_0.3_200617	SE207850.017	%	10 - 150%	96
	0407_TP163_0.1_200617	SE207850.018	%	10 - 150%	69
	0407_TP163_0.4_200617	SE207850.019	%	10 - 150%	105
	0407_TP164_0.1_200617	SE207850.021	%	10 - 150%	105
	0407_TP164_0.5_200617	SE207850.022	%	10 - 150%	101
	0407_TP176_0.2_200617	SE207850.023	%	10 - 150%	101
	0407_TP176_0.5_200617	SE207850.024	%	10 - 150%	85
	0407_TP177_0.1_200617	SE207850.025	%	10 - 150%	100
	0407_TP177_0.5_200617	SE207850.026	%	10 - 150%	93
	0407_TP178_0.1_200617	SE207850.027	%	10 - 150%	113
	0407_TP178_0.3_200617	SE207850.028	%	10 - 150%	82
	0407_TP189_0.1_200617	SE207850.029	%	10 - 150%	105
	0407_TP189_0.4_200617	SE207850.030	%	10 - 150%	104
	0407_TP190_0.1_200617	SE207850.032	%	10 - 150%	100
	0407_TP190_0.5_200617	SE207850.033	%	10 - 150%	101
	0407_TP191_0.1_200617	SE207850.034	%	10 - 150%	97
	0407_TP191_0.4_200617	SE207850.035	%	10 - 150%	83
(13C2-PFHxDA) Surrogate	0407_TP118_0.1_200617	SE207850.001	%	10 - 150%	8 †
	0407_TP118_0.5_200617	SE207850.002	%	10 - 150%	8 †
	0407_TP119_0.1_200617	SE207850.003	%	10 - 150%	5 †
	0407_TP119_1.0_200617	SE207850.004	%	10 - 150%	3 †
	0407_TP120_0.1_200617	SE207850.005	%	10 - 150%	5 †
	0407_TP120_0.8_200617	SE207850.006	%	10 - 150%	2 †
	0407_TP121_0.2_200617	SE207850.008	%	10 - 150%	3 †
	0407_TP121_0.5_200617	SE207850.009	%	10 - 150%	4 †
	0407_TP148_0.1_200617	SE207850.010	%	10 - 150%	3 †
	0407_TP148_0.5_200617	SE207850.011	%	10 - 150%	2 †
	0407_TP149_0.1_200617	SE207850.012	%	10 - 150%	10 †
	0407_TP149_0.5_200617	SE207850.013	%	10 - 150%	7 †
	0407_TP150_0.1_200617	SE207850.014	%	10 - 150%	4 †
	0407_TP150_0.5_200617	SE207850.015	%	10 - 150%	4 †
	0407_TP162_0.1_200617	SE207850.016	%	10 - 150%	2 †
	0407_TP162_0.3_200617	SE207850.017	%	10 - 150%	10
	0407_TP163_0.1_200617	SE207850.018	%	10 - 150%	8 †
	0407_TP163_0.4_200617	SE207850.019	%	10 - 150%	15
	0407_TP164_0.1_200617	SE207850.021	%	10 - 150%	21
	0407_TP164_0.5_200617	SE207850.022	%	10 - 150%	54
	0407_TP176_0.2_200617	SE207850.023	%	10 - 150%	43
	0407_TP176_0.5_200617	SE207850.024	%	10 - 150%	15
	0407_TP177_0.1_200617	SE207850.025	%	10 - 150%	50
	0407_TP177_0.5_200617	SE207850.026	%	10 - 150%	22
	0407_TP178_0.1_200617	SE207850.027	%	10 - 150%	21
	0407_TP178_0.3_200617	SE207850.028	%	10 - 150%	16
	0407_TP189_0.1_200617	SE207850.029	%	10 - 150%	26
	0407_TP189_0.4_200617	SE207850.030	%	10 - 150%	21
	0407_TP190_0.1_200617	SE207850.032	%	10 - 150%	24
	0407_TP190_0.5_200617	SE207850.033	%	10 - 150%	20
	0407_TP191_0.1_200617	SE207850.034	%	10 - 150%	26
	0407_TP191_0.4_200617	SE207850.035	%	10 - 150%	18
(13C2-PFTeDA) Surrogate	0407_TP118_0.1_200617	SE207850.001	%	10 - 130%	48
	0407_TP118_0.5_200617	SE207850.002	%	10 - 130%	54
	0407_TP119_0.1_200617	SE207850.003	%	10 - 130%	54

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level (continued) **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C2-PFTeDA) Surrogate	0407_TP119_1.0_200617	SE207850.004	%	10 - 130%	26
	0407_TP120_0.1_200617	SE207850.005	%	10 - 130%	39
	0407_TP120_0.8_200617	SE207850.006	%	10 - 130%	18
	0407_TP121_0.2_200617	SE207850.008	%	10 - 130%	29
	0407_TP121_0.5_200617	SE207850.009	%	10 - 130%	26
	0407_TP148_0.1_200617	SE207850.010	%	10 - 130%	35
	0407_TP148_0.5_200617	SE207850.011	%	10 - 130%	24
	0407_TP149_0.1_200617	SE207850.012	%	10 - 130%	55
	0407_TP149_0.5_200617	SE207850.013	%	10 - 130%	36
	0407_TP150_0.1_200617	SE207850.014	%	10 - 130%	26
	0407_TP150_0.5_200617	SE207850.015	%	10 - 130%	34
	0407_TP162_0.1_200617	SE207850.016	%	10 - 130%	22
	0407_TP162_0.3_200617	SE207850.017	%	10 - 130%	74
	0407_TP163_0.1_200617	SE207850.018	%	10 - 130%	32
	0407_TP163_0.4_200617	SE207850.019	%	10 - 130%	70
	0407_TP164_0.1_200617	SE207850.021	%	10 - 130%	66
	0407_TP164_0.5_200617	SE207850.022	%	10 - 130%	94
	0407_TP176_0.2_200617	SE207850.023	%	10 - 130%	82
	0407_TP176_0.5_200617	SE207850.024	%	10 - 130%	58
	0407_TP177_0.1_200617	SE207850.025	%	10 - 130%	92
	0407_TP177_0.5_200617	SE207850.026	%	10 - 130%	66
	0407_TP178_0.1_200617	SE207850.027	%	10 - 130%	76
	0407_TP178_0.3_200617	SE207850.028	%	10 - 130%	60
	0407_TP189_0.1_200617	SE207850.029	%	10 - 130%	68
	0407_TP189_0.4_200617	SE207850.030	%	10 - 130%	78
	0407_TP190_0.1_200617	SE207850.032	%	10 - 130%	77
	0407_TP190_0.5_200617	SE207850.033	%	10 - 130%	68
	0407_TP191_0.1_200617	SE207850.034	%	10 - 130%	79
	0407_TP191_0.4_200617	SE207850.035	%	10 - 130%	71
(13C3-PFBS) Surrogate	0407_TP118_0.1_200617	SE207850.001	%	10 - 150%	91
	0407_TP118_0.5_200617	SE207850.002	%	10 - 150%	91
	0407_TP119_0.1_200617	SE207850.003	%	10 - 150%	110
	0407_TP119_1.0_200617	SE207850.004	%	10 - 150%	93
	0407_TP120_0.1_200617	SE207850.005	%	10 - 150%	85
	0407_TP120_0.8_200617	SE207850.006	%	10 - 150%	80
	0407_TP121_0.2_200617	SE207850.008	%	10 - 150%	93
	0407_TP121_0.5_200617	SE207850.009	%	10 - 150%	94
	0407_TP148_0.1_200617	SE207850.010	%	10 - 150%	117
	0407_TP148_0.5_200617	SE207850.011	%	10 - 150%	107
	0407_TP149_0.1_200617	SE207850.012	%	10 - 150%	102
	0407_TP149_0.5_200617	SE207850.013	%	10 - 150%	90
	0407_TP150_0.1_200617	SE207850.014	%	10 - 150%	96
	0407_TP150_0.5_200617	SE207850.015	%	10 - 150%	101
	0407_TP162_0.1_200617	SE207850.016	%	10 - 150%	114
	0407_TP162_0.3_200617	SE207850.017	%	10 - 150%	106
	0407_TP163_0.1_200617	SE207850.018	%	10 - 150%	93
	0407_TP163_0.4_200617	SE207850.019	%	10 - 150%	83
	0407_TP164_0.1_200617	SE207850.021	%	10 - 150%	82
	0407_TP164_0.5_200617	SE207850.022	%	10 - 150%	82
	0407_TP176_0.2_200617	SE207850.023	%	10 - 150%	97
	0407_TP176_0.5_200617	SE207850.024	%	10 - 150%	87
	0407_TP177_0.1_200617	SE207850.025	%	10 - 150%	109
	0407_TP177_0.5_200617	SE207850.026	%	10 - 150%	96
	0407_TP178_0.1_200617	SE207850.027	%	10 - 150%	96
	0407_TP178_0.3_200617	SE207850.028	%	10 - 150%	92
	0407_TP189_0.1_200617	SE207850.029	%	10 - 150%	99
	0407_TP189_0.4_200617	SE207850.030	%	10 - 150%	91
	0407_TP190_0.1_200617	SE207850.032	%	10 - 150%	103
	0407_TP190_0.5_200617	SE207850.033	%	10 - 150%	96
	0407_TP191_0.1_200617	SE207850.034	%	10 - 150%	89
	0407_TP191_0.4_200617	SE207850.035	%	10 - 150%	99

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level (continued) **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C3-PFHxS) Surrogate	0407_TP118_0.1_200617	SE207850.001	%	10 - 150%	94
	0407_TP118_0.5_200617	SE207850.002	%	10 - 150%	100
	0407_TP119_0.1_200617	SE207850.003	%	10 - 150%	109
	0407_TP119_1.0_200617	SE207850.004	%	10 - 150%	97
	0407_TP120_0.1_200617	SE207850.005	%	10 - 150%	95
	0407_TP120_0.8_200617	SE207850.006	%	10 - 150%	99
	0407_TP121_0.2_200617	SE207850.008	%	10 - 150%	96
	0407_TP121_0.5_200617	SE207850.009	%	10 - 150%	93
	0407_TP148_0.1_200617	SE207850.010	%	10 - 150%	90
	0407_TP148_0.5_200617	SE207850.011	%	10 - 150%	99
	0407_TP149_0.1_200617	SE207850.012	%	10 - 150%	113
	0407_TP149_0.5_200617	SE207850.013	%	10 - 150%	89
	0407_TP150_0.1_200617	SE207850.014	%	10 - 150%	105
	0407_TP150_0.5_200617	SE207850.015	%	10 - 150%	101
	0407_TP162_0.1_200617	SE207850.016	%	10 - 150%	92
	0407_TP162_0.3_200617	SE207850.017	%	10 - 150%	96
	0407_TP163_0.1_200617	SE207850.018	%	10 - 150%	97
	0407_TP163_0.4_200617	SE207850.019	%	10 - 150%	96
	0407_TP164_0.1_200617	SE207850.021	%	10 - 150%	89
	0407_TP164_0.5_200617	SE207850.022	%	10 - 150%	98
	0407_TP176_0.2_200617	SE207850.023	%	10 - 150%	94
	0407_TP176_0.5_200617	SE207850.024	%	10 - 150%	93
	0407_TP177_0.1_200617	SE207850.025	%	10 - 150%	95
	0407_TP177_0.5_200617	SE207850.026	%	10 - 150%	93
	0407_TP178_0.1_200617	SE207850.027	%	10 - 150%	99
	0407_TP178_0.3_200617	SE207850.028	%	10 - 150%	96
	0407_TP189_0.1_200617	SE207850.029	%	10 - 150%	100
	0407_TP189_0.4_200617	SE207850.030	%	10 - 150%	101
	0407_TP190_0.1_200617	SE207850.032	%	10 - 150%	105
	0407_TP190_0.5_200617	SE207850.033	%	10 - 150%	96
	0407_TP191_0.1_200617	SE207850.034	%	10 - 150%	91
	0407_TP191_0.4_200617	SE207850.035	%	10 - 150%	102
(13C4-PFBA) Surrogate	0407_TP118_0.1_200617	SE207850.001	%	10 - 150%	102
	0407_TP118_0.5_200617	SE207850.002	%	10 - 150%	101
	0407_TP119_0.1_200617	SE207850.003	%	10 - 150%	102
	0407_TP119_1.0_200617	SE207850.004	%	10 - 150%	99
	0407_TP120_0.1_200617	SE207850.005	%	10 - 150%	100
	0407_TP120_0.8_200617	SE207850.006	%	10 - 150%	100
	0407_TP121_0.2_200617	SE207850.008	%	10 - 150%	103
	0407_TP121_0.5_200617	SE207850.009	%	10 - 150%	100
	0407_TP148_0.1_200617	SE207850.010	%	10 - 150%	102
	0407_TP148_0.5_200617	SE207850.011	%	10 - 150%	101
	0407_TP149_0.1_200617	SE207850.012	%	10 - 150%	100
	0407_TP149_0.5_200617	SE207850.013	%	10 - 150%	98
	0407_TP150_0.1_200617	SE207850.014	%	10 - 150%	100
	0407_TP150_0.5_200617	SE207850.015	%	10 - 150%	101
	0407_TP162_0.1_200617	SE207850.016	%	10 - 150%	113
	0407_TP162_0.3_200617	SE207850.017	%	10 - 150%	104
	0407_TP163_0.1_200617	SE207850.018	%	10 - 150%	106
	0407_TP163_0.4_200617	SE207850.019	%	10 - 150%	99
	0407_TP164_0.1_200617	SE207850.021	%	10 - 150%	99
	0407_TP164_0.5_200617	SE207850.022	%	10 - 150%	101
	0407_TP176_0.2_200617	SE207850.023	%	10 - 150%	103
	0407_TP176_0.5_200617	SE207850.024	%	10 - 150%	101
	0407_TP177_0.1_200617	SE207850.025	%	10 - 150%	101
	0407_TP177_0.5_200617	SE207850.026	%	10 - 150%	101
	0407_TP178_0.1_200617	SE207850.027	%	10 - 150%	98
	0407_TP178_0.3_200617	SE207850.028	%	10 - 150%	98
	0407_TP189_0.1_200617	SE207850.029	%	10 - 150%	99
	0407_TP189_0.4_200617	SE207850.030	%	10 - 150%	101
	0407_TP190_0.1_200617	SE207850.032	%	10 - 150%	100

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level (continued) **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C4-PFBA) Surrogate	0407_TP190_0.5_200617	SE207850.033	%	10 - 150%	99
	0407_TP191_0.1_200617	SE207850.034	%	10 - 150%	100
	0407_TP191_0.4_200617	SE207850.035	%	10 - 150%	100
(13C4-PFHpA) Surrogate	0407_TP118_0.1_200617	SE207850.001	%	10 - 150%	122
	0407_TP118_0.5_200617	SE207850.002	%	10 - 150%	106
	0407_TP119_0.1_200617	SE207850.003	%	10 - 150%	114
	0407_TP119_1.0_200617	SE207850.004	%	10 - 150%	115
	0407_TP120_0.1_200617	SE207850.005	%	10 - 150%	101
	0407_TP120_0.8_200617	SE207850.006	%	10 - 150%	99
	0407_TP121_0.2_200617	SE207850.008	%	10 - 150%	107
	0407_TP121_0.5_200617	SE207850.009	%	10 - 150%	107
	0407_TP148_0.1_200617	SE207850.010	%	10 - 150%	117
	0407_TP148_0.5_200617	SE207850.011	%	10 - 150%	123
	0407_TP149_0.1_200617	SE207850.012	%	10 - 150%	115
	0407_TP149_0.5_200617	SE207850.013	%	10 - 150%	105
	0407_TP150_0.1_200617	SE207850.014	%	10 - 150%	106
	0407_TP150_0.5_200617	SE207850.015	%	10 - 150%	107
	0407_TP162_0.1_200617	SE207850.016	%	10 - 150%	121
	0407_TP162_0.3_200617	SE207850.017	%	10 - 150%	128
	0407_TP163_0.1_200617	SE207850.018	%	10 - 150%	110
	0407_TP163_0.4_200617	SE207850.019	%	10 - 150%	108
	0407_TP164_0.1_200617	SE207850.021	%	10 - 150%	102
	0407_TP164_0.5_200617	SE207850.022	%	10 - 150%	99
	0407_TP176_0.2_200617	SE207850.023	%	10 - 150%	104
	0407_TP176_0.5_200617	SE207850.024	%	10 - 150%	106
	0407_TP177_0.1_200617	SE207850.025	%	10 - 150%	117
	0407_TP177_0.5_200617	SE207850.026	%	10 - 150%	109
	0407_TP178_0.1_200617	SE207850.027	%	10 - 150%	104
	0407_TP178_0.3_200617	SE207850.028	%	10 - 150%	106
	0407_TP189_0.1_200617	SE207850.029	%	10 - 150%	117
	0407_TP189_0.4_200617	SE207850.030	%	10 - 150%	99
	0407_TP190_0.1_200617	SE207850.032	%	10 - 150%	124
	0407_TP190_0.5_200617	SE207850.033	%	10 - 150%	115
	0407_TP191_0.1_200617	SE207850.034	%	10 - 150%	109
	0407_TP191_0.4_200617	SE207850.035	%	10 - 150%	126
(13C4-PFOA) Surrogate	0407_TP118_0.1_200617	SE207850.001	%	10 - 150%	106
	0407_TP118_0.5_200617	SE207850.002	%	10 - 150%	93
	0407_TP119_0.1_200617	SE207850.003	%	10 - 150%	101
	0407_TP119_1.0_200617	SE207850.004	%	10 - 150%	102
	0407_TP120_0.1_200617	SE207850.005	%	10 - 150%	101
	0407_TP120_0.8_200617	SE207850.006	%	10 - 150%	92
	0407_TP121_0.2_200617	SE207850.008	%	10 - 150%	103
	0407_TP121_0.5_200617	SE207850.009	%	10 - 150%	102
	0407_TP148_0.1_200617	SE207850.010	%	10 - 150%	103
	0407_TP148_0.5_200617	SE207850.011	%	10 - 150%	106
	0407_TP149_0.1_200617	SE207850.012	%	10 - 150%	101
	0407_TP149_0.5_200617	SE207850.013	%	10 - 150%	97
	0407_TP150_0.1_200617	SE207850.014	%	10 - 150%	94
	0407_TP150_0.5_200617	SE207850.015	%	10 - 150%	96
	0407_TP162_0.1_200617	SE207850.016	%	10 - 150%	101
	0407_TP162_0.3_200617	SE207850.017	%	10 - 150%	111
	0407_TP163_0.1_200617	SE207850.018	%	10 - 150%	95
	0407_TP163_0.4_200617	SE207850.019	%	10 - 150%	104
	0407_TP164_0.1_200617	SE207850.021	%	10 - 150%	101
	0407_TP164_0.5_200617	SE207850.022	%	10 - 150%	95
	0407_TP176_0.2_200617	SE207850.023	%	10 - 150%	104
	0407_TP176_0.5_200617	SE207850.024	%	10 - 150%	96
	0407_TP177_0.1_200617	SE207850.025	%	10 - 150%	100
	0407_TP177_0.5_200617	SE207850.026	%	10 - 150%	103
	0407_TP178_0.1_200617	SE207850.027	%	10 - 150%	95
	0407_TP178_0.3_200617	SE207850.028	%	10 - 150%	95

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level (continued) **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C4-PFOA) Surrogate	0407_TP189_0.1_200617	SE207850.029	%	10 - 150%	108
	0407_TP189_0.4_200617	SE207850.030	%	10 - 150%	102
	0407_TP190_0.1_200617	SE207850.032	%	10 - 150%	99
	0407_TP190_0.5_200617	SE207850.033	%	10 - 150%	98
	0407_TP191_0.1_200617	SE207850.034	%	10 - 150%	98
	0407_TP191_0.4_200617	SE207850.035	%	10 - 150%	109
(13C5_PFPeA) Surrogate	0407_TP118_0.1_200617	SE207850.001	%	10 - 150%	99
	0407_TP118_0.5_200617	SE207850.002	%	10 - 150%	95
	0407_TP119_0.1_200617	SE207850.003	%	10 - 150%	103
	0407_TP119_1.0_200617	SE207850.004	%	10 - 150%	95
	0407_TP120_0.1_200617	SE207850.005	%	10 - 150%	101
	0407_TP120_0.8_200617	SE207850.006	%	10 - 150%	92
	0407_TP121_0.2_200617	SE207850.008	%	10 - 150%	97
	0407_TP121_0.5_200617	SE207850.009	%	10 - 150%	97
	0407_TP148_0.1_200617	SE207850.010	%	10 - 150%	102
	0407_TP148_0.5_200617	SE207850.011	%	10 - 150%	93
	0407_TP149_0.1_200617	SE207850.012	%	10 - 150%	97
	0407_TP149_0.5_200617	SE207850.013	%	10 - 150%	91
	0407_TP150_0.1_200617	SE207850.014	%	10 - 150%	101
	0407_TP150_0.5_200617	SE207850.015	%	10 - 150%	90
	0407_TP162_0.1_200617	SE207850.016	%	10 - 150%	115
	0407_TP162_0.3_200617	SE207850.017	%	10 - 150%	104
	0407_TP163_0.1_200617	SE207850.018	%	10 - 150%	97
	0407_TP163_0.4_200617	SE207850.019	%	10 - 150%	101
	0407_TP164_0.1_200617	SE207850.021	%	10 - 150%	83
	0407_TP164_0.5_200617	SE207850.022	%	10 - 150%	85
	0407_TP176_0.2_200617	SE207850.023	%	10 - 150%	89
	0407_TP176_0.5_200617	SE207850.024	%	10 - 150%	93
	0407_TP177_0.1_200617	SE207850.025	%	10 - 150%	100
	0407_TP177_0.5_200617	SE207850.026	%	10 - 150%	102
	0407_TP178_0.1_200617	SE207850.027	%	10 - 150%	95
	0407_TP178_0.3_200617	SE207850.028	%	10 - 150%	87
	0407_TP189_0.1_200617	SE207850.029	%	10 - 150%	96
	0407_TP189_0.4_200617	SE207850.030	%	10 - 150%	93
	0407_TP190_0.1_200617	SE207850.032	%	10 - 150%	95
	0407_TP190_0.5_200617	SE207850.033	%	10 - 150%	88
	0407_TP191_0.1_200617	SE207850.034	%	10 - 150%	99
	0407_TP191_0.4_200617	SE207850.035	%	10 - 150%	94
(13C5-PFHxA) Surrogate	0407_TP118_0.1_200617	SE207850.001	%	10 - 150%	100
	0407_TP118_0.5_200617	SE207850.002	%	10 - 150%	92
	0407_TP119_0.1_200617	SE207850.003	%	10 - 150%	103
	0407_TP119_1.0_200617	SE207850.004	%	10 - 150%	97
	0407_TP120_0.1_200617	SE207850.005	%	10 - 150%	90
	0407_TP120_0.8_200617	SE207850.006	%	10 - 150%	86
	0407_TP121_0.2_200617	SE207850.008	%	10 - 150%	94
	0407_TP121_0.5_200617	SE207850.009	%	10 - 150%	94
	0407_TP148_0.1_200617	SE207850.010	%	10 - 150%	115
	0407_TP148_0.5_200617	SE207850.011	%	10 - 150%	117
	0407_TP149_0.1_200617	SE207850.012	%	10 - 150%	103
	0407_TP149_0.5_200617	SE207850.013	%	10 - 150%	92
	0407_TP150_0.1_200617	SE207850.014	%	10 - 150%	90
	0407_TP150_0.5_200617	SE207850.015	%	10 - 150%	95
	0407_TP162_0.1_200617	SE207850.016	%	10 - 150%	102
	0407_TP162_0.3_200617	SE207850.017	%	10 - 150%	109
	0407_TP163_0.1_200617	SE207850.018	%	10 - 150%	97
	0407_TP163_0.4_200617	SE207850.019	%	10 - 150%	91
	0407_TP164_0.1_200617	SE207850.021	%	10 - 150%	88
	0407_TP164_0.5_200617	SE207850.022	%	10 - 150%	86
	0407_TP176_0.2_200617	SE207850.023	%	10 - 150%	96
	0407_TP176_0.5_200617	SE207850.024	%	10 - 150%	92
	0407_TP177_0.1_200617	SE207850.025	%	10 - 150%	101

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level (continued) **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C5-PFHxA) Surrogate	0407_TP177_0.5_200617	SE207850.026	%	10 - 150%	91
	0407_TP178_0.1_200617	SE207850.027	%	10 - 150%	99
	0407_TP178_0.3_200617	SE207850.028	%	10 - 150%	98
	0407_TP189_0.1_200617	SE207850.029	%	10 - 150%	93
	0407_TP189_0.4_200617	SE207850.030	%	10 - 150%	88
	0407_TP190_0.1_200617	SE207850.032	%	10 - 150%	108
	0407_TP190_0.5_200617	SE207850.033	%	10 - 150%	106
	0407_TP191_0.1_200617	SE207850.034	%	10 - 150%	93
	0407_TP191_0.4_200617	SE207850.035	%	10 - 150%	109
(13C6-PFDA) Surrogate	0407_TP118_0.1_200617	SE207850.001	%	10 - 150%	80
	0407_TP118_0.5_200617	SE207850.002	%	10 - 150%	110
	0407_TP119_0.1_200617	SE207850.003	%	10 - 150%	96
	0407_TP119_1.0_200617	SE207850.004	%	10 - 150%	94
	0407_TP120_0.1_200617	SE207850.005	%	10 - 150%	96
	0407_TP120_0.8_200617	SE207850.006	%	10 - 150%	115
	0407_TP121_0.2_200617	SE207850.008	%	10 - 150%	100
	0407_TP121_0.5_200617	SE207850.009	%	10 - 150%	79
	0407_TP148_0.1_200617	SE207850.010	%	10 - 150%	120
	0407_TP148_0.5_200617	SE207850.011	%	10 - 150%	103
	0407_TP149_0.1_200617	SE207850.012	%	10 - 150%	97
	0407_TP149_0.5_200617	SE207850.013	%	10 - 150%	107
	0407_TP150_0.1_200617	SE207850.014	%	10 - 150%	116
	0407_TP150_0.5_200617	SE207850.015	%	10 - 150%	97
	0407_TP162_0.1_200617	SE207850.016	%	10 - 150%	86
	0407_TP162_0.3_200617	SE207850.017	%	10 - 150%	87
	0407_TP163_0.1_200617	SE207850.018	%	10 - 150%	98
	0407_TP163_0.4_200617	SE207850.019	%	10 - 150%	94
	0407_TP164_0.1_200617	SE207850.021	%	10 - 150%	87
	0407_TP164_0.5_200617	SE207850.022	%	10 - 150%	94
	0407_TP176_0.2_200617	SE207850.023	%	10 - 150%	90
	0407_TP176_0.5_200617	SE207850.024	%	10 - 150%	93
	0407_TP177_0.1_200617	SE207850.025	%	10 - 150%	93
	0407_TP177_0.5_200617	SE207850.026	%	10 - 150%	92
	0407_TP178_0.1_200617	SE207850.027	%	10 - 150%	91
	0407_TP178_0.3_200617	SE207850.028	%	10 - 150%	117
	0407_TP189_0.1_200617	SE207850.029	%	10 - 150%	96
	0407_TP189_0.4_200617	SE207850.030	%	10 - 150%	112
	0407_TP190_0.1_200617	SE207850.032	%	10 - 150%	98
	0407_TP190_0.5_200617	SE207850.033	%	10 - 150%	86
	0407_TP191_0.1_200617	SE207850.034	%	10 - 150%	85
	0407_TP191_0.4_200617	SE207850.035	%	10 - 150%	103
(13C7-PFUdA) Surrogate	0407_TP118_0.1_200617	SE207850.001	%	10 - 150%	93
	0407_TP118_0.5_200617	SE207850.002	%	10 - 150%	105
	0407_TP119_0.1_200617	SE207850.003	%	10 - 150%	91
	0407_TP119_1.0_200617	SE207850.004	%	10 - 150%	88
	0407_TP120_0.1_200617	SE207850.005	%	10 - 150%	98
	0407_TP120_0.8_200617	SE207850.006	%	10 - 150%	88
	0407_TP121_0.2_200617	SE207850.008	%	10 - 150%	101
	0407_TP121_0.5_200617	SE207850.009	%	10 - 150%	90
	0407_TP148_0.1_200617	SE207850.010	%	10 - 150%	115
	0407_TP148_0.5_200617	SE207850.011	%	10 - 150%	99
	0407_TP149_0.1_200617	SE207850.012	%	10 - 150%	97
	0407_TP149_0.5_200617	SE207850.013	%	10 - 150%	116
	0407_TP150_0.1_200617	SE207850.014	%	10 - 150%	103
	0407_TP150_0.5_200617	SE207850.015	%	10 - 150%	112
	0407_TP162_0.1_200617	SE207850.016	%	10 - 150%	83
	0407_TP162_0.3_200617	SE207850.017	%	10 - 150%	99
	0407_TP163_0.1_200617	SE207850.018	%	10 - 150%	87
	0407_TP163_0.4_200617	SE207850.019	%	10 - 150%	125
	0407_TP164_0.1_200617	SE207850.021	%	10 - 150%	114
	0407_TP164_0.5_200617	SE207850.022	%	10 - 150%	96

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level (continued) **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C7-PFUdA) Surrogate	0407_TP176_0.2_200617	SE207850.023	%	10 - 150%	95
	0407_TP176_0.5_200617	SE207850.024	%	10 - 150%	102
	0407_TP177_0.1_200617	SE207850.025	%	10 - 150%	99
	0407_TP177_0.5_200617	SE207850.026	%	10 - 150%	96
	0407_TP178_0.1_200617	SE207850.027	%	10 - 150%	109
	0407_TP178_0.3_200617	SE207850.028	%	10 - 150%	99
	0407_TP189_0.1_200617	SE207850.029	%	10 - 150%	105
	0407_TP189_0.4_200617	SE207850.030	%	10 - 150%	112
	0407_TP190_0.1_200617	SE207850.032	%	10 - 150%	107
	0407_TP190_0.5_200617	SE207850.033	%	10 - 150%	110
	0407_TP191_0.1_200617	SE207850.034	%	10 - 150%	105
	0407_TP191_0.4_200617	SE207850.035	%	10 - 150%	95
(13C8-PFOS) Surrogate	0407_TP118_0.1_200617	SE207850.001	%	10 - 150%	104
	0407_TP118_0.5_200617	SE207850.002	%	10 - 150%	91
	0407_TP119_0.1_200617	SE207850.003	%	10 - 150%	88
	0407_TP119_1.0_200617	SE207850.004	%	10 - 150%	95
	0407_TP120_0.1_200617	SE207850.005	%	10 - 150%	88
	0407_TP120_0.8_200617	SE207850.006	%	10 - 150%	89
	0407_TP121_0.2_200617	SE207850.008	%	10 - 150%	92
	0407_TP121_0.5_200617	SE207850.009	%	10 - 150%	92
	0407_TP148_0.1_200617	SE207850.010	%	10 - 150%	112
	0407_TP148_0.5_200617	SE207850.011	%	10 - 150%	106
	0407_TP149_0.1_200617	SE207850.012	%	10 - 150%	101
	0407_TP149_0.5_200617	SE207850.013	%	10 - 150%	112
	0407_TP150_0.1_200617	SE207850.014	%	10 - 150%	114
	0407_TP150_0.5_200617	SE207850.015	%	10 - 150%	100
	0407_TP162_0.1_200617	SE207850.016	%	10 - 150%	104
	0407_TP162_0.3_200617	SE207850.017	%	10 - 150%	97
	0407_TP163_0.1_200617	SE207850.018	%	10 - 150%	79
	0407_TP163_0.4_200617	SE207850.019	%	10 - 150%	109
	0407_TP164_0.1_200617	SE207850.021	%	10 - 150%	92
	0407_TP164_0.5_200617	SE207850.022	%	10 - 150%	90
	0407_TP176_0.2_200617	SE207850.023	%	10 - 150%	90
	0407_TP176_0.5_200617	SE207850.024	%	10 - 150%	109
	0407_TP177_0.1_200617	SE207850.025	%	10 - 150%	135
	0407_TP177_0.5_200617	SE207850.026	%	10 - 150%	88
	0407_TP178_0.1_200617	SE207850.027	%	10 - 150%	91
	0407_TP178_0.3_200617	SE207850.028	%	10 - 150%	116
	0407_TP189_0.1_200617	SE207850.029	%	10 - 150%	111
	0407_TP189_0.4_200617	SE207850.030	%	10 - 150%	103
	0407_TP190_0.1_200617	SE207850.032	%	10 - 150%	109
	0407_TP190_0.5_200617	SE207850.033	%	10 - 150%	96
	0407_TP191_0.1_200617	SE207850.034	%	10 - 150%	91
	0407_TP191_0.4_200617	SE207850.035	%	10 - 150%	86
(13C8-PFOSA) Surrogate	0407_TP118_0.1_200617	SE207850.001	%	10 - 150%	53
	0407_TP118_0.5_200617	SE207850.002	%	10 - 150%	47
	0407_TP119_0.1_200617	SE207850.003	%	10 - 150%	49
	0407_TP119_1.0_200617	SE207850.004	%	10 - 150%	42
	0407_TP120_0.1_200617	SE207850.005	%	10 - 150%	44
	0407_TP120_0.8_200617	SE207850.006	%	10 - 150%	60
	0407_TP121_0.2_200617	SE207850.008	%	10 - 150%	56
	0407_TP121_0.5_200617	SE207850.009	%	10 - 150%	54
	0407_TP148_0.1_200617	SE207850.010	%	10 - 150%	60
	0407_TP148_0.5_200617	SE207850.011	%	10 - 150%	62
	0407_TP149_0.1_200617	SE207850.012	%	10 - 150%	48
	0407_TP149_0.5_200617	SE207850.013	%	10 - 150%	46
	0407_TP150_0.1_200617	SE207850.014	%	10 - 150%	59
	0407_TP150_0.5_200617	SE207850.015	%	10 - 150%	53
	0407_TP162_0.1_200617	SE207850.016	%	10 - 150%	57
	0407_TP162_0.3_200617	SE207850.017	%	10 - 150%	54
	0407_TP163_0.1_200617	SE207850.018	%	10 - 150%	39

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level (continued) **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C8-PFOSA) Surrogate	0407_TP163_0.4_200617	SE207850.019	%	10 - 150%	52
	0407_TP164_0.1_200617	SE207850.021	%	10 - 150%	48
	0407_TP164_0.5_200617	SE207850.022	%	10 - 150%	50
	0407_TP176_0.2_200617	SE207850.023	%	10 - 150%	53
	0407_TP176_0.5_200617	SE207850.024	%	10 - 150%	44
	0407_TP177_0.1_200617	SE207850.025	%	10 - 150%	49
	0407_TP177_0.5_200617	SE207850.026	%	10 - 150%	41
	0407_TP178_0.1_200617	SE207850.027	%	10 - 150%	53
	0407_TP178_0.3_200617	SE207850.028	%	10 - 150%	54
	0407_TP189_0.1_200617	SE207850.029	%	10 - 150%	63
	0407_TP189_0.4_200617	SE207850.030	%	10 - 150%	50
	0407_TP190_0.1_200617	SE207850.032	%	10 - 150%	57
	0407_TP190_0.5_200617	SE207850.033	%	10 - 150%	51
	0407_TP191_0.1_200617	SE207850.034	%	10 - 150%	46
	0407_TP191_0.4_200617	SE207850.035	%	10 - 150%	48
(13C9-PFNA) Surrogate	0407_TP118_0.1_200617	SE207850.001	%	10 - 150%	98
	0407_TP118_0.5_200617	SE207850.002	%	10 - 150%	86
	0407_TP119_0.1_200617	SE207850.003	%	10 - 150%	105
	0407_TP119_1.0_200617	SE207850.004	%	10 - 150%	99
	0407_TP120_0.1_200617	SE207850.005	%	10 - 150%	100
	0407_TP120_0.8_200617	SE207850.006	%	10 - 150%	102
	0407_TP121_0.2_200617	SE207850.008	%	10 - 150%	86
	0407_TP121_0.5_200617	SE207850.009	%	10 - 150%	104
	0407_TP148_0.1_200617	SE207850.010	%	10 - 150%	106
	0407_TP148_0.5_200617	SE207850.011	%	10 - 150%	108
	0407_TP149_0.1_200617	SE207850.012	%	10 - 150%	96
	0407_TP149_0.5_200617	SE207850.013	%	10 - 150%	102
	0407_TP150_0.1_200617	SE207850.014	%	10 - 150%	93
	0407_TP150_0.5_200617	SE207850.015	%	10 - 150%	90
	0407_TP162_0.1_200617	SE207850.016	%	10 - 150%	93
	0407_TP162_0.3_200617	SE207850.017	%	10 - 150%	104
	0407_TP163_0.1_200617	SE207850.018	%	10 - 150%	102
	0407_TP163_0.4_200617	SE207850.019	%	10 - 150%	96
	0407_TP164_0.1_200617	SE207850.021	%	10 - 150%	92
	0407_TP164_0.5_200617	SE207850.022	%	10 - 150%	95
	0407_TP176_0.2_200617	SE207850.023	%	10 - 150%	91
	0407_TP176_0.5_200617	SE207850.024	%	10 - 150%	91
	0407_TP177_0.1_200617	SE207850.025	%	10 - 150%	90
	0407_TP177_0.5_200617	SE207850.026	%	10 - 150%	108
	0407_TP178_0.1_200617	SE207850.027	%	10 - 150%	99
	0407_TP178_0.3_200617	SE207850.028	%	10 - 150%	106
	0407_TP189_0.1_200617	SE207850.029	%	10 - 150%	105
	0407_TP189_0.4_200617	SE207850.030	%	10 - 150%	95
	0407_TP190_0.1_200617	SE207850.032	%	10 - 150%	98
	0407_TP190_0.5_200617	SE207850.033	%	10 - 150%	102
	0407_TP191_0.1_200617	SE207850.034	%	10 - 150%	96
	0407_TP191_0.4_200617	SE207850.035	%	10 - 150%	106
(D3-N-MeFOSA) Surrogate	0407_TP118_0.1_200617	SE207850.001	%	10 - 150%	46
	0407_TP118_0.5_200617	SE207850.002	%	10 - 150%	29
	0407_TP119_0.1_200617	SE207850.003	%	10 - 150%	25
	0407_TP119_1.0_200617	SE207850.004	%	10 - 150%	29
	0407_TP120_0.1_200617	SE207850.005	%	10 - 150%	37
	0407_TP120_0.8_200617	SE207850.006	%	10 - 150%	36
	0407_TP121_0.2_200617	SE207850.008	%	10 - 150%	33
	0407_TP121_0.5_200617	SE207850.009	%	10 - 150%	36
	0407_TP148_0.1_200617	SE207850.010	%	10 - 150%	41
	0407_TP148_0.5_200617	SE207850.011	%	10 - 150%	41
	0407_TP149_0.1_200617	SE207850.012	%	10 - 150%	38
	0407_TP149_0.5_200617	SE207850.013	%	10 - 150%	23
	0407_TP150_0.1_200617	SE207850.014	%	10 - 150%	26
	0407_TP150_0.5_200617	SE207850.015	%	10 - 150%	26

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level (continued) **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(D3-N-MeFOSA) Surrogate	0407_TP162_0.1_200617	SE207850.016	%	10 - 150%	24
	0407_TP162_0.3_200617	SE207850.017	%	10 - 150%	30
	0407_TP163_0.1_200617	SE207850.018	%	10 - 150%	19
	0407_TP163_0.4_200617	SE207850.019	%	10 - 150%	33
	0407_TP164_0.1_200617	SE207850.021	%	10 - 150%	41
	0407_TP164_0.5_200617	SE207850.022	%	10 - 150%	37
	0407_TP176_0.2_200617	SE207850.023	%	10 - 150%	43
	0407_TP176_0.5_200617	SE207850.024	%	10 - 150%	32
	0407_TP177_0.1_200617	SE207850.025	%	10 - 150%	48
	0407_TP177_0.5_200617	SE207850.026	%	10 - 150%	35
	0407_TP178_0.1_200617	SE207850.027	%	10 - 150%	41
	0407_TP178_0.3_200617	SE207850.028	%	10 - 150%	26
	0407_TP189_0.1_200617	SE207850.029	%	10 - 150%	45
	0407_TP189_0.4_200617	SE207850.030	%	10 - 150%	36
	0407_TP190_0.1_200617	SE207850.032	%	10 - 150%	58
	0407_TP190_0.5_200617	SE207850.033	%	10 - 150%	40
	0407_TP191_0.1_200617	SE207850.034	%	10 - 150%	35
	0407_TP191_0.4_200617	SE207850.035	%	10 - 150%	45
(D3-N-MeFOSAA) Surrogate	0407_TP118_0.1_200617	SE207850.001	%	10 - 150%	80
	0407_TP118_0.5_200617	SE207850.002	%	10 - 150%	80
	0407_TP119_0.1_200617	SE207850.003	%	10 - 150%	81
	0407_TP119_1.0_200617	SE207850.004	%	10 - 150%	66
	0407_TP120_0.1_200617	SE207850.005	%	10 - 150%	81
	0407_TP120_0.8_200617	SE207850.006	%	10 - 150%	77
	0407_TP121_0.2_200617	SE207850.008	%	10 - 150%	71
	0407_TP121_0.5_200617	SE207850.009	%	10 - 150%	83
	0407_TP148_0.1_200617	SE207850.010	%	10 - 150%	87
	0407_TP148_0.5_200617	SE207850.011	%	10 - 150%	87
	0407_TP149_0.1_200617	SE207850.012	%	10 - 150%	97
	0407_TP149_0.5_200617	SE207850.013	%	10 - 150%	84
	0407_TP150_0.1_200617	SE207850.014	%	10 - 150%	84
	0407_TP150_0.5_200617	SE207850.015	%	10 - 150%	72
	0407_TP162_0.1_200617	SE207850.016	%	10 - 150%	81
	0407_TP162_0.3_200617	SE207850.017	%	10 - 150%	72
	0407_TP163_0.1_200617	SE207850.018	%	10 - 150%	59
	0407_TP163_0.4_200617	SE207850.019	%	10 - 150%	75
	0407_TP164_0.1_200617	SE207850.021	%	10 - 150%	79
	0407_TP164_0.5_200617	SE207850.022	%	10 - 150%	71
	0407_TP176_0.2_200617	SE207850.023	%	10 - 150%	94
	0407_TP176_0.5_200617	SE207850.024	%	10 - 150%	77
	0407_TP177_0.1_200617	SE207850.025	%	10 - 150%	77
	0407_TP177_0.5_200617	SE207850.026	%	10 - 150%	58
	0407_TP178_0.1_200617	SE207850.027	%	10 - 150%	74
	0407_TP178_0.3_200617	SE207850.028	%	10 - 150%	77
	0407_TP189_0.1_200617	SE207850.029	%	10 - 150%	90
	0407_TP189_0.4_200617	SE207850.030	%	10 - 150%	91
	0407_TP190_0.1_200617	SE207850.032	%	10 - 150%	70
	0407_TP190_0.5_200617	SE207850.033	%	10 - 150%	74
	0407_TP191_0.1_200617	SE207850.034	%	10 - 150%	74
	0407_TP191_0.4_200617	SE207850.035	%	10 - 150%	56
(D5-N-EtFOSA) Surrogate	0407_TP118_0.1_200617	SE207850.001	%	10 - 150%	37
	0407_TP118_0.5_200617	SE207850.002	%	10 - 150%	29
	0407_TP119_0.1_200617	SE207850.003	%	10 - 150%	21
	0407_TP119_1.0_200617	SE207850.004	%	10 - 150%	19
	0407_TP120_0.1_200617	SE207850.005	%	10 - 150%	25
	0407_TP120_0.8_200617	SE207850.006	%	10 - 150%	24
	0407_TP121_0.2_200617	SE207850.008	%	10 - 150%	27
	0407_TP121_0.5_200617	SE207850.009	%	10 - 150%	36
	0407_TP148_0.1_200617	SE207850.010	%	10 - 150%	33
	0407_TP148_0.5_200617	SE207850.011	%	10 - 150%	23
	0407_TP149_0.1_200617	SE207850.012	%	10 - 150%	31

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level (continued) **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(D5-N-EtFOSA) Surrogate	0407_TP149_0.5_200617	SE207850.013	%	10 - 150%	14
	0407_TP150_0.1_200617	SE207850.014	%	10 - 150%	12
	0407_TP150_0.5_200617	SE207850.015	%	10 - 150%	15
	0407_TP162_0.1_200617	SE207850.016	%	10 - 150%	13
	0407_TP162_0.3_200617	SE207850.017	%	10 - 150%	22
	0407_TP163_0.1_200617	SE207850.018	%	10 - 150%	14
	0407_TP163_0.4_200617	SE207850.019	%	10 - 150%	26
	0407_TP164_0.1_200617	SE207850.021	%	10 - 150%	43
	0407_TP164_0.5_200617	SE207850.022	%	10 - 150%	43
	0407_TP176_0.2_200617	SE207850.023	%	10 - 150%	51
	0407_TP176_0.5_200617	SE207850.024	%	10 - 150%	33
	0407_TP177_0.1_200617	SE207850.025	%	10 - 150%	57
	0407_TP177_0.5_200617	SE207850.026	%	10 - 150%	32
	0407_TP178_0.1_200617	SE207850.027	%	10 - 150%	44
	0407_TP178_0.3_200617	SE207850.028	%	10 - 150%	27
	0407_TP189_0.1_200617	SE207850.029	%	10 - 150%	39
	0407_TP189_0.4_200617	SE207850.030	%	10 - 150%	37
	0407_TP190_0.1_200617	SE207850.032	%	10 - 150%	45
	0407_TP190_0.5_200617	SE207850.033	%	10 - 150%	41
	0407_TP191_0.1_200617	SE207850.034	%	10 - 150%	31
	0407_TP191_0.4_200617	SE207850.035	%	10 - 150%	42
(D5-N-EtFOSAA) Surrogate	0407_TP118_0.1_200617	SE207850.001	%	10 - 150%	74
	0407_TP118_0.5_200617	SE207850.002	%	10 - 150%	62
	0407_TP119_0.1_200617	SE207850.003	%	10 - 150%	62
	0407_TP119_1.0_200617	SE207850.004	%	10 - 150%	48
	0407_TP120_0.1_200617	SE207850.005	%	10 - 150%	63
	0407_TP120_0.8_200617	SE207850.006	%	10 - 150%	83
	0407_TP121_0.2_200617	SE207850.008	%	10 - 150%	82
	0407_TP121_0.5_200617	SE207850.009	%	10 - 150%	67
	0407_TP148_0.1_200617	SE207850.010	%	10 - 150%	82
	0407_TP148_0.5_200617	SE207850.011	%	10 - 150%	82
	0407_TP149_0.1_200617	SE207850.012	%	10 - 150%	79
	0407_TP149_0.5_200617	SE207850.013	%	10 - 150%	84
	0407_TP150_0.1_200617	SE207850.014	%	10 - 150%	86
	0407_TP150_0.5_200617	SE207850.015	%	10 - 150%	74
	0407_TP162_0.1_200617	SE207850.016	%	10 - 150%	51
	0407_TP162_0.3_200617	SE207850.017	%	10 - 150%	58
	0407_TP163_0.1_200617	SE207850.018	%	10 - 150%	50
	0407_TP163_0.4_200617	SE207850.019	%	10 - 150%	68
	0407_TP164_0.1_200617	SE207850.021	%	10 - 150%	73
	0407_TP164_0.5_200617	SE207850.022	%	10 - 150%	58
	0407_TP176_0.2_200617	SE207850.023	%	10 - 150%	62
	0407_TP176_0.5_200617	SE207850.024	%	10 - 150%	76
	0407_TP177_0.1_200617	SE207850.025	%	10 - 150%	77
	0407_TP177_0.5_200617	SE207850.026	%	10 - 150%	51
	0407_TP178_0.1_200617	SE207850.027	%	10 - 150%	67
	0407_TP178_0.3_200617	SE207850.028	%	10 - 150%	70
	0407_TP189_0.1_200617	SE207850.029	%	10 - 150%	73
	0407_TP189_0.4_200617	SE207850.030	%	10 - 150%	74
	0407_TP190_0.1_200617	SE207850.032	%	10 - 150%	67
	0407_TP190_0.5_200617	SE207850.033	%	10 - 150%	67
	0407_TP191_0.1_200617	SE207850.034	%	10 - 150%	53
	0407_TP191_0.4_200617	SE207850.035	%	10 - 150%	53
(D7-N-MeFOSE) Surrogate	0407_TP118_0.1_200617	SE207850.001	%	10 - 150%	48
	0407_TP118_0.5_200617	SE207850.002	%	10 - 150%	36
	0407_TP119_0.1_200617	SE207850.003	%	10 - 150%	35
	0407_TP119_1.0_200617	SE207850.004	%	10 - 150%	34
	0407_TP120_0.1_200617	SE207850.005	%	10 - 150%	34
	0407_TP120_0.8_200617	SE207850.006	%	10 - 150%	44
	0407_TP121_0.2_200617	SE207850.008	%	10 - 150%	38
	0407_TP121_0.5_200617	SE207850.009	%	10 - 150%	47

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level (continued) — **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(D7-N-MeFOSE) Surrogate	0407_TP148_0.1_200617	SE207850.010	%	10 - 150%	54
	0407_TP148_0.5_200617	SE207850.011	%	10 - 150%	43
	0407_TP149_0.1_200617	SE207850.012	%	10 - 150%	36
	0407_TP149_0.5_200617	SE207850.013	%	10 - 150%	36
	0407_TP150_0.1_200617	SE207850.014	%	10 - 150%	36
	0407_TP150_0.5_200617	SE207850.015	%	10 - 150%	39
	0407_TP162_0.1_200617	SE207850.016	%	10 - 150%	36
	0407_TP162_0.3_200617	SE207850.017	%	10 - 150%	42
	0407_TP163_0.1_200617	SE207850.018	%	10 - 150%	29
	0407_TP163_0.4_200617	SE207850.019	%	10 - 150%	37
	0407_TP164_0.1_200617	SE207850.021	%	10 - 150%	42
	0407_TP164_0.5_200617	SE207850.022	%	10 - 150%	38
	0407_TP176_0.2_200617	SE207850.023	%	10 - 150%	46
	0407_TP176_0.5_200617	SE207850.024	%	10 - 150%	42
	0407_TP177_0.1_200617	SE207850.025	%	10 - 150%	54
	0407_TP177_0.5_200617	SE207850.026	%	10 - 150%	38
	0407_TP178_0.1_200617	SE207850.027	%	10 - 150%	45
	0407_TP178_0.3_200617	SE207850.028	%	10 - 150%	45
	0407_TP189_0.1_200617	SE207850.029	%	10 - 150%	44
	0407_TP189_0.4_200617	SE207850.030	%	10 - 150%	46
	0407_TP190_0.1_200617	SE207850.032	%	10 - 150%	50
	0407_TP190_0.5_200617	SE207850.033	%	10 - 150%	45
	0407_TP191_0.1_200617	SE207850.034	%	10 - 150%	37
	0407_TP191_0.4_200617	SE207850.035	%	10 - 150%	42
(D9-N-EtFOSE) Surrogate	0407_TP118_0.1_200617	SE207850.001	%	10 - 150%	52
	0407_TP118_0.5_200617	SE207850.002	%	10 - 150%	38
	0407_TP119_0.1_200617	SE207850.003	%	10 - 150%	54
	0407_TP119_1.0_200617	SE207850.004	%	10 - 150%	44
	0407_TP120_0.1_200617	SE207850.005	%	10 - 150%	39
	0407_TP120_0.8_200617	SE207850.006	%	10 - 150%	40
	0407_TP121_0.2_200617	SE207850.008	%	10 - 150%	34
	0407_TP121_0.5_200617	SE207850.009	%	10 - 150%	44
	0407_TP148_0.1_200617	SE207850.010	%	10 - 150%	57
	0407_TP148_0.5_200617	SE207850.011	%	10 - 150%	45
	0407_TP149_0.1_200617	SE207850.012	%	10 - 150%	41
	0407_TP149_0.5_200617	SE207850.013	%	10 - 150%	33
	0407_TP150_0.1_200617	SE207850.014	%	10 - 150%	52
	0407_TP150_0.5_200617	SE207850.015	%	10 - 150%	35
	0407_TP162_0.1_200617	SE207850.016	%	10 - 150%	49
	0407_TP162_0.3_200617	SE207850.017	%	10 - 150%	57
	0407_TP163_0.1_200617	SE207850.018	%	10 - 150%	38
	0407_TP163_0.4_200617	SE207850.019	%	10 - 150%	40
	0407_TP164_0.1_200617	SE207850.021	%	10 - 150%	42
	0407_TP164_0.5_200617	SE207850.022	%	10 - 150%	43
	0407_TP176_0.2_200617	SE207850.023	%	10 - 150%	77
	0407_TP176_0.5_200617	SE207850.024	%	10 - 150%	44
	0407_TP177_0.1_200617	SE207850.025	%	10 - 150%	79
	0407_TP177_0.5_200617	SE207850.026	%	10 - 150%	43
	0407_TP178_0.1_200617	SE207850.027	%	10 - 150%	46
	0407_TP178_0.3_200617	SE207850.028	%	10 - 150%	34
	0407_TP189_0.1_200617	SE207850.029	%	10 - 150%	49
	0407_TP189_0.4_200617	SE207850.030	%	10 - 150%	42
	0407_TP190_0.1_200617	SE207850.032	%	10 - 150%	51
	0407_TP190_0.5_200617	SE207850.033	%	10 - 150%	44
	0407_TP191_0.1_200617	SE207850.034	%	10 - 150%	49
	0407_TP191_0.4_200617	SE207850.035	%	10 - 150%	43

Speciated Phenols in Soil — **Method: ME-(AU)-[ENV]AN420**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	0407_TP118_0.1_200617	SE207850.001	%	70 - 130%	74
	0407_TP118_0.5_200617	SE207850.002	%	70 - 130%	79

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil (continued) — **Method: ME-(AU)-[ENV]AN420**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	0407_TP119_0.1_200617	SE207850.003	%	70 - 130%	75
	0407_TP119_1.0_200617	SE207850.004	%	70 - 130%	75
	0407_TP120_0.1_200617	SE207850.005	%	70 - 130%	78
	0407_TP120_0.8_200617	SE207850.006	%	70 - 130%	79
	0407_QC114_200617	SE207850.007	%	70 - 130%	77
	0407_TP121_0.2_200617	SE207850.008	%	70 - 130%	81
	0407_TP121_0.5_200617	SE207850.009	%	70 - 130%	77
	0407_TP148_0.1_200617	SE207850.010	%	70 - 130%	73
	0407_TP148_0.5_200617	SE207850.011	%	70 - 130%	75
	0407_TP149_0.1_200617	SE207850.012	%	70 - 130%	74
	0407_TP149_0.5_200617	SE207850.013	%	70 - 130%	71
	0407_TP150_0.1_200617	SE207850.014	%	70 - 130%	70
	0407_TP150_0.5_200617	SE207850.015	%	70 - 130%	77
	0407_TP162_0.1_200617	SE207850.016	%	70 - 130%	81
	0407_TP162_0.3_200617	SE207850.017	%	70 - 130%	76
	0407_TP163_0.1_200617	SE207850.018	%	70 - 130%	77
	0407_TP163_0.4_200617	SE207850.019	%	70 - 130%	75
	0407_QC108_200617	SE207850.020	%	70 - 130%	79
	0407_TP164_0.1_200617	SE207850.021	%	70 - 130%	77
	0407_TP164_0.5_200617	SE207850.022	%	70 - 130%	77
	0407_TP176_0.2_200617	SE207850.023	%	70 - 130%	74
	0407_TP176_0.5_200617	SE207850.024	%	70 - 130%	79
	0407_TP177_0.1_200617	SE207850.025	%	70 - 130%	78
	0407_TP177_0.5_200617	SE207850.026	%	70 - 130%	78
	0407_TP178_0.1_200617	SE207850.027	%	70 - 130%	73
	0407_TP178_0.3_200617	SE207850.028	%	70 - 130%	80
	0407_TP189_0.1_200617	SE207850.029	%	70 - 130%	80
	0407_TP189_0.4_200617	SE207850.030	%	70 - 130%	72
	0407_QC112_200617	SE207850.031	%	70 - 130%	71
	0407_TP190_0.1_200617	SE207850.032	%	70 - 130%	72
	0407_TP190_0.5_200617	SE207850.033	%	70 - 130%	82
	0407_TP191_0.1_200617	SE207850.034	%	70 - 130%	74
	0407_TP191_0.4_200617	SE207850.035	%	70 - 130%	73
	0407_QC110_200617	SE207850.036	%	70 - 130%	70
d5-phenol (Surrogate)	0407_TP118_0.1_200617	SE207850.001	%	50 - 130%	76
	0407_TP118_0.5_200617	SE207850.002	%	50 - 130%	77
	0407_TP119_0.1_200617	SE207850.003	%	50 - 130%	76
	0407_TP119_1.0_200617	SE207850.004	%	50 - 130%	80
	0407_TP120_0.1_200617	SE207850.005	%	50 - 130%	85
	0407_TP120_0.8_200617	SE207850.006	%	50 - 130%	72
	0407_QC114_200617	SE207850.007	%	50 - 130%	70
	0407_TP121_0.2_200617	SE207850.008	%	50 - 130%	81
	0407_TP121_0.5_200617	SE207850.009	%	50 - 130%	81
	0407_TP148_0.1_200617	SE207850.010	%	50 - 130%	79
	0407_TP148_0.5_200617	SE207850.011	%	50 - 130%	72
	0407_TP149_0.1_200617	SE207850.012	%	50 - 130%	71
	0407_TP149_0.5_200617	SE207850.013	%	50 - 130%	78
	0407_TP150_0.1_200617	SE207850.014	%	50 - 130%	70
	0407_TP150_0.5_200617	SE207850.015	%	50 - 130%	80
	0407_TP162_0.1_200617	SE207850.016	%	50 - 130%	80
	0407_TP162_0.3_200617	SE207850.017	%	50 - 130%	85
	0407_TP163_0.1_200617	SE207850.018	%	50 - 130%	81
	0407_TP163_0.4_200617	SE207850.019	%	50 - 130%	78
	0407_QC108_200617	SE207850.020	%	50 - 130%	76
	0407_TP164_0.1_200617	SE207850.021	%	50 - 130%	83
	0407_TP164_0.5_200617	SE207850.022	%	50 - 130%	79
	0407_TP176_0.2_200617	SE207850.023	%	50 - 130%	80
	0407_TP176_0.5_200617	SE207850.024	%	50 - 130%	83
	0407_TP177_0.1_200617	SE207850.025	%	50 - 130%	79
	0407_TP177_0.5_200617	SE207850.026	%	50 - 130%	81
	0407_TP178_0.1_200617	SE207850.027	%	50 - 130%	80

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil (continued) — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d5-phenol (Surrogate)	0407_TP178_0.3_200617	SE207850.028	%	50 - 130%	78
	0407_TP189_0.1_200617	SE207850.029	%	50 - 130%	82
	0407_TP189_0.4_200617	SE207850.030	%	50 - 130%	79
	0407_QC112_200617	SE207850.031	%	50 - 130%	79
	0407_TP190_0.1_200617	SE207850.032	%	50 - 130%	78
	0407_TP190_0.5_200617	SE207850.033	%	50 - 130%	78
	0407_TP191_0.1_200617	SE207850.034	%	50 - 130%	83
	0407_TP191_0.4_200617	SE207850.035	%	50 - 130%	83
	0407_QC110_200617	SE207850.036	%	50 - 130%	79

VOC's in Soil — Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP118_0.1_200617	SE207850.001	%	60 - 130%	85
	0407_TP118_0.5_200617	SE207850.002	%	60 - 130%	83
	0407_TP119_0.1_200617	SE207850.003	%	60 - 130%	87
	0407_TP119_1.0_200617	SE207850.004	%	60 - 130%	91
	0407_TP120_0.1_200617	SE207850.005	%	60 - 130%	84
	0407_TP120_0.8_200617	SE207850.006	%	60 - 130%	84
	0407_QC114_200617	SE207850.007	%	60 - 130%	89
	0407_TP121_0.2_200617	SE207850.008	%	60 - 130%	88
	0407_TP121_0.5_200617	SE207850.009	%	60 - 130%	82
	0407_TP148_0.1_200617	SE207850.010	%	60 - 130%	84
	0407_TP148_0.5_200617	SE207850.011	%	60 - 130%	83
	0407_TP149_0.1_200617	SE207850.012	%	60 - 130%	95
	0407_TP149_0.5_200617	SE207850.013	%	60 - 130%	88
	0407_TP150_0.1_200617	SE207850.014	%	60 - 130%	86
	0407_TP150_0.5_200617	SE207850.015	%	60 - 130%	91
	0407_TP162_0.1_200617	SE207850.016	%	60 - 130%	83
	0407_TP162_0.3_200617	SE207850.017	%	60 - 130%	86
	0407_TP163_0.1_200617	SE207850.018	%	60 - 130%	92
	0407_TP163_0.4_200617	SE207850.019	%	60 - 130%	71
	0407_QC108_200617	SE207850.020	%	60 - 130%	77
	0407_TP164_0.1_200617	SE207850.021	%	60 - 130%	69
	0407_TP164_0.5_200617	SE207850.022	%	60 - 130%	71
	0407_TP176_0.2_200617	SE207850.023	%	60 - 130%	71
	0407_TP176_0.5_200617	SE207850.024	%	60 - 130%	70
	0407_TP177_0.1_200617	SE207850.025	%	60 - 130%	71
	0407_TP177_0.5_200617	SE207850.026	%	60 - 130%	72
	0407_TP178_0.1_200617	SE207850.027	%	60 - 130%	69
	0407_TP178_0.3_200617	SE207850.028	%	60 - 130%	71
	0407_TP189_0.1_200617	SE207850.029	%	60 - 130%	71
	0407_TP189_0.4_200617	SE207850.030	%	60 - 130%	69
	0407_QC112_200617	SE207850.031	%	60 - 130%	70
	0407_TP190_0.1_200617	SE207850.032	%	60 - 130%	71
	0407_TP190_0.5_200617	SE207850.033	%	60 - 130%	75
	0407_TP191_0.1_200617	SE207850.034	%	60 - 130%	75
	0407_TP191_0.4_200617	SE207850.035	%	60 - 130%	67
	0407_QC110_200617	SE207850.036	%	60 - 130%	66
d4-1,2-dichloroethane (Surrogate)	0407_TP118_0.1_200617	SE207850.001	%	60 - 130%	87
	0407_TP118_0.5_200617	SE207850.002	%	60 - 130%	84
	0407_TP119_0.1_200617	SE207850.003	%	60 - 130%	90
	0407_TP119_1.0_200617	SE207850.004	%	60 - 130%	85
	0407_TP120_0.1_200617	SE207850.005	%	60 - 130%	92
	0407_TP120_0.8_200617	SE207850.006	%	60 - 130%	89
	0407_QC114_200617	SE207850.007	%	60 - 130%	92
	0407_TP121_0.2_200617	SE207850.008	%	60 - 130%	74
	0407_TP121_0.5_200617	SE207850.009	%	60 - 130%	86
	0407_TP148_0.1_200617	SE207850.010	%	60 - 130%	88
	0407_TP148_0.5_200617	SE207850.011	%	60 - 130%	82
	0407_TP149_0.1_200617	SE207850.012	%	60 - 130%	98
	0407_TP149_0.5_200617	SE207850.013	%	60 - 130%	79

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued) **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d4-1,2-dichloroethane (Surrogate)	0407_TP150_0.1_200617	SE207850.014	%	60 - 130%	82
	0407_TP150_0.5_200617	SE207850.015	%	60 - 130%	80
	0407_TP162_0.1_200617	SE207850.016	%	60 - 130%	88
	0407_TP162_0.3_200617	SE207850.017	%	60 - 130%	85
	0407_TP163_0.1_200617	SE207850.018	%	60 - 130%	94
	0407_TP163_0.4_200617	SE207850.019	%	60 - 130%	97
	0407_QC108_200617	SE207850.020	%	60 - 130%	105
	0407_TP164_0.1_200617	SE207850.021	%	60 - 130%	95
	0407_TP164_0.5_200617	SE207850.022	%	60 - 130%	98
	0407_TP176_0.2_200617	SE207850.023	%	60 - 130%	96
	0407_TP176_0.5_200617	SE207850.024	%	60 - 130%	96
	0407_TP177_0.1_200617	SE207850.025	%	60 - 130%	100
	0407_TP177_0.5_200617	SE207850.026	%	60 - 130%	100
	0407_TP178_0.1_200617	SE207850.027	%	60 - 130%	96
	0407_TP178_0.3_200617	SE207850.028	%	60 - 130%	98
	0407_TP189_0.1_200617	SE207850.029	%	60 - 130%	99
	0407_TP189_0.4_200617	SE207850.030	%	60 - 130%	96
	0407_QC112_200617	SE207850.031	%	60 - 130%	97
	0407_TP190_0.1_200617	SE207850.032	%	60 - 130%	100
	0407_TP190_0.5_200617	SE207850.033	%	60 - 130%	104
	0407_TP191_0.1_200617	SE207850.034	%	60 - 130%	101
	0407_TP191_0.4_200617	SE207850.035	%	60 - 130%	92
	0407_QC110_200617	SE207850.036	%	60 - 130%	91
d8-toluene (Surrogate)	0407_TP118_0.1_200617	SE207850.001	%	60 - 130%	80
	0407_TP118_0.5_200617	SE207850.002	%	60 - 130%	82
	0407_TP119_0.1_200617	SE207850.003	%	60 - 130%	80
	0407_TP119_1.0_200617	SE207850.004	%	60 - 130%	90
	0407_TP120_0.1_200617	SE207850.005	%	60 - 130%	90
	0407_TP120_0.8_200617	SE207850.006	%	60 - 130%	86
	0407_QC114_200617	SE207850.007	%	60 - 130%	92
	0407_TP121_0.2_200617	SE207850.008	%	60 - 130%	84
	0407_TP121_0.5_200617	SE207850.009	%	60 - 130%	91
	0407_TP148_0.1_200617	SE207850.010	%	60 - 130%	79
	0407_TP148_0.5_200617	SE207850.011	%	60 - 130%	87
	0407_TP149_0.1_200617	SE207850.012	%	60 - 130%	94
	0407_TP149_0.5_200617	SE207850.013	%	60 - 130%	88
	0407_TP150_0.1_200617	SE207850.014	%	60 - 130%	82
	0407_TP150_0.5_200617	SE207850.015	%	60 - 130%	94
	0407_TP162_0.1_200617	SE207850.016	%	60 - 130%	88
	0407_TP162_0.3_200617	SE207850.017	%	60 - 130%	85
	0407_TP163_0.1_200617	SE207850.018	%	60 - 130%	99
	0407_TP163_0.4_200617	SE207850.019	%	60 - 130%	97
	0407_QC108_200617	SE207850.020	%	60 - 130%	103
	0407_TP164_0.1_200617	SE207850.021	%	60 - 130%	95
	0407_TP164_0.5_200617	SE207850.022	%	60 - 130%	97
	0407_TP176_0.2_200617	SE207850.023	%	60 - 130%	95
	0407_TP176_0.5_200617	SE207850.024	%	60 - 130%	95
	0407_TP177_0.1_200617	SE207850.025	%	60 - 130%	97
	0407_TP177_0.5_200617	SE207850.026	%	60 - 130%	98
	0407_TP178_0.1_200617	SE207850.027	%	60 - 130%	94
	0407_TP178_0.3_200617	SE207850.028	%	60 - 130%	97
	0407_TP189_0.1_200617	SE207850.029	%	60 - 130%	97
	0407_TP189_0.4_200617	SE207850.030	%	60 - 130%	95
	0407_QC112_200617	SE207850.031	%	60 - 130%	96
	0407_TP190_0.1_200617	SE207850.032	%	60 - 130%	97
	0407_TP190_0.5_200617	SE207850.033	%	60 - 130%	101
	0407_TP191_0.1_200617	SE207850.034	%	60 - 130%	102
	0407_TP191_0.4_200617	SE207850.035	%	60 - 130%	92
	0407_QC110_200617	SE207850.036	%	60 - 130%	92

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP118_0.1_200617	SE207850.001	%	60 - 130%	85
	0407_TP118_0.5_200617	SE207850.002	%	60 - 130%	83
	0407_TP119_0.1_200617	SE207850.003	%	60 - 130%	87
	0407_TP119_1.0_200617	SE207850.004	%	60 - 130%	91
	0407_TP120_0.1_200617	SE207850.005	%	60 - 130%	84
	0407_TP120_0.8_200617	SE207850.006	%	60 - 130%	84
	0407_QC114_200617	SE207850.007	%	60 - 130%	89
	0407_TP121_0.2_200617	SE207850.008	%	60 - 130%	88
	0407_TP121_0.5_200617	SE207850.009	%	60 - 130%	82
	0407_TP148_0.1_200617	SE207850.010	%	60 - 130%	84
	0407_TP148_0.5_200617	SE207850.011	%	60 - 130%	83
	0407_TP149_0.1_200617	SE207850.012	%	60 - 130%	95
	0407_TP149_0.5_200617	SE207850.013	%	60 - 130%	88
	0407_TP150_0.1_200617	SE207850.014	%	60 - 130%	86
	0407_TP150_0.5_200617	SE207850.015	%	60 - 130%	91
	0407_TP162_0.1_200617	SE207850.016	%	60 - 130%	83
	0407_TP162_0.3_200617	SE207850.017	%	60 - 130%	86
	0407_TP163_0.1_200617	SE207850.018	%	60 - 130%	92
	0407_TP163_0.4_200617	SE207850.019	%	60 - 130%	71
	0407_QC108_200617	SE207850.020	%	60 - 130%	77
	0407_TP164_0.1_200617	SE207850.021	%	60 - 130%	69
	0407_TP164_0.5_200617	SE207850.022	%	60 - 130%	71
	0407_TP176_0.2_200617	SE207850.023	%	60 - 130%	71
	0407_TP176_0.5_200617	SE207850.024	%	60 - 130%	70
	0407_TP177_0.1_200617	SE207850.025	%	60 - 130%	71
	0407_TP177_0.5_200617	SE207850.026	%	60 - 130%	72
	0407_TP178_0.1_200617	SE207850.027	%	60 - 130%	69
	0407_TP178_0.3_200617	SE207850.028	%	60 - 130%	71
	0407_TP189_0.1_200617	SE207850.029	%	60 - 130%	71
	0407_TP189_0.4_200617	SE207850.030	%	60 - 130%	69
	0407_QC112_200617	SE207850.031	%	60 - 130%	70
	0407_TP190_0.1_200617	SE207850.032	%	60 - 130%	71
	0407_TP190_0.5_200617	SE207850.033	%	60 - 130%	75
	0407_TP191_0.1_200617	SE207850.034	%	60 - 130%	75
	0407_TP191_0.4_200617	SE207850.035	%	60 - 130%	67
	0407_QC110_200617	SE207850.036	%	60 - 130%	66
d4-1,2-dichloroethane (Surrogate)	0407_TP118_0.1_200617	SE207850.001	%	60 - 130%	87
	0407_TP118_0.5_200617	SE207850.002	%	60 - 130%	84
	0407_TP119_0.1_200617	SE207850.003	%	60 - 130%	90
	0407_TP119_1.0_200617	SE207850.004	%	60 - 130%	85
	0407_TP120_0.1_200617	SE207850.005	%	60 - 130%	92
	0407_TP120_0.8_200617	SE207850.006	%	60 - 130%	89
	0407_QC114_200617	SE207850.007	%	60 - 130%	92
	0407_TP121_0.2_200617	SE207850.008	%	60 - 130%	74
	0407_TP121_0.5_200617	SE207850.009	%	60 - 130%	86
	0407_TP148_0.1_200617	SE207850.010	%	60 - 130%	88
	0407_TP148_0.5_200617	SE207850.011	%	60 - 130%	82
	0407_TP149_0.1_200617	SE207850.012	%	60 - 130%	98
	0407_TP149_0.5_200617	SE207850.013	%	60 - 130%	79
	0407_TP150_0.1_200617	SE207850.014	%	60 - 130%	82
	0407_TP150_0.5_200617	SE207850.015	%	60 - 130%	80
	0407_TP162_0.1_200617	SE207850.016	%	60 - 130%	88
	0407_TP162_0.3_200617	SE207850.017	%	60 - 130%	85
	0407_TP163_0.1_200617	SE207850.018	%	60 - 130%	94
	0407_TP163_0.4_200617	SE207850.019	%	60 - 130%	97
	0407_QC108_200617	SE207850.020	%	60 - 130%	105
	0407_TP164_0.1_200617	SE207850.021	%	60 - 130%	95
	0407_TP164_0.5_200617	SE207850.022	%	60 - 130%	98
	0407_TP176_0.2_200617	SE207850.023	%	60 - 130%	96
	0407_TP176_0.5_200617	SE207850.024	%	60 - 130%	96
	0407_TP177_0.1_200617	SE207850.025	%	60 - 130%	100

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d4-1,2-dichloroethane (Surrogate)	0407_TP177_0.5_200617	SE207850.026	%	60 - 130%	100
	0407_TP178_0.1_200617	SE207850.027	%	60 - 130%	96
	0407_TP178_0.3_200617	SE207850.028	%	60 - 130%	98
	0407_TP189_0.1_200617	SE207850.029	%	60 - 130%	99
	0407_TP189_0.4_200617	SE207850.030	%	60 - 130%	96
	0407_QC112_200617	SE207850.031	%	60 - 130%	97
	0407_TP190_0.1_200617	SE207850.032	%	60 - 130%	100
	0407_TP190_0.5_200617	SE207850.033	%	60 - 130%	104
	0407_TP191_0.1_200617	SE207850.034	%	60 - 130%	101
	0407_TP191_0.4_200617	SE207850.035	%	60 - 130%	92
	0407_QC110_200617	SE207850.036	%	60 - 130%	91
d8-toluene (Surrogate)	0407_TP118_0.1_200617	SE207850.001	%	60 - 130%	80
	0407_TP118_0.5_200617	SE207850.002	%	60 - 130%	82
	0407_TP119_0.1_200617	SE207850.003	%	60 - 130%	80
	0407_TP119_1.0_200617	SE207850.004	%	60 - 130%	90
	0407_TP120_0.1_200617	SE207850.005	%	60 - 130%	90
	0407_TP120_0.8_200617	SE207850.006	%	60 - 130%	86
	0407_QC114_200617	SE207850.007	%	60 - 130%	92
	0407_TP121_0.2_200617	SE207850.008	%	60 - 130%	84
	0407_TP121_0.5_200617	SE207850.009	%	60 - 130%	91
	0407_TP148_0.1_200617	SE207850.010	%	60 - 130%	79
	0407_TP148_0.5_200617	SE207850.011	%	60 - 130%	87
	0407_TP149_0.1_200617	SE207850.012	%	60 - 130%	94
	0407_TP149_0.5_200617	SE207850.013	%	60 - 130%	88
	0407_TP150_0.1_200617	SE207850.014	%	60 - 130%	82
	0407_TP150_0.5_200617	SE207850.015	%	60 - 130%	94
	0407_TP162_0.1_200617	SE207850.016	%	60 - 130%	88
	0407_TP162_0.3_200617	SE207850.017	%	60 - 130%	85
	0407_TP163_0.1_200617	SE207850.018	%	60 - 130%	99
	0407_TP163_0.4_200617	SE207850.019	%	60 - 130%	97
	0407_QC108_200617	SE207850.020	%	60 - 130%	103
	0407_TP164_0.1_200617	SE207850.021	%	60 - 130%	95
	0407_TP164_0.5_200617	SE207850.022	%	60 - 130%	97
	0407_TP176_0.2_200617	SE207850.023	%	60 - 130%	95
	0407_TP176_0.5_200617	SE207850.024	%	60 - 130%	95
	0407_TP177_0.1_200617	SE207850.025	%	60 - 130%	97
	0407_TP177_0.5_200617	SE207850.026	%	60 - 130%	98
	0407_TP178_0.1_200617	SE207850.027	%	60 - 130%	94
	0407_TP178_0.3_200617	SE207850.028	%	60 - 130%	97
	0407_TP189_0.1_200617	SE207850.029	%	60 - 130%	97
	0407_TP189_0.4_200617	SE207850.030	%	60 - 130%	95
	0407_QC112_200617	SE207850.031	%	60 - 130%	96
	0407_TP190_0.1_200617	SE207850.032	%	60 - 130%	97
	0407_TP190_0.5_200617	SE207850.033	%	60 - 130%	101
	0407_TP191_0.1_200617	SE207850.034	%	60 - 130%	102
	0407_TP191_0.4_200617	SE207850.035	%	60 - 130%	92
	0407_QC110_200617	SE207850.036	%	60 - 130%	92

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result
LB202697.001	Mercury	mg/kg	0.05	<0.05
LB202699.001	Mercury	mg/kg	0.05	<0.05

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202633.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	94
LB202635.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	99

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB202633.001	Dichlorvos	mg/kg	0.5	<0.5
	Dimethoate	mg/kg	0.5	<0.5
	Diazinon (Dimpylate)	mg/kg	0.5	<0.5
	Fenitrothion	mg/kg	0.2	<0.2
	Malathion	mg/kg	0.2	<0.2

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202633.001		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	81
		d14-p-terphenyl (Surrogate)	%	-	94
LB202635.001		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	95
		d14-p-terphenyl (Surrogate)	%	-	90

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202633.001		Naphthalene	mg/kg	0.1	<0.1
		2-methylnaphthalene	mg/kg	0.1	<0.1
		1-methylnaphthalene	mg/kg	0.1	<0.1
		Acenaphthylene	mg/kg	0.1	<0.1
		Acenaphthene	mg/kg	0.1	<0.1
		Fluorene	mg/kg	0.1	<0.1
		Phenanthrene	mg/kg	0.1	<0.1
		Anthracene	mg/kg	0.1	<0.1
		Fluoranthene	mg/kg	0.1	<0.1
		Pyrene	mg/kg	0.1	<0.1
		Benzo(a)anthracene	mg/kg	0.1	<0.1
		Chrysene	mg/kg	0.1	<0.1
		Benzo(a)pyrene	mg/kg	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	86
		2-fluorobiphenyl (Surrogate)	%	-	81
		d14-p-terphenyl (Surrogate)	%	-	94
LB202635.001		Naphthalene	mg/kg	0.1	<0.1
		2-methylnaphthalene	mg/kg	0.1	<0.1
		1-methylnaphthalene	mg/kg	0.1	<0.1
		Acenaphthylene	mg/kg	0.1	<0.1
		Acenaphthene	mg/kg	0.1	<0.1
		Fluorene	mg/kg	0.1	<0.1
		Phenanthrene	mg/kg	0.1	<0.1
		Anthracene	mg/kg	0.1	<0.1
		Fluoranthene	mg/kg	0.1	<0.1
		Pyrene	mg/kg	0.1	<0.1
		Benzo(a)anthracene	mg/kg	0.1	<0.1
		Chrysene	mg/kg	0.1	<0.1
		Benzo(a)pyrene	mg/kg	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202635.001	Surrogates	d5-nitrobenzene (Surrogate)	%	-	96
		2-fluorobiphenyl (Surrogate)	%	-	95
		d14-p-terphenyl (Surrogate)	%	-	90

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202633.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	94
LB202635.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	99

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202633.001		Phenol	mg/kg	0.5	<0.5
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5
		2-nitrophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
		Pentachlorophenol	mg/kg	0.5	<0.5
		2,4-dinitrophenol	mg/kg	2	<2
		4-chloro-3-methylphenol	mg/kg	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	84
		d5-phenol (Surrogate)	%	-	80
LB202635.001		Phenol	mg/kg	0.5	<0.5
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5
		2-nitrophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
		Pentachlorophenol	mg/kg	0.5	<0.5
		2,4-dinitrophenol	mg/kg	2	<2

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Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202635.001		4-chloro-3-methylphenol	mg/kg	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	78
		d5-phenol (Surrogate)	%	-	81

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB202685.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0
LB202686.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB202633.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110
LB202635.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB202636.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1

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VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB202636.001	Halogenated Aliphatics	1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10
		MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	95
		d8-toluene (Surrogate)	%	-	98
		Bromofluorobenzene (Surrogate)	%	-	95
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1
LB202637.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1

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VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB202637.001	Halogenated Aliphatics	Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic	Benzene	mg/kg	0.1	<0.1
	Hydrocarbons	Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10
		MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	102
		d8-toluene (Surrogate)	%	-	101

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB202637.001	Surrogates	Bromofluorobenzene (Surrogate)	%	-	73
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB202636.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	95
LB202637.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	102

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207850.010	LB202697.014	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE207850.018	LB202697.023	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE207850.028	LB202699.014	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE207850.036	LB202699.023	Mercury	mg/kg	0.05	<0.05	<0.05	200	0

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207850.010	LB202649.011	% Moisture	%w/w	1	5.6	4.8	49	16
SE207850.018	LB202649.020	% Moisture	%w/w	1	1.8	1.5	90	14
SE207850.028	LB202650.011	% Moisture	%w/w	1	3.1	3.2	62	0
SE207850.036	LB202650.020	% Moisture	%w/w	1	10.1	12.4	39	21

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207850.010	LB202633.014		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	0.14	30	1
SE207850.018	LB202633.023		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil (continued) — **Method: ME-(AU)-[ENV]AN420**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207850.018	LB202633.023		p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	0.16	30	13
SE207850.028	LB202635.014		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	0.14	30	1
SE207850.033	LB202635.024		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	0	200	0
			Alpha BHC	mg/kg	0.1	<0.1	0	200	0
			Lindane	mg/kg	0.1	<0.1	0	200	0
			Heptachlor	mg/kg	0.1	<0.1	0	200	0
			Aldrin	mg/kg	0.1	<0.1	0	200	0
			Beta BHC	mg/kg	0.1	<0.1	0	200	0
			Delta BHC	mg/kg	0.1	<0.1	0	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	0	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	0	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	0	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Dieldrin	mg/kg	0.2	<0.2	0	200	0
			Endrin	mg/kg	0.2	<0.2	0	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	0	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207850.033	LB202635.024		Endrin Aldehyde	mg/kg	0.1	<0.1	0	200	0
			Methoxychlor	mg/kg	0.1	<0.1	0	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	0	200	0
			Isodrin	mg/kg	0.1	<0.1	0	200	0
			Mirex	mg/kg	0.1	<0.1	0	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	0.141	30	0

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207850.010	LB202633.014		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	5
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.4	30	6
SE207850.018	LB202633.023		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	12
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	6
SE207850.028	LB202635.014		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.4	30	14
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	9
SE207850.033	LB202635.024		Dichlorvos	mg/kg	0.5	<0.5	0.0020976322	200	0
			Dimethoate	mg/kg	0.5	<0.5	0	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	0	200	0
			Fenitrothion	mg/kg	0.2	<0.2	0	200	0
			Malathion	mg/kg	0.2	<0.2	0	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	0	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	0	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	0	200	0
			Methidathion	mg/kg	0.5	<0.5	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207850.033	LB202635.024		Ethion	mg/kg	0.2	<0.2	0	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	0	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	0	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4428775191	30	1
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.3930010441	30	3

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207850.010	LB202633.014		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	0.2	0.4	66	64
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	0.1	149	15
			Phenanthrene	mg/kg	0.1	0.8	2.1	37	89 ⑨
			Anthracene	mg/kg	0.1	0.3	0.6	52	67 ⑨
			Fluoranthene	mg/kg	0.1	1.7	3.1	34	59 ⑨
			Pyrene	mg/kg	0.1	1.7	2.8	34	52 ⑨
			Benzo(a)anthracene	mg/kg	0.1	0.6	1.1	42	50 ⑨
			Chrysene	mg/kg	0.1	0.6	1.1	42	56 ⑨
			Benzo(b&j)fluoranthene	mg/kg	0.1	0.6	1.1	42	67 ⑨
			Benzo(k)fluoranthene	mg/kg	0.1	0.3	0.6	53	55 ⑨
			Benzo(a)pyrene	mg/kg	0.1	0.5	1.1	43	81 ⑨
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.2	0.4	65	58
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	0.4	0.5	53	35
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	0.7	1.4	29	75 ⑨
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	0.8	1.5	36	69 ⑨
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	0.7	1.5	28	72 ⑨
			Total PAH (18)	mg/kg	0.8	7.8	15	37	63 ⑨
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	30	0
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	5
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.4	30	6
SE207850.018	LB202633.023		Naphthalene	mg/kg	0.1	<0.1	0.1	172	22
			2-methylnaphthalene	mg/kg	0.1	<0.1	0.1	177	21
			1-methylnaphthalene	mg/kg	0.1	<0.1	0.2	151	44
			Acenaphthylene	mg/kg	0.1	0.1	1.2	45	158 ⑨
			Acenaphthene	mg/kg	0.1	<0.1	0.1	168	29
			Fluorene	mg/kg	0.1	<0.1	0.6	58	145 ⑨
			Phenanthrene	mg/kg	0.1	1.1	9.1	32	159 ⑨
			Anthracene	mg/kg	0.1	0.4	1.9	39	135 ⑨
			Fluoranthene	mg/kg	0.1	1.5	11	32	151 ⑨
			Pyrene	mg/kg	0.1	1.3	9.1	32	149 ⑨
			Benzo(a)anthracene	mg/kg	0.1	0.6	4.3	34	153 ⑨
			Chrysene	mg/kg	0.1	0.5	3.2	35	144 ⑨
			Benzo(b&j)fluoranthene	mg/kg	0.1	0.5	3.2	35	143 ⑨
			Benzo(k)fluoranthene	mg/kg	0.1	0.2	1.8	40	152 ⑨
			Benzo(a)pyrene	mg/kg	0.1	0.5	3.5	35	151 ⑨
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.2	1.2	45	148 ⑨
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	0.2	118	65
			Benzo(ghi)perylene	mg/kg	0.1	0.2	1.2	44	147 ⑨
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	0.6	4.8	17	152 ⑨
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	0.7	4.8	21	146 ⑨
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	0.7	4.8	17	149 ⑨
			Total PAH (18)	mg/kg	0.8	7.0	52	33	152 ⑨
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	30	14
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	12
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	6
SE207850.028	LB202635.014		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207850.028	LB202635.014		Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	<0.3	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	<0.2	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.4	30	6
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.4	30	14
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	9
SE207850.033	LB202635.024		Naphthalene	mg/kg	0.1	<0.1	0.0004847372	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	0	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	0	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	0.0004796220	200	0
			Acenaphthene	mg/kg	0.1	<0.1	0.0006047402	200	0
			Fluorene	mg/kg	0.1	<0.1	3.3264227772	200	0
			Phenanthrene	mg/kg	0.1	<0.1	0.0013464810	200	0
			Anthracene	mg/kg	0.1	<0.1	0	200	0
			Fluoranthene	mg/kg	0.1	<0.1	0	200	0
			Pyrene	mg/kg	0.1	<0.1	0.0004165138	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	0.0051289780	200	0
			Chrysene	mg/kg	0.1	<0.1	0.0051927373	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	0.0003086057	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	0.0002672716	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	0	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	0.0001516160	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	0	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	0	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	0	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	0.242	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	0.121	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	0	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4552775845	30	2
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4428775191	30	1
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.3930010441	30	3

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207850.010	LB202633.014		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	1

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PCBs in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207850.018	LB202633.023		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	13
SE207850.028	LB202635.014		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	1
SE207850.033	LB202635.024		Arochlor 1016	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	0	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0.141	30	0

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207850.010	LB202633.014		Phenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	200	0
			Total Cresol	mg/kg	1.5	<1.5	<1.5	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	200	0
			4-nitrophenol	mg/kg	1	<1	<1	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dinitrophenol	mg/kg	2	<2	<2	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.7	3.7	30	2
			d5-phenol (Surrogate)	mg/kg	-	1.6	1.4	30	11
SE207850.018	LB202633.023		Phenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	200	0
			Total Cresol	mg/kg	1.5	<1.5	<1.5	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207850.018	LB202633.023		2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	200	0
			4-nitrophenol	mg/kg	1	<1	<1	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dinitrophenol	mg/kg	2	<2	<2	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.9	3.7	30	3
			d5-phenol (Surrogate)	mg/kg	-	1.6	1.7	30	4
SE207850.028	LB202635.014		Phenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	200	0
			Total Cresol	mg/kg	1.5	<1.5	<1.5	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	200	0
			4-nitrophenol	mg/kg	1	<1	<1	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dinitrophenol	mg/kg	2	<2	<2	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.0	3.9	30	3
			d5-phenol (Surrogate)	mg/kg	-	1.6	1.6	30	3
SE207850.033	LB202635.024		Phenol	mg/kg	0.5	<0.5	0	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	0	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	0	200	0
			Total Cresol	mg/kg	1.5	<1.5	0	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	0	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	0	200	0
			4-nitrophenol	mg/kg	1	<1	0	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	0	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dinitrophenol	mg/kg	2	<2	0	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	0	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.1	4.11	30	0
			d5-phenol (Surrogate)	mg/kg	-	1.6	1.54	30	1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207850.010	LB202685.014	Arsenic, As	mg/kg	1	<1	<1	200	0
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	1.2	2.1	60	55
		Copper, Cu	mg/kg	0.5	4.3	3.6	43	19
		Nickel, Ni	mg/kg	0.5	0.8	0.9	90	9
		Lead, Pb	mg/kg	1	17	11	37	39 ②
		Zinc, Zn	mg/kg	2	11	9.4	50	15
SE207850.018	LB202685.023	Arsenic, As	mg/kg	1	<1	<1	200	0
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	1.7	1.5	61	14
		Copper, Cu	mg/kg	0.5	1.4	1.3	68	8

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207850.018	LB202685.023		Nickel, Ni	mg/kg	0.5	<0.5	<0.5	146	0
			Lead, Pb	mg/kg	1	5	5	50	1
			Zinc, Zn	mg/kg	2	4.2	4.5	76	7
SE207850.028	LB202686.014		Arsenic, As	mg/kg	1	<1	<1	200	0
			Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
			Chromium, Cr	mg/kg	0.5	<0.5	<0.5	200	0
			Copper, Cu	mg/kg	0.5	<0.5	<0.5	200	0
			Nickel, Ni	mg/kg	0.5	<0.5	<0.5	200	0
			Lead, Pb	mg/kg	1	<1	<1	200	0
			Zinc, Zn	mg/kg	2	<2.0	<2.0	200	0
SE207850.036	LB202686.023		Arsenic, As	mg/kg	1	<1	<1	161	0
			Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
			Chromium, Cr	mg/kg	0.5	2.0	1.7	57	17
			Copper, Cu	mg/kg	0.5	<0.5	<0.5	143	0
			Nickel, Ni	mg/kg	0.5	0.6	0.6	115	8
			Lead, Pb	mg/kg	1	3	3	61	1
			Zinc, Zn	mg/kg	2	8.9	8.9	53	1

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207850.010	LB202633.014		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE207850.018	LB202633.023		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE207850.028	LB202635.014		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE207850.033	LB202635.024		TRH C10-C14	mg/kg	20	<20	0	200	0
			TRH C15-C28	mg/kg	45	<45	0	200	0
			TRH C29-C36	mg/kg	45	<45	0	200	0
			TRH C37-C40	mg/kg	100	<100	0	200	0
			TRH C10-C36 Total	mg/kg	110	<110	0	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	0	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	0	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	0	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	0	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207850.010	LB202636.014	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207850.010	LB202636.014	Oxygenated Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.8	9.8	50	11
			d8-toluene (Surrogate)	mg/kg	-	7.9	9.9	50	22
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.4	10.4	50	21
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethanes	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
			Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE207850.018	LB202636.023	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
			Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207850.018	LB202636.023	Halogenated	1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.4	10.8	50	14
			d8-toluene (Surrogate)	mg/kg	-	9.9	9.8	50	1
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.2	10.3	50	11
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE207850.028	LB202637.014	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207850.028	LB202637.014	Halogenated	1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
		Aliphatics	Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.8	9.8	50	0
			d8-toluene (Surrogate)	mg/kg	-	9.7	9.5	50	2
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.1	7.0	50	1
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE207850.036	LB202637.023	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued) — Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207850.036	LB202637.023	Fumigants	1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207850.036	LB202637.023	Oxygenated	Vinyl acetate	mg/kg	10	<10	<10	200	0
		Compounds	MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.1	9.3	50	1
			d8-toluene (Surrogate)	mg/kg	-	9.2	9.2	50	1
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.6	6.8	50	2
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207850.010	LB202636.014		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.8	9.8	30	11
			d8-toluene (Surrogate)	mg/kg	-	7.9	9.9	30	22
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.4	10.4	30	21
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE207850.018	LB202636.023		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.4	10.8	30	14
			d8-toluene (Surrogate)	mg/kg	-	9.9	9.8	30	1
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.2	10.3	30	11
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE207850.028	LB202637.014		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.8	9.8	30	0
			d8-toluene (Surrogate)	mg/kg	-	9.7	9.5	30	2
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.1	7.0	30	1
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE207850.036	LB202637.023		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.1	9.3	30	1
			d8-toluene (Surrogate)	mg/kg	-	9.2	9.2	30	1
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.6	6.8	30	2
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202697.002	Mercury	mg/kg	0.05	0.19	0.2	70 - 130	97
LB202699.002	Mercury	mg/kg	0.05	0.20	0.2	70 - 130	98

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202633.002		Heptachlor	mg/kg	0.1	0.3	0.2	60 - 140	137
		Aldrin	mg/kg	0.1	0.3	0.2	60 - 140	135
		Delta BHC	mg/kg	0.1	0.3	0.2	60 - 140	136
		Dieldrin	mg/kg	0.2	0.3	0.2	60 - 140	134
		Endrin	mg/kg	0.2	0.3	0.2	60 - 140	133
		p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	113
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	0.15	40 - 130	94
LB202635.002		Heptachlor	mg/kg	0.1	0.1	0.2	60 - 140	73
		Aldrin	mg/kg	0.1	0.1	0.2	60 - 140	74
		Delta BHC	mg/kg	0.1	0.1	0.2	60 - 140	74
		Dieldrin	mg/kg	0.2	<0.2	0.2	60 - 140	73
		Endrin	mg/kg	0.2	<0.2	0.2	60 - 140	72
		p,p'-DDT	mg/kg	0.1	0.1	0.2	60 - 140	73
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.15	40 - 130	98

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202633.002		Dichlorvos	mg/kg	0.5	1.5	2	60 - 140	75
		Diazinon (Dimpylate)	mg/kg	0.5	1.6	2	60 - 140	81
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.5	2	60 - 140	77
		Ethion	mg/kg	0.2	1.5	2	60 - 140	73
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	92
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	79
LB202635.002		Dichlorvos	mg/kg	0.5	1.8	2	60 - 140	92
		Diazinon (Dimpylate)	mg/kg	0.5	2.2	2	60 - 140	108
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.2	2	60 - 140	110
		Ethion	mg/kg	0.2	1.8	2	60 - 140	90
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	96
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	92

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202633.002		Naphthalene	mg/kg	0.1	5.4	4	60 - 140	136
		Acenaphthylene	mg/kg	0.1	5.2	4	60 - 140	130
		Acenaphthene	mg/kg	0.1	5.3	4	60 - 140	132
		Phenanthrene	mg/kg	0.1	5.4	4	60 - 140	134
		Anthracene	mg/kg	0.1	5.5	4	60 - 140	138
		Fluoranthene	mg/kg	0.1	5.6	4	60 - 140	140
		Pyrene	mg/kg	0.1	5.4	4	60 - 140	136
		Benzo(a)pyrene	mg/kg	0.1	5.3	4	60 - 140	132
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	84
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	92
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	79
LB202635.002		Naphthalene	mg/kg	0.1	4.9	4	60 - 140	122
		Acenaphthylene	mg/kg	0.1	4.7	4	60 - 140	116
		Acenaphthene	mg/kg	0.1	4.6	4	60 - 140	114
		Phenanthrene	mg/kg	0.1	4.8	4	60 - 140	119
		Anthracene	mg/kg	0.1	4.1	4	60 - 140	102
		Fluoranthene	mg/kg	0.1	4.8	4	60 - 140	120
		Pyrene	mg/kg	0.1	4.7	4	60 - 140	117
		Benzo(a)pyrene	mg/kg	0.1	4.7	4	60 - 140	117
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	94
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	96
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	92

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PCBs in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202633.002		Arochlor 1260	mg/kg	0.2	0.3	0.4	60 - 140	82
LB202635.002		Arochlor 1260	mg/kg	0.2	0.4	0.4	60 - 140	89

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202633.002		Phenol	mg/kg	0.5	0.7	1	70 - 130	71
		2,4-dichlorophenol	mg/kg	0.5	0.8	1	70 - 130	82
		2,4,6-trichlorophenol	mg/kg	0.5	1.1	1	70 - 130	107
		Pentachlorophenol	mg/kg	0.5	0.7	1	70 - 130	70
	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.1	5	40 - 130	83
		d5-phenol (Surrogate)	mg/kg	-	1.6	2	40 - 130	82
LB202635.002		Phenol	mg/kg	0.5	0.7	1	70 - 130	74
		2,4-dichlorophenol	mg/kg	0.5	0.8	1	70 - 130	76
		2,4,6-trichlorophenol	mg/kg	0.5	0.9	1	70 - 130	88
		Pentachlorophenol	mg/kg	0.5	0.9	1	70 - 130	87
	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.8	5	40 - 130	76
		d5-phenol (Surrogate)	mg/kg	-	1.6	2	40 - 130	82

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202685.002	Arsenic, As	mg/kg	1	340	318.22	80 - 120	106
	Cadmium, Cd	mg/kg	0.3	4.6	5.41	80 - 120	85
	Chromium, Cr	mg/kg	0.5	40	38.31	80 - 120	104
	Copper, Cu	mg/kg	0.5	300	290	80 - 120	104
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	102
	Lead, Pb	mg/kg	1	94	89.9	80 - 120	104
	Zinc, Zn	mg/kg	2	270	273	80 - 120	101
LB202686.002	Arsenic, As	mg/kg	1	340	318.22	80 - 120	106
	Cadmium, Cd	mg/kg	0.3	4.6	5.41	80 - 120	85
	Chromium, Cr	mg/kg	0.5	40	38.31	80 - 120	105
	Copper, Cu	mg/kg	0.5	300	290	80 - 120	104
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	102
	Lead, Pb	mg/kg	1	94	89.9	80 - 120	105
	Zinc, Zn	mg/kg	2	270	273	80 - 120	100

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202633.002		TRH C10-C14	mg/kg	20	46	40	60 - 140	115
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	110
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	75
	TRH F Bands	TRH >C10-C16	mg/kg	25	46	40	60 - 140	115
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	98
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	75
LB202635.002		TRH C10-C14	mg/kg	20	41	40	60 - 140	103
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	95
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	75
	TRH F Bands	TRH >C10-C16	mg/kg	25	41	40	60 - 140	103
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	85
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	60

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202636.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	4.3	5	60 - 140	86
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	5.3	5	60 - 140	105
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	4.6	5	60 - 140	92
	Halogenated	Chlorobenzene	mg/kg	0.1	5.5	5	60 - 140	111
	Monocyclic	Benzene	mg/kg	0.1	4.9	5	60 - 140	98
	Aromatic	Toluene	mg/kg	0.1	4.7	5	60 - 140	95
		Ethylbenzene	mg/kg	0.1	4.8	5	60 - 140	96
		m/p-xylene	mg/kg	0.2	10	10	60 - 140	101
		o-xylene	mg/kg	0.1	4.8	5	60 - 140	96
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.9	10	70 - 130	89

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202636.002	Surrogates	d8-toluene (Surrogate)	mg/kg	-	7.8	10	70 - 130	78
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.1	10	70 - 130	81
	Trihalomethan	Chloroform	mg/kg	0.1	4.2	5	60 - 140	83
LB202637.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	3.3	5	60 - 140	65
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	4.0	5	60 - 140	79
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	3.7	5	60 - 140	74
	Halogenated	Chlorobenzene	mg/kg	0.1	4.4	5	60 - 140	89
	Monocyclic	Benzene	mg/kg	0.1	4.2	5	60 - 140	83
	Aromatic	Toluene	mg/kg	0.1	4.1	5	60 - 140	83
		Ethylbenzene	mg/kg	0.1	4.2	5	60 - 140	85
		m/p-xylene	mg/kg	0.2	8.4	10	60 - 140	84
		o-xylene	mg/kg	0.1	4.2	5	60 - 140	84
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.7	10	70 - 130	107
		d8-toluene (Surrogate)	mg/kg	-	10.5	10	70 - 130	105
		Bromofluorobenzene (Surrogate)	mg/kg	-	7.0	10	70 - 130	70
	Trihalomethan	Chloroform	mg/kg	0.1	3.9	5	60 - 140	78

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202636.002		TRH C6-C10	mg/kg	25	69	92.5	60 - 140	75
		TRH C6-C9	mg/kg	20	63	80	60 - 140	79
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.9	10	70 - 130	89
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.1	10	70 - 130	81
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	40	62.5	60 - 140	63
LB202637.002		TRH C6-C10	mg/kg	25	65	92.5	60 - 140	70
		TRH C6-C9	mg/kg	20	56	80	60 - 140	70
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.7	10	70 - 130	107
		Bromofluorobenzene (Surrogate)	mg/kg	-	7.0	10	70 - 130	70
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	40	62.5	60 - 140	64

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207850.001	LB202697.004	Mercury	mg/kg	0.05	0.21	<0.05	0.2	101
SE207850.019	LB202699.004	Mercury	mg/kg	0.05	0.20	<0.05	0.2	97

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207850.001	LB202633.004		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	-	-
			Lindane	mg/kg	0.1	<0.1	<0.1	-	-
			Heptachlor	mg/kg	0.1	0.2	<0.1	0.2	102
			Aldrin	mg/kg	0.1	0.2	<0.1	0.2	102
			Beta BHC	mg/kg	0.1	<0.1	<0.1	-	-
			Delta BHC	mg/kg	0.1	0.2	<0.1	0.2	101
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	-	-
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	-	-
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	-	-
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	-	-
			Dieldrin	mg/kg	0.2	0.2	<0.2	0.2	102
			Endrin	mg/kg	0.2	0.2	<0.2	0.2	103
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	-	-
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	-	-
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	-	-
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	-	-
			p,p'-DDT	mg/kg	0.1	0.2	<0.1	0.2	85
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	-	-
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	-	-
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	-	-
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	-	-
			Isodrin	mg/kg	0.1	<0.1	<0.1	-	-
			Mirex	mg/kg	0.1	<0.1	<0.1	-	-
			Total CLP OC Pesticides	mg/kg	1	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	0.14	-	90
SE207850.019	LB202635.004		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	-	-
			Lindane	mg/kg	0.1	<0.1	<0.1	-	-
			Heptachlor	mg/kg	0.1	0.2	<0.1	0.2	107
			Aldrin	mg/kg	0.1	0.2	<0.1	0.2	108
			Beta BHC	mg/kg	0.1	<0.1	<0.1	-	-
			Delta BHC	mg/kg	0.1	0.2	<0.1	0.2	108
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	-	-
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	-	-
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	-	-
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	-	-
			Dieldrin	mg/kg	0.2	0.2	<0.2	0.2	107
			Endrin	mg/kg	0.2	0.2	<0.2	0.2	105
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	-	-
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	-	-
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	-	-
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	-	-
			p,p'-DDT	mg/kg	0.1	0.2	<0.1	0.2	86
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	-	-
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	-	-
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	-	-
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	-	-
			Isodrin	mg/kg	0.1	<0.1	<0.1	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207850.019	LB202635.004		Mirex	mg/kg	0.1	<0.1	<0.1	-	-
			Total CLP OC Pesticides	mg/kg	1	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.14	-	99

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207850.001	LB202633.004		Dichlorvos	mg/kg	0.5	1.5	<0.5	2	76
			Dimethoate	mg/kg	0.5	<0.5	<0.5	-	-
			Diazinon (Dimpylate)	mg/kg	0.5	1.6	<0.5	2	79
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	-	-
			Malathion	mg/kg	0.2	<0.2	<0.2	-	-
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.6	<0.2	2	79
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	-	-
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	-	-
			Methidathion	mg/kg	0.5	<0.5	<0.5	-	-
			Ethion	mg/kg	0.2	1.5	<0.2	2	75
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	-	-
			Total OP Pesticides*	mg/kg	1.7	6.2	<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	83
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	77
SE207850.019	LB202635.004		Dichlorvos	mg/kg	0.5	1.6	<0.5	2	79
			Dimethoate	mg/kg	0.5	<0.5	<0.5	-	-
			Diazinon (Dimpylate)	mg/kg	0.5	1.8	<0.5	2	90
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	-	-
			Malathion	mg/kg	0.2	<0.2	<0.2	-	-
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.0	<0.2	2	101
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	-	-
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	-	-
			Methidathion	mg/kg	0.5	<0.5	<0.5	-	-
			Ethion	mg/kg	0.2	1.5	<0.2	2	75
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	-	-
			Total OP Pesticides*	mg/kg	1.7	6.9	<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	82
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	73

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207850.001	LB202633.004		Naphthalene	mg/kg	0.1	3.8	<0.1	4	95
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
			Acenaphthylene	mg/kg	0.1	3.7	<0.1	4	92
			Acenaphthene	mg/kg	0.1	3.8	<0.1	4	95
			Fluorene	mg/kg	0.1	<0.1	<0.1	-	-
			Phenanthrene	mg/kg	0.1	3.8	<0.1	4	96
			Anthracene	mg/kg	0.1	4.0	<0.1	4	100
			Fluoranthene	mg/kg	0.1	4.0	<0.1	4	99
			Pyrene	mg/kg	0.1	4.2	<0.1	4	105
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Chrysene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(a)pyrene	mg/kg	0.1	4.0	<0.1	4	100
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	4.0	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	4.2	<0.3	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	4.1	<0.2	-	-
			Total PAH (18)	mg/kg	0.8	31	<0.8	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	-	73
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	83
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	77

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207850.019	LB202635.004		Naphthalene	mg/kg	0.1	3.8	<0.1	4	95
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
			Acenaphthylene	mg/kg	0.1	3.7	<0.1	4	93
			Acenaphthene	mg/kg	0.1	3.9	<0.1	4	96
			Fluorene	mg/kg	0.1	<0.1	<0.1	-	-
			Phenanthrene	mg/kg	0.1	4.0	<0.1	4	100
			Anthracene	mg/kg	0.1	3.9	<0.1	4	97
			Fluoranthene	mg/kg	0.1	3.9	<0.1	4	97
			Pyrene	mg/kg	0.1	4.0	<0.1	4	98
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Chrysene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(a)pyrene	mg/kg	0.1	3.9	<0.1	4	98
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	3.9	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	4.1	<0.3	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	4.0	<0.2	-	-
			Total PAH (18)	mg/kg	0.8	31	<0.8	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	-	77
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	82
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	73

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207850.001	LB202633.004		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1260	mg/kg	0.2	0.4	<0.2	0.4	99
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	-	-
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	-	95
SE207850.019	LB202635.004		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1260	mg/kg	0.2	0.4	<0.2	0.4	98
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	-	-
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	-	90

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207850.001	LB202633.004	Phenol	mg/kg	0.5	0.8	<0.5	1	74
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	-	-
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	-	-
		Total Cresol	mg/kg	1.5	<1.5	<1.5	-	-
		2-chlorophenol	mg/kg	0.5	<0.5	<0.5	-	-
		2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	-	-
		2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	-	-
		2,4-dichlorophenol	mg/kg	0.5	1.0	<0.5	1	97
		2,4,6-trichlorophenol	mg/kg	0.5	1.0	<0.5	1	104

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207850.001	LB202633.004		2-nitrophenol	mg/kg	0.5	<0.5	<0.5	-	-
			4-nitrophenol	mg/kg	1	<1	<1	-	-
			2,4,5-trichlorophenol	mg/kg	0.5	0.9	<0.5	-	-
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	-	-
			Pentachlorophenol	mg/kg	0.5	0.8	<0.5	1	81
			2,4-dinitrophenol	mg/kg	2	<2	<2	-	-
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	-	-
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.8	3.7	-	77
			d5-phenol (Surrogate)	mg/kg	-	1.6	1.5	-	81
SE207850.019	LB202635.004		Phenol	mg/kg	0.5	0.7	<0.5	1	71
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	-	-
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	-	-
			Total Cresol	mg/kg	1.5	<1.5	<1.5	-	-
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	-	-
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	-	-
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	-	-
			2,4-dichlorophenol	mg/kg	0.5	0.8	<0.5	1	76
			2,4,6-trichlorophenol	mg/kg	0.5	0.9	<0.5	1	94
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	-	-
			4-nitrophenol	mg/kg	1	<1	<1	-	-
			2,4,5-trichlorophenol	mg/kg	0.5	0.8	<0.5	-	-
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	-	-
			Pentachlorophenol	mg/kg	0.5	0.8	<0.5	1	84
			2,4-dinitrophenol	mg/kg	2	<2	<2	-	-
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	-	-
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.9	3.7	-	78
			d5-phenol (Surrogate)	mg/kg	-	1.5	1.6	-	76

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207850.001	LB202685.004	Arsenic, As	mg/kg	1	52	<1	50	102
		Cadmium, Cd	mg/kg	0.3	46	<0.3	50	93
		Chromium, Cr	mg/kg	0.5	51	0.7	50	102
		Copper, Cu	mg/kg	0.5	54	2.0	50	103
		Nickel, Ni	mg/kg	0.5	52	<0.5	50	103
		Lead, Pb	mg/kg	1	54	4	50	101
		Zinc, Zn	mg/kg	2	53	2.9	50	100
SE207850.019	LB202686.004	Arsenic, As	mg/kg	1	48	<1	50	97
		Cadmium, Cd	mg/kg	0.3	44	<0.3	50	88
		Chromium, Cr	mg/kg	0.5	48	<0.5	50	96
		Copper, Cu	mg/kg	0.5	49	<0.5	50	99
		Nickel, Ni	mg/kg	0.5	49	<0.5	50	99
		Lead, Pb	mg/kg	1	50	<1	50	99
		Zinc, Zn	mg/kg	2	48	<2.0	50	95

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207850.001	LB202633.004		TRH C10-C14	mg/kg	20	42	<20	40	105
			TRH C15-C28	mg/kg	45	<45	<45	40	95
			TRH C29-C36	mg/kg	45	<45	<45	40	65
			TRH C37-C40	mg/kg	100	<100	<100	-	-
			TRH C10-C36 Total	mg/kg	110	<110	<110	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25	41	<25	40	103
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	41	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	40	85
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	-	-
SE207850.019	LB202635.004		TRH C10-C14	mg/kg	20	36	<20	40	90
			TRH C15-C28	mg/kg	45	<45	<45	40	83
			TRH C29-C36	mg/kg	45	<45	<45	40	65
			TRH C37-C40	mg/kg	100	<100	<100	-	-
			TRH C10-C36 Total	mg/kg	110	<110	<110	-	-

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TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207850.019	LB202635.004		TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25	35	<25	40	88
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	35	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	40	75
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	-	-

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207850.001	LB202636.004	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	-	-
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	-	-
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	-	-
			Bromomethane	mg/kg	1	<1	<1	-	-
			Chloroethane	mg/kg	1	<1	<1	-	-
			Trichlorofluoromethane	mg/kg	1	<1	<1	-	-
			Iodomethane	mg/kg	5	<5	<5	-	-
			1,1-dichloroethene	mg/kg	0.1	4.2	<0.1	5	84
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	-	-
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloroethane	mg/kg	0.1	4.7	<0.1	5	95
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	-	-
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	4.6	<0.1	5	92
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	-	-
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated	Chlorobenzene	mg/kg	0.1	5.3	<0.1	5	106
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Monocyclic	Benzene	mg/kg	0.1	5.1	<0.1	5	102
		Aromatic	Toluene	mg/kg	0.1	5.2	<0.1	5	105
			Ethylbenzene	mg/kg	0.1	5.3	<0.1	5	106
			m/p-xylene	mg/kg	0.2	11	<0.2	10	105
			o-xylene	mg/kg	0.1	5.2	<0.1	5	103
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	-	-
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	-	-
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-

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VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207850.001	LB202636.004	Monocyclic Aromatic	tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	-	-
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	-	-
			2-nitropropane	mg/kg	10	<10	<10	-	-
		Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10	<10	-	-
			MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	-	-
			Vinyl acetate	mg/kg	10	<10	<10	-	-
			MEK (2-butanone)	mg/kg	10	<10	<10	-	-
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	-	-
			2-hexanone (MBK)	mg/kg	5	<5	<5	-	-
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.3	8.7	10	103
			d8-toluene (Surrogate)	mg/kg	-	8.8	8.0	10	88
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.0	8.5	10	90
		Totals	Total Xylenes	mg/kg	0.3	16	<0.3	-	-
			Total BTEX	mg/kg	0.6	31	<0.6	-	-
			Total VOC*	mg/kg	24	55	<24	-	-
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	-	-
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	23	<1.8	-	-
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	23	<1.8	-	-
		Trihalomethanes	Chloroform	mg/kg	0.1	4.2	<0.1	5	84
			Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Bromoform	mg/kg	0.1	<0.1	<0.1	-	-
SE207850.019	LB202637.004	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	-	-
			Chloromethane	mg/kg	1	<1	<1	-	-
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	-	-
			Bromomethane	mg/kg	1	<1	<1	-	-
			Chloroethane	mg/kg	1	<1	<1	-	-
			Trichlorofluoromethane	mg/kg	1	<1	<1	-	-
			Iodomethane	mg/kg	5	<5	<5	-	-
			1,1-dichloroethene	mg/kg	0.1	3.3	<0.1	5	67
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	-	-
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloroethane	mg/kg	0.1	4.0	<0.1	5	81
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	-	-
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	3.8	<0.1	5	76
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	-	-
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207850.019	LB202637.004	Halogenated Aliphatics	1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	4.5	<0.1	5	89
			Bromobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Monocyclic Aromatic	Benzene	mg/kg	0.1	4.1	<0.1	5	81
			Toluene	mg/kg	0.1	4.1	<0.1	5	81
			Ethylbenzene	mg/kg	0.1	4.2	<0.1	5	82
			m/p-xylene	mg/kg	0.2	8.3	<0.2	10	82
			o-xylene	mg/kg	0.1	4.1	<0.1	5	82
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	-	-
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	-	-
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	-	-
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	-	-
			2-nitropropane	mg/kg	10	<10	<10	-	-
		Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10	<10	-	-
			MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	-	-
			Vinyl acetate	mg/kg	10	<10	<10	-	-
			MEK (2-butanone)	mg/kg	10	<10	<10	-	-
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	-	-
			2-hexanone (MBK)	mg/kg	5	<5	<5	-	-
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.4	9.7	10	104
			d8-toluene (Surrogate)	mg/kg	-	10.3	9.7	10	103
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.9	7.1	10	69 ①
		Totals	Total Xylenes	mg/kg	0.3	12	<0.3	-	-
			Total BTEX	mg/kg	0.6	25	<0.6	-	-
			Total VOC*	mg/kg	24	46	<24	-	-
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	-	-
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	20	<1.8	-	-
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	20	<1.8	-	-
		Trihalomethanes	Chloroform	mg/kg	0.1	4.0	<0.1	5	80
			Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Bromoform	mg/kg	0.1	<0.1	<0.1	-	-

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207850.001	LB202636.004		TRH C6-C10	mg/kg	25	72	<25	92.5	77
			TRH C6-C9	mg/kg	20	66	<20	80	82
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.3	8.7	10	103
			d8-toluene (Surrogate)	mg/kg	-	8.8	8.0	10	88
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.0	8.5	-	90
		VPH F Bands	Benzene (F0)	mg/kg	0.1	5.1	<0.1	-	-
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	40	<25	62.5	64
SE207850.019	LB202637.004		TRH C6-C10	mg/kg	25	64	<25	92.5	69
			TRH C6-C9	mg/kg	20	55	<20	80	69
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.4	9.7	10	104

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207850.019	LB202637.004	Surrogates	d8-toluene (Surrogate)	mg/kg	-	10.3	9.7	10	103
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.9	7.1	-	69
		VPH F	Benzene (F0)	mg/kg	0.1	4.1	<0.1	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	39	<25	62.5	62

MATRIX SPIKE DUPLICATES

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

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- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐

CLIENT: Defence Housing Australia

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGER [redacted]

PM CONTACT No: [redacted]

COMMENTS OR ADDITIONAL DIRECTIONS

LABORATORY: SGS Australia

LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015

SAMPLER:

SAMPLER CONTACT No:

Email Reports and Invoices to: LQRSYD@slrconsulting.com [redacted]

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number of

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: Suite A	Asbestos ONLY	HOLD	Additional Information (Comment on any gross contamination or specific requirements)
1	0407_TP204_0.1_200618	18/06/2020	Soil	jar, pfas, bag ✓	x			Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 19/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
2	0407_TP204_0.5_200618	18/06/2020	Soil	jar, pfas	x			
	0407_TP204_1.0_200618	18/06/2020	Soil	jar, pfas			x	
3	0407_TP205_0.1_200618	18/06/2020	Soil	jar, pfas, bag ✓	x			
4	0407_TP205_0.5_200618	18/06/2020	Soil	jar, pfas, bag	x			
	0407_TP205_1.0_200618	18/06/2020	Soil	jar, pfas			x	
5	0407_TP206_0.1_200618	18/06/2020	Soil	jar, pfas, bag ✓	x			
	0407_TP206_0.5_200618	18/06/2020	Soil	jar, pfas			x	
6	0407_TP206_1.0_200618	18/06/2020	Soil	jar, pfas	x			
7	0407_TP220_0.1_200618	18/06/2020	Soil	jar, pfas, bag ✓	x			
	0407_TP220_0.5_200618	18/06/2020	Soil	jar, pfas		–	x	
8	0407_TP220_1.0_200618	18/06/2020	Soil	jar, pfas	x			

SGS EHS Sydney COC

SE207831

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time	18/06/2020	**Received by**	Sign [redacted]	Date / Time 19/6 @ 8:30
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time

Temperature Received: 8 °C

source: [Untitled].pdf page: 1 SGS Ref: SE207831_COC

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CLIENT: Defence Housing Australia	**LABORATORY: SGS Australia**	**Turnaround Time (TAT)**	**COC Number**
PROJECT: Randwick Barracks	**LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015**		**of**
PROJECT NUMBER: 610.30041	**SAMPLER:**	☐ Standard TAT	
PROJECT MANAGER [redacted]	**SAMPLER CONTACT No:**	☐ Non Standard or Urgent TAT	
PM CONTACT No [redacted]	**Email Reports and Invoices to: LQRSYD@slrconsulting.com ;** [redacted]	**Required TAT: Standard**	

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: Suite A	Asbestos ONLY	HOLD	Additional Information (Comment on any gross contamination or specific requirements)
9	0407_TP207_0.1_200618	18/06/2020	Soil	jar, pfas, bag ✓	×			Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 19/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
	0407_TP207_0.5_200618	18/06/2020	Soil	jar, pfas			×	
10	0407_TP207_1.0_200618	18/06/2020	Soil	jar, pfas	×			
11	0407_TP203_0.1_200618	18/06/2020	Soil	jar, pfas, bag ✓	×			
12	0407_TP203_0.5_200618	18/06/2020	Soil	jar, pfas, bag ✓	×			
	0407_TP203_1.0_200618	18/06/2020	Soil	jar, pfas			×	
	0407_TP203 2 0.1_200618	18/06/2020	Soil	jar, pfas, bag ✓			×	
13	0407_TP203 2 0.5_200618	18/06/2020	Soil	jar, pfas, bag ✓	×			
	0407_TP203 2 0.8_200618	18/06/2020	Soil	bag ✓			×	
14	0407_TP203 2 1.0_200618	18/06/2020	Soil	jar, pfas, bag ✓	×			
15	0407_TP201_0.1_200618	18/06/2020	Soil	jar, pfas, bag ✓	×			
16	0407_TP201_0.5_200618	18/06/2020	Soil	jar, pfas, bag ✓	×			

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 18/06/2020	**Received by**	Sign [redacted]	Date / Time 19/6 @ 4:30
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time

Temperature Received: 8 °C

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CLIENT: Defence Housing Australia	**LABORATORY: SGS Australia**	**Turnaround Time (TAT)**	**COC Number**
PROJECT: Randwick Barracks	**LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015**		**of**
PROJECT NUMBER: 610.30041	**SAMPLER:**	☐ Standard TAT	
PROJECT MANAGER [redacted]	**SAMPLER CONTACT No:**	☐ Non Standard or Urgent TAT	
PM CONTACT No: [redacted]	**Email Reports and Invoices to: LQRSYD@slrconsulting.com** [redacted]	**Required TAT: Standard**	

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	Asbestos ONLY	HOLD	Additional Information (Comment on any gross contamination or specific requirements)
16	0407_TP201_1.0_200618	18/06/2020	Soil	jar, pfas			x	~~Sample jars and bags have~~ been designated as RWBB_TPXX_depth_date up until 19/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
17	0407_TP200_0.1_200618	18/06/2020	Soil	jar, pfas, bag ✓	x			
18	0407_TP200_0.5_200618	18/06/2020	Soil	jar, pfas	x			
	0407_TP200_1.0_200618	18/06/2020	Soil	jar, pfas			x	
19	0407_TP199_0.1_200618	18/06/2020	Soil	jar, pfas, bag ✓	x			
20	0407_TP199_0.5_200618	18/06/2020	Soil	jar, pfas	x			
	0407_TP199_1.0_200618	18/06/2020	Soil	jar, pfas			x	
21	0407_TP198_0.1_200618	18/06/2020	Soil	jar, pfas	x			
22	0407_TP198_0.5_200618	18/06/2020	Soil	jar, pfas	x			
23	0407_TP222_0.1_200619	19/06/2020	Soil	jar, pfas, bag ✓	x			
24	0407_TP222_0.5_200619	19/06/2020	Soil	jar, pfas, bag ✓	x			
	0407_TP222_1.0_200619	19/06/2020	Soil	jar, pfas			x	

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time	18/06/2020	**Received by**	Sign [redacted]	Date / Time	19/6 @ 4.20
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	

Temperature Received: 8 °C

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- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ❄ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Stuart Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐

CLIENT: Defence Housing Australia

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGER: [redacted]

PM CONTACT No: [redacted]

COMMENTS OR ADDITIONAL DIRECTIONS

LABORATORY: SGS Australia

LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015

SAMPLER:

SAMPLER CONTACT No:

Email Reports and Invoices to: LQRSYD@slrconsulting.com [redacted]

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number of

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	Asbestos ONLY	HOLD	Additional Information (Comment on any gross contamination or specific requirements)
								Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 19/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
25	0407_TP222_0.1_ACM_200619	19/06/2020	Soil	bag		×		
26	0407_TP221_0.1_200619	19/06/2020	Soil	jar, pfas, bag	×			
27	0407_TP221_0.5_200619	19/06/2020	Soil	jar, pfas, bag	×			
	0407_TP221_1.0_200619	19/06/2020	Soil	jar, pfas			×	
28	0407_TP209_0.1_200619	19/06/2020	Soil	jar, pfas, bag	×			
29	0407_TP209_0.5_200619	19/06/2020	Soil	jar, pfas, bag	×			
30	0407_TP208_0.1_200619	19/06/2020	Soil	jar, pfas, bag	×			
31	0407_TP208_0.5_200619	19/06/2020	Soil	jar, pfas	×			
32	0407_TP195_0.1_200619	19/06/2020	Soil	jar, pfas, bag	×			
	0407_TP195_0.5_200619	19/06/2020	Soil	jar, pfas			×	
33	0407_TP195_1.0_200619	19/06/2020	Soil	jar, pfas	×			

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time	18/06/2020	**Received by**	Sign	Date / Time	19/6 @ 4.30
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	

Temperature Received: 8 °C

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

SLR

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 430, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ✱ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐

CLIENT: Defence Housing Australia	**LABORATORY: SGS Australia**	**Turnaround Time (TAT)**	**COC Number**
PROJECT: Randwick Barracks	**LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015**		**of**
PROJECT NUMBER: 610.30041	**SAMPLER:**	☐ Standard TAT	
PROJECT MANAGER [redacted]	**SAMPLER CONTACT No:**	☐ Non Standard or Urgent TAT	
PM CONTACT No [redacted]	**Email Reports and Invoices to: LQRSYD@slrconsulting.com** [redacted]	**Required TAT: Standard**	

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	Asbestos ONLY	HOLD						Additional Information *(Comment on any gross contamination or specific requirements)*
													~~Sample jars and bags have~~ been designated as RWBB_TPXX_depth_date up until 19/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
34	0407_TP196_0.1_ACM_200619	19/06/2020	Soil	bag		×							
35	0407_TP196_0.1_200619	19/06/2020	Soil	jar, pfas, bag ✓	×								
	0407_TP196_0.5_200619	19/06/2020	Soil	jar, pfas, bag			×						
~~36~~	0407_TP196_1.0_200619	19/06/2020	Soil	jar, pfas, bag ✓	×								
36	0407_TP196_1.5_200619	19/06/2020	Soil	jar, pfas, bag ✓			×						
37	0407_TP197_0.1_ACM_200619	19/06/2020	Soil	bag		×							
38	0407_TP197_0.1_200619	19/06/2020	Soil	jar, pfas, bag ✓	×								
39	0407_TP197_0.5_200619	19/06/2020	Soil	jar, pfas, bag ✓	×								
	0407_TP197_0.6_200619	19/06/2020	Soil	jar, pfas			×						
		19/06/2020	Soil										
		19/06/2020	Soil										

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time	18/06/2020	**Received by**	Sign	Date / Time	19/6 @ 8.30
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	

Temperature Received: 8°C

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

SLR

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☒ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ DARWIN: 23 Parap Rd, Dawin, NT 0820
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☐ AUCKLAND: 69 Beach Road, Auckland 1010 NZ
- ☐

CLIENT: Defence Housing Australia	**LABORATORY: SGS Australia**	**Turnaround Time (TAT)**	**COC Number**
PROJECT: Randwick Barracks	**LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015**		**of**
PROJECT NUMBER: 610.30041	**SAMPLER: [redacted]**	☐ Standard TAT	
PROJECT MANAGER: [redacted]	**SAMPLER CONTACT No [redacted]**	☐ Non Standard or Urgent TAT	
PM CONTACT No [redacted]	**Email Reports and Invoices to: LQRSYD@slrconsulting.com [redacted]**	**Required TAT: Standard**	

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: Suite A	Asbestos ONLY	HOLD	C6-C10/BETXN					Additional Information (Comment on any gross contamination or specific requirements)
40	0407_QC117_200618	18/06/2020	Soil	jar, pfas	x								[illegible] been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
	0407_QC217_200618	18/06/2020	Soil	jar, pfas	x								Please send to Eurofins
41	0407_QC115_200618	18/06/2020	Soil	jar, pfas	x								
	0407_QC215_200618	18/06/2020	Soil	jar, pfas	x								Please send to Eurofins
42	0407_QC121_200619	19/06/2020	Soil	jar, pfas	x								
	0407_QC221_200619	19/06/2020	Soil	jar, pfas	x								Please send to Eurofins
43	0407_QC119_200619	19/06/2020	Soil	jar, pfas	x								
	0407_QC219_200619	19/06/2020	Soil	jar, pfas	x								Please send to Eurofins
44	0407_QC410_200619	19/06/2020	Trip Blank	vial				x					Trip blank
45	0407_QC510_200619	19/06/2020	Trip Spike	vial				x					Trip spike

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 18/06/2020	**Received by**	Sign [redacted]	Date / Time 19 [illegible] 4.30	**Temperature Received:** 8 °C
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

SAMPLE RECEIPT ADVICE

SE207831

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610_30041 Randwick Barrack**
Order Number	(Not specified)
Samples	45

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Fri 19/6/2020
Report Due	Mon 29/6/2020
SGS Reference	**SE207831**

SUBMISSION DETAILS

This is to confirm that 45 samples were received on Friday 19/6/2020. Results are expected to be ready by COB Monday 29/6/2020. Please quote SGS reference SE207831 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	42 Soil, 3 Material
Date documentation received	19/6/2020	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	8°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

17 soil samples have been placed on hold as no tests have been assigned for them by the client. These samples will not be processed.

This document is issued by the Company under its General Conditions of Service accessible at www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

SAMPLE RECEIPT ADVICE

SE207831

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610_30041 Randwick Barrack

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	Speciated Phenols in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
001	0407_TP204_0.1_200618	29	14	26	11	18	10	81	7
002	0407_TP204_0.5_200618	29	14	26	11	18	10	81	7
003	0407_TP205_0.1_200618	29	14	26	11	18	10	81	7
004	0407_TP205_0.5_200618	29	14	26	11	18	10	81	7
005	0407_TP206_0.1_200618	29	14	26	11	18	10	81	7
006	0407_TP206_1.0_200618	29	14	26	11	18	10	81	7
007	0407_TP220_0.1_200618	29	14	26	11	18	10	81	7
008	0407_TP220_1.0_200618	29	14	26	11	18	10	81	7
009	0407_TP207_0.1_200618	29	14	26	11	18	10	81	7
010	0407_TP207_1.0_200618	29	14	26	11	18	10	81	7
011	0407_TP203_0.1_200618	29	14	26	11	18	10	81	7
012	0407_TP203_0.5_200618	29	14	26	11	18	10	81	7
013	0407_TP202_0.5_200618	29	14	26	11	18	10	81	7
014	0407_TP202_1.0_200618	29	14	26	11	18	10	81	7
015	0407_TP201_0.1_200618	29	14	26	11	18	10	81	7
016	0407_TP201_0.5_200618	29	14	26	11	18	10	81	7
017	0407_TP200_0.1_200618	29	14	26	11	18	10	81	7
018	0407_TP200_0.5_200618	29	14	26	11	18	10	81	7
019	0407_TP199_0.1_200618	29	14	26	11	18	10	81	7
020	0407_TP199_0.5_200618	29	14	26	11	18	10	81	7
021	0407_TP198_0.1_200618	29	14	26	11	18	10	81	7
022	0407_TP198_0.5_200618	29	14	26	11	18	10	81	7
023	0407_TP222_0.1_200619	29	14	26	11	18	10	81	7
024	0407_TP222_0.5_200619	29	14	26	11	18	10	81	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE207831

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610_30041 Randwick Barrack

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	Speciated Phenols in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
026	0407_TP221_0.1_200619	29	14	26	11	18	10	81	7
027	0407_TP221_0.5_200619	29	14	26	11	18	10	81	7
028	0407_TP209_0.1_200619	29	14	26	11	18	10	81	7
029	0407_TP209_0.5_200619	29	14	26	11	18	10	81	7
030	0407_TP208_0.1_200619	29	14	26	11	18	10	81	7
031	0407_TP208_0.5_200619	29	14	26	11	18	10	81	7
032	0407_TP195_0.1_200619	29	14	26	11	18	10	81	7
033	0407_TP195_1.0_200619	29	14	26	11	18	10	81	7
035	0407_TP196_0.1_200619	29	14	26	11	18	10	81	7
036	0407_TP196_1.5_200619	29	14	26	11	18	10	81	7
038	0407_TP197_0.1_200619	29	14	26	11	18	10	81	7
039	0407_TP197_0.5_200619	29	14	26	11	18	10	81	7
040	0407_QC117_200618	29	14	26	11	18	10	81	7
041	0407_QC115_200618	29	14	26	11	18	10	81	7
042	0407_QC121_200619	29	14	26	11	18	10	81	7
043	0407_QC119_200618	29	14	26	11	18	10	81	7
044	0407_QC410_200619	-	-	-	-	-	-	11	7
045	0407_QC510_200619	-	-	-	-	-	-	11	-

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
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Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE207831

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610_30041 Randwick Barrack

SUMMARY OF ANALYSIS

No.	Sample ID	Fibre Identification in soil	Gravimetric Determination of Asbestos in Soil	Mercury in Soil	Moisture Content	Total Recoverable Elements in Soil/Waste
001	0407_TP204_0.1_200618	2	9	1	1	7
002	0407_TP204_0.5_200618	-	-	1	1	7
003	0407_TP205_0.1_200618	2	9	1	1	7
004	0407_TP205_0.5_200618	-	-	1	1	7
005	0407_TP206_0.1_200618	2	9	1	1	7
006	0407_TP206_1.0_200618	-	-	1	1	7
007	0407_TP220_0.1_200618	2	9	1	1	7
008	0407_TP220_1.0_200618	-	-	1	1	7
009	0407_TP207_0.1_200618	2	9	1	1	7
010	0407_TP207_1.0_200618	-	-	1	1	7
011	0407_TP203_0.1_200618	2	9	1	1	7
012	0407_TP203_0.5_200618	2	9	1	1	7
013	0407_TP202_0.5_200618	2	9	1	1	7
014	0407_TP202_1.0_200618	2	9	1	1	7
015	0407_TP201_0.1_200618	2	9	1	1	7
016	0407_TP201_0.5_200618	2	9	1	1	7
017	0407_TP200_0.1_200618	2	9	1	1	7
018	0407_TP200_0.5_200618	-	-	1	1	7
019	0407_TP199_0.1_200618	2	9	1	1	7
020	0407_TP199_0.5_200618	-	-	1	1	7
021	0407_TP198_0.1_200618	-	-	1	1	7
022	0407_TP198_0.5_200618	-	-	1	1	7
023	0407_TP222_0.1_200619	2	9	1	1	7
024	0407_TP222_0.5_200619	2	9	1	1	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE207831

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610_30041 Randwick Barrack

SUMMARY OF ANALYSIS

No.	Sample ID	Fibre ID in bulk materials	Fibre Identification in soil	Gravimetric Determination of Asbestos in Soil	Mercury in Soil	Moisture Content	Total Recoverable Elements in Soil/Waste
025	0407_TP222_0.1_ACM_200619	1	-	-	-	-	-
026	0407_TP221_0.1_200619	-	2	9	1	1	7
027	0407_TP221_0.5_200619	-	2	9	1	1	7
028	0407_TP209_0.1_200619	-	2	9	1	1	7
029	0407_TP209_0.5_200619	-	-	-	1	1	7
030	0407_TP208_0.1_200619	-	2	9	1	1	7
031	0407_TP208_0.5_200619	-	-	-	1	1	7
032	0407_TP195_0.1_200619	-	2	9	1	1	7
033	0407_TP195_1.0_200619	-	-	-	1	1	7
034	0407_TP196_0.1_CM_200619	1	-	-	-	-	-
035	0407_TP196_0.1_200619	-	2	9	1	1	7
036	0407_TP196_1.5_200619	-	2	9	1	1	7
037	0407_TP197_0.1_ACM_200619	1	-	-	-	-	-
038	0407_TP197_0.1_200619	-	2	9	1	1	7
039	0407_TP197_0.5_200619	-	2	9	1	1	7
040	0407_QC117_200618	-	-	-	1	1	7
041	0407_QC115_200618	-	-	-	1	1	7
042	0407_QC121_200619	-	-	-	1	1	7
043	0407_QC119_200618	-	-	-	1	1	7
044	0407_QC410_200619	-	-	-	-	1	-

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
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Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	45

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207831 R0**
Date Received	19/6/2020
Date Reported	30/6/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.

Sample #1: Asbestos found in approx 5x3x2mm cement sheet fragments in >2mm portion.
Sample #3, 11: Asbestos found in approx 8x4x2mm cement sheet fragments in >2mm portion.
Sample #7: Asbestos found in approx 7x5x2mm cement sheet fragments in >2mm portion.
Sample #9: Asbestos found in approx 15x5x3mm cement sheet fragments x6 in >2mm portion.
Sample #12: Asbestos found in approx 3x2x1mm cement sheet fragments in >2mm portion.
Sample #15: Asbestos found in approx 10x5x3mm cement sheet fragments x4 in >2mm portion.
Sample #17: Asbestos found in approx 6x4x2mm cement sheet fragments in >2mm portion.
Sample #35-36: Approx 5-6x1mm fibre bundles found loose in sample in >2mm portion.
Sample #39: Approx 4-5x0.5mm fibre bundles found loose in sample in >2mm portion.

Asbestos analysed by Approved Identifiers Ravee Sivasubramaniam and Yusuf Kuthpudin .

SIGNATORIES

[redacted]

Chemist | Senior Organic Chemist/Metals Chemist | Metals/Inorganics Team Leader

[redacted]

Organic Section Head | Asbestos Analyst

VOC's in Soil [AN433] Tested: 24/6/2020

PARAMETER	UOM	LOR	0407_TP204_0.1_20(618 SOIL - 18/6/2020 SE207831.001	0407_TP204_0.5_20(618 SOIL - 18/6/2020 SE207831.002	0407_TP205_0.1_20(618 SOIL - 18/6/2020 SE207831.003	0407_TP205_0.5_20(618 SOIL - 18/6/2020 SE207831.004	0407_TP206_0.1_20(618 SOIL - 18/6/2020 SE207831.005
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 24/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP204_0.1_20(618 SOIL - 18/6/2020 SE207831.001	0407_TP204_0.5_20(618 SOIL - 18/6/2020 SE207831.002	0407_TP205_0.1_20(618 SOIL - 18/6/2020 SE207831.003	0407_TP205_0.5_20(618 SOIL - 18/6/2020 SE207831.004	0407_TP206_0.1_20(618 SOIL - 18/6/2020 SE207831.005
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 24/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP206_1.0_20(618 SOIL - 18/6/2020 SE207831.006	0407_TP220_0.1_20(618 SOIL - 18/6/2020 SE207831.007	0407_TP220_1.0_20(618 SOIL - 18/6/2020 SE207831.008	0407_TP207_0.1_20(618 SOIL - 18/6/2020 SE207831.009	0407_TP207_1.0_20(618 SOIL - 18/6/2020 SE207831.010
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 24/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP206_1.0_20(618 SOIL - 18/6/2020 SE207831.006	0407_TP220_0.1_20(618 SOIL - 18/6/2020 SE207831.007	0407_TP220_1.0_20(618 SOIL - 18/6/2020 SE207831.008	0407_TP207_0.1_20(618 SOIL - 18/6/2020 SE207831.009	0407_TP207_1.0_20(618 SOIL - 18/6/2020 SE207831.010
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 24/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP203_0.1_20(618 SOIL - 18/6/2020 SE207831.011	0407_TP203_0.5_20(618 SOIL - 18/6/2020 SE207831.012	0407_TP202_0.5_20(618 SOIL - 18/6/2020 SE207831.013	0407_TP202_1.0_20(618 SOIL - 18/6/2020 SE207831.014	0407_TP201_0.1_20(618 SOIL - 18/6/2020 SE207831.015
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 24/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP203_0.1_20(618 SOIL - 18/6/2020 SE207831.011	0407_TP203_0.5_20(618 SOIL - 18/6/2020 SE207831.012	0407_TP202_0.5_20(618 SOIL - 18/6/2020 SE207831.013	0407_TP202_1.0_20(618 SOIL - 18/6/2020 SE207831.014	0407_TP201_0.1_20(618 SOIL - 18/6/2020 SE207831.015
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 24/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP201_0.5_20(618 SOIL - 18/6/2020 SE207831.016	0407_TP200_0.1_20(618 SOIL - 18/6/2020 SE207831.017	0407_TP200_0.5_20(618 SOIL - 18/6/2020 SE207831.018	0407_TP199_0.1_20(618 SOIL - 18/6/2020 SE207831.019	0407_TP199_0.5_20(618 SOIL - 18/6/2020 SE207831.020
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 24/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP201_0.5_20 618 SOIL - 18/6/2020 SE207831.016	0407_TP200_0.1_20 618 SOIL - 18/6/2020 SE207831.017	0407_TP200_0.5_20 618 SOIL - 18/6/2020 SE207831.018	0407_TP199_0.1_20 618 SOIL - 18/6/2020 SE207831.019	0407_TP199_0.5_20 618 SOIL - 18/6/2020 SE207831.020
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 24/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP198_0.1_20(618 SOIL - 18/6/2020 SE207831.021	0407_TP198_0.5_20(618 SOIL - 18/6/2020 SE207831.022	0407_TP222_0.1_20(619 SOIL - 18/6/2020 SE207831.023	0407_TP222_0.5_20(619 SOIL - 19/6/2020 SE207831.024	0407_TP221_0.1_20(619 SOIL - 19/6/2020 SE207831.026
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 24/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP198_0.1_20(618 SOIL - 18/6/2020 SE207831.021	0407_TP198_0.5_20(618 SOIL - 18/6/2020 SE207831.022	0407_TP222_0.1_20(619 SOIL - 18/6/2020 SE207831.023	0407_TP222_0.5_20(619 SOIL - 19/6/2020 SE207831.024	0407_TP221_0.1_20(619 SOIL - 19/6/2020 SE207831.026
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 24/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP221_0.5_20(619 SOIL - 19/6/2020 SE207831.027	0407_TP209_0.1_20(619 SOIL - 19/6/2020 SE207831.028	0407_TP209_0.5_20(619 SOIL - 19/6/2020 SE207831.029	0407_TP208_0.1_20(619 SOIL - 19/6/2020 SE207831.030	0407_TP208_0.5_20(619 SOIL - 19/6/2020 SE207831.031
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 24/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP221_0.5_20(619 SOIL - 19/6/2020 SE207831.027	0407_TP209_0.1_20(619 SOIL - 19/6/2020 SE207831.028	0407_TP209_0.5_20(619 SOIL - 19/6/2020 SE207831.029	0407_TP208_0.1_20(619 SOIL - 19/6/2020 SE207831.030	0407_TP208_0.5_20(619 SOIL - 19/6/2020 SE207831.031
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 24/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP195_0.1_20(619 SOIL - 19/6/2020 SE207831.032	0407_TP195_1.0_20(619 SOIL - 19/6/2020 SE207831.033	0407_TP196_0.1_20(619 SOIL - 19/6/2020 SE207831.035	0407_TP196_1.5_20(619 SOIL - 19/6/2020 SE207831.036	0407_TP197_0.1_20(619 SOIL - 19/6/2020 SE207831.038
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 24/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP195_0.1_20(619 SOIL - 19/6/2020 SE207831.032	0407_TP195_1.0_20(619 SOIL - 19/6/2020 SE207831.033	0407_TP196_0.1_20(619 SOIL - 19/6/2020 SE207831.035	0407_TP196_1.5_20(619 SOIL - 19/6/2020 SE207831.036	0407_TP197_0.1_20(619 SOIL - 19/6/2020 SE207831.038
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 24/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP197_0.5_20619 SOIL - 19/6/2020 SE207831.039	0407_QC117_200618 SOIL - 19/6/2020 SE207831.040	0407_QC115_200618 SOIL - 19/6/2020 SE207831.041	0407_QC121_200618 SOIL - 19/6/2020 SE207831.042	0407_QC119_200618 SOIL - 19/6/2020 SE207831.043
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	**0.1**	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 24/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP197_0.5_20619 SOIL - 19/6/2020 SE207831.039	0407_QC117_200618 SOIL - 19/6/2020 SE207831.040	0407_QC115_200618 SOIL - 19/6/2020 SE207831.041	0407_QC121_200618 SOIL - 19/6/2020 SE207831.042	0407_QC119_200618 SOIL - 19/6/2020 SE207831.043
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 24/6/2020 (continued)

PARAMETER	UOM	LOR	0407_QC410_20061 SOIL - 19/6/2020 SE207831.044	0407_QC510_20061 SOIL - 19/6/2020 SE207831.045
Benzene	mg/kg	0.1	<0.1	[92%]
Toluene	mg/kg	0.1	<0.1	[89%]
Ethylbenzene	mg/kg	0.1	<0.1	[90%]
m/p-xylene	mg/kg	0.2	<0.2	[89%]
o-xylene	mg/kg	0.1	<0.1	[89%]
Naphthalene	mg/kg	0.1	<0.1	-
Total Xylenes	mg/kg	0.3	<0.3	-
Total BTEX	mg/kg	0.6	<0.6	-
Dichlorodifluoromethane (CFC-12)	mg/kg	1	-	-
Chloromethane	mg/kg	1	-	-
Vinyl chloride (Chloroethene)	mg/kg	0.1	-	-
Bromomethane	mg/kg	1	-	-
Chloroethane	mg/kg	1	-	-
Trichlorofluoromethane	mg/kg	1	-	-
Acetone (2-propanone)	mg/kg	10	-	-
Iodomethane	mg/kg	5	-	-
1,1-dichloroethene	mg/kg	0.1	-	-
Acrylonitrile	mg/kg	0.1	-	-
Dichloromethane (Methylene chloride)	mg/kg	0.5	-	-
Allyl chloride	mg/kg	0.1	-	-
Carbon disulfide	mg/kg	0.5	-	-
trans-1,2-dichloroethene	mg/kg	0.1	-	-
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	-	-
1,1-dichloroethane	mg/kg	0.1	-	-
Vinyl acetate	mg/kg	10	-	-
MEK (2-butanone)	mg/kg	10	-	-
cis-1,2-dichloroethene	mg/kg	0.1	-	-
Bromochloromethane	mg/kg	0.1	-	-
Chloroform	mg/kg	0.1	-	-
2,2-dichloropropane	mg/kg	0.1	-	-
1,2-dichloroethane	mg/kg	0.1	-	-
1,1,1-trichloroethane	mg/kg	0.1	-	-
1,1-dichloropropene	mg/kg	0.1	-	-
Carbon tetrachloride	mg/kg	0.1	-	-
Dibromomethane	mg/kg	0.1	-	-
1,2-dichloropropane	mg/kg	0.1	-	-
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	-	-
2-nitropropane	mg/kg	10	-	-
Bromodichloromethane	mg/kg	0.1	-	-
MIBK (4-methyl-2-pentanone)	mg/kg	1	-	-
cis-1,3-dichloropropene	mg/kg	0.1	-	-
trans-1,3-dichloropropene	mg/kg	0.1	-	-
1,1,2-trichloroethane	mg/kg	0.1	-	-
1,3-dichloropropane	mg/kg	0.1	-	-
Chlorodibromomethane	mg/kg	0.1	-	-
2-hexanone (MBK)	mg/kg	5	-	-
1,2-dibromoethane (EDB)	mg/kg	0.1	-	-
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	-	-
1,1,1,2-tetrachloroethane	mg/kg	0.1	-	-
Chlorobenzene	mg/kg	0.1	-	-
Bromoform	mg/kg	0.1	-	-
cis-1,4-dichloro-2-butene	mg/kg	1	-	-
Styrene (Vinyl benzene)	mg/kg	0.1	-	-
1,1,2,2-tetrachloroethane	mg/kg	0.1	-	-
1,2,3-trichloropropane	mg/kg	0.1	-	-
trans-1,4-dichloro-2-butene	mg/kg	1	-	-

VOC's in Soil [AN433] Tested: 24/6/2020 (continued)

PARAMETER	UOM	LOR	0407_QC410_20061 SOIL - 19/6/2020 SE207831.044	0407_QC510_20061 SOIL - 19/6/2020 SE207831.045
Isopropylbenzene (Cumene)	mg/kg	0.1	-	-
Bromobenzene	mg/kg	0.1	-	-
n-propylbenzene	mg/kg	0.1	-	-
2-chlorotoluene	mg/kg	0.1	-	-
4-chlorotoluene	mg/kg	0.1	-	-
1,3,5-trimethylbenzene	mg/kg	0.1	-	-
tert-butylbenzene	mg/kg	0.1	-	-
1,2,4-trimethylbenzene	mg/kg	0.1	-	-
sec-butylbenzene	mg/kg	0.1	-	-
1,3-dichlorobenzene	mg/kg	0.1	-	-
1,4-dichlorobenzene	mg/kg	0.1	-	-
p-isopropyltoluene	mg/kg	0.1	-	-
1,2-dichlorobenzene	mg/kg	0.1	-	-
n-butylbenzene	mg/kg	0.1	-	-
1,2-dibromo-3-chloropropane	mg/kg	0.1	-	-
1,2,4-trichlorobenzene	mg/kg	0.1	-	-
Hexachlorobutadiene	mg/kg	0.1	-	-
1,2,3-trichlorobenzene	mg/kg	0.1	-	-
Total VOC*	mg/kg	24	-	-
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	-	-
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	-	-
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	-	-

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 24/6/2020

PARAMETER	UOM	LOR	0407_TP204_0.1_20(618 SOIL - 18/6/2020 SE207831.001	0407_TP204_0.5_20(618 SOIL - 18/6/2020 SE207831.002	0407_TP205_0.1_20(618 SOIL - 18/6/2020 SE207831.003	0407_TP205_0.5_20(618 SOIL - 18/6/2020 SE207831.004	0407_TP206_0.1_20(618 SOIL - 18/6/2020 SE207831.005
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP206_1.0_20(618 SOIL - 18/6/2020 SE207831.006	0407_TP220_0.1_20(618 SOIL - 18/6/2020 SE207831.007	0407_TP220_1.0_20(618 SOIL - 18/6/2020 SE207831.008	0407_TP207_0.1_20(618 SOIL - 18/6/2020 SE207831.009	0407_TP207_1.0_20(618 SOIL - 18/6/2020 SE207831.010
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP203_0.1_20(618 SOIL - 18/6/2020 SE207831.011	0407_TP203_0.5_20(618 SOIL - 18/6/2020 SE207831.012	0407_TP202_0.5_20(618 SOIL - 18/6/2020 SE207831.013	0407_TP202_1.0_20(618 SOIL - 18/6/2020 SE207831.014	0407_TP201_0.1_20(618 SOIL - 18/6/2020 SE207831.015
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP201_0.5_20(618 SOIL - 18/6/2020 SE207831.016	0407_TP200_0.1_20(618 SOIL - 18/6/2020 SE207831.017	0407_TP200_0.5_20(618 SOIL - 18/6/2020 SE207831.018	0407_TP199_0.1_20(618 SOIL - 18/6/2020 SE207831.019	0407_TP199_0.5_20(618 SOIL - 18/6/2020 SE207831.020
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP198_0.1_20(618 SOIL - 18/6/2020 SE207831.021	0407_TP198_0.5_20(618 SOIL - 18/6/2020 SE207831.022	0407_TP222_0.1_20(619 SOIL - 18/6/2020 SE207831.023	0407_TP222_0.5_20(619 SOIL - 19/6/2020 SE207831.024	0407_TP221_0.1_20(619 SOIL - 19/6/2020 SE207831.026
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP221_0.5_20(619 SOIL - 19/6/2020 SE207831.027	0407_TP209_0.1_20(619 SOIL - 19/6/2020 SE207831.028	0407_TP209_0.5_20(619 SOIL - 19/6/2020 SE207831.029	0407_TP208_0.1_20(619 SOIL - 19/6/2020 SE207831.030	0407_TP208_0.5_20(619 SOIL - 19/6/2020 SE207831.031
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 24/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP195_0.1_20(619 SOIL - 19/6/2020 SE207831.032	0407_TP195_1.0_20(619 SOIL - 19/6/2020 SE207831.033	0407_TP196_0.1_20(619 SOIL - 19/6/2020 SE207831.035	0407_TP196_1.5_20(619 SOIL - 19/6/2020 SE207831.036	0407_TP197_0.1_20(619 SOIL - 19/6/2020 SE207831.038
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP197_0.5_20(619 SOIL - 19/6/2020 SE207831.039	0407_QC117_20061(SOIL - 19/6/2020 SE207831.040	0407_QC115_20061(SOIL - 19/6/2020 SE207831.041	0407_QC121_20061(SOIL - 19/6/2020 SE207831.042	0407_QC119_20061(SOIL - 19/6/2020 SE207831.043
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_QC410_20061(SOIL - 19/6/2020 SE207831.044
Benzene (F0)	mg/kg	0.1	<0.1
TRH C6-C9	mg/kg	20	<20
TRH C6-C10	mg/kg	25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 24/6/2020

PARAMETER	UOM	LOR	0407_TP204_0.1_20(618 SOIL - 18/6/2020 SE207831.001	0407_TP204_0.5_20(618 SOIL - 18/6/2020 SE207831.002	0407_TP205_0.1_20(618 SOIL - 18/6/2020 SE207831.003	0407_TP205_0.5_20(618 SOIL - 18/6/2020 SE207831.004	0407_TP206_0.1_20(618 SOIL - 18/6/2020 SE207831.005
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	**210**
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	**960**
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	**210**
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	**88**
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	**88**
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	**1100**
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	**1400**
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	**1200**

PARAMETER	UOM	LOR	0407_TP206_1.0_20(618 SOIL - 18/6/2020 SE207831.006	0407_TP220_0.1_20(618 SOIL - 18/6/2020 SE207831.007	0407_TP220_1.0_20(618 SOIL - 18/6/2020 SE207831.008	0407_TP207_0.1_20(618 SOIL - 18/6/2020 SE207831.009	0407_TP207_1.0_20(618 SOIL - 18/6/2020 SE207831.010
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP203_0.1_20(618 SOIL - 18/6/2020 SE207831.011	0407_TP203_0.5_20(618 SOIL - 18/6/2020 SE207831.012	0407_TP202_0.5_20(618 SOIL - 18/6/2020 SE207831.013	0407_TP202_1.0_20(618 SOIL - 18/6/2020 SE207831.014	0407_TP201_0.1_20(618 SOIL - 18/6/2020 SE207831.015
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	**57**	<45	**57**
TRH C29-C36	mg/kg	45	**57**	<45	**56**	<45	**61**
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	**100**	<90	**100**
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	**110**	<110	**120**
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 24/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP201_0.5_20(618 SOIL - 18/6/2020 SE207831.016	0407_TP200_0.1_20(618 SOIL - 18/6/2020 SE207831.017	0407_TP200_0.5_20(618 SOIL - 18/6/2020 SE207831.018	0407_TP199_0.1_20(618 SOIL - 18/6/2020 SE207831.019	0407_TP199_0.5_20(618 SOIL - 18/6/2020 SE207831.020
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	**430**	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	**180**	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	**26**	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	**26**	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	**560**	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	**610**	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	**590**	<210	<210

PARAMETER	UOM	LOR	0407_TP198_0.1_20(618 SOIL - 18/6/2020 SE207831.021	0407_TP198_0.5_20(618 SOIL - 18/6/2020 SE207831.022	0407_TP222_0.1_20(619 SOIL - 18/6/2020 SE207831.023	0407_TP222_0.5_20(619 SOIL - 19/6/2020 SE207831.024	0407_TP221_0.1_20(619 SOIL - 19/6/2020 SE207831.026
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	**48**	<45	**88**	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	**86**	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	**160**	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	**170**	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP221_0.5_20(619 SOIL - 19/6/2020 SE207831.027	0407_TP209_0.1_20(619 SOIL - 19/6/2020 SE207831.028	0407_TP209_0.5_20(619 SOIL - 19/6/2020 SE207831.029	0407_TP208_0.1_20(619 SOIL - 19/6/2020 SE207831.030	0407_TP208_0.5_20(619 SOIL - 19/6/2020 SE207831.031
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	**370**	<45	**83**	<45	<45
TRH C29-C36	mg/kg	45	**370**	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	**650**	<90	**120**	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	**740**	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	**650**	<210	<210	<210	<210

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 24/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP195_0.1_20(619 SOIL - 19/6/2020 SE207831.032	0407_TP195_1.0_20(619 SOIL - 19/6/2020 SE207831.033	0407_TP196_0.1_20(619 SOIL - 19/6/2020 SE207831.035	0407_TP196_1.5_20(619 SOIL - 19/6/2020 SE207831.036	0407_TP197_0.1_20(619 SOIL - 19/6/2020 SE207831.038
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	**28**
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	**1800**
TRH C29-C36	mg/kg	45	**45**	<45	<45	<45	**1200**
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	**320**
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	**73**
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	**73**
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	**2800**
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	**550**
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	**3100**
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	**3400**

PARAMETER	UOM	LOR	0407_TP197_0.5_20(619 SOIL - 19/6/2020 SE207831.039	0407_QC117_20061(SOIL - 19/6/2020 SE207831.040	0407_QC115_20061(SOIL - 19/6/2020 SE207831.041	0407_QC121_20061(SOIL - 19/6/2020 SE207831.042	0407_QC119_20061(SOIL - 19/6/2020 SE207831.043
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	**130**	<45	<45	<45	**280**
TRH C29-C36	mg/kg	45	**110**	**78**	<45	<45	**300**
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	**220**	**98**	<90	<90	**510**
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	**120**
TRH C10-C36 Total	mg/kg	110	**240**	<110	<110	<110	**580**
TRH >C10-C40 Total (F bands)	mg/kg	210	**220**	<210	<210	<210	**630**

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 24/6/2020

PARAMETER	UOM	LOR	0407_TP204_0.1_20(618 SOIL - 18/6/2020 SE207831.001	0407_TP204_0.5_20(618 SOIL - 18/6/2020 SE207831.002	0407_TP205_0.1_20(618 SOIL - 18/6/2020 SE207831.003	0407_TP205_0.5_20(618 SOIL - 18/6/2020 SE207831.004	0407_TP206_0.1_20(618 SOIL - 18/6/2020 SE207831.005
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	0.1	<0.1	0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	0.2	0.3	0.3	0.2	0.1
Pyrene	mg/kg	0.1	0.2	0.2	0.3	0.2	<0.1
Benzo(a)anthracene	mg/kg	0.1	0.1	0.1	0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	0.1	0.1	0.1	0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	0.1	0.1	0.1	0.1	0.3
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	0.1	0.1	0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	0.2	<0.2	0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	1.3	1.0	1.2	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	1.3	1.0	1.2	<0.8	<0.8

PARAMETER	UOM	LOR	0407_TP206_1.0_20(618 SOIL - 18/6/2020 SE207831.006	0407_TP220_0.1_20(618 SOIL - 18/6/2020 SE207831.007	0407_TP220_1.0_20(618 SOIL - 18/6/2020 SE207831.008	0407_TP207_0.1_20(618 SOIL - 18/6/2020 SE207831.009	0407_TP207_1.0_20(618 SOIL - 18/6/2020 SE207831.010
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	0.1	<0.1	0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	0.4	<0.1	0.3	<0.1
Pyrene	mg/kg	0.1	<0.1	0.4	<0.1	0.3	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	0.2	<0.1	0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	0.2	<0.1	0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	0.2	<0.1	0.2	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	0.2	<0.1	0.2	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	0.3	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	0.4	<0.3	0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	0.3	<0.2	0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	2.1	<0.8	1.4	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	2.1	<0.8	1.4	<0.8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 24/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP203_0.1_20(618 SOIL - 18/6/2020 SE207831.011	0407_TP203_0.5_20(618 SOIL - 18/6/2020 SE207831.012	0407_TP202_0.5_20(618 SOIL - 18/6/2020 SE207831.013	0407_TP202_1.0_20(618 SOIL - 18/6/2020 SE207831.014	0407_TP201_0.1_20(618 SOIL - 18/6/2020 SE207831.015
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	0.1	0.1	0.1	<0.1	0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	0.3	0.2	0.3	<0.1	0.2
Pyrene	mg/kg	0.1	0.3	0.2	0.3	<0.1	0.2
Benzo(a)anthracene	mg/kg	0.1	0.1	0.1	0.1	<0.1	0.1
Chrysene	mg/kg	0.1	0.2	0.1	0.2	<0.1	0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	0.2	0.1	0.3	<0.1	0.2
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	0.1	<0.1	0.1
Benzo(a)pyrene	mg/kg	0.1	0.2	0.1	0.3	<0.1	0.2
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	0.1	<0.1	0.1	<0.1	0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	0.2	<0.2	0.3	<0.2	0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	0.3	<0.3	0.4	<0.3	0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	0.3	0.2	0.4	<0.2	0.3
Total PAH (18)	mg/kg	0.8	1.6	1.1	1.9	<0.8	1.4
Total PAH (NEPM/WHO 16)	mg/kg	0.8	1.6	1.1	1.9	<0.8	1.4

PARAMETER	UOM	LOR	0407_TP201_0.5_20(618 SOIL - 18/6/2020 SE207831.016	0407_TP200_0.1_20(618 SOIL - 18/6/2020 SE207831.017	0407_TP200_0.5_20(618 SOIL - 18/6/2020 SE207831.018	0407_TP199_0.1_20(618 SOIL - 18/6/2020 SE207831.019	0407_TP199_0.5_20(618 SOIL - 18/6/2020 SE207831.020
Naphthalene	mg/kg	0.1	<0.1	<0.1	0.4	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	0.3	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	0.3	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	3.2	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	0.4	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	2.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	0.1	22	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	4.9	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	0.3	22	0.2	<0.1
Pyrene	mg/kg	0.1	<0.1	0.4	22	0.3	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	0.2	12	0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	0.2	9.5	0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	0.2	11	0.2	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	0.1	4.5	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	0.2	10	0.2	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	0.1	4.3	0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	0.8	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	0.1	3.7	0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	0.3	14	0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	0.4	14	0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	0.3	14	0.3	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	1.9	130	1.4	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	1.9	130	1.4	<0.8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 24/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP198_0.1_20(618 SOIL - 18/6/2020 SE207831.021	0407_TP198_0.5_20(618 SOIL - 18/6/2020 SE207831.022	0407_TP222_0.1_20(619 SOIL - 18/6/2020 SE207831.023	0407_TP222_0.5_20(619 SOIL - 19/6/2020 SE207831.024	0407_TP221_0.1_20(619 SOIL - 19/6/2020 SE207831.026
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	0.2	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	0.2	<0.1	0.9	<0.1	0.2
Anthracene	mg/kg	0.1	0.1	<0.1	0.3	<0.1	<0.1
Fluoranthene	mg/kg	0.1	1.4	<0.1	2.2	0.3	0.2
Pyrene	mg/kg	0.1	1.6	<0.1	2.2	0.3	0.2
Benzo(a)anthracene	mg/kg	0.1	0.7	<0.1	1.0	0.2	<0.1
Chrysene	mg/kg	0.1	1.0	<0.1	1.2	0.2	0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	1.9	<0.1	2.0	0.2	0.1
Benzo(k)fluoranthene	mg/kg	0.1	0.9	<0.1	0.9	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	1.6	<0.1	1.8	0.2	0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	1.1	<0.1	1.4	0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	0.2	<0.1	0.2	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	1.2	<0.1	1.4	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	2.3	<0.2	2.5	0.3	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	2.3	<0.3	2.5	0.4	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	2.3	<0.2	2.5	0.3	<0.2
Total PAH (18)	mg/kg	0.8	12	<0.8	15	1.6	1.0
Total PAH (NEPM/WHO 16)	mg/kg	0.8	12	<0.8	15	1.6	1.0

PARAMETER	UOM	LOR	0407_TP221_0.5_20(619 SOIL - 19/6/2020 SE207831.027	0407_TP209_0.1_20(619 SOIL - 19/6/2020 SE207831.028	0407_TP209_0.5_20(619 SOIL - 19/6/2020 SE207831.029	0407_TP208_0.1_20(619 SOIL - 19/6/2020 SE207831.030	0407_TP208_0.5_20(619 SOIL - 19/6/2020 SE207831.031
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	0.4	<0.1	0.4	0.2	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	0.3	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	0.4	<0.1	<0.1
Phenanthrene	mg/kg	0.1	1.2	0.4	5.8	0.7	0.3
Anthracene	mg/kg	0.1	<0.1	0.2	1.6	0.3	0.1
Fluoranthene	mg/kg	0.1	8.3	1.4	14	2.0	0.9
Pyrene	mg/kg	0.1	9.8	1.4	15	2.0	0.9
Benzo(a)anthracene	mg/kg	0.1	6.9	0.5	5.1	1.0	0.5
Chrysene	mg/kg	0.1	6.3	0.6	4.7	0.9	0.4
Benzo(b&j)fluoranthene	mg/kg	0.1	12	1.1	7.1	1.1	0.6
Benzo(k)fluoranthene	mg/kg	0.1	4.7	0.4	2.9	0.5	0.2
Benzo(a)pyrene	mg/kg	0.1	10	0.9	6.9	1.0	0.5
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	7.7	0.7	4.9	0.6	0.3
Dibenzo(ah)anthracene	mg/kg	0.1	1.3	<0.1	0.5	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	6.4	0.7	4.4	0.4	0.2
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	15	1.2	9.5	1.4	0.7
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	15	1.3	9.5	1.5	0.8
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	15	1.3	9.5	1.4	0.7
Total PAH (18)	mg/kg	0.8	75	8.2	73	11	4.9
Total PAH (NEPM/WHO 16)	mg/kg	0.8	75	8.2	73	11	4.9

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 24/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP195_0.1_20(619 SOIL - 19/6/2020 SE207831.032	0407_TP195_1.0_20(619 SOIL - 19/6/2020 SE207831.033	0407_TP196_0.1_20(619 SOIL - 19/6/2020 SE207831.035	0407_TP196_1.5_20(619 SOIL - 19/6/2020 SE207831.036	0407_TP197_0.1_20(619 SOIL - 19/6/2020 SE207831.038
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	4.5
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	1.6
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	2.3
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	4.8
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	10
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	17
Phenanthrene	mg/kg	0.1	0.1	<0.1	0.3	<0.1	230
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	44
Fluoranthene	mg/kg	0.1	0.9	<0.1	0.5	0.1	270
Pyrene	mg/kg	0.1	1.1	<0.1	0.5	0.1	240
Benzo(a)anthracene	mg/kg	0.1	0.6	<0.1	0.2	<0.1	110
Chrysene	mg/kg	0.1	0.7	<0.1	0.2	<0.1	100
Benzo(b&j)fluoranthene	mg/kg	0.1	1.2	<0.1	0.3	0.1	130
Benzo(k)fluoranthene	mg/kg	0.1	0.6	<0.1	0.1	<0.1	45
Benzo(a)pyrene	mg/kg	0.1	1.0	<0.1	0.3	0.1	120
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.7	<0.1	0.1	<0.1	88
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	8.0
Benzo(ghi)perylene	mg/kg	0.1	0.7	<0.1	0.1	<0.1	61
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	1.4	<0.2	0.3	<0.2	170
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	1.5	<0.3	0.4	<0.3	170
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	1.4	<0.2	0.4	<0.2	170
Total PAH (18)	mg/kg	0.8	7.6	<0.8	2.6	<0.8	1500
Total PAH (NEPM/WHO 16)	mg/kg	0.8	7.6	<0.8	2.6	<0.8	1500

PARAMETER	UOM	LOR	0407_TP197_0.5_20(619 SOIL - 19/6/2020 SE207831.039	0407_QC117_20061(SOIL - 19/6/2020 SE207831.040	0407_QC115_20061(SOIL - 19/6/2020 SE207831.041	0407_QC121_20061(SOIL - 19/6/2020 SE207831.042	0407_QC119_20061(SOIL - 19/6/2020 SE207831.043
Naphthalene	mg/kg	0.1	0.3	<0.1	<0.1	<0.1	0.5
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	0.2
Acenaphthylene	mg/kg	0.1	0.6	<0.1	<0.1	<0.1	1.1
Acenaphthene	mg/kg	0.1	0.4	<0.1	<0.1	<0.1	0.8
Fluorene	mg/kg	0.1	0.6	<0.1	<0.1	<0.1	1.2
Phenanthrene	mg/kg	0.1	6.6	0.1	<0.1	0.2	14
Anthracene	mg/kg	0.1	1.5	<0.1	<0.1	<0.1	3.4
Fluoranthene	mg/kg	0.1	14	0.4	<0.1	0.4	24
Pyrene	mg/kg	0.1	13	0.3	<0.1	0.5	24
Benzo(a)anthracene	mg/kg	0.1	5.8	0.2	<0.1	0.2	11
Chrysene	mg/kg	0.1	5.3	0.2	<0.1	0.2	10
Benzo(b&j)fluoranthene	mg/kg	0.1	8.6	0.3	0.1	0.3	17
Benzo(k)fluoranthene	mg/kg	0.1	3.1	0.1	<0.1	0.1	6.2
Benzo(a)pyrene	mg/kg	0.1	8.1	0.3	<0.1	0.3	16
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	5.7	0.2	<0.1	0.2	12
Dibenzo(ah)anthracene	mg/kg	0.1	0.7	<0.1	<0.1	<0.1	1.5
Benzo(ghi)perylene	mg/kg	0.1	4.8	0.1	<0.1	0.1	10
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	11	0.3	<0.2	0.3	22
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	11	0.4	<0.3	0.4	22
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	11	0.4	<0.2	0.4	22
Total PAH (18)	mg/kg	0.8	79	2.1	<0.8	2.4	150
Total PAH (NEPM/WHO 16)	mg/kg	0.8	79	2.1	<0.8	2.4	150

Speciated Phenols in Soil [AN420] Tested: 24/6/2020

PARAMETER	UOM	LOR	0407_TP204_0.1_20(618 SOIL - 18/6/2020 SE207831.001	0407_TP204_0.5_20(618 SOIL - 18/6/2020 SE207831.002	0407_TP205_0.1_20(618 SOIL - 18/6/2020 SE207831.003	0407_TP205_0.5_20(618 SOIL - 18/6/2020 SE207831.004	0407_TP206_0.1_20(618 SOIL - 18/6/2020 SE207831.005
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_TP206_1.0_20(618 SOIL - 18/6/2020 SE207831.006	0407_TP220_0.1_20(618 SOIL - 18/6/2020 SE207831.007	0407_TP220_1.0_20(618 SOIL - 18/6/2020 SE207831.008	0407_TP207_0.1_20(618 SOIL - 18/6/2020 SE207831.009	0407_TP207_1.0_20(618 SOIL - 18/6/2020 SE207831.010
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

Speciated Phenols in Soil [AN420] Tested: 24/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP203_0.1_20(618 SOIL - 18/6/2020 SE207831.011	0407_TP203_0.5_20(618 SOIL - 18/6/2020 SE207831.012	0407_TP202_0.5_20(618 SOIL - 18/6/2020 SE207831.013	0407_TP202_1.0_20(618 SOIL - 18/6/2020 SE207831.014	0407_TP201_0.1_20(618 SOIL - 18/6/2020 SE207831.015
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_TP201_0.5_20(618 SOIL - 18/6/2020 SE207831.016	0407_TP200_0.1_20(618 SOIL - 18/6/2020 SE207831.017	0407_TP200_0.5_20(618 SOIL - 18/6/2020 SE207831.018	0407_TP199_0.1_20(618 SOIL - 18/6/2020 SE207831.019	0407_TP199_0.5_20(618 SOIL - 18/6/2020 SE207831.020
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

Speciated Phenols in Soil [AN420] Tested: 24/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP198_0.1_20(618 SOIL - 18/6/2020 SE207831.021	0407_TP198_0.5_20(618 SOIL - 18/6/2020 SE207831.022	0407_TP222_0.1_20(619 SOIL - 18/6/2020 SE207831.023	0407_TP222_0.5_20(619 SOIL - 19/6/2020 SE207831.024	0407_TP221_0.1_20(619 SOIL - 19/6/2020 SE207831.026
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_TP221_0.5_20(619 SOIL - 19/6/2020 SE207831.027	0407_TP209_0.1_20(619 SOIL - 19/6/2020 SE207831.028	0407_TP209_0.5_20(619 SOIL - 19/6/2020 SE207831.029	0407_TP208_0.1_20(619 SOIL - 19/6/2020 SE207831.030	0407_TP208_0.5_20(619 SOIL - 19/6/2020 SE207831.031
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

Speciated Phenols in Soil [AN420] Tested: 24/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP195_0.1_20(619 SOIL - 19/6/2020 SE207831.032	0407_TP195_1.0_20(619 SOIL - 19/6/2020 SE207831.033	0407_TP196_0.1_20(619 SOIL - 19/6/2020 SE207831.035	0407_TP196_1.5_20(619 SOIL - 19/6/2020 SE207831.036	0407_TP197_0.1_20(619 SOIL - 19/6/2020 SE207831.038
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_TP197_0.5_20(619 SOIL - 19/6/2020 SE207831.039	0407_QC117_200618 SOIL - 19/6/2020 SE207831.040	0407_QC115_200618 SOIL - 19/6/2020 SE207831.041	0407_QC121_20061 SOIL - 19/6/2020 SE207831.042	0407_QC119_200618 SOIL - 19/6/2020 SE207831.043
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

OC Pesticides in Soil [AN420] Tested: 24/6/2020

PARAMETER	UOM	LOR	0407_TP204_0.1_20(618 SOIL - 18/6/2020 SE207831.001	0407_TP204_0.5_20(618 SOIL - 18/6/2020 SE207831.002	0407_TP205_0.1_20(618 SOIL - 18/6/2020 SE207831.003	0407_TP205_0.5_20(618 SOIL - 18/6/2020 SE207831.004	0407_TP206_0.1_20(618 SOIL - 18/6/2020 SE207831.005
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 24/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP206_1.0_20(618 SOIL - 18/6/2020 SE207831.006	0407_TP220_0.1_20(618 SOIL - 18/6/2020 SE207831.007	0407_TP220_1.0_20(618 SOIL - 18/6/2020 SE207831.008	0407_TP207_0.1_20(618 SOIL - 18/6/2020 SE207831.009	0407_TP207_1.0_20(618 SOIL - 18/6/2020 SE207831.010
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 24/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP203_0.1_20(618 SOIL - 18/6/2020 SE207831.011	0407_TP203_0.5_20(618 SOIL - 18/6/2020 SE207831.012	0407_TP202_0.5_20(618 SOIL - 18/6/2020 SE207831.013	0407_TP202_1.0_20(618 SOIL - 18/6/2020 SE207831.014	0407_TP201_0.1_20(618 SOIL - 18/6/2020 SE207831.015
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 24/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP201_0.5_20(618 SOIL - 18/6/2020 SE207831.016	0407_TP200_0.1_20(618 SOIL - 18/6/2020 SE207831.017	0407_TP200_0.5_20(618 SOIL - 18/6/2020 SE207831.018	0407_TP199_0.1_20(618 SOIL - 18/6/2020 SE207831.019	0407_TP199_0.5_20(618 SOIL - 18/6/2020 SE207831.020
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	**0.1**	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	**0.1**	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 24/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP198_0.1_20(618 SOIL - 18/6/2020 SE207831.021	0407_TP198_0.5_20(618 SOIL - 18/6/2020 SE207831.022	0407_TP222_0.1_20(619 SOIL - 18/6/2020 SE207831.023	0407_TP222_0.5_20(619 SOIL - 19/6/2020 SE207831.024	0407_TP221_0.1_20(619 SOIL - 19/6/2020 SE207831.026
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	**0.3**	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	**0.2**	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 24/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP221_0.5_20(619 SOIL - 19/6/2020 SE207831.027	0407_TP209_0.1_20(619 SOIL - 19/6/2020 SE207831.028	0407_TP209_0.5_20(619 SOIL - 19/6/2020 SE207831.029	0407_TP208_0.1_20(619 SOIL - 19/6/2020 SE207831.030	0407_TP208_0.5_20(619 SOIL - 19/6/2020 SE207831.031
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	**0.4**	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 24/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP195_0.1_20(619 SOIL - 19/6/2020 SE207831.032	0407_TP195_1.0_20(619 SOIL - 19/6/2020 SE207831.033	0407_TP196_0.1_20(619 SOIL - 19/6/2020 SE207831.035	0407_TP196_1.5_20(619 SOIL - 19/6/2020 SE207831.036	0407_TP197_0.1_20(619 SOIL - 19/6/2020 SE207831.038
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 24/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP197_0.5_20619 SOIL - 19/6/2020 SE207831.039	0407_QC117_200618 SOIL - 19/6/2020 SE207831.040	0407_QC115_200618 SOIL - 19/6/2020 SE207831.041	0407_QC121_200618 SOIL - 19/6/2020 SE207831.042	0407_QC119_200618 SOIL - 19/6/2020 SE207831.043
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	**0.3**
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OP Pesticides in Soil [AN420] Tested: 24/6/2020

PARAMETER	UOM	LOR	0407_TP204_0.1_20(618 SOIL - 18/6/2020 SE207831.001	0407_TP204_0.5_20(618 SOIL - 18/6/2020 SE207831.002	0407_TP205_0.1_20(618 SOIL - 18/6/2020 SE207831.003	0407_TP205_0.5_20(618 SOIL - 18/6/2020 SE207831.004	0407_TP206_0.1_20(618 SOIL - 18/6/2020 SE207831.005
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP206_1.0_20(618 SOIL - 18/6/2020 SE207831.006	0407_TP220_0.1_20(618 SOIL - 18/6/2020 SE207831.007	0407_TP220_1.0_20(618 SOIL - 18/6/2020 SE207831.008	0407_TP207_0.1_20(618 SOIL - 18/6/2020 SE207831.009	0407_TP207_1.0_20(618 SOIL - 18/6/2020 SE207831.010
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP203_0.1_20(618 SOIL - 18/6/2020 SE207831.011	0407_TP203_0.5_20(618 SOIL - 18/6/2020 SE207831.012	0407_TP202_0.5_20(618 SOIL - 18/6/2020 SE207831.013	0407_TP202_1.0_20(618 SOIL - 18/6/2020 SE207831.014	0407_TP201_0.1_20(618 SOIL - 18/6/2020 SE207831.015
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

OP Pesticides in Soil [AN420] Tested: 24/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP201_0.5_20(618 SOIL - 18/6/2020 SE207831.016	0407_TP200_0.1_20(618 SOIL - 18/6/2020 SE207831.017	0407_TP200_0.5_20(618 SOIL - 18/6/2020 SE207831.018	0407_TP199_0.1_20(618 SOIL - 18/6/2020 SE207831.019	0407_TP199_0.5_20(618 SOIL - 18/6/2020 SE207831.020
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP198_0.1_20(618 SOIL - 18/6/2020 SE207831.021	0407_TP198_0.5_20(618 SOIL - 18/6/2020 SE207831.022	0407_TP222_0.1_20(619 SOIL - 18/6/2020 SE207831.023	0407_TP222_0.5_20(619 SOIL - 19/6/2020 SE207831.024	0407_TP221_0.1_20(619 SOIL - 19/6/2020 SE207831.026
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP221_0.5_20(619 SOIL - 19/6/2020 SE207831.027	0407_TP209_0.1_20(619 SOIL - 19/6/2020 SE207831.028	0407_TP209_0.5_20(619 SOIL - 19/6/2020 SE207831.029	0407_TP208_0.1_20(619 SOIL - 19/6/2020 SE207831.030	0407_TP208_0.5_20(619 SOIL - 19/6/2020 SE207831.031
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

OP Pesticides in Soil [AN420] Tested: 24/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP195_0.1_20(619 SOIL - 19/6/2020 SE207831.032	0407_TP195_1.0_20(619 SOIL - 19/6/2020 SE207831.033	0407_TP196_0.1_20(619 SOIL - 19/6/2020 SE207831.035	0407_TP196_1.5_20(619 SOIL - 19/6/2020 SE207831.036	0407_TP197_0.1_20(619 SOIL - 19/6/2020 SE207831.038
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP197_0.5_20(619 SOIL - 19/6/2020 SE207831.039	0407_QC117_20061(SOIL - 19/6/2020 SE207831.040	0407_QC115_20061(SOIL - 19/6/2020 SE207831.041	0407_QC121_20061(SOIL - 19/6/2020 SE207831.042	0407_QC119_20061(SOIL - 19/6/2020 SE207831.043
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PCBs in Soil [AN420] Tested: 24/6/2020

PARAMETER	UOM	LOR	0407_TP204_0.1_20(618 SOIL - 18/6/2020 SE207831.001	0407_TP204_0.5_20(618 SOIL - 18/6/2020 SE207831.002	0407_TP205_0.1_20(618 SOIL - 18/6/2020 SE207831.003	0407_TP205_0.5_20(618 SOIL - 18/6/2020 SE207831.004	0407_TP206_0.1_20(618 SOIL - 18/6/2020 SE207831.005
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP206_1.0_20(618 SOIL - 18/6/2020 SE207831.006	0407_TP220_0.1_20(618 SOIL - 18/6/2020 SE207831.007	0407_TP220_1.0_20(618 SOIL - 18/6/2020 SE207831.008	0407_TP207_0.1_20(618 SOIL - 18/6/2020 SE207831.009	0407_TP207_1.0_20(618 SOIL - 18/6/2020 SE207831.010
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP203_0.1_20(618 SOIL - 18/6/2020 SE207831.011	0407_TP203_0.5_20(618 SOIL - 18/6/2020 SE207831.012	0407_TP202_0.5_20(618 SOIL - 18/6/2020 SE207831.013	0407_TP202_1.0_20(618 SOIL - 18/6/2020 SE207831.014	0407_TP201_0.1_20(618 SOIL - 18/6/2020 SE207831.015
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PCBs in Soil [AN420] Tested: 24/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP201_0.5_20(618 SOIL - 18/6/2020 SE207831.016	0407_TP200_0.1_20(618 SOIL - 18/6/2020 SE207831.017	0407_TP200_0.5_20(618 SOIL - 18/6/2020 SE207831.018	0407_TP199_0.1_20(618 SOIL - 18/6/2020 SE207831.019	0407_TP199_0.5_20(618 SOIL - 18/6/2020 SE207831.020
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP198_0.1_20(618 SOIL - 18/6/2020 SE207831.021	0407_TP198_0.5_20(618 SOIL - 18/6/2020 SE207831.022	0407_TP222_0.1_20(619 SOIL - 18/6/2020 SE207831.023	0407_TP222_0.5_20(619 SOIL - 19/6/2020 SE207831.024	0407_TP221_0.1_20(619 SOIL - 19/6/2020 SE207831.026
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	**3.0**	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	**3**	<1	<1

PARAMETER	UOM	LOR	0407_TP221_0.5_20(619 SOIL - 19/6/2020 SE207831.027	0407_TP209_0.1_20(619 SOIL - 19/6/2020 SE207831.028	0407_TP209_0.5_20(619 SOIL - 19/6/2020 SE207831.029	0407_TP208_0.1_20(619 SOIL - 19/6/2020 SE207831.030	0407_TP208_0.5_20(619 SOIL - 19/6/2020 SE207831.031
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PCBs in Soil [AN420] Tested: 24/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP195_0.1_20(619 SOIL - 19/6/2020 SE207831.032	0407_TP195_1.0_20(619 SOIL - 19/6/2020 SE207831.033	0407_TP196_0.1_20(619 SOIL - 19/6/2020 SE207831.035	0407_TP196_1.5_20(619 SOIL - 19/6/2020 SE207831.036	0407_TP197_0.1_20(619 SOIL - 19/6/2020 SE207831.038
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP197_0.5_20(619 SOIL - 19/6/2020 SE207831.039	0407_QC117_20061(SOIL - 19/6/2020 SE207831.040	0407_QC115_20061(SOIL - 19/6/2020 SE207831.041	0407_QC121_20061(SOIL - 19/6/2020 SE207831.042	0407_QC119_20061(SOIL - 19/6/2020 SE207831.043
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 24/6/2020

PARAMETER	UOM	LOR	0407_TP204_0.1_20(618 SOIL - 18/6/2020 SE207831.001	0407_TP204_0.5_20(618 SOIL - 18/6/2020 SE207831.002	0407_TP205_0.1_20(618 SOIL - 18/6/2020 SE207831.003	0407_TP205_0.5_20(618 SOIL - 18/6/2020 SE207831.004	0407_TP206_0.1_20(618 SOIL - 18/6/2020 SE207831.005
Arsenic, As	mg/kg	1	8	<1	8	2	4
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	0.4
Chromium, Cr	mg/kg	0.5	16	0.8	21	1.9	9.8
Copper, Cu	mg/kg	0.5	58	2.8	59	4.2	48
Lead, Pb	mg/kg	1	100	22	97	62	65
Nickel, Ni	mg/kg	0.5	9.9	<0.5	12	0.8	7.3
Zinc, Zn	mg/kg	2	250	22	330	35	260

PARAMETER	UOM	LOR	0407_TP206_1.0_20(618 SOIL - 18/6/2020 SE207831.006	0407_TP220_0.1_20(618 SOIL - 18/6/2020 SE207831.007	0407_TP220_1.0_20(618 SOIL - 18/6/2020 SE207831.008	0407_TP207_0.1_20(618 SOIL - 18/6/2020 SE207831.009	0407_TP207_1.0_20(618 SOIL - 18/6/2020 SE207831.010
Arsenic, As	mg/kg	1	<1	8	<1	8	<1
Cadmium, Cd	mg/kg	0.3	<0.3	0.4	<0.3	0.4	<0.3
Chromium, Cr	mg/kg	0.5	1.2	18	<0.5	19	1.1
Copper, Cu	mg/kg	0.5	1.8	160	<0.5	87	1.6
Lead, Pb	mg/kg	1	9	99	<1	98	8
Nickel, Ni	mg/kg	0.5	0.6	25	<0.5	13	<0.5
Zinc, Zn	mg/kg	2	9.1	320	<2.0	640	5.7

PARAMETER	UOM	LOR	0407_TP203_0.1_20(618 SOIL - 18/6/2020 SE207831.011	0407_TP203_0.5_20(618 SOIL - 18/6/2020 SE207831.012	0407_TP202_0.5_20(618 SOIL - 18/6/2020 SE207831.013	0407_TP202_1.0_20(618 SOIL - 18/6/2020 SE207831.014	0407_TP201_0.1_20(618 SOIL - 18/6/2020 SE207831.015
Arsenic, As	mg/kg	1	11	7	8	<1	9
Cadmium, Cd	mg/kg	0.3	0.4	<0.3	<0.3	<0.3	0.4
Chromium, Cr	mg/kg	0.5	24	23	15	<0.5	19
Copper, Cu	mg/kg	0.5	56	45	46	<0.5	71
Lead, Pb	mg/kg	1	99	68	76	<1	130
Nickel, Ni	mg/kg	0.5	13	13	9.8	<0.5	13
Zinc, Zn	mg/kg	2	290	210	240	<2.0	360

PARAMETER	UOM	LOR	0407_TP201_0.5_20(618 SOIL - 18/6/2020 SE207831.016	0407_TP200_0.1_20(618 SOIL - 18/6/2020 SE207831.017	0407_TP200_0.5_20(618 SOIL - 18/6/2020 SE207831.018	0407_TP199_0.1_20(618 SOIL - 18/6/2020 SE207831.019	0407_TP199_0.5_20(618 SOIL - 18/6/2020 SE207831.020
Arsenic, As	mg/kg	1	<1	6	2	1	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	1.0	14	4.2	1.3	1.3
Copper, Cu	mg/kg	0.5	3.9	50	31	8.5	1.7
Lead, Pb	mg/kg	1	9	110	120	27	3
Nickel, Ni	mg/kg	0.5	1.0	10	5.2	0.9	0.8
Zinc, Zn	mg/kg	2	12	210	190	11	69

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 24/6/2020

(continued)

PARAMETER	UOM	LOR	0407_TP198_0.1_20(618 SOIL - 18/6/2020 SE207831.021	0407_TP198_0.5_20(618 SOIL - 18/6/2020 SE207831.022	0407_TP222_0.1_20(619 SOIL - 18/6/2020 SE207831.023	0407_TP222_0.5_20(619 SOIL - 19/6/2020 SE207831.024	0407_TP221_0.1_20(619 SOIL - 19/6/2020 SE207831.026
Arsenic, As	mg/kg	1	7	<1	5	<1	15
Cadmium, Cd	mg/kg	0.3	0.5	<0.3	0.7	<0.3	0.8
Chromium, Cr	mg/kg	0.5	5.1	0.7	8.9	0.8	3.4
Copper, Cu	mg/kg	0.5	31	1.6	72	6.3	71
Lead, Pb	mg/kg	1	150	5	180	54	58
Nickel, Ni	mg/kg	0.5	4.2	<0.5	9.4	0.9	11
Zinc, Zn	mg/kg	2	240	27	910	40	220

PARAMETER	UOM	LOR	0407_TP221_0.5_20(619 SOIL - 19/6/2020 SE207831.027	0407_TP209_0.1_20(619 SOIL - 19/6/2020 SE207831.028	0407_TP209_0.5_20(619 SOIL - 19/6/2020 SE207831.029	0407_TP208_0.1_20(619 SOIL - 19/6/2020 SE207831.030	0407_TP208_0.5_20(619 SOIL - 19/6/2020 SE207831.031
Arsenic, As	mg/kg	1	4	3	1	2	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	3.7	6.3	4.2	2.6	6.5
Copper, Cu	mg/kg	0.5	27	25	12	14	16
Lead, Pb	mg/kg	1	96	47	12	45	32
Nickel, Ni	mg/kg	0.5	3.0	5.0	4.9	5.6	3.3
Zinc, Zn	mg/kg	2	190	68	14	37	36

PARAMETER	UOM	LOR	0407_TP195_0.1_20(619 SOIL - 19/6/2020 SE207831.032	0407_TP195_1.0_20(619 SOIL - 19/6/2020 SE207831.033	0407_TP196_0.1_20(619 SOIL - 19/6/2020 SE207831.035	0407_TP196_1.5_20(619 SOIL - 19/6/2020 SE207831.036	0407_TP197_0.1_20(619 SOIL - 19/6/2020 SE207831.038
Arsenic, As	mg/kg	1	2	<1	5	2	4
Cadmium, Cd	mg/kg	0.3	0.5	<0.3	<0.3	<0.3	0.5
Chromium, Cr	mg/kg	0.5	6.7	1.7	7.5	2.6	6.0
Copper, Cu	mg/kg	0.5	23	1.1	23	5.3	59
Lead, Pb	mg/kg	1	160	<1	41	20	170
Nickel, Ni	mg/kg	0.5	1.6	<0.5	4.2	0.7	8.2
Zinc, Zn	mg/kg	2	210	3.1	130	22	150

PARAMETER	UOM	LOR	0407_TP197_0.5_20(619 SOIL - 19/6/2020 SE207831.039	0407_QC117_20061{ SOIL - 19/6/2020 SE207831.040	0407_QC115_20061{ SOIL - 19/6/2020 SE207831.041	0407_QC121_20061{ SOIL - 19/6/2020 SE207831.042	0407_QC119_20061{ SOIL - 19/6/2020 SE207831.043
Arsenic, As	mg/kg	1	2	8	2	4	5
Cadmium, Cd	mg/kg	0.3	<0.3	0.3	<0.3	<0.3	0.3
Chromium, Cr	mg/kg	0.5	4.8	18	2.0	7.6	8.5
Copper, Cu	mg/kg	0.5	94	42	5.0	23	45
Lead, Pb	mg/kg	1	48	90	22	47	160
Nickel, Ni	mg/kg	0.5	7.9	9.9	0.7	4.5	9.2
Zinc, Zn	mg/kg	2	120	260	16	110	170

Mercury in Soil [AN312] Tested: 24/6/2020

PARAMETER	UOM	LOR	0407_TP204_0.1_20(618 SOIL - 18/6/2020 SE207831.001	0407_TP204_0.5_20(618 SOIL - 18/6/2020 SE207831.002	0407_TP205_0.1_20(618 SOIL - 18/6/2020 SE207831.003	0407_TP205_0.5_20(618 SOIL - 18/6/2020 SE207831.004	0407_TP206_0.1_20(618 SOIL - 18/6/2020 SE207831.005
Mercury	mg/kg	0.05	0.06	<0.05	0.08	0.12	0.07

PARAMETER	UOM	LOR	0407_TP206_1.0_20(618 SOIL - 18/6/2020 SE207831.006	0407_TP220_0.1_20(618 SOIL - 18/6/2020 SE207831.007	0407_TP220_1.0_20(618 SOIL - 18/6/2020 SE207831.008	0407_TP207_0.1_20(618 SOIL - 18/6/2020 SE207831.009	0407_TP207_1.0_20(618 SOIL - 18/6/2020 SE207831.010
Mercury	mg/kg	0.05	<0.05	0.08	<0.05	0.20	<0.05

PARAMETER	UOM	LOR	0407_TP203_0.1_20(618 SOIL - 18/6/2020 SE207831.011	0407_TP203_0.5_20(618 SOIL - 18/6/2020 SE207831.012	0407_TP202_0.5_20(618 SOIL - 18/6/2020 SE207831.013	0407_TP202_1.0_20(618 SOIL - 18/6/2020 SE207831.014	0407_TP201_0.1_20(618 SOIL - 18/6/2020 SE207831.015
Mercury	mg/kg	0.05	0.07	0.08	0.07	<0.05	0.10

PARAMETER	UOM	LOR	0407_TP201_0.5_20(618 SOIL - 18/6/2020 SE207831.016	0407_TP200_0.1_20(618 SOIL - 18/6/2020 SE207831.017	0407_TP200_0.5_20(618 SOIL - 18/6/2020 SE207831.018	0407_TP199_0.1_20(618 SOIL - 18/6/2020 SE207831.019	0407_TP199_0.5_20(618 SOIL - 18/6/2020 SE207831.020
Mercury	mg/kg	0.05	<0.05	0.21	0.20	0.07	<0.05

PARAMETER	UOM	LOR	0407_TP198_0.1_20(618 SOIL - 18/6/2020 SE207831.021	0407_TP198_0.5_20(618 SOIL - 18/6/2020 SE207831.022	0407_TP222_0.1_20(619 SOIL - 18/6/2020 SE207831.023	0407_TP222_0.5_20(619 SOIL - 19/6/2020 SE207831.024	0407_TP221_0.1_20(619 SOIL - 19/6/2020 SE207831.026
Mercury	mg/kg	0.05	0.11	<0.05	0.15	<0.05	0.07

PARAMETER	UOM	LOR	0407_TP221_0.5_20(619 SOIL - 19/6/2020 SE207831.027	0407_TP209_0.1_20(619 SOIL - 19/6/2020 SE207831.028	0407_TP209_0.5_20(619 SOIL - 19/6/2020 SE207831.029	0407_TP208_0.1_20(619 SOIL - 19/6/2020 SE207831.030	0407_TP208_0.5_20(619 SOIL - 19/6/2020 SE207831.031
Mercury	mg/kg	0.05	0.08	0.10	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_TP195_0.1_20(619 SOIL - 19/6/2020 SE207831.032	0407_TP195_1.0_20(619 SOIL - 19/6/2020 SE207831.033	0407_TP196_0.1_20(619 SOIL - 19/6/2020 SE207831.035	0407_TP196_1.5_20(619 SOIL - 19/6/2020 SE207831.036	0407_TP197_0.1_20(619 SOIL - 19/6/2020 SE207831.038
Mercury	mg/kg	0.05	0.09	<0.05	0.08	0.05	0.14

Mercury in Soil [AN312] Tested: 24/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP197_0.5_20619 SOIL - 19/6/2020 SE207831.039	0407_QC117_200618 SOIL - 19/6/2020 SE207831.040	0407_QC115_200618 SOIL - 19/6/2020 SE207831.041	0407_QC121_200618 SOIL - 19/6/2020 SE207831.042	0407_QC119_200618 SOIL - 19/6/2020 SE207831.043
Mercury	mg/kg	0.05	**0.35**	**0.09**	**0.21**	**0.10**	**0.18**

Moisture Content [AN002] Tested: 24/6/2020

PARAMETER	UOM	LOR	0407_TP204_0.1_20(618 SOIL - 18/6/2020 SE207831.001	0407_TP204_0.5_20(618 SOIL - 18/6/2020 SE207831.002	0407_TP205_0.1_20(618 SOIL - 18/6/2020 SE207831.003	0407_TP205_0.5_20(618 SOIL - 18/6/2020 SE207831.004	0407_TP206_0.1_20(618 SOIL - 18/6/2020 SE207831.005
% Moisture	%w/w	1	20.8	4.2	21.1	4.4	43.8

PARAMETER	UOM	LOR	0407_TP206_1.0_20(618 SOIL - 18/6/2020 SE207831.006	0407_TP220_0.1_20(618 SOIL - 18/6/2020 SE207831.007	0407_TP220_1.0_20(618 SOIL - 18/6/2020 SE207831.008	0407_TP207_0.1_20(618 SOIL - 18/6/2020 SE207831.009	0407_TP207_1.0_20(618 SOIL - 18/6/2020 SE207831.010
% Moisture	%w/w	1	6.2	46.0	5.0	20.5	10.7

PARAMETER	UOM	LOR	0407_TP203_0.1_20(618 SOIL - 18/6/2020 SE207831.011	0407_TP203_0.5_20(618 SOIL - 18/6/2020 SE207831.012	0407_TP202_0.5_20(618 SOIL - 18/6/2020 SE207831.013	0407_TP202_1.0_20(618 SOIL - 18/6/2020 SE207831.014	0407_TP201_0.1_20(618 SOIL - 18/6/2020 SE207831.015
% Moisture	%w/w	1	22.8	22.0	19.8	3.6	20.0

PARAMETER	UOM	LOR	0407_TP201_0.5_20(618 SOIL - 18/6/2020 SE207831.016	0407_TP200_0.1_20(618 SOIL - 18/6/2020 SE207831.017	0407_TP200_0.5_20(618 SOIL - 18/6/2020 SE207831.018	0407_TP199_0.1_20(618 SOIL - 18/6/2020 SE207831.019	0407_TP199_0.5_20(618 SOIL - 18/6/2020 SE207831.020
% Moisture	%w/w	1	5.8	25.6	19.8	14.6	14.7

PARAMETER	UOM	LOR	0407_TP198_0.1_20(618 SOIL - 18/6/2020 SE207831.021	0407_TP198_0.5_20(618 SOIL - 18/6/2020 SE207831.022	0407_TP222_0.1_20(619 SOIL - 18/6/2020 SE207831.023	0407_TP222_0.5_20(619 SOIL - 19/6/2020 SE207831.024	0407_TP221_0.1_20(619 SOIL - 19/6/2020 SE207831.026
% Moisture	%w/w	1	28.8	13.3	13.6	6.5	21.9

PARAMETER	UOM	LOR	0407_TP221_0.5_20(619 SOIL - 19/6/2020 SE207831.027	0407_TP209_0.1_20(619 SOIL - 19/6/2020 SE207831.028	0407_TP209_0.5_20(619 SOIL - 19/6/2020 SE207831.029	0407_TP208_0.1_20(619 SOIL - 19/6/2020 SE207831.030	0407_TP208_0.5_20(619 SOIL - 19/6/2020 SE207831.031
% Moisture	%w/w	1	15.3	23.5	8.8	6.5	7.0

PARAMETER	UOM	LOR	0407_TP195_0.1_20(619 SOIL - 19/6/2020 SE207831.032	0407_TP195_1.0_20(619 SOIL - 19/6/2020 SE207831.033	0407_TP196_0.1_20(619 SOIL - 19/6/2020 SE207831.035	0407_TP196_1.5_20(619 SOIL - 19/6/2020 SE207831.036	0407_TP197_0.1_20(619 SOIL - 19/6/2020 SE207831.038
% Moisture	%w/w	1	13.2	14.9	12.0	9.6	15.0

Moisture Content [AN002] Tested: 24/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP197_0.5_20619 SOIL - 19/6/2020 SE207831.039	0407_QC117_200618 SOIL - 19/6/2020 SE207831.040	0407_QC115_200618 SOIL - 19/6/2020 SE207831.041	0407_QC121_200619 SOIL - 19/6/2020 SE207831.042	0407_QC119_200618 SOIL - 19/6/2020 SE207831.043
% Moisture	%w/w	1	**11.4**	**21.7**	**4.6**	**12.8**	**15.5**

PARAMETER	UOM	LOR	0407_QC410_200619 SOIL - 19/6/2020 SE207831.044
% Moisture	%w/w	1	<1.0

Fibre ID in bulk materials [AN602] Tested: 29/6/2020

PARAMETER	UOM	LOR	0407_TP222_0.1_AC M_200619 MATERIAL - 19/6/2020 SE207831.025	0407_TP196_0.1_CM _200619 MATERIAL - 19/6/2020 SE207831.034	0407_TP197_0.1_AC M_200619 MATERIAL - 19/6/2020 SE207831.037
Asbestos Detected	No unit	-	Yes	Yes	Yes

Fibre Identification in soil [AN602] Tested: 26/6/2020

PARAMETER	UOM	LOR	0407_TP204_0.1_20(618 SOIL - 18/6/2020 SE207831.001	0407_TP205_0.1_20(618 SOIL - 18/6/2020 SE207831.003	0407_TP206_0.1_20(618 SOIL - 18/6/2020 SE207831.005	0407_TP220_0.1_20(618 SOIL - 18/6/2020 SE207831.007	0407_TP207_0.1_20(618 SOIL - 18/6/2020 SE207831.009
Asbestos Detected	No unit	-	Yes	Yes	No	Yes	Yes
Estimated Fibres*	%w/w	0.01	<0.01	**>0.01**	<0.01	**>0.01**	**>0.01**

PARAMETER	UOM	LOR	0407_TP203_0.1_20(618 SOIL - 18/6/2020 SE207831.011	0407_TP203_0.5_20(618 SOIL - 18/6/2020 SE207831.012	0407_TP202_0.5_20(618 SOIL - 18/6/2020 SE207831.013	0407_TP202_1.0_20(618 SOIL - 18/6/2020 SE207831.014	0407_TP201_0.1_20(618 SOIL - 18/6/2020 SE207831.015
Asbestos Detected	No unit	-	Yes	Yes	No	No	Yes
Estimated Fibres*	%w/w	0.01	**>0.01**	<0.01	<0.01	<0.01	**>0.01**

PARAMETER	UOM	LOR	0407_TP201_0.5_20(618 SOIL - 18/6/2020 SE207831.016	0407_TP200_0.1_20(618 SOIL - 18/6/2020 SE207831.017	0407_TP199_0.1_20(618 SOIL - 18/6/2020 SE207831.019	0407_TP222_0.1_20(619 SOIL - 18/6/2020 SE207831.023	0407_TP222_0.5_20(619 SOIL - 19/6/2020 SE207831.024
Asbestos Detected	No unit	-	No	Yes	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	0407_TP221_0.1_20(619 SOIL - 19/6/2020 SE207831.026	0407_TP221_0.5_20(619 SOIL - 19/6/2020 SE207831.027	0407_TP209_0.1_20(619 SOIL - 19/6/2020 SE207831.028	0407_TP208_0.1_20(619 SOIL - 19/6/2020 SE207831.030	0407_TP195_0.1_20(619 SOIL - 19/6/2020 SE207831.032
Asbestos Detected	No unit	-	No	No	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	0407_TP196_0.1_20(619 SOIL - 19/6/2020 SE207831.035	0407_TP196_1.5_20(619 SOIL - 19/6/2020 SE207831.036	0407_TP197_0.1_20(619 SOIL - 19/6/2020 SE207831.038	0407_TP197_0.5_20(619 SOIL - 19/6/2020 SE207831.039
Asbestos Detected	No unit	-	Yes	Yes	No	Yes
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 26/6/2020

PARAMETER	UOM	LOR	0407_TP204_0.1_20(618 SOIL - 18/6/2020 SE207831.001	0407_TP205_0.1_20(618 SOIL - 18/6/2020 SE207831.003	0407_TP206_0.1_20(618 SOIL - 18/6/2020 SE207831.005	0407_TP220_0.1_20(618 SOIL - 18/6/2020 SE207831.007	0407_TP207_0.1_20(618 SOIL - 18/6/2020 SE207831.009
Total Sample Weight*	g	1	587	643	344	620	703
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	0.0306	0.0950	<0.00001	0.0887	0.197
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	0.005	0.015	<0.001	0.014	0.028
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	0.005	0.015	<0.001	0.014	0.028
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP203_0.1_20(618 SOIL - 18/6/2020 SE207831.011	0407_TP203_0.5_20(618 SOIL - 18/6/2020 SE207831.012	0407_TP202_0.5_20(618 SOIL - 18/6/2020 SE207831.013	0407_TP202_1.0_20(618 SOIL - 18/6/2020 SE207831.014	0407_TP201_0.1_20(618 SOIL - 18/6/2020 SE207831.015
Total Sample Weight*	g	1	616	664	669	1227	622
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	0.141	0.0358	<0.00001	<0.00001	0.136
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	0.023	0.005	<0.001	<0.001	0.022
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	0.023	0.005	<0.001	<0.001	0.022
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP201_0.5_20(618 SOIL - 18/6/2020 SE207831.016	0407_TP200_0.1_20(618 SOIL - 18/6/2020 SE207831.017	0407_TP199_0.1_20(618 SOIL - 18/6/2020 SE207831.019	0407_TP222_0.1_20(619 SOIL - 18/6/2020 SE207831.023	0407_TP222_0.5_20(619 SOIL - 19/6/2020 SE207831.024
Total Sample Weight*	g	1	1236	735	1015	893	926
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	0.0571	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	0.008	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	0.008	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP221_0.1_20(619 SOIL - 19/6/2020 SE207831.026	0407_TP221_0.5_20(619 SOIL - 19/6/2020 SE207831.027	0407_TP209_0.1_20(619 SOIL - 19/6/2020 SE207831.028	0407_TP208_0.1_20(619 SOIL - 19/6/2020 SE207831.030	0407_TP195_0.1_20(619 SOIL - 19/6/2020 SE207831.032
Total Sample Weight*	g	1	634	867	659	1055	920
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 26/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP196_0.1_20(619 SOIL - 19/6/2020 SE207831.035	0407_TP196_1.5_20(619 SOIL - 19/6/2020 SE207831.036	0407_TP197_0.1_20(619 SOIL - 19/6/2020 SE207831.038	0407_TP197_0.5_20(619 SOIL - 19/6/2020 SE207831.039
Total Sample Weight*	g	1	**876**	**1286**	**880**	**1095**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	**0.00173**	**0.00122**	<0.00001	**0.00043**
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid , mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser . Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC /MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents .
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup /fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS /ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples, Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable ’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.
AN605	This technique gravimetrically determines the mass of Bonded Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight. Any fibrous asbestos (FA) found in this fraction will be added to the 2-7mm fraction and its mass recorded there.

AN605	This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free/respirable fibres which are only observed by standard trace analysis as per AN602.
AN605	Bonded asbestos containing material (Bonded ACM) comprises asbestos-containing-material which is sound in condition. Fibrous asbestos (FA) comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material. Asbestos fines (AF) includes free fibres, small fibre bundles and also small fragments of bonded ACM that passes through a 7mm sieve - which implies that the bonded ACM fragments have a substantial degree of damage which increases the potential for fibre release.
AN-605	Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009 and NEPM 1999 (2013) schedule B1 section 4..

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	27

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
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Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207831 R0**
Date Received	19 Jun 2020
Date Reported	30 Jun 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.

Sample #1: Asbestos found in approx 5x3x2mm cement sheet fragments in >2mm portion.
Sample #3, 11: Asbestos found in approx 8x4x2mm cement sheet fragments in >2mm portion.
Sample #7: Asbestos found in approx 7x5x2mm cement sheet fragments in >2mm portion.
Sample #9: Asbestos found in approx 15x5x3mm cement sheet fragments x6 in >2mm portion.
Sample #12: Asbestos found in approx 3x2x1mm cement sheet fragments in >2mm portion.
Sample #15: Asbestos found in approx 10x5x3mm cement sheet fragments x4 in >2mm portion.
Sample #17: Asbestos found in approx 6x4x2mm cement sheet fragments in >2mm portion.
Sample #35-36: Approx 5-6x1mm fibre bundles found loose in sample in >2mm portion.
Sample #39: Approx 4-5x0.5mm fibre bundles found loose in sample in >2mm portion.

Asbestos analysed by Approved Identifiers Ravee Sivasubramaniam and Yusuf Kuthpudin .

SIGNATORIES

[redacted]

Chemist | Senior Organic Chemist/Metals Chemis | Organic Section Head

[redacted]

Asbestos Analyst

RESULTS

Fibre ID in bulk materials — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE207831.025	0407_TP222_0.1 _ACM_200619	Other	60x60x5mm Cement sheet fragment	19 Jun 2020	Amosite, Chrysotile & Crocidolite Asbestos Detected	
SE207831.034	0407_TP196_0.1 _CM_200619	Other	70x50x5mm Cement sheet fragments	19 Jun 2020	Amosite, Chrysotile & Crocidolite Asbestos Detected	
SE207831.037	0407_TP197_0.1 _ACM_200619	Other	30x10x3mm Cement sheet fragment	19 Jun 2020	Amosite, Chrysotile & Crocidolite Asbestos Detected	

RESULTS

Fibre Identification in soil — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE207831.001	0407_TP204_0.1 _200618	Soil	587g Sand, Soil, Rocks, Plant matter	18 Jun 2020	Chrysotile Asbestos Found Synthetic Mineral Fibres Detected Organic Fibres Detected	<0.01
SE207831.003	0407_TP205_0.1 _200618	Soil	643g Sand, Soil, Rocks, Plant matter	18 Jun 2020	Chrysotile Asbestos Found Synthetic Mineral Fibres Detected Organic Fibres Detected	>0.01
SE207831.005	0407_TP206_0.1 _200618	Soil	344g Sand, Soil, Rocks, Plant matter	18 Jun 2020	No Asbestos Found Synthetic Mineral Fibres Detected Organic Fibres Detected	<0.01
SE207831.007	0407_TP220_0.1 _200618	Soil	620g Sand, Soil, Rocks, Plant matter	18 Jun 2020	Chrysotile Asbestos Found Synthetic Mineral Fibres Detected Organic Fibres Detected	>0.01
SE207831.009	0407_TP207_0.1 _200618	Soil	703g Sand, Soil, Rocks, Plant matter	18 Jun 2020	Chrysotile Asbestos Found Organic Fibres Detected	>0.01
SE207831.011	0407_TP203_0.1 _200618	Soil	616g Sand, Soil, Rocks	18 Jun 2020	Chrysotile & Crocidolite Asbestos Found Synthetic Mineral Fibres Detected Organic Fibres Detected	>0.01
SE207831.012	0407_TP203_0.5 _200618	Soil	664g Sand, Soil, Rocks, Plant matter	18 Jun 2020	Chrysotile & Crocidolite Asbestos Found Synthetic Mineral Fibres Detected Organic Fibres Detected	<0.01
SE207831.013	0407_TP202_0.5 _200618	Soil	669g Sand, Soil, Rocks, Plant matter	18 Jun 2020	No Asbestos Found Synthetic Mineral Fibres Detected Organic Fibres Detected	<0.01
SE207831.014	0407_TP202_1.0 _200618	Soil	1227g Sand, Soil, Rocks	18 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE207831.015	0407_TP201_0.1 _200618	Soil	622g Sand, Soil, Rocks, Plant matter	18 Jun 2020	Chrysotile Asbestos Found Synthetic Mineral Fibres Detected Organic Fibres Detected	>0.01
SE207831.016	0407_TP201_0.5 _200618	Soil	1236g Sand, Soil, Rocks	18 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE207831.017	0407_TP200_0.1 _200618	Soil	735g Sand, Soil, Rocks	18 Jun 2020	Chrysotile Asbestos Found Synthetic Mineral Fibres Detected Organic Fibres Detected	<0.01
SE207831.019	0407_TP199_0.1 _200618	Soil	1015g Sand, Soil, Plant matter	18 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE207831.023	0407_TP222_0.1 _200619	Soil	893g Sand, Soil, Rocks	18 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE207831.024	0407_TP222_0.5 _200619	Soil	926 Sand, Soil, Rocks	19 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE207831.026	0407_TP221_0.1 _200619	Soil	634g Sand, Soil, Rocks	19 Jun 2020	No Asbestos Found	<0.01
SE207831.027	0407_TP221_0.5 _200619	Soil	867g Sand, Soil, Rocks	19 Jun 2020	No Asbestos Found	<0.01
SE207831.028	0407_TP209_0.1 _200619	Soil	659g Sand, Soil, Rocks, Plant matter	19 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE207831.030	0407_TP208_0.1 _200619	Soil	1055g Sand, Soil, Rocks	19 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE207831.032	0407_TP195_0.1 _200619	Soil	920g Sand, Soil, Rocks, Plant matter	19 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE207831.035	0407_TP196_0.1 _200619	Soil	876g Sand, Soil, Rocks	19 Jun 2020	Chrysotile Asbestos Found Organic Fibres Detected	<0.01

RESULTS

Fibre Identification in soil — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE207831.036	0407_TP196_1.5 _200619	Soil	1286g Sand, Soil, Rocks, Plant matter	19 Jun 2020	Chrysotile Asbestos Found	<0.01
SE207831.038	0407_TP197_0.1 _200619	Soil	880g Sand, Soil, Plant matter	19 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE207831.039	0407_TP197_0.5 _200619	Soil	1095g Sand, Soil, Rocks	19 Jun 2020	Chrysotile Asbestos Found Organic Fibres Detected	<0.01

METHOD SUMMARY

SE207831 R0

METHOD	METHODOLOGY SUMMARY
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples , Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable ’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.

FOOTNOTES

Amosite	-	Brown Asbestos	NA	-	Not Analysed
Chrysotile	-	White Asbestos	LNR	-	Listed, Not Required
Crocidolite	-	Blue Asbestos	*	-	NATA accreditation does not cover the performance of this service .
Amphiboles	-	Amosite and/or Crocidolite	**	-	Indicative data, theoretical holding time exceeded.

(In reference to soil samples only) This report does not comply with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment and Remediation and Management of Asbestos Contaminated sites in Western Australia - May 2009.

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.

Where reported: 'Asbestos Detected': Asbestos detected by polarised light microscopy, including dispersion staining.
Where reported: 'No Asbestos Found': No Asbestos Found by polarised light microscopy , including dispersion staining.
Where reported: 'UMF Detected': Mineral fibres of unknown type detected by polarised light microscopy, including dispersion staining. Confirmation by another independent analytical technique may be necessary.

Even after disintegration it can be very difficult, or impossible, to detect the presence of asbestos in some asbestos -containing bulk materials using polarised light microscopy. This is due to the low grade or small length or diameter of asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety .

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STATEMENT OF QA/QC PERFORMANCE

SE207831 R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	45

LABORATORY DETAILS

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Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207831 R0**
Date Received	19 Jun 2020
Date Reported	30 Jun 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Surrogate	VOC's in Soil	1 item
	Volatile Petroleum Hydrocarbons in Soil	1 item
Duplicate	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	4 items
	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	1 item
	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	1 item
Matrix Spike	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	3 items
	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	3 items
	TRH (Total Recoverable Hydrocarbons) in Soil	3 items
	VOC's in Soil	1 item

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	42 Soil, 3 Material
Date documentation received	19/6/2020	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	8°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE207831 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Fibre ID in bulk materials

Method: ME-(AU)-[ENV]AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP222_0.1_ACM_200	SE207831.025	LB202934	19 Jun 2020	19 Jun 2020	19 Jun 2021	29 Jun 2020	19 Jun 2021	29 Jun 2020
0407_TP196_0.1_CM_2006	SE207831.034	LB202934	19 Jun 2020	19 Jun 2020	19 Jun 2021	29 Jun 2020	19 Jun 2021	29 Jun 2020
0407_TP197_0.1_ACM_200	SE207831.037	LB202934	19 Jun 2020	19 Jun 2020	19 Jun 2021	29 Jun 2020	19 Jun 2021	29 Jun 2020

Fibre Identification in soil

Method: ME-(AU)-[ENV]AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP204_0.1_200618	SE207831.001	LB202872	18 Jun 2020	19 Jun 2020	18 Jun 2021	26 Jun 2020	18 Jun 2021	29 Jun 2020
0407_TP205_0.1_200618	SE207831.003	LB202872	18 Jun 2020	19 Jun 2020	18 Jun 2021	26 Jun 2020	18 Jun 2021	29 Jun 2020
0407_TP206_0.1_200618	SE207831.005	LB202872	18 Jun 2020	19 Jun 2020	18 Jun 2021	26 Jun 2020	18 Jun 2021	29 Jun 2020
0407_TP220_0.1_200618	SE207831.007	LB202872	18 Jun 2020	19 Jun 2020	18 Jun 2021	26 Jun 2020	18 Jun 2021	29 Jun 2020
0407_TP207_0.1_200618	SE207831.009	LB202872	18 Jun 2020	19 Jun 2020	18 Jun 2021	26 Jun 2020	18 Jun 2021	29 Jun 2020
0407_TP203_0.1_200618	SE207831.011	LB202872	18 Jun 2020	19 Jun 2020	18 Jun 2021	26 Jun 2020	18 Jun 2021	29 Jun 2020
0407_TP203_0.5_200618	SE207831.012	LB202872	18 Jun 2020	19 Jun 2020	18 Jun 2021	26 Jun 2020	18 Jun 2021	29 Jun 2020
0407_TP202_0.5_200618	SE207831.013	LB202872	18 Jun 2020	19 Jun 2020	18 Jun 2021	26 Jun 2020	18 Jun 2021	29 Jun 2020
0407_TP202_1.0_200618	SE207831.014	LB202872	18 Jun 2020	19 Jun 2020	18 Jun 2021	26 Jun 2020	18 Jun 2021	29 Jun 2020
0407_TP201_0.1_200618	SE207831.015	LB202872	18 Jun 2020	19 Jun 2020	18 Jun 2021	26 Jun 2020	18 Jun 2021	29 Jun 2020
0407_TP201_0.5_200618	SE207831.016	LB202872	18 Jun 2020	19 Jun 2020	18 Jun 2021	26 Jun 2020	18 Jun 2021	29 Jun 2020
0407_TP200_0.1_200618	SE207831.017	LB202872	18 Jun 2020	19 Jun 2020	18 Jun 2021	26 Jun 2020	18 Jun 2021	29 Jun 2020
0407_TP199_0.1_200618	SE207831.019	LB202872	18 Jun 2020	19 Jun 2020	18 Jun 2021	26 Jun 2020	18 Jun 2021	29 Jun 2020
0407_TP222_0.1_200619	SE207831.023	LB202872	18 Jun 2020	19 Jun 2020	18 Jun 2021	26 Jun 2020	18 Jun 2021	29 Jun 2020
0407_TP222_0.5_200619	SE207831.024	LB202872	19 Jun 2020	19 Jun 2020	19 Jun 2021	26 Jun 2020	19 Jun 2021	29 Jun 2020
0407_TP221_0.1_200619	SE207831.026	LB202872	19 Jun 2020	19 Jun 2020	19 Jun 2021	26 Jun 2020	19 Jun 2021	29 Jun 2020
0407_TP221_0.5_200619	SE207831.027	LB202872	19 Jun 2020	19 Jun 2020	19 Jun 2021	26 Jun 2020	19 Jun 2021	29 Jun 2020
0407_TP209_0.1_200619	SE207831.028	LB202872	19 Jun 2020	19 Jun 2020	19 Jun 2021	26 Jun 2020	19 Jun 2021	29 Jun 2020
0407_TP208_0.1_200619	SE207831.030	LB202872	19 Jun 2020	19 Jun 2020	19 Jun 2021	26 Jun 2020	19 Jun 2021	29 Jun 2020
0407_TP195_0.1_200619	SE207831.032	LB202872	19 Jun 2020	19 Jun 2020	19 Jun 2021	26 Jun 2020	19 Jun 2021	29 Jun 2020
0407_TP196_0.1_200619	SE207831.035	LB202872	19 Jun 2020	19 Jun 2020	19 Jun 2021	26 Jun 2020	19 Jun 2021	29 Jun 2020
0407_TP196_1.5_200619	SE207831.036	LB202872	19 Jun 2020	19 Jun 2020	19 Jun 2021	26 Jun 2020	19 Jun 2021	29 Jun 2020
0407_TP197_0.1_200619	SE207831.038	LB202872	19 Jun 2020	19 Jun 2020	19 Jun 2021	26 Jun 2020	19 Jun 2021	29 Jun 2020
0407_TP197_0.5_200619	SE207831.039	LB202872	19 Jun 2020	19 Jun 2020	19 Jun 2021	26 Jun 2020	19 Jun 2021	29 Jun 2020

Gravimetric Determination of Asbestos in Soil

Method: ME-(AU)-[ENV]AN605

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP204_0.1_200618	SE207831.001	LB202872	18 Jun 2020	19 Jun 2020	15 Dec 2020	26 Jun 2020	15 Dec 2020	29 Jun 2020
0407_TP205_0.1_200618	SE207831.003	LB202872	18 Jun 2020	19 Jun 2020	15 Dec 2020	26 Jun 2020	15 Dec 2020	29 Jun 2020
0407_TP206_0.1_200618	SE207831.005	LB202872	18 Jun 2020	19 Jun 2020	15 Dec 2020	26 Jun 2020	15 Dec 2020	29 Jun 2020
0407_TP220_0.1_200618	SE207831.007	LB202872	18 Jun 2020	19 Jun 2020	15 Dec 2020	26 Jun 2020	15 Dec 2020	29 Jun 2020
0407_TP207_0.1_200618	SE207831.009	LB202872	18 Jun 2020	19 Jun 2020	15 Dec 2020	26 Jun 2020	15 Dec 2020	29 Jun 2020
0407_TP203_0.1_200618	SE207831.011	LB202872	18 Jun 2020	19 Jun 2020	15 Dec 2020	26 Jun 2020	15 Dec 2020	29 Jun 2020
0407_TP203_0.5_200618	SE207831.012	LB202872	18 Jun 2020	19 Jun 2020	15 Dec 2020	26 Jun 2020	15 Dec 2020	29 Jun 2020
0407_TP202_0.5_200618	SE207831.013	LB202872	18 Jun 2020	19 Jun 2020	15 Dec 2020	26 Jun 2020	15 Dec 2020	29 Jun 2020
0407_TP202_1.0_200618	SE207831.014	LB202872	18 Jun 2020	19 Jun 2020	15 Dec 2020	26 Jun 2020	15 Dec 2020	29 Jun 2020
0407_TP201_0.1_200618	SE207831.015	LB202872	18 Jun 2020	19 Jun 2020	15 Dec 2020	26 Jun 2020	15 Dec 2020	29 Jun 2020
0407_TP201_0.5_200618	SE207831.016	LB202872	18 Jun 2020	19 Jun 2020	15 Dec 2020	26 Jun 2020	15 Dec 2020	29 Jun 2020
0407_TP200_0.1_200618	SE207831.017	LB202872	18 Jun 2020	19 Jun 2020	15 Dec 2020	26 Jun 2020	15 Dec 2020	29 Jun 2020
0407_TP199_0.1_200618	SE207831.019	LB202872	18 Jun 2020	19 Jun 2020	15 Dec 2020	26 Jun 2020	15 Dec 2020	29 Jun 2020
0407_TP222_0.1_200619	SE207831.023	LB202872	18 Jun 2020	19 Jun 2020	15 Dec 2020	26 Jun 2020	15 Dec 2020	29 Jun 2020
0407_TP222_0.5_200619	SE207831.024	LB202872	19 Jun 2020	19 Jun 2020	16 Dec 2020	26 Jun 2020	16 Dec 2020	29 Jun 2020
0407_TP221_0.1_200619	SE207831.026	LB202872	19 Jun 2020	19 Jun 2020	16 Dec 2020	26 Jun 2020	16 Dec 2020	29 Jun 2020
0407_TP221_0.5_200619	SE207831.027	LB202872	19 Jun 2020	19 Jun 2020	16 Dec 2020	26 Jun 2020	16 Dec 2020	29 Jun 2020
0407_TP209_0.1_200619	SE207831.028	LB202872	19 Jun 2020	19 Jun 2020	16 Dec 2020	26 Jun 2020	16 Dec 2020	29 Jun 2020
0407_TP208_0.1_200619	SE207831.030	LB202872	19 Jun 2020	19 Jun 2020	16 Dec 2020	26 Jun 2020	16 Dec 2020	29 Jun 2020
0407_TP195_0.1_200619	SE207831.032	LB202872	19 Jun 2020	19 Jun 2020	16 Dec 2020	26 Jun 2020	16 Dec 2020	29 Jun 2020
0407_TP196_0.1_200619	SE207831.035	LB202872	19 Jun 2020	19 Jun 2020	16 Dec 2020	26 Jun 2020	16 Dec 2020	29 Jun 2020
0407_TP196_1.5_200619	SE207831.036	LB202872	19 Jun 2020	19 Jun 2020	16 Dec 2020	26 Jun 2020	16 Dec 2020	29 Jun 2020
0407_TP197_0.1_200619	SE207831.038	LB202872	19 Jun 2020	19 Jun 2020	16 Dec 2020	26 Jun 2020	16 Dec 2020	29 Jun 2020
0407_TP197_0.5_200619	SE207831.039	LB202872	19 Jun 2020	19 Jun 2020	16 Dec 2020	26 Jun 2020	16 Dec 2020	29 Jun 2020

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref

HOLDING TIME SUMMARY

SE207831 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Mercury in Soil (continued)

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP204_0.1_200618	SE207831.001	LB202695	18 Jun 2020	19 Jun 2020	16 Jul 2020	24 Jun 2020	16 Jul 2020	29 Jun 2020
0407_TP204_0.5_200618	SE207831.002	LB202695	18 Jun 2020	19 Jun 2020	16 Jul 2020	24 Jun 2020	16 Jul 2020	29 Jun 2020
0407_TP205_0.1_200618	SE207831.003	LB202695	18 Jun 2020	19 Jun 2020	16 Jul 2020	24 Jun 2020	16 Jul 2020	29 Jun 2020
0407_TP205_0.5_200618	SE207831.004	LB202695	18 Jun 2020	19 Jun 2020	16 Jul 2020	24 Jun 2020	16 Jul 2020	29 Jun 2020
0407_TP206_0.1_200618	SE207831.005	LB202695	18 Jun 2020	19 Jun 2020	16 Jul 2020	24 Jun 2020	16 Jul 2020	29 Jun 2020
0407_TP206_1.0_200618	SE207831.006	LB202695	18 Jun 2020	19 Jun 2020	16 Jul 2020	24 Jun 2020	16 Jul 2020	29 Jun 2020
0407_TP220_0.1_200618	SE207831.007	LB202695	18 Jun 2020	19 Jun 2020	16 Jul 2020	24 Jun 2020	16 Jul 2020	29 Jun 2020
0407_TP220_1.0_200618	SE207831.008	LB202695	18 Jun 2020	19 Jun 2020	16 Jul 2020	24 Jun 2020	16 Jul 2020	29 Jun 2020
0407_TP207_0.1_200618	SE207831.009	LB202695	18 Jun 2020	19 Jun 2020	16 Jul 2020	24 Jun 2020	16 Jul 2020	29 Jun 2020
0407_TP207_1.0_200618	SE207831.010	LB202695	18 Jun 2020	19 Jun 2020	16 Jul 2020	24 Jun 2020	16 Jul 2020	29 Jun 2020
0407_TP203_0.1_200618	SE207831.011	LB202695	18 Jun 2020	19 Jun 2020	16 Jul 2020	24 Jun 2020	16 Jul 2020	29 Jun 2020
0407_TP203_0.5_200618	SE207831.012	LB202695	18 Jun 2020	19 Jun 2020	16 Jul 2020	24 Jun 2020	16 Jul 2020	29 Jun 2020
0407_TP202_0.5_200618	SE207831.013	LB202695	18 Jun 2020	19 Jun 2020	16 Jul 2020	24 Jun 2020	16 Jul 2020	29 Jun 2020
0407_TP202_1.0_200618	SE207831.014	LB202695	18 Jun 2020	19 Jun 2020	16 Jul 2020	24 Jun 2020	16 Jul 2020	29 Jun 2020
0407_TP201_0.1_200618	SE207831.015	LB202695	18 Jun 2020	19 Jun 2020	16 Jul 2020	24 Jun 2020	16 Jul 2020	29 Jun 2020
0407_TP201_0.5_200618	SE207831.016	LB202695	18 Jun 2020	19 Jun 2020	16 Jul 2020	24 Jun 2020	16 Jul 2020	29 Jun 2020
0407_TP200_0.1_200618	SE207831.017	LB202695	18 Jun 2020	19 Jun 2020	16 Jul 2020	24 Jun 2020	16 Jul 2020	29 Jun 2020
0407_TP200_0.5_200618	SE207831.018	LB202695	18 Jun 2020	19 Jun 2020	16 Jul 2020	24 Jun 2020	16 Jul 2020	29 Jun 2020
0407_TP199_0.1_200618	SE207831.019	LB202695	18 Jun 2020	19 Jun 2020	16 Jul 2020	24 Jun 2020	16 Jul 2020	29 Jun 2020
0407_TP199_0.5_200618	SE207831.020	LB202696	18 Jun 2020	19 Jun 2020	16 Jul 2020	24 Jun 2020	16 Jul 2020	29 Jun 2020
0407_TP198_0.1_200618	SE207831.021	LB202696	18 Jun 2020	19 Jun 2020	16 Jul 2020	24 Jun 2020	16 Jul 2020	29 Jun 2020
0407_TP198_0.5_200618	SE207831.022	LB202696	18 Jun 2020	19 Jun 2020	16 Jul 2020	24 Jun 2020	16 Jul 2020	29 Jun 2020
0407_TP222_0.1_200619	SE207831.023	LB202696	18 Jun 2020	19 Jun 2020	16 Jul 2020	24 Jun 2020	16 Jul 2020	29 Jun 2020
0407_TP222_0.5_200619	SE207831.024	LB202696	19 Jun 2020	19 Jun 2020	17 Jul 2020	24 Jun 2020	17 Jul 2020	29 Jun 2020
0407_TP221_0.1_200619	SE207831.026	LB202696	19 Jun 2020	19 Jun 2020	17 Jul 2020	24 Jun 2020	17 Jul 2020	29 Jun 2020
0407_TP221_0.5_200619	SE207831.027	LB202696	19 Jun 2020	19 Jun 2020	17 Jul 2020	24 Jun 2020	17 Jul 2020	29 Jun 2020
0407_TP209_0.1_200619	SE207831.028	LB202696	19 Jun 2020	19 Jun 2020	17 Jul 2020	24 Jun 2020	17 Jul 2020	29 Jun 2020
0407_TP209_0.5_200619	SE207831.029	LB202696	19 Jun 2020	19 Jun 2020	17 Jul 2020	24 Jun 2020	17 Jul 2020	29 Jun 2020
0407_TP208_0.1_200619	SE207831.030	LB202696	19 Jun 2020	19 Jun 2020	17 Jul 2020	24 Jun 2020	17 Jul 2020	29 Jun 2020
0407_TP208_0.5_200619	SE207831.031	LB202696	19 Jun 2020	19 Jun 2020	17 Jul 2020	24 Jun 2020	17 Jul 2020	29 Jun 2020
0407_TP195_0.1_200619	SE207831.032	LB202696	19 Jun 2020	19 Jun 2020	17 Jul 2020	24 Jun 2020	17 Jul 2020	29 Jun 2020
0407_TP195_1.0_200619	SE207831.033	LB202696	19 Jun 2020	19 Jun 2020	17 Jul 2020	24 Jun 2020	17 Jul 2020	29 Jun 2020
0407_TP196_0.1_200619	SE207831.035	LB202696	19 Jun 2020	19 Jun 2020	17 Jul 2020	24 Jun 2020	17 Jul 2020	29 Jun 2020
0407_TP196_1.5_200619	SE207831.036	LB202692	19 Jun 2020	19 Jun 2020	17 Jul 2020	24 Jun 2020	17 Jul 2020	29 Jun 2020
0407_TP197_0.1_200619	SE207831.038	LB202696	19 Jun 2020	19 Jun 2020	17 Jul 2020	24 Jun 2020	17 Jul 2020	29 Jun 2020
0407_TP197_0.5_200619	SE207831.039	LB202692	19 Jun 2020	19 Jun 2020	17 Jul 2020	24 Jun 2020	17 Jul 2020	29 Jun 2020
0407_QC117_200618	SE207831.040	LB202696	19 Jun 2020	19 Jun 2020	17 Jul 2020	24 Jun 2020	17 Jul 2020	29 Jun 2020
0407_QC115_200618	SE207831.041	LB202696	19 Jun 2020	19 Jun 2020	17 Jul 2020	24 Jun 2020	17 Jul 2020	29 Jun 2020
0407_QC121_200619	SE207831.042	LB202696	19 Jun 2020	19 Jun 2020	17 Jul 2020	24 Jun 2020	17 Jul 2020	29 Jun 2020
0407_QC119_200618	SE207831.043	LB202696	19 Jun 2020	19 Jun 2020	17 Jul 2020	24 Jun 2020	17 Jul 2020	29 Jun 2020

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP204_0.1_200618	SE207831.001	LB202646	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP204_0.5_200618	SE207831.002	LB202646	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP205_0.1_200618	SE207831.003	LB202646	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP205_0.5_200618	SE207831.004	LB202646	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP206_0.1_200618	SE207831.005	LB202646	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP206_1.0_200618	SE207831.006	LB202646	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP220_0.1_200618	SE207831.007	LB202646	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP220_1.0_200618	SE207831.008	LB202646	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP207_0.1_200618	SE207831.009	LB202646	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP207_1.0_200618	SE207831.010	LB202646	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP203_0.1_200618	SE207831.011	LB202646	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP203_0.5_200618	SE207831.012	LB202646	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP202_0.5_200618	SE207831.013	LB202646	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP202_1.0_200618	SE207831.014	LB202646	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP201_0.1_200618	SE207831.015	LB202646	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP201_0.5_200618	SE207831.016	LB202646	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP200_0.1_200618	SE207831.017	LB202646	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020

HOLDING TIME SUMMARY

SE207831 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Moisture Content (continued)

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP200_0.5_200618	SE207831.018	LB202646	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP199_0.1_200618	SE207831.019	LB202646	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP199_0.5_200618	SE207831.020	LB202646	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	29 Jun 2020	26 Jun 2020
0407_TP198_0.1_200618	SE207831.021	LB202647	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	29 Jun 2020	29 Jun 2020
0407_TP198_0.5_200618	SE207831.022	LB202647	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	29 Jun 2020	29 Jun 2020
0407_TP222_0.1_200619	SE207831.023	LB202647	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	29 Jun 2020	29 Jun 2020
0407_TP222_0.5_200619	SE207831.024	LB202647	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	29 Jun 2020	29 Jun 2020
0407_TP221_0.1_200619	SE207831.026	LB202647	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	29 Jun 2020	29 Jun 2020
0407_TP221_0.5_200619	SE207831.027	LB202647	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	29 Jun 2020	29 Jun 2020
0407_TP209_0.1_200619	SE207831.028	LB202647	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	29 Jun 2020	29 Jun 2020
0407_TP209_0.5_200619	SE207831.029	LB202647	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	29 Jun 2020	29 Jun 2020
0407_TP208_0.1_200619	SE207831.030	LB202647	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	29 Jun 2020	29 Jun 2020
0407_TP208_0.5_200619	SE207831.031	LB202647	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	29 Jun 2020	29 Jun 2020
0407_TP195_0.1_200619	SE207831.032	LB202647	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	29 Jun 2020	29 Jun 2020
0407_TP195_1.0_200619	SE207831.033	LB202647	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	29 Jun 2020	29 Jun 2020
0407_TP196_0.1_200619	SE207831.035	LB202647	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	29 Jun 2020	29 Jun 2020
0407_TP196_1.5_200619	SE207831.036	LB202647	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	29 Jun 2020	29 Jun 2020
0407_TP197_0.1_200619	SE207831.038	LB202647	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	29 Jun 2020	29 Jun 2020
0407_TP197_0.5_200619	SE207831.039	LB202647	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	29 Jun 2020	29 Jun 2020
0407_QC117_200618	SE207831.040	LB202647	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	29 Jun 2020	29 Jun 2020
0407_QC115_200618	SE207831.041	LB202647	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	29 Jun 2020	29 Jun 2020
0407_QC121_200619	SE207831.042	LB202647	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	29 Jun 2020	29 Jun 2020
0407_QC119_200618	SE207831.043	LB202647	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	29 Jun 2020	29 Jun 2020
0407_QC410_200619	SE207831.044	LB202647	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	29 Jun 2020	29 Jun 2020

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP204_0.1_200618	SE207831.001	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP204_0.5_200618	SE207831.002	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP205_0.1_200618	SE207831.003	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP205_0.5_200618	SE207831.004	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP206_0.1_200618	SE207831.005	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP206_1.0_200618	SE207831.006	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP220_0.1_200618	SE207831.007	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP220_1.0_200618	SE207831.008	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP207_0.1_200618	SE207831.009	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP207_1.0_200618	SE207831.010	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP203_0.1_200618	SE207831.011	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP203_0.5_200618	SE207831.012	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP202_0.5_200618	SE207831.013	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP202_1.0_200618	SE207831.014	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP201_0.1_200618	SE207831.015	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP201_0.5_200618	SE207831.016	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP200_0.1_200618	SE207831.017	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP200_0.5_200618	SE207831.018	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP199_0.1_200618	SE207831.019	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP199_0.5_200618	SE207831.020	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP198_0.1_200618	SE207831.021	LB202632	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	30 Jun 2020
0407_TP198_0.5_200618	SE207831.022	LB202632	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	30 Jun 2020
0407_TP222_0.1_200619	SE207831.023	LB202632	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	30 Jun 2020
0407_TP222_0.5_200619	SE207831.024	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	30 Jun 2020
0407_TP221_0.1_200619	SE207831.026	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	30 Jun 2020
0407_TP221_0.5_200619	SE207831.027	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	30 Jun 2020
0407_TP209_0.1_200619	SE207831.028	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	30 Jun 2020
0407_TP209_0.5_200619	SE207831.029	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	30 Jun 2020
0407_TP208_0.1_200619	SE207831.030	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	30 Jun 2020
0407_TP208_0.5_200619	SE207831.031	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	30 Jun 2020
0407_TP195_0.1_200619	SE207831.032	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	30 Jun 2020
0407_TP195_1.0_200619	SE207831.033	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	30 Jun 2020
0407_TP196_0.1_200619	SE207831.035	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	30 Jun 2020

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP196_1.5_200619	SE207831.036	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	30 Jun 2020
0407_TP197_0.1_200619	SE207831.038	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	30 Jun 2020
0407_TP197_0.5_200619	SE207831.039	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	30 Jun 2020
0407_QC117_200618	SE207831.040	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	30 Jun 2020
0407_QC115_200618	SE207831.041	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	30 Jun 2020
0407_QC121_200619	SE207831.042	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	30 Jun 2020
0407_QC119_200618	SE207831.043	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	30 Jun 2020

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP204_0.1_200618	SE207831.001	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP204_0.5_200618	SE207831.002	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP205_0.1_200618	SE207831.003	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP205_0.5_200618	SE207831.004	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP206_0.1_200618	SE207831.005	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP206_1.0_200618	SE207831.006	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP220_0.1_200618	SE207831.007	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP220_1.0_200618	SE207831.008	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP207_0.1_200618	SE207831.009	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP207_1.0_200618	SE207831.010	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP203_0.1_200618	SE207831.011	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP203_0.5_200618	SE207831.012	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP202_0.5_200618	SE207831.013	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP202_1.0_200618	SE207831.014	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP201_0.1_200618	SE207831.015	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP201_0.5_200618	SE207831.016	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP200_0.1_200618	SE207831.017	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP200_0.5_200618	SE207831.018	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP199_0.1_200618	SE207831.019	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP199_0.5_200618	SE207831.020	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP198_0.1_200618	SE207831.021	LB202632	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP198_0.5_200618	SE207831.022	LB202632	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP222_0.1_200619	SE207831.023	LB202632	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP222_0.5_200619	SE207831.024	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP221_0.1_200619	SE207831.026	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP221_0.5_200619	SE207831.027	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP209_0.1_200619	SE207831.028	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP209_0.5_200619	SE207831.029	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP208_0.1_200619	SE207831.030	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP208_0.5_200619	SE207831.031	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP195_0.1_200619	SE207831.032	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP195_1.0_200619	SE207831.033	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP196_0.1_200619	SE207831.035	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP196_1.5_200619	SE207831.036	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP197_0.1_200619	SE207831.038	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP197_0.5_200619	SE207831.039	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_QC117_200618	SE207831.040	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_QC115_200618	SE207831.041	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_QC121_200619	SE207831.042	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_QC119_200618	SE207831.043	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP204_0.1_200618	SE207831.001	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP204_0.5_200618	SE207831.002	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP205_0.1_200618	SE207831.003	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP205_0.5_200618	SE207831.004	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP206_0.1_200618	SE207831.005	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP206_1.0_200618	SE207831.006	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP220_0.1_200618	SE207831.007	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP220_1.0_200618	SE207831.008	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP207_0.1_200618	SE207831.009	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP207_1.0_200618	SE207831.010	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP203_0.1_200618	SE207831.011	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP203_0.5_200618	SE207831.012	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP202_0.5_200618	SE207831.013	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP202_1.0_200618	SE207831.014	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP201_0.1_200618	SE207831.015	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP201_0.5_200618	SE207831.016	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP200_0.1_200618	SE207831.017	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP200_0.5_200618	SE207831.018	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP199_0.1_200618	SE207831.019	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP199_0.5_200618	SE207831.020	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP198_0.1_200618	SE207831.021	LB202632	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP198_0.5_200618	SE207831.022	LB202632	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP222_0.1_200619	SE207831.023	LB202632	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP222_0.5_200619	SE207831.024	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP221_0.1_200619	SE207831.026	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP221_0.5_200619	SE207831.027	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP209_0.1_200619	SE207831.028	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP209_0.5_200619	SE207831.029	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP208_0.1_200619	SE207831.030	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP208_0.5_200619	SE207831.031	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP195_0.1_200619	SE207831.032	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP195_1.0_200619	SE207831.033	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP196_0.1_200619	SE207831.035	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP196_1.5_200619	SE207831.036	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP197_0.1_200619	SE207831.038	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP197_0.5_200619	SE207831.039	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_QC117_200618	SE207831.040	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_QC115_200618	SE207831.041	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_QC121_200619	SE207831.042	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_QC119_200618	SE207831.043	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP204_0.1_200618	SE207831.001	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP204_0.5_200618	SE207831.002	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP205_0.1_200618	SE207831.003	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP205_0.5_200618	SE207831.004	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP206_0.1_200618	SE207831.005	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP206_1.0_200618	SE207831.006	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP220_0.1_200618	SE207831.007	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP220_1.0_200618	SE207831.008	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP207_0.1_200618	SE207831.009	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP207_1.0_200618	SE207831.010	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP203_0.1_200618	SE207831.011	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP203_0.5_200618	SE207831.012	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP202_0.5_200618	SE207831.013	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP202_1.0_200618	SE207831.014	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP201_0.1_200618	SE207831.015	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP201_0.5_200618	SE207831.016	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP200_0.1_200618	SE207831.017	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP200_0.5_200618	SE207831.018	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP199_0.1_200618	SE207831.019	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP199_0.5_200618	SE207831.020	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP198_0.1_200618	SE207831.021	LB202632	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	30 Jun 2020
0407_TP198_0.5_200618	SE207831.022	LB202632	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	30 Jun 2020
0407_TP222_0.1_200619	SE207831.023	LB202632	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	30 Jun 2020
0407_TP222_0.5_200619	SE207831.024	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	30 Jun 2020
0407_TP221_0.1_200619	SE207831.026	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	30 Jun 2020

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

PCBs in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP221_0.5_200619	SE207831.027	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	30 Jun 2020
0407_TP209_0.1_200619	SE207831.028	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	30 Jun 2020
0407_TP209_0.5_200619	SE207831.029	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	30 Jun 2020
0407_TP208_0.1_200619	SE207831.030	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	30 Jun 2020
0407_TP208_0.5_200619	SE207831.031	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	30 Jun 2020
0407_TP195_0.1_200619	SE207831.032	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	30 Jun 2020
0407_TP195_1.0_200619	SE207831.033	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	30 Jun 2020
0407_TP196_0.1_200619	SE207831.035	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	30 Jun 2020
0407_TP196_1.5_200619	SE207831.036	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	30 Jun 2020
0407_TP197_0.1_200619	SE207831.038	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	30 Jun 2020
0407_TP197_0.5_200619	SE207831.039	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	30 Jun 2020
0407_QC117_200618	SE207831.040	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	30 Jun 2020
0407_QC115_200618	SE207831.041	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	30 Jun 2020
0407_QC121_200619	SE207831.042	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	30 Jun 2020
0407_QC119_200618	SE207831.043	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	30 Jun 2020

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP204_0.1_200618	SE207831.001	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP204_0.5_200618	SE207831.002	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP205_0.1_200618	SE207831.003	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP205_0.5_200618	SE207831.004	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP206_0.1_200618	SE207831.005	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP206_1.0_200618	SE207831.006	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP220_0.1_200618	SE207831.007	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP220_1.0_200618	SE207831.008	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP207_0.1_200618	SE207831.009	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP207_1.0_200618	SE207831.010	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP203_0.1_200618	SE207831.011	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP203_0.5_200618	SE207831.012	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP202_0.5_200618	SE207831.013	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP202_1.0_200618	SE207831.014	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP201_0.1_200618	SE207831.015	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP201_0.5_200618	SE207831.016	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP200_0.1_200618	SE207831.017	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP200_0.5_200618	SE207831.018	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP199_0.1_200618	SE207831.019	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP199_0.5_200618	SE207831.020	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP198_0.1_200618	SE207831.021	LB202632	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP198_0.5_200618	SE207831.022	LB202632	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP222_0.1_200619	SE207831.023	LB202632	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP222_0.5_200619	SE207831.024	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP221_0.1_200619	SE207831.026	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP221_0.5_200619	SE207831.027	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP209_0.1_200619	SE207831.028	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP209_0.5_200619	SE207831.029	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP208_0.1_200619	SE207831.030	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP208_0.5_200619	SE207831.031	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP195_0.1_200619	SE207831.032	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP195_1.0_200619	SE207831.033	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP196_0.1_200619	SE207831.035	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP196_1.5_200619	SE207831.036	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP197_0.1_200619	SE207831.038	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP197_0.5_200619	SE207831.039	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_QC117_200618	SE207831.040	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_QC115_200618	SE207831.041	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_QC121_200619	SE207831.042	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_QC119_200618	SE207831.043	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP204_0.1_200618	SE207831.001	LB202682	18 Jun 2020	19 Jun 2020	15 Dec 2020	24 Jun 2020	15 Dec 2020	26 Jun 2020
0407_TP204_0.5_200618	SE207831.002	LB202682	18 Jun 2020	19 Jun 2020	15 Dec 2020	24 Jun 2020	15 Dec 2020	26 Jun 2020
0407_TP205_0.1_200618	SE207831.003	LB202682	18 Jun 2020	19 Jun 2020	15 Dec 2020	24 Jun 2020	15 Dec 2020	26 Jun 2020
0407_TP205_0.5_200618	SE207831.004	LB202682	18 Jun 2020	19 Jun 2020	15 Dec 2020	24 Jun 2020	15 Dec 2020	26 Jun 2020
0407_TP206_0.1_200618	SE207831.005	LB202682	18 Jun 2020	19 Jun 2020	15 Dec 2020	24 Jun 2020	15 Dec 2020	26 Jun 2020
0407_TP206_1.0_200618	SE207831.006	LB202682	18 Jun 2020	19 Jun 2020	15 Dec 2020	24 Jun 2020	15 Dec 2020	26 Jun 2020
0407_TP220_0.1_200618	SE207831.007	LB202682	18 Jun 2020	19 Jun 2020	15 Dec 2020	24 Jun 2020	15 Dec 2020	26 Jun 2020
0407_TP220_1.0_200618	SE207831.008	LB202682	18 Jun 2020	19 Jun 2020	15 Dec 2020	24 Jun 2020	15 Dec 2020	26 Jun 2020
0407_TP207_0.1_200618	SE207831.009	LB202682	18 Jun 2020	19 Jun 2020	15 Dec 2020	24 Jun 2020	15 Dec 2020	26 Jun 2020
0407_TP207_1.0_200618	SE207831.010	LB202682	18 Jun 2020	19 Jun 2020	15 Dec 2020	24 Jun 2020	15 Dec 2020	26 Jun 2020
0407_TP203_0.1_200618	SE207831.011	LB202682	18 Jun 2020	19 Jun 2020	15 Dec 2020	24 Jun 2020	15 Dec 2020	26 Jun 2020
0407_TP203_0.5_200618	SE207831.012	LB202682	18 Jun 2020	19 Jun 2020	15 Dec 2020	24 Jun 2020	15 Dec 2020	26 Jun 2020
0407_TP202_0.5_200618	SE207831.013	LB202682	18 Jun 2020	19 Jun 2020	15 Dec 2020	24 Jun 2020	15 Dec 2020	26 Jun 2020
0407_TP202_1.0_200618	SE207831.014	LB202682	18 Jun 2020	19 Jun 2020	15 Dec 2020	24 Jun 2020	15 Dec 2020	26 Jun 2020
0407_TP201_0.1_200618	SE207831.015	LB202682	18 Jun 2020	19 Jun 2020	15 Dec 2020	24 Jun 2020	15 Dec 2020	26 Jun 2020
0407_TP201_0.5_200618	SE207831.016	LB202682	18 Jun 2020	19 Jun 2020	15 Dec 2020	24 Jun 2020	15 Dec 2020	26 Jun 2020
0407_TP200_0.1_200618	SE207831.017	LB202682	18 Jun 2020	19 Jun 2020	15 Dec 2020	24 Jun 2020	15 Dec 2020	26 Jun 2020
0407_TP200_0.5_200618	SE207831.018	LB202682	18 Jun 2020	19 Jun 2020	15 Dec 2020	24 Jun 2020	15 Dec 2020	26 Jun 2020
0407_TP199_0.1_200618	SE207831.019	LB202682	18 Jun 2020	19 Jun 2020	15 Dec 2020	24 Jun 2020	15 Dec 2020	26 Jun 2020
0407_TP199_0.5_200618	SE207831.020	LB202684	18 Jun 2020	19 Jun 2020	15 Dec 2020	24 Jun 2020	15 Dec 2020	26 Jun 2020
0407_TP198_0.1_200618	SE207831.021	LB202684	18 Jun 2020	19 Jun 2020	15 Dec 2020	24 Jun 2020	15 Dec 2020	29 Jun 2020
0407_TP198_0.5_200618	SE207831.022	LB202684	18 Jun 2020	19 Jun 2020	15 Dec 2020	24 Jun 2020	15 Dec 2020	29 Jun 2020
0407_TP222_0.1_200619	SE207831.023	LB202684	18 Jun 2020	19 Jun 2020	15 Dec 2020	24 Jun 2020	15 Dec 2020	29 Jun 2020
0407_TP222_0.5_200619	SE207831.024	LB202684	19 Jun 2020	19 Jun 2020	16 Dec 2020	24 Jun 2020	16 Dec 2020	29 Jun 2020
0407_TP221_0.1_200619	SE207831.026	LB202684	19 Jun 2020	19 Jun 2020	16 Dec 2020	24 Jun 2020	16 Dec 2020	29 Jun 2020
0407_TP221_0.5_200619	SE207831.027	LB202684	19 Jun 2020	19 Jun 2020	16 Dec 2020	24 Jun 2020	16 Dec 2020	29 Jun 2020
0407_TP209_0.1_200619	SE207831.028	LB202684	19 Jun 2020	19 Jun 2020	16 Dec 2020	24 Jun 2020	16 Dec 2020	29 Jun 2020
0407_TP209_0.5_200619	SE207831.029	LB202684	19 Jun 2020	19 Jun 2020	16 Dec 2020	24 Jun 2020	16 Dec 2020	29 Jun 2020
0407_TP208_0.1_200619	SE207831.030	LB202684	19 Jun 2020	19 Jun 2020	16 Dec 2020	24 Jun 2020	16 Dec 2020	29 Jun 2020
0407_TP208_0.5_200619	SE207831.031	LB202684	19 Jun 2020	19 Jun 2020	16 Dec 2020	24 Jun 2020	16 Dec 2020	29 Jun 2020
0407_TP195_0.1_200619	SE207831.032	LB202684	19 Jun 2020	19 Jun 2020	16 Dec 2020	24 Jun 2020	16 Dec 2020	29 Jun 2020
0407_TP195_1.0_200619	SE207831.033	LB202684	19 Jun 2020	19 Jun 2020	16 Dec 2020	24 Jun 2020	16 Dec 2020	29 Jun 2020
0407_TP196_0.1_200619	SE207831.035	LB202684	19 Jun 2020	19 Jun 2020	16 Dec 2020	24 Jun 2020	16 Dec 2020	29 Jun 2020
0407_TP196_1.5_200619	SE207831.036	LB202681	19 Jun 2020	19 Jun 2020	16 Dec 2020	24 Jun 2020	16 Dec 2020	29 Jun 2020
0407_TP197_0.1_200619	SE207831.038	LB202684	19 Jun 2020	19 Jun 2020	16 Dec 2020	24 Jun 2020	16 Dec 2020	29 Jun 2020
0407_TP197_0.5_200619	SE207831.039	LB202681	19 Jun 2020	19 Jun 2020	16 Dec 2020	24 Jun 2020	16 Dec 2020	29 Jun 2020
0407_QC117_200618	SE207831.040	LB202684	19 Jun 2020	19 Jun 2020	16 Dec 2020	24 Jun 2020	16 Dec 2020	29 Jun 2020
0407_QC115_200618	SE207831.041	LB202684	19 Jun 2020	19 Jun 2020	16 Dec 2020	24 Jun 2020	16 Dec 2020	29 Jun 2020
0407_QC121_200619	SE207831.042	LB202684	19 Jun 2020	19 Jun 2020	16 Dec 2020	24 Jun 2020	16 Dec 2020	29 Jun 2020
0407_QC119_200618	SE207831.043	LB202684	19 Jun 2020	19 Jun 2020	16 Dec 2020	24 Jun 2020	16 Dec 2020	29 Jun 2020

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP204_0.1_200618	SE207831.001	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP204_0.5_200618	SE207831.002	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP205_0.1_200618	SE207831.003	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP205_0.5_200618	SE207831.004	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP206_0.1_200618	SE207831.005	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP206_1.0_200618	SE207831.006	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP220_0.1_200618	SE207831.007	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP220_1.0_200618	SE207831.008	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP207_0.1_200618	SE207831.009	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP207_1.0_200618	SE207831.010	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP203_0.1_200618	SE207831.011	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP203_0.5_200618	SE207831.012	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP202_0.5_200618	SE207831.013	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP202_1.0_200618	SE207831.014	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP201_0.1_200618	SE207831.015	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP201_0.5_200618	SE207831.016	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP200_0.1_200618	SE207831.017	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP200_0.5_200618	SE207831.018	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP199_0.1_200618	SE207831.019	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP199_0.5_200618	SE207831.020	LB202630	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP198_0.1_200618	SE207831.021	LB202632	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP198_0.5_200618	SE207831.022	LB202632	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP222_0.1_200619	SE207831.023	LB202632	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP222_0.5_200619	SE207831.024	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP221_0.1_200619	SE207831.026	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP221_0.5_200619	SE207831.027	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP209_0.1_200619	SE207831.028	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP209_0.5_200619	SE207831.029	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP208_0.1_200619	SE207831.030	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP208_0.5_200619	SE207831.031	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP195_0.1_200619	SE207831.032	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP195_1.0_200619	SE207831.033	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP196_0.1_200619	SE207831.035	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP196_1.5_200619	SE207831.036	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP197_0.1_200619	SE207831.038	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP197_0.5_200619	SE207831.039	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_QC117_200618	SE207831.040	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_QC115_200618	SE207831.041	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_QC121_200619	SE207831.042	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_QC119_200618	SE207831.043	LB202632	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP204_0.1_200618	SE207831.001	LB202628	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP204_0.5_200618	SE207831.002	LB202628	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP205_0.1_200618	SE207831.003	LB202628	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP205_0.5_200618	SE207831.004	LB202628	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP206_0.1_200618	SE207831.005	LB202628	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP206_1.0_200618	SE207831.006	LB202628	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP220_0.1_200618	SE207831.007	LB202628	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP220_1.0_200618	SE207831.008	LB202628	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP207_0.1_200618	SE207831.009	LB202628	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP207_1.0_200618	SE207831.010	LB202628	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP203_0.1_200618	SE207831.011	LB202628	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP203_0.5_200618	SE207831.012	LB202628	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP202_0.5_200618	SE207831.013	LB202628	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP202_1.0_200618	SE207831.014	LB202628	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP201_0.1_200618	SE207831.015	LB202628	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP201_0.5_200618	SE207831.016	LB202628	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP200_0.1_200618	SE207831.017	LB202628	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP200_0.5_200618	SE207831.018	LB202628	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP199_0.1_200618	SE207831.019	LB202628	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP199_0.5_200618	SE207831.020	LB202628	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP198_0.1_200618	SE207831.021	LB202629	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP198_0.5_200618	SE207831.022	LB202629	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP222_0.1_200619	SE207831.023	LB202629	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP222_0.5_200619	SE207831.024	LB202629	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP221_0.1_200619	SE207831.026	LB202629	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP221_0.5_200619	SE207831.027	LB202629	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP209_0.1_200619	SE207831.028	LB202629	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP209_0.5_200619	SE207831.029	LB202629	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP208_0.1_200619	SE207831.030	LB202629	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP208_0.5_200619	SE207831.031	LB202629	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP195_0.1_200619	SE207831.032	LB202629	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP195_1.0_200619	SE207831.033	LB202629	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP196_0.1_200619	SE207831.035	LB202629	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP196_1.5_200619	SE207831.036	LB202629	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP197_0.1_200619	SE207831.038	LB202629	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP197_0.5_200619	SE207831.039	LB202629	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_QC117_200618	SE207831.040	LB202629	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_QC115_200618	SE207831.041	LB202629	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_QC121_200619	SE207831.042	LB202629	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_QC119_200618	SE207831.043	LB202629	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_QC410_200619	SE207831.044	LB202629	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_QC510_200619	SE207831.045	LB202629	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP204_0.1_200618	SE207831.001	LB202628	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP204_0.5_200618	SE207831.002	LB202628	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP205_0.1_200618	SE207831.003	LB202628	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP205_0.5_200618	SE207831.004	LB202628	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP206_0.1_200618	SE207831.005	LB202628	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP206_1.0_200618	SE207831.006	LB202628	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP220_0.1_200618	SE207831.007	LB202628	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP220_1.0_200618	SE207831.008	LB202628	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP207_0.1_200618	SE207831.009	LB202628	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP207_1.0_200618	SE207831.010	LB202628	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP203_0.1_200618	SE207831.011	LB202628	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP203_0.5_200618	SE207831.012	LB202628	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP202_0.5_200618	SE207831.013	LB202628	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP202_1.0_200618	SE207831.014	LB202628	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP201_0.1_200618	SE207831.015	LB202628	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP201_0.5_200618	SE207831.016	LB202628	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP200_0.1_200618	SE207831.017	LB202628	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP200_0.5_200618	SE207831.018	LB202628	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP199_0.1_200618	SE207831.019	LB202628	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP199_0.5_200618	SE207831.020	LB202628	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	26 Jun 2020
0407_TP198_0.1_200618	SE207831.021	LB202629	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP198_0.5_200618	SE207831.022	LB202629	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP222_0.1_200619	SE207831.023	LB202629	18 Jun 2020	19 Jun 2020	02 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP222_0.5_200619	SE207831.024	LB202629	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP221_0.1_200619	SE207831.026	LB202629	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP221_0.5_200619	SE207831.027	LB202629	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP209_0.1_200619	SE207831.028	LB202629	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP209_0.5_200619	SE207831.029	LB202629	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP208_0.1_200619	SE207831.030	LB202629	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP208_0.5_200619	SE207831.031	LB202629	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP195_0.1_200619	SE207831.032	LB202629	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP195_1.0_200619	SE207831.033	LB202629	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP196_0.1_200619	SE207831.035	LB202629	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP196_1.5_200619	SE207831.036	LB202629	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP197_0.1_200619	SE207831.038	LB202629	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_TP197_0.5_200619	SE207831.039	LB202629	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_QC117_200618	SE207831.040	LB202629	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_QC115_200618	SE207831.041	LB202629	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_QC121_200619	SE207831.042	LB202629	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_QC119_200618	SE207831.043	LB202629	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_QC410_200619	SE207831.044	LB202629	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020
0407_QC510_200619	SE207831.045	LB202629	19 Jun 2020	19 Jun 2020	03 Jul 2020	24 Jun 2020	03 Aug 2020	29 Jun 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP204_0.1_200618	SE207831.001	%	60 - 130%	105
	0407_TP204_0.5_200618	SE207831.002	%	60 - 130%	103
	0407_TP205_0.1_200618	SE207831.003	%	60 - 130%	107
	0407_TP205_0.5_200618	SE207831.004	%	60 - 130%	101
	0407_TP206_0.1_200618	SE207831.005	%	60 - 130%	116
	0407_TP206_1.0_200618	SE207831.006	%	60 - 130%	92
	0407_TP220_0.1_200618	SE207831.007	%	60 - 130%	111
	0407_TP220_1.0_200618	SE207831.008	%	60 - 130%	73
	0407_TP207_0.1_200618	SE207831.009	%	60 - 130%	83
	0407_TP207_1.0_200618	SE207831.010	%	60 - 130%	81
	0407_TP203_0.1_200618	SE207831.011	%	60 - 130%	85
	0407_TP203_0.5_200618	SE207831.012	%	60 - 130%	88
	0407_TP202_0.5_200618	SE207831.013	%	60 - 130%	88
	0407_TP202_1.0_200618	SE207831.014	%	60 - 130%	81
	0407_TP201_0.1_200618	SE207831.015	%	60 - 130%	90
	0407_TP201_0.5_200618	SE207831.016	%	60 - 130%	81
	0407_TP200_0.1_200618	SE207831.017	%	60 - 130%	90
	0407_TP200_0.5_200618	SE207831.018	%	60 - 130%	87
	0407_TP199_0.1_200618	SE207831.019	%	60 - 130%	85
	0407_TP199_0.5_200618	SE207831.020	%	60 - 130%	83
	0407_TP198_0.1_200618	SE207831.021	%	60 - 130%	105
	0407_TP198_0.5_200618	SE207831.022	%	60 - 130%	101
	0407_TP222_0.1_200619	SE207831.023	%	60 - 130%	99
	0407_TP222_0.5_200619	SE207831.024	%	60 - 130%	105
	0407_TP221_0.1_200619	SE207831.026	%	60 - 130%	110
	0407_TP221_0.5_200619	SE207831.027	%	60 - 130%	99
	0407_TP209_0.1_200619	SE207831.028	%	60 - 130%	111
	0407_TP209_0.5_200619	SE207831.029	%	60 - 130%	104
	0407_TP208_0.1_200619	SE207831.030	%	60 - 130%	102
	0407_TP208_0.5_200619	SE207831.031	%	60 - 130%	96
	0407_TP195_0.1_200619	SE207831.032	%	60 - 130%	98
	0407_TP195_1.0_200619	SE207831.033	%	60 - 130%	104
	0407_TP196_0.1_200619	SE207831.035	%	60 - 130%	101
	0407_TP196_1.5_200619	SE207831.036	%	60 - 130%	104
	0407_TP197_0.1_200619	SE207831.038	%	60 - 130%	104
	0407_TP197_0.5_200619	SE207831.039	%	60 - 130%	102
	0407_QC117_200618	SE207831.040	%	60 - 130%	105
	0407_QC115_200618	SE207831.041	%	60 - 130%	99
	0407_QC121_200619	SE207831.042	%	60 - 130%	104
	0407_QC119_200618	SE207831.043	%	60 - 130%	121

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP204_0.1_200618	SE207831.001	%	60 - 130%	80
	0407_TP204_0.5_200618	SE207831.002	%	60 - 130%	88
	0407_TP205_0.1_200618	SE207831.003	%	60 - 130%	89
	0407_TP205_0.5_200618	SE207831.004	%	60 - 130%	82
	0407_TP206_0.1_200618	SE207831.005	%	60 - 130%	89
	0407_TP206_1.0_200618	SE207831.006	%	60 - 130%	82
	0407_TP220_0.1_200618	SE207831.007	%	60 - 130%	89
	0407_TP220_1.0_200618	SE207831.008	%	60 - 130%	86
	0407_TP207_0.1_200618	SE207831.009	%	60 - 130%	91
	0407_TP207_1.0_200618	SE207831.010	%	60 - 130%	86
	0407_TP203_0.1_200618	SE207831.011	%	60 - 130%	91
	0407_TP203_0.5_200618	SE207831.012	%	60 - 130%	86
	0407_TP202_0.5_200618	SE207831.013	%	60 - 130%	90
	0407_TP202_1.0_200618	SE207831.014	%	60 - 130%	89
	0407_TP201_0.1_200618	SE207831.015	%	60 - 130%	85
	0407_TP201_0.5_200618	SE207831.016	%	60 - 130%	97
	0407_TP200_0.1_200618	SE207831.017	%	60 - 130%	82
	0407_TP200_0.5_200618	SE207831.018	%	60 - 130%	87

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OP Pesticides in Soil (continued) — **Method: ME-(AU)-[ENV]AN420**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP199_0.1_200618	SE207831.019	%	60 - 130%	89
	0407_TP199_0.5_200618	SE207831.020	%	60 - 130%	94
	0407_TP198_0.1_200618	SE207831.021	%	60 - 130%	93
	0407_TP198_0.5_200618	SE207831.022	%	60 - 130%	82
	0407_TP222_0.1_200619	SE207831.023	%	60 - 130%	98
	0407_TP222_0.5_200619	SE207831.024	%	60 - 130%	81
	0407_TP221_0.1_200619	SE207831.026	%	60 - 130%	91
	0407_TP221_0.5_200619	SE207831.027	%	60 - 130%	92
	0407_TP209_0.1_200619	SE207831.028	%	60 - 130%	97
	0407_TP209_0.5_200619	SE207831.029	%	60 - 130%	91
	0407_TP208_0.1_200619	SE207831.030	%	60 - 130%	98
	0407_TP208_0.5_200619	SE207831.031	%	60 - 130%	87
	0407_TP195_0.1_200619	SE207831.032	%	60 - 130%	92
	0407_TP195_1.0_200619	SE207831.033	%	60 - 130%	91
	0407_TP196_0.1_200619	SE207831.035	%	60 - 130%	90
	0407_TP196_1.5_200619	SE207831.036	%	60 - 130%	89
	0407_TP197_0.1_200619	SE207831.038	%	60 - 130%	103
	0407_TP197_0.5_200619	SE207831.039	%	60 - 130%	90
	0407_QC117_200618	SE207831.040	%	60 - 130%	85
	0407_QC115_200618	SE207831.041	%	60 - 130%	94
	0407_QC121_200619	SE207831.042	%	60 - 130%	92
	0407_QC119_200618	SE207831.043	%	60 - 130%	98
d14-p-terphenyl (Surrogate)	0407_TP204_0.1_200618	SE207831.001	%	60 - 130%	86
	0407_TP204_0.5_200618	SE207831.002	%	60 - 130%	91
	0407_TP205_0.1_200618	SE207831.003	%	60 - 130%	89
	0407_TP205_0.5_200618	SE207831.004	%	60 - 130%	88
	0407_TP206_0.1_200618	SE207831.005	%	60 - 130%	94
	0407_TP206_1.0_200618	SE207831.006	%	60 - 130%	80
	0407_TP220_0.1_200618	SE207831.007	%	60 - 130%	93
	0407_TP220_1.0_200618	SE207831.008	%	60 - 130%	90
	0407_TP207_0.1_200618	SE207831.009	%	60 - 130%	89
	0407_TP207_1.0_200618	SE207831.010	%	60 - 130%	88
	0407_TP203_0.1_200618	SE207831.011	%	60 - 130%	95
	0407_TP203_0.5_200618	SE207831.012	%	60 - 130%	89
	0407_TP202_0.5_200618	SE207831.013	%	60 - 130%	95
	0407_TP202_1.0_200618	SE207831.014	%	60 - 130%	84
	0407_TP201_0.1_200618	SE207831.015	%	60 - 130%	96
	0407_TP201_0.5_200618	SE207831.016	%	60 - 130%	101
	0407_TP200_0.1_200618	SE207831.017	%	60 - 130%	89
	0407_TP200_0.5_200618	SE207831.018	%	60 - 130%	91
	0407_TP199_0.1_200618	SE207831.019	%	60 - 130%	92
	0407_TP199_0.5_200618	SE207831.020	%	60 - 130%	90
	0407_TP198_0.1_200618	SE207831.021	%	60 - 130%	92
	0407_TP198_0.5_200618	SE207831.022	%	60 - 130%	82
	0407_TP222_0.1_200619	SE207831.023	%	60 - 130%	96
	0407_TP222_0.5_200619	SE207831.024	%	60 - 130%	87
	0407_TP221_0.1_200619	SE207831.026	%	60 - 130%	91
	0407_TP221_0.5_200619	SE207831.027	%	60 - 130%	97
	0407_TP209_0.1_200619	SE207831.028	%	60 - 130%	96
	0407_TP209_0.5_200619	SE207831.029	%	60 - 130%	91
	0407_TP208_0.1_200619	SE207831.030	%	60 - 130%	93
	0407_TP208_0.5_200619	SE207831.031	%	60 - 130%	87
	0407_TP195_0.1_200619	SE207831.032	%	60 - 130%	94
	0407_TP195_1.0_200619	SE207831.033	%	60 - 130%	92
	0407_TP196_0.1_200619	SE207831.035	%	60 - 130%	89
	0407_TP196_1.5_200619	SE207831.036	%	60 - 130%	88
	0407_TP197_0.1_200619	SE207831.038	%	60 - 130%	106
	0407_TP197_0.5_200619	SE207831.039	%	60 - 130%	87
	0407_QC117_200618	SE207831.040	%	60 - 130%	93
	0407_QC115_200618	SE207831.041	%	60 - 130%	95
	0407_QC121_200619	SE207831.042	%	60 - 130%	101

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d14-p-terphenyl (Surrogate)	0407_QC119_200618	SE207831.043	%	60 - 130%	92

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP204_0.1_200618	SE207831.001	%	70 - 130%	80
	0407_TP204_0.5_200618	SE207831.002	%	70 - 130%	88
	0407_TP205_0.1_200618	SE207831.003	%	70 - 130%	89
	0407_TP205_0.5_200618	SE207831.004	%	70 - 130%	82
	0407_TP206_0.1_200618	SE207831.005	%	70 - 130%	89
	0407_TP206_1.0_200618	SE207831.006	%	70 - 130%	82
	0407_TP220_0.1_200618	SE207831.007	%	70 - 130%	89
	0407_TP220_1.0_200618	SE207831.008	%	70 - 130%	86
	0407_TP207_0.1_200618	SE207831.009	%	70 - 130%	91
	0407_TP207_1.0_200618	SE207831.010	%	70 - 130%	86
	0407_TP203_0.1_200618	SE207831.011	%	70 - 130%	91
	0407_TP203_0.5_200618	SE207831.012	%	70 - 130%	86
	0407_TP202_0.5_200618	SE207831.013	%	70 - 130%	90
	0407_TP202_1.0_200618	SE207831.014	%	70 - 130%	89
	0407_TP201_0.1_200618	SE207831.015	%	70 - 130%	85
	0407_TP201_0.5_200618	SE207831.016	%	70 - 130%	97
	0407_TP200_0.1_200618	SE207831.017	%	70 - 130%	82
	0407_TP200_0.5_200618	SE207831.018	%	70 - 130%	87
	0407_TP199_0.1_200618	SE207831.019	%	70 - 130%	89
	0407_TP199_0.5_200618	SE207831.020	%	70 - 130%	94
	0407_TP198_0.1_200618	SE207831.021	%	70 - 130%	93
	0407_TP198_0.5_200618	SE207831.022	%	70 - 130%	82
	0407_TP222_0.1_200619	SE207831.023	%	70 - 130%	98
	0407_TP222_0.5_200619	SE207831.024	%	70 - 130%	81
	0407_TP221_0.1_200619	SE207831.026	%	70 - 130%	91
	0407_TP221_0.5_200619	SE207831.027	%	70 - 130%	92
	0407_TP209_0.1_200619	SE207831.028	%	70 - 130%	97
	0407_TP209_0.5_200619	SE207831.029	%	70 - 130%	91
	0407_TP208_0.1_200619	SE207831.030	%	70 - 130%	98
	0407_TP208_0.5_200619	SE207831.031	%	70 - 130%	87
	0407_TP195_0.1_200619	SE207831.032	%	70 - 130%	92
	0407_TP195_1.0_200619	SE207831.033	%	70 - 130%	91
	0407_TP196_0.1_200619	SE207831.035	%	70 - 130%	90
	0407_TP196_1.5_200619	SE207831.036	%	70 - 130%	89
	0407_TP197_0.1_200619	SE207831.038	%	70 - 130%	103
	0407_TP197_0.5_200619	SE207831.039	%	70 - 130%	90
	0407_QC117_200618	SE207831.040	%	70 - 130%	85
	0407_QC115_200618	SE207831.041	%	70 - 130%	94
	0407_QC121_200619	SE207831.042	%	70 - 130%	92
	0407_QC119_200618	SE207831.043	%	70 - 130%	98
d14-p-terphenyl (Surrogate)	0407_TP204_0.1_200618	SE207831.001	%	70 - 130%	86
	0407_TP204_0.5_200618	SE207831.002	%	70 - 130%	91
	0407_TP205_0.1_200618	SE207831.003	%	70 - 130%	89
	0407_TP205_0.5_200618	SE207831.004	%	70 - 130%	88
	0407_TP206_0.1_200618	SE207831.005	%	70 - 130%	94
	0407_TP206_1.0_200618	SE207831.006	%	70 - 130%	80
	0407_TP220_0.1_200618	SE207831.007	%	70 - 130%	93
	0407_TP220_1.0_200618	SE207831.008	%	70 - 130%	90
	0407_TP207_0.1_200618	SE207831.009	%	70 - 130%	89
	0407_TP207_1.0_200618	SE207831.010	%	70 - 130%	88
	0407_TP203_0.1_200618	SE207831.011	%	70 - 130%	95
	0407_TP203_0.5_200618	SE207831.012	%	70 - 130%	89
	0407_TP202_0.5_200618	SE207831.013	%	70 - 130%	95
	0407_TP202_1.0_200618	SE207831.014	%	70 - 130%	84
	0407_TP201_0.1_200618	SE207831.015	%	70 - 130%	96
	0407_TP201_0.5_200618	SE207831.016	%	70 - 130%	101
	0407_TP200_0.1_200618	SE207831.017	%	70 - 130%	89

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued) — **Method: ME-(AU)-[ENV]AN420**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d14-p-terphenyl (Surrogate)	0407_TP200_0.5_200618	SE207831.018	%	70 - 130%	91
	0407_TP199_0.1_200618	SE207831.019	%	70 - 130%	92
	0407_TP199_0.5_200618	SE207831.020	%	70 - 130%	90
	0407_TP198_0.1_200618	SE207831.021	%	70 - 130%	92
	0407_TP198_0.5_200618	SE207831.022	%	70 - 130%	82
	0407_TP222_0.1_200619	SE207831.023	%	70 - 130%	96
	0407_TP222_0.5_200619	SE207831.024	%	70 - 130%	87
	0407_TP221_0.1_200619	SE207831.026	%	70 - 130%	91
	0407_TP221_0.5_200619	SE207831.027	%	70 - 130%	97
	0407_TP209_0.1_200619	SE207831.028	%	70 - 130%	96
	0407_TP209_0.5_200619	SE207831.029	%	70 - 130%	91
	0407_TP208_0.1_200619	SE207831.030	%	70 - 130%	93
	0407_TP208_0.5_200619	SE207831.031	%	70 - 130%	87
	0407_TP195_0.1_200619	SE207831.032	%	70 - 130%	94
	0407_TP195_1.0_200619	SE207831.033	%	70 - 130%	92
	0407_TP196_0.1_200619	SE207831.035	%	70 - 130%	89
	0407_TP196_1.5_200619	SE207831.036	%	70 - 130%	88
	0407_TP197_0.1_200619	SE207831.038	%	70 - 130%	106
	0407_TP197_0.5_200619	SE207831.039	%	70 - 130%	87
	0407_QC117_200618	SE207831.040	%	70 - 130%	93
	0407_QC115_200618	SE207831.041	%	70 - 130%	95
	0407_QC121_200619	SE207831.042	%	70 - 130%	101
	0407_QC119_200618	SE207831.043	%	70 - 130%	92
d5-nitrobenzene (Surrogate)	0407_TP204_0.1_200618	SE207831.001	%	70 - 130%	82
	0407_TP204_0.5_200618	SE207831.002	%	70 - 130%	90
	0407_TP205_0.1_200618	SE207831.003	%	70 - 130%	86
	0407_TP205_0.5_200618	SE207831.004	%	70 - 130%	85
	0407_TP206_0.1_200618	SE207831.005	%	70 - 130%	87
	0407_TP206_1.0_200618	SE207831.006	%	70 - 130%	96
	0407_TP220_0.1_200618	SE207831.007	%	70 - 130%	90
	0407_TP220_1.0_200618	SE207831.008	%	70 - 130%	88
	0407_TP207_0.1_200618	SE207831.009	%	70 - 130%	89
	0407_TP207_1.0_200618	SE207831.010	%	70 - 130%	84
	0407_TP203_0.1_200618	SE207831.011	%	70 - 130%	89
	0407_TP203_0.5_200618	SE207831.012	%	70 - 130%	90
	0407_TP202_0.5_200618	SE207831.013	%	70 - 130%	88
	0407_TP202_1.0_200618	SE207831.014	%	70 - 130%	87
	0407_TP201_0.1_200618	SE207831.015	%	70 - 130%	87
	0407_TP201_0.5_200618	SE207831.016	%	70 - 130%	96
	0407_TP200_0.1_200618	SE207831.017	%	70 - 130%	84
	0407_TP200_0.5_200618	SE207831.018	%	70 - 130%	82
	0407_TP199_0.1_200618	SE207831.019	%	70 - 130%	93
	0407_TP199_0.5_200618	SE207831.020	%	70 - 130%	84
	0407_TP198_0.1_200618	SE207831.021	%	70 - 130%	93
	0407_TP198_0.5_200618	SE207831.022	%	70 - 130%	89
	0407_TP222_0.1_200619	SE207831.023	%	70 - 130%	95
	0407_TP222_0.5_200619	SE207831.024	%	70 - 130%	86
	0407_TP221_0.1_200619	SE207831.026	%	70 - 130%	88
	0407_TP221_0.5_200619	SE207831.027	%	70 - 130%	92
	0407_TP209_0.1_200619	SE207831.028	%	70 - 130%	101
	0407_TP209_0.5_200619	SE207831.029	%	70 - 130%	97
	0407_TP208_0.1_200619	SE207831.030	%	70 - 130%	102
	0407_TP208_0.5_200619	SE207831.031	%	70 - 130%	92
	0407_TP195_0.1_200619	SE207831.032	%	70 - 130%	88
	0407_TP195_1.0_200619	SE207831.033	%	70 - 130%	90
	0407_TP196_0.1_200619	SE207831.035	%	70 - 130%	87
	0407_TP196_1.5_200619	SE207831.036	%	70 - 130%	85
	0407_TP197_0.1_200619	SE207831.038	%	70 - 130%	88
	0407_TP197_0.5_200619	SE207831.039	%	70 - 130%	91
	0407_QC117_200618	SE207831.040	%	70 - 130%	94
	0407_QC115_200618	SE207831.041	%	70 - 130%	107

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d5-nitrobenzene (Surrogate)	0407_QC121_200619	SE207831.042	%	70 - 130%	98
	0407_QC119_200618	SE207831.043	%	70 - 130%	96

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP204_0.1_200618	SE207831.001	%	60 - 130%	105
	0407_TP204_0.5_200618	SE207831.002	%	60 - 130%	103
	0407_TP205_0.1_200618	SE207831.003	%	60 - 130%	107
	0407_TP205_0.5_200618	SE207831.004	%	60 - 130%	101
	0407_TP206_0.1_200618	SE207831.005	%	60 - 130%	116
	0407_TP206_1.0_200618	SE207831.006	%	60 - 130%	92
	0407_TP220_0.1_200618	SE207831.007	%	60 - 130%	111
	0407_TP220_1.0_200618	SE207831.008	%	60 - 130%	73
	0407_TP207_0.1_200618	SE207831.009	%	60 - 130%	83
	0407_TP207_1.0_200618	SE207831.010	%	60 - 130%	81
	0407_TP203_0.1_200618	SE207831.011	%	60 - 130%	85
	0407_TP203_0.5_200618	SE207831.012	%	60 - 130%	88
	0407_TP202_0.5_200618	SE207831.013	%	60 - 130%	88
	0407_TP202_1.0_200618	SE207831.014	%	60 - 130%	81
	0407_TP201_0.1_200618	SE207831.015	%	60 - 130%	90
	0407_TP201_0.5_200618	SE207831.016	%	60 - 130%	81
	0407_TP200_0.1_200618	SE207831.017	%	60 - 130%	90
	0407_TP200_0.5_200618	SE207831.018	%	60 - 130%	87
	0407_TP199_0.1_200618	SE207831.019	%	60 - 130%	85
	0407_TP199_0.5_200618	SE207831.020	%	60 - 130%	83
	0407_TP198_0.1_200618	SE207831.021	%	60 - 130%	105
	0407_TP198_0.5_200618	SE207831.022	%	60 - 130%	101
	0407_TP222_0.1_200619	SE207831.023	%	60 - 130%	99
	0407_TP222_0.5_200619	SE207831.024	%	60 - 130%	105
	0407_TP221_0.1_200619	SE207831.026	%	60 - 130%	110
	0407_TP221_0.5_200619	SE207831.027	%	60 - 130%	99
	0407_TP209_0.1_200619	SE207831.028	%	60 - 130%	111
	0407_TP209_0.5_200619	SE207831.029	%	60 - 130%	104
	0407_TP208_0.1_200619	SE207831.030	%	60 - 130%	102
	0407_TP208_0.5_200619	SE207831.031	%	60 - 130%	96
	0407_TP195_0.1_200619	SE207831.032	%	60 - 130%	98
	0407_TP195_1.0_200619	SE207831.033	%	60 - 130%	104
	0407_TP196_0.1_200619	SE207831.035	%	60 - 130%	101
	0407_TP196_1.5_200619	SE207831.036	%	60 - 130%	104
	0407_TP197_0.1_200619	SE207831.038	%	60 - 130%	104
	0407_TP197_0.5_200619	SE207831.039	%	60 - 130%	102
	0407_QC117_200618	SE207831.040	%	60 - 130%	105
	0407_QC115_200618	SE207831.041	%	60 - 130%	99
	0407_QC121_200619	SE207831.042	%	60 - 130%	104
	0407_QC119_200618	SE207831.043	%	60 - 130%	121

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	0407_TP204_0.1_200618	SE207831.001	%	70 - 130%	84
	0407_TP204_0.5_200618	SE207831.002	%	70 - 130%	86
	0407_TP205_0.1_200618	SE207831.003	%	70 - 130%	88
	0407_TP205_0.5_200618	SE207831.004	%	70 - 130%	87
	0407_TP206_0.1_200618	SE207831.005	%	70 - 130%	89
	0407_TP206_1.0_200618	SE207831.006	%	70 - 130%	83
	0407_TP220_0.1_200618	SE207831.007	%	70 - 130%	94
	0407_TP220_1.0_200618	SE207831.008	%	70 - 130%	81
	0407_TP207_0.1_200618	SE207831.009	%	70 - 130%	95
	0407_TP207_1.0_200618	SE207831.010	%	70 - 130%	89
	0407_TP203_0.1_200618	SE207831.011	%	70 - 130%	89
	0407_TP203_0.5_200618	SE207831.012	%	70 - 130%	96
	0407_TP202_0.5_200618	SE207831.013	%	70 - 130%	90
	0407_TP202_1.0_200618	SE207831.014	%	70 - 130%	87

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil (continued) — **Method: ME-(AU)-[ENV]AN420**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	0407_TP201_0.1_200618	SE207831.015	%	70 - 130%	94
	0407_TP201_0.5_200618	SE207831.016	%	70 - 130%	87
	0407_TP200_0.1_200618	SE207831.017	%	70 - 130%	94
	0407_TP200_0.5_200618	SE207831.018	%	70 - 130%	94
	0407_TP199_0.1_200618	SE207831.019	%	70 - 130%	96
	0407_TP199_0.5_200618	SE207831.020	%	70 - 130%	97
	0407_TP198_0.1_200618	SE207831.021	%	70 - 130%	86
	0407_TP198_0.5_200618	SE207831.022	%	70 - 130%	84
	0407_TP222_0.1_200619	SE207831.023	%	70 - 130%	82
	0407_TP222_0.5_200619	SE207831.024	%	70 - 130%	85
	0407_TP221_0.1_200619	SE207831.026	%	70 - 130%	86
	0407_TP221_0.5_200619	SE207831.027	%	70 - 130%	87
	0407_TP209_0.1_200619	SE207831.028	%	70 - 130%	83
	0407_TP209_0.5_200619	SE207831.029	%	70 - 130%	86
	0407_TP208_0.1_200619	SE207831.030	%	70 - 130%	84
	0407_TP208_0.5_200619	SE207831.031	%	70 - 130%	86
	0407_TP195_0.1_200619	SE207831.032	%	70 - 130%	82
	0407_TP195_1.0_200619	SE207831.033	%	70 - 130%	85
	0407_TP196_0.1_200619	SE207831.035	%	70 - 130%	83
	0407_TP196_1.5_200619	SE207831.036	%	70 - 130%	82
	0407_TP197_0.1_200619	SE207831.038	%	70 - 130%	89
	0407_TP197_0.5_200619	SE207831.039	%	70 - 130%	85
	0407_QC117_200618	SE207831.040	%	70 - 130%	110
	0407_QC115_200618	SE207831.041	%	70 - 130%	83
	0407_QC121_200619	SE207831.042	%	70 - 130%	81
	0407_QC119_200618	SE207831.043	%	70 - 130%	86
d5-phenol (Surrogate)	0407_TP204_0.1_200618	SE207831.001	%	50 - 130%	80
	0407_TP204_0.5_200618	SE207831.002	%	50 - 130%	72
	0407_TP205_0.1_200618	SE207831.003	%	50 - 130%	74
	0407_TP205_0.5_200618	SE207831.004	%	50 - 130%	77
	0407_TP206_0.1_200618	SE207831.005	%	50 - 130%	80
	0407_TP206_1.0_200618	SE207831.006	%	50 - 130%	75
	0407_TP220_0.1_200618	SE207831.007	%	50 - 130%	80
	0407_TP220_1.0_200618	SE207831.008	%	50 - 130%	71
	0407_TP207_0.1_200618	SE207831.009	%	50 - 130%	83
	0407_TP207_1.0_200618	SE207831.010	%	50 - 130%	80
	0407_TP203_0.1_200618	SE207831.011	%	50 - 130%	77
	0407_TP203_0.5_200618	SE207831.012	%	50 - 130%	88
	0407_TP202_0.5_200618	SE207831.013	%	50 - 130%	78
	0407_TP202_1.0_200618	SE207831.014	%	50 - 130%	80
	0407_TP201_0.1_200618	SE207831.015	%	50 - 130%	81
	0407_TP201_0.5_200618	SE207831.016	%	50 - 130%	78
	0407_TP200_0.1_200618	SE207831.017	%	50 - 130%	80
	0407_TP200_0.5_200618	SE207831.018	%	50 - 130%	82
	0407_TP199_0.1_200618	SE207831.019	%	50 - 130%	83
	0407_TP199_0.5_200618	SE207831.020	%	50 - 130%	86
	0407_TP198_0.1_200618	SE207831.021	%	50 - 130%	96
	0407_TP198_0.5_200618	SE207831.022	%	50 - 130%	97
	0407_TP222_0.1_200619	SE207831.023	%	50 - 130%	92
	0407_TP222_0.5_200619	SE207831.024	%	50 - 130%	97
	0407_TP221_0.1_200619	SE207831.026	%	50 - 130%	95
	0407_TP221_0.5_200619	SE207831.027	%	50 - 130%	85
	0407_TP209_0.1_200619	SE207831.028	%	50 - 130%	96
	0407_TP209_0.5_200619	SE207831.029	%	50 - 130%	89
	0407_TP208_0.1_200619	SE207831.030	%	50 - 130%	98
	0407_TP208_0.5_200619	SE207831.031	%	50 - 130%	100
	0407_TP195_0.1_200619	SE207831.032	%	50 - 130%	96
	0407_TP195_1.0_200619	SE207831.033	%	50 - 130%	96
	0407_TP196_0.1_200619	SE207831.035	%	50 - 130%	95
	0407_TP196_1.5_200619	SE207831.036	%	50 - 130%	98
	0407_TP197_0.1_200619	SE207831.038	%	50 - 130%	96

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil (continued) — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d5-phenol (Surrogate)	0407_TP197_0.5_200619	SE207831.039	%	50 - 130%	97
	0407_QC117_200618	SE207831.040	%	50 - 130%	124
	0407_QC115_200618	SE207831.041	%	50 - 130%	98
	0407_QC121_200619	SE207831.042	%	50 - 130%	96
	0407_QC119_200618	SE207831.043	%	50 - 130%	97

VOC's in Soil — Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP204_0.1_200618	SE207831.001	%	60 - 130%	72
	0407_TP204_0.5_200618	SE207831.002	%	60 - 130%	71
	0407_TP205_0.1_200618	SE207831.003	%	60 - 130%	63
	0407_TP205_0.5_200618	SE207831.004	%	60 - 130%	73
	0407_TP206_0.1_200618	SE207831.005	%	60 - 130%	56 ⓘ
	0407_TP206_1.0_200618	SE207831.006	%	60 - 130%	70
	0407_TP220_0.1_200618	SE207831.007	%	60 - 130%	63
	0407_TP220_1.0_200618	SE207831.008	%	60 - 130%	69
	0407_TP207_0.1_200618	SE207831.009	%	60 - 130%	64
	0407_TP207_1.0_200618	SE207831.010	%	60 - 130%	70
	0407_TP203_0.1_200618	SE207831.011	%	60 - 130%	67
	0407_TP203_0.5_200618	SE207831.012	%	60 - 130%	64
	0407_TP202_0.5_200618	SE207831.013	%	60 - 130%	67
	0407_TP202_1.0_200618	SE207831.014	%	60 - 130%	72
	0407_TP201_0.1_200618	SE207831.015	%	60 - 130%	65
	0407_TP201_0.5_200618	SE207831.016	%	60 - 130%	71
	0407_TP200_0.1_200618	SE207831.017	%	60 - 130%	64
	0407_TP200_0.5_200618	SE207831.018	%	60 - 130%	68
	0407_TP199_0.1_200618	SE207831.019	%	60 - 130%	68
	0407_TP199_0.5_200618	SE207831.020	%	60 - 130%	66
	0407_TP198_0.1_200618	SE207831.021	%	60 - 130%	91
	0407_TP198_0.5_200618	SE207831.022	%	60 - 130%	95
	0407_TP222_0.1_200619	SE207831.023	%	60 - 130%	94
	0407_TP222_0.5_200619	SE207831.024	%	60 - 130%	87
	0407_TP221_0.1_200619	SE207831.026	%	60 - 130%	90
	0407_TP221_0.5_200619	SE207831.027	%	60 - 130%	91
	0407_TP209_0.1_200619	SE207831.028	%	60 - 130%	89
	0407_TP209_0.5_200619	SE207831.029	%	60 - 130%	87
	0407_TP208_0.1_200619	SE207831.030	%	60 - 130%	93
	0407_TP208_0.5_200619	SE207831.031	%	60 - 130%	93
	0407_TP195_0.1_200619	SE207831.032	%	60 - 130%	84
	0407_TP195_1.0_200619	SE207831.033	%	60 - 130%	86
	0407_TP196_0.1_200619	SE207831.035	%	60 - 130%	105
	0407_TP196_1.5_200619	SE207831.036	%	60 - 130%	110
	0407_TP197_0.1_200619	SE207831.038	%	60 - 130%	90
	0407_TP197_0.5_200619	SE207831.039	%	60 - 130%	93
	0407_QC117_200618	SE207831.040	%	60 - 130%	87
	0407_QC115_200618	SE207831.041	%	60 - 130%	95
	0407_QC121_200619	SE207831.042	%	60 - 130%	94
	0407_QC119_200618	SE207831.043	%	60 - 130%	92
	0407_QC410_200619	SE207831.044	%	60 - 130%	105
	0407_QC510_200619	SE207831.045	%	60 - 130%	91
d4-1,2-dichloroethane (Surrogate)	0407_TP204_0.1_200618	SE207831.001	%	60 - 130%	93
	0407_TP204_0.5_200618	SE207831.002	%	60 - 130%	94
	0407_TP205_0.1_200618	SE207831.003	%	60 - 130%	85
	0407_TP205_0.5_200618	SE207831.004	%	60 - 130%	97
	0407_TP206_0.1_200618	SE207831.005	%	60 - 130%	77
	0407_TP206_1.0_200618	SE207831.006	%	60 - 130%	95
	0407_TP220_0.1_200618	SE207831.007	%	60 - 130%	87
	0407_TP220_1.0_200618	SE207831.008	%	60 - 130%	95
	0407_TP207_0.1_200618	SE207831.009	%	60 - 130%	89
	0407_TP207_1.0_200618	SE207831.010	%	60 - 130%	95
	0407_TP203_0.1_200618	SE207831.011	%	60 - 130%	90

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d4-1,2-dichloroethane (Surrogate)	0407_TP203_0.5_200618	SE207831.012	%	60 - 130%	86
	0407_TP202_0.5_200618	SE207831.013	%	60 - 130%	89
	0407_TP202_1.0_200618	SE207831.014	%	60 - 130%	99
	0407_TP201_0.1_200618	SE207831.015	%	60 - 130%	86
	0407_TP201_0.5_200618	SE207831.016	%	60 - 130%	98
	0407_TP200_0.1_200618	SE207831.017	%	60 - 130%	87
	0407_TP200_0.5_200618	SE207831.018	%	60 - 130%	92
	0407_TP199_0.1_200618	SE207831.019	%	60 - 130%	92
	0407_TP199_0.5_200618	SE207831.020	%	60 - 130%	92
	0407_TP198_0.1_200618	SE207831.021	%	60 - 130%	79
	0407_TP198_0.5_200618	SE207831.022	%	60 - 130%	87
	0407_TP222_0.1_200619	SE207831.023	%	60 - 130%	87
	0407_TP222_0.5_200619	SE207831.024	%	60 - 130%	86
	0407_TP221_0.1_200619	SE207831.026	%	60 - 130%	90
	0407_TP221_0.5_200619	SE207831.027	%	60 - 130%	102
	0407_TP209_0.1_200619	SE207831.028	%	60 - 130%	78
	0407_TP209_0.5_200619	SE207831.029	%	60 - 130%	85
	0407_TP208_0.1_200619	SE207831.030	%	60 - 130%	81
	0407_TP208_0.5_200619	SE207831.031	%	60 - 130%	99
	0407_TP195_0.1_200619	SE207831.032	%	60 - 130%	84
	0407_TP195_1.0_200619	SE207831.033	%	60 - 130%	83
	0407_TP196_0.1_200619	SE207831.035	%	60 - 130%	101
	0407_TP196_1.5_200619	SE207831.036	%	60 - 130%	88
	0407_TP197_0.1_200619	SE207831.038	%	60 - 130%	92
	0407_TP197_0.5_200619	SE207831.039	%	60 - 130%	81
	0407_QC117_200618	SE207831.040	%	60 - 130%	84
	0407_QC115_200618	SE207831.041	%	60 - 130%	81
	0407_QC121_200619	SE207831.042	%	60 - 130%	93
	0407_QC119_200618	SE207831.043	%	60 - 130%	92
	0407_QC410_200619	SE207831.044	%	60 - 130%	110
	0407_QC510_200619	SE207831.045	%	60 - 130%	103
d8-toluene (Surrogate)	0407_TP204_0.1_200618	SE207831.001	%	60 - 130%	93
	0407_TP204_0.5_200618	SE207831.002	%	60 - 130%	94
	0407_TP205_0.1_200618	SE207831.003	%	60 - 130%	84
	0407_TP205_0.5_200618	SE207831.004	%	60 - 130%	97
	0407_TP206_0.1_200618	SE207831.005	%	60 - 130%	76
	0407_TP206_1.0_200618	SE207831.006	%	60 - 130%	95
	0407_TP220_0.1_200618	SE207831.007	%	60 - 130%	85
	0407_TP220_1.0_200618	SE207831.008	%	60 - 130%	93
	0407_TP207_0.1_200618	SE207831.009	%	60 - 130%	88
	0407_TP207_1.0_200618	SE207831.010	%	60 - 130%	94
	0407_TP203_0.1_200618	SE207831.011	%	60 - 130%	88
	0407_TP203_0.5_200618	SE207831.012	%	60 - 130%	86
	0407_TP202_0.5_200618	SE207831.013	%	60 - 130%	87
	0407_TP202_1.0_200618	SE207831.014	%	60 - 130%	98
	0407_TP201_0.1_200618	SE207831.015	%	60 - 130%	84
	0407_TP201_0.5_200618	SE207831.016	%	60 - 130%	97
	0407_TP200_0.1_200618	SE207831.017	%	60 - 130%	84
	0407_TP200_0.5_200618	SE207831.018	%	60 - 130%	90
	0407_TP199_0.1_200618	SE207831.019	%	60 - 130%	90
	0407_TP199_0.5_200618	SE207831.020	%	60 - 130%	90
	0407_TP198_0.1_200618	SE207831.021	%	60 - 130%	78
	0407_TP198_0.5_200618	SE207831.022	%	60 - 130%	83
	0407_TP222_0.1_200619	SE207831.023	%	60 - 130%	77
	0407_TP222_0.5_200619	SE207831.024	%	60 - 130%	88
	0407_TP221_0.1_200619	SE207831.026	%	60 - 130%	83
	0407_TP221_0.5_200619	SE207831.027	%	60 - 130%	81
	0407_TP209_0.1_200619	SE207831.028	%	60 - 130%	91
	0407_TP209_0.5_200619	SE207831.029	%	60 - 130%	83
	0407_TP208_0.1_200619	SE207831.030	%	60 - 130%	87
	0407_TP208_0.5_200619	SE207831.031	%	60 - 130%	87

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d8-toluene (Surrogate)	0407_TP195_0.1_200619	SE207831.032	%	60 - 130%	82
	0407_TP195_1.0_200619	SE207831.033	%	60 - 130%	86
	0407_TP196_0.1_200619	SE207831.035	%	60 - 130%	91
	0407_TP196_1.5_200619	SE207831.036	%	60 - 130%	83
	0407_TP197_0.1_200619	SE207831.038	%	60 - 130%	94
	0407_TP197_0.5_200619	SE207831.039	%	60 - 130%	81
	0407_QC117_200618	SE207831.040	%	60 - 130%	88
	0407_QC115_200618	SE207831.041	%	60 - 130%	79
	0407_QC121_200619	SE207831.042	%	60 - 130%	88
	0407_QC119_200618	SE207831.043	%	60 - 130%	80
	0407_QC410_200619	SE207831.044	%	60 - 130%	97
	0407_QC510_200619	SE207831.045	%	60 - 130%	80

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP204_0.1_200618	SE207831.001	%	60 - 130%	72
	0407_TP204_0.5_200618	SE207831.002	%	60 - 130%	71
	0407_TP205_0.1_200618	SE207831.003	%	60 - 130%	63
	0407_TP205_0.5_200618	SE207831.004	%	60 - 130%	73
	0407_TP206_0.1_200618	SE207831.005	%	60 - 130%	56 ①
	0407_TP206_1.0_200618	SE207831.006	%	60 - 130%	70
	0407_TP220_0.1_200618	SE207831.007	%	60 - 130%	63
	0407_TP220_1.0_200618	SE207831.008	%	60 - 130%	69
	0407_TP207_0.1_200618	SE207831.009	%	60 - 130%	64
	0407_TP207_1.0_200618	SE207831.010	%	60 - 130%	70
	0407_TP203_0.1_200618	SE207831.011	%	60 - 130%	67
	0407_TP203_0.5_200618	SE207831.012	%	60 - 130%	64
	0407_TP202_0.5_200618	SE207831.013	%	60 - 130%	67
	0407_TP202_1.0_200618	SE207831.014	%	60 - 130%	72
	0407_TP201_0.1_200618	SE207831.015	%	60 - 130%	65
	0407_TP201_0.5_200618	SE207831.016	%	60 - 130%	71
	0407_TP200_0.1_200618	SE207831.017	%	60 - 130%	64
	0407_TP200_0.5_200618	SE207831.018	%	60 - 130%	68
	0407_TP199_0.1_200618	SE207831.019	%	60 - 130%	68
	0407_TP199_0.5_200618	SE207831.020	%	60 - 130%	66
	0407_TP198_0.1_200618	SE207831.021	%	60 - 130%	91
	0407_TP198_0.5_200618	SE207831.022	%	60 - 130%	95
	0407_TP222_0.1_200619	SE207831.023	%	60 - 130%	94
	0407_TP222_0.5_200619	SE207831.024	%	60 - 130%	87
	0407_TP221_0.1_200619	SE207831.026	%	60 - 130%	90
	0407_TP221_0.5_200619	SE207831.027	%	60 - 130%	91
	0407_TP209_0.1_200619	SE207831.028	%	60 - 130%	89
	0407_TP209_0.5_200619	SE207831.029	%	60 - 130%	87
	0407_TP208_0.1_200619	SE207831.030	%	60 - 130%	93
	0407_TP208_0.5_200619	SE207831.031	%	60 - 130%	93
	0407_TP195_0.1_200619	SE207831.032	%	60 - 130%	84
	0407_TP195_1.0_200619	SE207831.033	%	60 - 130%	86
	0407_TP196_0.1_200619	SE207831.035	%	60 - 130%	105
	0407_TP196_1.5_200619	SE207831.036	%	60 - 130%	110
	0407_TP197_0.1_200619	SE207831.038	%	60 - 130%	90
	0407_TP197_0.5_200619	SE207831.039	%	60 - 130%	93
	0407_QC117_200618	SE207831.040	%	60 - 130%	87
	0407_QC115_200618	SE207831.041	%	60 - 130%	95
	0407_QC121_200619	SE207831.042	%	60 - 130%	94
	0407_QC119_200618	SE207831.043	%	60 - 130%	92
	0407_QC410_200619	SE207831.044	%	60 - 130%	105
d4-1,2-dichloroethane (Surrogate)	0407_TP204_0.1_200618	SE207831.001	%	60 - 130%	93
	0407_TP204_0.5_200618	SE207831.002	%	60 - 130%	94
	0407_TP205_0.1_200618	SE207831.003	%	60 - 130%	85
	0407_TP205_0.5_200618	SE207831.004	%	60 - 130%	97
	0407_TP206_0.1_200618	SE207831.005	%	60 - 130%	77

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d4-1,2-dichloroethane (Surrogate)	0407_TP206_1.0_200618	SE207831.006	%	60 - 130%	95
	0407_TP220_0.1_200618	SE207831.007	%	60 - 130%	87
	0407_TP220_1.0_200618	SE207831.008	%	60 - 130%	95
	0407_TP207_0.1_200618	SE207831.009	%	60 - 130%	89
	0407_TP207_1.0_200618	SE207831.010	%	60 - 130%	95
	0407_TP203_0.1_200618	SE207831.011	%	60 - 130%	90
	0407_TP203_0.5_200618	SE207831.012	%	60 - 130%	86
	0407_TP202_0.5_200618	SE207831.013	%	60 - 130%	89
	0407_TP202_1.0_200618	SE207831.014	%	60 - 130%	99
	0407_TP201_0.1_200618	SE207831.015	%	60 - 130%	86
	0407_TP201_0.5_200618	SE207831.016	%	60 - 130%	98
	0407_TP200_0.1_200618	SE207831.017	%	60 - 130%	87
	0407_TP200_0.5_200618	SE207831.018	%	60 - 130%	92
	0407_TP199_0.1_200618	SE207831.019	%	60 - 130%	92
	0407_TP199_0.5_200618	SE207831.020	%	60 - 130%	92
	0407_TP198_0.1_200618	SE207831.021	%	60 - 130%	79
	0407_TP198_0.5_200618	SE207831.022	%	60 - 130%	87
	0407_TP222_0.1_200619	SE207831.023	%	60 - 130%	87
	0407_TP222_0.5_200619	SE207831.024	%	60 - 130%	86
	0407_TP221_0.1_200619	SE207831.026	%	60 - 130%	90
	0407_TP221_0.5_200619	SE207831.027	%	60 - 130%	102
	0407_TP209_0.1_200619	SE207831.028	%	60 - 130%	78
	0407_TP209_0.5_200619	SE207831.029	%	60 - 130%	85
	0407_TP208_0.1_200619	SE207831.030	%	60 - 130%	81
	0407_TP208_0.5_200619	SE207831.031	%	60 - 130%	99
	0407_TP195_0.1_200619	SE207831.032	%	60 - 130%	84
	0407_TP195_1.0_200619	SE207831.033	%	60 - 130%	83
	0407_TP196_0.1_200619	SE207831.035	%	60 - 130%	101
	0407_TP196_1.5_200619	SE207831.036	%	60 - 130%	88
	0407_TP197_0.1_200619	SE207831.038	%	60 - 130%	92
	0407_TP197_0.5_200619	SE207831.039	%	60 - 130%	81
	0407_QC117_200618	SE207831.040	%	60 - 130%	84
	0407_QC115_200618	SE207831.041	%	60 - 130%	81
	0407_QC121_200619	SE207831.042	%	60 - 130%	93
	0407_QC119_200618	SE207831.043	%	60 - 130%	92
	0407_QC410_200619	SE207831.044	%	60 - 130%	110
d8-toluene (Surrogate)	0407_TP204_0.1_200618	SE207831.001	%	60 - 130%	93
	0407_TP204_0.5_200618	SE207831.002	%	60 - 130%	94
	0407_TP205_0.1_200618	SE207831.003	%	60 - 130%	84
	0407_TP205_0.5_200618	SE207831.004	%	60 - 130%	97
	0407_TP206_0.1_200618	SE207831.005	%	60 - 130%	76
	0407_TP206_1.0_200618	SE207831.006	%	60 - 130%	95
	0407_TP220_0.1_200618	SE207831.007	%	60 - 130%	85
	0407_TP220_1.0_200618	SE207831.008	%	60 - 130%	93
	0407_TP207_0.1_200618	SE207831.009	%	60 - 130%	88
	0407_TP207_1.0_200618	SE207831.010	%	60 - 130%	94
	0407_TP203_0.1_200618	SE207831.011	%	60 - 130%	88
	0407_TP203_0.5_200618	SE207831.012	%	60 - 130%	86
	0407_TP202_0.5_200618	SE207831.013	%	60 - 130%	87
	0407_TP202_1.0_200618	SE207831.014	%	60 - 130%	98
	0407_TP201_0.1_200618	SE207831.015	%	60 - 130%	84
	0407_TP201_0.5_200618	SE207831.016	%	60 - 130%	97
	0407_TP200_0.1_200618	SE207831.017	%	60 - 130%	84
	0407_TP200_0.5_200618	SE207831.018	%	60 - 130%	90
	0407_TP199_0.1_200618	SE207831.019	%	60 - 130%	90
	0407_TP199_0.5_200618	SE207831.020	%	60 - 130%	90
	0407_TP198_0.1_200618	SE207831.021	%	60 - 130%	78
	0407_TP198_0.5_200618	SE207831.022	%	60 - 130%	83
	0407_TP222_0.1_200619	SE207831.023	%	60 - 130%	77
	0407_TP222_0.5_200619	SE207831.024	%	60 - 130%	88
	0407_TP221_0.1_200619	SE207831.026	%	60 - 130%	83

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d8-toluene (Surrogate)	0407_TP221_0.5_200619	SE207831.027	%	60 - 130%	81
	0407_TP209_0.1_200619	SE207831.028	%	60 - 130%	91
	0407_TP209_0.5_200619	SE207831.029	%	60 - 130%	83
	0407_TP208_0.1_200619	SE207831.030	%	60 - 130%	87
	0407_TP208_0.5_200619	SE207831.031	%	60 - 130%	87
	0407_TP195_0.1_200619	SE207831.032	%	60 - 130%	82
	0407_TP195_1.0_200619	SE207831.033	%	60 - 130%	86
	0407_TP196_0.1_200619	SE207831.035	%	60 - 130%	91
	0407_TP196_1.5_200619	SE207831.036	%	60 - 130%	83
	0407_TP197_0.1_200619	SE207831.038	%	60 - 130%	94
	0407_TP197_0.5_200619	SE207831.039	%	60 - 130%	81
	0407_QC117_200618	SE207831.040	%	60 - 130%	88
	0407_QC115_200618	SE207831.041	%	60 - 130%	79
	0407_QC121_200619	SE207831.042	%	60 - 130%	88
	0407_QC119_200618	SE207831.043	%	60 - 130%	80
	0407_QC410_200619	SE207831.044	%	60 - 130%	97

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result
LB202692.001	Mercury	mg/kg	0.05	<0.05
LB202695.001	Mercury	mg/kg	0.05	<0.05
LB202696.001	Mercury	mg/kg	0.05	<0.05

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202630.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	95
LB202632.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	86

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB202630.001	Dichlorvos	mg/kg	0.5	<0.5
	Dimethoate	mg/kg	0.5	<0.5
	Diazinon (Dimpylate)	mg/kg	0.5	<0.5
	Fenitrothion	mg/kg	0.2	<0.2
	Malathion	mg/kg	0.2	<0.2

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202630.001		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	90
		d14-p-terphenyl (Surrogate)	%	-	91
LB202632.001		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	90
		d14-p-terphenyl (Surrogate)	%	-	93

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202630.001		Naphthalene	mg/kg	0.1	<0.1
		2-methylnaphthalene	mg/kg	0.1	<0.1
		1-methylnaphthalene	mg/kg	0.1	<0.1
		Acenaphthylene	mg/kg	0.1	<0.1
		Acenaphthene	mg/kg	0.1	<0.1
		Fluorene	mg/kg	0.1	<0.1
		Phenanthrene	mg/kg	0.1	<0.1
		Anthracene	mg/kg	0.1	<0.1
		Fluoranthene	mg/kg	0.1	<0.1
		Pyrene	mg/kg	0.1	<0.1
		Benzo(a)anthracene	mg/kg	0.1	<0.1
		Chrysene	mg/kg	0.1	<0.1
		Benzo(a)pyrene	mg/kg	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	94
		2-fluorobiphenyl (Surrogate)	%	-	90
		d14-p-terphenyl (Surrogate)	%	-	91
LB202632.001		Naphthalene	mg/kg	0.1	<0.1
		2-methylnaphthalene	mg/kg	0.1	<0.1
		1-methylnaphthalene	mg/kg	0.1	<0.1
		Acenaphthylene	mg/kg	0.1	<0.1
		Acenaphthene	mg/kg	0.1	<0.1
		Fluorene	mg/kg	0.1	<0.1
		Phenanthrene	mg/kg	0.1	<0.1
		Anthracene	mg/kg	0.1	<0.1
		Fluoranthene	mg/kg	0.1	<0.1
		Pyrene	mg/kg	0.1	<0.1
		Benzo(a)anthracene	mg/kg	0.1	<0.1
		Chrysene	mg/kg	0.1	<0.1
		Benzo(a)pyrene	mg/kg	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202632.001	Surrogates	d5-nitrobenzene (Surrogate)	%	-	95
		2-fluorobiphenyl (Surrogate)	%	-	90
		d14-p-terphenyl (Surrogate)	%	-	93

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202630.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	95
LB202632.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	86

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202630.001		Phenol	mg/kg	0.5	<0.5
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5
		2-nitrophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
		Pentachlorophenol	mg/kg	0.5	<0.5
		2,4-dinitrophenol	mg/kg	2	<2
		4-chloro-3-methylphenol	mg/kg	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	78
		d5-phenol (Surrogate)	%	-	82
LB202632.001		Phenol	mg/kg	0.5	<0.5
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5
		2-nitrophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
		Pentachlorophenol	mg/kg	0.5	<0.5
		2,4-dinitrophenol	mg/kg	2	<2

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Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202632.001		4-chloro-3-methylphenol	mg/kg	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	83
		d5-phenol (Surrogate)	%	-	99

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB202681.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0
LB202682.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0
LB202684.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB202630.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110
LB202632.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB202628.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1

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VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB202628.001	Halogenated Aliphatics	1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10
		MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	93
		d8-toluene (Surrogate)	%	-	98
		Bromofluorobenzene (Surrogate)	%	-	81
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1
LB202629.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1

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VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB202629.001	Fumigants	cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10
		MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB202629.001	Oxygenated Compounds	MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	89
		d8-toluene (Surrogate)	%	-	78
		Bromofluorobenzene (Surrogate)	%	-	81
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB202628.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	93
LB202629.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	89

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207824.006	LB202692.014	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE207824.015	LB202692.024	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE207831.010	LB202695.014	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE207831.019	LB202695.024	Mercury	mg/kg	0.05	0.07	0.06	108	5
SE207831.030	LB202696.014	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE207831.043	LB202696.024	Mercury	mg/kg	0.05	0.18	0.20	56	9

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207831.010	LB202646.011	% Moisture	%w/w	1	10.7	11.2	39	5
SE207831.020	LB202646.022	% Moisture	%w/w	1	14.7	14.4	37	2
SE207831.031	LB202647.011	% Moisture	%w/w	1	7.0	6.8	45	3
SE207831.043	LB202647.022	% Moisture	%w/w	1	15.5	15.2	37	2
SE207831.044	LB202647.024	% Moisture	%w/w	1	<1.0	<1.0	188	0

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207831.010	LB202630.014		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.12	0.12	30	3
SE207831.020	LB202630.027		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil (continued) — **Method: ME-(AU)-[ENV]AN420**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207831.020	LB202630.027		o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.13	0.13	30	5
SE207831.031	LB202632.014		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	0.16	30	8
SE207831.041	LB202632.029		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	0	200	0
			Alpha BHC	mg/kg	0.1	<0.1	0	200	0
			Lindane	mg/kg	0.1	<0.1	0	200	0
			Heptachlor	mg/kg	0.1	<0.1	0	200	0
			Aldrin	mg/kg	0.1	<0.1	0	200	0
			Beta BHC	mg/kg	0.1	<0.1	0	200	0
			Delta BHC	mg/kg	0.1	<0.1	0	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	0	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	0	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	0	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Dieldrin	mg/kg	0.2	<0.2	0	200	0
			Endrin	mg/kg	0.2	<0.2	0	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207831.041	LB202632.029		p,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	0	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	0	200	0
			Methoxychlor	mg/kg	0.1	<0.1	0	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	0	200	0
			Isodrin	mg/kg	0.1	<0.1	0	200	0
			Mirex	mg/kg	0.1	<0.1	0	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.151	30	1

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207831.010	LB202630.014		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	7
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	2
SE207831.020	LB202630.027		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	4
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	30	4
SE207831.031	LB202632.014		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	30	9
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	30	4
SE207831.041	LB202632.029		Dichlorvos	mg/kg	0.5	<0.5	0	200	0
			Dimethoate	mg/kg	0.5	<0.5	0.0001073419	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	0.0427190283	200	0
			Fenitrothion	mg/kg	0.2	<0.2	0.0031526387	200	0
			Malathion	mg/kg	0.2	<0.2	0.0030385045	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207831.041	LB202632.029		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	0	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	0	200	0
			Methidathion	mg/kg	0.5	<0.5	0	200	0
			Ethion	mg/kg	0.2	<0.2	0.0091649393	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	0	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	0	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.4535179691	30	4
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.4651144574	30	2

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207831.010	LB202630.014		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	<0.3	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	<0.2	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	30	3
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	7
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	2
SE207831.020	LB202630.027		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	<0.3	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	<0.2	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	30	15
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	4
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	30	4

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207831.031	LB202632.014		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	0.1	126	16
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	0.3	0.5	53	39
			Anthracene	mg/kg	0.1	0.1	0.2	95	30
			Fluoranthene	mg/kg	0.1	0.9	1.3	39	40 ⑨
			Pyrene	mg/kg	0.1	0.9	1.3	39	38
			Benzo(a)anthracene	mg/kg	0.1	0.5	0.6	48	35
			Chrysene	mg/kg	0.1	0.4	0.7	47	51 ⑨
			Benzo(b&j)fluoranthene	mg/kg	0.1	0.6	0.8	45	31
			Benzo(k)fluoranthene	mg/kg	0.1	0.2	0.4	59	55
			Benzo(a)pyrene	mg/kg	0.1	0.5	0.8	46	40
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.3	0.4	58	38
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	0.2	0.3	66	36
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	0.7	1.0	34	40 ⑨
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	0.8	1.1	42	35
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	0.7	1.0	33	37 ⑨
			Total PAH (18)	mg/kg	0.8	4.9	7.5	43	41
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.4	30	3
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	30	9
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	30	4
SE207831.041	LB202632.029		Naphthalene	mg/kg	0.1	<0.1	0.0010217951	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	0.0002850902	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	0	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	0.0260197492	200	0
			Acenaphthene	mg/kg	0.1	<0.1	0.0031995365	200	0
			Fluorene	mg/kg	0.1	<0.1	0.0027542010	200	0
			Phenanthrene	mg/kg	0.1	<0.1	0.0316419284	200	0
			Anthracene	mg/kg	0.1	<0.1	0.0154911029	200	0
			Fluoranthene	mg/kg	0.1	<0.1	0.0990178997	134	0
			Pyrene	mg/kg	0.1	<0.1	0.1018576588	130	2
			Benzo(a)anthracene	mg/kg	0.1	<0.1	0.0593218272	169	0
			Chrysene	mg/kg	0.1	<0.1	0.0640762029	182	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	0.1	0.1033875442	123	8
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	0.0380740513	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	0.0751054111	152	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	0.0464775607	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	0.0066718115	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	0.0432708902	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	0	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	0.242	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	0.121	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	0.1018576588	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.4865298112	30	10
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.4535179691	30	4
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.4651144574	30	2

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207831.010	LB202630.014	Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PCBs in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207831.010	LB202630.014		Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	3
SE207831.020	LB202630.027		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	5
SE207831.031	LB202632.014		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	8
SE207831.041	LB202632.029		Arochlor 1016	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	0	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0.151	30	1

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207831.010	LB202630.014		Phenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	200	0
			Total Cresol	mg/kg	1.5	<1.5	<1.5	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	200	0
			4-nitrophenol	mg/kg	1	<1	<1	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dinitrophenol	mg/kg	2	<2	<2	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.4	4.5	30	1
			d5-phenol (Surrogate)	mg/kg	-	1.6	1.6	30	0
SE207831.020	LB202630.027		Phenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	200	0
			Total Cresol	mg/kg	1.5	<1.5	<1.5	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207831.020	LB202630.027		2-chlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	200	0
			4-nitrophenol	mg/kg	1	<1	<1	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dinitrophenol	mg/kg	2	<2	<2	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.8	4.7	30	3
			d5-phenol (Surrogate)	mg/kg	-	1.7	1.7	30	4
SE207831.031	LB202632.014		Phenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	200	0
			Total Cresol	mg/kg	1.5	<1.5	<1.5	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	200	0
			4-nitrophenol	mg/kg	1	<1	<1	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dinitrophenol	mg/kg	2	<2	<2	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.3	4.2	30	2
			d5-phenol (Surrogate)	mg/kg	-	2.0	2.0	30	1
SE207831.041	LB202632.029		Phenol	mg/kg	0.5	<0.5	0	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	0	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	0	200	0
			Total Cresol	mg/kg	1.5	<1.5	0	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	0	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	0	200	0
			4-nitrophenol	mg/kg	1	<1	0	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	0	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dinitrophenol	mg/kg	2	<2	0	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	0	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.1	4.19	30	1
			d5-phenol (Surrogate)	mg/kg	-	2.0	1.96	30	1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207824.006	LB202681.014	Arsenic, As	mg/kg	1	1	2	93	19
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	3.3	3.7	44	14
		Copper, Cu	mg/kg	0.5	30	35	32	16
		Nickel, Ni	mg/kg	0.5	12	14	34	17
		Lead, Pb	mg/kg	1	31	53	32	52 ②
		Zinc, Zn	mg/kg	2	53	52	34	3
SE207824.015	LB202681.024	Arsenic, As	mg/kg	1	<1	<1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207824.015	LB202681.024	Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	0.9	0.8	87	8
		Copper, Cu	mg/kg	0.5	0.9	0.9	84	2
		Nickel, Ni	mg/kg	0.5	0.6	0.6	115	9
		Lead, Pb	mg/kg	1	3	3	66	4
		Zinc, Zn	mg/kg	2	11	11	49	4
SE207831.010	LB202682.014	Arsenic, As	mg/kg	1	<1	<1	145	0
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	1.1	1.0	77	14
		Copper, Cu	mg/kg	0.5	1.6	1.4	64	18
		Nickel, Ni	mg/kg	0.5	<0.5	<0.5	135	0
		Lead, Pb	mg/kg	1	8	7	44	19
		Zinc, Zn	mg/kg	2	5.7	6.4	63	12
SE207831.019	LB202682.024	Arsenic, As	mg/kg	1	1	<1	130	6
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	1.3	1.3	68	5
		Copper, Cu	mg/kg	0.5	8.5	8.2	36	5
		Nickel, Ni	mg/kg	0.5	0.9	0.9	88	0
		Lead, Pb	mg/kg	1	27	27	34	1
		Zinc, Zn	mg/kg	2	11	11	48	5
SE207831.030	LB202684.014	Arsenic, As	mg/kg	1	2	<1	110	42
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	2.6	2.0	52	28
		Copper, Cu	mg/kg	0.5	14	10	34	33
		Nickel, Ni	mg/kg	0.5	5.6	4.2	40	29
		Lead, Pb	mg/kg	1	45	29	33	43 ②
		Zinc, Zn	mg/kg	2	37	29	36	22
SE207831.043	LB202684.024	Arsenic, As	mg/kg	1	5	5	51	10
		Cadmium, Cd	mg/kg	0.3	0.3	0.3	120	1
		Chromium, Cr	mg/kg	0.5	8.5	6.9	37	22
		Copper, Cu	mg/kg	0.5	45	51	31	12
		Nickel, Ni	mg/kg	0.5	9.2	9.2	35	0
		Lead, Pb	mg/kg	1	160	160	31	3
		Zinc, Zn	mg/kg	2	170	150	31	11

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207831.010	LB202630.014		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE207831.020	LB202630.027		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE207831.031	LB202632.014		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207831.031	LB202632.014		TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE207831.041	LB202632.029		TRH C10-C14	mg/kg	20	<20	0	200	0
			TRH C15-C28	mg/kg	45	<45	0	200	0
			TRH C29-C36	mg/kg	45	<45	0	200	0
			TRH C37-C40	mg/kg	100	<100	0	200	0
			TRH C10-C36 Total	mg/kg	110	<110	0	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	0	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	0	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	0	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	0	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	0	200	0

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207831.010	LB202628.014	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207831.010	LB202628.014	Halogenated	1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.5	9.8	50	3
			d8-toluene (Surrogate)	mg/kg	-	9.4	9.7	50	3
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.0	7.2	50	3
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE207831.020	LB202628.025	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207831.020	LB202628.025	Halogenated	Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
		Aliphatics	Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.2	9.2	50	0
			d8-toluene (Surrogate)	mg/kg	-	9.0	9.0	50	0
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.6	6.8	50	3
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE207831.031	LB202629.015	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207831.031	LB202629.015	Fumigants	cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207831.031	LB202629.015	Oxygenated	MEK (2-butanone)	mg/kg	10	<10	<10	200	0
		Compounds	MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.9	10.2	50	4
			d8-toluene (Surrogate)	mg/kg	-	8.7	8.4	50	3
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.3	9.3	50	0
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE207831.043	LB202629.029	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207831.043	LB202629.029	Halogenated	1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.2	8.7	50	6
			d8-toluene (Surrogate)	mg/kg	-	8.0	8.1	50	1
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.2	9.1	50	2
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207831.010	LB202628.014		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.5	9.8	30	3
			d8-toluene (Surrogate)	mg/kg	-	9.4	9.7	30	3
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.0	7.2	30	3
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE207831.020	LB202628.025		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.2	9.2	30	0
			d8-toluene (Surrogate)	mg/kg	-	9.0	9.0	30	0
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.6	6.8	30	3
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE207831.031	LB202629.015		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.9	10.2	30	4
			d8-toluene (Surrogate)	mg/kg	-	8.7	8.4	30	3
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.3	9.3	30	0
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207831.031	LB202629.015	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE207831.043	LB202629.029		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.2	8.7	30	6
			d8-toluene (Surrogate)	mg/kg	-	8.0	8.1	30	1
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.2	9.1	30	2
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202692.002		Mercury	mg/kg	0.05	0.17	0.2	70 - 130	87
LB202695.002		Mercury	mg/kg	0.05	0.20	0.2	70 - 130	100
LB202696.002		Mercury	mg/kg	0.05	0.20	0.2	70 - 130	102

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202630.002		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	101
		Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	102
		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	102
		Dieldrin	mg/kg	0.2	0.2	0.2	60 - 140	102
		Endrin	mg/kg	0.2	0.2	0.2	60 - 140	101
		p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	80
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	0.15	40 - 130	91
LB202632.002		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	118
		Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	114
		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	112
		Dieldrin	mg/kg	0.2	0.2	0.2	60 - 140	119
		Endrin	mg/kg	0.2	0.2	0.2	60 - 140	118
		p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	108
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.12	0.15	40 - 130	83

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202630.002		Dichlorvos	mg/kg	0.5	1.4	2	60 - 140	70
		Diazinon (Dimpylate)	mg/kg	0.5	2.0	2	60 - 140	99
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.1	2	60 - 140	104
		Ethion	mg/kg	0.2	1.7	2	60 - 140	83
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	87
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	83
LB202632.002		Dichlorvos	mg/kg	0.5	1.8	2	60 - 140	89
		Diazinon (Dimpylate)	mg/kg	0.5	2.1	2	60 - 140	107
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.1	2	60 - 140	104
		Ethion	mg/kg	0.2	1.7	2	60 - 140	85
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	91
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	81

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202630.002		Naphthalene	mg/kg	0.1	4.0	4	60 - 140	101
		Acenaphthylene	mg/kg	0.1	4.0	4	60 - 140	100
		Acenaphthene	mg/kg	0.1	4.1	4	60 - 140	103
		Phenanthrene	mg/kg	0.1	4.0	4	60 - 140	101
		Anthracene	mg/kg	0.1	4.1	4	60 - 140	103
		Fluoranthene	mg/kg	0.1	4.2	4	60 - 140	105
		Pyrene	mg/kg	0.1	4.2	4	60 - 140	105
		Benzo(a)pyrene	mg/kg	0.1	4.3	4	60 - 140	108
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	82
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	87
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	83
LB202632.002		Naphthalene	mg/kg	0.1	4.1	4	60 - 140	103
		Acenaphthylene	mg/kg	0.1	4.1	4	60 - 140	102
		Acenaphthene	mg/kg	0.1	4.3	4	60 - 140	107
		Phenanthrene	mg/kg	0.1	4.0	4	60 - 140	101
		Anthracene	mg/kg	0.1	4.0	4	60 - 140	99
		Fluoranthene	mg/kg	0.1	4.1	4	60 - 140	101
		Pyrene	mg/kg	0.1	4.2	4	60 - 140	105
		Benzo(a)pyrene	mg/kg	0.1	4.2	4	60 - 140	106
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	91
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	91
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	81

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PCBs in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202630.002		Arochlor 1260	mg/kg	0.2	0.4	0.4	60 - 140	105
LB202632.002		Arochlor 1260	mg/kg	0.2	0.4	0.4	60 - 140	109

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202630.002		Phenol	mg/kg	0.5	0.8	1	70 - 130	78
		2,4-dichlorophenol	mg/kg	0.5	0.8	1	70 - 130	81
		2,4,6-trichlorophenol	mg/kg	0.5	0.9	1	70 - 130	89
		Pentachlorophenol	mg/kg	0.5	0.8	1	70 - 130	75
	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.1	5	40 - 130	82
		d5-phenol (Surrogate)	mg/kg	-	1.5	2	40 - 130	77
LB202632.002		Phenol	mg/kg	0.5	0.9	1	70 - 130	94
		2,4-dichlorophenol	mg/kg	0.5	0.7	1	70 - 130	73
		2,4,6-trichlorophenol	mg/kg	0.5	0.7	1	70 - 130	74
		Pentachlorophenol	mg/kg	0.5	0.7	1	70 - 130	71
	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.2	5	40 - 130	84
		d5-phenol (Surrogate)	mg/kg	-	2.0	2	40 - 130	98

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202681.002	Arsenic, As	mg/kg	1	340	318.22	80 - 120	106
	Cadmium, Cd	mg/kg	0.3	4.5	5.41	80 - 120	84
	Chromium, Cr	mg/kg	0.5	40	38.31	80 - 120	104
	Copper, Cu	mg/kg	0.5	300	290	80 - 120	105
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	102
	Lead, Pb	mg/kg	1	94	89.9	80 - 120	104
	Zinc, Zn	mg/kg	2	280	273	80 - 120	101
LB202682.002	Arsenic, As	mg/kg	1	330	318.22	80 - 120	105
	Cadmium, Cd	mg/kg	0.3	5.2	5.41	80 - 120	96
	Chromium, Cr	mg/kg	0.5	40	38.31	80 - 120	104
	Copper, Cu	mg/kg	0.5	300	290	80 - 120	103
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	101
	Lead, Pb	mg/kg	1	93	89.9	80 - 120	103
	Zinc, Zn	mg/kg	2	270	273	80 - 120	99
LB202684.002	Arsenic, As	mg/kg	1	330	318.22	80 - 120	104
	Cadmium, Cd	mg/kg	0.3	4.6	5.41	80 - 120	84
	Chromium, Cr	mg/kg	0.5	40	38.31	80 - 120	104
	Copper, Cu	mg/kg	0.5	300	290	80 - 120	103
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	101
	Lead, Pb	mg/kg	1	92	89.9	80 - 120	103
	Zinc, Zn	mg/kg	2	270	273	80 - 120	99

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202630.002		TRH C10-C14	mg/kg	20	50	40	60 - 140	125
		TRH C15-C28	mg/kg	45	50	40	60 - 140	125
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	108
	TRH F Bands	TRH >C10-C16	mg/kg	25	50	40	60 - 140	125
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	125
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	90
LB202632.002		TRH C10-C14	mg/kg	20	43	40	60 - 140	108
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	103
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	95
	TRH F Bands	TRH >C10-C16	mg/kg	25	43	40	60 - 140	108
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	103
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	85

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202628.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	3.0	5	60 - 140	60
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	4.2	5	60 - 140	83
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	3.8	5	60 - 140	77

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202628.002	Halogenated	Chlorobenzene	mg/kg	0.1	4.7	5	60 - 140	93
	Monocyclic	Benzene	mg/kg	0.1	4.0	5	60 - 140	80
	Aromatic	Toluene	mg/kg	0.1	4.1	5	60 - 140	82
		Ethylbenzene	mg/kg	0.1	4.2	5	60 - 140	85
		m/p-xylene	mg/kg	0.2	8.3	10	60 - 140	83
		o-xylene	mg/kg	0.1	4.2	5	60 - 140	84
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.7	10	70 - 130	107
		d8-toluene (Surrogate)	mg/kg	-	10.7	10	70 - 130	107
		Bromofluorobenzene (Surrogate)	mg/kg	-	7.2	10	70 - 130	72
	Trihalomethan	Chloroform	mg/kg	0.1	4.1	5	60 - 140	83
LB202629.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	4.4	5	60 - 140	89
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	4.5	5	60 - 140	89
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	3.9	5	60 - 140	78
	Halogenated	Chlorobenzene	mg/kg	0.1	5.7	5	60 - 140	114
	Monocyclic	Benzene	mg/kg	0.1	4.9	5	60 - 140	97
	Aromatic	Toluene	mg/kg	0.1	4.4	5	60 - 140	88
		Ethylbenzene	mg/kg	0.1	4.5	5	60 - 140	91
		m/p-xylene	mg/kg	0.2	9.1	10	60 - 140	91
		o-xylene	mg/kg	0.1	4.4	5	60 - 140	89
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.3	10	70 - 130	93
		d8-toluene (Surrogate)	mg/kg	-	8.6	10	70 - 130	86
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.5	10	70 - 130	95
	Trihalomethan	Chloroform	mg/kg	0.1	4.3	5	60 - 140	86

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202628.002		TRH C6-C10	mg/kg	25	74	92.5	60 - 140	80
		TRH C6-C9	mg/kg	20	64	80	60 - 140	80
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.7	10	70 - 130	107
		Bromofluorobenzene (Surrogate)	mg/kg	-	7.2	10	70 - 130	72
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	49	62.5	60 - 140	78
LB202629.002		TRH C6-C10	mg/kg	25	73	92.5	60 - 140	78
		TRH C6-C9	mg/kg	20	66	80	60 - 140	82
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.3	10	70 - 130	93
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.5	10	70 - 130	95
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	45	62.5	60 - 140	72

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207727.001	LB202692.004	Mercury	mg/kg	0.05	0.21	<0.05	0.2	90
SE207831.001	LB202695.004	Mercury	mg/kg	0.05	0.23	0.06	0.2	81
SE207831.020	LB202696.004	Mercury	mg/kg	0.05	0.19	<0.05	0.2	85

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE207831.002	LB202630.028		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	-	-
			Alpha BHC	mg/kg	0.1	<0.1	-	-
			Lindane	mg/kg	0.1	<0.1	-	-
			Heptachlor	mg/kg	0.1	<0.1	0.2	110
			Aldrin	mg/kg	0.1	<0.1	0.2	108
			Beta BHC	mg/kg	0.1	<0.1	-	-
			Delta BHC	mg/kg	0.1	<0.1	0.2	109
			Heptachlor epoxide	mg/kg	0.1	<0.1	-	-
			o,p'-DDE	mg/kg	0.1	<0.1	-	-
			Alpha Endosulfan	mg/kg	0.2	<0.2	-	-
			Gamma Chlordane	mg/kg	0.1	<0.1	-	-
			Alpha Chlordane	mg/kg	0.1	<0.1	-	-
			trans-Nonachlor	mg/kg	0.1	<0.1	-	-
			p,p'-DDE	mg/kg	0.1	<0.1	-	-
			Dieldrin	mg/kg	0.2	<0.2	0.2	110
			Endrin	mg/kg	0.2	<0.2	0.2	107
			o,p'-DDD	mg/kg	0.1	<0.1	-	-
			o,p'-DDT	mg/kg	0.1	<0.1	-	-
			Beta Endosulfan	mg/kg	0.2	<0.2	-	-
			p,p'-DDD	mg/kg	0.1	<0.1	-	-
			p,p'-DDT	mg/kg	0.1	<0.1	0.2	87
			Endosulfan sulphate	mg/kg	0.1	<0.1	-	-
			Endrin Aldehyde	mg/kg	0.1	<0.1	-	-
			Methoxychlor	mg/kg	0.1	<0.1	-	-
			Endrin Ketone	mg/kg	0.1	<0.1	-	-
			Isodrin	mg/kg	0.1	<0.1	-	-
			Mirex	mg/kg	0.1	<0.1	-	-
			Total CLP OC Pesticides	mg/kg	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	-	99
SE207831.029	LB202632.028		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	-	-
			Alpha BHC	mg/kg	0.1	<0.1	-	-
			Lindane	mg/kg	0.1	<0.1	-	-
			Heptachlor	mg/kg	0.1	<0.1	0.2	124
			Aldrin	mg/kg	0.1	<0.1	0.2	110
			Beta BHC	mg/kg	0.1	<0.1	-	-
			Delta BHC	mg/kg	0.1	<0.1	0.2	112
			Heptachlor epoxide	mg/kg	0.1	<0.1	-	-
			o,p'-DDE	mg/kg	0.1	<0.1	-	-
			Alpha Endosulfan	mg/kg	0.2	<0.2	-	-
			Gamma Chlordane	mg/kg	0.1	<0.1	-	-
			Alpha Chlordane	mg/kg	0.1	<0.1	-	-
			trans-Nonachlor	mg/kg	0.1	<0.1	-	-
			p,p'-DDE	mg/kg	0.1	<0.1	-	-
			Dieldrin	mg/kg	0.2	<0.2	0.2	128
			Endrin	mg/kg	0.2	<0.2	0.2	120
			o,p'-DDD	mg/kg	0.1	<0.1	-	-
			o,p'-DDT	mg/kg	0.1	<0.1	-	-
			Beta Endosulfan	mg/kg	0.2	<0.2	-	-
			p,p'-DDD	mg/kg	0.1	<0.1	-	-
			p,p'-DDT	mg/kg	0.1	<0.1	0.2	98
			Endosulfan sulphate	mg/kg	0.1	<0.1	-	-
			Endrin Aldehyde	mg/kg	0.1	<0.1	-	-
			Methoxychlor	mg/kg	0.1	<0.1	-	-
			Endrin Ketone	mg/kg	0.1	<0.1	-	-
			Isodrin	mg/kg	0.1	<0.1	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE207831.029	LB202632.028		Mirex	mg/kg	0.1	<0.1	-	-
			Total CLP OC Pesticides	mg/kg	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.16	-	101

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207831.001	LB202630.004		Dichlorvos	mg/kg	0.5	1.8	<0.5	2	90
			Dimethoate	mg/kg	0.5	<0.5	<0.5	-	-
			Diazinon (Dimpylate)	mg/kg	0.5	2.1	<0.5	2	107
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	-	-
			Malathion	mg/kg	0.2	<0.2	<0.2	-	-
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.3	<0.2	2	114
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	-	-
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	-	-
			Methidathion	mg/kg	0.5	<0.5	<0.5	-	-
			Ethion	mg/kg	0.2	2.1	<0.2	2	104
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	-	-
			Total OP Pesticides*	mg/kg	1.7	8.3	<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	88
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.4	-	90
SE207831.029	LB202632.028		Dichlorvos	mg/kg	0.5		<0.5	2	126
			Dimethoate	mg/kg	0.5		<0.5	-	-
			Diazinon (Dimpylate)	mg/kg	0.5		<0.5	2	112
			Fenitrothion	mg/kg	0.2		<0.2	-	-
			Malathion	mg/kg	0.2		<0.2	-	-
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2		<0.2	2	116
			Parathion-ethyl (Parathion)	mg/kg	0.2		<0.2	-	-
			Bromophos Ethyl	mg/kg	0.2		<0.2	-	-
			Methidathion	mg/kg	0.5		<0.5	-	-
			Ethion	mg/kg	0.2		<0.2	2	113
			Azinphos-methyl (Guthion)	mg/kg	0.2		<0.2	-	-
			Total OP Pesticides*	mg/kg	1.7		<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-		0.5	-	89
			d14-p-terphenyl (Surrogate)	mg/kg	-		0.5	-	86

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207831.001	LB202630.004		Naphthalene	mg/kg	0.1	3.9	<0.1	4	98
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
			Acenaphthylene	mg/kg	0.1	4.0	<0.1	4	100
			Acenaphthene	mg/kg	0.1	4.2	<0.1	4	105
			Fluorene	mg/kg	0.1	<0.1	<0.1	-	-
			Phenanthrene	mg/kg	0.1	4.5	0.1	4	110
			Anthracene	mg/kg	0.1	4.1	<0.1	4	102
			Fluoranthene	mg/kg	0.1	4.5	0.2	4	107
			Pyrene	mg/kg	0.1	4.4	0.2	4	105
			Benzo(a)anthracene	mg/kg	0.1	0.1	0.1	-	-
			Chrysene	mg/kg	0.1	0.1	0.1	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1	0.1	0.1	-	-
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(a)pyrene	mg/kg	0.1	4.4	0.1	4	107
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	0.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	4.4	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	4.6	<0.3	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	4.5	0.2	-	-
			Total PAH (18)	mg/kg	0.8	35	1.3	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	-	86
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	88
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.4	-	90

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207831.029	LB202632.028		Naphthalene	mg/kg	0.1		<0.1	4	95
			2-methylnaphthalene	mg/kg	0.1		<0.1	-	-
			1-methylnaphthalene	mg/kg	0.1		<0.1	-	-
			Acenaphthylene	mg/kg	0.1		0.4	4	95
			Acenaphthene	mg/kg	0.1		0.3	4	97
			Fluorene	mg/kg	0.1		0.4	-	-
			Phenanthrene	mg/kg	0.1		5.8	4	73
			Anthracene	mg/kg	0.1		1.6	4	86
			Fluoranthene	mg/kg	0.1		14	4	15 ⑨
			Pyrene	mg/kg	0.1		15	4	15 ⑨
			Benzo(a)anthracene	mg/kg	0.1		5.1	-	-
			Chrysene	mg/kg	0.1		4.7	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1		7.1	-	-
			Benzo(k)fluoranthene	mg/kg	0.1		2.9	-	-
			Benzo(a)pyrene	mg/kg	0.1		6.9	4	41 ⑨
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1		4.9	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1		0.5	-	-
			Benzo(ghi)perylene	mg/kg	0.1		4.4	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2		9.5	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3		9.5	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2		9.5	-	-
			Total PAH (18)	mg/kg	0.8		73	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-		0.5	-	91
			2-fluorobiphenyl (Surrogate)	mg/kg	-		0.5	-	89
			d14-p-terphenyl (Surrogate)	mg/kg	-		0.5	-	86

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE207831.002	LB202630.028		Arochlor 1016	mg/kg	0.2	<0.2	-	-
			Arochlor 1221	mg/kg	0.2	<0.2	-	-
			Arochlor 1232	mg/kg	0.2	<0.2	-	-
			Arochlor 1242	mg/kg	0.2	<0.2	-	-
			Arochlor 1248	mg/kg	0.2	<0.2	-	-
			Arochlor 1254	mg/kg	0.2	<0.2	-	-
			Arochlor 1260	mg/kg	0.2	<0.2	0.4	109
			Arochlor 1262	mg/kg	0.2	<0.2	-	-
			Arochlor 1268	mg/kg	0.2	<0.2	-	-
			Total PCBs (Arochlors)	mg/kg	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	-	95
SE207831.029	LB202632.028		Arochlor 1016	mg/kg	0.2	<0.2	-	-
			Arochlor 1221	mg/kg	0.2	<0.2	-	-
			Arochlor 1232	mg/kg	0.2	<0.2	-	-
			Arochlor 1242	mg/kg	0.2	<0.2	-	-
			Arochlor 1248	mg/kg	0.2	<0.2	-	-
			Arochlor 1254	mg/kg	0.2	<0.2	-	-
			Arochlor 1260	mg/kg	0.2	<0.2	0.4	115
			Arochlor 1262	mg/kg	0.2	<0.2	-	-
			Arochlor 1268	mg/kg	0.2	<0.2	-	-
			Total PCBs (Arochlors)	mg/kg	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	-	101

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207831.001	LB202630.004	Phenol	mg/kg	0.5	0.8	<0.5	1	80
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	-	-
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	-	-
		Total Cresol	mg/kg	1.5	<1.5	<1.5	-	-
		2-chlorophenol	mg/kg	0.5	<0.5	<0.5	-	-
		2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	-	-
		2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	-	-
		2,4-dichlorophenol	mg/kg	0.5	0.9	<0.5	1	87
		2,4,6-trichlorophenol	mg/kg	0.5	1.1	<0.5	1	105

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207831.001	LB202630.004		2-nitrophenol	mg/kg	0.5	<0.5	<0.5	-	-
			4-nitrophenol	mg/kg	1	<1	<1	-	-
			2,4,5-trichlorophenol	mg/kg	0.5	0.9	<0.5	-	-
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	-	-
			Pentachlorophenol	mg/kg	0.5	0.7	<0.5	1	74
			2,4-dinitrophenol	mg/kg	2	<2	<2	-	-
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	-	-
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.4	4.2	-	87
			d5-phenol (Surrogate)	mg/kg	-	1.5	1.6	-	74
SE207831.029	LB202632.028		Phenol	mg/kg	0.5		<0.5	1	85
			2-methyl phenol (o-cresol)	mg/kg	0.5		<0.5	-	-
			3/4-methyl phenol (m/p-cresol)	mg/kg	1		<1	-	-
			Total Cresol	mg/kg	1.5		<1.5	-	-
			2-chlorophenol	mg/kg	0.5		<0.5	-	-
			2,4-dimethylphenol	mg/kg	0.5		<0.5	-	-
			2,6-dichlorophenol	mg/kg	0.5		<0.5	-	-
			2,4-dichlorophenol	mg/kg	0.5		<0.5	1	75
			2,4,6-trichlorophenol	mg/kg	0.5		<0.5	1	78
			2-nitrophenol	mg/kg	0.5		<0.5	-	-
			4-nitrophenol	mg/kg	1		<1	-	-
			2,4,5-trichlorophenol	mg/kg	0.5		<0.5	-	-
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1		<1	-	-
			Pentachlorophenol	mg/kg	0.5		<0.5	1	71
			2,4-dinitrophenol	mg/kg	2		<2	-	-
			4-chloro-3-methylphenol	mg/kg	2		<2	-	-
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-		4.3	-	88
			d5-phenol (Surrogate)	mg/kg	-		1.8	-	90

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207727.001	LB202681.004	Arsenic, As	mg/kg	1	42	2	50	79
		Cadmium, Cd	mg/kg	0.3	44	<0.3	50	89
		Chromium, Cr	mg/kg	0.5	54	6.6	50	95
		Copper, Cu	mg/kg	0.5	100	67	50	73
		Nickel, Ni	mg/kg	0.5	51	2.5	50	98
		Lead, Pb	mg/kg	1	56	9	50	93
		Zinc, Zn	mg/kg	2	72	26	50	93
SE207831.001	LB202682.004	Arsenic, As	mg/kg	1	57	8	50	96
		Cadmium, Cd	mg/kg	0.3	44	<0.3	50	87
		Chromium, Cr	mg/kg	0.5	65	16	50	98
		Copper, Cu	mg/kg	0.5	93	58	50	68 ④
		Nickel, Ni	mg/kg	0.5	56	9.9	50	93
		Lead, Pb	mg/kg	1	130	100	50	47 ④
		Zinc, Zn	mg/kg	2	280	250	50	51 ④
SE207831.020	LB202684.004	Arsenic, As	mg/kg	1	48	<1	50	95
		Cadmium, Cd	mg/kg	0.3	43	<0.3	50	86
		Chromium, Cr	mg/kg	0.5	49	1.3	50	95
		Copper, Cu	mg/kg	0.5	50	1.7	50	96
		Nickel, Ni	mg/kg	0.5	49	0.8	50	96
		Lead, Pb	mg/kg	1	50	3	50	94
		Zinc, Zn	mg/kg	2	110	69	50	72

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207831.001	LB202630.004		TRH C10-C14	mg/kg	20	45	<20	40	113
			TRH C15-C28	mg/kg	45	53	<45	40	133
			TRH C29-C36	mg/kg	45	<45	<45	40	98
			TRH C37-C40	mg/kg	100	<100	<100	-	-
			TRH C10-C36 Total	mg/kg	110	<110	<110	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25	44	<25	40	110
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	44	<25	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

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TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207831.001	LB202630.004	TRH F Bands	TRH >C16-C34 (F3)	mg/kg	90	<90	<90	40	135
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	-	-
SE207831.029	LB202632.028		TRH C10-C14	mg/kg	20		<20	40	110
			TRH C15-C28	mg/kg	45		83	40	453 ⑤
			TRH C29-C36	mg/kg	45		<45	40	268 ⑤
			TRH C37-C40	mg/kg	100		<100	-	-
			TRH C10-C36 Total	mg/kg	110		<110	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210		<210	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25		<25	40	118
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25		<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90		120	40	610 ⑤
			TRH >C34-C40 (F4)	mg/kg	120		<120	-	-

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207831.001	LB202628.004	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	-	-
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	-	-
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	-	-
			Bromomethane	mg/kg	1	<1	<1	-	-
			Chloroethane	mg/kg	1	<1	<1	-	-
			Trichlorofluoromethane	mg/kg	1	<1	<1	-	-
			Iodomethane	mg/kg	5	<5	<5	-	-
			1,1-dichloroethene	mg/kg	0.1	3.7	<0.1	5	74
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	-	-
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloroethane	mg/kg	0.1	4.5	<0.1	5	89
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	-	-
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	4.2	<0.1	5	84
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	-	-
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated	Chlorobenzene	mg/kg	0.1	5.3	<0.1	5	105
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Monocyclic	Benzene	mg/kg	0.1	3.4	<0.1	5	67
		Aromatic	Toluene	mg/kg	0.1	3.6	<0.1	5	70

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VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207831.001	LB202628.004	Monocyclic Aromatic	Ethylbenzene	mg/kg	0.1	3.7	<0.1	5	73
			m/p-xylene	mg/kg	0.2	7.4	<0.2	10	73
			o-xylene	mg/kg	0.1	3.7	<0.1	5	73
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	-	-
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	-	-
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	-	-
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	-	-
			2-nitropropane	mg/kg	10	<10	<10	-	-
		Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10	<10	-	-
			MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	-	-
			Vinyl acetate	mg/kg	10	<10	<10	-	-
			MEK (2-butanone)	mg/kg	10	<10	<10	-	-
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	-	-
			2-hexanone (MBK)	mg/kg	5	<5	<5	-	-
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.9	9.3	10	99
			d8-toluene (Surrogate)	mg/kg	-	9.8	9.3	10	98
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.8	7.2	10	68 ①
		Totals	Total Xylenes	mg/kg	0.3	11	<0.3	-	-
			Total BTEX	mg/kg	0.6	22	<0.6	-	-
			Total VOC*	mg/kg	24	45	<24	-	-
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	-	-
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	22	<1.8	-	-
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	22	<1.8	-	-
		Trihalomethanes	Chloroform	mg/kg	0.1	4.5	<0.1	5	89
			Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Bromoform	mg/kg	0.1	<0.1	<0.1	-	-
SE207831.021	LB202629.004	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	-	-
			Chloromethane	mg/kg	1	<1	<1	-	-
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	-	-
			Bromomethane	mg/kg	1	<1	<1	-	-
			Chloroethane	mg/kg	1	<1	<1	-	-
			Trichlorofluoromethane	mg/kg	1	<1	<1	-	-
			Iodomethane	mg/kg	5	<5	<5	-	-
			1,1-dichloroethene	mg/kg	0.1	4.7	<0.1	5	94
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	-	-
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloroethane	mg/kg	0.1	5.0	<0.1	5	99
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	-	-
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	4.2	<0.1	5	84
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207831.021	LB202629.004	Halogenated	1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
		Aliphatics	Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	-	-
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated	Chlorobenzene	mg/kg	0.1	5.1	<0.1	5	102
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Monocyclic	Benzene	mg/kg	0.1	4.7	<0.1	5	95
		Aromatic	Toluene	mg/kg	0.1	3.9	<0.1	5	78
			Ethylbenzene	mg/kg	0.1	4.1	<0.1	5	82
			m/p-xylene	mg/kg	0.2	8.0	<0.2	10	80
			o-xylene	mg/kg	0.1	4.0	<0.1	5	79
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	-	-
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	-	-
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	-	-
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	-	-
		Compounds	2-nitropropane	mg/kg	10	<10	<10	-	-
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	-	-
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	-	-
			Vinyl acetate	mg/kg	10	<10	<10	-	-
			MEK (2-butanone)	mg/kg	10	<10	<10	-	-
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	-	-
			2-hexanone (MBK)	mg/kg	5	<5	<5	-	-
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.8	7.9	10	88
			d8-toluene (Surrogate)	mg/kg	-	7.5	7.8	10	75
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.4	9.1	10	84
		Totals	Total Xylenes	mg/kg	0.3	12	<0.3	-	-
			Total BTEX	mg/kg	0.6	25	<0.6	-	-
			Total VOC*	mg/kg	24	49	<24	-	-
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	-	-
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	24	<1.8	-	-
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	24	<1.8	-	-
		Trihalometha	Chloroform	mg/kg	0.1	4.7	<0.1	5	94
		nes	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Bromoform	mg/kg	0.1	<0.1	<0.1	-	-

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207831.001	LB202628.004		TRH C6-C10	mg/kg	25	62	<25	92.5	67
			TRH C6-C9	mg/kg	20	54	<20	80	67
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.9	9.3	10	99

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207831.001	LB202628.004	Surrogates	d8-toluene (Surrogate)	mg/kg	-	9.8	9.3	10	98
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.8	7.2	-	68
		VPH F	Benzene (F0)	mg/kg	0.1	3.4	<0.1	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	40	<25	62.5	65
SE207831.021	LB202629.005		TRH C6-C10	mg/kg	25	65	<25	92.5	70
			TRH C6-C9	mg/kg	20	58	<20	80	72
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.8	7.9	10	88
			d8-toluene (Surrogate)	mg/kg	-	7.5	7.8	10	75
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.4	9.1	-	84
		VPH F	Benzene (F0)	mg/kg	0.1	4.7	<0.1	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	40	<25	62.5	63

MATRIX SPIKE DUPLICATES

SE207831 R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

QC Sample	Sample Number	Parameter	Units	LOR

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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CHAIN OF CUSTODY RECORD

COC#: SE207731

Owner job:

Ship to: XML	Project Name:	Due date: 26/06/2020 4:30:23 PM
	Client: SLR_LANECOVE_NSW	Send Results to: AUENVSE
	Sampler Name: [redacted]	
Carrier:	Airbill #:	

Field Sample ID	Client ID	Date sampling	Time	Matrix	# of Containers	Analyses Requested										Comments
						1523LL										
SE207731.017	0407_QC120_200619	19/06/2020	0:00:00	Soil		X										

SGS EHS Melbourne COC

ME315374

Sample Condition Upon Receipt at Laboratory:	Cooler temperature:
Special Instructions/Comments: Job Booked by: [redacted] 19/6/2020 Loggin Checked by:	

#1 Released by: (Sig)	Date:	#2 Released by: (Sig)	Date:	#3 Released by: (Sig)	Date:
Company Name:	Time	Company Name:	Time	Company Name:	Time
#1 Received by: (Sig) [redacted]	Date 23/6/20	#2 Received by: (Sig)	Date	#3 Received by: (Sig)	Date
Company Name:	Time: 1:35pm	Company Name:	Time:	Company Name:	Time:

SGS Notting Hill Bottle Map

| Job Number: | ME315374 | | | | | | | | Eskies /boxes: | (2) | | | | | | | | | | | | | | | | | | | | | | | Ice /icebricks: | (2) | | | | | | | | | | | | | | | | | | |

SAMPLE RECEIPT ADVICE

SE207731

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000671--000673**
Samples	17

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Fri 19/6/2020
Report Due	Fri 26/6/2020
SGS Reference	**SE207731**

SUBMISSION DETAILS

This is to confirm that 17 samples were received on Friday 19/6/2020. Results are expected to be ready by COB Friday 26/6/2020. Please quote SGS reference SE207731 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	13 Soil, 4 Material
Date documentation received	18/6/2020	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	10°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

7 Soil and 3 Material have been placed on hold as no tests have been assigned for them by the client. These samples will not be processed.
PFAS subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420.

This document is issued by the Company under its General Conditions of Service accessible at www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

SAMPLE RECEIPT ADVICE

SE207731

CLIENT DETAILS

Client SLR CONSULTING AUSTRALIA PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	Speciated Phenols in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
001	0407_TP65_0.1_200619	29	14	26	11	18	10	81	7
002	0407_TP65_0.5_200619	29	14	26	11	18	10	81	7
003	0407_TP77_0.1_200619	29	14	26	11	18	10	81	7
004	0407_TP77_0.5_200619	29	14	26	11	18	10	81	7
005	0407_TP76_0.1_200619	29	14	26	11	18	10	81	7
006	0407_TP76_0.5_200619	29	14	26	11	18	10	81	7
007	0407_TP75_0.1_200619	29	14	26	11	18	10	81	7
008	0407_TP75_0.5_200619	29	14	26	11	18	10	81	7
009	0407_TP74_0.1_200619	29	14	26	11	18	10	81	7
010	0407_TP74_0.5_200619	29	14	26	11	18	10	81	7
011	0407_TP73_0.1_200619	29	14	26	11	18	10	81	7
012	0407_TP73_1.0_200619	29	14	26	11	18	10	81	7
017	0407_QC120_200619	29	14	26	11	18	10	81	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE207731

CLIENT DETAILS

Client SLR CONSULTING AUSTRALIA PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Fibre Identification in soil	Gravimetric Determination of Asbestos in Soil	Mercury in Soil	Moisture Content	Per- and Polyfluoroalkyl Substances (PFAS) in	Total Recoverable Elements in Soil/Waste
001	0407_TP65_0.1_200619	2	9	1	1	-	7
002	0407_TP65_0.5_200619	2	9	1	1	-	7
003	0407_TP77_0.1_200619	2	9	1	1	-	7
004	0407_TP77_0.5_200619	2	9	1	1	-	7
005	0407_TP76_0.1_200619	2	9	1	1	-	7
006	0407_TP76_0.5_200619	2	9	1	1	-	7
007	0407_TP75_0.1_200619	2	9	1	1	-	7
008	0407_TP75_0.5_200619	2	9	1	1	-	7
009	0407_TP74_0.1_200619	2	9	1	1	-	7
010	0407_TP74_0.5_200619	2	9	1	1	-	7
011	0407_TP73_0.1_200619	2	9	1	1	-	7
012	0407_TP73_1.0_200619	2	9	1	1	-	7
017	0407_QC120_200619	-	-	1	1	55	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE207731

CLIENT DETAILS

Client SLR CONSULTING AUSTRALIA PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Fibre ID in bulk materials
013	0407_TP73_A01_200619	1
014	0407_TP76_A03_200619	1
015	0407_TP76_A05_200619	1
016	0407_TP65_A01_200619	1

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000671--000673**
Samples	17

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207731 R0**
Date Received	19/6/2020
Date Reported	26/6/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

PFAS subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420. Report Number ME315374 RO

MA1523: Some surrogate recovery is outside of the acceptance criteria due to sample matrix interference.

No respirable fibres detected in all soil samples using trace analysis technique.
No trace asbestos fibres detected using trace analysis technique.

Sample #11: Approx 6-7x2mm fibre bundles found loose in sample and asbestos found in approx 30x10x3mm cement sheet fragments x>15 in >2mm and <2mm portions.
Sample #12: Asbestos found in approx 5x3x2mm cement sheet fragments in >2mm portion.

Asbestos analysed by Approved Identifier Ravee Sivasubramaniam and Yusuf Kuthpudin .

SIGNATORIES

[redacted]

Chemist | Metals/Inorganics Team Leader | Senior Chemist

[redacted]

Organic Section Head | Asbestos Analyst

VOC's in Soil [AN433] Tested: 22/6/2020

PARAMETER	UOM	LOR	0407_TP65_0.1_20019 SOIL - 19/6/2020 SE207731.001	0407_TP65_0.5_20019 SOIL - 19/6/2020 SE207731.002	0407_TP77_0.1_20019 SOIL - 19/6/2020 SE207731.003	0407_TP77_0.5_20019 SOIL - 19/6/2020 SE207731.004	0407_TP76_0.1_20019 SOIL - 19/6/2020 SE207731.005
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 22/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP65_0.1_200(19 SOIL - 19/6/2020 SE207731.001	0407_TP65_0.5_200(19 SOIL - 19/6/2020 SE207731.002	0407_TP77_0.1_200(19 SOIL - 19/6/2020 SE207731.003	0407_TP77_0.5_200(19 SOIL - 19/6/2020 SE207731.004	0407_TP76_0.1_200(19 SOIL - 19/6/2020 SE207731.005
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 22/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP76_0.5_200(19 SOIL - 19/6/2020 SE207731.006	0407_TP75_0.1_200(19 SOIL - 19/6/2020 SE207731.007	0407_TP75_0.5_200(19 SOIL - 19/6/2020 SE207731.008	0407_TP74_0.1_200(19 SOIL - 19/6/2020 SE207731.009	0407_TP74_0.5_200(19 SOIL - 19/6/2020 SE207731.010
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 22/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP76_0.5_200(19 SOIL - 19/6/2020 SE207731.006	0407_TP75_0.1_200(19 SOIL - 19/6/2020 SE207731.007	0407_TP75_0.5_200(19 SOIL - 19/6/2020 SE207731.008	0407_TP74_0.1_200(19 SOIL - 19/6/2020 SE207731.009	0407_TP74_0.5_200(19 SOIL - 19/6/2020 SE207731.010
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 22/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP73_0.1_20019 SOIL - 19/6/2020 SE207731.011	0407_TP73_1.0_20019 SOIL - 19/6/2020 SE207731.012	0407_QC120_20061 SOIL - 19/6/2020 SE207731.017
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1

VOC's in Soil [AN433] Tested: 22/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP73_0.1_20019 SOIL - 19/6/2020 SE207731.011	0407_TP73_1.0_20019 SOIL - 19/6/2020 SE207731.012	0407_QC120_20061 SOIL - 19/6/2020 SE207731.017
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 22/6/2020

PARAMETER	UOM	LOR	0407_TP65_0.1_20019 SOIL - 19/6/2020 SE207731.001	0407_TP65_0.5_20019 SOIL - 19/6/2020 SE207731.002	0407_TP77_0.1_20019 SOIL - 19/6/2020 SE207731.003	0407_TP77_0.5_20019 SOIL - 19/6/2020 SE207731.004	0407_TP76_0.1_20019 SOIL - 19/6/2020 SE207731.005
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP76_0.5_20019 SOIL - 19/6/2020 SE207731.006	0407_TP75_0.1_20019 SOIL - 19/6/2020 SE207731.007	0407_TP75_0.5_20019 SOIL - 19/6/2020 SE207731.008	0407_TP74_0.1_20019 SOIL - 19/6/2020 SE207731.009	0407_TP74_0.5_20019 SOIL - 19/6/2020 SE207731.010
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP73_0.1_20019 SOIL - 19/6/2020 SE207731.011	0407_TP73_1.0_20019 SOIL - 19/6/2020 SE207731.012	0407_QC120_20061 SOIL - 19/6/2020 SE207731.017
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 22/6/2020

PARAMETER	UOM	LOR	0407_TP65_0.1_20019 SOIL - 19/6/2020 SE207731.001	0407_TP65_0.5_20019 SOIL - 19/6/2020 SE207731.002	0407_TP77_0.1_20019 SOIL - 19/6/2020 SE207731.003	0407_TP77_0.5_20019 SOIL - 19/6/2020 SE207731.004	0407_TP76_0.1_20019 SOIL - 19/6/2020 SE207731.005
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP76_0.5_20019 SOIL - 19/6/2020 SE207731.006	0407_TP75_0.1_20019 SOIL - 19/6/2020 SE207731.007	0407_TP75_0.5_20019 SOIL - 19/6/2020 SE207731.008	0407_TP74_0.1_20019 SOIL - 19/6/2020 SE207731.009	0407_TP74_0.5_20019 SOIL - 19/6/2020 SE207731.010
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP73_0.1_20019 SOIL - 19/6/2020 SE207731.011	0407_TP73_1.0_20019 SOIL - 19/6/2020 SE207731.012	0407_QC120_20061 SOIL - 19/6/2020 SE207731.017
TRH C10-C14	mg/kg	20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 22/6/2020

PARAMETER	UOM	LOR	0407_TP65_0.1_2006 19 SOIL - 19/6/2020 SE207731.001	0407_TP65_0.5_2006 19 SOIL - 19/6/2020 SE207731.002	0407_TP77_0.1_2006 19 SOIL - 19/6/2020 SE207731.003	0407_TP77_0.5_2006 19 SOIL - 19/6/2020 SE207731.004	0407_TP76_0.1_2006 19 SOIL - 19/6/2020 SE207731.005
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PARAMETER	UOM	LOR	0407_TP76_0.5_2006 19 SOIL - 19/6/2020 SE207731.006	0407_TP75_0.1_2006 19 SOIL - 19/6/2020 SE207731.007	0407_TP75_0.5_2006 19 SOIL - 19/6/2020 SE207731.008	0407_TP74_0.1_2006 19 SOIL - 19/6/2020 SE207731.009	0407_TP74_0.5_2006 19 SOIL - 19/6/2020 SE207731.010
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 22/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP73_0.1_20019 SOIL - 19/6/2020 SE207731.011	0407_TP73_1.0_20019 SOIL - 19/6/2020 SE207731.012	0407_QC120_20061 SOIL - 19/6/2020 SE207731.017
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8

Speciated Phenols in Soil [AN420] Tested: 22/6/2020

PARAMETER	UOM	LOR	0407_TP65_0.1_200(19 SOIL - 19/6/2020 SE207731.001	0407_TP65_0.5_200(19 SOIL - 19/6/2020 SE207731.002	0407_TP77_0.1_200(19 SOIL - 19/6/2020 SE207731.003	0407_TP77_0.5_200(19 SOIL - 19/6/2020 SE207731.004	0407_TP76_0.1_200(19 SOIL - 19/6/2020 SE207731.005
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_TP76_0.5_200(19 SOIL - 19/6/2020 SE207731.006	0407_TP75_0.1_200(19 SOIL - 19/6/2020 SE207731.007	0407_TP75_0.5_200(19 SOIL - 19/6/2020 SE207731.008	0407_TP74_0.1_200(19 SOIL - 19/6/2020 SE207731.009	0407_TP74_0.5_200(19 SOIL - 19/6/2020 SE207731.010
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

Speciated Phenols in Soil [AN420] Tested: 22/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP73_0.1_20019 SOIL - 19/6/2020 SE207731.011	0407_TP73_1.0_20019 SOIL - 19/6/2020 SE207731.012	0407_QC120_20061 SOIL - 19/6/2020 SE207731.017
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2

OC Pesticides in Soil [AN420] Tested: 22/6/2020

PARAMETER	UOM	LOR	0407_TP65_0.1_200(19 SOIL - 19/6/2020 SE207731.001	0407_TP65_0.5_200(19 SOIL - 19/6/2020 SE207731.002	0407_TP77_0.1_200(19 SOIL - 19/6/2020 SE207731.003	0407_TP77_0.5_200(19 SOIL - 19/6/2020 SE207731.004	0407_TP76_0.1_200(19 SOIL - 19/6/2020 SE207731.005
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 22/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP76_0.5_200(19 SOIL - 19/6/2020 SE207731.006	0407_TP75_0.1_200(19 SOIL - 19/6/2020 SE207731.007	0407_TP75_0.5_200(19 SOIL - 19/6/2020 SE207731.008	0407_TP74_0.1_200(19 SOIL - 19/6/2020 SE207731.009	0407_TP74_0.5_200(19 SOIL - 19/6/2020 SE207731.010
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 22/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP73_0.1_20019 SOIL - 19/6/2020 SE207731.011	0407_TP73_1.0_20019 SOIL - 19/6/2020 SE207731.012	0407_QC120_20061 SOIL - 19/6/2020 SE207731.017
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1

OP Pesticides in Soil [AN420] Tested: 22/6/2020

PARAMETER	UOM	LOR	0407_TP65_0.1_20019 SOIL - 19/6/2020 SE207731.001	0407_TP65_0.5_20019 SOIL - 19/6/2020 SE207731.002	0407_TP77_0.1_20019 SOIL - 19/6/2020 SE207731.003	0407_TP77_0.5_20019 SOIL - 19/6/2020 SE207731.004	0407_TP76_0.1_20019 SOIL - 19/6/2020 SE207731.005
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP76_0.5_20019 SOIL - 19/6/2020 SE207731.006	0407_TP75_0.1_20019 SOIL - 19/6/2020 SE207731.007	0407_TP75_0.5_20019 SOIL - 19/6/2020 SE207731.008	0407_TP74_0.1_20019 SOIL - 19/6/2020 SE207731.009	0407_TP74_0.5_20019 SOIL - 19/6/2020 SE207731.010
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP73_0.1_20019 SOIL - 19/6/2020 SE207731.011	0407_TP73_1.0_20019 SOIL - 19/6/2020 SE207731.012	0407_QC120_20061 SOIL - 19/6/2020 SE207731.017
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7

PCBs in Soil [AN420] Tested: 22/6/2020

PARAMETER	UOM	LOR	0407_TP65_0.1_20019 SOIL - 19/6/2020 SE207731.001	0407_TP65_0.5_20019 SOIL - 19/6/2020 SE207731.002	0407_TP77_0.1_20019 SOIL - 19/6/2020 SE207731.003	0407_TP77_0.5_20019 SOIL - 19/6/2020 SE207731.004	0407_TP76_0.1_20019 SOIL - 19/6/2020 SE207731.005
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP76_0.5_20019 SOIL - 19/6/2020 SE207731.006	0407_TP75_0.1_20019 SOIL - 19/6/2020 SE207731.007	0407_TP75_0.5_20019 SOIL - 19/6/2020 SE207731.008	0407_TP74_0.1_20019 SOIL - 19/6/2020 SE207731.009	0407_TP74_0.5_20019 SOIL - 19/6/2020 SE207731.010
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP73_0.1_20019 SOIL - 19/6/2020 SE207731.011	0407_TP73_1.0_20019 SOIL - 19/6/2020 SE207731.012	0407_QC120_20061 SOIL - 19/6/2020 SE207731.017
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 24/6/2020

PARAMETER	UOM	LOR	0407_TP65_0.1_20019 SOIL - 19/6/2020 SE207731.001	0407_TP65_0.5_20019 SOIL - 19/6/2020 SE207731.002	0407_TP77_0.1_20019 SOIL - 19/6/2020 SE207731.003	0407_TP77_0.5_20019 SOIL - 19/6/2020 SE207731.004	0407_TP76_0.1_20019 SOIL - 19/6/2020 SE207731.005
Arsenic, As	mg/kg	1	<1	<1	<1	<1	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	0.8
Copper, Cu	mg/kg	0.5	0.9	<0.5	1.3	<0.5	1.8
Lead, Pb	mg/kg	1	3	2	4	<1	6
Nickel, Ni	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Zinc, Zn	mg/kg	2	12	<2.0	5.4	<2.0	9.9

PARAMETER	UOM	LOR	0407_TP76_0.5_20019 SOIL - 19/6/2020 SE207731.006	0407_TP75_0.1_20019 SOIL - 19/6/2020 SE207731.007	0407_TP75_0.5_20019 SOIL - 19/6/2020 SE207731.008	0407_TP74_0.1_20019 SOIL - 19/6/2020 SE207731.009	0407_TP74_0.5_20019 SOIL - 19/6/2020 SE207731.010
Arsenic, As	mg/kg	1	<1	<1	<1	<1	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Copper, Cu	mg/kg	0.5	0.6	0.7	1.0	0.8	0.9
Lead, Pb	mg/kg	1	2	4	5	3	2
Nickel, Ni	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Zinc, Zn	mg/kg	2	<2.0	2.3	2.9	3.3	<2.0

PARAMETER	UOM	LOR	0407_TP73_0.1_20019 SOIL - 19/6/2020 SE207731.011	0407_TP73_1.0_20019 SOIL - 19/6/2020 SE207731.012	0407_QC120_20061 SOIL - 19/6/2020 SE207731.017
Arsenic, As	mg/kg	1	<1	<1	<1
Cadmium, Cd	mg/kg	0.3	0.7	1.7	<0.3
Chromium, Cr	mg/kg	0.5	260	8.7	<0.5
Copper, Cu	mg/kg	0.5	26	22	1.0
Lead, Pb	mg/kg	1	97	130	2
Nickel, Ni	mg/kg	0.5	2.3	15	<0.5
Zinc, Zn	mg/kg	2	130	57	3.3

Mercury in Soil [AN312] Tested: 24/6/2020

PARAMETER	UOM	LOR	0407_TP65_0.1_20019 SOIL - 19/6/2020 SE207731.001	0407_TP65_0.5_20019 SOIL - 19/6/2020 SE207731.002	0407_TP77_0.1_20019 SOIL - 19/6/2020 SE207731.003	0407_TP77_0.5_20019 SOIL - 19/6/2020 SE207731.004	0407_TP76_0.1_20019 SOIL - 19/6/2020 SE207731.005
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_TP76_0.5_20019 SOIL - 19/6/2020 SE207731.006	0407_TP75_0.1_20019 SOIL - 19/6/2020 SE207731.007	0407_TP75_0.5_20019 SOIL - 19/6/2020 SE207731.008	0407_TP74_0.1_20019 SOIL - 19/6/2020 SE207731.009	0407_TP74_0.5_20019 SOIL - 19/6/2020 SE207731.010
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_TP73_0.1_20019 SOIL - 19/6/2020 SE207731.011	0407_TP73_1.0_20019 SOIL - 19/6/2020 SE207731.012	0407_QC120_20061 SOIL - 19/6/2020 SE207731.017
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05

Moisture Content [AN002] Tested: 22/6/2020

PARAMETER	UOM	LOR	0407_TP65_0.1_20019 SOIL - 19/6/2020 SE207731.001	0407_TP65_0.5_20019 SOIL - 19/6/2020 SE207731.002	0407_TP77_0.1_20019 SOIL - 19/6/2020 SE207731.003	0407_TP77_0.5_20019 SOIL - 19/6/2020 SE207731.004	0407_TP76_0.1_20019 SOIL - 19/6/2020 SE207731.005
% Moisture	%w/w	1	3.9	4.2	5.0	3.0	4.1

PARAMETER	UOM	LOR	0407_TP76_0.5_20019 SOIL - 19/6/2020 SE207731.006	0407_TP75_0.1_20019 SOIL - 19/6/2020 SE207731.007	0407_TP75_0.5_20019 SOIL - 19/6/2020 SE207731.008	0407_TP74_0.1_20019 SOIL - 19/6/2020 SE207731.009	0407_TP74_0.5_20019 SOIL - 19/6/2020 SE207731.010
% Moisture	%w/w	1	4.1	3.2	4.7	4.2	4.2

PARAMETER	UOM	LOR	0407_TP73_0.1_20019 SOIL - 19/6/2020 SE207731.011	0407_TP73_1.0_20019 SOIL - 19/6/2020 SE207731.012	0407_QC120_20061 SOIL - 19/6/2020 SE207731.017
% Moisture	%w/w	1	5.0	5.5	4.5

Fibre Identification in soil [AN602] Tested: 25/6/2020

PARAMETER	UOM	LOR	0407_TP65_0.1_2006 19 SOIL - 19/6/2020 SE207731.001	0407_TP77_0.1_2006 19 SOIL - 19/6/2020 SE207731.003	0407_TP76_0.1_2006 19 SOIL - 19/6/2020 SE207731.005	0407_TP75_0.1_2006 19 SOIL - 19/6/2020 SE207731.007	0407_TP74_0.1_2006 19 SOIL - 19/6/2020 SE207731.009
Asbestos Detected	No unit	-	No	No	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	0407_TP73_0.1_2006 19 SOIL - 19/6/2020 SE207731.011	0407_TP73_1.0_2006 19 SOIL - 19/6/2020 SE207731.012
Asbestos Detected	No unit	-	Yes	Yes
Estimated Fibres*	%w/w	0.01	**>0.01**	<0.01

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 25/6/2020

PARAMETER	UOM	LOR	0407_TP65_0.1_20019 SOIL - 19/6/2020 SE207731.001	0407_TP77_0.1_20019 SOIL - 19/6/2020 SE207731.003	0407_TP76_0.1_20019 SOIL - 19/6/2020 SE207731.005	0407_TP75_0.1_20019 SOIL - 19/6/2020 SE207731.007	0407_TP74_0.1_20019 SOIL - 19/6/2020 SE207731.009
Total Sample Weight*	g	1	**885**	**659**	**989**	**922**	**965**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP73_0.1_20019 SOIL - 19/6/2020 SE207731.011	0407_TP73_1.0_20019 SOIL - 19/6/2020 SE207731.012
Total Sample Weight*	g	1	**691**	**757**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	**1.32**	**0.0187**
AF/FA in <2mm Sample*	g	0.00001	**0.0260**	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	**0.19**	**0.002**
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	**0.004**	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	**0.19**	**0.002**
Fibre Type*	No unit	-	-	-

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level [MA-1523] Tested: 25/6/2020

PARAMETER	UOM	LOR	0407_QC120_200619 SOIL - 19/6/2020 SE207731.017
Perfluorobutanoic acid (PFBA)	mg/kg	0.0001	<0.0001
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0005	<0.0005
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0001	<0.0001
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0001	<0.0001
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0001	<0.0001
Perfluorononanoic acid (PFNA)	mg/kg	0.0001	<0.0001
Perfluorodecanoic acid (PFDA)	mg/kg	0.0001	<0.0001
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0001	<0.0001
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0001	<0.0001
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0001	<0.0001
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0001	<0.0001
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0001	<0.0001
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0001	<0.0001
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0001	<0.0001
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0001	<0.0001
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0001	<0.0001
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0001	<0.0001
Sum PFOS and PFHXS	mg/kg	0.0001	<0.0001
Perfluorononane sulfonate (PFNS)	mg/kg	0.0001	<0.0001
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0001	<0.0001
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0001	<0.0001
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.001	<0.001
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.001	<0.001
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.001	<0.001
Perfluoroctane sulfonamide (PFOSA)	mg/kg	0.001	<0.001
N-Methylperfluoroctane sulfonamide (N-MeFOSA)	mg/kg	0.001	<0.001
N-Ethylperfluoroctane sulfonamide (N-EtFOSA)	mg/kg	0.001	<0.001
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002	<0.002
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002	<0.002
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.001	<0.001
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.001	<0.001

Fibre ID in bulk materials [AN602] Tested: 26/6/2020

PARAMETER	UOM	LOR	0407_TP73_A01_20019 MATERIAL - 19/6/2020 SE207731.013	0407_TP76_A03_20019 MATERIAL - 19/6/2020 SE207731.014	0407_TP76_A05_20019 MATERIAL - 19/6/2020 SE207731.015	0407_TP65_A01_20019 MATERIAL - 19/6/2020 SE207731.016
Asbestos Detected	No unit	-	Yes	No	Yes	Yes

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid, mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents .
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples, Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.
AN605	This technique gravimetrically determines the mass of Bonded Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight. Any fibrous asbestos (FA) found in this fraction will be added to the 2-7mm fraction and its mass recorded there.

AN605	This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free/respirable fibres which are only observed by standard trace analysis as per AN602.
AN605	Bonded asbestos containing material (Bonded ACM) comprises asbestos-containing-material which is sound in condition. Fibrous asbestos (FA) comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material. Asbestos fines (AF) includes free fibres, small fibre bundles and also small fragments of bonded ACM that passes through a 7mm sieve - which implies that the bonded ACM fragments have a substantial degree of damage which increases the potential for fibre release.
AN-605	Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009 and NEPM 1999 (2013) schedule B1 section 4..
MA-1523	This method covers the analysis of per- and polyfluoroalkyl substances (PFAS) in aqueous, solid and biosolid samples and solvent extracts, determined as the total of linear and branched isomers. After spiking with isotopically labelled quantification surrogates and clean-up via SPE cartridges sample extracts are analysed by liquid chromatography/mass spectrometry (LC-MS/MS). PFAS concentrations are determined by isotope dilution quantification.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

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Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000671--000673**
Samples	11

LABORATORY DETAILS

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SGS Reference	**SE207731 R0**
Date Received	19 Jun 2020
Date Reported	26 Jun 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

PFAS subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420. Report Number ME315374 RO

MA1523: Some surrogate recovery is outside of the acceptance criteria due to sample matrix interference.

No respirable fibres detected in all soil samples using trace analysis technique.
No trace asbestos fibres detected using trace analysis technique.

Sample #11: Approx 6-7x2mm fibre bundles found loose in sample and asbestos found in approx 30x10x3mm cement sheet fragments x>15 in >2mm and <2mm portions.
Sample #12: Asbestos found in approx 5x3x2mm cement sheet fragments in >2mm portion.

Asbestos analysed by Approved Identifier Ravee Sivasubramaniam and Yusuf Kuthpudin .

SIGNATORIES

[redacted]

Chemist | Senior Chemist | Organic Section Head

[redacted]

Asbestos Analyst

RESULTS

Fibre Identification in soil — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE207731.001	0407_TP65_0.1_200619	Soil	885g Sand, Soil	19 Jun 2020	No Asbestos Found	<0.01
SE207731.003	0407_TP77_0.1_200619	Soil	659g Sand, Soil, Rocks, Plant matter	19 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE207731.005	0407_TP76_0.1_200619	Soil	989g Sand, Soil, Rocks, Plant matter	19 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE207731.007	0407_TP75_0.1_200619	Soil	922g Sand, Soil, Plant matter	19 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE207731.009	0407_TP74_0.1_200619	Soil	965g Sand, Soil, Plant matter	19 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE207731.011	0407_TP73_0.1_200619	Soil	691g Sand, Soil, Rocks, Plant matter	19 Jun 2020	Amosite & Chrysotile Asbestos Found Organic Fibres Detected	>0.01
SE207731.012	0407_TP73_1.0_200619	Soil	757g Sand, Soil, Rocks	19 Jun 2020	Chrysotile Asbestos Found	<0.01

RESULTS

Fibre ID in bulk materials — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE207731.013	0407_TP73_A01 _200619	Other	60x40x6mm Cement Sheet Fragment	19 Jun 2020	Chrysotile Asbestos Detected	
SE207731.014	0407_TP76_A03 _200619	Other	25x25x5mm Sheeting	19 Jun 2020	No Asbestos Detected	
SE207731.015	0407_TP76_A05 _200619	Other	80x60x6mm Cement Sheet Fragment	19 Jun 2020	Chrysotile Asbestos Detected	
SE207731.016	0407_TP65_A01 _200619	Other	110x85x10mm Cement Sheet Fragment	19 Jun 2020	Chrysotile Asbestos Detected	

METHOD SUMMARY

METHOD	METHODOLOGY SUMMARY
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples , Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable ’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.

FOOTNOTES

Amosite	-	Brown Asbestos	NA	-	Not Analysed
Chrysotile	-	White Asbestos	LNR	-	Listed, Not Required
Crocidolite	-	Blue Asbestos	*	-	NATA accreditation does not cover the performance of this service .
Amphiboles	-	Amosite and/or Crocidolite	**	-	Indicative data, theoretical holding time exceeded.

(In reference to soil samples only) This report does not comply with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment and Remediation and Management of Asbestos Contaminated sites in Western Australia - May 2009.

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.

Where reported: 'Asbestos Detected': Asbestos detected by polarised light microscopy, including dispersion staining.
Where reported: 'No Asbestos Found': No Asbestos Found by polarised light microscopy , including dispersion staining.
Where reported: 'UMF Detected': Mineral fibres of unknown type detected by polarised light microscopy, including dispersion staining. Confirmation by another independent analytical technique may be necessary.

Even after disintegration it can be very difficult, or impossible, to detect the presence of asbestos in some asbestos -containing bulk materials using polarised light microscopy. This is due to the low grade or small length or diameter of asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety .

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STATEMENT OF QA/QC PERFORMANCE

SE207731 R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
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Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000671--000673**
Samples	17

LABORATORY DETAILS

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Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207731 R0**
Date Received	19 Jun 2020
Date Reported	26 Jun 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met (within the SGS Alexandria Environmental laboratory).

SAMPLE SUMMARY

HOLDING TIME SUMMARY

SE207731 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Fibre ID in bulk materials

Method: ME-(AU)-[ENV]AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP73_A01_200619	SE207731.013	LB202813	19 Jun 2020	19 Jun 2020	19 Jun 2021	26 Jun 2020	19 Jun 2021	26 Jun 2020
0407_TP76_A03_200619	SE207731.014	LB202813	19 Jun 2020	19 Jun 2020	19 Jun 2021	26 Jun 2020	19 Jun 2021	26 Jun 2020
0407_TP76_A05_200619	SE207731.015	LB202813	19 Jun 2020	19 Jun 2020	19 Jun 2021	26 Jun 2020	19 Jun 2021	26 Jun 2020
0407_TP65_A01_200619	SE207731.016	LB202813	19 Jun 2020	19 Jun 2020	19 Jun 2021	26 Jun 2020	19 Jun 2021	26 Jun 2020

Fibre Identification in soil

Method: ME-(AU)-[ENV]AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP65_0.1_200619	SE207731.001	LB202786	19 Jun 2020	19 Jun 2020	19 Jun 2021	25 Jun 2020	19 Jun 2021	26 Jun 2020
0407_TP65_0.5_200619	SE207731.002	LB202786	19 Jun 2020	19 Jun 2020	19 Jun 2021	25 Jun 2020	19 Jun 2021	26 Jun 2020
0407_TP77_0.1_200619	SE207731.003	LB202786	19 Jun 2020	19 Jun 2020	19 Jun 2021	25 Jun 2020	19 Jun 2021	26 Jun 2020
0407_TP77_0.5_200619	SE207731.004	LB202786	19 Jun 2020	19 Jun 2020	19 Jun 2021	25 Jun 2020	19 Jun 2021	26 Jun 2020
0407_TP76_0.1_200619	SE207731.005	LB202786	19 Jun 2020	19 Jun 2020	19 Jun 2021	25 Jun 2020	19 Jun 2021	26 Jun 2020
0407_TP76_0.5_200619	SE207731.006	LB202786	19 Jun 2020	19 Jun 2020	19 Jun 2021	25 Jun 2020	19 Jun 2021	26 Jun 2020
0407_TP75_0.1_200619	SE207731.007	LB202786	19 Jun 2020	19 Jun 2020	19 Jun 2021	25 Jun 2020	19 Jun 2021	26 Jun 2020
0407_TP75_0.5_200619	SE207731.008	LB202786	19 Jun 2020	19 Jun 2020	19 Jun 2021	25 Jun 2020	19 Jun 2021	26 Jun 2020
0407_TP74_0.1_200619	SE207731.009	LB202786	19 Jun 2020	19 Jun 2020	19 Jun 2021	25 Jun 2020	19 Jun 2021	26 Jun 2020
0407_TP74_0.5_200619	SE207731.010	LB202786	19 Jun 2020	19 Jun 2020	19 Jun 2021	25 Jun 2020	19 Jun 2021	26 Jun 2020
0407_TP73_0.1_200619	SE207731.011	LB202786	19 Jun 2020	19 Jun 2020	19 Jun 2021	25 Jun 2020	19 Jun 2021	26 Jun 2020
0407_TP73_1.0_200619	SE207731.012	LB202786	19 Jun 2020	19 Jun 2020	19 Jun 2021	25 Jun 2020	19 Jun 2021	26 Jun 2020

Gravimetric Determination of Asbestos in Soil

Method: ME-(AU)-[ENV]AN605

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP65_0.1_200619	SE207731.001	LB202786	19 Jun 2020	19 Jun 2020	16 Dec 2020	25 Jun 2020	16 Dec 2020	26 Jun 2020
0407_TP65_0.5_200619	SE207731.002	LB202786	19 Jun 2020	19 Jun 2020	16 Dec 2020	25 Jun 2020	16 Dec 2020	26 Jun 2020
0407_TP77_0.1_200619	SE207731.003	LB202786	19 Jun 2020	19 Jun 2020	16 Dec 2020	25 Jun 2020	16 Dec 2020	26 Jun 2020
0407_TP77_0.5_200619	SE207731.004	LB202786	19 Jun 2020	19 Jun 2020	16 Dec 2020	25 Jun 2020	16 Dec 2020	26 Jun 2020
0407_TP76_0.1_200619	SE207731.005	LB202786	19 Jun 2020	19 Jun 2020	16 Dec 2020	25 Jun 2020	16 Dec 2020	26 Jun 2020
0407_TP76_0.5_200619	SE207731.006	LB202786	19 Jun 2020	19 Jun 2020	16 Dec 2020	25 Jun 2020	16 Dec 2020	26 Jun 2020
0407_TP75_0.1_200619	SE207731.007	LB202786	19 Jun 2020	19 Jun 2020	16 Dec 2020	25 Jun 2020	16 Dec 2020	26 Jun 2020
0407_TP75_0.5_200619	SE207731.008	LB202786	19 Jun 2020	19 Jun 2020	16 Dec 2020	25 Jun 2020	16 Dec 2020	26 Jun 2020
0407_TP74_0.1_200619	SE207731.009	LB202786	19 Jun 2020	19 Jun 2020	16 Dec 2020	25 Jun 2020	16 Dec 2020	26 Jun 2020
0407_TP74_0.5_200619	SE207731.010	LB202786	19 Jun 2020	19 Jun 2020	16 Dec 2020	25 Jun 2020	16 Dec 2020	26 Jun 2020
0407_TP73_0.1_200619	SE207731.011	LB202786	19 Jun 2020	19 Jun 2020	16 Dec 2020	25 Jun 2020	16 Dec 2020	26 Jun 2020
0407_TP73_1.0_200619	SE207731.012	LB202786	19 Jun 2020	19 Jun 2020	16 Dec 2020	25 Jun 2020	16 Dec 2020	26 Jun 2020

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP65_0.1_200619	SE207731.001	LB202615	19 Jun 2020	19 Jun 2020	17 Jul 2020	24 Jun 2020	17 Jul 2020	25 Jun 2020
0407_TP65_0.5_200619	SE207731.002	LB202615	19 Jun 2020	19 Jun 2020	17 Jul 2020	24 Jun 2020	17 Jul 2020	25 Jun 2020
0407_TP77_0.1_200619	SE207731.003	LB202615	19 Jun 2020	19 Jun 2020	17 Jul 2020	24 Jun 2020	17 Jul 2020	25 Jun 2020
0407_TP77_0.5_200619	SE207731.004	LB202615	19 Jun 2020	19 Jun 2020	17 Jul 2020	24 Jun 2020	17 Jul 2020	25 Jun 2020
0407_TP76_0.1_200619	SE207731.005	LB202615	19 Jun 2020	19 Jun 2020	17 Jul 2020	24 Jun 2020	17 Jul 2020	25 Jun 2020
0407_TP76_0.5_200619	SE207731.006	LB202615	19 Jun 2020	19 Jun 2020	17 Jul 2020	24 Jun 2020	17 Jul 2020	25 Jun 2020
0407_TP75_0.1_200619	SE207731.007	LB202615	19 Jun 2020	19 Jun 2020	17 Jul 2020	24 Jun 2020	17 Jul 2020	25 Jun 2020
0407_TP75_0.5_200619	SE207731.008	LB202615	19 Jun 2020	19 Jun 2020	17 Jul 2020	24 Jun 2020	17 Jul 2020	25 Jun 2020
0407_TP74_0.1_200619	SE207731.009	LB202615	19 Jun 2020	19 Jun 2020	17 Jul 2020	24 Jun 2020	17 Jul 2020	25 Jun 2020
0407_TP74_0.5_200619	SE207731.010	LB202615	19 Jun 2020	19 Jun 2020	17 Jul 2020	24 Jun 2020	17 Jul 2020	25 Jun 2020
0407_TP73_0.1_200619	SE207731.011	LB202615	19 Jun 2020	19 Jun 2020	17 Jul 2020	24 Jun 2020	17 Jul 2020	25 Jun 2020
0407_TP73_1.0_200619	SE207731.012	LB202615	19 Jun 2020	19 Jun 2020	17 Jul 2020	24 Jun 2020	17 Jul 2020	25 Jun 2020
0407_QC120_200619	SE207731.017	LB202615	19 Jun 2020	19 Jun 2020	17 Jul 2020	24 Jun 2020	17 Jul 2020	25 Jun 2020

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP65_0.1_200619	SE207731.001	LB202479	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	27 Jun 2020	25 Jun 2020
0407_TP65_0.5_200619	SE207731.002	LB202479	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	27 Jun 2020	25 Jun 2020
0407_TP77_0.1_200619	SE207731.003	LB202479	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	27 Jun 2020	25 Jun 2020
0407_TP77_0.5_200619	SE207731.004	LB202479	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	27 Jun 2020	25 Jun 2020
0407_TP76_0.1_200619	SE207731.005	LB202479	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	27 Jun 2020	25 Jun 2020
0407_TP76_0.5_200619	SE207731.006	LB202479	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	27 Jun 2020	25 Jun 2020
0407_TP75_0.1_200619	SE207731.007	LB202479	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	27 Jun 2020	25 Jun 2020
0407_TP75_0.5_200619	SE207731.008	LB202479	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	27 Jun 2020	25 Jun 2020
0407_TP74_0.1_200619	SE207731.009	LB202479	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	27 Jun 2020	25 Jun 2020

HOLDING TIME SUMMARY

SE207731 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Moisture Content (continued)

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP74_0.5_200619	SE207731.010	LB202479	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	27 Jun 2020	25 Jun 2020
0407_TP73_0.1_200619	SE207731.011	LB202479	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	27 Jun 2020	25 Jun 2020
0407_TP73_1.0_200619	SE207731.012	LB202479	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	27 Jun 2020	25 Jun 2020
0407_QC120_200619	SE207731.017	LB202479	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	27 Jun 2020	25 Jun 2020

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP65_0.1_200619	SE207731.001	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	26 Jun 2020
0407_TP65_0.5_200619	SE207731.002	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	26 Jun 2020
0407_TP77_0.1_200619	SE207731.003	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	26 Jun 2020
0407_TP77_0.5_200619	SE207731.004	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	26 Jun 2020
0407_TP76_0.1_200619	SE207731.005	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	26 Jun 2020
0407_TP76_0.5_200619	SE207731.006	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	26 Jun 2020
0407_TP75_0.1_200619	SE207731.007	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	26 Jun 2020
0407_TP75_0.5_200619	SE207731.008	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	26 Jun 2020
0407_TP74_0.1_200619	SE207731.009	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	26 Jun 2020
0407_TP74_0.5_200619	SE207731.010	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	26 Jun 2020
0407_TP73_0.1_200619	SE207731.011	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	26 Jun 2020
0407_TP73_1.0_200619	SE207731.012	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	26 Jun 2020
0407_QC120_200619	SE207731.017	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	26 Jun 2020

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP65_0.1_200619	SE207731.001	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP65_0.5_200619	SE207731.002	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP77_0.1_200619	SE207731.003	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP77_0.5_200619	SE207731.004	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP76_0.1_200619	SE207731.005	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP76_0.5_200619	SE207731.006	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP75_0.1_200619	SE207731.007	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP75_0.5_200619	SE207731.008	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP74_0.1_200619	SE207731.009	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP74_0.5_200619	SE207731.010	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP73_0.1_200619	SE207731.011	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP73_1.0_200619	SE207731.012	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_QC120_200619	SE207731.017	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP65_0.1_200619	SE207731.001	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP65_0.5_200619	SE207731.002	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP77_0.1_200619	SE207731.003	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP77_0.5_200619	SE207731.004	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP76_0.1_200619	SE207731.005	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP76_0.5_200619	SE207731.006	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP75_0.1_200619	SE207731.007	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP75_0.5_200619	SE207731.008	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP74_0.1_200619	SE207731.009	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP74_0.5_200619	SE207731.010	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP73_0.1_200619	SE207731.011	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP73_1.0_200619	SE207731.012	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_QC120_200619	SE207731.017	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP65_0.1_200619	SE207731.001	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	26 Jun 2020
0407_TP65_0.5_200619	SE207731.002	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	26 Jun 2020
0407_TP77_0.1_200619	SE207731.003	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	26 Jun 2020
0407_TP77_0.5_200619	SE207731.004	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	26 Jun 2020
0407_TP76_0.1_200619	SE207731.005	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	26 Jun 2020
0407_TP76_0.5_200619	SE207731.006	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	26 Jun 2020
0407_TP75_0.1_200619	SE207731.007	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	26 Jun 2020

HOLDING TIME SUMMARY

SE207731 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

PCBs in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP75_0.5_200619	SE207731.008	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	26 Jun 2020
0407_TP74_0.1_200619	SE207731.009	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	26 Jun 2020
0407_TP74_0.5_200619	SE207731.010	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	26 Jun 2020
0407_TP73_0.1_200619	SE207731.011	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	26 Jun 2020
0407_TP73_1.0_200619	SE207731.012	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	26 Jun 2020
0407_QC120_200619	SE207731.017	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	26 Jun 2020

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP65_0.1_200619	SE207731.001	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	26 Jun 2020
0407_TP65_0.5_200619	SE207731.002	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	26 Jun 2020
0407_TP77_0.1_200619	SE207731.003	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	26 Jun 2020
0407_TP77_0.5_200619	SE207731.004	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	26 Jun 2020
0407_TP76_0.1_200619	SE207731.005	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	26 Jun 2020
0407_TP76_0.5_200619	SE207731.006	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	26 Jun 2020
0407_TP75_0.1_200619	SE207731.007	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	26 Jun 2020
0407_TP75_0.5_200619	SE207731.008	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	26 Jun 2020
0407_TP74_0.1_200619	SE207731.009	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	26 Jun 2020
0407_TP74_0.5_200619	SE207731.010	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	26 Jun 2020
0407_TP73_0.1_200619	SE207731.011	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	26 Jun 2020
0407_TP73_1.0_200619	SE207731.012	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	26 Jun 2020
0407_QC120_200619	SE207731.017	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	26 Jun 2020

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP65_0.1_200619	SE207731.001	LB202613	19 Jun 2020	19 Jun 2020	16 Dec 2020	24 Jun 2020	16 Dec 2020	25 Jun 2020
0407_TP65_0.5_200619	SE207731.002	LB202613	19 Jun 2020	19 Jun 2020	16 Dec 2020	24 Jun 2020	16 Dec 2020	25 Jun 2020
0407_TP77_0.1_200619	SE207731.003	LB202613	19 Jun 2020	19 Jun 2020	16 Dec 2020	24 Jun 2020	16 Dec 2020	25 Jun 2020
0407_TP77_0.5_200619	SE207731.004	LB202613	19 Jun 2020	19 Jun 2020	16 Dec 2020	24 Jun 2020	16 Dec 2020	25 Jun 2020
0407_TP76_0.1_200619	SE207731.005	LB202613	19 Jun 2020	19 Jun 2020	16 Dec 2020	24 Jun 2020	16 Dec 2020	25 Jun 2020
0407_TP76_0.5_200619	SE207731.006	LB202613	19 Jun 2020	19 Jun 2020	16 Dec 2020	24 Jun 2020	16 Dec 2020	25 Jun 2020
0407_TP75_0.1_200619	SE207731.007	LB202613	19 Jun 2020	19 Jun 2020	16 Dec 2020	24 Jun 2020	16 Dec 2020	25 Jun 2020
0407_TP75_0.5_200619	SE207731.008	LB202613	19 Jun 2020	19 Jun 2020	16 Dec 2020	24 Jun 2020	16 Dec 2020	25 Jun 2020
0407_TP74_0.1_200619	SE207731.009	LB202613	19 Jun 2020	19 Jun 2020	16 Dec 2020	24 Jun 2020	16 Dec 2020	25 Jun 2020
0407_TP74_0.5_200619	SE207731.010	LB202613	19 Jun 2020	19 Jun 2020	16 Dec 2020	24 Jun 2020	16 Dec 2020	25 Jun 2020
0407_TP73_0.1_200619	SE207731.011	LB202613	19 Jun 2020	19 Jun 2020	16 Dec 2020	24 Jun 2020	16 Dec 2020	25 Jun 2020
0407_TP73_1.0_200619	SE207731.012	LB202613	19 Jun 2020	19 Jun 2020	16 Dec 2020	24 Jun 2020	16 Dec 2020	25 Jun 2020
0407_QC120_200619	SE207731.017	LB202613	19 Jun 2020	19 Jun 2020	16 Dec 2020	24 Jun 2020	16 Dec 2020	25 Jun 2020

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP65_0.1_200619	SE207731.001	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP65_0.5_200619	SE207731.002	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP77_0.1_200619	SE207731.003	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP77_0.5_200619	SE207731.004	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP76_0.1_200619	SE207731.005	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP76_0.5_200619	SE207731.006	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP75_0.1_200619	SE207731.007	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP75_0.5_200619	SE207731.008	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP74_0.1_200619	SE207731.009	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP74_0.5_200619	SE207731.010	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP73_0.1_200619	SE207731.011	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP73_1.0_200619	SE207731.012	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_QC120_200619	SE207731.017	LB202476	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP65_0.1_200619	SE207731.001	LB202466	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP65_0.5_200619	SE207731.002	LB202466	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP77_0.1_200619	SE207731.003	LB202466	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP77_0.5_200619	SE207731.004	LB202466	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP76_0.1_200619	SE207731.005	LB202466	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020

HOLDING TIME SUMMARY

SE207731 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP76_0.5_200619	SE207731.006	LB202466	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP75_0.1_200619	SE207731.007	LB202466	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP75_0.5_200619	SE207731.008	LB202466	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP74_0.1_200619	SE207731.009	LB202466	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP74_0.5_200619	SE207731.010	LB202466	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP73_0.1_200619	SE207731.011	LB202466	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP73_1.0_200619	SE207731.012	LB202466	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_QC120_200619	SE207731.017	LB202466	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP65_0.1_200619	SE207731.001	LB202466	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP65_0.5_200619	SE207731.002	LB202466	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP77_0.1_200619	SE207731.003	LB202466	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP77_0.5_200619	SE207731.004	LB202466	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP76_0.1_200619	SE207731.005	LB202466	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP76_0.5_200619	SE207731.006	LB202466	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP75_0.1_200619	SE207731.007	LB202466	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP75_0.5_200619	SE207731.008	LB202466	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP74_0.1_200619	SE207731.009	LB202466	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP74_0.5_200619	SE207731.010	LB202466	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP73_0.1_200619	SE207731.011	LB202466	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_TP73_1.0_200619	SE207731.012	LB202466	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020
0407_QC120_200619	SE207731.017	LB202466	19 Jun 2020	19 Jun 2020	03 Jul 2020	22 Jun 2020	01 Aug 2020	25 Jun 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP65_0.1_200619	SE207731.001	%	60 - 130%	97
	0407_TP65_0.5_200619	SE207731.002	%	60 - 130%	95
	0407_TP77_0.1_200619	SE207731.003	%	60 - 130%	98
	0407_TP77_0.5_200619	SE207731.004	%	60 - 130%	101
	0407_TP76_0.1_200619	SE207731.005	%	60 - 130%	97
	0407_TP76_0.5_200619	SE207731.006	%	60 - 130%	99
	0407_TP75_0.1_200619	SE207731.007	%	60 - 130%	106
	0407_TP75_0.5_200619	SE207731.008	%	60 - 130%	99
	0407_TP74_0.1_200619	SE207731.009	%	60 - 130%	103
	0407_TP74_0.5_200619	SE207731.010	%	60 - 130%	101
	0407_TP73_0.1_200619	SE207731.011	%	60 - 130%	104
	0407_TP73_1.0_200619	SE207731.012	%	60 - 130%	101
	0407_QC120_200619	SE207731.017	%	60 - 130%	104

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP65_0.1_200619	SE207731.001	%	60 - 130%	80
	0407_TP65_0.5_200619	SE207731.002	%	60 - 130%	80
	0407_TP77_0.1_200619	SE207731.003	%	60 - 130%	74
	0407_TP77_0.5_200619	SE207731.004	%	60 - 130%	80
	0407_TP76_0.1_200619	SE207731.005	%	60 - 130%	82
	0407_TP76_0.5_200619	SE207731.006	%	60 - 130%	78
	0407_TP75_0.1_200619	SE207731.007	%	60 - 130%	82
	0407_TP75_0.5_200619	SE207731.008	%	60 - 130%	88
	0407_TP74_0.1_200619	SE207731.009	%	60 - 130%	84
	0407_TP74_0.5_200619	SE207731.010	%	60 - 130%	82
	0407_TP73_0.1_200619	SE207731.011	%	60 - 130%	82
	0407_TP73_1.0_200619	SE207731.012	%	60 - 130%	78
	0407_QC120_200619	SE207731.017	%	60 - 130%	78
d14-p-terphenyl (Surrogate)	0407_TP65_0.1_200619	SE207731.001	%	60 - 130%	92
	0407_TP65_0.5_200619	SE207731.002	%	60 - 130%	90
	0407_TP77_0.1_200619	SE207731.003	%	60 - 130%	86
	0407_TP77_0.5_200619	SE207731.004	%	60 - 130%	94
	0407_TP76_0.1_200619	SE207731.005	%	60 - 130%	96
	0407_TP76_0.5_200619	SE207731.006	%	60 - 130%	90
	0407_TP75_0.1_200619	SE207731.007	%	60 - 130%	94
	0407_TP75_0.5_200619	SE207731.008	%	60 - 130%	98
	0407_TP74_0.1_200619	SE207731.009	%	60 - 130%	96
	0407_TP74_0.5_200619	SE207731.010	%	60 - 130%	94
	0407_TP73_0.1_200619	SE207731.011	%	60 - 130%	96
	0407_TP73_1.0_200619	SE207731.012	%	60 - 130%	92
	0407_QC120_200619	SE207731.017	%	60 - 130%	90

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP65_0.1_200619	SE207731.001	%	70 - 130%	80
	0407_TP65_0.5_200619	SE207731.002	%	70 - 130%	80
	0407_TP77_0.1_200619	SE207731.003	%	70 - 130%	74
	0407_TP77_0.5_200619	SE207731.004	%	70 - 130%	80
	0407_TP76_0.1_200619	SE207731.005	%	70 - 130%	82
	0407_TP76_0.5_200619	SE207731.006	%	70 - 130%	78
	0407_TP75_0.1_200619	SE207731.007	%	70 - 130%	82
	0407_TP75_0.5_200619	SE207731.008	%	70 - 130%	88
	0407_TP74_0.1_200619	SE207731.009	%	70 - 130%	84
	0407_TP74_0.5_200619	SE207731.010	%	70 - 130%	82
	0407_TP73_0.1_200619	SE207731.011	%	70 - 130%	82
	0407_TP73_1.0_200619	SE207731.012	%	70 - 130%	78
	0407_QC120_200619	SE207731.017	%	70 - 130%	78
d14-p-terphenyl (Surrogate)	0407_TP65_0.1_200619	SE207731.001	%	70 - 130%	92
	0407_TP65_0.5_200619	SE207731.002	%	70 - 130%	90
	0407_TP77_0.1_200619	SE207731.003	%	70 - 130%	86
	0407_TP77_0.5_200619	SE207731.004	%	70 - 130%	94

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d14-p-terphenyl (Surrogate)	0407_TP76_0.1_200619	SE207731.005	%	70 - 130%	96
	0407_TP76_0.5_200619	SE207731.006	%	70 - 130%	90
	0407_TP75_0.1_200619	SE207731.007	%	70 - 130%	94
	0407_TP75_0.5_200619	SE207731.008	%	70 - 130%	98
	0407_TP74_0.1_200619	SE207731.009	%	70 - 130%	96
	0407_TP74_0.5_200619	SE207731.010	%	70 - 130%	94
	0407_TP73_0.1_200619	SE207731.011	%	70 - 130%	96
	0407_TP73_1.0_200619	SE207731.012	%	70 - 130%	92
	0407_QC120_200619	SE207731.017	%	70 - 130%	90
d5-nitrobenzene (Surrogate)	0407_TP65_0.1_200619	SE207731.001	%	70 - 130%	86
	0407_TP65_0.5_200619	SE207731.002	%	70 - 130%	74
	0407_TP77_0.1_200619	SE207731.003	%	70 - 130%	76
	0407_TP77_0.5_200619	SE207731.004	%	70 - 130%	78
	0407_TP76_0.1_200619	SE207731.005	%	70 - 130%	84
	0407_TP76_0.5_200619	SE207731.006	%	70 - 130%	76
	0407_TP75_0.1_200619	SE207731.007	%	70 - 130%	80
	0407_TP75_0.5_200619	SE207731.008	%	70 - 130%	86
	0407_TP74_0.1_200619	SE207731.009	%	70 - 130%	80
	0407_TP74_0.5_200619	SE207731.010	%	70 - 130%	76
	0407_TP73_0.1_200619	SE207731.011	%	70 - 130%	76
	0407_TP73_1.0_200619	SE207731.012	%	70 - 130%	74
	0407_QC120_200619	SE207731.017	%	70 - 130%	74

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP65_0.1_200619	SE207731.001	%	60 - 130%	97
	0407_TP65_0.5_200619	SE207731.002	%	60 - 130%	95
	0407_TP77_0.1_200619	SE207731.003	%	60 - 130%	98
	0407_TP77_0.5_200619	SE207731.004	%	60 - 130%	101
	0407_TP76_0.1_200619	SE207731.005	%	60 - 130%	97
	0407_TP76_0.5_200619	SE207731.006	%	60 - 130%	99
	0407_TP75_0.1_200619	SE207731.007	%	60 - 130%	106
	0407_TP75_0.5_200619	SE207731.008	%	60 - 130%	99
	0407_TP74_0.1_200619	SE207731.009	%	60 - 130%	103
	0407_TP74_0.5_200619	SE207731.010	%	60 - 130%	101
	0407_TP73_0.1_200619	SE207731.011	%	60 - 130%	104
	0407_TP73_1.0_200619	SE207731.012	%	60 - 130%	101
	0407_QC120_200619	SE207731.017	%	60 - 130%	104

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level

Method: MA-1523

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C2-4:2FTS) Surrogate	0407_QC120_200619	SE207731.017	%	10 - 150%	70
(13C2-6:2FTS) Surrogate	0407_QC120_200619	SE207731.017	%	10 - 150%	78
(13C2-8:2FTS) Surrogate	0407_QC120_200619	SE207731.017	%	10 - 150%	72
(13C2-PFDoA) Surrogate	0407_QC120_200619	SE207731.017	%	10 - 150%	110
(13C2-PFHxDA) Surrogate	0407_QC120_200619	SE207731.017	%	10 - 150%	53
(13C2-PFTeDA) Surrogate	0407_QC120_200619	SE207731.017	%	10 - 130%	94
(13C3-PFBS) Surrogate	0407_QC120_200619	SE207731.017	%	10 - 150%	100
(13C3-PFHxS) Surrogate	0407_QC120_200619	SE207731.017	%	10 - 150%	94
(13C4-PFBA) Surrogate	0407_QC120_200619	SE207731.017	%	10 - 150%	101
(13C4-PFHpA) Surrogate	0407_QC120_200619	SE207731.017	%	10 - 150%	98
(13C4-PFOA) Surrogate	0407_QC120_200619	SE207731.017	%	10 - 150%	96
(13C5_PFPeA) Surrogate	0407_QC120_200619	SE207731.017	%	10 - 150%	88
(13C5-PFHxA) Surrogate	0407_QC120_200619	SE207731.017	%	10 - 150%	92
(13C6-PFDA) Surrogate	0407_QC120_200619	SE207731.017	%	10 - 150%	90
(13C7-PFUdA) Surrogate	0407_QC120_200619	SE207731.017	%	10 - 150%	96
(13C8-PFOS) Surrogate	0407_QC120_200619	SE207731.017	%	10 - 150%	90
(13C8-PFOSA) Surrogate	0407_QC120_200619	SE207731.017	%	10 - 150%	67
(13C9-PFNA) Surrogate	0407_QC120_200619	SE207731.017	%	10 - 150%	96
(D3-N-MeFOSA) Surrogate	0407_QC120_200619	SE207731.017	%	10 - 150%	64
(D3-N-MeFOSAA) Surrogate	0407_QC120_200619	SE207731.017	%	10 - 150%	74
(D5-N-EtFOSA) Surrogate	0407_QC120_200619	SE207731.017	%	10 - 150%	60

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level (continued)

Method: MA-1523

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(D5-N-EtFOSAA) Surrogate	0407_QC120_200619	SE207731.017	%	10 - 150%	84
(D7-N-MeFOSE) Surrogate	0407_QC120_200619	SE207731.017	%	10 - 150%	53
(D9-N-EtFOSE) Surrogate	0407_QC120_200619	SE207731.017	%	10 - 150%	71

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	0407_TP65_0.1_200619	SE207731.001	%	70 - 130%	80
	0407_TP65_0.5_200619	SE207731.002	%	70 - 130%	79
	0407_TP77_0.1_200619	SE207731.003	%	70 - 130%	78
	0407_TP77_0.5_200619	SE207731.004	%	70 - 130%	78
	0407_TP76_0.1_200619	SE207731.005	%	70 - 130%	80
	0407_TP76_0.5_200619	SE207731.006	%	70 - 130%	77
	0407_TP75_0.1_200619	SE207731.007	%	70 - 130%	77
	0407_TP75_0.5_200619	SE207731.008	%	70 - 130%	78
	0407_TP74_0.1_200619	SE207731.009	%	70 - 130%	78
	0407_TP74_0.5_200619	SE207731.010	%	70 - 130%	76
	0407_TP73_0.1_200619	SE207731.011	%	70 - 130%	78
	0407_TP73_1.0_200619	SE207731.012	%	70 - 130%	77
	0407_QC120_200619	SE207731.017	%	70 - 130%	73
d5-phenol (Surrogate)	0407_TP65_0.1_200619	SE207731.001	%	50 - 130%	76
	0407_TP65_0.5_200619	SE207731.002	%	50 - 130%	76
	0407_TP77_0.1_200619	SE207731.003	%	50 - 130%	75
	0407_TP77_0.5_200619	SE207731.004	%	50 - 130%	79
	0407_TP76_0.1_200619	SE207731.005	%	50 - 130%	76
	0407_TP76_0.5_200619	SE207731.006	%	50 - 130%	76
	0407_TP75_0.1_200619	SE207731.007	%	50 - 130%	76
	0407_TP75_0.5_200619	SE207731.008	%	50 - 130%	76
	0407_TP74_0.1_200619	SE207731.009	%	50 - 130%	77
	0407_TP74_0.5_200619	SE207731.010	%	50 - 130%	76
	0407_TP73_0.1_200619	SE207731.011	%	50 - 130%	75
	0407_TP73_1.0_200619	SE207731.012	%	50 - 130%	76
	0407_QC120_200619	SE207731.017	%	50 - 130%	73

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP65_0.1_200619	SE207731.001	%	60 - 130%	73
	0407_TP65_0.5_200619	SE207731.002	%	60 - 130%	74
	0407_TP77_0.1_200619	SE207731.003	%	60 - 130%	72
	0407_TP77_0.5_200619	SE207731.004	%	60 - 130%	74
	0407_TP76_0.1_200619	SE207731.005	%	60 - 130%	73
	0407_TP76_0.5_200619	SE207731.006	%	60 - 130%	74
	0407_TP75_0.1_200619	SE207731.007	%	60 - 130%	76
	0407_TP75_0.5_200619	SE207731.008	%	60 - 130%	70
	0407_TP74_0.1_200619	SE207731.009	%	60 - 130%	75
	0407_TP74_0.5_200619	SE207731.010	%	60 - 130%	71
	0407_TP73_0.1_200619	SE207731.011	%	60 - 130%	72
	0407_TP73_1.0_200619	SE207731.012	%	60 - 130%	74
	0407_QC120_200619	SE207731.017	%	60 - 130%	72
d4-1,2-dichloroethane (Surrogate)	0407_TP65_0.1_200619	SE207731.001	%	60 - 130%	99
	0407_TP65_0.5_200619	SE207731.002	%	60 - 130%	101
	0407_TP77_0.1_200619	SE207731.003	%	60 - 130%	99
	0407_TP77_0.5_200619	SE207731.004	%	60 - 130%	100
	0407_TP76_0.1_200619	SE207731.005	%	60 - 130%	99
	0407_TP76_0.5_200619	SE207731.006	%	60 - 130%	102
	0407_TP75_0.1_200619	SE207731.007	%	60 - 130%	104
	0407_TP75_0.5_200619	SE207731.008	%	60 - 130%	99
	0407_TP74_0.1_200619	SE207731.009	%	60 - 130%	104
	0407_TP74_0.5_200619	SE207731.010	%	60 - 130%	101
	0407_TP73_0.1_200619	SE207731.011	%	60 - 130%	97
	0407_TP73_1.0_200619	SE207731.012	%	60 - 130%	103
	0407_QC120_200619	SE207731.017	%	60 - 130%	101
d8-toluene (Surrogate)	0407_TP65_0.1_200619	SE207731.001	%	60 - 130%	98

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d8-toluene (Surrogate)	0407_TP65_0.5_200619	SE207731.002	%	60 - 130%	101
	0407_TP77_0.1_200619	SE207731.003	%	60 - 130%	98
	0407_TP77_0.5_200619	SE207731.004	%	60 - 130%	101
	0407_TP76_0.1_200619	SE207731.005	%	60 - 130%	98
	0407_TP76_0.5_200619	SE207731.006	%	60 - 130%	100
	0407_TP75_0.1_200619	SE207731.007	%	60 - 130%	103
	0407_TP75_0.5_200619	SE207731.008	%	60 - 130%	96
	0407_TP74_0.1_200619	SE207731.009	%	60 - 130%	102
	0407_TP74_0.5_200619	SE207731.010	%	60 - 130%	98
	0407_TP73_0.1_200619	SE207731.011	%	60 - 130%	95
	0407_TP73_1.0_200619	SE207731.012	%	60 - 130%	102
	0407_QC120_200619	SE207731.017	%	60 - 130%	98

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP65_0.1_200619	SE207731.001	%	60 - 130%	73
	0407_TP65_0.5_200619	SE207731.002	%	60 - 130%	74
	0407_TP77_0.1_200619	SE207731.003	%	60 - 130%	72
	0407_TP77_0.5_200619	SE207731.004	%	60 - 130%	74
	0407_TP76_0.1_200619	SE207731.005	%	60 - 130%	73
	0407_TP76_0.5_200619	SE207731.006	%	60 - 130%	74
	0407_TP75_0.1_200619	SE207731.007	%	60 - 130%	76
	0407_TP75_0.5_200619	SE207731.008	%	60 - 130%	70
	0407_TP74_0.1_200619	SE207731.009	%	60 - 130%	75
	0407_TP74_0.5_200619	SE207731.010	%	60 - 130%	71
	0407_TP73_0.1_200619	SE207731.011	%	60 - 130%	72
	0407_TP73_1.0_200619	SE207731.012	%	60 - 130%	74
	0407_QC120_200619	SE207731.017	%	60 - 130%	72
d4-1,2-dichloroethane (Surrogate)	0407_TP65_0.1_200619	SE207731.001	%	60 - 130%	99
	0407_TP65_0.5_200619	SE207731.002	%	60 - 130%	101
	0407_TP77_0.1_200619	SE207731.003	%	60 - 130%	99
	0407_TP77_0.5_200619	SE207731.004	%	60 - 130%	100
	0407_TP76_0.1_200619	SE207731.005	%	60 - 130%	99
	0407_TP76_0.5_200619	SE207731.006	%	60 - 130%	102
	0407_TP75_0.1_200619	SE207731.007	%	60 - 130%	104
	0407_TP75_0.5_200619	SE207731.008	%	60 - 130%	99
	0407_TP74_0.1_200619	SE207731.009	%	60 - 130%	104
	0407_TP74_0.5_200619	SE207731.010	%	60 - 130%	101
	0407_TP73_0.1_200619	SE207731.011	%	60 - 130%	97
	0407_TP73_1.0_200619	SE207731.012	%	60 - 130%	103
	0407_QC120_200619	SE207731.017	%	60 - 130%	101
d8-toluene (Surrogate)	0407_TP65_0.1_200619	SE207731.001	%	60 - 130%	98
	0407_TP65_0.5_200619	SE207731.002	%	60 - 130%	101
	0407_TP77_0.1_200619	SE207731.003	%	60 - 130%	98
	0407_TP77_0.5_200619	SE207731.004	%	60 - 130%	101
	0407_TP76_0.1_200619	SE207731.005	%	60 - 130%	98
	0407_TP76_0.5_200619	SE207731.006	%	60 - 130%	100
	0407_TP75_0.1_200619	SE207731.007	%	60 - 130%	103
	0407_TP75_0.5_200619	SE207731.008	%	60 - 130%	96
	0407_TP74_0.1_200619	SE207731.009	%	60 - 130%	102
	0407_TP74_0.5_200619	SE207731.010	%	60 - 130%	98
	0407_TP73_0.1_200619	SE207731.011	%	60 - 130%	95
	0407_TP73_1.0_200619	SE207731.012	%	60 - 130%	102
	0407_QC120_200619	SE207731.017	%	60 - 130%	98

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result
LB202615.001	Mercury	mg/kg	0.05	<0.05

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202476.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	95

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202476.001		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	92
		d14-p-terphenyl (Surrogate)	%	-	98

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB202476.001	Naphthalene	mg/kg	0.1	<0.1
	2-methylnaphthalene	mg/kg	0.1	<0.1
	1-methylnaphthalene	mg/kg	0.1	<0.1
	Acenaphthylene	mg/kg	0.1	<0.1
	Acenaphthene	mg/kg	0.1	<0.1
	Fluorene	mg/kg	0.1	<0.1
	Phenanthrene	mg/kg	0.1	<0.1
	Anthracene	mg/kg	0.1	<0.1
	Fluoranthene	mg/kg	0.1	<0.1
	Pyrene	mg/kg	0.1	<0.1
	Benzo(a)anthracene	mg/kg	0.1	<0.1
	Chrysene	mg/kg	0.1	<0.1
	Benzo(a)pyrene	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202476.001		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	78
		2-fluorobiphenyl (Surrogate)	%	-	92
		d14-p-terphenyl (Surrogate)	%	-	98

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202476.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	95

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202476.001		Phenol	mg/kg	0.5	<0.5
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5
		2-nitrophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
		Pentachlorophenol	mg/kg	0.5	<0.5
		2,4-dinitrophenol	mg/kg	2	<2
		4-chloro-3-methylphenol	mg/kg	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	85
		d5-phenol (Surrogate)	%	-	76

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB202613.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB202476.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number	Parameter	Units	LOR

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

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VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB202466.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB202466.001	Oxygenated Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	103
		d8-toluene (Surrogate)	%	-	102
		Bromofluorobenzene (Surrogate)	%	-	75
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB202466.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	103

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207731.007	LB202615.014	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE207731.017	LB202615.021	Mercury	mg/kg	0.05	<0.05	<0.05	200	0

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207731.009	LB202479.011	% Moisture	%w/w	1	4.2	4.6	53	8

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207731.006	LB202476.031		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	0	200	0
			Alpha BHC	mg/kg	0.1	<0.1	0	200	0
			Lindane	mg/kg	0.1	<0.1	0	200	0
			Heptachlor	mg/kg	0.1	<0.1	0	200	0
			Aldrin	mg/kg	0.1	<0.1	0	200	0
			Beta BHC	mg/kg	0.1	<0.1	0	200	0
			Delta BHC	mg/kg	0.1	<0.1	0	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	0	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	0	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	0	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Dieldrin	mg/kg	0.2	<0.2	0	200	0
			Endrin	mg/kg	0.2	<0.2	0	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	0	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	0	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	0	200	0
			Methoxychlor	mg/kg	0.1	<0.1	0	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	0	200	0
			Isodrin	mg/kg	0.1	<0.1	0	200	0
			Mirex	mg/kg	0.1	<0.1	0	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.142	30	4
SE207731.012	LB202476.032		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	0	200	0
			Alpha BHC	mg/kg	0.1	<0.1	0	200	0
			Lindane	mg/kg	0.1	<0.1	0	200	0
			Heptachlor	mg/kg	0.1	<0.1	0	200	0
			Aldrin	mg/kg	0.1	<0.1	0	200	0
			Beta BHC	mg/kg	0.1	<0.1	0	200	0
			Delta BHC	mg/kg	0.1	<0.1	0	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	0	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	0	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	0	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Dieldrin	mg/kg	0.2	<0.2	0	200	0
			Endrin	mg/kg	0.2	<0.2	0	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	0	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207731.012	LB202476.032		p,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	0	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	0	200	0
			Methoxychlor	mg/kg	0.1	<0.1	0	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	0	200	0
			Isodrin	mg/kg	0.1	<0.1	0	200	0
			Mirex	mg/kg	0.1	<0.1	0	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.146	30	3

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207731.006	LB202476.028		Dichlorvos	mg/kg	0.5	<0.5	0	200	0
			Dimethoate	mg/kg	0.5	<0.5	0.01	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	0.01	200	0
			Fenitrothion	mg/kg	0.2	<0.2	0	200	0
			Malathion	mg/kg	0.2	<0.2	0.03	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	0.01	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	0	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	0.01	200	0
			Methidathion	mg/kg	0.5	<0.5	0	200	0
			Ethion	mg/kg	0.2	<0.2	0	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	0	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	0	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.41	30	5
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.48	30	6
SE207731.012	LB202476.029		Dichlorvos	mg/kg	0.5	<0.5	0	200	0
			Dimethoate	mg/kg	0.5	<0.5	0.01	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	0.01	200	0
			Fenitrothion	mg/kg	0.2	<0.2	0	200	0
			Malathion	mg/kg	0.2	<0.2	0.03	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	0	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	0	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	0.01	200	0
			Methidathion	mg/kg	0.5	<0.5	0	200	0
			Ethion	mg/kg	0.2	<0.2	0	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	0	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	0	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.38	30	3
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.45	30	2

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207731.006	LB202476.028	Naphthalene	mg/kg	0.1	<0.1	0	200	0
		2-methylnaphthalene	mg/kg	0.1	<0.1	0	200	0
		1-methylnaphthalene	mg/kg	0.1	<0.1	0	200	0
		Acenaphthylene	mg/kg	0.1	<0.1	0	200	0
		Acenaphthene	mg/kg	0.1	<0.1	0	200	0
		Fluorene	mg/kg	0.1	<0.1	0	200	0
		Phenanthrene	mg/kg	0.1	<0.1	0	200	0
		Anthracene	mg/kg	0.1	<0.1	0	200	0
		Fluoranthene	mg/kg	0.1	<0.1	0.01	200	0
		Pyrene	mg/kg	0.1	<0.1	0.01	200	0
		Benzo(a)anthracene	mg/kg	0.1	<0.1	0.01	200	0
		Chrysene	mg/kg	0.1	<0.1	0.01	200	0
		Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	0.01	200	0
		Benzo(k)fluoranthene	mg/kg	0.1	<0.1	0.01	200	0
		Benzo(a)pyrene	mg/kg	0.1	<0.1	0	200	0
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	0	200	0
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	0	200	0
		Benzo(ghi)perylene	mg/kg	0.1	<0.1	0	200	0
		Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207731.006	LB202476.028		Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	0.242	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	0.121	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	0	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.37	30	3
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.41	30	5
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.48	30	6
SE207731.012	LB202476.029		Naphthalene	mg/kg	0.1	<0.1	0	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	0	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	0	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	0	200	0
			Acenaphthene	mg/kg	0.1	<0.1	0	200	0
			Fluorene	mg/kg	0.1	<0.1	0	200	0
			Phenanthrene	mg/kg	0.1	<0.1	0	200	0
			Anthracene	mg/kg	0.1	<0.1	0	200	0
			Fluoranthene	mg/kg	0.1	<0.1	0.01	200	0
			Pyrene	mg/kg	0.1	<0.1	0.01	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	0.01	200	0
			Chrysene	mg/kg	0.1	<0.1	0.01	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	0.01	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	0.01	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	0	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	0	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	0	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	0.01	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	0	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	0.242	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	0.121	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	0	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.36	30	3
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.38	30	3
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.45	30	2

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207731.006	LB202476.025		Arochlor 1016	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	0	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0.142	30	4
SE207731.012	LB202476.026		Arochlor 1016	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	0	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0.146	30	3

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207731.006	LB202476.031		Phenol	mg/kg	0.5	<0.5	0.01	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	0	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	0	200	0
			Total Cresol	mg/kg	1.5	<1.5	0	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	0	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	0	200	0
			4-nitrophenol	mg/kg	1	<1	0	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	0	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dinitrophenol	mg/kg	2	<2	0	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	0	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.9	3.88	30	1
			d5-phenol (Surrogate)	mg/kg	-	1.5	1.54	30	2
SE207731.012	LB202476.032		Phenol	mg/kg	0.5	<0.5	0	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	0	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	0	200	0
			Total Cresol	mg/kg	1.5	<1.5	0	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	0	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	0	200	0
			4-nitrophenol	mg/kg	1	<1	0	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	0	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dinitrophenol	mg/kg	2	<2	0	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	0	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.9	3.79	30	2
			d5-phenol (Surrogate)	mg/kg	-	1.5	1.5	30	1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207731.005	LB202613.014	Arsenic, As	mg/kg	1	<1	<1	200	0
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	0.8	0.8	94	2
		Copper, Cu	mg/kg	0.5	1.8	1.7	59	3
		Nickel, Ni	mg/kg	0.5	<0.5	<0.5	135	0
		Lead, Pb	mg/kg	1	6	6	46	0
		Zinc, Zn	mg/kg	2	9.9	9.9	50	1
SE207731.017	LB202613.023	Arsenic, As	mg/kg	1	<1	<1	200	0
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	<0.5	<0.5	200	0
		Copper, Cu	mg/kg	0.5	1.0	0.8	88	20
		Nickel, Ni	mg/kg	0.5	<0.5	<0.5	200	0
		Lead, Pb	mg/kg	1	2	2	92	9
		Zinc, Zn	mg/kg	2	3.3	2.4	100	33

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207731.006	LB202476.025	TRH C10-C14	mg/kg	20	<20	0	200	0
		TRH C15-C28	mg/kg	45	<45	0	200	0
		TRH C29-C36	mg/kg	45	<45	0	200	0
		TRH C37-C40	mg/kg	100	<100	0	200	0
		TRH C10-C36 Total	mg/kg	110	<110	0	200	0
		TRH >C10-C40 Total (F bands)	mg/kg	210	<210	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207731.006	LB202476.025	TRH F Bands	TRH >C10-C16	mg/kg	25	<25	0	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	0	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	0	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	0	200	0
SE207731.012	LB202476.026		TRH C10-C14	mg/kg	20	<20	0	200	0
			TRH C15-C28	mg/kg	45	<45	0	200	0
			TRH C29-C36	mg/kg	45	<45	0	200	0
			TRH C37-C40	mg/kg	100	<100	0	200	0
			TRH C10-C36 Total	mg/kg	110	<110	0	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	0	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	0	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	0	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	0	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	0	200	0

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207731.009	LB202466.014	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207731.009	LB202466.014	Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.4	9.5	50	9
			d8-toluene (Surrogate)	mg/kg	-	10.2	9.3	50	9
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.5	6.8	50	10
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE207758.004	LB202466.023	Halogenated	Vinyl chloride (Chloroethene)	mg/kg	0.1	0.007926227	20.000678670	9 200	0
		Aliphatics	1,1-dichloroethene	mg/kg	0.1	0.000308469	70.000417512	5 200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	0.043756317	20.043193598	3 200	0
			trans-1,2-dichloroethene	mg/kg	0.1	0.002644987	70.002059874	5 200	0
			cis-1,2-dichloroethene	mg/kg	0.1	0	0	200	0
			1,2-dichloroethane	mg/kg	0.1	0.001548232	40.001570049	0 200	0
			1,1,1-trichloroethane	mg/kg	0.1	0	0	200	0
			Carbon tetrachloride	mg/kg	0.1	0	0	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	0.000336469	00.000302976	2 200	0
			1,1,2-trichloroethane	mg/kg	0.1	0	0	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	0.000184324	70.000127935	2 200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	0	0	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	0.003881635	20.003364767	5 200	0
			Hexachlorobutadiene	mg/kg	0.1	0.000389078	60.000696988	8 200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	0.001078403	80.000879931	3 200	0
		Aromatics	1,4-dichlorobenzene	mg/kg	0.1	0.001329185	20.001586640	8 200	0
			1,2-dichlorobenzene	mg/kg	0.1	0.005298012	00.005756927	0 200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	0.000588219	10.000948775	5 200	0
		Monocyclic	Benzene	mg/kg	0.1	0.004295313	00.004169580	4 200	0
		Aromatic	Toluene	mg/kg	0.1	0.033670479	10.033811244	9 200	0
			Ethylbenzene	mg/kg	0.1	0.027035045	20.030016283	0 200	0
			m/p-xylene	mg/kg	0.2	0.059226325	00.078460842	5 200	0
			o-xylene	mg/kg	0.1	0.012848394	70.018697488	2 200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	0.000470674	90.000433367	4 200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207758.004	LB202466.023	Polycyclic	Naphthalene	mg/kg	0.1	0.005831106	40.0087991972	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.611152472	810.505491046	50	9
			d8-toluene (Surrogate)	mg/kg	-	9.491834318	810.579801348	50	11
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.00329950737	.8702703708	50	12
		Totals	Total Xylenes	mg/kg	0.3	0.072071027	20.0971583308	200	0
			Total BTEX	mg/kg	0.6	0	0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	0.067387502	50.0603587408	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	0.061532859	60.0609150202	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	0.000762927	90.0008339672	200	0

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207731.009	LB202466.014		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.4	9.5	30	9
			d8-toluene (Surrogate)	mg/kg	-	10.2	9.3	30	9
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.5	6.8	30	10
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE207758.004	LB202466.023		TRH C6-C10	mg/kg	25	0	0	200	0
			TRH C6-C9	mg/kg	20	0	0	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.611152472	810.505491046	30	9
			d8-toluene (Surrogate)	mg/kg	-	9.491834318	810.579801348	30	11
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.00329950737	.8702703708	30	12
		VPH F Bands	Benzene (F0)	mg/kg	0.1	0.004295313	00.0041695804	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	0	0	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202615.002	Mercury	mg/kg	0.05	0.19	0.2	70 - 130	97

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202476.002		Heptachlor	mg/kg	0.1	0.3	0.2	60 - 140	132
		Aldrin	mg/kg	0.1	0.3	0.2	60 - 140	131
		Delta BHC	mg/kg	0.1	0.3	0.2	60 - 140	134
		Dieldrin	mg/kg	0.2	0.3	0.2	60 - 140	135
		Endrin	mg/kg	0.2	0.3	0.2	60 - 140	139
		p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	114
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	0.15	40 - 130	95

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202476.002		Dichlorvos	mg/kg	0.5	1.8	2	60 - 140	88
		Diazinon (Dimpylate)	mg/kg	0.5	1.6	2	60 - 140	79
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.6	2	60 - 140	81
		Ethion	mg/kg	0.2	1.2	2	60 - 140	62
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	94
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	86

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202476.002		Naphthalene	mg/kg	0.1	4.5	4	60 - 140	114
		Acenaphthylene	mg/kg	0.1	4.8	4	60 - 140	120
		Acenaphthene	mg/kg	0.1	4.3	4	60 - 140	106
		Phenanthrene	mg/kg	0.1	4.1	4	60 - 140	102
		Anthracene	mg/kg	0.1	4.4	4	60 - 140	111
		Fluoranthene	mg/kg	0.1	4.5	4	60 - 140	112
		Pyrene	mg/kg	0.1	4.9	4	60 - 140	123
		Benzo(a)pyrene	mg/kg	0.1	5.4	4	60 - 140	135
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	78
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	94
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	86

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202476.002	Arochlor 1260	mg/kg	0.2	0.4	0.4	60 - 140	88

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202476.002		Phenol	mg/kg	0.5	0.7	1	70 - 130	70
		2,4-dichlorophenol	mg/kg	0.5	0.8	1	70 - 130	77
		2,4,6-trichlorophenol	mg/kg	0.5	0.8	1	70 - 130	75
		Pentachlorophenol	mg/kg	0.5	0.7	1	70 - 130	71
	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.8	5	40 - 130	76
		d5-phenol (Surrogate)	mg/kg	-	1.4	2	40 - 130	72

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202613.002	Arsenic, As	mg/kg	1	340	318.22	80 - 120	107
	Cadmium, Cd	mg/kg	0.3	5.6	5.41	80 - 120	103
	Chromium, Cr	mg/kg	0.5	38	38.31	80 - 120	100
	Copper, Cu	mg/kg	0.5	300	290	80 - 120	103
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	101
	Lead, Pb	mg/kg	1	95	89.9	80 - 120	106
	Zinc, Zn	mg/kg	2	270	273	80 - 120	101

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202476.002		TRH C10-C14	mg/kg	20	49	40	60 - 140	123
		TRH C15-C28	mg/kg	45	48	40	60 - 140	120
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	85
	TRH F Bands	TRH >C10-C16	mg/kg	25	49	40	60 - 140	123
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	113
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	70

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202466.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	4.4	5	60 - 140	89
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	4.1	5	60 - 140	82
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	3.8	5	60 - 140	76
	Halogenated	Chlorobenzene	mg/kg	0.1	4.6	5	60 - 140	93
	Monocyclic	Benzene	mg/kg	0.1	3.9	5	60 - 140	77
	Aromatic	Toluene	mg/kg	0.1	4.1	5	60 - 140	82
		Ethylbenzene	mg/kg	0.1	3.9	5	60 - 140	79
		m/p-xylene	mg/kg	0.2	8.0	10	60 - 140	80
		o-xylene	mg/kg	0.1	4.0	5	60 - 140	81
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.5	10	70 - 130	105
		d8-toluene (Surrogate)	mg/kg	-	10.5	10	70 - 130	105
		Bromofluorobenzene (Surrogate)	mg/kg	-	7.1	10	70 - 130	71
	Trihalomethan	Chloroform	mg/kg	0.1	4.1	5	60 - 140	82

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202466.002		TRH C6-C10	mg/kg	25	63	92.5	60 - 140	68
		TRH C6-C9	mg/kg	20	54	80	60 - 140	68
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.5	10	70 - 130	105
		Bromofluorobenzene (Surrogate)	mg/kg	-	7.1	10	70 - 130	71
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	39	62.5	60 - 140	62

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207837.001	LB202615.004	Mercury	mg/kg	0.05	0.22	<0.05	0.2	97

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE207731.002	LB202476.030		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	-	-
			Alpha BHC	mg/kg	0.1	<0.1	-	-
			Lindane	mg/kg	0.1	<0.1	-	-
			Heptachlor	mg/kg	0.1	<0.1	0.2	76
			Aldrin	mg/kg	0.1	<0.1	0.2	75
			Beta BHC	mg/kg	0.1	<0.1	-	-
			Delta BHC	mg/kg	0.1	<0.1	0.2	78
			Heptachlor epoxide	mg/kg	0.1	<0.1	-	-
			o,p'-DDE	mg/kg	0.1	<0.1	-	-
			Alpha Endosulfan	mg/kg	0.2	<0.2	-	-
			Gamma Chlordane	mg/kg	0.1	<0.1	-	-
			Alpha Chlordane	mg/kg	0.1	<0.1	-	-
			trans-Nonachlor	mg/kg	0.1	<0.1	-	-
			p,p'-DDE	mg/kg	0.1	<0.1	-	-
			Dieldrin	mg/kg	0.2	<0.2	0.2	75
			Endrin	mg/kg	0.2	<0.2	0.2	78
			o,p'-DDD	mg/kg	0.1	<0.1	-	-
			o,p'-DDT	mg/kg	0.1	<0.1	-	-
			Beta Endosulfan	mg/kg	0.2	<0.2	-	-
			p,p'-DDD	mg/kg	0.1	<0.1	-	-
			p,p'-DDT	mg/kg	0.1	<0.1	0.2	70
			Endosulfan sulphate	mg/kg	0.1	<0.1	-	-
			Endrin Aldehyde	mg/kg	0.1	<0.1	-	-
			Methoxychlor	mg/kg	0.1	<0.1	-	-
			Endrin Ketone	mg/kg	0.1	<0.1	-	-
			Isodrin	mg/kg	0.1	<0.1	-	-
			Mirex	mg/kg	0.1	<0.1	-	-
			Total CLP OC Pesticides	mg/kg	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	-	98

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE207731.001	LB202476.027		Dichlorvos	mg/kg	0.5	<0.5	2	74
			Dimethoate	mg/kg	0.5	<0.5	-	-
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	2	85
			Fenitrothion	mg/kg	0.2	<0.2	-	-
			Malathion	mg/kg	0.2	<0.2	-	-
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	2	86
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	-	-
			Bromophos Ethyl	mg/kg	0.2	<0.2	-	-
			Methidathion	mg/kg	0.5	<0.5	-	-
			Ethion	mg/kg	0.2	<0.2	2	80
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	-	-
			Total OP Pesticides*	mg/kg	1.7	<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	-	84
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	-	86

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number	Parameter	Units	LOR	Original	Spike	Recovery%
SE207731.001	LB202476.027	Naphthalene	mg/kg	0.1	<0.1	4	119
		2-methylnaphthalene	mg/kg	0.1	<0.1	-	-
		1-methylnaphthalene	mg/kg	0.1	<0.1	-	-
		Acenaphthylene	mg/kg	0.1	<0.1	4	115
		Acenaphthene	mg/kg	0.1	<0.1	4	118
		Fluorene	mg/kg	0.1	<0.1	-	-
		Phenanthrene	mg/kg	0.1	<0.1	4	114

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE207731.001	LB202476.027		Anthracene	mg/kg	0.1	<0.1	4	107
			Fluoranthene	mg/kg	0.1	<0.1	4	127
			Pyrene	mg/kg	0.1	<0.1	4	130
			Benzo(a)anthracene	mg/kg	0.1	<0.1	-	-
			Chrysene	mg/kg	0.1	<0.1	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	-	-
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	-	-
			Benzo(a)pyrene	mg/kg	0.1	<0.1	4	137
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	-	-
			Total PAH (18)	mg/kg	0.8	<0.8	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	-	76
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	-	84
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	-	86

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE207731.002	LB202476.027		Arochlor 1016	mg/kg	0.2	<0.2	-	-
			Arochlor 1221	mg/kg	0.2	<0.2	-	-
			Arochlor 1232	mg/kg	0.2	<0.2	-	-
			Arochlor 1242	mg/kg	0.2	<0.2	-	-
			Arochlor 1248	mg/kg	0.2	<0.2	-	-
			Arochlor 1254	mg/kg	0.2	<0.2	-	-
			Arochlor 1260	mg/kg	0.2	<0.2	0.4	108
			Arochlor 1262	mg/kg	0.2	<0.2	-	-
			Arochlor 1268	mg/kg	0.2	<0.2	-	-
			Total PCBs (Arochlors)	mg/kg	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	-	93

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE207731.002	LB202476.030		Phenol	mg/kg	0.5	<0.5	1	70
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	-	-
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	-	-
			Total Cresol	mg/kg	1.5	<1.5	-	-
			2-chlorophenol	mg/kg	0.5	<0.5	-	-
			2,4-dimethylphenol	mg/kg	0.5	<0.5	-	-
			2,6-dichlorophenol	mg/kg	0.5	<0.5	-	-
			2,4-dichlorophenol	mg/kg	0.5	<0.5	1	83
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	1	74
			2-nitrophenol	mg/kg	0.5	<0.5	-	-
			4-nitrophenol	mg/kg	1	<1	-	-
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	-	-
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	-	-
			Pentachlorophenol	mg/kg	0.5	<0.5	1	71
			2,4-dinitrophenol	mg/kg	2	<2	-	-
			4-chloro-3-methylphenol	mg/kg	2	<2	-	-
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.0	-	82
			d5-phenol (Surrogate)	mg/kg	-	1.5	-	79

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207837.001	LB202613.004	Arsenic, As	mg/kg	1	51	5	50	92
		Cadmium, Cd	mg/kg	0.3	41	<0.3	50	81
		Chromium, Cr	mg/kg	0.5	54	8.0	50	92
		Copper, Cu	mg/kg	0.5	59	12	50	94
		Nickel, Ni	mg/kg	0.5	54	8.6	50	91
		Lead, Pb	mg/kg	1	57	11	50	91

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207837.001	LB202613.004	Zinc, Zn	mg/kg	2	81	41	50	80

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE207731.001	LB202476.024		TRH C10-C14	mg/kg	20	<20	40	118
			TRH C15-C28	mg/kg	45	<45	40	113
			TRH C29-C36	mg/kg	45	<45	40	83
			TRH C37-C40	mg/kg	100	<100	-	-
			TRH C10-C36 Total	mg/kg	110	<110	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	40	118
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	<90	40	105
			TRH >C34-C40 (F4)	mg/kg	120	<120	-	-

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE207731.001	LB202466.026	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	-	-
			1,2-dichloropropane	mg/kg	0.1	<0.1	-	-
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	-	-
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	-	-
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	-	-
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	-	-
		Aliphatics	Chloromethane	mg/kg	1	<1	-	-
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	-	-
			Bromomethane	mg/kg	1	<1	-	-
			Chloroethane	mg/kg	1	<1	-	-
			Trichlorofluoromethane	mg/kg	1	<1	-	-
			Iodomethane	mg/kg	5	<5	-	-
			1,1-dichloroethene	mg/kg	0.1	<0.1	5	67
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	-	-
			Allyl chloride	mg/kg	0.1	<0.1	-	-
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	-	-
			1,1-dichloroethane	mg/kg	0.1	<0.1	-	-
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	-	-
			Bromochloromethane	mg/kg	0.1	<0.1	-	-
			1,2-dichloroethane	mg/kg	0.1	<0.1	5	82
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	-	-
			1,1-dichloropropene	mg/kg	0.1	<0.1	-	-
			Carbon tetrachloride	mg/kg	0.1	<0.1	-	-
			Dibromomethane	mg/kg	0.1	<0.1	-	-
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	5	76
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	-	-
			1,3-dichloropropane	mg/kg	0.1	<0.1	-	-
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	-	-
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	-	-
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	-	-
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	-	-
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	-	-
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	-	-
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	-	-
			Hexachlorobutadiene	mg/kg	0.1	<0.1	-	-
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	5	92
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	-	-
			2-chlorotoluene	mg/kg	0.1	<0.1	-	-
			4-chlorotoluene	mg/kg	0.1	<0.1	-	-
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	-	-
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	-	-
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	-	-
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	-	-
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	-	-
		Monocyclic	Benzene	mg/kg	0.1	<0.1	5	80

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE207731.001	LB202466.026	Monocyclic	Toluene	mg/kg	0.1	<0.1	5	80
		Aromatic	Ethylbenzene	mg/kg	0.1	<0.1	5	82
			m/p-xylene	mg/kg	0.2	<0.2	10	82
			o-xylene	mg/kg	0.1	<0.1	5	80
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	-	-
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	-	-
			n-propylbenzene	mg/kg	0.1	<0.1	-	-
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	-	-
			tert-butylbenzene	mg/kg	0.1	<0.1	-	-
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	-	-
			sec-butylbenzene	mg/kg	0.1	<0.1	-	-
			p-isopropyltoluene	mg/kg	0.1	<0.1	-	-
			n-butylbenzene	mg/kg	0.1	<0.1	-	-
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	-	-
		Compounds	2-nitropropane	mg/kg	10	<10	-	-
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	-	-
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	-	-
			Vinyl acetate	mg/kg	10	<10	-	-
			MEK (2-butanone)	mg/kg	10	<10	-	-
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	-	-
			2-hexanone (MBK)	mg/kg	5	<5	-	-
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	-	-
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.9	10	104
			d8-toluene (Surrogate)	mg/kg	-	9.8	10	102
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.3	10	69
		Totals	Total Xylenes	mg/kg	0.3	<0.3	-	-
			Total BTEX	mg/kg	0.6	<0.6	-	-
			Total VOC*	mg/kg	24	<24	-	-
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	-	-
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	-	-
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	-	-
		Trihalometha	Chloroform	mg/kg	0.1	<0.1	5	80
		nes	Bromodichloromethane	mg/kg	0.1	<0.1	-	-
			Chlorodibromomethane	mg/kg	0.1	<0.1	-	-
			Bromoform	mg/kg	0.1	<0.1	-	-

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE207731.001	LB202466.024		TRH C6-C10	mg/kg	25	<25	92.5	67
			TRH C6-C9	mg/kg	20	<20	80	67
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.9	10	104
			d8-toluene (Surrogate)	mg/kg	-	9.8	10	102
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.3	-	69
		VPH F	Benzene (F0)	mg/kg	0.1	<0.1	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	62.5	60

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

E-MAILED 9/7 @ 11.07am

SLR

PROJECT OFFICE (Tick one)					
☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000	☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227	☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305	☒ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066	☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
☐ CANBERRA: GPO Box 410, Canberra, ACT 2600	☐ MACKAY: 21 River Street, Mackay, QLD 4740	☐ PERTH: 503 Murray Street, Perth, WA 6000	☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810	☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
☐ DARWIN: 21 Parap Rd, Darwin, NT 0820	☐ MELBOURNE: Suite 2, 2 Dormville Avenue, Hawthorn, VIC 3122	☐ ROCKHAMPTON: rockhampton@slrconsulting.com	☐ AUCKLAND: 64 Beach Road, Auckland 1010 NZ	☐

CLIENT: Defence Housing Australia	LABORATORY: SGS Australia
PROJECT: Randwick Barracks	LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015
PROJECT NUMBER: 610.30041	SAMPLER: [redacted]
PROJECT MANAGER [redacted]	SAMPLER CONTACT No: [redacted]
PM CONTACT No: [redacted]	Email Reports and Invoices to: LQRSYD@slrconsulting.com [redacted]

Turnaround Time (TAT): ☐ Standard TAT ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number of

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: Suite A (No asbestos)	PFAS	OCP/OPP Only	Asbestos Only	HOLD	Suite F, Suite E, Suite H, Solvents	Heavy metals, TPH/BTEXN, PAH, VOC/SVOCs and PFAS	Suite D, MTBEs	Additional Information (Comment on any gross contamination or specific requirements)
1	0407_SH002_0.1_200625	25/06/2020	Soil				x						Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
	0407_SH002_0.3_200625	25/06/2020	Soil						x				
	0407_SH002_0.5_200625	25/06/2020	Soil						x				
2	0407_SH010_0.3-0.5_200625	25/06/2020	Soil									x	
	0407_SH010_0.5-0.7_200625	25/06/2020	Soil						x				
	0407_SH010_0.7-0.9_200625	25/06/2020	Soil						x				
3	0407_SH018_0.1_200625	25/06/2020	Soil		x	x							
4	0407_SH020_0.1_200625	25/06/2020	Soil		x	x							
5	0407_QC168_200625	25/06/2020	Soil		x	x							
	0407_QC268_200625	25/06/2020	Soil										Please send to Eurofins for Suite A and PFAS
6	0407_SH02[illegible]_0.1_200625	25/06/2020	Soil		x	x							
7	0407_SH022_0.1-0.2_200625	25/06/2020	Soil		x	x							

SGS EHS Sydney COC

SE208579

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time	25/06/2020	Received by	Sign [redacted]	Date / Time	25/06/20
Relinquished By	Sign	Date / Time		Received by	Sign	Date / Time	@4:30
Relinquished By	Sign	Date / Time		Received by	Sign	Date / Time	

Temperature Received:

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

SLR

PROJECT OFFICE (Tick one)
- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 23 Parap Rd, Dawin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☒ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Stuart Street, Townsville, QLD 4810
- ☐ AUCKLAND: 66 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐

CLIENT: Defence Housing Australia

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGER: [redacted]

PM CONTACT No: [redacted]

LABORATORY: SGS Australia

LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015

SAMPLER: [redacted]

SAMPLER CONTACT No: [redacted]

Email Reports and invoices to: LQRSYD@slrconsulting.com ; [redacted]

Turnaround Time (TAT)
- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number of

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A (No asbestos)	PFAS	OCP/OPP Only	Asbestos Only	HOLD	Suite F, Suite E, Suite H, Solvents	Heavy metals, TPH/BTEXN, PAH, VOC/SVOCs and PFAS	Suite D, MTBEs	Additional Information (Comment on any gross contamination or specific requirements)
8	0407_BH014_0.1_200625	25/06/2020	Soil				x			x			Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
9	0407_BH014_0.3_200625	25/06/2020	Soil				x			x			
	0407_BH014_0.5_200625	25/06/2020	Soil						x				
	0407_BH014_1.0_200625	25/06/2020	Soil						x				
	0407_BH014_1.2_200625	25/06/2020	Soil						x				
10	0407_TP237a_0.4	25/06/2020	Soil		x								
11	0407_TP237b_0.5	25/06/2020	Soil		x								
12	0407_TP237c_0.5	25/06/2020	Soil		x								

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time	25/06/2020	**Received by**	Sign [redacted]	Date / Time	29/06/20
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	04:30
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	

Temperature Received:

SAMPLE RECEIPT ADVICE

SE208579

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	12

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Thu 25/6/2020
Report Due	Tue 21/7/2020
SGS Reference	**SE208579**

SUBMISSION DETAILS

This is to confirm that 12 samples were received on Thursday 25/6/2020. Results are expected to be ready by COB Tuesday 21/7/2020. Please quote SGS reference SE208579 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	12 Soil
Date documentation received	9/7/2020@11:07am	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	4.7°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

7 samples have been placed on hold as no tests have been assigned for them by the client. These samples will not be processed.
PFAS subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420.
Explosives subcontracted to Eurofins/MGT.

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SAMPLE RECEIPT ADVICE

SE208579

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	Speciated Phenols in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
001	0407_SH002_0.1_200625	29	14	-	-	-	-	-	-
002	0407_SH010_0.3-0.5_200625	-	-	26	-	18	10	12	7
003	0407_SH018_0.1_200625	29	14	26	11	18	10	81	7
004	0407_SH020_0.1_200625	29	14	26	11	18	10	81	7
005	0407_QC168_200625	29	14	26	11	18	10	81	7
006	0407_SH021_0.1_200625	29	14	26	11	18	10	81	7
007	0407_SH022_0.1-0.2_200625	29	14	26	11	18	10	81	7
008	0407_BH014_0.1_200625	29	14	26	11	-	10	81	7
009	0407_BH014_0.3_200625	29	14	26	11	-	10	81	7
010	0407_TP237a_0.4_200624	29	14	26	11	18	10	81	7
011	0407_TP237b_0.5_200624	29	14	26	11	18	10	81	7
012	0407_TP237c_0.5_200624	29	14	26	11	18	10	81	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE208579

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Mercury in Soil	Moisture Content	Per- and Polyfluoroalkyl Substances (PFAS) in	Sample Subcontracted	Total Recoverable Elements in Soil/Waste
001	0407_SH002_0.1_200625	-	1	-	-	-
002	0407_SH010_0.3-0.5_200625	-	1	-	-	1
003	0407_SH018_0.1_200625	1	1	55	-	7
004	0407_SH020_0.1_200625	1	1	55	-	7
005	0407_QC168_200625	1	1	55	-	7
006	0407_SH021_0.1_200625	1	1	55	-	7
007	0407_SH022_0.1-0.2_200625	1	1	55	-	7
008	0407_BH014_0.1_200625	1	1	-	1	11
009	0407_BH014_0.3_200625	1	1	-	1	11
010	0407_TP237a_0.4_200624	1	1	55	-	7
011	0407_TP237b_0.5_200624	1	1	55	-	7
012	0407_TP237c_0.5_200624	1	1	55	-	7

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	12

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208579 R0**
Date Received	25/6/2020
Date Reported	21/7/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

PFAS subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420. Report number ME315710
Explosives subcontracted to Eurofins/MGT. 732156

SIGNATORIES

[redacted]

Senior Organic Chemist/Metals Chemist | Senior Chemist | Organic Section Head

VOC's in Soil [AN433] Tested: 16/7/2020

PARAMETER	UOM	LOR	0407_SH010_0.3-0.5_200625 SOIL - 25/6/2020 SE208579.002	0407_SH018_0.1_20_625 SOIL - 25/6/2020 SE208579.003	0407_SH020_0.1_20_625 SOIL - 25/6/2020 SE208579.004	0407_QC168_20062_ SOIL - 25/6/2020 SE208579.005	0407_SH021_0.1_20_625 SOIL - 25/6/2020 SE208579.006
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	-	<1	<1	<1	<1
Chloromethane	mg/kg	1	-	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	-	<1	<1	<1	<1
Chloroethane	mg/kg	1	-	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	-	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	-	<10	<10	<10	<10
Iodomethane	mg/kg	5	-	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	-	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	-	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	-	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	-	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	-	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	-	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	-	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	-	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	-	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 16/7/2020 (continued)

PARAMETER	UOM	LOR	0407_SH010_0.3-0.5_200625 SOIL - 25/6/2020 SE208579.002	0407_SH018_0.1_20_625 SOIL - 25/6/2020 SE208579.003	0407_SH020_0.1_20_625 SOIL - 25/6/2020 SE208579.004	0407_QC168_20062_ SOIL - 25/6/2020 SE208579.005	0407_SH021_0.1_20_625 SOIL - 25/6/2020 SE208579.006
Isopropylbenzene (Cumene)	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	-	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	-	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	-	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	-	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	-	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 16/7/2020 (continued)

PARAMETER	UOM	LOR	0407_SH022_0.1-0.2 200625 SOIL - 25/6/2020 SE208579.007	0407_BH014_0.1_20 625 SOIL - 25/6/2020 SE208579.008	0407_BH014_0.3_20 625 SOIL - 25/6/2020 SE208579.009	0407_TP237a_0.4_2 0624 SOIL - 25/6/2020 SE208579.010	0407_TP237b_0.5_2 0624 SOIL - 25/6/2020 SE208579.011
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 16/7/2020 (continued)

PARAMETER	UOM	LOR	0407_SH022_0.1-0.2 200625 SOIL - 25/6/2020 SE208579.007	0407_BH014_0.1_20 625 SOIL - 25/6/2020 SE208579.008	0407_BH014_0.3_20 625 SOIL - 25/6/2020 SE208579.009	0407_TP237a_0.4_2 0624 SOIL - 25/6/2020 SE208579.010	0407_TP237b_0.5_2 0624 SOIL - 25/6/2020 SE208579.011
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 16/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP237c_0.5_20624 SOIL - 25/6/2020 SE208579.012
Benzene	mg/kg	0.1	<0.1
Toluene	mg/kg	0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2
o-xylene	mg/kg	0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
Chloromethane	mg/kg	1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
Bromomethane	mg/kg	1	<1
Chloroethane	mg/kg	1	<1
Trichlorofluoromethane	mg/kg	1	<1
Acetone (2-propanone)	mg/kg	10	<10
Iodomethane	mg/kg	5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1
Vinyl acetate	mg/kg	10	<10
MEK (2-butanone)	mg/kg	10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1
Chloroform	mg/kg	0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
2-nitropropane	mg/kg	10	<10
Bromodichloromethane	mg/kg	0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1
Bromoform	mg/kg	0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1

VOC's in Soil [AN433] Tested: 16/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP237c_0.5_20624 SOIL - 25/6/2020 SE208579.012
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
Total VOC*	mg/kg	24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 16/7/2020

PARAMETER	UOM	LOR	0407_SH010_0.3-0.5_200625 SOIL - 25/6/2020 SE208579.002	0407_SH018_0.1_20625 SOIL - 25/6/2020 SE208579.003	0407_SH020_0.1_20625 SOIL - 25/6/2020 SE208579.004	0407_QC168_20062 SOIL - 25/6/2020 SE208579.005	0407_SH021_0.1_20625 SOIL - 25/6/2020 SE208579.006
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_SH022_0.1-0.2_200625 SOIL - 25/6/2020 SE208579.007	0407_BH014_0.1_20625 SOIL - 25/6/2020 SE208579.008	0407_BH014_0.3_20625 SOIL - 25/6/2020 SE208579.009	0407_TP237a_0.4_20624 SOIL - 25/6/2020 SE208579.010	0407_TP237b_0.5_20624 SOIL - 25/6/2020 SE208579.011
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP237c_0.5_20624 SOIL - 25/6/2020 SE208579.012
Benzene (F0)	mg/kg	0.1	<0.1
TRH C6-C9	mg/kg	20	<20
TRH C6-C10	mg/kg	25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 16/7/2020

PARAMETER	UOM	LOR	0407_SH010_0.3-0.5_200625 SOIL - 25/6/2020 SE208579.002	0407_SH018_0.1_20_625 SOIL - 25/6/2020 SE208579.003	0407_SH020_0.1_20_625 SOIL - 25/6/2020 SE208579.004	0407_QC168_20062_ SOIL - 25/6/2020 SE208579.005	0407_SH021_0.1_20_625 SOIL - 25/6/2020 SE208579.006
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	**57**	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	**160**	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	**170**	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	**220**	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_SH022_0.1-0.2_200625 SOIL - 25/6/2020 SE208579.007	0407_BH014_0.1_20_625 SOIL - 25/6/2020 SE208579.008	0407_BH014_0.3_20_625 SOIL - 25/6/2020 SE208579.009	0407_TP237a_0.4_2_0624 SOIL - 25/6/2020 SE208579.010	0407_TP237b_0.5_2_0624 SOIL - 25/6/2020 SE208579.011
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	**460**
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	**220**
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	**540**
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	**540**
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	**180**
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	**690**
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	**710**

PARAMETER	UOM	LOR	0407_TP237c_0.5_2_0624 SOIL - 25/6/2020 SE208579.012
TRH C10-C14	mg/kg	20	<20
TRH C15-C28	mg/kg	45	**310**
TRH C29-C36	mg/kg	45	**340**
TRH C37-C40	mg/kg	100	<100
TRH >C10-C16	mg/kg	25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25
TRH >C16-C34 (F3)	mg/kg	90	**560**
TRH >C34-C40 (F4)	mg/kg	120	**150**
TRH C10-C36 Total	mg/kg	110	**650**
TRH >C10-C40 Total (F bands)	mg/kg	210	**710**

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 16/7/2020

PARAMETER	UOM	LOR	0407_SH010_0.3-0.5_200625 SOIL - 25/6/2020 SE208579.002	0407_SH018_0.1_20625 SOIL - 25/6/2020 SE208579.003	0407_SH020_0.1_20625 SOIL - 25/6/2020 SE208579.004	0407_QC168_20062 SOIL - 25/6/2020 SE208579.005	0407_SH021_0.1_20625 SOIL - 25/6/2020 SE208579.006
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	0.6	0.4	0.2
Anthracene	mg/kg	0.1	<0.1	<0.1	0.1	0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	0.9	0.7	0.3
Pyrene	mg/kg	0.1	0.1	<0.1	0.9	0.6	0.3
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	0.4	0.3	0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	0.4	0.3	0.2
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	0.5	0.3	0.2
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	0.2	0.2	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	0.4	0.3	0.2
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	0.3	0.2	0.2
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	0.3	0.2	0.2
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	0.6	0.4	0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	0.7	0.5	0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	0.6	0.5	0.3
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	5.1	3.6	1.9
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	5.1	3.6	1.9

PARAMETER	UOM	LOR	0407_SH022_0.1-0.2_200625 SOIL - 25/6/2020 SE208579.007	0407_BH014_0.1_20625 SOIL - 25/6/2020 SE208579.008	0407_BH014_0.3_20625 SOIL - 25/6/2020 SE208579.009	0407_TP237a_0.4_20624 SOIL - 25/6/2020 SE208579.010	0407_TP237b_0.5_20624 SOIL - 25/6/2020 SE208579.011
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	0.2	<0.1	<0.1	0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	0.8	<0.1	<0.1	0.5	<0.1
Anthracene	mg/kg	0.1	0.2	<0.1	<0.1	0.2	<0.1
Fluoranthene	mg/kg	0.1	0.9	<0.1	<0.1	0.7	<0.1
Pyrene	mg/kg	0.1	0.9	<0.1	<0.1	0.7	<0.1
Benzo(a)anthracene	mg/kg	0.1	0.3	<0.1	<0.1	0.3	<0.1
Chrysene	mg/kg	0.1	0.4	<0.1	<0.1	0.4	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	0.5	<0.1	<0.1	0.5	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	0.2	<0.1	<0.1	0.2	<0.1
Benzo(a)pyrene	mg/kg	0.1	0.4	<0.1	<0.1	0.4	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.3	<0.1	<0.1	0.4	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	0.3	<0.1	<0.1	0.4	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	0.6	<0.2	<0.2	0.6	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	0.7	<0.3	<0.3	0.7	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	0.6	<0.2	<0.2	0.6	<0.2
Total PAH (18)	mg/kg	0.8	5.3	<0.8	<0.8	4.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	5.3	<0.8	<0.8	4.8	<0.8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 16/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP237c_0.5_20624 SOIL - 25/6/2020 SE208579.012
Naphthalene	mg/kg	0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1
Fluorene	mg/kg	0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1
Anthracene	mg/kg	0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1
Pyrene	mg/kg	0.1	**0.1**
Benzo(a)anthracene	mg/kg	0.1	<0.1
Chrysene	mg/kg	0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	**0.2**
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	**0.3**
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8

Speciated Phenols in Soil [AN420] Tested: 16/7/2020

PARAMETER	UOM	LOR	0407_SH002_0.1_200625 SOIL - 25/6/2020 SE208579.001	0407_SH010_0.3-0.5_200625 SOIL - 25/6/2020 SE208579.002	0407_SH018_0.1_200625 SOIL - 25/6/2020 SE208579.003	0407_SH020_0.1_200625 SOIL - 25/6/2020 SE208579.004	0407_QC168_200625 SOIL - 25/6/2020 SE208579.005
Phenol	mg/kg	0.5	-	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	-	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	-	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	-	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	-	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	-	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	-	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	-	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	-	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	-	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	-	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	-	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	-	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	-	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	-	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	-	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_SH021_0.1_200625 SOIL - 25/6/2020 SE208579.006	0407_SH022_0.1-0.2_200625 SOIL - 25/6/2020 SE208579.007	0407_BH014_0.1_200625 SOIL - 25/6/2020 SE208579.008	0407_BH014_0.3_200625 SOIL - 25/6/2020 SE208579.009	0407_TP237a_0.4_20624 SOIL - 25/6/2020 SE208579.010
Phenol	mg/kg	0.5	<0.5	<0.5	-	-	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	-	-	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	-	-	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	-	-	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	-	-	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	-	-	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	-	-	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	-	-	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	-	-	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	-	-	<0.5
4-nitrophenol	mg/kg	1	<1	<1	-	-	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	-	-	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	-	-	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	-	-	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	-	-	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	-	-	<2

Speciated Phenols in Soil [AN420] Tested: 16/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP237b_0.5_2(0624 SOIL - 25/6/2020 SE208579.011	0407_TP237c_0.5_2(0624 SOIL - 25/6/2020 SE208579.012
Phenol	mg/kg	0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2

OC Pesticides in Soil [AN420] Tested: 16/7/2020

PARAMETER	UOM	LOR	0407_SH002_0.1_200625 SOIL - 25/6/2020 SE208579.001	0407_SH010_0.3-0.5_200625 SOIL - 25/6/2020 SE208579.002	0407_SH018_0.1_200625 SOIL - 25/6/2020 SE208579.003	0407_SH020_0.1_200625 SOIL - 25/6/2020 SE208579.004	0407_QC168_200625 SOIL - 25/6/2020 SE208579.005
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	-	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	-	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	-	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	-	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	-	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	-	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	-	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	-	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	-	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	-	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	-	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	-	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	-	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	-	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	-	<0.2	**4.0**	**3.5**
Endrin	mg/kg	0.2	<0.2	-	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	-	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	-	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	-	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	-	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	-	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	-	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	-	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	-	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	-	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	-	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	-	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	-	<1	**4**	**4**

OC Pesticides in Soil [AN420] Tested: 16/7/2020 (continued)

PARAMETER	UOM	LOR	0407_SH021_0.1_200625 SOIL - 25/6/2020 SE208579.006	0407_SH022_0.1-0.2_200625 SOIL - 25/6/2020 SE208579.007	0407_BH014_0.1_200625 SOIL - 25/6/2020 SE208579.008	0407_BH014_0.3_200625 SOIL - 25/6/2020 SE208579.009	0407_TP237a_0.4_20624 SOIL - 25/6/2020 SE208579.010
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	**2.0**	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	**230**	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	**3.3**	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	**2.5**	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	**230**	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 16/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP237b_0.5_2(0624 SOIL - 25/6/2020 SE208579.011	0407_TP237c_0.5_2(0624 SOIL - 25/6/2020 SE208579.012
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	**0.2**
Alpha BHC	mg/kg	0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1

OP Pesticides in Soil [AN420] Tested: 16/7/2020

PARAMETER	UOM	LOR	0407_SH002_0.1_20625 SOIL - 25/6/2020 SE208579.001	0407_SH018_0.1_20625 SOIL - 25/6/2020 SE208579.003	0407_SH020_0.1_20625 SOIL - 25/6/2020 SE208579.004	0407_QC168_20062 SOIL - 25/6/2020 SE208579.005	0407_SH021_0.1_20625 SOIL - 25/6/2020 SE208579.006
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_SH022_0.1-0.2200625 SOIL - 25/6/2020 SE208579.007	0407_BH014_0.1_20625 SOIL - 25/6/2020 SE208579.008	0407_BH014_0.3_20625 SOIL - 25/6/2020 SE208579.009	0407_TP237a_0.4_20624 SOIL - 25/6/2020 SE208579.010	0407_TP237b_0.5_20624 SOIL - 25/6/2020 SE208579.011
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP237c_0.5_20624 SOIL - 25/6/2020 SE208579.012
Dichlorvos	mg/kg	0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2
Malathion	mg/kg	0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2
Methidathion	mg/kg	0.5	<0.5
Ethion	mg/kg	0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7

PCBs in Soil [AN420] Tested: 16/7/2020

PARAMETER	UOM	LOR	0407_SH002_0.1_200625 SOIL - 25/6/2020 SE208579.001	0407_SH010_0.3-0.5_200625 SOIL - 25/6/2020 SE208579.002	0407_SH018_0.1_200625 SOIL - 25/6/2020 SE208579.003	0407_SH020_0.1_200625 SOIL - 25/6/2020 SE208579.004	0407_QC168_200625 SOIL - 25/6/2020 SE208579.005
Arochlor 1016	mg/kg	0.2	-	-	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	-	-	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	-	-	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	-	-	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	-	-	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	-	-	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	-	-	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	-	-	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	-	-	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	-	-	<1	<1	<1

PARAMETER	UOM	LOR	0407_SH021_0.1_200625 SOIL - 25/6/2020 SE208579.006	0407_SH022_0.1-0.2_200625 SOIL - 25/6/2020 SE208579.007	0407_BH014_0.1_200625 SOIL - 25/6/2020 SE208579.008	0407_BH014_0.3_200625 SOIL - 25/6/2020 SE208579.009	0407_TP237a_0.4_20[illegible]0624 SOIL - 25/6/2020 SE208579.010
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP237b_0.5_2[illegible]0624 SOIL - 25/6/2020 SE208579.011	0407_TP237c_0.5_2[illegible]0624 SOIL - 25/6/2020 SE208579.012
Arochlor 1016	mg/kg	0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 17/7/2020

PARAMETER	UOM	LOR	0407_SH010_0.3-0.5_200625 SOIL - 25/6/2020 SE208579.002	0407_SH018_0.1_20625 SOIL - 25/6/2020 SE208579.003	0407_SH020_0.1_20625 SOIL - 25/6/2020 SE208579.004	0407_QC168_20062 SOIL - 25/6/2020 SE208579.005	0407_SH021_0.1_20625 SOIL - 25/6/2020 SE208579.006
Arsenic, As	mg/kg	1	-	<1	<1	<1	<1
Cadmium, Cd	mg/kg	0.3	-	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	-	<0.5	**0.5**	**1.5**	**1.0**
Copper, Cu	mg/kg	0.5	-	<0.5	**2.0**	**3.7**	**2.2**
Lead, Pb	mg/kg	1	**3**	<1	**6**	**8**	**33**
Nickel, Ni	mg/kg	0.5	-	<0.5	<0.5	**0.8**	**0.9**
Zinc, Zn	mg/kg	2	-	<2.0	**4.6**	**7.1**	**7.9**
Beryllium, Be	mg/kg	0.5	-	-	-	-	-
Boron, B	mg/kg	5	-	-	-	-	-
Cobalt, Co	mg/kg	0.5	-	-	-	-	-
Manganese, Mn	mg/kg	1	-	-	-	-	-

PARAMETER	UOM	LOR	0407_SH022_0.1-0.2_200625 SOIL - 25/6/2020 SE208579.007	0407_BH014_0.1_20625 SOIL - 25/6/2020 SE208579.008	0407_BH014_0.3_20625 SOIL - 25/6/2020 SE208579.009	0407_TP237a_0.4_20624 SOIL - 25/6/2020 SE208579.010	0407_TP237b_0.5_20624 SOIL - 25/6/2020 SE208579.011
Arsenic, As	mg/kg	1	<1	<1	<1	**5**	**1**
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	**0.6**
Chromium, Cr	mg/kg	0.5	<0.5	**1.6**	<0.5	**15**	**6.4**
Copper, Cu	mg/kg	0.5	**1.0**	**2.4**	**0.6**	**53**	**24**
Lead, Pb	mg/kg	1	**7**	**2**	**1**	**89**	**530**
Nickel, Ni	mg/kg	0.5	<0.5	**0.9**	<0.5	**9.9**	**2.3**
Zinc, Zn	mg/kg	2	**8.0**	**6.0**	**2.8**	**380**	**3100**
Beryllium, Be	mg/kg	0.5	-	<0.5	<0.5	-	-
Boron, B	mg/kg	5	-	<5	<5	-	-
Cobalt, Co	mg/kg	0.5	-	**0.5**	<0.5	-	-
Manganese, Mn	mg/kg	1	-	**15**	<1	-	-

PARAMETER	UOM	LOR	0407_TP237c_0.5_20624 SOIL - 25/6/2020 SE208579.012
Arsenic, As	mg/kg	1	**1**
Cadmium, Cd	mg/kg	0.3	<0.3
Chromium, Cr	mg/kg	0.5	**2.9**
Copper, Cu	mg/kg	0.5	**5.1**
Lead, Pb	mg/kg	1	**77**
Nickel, Ni	mg/kg	0.5	**0.8**
Zinc, Zn	mg/kg	2	**190**
Beryllium, Be	mg/kg	0.5	-
Boron, B	mg/kg	5	-
Cobalt, Co	mg/kg	0.5	-
Manganese, Mn	mg/kg	1	-

Mercury in Soil [AN312] Tested: 17/7/2020

PARAMETER	UOM	LOR	0407_SH018_0.1_200625 SOIL - 25/6/2020 SE208579.003	0407_SH020_0.1_200625 SOIL - 25/6/2020 SE208579.004	0407_QC168_200625 SOIL - 25/6/2020 SE208579.005	0407_SH021_0.1_200625 SOIL - 25/6/2020 SE208579.006	0407_SH022_0.1-0.2_200625 SOIL - 25/6/2020 SE208579.007
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_BH014_0.1_200625 SOIL - 25/6/2020 SE208579.008	0407_BH014_0.3_200625 SOIL - 25/6/2020 SE208579.009	0407_TP237a_0.4_200624 SOIL - 25/6/2020 SE208579.010	0407_TP237b_0.5_200624 SOIL - 25/6/2020 SE208579.011	0407_TP237c_0.5_200624 SOIL - 25/6/2020 SE208579.012
Mercury	mg/kg	0.05	<0.05	<0.05	**0.10**	<0.05	<0.05

Moisture Content [AN002] Tested: 16/7/2020

PARAMETER	UOM	LOR	0407_SH002_0.1_20(625 SOIL - 25/6/2020 SE208579.001	0407_SH010_0.3-0.5_200625 SOIL - 25/6/2020 SE208579.002	0407_SH018_0.1_20(625 SOIL - 25/6/2020 SE208579.003	0407_SH020_0.1_20(625 SOIL - 25/6/2020 SE208579.004	0407_QC168_20062(SOIL - 25/6/2020 SE208579.005
% Moisture	%w/w	1	4.6	4.3	2.9	5.0	4.7

PARAMETER	UOM	LOR	0407_SH021_0.1_20(625 SOIL - 25/6/2020 SE208579.006	0407_SH022_0.1-0.2_200625 SOIL - 25/6/2020 SE208579.007	0407_BH014_0.1_20(625 SOIL - 25/6/2020 SE208579.008	0407_BH014_0.3_20(625 SOIL - 25/6/2020 SE208579.009	0407_TP237a_0.4_2(0624 SOIL - 25/6/2020 SE208579.010
% Moisture	%w/w	1	6.0	2.8	8.5	1.1	16.6

PARAMETER	UOM	LOR	0407_TP237b_0.5_2(0624 SOIL - 25/6/2020 SE208579.011	0407_TP237c_0.5_2(0624 SOIL - 25/6/2020 SE208579.012
% Moisture	%w/w	1	22.3	7.8

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level [MA-1523] Tested: 21/7/2020

PARAMETER	UOM	LOR	0407_SH018_0.1_200625 SOIL - 25/6/2020 SE208579.003	0407_SH020_0.1_200625 SOIL - 25/6/2020 SE208579.004	0407_QC168_200625 SOIL - 25/6/2020 SE208579.005	0407_SH021_0.1_200625 SOIL - 25/6/2020 SE208579.006	0407_SH022_0.1-0.2_200625 SOIL - 25/6/2020 SE208579.007
Perfluorobutanoic acid (PFBA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorononanoic acid (PFNA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorodecanoic acid (PFDA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sum PFOS and PFHXS	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorononane sulfonate (PFNS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.001	<0.001	<0.001	<0.001	<0.001	<0.001

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level [MA-1523] Tested: 21/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP237a_0.4_2(0624 SOIL - 25/6/2020 SE208579.010	0407_TP237b_0.5_2(0624 SOIL - 25/6/2020 SE208579.011	0407_TP237c_0.5_2(0624 SOIL - 25/6/2020 SE208579.012
Perfluorobutanoic acid (PFBA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0005	<0.0005	<0.0005	<0.0005
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0001	**0.0003**	**0.0003**	**0.0003**
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0001	**0.0002**	**0.0003**	**0.0001**
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0001	**0.0011**	**0.0005**	**0.0002**
Perfluorononanoic acid (PFNA)	mg/kg	0.0001	**0.0002**	<0.0001	<0.0001
Perfluorodecanoic acid (PFDA)	mg/kg	0.0001	**0.0005**	**0.0001**	<0.0001
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0001	**0.0001**	<0.0001	<0.0001
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0001	**0.0002**	<0.0001	<0.0001
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0001	**0.0004**	**0.0001**	<0.0001
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0001	**0.0062**	**0.0015**	**0.0002**
Sum PFOS and PFHXS	mg/kg	0.0001	**0.0066**	**0.0016**	**0.0002**
Perfluorononane sulfonate (PFNS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.001	<0.001	<0.001	<0.001
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.001	<0.001	<0.001	<0.001
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.001	<0.001	<0.001	<0.001
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.001	<0.001	<0.001	<0.001
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.001	<0.001	<0.001	<0.001
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.001	<0.001	<0.001	<0.001
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002	<0.002	<0.002	<0.002
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002	<0.002	<0.002	<0.002
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.001	<0.001	<0.001	<0.001
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.001	<0.001	<0.001	<0.001

Sample Subcontracted [] Tested: 21/7/2020

PARAMETER	UOM	LOR	0407_BH014_0.1_20625 SOIL - 25/6/2020 SE208579.008	0407_BH014_0.3_20625 SOIL - 25/6/2020 SE208579.009
Sample Subcontracted*	No unit	-	Subcontracted	Subcontracted

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid, mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents.
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.
MA-1523	This method covers the analysis of per- and polyfluoroalkyl substances (PFAS) in aqueous, solid and biosolid samples and solvent extracts, determined as the total of linear and branched isomers. After spiking with isotopically labelled quantification surrogates and clean-up via SPE cartridges sample extracts are analysed by liquid chromatography/mass spectrometry (LC-MS/MS). PFAS concentrations are determined by isotope dilution quantification.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS		LABORATORY DETAILS	
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Project	**610.30041 Randwick Barracks**	SGS Reference	**ME315710 R0**
Order Number	**SE208579**	Date Received	17 Jul 2020
Samples	12	Date Reported	21 Jul 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(14420).

Some PFAS surrogate recovery values are out of acceptance due to matrix interference .

SIGNATORIES

[redacted]

Australian Chemistry Manager

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315710.001 Soil 25 Jun 2020 SE208579.001	ME315710.002 Soil 25 Jun 2020 SE208579.002	ME315710.003 Soil 25 Jun 2020 SE208579.003	ME315710.004 Soil 25 Jun 2020 SE208579.004
Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level	**Method: MA-1523**	**Tested: 21/7/2020**					
Perfluorobutanoic acid (PFBA)	mg/kg	0.0001		-	-	<0.0001	<0.0001
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0005		-	-	<0.0005	<0.0005
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0001		-	-	<0.0001	<0.0001
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0001		-	-	<0.0001	<0.0001
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0001		-	-	<0.0001	<0.0001
Perfluorononanoic acid (PFNA)	mg/kg	0.0001		-	-	<0.0001	<0.0001
Perfluorodecanoic acid (PFDA)	mg/kg	0.0001		-	-	<0.0001	<0.0001
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0001		-	-	<0.0001	<0.0001
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0001		-	-	<0.0001	<0.0001
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0001		-	-	<0.0001	<0.0001
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0001		-	-	<0.0001	<0.0001
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0001		-	-	<0.0001	<0.0001
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0001		-	-	<0.0001	<0.0001
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0001		-	-	<0.0001	<0.0001
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0001		-	-	<0.0001	<0.0001
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0001		-	-	<0.0001	<0.0001
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0001		-	-	<0.0001	<0.0001
Sum PFOS and PFHXS	mg/kg	0.0001		-	-	<0.0001	<0.0001
Perfluorononane sulfonate (PFNS)	mg/kg	0.0001		-	-	<0.0001	<0.0001
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0001		-	-	<0.0001	<0.0001
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0001		-	-	<0.0001	<0.0001
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.001		-	-	<0.001	<0.001
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.001		-	-	<0.001	<0.001
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.001		-	-	<0.001	<0.001
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.001		-	-	<0.001	<0.001
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.001		-	-	<0.001	<0.001
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.001		-	-	<0.001	<0.001
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002		-	-	<0.002	<0.002
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002		-	-	<0.002	<0.002
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.001		-	-	<0.001	<0.001
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.001		-	-	<0.001	<0.001
(13C4-PFBA) Surrogate	%	-		-	-	**100**	**99**
(13C5_PFPeA) Surrogate	%	-		-	-	**97**	**95**
(13C5-PFHxA) Surrogate	%	-		-	-	**113**	**111**
(13C4-PFHpA) Surrogate	%	-		-	-	**108**	**108**
(13C4-PFOA) Surrogate	%	-		-	-	**108**	**112**
(13C9-PFNA) Surrogate	%	-		-	-	**96**	**106**
(13C6-PFDA) Surrogate	%	-		-	-	**96**	**100**
(13C7-PFUdA) Surrogate	%	-		-	-	**87**	**97**
(13C2-PFDoA) Surrogate	%	-		-	-	**77**	**85**
(13C2-PFTeDA) Surrogate	%	-		-	-	**45**	**56**
(13C2-PFHxDA) Surrogate	%	-		-	-	**18**	**22**
(13C3-PFBS) Surrogate	%	-		-	-	**109**	**105**
(13C3-PFHxS) Surrogate	%	-		-	-	**100**	**96**
(13C8-PFOS) Surrogate	%	-		-	-	**91**	**86**
(13C2-4:2FTS) Surrogate	%	-		-	-	**253**	**250**
(13C2-6:2FTS) Surrogate	%	-		-	-	**232**	**229**
(13C2-8:2FTS) Surrogate	%	-		-	-	**166**	**177**
(13C8-PFOSA) Surrogate	%	-		-	-	**76**	**71**
(D3-N-MeFOSA) Surrogate	%	-		-	-	**50**	**55**
(D5-N-EtFOSA) Surrogate	%	-		-	-	**44**	**49**
(D7-N-MeFOSE) Surrogate	%	-		-	-	**65**	**57**
(D9-N-EtFOSE) Surrogate	%	-		-	-	**60**	**61**
(D3-N-MeFOSAA) Surrogate	%	-		-	-	**108**	**110**
(D5-N-EtFOSAA) Surrogate	%	-		-	-	**105**	**98**
Moisture Content	**Method: AN002**	**Tested: 21/7/2020**					

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315710.001 Soil 25 Jun 2020 SE208579.001	ME315710.002 Soil 25 Jun 2020 SE208579.002	ME315710.003 Soil 25 Jun 2020 SE208579.003	ME315710.004 Soil 25 Jun 2020 SE208579.004
Moisture Content Method: AN002 Tested: 20/7/2020 (continued)							
% Moisture*	%w/w	1		-	-	**3.6**	**5.9**

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315710.005 Soil 25 Jun 2020 SE208579.005	ME315710.006 Soil 25 Jun 2020 SE208579.006	ME315710.007 Soil 25 Jun 2020 SE208579.007	ME315710.008 Soil 25 Jun 2020 SE208579.008
Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level	**Method: MA-1523**	**Tested: 20/7/2020**					
Perfluorobutanoic acid (PFBA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	-
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0005		<0.0005	<0.0005	<0.0005	-
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	-
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	-
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	-
Perfluorononanoic acid (PFNA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	-
Perfluorodecanoic acid (PFDA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	-
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	-
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	-
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	-
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	-
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	-
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	-
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	-
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	-
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	-
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	-
Sum PFOS and PFHXS	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	-
Perfluorononane sulfonate (PFNS)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	-
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	-
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0001		<0.0001	<0.0001	<0.0001	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.001		<0.001	<0.001	<0.001	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.001		<0.001	<0.001	<0.001	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.001		<0.001	<0.001	<0.001	-
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.001		<0.001	<0.001	<0.001	-
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.001		<0.001	<0.001	<0.001	-
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.001		<0.001	<0.001	<0.001	-
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002		<0.002	<0.002	<0.002	-
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002		<0.002	<0.002	<0.002	-
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.001		<0.001	<0.001	<0.001	-
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.001		<0.001	<0.001	<0.001	-
(13C4-PFBA) Surrogate	%	-		**103**	**101**	**102**	-
(13C5_PFPeA) Surrogate	%	-		**98**	**97**	**99**	-
(13C5-PFHxA) Surrogate	%	-		**111**	**113**	**108**	-
(13C4-PFHpA) Surrogate	%	-		**109**	**110**	**104**	-
(13C4-PFOA) Surrogate	%	-		**109**	**112**	**104**	-
(13C9-PFNA) Surrogate	%	-		**106**	**115**	**107**	-
(13C6-PFDA) Surrogate	%	-		**95**	**118**	**109**	-
(13C7-PFUdA) Surrogate	%	-		**87**	**95**	**90**	-
(13C2-PFDoA) Surrogate	%	-		**76**	**89**	**81**	-
(13C2-PFTeDA) Surrogate	%	-		**33**	**67**	**61**	-
(13C2-PFHxDA) Surrogate	%	-		**12**	**39**	**26**	-
(13C3-PFBS) Surrogate	%	-		**103**	**103**	**106**	-
(13C3-PFHxS) Surrogate	%	-		**97**	**96**	**95**	-
(13C8-PFOS) Surrogate	%	-		**83**	**110**	**101**	-
(13C2-4:2FTS) Surrogate	%	-		**250**	**250**	**252**	-
(13C2-6:2FTS) Surrogate	%	-		**232**	**265**	**226**	-
(13C2-8:2FTS) Surrogate	%	-		**166**	**240**	**192**	-
(13C8-PFOSA) Surrogate	%	-		**74**	**74**	**82**	-
(D3-N-MeFOSA) Surrogate	%	-		**48**	**61**	**63**	-
(D5-N-EtFOSA) Surrogate	%	-		**43**	**55**	**56**	-
(D7-N-MeFOSE) Surrogate	%	-		**53**	**68**	**64**	-
(D9-N-EtFOSE) Surrogate	%	-		**51**	**66**	**60**	-
(D3-N-MeFOSAA) Surrogate	%	-		**101**	**127**	**115**	-
(D5-N-EtFOSAA) Surrogate	%	-		**83**	**133**	**119**	-
Moisture Content	**Method: AN002**	**Tested: 20/7/2020**					

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315710.005 Soil 25 Jun 2020 SE208579.005	ME315710.006 Soil 25 Jun 2020 SE208579.006	ME315710.007 Soil 25 Jun 2020 SE208579.007	ME315710.008 Soil 25 Jun 2020 SE208579.008
Moisture Content Method: AN002 Tested: 21/7/2020 (continued)							
% Moisture*	%w/w	1		**5.8**	**5.4**	**2.8**	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315710.009 Soil 25 Jun 2020 SE208579.009	ME315710.010 Soil 25 Jun 2020 SE208579.010	ME315710.011 Soil 25 Jun 2020 SE208579.011	ME315710.012 Soil 25 Jun 2020 SE208579.012
Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level	**Method: MA-1523**	**Tested: 21/7/2020**					
Perfluorobutanoic acid (PFBA)	mg/kg	0.0001	-	<0.0001	<0.0001	<0.0001
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0005	-	<0.0005	<0.0005	<0.0005
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0001	-	**0.0003**	**0.0003**	**0.0003**
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0001	-	**0.0002**	**0.0003**	**0.0001**
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0001	-	**0.0011**	**0.0005**	**0.0002**
Perfluorononanoic acid (PFNA)	mg/kg	0.0001	-	**0.0002**	<0.0001	<0.0001
Perfluorodecanoic acid (PFDA)	mg/kg	0.0001	-	**0.0005**	**0.0001**	<0.0001
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0001	-	**0.0001**	<0.0001	<0.0001
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0001	-	**0.0002**	<0.0001	<0.0001
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0001	-	<0.0001	<0.0001	<0.0001
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0001	-	<0.0001	<0.0001	<0.0001
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0001	-	<0.0001	<0.0001	<0.0001
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0001	-	<0.0001	<0.0001	<0.0001
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0001	-	<0.0001	<0.0001	<0.0001
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0001	-	**0.0004**	**0.0001**	<0.0001
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0001	-	<0.0001	<0.0001	<0.0001
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0001	-	**0.0062**	**0.0015**	**0.0002**
Sum PFOS and PFHXS	mg/kg	0.0001	-	**0.0066**	**0.0016**	**0.0002**
Perfluorononane sulfonate (PFNS)	mg/kg	0.0001	-	<0.0001	<0.0001	<0.0001
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0001	-	<0.0001	<0.0001	<0.0001
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0001	-	<0.0001	<0.0001	<0.0001
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.001	-	<0.001	<0.001	<0.001
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.001	-	<0.001	<0.001	<0.001
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.001	-	<0.001	<0.001	<0.001
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.001	-	<0.001	<0.001	<0.001
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.001	-	<0.001	<0.001	<0.001
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.001	-	<0.001	<0.001	<0.001
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002	-	<0.002	<0.002	<0.002
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002	-	<0.002	<0.002	<0.002
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.001	-	<0.001	<0.001	<0.001
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.001	-	<0.001	<0.001	<0.001
(13C4-PFBA) Surrogate	%	-	-	**102**	**101**	**102**
(13C5_PFPeA) Surrogate	%	-	-	**99**	**83**	**102**
(13C5-PFHxA) Surrogate	%	-	-	**110**	**91**	**103**
(13C4-PFHpA) Surrogate	%	-	-	**105**	**85**	**102**
(13C4-PFOA) Surrogate	%	-	-	**99**	**97**	**100**
(13C9-PFNA) Surrogate	%	-	-	**107**	**97**	**106**
(13C6-PFDA) Surrogate	%	-	-	**113**	**120**	**119**
(13C7-PFUdA) Surrogate	%	-	-	**96**	**104**	**102**
(13C2-PFDoA) Surrogate	%	-	-	**89**	**93**	**103**
(13C2-PFTeDA) Surrogate	%	-	-	**42**	**56**	**67**
(13C2-PFHxDA) Surrogate	%	-	-	**16**	**36**	**23**
(13C3-PFBS) Surrogate	%	-	-	**104**	**107**	**101**
(13C3-PFHxS) Surrogate	%	-	-	**95**	**99**	**93**
(13C8-PFOS) Surrogate	%	-	-	**103**	**98**	**101**
(13C2-4:2FTS) Surrogate	%	-	-	**278**	**384**	**320**
(13C2-6:2FTS) Surrogate	%	-	-	**255**	**299**	**303**
(13C2-8:2FTS) Surrogate	%	-	-	**188**	**249**	**212**
(13C8-PFOSA) Surrogate	%	-	-	**71**	**97**	**77**
(D3-N-MeFOSA) Surrogate	%	-	-	**47**	**49**	**46**
(D5-N-EtFOSA) Surrogate	%	-	-	**43**	**33**	**32**
(D7-N-MeFOSE) Surrogate	%	-	-	**58**	**49**	**57**
(D9-N-EtFOSE) Surrogate	%	-	-	**52**	**48**	**49**
(D3-N-MeFOSAA) Surrogate	%	-	-	**116**	**165**	**111**
(D5-N-EtFOSAA) Surrogate	%	-	-	**98**	**167**	**108**
Moisture Content	**Method: AN002**	**Tested: 21/7/2020**					

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315710.009 Soil 25 Jun 2020 SE208579.009	ME315710.010 Soil 25 Jun 2020 SE208579.010	ME315710.011 Soil 25 Jun 2020 SE208579.011	ME315710.012 Soil 25 Jun 2020 SE208579.012
Moisture Content Method: AN002 Tested: 20/7/2020 (continued)							
% Moisture*	%w/w	1		-	**15.8**	**26.8**	**2.6**

QC SUMMARY

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Moisture Content Method: ME-(AU)-[ENV]AN002

Parameter	QC Reference	Units	LOR	DUP %RPD
% Moisture*	LB034307	%w/w	1	8%

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level Method: MA-1523

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Perfluorobutanoic acid (PFBA)	LB034306	mg/kg	0.0001	<0.0001	0%	NA
Perfluoropentanoic acid (PFPeA)	LB034306	mg/kg	0.0005	<0.0005	0%	NA
Perfluorohexanoic acid (PFHxA)	LB034306	mg/kg	0.0001	<0.0001	0%	NA
Perfluoroheptanoic acid (PFHpA)	LB034306	mg/kg	0.0001	<0.0001	0%	85%
Perfluorooctanoic Acid (PFOA)	LB034306	mg/kg	0.0001	<0.0001	0%	89%
Perfluorononanoic acid (PFNA)	LB034306	mg/kg	0.0001	<0.0001	0%	109%
Perfluorodecanoic acid (PFDA)	LB034306	mg/kg	0.0001	<0.0001	0%	80%
Perfluoroundecanoic acid (PFUnA)	LB034306	mg/kg	0.0001	<0.0001	0%	81%
Perfluorododecanoic acid (PFDoA)	LB034306	mg/kg	0.0001	<0.0001	0%	101%
Perfluorotridecanoic acid (PFTrDA)	LB034306	mg/kg	0.0001	<0.0001	0%	145%
Perfluorotetradecanoic acid (PFTeDA)	LB034306	mg/kg	0.0001	<0.0001	0%	113%
Perfluorohexadecanoic acid (PFHxDA)	LB034306	mg/kg	0.0001	<0.0001	0%	NA
Perfluorobutane sulfonate (PFBS)	LB034306	mg/kg	0.0001	<0.0001	0%	NA
Perfluoropentane sulfonate (PFPeS)	LB034306	mg/kg	0.0001	<0.0001	0%	NA
Perfluorohexane sulfonate (PFHxS)	LB034306	mg/kg	0.0001	<0.0001	0%	NA
Perfluoroheptane sulfonate (PFHpS)	LB034306	mg/kg	0.0001	<0.0001	0%	NA
Perfluorooctane sulfonate (PFOS)	LB034306	mg/kg	0.0001	<0.0001	0%	92%
Sum PFOS and PFHXS	LB034306	mg/kg	0.0001	<0.0001	0%	NA
Perfluorononane sulfonate (PFNS)	LB034306	mg/kg	0.0001	<0.0001	0%	NA
Perfluorodecane sulfonate (PFDS)	LB034306	mg/kg	0.0001	<0.0001	0%	NA
Perfluorododecane sulfonate (PFDoS)	LB034306	mg/kg	0.0001	<0.0001	0%	NA
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	LB034306	mg/kg	0.001	<0.001	0%	NA
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	LB034306	mg/kg	0.001	<0.001	0%	NA
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	LB034306	mg/kg	0.001	<0.001	0%	NA
Perfluorooctane sulfonamide (PFOSA)	LB034306	mg/kg	0.001	<0.001	0%	63%
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	LB034306	mg/kg	0.001	<0.001	0%	NA
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	LB034306	mg/kg	0.001	<0.001	0%	NA
2-(N-Methylperfluorooctane sulfonamido)-ethanol (N-MeFOSE)	LB034306	mg/kg	0.002	<0.002	0%	NA
2-(N-Ethylperfluorooctane sulfonamido)-ethanol (N-EtFOSE)	LB034306	mg/kg	0.002	<0.002	0%	NA
N-Methylperfluorooctanesulfonamidoacetic acid (N_MeFOSAA)	LB034306	mg/kg	0.001	<0.001	0%	NA
N-Ethylperfluorooctanesulfonamidoacetic Acid (N-EtFOSAA)	LB034306	mg/kg	0.001	<0.001	0%	NA
(13C4-PFBA) Surrogate	LB034306	%	-	101%	0%	100%
(13C5_PFPeA) Surrogate	LB034306	%	-	99%	0%	96%
(13C5-PFHxA) Surrogate	LB034306	%	-	108%	0%	107%
(13C4-PFHpA) Surrogate	LB034306	%	-	94%	2%	107%
(13C4-PFOA) Surrogate	LB034306	%	-	101%	10%	107%
(13C9-PFNA) Surrogate	LB034306	%	-	106%	11%	111%
(13C6-PFDA) Surrogate	LB034306	%	-	98%	18%	112%
(13C7-PFUdA) Surrogate	LB034306	%	-	94%	4%	98%
(13C2-PFDoA) Surrogate	LB034306	%	-	71%	8%	86%
(13C2-PFTeDA) Surrogate	LB034306	%	-	32%	2%	43%
(13C2-PFHxDA) Surrogate	LB034306	%	-	15%	9%	22%
(13C3-PFBS) Surrogate	LB034306	%	-	109%	8%	103%
(13C3-PFHxS) Surrogate	LB034306	%	-	100%	4%	95%
(13C8-PFOS) Surrogate	LB034306	%	-	95%	13%	85%
(13C2-4:2FTS) Surrogate	LB034306	%	-	246%	8%	242%
(13C2-6:2FTS) Surrogate	LB034306	%	-	222%	9%	223%
(13C2-8:2FTS) Surrogate	LB034306	%	-	153%	6%	174%
(13C8-PFOSA) Surrogate	LB034306	%	-	89%	10%	79%
(D3-N-MeFOSA) Surrogate	LB034306	%	-	56%	30%	52%
(D5-N-EtFOSA) Surrogate	LB034306	%	-	45%	26%	40%

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level Method: MA-1523 (continued)

				MB	DUP %RPD	LCS %Recovery
(D7-N-MeFOSE) Surrogate	LB034306	%	-	70%	2%	52%
(D9-N-EtFOSE) Surrogate	LB034306	%	-	57%	11%	46%
(D3-N-MeFOSAA) Surrogate	LB034306	%	-	121%	6%	111%
(D5-N-EtFOSAA) Surrogate	LB034306	%	-	124%	6%	103%

METHOD SUMMARY

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
MA-1523	This method covers the analysis of per- and polyfluoroalkyl substances (PFAS) in aqueous, solid and biosolid samples and solvent extracts, determined as the total of linear and branched isomers. After spiking with isotopically labelled quantification surrogates and clean-up via SPE cartridges sample extracts are analysed by liquid chromatography/mass spectrometry (LC-MS/MS). PFAS concentrations are determined by isotope dilution quantification.

FOOTNOTES

IS	Insufficient sample for analysis.	LOR	Limit of Reporting
LNR	Sample listed, but not received.	↑↓	Raised or Lowered Limit of Reporting
*	NATA accreditation does not cover the performance of this service.	QFH	QC result is above the upper tolerance
		QFL	QC result is below the lower tolerance
**	Indicative data, theoretical holding time exceeded.	-	The sample was not analysed for this analyte
		NVL	Not Validated

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calcuated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety .

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NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: **Results Environmental**

Report **732156-S**
Project name SE208579
Received Date Jul 16, 2020

Client Sample ID			**SE208579.008 0407_BH014_0 .1_200625**	**SE208579.009 0407_BH014_0 .3_200625**
Sample Matrix			**Soil**	**Soil**
Eurofins Sample No.			**S20-Jl26749**	**S20-Jl26750**
Date Sampled			**Jun 25, 2020**	**Jun 25, 2020**
Test/Reference	LOR	Unit		
Nitroglycerine (NG)	5	mg/kg	< 5	< 5
% Moisture	1	%	7.3	1.7
Explosives				
Octahydro-1.3.5.7-tetranitro-1.3.5.7-tetrazocine (HMX)	0.5	mg/kg	< 0.5	< 0.5
Pentaerythritol tetranitrate (PETN)	1	mg/kg	< 1	< 1
1-Chloro-2-nitrobenzene	0.5	mg/kg	< 0.5	< 0.5
1-Chloro-3-nitrobenzene	0.5	mg/kg	< 0.5	< 0.5
1-Chloro-4-nitrobenzene	0.5	mg/kg	< 0.5	< 0.5
1.3-Dinitrobenzene (1.3-DNB)	0.5	mg/kg	< 0.5	< 0.5
1.3.5-Trinitrobenzene (1.3.5-TNB)	1	mg/kg	< 1	< 1
2-Amino-4.6 dinitrotoluene	0.5	mg/kg	< 0.5	< 0.5
2-Nitrotoluene (2-NT)	0.5	mg/kg	< 0.5	< 0.5
2.4- & 2.6-Dinitrotoluene	1	mg/kg	< 1	< 1
3-Nitrotoluene (3-NT)	0.5	mg/kg	< 0.5	< 0.5
4-Amino-2.6-dinitrotoluene (4-Am-DNT)	0.5	mg/kg	< 0.5	< 0.5
4-Nitrotoluene (4-NT)	0.5	mg/kg	< 0.5	< 0.5
Hexahydro-1.3.5-trinitro-1.3.5-triazine (RDX)	0.5	mg/kg	< 0.5	< 0.5
Methyl-2.4.6-trinitrophenylnitramine (Tetryl)	1	mg/kg	< 1	< 1
Nitrobenzene (NB)	0.5	mg/kg	< 0.5	< 0.5
TNT	1	mg/kg	< 1	< 1

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Nitroglycerine (NG)	Melbourne	Jul 20, 2020	14 Days
- Method: USEPA Method 8332			
Explosives	Melbourne	Jul 20, 2020	14 Days
- Method: LTM-ORG-2230 Determination of Explosive by HPLC			
% Moisture	Melbourne	Jul 16, 2020	14 Days
- Method: LTM-GEN-7080 Moisture			

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IANZ # 1290

Company Name: SGS Environmental Services NSW
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Project Name: SE208579

Order No.:
Report #: 732156
Phone: 02 8594 0400
Fax: 02 8594 0499

Received: Jul 16, 2020 1:46 PM
Due: Jul 21, 2020
Priority: 3 Day
Contact Name: Results Environmental

Eurofins Analytical Services Manager : Asim Khan

Sample Detail						Nitroglycerine (NG)	Moisture Set	Explosives
Melbourne Laboratory - NATA Site # 1254 & 14271						X	X	X
Sydney Laboratory - NATA Site # 18217								
Brisbane Laboratory - NATA Site # 20794								
Perth Laboratory - NATA Site # 23736								
External Laboratory								
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**			
1	SE208579.008 0407_BH014_ 0.1_200625	Jun 25, 2020		Soil	S20-Jl26749	X	X	X
2	SE208579.009 0407_BH014_ 0.3_200625	Jun 25, 2020		Soil	S20-Jl26750	X	X	X
Test Counts						2	2	2

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

****NOTE:** pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram

mg/L: milligrams per litre

ug/L: micrograms per litre

ppm: Parts per million

ppb: Parts per billion

%: Percentage

org/100mL: Organisms per 100 millilitres

NTU: Nephelometric Turbidity Units

MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version 5.3
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling.Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Nitroglycerine (NG)	mg/kg	< 5			5	Pass	
Method Blank							
Explosives							
Octahydro-1.3.5.7-tetranitro-1.3.5.7-tetrazocine (HMX)	mg/kg	< 0.5			0.5	Pass	
Pentaerythritol tetranitrate (PETN)	mg/kg	< 1			1	Pass	
1-Chloro-2-nitrobenzene	mg/kg	< 0.5			0.5	Pass	
1-Chloro-3-nitrobenzene	mg/kg	< 0.5			0.5	Pass	
1-Chloro-4-nitrobenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dinitrobenzene (1.3-DNB)	mg/kg	< 0.5			0.5	Pass	
1.3.5-Trinitrobenzene (1.3.5-TNB)	mg/kg	< 1			1	Pass	
2-Amino-4.6 dinitrotoluene	mg/kg	< 0.5			0.5	Pass	
2-Nitrotoluene (2-NT)	mg/kg	< 0.5			0.5	Pass	
2.4- & 2.6-Dinitrotoluene	mg/kg	< 1			1	Pass	
3-Nitrotoluene (3-NT)	mg/kg	< 0.5			0.5	Pass	
4-Amino-2.6-dinitrotoluene (4-Am-DNT)	mg/kg	< 0.5			0.5	Pass	
4-Nitrotoluene (4-NT)	mg/kg	< 0.5			0.5	Pass	
Hexahydro-1.3.5-trinitro-1.3.5-triazine (RDX)	mg/kg	< 0.5			0.5	Pass	
Methyl-2.4.6-trinitrophenylnitramine (Tetryl)	mg/kg	< 1			1	Pass	
Nitrobenzene (NB)	mg/kg	< 0.5			0.5	Pass	
TNT	mg/kg	< 1			1	Pass	
LCS - % Recovery							
Nitroglycerine (NG)	%	98			75-125	Pass	
LCS - % Recovery							
Explosives							
Octahydro-1.3.5.7-tetranitro-1.3.5.7-tetrazocine (HMX)	%	92			70-130	Pass	
Pentaerythritol tetranitrate (PETN)	%	88			70-130	Pass	
1.3-Dinitrobenzene (1.3-DNB)	%	97			70-130	Pass	
1.3.5-Trinitrobenzene (1.3.5-TNB)	%	101			70-130	Pass	
2-Nitrotoluene (2-NT)	%	82			70-130	Pass	
2.4- & 2.6-Dinitrotoluene	%	88			70-130	Pass	
3-Nitrotoluene (3-NT)	%	129			70-130	Pass	
4-Nitrotoluene (4-NT)	%	110			70-130	Pass	
Hexahydro-1.3.5-trinitro-1.3.5-triazine (RDX)	%	97			70-130	Pass	
Methyl-2.4.6-trinitrophenylnitramine (Tetryl)	%	121			70-130	Pass	
TNT	%	127			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Explosives				Result 1					
Octahydro-1.3.5.7-tetranitro-1.3.5.7-tetrazocine (HMX)	M20-Jl07454	NCP	%	114			70-130	Pass	
Pentaerythritol tetranitrate (PETN)	M20-Jl00529	NCP	%	int			70-130	Fail	Q08
1-Chloro-3-nitrobenzene	M20-Jl07454	NCP	%	121			70-130	Pass	
1.3-Dinitrobenzene (1.3-DNB)	M20-Jl07454	NCP	%	105			70-130	Pass	
2-Amino-4.6 dinitrotoluene	M20-Jl07454	NCP	%	121			70-130	Pass	
2-Nitrotoluene (2-NT)	M20-Jl07454	NCP	%	77			70-130	Pass	
2.4- & 2.6-Dinitrotoluene	M20-Jl07454	NCP	%	106			70-130	Pass	
3-Nitrotoluene (3-NT)	M20-Jl07454	NCP	%	128			70-130	Pass	
4-Amino-2.6-dinitrotoluene (4-Am-DNT)	M20-Jl07454	NCP	%	114			70-130	Pass	
4-Nitrotoluene (4-NT)	M20-Jl07454	NCP	%	84			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Methyl-2.4.6-trinitrophenylnitramine (Tetryl)	M20-Jl07454	NCP	%	122			70-130	Pass	
Nitrobenzene (NB)	M20-Jl07454	NCP	%	116			70-130	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
				Result 1	Result 2	RPD			
Nitroglycerine (NG)	M20-Jl25844	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
% Moisture	S20-Jl26165	NCP	%	12	12	6.0	30%	Pass	
Duplicate									
Explosives				Result 1	Result 2	RPD			
Octahydro-1.3.5.7-tetranitro-1.3.5.7-tetrazocine (HMX)	M20-Jl12207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pentaerythritol tetranitrate (PETN)	M20-Jl12207	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
1-Chloro-2-nitrobenzene	M20-Jl12207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1-Chloro-3-nitrobenzene	M20-Jl12207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1-Chloro-4-nitrobenzene	M20-Jl12207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dinitrobenzene (1.3-DNB)	M20-Jl12207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3.5-Trinitrobenzene (1.3.5-TNB)	M20-Jl12207	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2-Amino-4.6 dinitrotoluene	M20-Jl12207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Nitrotoluene (2-NT)	M20-Jl12207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4- & 2.6-Dinitrotoluene	M20-Jl12207	NCP	mg/kg	**	< 1	<1	30%	Pass	
3-Nitrotoluene (3-NT)	M20-Jl12207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Amino-2.6-dinitrotoluene (4-Am-DNT)	M20-Jl12207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Nitrotoluene (4-NT)	M20-Jl12207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Hexahydro-1.3.5-trinitro-1.3.5-triazine (RDX)	M20-Jl12207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Methyl-2.4.6-trinitrophenylnitramine (Tetryl)	M20-Jl12207	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Nitrobenzene (NB)	M20-Jl12207	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TNT	M20-Jl12207	NCP	mg/kg	< 1	< 1	<1	30%	Pass	

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
Q08	The matrix spike recovery is outside of the recommended acceptance criteria. An acceptable recovery was obtained for the laboratory control sample indicating a sample matrix interference.

Authorised By

[redacted] Analytical Services Manager
[redacted] Senior Analyst-Organic (VIC)

[redacted]

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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STATEMENT OF QA/QC PERFORMANCE

SE208579 R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	12

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208579 R0**
Date Received	25 Jun 2020
Date Reported	21 Jul 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Extraction Date	Moisture Content	12 items
	OC Pesticides in Soil	11 items
	OP Pesticides in Soil	11 items
	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	11 items
	PCBs in Soil	10 items
	Speciated Phenols in Soil	9 items
	TRH (Total Recoverable Hydrocarbons) in Soil	11 items
	VOC's in Soil	11 items
	Volatile Petroleum Hydrocarbons in Soil	11 items
Surrogate	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	1 item
	Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level	26 items
Duplicate	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	2 items
	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	3 items
Matrix Spike	VOC's in Soil	1 item

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	12 Soil
Date documentation received	9/7/2020@11:07am	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	4.7°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE208579 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SH018_0.1_200625	SE208579.003	LB204571	25 Jun 2020	25 Jun 2020	23 Jul 2020	17 Jul 2020	23 Jul 2020	21 Jul 2020
0407_SH020_0.1_200625	SE208579.004	LB204571	25 Jun 2020	25 Jun 2020	23 Jul 2020	17 Jul 2020	23 Jul 2020	21 Jul 2020
0407_QC168_200625	SE208579.005	LB204571	25 Jun 2020	25 Jun 2020	23 Jul 2020	17 Jul 2020	23 Jul 2020	21 Jul 2020
0407_SH021_0.1_200625	SE208579.006	LB204571	25 Jun 2020	25 Jun 2020	23 Jul 2020	17 Jul 2020	23 Jul 2020	21 Jul 2020
0407_SH022_0.1-0.2_2006	SE208579.007	LB204571	25 Jun 2020	25 Jun 2020	23 Jul 2020	17 Jul 2020	23 Jul 2020	21 Jul 2020
0407_BH014_0.1_200625	SE208579.008	LB204571	25 Jun 2020	25 Jun 2020	23 Jul 2020	17 Jul 2020	23 Jul 2020	21 Jul 2020
0407_BH014_0.3_200625	SE208579.009	LB204571	25 Jun 2020	25 Jun 2020	23 Jul 2020	17 Jul 2020	23 Jul 2020	21 Jul 2020
0407_TP237a_0.4_200624	SE208579.010	LB204571	25 Jun 2020	25 Jun 2020	23 Jul 2020	17 Jul 2020	23 Jul 2020	21 Jul 2020
0407_TP237b_0.5_200624	SE208579.011	LB204571	25 Jun 2020	25 Jun 2020	23 Jul 2020	17 Jul 2020	23 Jul 2020	21 Jul 2020
0407_TP237c_0.5_200624	SE208579.012	LB204571	25 Jun 2020	25 Jun 2020	23 Jul 2020	17 Jul 2020	23 Jul 2020	21 Jul 2020

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SH002_0.1_200625	SE208579.001	LB204489	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	21 Jul 2020	20 Jul 2020
0407_SH010_0.3-0.5_2006	SE208579.002	LB204489	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	21 Jul 2020	20 Jul 2020
0407_SH018_0.1_200625	SE208579.003	LB204489	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	21 Jul 2020	20 Jul 2020
0407_SH020_0.1_200625	SE208579.004	LB204489	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	21 Jul 2020	20 Jul 2020
0407_QC168_200625	SE208579.005	LB204489	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	21 Jul 2020	20 Jul 2020
0407_SH021_0.1_200625	SE208579.006	LB204489	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	21 Jul 2020	20 Jul 2020
0407_SH022_0.1-0.2_2006	SE208579.007	LB204489	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	21 Jul 2020	20 Jul 2020
0407_BH014_0.1_200625	SE208579.008	LB204489	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	21 Jul 2020	20 Jul 2020
0407_BH014_0.3_200625	SE208579.009	LB204489	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	21 Jul 2020	20 Jul 2020
0407_TP237a_0.4_200624	SE208579.010	LB204489	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	21 Jul 2020	20 Jul 2020
0407_TP237b_0.5_200624	SE208579.011	LB204489	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	21 Jul 2020	20 Jul 2020
0407_TP237c_0.5_200624	SE208579.012	LB204489	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	21 Jul 2020	20 Jul 2020

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SH002_0.1_200625	SE208579.001	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_SH010_0.3-0.5_2006	SE208579.002	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_SH018_0.1_200625	SE208579.003	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_SH020_0.1_200625	SE208579.004	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_QC168_200625	SE208579.005	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_SH021_0.1_200625	SE208579.006	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_SH022_0.1-0.2_2006	SE208579.007	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_BH014_0.1_200625	SE208579.008	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_BH014_0.3_200625	SE208579.009	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP237a_0.4_200624	SE208579.010	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP237b_0.5_200624	SE208579.011	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP237c_0.5_200624	SE208579.012	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SH002_0.1_200625	SE208579.001	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_SH010_0.3-0.5_2006	SE208579.002	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_SH018_0.1_200625	SE208579.003	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_SH020_0.1_200625	SE208579.004	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_QC168_200625	SE208579.005	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_SH021_0.1_200625	SE208579.006	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_SH022_0.1-0.2_2006	SE208579.007	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_BH014_0.1_200625	SE208579.008	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_BH014_0.3_200625	SE208579.009	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_TP237a_0.4_200624	SE208579.010	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_TP237b_0.5_200624	SE208579.011	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_TP237c_0.5_200624	SE208579.012	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SH002_0.1_200625	SE208579.001	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_SH010_0.3-0.5_2006	SE208579.002	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_SH018_0.1_200625	SE208579.003	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_SH020_0.1_200625	SE208579.004	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020

HOLDING TIME SUMMARY

SE208579 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC168_200625	SE208579.005	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_SH021_0.1_200625	SE208579.006	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_SH022_0.1-0.2_2006	SE208579.007	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_BH014_0.1_200625	SE208579.008	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_BH014_0.3_200625	SE208579.009	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_TP237a_0.4_200624	SE208579.010	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_TP237b_0.5_200624	SE208579.011	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_TP237c_0.5_200624	SE208579.012	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SH002_0.1_200625	SE208579.001	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_SH010_0.3-0.5_2006	SE208579.002	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_SH018_0.1_200625	SE208579.003	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_SH020_0.1_200625	SE208579.004	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_QC168_200625	SE208579.005	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_SH021_0.1_200625	SE208579.006	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_SH022_0.1-0.2_2006	SE208579.007	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_BH014_0.1_200625	SE208579.008	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_BH014_0.3_200625	SE208579.009	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP237a_0.4_200624	SE208579.010	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP237b_0.5_200624	SE208579.011	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP237c_0.5_200624	SE208579.012	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SH002_0.1_200625	SE208579.001	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_SH010_0.3-0.5_2006	SE208579.002	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_SH018_0.1_200625	SE208579.003	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_SH020_0.1_200625	SE208579.004	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_QC168_200625	SE208579.005	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_SH021_0.1_200625	SE208579.006	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_SH022_0.1-0.2_2006	SE208579.007	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_BH014_0.1_200625	SE208579.008	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_BH014_0.3_200625	SE208579.009	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP237a_0.4_200624	SE208579.010	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP237b_0.5_200624	SE208579.011	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP237c_0.5_200624	SE208579.012	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SH010_0.3-0.5_2006	SE208579.002	LB204570	25 Jun 2020	25 Jun 2020	22 Dec 2020	17 Jul 2020	22 Dec 2020	20 Jul 2020
0407_SH018_0.1_200625	SE208579.003	LB204570	25 Jun 2020	25 Jun 2020	22 Dec 2020	17 Jul 2020	22 Dec 2020	20 Jul 2020
0407_SH020_0.1_200625	SE208579.004	LB204570	25 Jun 2020	25 Jun 2020	22 Dec 2020	17 Jul 2020	22 Dec 2020	20 Jul 2020
0407_QC168_200625	SE208579.005	LB204570	25 Jun 2020	25 Jun 2020	22 Dec 2020	17 Jul 2020	22 Dec 2020	20 Jul 2020
0407_SH021_0.1_200625	SE208579.006	LB204570	25 Jun 2020	25 Jun 2020	22 Dec 2020	17 Jul 2020	22 Dec 2020	20 Jul 2020
0407_SH022_0.1-0.2_2006	SE208579.007	LB204570	25 Jun 2020	25 Jun 2020	22 Dec 2020	17 Jul 2020	22 Dec 2020	20 Jul 2020
0407_BH014_0.1_200625	SE208579.008	LB204570	25 Jun 2020	25 Jun 2020	22 Dec 2020	17 Jul 2020	22 Dec 2020	20 Jul 2020
0407_BH014_0.3_200625	SE208579.009	LB204570	25 Jun 2020	25 Jun 2020	22 Dec 2020	17 Jul 2020	22 Dec 2020	20 Jul 2020
0407_TP237a_0.4_200624	SE208579.010	LB204570	25 Jun 2020	25 Jun 2020	22 Dec 2020	17 Jul 2020	22 Dec 2020	20 Jul 2020
0407_TP237b_0.5_200624	SE208579.011	LB204570	25 Jun 2020	25 Jun 2020	22 Dec 2020	17 Jul 2020	22 Dec 2020	20 Jul 2020
0407_TP237c_0.5_200624	SE208579.012	LB204570	25 Jun 2020	25 Jun 2020	22 Dec 2020	17 Jul 2020	22 Dec 2020	20 Jul 2020

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SH002_0.1_200625	SE208579.001	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_SH010_0.3-0.5_2006	SE208579.002	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_SH018_0.1_200625	SE208579.003	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_SH020_0.1_200625	SE208579.004	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_QC168_200625	SE208579.005	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_SH021_0.1_200625	SE208579.006	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_SH022_0.1-0.2_2006	SE208579.007	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020

HOLDING TIME SUMMARY

SE208579 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH014_0.1_200625	SE208579.008	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_BH014_0.3_200625	SE208579.009	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_TP237a_0.4_200624	SE208579.010	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_TP237b_0.5_200624	SE208579.011	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_TP237c_0.5_200624	SE208579.012	LB204484	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SH010_0.3-0.5_2006	SE208579.002	LB204479	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_SH018_0.1_200625	SE208579.003	LB204479	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_SH020_0.1_200625	SE208579.004	LB204479	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_QC168_200625	SE208579.005	LB204479	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_SH021_0.1_200625	SE208579.006	LB204479	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_SH022_0.1-0.2_2006	SE208579.007	LB204479	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_BH014_0.1_200625	SE208579.008	LB204479	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_BH014_0.3_200625	SE208579.009	LB204479	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_TP237a_0.4_200624	SE208579.010	LB204479	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_TP237b_0.5_200624	SE208579.011	LB204479	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_TP237c_0.5_200624	SE208579.012	LB204479	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SH010_0.3-0.5_2006	SE208579.002	LB204479	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_SH018_0.1_200625	SE208579.003	LB204479	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_SH020_0.1_200625	SE208579.004	LB204479	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_QC168_200625	SE208579.005	LB204479	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_SH021_0.1_200625	SE208579.006	LB204479	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_SH022_0.1-0.2_2006	SE208579.007	LB204479	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_BH014_0.1_200625	SE208579.008	LB204479	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_BH014_0.3_200625	SE208579.009	LB204479	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_TP237a_0.4_200624	SE208579.010	LB204479	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_TP237b_0.5_200624	SE208579.011	LB204479	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_TP237c_0.5_200624	SE208579.012	LB204479	25 Jun 2020	25 Jun 2020	09 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_SH002_0.1_200625	SE208579.001	%	60 - 130%	103
	0407_SH018_0.1_200625	SE208579.003	%	60 - 130%	103
	0407_SH020_0.1_200625	SE208579.004	%	60 - 130%	105
	0407_QC168_200625	SE208579.005	%	60 - 130%	101
	0407_SH021_0.1_200625	SE208579.006	%	60 - 130%	103
	0407_SH022_0.1-0.2_200625	SE208579.007	%	60 - 130%	98
	0407_BH014_0.1_200625	SE208579.008	%	60 - 130%	100
	0407_BH014_0.3_200625	SE208579.009	%	60 - 130%	101
	0407_TP237a_0.4_200624	SE208579.010	%	60 - 130%	106
	0407_TP237b_0.5_200624	SE208579.011	%	60 - 130%	103
	0407_TP237c_0.5_200624	SE208579.012	%	60 - 130%	92

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_SH002_0.1_200625	SE208579.001	%	60 - 130%	88
	0407_SH018_0.1_200625	SE208579.003	%	60 - 130%	92
	0407_SH020_0.1_200625	SE208579.004	%	60 - 130%	94
	0407_QC168_200625	SE208579.005	%	60 - 130%	91
	0407_SH021_0.1_200625	SE208579.006	%	60 - 130%	91
	0407_SH022_0.1-0.2_200625	SE208579.007	%	60 - 130%	86
	0407_BH014_0.1_200625	SE208579.008	%	60 - 130%	91
	0407_BH014_0.3_200625	SE208579.009	%	60 - 130%	92
	0407_TP237a_0.4_200624	SE208579.010	%	60 - 130%	90
	0407_TP237b_0.5_200624	SE208579.011	%	60 - 130%	90
	0407_TP237c_0.5_200624	SE208579.012	%	60 - 130%	91
d14-p-terphenyl (Surrogate)	0407_SH002_0.1_200625	SE208579.001	%	60 - 130%	84
	0407_SH018_0.1_200625	SE208579.003	%	60 - 130%	91
	0407_SH020_0.1_200625	SE208579.004	%	60 - 130%	88
	0407_QC168_200625	SE208579.005	%	60 - 130%	89
	0407_SH021_0.1_200625	SE208579.006	%	60 - 130%	88
	0407_SH022_0.1-0.2_200625	SE208579.007	%	60 - 130%	83
	0407_BH014_0.1_200625	SE208579.008	%	60 - 130%	88
	0407_BH014_0.3_200625	SE208579.009	%	60 - 130%	90
	0407_TP237a_0.4_200624	SE208579.010	%	60 - 130%	85
	0407_TP237b_0.5_200624	SE208579.011	%	60 - 130%	91
	0407_TP237c_0.5_200624	SE208579.012	%	60 - 130%	86

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_SH010_0.3-0.5_200625	SE208579.002	%	70 - 130%	91
	0407_SH018_0.1_200625	SE208579.003	%	70 - 130%	92
	0407_SH020_0.1_200625	SE208579.004	%	70 - 130%	94
	0407_QC168_200625	SE208579.005	%	70 - 130%	91
	0407_SH021_0.1_200625	SE208579.006	%	70 - 130%	91
	0407_SH022_0.1-0.2_200625	SE208579.007	%	70 - 130%	86
	0407_BH014_0.1_200625	SE208579.008	%	70 - 130%	91
	0407_BH014_0.3_200625	SE208579.009	%	70 - 130%	92
	0407_TP237a_0.4_200624	SE208579.010	%	70 - 130%	90
	0407_TP237b_0.5_200624	SE208579.011	%	70 - 130%	90
	0407_TP237c_0.5_200624	SE208579.012	%	70 - 130%	91
d14-p-terphenyl (Surrogate)	0407_SH010_0.3-0.5_200625	SE208579.002	%	70 - 130%	89
	0407_SH018_0.1_200625	SE208579.003	%	70 - 130%	91
	0407_SH020_0.1_200625	SE208579.004	%	70 - 130%	88
	0407_QC168_200625	SE208579.005	%	70 - 130%	89
	0407_SH021_0.1_200625	SE208579.006	%	70 - 130%	88
	0407_SH022_0.1-0.2_200625	SE208579.007	%	70 - 130%	83
	0407_BH014_0.1_200625	SE208579.008	%	70 - 130%	88
	0407_BH014_0.3_200625	SE208579.009	%	70 - 130%	90
	0407_TP237a_0.4_200624	SE208579.010	%	70 - 130%	85
	0407_TP237b_0.5_200624	SE208579.011	%	70 - 130%	91
	0407_TP237c_0.5_200624	SE208579.012	%	70 - 130%	86
d5-nitrobenzene (Surrogate)	0407_SH010_0.3-0.5_200625	SE208579.002	%	70 - 130%	107

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d5-nitrobenzene (Surrogate)	0407_SH018_0.1_200625	SE208579.003	%	70 - 130%	111
	0407_SH020_0.1_200625	SE208579.004	%	70 - 130%	110
	0407_QC168_200625	SE208579.005	%	70 - 130%	109
	0407_SH021_0.1_200625	SE208579.006	%	70 - 130%	112
	0407_SH022_0.1-0.2_200625	SE208579.007	%	70 - 130%	104
	0407_BH014_0.1_200625	SE208579.008	%	70 - 130%	111
	0407_BH014_0.3_200625	SE208579.009	%	70 - 130%	110
	0407_TP237a_0.4_200624	SE208579.010	%	70 - 130%	108
	0407_TP237b_0.5_200624	SE208579.011	%	70 - 130%	147 †
	0407_TP237c_0.5_200624	SE208579.012	%	70 - 130%	120

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_SH018_0.1_200625	SE208579.003	%	60 - 130%	103
	0407_SH020_0.1_200625	SE208579.004	%	60 - 130%	105
	0407_QC168_200625	SE208579.005	%	60 - 130%	101
	0407_SH021_0.1_200625	SE208579.006	%	60 - 130%	103
	0407_SH022_0.1-0.2_200625	SE208579.007	%	60 - 130%	98
	0407_BH014_0.1_200625	SE208579.008	%	60 - 130%	100
	0407_BH014_0.3_200625	SE208579.009	%	60 - 130%	101
	0407_TP237a_0.4_200624	SE208579.010	%	60 - 130%	106
	0407_TP237b_0.5_200624	SE208579.011	%	60 - 130%	103
	0407_TP237c_0.5_200624	SE208579.012	%	60 - 130%	92

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level

Method: MA-1523

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C2-4:2FTS) Surrogate	0407_SH018_0.1_200625	SE208579.003	%	10 - 150%	253 †
	0407_SH020_0.1_200625	SE208579.004	%	10 - 150%	250 †
	0407_QC168_200625	SE208579.005	%	10 - 150%	250 †
	0407_SH021_0.1_200625	SE208579.006	%	10 - 150%	250 †
	0407_SH022_0.1-0.2_200625	SE208579.007	%	10 - 150%	252 †
	0407_TP237a_0.4_200624	SE208579.010	%	10 - 150%	278 †
	0407_TP237b_0.5_200624	SE208579.011	%	10 - 150%	384 †
	0407_TP237c_0.5_200624	SE208579.012	%	10 - 150%	320 †
(13C2-6:2FTS) Surrogate	0407_SH018_0.1_200625	SE208579.003	%	10 - 150%	232 †
	0407_SH020_0.1_200625	SE208579.004	%	10 - 150%	229 †
	0407_QC168_200625	SE208579.005	%	10 - 150%	232 †
	0407_SH021_0.1_200625	SE208579.006	%	10 - 150%	265 †
	0407_SH022_0.1-0.2_200625	SE208579.007	%	10 - 150%	226 †
	0407_TP237a_0.4_200624	SE208579.010	%	10 - 150%	255 †
	0407_TP237b_0.5_200624	SE208579.011	%	10 - 150%	299 †
	0407_TP237c_0.5_200624	SE208579.012	%	10 - 150%	303 †
(13C2-8:2FTS) Surrogate	0407_SH018_0.1_200625	SE208579.003	%	10 - 150%	166 †
	0407_SH020_0.1_200625	SE208579.004	%	10 - 150%	177 †
	0407_QC168_200625	SE208579.005	%	10 - 150%	166 †
	0407_SH021_0.1_200625	SE208579.006	%	10 - 150%	240 †
	0407_SH022_0.1-0.2_200625	SE208579.007	%	10 - 150%	192 †
	0407_TP237a_0.4_200624	SE208579.010	%	10 - 150%	188 †
	0407_TP237b_0.5_200624	SE208579.011	%	10 - 150%	249 †
	0407_TP237c_0.5_200624	SE208579.012	%	10 - 150%	212 †
(13C2-PFDoA) Surrogate	0407_SH018_0.1_200625	SE208579.003	%	10 - 150%	77
	0407_SH020_0.1_200625	SE208579.004	%	10 - 150%	85
	0407_QC168_200625	SE208579.005	%	10 - 150%	76
	0407_SH021_0.1_200625	SE208579.006	%	10 - 150%	89
	0407_SH022_0.1-0.2_200625	SE208579.007	%	10 - 150%	81
	0407_TP237a_0.4_200624	SE208579.010	%	10 - 150%	89
	0407_TP237b_0.5_200624	SE208579.011	%	10 - 150%	93
	0407_TP237c_0.5_200624	SE208579.012	%	10 - 150%	103
(13C2-PFHxDA) Surrogate	0407_SH018_0.1_200625	SE208579.003	%	10 - 150%	18
	0407_SH020_0.1_200625	SE208579.004	%	10 - 150%	22
	0407_QC168_200625	SE208579.005	%	10 - 150%	12
	0407_SH021_0.1_200625	SE208579.006	%	10 - 150%	39

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level (continued) **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C2-PFHxDA) Surrogate	0407_SH022_0.1-0.2_200625	SE208579.007	%	10 - 150%	26
	0407_TP237a_0.4_200624	SE208579.010	%	10 - 150%	16
	0407_TP237b_0.5_200624	SE208579.011	%	10 - 150%	36
	0407_TP237c_0.5_200624	SE208579.012	%	10 - 150%	23
(13C2-PFTeDA) Surrogate	0407_SH018_0.1_200625	SE208579.003	%	10 - 130%	45
	0407_SH020_0.1_200625	SE208579.004	%	10 - 130%	56
	0407_QC168_200625	SE208579.005	%	10 - 130%	33
	0407_SH021_0.1_200625	SE208579.006	%	10 - 130%	67
	0407_SH022_0.1-0.2_200625	SE208579.007	%	10 - 130%	61
	0407_TP237a_0.4_200624	SE208579.010	%	10 - 130%	42
	0407_TP237b_0.5_200624	SE208579.011	%	10 - 130%	56
	0407_TP237c_0.5_200624	SE208579.012	%	10 - 130%	67
(13C3-PFBS) Surrogate	0407_SH018_0.1_200625	SE208579.003	%	10 - 150%	109
	0407_SH020_0.1_200625	SE208579.004	%	10 - 150%	105
	0407_QC168_200625	SE208579.005	%	10 - 150%	103
	0407_SH021_0.1_200625	SE208579.006	%	10 - 150%	103
	0407_SH022_0.1-0.2_200625	SE208579.007	%	10 - 150%	106
	0407_TP237a_0.4_200624	SE208579.010	%	10 - 150%	104
	0407_TP237b_0.5_200624	SE208579.011	%	10 - 150%	107
	0407_TP237c_0.5_200624	SE208579.012	%	10 - 150%	101
(13C3-PFHxS) Surrogate	0407_SH018_0.1_200625	SE208579.003	%	10 - 150%	100
	0407_SH020_0.1_200625	SE208579.004	%	10 - 150%	96
	0407_QC168_200625	SE208579.005	%	10 - 150%	97
	0407_SH021_0.1_200625	SE208579.006	%	10 - 150%	96
	0407_SH022_0.1-0.2_200625	SE208579.007	%	10 - 150%	95
	0407_TP237a_0.4_200624	SE208579.010	%	10 - 150%	95
	0407_TP237b_0.5_200624	SE208579.011	%	10 - 150%	99
	0407_TP237c_0.5_200624	SE208579.012	%	10 - 150%	93
(13C4-PFBA) Surrogate	0407_SH018_0.1_200625	SE208579.003	%	10 - 150%	100
	0407_SH020_0.1_200625	SE208579.004	%	10 - 150%	99
	0407_QC168_200625	SE208579.005	%	10 - 150%	103
	0407_SH021_0.1_200625	SE208579.006	%	10 - 150%	101
	0407_SH022_0.1-0.2_200625	SE208579.007	%	10 - 150%	102
	0407_TP237a_0.4_200624	SE208579.010	%	10 - 150%	102
	0407_TP237b_0.5_200624	SE208579.011	%	10 - 150%	101
	0407_TP237c_0.5_200624	SE208579.012	%	10 - 150%	102
(13C4-PFHpA) Surrogate	0407_SH018_0.1_200625	SE208579.003	%	10 - 150%	108
	0407_SH020_0.1_200625	SE208579.004	%	10 - 150%	108
	0407_QC168_200625	SE208579.005	%	10 - 150%	109
	0407_SH021_0.1_200625	SE208579.006	%	10 - 150%	110
	0407_SH022_0.1-0.2_200625	SE208579.007	%	10 - 150%	104
	0407_TP237a_0.4_200624	SE208579.010	%	10 - 150%	105
	0407_TP237b_0.5_200624	SE208579.011	%	10 - 150%	85
	0407_TP237c_0.5_200624	SE208579.012	%	10 - 150%	102
(13C4-PFOA) Surrogate	0407_SH018_0.1_200625	SE208579.003	%	10 - 150%	108
	0407_SH020_0.1_200625	SE208579.004	%	10 - 150%	112
	0407_QC168_200625	SE208579.005	%	10 - 150%	109
	0407_SH021_0.1_200625	SE208579.006	%	10 - 150%	112
	0407_SH022_0.1-0.2_200625	SE208579.007	%	10 - 150%	104
	0407_TP237a_0.4_200624	SE208579.010	%	10 - 150%	99
	0407_TP237b_0.5_200624	SE208579.011	%	10 - 150%	97
	0407_TP237c_0.5_200624	SE208579.012	%	10 - 150%	100
(13C5_PFPeA) Surrogate	0407_SH018_0.1_200625	SE208579.003	%	10 - 150%	97
	0407_SH020_0.1_200625	SE208579.004	%	10 - 150%	95
	0407_QC168_200625	SE208579.005	%	10 - 150%	98
	0407_SH021_0.1_200625	SE208579.006	%	10 - 150%	97
	0407_SH022_0.1-0.2_200625	SE208579.007	%	10 - 150%	99
	0407_TP237a_0.4_200624	SE208579.010	%	10 - 150%	99
	0407_TP237b_0.5_200624	SE208579.011	%	10 - 150%	83
	0407_TP237c_0.5_200624	SE208579.012	%	10 - 150%	102
(13C5-PFHxA) Surrogate	0407_SH018_0.1_200625	SE208579.003	%	10 - 150%	113

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level (continued) **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C5-PFHxA) Surrogate	0407_SH020_0.1_200625	SE208579.004	%	10 - 150%	111
	0407_QC168_200625	SE208579.005	%	10 - 150%	111
	0407_SH021_0.1_200625	SE208579.006	%	10 - 150%	113
	0407_SH022_0.1-0.2_200625	SE208579.007	%	10 - 150%	108
	0407_TP237a_0.4_200624	SE208579.010	%	10 - 150%	110
	0407_TP237b_0.5_200624	SE208579.011	%	10 - 150%	91
	0407_TP237c_0.5_200624	SE208579.012	%	10 - 150%	103
(13C6-PFDA) Surrogate	0407_SH018_0.1_200625	SE208579.003	%	10 - 150%	96
	0407_SH020_0.1_200625	SE208579.004	%	10 - 150%	100
	0407_QC168_200625	SE208579.005	%	10 - 150%	95
	0407_SH021_0.1_200625	SE208579.006	%	10 - 150%	118
	0407_SH022_0.1-0.2_200625	SE208579.007	%	10 - 150%	109
	0407_TP237a_0.4_200624	SE208579.010	%	10 - 150%	113
	0407_TP237b_0.5_200624	SE208579.011	%	10 - 150%	120
	0407_TP237c_0.5_200624	SE208579.012	%	10 - 150%	119
(13C7-PFUdA) Surrogate	0407_SH018_0.1_200625	SE208579.003	%	10 - 150%	87
	0407_SH020_0.1_200625	SE208579.004	%	10 - 150%	97
	0407_QC168_200625	SE208579.005	%	10 - 150%	87
	0407_SH021_0.1_200625	SE208579.006	%	10 - 150%	95
	0407_SH022_0.1-0.2_200625	SE208579.007	%	10 - 150%	90
	0407_TP237a_0.4_200624	SE208579.010	%	10 - 150%	96
	0407_TP237b_0.5_200624	SE208579.011	%	10 - 150%	104
	0407_TP237c_0.5_200624	SE208579.012	%	10 - 150%	102
(13C8-PFOS) Surrogate	0407_SH018_0.1_200625	SE208579.003	%	10 - 150%	91
	0407_SH020_0.1_200625	SE208579.004	%	10 - 150%	86
	0407_QC168_200625	SE208579.005	%	10 - 150%	83
	0407_SH021_0.1_200625	SE208579.006	%	10 - 150%	110
	0407_SH022_0.1-0.2_200625	SE208579.007	%	10 - 150%	101
	0407_TP237a_0.4_200624	SE208579.010	%	10 - 150%	103
	0407_TP237b_0.5_200624	SE208579.011	%	10 - 150%	98
	0407_TP237c_0.5_200624	SE208579.012	%	10 - 150%	101
(13C8-PFOSA) Surrogate	0407_SH018_0.1_200625	SE208579.003	%	10 - 150%	76
	0407_SH020_0.1_200625	SE208579.004	%	10 - 150%	71
	0407_QC168_200625	SE208579.005	%	10 - 150%	74
	0407_SH021_0.1_200625	SE208579.006	%	10 - 150%	74
	0407_SH022_0.1-0.2_200625	SE208579.007	%	10 - 150%	82
	0407_TP237a_0.4_200624	SE208579.010	%	10 - 150%	71
	0407_TP237b_0.5_200624	SE208579.011	%	10 - 150%	97
	0407_TP237c_0.5_200624	SE208579.012	%	10 - 150%	77
(13C9-PFNA) Surrogate	0407_SH018_0.1_200625	SE208579.003	%	10 - 150%	96
	0407_SH020_0.1_200625	SE208579.004	%	10 - 150%	106
	0407_QC168_200625	SE208579.005	%	10 - 150%	106
	0407_SH021_0.1_200625	SE208579.006	%	10 - 150%	115
	0407_SH022_0.1-0.2_200625	SE208579.007	%	10 - 150%	107
	0407_TP237a_0.4_200624	SE208579.010	%	10 - 150%	107
	0407_TP237b_0.5_200624	SE208579.011	%	10 - 150%	97
	0407_TP237c_0.5_200624	SE208579.012	%	10 - 150%	106
(D3-N-MeFOSA) Surrogate	0407_SH018_0.1_200625	SE208579.003	%	10 - 150%	50
	0407_SH020_0.1_200625	SE208579.004	%	10 - 150%	55
	0407_QC168_200625	SE208579.005	%	10 - 150%	48
	0407_SH021_0.1_200625	SE208579.006	%	10 - 150%	61
	0407_SH022_0.1-0.2_200625	SE208579.007	%	10 - 150%	63
	0407_TP237a_0.4_200624	SE208579.010	%	10 - 150%	47
	0407_TP237b_0.5_200624	SE208579.011	%	10 - 150%	49
	0407_TP237c_0.5_200624	SE208579.012	%	10 - 150%	46
(D3-N-MeFOSAA) Surrogate	0407_SH018_0.1_200625	SE208579.003	%	10 - 150%	108
	0407_SH020_0.1_200625	SE208579.004	%	10 - 150%	110
	0407_QC168_200625	SE208579.005	%	10 - 150%	101
	0407_SH021_0.1_200625	SE208579.006	%	10 - 150%	127
	0407_SH022_0.1-0.2_200625	SE208579.007	%	10 - 150%	115
	0407_TP237a_0.4_200624	SE208579.010	%	10 - 150%	116

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level (continued)

Method: MA-1523

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(D3-N-MeFOSAA) Surrogate	0407_TP237b_0.5_200624	SE208579.011	%	10 - 150%	165 †
	0407_TP237c_0.5_200624	SE208579.012	%	10 - 150%	111
(D5-N-EtFOSA) Surrogate	0407_SH018_0.1_200625	SE208579.003	%	10 - 150%	44
	0407_SH020_0.1_200625	SE208579.004	%	10 - 150%	49
	0407_QC168_200625	SE208579.005	%	10 - 150%	43
	0407_SH021_0.1_200625	SE208579.006	%	10 - 150%	55
	0407_SH022_0.1-0.2_200625	SE208579.007	%	10 - 150%	56
	0407_TP237a_0.4_200624	SE208579.010	%	10 - 150%	43
	0407_TP237b_0.5_200624	SE208579.011	%	10 - 150%	33
	0407_TP237c_0.5_200624	SE208579.012	%	10 - 150%	32
(D5-N-EtFOSAA) Surrogate	0407_SH018_0.1_200625	SE208579.003	%	10 - 150%	105
	0407_SH020_0.1_200625	SE208579.004	%	10 - 150%	98
	0407_QC168_200625	SE208579.005	%	10 - 150%	83
	0407_SH021_0.1_200625	SE208579.006	%	10 - 150%	133
	0407_SH022_0.1-0.2_200625	SE208579.007	%	10 - 150%	119
	0407_TP237a_0.4_200624	SE208579.010	%	10 - 150%	98
	0407_TP237b_0.5_200624	SE208579.011	%	10 - 150%	167 †
	0407_TP237c_0.5_200624	SE208579.012	%	10 - 150%	108
(D7-N-MeFOSE) Surrogate	0407_SH018_0.1_200625	SE208579.003	%	10 - 150%	65
	0407_SH020_0.1_200625	SE208579.004	%	10 - 150%	57
	0407_QC168_200625	SE208579.005	%	10 - 150%	53
	0407_SH021_0.1_200625	SE208579.006	%	10 - 150%	68
	0407_SH022_0.1-0.2_200625	SE208579.007	%	10 - 150%	64
	0407_TP237a_0.4_200624	SE208579.010	%	10 - 150%	58
	0407_TP237b_0.5_200624	SE208579.011	%	10 - 150%	49
	0407_TP237c_0.5_200624	SE208579.012	%	10 - 150%	57
(D9-N-EtFOSE) Surrogate	0407_SH018_0.1_200625	SE208579.003	%	10 - 150%	60
	0407_SH020_0.1_200625	SE208579.004	%	10 - 150%	61
	0407_QC168_200625	SE208579.005	%	10 - 150%	51
	0407_SH021_0.1_200625	SE208579.006	%	10 - 150%	66
	0407_SH022_0.1-0.2_200625	SE208579.007	%	10 - 150%	60
	0407_TP237a_0.4_200624	SE208579.010	%	10 - 150%	52
	0407_TP237b_0.5_200624	SE208579.011	%	10 - 150%	48
	0407_TP237c_0.5_200624	SE208579.012	%	10 - 150%	49

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	0407_SH010_0.3-0.5_200625	SE208579.002	%	70 - 130%	72
	0407_SH018_0.1_200625	SE208579.003	%	70 - 130%	75
	0407_SH020_0.1_200625	SE208579.004	%	70 - 130%	74
	0407_QC168_200625	SE208579.005	%	70 - 130%	75
	0407_SH021_0.1_200625	SE208579.006	%	70 - 130%	82
	0407_SH022_0.1-0.2_200625	SE208579.007	%	70 - 130%	71
	0407_TP237a_0.4_200624	SE208579.010	%	70 - 130%	78
	0407_TP237b_0.5_200624	SE208579.011	%	70 - 130%	86
	0407_TP237c_0.5_200624	SE208579.012	%	70 - 130%	74
d5-phenol (Surrogate)	0407_SH010_0.3-0.5_200625	SE208579.002	%	50 - 130%	71
	0407_SH018_0.1_200625	SE208579.003	%	50 - 130%	78
	0407_SH020_0.1_200625	SE208579.004	%	50 - 130%	71
	0407_QC168_200625	SE208579.005	%	50 - 130%	75
	0407_SH021_0.1_200625	SE208579.006	%	50 - 130%	81
	0407_SH022_0.1-0.2_200625	SE208579.007	%	50 - 130%	78
	0407_TP237a_0.4_200624	SE208579.010	%	50 - 130%	82
	0407_TP237b_0.5_200624	SE208579.011	%	50 - 130%	80
	0407_TP237c_0.5_200624	SE208579.012	%	50 - 130%	75

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_SH010_0.3-0.5_200625	SE208579.002	%	60 - 130%	66
	0407_SH018_0.1_200625	SE208579.003	%	60 - 130%	72
	0407_SH020_0.1_200625	SE208579.004	%	60 - 130%	69
	0407_QC168_200625	SE208579.005	%	60 - 130%	69

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_SH021_0.1_200625	SE208579.006	%	60 - 130%	70
	0407_SH022_0.1-0.2_200625	SE208579.007	%	60 - 130%	74
	0407_BH014_0.1_200625	SE208579.008	%	60 - 130%	76
	0407_BH014_0.3_200625	SE208579.009	%	60 - 130%	71
	0407_TP237a_0.4_200624	SE208579.010	%	60 - 130%	70
	0407_TP237b_0.5_200624	SE208579.011	%	60 - 130%	65
	0407_TP237c_0.5_200624	SE208579.012	%	60 - 130%	72
d4-1,2-dichloroethane (Surrogate)	0407_SH010_0.3-0.5_200625	SE208579.002	%	60 - 130%	76
	0407_SH018_0.1_200625	SE208579.003	%	60 - 130%	82
	0407_SH020_0.1_200625	SE208579.004	%	60 - 130%	75
	0407_QC168_200625	SE208579.005	%	60 - 130%	78
	0407_SH021_0.1_200625	SE208579.006	%	60 - 130%	79
	0407_SH022_0.1-0.2_200625	SE208579.007	%	60 - 130%	88
	0407_BH014_0.1_200625	SE208579.008	%	60 - 130%	88
	0407_BH014_0.3_200625	SE208579.009	%	60 - 130%	82
	0407_TP237a_0.4_200624	SE208579.010	%	60 - 130%	77
	0407_TP237b_0.5_200624	SE208579.011	%	60 - 130%	71
	0407_TP237c_0.5_200624	SE208579.012	%	60 - 130%	78
d8-toluene (Surrogate)	0407_SH010_0.3-0.5_200625	SE208579.002	%	60 - 130%	74
	0407_SH018_0.1_200625	SE208579.003	%	60 - 130%	80
	0407_SH020_0.1_200625	SE208579.004	%	60 - 130%	74
	0407_QC168_200625	SE208579.005	%	60 - 130%	77
	0407_SH021_0.1_200625	SE208579.006	%	60 - 130%	79
	0407_SH022_0.1-0.2_200625	SE208579.007	%	60 - 130%	84
	0407_BH014_0.1_200625	SE208579.008	%	60 - 130%	87
	0407_BH014_0.3_200625	SE208579.009	%	60 - 130%	80
	0407_TP237a_0.4_200624	SE208579.010	%	60 - 130%	77
	0407_TP237b_0.5_200624	SE208579.011	%	60 - 130%	69
	0407_TP237c_0.5_200624	SE208579.012	%	60 - 130%	79

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_SH010_0.3-0.5_200625	SE208579.002	%	60 - 130%	66
	0407_SH018_0.1_200625	SE208579.003	%	60 - 130%	72
	0407_SH020_0.1_200625	SE208579.004	%	60 - 130%	69
	0407_QC168_200625	SE208579.005	%	60 - 130%	69
	0407_SH021_0.1_200625	SE208579.006	%	60 - 130%	70
	0407_SH022_0.1-0.2_200625	SE208579.007	%	60 - 130%	74
	0407_BH014_0.1_200625	SE208579.008	%	60 - 130%	76
	0407_BH014_0.3_200625	SE208579.009	%	60 - 130%	71
	0407_TP237a_0.4_200624	SE208579.010	%	60 - 130%	70
	0407_TP237b_0.5_200624	SE208579.011	%	60 - 130%	65
	0407_TP237c_0.5_200624	SE208579.012	%	60 - 130%	72
d4-1,2-dichloroethane (Surrogate)	0407_SH010_0.3-0.5_200625	SE208579.002	%	60 - 130%	76
	0407_SH018_0.1_200625	SE208579.003	%	60 - 130%	82
	0407_SH020_0.1_200625	SE208579.004	%	60 - 130%	75
	0407_QC168_200625	SE208579.005	%	60 - 130%	78
	0407_SH021_0.1_200625	SE208579.006	%	60 - 130%	79
	0407_SH022_0.1-0.2_200625	SE208579.007	%	60 - 130%	88
	0407_BH014_0.1_200625	SE208579.008	%	60 - 130%	88
	0407_BH014_0.3_200625	SE208579.009	%	60 - 130%	82
	0407_TP237a_0.4_200624	SE208579.010	%	60 - 130%	77
	0407_TP237b_0.5_200624	SE208579.011	%	60 - 130%	71
	0407_TP237c_0.5_200624	SE208579.012	%	60 - 130%	78
d8-toluene (Surrogate)	0407_SH010_0.3-0.5_200625	SE208579.002	%	60 - 130%	74
	0407_SH018_0.1_200625	SE208579.003	%	60 - 130%	80
	0407_SH020_0.1_200625	SE208579.004	%	60 - 130%	74
	0407_QC168_200625	SE208579.005	%	60 - 130%	77
	0407_SH021_0.1_200625	SE208579.006	%	60 - 130%	79
	0407_SH022_0.1-0.2_200625	SE208579.007	%	60 - 130%	84
	0407_BH014_0.1_200625	SE208579.008	%	60 - 130%	87

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d8-toluene (Surrogate)	0407_BH014_0.3_200625	SE208579.009	%	60 - 130%	80
	0407_TP237a_0.4_200624	SE208579.010	%	60 - 130%	77
	0407_TP237b_0.5_200624	SE208579.011	%	60 - 130%	69
	0407_TP237c_0.5_200624	SE208579.012	%	60 - 130%	79

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result
LB204571.001	Mercury	mg/kg	0.05	<0.05

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB204484.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	103

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB204484.001		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	92
		d14-p-terphenyl (Surrogate)	%	-	89

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB204484.001	Naphthalene	mg/kg	0.1	<0.1
	2-methylnaphthalene	mg/kg	0.1	<0.1
	1-methylnaphthalene	mg/kg	0.1	<0.1
	Acenaphthylene	mg/kg	0.1	<0.1
	Acenaphthene	mg/kg	0.1	<0.1
	Fluorene	mg/kg	0.1	<0.1
	Phenanthrene	mg/kg	0.1	<0.1
	Anthracene	mg/kg	0.1	<0.1
	Fluoranthene	mg/kg	0.1	<0.1
	Pyrene	mg/kg	0.1	<0.1
	Benzo(a)anthracene	mg/kg	0.1	<0.1
	Chrysene	mg/kg	0.1	<0.1
	Benzo(a)pyrene	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB204484.001		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	104
		2-fluorobiphenyl (Surrogate)	%	-	92
		d14-p-terphenyl (Surrogate)	%	-	89

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB204484.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	103

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB204484.001		Phenol	mg/kg	0.5	<0.5
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5
		2-nitrophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
		Pentachlorophenol	mg/kg	0.5	<0.5
		2,4-dinitrophenol	mg/kg	2	<2
		4-chloro-3-methylphenol	mg/kg	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	83
		d5-phenol (Surrogate)	%	-	70

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB204570.001	Arsenic, As	mg/kg	1	<1
	Beryllium, Be	mg/kg	0.5	<0.5
	Cadmium, Cd	mg/kg	0.3	<0.3
	Cobalt, Co	mg/kg	0.5	<0.5
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Manganese, Mn	mg/kg	1	<1
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB204484.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB204479.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB204479.001	Oxygenated Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	82
		d8-toluene (Surrogate)	%	-	84
		Bromofluorobenzene (Surrogate)	%	-	76
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB204479.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	82

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208579.011	LB204571.014	Mercury	mg/kg	0.05	<0.05	<0.05	137	0
SE208579.012	LB204571.016	Mercury	mg/kg	0.05	<0.05	<0.05	160	0

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208579.010	LB204489.011	% Moisture	%w/w	1	16.6	16.4	36	1
SE208692.007	LB204489.019	% Moisture	%w/w	1	12.69702276703.2048536759		38	4

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208579.011	LB204484.024		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	0	200	0
			Alpha BHC	mg/kg	0.1	<0.1	0	200	0
			Lindane	mg/kg	0.1	<0.1	0	200	0
			Heptachlor	mg/kg	0.1	<0.1	0	200	0
			Aldrin	mg/kg	0.1	<0.1	0	200	0
			Beta BHC	mg/kg	0.1	<0.1	0	200	0
			Delta BHC	mg/kg	0.1	<0.1	0	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	0	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	0	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	0	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Dieldrin	mg/kg	0.2	<0.2	0	200	0
			Endrin	mg/kg	0.2	<0.2	0	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	0	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	0	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	0	200	0
			Methoxychlor	mg/kg	0.1	<0.1	0	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	0	200	0
			Isodrin	mg/kg	0.1	<0.1	0	200	0
			Mirex	mg/kg	0.1	<0.1	0	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.152	30	1
SE208692.007	LB204484.021		Hexachlorobenzene (HCB)	mg/kg	0.1	0	0	200	0
			Alpha BHC	mg/kg	0.1	0	0	200	0
			Lindane	mg/kg	0.1	0	0	200	0
			Heptachlor	mg/kg	0.1	0	0	200	0
			Aldrin	mg/kg	0.1	0	0	200	0
			Beta BHC	mg/kg	0.1	0	0	200	0
			Delta BHC	mg/kg	0.1	0	0	200	0
			Heptachlor epoxide	mg/kg	0.1	0	0	200	0
			o,p'-DDE	mg/kg	0.1	0	0	200	0
			Alpha Endosulfan	mg/kg	0.2	0	0	200	0
			Gamma Chlordane	mg/kg	0.1	0	0	200	0
			Alpha Chlordane	mg/kg	0.1	0	0	200	0
			trans-Nonachlor	mg/kg	0.1	0	0	200	0
			p,p'-DDE	mg/kg	0.1	0	0	200	0
			Dieldrin	mg/kg	0.2	0	0	200	0
			Endrin	mg/kg	0.2	0	0	200	0
			o,p'-DDD	mg/kg	0.1	0	0	200	0
			o,p'-DDT	mg/kg	0.1	0	0	200	0
			Beta Endosulfan	mg/kg	0.2	0	0	200	0
			p,p'-DDD	mg/kg	0.1	0	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208692.007	LB204484.021		p,p'-DDT	mg/kg	0.1	0	0	200	0
			Endosulfan sulphate	mg/kg	0.1	0	0	200	0
			Endrin Aldehyde	mg/kg	0.1	0	0	200	0
			Methoxychlor	mg/kg	0.1	0	0	200	0
			Endrin Ketone	mg/kg	0.1	0	0	200	0
			Isodrin	mg/kg	0.1	0	0	200	0
			Mirex	mg/kg	0.1	0	0	200	0
			Total CLP OC Pesticides	mg/kg	1	0	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.149	0.135	30	10

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208579.010	LB204484.014		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	30	0
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	3
SE208692.007	LB204484.021		Dichlorvos	mg/kg	0.5	0	0	200	0
			Dimethoate	mg/kg	0.5	0.011349258	30.014883183	6 200	0
			Diazinon (Dimpylate)	mg/kg	0.5	0.024200017	00.030369287	4 200	0
			Fenitrothion	mg/kg	0.2	0.0670011157	0	200	0
			Malathion	mg/kg	0.2	0.030196138	20.034552304	5 200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	0	0	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	0	0	200	0
			Bromophos Ethyl	mg/kg	0.2	0	0	200	0
			Methidathion	mg/kg	0.5	0	0.0028902286	200	0
			Ethion	mg/kg	0.2	0.028892315	00.004515677	6 200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	0.015784292	60.047919018	7 200	0
			Total OP Pesticides*	mg/kg	1.7	0	0	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.3796848307	0.45	30	17
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.3838689837	0.427	30	11

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208579.010	LB204484.014	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthylene	mg/kg	0.1	0.1	<0.1	124	33
		Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
		Phenanthrene	mg/kg	0.1	0.5	0.2	59	95 ⑨
		Anthracene	mg/kg	0.1	0.2	<0.1	113	47
		Fluoranthene	mg/kg	0.1	0.7	0.4	48	56 ⑨
		Pyrene	mg/kg	0.1	0.7	0.4	47	47
		Benzo(a)anthracene	mg/kg	0.1	0.3	0.2	67	40
		Chrysene	mg/kg	0.1	0.4	0.3	62	39
		Benzo(b&j)fluoranthene	mg/kg	0.1	0.5	0.4	54	27
		Benzo(k)fluoranthene	mg/kg	0.1	0.2	0.2	84	39
		Benzo(a)pyrene	mg/kg	0.1	0.4	0.3	56	34
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.4	0.3	60	25
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(ghi)perylene	mg/kg	0.1	0.4	0.3	61	20
		Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	0.6	0.4	49	33

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208579.010	LB204484.014		Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	0.7	0.5	59	28
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	0.6	0.5	46	30
			Total PAH (18)	mg/kg	0.8	4.8	2.9	51	50
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.6	30	3
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	30	0
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	3
SE208692.007	LB204484.021		Naphthalene	mg/kg	0.1	0.00161458950	0.0018778100	200	0
			2-methylnaphthalene	mg/kg	0.1	0.00068167740	0.0008512662	200	0
			1-methylnaphthalene	mg/kg	0.1	0.00075559710	0.0008072217	200	0
			Acenaphthylene	mg/kg	0.1	0.00552191420	0.0063139801	200	0
			Acenaphthene	mg/kg	0.1	0.00039378560	0.0009740680	200	0
			Fluorene	mg/kg	0.1	0.00167933460	0.0017434817	200	0
			Phenanthrene	mg/kg	0.1	0.00899541310	0.0114750949	200	0
			Anthracene	mg/kg	0.1	0.00823633860	0.0097590178	200	0
			Fluoranthene	mg/kg	0.1	0.02161492990	0.0314613686	200	0
			Pyrene	mg/kg	0.1	0.02526582430	0.0353883514	200	0
			Benzo(a)anthracene	mg/kg	0.1	0.03135146560	0.0227446721	200	0
			Chrysene	mg/kg	0.1	0.03510135610	0.0196894750	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	0.03163734240	0.0453974302	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	0.03169388110	0.0060281021	200	0
			Benzo(a)pyrene	mg/kg	0.1	0.01962234820	0.0261592253	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.01684453600	0.0252199535	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	0	0.0033017114	200	0
			Benzo(ghi)perylene	mg/kg	0.1	0.01501366820	0.0226107278	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	0	0	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	0.242	0.242	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	0.121	0.121	175	0
			Total PAH (18)	mg/kg	0.8	0	0	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4985984345	0.539	30	8
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.3796848307	0.45	30	17
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.3838689837	0.427	30	11

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208579.010	LB204484.014		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	3
SE208579.011	LB204484.023		Arochlor 1016	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	0	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0.152	30	1
SE208692.007	LB204484.021		Arochlor 1016	mg/kg	0.2	0	0	200	0
			Arochlor 1221	mg/kg	0.2	0	0	200	0
			Arochlor 1232	mg/kg	0.2	0	0	200	0
			Arochlor 1242	mg/kg	0.2	0	0	200	0
			Arochlor 1248	mg/kg	0.2	0	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PCBs in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208692.007	LB204484.021		Arochlor 1254	mg/kg	0.2	0	0	200	0
			Arochlor 1260	mg/kg	0.2	0	0	200	0
			Arochlor 1262	mg/kg	0.2	0	0	200	0
			Arochlor 1268	mg/kg	0.2	0	0	200	0
			Total PCBs (Arochlors)	mg/kg	1	0	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.149	0.135	30	10

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208692.001	LB204484.023		Phenol	mg/kg	0.5	0	0	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	0	0	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	0	0	200	0
			Total Cresol	mg/kg	1.5	0	0	200	0
			2-chlorophenol	mg/kg	0.5	0	0	200	0
			2,4-dimethylphenol	mg/kg	0.5	0	0	200	0
			2,6-dichlorophenol	mg/kg	0.5	0	0	200	0
			2,4-dichlorophenol	mg/kg	0.5	0	0	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	0	0	200	0
			2-nitrophenol	mg/kg	0.5	0	0	200	0
			4-nitrophenol	mg/kg	1	0	0	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	0	0	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	0	0	200	0
			Pentachlorophenol	mg/kg	0.5	0	0	200	0
			2,4-dinitrophenol	mg/kg	2	0	0	200	0
			4-chloro-3-methylphenol	mg/kg	2	0	0	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.76	3.9	30	4
			d5-phenol (Surrogate)	mg/kg	-	1.54	1.45	30	6
SE208692.007	LB204484.021		Phenol	mg/kg	0.5	0	0	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	0	0	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	0	0	200	0
			Total Cresol	mg/kg	1.5	0	0	200	0
			2-chlorophenol	mg/kg	0.5	0	0	200	0
			2,4-dimethylphenol	mg/kg	0.5	0	0	200	0
			2,6-dichlorophenol	mg/kg	0.5	0	0	200	0
			2,4-dichlorophenol	mg/kg	0.5	0	0	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	0	0	200	0
			2-nitrophenol	mg/kg	0.5	0	0	200	0
			4-nitrophenol	mg/kg	1	0	0	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	0	0	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	0	0	200	0
			Pentachlorophenol	mg/kg	0.5	0	0	200	0
			2,4-dinitrophenol	mg/kg	2	0	0	200	0
			4-chloro-3-methylphenol	mg/kg	2	0	0	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.85	3.78	30	2
			d5-phenol (Surrogate)	mg/kg	-	1.44	1.54	30	7

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208579.010	LB204570.014	Arsenic, As	mg/kg	1	5	6	48	25
		Cadmium, Cd	mg/kg	0.3	<0.3	0.3	128	14
		Chromium, Cr	mg/kg	0.5	15	32	32	75 ②
		Copper, Cu	mg/kg	0.5	53	53	31	1
		Nickel, Ni	mg/kg	0.5	9.9	11	35	14
		Lead, Pb	mg/kg	1	89	120	31	32 ②
		Zinc, Zn	mg/kg	2	380	240	31	44 ②
SE208783.006	LB204570.023	Lead, Pb	mg/kg	1	7	6	45	4

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208579.010	LB204484.014	TRH C10-C14	mg/kg	20	<20	<20	200	0
		TRH C15-C28	mg/kg	45	<45	<45	200	0
		TRH C29-C36	mg/kg	45	<45	<45	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208579.010	LB204484.014		TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE208692.007	LB204484.021		TRH C10-C14	mg/kg	20	0	0	200	0
			TRH C15-C28	mg/kg	45	0	0	200	0
			TRH C29-C36	mg/kg	45	0	0	200	0
			TRH C37-C40	mg/kg	100	0	0	200	0
			TRH C10-C36 Total	mg/kg	110	0	0	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	0	0	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	0	0	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	0	0	200	0
			TRH >C16-C34 (F3)	mg/kg	90	0	0	200	0
			TRH >C34-C40 (F4)	mg/kg	120	0	0	200	0

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208579.011	LB204479.014	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208579.011	LB204479.014	Halogenated	1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.1	7.0	50	1
			d8-toluene (Surrogate)	mg/kg	-	6.9	7.0	50	1
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.5	6.5	50	0
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE208692.007	LB204479.022	Fumigants	2,2-dichloropropane	mg/kg	0.1	0	0	200	0
			1,2-dichloropropane	mg/kg	0.1	0.000416872	50.0002850276	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	0	0.0016355356	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	0.000749740	90.0006168600	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	0	0	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	0	0.0021868769	200	0
		Aliphatics	Chloromethane	mg/kg	1	0.031186990	30.0299194288	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	0.007752926	00.0076830477	200	0
			Bromomethane	mg/kg	1	0.035902226	30.0173836024	200	0
			Chloroethane	mg/kg	1	0.040569216	10.0195295351	200	0
			Trichlorofluoromethane	mg/kg	1	0	0	200	0
			Iodomethane	mg/kg	5	0.007813483	90.0068452531	200	0
			1,1-dichloroethene	mg/kg	0.1	9.303781989	00.0002740961	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	0.037910779	90.0358126664	200	0
			Allyl chloride	mg/kg	0.1	0.006194366	70.0052872029	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	0.000894593	00.0009128352	200	0
			1,1-dichloroethane	mg/kg	0.1	0.001633163	90.0016398496	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	0	7.7847844719	200	0
			Bromochloromethane	mg/kg	0.1	0.0001176396	0	200	0
			1,2-dichloroethane	mg/kg	0.1	0.001225965	10.0012075227	200	0
			1,1,1-trichloroethane	mg/kg	0.1	0	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208692.007	LB204479.022	Halogenated	1,1-dichloropropene	mg/kg	0.1	0	0	200	0
		Aliphatics	Carbon tetrachloride	mg/kg	0.1	0	0	200	0
			Dibromomethane	mg/kg	0.1	0	0	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	0.00022486550	0.0002182050	200	0
			1,1,2-trichloroethane	mg/kg	0.1	0	0	200	0
			1,3-dichloropropane	mg/kg	0.1	0.02219363130	0.0223794465	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	8.18603908968	8.9062848048	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	0	0	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	0	0.0006072448	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	0	0	200	0
			1,2,3-trichloropropane	mg/kg	0.1	0	0.0001497479	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	0	0	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	0	0	200	0
			Hexachlorobutadiene	mg/kg	0.1	0	0.0002558139	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	0.00060758570	0.0006693448	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	0.00430183320	0.0042372500	200	0
			2-chlorotoluene	mg/kg	0.1	0	0	200	0
			4-chlorotoluene	mg/kg	0.1	0	0	200	0
			1,3-dichlorobenzene	mg/kg	0.1	0.0004243647	0	200	0
			1,4-dichlorobenzene	mg/kg	0.1	0.00039100500	0.0004995710	200	0
			1,2-dichlorobenzene	mg/kg	0.1	0.00557524730	0.0039888593	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	0.00027681420	0.0002176224	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	0.00034607580	0.0002609187	200	0
		Monocyclic	Benzene	mg/kg	0.1	0	0	200	0
		Aromatic	Toluene	mg/kg	0.1	0.00264548010	0.0024610862	200	0
			Ethylbenzene	mg/kg	0.1	0.00268472120	0.0013436739	200	0
			m/p-xylene	mg/kg	0.2	0.00683268630	0.0034311599	200	0
			o-xylene	mg/kg	0.1	0.00349174750	0.0016399595	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	0.00046203040	0.0003419236	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	0.00060425520	0.0004083419	200	0
			n-propylbenzene	mg/kg	0.1	0.00109310520	0.0002120289	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	0.00030104610	0.0006495976	200	0
			tert-butylbenzene	mg/kg	0.1	0.00013406370	0.0001251557	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	0.00090081790	0.0007353476	200	0
			sec-butylbenzene	mg/kg	0.1	0.00014077160	0.0007225738	200	0
			p-isopropyltoluene	mg/kg	0.1	0.0002443034	0	200	0
			n-butylbenzene	mg/kg	0.1	0.01745088550	0.0014420278	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	0.00137666240	0.0005502236	200	0
		Compounds	2-nitropropane	mg/kg	10	0.05528915190	0.0554193020	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	0.80993828320	0.6376546664	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	0.01921618600	0.0186355791	200	0
			Vinyl acetate	mg/kg	10	0	0	200	0
			MEK (2-butanone)	mg/kg	10	0	0	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	0.00230192270	0.0089468987	200	0
			2-hexanone (MBK)	mg/kg	5	0	0	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	0.00195566770	0.0022871435	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	0.00042466160	0.0004824006	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.54969665947	7.5355377154	50	0
			d8-toluene (Surrogate)	mg/kg	-	7.39936112277	7.4387075743	50	1
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.79253319346	6.7157897744	50	1
		Totals	Total Xylenes	mg/kg	0.3	0.01032443390	0.0050711195	200	0
			Total BTEX	mg/kg	0.6	0	0	200	0
			Total VOC*	mg/kg	24	1.06756747030	0.8421618941	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	0.09827950650	0.0791391261	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	0.05893420600	0.0558102285	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	0.05205322720	0.0486951392	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	0.00485333330	0.0048165680	200	0
		es	Bromodichloromethane	mg/kg	0.1	0.00055995050	0.0004468361	200	0
			Chlorodibromomethane	mg/kg	0.1	0	0	200	0
			Bromoform	mg/kg	0.1	0	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil — **Method: ME-(AU)-[ENV]AN433**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208579.011	LB204479.014		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.1	7.0	30	1
			d8-toluene (Surrogate)	mg/kg	-	6.9	7.0	30	1
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.5	6.5	30	0
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE208692.007	LB204479.022		TRH C6-C10	mg/kg	25	0.0691110266	0	200	0
			TRH C6-C9	mg/kg	20	0.0612066562	0	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.549696659	47.5355377154	30	0
			d8-toluene (Surrogate)	mg/kg	-	7.3993611227	7.4387075743	30	1
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.7925331934	6.7157897744	30	1
		VPH F Bands	Benzene (F0)	mg/kg	0.1	0	0	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	0.0691110266	0	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204571.002	Mercury	mg/kg	0.05	0.22	0.2	70 - 130	108

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204484.002		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	105
		Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	102
		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	101
		Dieldrin	mg/kg	0.2	<0.2	0.2	60 - 140	99
		Endrin	mg/kg	0.2	0.2	0.2	60 - 140	100
		p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	75
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.15	40 - 130	102

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204484.002		Dichlorvos	mg/kg	0.5	2.3	2	60 - 140	114
		Diazinon (Dimpylate)	mg/kg	0.5	1.9	2	60 - 140	96
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.9	2	60 - 140	97
		Ethion	mg/kg	0.2	1.7	2	60 - 140	85
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	92
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	86

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204484.002		Naphthalene	mg/kg	0.1	4.1	4	60 - 140	103
		Acenaphthylene	mg/kg	0.1	4.3	4	60 - 140	107
		Acenaphthene	mg/kg	0.1	4.2	4	60 - 140	104
		Phenanthrene	mg/kg	0.1	4.1	4	60 - 140	103
		Anthracene	mg/kg	0.1	4.0	4	60 - 140	100
		Fluoranthene	mg/kg	0.1	4.0	4	60 - 140	101
		Pyrene	mg/kg	0.1	4.2	4	60 - 140	106
		Benzo(a)pyrene	mg/kg	0.1	4.9	4	60 - 140	122
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	108
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	92
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	86

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204484.002	Arochlor 1260	mg/kg	0.2	0.3	0.4	60 - 140	80

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204484.002		Phenol	mg/kg	0.5	0.8	1	70 - 130	78
		2,4-dichlorophenol	mg/kg	0.5	0.9	1	70 - 130	85
		2,4,6-trichlorophenol	mg/kg	0.5	1.0	1	70 - 130	104
		Pentachlorophenol	mg/kg	0.5	0.9	1	70 - 130	88
	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.9	5	40 - 130	79
		d5-phenol (Surrogate)	mg/kg	-	1.4	2	40 - 130	70

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204570.002	Arsenic, As	mg/kg	1	350	318.22	80 - 120	110
	Boron, B	mg/kg	5	36	37.13	80 - 120	96
	Beryllium, Be	mg/kg	0.5	4.4	4.17	80 - 120	105
	Cadmium, Cd	mg/kg	0.3	4.7	5.41	80 - 120	88
	Cobalt, Co	mg/kg	0.5	21	20.71	80 - 120	103
	Chromium, Cr	mg/kg	0.5	37	38.31	80 - 120	97
	Copper, Cu	mg/kg	0.5	310	290	80 - 120	105
	Manganese, Mn	mg/kg	1	690	660	80 - 120	105
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	103
	Lead, Pb	mg/kg	1	94	89.9	80 - 120	105

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204570.002		Zinc, Zn	mg/kg	2	280	273	80 - 120	102

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204484.002		TRH C10-C14	mg/kg	20	32	40	60 - 140	80
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	75
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	78
	TRH F Bands	TRH >C10-C16	mg/kg	25	32	40	60 - 140	80
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	78
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	75

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204479.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	3.2	5	60 - 140	64
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	3.7	5	60 - 140	74
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	3.3	5	60 - 140	66
	Halogenated	Chlorobenzene	mg/kg	0.1	4.7	5	60 - 140	94
	Monocyclic	Benzene	mg/kg	0.1	3.6	5	60 - 140	71
	Aromatic	Toluene	mg/kg	0.1	3.5	5	60 - 140	70
		Ethylbenzene	mg/kg	0.1	4.3	5	60 - 140	86
		m/p-xylene	mg/kg	0.2	8.7	10	60 - 140	87
		o-xylene	mg/kg	0.1	4.4	5	60 - 140	88
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.1	10	70 - 130	91
		d8-toluene (Surrogate)	mg/kg	-	9.0	10	70 - 130	90
		Bromofluorobenzene (Surrogate)	mg/kg	-	7.5	10	70 - 130	75
	Trihalomethan	Chloroform	mg/kg	0.1	3.7	5	60 - 140	74

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204479.002		TRH C6-C10	mg/kg	25	66	92.5	60 - 140	72
		TRH C6-C9	mg/kg	20	57	80	60 - 140	71
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.1	10	70 - 130	91
		Bromofluorobenzene (Surrogate)	mg/kg	-	7.5	10	70 - 130	75
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	42	62.5	60 - 140	67

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208720.001	LB204571.004	Mercury	mg/kg	0.05	0.20	<0.05	0.2	94

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208579.004	LB204484.023		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	-	-
			Alpha BHC	mg/kg	0.1	<0.1	-	-
			Lindane	mg/kg	0.1	<0.1	-	-
			Heptachlor	mg/kg	0.1	<0.1	0.2	103
			Aldrin	mg/kg	0.1	<0.1	0.2	100
			Beta BHC	mg/kg	0.1	<0.1	-	-
			Delta BHC	mg/kg	0.1	<0.1	0.2	98
			Heptachlor epoxide	mg/kg	0.1	<0.1	-	-
			o,p'-DDE	mg/kg	0.1	<0.1	-	-
			Alpha Endosulfan	mg/kg	0.2	<0.2	-	-
			Gamma Chlordane	mg/kg	0.1	<0.1	-	-
			Alpha Chlordane	mg/kg	0.1	<0.1	-	-
			trans-Nonachlor	mg/kg	0.1	<0.1	-	-
			p,p'-DDE	mg/kg	0.1	<0.1	-	-
			Dieldrin	mg/kg	0.2	4.0	0.2	63
			Endrin	mg/kg	0.2	<0.2	0.2	117
			o,p'-DDD	mg/kg	0.1	<0.1	-	-
			o,p'-DDT	mg/kg	0.1	<0.1	-	-
			Beta Endosulfan	mg/kg	0.2	<0.2	-	-
			p,p'-DDD	mg/kg	0.1	<0.1	-	-
			p,p'-DDT	mg/kg	0.1	<0.1	0.2	77
			Endosulfan sulphate	mg/kg	0.1	<0.1	-	-
			Endrin Aldehyde	mg/kg	0.1	<0.1	-	-
			Methoxychlor	mg/kg	0.1	<0.1	-	-
			Endrin Ketone	mg/kg	0.1	<0.1	-	-
			Isodrin	mg/kg	0.1	<0.1	-	-
			Mirex	mg/kg	0.1	<0.1	-	-
			Total CLP OC Pesticides	mg/kg	1	4	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.16	-	101

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208579.003	LB204484.022		Dichlorvos	mg/kg	0.5	<0.5	2	116
			Dimethoate	mg/kg	0.5	<0.5	-	-
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	2	99
			Fenitrothion	mg/kg	0.2	<0.2	-	-
			Malathion	mg/kg	0.2	<0.2	-	-
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	2	99
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	-	-
			Bromophos Ethyl	mg/kg	0.2	<0.2	-	-
			Methidathion	mg/kg	0.5	<0.5	-	-
			Ethion	mg/kg	0.2	<0.2	2	90
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	-	-
			Total OP Pesticides*	mg/kg	1.7	<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	-	92
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	-	86

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number	Parameter	Units	LOR	Original	Spike	Recovery%
SE208579.003	LB204484.022	Naphthalene	mg/kg	0.1	<0.1	4	102
		2-methylnaphthalene	mg/kg	0.1	<0.1	-	-
		1-methylnaphthalene	mg/kg	0.1	<0.1	-	-
		Acenaphthylene	mg/kg	0.1	<0.1	4	108
		Acenaphthene	mg/kg	0.1	<0.1	4	104
		Fluorene	mg/kg	0.1	<0.1	-	-
		Phenanthrene	mg/kg	0.1	<0.1	4	101

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208579.003	LB204484.022		Anthracene	mg/kg	0.1	<0.1	4	98
			Fluoranthene	mg/kg	0.1	<0.1	4	96
			Pyrene	mg/kg	0.1	<0.1	4	104
			Benzo(a)anthracene	mg/kg	0.1	<0.1	-	-
			Chrysene	mg/kg	0.1	<0.1	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	-	-
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	-	-
			Benzo(a)pyrene	mg/kg	0.1	<0.1	4	120
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	-	-
			Total PAH (18)	mg/kg	0.8	<0.8	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.6	-	109
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	-	92
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	-	86

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208579.004	LB204484.024		Arochlor 1016	mg/kg	0.2	<0.2	-	-
			Arochlor 1221	mg/kg	0.2	<0.2	-	-
			Arochlor 1232	mg/kg	0.2	<0.2	-	-
			Arochlor 1242	mg/kg	0.2	<0.2	-	-
			Arochlor 1248	mg/kg	0.2	<0.2	-	-
			Arochlor 1254	mg/kg	0.2	<0.2	-	-
			Arochlor 1260	mg/kg	0.2	<0.2	0.4	102
			Arochlor 1262	mg/kg	0.2	<0.2	-	-
			Arochlor 1268	mg/kg	0.2	<0.2	-	-
			Total PCBs (Arochlors)	mg/kg	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	-	97

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208579.002	LB204484.024		Phenol	mg/kg	0.5	<0.5	1	82
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	-	-
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	-	-
			Total Cresol	mg/kg	1.5	<1.5	-	-
			2-chlorophenol	mg/kg	0.5	<0.5	-	-
			2,4-dimethylphenol	mg/kg	0.5	<0.5	-	-
			2,6-dichlorophenol	mg/kg	0.5	<0.5	-	-
			2,4-dichlorophenol	mg/kg	0.5	<0.5	1	86
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	1	94
			2-nitrophenol	mg/kg	0.5	<0.5	-	-
			4-nitrophenol	mg/kg	1	<1	-	-
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	-	-
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	-	-
			Pentachlorophenol	mg/kg	0.5	<0.5	1	85
			2,4-dinitrophenol	mg/kg	2	<2	-	-
			4-chloro-3-methylphenol	mg/kg	2	<2	-	-
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.6	-	73
			d5-phenol (Surrogate)	mg/kg	-	1.4	-	73

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208720.001	LB204570.004	Arsenic, As	mg/kg	1	55	8	50	94
		Cadmium, Cd	mg/kg	0.3	43	<0.3	50	86
		Chromium, Cr	mg/kg	0.5	52	6.2	50	91
		Copper, Cu	mg/kg	0.5	61	15	50	91
		Nickel, Ni	mg/kg	0.5	51	5.4	50	91
		Lead, Pb	mg/kg	1	56	13	50	87

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Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208720.001	LB204570.004	Zinc, Zn	mg/kg	2	71	27	50	89

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208579.003	LB204484.022		TRH C10-C14	mg/kg	20	<20	40	78
			TRH C15-C28	mg/kg	45	<45	40	63
			TRH C29-C36	mg/kg	45	<45	40	95
			TRH C37-C40	mg/kg	100	<100	-	-
			TRH C10-C36 Total	mg/kg	110	<110	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	40	75
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	<90	40	98
			TRH >C34-C40 (F4)	mg/kg	120	<120	-	-

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208579.002	LB204479.004	Monocyclic Aromatic	Benzene	mg/kg	0.1	3.2	<0.1	5	63
			Toluene	mg/kg	0.1	3.2	<0.1	5	63
			Ethylbenzene	mg/kg	0.1	4.0	<0.1	5	80
			m/p-xylene	mg/kg	0.2	7.9	<0.2	10	79
			o-xylene	mg/kg	0.1	4.1	<0.1	5	81
		Oxygenated	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	-	-
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.1	7.6	10	81
			d8-toluene (Surrogate)	mg/kg	-	7.9	7.4	10	79
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.5	6.6	10	65 ①
		Totals	Total Xylenes	mg/kg	0.3	12	<0.3	-	-
			Total BTEX	mg/kg	0.6	22	<0.6	-	-
SE208579.004	LB204479.023	Fumigants	2,2-dichloropropane	mg/kg	0.1		<0.1	-	-
			1,2-dichloropropane	mg/kg	0.1		<0.1	-	-
			cis-1,3-dichloropropene	mg/kg	0.1		<0.1	-	-
			trans-1,3-dichloropropene	mg/kg	0.1		<0.1	-	-
			1,2-dibromoethane (EDB)	mg/kg	0.1		<0.1	-	-
		Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1		<1	-	-
			Chloromethane	mg/kg	1		<1	-	-
			Vinyl chloride (Chloroethene)	mg/kg	0.1		<0.1	-	-
			Bromomethane	mg/kg	1		<1	-	-
			Chloroethane	mg/kg	1		<1	-	-
			Trichlorofluoromethane	mg/kg	1		<1	-	-
			Iodomethane	mg/kg	5		<5	-	-
			1,1-dichloroethene	mg/kg	0.1		<0.1	5	62
			Dichloromethane (Methylene chloride)	mg/kg	0.5		<0.5	-	-
			Allyl chloride	mg/kg	0.1		<0.1	-	-
			trans-1,2-dichloroethene	mg/kg	0.1		<0.1	-	-
			1,1-dichloroethane	mg/kg	0.1		<0.1	-	-
			cis-1,2-dichloroethene	mg/kg	0.1		<0.1	-	-
			Bromochloromethane	mg/kg	0.1		<0.1	-	-
			1,2-dichloroethane	mg/kg	0.1		<0.1	5	71
			1,1,1-trichloroethane	mg/kg	0.1		<0.1	-	-
			1,1-dichloropropene	mg/kg	0.1		<0.1	-	-
			Carbon tetrachloride	mg/kg	0.1		<0.1	-	-
			Dibromomethane	mg/kg	0.1		<0.1	-	-
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1		<0.1	5	63
			1,1,2-trichloroethane	mg/kg	0.1		<0.1	-	-
			1,3-dichloropropane	mg/kg	0.1		<0.1	-	-
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1		<0.1	-	-
			1,1,1,2-tetrachloroethane	mg/kg	0.1		<0.1	-	-
			cis-1,4-dichloro-2-butene	mg/kg	1		<1	-	-
			1,1,2,2-tetrachloroethane	mg/kg	0.1		<0.1	-	-
			1,2,3-trichloropropane	mg/kg	0.1		<0.1	-	-
			trans-1,4-dichloro-2-butene	mg/kg	1		<1	-	-

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VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208579.004	LB204479.023	Halogenated Aliphatics	1,2-dibromo-3-chloropropane	mg/kg	0.1		<0.1	-	-
			Hexachlorobutadiene	mg/kg	0.1		<0.1	-	-
		Halogenated Aromatics	Chlorobenzene	mg/kg	0.1		<0.1	5	91
			Bromobenzene	mg/kg	0.1		<0.1	-	-
			2-chlorotoluene	mg/kg	0.1		<0.1	-	-
			4-chlorotoluene	mg/kg	0.1		<0.1	-	-
			1,3-dichlorobenzene	mg/kg	0.1		<0.1	-	-
			1,4-dichlorobenzene	mg/kg	0.1		<0.1	-	-
			1,2-dichlorobenzene	mg/kg	0.1		<0.1	-	-
			1,2,4-trichlorobenzene	mg/kg	0.1		<0.1	-	-
			1,2,3-trichlorobenzene	mg/kg	0.1		<0.1	-	-
		Monocyclic Aromatic	Benzene	mg/kg	0.1		<0.1	5	70
			Toluene	mg/kg	0.1		<0.1	5	69
			Ethylbenzene	mg/kg	0.1		<0.1	5	79
			m/p-xylene	mg/kg	0.2		<0.2	10	81
			o-xylene	mg/kg	0.1		<0.1	5	83
			Styrene (Vinyl benzene)	mg/kg	0.1		<0.1	-	-
			Isopropylbenzene (Cumene)	mg/kg	0.1		<0.1	-	-
			n-propylbenzene	mg/kg	0.1		<0.1	-	-
			1,3,5-trimethylbenzene	mg/kg	0.1		<0.1	-	-
			tert-butylbenzene	mg/kg	0.1		<0.1	-	-
			1,2,4-trimethylbenzene	mg/kg	0.1		<0.1	-	-
			sec-butylbenzene	mg/kg	0.1		<0.1	-	-
			p-isopropyltoluene	mg/kg	0.1		<0.1	-	-
			n-butylbenzene	mg/kg	0.1		<0.1	-	-
		Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1		<0.1	-	-
			2-nitropropane	mg/kg	10		<10	-	-
		Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10		<10	-	-
			MtBE (Methyl-tert-butyl ether)	mg/kg	0.1		<0.1	-	-
			Vinyl acetate	mg/kg	10		<10	-	-
			MEK (2-butanone)	mg/kg	10		<10	-	-
			MIBK (4-methyl-2-pentanone)	mg/kg	1		<1	-	-
			2-hexanone (MBK)	mg/kg	5		<5	-	-
		Polycyclic	Naphthalene	mg/kg	0.1		<0.1	-	-
		Sulphonated	Carbon disulfide	mg/kg	0.5		<0.5	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-		7.4	10	82
			d8-toluene (Surrogate)	mg/kg	-		7.4	10	81
			Bromofluorobenzene (Surrogate)	mg/kg	-		6.9	10	68
		Totals	Total Xylenes	mg/kg	0.3		<0.3	-	-
			Total BTEX	mg/kg	0.6		<0.6	-	-
			Total VOC*	mg/kg	24		<24	-	-
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3		<3.0	-	-
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8		<1.8	-	-
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8		<1.8	-	-
		Trihalomethanes	Chloroform	mg/kg	0.1		<0.1	5	71
			Bromodichloromethane	mg/kg	0.1		<0.1	-	-
			Chlorodibromomethane	mg/kg	0.1		<0.1	-	-
			Bromoform	mg/kg	0.1		<0.1	-	-

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208579.002	LB204479.004		TRH C6-C10	mg/kg	25	70	<25	92.5	75
			TRH C6-C9	mg/kg	20	60	<20	80	75
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.1	7.6	10	81
			d8-toluene (Surrogate)	mg/kg	-	7.9	7.4	10	79
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.5	6.6	-	65
		VPH F Bands	Benzene (F0)	mg/kg	0.1	3.2	<0.1	-	-
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	47	<25	62.5	75
SE208579.004	LB204479.023		TRH C6-C10	mg/kg	25		<25	92.5	71
			TRH C6-C9	mg/kg	20		<20	80	70
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-		7.4	10	82

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

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Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208579.004	LB204479.023	Surrogates	d8-toluene (Surrogate)	mg/kg	-		7.4	10	81
			Bromofluorobenzene (Surrogate)	mg/kg	-		6.9	-	68
		VPH F	Benzene (F0)	mg/kg	0.1		<0.1	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25		<25	62.5	68

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

SLR

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 23 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ✱ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ

CLIENT: Defence Housing Australia

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGER: [redacted]

PM CONTACT No: [redacted]

E-MAILED 14/7/20 1:34pm

LABORATORY: SGS Australia

LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015

SAMPLER: [redacted]

SAMPLER CONTACT No: [redacted]

Email Reports and Invoices to: LQRSYD@slrconsulting.com [redacted]

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number 1 of 4

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS	Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only (for asbestos bags)	HOLD	Suite E and H	Heavy metals, TPH/BTEXN, PAH, VOC/SVOCs and PFAS	C6-C10, BTEX for TRIPBLANK and TRIP SPIKE	Additional Information (Comment on any gross contamination or specific requirements)
1	0407_TP143_0.1_200630	30-06-2020	Soil			x			x					
2	0407_TP143_0.5_200630	30-06-2020	Soil			x			x					
	0407_TP143_1.0_200630	30-06-2020	Soil							x				
3	0407_QC415_200629	29-06-2020	Soil										x	
4	0407_QC515_200629	29-06-2020	Soil										x	
5	0407_TP157_0.1_200630	30-06-2020	Soil			x			x					
6	0407_TP157_0.1_ACM_200630	30-06-2020	Soil						x					
7	0407_TP157_0.5_200630	30-06-2020	Soil			x			x					
8	0407_TP171_0.1_200630	30-06-2020	Soil			x								
9	0407_TP171_0.1_ACM_200630	30-06-2020	Soil						x					
10	0407_TP171_0.3_200630	30-06-2020	Soil			x			x					
	0407_TP171_0.6_200630	30-06-2020	Soil							x				

SGS EHS Sydney COC

SE208692

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time	30-06-2020	**Received by**	Sign [redacted]	Date / Time	30/06/20
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	@ 4:30
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	

Temperature Received:

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

SLR

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 430, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☒ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Stuart Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010, NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐

CLIENT: Defence Housing Australia	**LABORATORY:** SGS Australia
PROJECT: Randwick Barracks	**LABORATORY ADDRESS:** Unit 16/33 Maddox St, Alexandria NSW 2015
PROJECT NUMBER: 610.30041	**SAMPLER:** [redacted]
PROJECT MANAGER [redacted]	**SAMPLER CONTACT No:** [redacted]
PM CONTACT No: [redacted]	**Email Reports and Invoices to:** LQRSYD@slrconsulting.com ; [redacted]

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number 2 of 4

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only (for asbestos bags)	HOLD	Suite E and H	Heavy metals, TPH/BTEXN, PAH, VOC/SVOCs and PFAS	C6-C10, BTEX	Additional Information (Comment on any gross contamination or specific requirements)
11	0407_TP172_0.1_200630	30-06-2020	Soil		x			x					
12	0407_TP172_0.3_200630	30-06-2020	Soil		x			x					
	0407_TP172_0.6_200630	30-06-2020	Soil						x				
13	0407_TP173_0.1_200630	30-06-2020	Soil		x			x					
14	0407_TP173_0.5_200630	30-06-2020	Soil		x			x					
	0407_TP173_1.0_200630	30-06-2020	Soil						x				
15	0407_QC181_200630	30-06-2020	Soil		x								
	0407_QC281_200630	30-06-2020	Soil										Please send to Eurofins for Suite A
16	0407_TP174_0.1_200630	30-06-2020	Soil		x			x					
17	0407_TP174_0.5_200630	30-06-2020	Soil		x			x					
	0407_TP174_0.7_200630	30-06-2020	Soil						x				
	0407_TP174_1.0_200630	30-06-2020	Soil						x				

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time	30-06-2020	**Received by**	Sign [redacted]	Date / Time	30/06/20
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	4.30
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	

Temperature Received:

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

SLR

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Dawin, NT 0820
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- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
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- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☒ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 30 Devon Street East, New Plymouth, 4310 NZ

CLIENT: Defence Housing Australia	**LABORATORY:** SGS Australia
PROJECT: Randwick Barracks	**LABORATORY ADDRESS:** Unit 16/33 Maddox St, Alexandria NSW 2015
PROJECT NUMBER: 610.30041	**SAMPLER:** [redacted]
PROJECT MANAGER [redacted]	**SAMPLER CONTACT No:** [redacted]
PM CONTACT N [redacted]	**Email Reports and Invoices to:** LQRSYD@slrconsulting.com ; [redacted]

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number 3 of 4

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only (for asbestos bags)	HOLD	Suite E and H	Heavy metals, TPH/BTEXN, PAH, VOC/SVOCs and PFAS	C6-C10, BTEX	Additional Information (Comment on any gross contamination or specific requirements)
18	0407_QC180_200630	30-06-2020	Soil		x								
	0407_QC280_200630	30-06-2020	Soil										Please send to Eurofins for Suite A
19	0407_TP259_0.1_200630	30-06-2020	Soil		x			x					
20	0407_TP259_0.3_200630	30-06-2020	Soil		x			x					
	0407_TP259_0.5_200630	30-06-2020	Soil						x				
	0407_TP259_1.0_200630	30-06-2020	Soil						x				
21	0407_QC184_200630	30-06-2020	Soil		x								
	0407_QC284_200630	30-06-2020	Soil										Please send to Eurofins for Suite A
22	0407_TP260_0.1_200630	30-06-2020	Soil		x			x					
23	0407_TP260_0.1_ACM_200630	30-06-2020	Soil					x					
	0407_TP260_0.3_200630	30-06-2020	Soil						x				
24	0407_TP260_0.5_200630	30-06-2020	Soil		x			x					

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time	30-06-2020	**Received by**	Sign [redacted]	Date / Time	30/06/20
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	04:30
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	

Temperature Received:

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

SLR

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 25 Percap Rd, Darwin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
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- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ

CLIENT: Defence Housing Australia	**LABORATORY:** SGS Australia
PROJECT: Randwick Barracks	**LABORATORY ADDRESS:** Unit 16/33 Maddox St, Alexandria NSW 2015
PROJECT NUMBER: 610.30041	**SAMPLER** [redacted]
PROJECT MANAGER: [redacted]	**SAMPLER CONTACT No:** [redacted]
PM CONTACT No [redacted]	**Email Reports and Invoices to:** LQRSYD@slrconsulting.com [redacted]
COMMENTS OR ADDITIONAL DIRECTIONS	**Turnaround Time (TAT)** ☐ Standard TAT ☐ Non Standard or Urgent TAT **Required TAT:** Standard
	COC Number 4 of 4

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only (for asbestos bags)	HOLD	Suite E and H	Heavy metals, TPH/BTEXN, PAH, VOC/SVOCs and PFAS	C6-C10, BTEX	Additional Information *(Comment on any gross contamination or specific requirements)*
25	0407_TP260_0.5_ACM_200630	30-06-2020	Soil					x					
	0407_TP260_1.1_200630	30-06-2020	Soil						x				
26	0407_QC183_200630	30-06-2020	Soil		x								
	0407_QC283_200630	30-06-2020	Soil										Please send to Eurofins for Suite A
		30-06-2020	Soil										
		30-06-2020	Soil										
		30-06-2020	Soil										
		30-06-2020	Soil										
		30-06-2020	Soil										
		30-06-2020	Soil										
		30-06-2020	Soil										
		30-06-2020	Soil										

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time	30-06-2020	**Received by**	Sign [redacted]	Date / Time	30/06/20 @ 4:30
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	

Temperature Received:

SAMPLE RECEIPT ADVICE

SE208692

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	26

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Tue 30/6/2020
Report Due	Tue 21/7/2020
SGS Reference	**SE208692**

SUBMISSION DETAILS

This is to confirm that 26 samples were received on Tuesday 30/6/2020. Results are expected to be ready by COB Tuesday 21/7/2020. Please quote SGS reference SE208692 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	22 Soil, 4 Material
Date documentation received	14/7/2020@1:34pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	4.7°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

10 samples have been placed on hold as no tests have been assigned for them by the client. These samples will not be processed.
Extra 0407_TP_0.1_ACM material sample received.

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SAMPLE RECEIPT ADVICE

SE208692

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	Speciated Phenols in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
001	0407_TP143_0.1_200630	29	14	26	11	18	10	81	7
002	0407_TP143_0.5_200630	29	14	26	11	18	10	81	7
003	0407_QC415_200629	-	-	-	-	-	-	11	7
004	0407_QC515_200629	-	-	-	-	-	-	11	-
005	0407_TP157_0.1_200630	29	14	26	11	18	10	81	7
007	0407_TP157_0.5_200630	29	14	26	11	18	10	81	7
008	0407_TP171_0.1_200630	29	14	26	11	18	10	81	7
010	0407_TP171_0.3_200630	29	14	26	11	18	10	81	7
011	0407_TP172_0.1_200630	29	14	26	11	18	10	81	7
012	0407_TP172_0.3_200630	29	14	26	11	18	10	81	7
013	0407_TP173_0.1_200630	29	14	26	11	18	10	81	7
014	0407_TP173_0.5_200630	29	14	26	11	18	10	81	7
015	0407_QC181_200630	29	14	26	11	18	10	81	7
016	0407_TP174_0.1_200630	29	14	26	11	18	10	81	7
017	0407_TP174_0.5_200630	29	14	26	11	18	10	81	7
018	0407_QC180_200630	29	14	26	11	18	10	81	7
019	0407_TP259_0.1_200630	29	14	26	11	18	10	81	7
020	0407_TP259_0.3_200630	29	14	26	11	18	10	81	7
021	0407_QC184_200630	29	14	26	11	18	10	81	7
022	0407_TP260_0.1_200630	29	14	26	11	18	10	81	7
024	0407_TP260_0.5_200630	29	14	26	11	18	10	81	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE208692

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	Speciated Phenols in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
026	0407_QC183_200630	29	14	26	11	18	10	81	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
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Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE208692

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Fibre Identification in soil	Gravimetric Determination of Asbestos in Soil	Mercury in Soil	Moisture Content	Total Recoverable Elements in Soil/Waste
001	0407_TP143_0.1_200630	2	9	1	1	7
002	0407_TP143_0.5_200630	2	9	1	1	7
003	0407_QC415_200629	-	-	-	1	-
005	0407_TP157_0.1_200630	2	9	1	1	7
007	0407_TP157_0.5_200630	2	9	1	1	7
008	0407_TP171_0.1_200630	2	9	1	1	7
010	0407_TP171_0.3_200630	2	9	1	1	7
011	0407_TP172_0.1_200630	2	9	1	1	7
012	0407_TP172_0.3_200630	2	9	1	1	7
013	0407_TP173_0.1_200630	2	9	1	1	7
014	0407_TP173_0.5_200630	2	9	1	1	7
015	0407_QC181_200630	-	-	1	1	7
016	0407_TP174_0.1_200630	2	9	1	1	7
017	0407_TP174_0.5_200630	2	9	1	1	7
018	0407_QC180_200630	-	-	1	1	7
019	0407_TP259_0.1_200630	2	9	1	1	7
020	0407_TP259_0.3_200630	2	9	1	1	7
021	0407_QC184_200630	-	-	1	1	7
022	0407_TP260_0.1_200630	2	9	1	1	7
024	0407_TP260_0.5_200630	2	9	1	1	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
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Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE208692

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Mercury in Soil	Moisture Content	Total Recoverable Elements in Soil/Waste
026	0407_QC183_200630	1	1	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE208692

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Fibre ID in bulk materials
006	0407_TP157_0.1_ACM_200630	1
009	0407_TP171_0.1_ACM_200630	1
023	0407_TP260_0.1_ACM_200630	1

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE208692

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Fibre ID in bulk materials
025	0407_TP260_0.5_ACM_200630	1

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	26

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208692 R0**
Date Received	30/6/2020
Date Reported	22/7/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.

Sample #8: Asbestos found in approx 10x6x2mm cement sheet fragments x7 in >2mm portion.
Sample #20: Approx 9-10x3mm fibre bundles x>10 found loose in sample in <2mm and >2mm portion.
Sample #22: Approx 7-8x2mm fibre bundles found loose in <2mm portion and asbestos found in approx 15x5x3mm cement sheet fragments in >2mm portion.

Asbestos analysed by Approved Identifiers Ravee Sivasubramaniam and Yusuf Kuthpudin .

SIGNATORIES

[redacted]

Senior Organic Chemist/Metals Chemist | Senior Chemist | Organic Section Head

[redacted]

Hygiene Team Leader | Asbestos Analyst

VOC's in Soil [AN433] Tested: 16/7/2020

PARAMETER	UOM	LOR	0407_TP143_0.1_20(630 SOIL - 30/6/2020 SE208692.001	0407_TP143_0.5_20(630 SOIL - 30/6/2020 SE208692.002	0407_QC415_20062(SOIL - 30/6/2020 SE208692.003	0407_QC515_20062(SOIL - 30/6/2020 SE208692.004	0407_TP157_0.1_20(630 SOIL - 30/6/2020 SE208692.005
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	[101%]	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	[102%]	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	[102%]	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	[107%]	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	[102%]	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	-	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	-	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	-	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	-	-	<1
Chloromethane	mg/kg	1	<1	<1	-	-	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	-	-	<0.1
Bromomethane	mg/kg	1	<1	<1	-	-	<1
Chloroethane	mg/kg	1	<1	<1	-	-	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	-	-	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	-	-	<10
Iodomethane	mg/kg	5	<5	<5	-	-	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	-	-	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	-	-	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	-	-	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	-	-	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	-	-	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	-	-	<0.1
Vinyl acetate	mg/kg	10	<10	<10	-	-	<10
MEK (2-butanone)	mg/kg	10	<10	<10	-	-	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	-	-	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	-	-	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	-	-	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	-	-	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	-	-	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	-	-	<0.1
2-nitropropane	mg/kg	10	<10	<10	-	-	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	-	-	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	-	-	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	-	-	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	-	-	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	-	-	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	-	-	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	-	-	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	-	-	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	-	-	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-	<1

VOC's in Soil [AN433] Tested: 16/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP143_0.1_20(630 SOIL - 30/6/2020 SE208692.001	0407_TP143_0.5_20(630 SOIL - 30/6/2020 SE208692.002	0407_QC415_20062(SOIL - 30/6/2020 SE208692.003	0407_QC515_20062(SOIL - 30/6/2020 SE208692.004	0407_TP157_0.1_20(630 SOIL - 30/6/2020 SE208692.005
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	-	-	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	-	-	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	-	-	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	-	-	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	-	-	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	-	-	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-	<0.1
Total VOC*	mg/kg	24	<24	<24	-	-	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	-	-	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	-	-	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	-	-	<1.8

VOC's in Soil [AN433] Tested: 16/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP157_0.5_20(630 SOIL - 30/6/2020 SE208692.007	0407_TP171_0.1_20(630 SOIL - 30/6/2020 SE208692.008	0407_TP171_0.3_20(630 SOIL - 30/6/2020 SE208692.010	0407_TP172_0.1_20(630 SOIL - 30/6/2020 SE208692.011	0407_TP172_0.3_20(630 SOIL - 30/6/2020 SE208692.012
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 16/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP157_0.5_20(630 SOIL - 30/6/2020 SE208692.007	0407_TP171_0.1_20(630 SOIL - 30/6/2020 SE208692.008	0407_TP171_0.3_20(630 SOIL - 30/6/2020 SE208692.010	0407_TP172_0.1_20(630 SOIL - 30/6/2020 SE208692.011	0407_TP172_0.3_20(630 SOIL - 30/6/2020 SE208692.012
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 16/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP173_0.1_20(630 SOIL - 30/6/2020 SE208692.013	0407_TP173_0.5_20(630 SOIL - 30/6/2020 SE208692.014	0407_QC181_20063(SOIL - 30/6/2020 SE208692.015	0407_TP174_0.1_20(630 SOIL - 30/6/2020 SE208692.016	0407_TP174_0.5_20(630 SOIL - 30/6/2020 SE208692.017
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 16/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP173_0.1_20(630 SOIL - 30/6/2020 SE208692.013	0407_TP173_0.5_20(630 SOIL - 30/6/2020 SE208692.014	0407_QC181_20063(SOIL - 30/6/2020 SE208692.015	0407_TP174_0.1_20(630 SOIL - 30/6/2020 SE208692.016	0407_TP174_0.5_20(630 SOIL - 30/6/2020 SE208692.017
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 16/7/2020 (continued)

PARAMETER	UOM	LOR	0407_QC180_20063 SOIL - 30/6/2020 SE208692.018	0407_TP259_0.1_20(630 SOIL - 30/6/2020 SE208692.019	0407_TP259_0.3_20(630 SOIL - 30/6/2020 SE208692.020	0407_QC184_20063 SOIL - 30/6/2020 SE208692.021	0407_TP260_0.1_20(630 SOIL - 30/6/2020 SE208692.022
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 16/7/2020 (continued)

PARAMETER	UOM	LOR	0407_QC180_20063 SOIL - 30/6/2020 SE208692.018	0407_TP259_0.1_20(630 SOIL - 30/6/2020 SE208692.019	0407_TP259_0.3_20(630 SOIL - 30/6/2020 SE208692.020	0407_QC184_20063 SOIL - 30/6/2020 SE208692.021	0407_TP260_0.1_20(630 SOIL - 30/6/2020 SE208692.022
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 16/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP260_0.5_20(630 SOIL - 30/6/2020 SE208692.024	0407_QC183_20063(SOIL - 30/6/2020 SE208692.026
Benzene	mg/kg	0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1
Chloromethane	mg/kg	1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1
Chloroethane	mg/kg	1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10
Iodomethane	mg/kg	5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1

VOC's in Soil [AN433] Tested: 16/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP260_0.5_20(630 SOIL - 30/6/2020 SE208692.024	0407_QC183_20063(SOIL - 30/6/2020 SE208692.026
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 16/7/2020

PARAMETER	UOM	LOR	0407_TP143_0.1_20(630 SOIL - 30/6/2020 SE208692.001	0407_TP143_0.5_20(630 SOIL - 30/6/2020 SE208692.002	0407_QC415_20062! SOIL - 30/6/2020 SE208692.003	0407_TP157_0.1_20(630 SOIL - 30/6/2020 SE208692.005	0407_TP157_0.5_20(630 SOIL - 30/6/2020 SE208692.007
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP171_0.1_20(630 SOIL - 30/6/2020 SE208692.008	0407_TP171_0.3_20(630 SOIL - 30/6/2020 SE208692.010	0407_TP172_0.1_20(630 SOIL - 30/6/2020 SE208692.011	0407_TP172_0.3_20(630 SOIL - 30/6/2020 SE208692.012	0407_TP173_0.1_20(630 SOIL - 30/6/2020 SE208692.013
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP173_0.5_20(630 SOIL - 30/6/2020 SE208692.014	0407_QC181_20063(SOIL - 30/6/2020 SE208692.015	0407_TP174_0.1_20(630 SOIL - 30/6/2020 SE208692.016	0407_TP174_0.5_20(630 SOIL - 30/6/2020 SE208692.017	0407_QC180_20063(SOIL - 30/6/2020 SE208692.018
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP259_0.1_20(630 SOIL - 30/6/2020 SE208692.019	0407_TP259_0.3_20(630 SOIL - 30/6/2020 SE208692.020	0407_QC184_20063(SOIL - 30/6/2020 SE208692.021	0407_TP260_0.1_20(630 SOIL - 30/6/2020 SE208692.022	0407_TP260_0.5_20(630 SOIL - 30/6/2020 SE208692.024
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_QC183_20063(SOIL - 30/6/2020 SE208692.026
Benzene (F0)	mg/kg	0.1	<0.1
TRH C6-C9	mg/kg	20	<20
TRH C6-C10	mg/kg	25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 16/7/2020

PARAMETER	UOM	LOR	0407_TP143_0.1_20(630 SOIL - 30/6/2020 SE208692.001	0407_TP143_0.5_20(630 SOIL - 30/6/2020 SE208692.002	0407_TP157_0.1_20(630 SOIL - 30/6/2020 SE208692.005	0407_TP157_0.5_20(630 SOIL - 30/6/2020 SE208692.007	0407_TP171_0.1_20(630 SOIL - 30/6/2020 SE208692.008
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP171_0.3_20(630 SOIL - 30/6/2020 SE208692.010	0407_TP172_0.1_20(630 SOIL - 30/6/2020 SE208692.011	0407_TP172_0.3_20(630 SOIL - 30/6/2020 SE208692.012	0407_TP173_0.1_20(630 SOIL - 30/6/2020 SE208692.013	0407_TP173_0.5_20(630 SOIL - 30/6/2020 SE208692.014
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	**54**	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	**98**	<45	**67**	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	**120**	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	**150**	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_QC181_20063 SOIL - 30/6/2020 SE208692.015	0407_TP174_0.1_20(630 SOIL - 30/6/2020 SE208692.016	0407_TP174_0.5_20(630 SOIL - 30/6/2020 SE208692.017	0407_QC180_20063 SOIL - 30/6/2020 SE208692.018	0407_TP259_0.1_20(630 SOIL - 30/6/2020 SE208692.019
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	**46**	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	**54**	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	**93**	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 16/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP259_0.3_20(630 SOIL - 30/6/2020 SE208692.020	0407_QC184_20063(SOIL - 30/6/2020 SE208692.021	0407_TP260_0.1_20(630 SOIL - 30/6/2020 SE208692.022	0407_TP260_0.5_20(630 SOIL - 30/6/2020 SE208692.024	0407_QC183_20063(SOIL - 30/6/2020 SE208692.026
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	**64**	<45	**160**	**49**
TRH C29-C36	mg/kg	45	**52**	<45	<45	**74**	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	**230**	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	**230**	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	**230**	<210

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 16/7/2020

PARAMETER	UOM	LOR	0407_TP143_0.1_20(630 SOIL - 30/6/2020 SE208692.001	0407_TP143_0.5_20(630 SOIL - 30/6/2020 SE208692.002	0407_TP157_0.1_20(630 SOIL - 30/6/2020 SE208692.005	0407_TP157_0.5_20(630 SOIL - 30/6/2020 SE208692.007	0407_TP171_0.1_20(630 SOIL - 30/6/2020 SE208692.008
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	0.1	<0.1	0.2
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	0.2	<0.1	0.2	<0.1	0.5
Pyrene	mg/kg	0.1	0.2	<0.1	0.2	<0.1	0.6
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	0.3
Chrysene	mg/kg	0.1	<0.1	<0.1	0.1	<0.1	0.3
Benzo(b&j)fluoranthene	mg/kg	0.1	0.1	<0.1	0.1	<0.1	0.3
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	0.2
Benzo(a)pyrene	mg/kg	0.1	0.1	<0.1	0.1	<0.1	0.3
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	0.1	<0.1	0.2
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	0.1	<0.1	0.3
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	0.4
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	0.5
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	0.2	<0.2	0.5
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	1.0	<0.8	3.2
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	1.0	<0.8	3.2

PARAMETER	UOM	LOR	0407_TP171_0.3_20(630 SOIL - 30/6/2020 SE208692.010	0407_TP172_0.1_20(630 SOIL - 30/6/2020 SE208692.011	0407_TP172_0.3_20(630 SOIL - 30/6/2020 SE208692.012	0407_TP173_0.1_20(630 SOIL - 30/6/2020 SE208692.013	0407_TP173_0.5_20(630 SOIL - 30/6/2020 SE208692.014
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	0.3	<0.1	0.3	0.1
Anthracene	mg/kg	0.1	<0.1	0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	0.9	0.1	1.0	1.1
Pyrene	mg/kg	0.1	<0.1	1.0	0.1	1.2	1.4
Benzo(a)anthracene	mg/kg	0.1	<0.1	0.4	<0.1	0.5	0.8
Chrysene	mg/kg	0.1	<0.1	0.5	<0.1	0.6	0.9
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	0.7	<0.1	0.9	1.6
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	0.4	<0.1	0.5	0.8
Benzo(a)pyrene	mg/kg	0.1	<0.1	0.6	<0.1	0.8	1.6
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	0.5	<0.1	0.6	1.4
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	0.2
Benzo(ghi)perylene	mg/kg	0.1	<0.1	0.5	<0.1	0.7	1.3
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	0.8	<0.2	1.1	2.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	0.9	<0.3	1.2	2.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	0.8	<0.2	1.1	2.2
Total PAH (18)	mg/kg	0.8	<0.8	5.8	<0.8	6.9	11
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	5.8	<0.8	6.9	11

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 16/7/2020 (continued)

PARAMETER	UOM	LOR	0407_QC181_20063(	0407_TP174_0.1_20(630	0407_TP174_0.5_20(630	0407_QC180_20063(	0407_TP259_0.1_20(630
			SOIL - 30/6/2020	SOIL - 30/6/2020	SOIL - 30/6/2020	SOIL - 30/6/2020	SOIL - 30/6/2020
			SE208692.015	SE208692.016	SE208692.017	SE208692.018	SE208692.019
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	0.1	0.1	0.2	0.3	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	0.1	0.1	<0.1
Fluoranthene	mg/kg	0.1	1.3	0.6	1.0	1.0	0.2
Pyrene	mg/kg	0.1	1.6	0.6	1.1	1.1	0.3
Benzo(a)anthracene	mg/kg	0.1	0.8	0.2	0.5	0.4	0.1
Chrysene	mg/kg	0.1	1.2	0.3	0.6	0.4	0.2
Benzo(b&j)fluoranthene	mg/kg	0.1	1.9	0.4	1.0	0.5	0.2
Benzo(k)fluoranthene	mg/kg	0.1	0.9	0.2	0.5	0.3	0.1
Benzo(a)pyrene	mg/kg	0.1	1.8	0.4	0.9	0.5	0.2
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	1.5	0.3	0.8	0.4	0.2
Dibenzo(ah)anthracene	mg/kg	0.1	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	1.4	0.3	0.9	0.4	0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	2.4	0.5	1.2	0.7	0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	2.4	0.6	1.3	0.8	0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	2.4	0.5	1.2	0.7	0.3
Total PAH (18)	mg/kg	0.8	13	3.3	7.5	5.3	1.6
Total PAH (NEPM/WHO 16)	mg/kg	0.8	13	3.3	7.5	5.3	1.6

PARAMETER	UOM	LOR	0407_TP259_0.3_20(630	0407_QC184_20063(	0407_TP260_0.1_20(630	0407_TP260_0.5_20(630	0407_QC183_20063(
			SOIL - 30/6/2020	SOIL - 30/6/2020	SOIL - 30/6/2020	SOIL - 30/6/2020	SOIL - 30/6/2020
			SE208692.020	SE208692.021	SE208692.022	SE208692.024	SE208692.026
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	0.5	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	0.3	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	0.3	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	5.1	0.2	<0.1	0.2
Anthracene	mg/kg	0.1	<0.1	1.2	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	0.1	6.1	0.5	<0.1	0.4
Pyrene	mg/kg	0.1	0.1	5.4	0.5	<0.1	0.4
Benzo(a)anthracene	mg/kg	0.1	<0.1	2.4	0.2	<0.1	0.2
Chrysene	mg/kg	0.1	<0.1	2.2	0.2	<0.1	0.2
Benzo(b&j)fluoranthene	mg/kg	0.1	0.2	2.5	0.3	<0.1	0.3
Benzo(k)fluoranthene	mg/kg	0.1	0.1	1.2	0.1	<0.1	0.1
Benzo(a)pyrene	mg/kg	0.1	0.1	2.2	0.3	<0.1	0.3
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.2	1.4	0.2	<0.1	0.2
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	0.2	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	0.2	1.1	0.2	<0.1	0.2
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	3.2	0.4	<0.2	0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	3.2	0.5	<0.3	0.4
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	0.2	3.2	0.4	<0.2	0.4
Total PAH (18)	mg/kg	0.8	1.0	32	2.8	<0.8	2.6
Total PAH (NEPM/WHO 16)	mg/kg	0.8	1.0	32	2.8	<0.8	2.6

Speciated Phenols in Soil [AN420] Tested: 16/7/2020

PARAMETER	UOM	LOR	0407_TP143_0.1_20(630 SOIL - 30/6/2020 SE208692.001	0407_TP143_0.5_20(630 SOIL - 30/6/2020 SE208692.002	0407_TP157_0.1_20(630 SOIL - 30/6/2020 SE208692.005	0407_TP157_0.5_20(630 SOIL - 30/6/2020 SE208692.007	0407_TP171_0.1_20(630 SOIL - 30/6/2020 SE208692.008
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_TP171_0.3_20(630 SOIL - 30/6/2020 SE208692.010	0407_TP172_0.1_20(630 SOIL - 30/6/2020 SE208692.011	0407_TP172_0.3_20(630 SOIL - 30/6/2020 SE208692.012	0407_TP173_0.1_20(630 SOIL - 30/6/2020 SE208692.013	0407_TP173_0.5_20(630 SOIL - 30/6/2020 SE208692.014
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

Speciated Phenols in Soil [AN420] Tested: 16/7/2020 (continued)

PARAMETER	UOM	LOR	0407_QC181_20063(	0407_TP174_0.1_20(630	0407_TP174_0.5_20(630	0407_QC180_20063(	0407_TP259_0.1_20(630
			SOIL - 30/6/2020	SOIL - 30/6/2020	SOIL - 30/6/2020	SOIL - 30/6/2020	SOIL - 30/6/2020
			SE208692.015	SE208692.016	SE208692.017	SE208692.018	SE208692.019
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_TP259_0.3_20(630	0407_QC184_20063(	0407_TP260_0.1_20(630	0407_TP260_0.5_20(630	0407_QC183_20063(
			SOIL - 30/6/2020	SOIL - 30/6/2020	SOIL - 30/6/2020	SOIL - 30/6/2020	SOIL - 30/6/2020
			SE208692.020	SE208692.021	SE208692.022	SE208692.024	SE208692.026
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

OC Pesticides in Soil [AN420] Tested: 16/7/2020

PARAMETER	UOM	LOR	0407_TP143_0.1_20(630 SOIL - 30/6/2020 SE208692.001	0407_TP143_0.5_20(630 SOIL - 30/6/2020 SE208692.002	0407_TP157_0.1_20(630 SOIL - 30/6/2020 SE208692.005	0407_TP157_0.5_20(630 SOIL - 30/6/2020 SE208692.007	0407_TP171_0.1_20(630 SOIL - 30/6/2020 SE208692.008
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 16/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP171_0.3_20(630 SOIL - 30/6/2020 SE208692.010	0407_TP172_0.1_20(630 SOIL - 30/6/2020 SE208692.011	0407_TP172_0.3_20(630 SOIL - 30/6/2020 SE208692.012	0407_TP173_0.1_20(630 SOIL - 30/6/2020 SE208692.013	0407_TP173_0.5_20(630 SOIL - 30/6/2020 SE208692.014
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 16/7/2020 (continued)

PARAMETER	UOM	LOR	0407_QC181_20063(	0407_TP174_0.1_20(630	0407_TP174_0.5_20(630	0407_QC180_20063(	0407_TP259_0.1_20(630
			SOIL - 30/6/2020	SOIL - 30/6/2020	SOIL - 30/6/2020	SOIL - 30/6/2020	SOIL - 30/6/2020
			SE208692.015	SE208692.016	SE208692.017	SE208692.018	SE208692.019
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 16/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP259_0.3_20(630 SOIL - 30/6/2020 SE208692.020	0407_QC184_20063(SOIL - 30/6/2020 SE208692.021	0407_TP260_0.1_20(630 SOIL - 30/6/2020 SE208692.022	0407_TP260_0.5_20(630 SOIL - 30/6/2020 SE208692.024	0407_QC183_20063(SOIL - 30/6/2020 SE208692.026
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	**0.2**	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OP Pesticides in Soil [AN420] Tested: 16/7/2020

PARAMETER	UOM	LOR	0407_TP143_0.1_20(630 SOIL - 30/6/2020 SE208692.001	0407_TP143_0.5_20(630 SOIL - 30/6/2020 SE208692.002	0407_TP157_0.1_20(630 SOIL - 30/6/2020 SE208692.005	0407_TP157_0.5_20(630 SOIL - 30/6/2020 SE208692.007	0407_TP171_0.1_20(630 SOIL - 30/6/2020 SE208692.008
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP171_0.3_20(630 SOIL - 30/6/2020 SE208692.010	0407_TP172_0.1_20(630 SOIL - 30/6/2020 SE208692.011	0407_TP172_0.3_20(630 SOIL - 30/6/2020 SE208692.012	0407_TP173_0.1_20(630 SOIL - 30/6/2020 SE208692.013	0407_TP173_0.5_20(630 SOIL - 30/6/2020 SE208692.014
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_QC181_20063(SOIL - 30/6/2020 SE208692.015	0407_TP174_0.1_20(630 SOIL - 30/6/2020 SE208692.016	0407_TP174_0.5_20(630 SOIL - 30/6/2020 SE208692.017	0407_QC180_20063(SOIL - 30/6/2020 SE208692.018	0407_TP259_0.1_20(630 SOIL - 30/6/2020 SE208692.019
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

OP Pesticides in Soil [AN420] Tested: 16/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP259_0.3_20(630 SOIL - 30/6/2020 SE208692.020	0407_QC184_20063(SOIL - 30/6/2020 SE208692.021	0407_TP260_0.1_20(630 SOIL - 30/6/2020 SE208692.022	0407_TP260_0.5_20(630 SOIL - 30/6/2020 SE208692.024	0407_QC183_20063(SOIL - 30/6/2020 SE208692.026
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PCBs in Soil [AN420] Tested: 16/7/2020

PARAMETER	UOM	LOR	0407_TP143_0.1_20(630 SOIL - 30/6/2020 SE208692.001	0407_TP143_0.5_20(630 SOIL - 30/6/2020 SE208692.002	0407_TP157_0.1_20(630 SOIL - 30/6/2020 SE208692.005	0407_TP157_0.5_20(630 SOIL - 30/6/2020 SE208692.007	0407_TP171_0.1_20(630 SOIL - 30/6/2020 SE208692.008
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP171_0.3_20(630 SOIL - 30/6/2020 SE208692.010	0407_TP172_0.1_20(630 SOIL - 30/6/2020 SE208692.011	0407_TP172_0.3_20(630 SOIL - 30/6/2020 SE208692.012	0407_TP173_0.1_20(630 SOIL - 30/6/2020 SE208692.013	0407_TP173_0.5_20(630 SOIL - 30/6/2020 SE208692.014
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_QC181_20063 SOIL - 30/6/2020 SE208692.015	0407_TP174_0.1_20(630 SOIL - 30/6/2020 SE208692.016	0407_TP174_0.5_20(630 SOIL - 30/6/2020 SE208692.017	0407_QC180_20063 SOIL - 30/6/2020 SE208692.018	0407_TP259_0.1_20(630 SOIL - 30/6/2020 SE208692.019
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PCBs in Soil [AN420] Tested: 16/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP259_0.3_20(630 SOIL - 30/6/2020 SE208692.020	0407_QC184_20063(SOIL - 30/6/2020 SE208692.021	0407_TP260_0.1_20(630 SOIL - 30/6/2020 SE208692.022	0407_TP260_0.5_20(630 SOIL - 30/6/2020 SE208692.024	0407_QC183_20063(SOIL - 30/6/2020 SE208692.026
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 16/7/2020

PARAMETER	UOM	LOR	0407_TP143_0.1_20(630 SOIL - 30/6/2020 SE208692.001	0407_TP143_0.5_20(630 SOIL - 30/6/2020 SE208692.002	0407_TP157_0.1_20(630 SOIL - 30/6/2020 SE208692.005	0407_TP157_0.5_20(630 SOIL - 30/6/2020 SE208692.007	0407_TP171_0.1_20(630 SOIL - 30/6/2020 SE208692.008
Arsenic, As	mg/kg	1	1	<1	1	1	7
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	4.4	<0.5	1.6	1.5	8.5
Copper, Cu	mg/kg	0.5	9.5	0.6	6.1	15	24
Lead, Pb	mg/kg	1	54	2	28	20	130
Nickel, Ni	mg/kg	0.5	2.0	<0.5	1.0	1.0	6.5
Zinc, Zn	mg/kg	2	48	<2.0	28	16	120

PARAMETER	UOM	LOR	0407_TP171_0.3_20(630 SOIL - 30/6/2020 SE208692.010	0407_TP172_0.1_20(630 SOIL - 30/6/2020 SE208692.011	0407_TP172_0.3_20(630 SOIL - 30/6/2020 SE208692.012	0407_TP173_0.1_20(630 SOIL - 30/6/2020 SE208692.013	0407_TP173_0.5_20(630 SOIL - 30/6/2020 SE208692.014
Arsenic, As	mg/kg	1	<1	4	2	4	<1
Cadmium, Cd	mg/kg	0.3	<0.3	0.4	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	0.5	8.5	2.6	6.9	0.9
Copper, Cu	mg/kg	0.5	3.4	24	12	23	3.4
Lead, Pb	mg/kg	1	14	110	21	62	10
Nickel, Ni	mg/kg	0.5	1.2	3.7	3.3	4.8	1.4
Zinc, Zn	mg/kg	2	22	130	53	230	28

PARAMETER	UOM	LOR	0407_QC181_20063(SOIL - 30/6/2020 SE208692.015	0407_TP174_0.1_20(630 SOIL - 30/6/2020 SE208692.016	0407_TP174_0.5_20(630 SOIL - 30/6/2020 SE208692.017	0407_QC180_20063(SOIL - 30/6/2020 SE208692.018	0407_TP259_0.1_20(630 SOIL - 30/6/2020 SE208692.019
Arsenic, As	mg/kg	1	<1	1	2	1	2
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	1.0	2.7	1.9	3.7	13
Copper, Cu	mg/kg	0.5	4.0	38	11	36	15
Lead, Pb	mg/kg	1	11	14	22	21	50
Nickel, Ni	mg/kg	0.5	1.6	17	2.9	17	3.7
Zinc, Zn	mg/kg	2	29	29	45	30	84

PARAMETER	UOM	LOR	0407_TP259_0.3_20(630 SOIL - 30/6/2020 SE208692.020	0407_QC184_20063(SOIL - 30/6/2020 SE208692.021	0407_TP260_0.1_20(630 SOIL - 30/6/2020 SE208692.022	0407_TP260_0.5_20(630 SOIL - 30/6/2020 SE208692.024	0407_QC183_20063(SOIL - 30/6/2020 SE208692.026
Arsenic, As	mg/kg	1	3	2	5	<1	3
Cadmium, Cd	mg/kg	0.3	0.5	<0.3	0.8	0.6	0.9
Chromium, Cr	mg/kg	0.5	45	12	27	28	29
Copper, Cu	mg/kg	0.5	34	14	37	20	36
Lead, Pb	mg/kg	1	570	47	260	170	270
Nickel, Ni	mg/kg	0.5	35	3.7	7.2	2.0	8.4
Zinc, Zn	mg/kg	2	240	69	430	200	210

Mercury in Soil [AN312] Tested: 16/7/2020

PARAMETER	UOM	LOR	0407_TP143_0.1_20(630 SOIL - 30/6/2020 SE208692.001	0407_TP143_0.5_20(630 SOIL - 30/6/2020 SE208692.002	0407_TP157_0.1_20(630 SOIL - 30/6/2020 SE208692.005	0407_TP157_0.5_20(630 SOIL - 30/6/2020 SE208692.007	0407_TP171_0.1_20(630 SOIL - 30/6/2020 SE208692.008
Mercury	mg/kg	0.05	**0.06**	<0.05	**0.06**	<0.05	**0.16**

PARAMETER	UOM	LOR	0407_TP171_0.3_20(630 SOIL - 30/6/2020 SE208692.010	0407_TP172_0.1_20(630 SOIL - 30/6/2020 SE208692.011	0407_TP172_0.3_20(630 SOIL - 30/6/2020 SE208692.012	0407_TP173_0.1_20(630 SOIL - 30/6/2020 SE208692.013	0407_TP173_0.5_20(630 SOIL - 30/6/2020 SE208692.014
Mercury	mg/kg	0.05	<0.05	**0.11**	**0.05**	**0.06**	<0.05

PARAMETER	UOM	LOR	0407_QC181_20063(SOIL - 30/6/2020 SE208692.015	0407_TP174_0.1_20(630 SOIL - 30/6/2020 SE208692.016	0407_TP174_0.5_20(630 SOIL - 30/6/2020 SE208692.017	0407_QC180_20063(SOIL - 30/6/2020 SE208692.018	0407_TP259_0.1_20(630 SOIL - 30/6/2020 SE208692.019
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	**0.20**

PARAMETER	UOM	LOR	0407_TP259_0.3_20(630 SOIL - 30/6/2020 SE208692.020	0407_QC184_20063(SOIL - 30/6/2020 SE208692.021	0407_TP260_0.1_20(630 SOIL - 30/6/2020 SE208692.022	0407_TP260_0.5_20(630 SOIL - 30/6/2020 SE208692.024	0407_QC183_20063(SOIL - 30/6/2020 SE208692.026
Mercury	mg/kg	0.05	**0.15**	**0.17**	**0.13**	**0.21**	**0.14**

Moisture Content [AN002] Tested: 16/7/2020

PARAMETER	UOM	LOR	0407_TP143_0.1_20(630 SOIL - 30/6/2020 SE208692.001	0407_TP143_0.5_20(630 SOIL - 30/6/2020 SE208692.002	0407_QC415_20062(SOIL - 30/6/2020 SE208692.003	0407_TP157_0.1_20(630 SOIL - 30/6/2020 SE208692.005	0407_TP157_0.5_20(630 SOIL - 30/6/2020 SE208692.007
% Moisture	%w/w	1	14.5	5.6	<1.0	10.0	12.7

PARAMETER	UOM	LOR	0407_TP171_0.1_20(630 SOIL - 30/6/2020 SE208692.008	0407_TP171_0.3_20(630 SOIL - 30/6/2020 SE208692.010	0407_TP172_0.1_20(630 SOIL - 30/6/2020 SE208692.011	0407_TP172_0.3_20(630 SOIL - 30/6/2020 SE208692.012	0407_TP173_0.1_20(630 SOIL - 30/6/2020 SE208692.013
% Moisture	%w/w	1	27.5	8.3	33.3	12.6	53.6

PARAMETER	UOM	LOR	0407_TP173_0.5_20(630 SOIL - 30/6/2020 SE208692.014	0407_QC181_20063(SOIL - 30/6/2020 SE208692.015	0407_TP174_0.1_20(630 SOIL - 30/6/2020 SE208692.016	0407_TP174_0.5_20(630 SOIL - 30/6/2020 SE208692.017	0407_QC180_20063(SOIL - 30/6/2020 SE208692.018
% Moisture	%w/w	1	9.7	10.6	9.2	20.4	18.2

PARAMETER	UOM	LOR	0407_TP259_0.1_20(630 SOIL - 30/6/2020 SE208692.019	0407_TP259_0.3_20(630 SOIL - 30/6/2020 SE208692.020	0407_QC184_20063(SOIL - 30/6/2020 SE208692.021	0407_TP260_0.1_20(630 SOIL - 30/6/2020 SE208692.022	0407_TP260_0.5_20(630 SOIL - 30/6/2020 SE208692.024
% Moisture	%w/w	1	10.1	7.1	10.5	9.7	22.2

PARAMETER	UOM	LOR	0407_QC183_20063(SOIL - 30/6/2020 SE208692.026
% Moisture	%w/w	1	9.5

Fibre Identification in soil [AN602] Tested: 20/7/2020

PARAMETER	UOM	LOR	0407_TP143_0.1_20(630 SOIL - 30/6/2020 SE208692.001	0407_TP143_0.5_20(630 SOIL - 30/6/2020 SE208692.002	0407_TP157_0.1_20(630 SOIL - 30/6/2020 SE208692.005	0407_TP157_0.5_20(630 SOIL - 30/6/2020 SE208692.007	0407_TP171_0.1_20(630 SOIL - 30/6/2020 SE208692.008
Asbestos Detected	No unit	-	No	No	No	No	Yes
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	0407_TP171_0.3_20(630 SOIL - 30/6/2020 SE208692.010	0407_TP172_0.1_20(630 SOIL - 30/6/2020 SE208692.011	0407_TP172_0.3_20(630 SOIL - 30/6/2020 SE208692.012	0407_TP173_0.1_20(630 SOIL - 30/6/2020 SE208692.013	0407_TP173_0.5_20(630 SOIL - 30/6/2020 SE208692.014
Asbestos Detected	No unit	-	No	No	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	0407_TP174_0.1_20(630 SOIL - 30/6/2020 SE208692.016	0407_TP174_0.5_20(630 SOIL - 30/6/2020 SE208692.017	0407_TP259_0.1_20(630 SOIL - 30/6/2020 SE208692.019	0407_TP259_0.3_20(630 SOIL - 30/6/2020 SE208692.020	0407_TP260_0.1_20(630 SOIL - 30/6/2020 SE208692.022
Asbestos Detected	No unit	-	No	No	No	Yes	Yes
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	**>0.01**

PARAMETER	UOM	LOR	0407_TP260_0.5_20(630 SOIL - 30/6/2020 SE208692.024
Asbestos Detected	No unit	-	No
Estimated Fibres*	%w/w	0.01	<0.01

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 20/7/2020

PARAMETER	UOM	LOR	0407_TP143_0.1_20(630 SOIL - 30/6/2020 SE208692.001	0407_TP143_0.5_20(630 SOIL - 30/6/2020 SE208692.002	0407_TP157_0.1_20(630 SOIL - 30/6/2020 SE208692.005	0407_TP157_0.5_20(630 SOIL - 30/6/2020 SE208692.007	0407_TP171_0.1_20(630 SOIL - 30/6/2020 SE208692.008
Total Sample Weight*	g	1	550	752	613	445	546
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.0455
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	0.008
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	0.008
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP171_0.3_20(630 SOIL - 30/6/2020 SE208692.010	0407_TP172_0.1_20(630 SOIL - 30/6/2020 SE208692.011	0407_TP172_0.3_20(630 SOIL - 30/6/2020 SE208692.012	0407_TP173_0.1_20(630 SOIL - 30/6/2020 SE208692.013	0407_TP173_0.5_20(630 SOIL - 30/6/2020 SE208692.014
Total Sample Weight*	g	1	640	344	617	360	646
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP174_0.1_20(630 SOIL - 30/6/2020 SE208692.016	0407_TP174_0.5_20(630 SOIL - 30/6/2020 SE208692.017	0407_TP259_0.1_20(630 SOIL - 30/6/2020 SE208692.019	0407_TP259_0.3_20(630 SOIL - 30/6/2020 SE208692.020	0407_TP260_0.1_20(630 SOIL - 30/6/2020 SE208692.022
Total Sample Weight*	g	1	662	625	566	640	634
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	0.00918	0.230
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	0.0151	0.0417
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	0.001	0.036
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	0.002	0.007
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	0.004	0.043
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP260_0.5_20(630 SOIL - 30/6/2020 SE208692.024
Total Sample Weight*	g	1	761
Bonded ACM in >7mm Sample*	g	0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001
Fibre Type*	No unit	-	-

Fibre ID in bulk materials [AN602] Tested: 21/7/2020

PARAMETER	UOM	LOR	0407_TP157_0.1_AC M_200630 MATERIAL - 30/6/2020 SE208692.006	0407_TP171_0.1_AC M_200630 MATERIAL - 30/6/2020 SE208692.009	0407_TP260_0.1_AC M_200630 MATERIAL - 30/6/2020 SE208692.023	0407_TP260_0.5_AC M_200630 MATERIAL - 30/6/2020 SE208692.025
Asbestos Detected	No unit	-	Yes	Yes	Yes	Yes

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid, mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents .
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples, Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.
AN605	This technique gravimetrically determines the mass of Bonded Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight. Any fibrous asbestos (FA) found in this fraction will be added to the 2-7mm fraction and its mass recorded there.

AN605	This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free/respirable fibres which are only observed by standard trace analysis as per AN602.
AN605	Bonded asbestos containing material (Bonded ACM) comprises asbestos-containing-material which is sound in condition. Fibrous asbestos (FA) comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material. Asbestos fines (AF) includes free fibres, small fibre bundles and also small fragments of bonded ACM that passes through a 7mm sieve - which implies that the bonded ACM fragments have a substantial degree of damage which increases the potential for fibre release.
AN-605	Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009 and NEPM 1999 (2013) schedule B1 section 4..

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	20

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208692 R0**
Date Received	30 Jun 2020
Date Reported	22 Jul 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.

Sample #8: Asbestos found in approx 10x6x2mm cement sheet fragments x7 in >2mm portion.
Sample #20: Approx 9-10x3mm fibre bundles x>10 found loose in sample in <2mm and >2mm portion.
Sample #22: Approx 7-8x2mm fibre bundles found loose in <2mm portion and asbestos found in approx 15x5x3mm cement sheet fragments in >2mm portion.

Asbestos analysed by Approved Identifiers Ravee Sivasubramaniam and Yusuf Kuthpudin .

SIGNATORIES

[redacted]

Senior Organic Chemist/Metals Chemis Senior Chemist Organic Section Head

[redacted]

Hygiene Team Leader Asbestos Analyst

RESULTS

Fibre Identification in soil — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE208692.001	0407_TP143_0.1 _200630	Soil	550g Sand, Soil, Plant matter	30 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208692.002	0407_TP143_0.5 _200630	Soil	752g Sand, Soil, Plant matter	30 Jun 2020	No Asbestos Found	<0.01
SE208692.005	0407_TP157_0.1 _200630	Soil	613g Sand, Soil, Rocks, Plant matter	30 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208692.007	0407_TP157_0.5 _200630	Soil	445g Sand, Soil, Rocks	30 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208692.008	0407_TP171_0.1 _200630	Soil	546g Sand, Soil, Rocks	30 Jun 2020	Amosite & Chrysotile Asbestos Found Organic Fibres Detected	<0.01
SE208692.010	0407_TP171_0.3 _200630	Soil	640g Sand, Soil	30 Jun 2020	No Asbestos Found	<0.01
SE208692.011	0407_TP172_0.1 _200630	Soil	344g Sand, Soil, Rocks, Plant matter	30 Jun 2020	No Asbestos Found Synthetic Mineral Fibres Detected Organic Fibres Detected	<0.01
SE208692.012	0407_TP172_0.3 _200630	Soil	617g Sand, Soil, Rocks	30 Jun 2020	No Asbestos Found	<0.01
SE208692.013	0407_TP173_0.1 _200630	Soil	360g Sand, Soil, Rocks, Plant matter	30 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208692.014	0407_TP173_0.5 _200630	Soil	646g Sand, Soil, Rocks	30 Jun 2020	No Asbestos Found	<0.01
SE208692.016	0407_TP174_0.1 _200630	Soil	662g Sand, Soil, Rocks	30 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208692.017	0407_TP174_0.5 _200630	Soil	625g Sand, Soil, Rocks	30 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208692.019	0407_TP259_0.1 _200630	Soil	566g Sand, Soil, Rocks	30 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208692.020	0407_TP259_0.3 _200630	Soil	640g Sand, Soil, Rocks, Plant matter	30 Jun 2020	Amosite & Chrysotile Asbestos Found Organic Fibres Detected	<0.01
SE208692.022	0407_TP260_0.1 _200630	Soil	634g Sand, Soil, Rocks, Plant matter	30 Jun 2020	Chrysotile & Crocidolite Asbestos Found Organic Fibres Detected	>0.01
SE208692.024	0407_TP260_0.5 _200630	Soil	761g Sand, Soil, Rocks, Plant matter	30 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01

RESULTS

Fibre ID in bulk materials — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE208692.006	0407_TP157_0.1 _ACM_200630	Other	35x30x6mm Cement Sheet Fragment	30 Jun 2020	Amosite, Chrysotile & Crocidolite Asbestos Detected	
SE208692.009	0407_TP171_0.1 _ACM_200630	Other	140x100x5mm Cement Sheet Fragments	30 Jun 2020	Chrysotile Asbestos Detected	
SE208692.023	0407_TP260_0.1 _ACM_200630	Other	50x40x4mm Cement Sheet Fragment	30 Jun 2020	Chrysotile Asbestos Detected	
SE208692.025	0407_TP260_0.5 _ACM_200630	Other	60x40x5mm Cement Sheet Fragments	30 Jun 2020	Amosite & Chrysotile Asbestos Detected	

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 20/7/2020

PARAMETER	UOM	LOR	0407_TP143_0.1_20(630 SOIL - 30/6/2020 SE208692.001	0407_TP143_0.5_20(630 SOIL - 30/6/2020 SE208692.002	0407_TP157_0.1_20(630 SOIL - 30/6/2020 SE208692.005	0407_TP157_0.5_20(630 SOIL - 30/6/2020 SE208692.007	0407_TP171_0.1_20(630 SOIL - 30/6/2020 SE208692.008
Total Sample Weight*	g	1	550	752	613	445	546
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	0.0455
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	0.008
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	0.008
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP171_0.3_20(630 SOIL - 30/6/2020 SE208692.010	0407_TP172_0.1_20(630 SOIL - 30/6/2020 SE208692.011	0407_TP172_0.3_20(630 SOIL - 30/6/2020 SE208692.012	0407_TP173_0.1_20(630 SOIL - 30/6/2020 SE208692.013	0407_TP173_0.5_20(630 SOIL - 30/6/2020 SE208692.014
Total Sample Weight*	g	1	640	344	617	360	646
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP174_0.1_20(630 SOIL - 30/6/2020 SE208692.016	0407_TP174_0.5_20(630 SOIL - 30/6/2020 SE208692.017	0407_TP259_0.1_20(630 SOIL - 30/6/2020 SE208692.019	0407_TP259_0.3_20(630 SOIL - 30/6/2020 SE208692.020	0407_TP260_0.1_20(630 SOIL - 30/6/2020 SE208692.022
Total Sample Weight*	g	1	662	625	566	640	634
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	0.00918	0.230
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	0.0151	0.0417
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	0.001	0.036
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	0.002	0.007
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	0.004	0.043
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP260_0.5_20(630 SOIL - 30/6/2020 SE208692.024
Total Sample Weight*	g	1	761
Bonded ACM in >7mm Sample*	g	0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001
Fibre Type*	No unit	-	-

METHOD SUMMARY

METHOD	METHODOLOGY SUMMARY
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples , Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable ’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.
AN605	This technique gravimetrically determines the mass of Bonded Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight. Any fibrous asbestos (FA) found in this fraction will be added to the 2-7mm fraction and its mass recorded there.
AN605	This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free/respirable fibres which are only observed by standard trace analysis as per AN602.
AN605	Bonded asbestos containing material (Bonded ACM) comprises asbestos-containing-material which is sound in condition. Fibrous asbestos (FA) comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material. Asbestos fines (AF) includes free fibres, small fibre bundles and also small fragments of bonded ACM that passes through a 7mm sieve - which implies that the bonded ACM fragments have a substantial degree of damage which increases the potential for fibre release.
AN-605	Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009 and NEPM 1999 (2013) schedule B1 section 4..

FOOTNOTES

Amosite	-	Brown Asbestos	NA	-	Not Analysed
Chrysotile	-	White Asbestos	LNR	-	Listed, Not Required
Crocidolite	-	Blue Asbestos	*	-	NATA accreditation does not cover the performance of this service.
Amphiboles	-	Amosite and/or Crocidolite	**	-	Indicative data, theoretical holding time exceeded.

(In reference to soil samples only) This report does not comply with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment and Remediation and Management of Asbestos Contaminated sites in Western Australia - May 2009.

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.

Where reported: 'Asbestos Detected': Asbestos detected by polarised light microscopy, including dispersion staining.
Where reported: 'No Asbestos Found': No Asbestos Found by polarised light microscopy, including dispersion staining.
Where reported: 'UMF Detected': Mineral fibres of unknown type detected by polarised light microscopy, including dispersion staining. Confirmation by another independent analytical technique may be necessary.

Even after disintegration it can be very difficult, or impossible, to detect the presence of asbestos in some asbestos-containing bulk materials using polarised light microscopy. This is due to the low grade or small length or diameter of asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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This test report shall not be reproduced, except in full.

STATEMENT OF QA/QC PERFORMANCE

SE208692 R0

CLIENT DETAILS		LABORATORY DETAILS	
Contact	[redacted]	Manager	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD	Laboratory	SGS Alexandria Environmental
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066	Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	[redacted]	Telephone	+61 2 8594 0400
Facsimile		Facsimile	+61 2 8594 0499
Email		Email	au.environmental.sydney@sgs.com
Project	**610.30041 Randwick Barracks**	SGS Reference	**SE208692 R0**
Order Number	(Not specified)	Date Received	30 Jun 2020
Samples	26	Date Reported	22 Jul 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Extraction Date	Moisture Content	21 items
	OC Pesticides in Soil	20 items
	OP Pesticides in Soil	20 items
	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	20 items
	PCBs in Soil	20 items
	Speciated Phenols in Soil	20 items
	TRH (Total Recoverable Hydrocarbons) in Soil	20 items
	VOC's in Soil	22 items
	Volatile Petroleum Hydrocarbons in Soil	21 items
Duplicate	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	2 items
Matrix Spike	VOC's in Soil	1 item

SAMPLE SUMMARY

HOLDING TIME SUMMARY

SE208692 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Fibre ID in bulk materials

Method: ME-(AU)-[ENV]AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP157_0.1_ACM_200	SE208692.006	LB204725	30 Jun 2020	30 Jun 2020	30 Jun 2021	21 Jul 2020	30 Jun 2021	21 Jul 2020
0407_TP171_0.1_ACM_200	SE208692.009	LB204725	30 Jun 2020	30 Jun 2020	30 Jun 2021	21 Jul 2020	30 Jun 2021	21 Jul 2020
0407_TP260_0.1_ACM_200	SE208692.023	LB204725	30 Jun 2020	30 Jun 2020	30 Jun 2021	21 Jul 2020	30 Jun 2021	21 Jul 2020
0407_TP260_0.5_ACM_200	SE208692.025	LB204725	30 Jun 2020	30 Jun 2020	30 Jun 2021	21 Jul 2020	30 Jun 2021	21 Jul 2020

Fibre Identification in soil

Method: ME-(AU)-[ENV]AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP143_0.1_200630	SE208692.001	LB204666	30 Jun 2020	30 Jun 2020	30 Jun 2021	20 Jul 2020	30 Jun 2021	21 Jul 2020
0407_TP143_0.5_200630	SE208692.002	LB204666	30 Jun 2020	30 Jun 2020	30 Jun 2021	20 Jul 2020	30 Jun 2021	21 Jul 2020
0407_TP157_0.1_200630	SE208692.005	LB204666	30 Jun 2020	30 Jun 2020	30 Jun 2021	20 Jul 2020	30 Jun 2021	21 Jul 2020
0407_TP157_0.5_200630	SE208692.007	LB204666	30 Jun 2020	30 Jun 2020	30 Jun 2021	20 Jul 2020	30 Jun 2021	21 Jul 2020
0407_TP171_0.1_200630	SE208692.008	LB204666	30 Jun 2020	30 Jun 2020	30 Jun 2021	20 Jul 2020	30 Jun 2021	21 Jul 2020
0407_TP171_0.3_200630	SE208692.010	LB204666	30 Jun 2020	30 Jun 2020	30 Jun 2021	20 Jul 2020	30 Jun 2021	21 Jul 2020
0407_TP172_0.1_200630	SE208692.011	LB204666	30 Jun 2020	30 Jun 2020	30 Jun 2021	20 Jul 2020	30 Jun 2021	21 Jul 2020
0407_TP172_0.3_200630	SE208692.012	LB204666	30 Jun 2020	30 Jun 2020	30 Jun 2021	20 Jul 2020	30 Jun 2021	21 Jul 2020
0407_TP173_0.1_200630	SE208692.013	LB204666	30 Jun 2020	30 Jun 2020	30 Jun 2021	20 Jul 2020	30 Jun 2021	21 Jul 2020
0407_TP173_0.5_200630	SE208692.014	LB204666	30 Jun 2020	30 Jun 2020	30 Jun 2021	20 Jul 2020	30 Jun 2021	21 Jul 2020
0407_TP174_0.1_200630	SE208692.016	LB204666	30 Jun 2020	30 Jun 2020	30 Jun 2021	20 Jul 2020	30 Jun 2021	21 Jul 2020
0407_TP174_0.5_200630	SE208692.017	LB204666	30 Jun 2020	30 Jun 2020	30 Jun 2021	20 Jul 2020	30 Jun 2021	21 Jul 2020
0407_TP259_0.1_200630	SE208692.019	LB204666	30 Jun 2020	30 Jun 2020	30 Jun 2021	20 Jul 2020	30 Jun 2021	21 Jul 2020
0407_TP259_0.3_200630	SE208692.020	LB204666	30 Jun 2020	30 Jun 2020	30 Jun 2021	20 Jul 2020	30 Jun 2021	21 Jul 2020
0407_TP260_0.1_200630	SE208692.022	LB204666	30 Jun 2020	30 Jun 2020	30 Jun 2021	20 Jul 2020	30 Jun 2021	21 Jul 2020
0407_TP260_0.5_200630	SE208692.024	LB204666	30 Jun 2020	30 Jun 2020	30 Jun 2021	20 Jul 2020	30 Jun 2021	21 Jul 2020

Gravimetric Determination of Asbestos in Soil

Method: ME-(AU)-[ENV]AN605

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP143_0.1_200630	SE208692.001	LB204666	30 Jun 2020	30 Jun 2020	27 Dec 2020	20 Jul 2020	27 Dec 2020	21 Jul 2020
0407_TP143_0.5_200630	SE208692.002	LB204666	30 Jun 2020	30 Jun 2020	27 Dec 2020	20 Jul 2020	27 Dec 2020	21 Jul 2020
0407_TP157_0.1_200630	SE208692.005	LB204666	30 Jun 2020	30 Jun 2020	27 Dec 2020	20 Jul 2020	27 Dec 2020	21 Jul 2020
0407_TP157_0.5_200630	SE208692.007	LB204666	30 Jun 2020	30 Jun 2020	27 Dec 2020	20 Jul 2020	27 Dec 2020	21 Jul 2020
0407_TP171_0.1_200630	SE208692.008	LB204666	30 Jun 2020	30 Jun 2020	27 Dec 2020	20 Jul 2020	27 Dec 2020	21 Jul 2020
0407_TP171_0.3_200630	SE208692.010	LB204666	30 Jun 2020	30 Jun 2020	27 Dec 2020	20 Jul 2020	27 Dec 2020	21 Jul 2020
0407_TP172_0.1_200630	SE208692.011	LB204666	30 Jun 2020	30 Jun 2020	27 Dec 2020	20 Jul 2020	27 Dec 2020	21 Jul 2020
0407_TP172_0.3_200630	SE208692.012	LB204666	30 Jun 2020	30 Jun 2020	27 Dec 2020	20 Jul 2020	27 Dec 2020	21 Jul 2020
0407_TP173_0.1_200630	SE208692.013	LB204666	30 Jun 2020	30 Jun 2020	27 Dec 2020	20 Jul 2020	27 Dec 2020	21 Jul 2020
0407_TP173_0.5_200630	SE208692.014	LB204666	30 Jun 2020	30 Jun 2020	27 Dec 2020	20 Jul 2020	27 Dec 2020	21 Jul 2020
0407_TP174_0.1_200630	SE208692.016	LB204666	30 Jun 2020	30 Jun 2020	27 Dec 2020	20 Jul 2020	27 Dec 2020	21 Jul 2020
0407_TP174_0.5_200630	SE208692.017	LB204666	30 Jun 2020	30 Jun 2020	27 Dec 2020	20 Jul 2020	27 Dec 2020	21 Jul 2020
0407_TP259_0.1_200630	SE208692.019	LB204666	30 Jun 2020	30 Jun 2020	27 Dec 2020	20 Jul 2020	27 Dec 2020	21 Jul 2020
0407_TP259_0.3_200630	SE208692.020	LB204666	30 Jun 2020	30 Jun 2020	27 Dec 2020	20 Jul 2020	27 Dec 2020	21 Jul 2020
0407_TP260_0.1_200630	SE208692.022	LB204666	30 Jun 2020	30 Jun 2020	27 Dec 2020	20 Jul 2020	27 Dec 2020	21 Jul 2020
0407_TP260_0.5_200630	SE208692.024	LB204666	30 Jun 2020	30 Jun 2020	27 Dec 2020	20 Jul 2020	27 Dec 2020	21 Jul 2020

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP143_0.1_200630	SE208692.001	LB204503	30 Jun 2020	30 Jun 2020	28 Jul 2020	16 Jul 2020	28 Jul 2020	21 Jul 2020
0407_TP143_0.5_200630	SE208692.002	LB204503	30 Jun 2020	30 Jun 2020	28 Jul 2020	16 Jul 2020	28 Jul 2020	21 Jul 2020
0407_TP157_0.1_200630	SE208692.005	LB204503	30 Jun 2020	30 Jun 2020	28 Jul 2020	16 Jul 2020	28 Jul 2020	21 Jul 2020
0407_TP157_0.5_200630	SE208692.007	LB204503	30 Jun 2020	30 Jun 2020	28 Jul 2020	16 Jul 2020	28 Jul 2020	21 Jul 2020
0407_TP171_0.1_200630	SE208692.008	LB204503	30 Jun 2020	30 Jun 2020	28 Jul 2020	16 Jul 2020	28 Jul 2020	21 Jul 2020
0407_TP171_0.3_200630	SE208692.010	LB204503	30 Jun 2020	30 Jun 2020	28 Jul 2020	16 Jul 2020	28 Jul 2020	21 Jul 2020
0407_TP172_0.1_200630	SE208692.011	LB204503	30 Jun 2020	30 Jun 2020	28 Jul 2020	16 Jul 2020	28 Jul 2020	21 Jul 2020
0407_TP172_0.3_200630	SE208692.012	LB204503	30 Jun 2020	30 Jun 2020	28 Jul 2020	16 Jul 2020	28 Jul 2020	21 Jul 2020
0407_TP173_0.1_200630	SE208692.013	LB204503	30 Jun 2020	30 Jun 2020	28 Jul 2020	16 Jul 2020	28 Jul 2020	21 Jul 2020
0407_TP173_0.5_200630	SE208692.014	LB204503	30 Jun 2020	30 Jun 2020	28 Jul 2020	16 Jul 2020	28 Jul 2020	21 Jul 2020
0407_QC181_200630	SE208692.015	LB204503	30 Jun 2020	30 Jun 2020	28 Jul 2020	16 Jul 2020	28 Jul 2020	21 Jul 2020
0407_TP174_0.1_200630	SE208692.016	LB204503	30 Jun 2020	30 Jun 2020	28 Jul 2020	16 Jul 2020	28 Jul 2020	21 Jul 2020
0407_TP174_0.5_200630	SE208692.017	LB204503	30 Jun 2020	30 Jun 2020	28 Jul 2020	16 Jul 2020	28 Jul 2020	21 Jul 2020
0407_QC180_200630	SE208692.018	LB204503	30 Jun 2020	30 Jun 2020	28 Jul 2020	16 Jul 2020	28 Jul 2020	21 Jul 2020
0407_TP259_0.1_200630	SE208692.019	LB204503	30 Jun 2020	30 Jun 2020	28 Jul 2020	16 Jul 2020	28 Jul 2020	21 Jul 2020
0407_TP259_0.3_200630	SE208692.020	LB204503	30 Jun 2020	30 Jun 2020	28 Jul 2020	16 Jul 2020	28 Jul 2020	21 Jul 2020

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Mercury in Soil (continued)

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC184_200630	SE208692.021	LB204503	30 Jun 2020	30 Jun 2020	28 Jul 2020	16 Jul 2020	28 Jul 2020	21 Jul 2020
0407_TP260_0.1_200630	SE208692.022	LB204503	30 Jun 2020	30 Jun 2020	28 Jul 2020	16 Jul 2020	28 Jul 2020	21 Jul 2020
0407_TP260_0.5_200630	SE208692.024	LB204503	30 Jun 2020	30 Jun 2020	28 Jul 2020	16 Jul 2020	28 Jul 2020	21 Jul 2020
0407_QC183_200630	SE208692.026	LB204503	30 Jun 2020	30 Jun 2020	28 Jul 2020	16 Jul 2020	28 Jul 2020	21 Jul 2020

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP143_0.1_200630	SE208692.001	LB204489	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	21 Jul 2020	20 Jul 2020
0407_TP143_0.5_200630	SE208692.002	LB204489	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	21 Jul 2020	20 Jul 2020
0407_QC415_200629	SE208692.003	LB204489	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	21 Jul 2020	20 Jul 2020
0407_TP157_0.1_200630	SE208692.005	LB204489	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	21 Jul 2020	20 Jul 2020
0407_TP157_0.5_200630	SE208692.007	LB204489	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	21 Jul 2020	20 Jul 2020
0407_TP171_0.1_200630	SE208692.008	LB204490	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	21 Jul 2020	20 Jul 2020
0407_TP171_0.3_200630	SE208692.010	LB204490	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	21 Jul 2020	20 Jul 2020
0407_TP172_0.1_200630	SE208692.011	LB204490	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	21 Jul 2020	20 Jul 2020
0407_TP172_0.3_200630	SE208692.012	LB204490	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	21 Jul 2020	20 Jul 2020
0407_TP173_0.1_200630	SE208692.013	LB204490	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	21 Jul 2020	20 Jul 2020
0407_TP173_0.5_200630	SE208692.014	LB204490	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	21 Jul 2020	20 Jul 2020
0407_QC181_200630	SE208692.015	LB204490	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	21 Jul 2020	20 Jul 2020
0407_TP174_0.1_200630	SE208692.016	LB204490	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	21 Jul 2020	20 Jul 2020
0407_TP174_0.5_200630	SE208692.017	LB204490	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	21 Jul 2020	20 Jul 2020
0407_QC180_200630	SE208692.018	LB204490	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	21 Jul 2020	20 Jul 2020
0407_TP259_0.1_200630	SE208692.019	LB204490	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	21 Jul 2020	20 Jul 2020
0407_TP259_0.3_200630	SE208692.020	LB204490	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	21 Jul 2020	20 Jul 2020
0407_QC184_200630	SE208692.021	LB204490	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	21 Jul 2020	20 Jul 2020
0407_TP260_0.1_200630	SE208692.022	LB204490	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	21 Jul 2020	20 Jul 2020
0407_TP260_0.5_200630	SE208692.024	LB204490	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	21 Jul 2020	20 Jul 2020
0407_QC183_200630	SE208692.026	LB204490	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	21 Jul 2020	20 Jul 2020

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP143_0.1_200630	SE208692.001	LB204484	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP143_0.5_200630	SE208692.002	LB204484	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP157_0.1_200630	SE208692.005	LB204484	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP157_0.5_200630	SE208692.007	LB204484	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP171_0.1_200630	SE208692.008	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP171_0.3_200630	SE208692.010	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP172_0.1_200630	SE208692.011	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP172_0.3_200630	SE208692.012	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP173_0.1_200630	SE208692.013	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP173_0.5_200630	SE208692.014	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_QC181_200630	SE208692.015	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP174_0.1_200630	SE208692.016	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP174_0.5_200630	SE208692.017	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_QC180_200630	SE208692.018	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP259_0.1_200630	SE208692.019	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP259_0.3_200630	SE208692.020	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_QC184_200630	SE208692.021	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP260_0.1_200630	SE208692.022	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP260_0.5_200630	SE208692.024	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_QC183_200630	SE208692.026	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP143_0.1_200630	SE208692.001	LB204484	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_TP143_0.5_200630	SE208692.002	LB204484	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_TP157_0.1_200630	SE208692.005	LB204484	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_TP157_0.5_200630	SE208692.007	LB204484	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_TP171_0.1_200630	SE208692.008	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP171_0.3_200630	SE208692.010	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP172_0.1_200630	SE208692.011	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020

HOLDING TIME SUMMARY

SE208692 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP172_0.3_200630	SE208692.012	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP173_0.1_200630	SE208692.013	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP173_0.5_200630	SE208692.014	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_QC181_200630	SE208692.015	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP174_0.1_200630	SE208692.016	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP174_0.5_200630	SE208692.017	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_QC180_200630	SE208692.018	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP259_0.1_200630	SE208692.019	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP259_0.3_200630	SE208692.020	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_QC184_200630	SE208692.021	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP260_0.1_200630	SE208692.022	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP260_0.5_200630	SE208692.024	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_QC183_200630	SE208692.026	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP143_0.1_200630	SE208692.001	LB204484	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_TP143_0.5_200630	SE208692.002	LB204484	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_TP157_0.1_200630	SE208692.005	LB204484	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_TP157_0.5_200630	SE208692.007	LB204484	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_TP171_0.1_200630	SE208692.008	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP171_0.3_200630	SE208692.010	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP172_0.1_200630	SE208692.011	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP172_0.3_200630	SE208692.012	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP173_0.1_200630	SE208692.013	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP173_0.5_200630	SE208692.014	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_QC181_200630	SE208692.015	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP174_0.1_200630	SE208692.016	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP174_0.5_200630	SE208692.017	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_QC180_200630	SE208692.018	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP259_0.1_200630	SE208692.019	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP259_0.3_200630	SE208692.020	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_QC184_200630	SE208692.021	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP260_0.1_200630	SE208692.022	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP260_0.5_200630	SE208692.024	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_QC183_200630	SE208692.026	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP143_0.1_200630	SE208692.001	LB204484	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP143_0.5_200630	SE208692.002	LB204484	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP157_0.1_200630	SE208692.005	LB204484	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP157_0.5_200630	SE208692.007	LB204484	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP171_0.1_200630	SE208692.008	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP171_0.3_200630	SE208692.010	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP172_0.1_200630	SE208692.011	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP172_0.3_200630	SE208692.012	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP173_0.1_200630	SE208692.013	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP173_0.5_200630	SE208692.014	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_QC181_200630	SE208692.015	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP174_0.1_200630	SE208692.016	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP174_0.5_200630	SE208692.017	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_QC180_200630	SE208692.018	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP259_0.1_200630	SE208692.019	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP259_0.3_200630	SE208692.020	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_QC184_200630	SE208692.021	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP260_0.1_200630	SE208692.022	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP260_0.5_200630	SE208692.024	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_QC183_200630	SE208692.026	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020

HOLDING TIME SUMMARY

SE208692 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP143_0.1_200630	SE208692.001	LB204484	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP143_0.5_200630	SE208692.002	LB204484	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP157_0.1_200630	SE208692.005	LB204484	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP157_0.5_200630	SE208692.007	LB204484	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP171_0.1_200630	SE208692.008	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP171_0.3_200630	SE208692.010	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP172_0.1_200630	SE208692.011	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP172_0.3_200630	SE208692.012	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP173_0.1_200630	SE208692.013	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP173_0.5_200630	SE208692.014	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_QC181_200630	SE208692.015	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP174_0.1_200630	SE208692.016	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP174_0.5_200630	SE208692.017	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_QC180_200630	SE208692.018	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP259_0.1_200630	SE208692.019	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP259_0.3_200630	SE208692.020	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_QC184_200630	SE208692.021	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP260_0.1_200630	SE208692.022	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP260_0.5_200630	SE208692.024	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_QC183_200630	SE208692.026	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP143_0.1_200630	SE208692.001	LB204497	30 Jun 2020	30 Jun 2020	27 Dec 2020	16 Jul 2020	27 Dec 2020	20 Jul 2020
0407_TP143_0.5_200630	SE208692.002	LB204497	30 Jun 2020	30 Jun 2020	27 Dec 2020	16 Jul 2020	27 Dec 2020	20 Jul 2020
0407_TP157_0.1_200630	SE208692.005	LB204497	30 Jun 2020	30 Jun 2020	27 Dec 2020	16 Jul 2020	27 Dec 2020	20 Jul 2020
0407_TP157_0.5_200630	SE208692.007	LB204497	30 Jun 2020	30 Jun 2020	27 Dec 2020	16 Jul 2020	27 Dec 2020	20 Jul 2020
0407_TP171_0.1_200630	SE208692.008	LB204497	30 Jun 2020	30 Jun 2020	27 Dec 2020	16 Jul 2020	27 Dec 2020	20 Jul 2020
0407_TP171_0.3_200630	SE208692.010	LB204497	30 Jun 2020	30 Jun 2020	27 Dec 2020	16 Jul 2020	27 Dec 2020	20 Jul 2020
0407_TP172_0.1_200630	SE208692.011	LB204497	30 Jun 2020	30 Jun 2020	27 Dec 2020	16 Jul 2020	27 Dec 2020	20 Jul 2020
0407_TP172_0.3_200630	SE208692.012	LB204497	30 Jun 2020	30 Jun 2020	27 Dec 2020	16 Jul 2020	27 Dec 2020	20 Jul 2020
0407_TP173_0.1_200630	SE208692.013	LB204497	30 Jun 2020	30 Jun 2020	27 Dec 2020	16 Jul 2020	27 Dec 2020	20 Jul 2020
0407_TP173_0.5_200630	SE208692.014	LB204497	30 Jun 2020	30 Jun 2020	27 Dec 2020	16 Jul 2020	27 Dec 2020	20 Jul 2020
0407_QC181_200630	SE208692.015	LB204497	30 Jun 2020	30 Jun 2020	27 Dec 2020	16 Jul 2020	27 Dec 2020	20 Jul 2020
0407_TP174_0.1_200630	SE208692.016	LB204497	30 Jun 2020	30 Jun 2020	27 Dec 2020	16 Jul 2020	27 Dec 2020	20 Jul 2020
0407_TP174_0.5_200630	SE208692.017	LB204497	30 Jun 2020	30 Jun 2020	27 Dec 2020	16 Jul 2020	27 Dec 2020	20 Jul 2020
0407_QC180_200630	SE208692.018	LB204497	30 Jun 2020	30 Jun 2020	27 Dec 2020	16 Jul 2020	27 Dec 2020	20 Jul 2020
0407_TP259_0.1_200630	SE208692.019	LB204497	30 Jun 2020	30 Jun 2020	27 Dec 2020	16 Jul 2020	27 Dec 2020	20 Jul 2020
0407_TP259_0.3_200630	SE208692.020	LB204497	30 Jun 2020	30 Jun 2020	27 Dec 2020	16 Jul 2020	27 Dec 2020	20 Jul 2020
0407_QC184_200630	SE208692.021	LB204497	30 Jun 2020	30 Jun 2020	27 Dec 2020	16 Jul 2020	27 Dec 2020	20 Jul 2020
0407_TP260_0.1_200630	SE208692.022	LB204497	30 Jun 2020	30 Jun 2020	27 Dec 2020	16 Jul 2020	27 Dec 2020	20 Jul 2020
0407_TP260_0.5_200630	SE208692.024	LB204497	30 Jun 2020	30 Jun 2020	27 Dec 2020	16 Jul 2020	27 Dec 2020	20 Jul 2020
0407_QC183_200630	SE208692.026	LB204497	30 Jun 2020	30 Jun 2020	27 Dec 2020	16 Jul 2020	27 Dec 2020	20 Jul 2020

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP143_0.1_200630	SE208692.001	LB204484	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_TP143_0.5_200630	SE208692.002	LB204484	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_TP157_0.1_200630	SE208692.005	LB204484	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_TP157_0.5_200630	SE208692.007	LB204484	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_TP171_0.1_200630	SE208692.008	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP171_0.3_200630	SE208692.010	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP172_0.1_200630	SE208692.011	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP172_0.3_200630	SE208692.012	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP173_0.1_200630	SE208692.013	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP173_0.5_200630	SE208692.014	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_QC181_200630	SE208692.015	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP174_0.1_200630	SE208692.016	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP174_0.5_200630	SE208692.017	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_QC180_200630	SE208692.018	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP259_0.1_200630	SE208692.019	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP259_0.3_200630	SE208692.020	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_QC184_200630	SE208692.021	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP260_0.1_200630	SE208692.022	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP260_0.5_200630	SE208692.024	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_QC183_200630	SE208692.026	LB204485	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP143_0.1_200630	SE208692.001	LB204479	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_TP143_0.5_200630	SE208692.002	LB204479	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_QC415_200629	SE208692.003	LB204479	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_QC515_200629	SE208692.004	LB204479	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_TP157_0.1_200630	SE208692.005	LB204479	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_TP157_0.5_200630	SE208692.007	LB204479	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_TP171_0.1_200630	SE208692.008	LB204480	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP171_0.3_200630	SE208692.010	LB204480	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP172_0.1_200630	SE208692.011	LB204480	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP172_0.3_200630	SE208692.012	LB204480	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP173_0.1_200630	SE208692.013	LB204480	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP173_0.5_200630	SE208692.014	LB204480	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_QC181_200630	SE208692.015	LB204480	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP174_0.1_200630	SE208692.016	LB204480	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP174_0.5_200630	SE208692.017	LB204480	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_QC180_200630	SE208692.018	LB204480	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP259_0.1_200630	SE208692.019	LB204480	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP259_0.3_200630	SE208692.020	LB204480	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_QC184_200630	SE208692.021	LB204480	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP260_0.1_200630	SE208692.022	LB204480	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP260_0.5_200630	SE208692.024	LB204480	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_QC183_200630	SE208692.026	LB204480	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP143_0.1_200630	SE208692.001	LB204479	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_TP143_0.5_200630	SE208692.002	LB204479	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_QC415_200629	SE208692.003	LB204479	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_QC515_200629	SE208692.004	LB204479	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	22 Jul 2020
0407_TP157_0.1_200630	SE208692.005	LB204479	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_TP157_0.5_200630	SE208692.007	LB204479	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	20 Jul 2020
0407_TP171_0.1_200630	SE208692.008	LB204480	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP171_0.3_200630	SE208692.010	LB204480	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP172_0.1_200630	SE208692.011	LB204480	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP172_0.3_200630	SE208692.012	LB204480	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP173_0.1_200630	SE208692.013	LB204480	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP173_0.5_200630	SE208692.014	LB204480	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_QC181_200630	SE208692.015	LB204480	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP174_0.1_200630	SE208692.016	LB204480	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP174_0.5_200630	SE208692.017	LB204480	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_QC180_200630	SE208692.018	LB204480	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP259_0.1_200630	SE208692.019	LB204480	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP259_0.3_200630	SE208692.020	LB204480	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_QC184_200630	SE208692.021	LB204480	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP260_0.1_200630	SE208692.022	LB204480	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_TP260_0.5_200630	SE208692.024	LB204480	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020
0407_QC183_200630	SE208692.026	LB204480	30 Jun 2020	30 Jun 2020	14 Jul 2020	16 Jul 2020†	25 Aug 2020	21 Jul 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP143_0.1_200630	SE208692.001	%	60 - 130%	94
	0407_TP143_0.5_200630	SE208692.002	%	60 - 130%	95
	0407_TP157_0.1_200630	SE208692.005	%	60 - 130%	97
	0407_TP157_0.5_200630	SE208692.007	%	60 - 130%	99
	0407_TP171_0.1_200630	SE208692.008	%	60 - 130%	104
	0407_TP171_0.3_200630	SE208692.010	%	60 - 130%	97
	0407_TP172_0.1_200630	SE208692.011	%	60 - 130%	109
	0407_TP172_0.3_200630	SE208692.012	%	60 - 130%	100
	0407_TP173_0.1_200630	SE208692.013	%	60 - 130%	115
	0407_TP173_0.5_200630	SE208692.014	%	60 - 130%	106
	0407_QC181_200630	SE208692.015	%	60 - 130%	99
	0407_TP174_0.1_200630	SE208692.016	%	60 - 130%	99
	0407_TP174_0.5_200630	SE208692.017	%	60 - 130%	106
	0407_QC180_200630	SE208692.018	%	60 - 130%	105
	0407_TP259_0.1_200630	SE208692.019	%	60 - 130%	100
	0407_TP259_0.3_200630	SE208692.020	%	60 - 130%	103
	0407_QC184_200630	SE208692.021	%	60 - 130%	99
	0407_TP260_0.1_200630	SE208692.022	%	60 - 130%	103
	0407_TP260_0.5_200630	SE208692.024	%	60 - 130%	109
	0407_QC183_200630	SE208692.026	%	60 - 130%	100

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP143_0.1_200630	SE208692.001	%	60 - 130%	91
	0407_TP143_0.5_200630	SE208692.002	%	60 - 130%	92
	0407_TP157_0.1_200630	SE208692.005	%	60 - 130%	93
	0407_TP157_0.5_200630	SE208692.007	%	60 - 130%	76
	0407_TP171_0.1_200630	SE208692.008	%	60 - 130%	91
	0407_TP171_0.3_200630	SE208692.010	%	60 - 130%	88
	0407_TP172_0.1_200630	SE208692.011	%	60 - 130%	76
	0407_TP172_0.3_200630	SE208692.012	%	60 - 130%	81
	0407_TP173_0.1_200630	SE208692.013	%	60 - 130%	96
	0407_TP173_0.5_200630	SE208692.014	%	60 - 130%	87
	0407_QC181_200630	SE208692.015	%	60 - 130%	84
	0407_TP174_0.1_200630	SE208692.016	%	60 - 130%	91
	0407_TP174_0.5_200630	SE208692.017	%	60 - 130%	100
	0407_QC180_200630	SE208692.018	%	60 - 130%	82
	0407_TP259_0.1_200630	SE208692.019	%	60 - 130%	76
	0407_TP259_0.3_200630	SE208692.020	%	60 - 130%	72
	0407_QC184_200630	SE208692.021	%	60 - 130%	87
	0407_TP260_0.1_200630	SE208692.022	%	60 - 130%	79
	0407_TP260_0.5_200630	SE208692.024	%	60 - 130%	80
	0407_QC183_200630	SE208692.026	%	60 - 130%	82
d14-p-terphenyl (Surrogate)	0407_TP143_0.1_200630	SE208692.001	%	60 - 130%	86
	0407_TP143_0.5_200630	SE208692.002	%	60 - 130%	90
	0407_TP157_0.1_200630	SE208692.005	%	60 - 130%	89
	0407_TP157_0.5_200630	SE208692.007	%	60 - 130%	77
	0407_TP171_0.1_200630	SE208692.008	%	60 - 130%	87
	0407_TP171_0.3_200630	SE208692.010	%	60 - 130%	88
	0407_TP172_0.1_200630	SE208692.011	%	60 - 130%	81
	0407_TP172_0.3_200630	SE208692.012	%	60 - 130%	100
	0407_TP173_0.1_200630	SE208692.013	%	60 - 130%	87
	0407_TP173_0.5_200630	SE208692.014	%	60 - 130%	87
	0407_QC181_200630	SE208692.015	%	60 - 130%	84
	0407_TP174_0.1_200630	SE208692.016	%	60 - 130%	87
	0407_TP174_0.5_200630	SE208692.017	%	60 - 130%	93
	0407_QC180_200630	SE208692.018	%	60 - 130%	89
	0407_TP259_0.1_200630	SE208692.019	%	60 - 130%	87
	0407_TP259_0.3_200630	SE208692.020	%	60 - 130%	87
	0407_QC184_200630	SE208692.021	%	60 - 130%	81
	0407_TP260_0.1_200630	SE208692.022	%	60 - 130%	94

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d14-p-terphenyl (Surrogate)	0407_TP260_0.5_200630	SE208692.024	%	60 - 130%	89
	0407_QC183_200630	SE208692.026	%	60 - 130%	86

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP143_0.1_200630	SE208692.001	%	70 - 130%	91
	0407_TP143_0.5_200630	SE208692.002	%	70 - 130%	92
	0407_TP157_0.1_200630	SE208692.005	%	70 - 130%	93
	0407_TP157_0.5_200630	SE208692.007	%	70 - 130%	76
	0407_TP171_0.1_200630	SE208692.008	%	70 - 130%	91
	0407_TP171_0.3_200630	SE208692.010	%	70 - 130%	88
	0407_TP172_0.1_200630	SE208692.011	%	70 - 130%	76
	0407_TP172_0.3_200630	SE208692.012	%	70 - 130%	81
	0407_TP173_0.1_200630	SE208692.013	%	70 - 130%	96
	0407_TP173_0.5_200630	SE208692.014	%	70 - 130%	87
	0407_QC181_200630	SE208692.015	%	70 - 130%	84
	0407_TP174_0.1_200630	SE208692.016	%	70 - 130%	91
	0407_TP174_0.5_200630	SE208692.017	%	70 - 130%	100
	0407_QC180_200630	SE208692.018	%	70 - 130%	82
	0407_TP259_0.1_200630	SE208692.019	%	70 - 130%	76
	0407_TP259_0.3_200630	SE208692.020	%	70 - 130%	72
	0407_QC184_200630	SE208692.021	%	70 - 130%	87
	0407_TP260_0.1_200630	SE208692.022	%	70 - 130%	79
	0407_TP260_0.5_200630	SE208692.024	%	70 - 130%	80
	0407_QC183_200630	SE208692.026	%	70 - 130%	82
d14-p-terphenyl (Surrogate)	0407_TP143_0.1_200630	SE208692.001	%	70 - 130%	86
	0407_TP143_0.5_200630	SE208692.002	%	70 - 130%	90
	0407_TP157_0.1_200630	SE208692.005	%	70 - 130%	89
	0407_TP157_0.5_200630	SE208692.007	%	70 - 130%	77
	0407_TP171_0.1_200630	SE208692.008	%	70 - 130%	87
	0407_TP171_0.3_200630	SE208692.010	%	70 - 130%	88
	0407_TP172_0.1_200630	SE208692.011	%	70 - 130%	81
	0407_TP172_0.3_200630	SE208692.012	%	70 - 130%	100
	0407_TP173_0.1_200630	SE208692.013	%	70 - 130%	87
	0407_TP173_0.5_200630	SE208692.014	%	70 - 130%	87
	0407_QC181_200630	SE208692.015	%	70 - 130%	84
	0407_TP174_0.1_200630	SE208692.016	%	70 - 130%	87
	0407_TP174_0.5_200630	SE208692.017	%	70 - 130%	93
	0407_QC180_200630	SE208692.018	%	70 - 130%	89
	0407_TP259_0.1_200630	SE208692.019	%	70 - 130%	87
	0407_TP259_0.3_200630	SE208692.020	%	70 - 130%	87
	0407_QC184_200630	SE208692.021	%	70 - 130%	81
	0407_TP260_0.1_200630	SE208692.022	%	70 - 130%	94
	0407_TP260_0.5_200630	SE208692.024	%	70 - 130%	89
	0407_QC183_200630	SE208692.026	%	70 - 130%	86
d5-nitrobenzene (Surrogate)	0407_TP143_0.1_200630	SE208692.001	%	70 - 130%	124
	0407_TP143_0.5_200630	SE208692.002	%	70 - 130%	128
	0407_TP157_0.1_200630	SE208692.005	%	70 - 130%	125
	0407_TP157_0.5_200630	SE208692.007	%	70 - 130%	100
	0407_TP171_0.1_200630	SE208692.008	%	70 - 130%	77
	0407_TP171_0.3_200630	SE208692.010	%	70 - 130%	83
	0407_TP172_0.1_200630	SE208692.011	%	70 - 130%	80
	0407_TP172_0.3_200630	SE208692.012	%	70 - 130%	84
	0407_TP173_0.1_200630	SE208692.013	%	70 - 130%	85
	0407_TP173_0.5_200630	SE208692.014	%	70 - 130%	89
	0407_QC181_200630	SE208692.015	%	70 - 130%	81
	0407_TP174_0.1_200630	SE208692.016	%	70 - 130%	83
	0407_TP174_0.5_200630	SE208692.017	%	70 - 130%	93
	0407_QC180_200630	SE208692.018	%	70 - 130%	81
	0407_TP259_0.1_200630	SE208692.019	%	70 - 130%	81
	0407_TP259_0.3_200630	SE208692.020	%	70 - 130%	82

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d5-nitrobenzene (Surrogate)	0407_QC184_200630	SE208692.021	%	70 - 130%	77
	0407_TP260_0.1_200630	SE208692.022	%	70 - 130%	89
	0407_TP260_0.5_200630	SE208692.024	%	70 - 130%	84
	0407_QC183_200630	SE208692.026	%	70 - 130%	84

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP143_0.1_200630	SE208692.001	%	60 - 130%	94
	0407_TP143_0.5_200630	SE208692.002	%	60 - 130%	95
	0407_TP157_0.1_200630	SE208692.005	%	60 - 130%	97
	0407_TP157_0.5_200630	SE208692.007	%	60 - 130%	99
	0407_TP171_0.1_200630	SE208692.008	%	60 - 130%	104
	0407_TP171_0.3_200630	SE208692.010	%	60 - 130%	97
	0407_TP172_0.1_200630	SE208692.011	%	60 - 130%	109
	0407_TP172_0.3_200630	SE208692.012	%	60 - 130%	100
	0407_TP173_0.1_200630	SE208692.013	%	60 - 130%	115
	0407_TP173_0.5_200630	SE208692.014	%	60 - 130%	106
	0407_QC181_200630	SE208692.015	%	60 - 130%	99
	0407_TP174_0.1_200630	SE208692.016	%	60 - 130%	99
	0407_TP174_0.5_200630	SE208692.017	%	60 - 130%	106
	0407_QC180_200630	SE208692.018	%	60 - 130%	105
	0407_TP259_0.1_200630	SE208692.019	%	60 - 130%	100
	0407_TP259_0.3_200630	SE208692.020	%	60 - 130%	103
	0407_QC184_200630	SE208692.021	%	60 - 130%	99
	0407_TP260_0.1_200630	SE208692.022	%	60 - 130%	103
	0407_TP260_0.5_200630	SE208692.024	%	60 - 130%	109
	0407_QC183_200630	SE208692.026	%	60 - 130%	100

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	0407_TP143_0.1_200630	SE208692.001	%	70 - 130%	75
	0407_TP143_0.5_200630	SE208692.002	%	70 - 130%	74
	0407_TP157_0.1_200630	SE208692.005	%	70 - 130%	75
	0407_TP157_0.5_200630	SE208692.007	%	70 - 130%	77
	0407_TP171_0.1_200630	SE208692.008	%	70 - 130%	77
	0407_TP171_0.3_200630	SE208692.010	%	70 - 130%	75
	0407_TP172_0.1_200630	SE208692.011	%	70 - 130%	82
	0407_TP172_0.3_200630	SE208692.012	%	70 - 130%	75
	0407_TP173_0.1_200630	SE208692.013	%	70 - 130%	85
	0407_TP173_0.5_200630	SE208692.014	%	70 - 130%	78
	0407_QC181_200630	SE208692.015	%	70 - 130%	78
	0407_TP174_0.1_200630	SE208692.016	%	70 - 130%	77
	0407_TP174_0.5_200630	SE208692.017	%	70 - 130%	75
	0407_QC180_200630	SE208692.018	%	70 - 130%	78
	0407_TP259_0.1_200630	SE208692.019	%	70 - 130%	78
	0407_TP259_0.3_200630	SE208692.020	%	70 - 130%	81
	0407_QC184_200630	SE208692.021	%	70 - 130%	75
	0407_TP260_0.1_200630	SE208692.022	%	70 - 130%	81
	0407_TP260_0.5_200630	SE208692.024	%	70 - 130%	82
	0407_QC183_200630	SE208692.026	%	70 - 130%	82
d5-phenol (Surrogate)	0407_TP143_0.1_200630	SE208692.001	%	50 - 130%	77
	0407_TP143_0.5_200630	SE208692.002	%	50 - 130%	77
	0407_TP157_0.1_200630	SE208692.005	%	50 - 130%	71
	0407_TP157_0.5_200630	SE208692.007	%	50 - 130%	72
	0407_TP171_0.1_200630	SE208692.008	%	50 - 130%	81
	0407_TP171_0.3_200630	SE208692.010	%	50 - 130%	79
	0407_TP172_0.1_200630	SE208692.011	%	50 - 130%	80
	0407_TP172_0.3_200630	SE208692.012	%	50 - 130%	81
	0407_TP173_0.1_200630	SE208692.013	%	50 - 130%	77
	0407_TP173_0.5_200630	SE208692.014	%	50 - 130%	79
	0407_QC181_200630	SE208692.015	%	50 - 130%	78
	0407_TP174_0.1_200630	SE208692.016	%	50 - 130%	76

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil (continued) — **Method: ME-(AU)-[ENV]AN420**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d5-phenol (Surrogate)	0407_TP174_0.5_200630	SE208692.017	%	50 - 130%	78
	0407_QC180_200630	SE208692.018	%	50 - 130%	76
	0407_TP259_0.1_200630	SE208692.019	%	50 - 130%	84
	0407_TP259_0.3_200630	SE208692.020	%	50 - 130%	81
	0407_QC184_200630	SE208692.021	%	50 - 130%	76
	0407_TP260_0.1_200630	SE208692.022	%	50 - 130%	77
	0407_TP260_0.5_200630	SE208692.024	%	50 - 130%	72
	0407_QC183_200630	SE208692.026	%	50 - 130%	72

VOC's in Soil — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP143_0.1_200630	SE208692.001	%	60 - 130%	68
	0407_TP143_0.5_200630	SE208692.002	%	60 - 130%	68
	0407_QC415_200629	SE208692.003	%	60 - 130%	73
	0407_QC515_200629	SE208692.004	%	60 - 130%	128
	0407_TP157_0.1_200630	SE208692.005	%	60 - 130%	72
	0407_TP157_0.5_200630	SE208692.007	%	60 - 130%	68
	0407_TP171_0.1_200630	SE208692.008	%	60 - 130%	100
	0407_TP171_0.3_200630	SE208692.010	%	60 - 130%	112
	0407_TP172_0.1_200630	SE208692.011	%	60 - 130%	79
	0407_TP172_0.3_200630	SE208692.012	%	60 - 130%	105
	0407_TP173_0.1_200630	SE208692.013	%	60 - 130%	68
	0407_TP173_0.5_200630	SE208692.014	%	60 - 130%	106
	0407_QC181_200630	SE208692.015	%	60 - 130%	108
	0407_TP174_0.1_200630	SE208692.016	%	60 - 130%	110
	0407_TP174_0.5_200630	SE208692.017	%	60 - 130%	76
	0407_QC180_200630	SE208692.018	%	60 - 130%	74
	0407_TP259_0.1_200630	SE208692.019	%	60 - 130%	102
	0407_TP259_0.3_200630	SE208692.020	%	60 - 130%	109
	0407_QC184_200630	SE208692.021	%	60 - 130%	106
	0407_TP260_0.1_200630	SE208692.022	%	60 - 130%	105
	0407_TP260_0.5_200630	SE208692.024	%	60 - 130%	103
	0407_QC183_200630	SE208692.026	%	60 - 130%	104
d4-1,2-dichloroethane (Surrogate)	0407_TP143_0.1_200630	SE208692.001	%	60 - 130%	75
	0407_TP143_0.5_200630	SE208692.002	%	60 - 130%	76
	0407_QC415_200629	SE208692.003	%	60 - 130%	79
	0407_QC515_200629	SE208692.004	%	60 - 130%	80
	0407_TP157_0.1_200630	SE208692.005	%	60 - 130%	78
	0407_TP157_0.5_200630	SE208692.007	%	60 - 130%	75
	0407_TP171_0.1_200630	SE208692.008	%	60 - 130%	78
	0407_TP171_0.3_200630	SE208692.010	%	60 - 130%	85
	0407_TP172_0.1_200630	SE208692.011	%	60 - 130%	80
	0407_TP172_0.3_200630	SE208692.012	%	60 - 130%	78
	0407_TP173_0.1_200630	SE208692.013	%	60 - 130%	67
	0407_TP173_0.5_200630	SE208692.014	%	60 - 130%	84
	0407_QC181_200630	SE208692.015	%	60 - 130%	81
	0407_TP174_0.1_200630	SE208692.016	%	60 - 130%	88
	0407_TP174_0.5_200630	SE208692.017	%	60 - 130%	70
	0407_QC180_200630	SE208692.018	%	60 - 130%	73
	0407_TP259_0.1_200630	SE208692.019	%	60 - 130%	76
	0407_TP259_0.3_200630	SE208692.020	%	60 - 130%	79
	0407_QC184_200630	SE208692.021	%	60 - 130%	77
	0407_TP260_0.1_200630	SE208692.022	%	60 - 130%	76
	0407_TP260_0.5_200630	SE208692.024	%	60 - 130%	77
	0407_QC183_200630	SE208692.026	%	60 - 130%	76
d8-toluene (Surrogate)	0407_TP143_0.1_200630	SE208692.001	%	60 - 130%	75
	0407_TP143_0.5_200630	SE208692.002	%	60 - 130%	75
	0407_QC415_200629	SE208692.003	%	60 - 130%	80
	0407_QC515_200629	SE208692.004	%	60 - 130%	81
	0407_TP157_0.1_200630	SE208692.005	%	60 - 130%	78
	0407_TP157_0.5_200630	SE208692.007	%	60 - 130%	74

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d8-toluene (Surrogate)	0407_TP171_0.1_200630	SE208692.008	%	60 - 130%	96
	0407_TP171_0.3_200630	SE208692.010	%	60 - 130%	105
	0407_TP172_0.1_200630	SE208692.011	%	60 - 130%	69
	0407_TP172_0.3_200630	SE208692.012	%	60 - 130%	99
	0407_TP173_0.1_200630	SE208692.013	%	60 - 130%	64
	0407_TP173_0.5_200630	SE208692.014	%	60 - 130%	102
	0407_QC181_200630	SE208692.015	%	60 - 130%	103
	0407_TP174_0.1_200630	SE208692.016	%	60 - 130%	107
	0407_TP174_0.5_200630	SE208692.017	%	60 - 130%	71
	0407_QC180_200630	SE208692.018	%	60 - 130%	68
	0407_TP259_0.1_200630	SE208692.019	%	60 - 130%	96
	0407_TP259_0.3_200630	SE208692.020	%	60 - 130%	105
	0407_QC184_200630	SE208692.021	%	60 - 130%	97
	0407_TP260_0.1_200630	SE208692.022	%	60 - 130%	101
	0407_TP260_0.5_200630	SE208692.024	%	60 - 130%	100
	0407_QC183_200630	SE208692.026	%	60 - 130%	100

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP143_0.1_200630	SE208692.001	%	60 - 130%	68
	0407_TP143_0.5_200630	SE208692.002	%	60 - 130%	68
	0407_QC415_200629	SE208692.003	%	60 - 130%	73
	0407_TP157_0.1_200630	SE208692.005	%	60 - 130%	72
	0407_TP157_0.5_200630	SE208692.007	%	60 - 130%	68
	0407_TP171_0.1_200630	SE208692.008	%	60 - 130%	66
	0407_TP171_0.3_200630	SE208692.010	%	60 - 130%	112
	0407_TP172_0.1_200630	SE208692.011	%	60 - 130%	79
	0407_TP172_0.3_200630	SE208692.012	%	60 - 130%	105
	0407_TP173_0.1_200630	SE208692.013	%	60 - 130%	68
	0407_TP173_0.5_200630	SE208692.014	%	60 - 130%	106
	0407_QC181_200630	SE208692.015	%	60 - 130%	108
	0407_TP174_0.1_200630	SE208692.016	%	60 - 130%	110
	0407_TP174_0.5_200630	SE208692.017	%	60 - 130%	76
	0407_QC180_200630	SE208692.018	%	60 - 130%	74
	0407_TP259_0.1_200630	SE208692.019	%	60 - 130%	102
	0407_TP259_0.3_200630	SE208692.020	%	60 - 130%	109
	0407_QC184_200630	SE208692.021	%	60 - 130%	106
	0407_TP260_0.1_200630	SE208692.022	%	60 - 130%	105
	0407_TP260_0.5_200630	SE208692.024	%	60 - 130%	103
	0407_QC183_200630	SE208692.026	%	60 - 130%	104
d4-1,2-dichloroethane (Surrogate)	0407_TP143_0.1_200630	SE208692.001	%	60 - 130%	75
	0407_TP143_0.5_200630	SE208692.002	%	60 - 130%	76
	0407_QC415_200629	SE208692.003	%	60 - 130%	79
	0407_TP157_0.1_200630	SE208692.005	%	60 - 130%	78
	0407_TP157_0.5_200630	SE208692.007	%	60 - 130%	75
	0407_TP171_0.1_200630	SE208692.008	%	60 - 130%	77
	0407_TP171_0.3_200630	SE208692.010	%	60 - 130%	85
	0407_TP172_0.1_200630	SE208692.011	%	60 - 130%	80
	0407_TP172_0.3_200630	SE208692.012	%	60 - 130%	78
	0407_TP173_0.1_200630	SE208692.013	%	60 - 130%	67
	0407_TP173_0.5_200630	SE208692.014	%	60 - 130%	84
	0407_QC181_200630	SE208692.015	%	60 - 130%	81
	0407_TP174_0.1_200630	SE208692.016	%	60 - 130%	88
	0407_TP174_0.5_200630	SE208692.017	%	60 - 130%	70
	0407_QC180_200630	SE208692.018	%	60 - 130%	73
	0407_TP259_0.1_200630	SE208692.019	%	60 - 130%	76
	0407_TP259_0.3_200630	SE208692.020	%	60 - 130%	79
	0407_QC184_200630	SE208692.021	%	60 - 130%	77
	0407_TP260_0.1_200630	SE208692.022	%	60 - 130%	76
	0407_TP260_0.5_200630	SE208692.024	%	60 - 130%	77
	0407_QC183_200630	SE208692.026	%	60 - 130%	76

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d8-toluene (Surrogate)	0407_TP143_0.1_200630	SE208692.001	%	60 - 130%	75
	0407_TP143_0.5_200630	SE208692.002	%	60 - 130%	75
	0407_QC415_200629	SE208692.003	%	60 - 130%	80
	0407_TP157_0.1_200630	SE208692.005	%	60 - 130%	78
	0407_TP157_0.5_200630	SE208692.007	%	60 - 130%	74
	0407_TP171_0.1_200630	SE208692.008	%	60 - 130%	73
	0407_TP171_0.3_200630	SE208692.010	%	60 - 130%	105
	0407_TP172_0.1_200630	SE208692.011	%	60 - 130%	69
	0407_TP172_0.3_200630	SE208692.012	%	60 - 130%	99
	0407_TP173_0.1_200630	SE208692.013	%	60 - 130%	64
	0407_TP173_0.5_200630	SE208692.014	%	60 - 130%	102
	0407_QC181_200630	SE208692.015	%	60 - 130%	103
	0407_TP174_0.1_200630	SE208692.016	%	60 - 130%	107
	0407_TP174_0.5_200630	SE208692.017	%	60 - 130%	71
	0407_QC180_200630	SE208692.018	%	60 - 130%	68
	0407_TP259_0.1_200630	SE208692.019	%	60 - 130%	96
	0407_TP259_0.3_200630	SE208692.020	%	60 - 130%	105
	0407_QC184_200630	SE208692.021	%	60 - 130%	97
	0407_TP260_0.1_200630	SE208692.022	%	60 - 130%	101
	0407_TP260_0.5_200630	SE208692.024	%	60 - 130%	100
	0407_QC183_200630	SE208692.026	%	60 - 130%	100

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result
LB204503.001	Mercury	mg/kg	0.05	<0.05

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB204484.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	103
LB204485.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	92

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB204484.001	Dichlorvos	mg/kg	0.5	<0.5
	Dimethoate	mg/kg	0.5	<0.5
	Diazinon (Dimpylate)	mg/kg	0.5	<0.5
	Fenitrothion	mg/kg	0.2	<0.2
	Malathion	mg/kg	0.2	<0.2

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB204484.001		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	92
		d14-p-terphenyl (Surrogate)	%	-	89
LB204485.001		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	84
		d14-p-terphenyl (Surrogate)	%	-	95

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB204484.001		Naphthalene	mg/kg	0.1	<0.1
		2-methylnaphthalene	mg/kg	0.1	<0.1
		1-methylnaphthalene	mg/kg	0.1	<0.1
		Acenaphthylene	mg/kg	0.1	<0.1
		Acenaphthene	mg/kg	0.1	<0.1
		Fluorene	mg/kg	0.1	<0.1
		Phenanthrene	mg/kg	0.1	<0.1
		Anthracene	mg/kg	0.1	<0.1
		Fluoranthene	mg/kg	0.1	<0.1
		Pyrene	mg/kg	0.1	<0.1
		Benzo(a)anthracene	mg/kg	0.1	<0.1
		Chrysene	mg/kg	0.1	<0.1
		Benzo(a)pyrene	mg/kg	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	104
		2-fluorobiphenyl (Surrogate)	%	-	92
		d14-p-terphenyl (Surrogate)	%	-	89
LB204485.001		Naphthalene	mg/kg	0.1	<0.1
		2-methylnaphthalene	mg/kg	0.1	<0.1
		1-methylnaphthalene	mg/kg	0.1	<0.1
		Acenaphthylene	mg/kg	0.1	<0.1
		Acenaphthene	mg/kg	0.1	<0.1
		Fluorene	mg/kg	0.1	<0.1
		Phenanthrene	mg/kg	0.1	<0.1
		Anthracene	mg/kg	0.1	<0.1
		Fluoranthene	mg/kg	0.1	<0.1
		Pyrene	mg/kg	0.1	<0.1
		Benzo(a)anthracene	mg/kg	0.1	<0.1
		Chrysene	mg/kg	0.1	<0.1
		Benzo(a)pyrene	mg/kg	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB204485.001	Surrogates	d5-nitrobenzene (Surrogate)	%	-	85
		2-fluorobiphenyl (Surrogate)	%	-	84
		d14-p-terphenyl (Surrogate)	%	-	95

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB204484.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	103
LB204485.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	92

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB204484.001		Phenol	mg/kg	0.5	<0.5
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5
		2-nitrophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
		Pentachlorophenol	mg/kg	0.5	<0.5
		2,4-dinitrophenol	mg/kg	2	<2
		4-chloro-3-methylphenol	mg/kg	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	83
		d5-phenol (Surrogate)	%	-	70
LB204485.001		Phenol	mg/kg	0.5	<0.5
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5
		2-nitrophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
		Pentachlorophenol	mg/kg	0.5	<0.5
		2,4-dinitrophenol	mg/kg	2	<2

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB204485.001		4-chloro-3-methylphenol	mg/kg	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	81
		d5-phenol (Surrogate)	%	-	76

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB204497.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB204484.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110
LB204485.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB204479.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB204479.001	Halogenated Aliphatics	1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic	Benzene	mg/kg	0.1	<0.1
	Hydrocarbons	Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10
		MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	82
		d8-toluene (Surrogate)	%	-	84
		Bromofluorobenzene (Surrogate)	%	-	76
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1
LB204480.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB204480.001	Halogenated Aliphatics	1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10
		MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	82
		d8-toluene (Surrogate)	%	-	104
		Bromofluorobenzene (Surrogate)	%	-	111
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB204480.001	Trihalomethanes	Bromoform	mg/kg	0.1	<0.1

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB204479.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	82
LB204480.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	82

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208692.014	LB204503.014	Mercury	mg/kg	0.05	<0.05	<0.05	200	0

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208579.010	LB204489.011	% Moisture	%w/w	1	16.6	16.4	36	1
SE208692.007	LB204489.019	% Moisture	%w/w	1	12.7	13.2	38	4
SE208692.026	LB204490.018	% Moisture	%w/w	1	9.5	9.0	41	5

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208579.011	LB204484.024		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	0	200	0
			Alpha BHC	mg/kg	0.1	<0.1	0	200	0
			Lindane	mg/kg	0.1	<0.1	0	200	0
			Heptachlor	mg/kg	0.1	<0.1	0	200	0
			Aldrin	mg/kg	0.1	<0.1	0	200	0
			Beta BHC	mg/kg	0.1	<0.1	0	200	0
			Delta BHC	mg/kg	0.1	<0.1	0	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	0	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	0	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	0	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Dieldrin	mg/kg	0.2	<0.2	0	200	0
			Endrin	mg/kg	0.2	<0.2	0	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	0	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	0	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	0	200	0
			Methoxychlor	mg/kg	0.1	<0.1	0	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	0	200	0
			Isodrin	mg/kg	0.1	<0.1	0	200	0
			Mirex	mg/kg	0.1	<0.1	0	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.152	30	1
SE208692.007	LB204484.021		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil (continued) — Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208692.007	LB204484.021		p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.14	30	10
SE208692.018	LB204485.014		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.16	0.15	30	3
SE208692.026	LB204485.021		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208692.026	LB204485.021		Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.16	30	3

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208579.010	LB204484.014		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	30	0
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	3
SE208692.007	LB204484.021		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	30	17
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	11
SE208692.018	LB204485.014		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	4
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	30	2
SE208692.026	LB204485.021		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208692.026	LB204485.021		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	9
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	0

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208579.010	LB204484.014		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	0.1	<0.1	124	33
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	0.5	0.2	59	95 ⑨
			Anthracene	mg/kg	0.1	0.2	<0.1	113	47
			Fluoranthene	mg/kg	0.1	0.7	0.4	48	56 ⑨
			Pyrene	mg/kg	0.1	0.7	0.4	47	47
			Benzo(a)anthracene	mg/kg	0.1	0.3	0.2	67	40
			Chrysene	mg/kg	0.1	0.4	0.3	62	39
			Benzo(b&j)fluoranthene	mg/kg	0.1	0.5	0.4	54	27
			Benzo(k)fluoranthene	mg/kg	0.1	0.2	0.2	84	39
			Benzo(a)pyrene	mg/kg	0.1	0.4	0.3	56	34
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.4	0.3	60	25
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	0.4	0.3	61	20
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	0.6	0.4	49	33
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	0.7	0.5	59	28
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	0.6	0.5	46	30
			Total PAH (18)	mg/kg	0.8	4.8	2.9	51	50
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.6	30	3
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	30	0
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	3
SE208692.007	LB204484.021		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	<0.3	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	<0.2	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	30	8
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	30	17
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	11
SE208692.026	LB204485.021		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208692.026	LB204485.021		Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	0.2	0.3	69	53
			Anthracene	mg/kg	0.1	<0.1	0.1	141	15
			Fluoranthene	mg/kg	0.1	0.4	0.6	50	43
			Pyrene	mg/kg	0.1	0.4	0.7	48	39
			Benzo(a)anthracene	mg/kg	0.1	0.2	0.3	76	44
			Chrysene	mg/kg	0.1	0.2	0.3	68	14
			Benzo(b&j)fluoranthene	mg/kg	0.1	0.3	0.4	59	13
			Benzo(k)fluoranthene	mg/kg	0.1	0.1	0.2	91	18
			Benzo(a)pyrene	mg/kg	0.1	0.3	0.3	67	16
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.2	0.3	73	15
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	0.2	0.3	71	16
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	0.3	0.4	64	18
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	0.4	0.5	74	14
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	0.4	0.5	57	15
			Total PAH (18)	mg/kg	0.8	2.6	3.6	56	33
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	30	5
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	9
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	0

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208579.010	LB204484.014		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	3
SE208579.011	LB204484.023		Arochlor 1016	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	0	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0.152	30	1
SE208692.007	LB204484.021		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	10
SE208692.018	LB204485.014		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PCBs in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208692.018	LB204485.014		Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	3
SE208692.026	LB204485.021		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	3

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208692.001	LB204484.023		Phenol	mg/kg	0.5	<0.5	0	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	0	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	0	200	0
			Total Cresol	mg/kg	1.5	<1.5	0	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	0	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	0	200	0
			4-nitrophenol	mg/kg	1	<1	0	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	0	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dinitrophenol	mg/kg	2	<2	0	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	0	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.8	3.9	30	4
			d5-phenol (Surrogate)	mg/kg	-	1.5	1.45	30	6
SE208692.007	LB204484.021		Phenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	200	0
			Total Cresol	mg/kg	1.5	<1.5	<1.5	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	200	0
			4-nitrophenol	mg/kg	1	<1	<1	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dinitrophenol	mg/kg	2	<2	<2	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.9	3.8	30	2
			d5-phenol (Surrogate)	mg/kg	-	1.4	1.5	30	7
SE208692.018	LB204485.014		Phenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	200	0
			Total Cresol	mg/kg	1.5	<1.5	<1.5	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208692.018	LB204485.014		2-chlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	200	0
			4-nitrophenol	mg/kg	1	<1	<1	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dinitrophenol	mg/kg	2	<2	<2	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.9	3.7	30	4
			d5-phenol (Surrogate)	mg/kg	-	1.5	1.5	30	1
SE208692.026	LB204485.021		Phenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	200	0
			Total Cresol	mg/kg	1.5	<1.5	<1.5	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	200	0
			4-nitrophenol	mg/kg	1	<1	<1	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dinitrophenol	mg/kg	2	<2	<2	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.1	4.3	30	4
			d5-phenol (Surrogate)	mg/kg	-	1.4	1.5	30	2

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208692.014	LB204497.014		Arsenic, As	mg/kg	1	<1	<1	200	0
			Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
			Chromium, Cr	mg/kg	0.5	0.9	0.9	84	3
			Copper, Cu	mg/kg	0.5	3.4	3.5	44	3
			Nickel, Ni	mg/kg	0.5	1.4	1.9	60	30
			Lead, Pb	mg/kg	1	10	10	40	4
			Zinc, Zn	mg/kg	2	28	28	37	2

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208579.010	LB204484.014		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE208692.007	LB204484.021		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208692.007	LB204484.021	TRH F Bands	TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE208692.018	LB204485.014		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE208692.026	LB204485.021		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	49	67	108	31
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	100	135	12
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208579.011	LB204479.014	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208579.011	LB204479.014	Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.1	7.0	50	1
			d8-toluene (Surrogate)	mg/kg	-	6.9	7.0	50	1
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.5	6.5	50	0
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE208692.007	LB204479.022	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208692.007	LB204479.022	Halogenated	trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
		Aliphatics	1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.5	7.5	50	0
			d8-toluene (Surrogate)	mg/kg	-	7.4	7.4	50	1
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.8	6.7	50	1
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208692.007	LB204479.022	Totals	Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethanes	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
			Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE208692.018	LB204480.014	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
			Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic Aromatic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
			Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208692.018	LB204480.014	Monocyclic	p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.3	7.5	50	3
			d8-toluene (Surrogate)	mg/kg	-	6.8	7.0	50	3
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.4	7.3	50	2
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE208692.026	LB204480.021	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208692.026	LB204480.021	Halogenated	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.6	7.7	50	1
			d8-toluene (Surrogate)	mg/kg	-	10.0	10.2	50	2
			Bromofluorobenzene (Surrogate)	mg/kg	-	10.4	10.7	50	2
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208579.011	LB204479.014		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.1	7.0	30	1
			d8-toluene (Surrogate)	mg/kg	-	6.9	7.0	30	1
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.5	6.5	30	0
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE208692.007	LB204479.022		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.5	7.5	30	0
			d8-toluene (Surrogate)	mg/kg	-	7.4	7.4	30	1
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.8	6.7	30	1
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208692.007	LB204479.022	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE208692.018	LB204480.014		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.3	7.5	30	3
			d8-toluene (Surrogate)	mg/kg	-	6.8	7.0	30	3
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.4	7.3	30	2
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE208692.026	LB204480.021		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.6	7.7	30	1
			d8-toluene (Surrogate)	mg/kg	-	10.0	10.2	30	2
			Bromofluorobenzene (Surrogate)	mg/kg	-	10.4	10.7	30	2
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204503.002	Mercury	mg/kg	0.05	0.23	0.2	70 - 130	114

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204484.002		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	105
		Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	102
		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	101
		Dieldrin	mg/kg	0.2	<0.2	0.2	60 - 140	99
		Endrin	mg/kg	0.2	0.2	0.2	60 - 140	100
		p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	75
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.15	40 - 130	102
LB204485.002		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	102
		Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	98
		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	95
		Dieldrin	mg/kg	0.2	<0.2	0.2	60 - 140	97
		Endrin	mg/kg	0.2	<0.2	0.2	60 - 140	98
		p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	87
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	0.15	40 - 130	95

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204484.002		Dichlorvos	mg/kg	0.5	2.3	2	60 - 140	114
		Diazinon (Dimpylate)	mg/kg	0.5	1.9	2	60 - 140	96
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.9	2	60 - 140	97
		Ethion	mg/kg	0.2	1.7	2	60 - 140	85
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	92
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	86
LB204485.002		Dichlorvos	mg/kg	0.5	1.7	2	60 - 140	85
		Diazinon (Dimpylate)	mg/kg	0.5	2.2	2	60 - 140	108
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.1	2	60 - 140	104
		Ethion	mg/kg	0.2	1.8	2	60 - 140	88
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	86
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	85

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204484.002		Naphthalene	mg/kg	0.1	4.1	4	60 - 140	103
		Acenaphthylene	mg/kg	0.1	4.3	4	60 - 140	107
		Acenaphthene	mg/kg	0.1	4.2	4	60 - 140	104
		Phenanthrene	mg/kg	0.1	4.1	4	60 - 140	103
		Anthracene	mg/kg	0.1	4.0	4	60 - 140	100
		Fluoranthene	mg/kg	0.1	4.0	4	60 - 140	101
		Pyrene	mg/kg	0.1	4.2	4	60 - 140	106
		Benzo(a)pyrene	mg/kg	0.1	4.9	4	60 - 140	122
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	108
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	92
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	86
LB204485.002		Naphthalene	mg/kg	0.1	4.3	4	60 - 140	108
		Acenaphthylene	mg/kg	0.1	4.7	4	60 - 140	118
		Acenaphthene	mg/kg	0.1	4.3	4	60 - 140	107
		Phenanthrene	mg/kg	0.1	4.4	4	60 - 140	110
		Anthracene	mg/kg	0.1	4.5	4	60 - 140	112
		Fluoranthene	mg/kg	0.1	4.4	4	60 - 140	111
		Pyrene	mg/kg	0.1	4.9	4	60 - 140	121
		Benzo(a)pyrene	mg/kg	0.1	4.0	4	60 - 140	101
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	78
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	86
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	85

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PCBs in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204484.002		Arochlor 1260	mg/kg	0.2	0.3	0.4	60 - 140	80
LB204485.002		Arochlor 1260	mg/kg	0.2	0.4	0.4	60 - 140	100

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204484.002		Phenol	mg/kg	0.5	0.8	1	70 - 130	78
		2,4-dichlorophenol	mg/kg	0.5	0.9	1	70 - 130	85
		2,4,6-trichlorophenol	mg/kg	0.5	1.0	1	70 - 130	104
		Pentachlorophenol	mg/kg	0.5	0.9	1	70 - 130	88
	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.9	5	40 - 130	79
		d5-phenol (Surrogate)	mg/kg	-	1.4	2	40 - 130	70
LB204485.002		Phenol	mg/kg	0.5	0.8	1	70 - 130	82
		2,4-dichlorophenol	mg/kg	0.5	1.2	1	70 - 130	116
		2,4,6-trichlorophenol	mg/kg	0.5	1.1	1	70 - 130	114
		Pentachlorophenol	mg/kg	0.5	0.7	1	70 - 130	73
	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.5	5	40 - 130	70
		d5-phenol (Surrogate)	mg/kg	-	1.4	2	40 - 130	71

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204497.002	Arsenic, As	mg/kg	1	320	318.22	80 - 120	102
	Cadmium, Cd	mg/kg	0.3	5.5	5.41	80 - 120	102
	Chromium, Cr	mg/kg	0.5	37	38.31	80 - 120	97
	Copper, Cu	mg/kg	0.5	300	290	80 - 120	103
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	100
	Lead, Pb	mg/kg	1	92	89.9	80 - 120	103
	Zinc, Zn	mg/kg	2	270	273	80 - 120	99

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204484.002		TRH C10-C14	mg/kg	20	32	40	60 - 140	80
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	75
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	78
	TRH F Bands	TRH >C10-C16	mg/kg	25	32	40	60 - 140	80
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	78
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	75
LB204485.002		TRH C10-C14	mg/kg	20	34	40	60 - 140	85
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	80
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	83
	TRH F Bands	TRH >C10-C16	mg/kg	25	34	40	60 - 140	85
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	83
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	80

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204479.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	3.2	5	60 - 140	64
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	3.7	5	60 - 140	74
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	3.3	5	60 - 140	66
	Halogenated	Chlorobenzene	mg/kg	0.1	4.7	5	60 - 140	94
	Monocyclic	Benzene	mg/kg	0.1	3.6	5	60 - 140	71
	Aromatic	Toluene	mg/kg	0.1	3.5	5	60 - 140	70
		Ethylbenzene	mg/kg	0.1	4.3	5	60 - 140	86
		m/p-xylene	mg/kg	0.2	8.7	10	60 - 140	87
		o-xylene	mg/kg	0.1	4.4	5	60 - 140	88
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.1	10	70 - 130	91
		d8-toluene (Surrogate)	mg/kg	-	9.0	10	70 - 130	90
		Bromofluorobenzene (Surrogate)	mg/kg	-	7.5	10	70 - 130	75
	Trihalomethan	Chloroform	mg/kg	0.1	3.7	5	60 - 140	74
LB204480.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	4.3	5	60 - 140	86
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	4.8	5	60 - 140	96
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	4.4	5	60 - 140	88
	Halogenated	Chlorobenzene	mg/kg	0.1	4.9	5	60 - 140	97

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204480.002	Monocyclic	Benzene	mg/kg	0.1	4.5	5	60 - 140	90
	Aromatic	Toluene	mg/kg	0.1	4.3	5	60 - 140	86
		Ethylbenzene	mg/kg	0.1	4.3	5	60 - 140	87
		m/p-xylene	mg/kg	0.2	8.8	10	60 - 140	88
		o-xylene	mg/kg	0.1	4.2	5	60 - 140	84
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.0	10	70 - 130	90
		d8-toluene (Surrogate)	mg/kg	-	7.8	10	70 - 130	78
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.7	10	70 - 130	87
	Trihalomethan	Chloroform	mg/kg	0.1	4.9	5	60 - 140	97

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204479.002		TRH C6-C10	mg/kg	25	66	92.5	60 - 140	72
		TRH C6-C9	mg/kg	20	57	80	60 - 140	71
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.1	10	70 - 130	91
		Bromofluorobenzene (Surrogate)	mg/kg	-	7.5	10	70 - 130	75
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	42	62.5	60 - 140	67
LB204480.002		TRH C6-C10	mg/kg	25	79	92.5	60 - 140	86
		TRH C6-C9	mg/kg	20	72	80	60 - 140	90
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.0	10	70 - 130	90
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.7	10	70 - 130	87
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	53	62.5	60 - 140	85

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208692.001	LB204503.004	Mercury	mg/kg	0.05	0.27	0.06	0.2	105

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208579.004	LB204484.023		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	-	-
			Alpha BHC	mg/kg	0.1	<0.1	-	-
			Lindane	mg/kg	0.1	<0.1	-	-
			Heptachlor	mg/kg	0.1	<0.1	0.2	103
			Aldrin	mg/kg	0.1	<0.1	0.2	100
			Beta BHC	mg/kg	0.1	<0.1	-	-
			Delta BHC	mg/kg	0.1	<0.1	0.2	98
			Heptachlor epoxide	mg/kg	0.1	<0.1	-	-
			o,p'-DDE	mg/kg	0.1	<0.1	-	-
			Alpha Endosulfan	mg/kg	0.2	<0.2	-	-
			Gamma Chlordane	mg/kg	0.1	<0.1	-	-
			Alpha Chlordane	mg/kg	0.1	<0.1	-	-
			trans-Nonachlor	mg/kg	0.1	<0.1	-	-
			p,p'-DDE	mg/kg	0.1	<0.1	-	-
			Dieldrin	mg/kg	0.2	4.0	0.2	63
			Endrin	mg/kg	0.2	<0.2	0.2	117
			o,p'-DDD	mg/kg	0.1	<0.1	-	-
			o,p'-DDT	mg/kg	0.1	<0.1	-	-
			Beta Endosulfan	mg/kg	0.2	<0.2	-	-
			p,p'-DDD	mg/kg	0.1	<0.1	-	-
			p,p'-DDT	mg/kg	0.1	<0.1	0.2	77
			Endosulfan sulphate	mg/kg	0.1	<0.1	-	-
			Endrin Aldehyde	mg/kg	0.1	<0.1	-	-
			Methoxychlor	mg/kg	0.1	<0.1	-	-
			Endrin Ketone	mg/kg	0.1	<0.1	-	-
			Isodrin	mg/kg	0.1	<0.1	-	-
			Mirex	mg/kg	0.1	<0.1	-	-
			Total CLP OC Pesticides	mg/kg	1	4	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.16	-	101
SE208692.010	LB204485.022		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	-	-
			Alpha BHC	mg/kg	0.1	<0.1	-	-
			Lindane	mg/kg	0.1	<0.1	-	-
			Heptachlor	mg/kg	0.1	<0.1	0.2	110
			Aldrin	mg/kg	0.1	<0.1	0.2	105
			Beta BHC	mg/kg	0.1	<0.1	-	-
			Delta BHC	mg/kg	0.1	<0.1	0.2	104
			Heptachlor epoxide	mg/kg	0.1	<0.1	-	-
			o,p'-DDE	mg/kg	0.1	<0.1	-	-
			Alpha Endosulfan	mg/kg	0.2	<0.2	-	-
			Gamma Chlordane	mg/kg	0.1	<0.1	-	-
			Alpha Chlordane	mg/kg	0.1	<0.1	-	-
			trans-Nonachlor	mg/kg	0.1	<0.1	-	-
			p,p'-DDE	mg/kg	0.1	<0.1	-	-
			Dieldrin	mg/kg	0.2	<0.2	0.2	104
			Endrin	mg/kg	0.2	<0.2	0.2	107
			o,p'-DDD	mg/kg	0.1	<0.1	-	-
			o,p'-DDT	mg/kg	0.1	<0.1	-	-
			Beta Endosulfan	mg/kg	0.2	<0.2	-	-
			p,p'-DDD	mg/kg	0.1	<0.1	-	-
			p,p'-DDT	mg/kg	0.1	<0.1	0.2	95
			Endosulfan sulphate	mg/kg	0.1	<0.1	-	-
			Endrin Aldehyde	mg/kg	0.1	<0.1	-	-
			Methoxychlor	mg/kg	0.1	<0.1	-	-
			Endrin Ketone	mg/kg	0.1	<0.1	-	-
			Isodrin	mg/kg	0.1	<0.1	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208692.010	LB204485.022		Mirex	mg/kg	0.1	<0.1	-	-
			Total CLP OC Pesticides	mg/kg	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	-	95

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208579.003	LB204484.022		Dichlorvos	mg/kg	0.5		<0.5	2	116
			Dimethoate	mg/kg	0.5		<0.5	-	-
			Diazinon (Dimpylate)	mg/kg	0.5		<0.5	2	99
			Fenitrothion	mg/kg	0.2		<0.2	-	-
			Malathion	mg/kg	0.2		<0.2	-	-
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2		<0.2	2	99
			Parathion-ethyl (Parathion)	mg/kg	0.2		<0.2	-	-
			Bromophos Ethyl	mg/kg	0.2		<0.2	-	-
			Methidathion	mg/kg	0.5		<0.5	-	-
			Ethion	mg/kg	0.2		<0.2	2	90
			Azinphos-methyl (Guthion)	mg/kg	0.2		<0.2	-	-
			Total OP Pesticides*	mg/kg	1.7		<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-		0.5	-	92
			d14-p-terphenyl (Surrogate)	mg/kg	-		0.5	-	86
SE208692.008	LB204485.004		Dichlorvos	mg/kg	0.5	1.7	<0.5	2	83
			Dimethoate	mg/kg	0.5	<0.5	<0.5	-	-
			Diazinon (Dimpylate)	mg/kg	0.5	2.2	<0.5	2	107
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	-	-
			Malathion	mg/kg	0.2	<0.2	<0.2	-	-
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.0	<0.2	2	102
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	-	-
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	-	-
			Methidathion	mg/kg	0.5	<0.5	<0.5	-	-
			Ethion	mg/kg	0.2	1.9	<0.2	2	92
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	-	-
			Total OP Pesticides*	mg/kg	1.7	7.7	<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	-	84
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	82

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208579.003	LB204484.022		Naphthalene	mg/kg	0.1		<0.1	4	102
			2-methylnaphthalene	mg/kg	0.1		<0.1	-	-
			1-methylnaphthalene	mg/kg	0.1		<0.1	-	-
			Acenaphthylene	mg/kg	0.1		<0.1	4	108
			Acenaphthene	mg/kg	0.1		<0.1	4	104
			Fluorene	mg/kg	0.1		<0.1	-	-
			Phenanthrene	mg/kg	0.1		<0.1	4	101
			Anthracene	mg/kg	0.1		<0.1	4	98
			Fluoranthene	mg/kg	0.1		<0.1	4	96
			Pyrene	mg/kg	0.1		<0.1	4	104
			Benzo(a)anthracene	mg/kg	0.1		<0.1	-	-
			Chrysene	mg/kg	0.1		<0.1	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1		<0.1	-	-
			Benzo(k)fluoranthene	mg/kg	0.1		<0.1	-	-
			Benzo(a)pyrene	mg/kg	0.1		<0.1	4	120
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1		<0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1		<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1		<0.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2		<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3		<0.3	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2		<0.2	-	-
			Total PAH (18)	mg/kg	0.8		<0.8	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-		0.6	-	109
			2-fluorobiphenyl (Surrogate)	mg/kg	-		0.5	-	92
			d14-p-terphenyl (Surrogate)	mg/kg	-		0.5	-	86

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

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PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208692.008	LB204485.004		Naphthalene	mg/kg	0.1	4.2	<0.1	4	105
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
			Acenaphthylene	mg/kg	0.1	4.5	<0.1	4	110
			Acenaphthene	mg/kg	0.1	4.2	<0.1	4	104
			Fluorene	mg/kg	0.1	<0.1	<0.1	-	-
			Phenanthrene	mg/kg	0.1	4.2	0.2	4	101
			Anthracene	mg/kg	0.1	4.2	<0.1	4	102
			Fluoranthene	mg/kg	0.1	4.4	0.5	4	96
			Pyrene	mg/kg	0.1	4.8	0.6	4	107
			Benzo(a)anthracene	mg/kg	0.1	0.1	0.3	-	-
			Chrysene	mg/kg	0.1	0.2	0.3	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1	0.3	0.3	-	-
			Benzo(k)fluoranthene	mg/kg	0.1	0.1	0.2	-	-
			Benzo(a)pyrene	mg/kg	0.1	4.1	0.3	4	95
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.2	0.2	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	0.2	0.3	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	4.2	0.4	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	4.3	0.5	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	4.2	0.5	-	-
			Total PAH (18)	mg/kg	0.8	36	3.2	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	-	79
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	-	84
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	82

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208579.004	LB204484.024		Arochlor 1016	mg/kg	0.2	<0.2	-	-
			Arochlor 1221	mg/kg	0.2	<0.2	-	-
			Arochlor 1232	mg/kg	0.2	<0.2	-	-
			Arochlor 1242	mg/kg	0.2	<0.2	-	-
			Arochlor 1248	mg/kg	0.2	<0.2	-	-
			Arochlor 1254	mg/kg	0.2	<0.2	-	-
			Arochlor 1260	mg/kg	0.2	<0.2	0.4	102
			Arochlor 1262	mg/kg	0.2	<0.2	-	-
			Arochlor 1268	mg/kg	0.2	<0.2	-	-
			Total PCBs (Arochlors)	mg/kg	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	-	97
SE208692.010	LB204485.022		Arochlor 1016	mg/kg	0.2	<0.2	-	-
			Arochlor 1221	mg/kg	0.2	<0.2	-	-
			Arochlor 1232	mg/kg	0.2	<0.2	-	-
			Arochlor 1242	mg/kg	0.2	<0.2	-	-
			Arochlor 1248	mg/kg	0.2	<0.2	-	-
			Arochlor 1254	mg/kg	0.2	<0.2	-	-
			Arochlor 1260	mg/kg	0.2	<0.2	0.4	113
			Arochlor 1262	mg/kg	0.2	<0.2	-	-
			Arochlor 1268	mg/kg	0.2	<0.2	-	-
			Total PCBs (Arochlors)	mg/kg	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	-	96

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208579.002	LB204484.024	Phenol	mg/kg	0.5		<0.5	1	82
		2-methyl phenol (o-cresol)	mg/kg	0.5		<0.5	-	-
		3/4-methyl phenol (m/p-cresol)	mg/kg	1		<1	-	-
		Total Cresol	mg/kg	1.5		<1.5	-	-
		2-chlorophenol	mg/kg	0.5		<0.5	-	-
		2,4-dimethylphenol	mg/kg	0.5		<0.5	-	-
		2,6-dichlorophenol	mg/kg	0.5		<0.5	-	-
		2,4-dichlorophenol	mg/kg	0.5		<0.5	1	86
		2,4,6-trichlorophenol	mg/kg	0.5		<0.5	1	94

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

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Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208579.002	LB204484.024		2-nitrophenol	mg/kg	0.5		<0.5	-	-
			4-nitrophenol	mg/kg	1		<1	-	-
			2,4,5-trichlorophenol	mg/kg	0.5		<0.5	-	-
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1		<1	-	-
			Pentachlorophenol	mg/kg	0.5		<0.5	1	85
			2,4-dinitrophenol	mg/kg	2		<2	-	-
			4-chloro-3-methylphenol	mg/kg	2		<2	-	-
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-		3.6	-	73
			d5-phenol (Surrogate)	mg/kg	-		1.4	-	73
SE208692.008	LB204485.004		Phenol	mg/kg	0.5	0.8	<0.5	1	80
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	-	-
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	-	-
			Total Cresol	mg/kg	1.5	<1.5	<1.5	-	-
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	-	-
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	-	-
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	-	-
			2,4-dichlorophenol	mg/kg	0.5	1.0	<0.5	1	95
			2,4,6-trichlorophenol	mg/kg	0.5	0.9	<0.5	1	91
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	-	-
			4-nitrophenol	mg/kg	1	<1	<1	-	-
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	-	-
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	-	-
			Pentachlorophenol	mg/kg	0.5	0.9	<0.5	1	93
			2,4-dinitrophenol	mg/kg	2	<2	<2	-	-
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	-	-
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.9	3.9	-	78
			d5-phenol (Surrogate)	mg/kg	-	1.5	1.6	-	77

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208692.001	LB204497.004	Arsenic, As	mg/kg	1	48	1	50	93
		Cadmium, Cd	mg/kg	0.3	42	<0.3	50	84
		Chromium, Cr	mg/kg	0.5	52	4.4	50	94
		Copper, Cu	mg/kg	0.5	56	9.5	50	93
		Nickel, Ni	mg/kg	0.5	49	2.0	50	94
		Lead, Pb	mg/kg	1	94	54	50	80
		Zinc, Zn	mg/kg	2	96	48	50	95

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208579.003	LB204484.022		TRH C10-C14	mg/kg	20		<20	40	78
			TRH C15-C28	mg/kg	45		<45	40	63
			TRH C29-C36	mg/kg	45		<45	40	95
			TRH C37-C40	mg/kg	100		<100	-	-
			TRH C10-C36 Total	mg/kg	110		<110	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210		<210	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25		<25	40	75
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25		<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90		<90	40	98
			TRH >C34-C40 (F4)	mg/kg	120		<120	-	-
SE208692.008	LB204485.004		TRH C10-C14	mg/kg	20	33	<20	40	83
			TRH C15-C28	mg/kg	45	<45	<45	40	95
			TRH C29-C36	mg/kg	45	<45	<45	40	105
			TRH C37-C40	mg/kg	100	<100	<100	-	-
			TRH C10-C36 Total	mg/kg	110	<110	<110	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25	34	<25	40	85
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	34	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	40	110
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	-	-

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VOC's in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208579.002	LB204479.004	Monocyclic Aromatic	Benzene	mg/kg	0.1	3.2	<0.1	5	63
			Toluene	mg/kg	0.1	3.2	<0.1	5	63
			Ethylbenzene	mg/kg	0.1	4.0	<0.1	5	80
			m/p-xylene	mg/kg	0.2	7.9	<0.2	10	79
			o-xylene	mg/kg	0.1	4.1	<0.1	5	81
		Oxygenated	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	-	-
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.1	7.6	10	81
			d8-toluene (Surrogate)	mg/kg	-	7.9	7.4	10	79
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.5	6.6	10	65 ①
		Totals	Total Xylenes	mg/kg	0.3	12	<0.3	-	-
			Total BTEX	mg/kg	0.6	22	<0.6	-	-
SE208579.004	LB204479.023	Fumigants	2,2-dichloropropane	mg/kg	0.1		<0.1	-	-
			1,2-dichloropropane	mg/kg	0.1		<0.1	-	-
			cis-1,3-dichloropropene	mg/kg	0.1		<0.1	-	-
			trans-1,3-dichloropropene	mg/kg	0.1		<0.1	-	-
			1,2-dibromoethane (EDB)	mg/kg	0.1		<0.1	-	-
		Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1		<1	-	-
			Chloromethane	mg/kg	1		<1	-	-
			Vinyl chloride (Chloroethene)	mg/kg	0.1		<0.1	-	-
			Bromomethane	mg/kg	1		<1	-	-
			Chloroethane	mg/kg	1		<1	-	-
			Trichlorofluoromethane	mg/kg	1		<1	-	-
			Iodomethane	mg/kg	5		<5	-	-
			1,1-dichloroethene	mg/kg	0.1		<0.1	5	62
			Dichloromethane (Methylene chloride)	mg/kg	0.5		<0.5	-	-
			Allyl chloride	mg/kg	0.1		<0.1	-	-
			trans-1,2-dichloroethene	mg/kg	0.1		<0.1	-	-
			1,1-dichloroethane	mg/kg	0.1		<0.1	-	-
			cis-1,2-dichloroethene	mg/kg	0.1		<0.1	-	-
			Bromochloromethane	mg/kg	0.1		<0.1	-	-
			1,2-dichloroethane	mg/kg	0.1		<0.1	5	71
			1,1,1-trichloroethane	mg/kg	0.1		<0.1	-	-
			1,1-dichloropropene	mg/kg	0.1		<0.1	-	-
			Carbon tetrachloride	mg/kg	0.1		<0.1	-	-
			Dibromomethane	mg/kg	0.1		<0.1	-	-
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1		<0.1	5	63
			1,1,2-trichloroethane	mg/kg	0.1		<0.1	-	-
			1,3-dichloropropane	mg/kg	0.1		<0.1	-	-
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1		<0.1	-	-
			1,1,1,2-tetrachloroethane	mg/kg	0.1		<0.1	-	-
			cis-1,4-dichloro-2-butene	mg/kg	1		<1	-	-
			1,1,2,2-tetrachloroethane	mg/kg	0.1		<0.1	-	-
			1,2,3-trichloropropane	mg/kg	0.1		<0.1	-	-
			trans-1,4-dichloro-2-butene	mg/kg	1		<1	-	-
			1,2-dibromo-3-chloropropane	mg/kg	0.1		<0.1	-	-
			Hexachlorobutadiene	mg/kg	0.1		<0.1	-	-
		Halogenated Aromatics	Chlorobenzene	mg/kg	0.1		<0.1	5	91
			Bromobenzene	mg/kg	0.1		<0.1	-	-
			2-chlorotoluene	mg/kg	0.1		<0.1	-	-
			4-chlorotoluene	mg/kg	0.1		<0.1	-	-
			1,3-dichlorobenzene	mg/kg	0.1		<0.1	-	-
			1,4-dichlorobenzene	mg/kg	0.1		<0.1	-	-
			1,2-dichlorobenzene	mg/kg	0.1		<0.1	-	-
			1,2,4-trichlorobenzene	mg/kg	0.1		<0.1	-	-
			1,2,3-trichlorobenzene	mg/kg	0.1		<0.1	-	-
		Monocyclic Aromatic	Benzene	mg/kg	0.1		<0.1	5	70
			Toluene	mg/kg	0.1		<0.1	5	69
			Ethylbenzene	mg/kg	0.1		<0.1	5	79
			m/p-xylene	mg/kg	0.2		<0.2	10	81
			o-xylene	mg/kg	0.1		<0.1	5	83

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208579.004	LB204479.023	Monocyclic Aromatic	Styrene (Vinyl benzene)	mg/kg	0.1		<0.1	-	-
			Isopropylbenzene (Cumene)	mg/kg	0.1		<0.1	-	-
			n-propylbenzene	mg/kg	0.1		<0.1	-	-
			1,3,5-trimethylbenzene	mg/kg	0.1		<0.1	-	-
			tert-butylbenzene	mg/kg	0.1		<0.1	-	-
			1,2,4-trimethylbenzene	mg/kg	0.1		<0.1	-	-
			sec-butylbenzene	mg/kg	0.1		<0.1	-	-
			p-isopropyltoluene	mg/kg	0.1		<0.1	-	-
			n-butylbenzene	mg/kg	0.1		<0.1	-	-
		Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1		<0.1	-	-
			2-nitropropane	mg/kg	10		<10	-	-
		Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10		<10	-	-
			MtBE (Methyl-tert-butyl ether)	mg/kg	0.1		<0.1	-	-
			Vinyl acetate	mg/kg	10		<10	-	-
			MEK (2-butanone)	mg/kg	10		<10	-	-
			MIBK (4-methyl-2-pentanone)	mg/kg	1		<1	-	-
			2-hexanone (MBK)	mg/kg	5		<5	-	-
		Polycyclic	Naphthalene	mg/kg	0.1		<0.1	-	-
		Sulphonated	Carbon disulfide	mg/kg	0.5		<0.5	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-		7.4	10	82
			d8-toluene (Surrogate)	mg/kg	-		7.4	10	81
			Bromofluorobenzene (Surrogate)	mg/kg	-		6.9	10	68
		Totals	Total Xylenes	mg/kg	0.3		<0.3	-	-
			Total BTEX	mg/kg	0.6		<0.6	-	-
			Total VOC*	mg/kg	24		<24	-	-
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3		<3.0	-	-
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8		<1.8	-	-
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8		<1.8	-	-
		Trihalomethanes	Chloroform	mg/kg	0.1		<0.1	5	71
			Bromodichloromethane	mg/kg	0.1		<0.1	-	-
			Chlorodibromomethane	mg/kg	0.1		<0.1	-	-
			Bromoform	mg/kg	0.1		<0.1	-	-
SE208692.008	LB204480.004	Monocyclic Aromatic	Benzene	mg/kg	0.1	3.7	<0.1	5	74
			Toluene	mg/kg	0.1	3.7	<0.1	5	75
			Ethylbenzene	mg/kg	0.1	4.8	<0.1	5	95
			m/p-xylene	mg/kg	0.2	9.6	<0.2	10	95
			o-xylene	mg/kg	0.1	4.8	<0.1	5	96
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.1	7.8	10	81
			d8-toluene (Surrogate)	mg/kg	-	7.6	9.6	10	76
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.7	10.0	10	77
		Totals	Total Xylenes	mg/kg	0.3	14	<0.3	-	-
			Total BTEX	mg/kg	0.6	27	<0.6	-	-

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208579.002	LB204479.004		TRH C6-C10	mg/kg	25	70	<25	92.5	75
			TRH C6-C9	mg/kg	20	60	<20	80	75
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.1	7.6	10	81
			d8-toluene (Surrogate)	mg/kg	-	7.9	7.4	10	79
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.5	6.6	-	65
		VPH F Bands	Benzene (F0)	mg/kg	0.1	3.2	<0.1	-	-
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	47	<25	62.5	75
SE208579.004	LB204479.023		TRH C6-C10	mg/kg	25		<25	92.5	71
			TRH C6-C9	mg/kg	20		<20	80	70
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-		7.4	10	82
			d8-toluene (Surrogate)	mg/kg	-		7.4	10	81
			Bromofluorobenzene (Surrogate)	mg/kg	-		6.9	-	68
		VPH F Bands	Benzene (F0)	mg/kg	0.1		<0.1	-	-
			TRH C6-C10 minus BTEX (F1)	mg/kg	25		<25	62.5	68
SE208692.008	LB204480.004		TRH C6-C10	mg/kg	25	76	<25	92.5	83

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208692.008	LB204480.004		TRH C6-C9	mg/kg	20	66	<20	80	83
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.1	7.7	10	81
			d8-toluene (Surrogate)	mg/kg	-	7.6	7.3	10	76
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.7	6.6	-	77
		VPH F	Benzene (F0)	mg/kg	0.1	3.7	<0.1	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	50	<25	62.5	80

MATRIX SPIKE DUPLICATES

SE208692 R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

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PROJECT OFFICE (Tick one)

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- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ

CLIENT: Defence Housing Australia

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGER: [redacted]

PM CONTACT No [redacted]

LABORATORY: SGS Australia

LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015

SAMPLER: [redacted]

SAMPLER CONTACT No [redacted]

Email Reports and Invoices to: LQRSYD@slrconsulting.com [redacted]

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number 1 of 4

COMMENTS OR ADDITIONAL DIRECTIONS

E-MAILED 14/7/20 9.15am

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only (for asbestos bags)	HOLD	Suite E and H	Suite B	C6-C10, BTEX for TRIPBLANK and TRIP SPIKE	Additional Information (Comment on any gross contamination or specific requirements)
1	0407_BH037_0.1_200701	01-07-2020	Soil								x		
2	0407_BH037_0.5_200701	01-07-2020	Soil								x		
3	0407_QC416_200630	01-07-2020	Soil									x	
4	0407_QC516_200630	01-07-2020	Soil									x	
5	0407_TP103_0.1_200701	01-07-2020	Soil		x			x					
6	0407_TP103_0.3_200701	01-07-2020	Soil		x			x					
	0407_TP103_0.5_200701	01-07-2020	Soil						x				
	0407_TP103_1.0_200701	01-07-2020	Soil						x				
7	0407_TP113_0.1_200701	01-07-2020	Soil		x								
8	0407_TP113_0.5_200701	01-07-2020	Soil		x								
	0407_TP113_1.0_200701	01-07-2020	Soil						x				

SGS EHS Sydney COC

SE208659

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 01-07-2020	**Received by**	[redacted]	Date / Time 01/07/20	**Temperature Received:**
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time @4.~	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

CHAIN OF CUSTODY DOCUMENTATION

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ABN 29 001 584 612

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- ☐

CLIENT: Defence Housing Australia

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGER [redacted]

PM CONTACT No [redacted]

LABORATORY: SGS Australia

LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015

SAMPLER [redacted]

SAMPLER CONTACT No [redacted]

Email Reports and Invoices to: LQRSYD@slrconsulting.com [redacted]

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number 2 of 4

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only (for asbestos bags)	HOLD	Suite E and H	Suite B	C6-C10, BTEX for TRIPBLANK and TRIP SPIKE	Additional Information (Comment on any gross contamination or specific requirements)
9	0407_TP123_0.1_200701	01-07-2020	Soil		x			x					
10	0407_TP123_0.3_200701	01-07-2020	Soil		x			x					
	0407_TP123_0.5_200701	01-07-2020	Soil						x				
	0407_TP123_1.0_200701	01-07-2020	Soil						x				
11	0407_TP133_0.1_200701	01-07-2020	Soil		x			x					
12	0407_TP133_0.5_200701	01-07-2020	Soil		x			x					
	0407_TP133_1.0_200701	01-07-2020	Soil						x				
13	0407_QC185_200701	01-07-2020	Soil		x								
	0407_QC285_200701	01-07-2020	Soil										Please send to Eurofins for Suite A
	0407_TP267_0.1_200701	01-07-2020	Soil		x								
	0407_TP267_0.5_200701	01-07-2020	Soil		x								
	0407_TP267_1.0_200701								x				

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time	01-07-2020	**Received by**	Sign [redacted]	Date / Time	01/07/20
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	04.~
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	

Temperature Received:

SLR

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ABN 29 001 584 612

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CLIENT: Defence Housing Australia	**LABORATORY:** SGS Australia
PROJECT: Randwick Barracks	**LABORATORY ADDRESS:** Unit 16/33 Maddox St, Alexandria NSW 2015
PROJECT NUMBER: 610.30041	**SAMPLER:** [redacted]
PROJECT MANAGER: [redacted]	**SAMPLER CONTACT No** [redacted]
PM CONTACT No: [redacted]	**Email Reports and Invoices to:** LQRSYD@slrconsulting.com [redacted]

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number 3 of 4

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only (for asbestos bags)	HOLD	Suite E and H	Suite B	C6-C10, BTEX for TRIPBLANK and TRIP SPIKE	Additional Information (Comment on any gross contamination or specific requirements)
14	0407_TP267_0.1_200701	01-07-2020	Soil		x			x					
15	0407_TP267_0.5_200701	01-07-2020	Soil		x			x					
	0407_TP267_1.0_200701	01-07-2020	Soil						x				
16	0407_TP268_0.1_200701	01-07-2020	Soil		x			x					
17	0407_TP268_0.5_200701	01-07-2020	Soil		x			x					
	0407_TP268_1.0_200701	01-07-2020	Soil						x				
18	0407_QC187_200701	01-07-2020	Soil		x								
	0407_QC287_200701	01-07-2020	Soil										Please send to Eurofins for Suite A
19	0407_TP269_0.1_200701	01-07-2020	Soil		x			x					
20	0407_TP269_0.3_200701	01-07-2020	Soil		x			x					
	0407_TP269_0.5_200701	01-07-2020	Soil						x				

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 01-07-2020	**Received by**	Sign [redacted]	Date / Time 01/07/20	**Temperature Received:**
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time 21:~	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

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SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

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- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐

CLIENT: Defence Housing Australia

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGER: [redacted]

PM CONTACT No: [redacted]

LABORATORY: SGS Australia

LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015

SAMPLER: [redacted]

SAMPLER CONTACT No: [redacted]

Email Reports and Invoices to: LQRSYD@slrconsulting.com ; [redacted]

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number: 4 of 4

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS	Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only (for asbestos bags)	HOLD	Suite E and H	Suite B	C6-C10, BTEX for TRIPBLANK and TRIP SPIKE	Additional Information (Comment on any gross contamination or specific requirements)
21	0407_TP269_0.1_ACM_200701	01-07-2020	Soil						x					
22	0407_TP269_0.3_ACM_200701	01-07-2020	Soil						x					

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time	01-07-2020	**Received by**	Sign [redacted]	Date / Time	01/07/20
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	@ 4:n
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	

Temperature Received:

SAMPLE RECEIPT ADVICE

SE208659

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	22

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Wed 1/7/2020
Report Due	Tue 21/7/2020
SGS Reference	**SE208659**

SUBMISSION DETAILS

This is to confirm that 22 samples were received on Wednesday 1/7/2020. Results are expected to be ready by COB Tuesday 21/7/2020.
Please quote SGS reference SE208659 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	20 Soil, 2 Material
Date documentation received	14/7/2020@9:15am	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	4.7°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

9 samples have been placed on hold as no tests have been assigned for them by the client. These samples will not be processed.

This document is issued by the Company under its General Conditions of Service accessible at www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

SAMPLE RECEIPT ADVICE

SE208659

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	Speciated Phenols in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
001	0407_BH037_0.1_200701	-	-	-	11	-	10	11	7
002	0407_BH037_0.5_200701	-	-	-	11	-	10	11	7
003	0407_QC416_200630	-	-	-	-	-	-	11	7
004	0407_QC516_200630	-	-	-	-	-	-	11	-
005	0407_TP103_0.1_200701	29	14	26	11	18	10	81	7
006	0407_TP103_0.3_200701	29	14	26	11	18	10	81	7
007	0407_TP113_0.1_200701	29	14	26	11	18	10	81	7
008	0407_TP113_0.5_200701	29	14	26	11	18	10	81	7
009	0407_TP123_0.1_200701	29	14	26	11	18	10	81	7
010	0407_TP123_0.3_200701	29	14	26	11	18	10	81	7
011	0407_TP133_0.1_200701	29	14	26	11	18	10	81	7
012	0407_TP133_0.5_200701	29	14	26	11	18	10	81	7
013	0407_QC185_200701	29	14	26	11	18	10	81	7
014	0407_TP267_0.1_200701	29	14	26	11	18	10	81	7
015	0407_TP267_0.5_200701	29	14	26	11	18	10	81	7
016	0407_TP268_0.1_200701	29	14	26	11	18	10	81	7
017	0407_TP268_0.5_200701	29	14	26	11	18	10	81	7
018	0407_QC187_200701	29	14	26	11	18	10	81	7
019	0407_TP269_0.1_200701	29	14	26	11	18	10	81	7
020	0407_TP269_0.3_200701	29	14	26	11	18	10	81	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE208659

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Fibre Identification in soil	Gravimetric Determination of Asbestos in Soil	Mercury in Soil	Moisture Content	Total Recoverable Elements in Soil/Waste
001	0407_BH037_0.1_200701	-	-	1	1	7
002	0407_BH037_0.5_200701	-	-	1	1	7
003	0407_QC416_200630	-	-	-	1	-
005	0407_TP103_0.1_200701	2	9	1	1	7
006	0407_TP103_0.3_200701	2	9	1	1	7
007	0407_TP113_0.1_200701	2	9	1	1	7
008	0407_TP113_0.5_200701	2	9	1	1	7
009	0407_TP123_0.1_200701	2	9	1	1	7
010	0407_TP123_0.3_200701	2	9	1	1	7
011	0407_TP133_0.1_200701	2	9	1	1	7
012	0407_TP133_0.5_200701	2	9	1	1	7
013	0407_QC185_200701	-	-	1	1	7
014	0407_TP267_0.1_200701	2	9	1	1	7
015	0407_TP267_0.5_200701	2	9	1	1	7
016	0407_TP268_0.1_200701	2	9	1	1	7
017	0407_TP268_0.5_200701	2	9	1	1	7
018	0407_QC187_200701	-	-	1	1	7
019	0407_TP269_0.1_200701	2	9	1	1	7
020	0407_TP269_0.3_200701	2	9	1	1	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
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Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE208659

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Fibre ID in bulk materials
021	0407_TP269_0.1_ACM_200701	1
022	0407_TP269_0.3_ACM_200701	1

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	22

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208659 R0**
Date Received	1/7/2020
Date Reported	22/7/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.

Sample #16: Asbestos found in approx 4x3x2mm cement sheet fragments in >2mm portion.
Sample #19: Approx 5-6x1mm fibre bundles found loose in sample and asbestos found in approx 7x4x3mm cement sheet fragments.

Asbestos analysed by Approved Identifiers Ravee Sivasubramaniam and Yusuf Kuthpudin .

VPH - Tripspikes control vial has been openned thus benzene not recovered within acceptance criteria .

SIGNATORIES

[redacted]

Chemist | Senior Chemist | Organic Section Head

[redacted]

Hygiene Team Leader | Asbestos Analyst

VOC's in Soil [AN433] Tested: 15/7/2020

PARAMETER	UOM	LOR	0407_BH037_0.1_20701 SOIL - 1/7/2020 SE208659.001	0407_BH037_0.5_20701 SOIL - 1/7/2020 SE208659.002	0407_QC416_20063 SOIL - 1/7/2020 SE208659.003	0407_QC516_20063 SOIL - 1/7/2020 SE208659.004	0407_TP103_0.1_20701 SOIL - 1/7/2020 SE208659.005
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	[186%]	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	[127%]	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	[106%]	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	[104%]	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	[102%]	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	-	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	-	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	-	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	-	-	-	-	<1
Chloromethane	mg/kg	1	-	-	-	-	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	-	-	-	-	<0.1
Bromomethane	mg/kg	1	-	-	-	-	<1
Chloroethane	mg/kg	1	-	-	-	-	<1
Trichlorofluoromethane	mg/kg	1	-	-	-	-	<1
Acetone (2-propanone)	mg/kg	10	-	-	-	-	<10
Iodomethane	mg/kg	5	-	-	-	-	<5
1,1-dichloroethene	mg/kg	0.1	-	-	-	-	<0.1
Acrylonitrile	mg/kg	0.1	-	-	-	-	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	-	-	-	-	<0.5
Allyl chloride	mg/kg	0.1	-	-	-	-	<0.1
Carbon disulfide	mg/kg	0.5	-	-	-	-	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	-	-	-	-	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	-	-	-	-	<0.1
1,1-dichloroethane	mg/kg	0.1	-	-	-	-	<0.1
Vinyl acetate	mg/kg	10	-	-	-	-	<10
MEK (2-butanone)	mg/kg	10	-	-	-	-	<10
cis-1,2-dichloroethene	mg/kg	0.1	-	-	-	-	<0.1
Bromochloromethane	mg/kg	0.1	-	-	-	-	<0.1
Chloroform	mg/kg	0.1	-	-	-	-	<0.1
2,2-dichloropropane	mg/kg	0.1	-	-	-	-	<0.1
1,2-dichloroethane	mg/kg	0.1	-	-	-	-	<0.1
1,1,1-trichloroethane	mg/kg	0.1	-	-	-	-	<0.1
1,1-dichloropropene	mg/kg	0.1	-	-	-	-	<0.1
Carbon tetrachloride	mg/kg	0.1	-	-	-	-	<0.1
Dibromomethane	mg/kg	0.1	-	-	-	-	<0.1
1,2-dichloropropane	mg/kg	0.1	-	-	-	-	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	-	-	-	-	<0.1
2-nitropropane	mg/kg	10	-	-	-	-	<10
Bromodichloromethane	mg/kg	0.1	-	-	-	-	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	-	-	-	-	<1
cis-1,3-dichloropropene	mg/kg	0.1	-	-	-	-	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	-	-	-	-	<0.1
1,1,2-trichloroethane	mg/kg	0.1	-	-	-	-	<0.1
1,3-dichloropropane	mg/kg	0.1	-	-	-	-	<0.1
Chlorodibromomethane	mg/kg	0.1	-	-	-	-	<0.1
2-hexanone (MBK)	mg/kg	5	-	-	-	-	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	-	-	-	-	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	-	-	-	-	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	-	-	-	-	<0.1
Chlorobenzene	mg/kg	0.1	-	-	-	-	<0.1
Bromoform	mg/kg	0.1	-	-	-	-	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	-	-	-	-	<1
Styrene (Vinyl benzene)	mg/kg	0.1	-	-	-	-	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	-	-	-	-	<0.1
1,2,3-trichloropropane	mg/kg	0.1	-	-	-	-	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	-	-	-	-	<1

VOC's in Soil [AN433] Tested: 15/7/2020 (continued)

PARAMETER	UOM	LOR	0407_BH037_0.1_20701 SOIL - 1/7/2020 SE208659.001	0407_BH037_0.5_20701 SOIL - 1/7/2020 SE208659.002	0407_QC416_20063(SOIL - 1/7/2020 SE208659.003	0407_QC516_20063(SOIL - 1/7/2020 SE208659.004	0407_TP103_0.1_20701 SOIL - 1/7/2020 SE208659.005
Isopropylbenzene (Cumene)	mg/kg	0.1	-	-	-	-	<0.1
Bromobenzene	mg/kg	0.1	-	-	-	-	<0.1
n-propylbenzene	mg/kg	0.1	-	-	-	-	<0.1
2-chlorotoluene	mg/kg	0.1	-	-	-	-	<0.1
4-chlorotoluene	mg/kg	0.1	-	-	-	-	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	-	-	-	-	<0.1
tert-butylbenzene	mg/kg	0.1	-	-	-	-	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	-	-	-	-	<0.1
sec-butylbenzene	mg/kg	0.1	-	-	-	-	<0.1
1,3-dichlorobenzene	mg/kg	0.1	-	-	-	-	<0.1
1,4-dichlorobenzene	mg/kg	0.1	-	-	-	-	<0.1
p-isopropyltoluene	mg/kg	0.1	-	-	-	-	<0.1
1,2-dichlorobenzene	mg/kg	0.1	-	-	-	-	<0.1
n-butylbenzene	mg/kg	0.1	-	-	-	-	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	-	-	-	-	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	-	-	-	-	<0.1
Hexachlorobutadiene	mg/kg	0.1	-	-	-	-	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	-	-	-	-	<0.1
Total VOC*	mg/kg	24	-	-	-	-	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	-	-	-	-	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	-	-	-	-	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	-	-	-	-	<1.8

VOC's in Soil [AN433] Tested: 15/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP103_0.3_20(701 SOIL - 1/7/2020 SE208659.006	0407_TP113_0.1_20(701 SOIL - 1/7/2020 SE208659.007	0407_TP113_0.5_20(701 SOIL - 1/7/2020 SE208659.008	0407_TP123_0.1_20(701 SOIL - 1/7/2020 SE208659.009	0407_TP123_0.3_20(701 SOIL - 1/7/2020 SE208659.010
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 15/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP103_0.3_20(701 SOIL - 1/7/2020 SE208659.006	0407_TP113_0.1_20(701 SOIL - 1/7/2020 SE208659.007	0407_TP113_0.5_20(701 SOIL - 1/7/2020 SE208659.008	0407_TP123_0.1_20(701 SOIL - 1/7/2020 SE208659.009	0407_TP123_0.3_20(701 SOIL - 1/7/2020 SE208659.010
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 15/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP133_0.1_20(701 SOIL - 1/7/2020 SE208659.011	0407_TP133_0.5_20(701 SOIL - 1/7/2020 SE208659.012	0407_QC185_20070 SOIL - 1/7/2020 SE208659.013	0407_TP267_0.1_20(701 SOIL - 1/7/2020 SE208659.014	0407_TP267_0.5_20(701 SOIL - 1/7/2020 SE208659.015
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 15/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP133_0.1_20(701 SOIL - 1/7/2020 SE208659.011	0407_TP133_0.5_20(701 SOIL - 1/7/2020 SE208659.012	0407_QC185_20070 SOIL - 1/7/2020 SE208659.013	0407_TP267_0.1_20(701 SOIL - 1/7/2020 SE208659.014	0407_TP267_0.5_20(701 SOIL - 1/7/2020 SE208659.015
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 15/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP268_0.1_20(701 SOIL - 1/7/2020 SE208659.016	0407_TP268_0.5_20(701 SOIL - 1/7/2020 SE208659.017	0407_QC187_20070 SOIL - 1/7/2020 SE208659.018	0407_TP269_0.1_20(701 SOIL - 1/7/2020 SE208659.019	0407_TP269_0.3_20(701 SOIL - 1/7/2020 SE208659.020
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 15/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP268_0.1_20(701 SOIL - 1/7/2020 SE208659.016	0407_TP268_0.5_20(701 SOIL - 1/7/2020 SE208659.017	0407_QC187_20070 SOIL - 1/7/2020 SE208659.018	0407_TP269_0.1_20(701 SOIL - 1/7/2020 SE208659.019	0407_TP269_0.3_20(701 SOIL - 1/7/2020 SE208659.020
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 15/7/2020

PARAMETER	UOM	LOR	0407_BH037_0.1_20(701 SOIL - 1/7/2020 SE208659.001	0407_BH037_0.5_20(701 SOIL - 1/7/2020 SE208659.002	0407_QC416_20063(SOIL - 1/7/2020 SE208659.003	0407_TP103_0.1_20(701 SOIL - 1/7/2020 SE208659.005	0407_TP103_0.3_20(701 SOIL - 1/7/2020 SE208659.006
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP113_0.1_20(701 SOIL - 1/7/2020 SE208659.007	0407_TP113_0.5_20(701 SOIL - 1/7/2020 SE208659.008	0407_TP123_0.1_20(701 SOIL - 1/7/2020 SE208659.009	0407_TP123_0.3_20(701 SOIL - 1/7/2020 SE208659.010	0407_TP133_0.1_20(701 SOIL - 1/7/2020 SE208659.011
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP133_0.5_20(701 SOIL - 1/7/2020 SE208659.012	0407_QC185_20070 SOIL - 1/7/2020 SE208659.013	0407_TP267_0.1_20(701 SOIL - 1/7/2020 SE208659.014	0407_TP267_0.5_20(701 SOIL - 1/7/2020 SE208659.015	0407_TP268_0.1_20(701 SOIL - 1/7/2020 SE208659.016
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP268_0.5_20(701 SOIL - 1/7/2020 SE208659.017	0407_QC187_20070 SOIL - 1/7/2020 SE208659.018	0407_TP269_0.1_20(701 SOIL - 1/7/2020 SE208659.019	0407_TP269_0.3_20(701 SOIL - 1/7/2020 SE208659.020
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 15/7/2020

PARAMETER	UOM	LOR	0407_BH037_0.1_20(701 SOIL - 1/7/2020 SE208659.001	0407_BH037_0.5_20(701 SOIL - 1/7/2020 SE208659.002	0407_TP103_0.1_20(701 SOIL - 1/7/2020 SE208659.005	0407_TP103_0.3_20(701 SOIL - 1/7/2020 SE208659.006	0407_TP113_0.1_20(701 SOIL - 1/7/2020 SE208659.007
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	56
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP113_0.5_20(701 SOIL - 1/7/2020 SE208659.008	0407_TP123_0.1_20(701 SOIL - 1/7/2020 SE208659.009	0407_TP123_0.3_20(701 SOIL - 1/7/2020 SE208659.010	0407_TP133_0.1_20(701 SOIL - 1/7/2020 SE208659.011	0407_TP133_0.5_20(701 SOIL - 1/7/2020 SE208659.012
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_QC185_20070 SOIL - 1/7/2020 SE208659.013	0407_TP267_0.1_20(701 SOIL - 1/7/2020 SE208659.014	0407_TP267_0.5_20(701 SOIL - 1/7/2020 SE208659.015	0407_TP268_0.1_20(701 SOIL - 1/7/2020 SE208659.016	0407_TP268_0.5_20(701 SOIL - 1/7/2020 SE208659.017
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	59	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 15/7/2020 (continued)

PARAMETER	UOM	LOR	0407_QC187_20070 SOIL - 1/7/2020 SE208659.018	0407_TP269_0.1_20 701 SOIL - 1/7/2020 SE208659.019	0407_TP269_0.3_20 701 SOIL - 1/7/2020 SE208659.020
TRH C10-C14	mg/kg	20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 15/7/2020

PARAMETER	UOM	LOR	0407_TP103_0.1_20(701 SOIL - 1/7/2020 SE208659.005	0407_TP103_0.3_20(701 SOIL - 1/7/2020 SE208659.006	0407_TP113_0.1_20(701 SOIL - 1/7/2020 SE208659.007	0407_TP113_0.5_20(701 SOIL - 1/7/2020 SE208659.008	0407_TP123_0.1_20(701 SOIL - 1/7/2020 SE208659.009
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	**0.1**	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	**0.4**	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	**0.4**	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	**0.2**	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	**0.2**	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	**0.2**	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	**0.1**	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	**0.2**	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	**0.2**	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	**0.2**	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	**0.3**	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	**0.4**	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	**0.4**	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	**2.4**	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	**2.4**	<0.8	<0.8	<0.8

PARAMETER	UOM	LOR	0407_TP123_0.3_20(701 SOIL - 1/7/2020 SE208659.010	0407_TP133_0.1_20(701 SOIL - 1/7/2020 SE208659.011	0407_TP133_0.5_20(701 SOIL - 1/7/2020 SE208659.012	0407_QC185_20070(SOIL - 1/7/2020 SE208659.013	0407_TP267_0.1_20(701 SOIL - 1/7/2020 SE208659.014
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 15/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP267_0.5_20(701 SOIL - 1/7/2020 SE208659.015	0407_TP268_0.1_20(701 SOIL - 1/7/2020 SE208659.016	0407_TP268_0.5_20(701 SOIL - 1/7/2020 SE208659.017	0407_QC187_20070(SOIL - 1/7/2020 SE208659.018	0407_TP269_0.1_20(701 SOIL - 1/7/2020 SE208659.019
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	0.2	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	2.3	<0.1	<0.1	0.2
Anthracene	mg/kg	0.1	<0.1	0.4	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	3.8	0.1	0.1	0.3
Pyrene	mg/kg	0.1	<0.1	5.0	0.2	0.2	0.4
Benzo(a)anthracene	mg/kg	0.1	<0.1	1.8	<0.1	<0.1	0.2
Chrysene	mg/kg	0.1	<0.1	1.8	<0.1	<0.1	0.2
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	2.4	<0.1	<0.1	0.2
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	0.9	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	2.0	<0.1	<0.1	0.2
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	1.5	<0.1	<0.1	0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	1.5	<0.1	<0.1	0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	2.8	<0.2	<0.2	0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	2.8	<0.3	<0.3	0.4
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	2.8	<0.2	<0.2	0.3
Total PAH (18)	mg/kg	0.8	<0.8	24	<0.8	<0.8	2.0
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	24	<0.8	<0.8	2.0

PARAMETER	UOM	LOR	0407_TP269_0.3_20(701 SOIL - 1/7/2020 SE208659.020
Naphthalene	mg/kg	0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1
Fluorene	mg/kg	0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1
Anthracene	mg/kg	0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1
Pyrene	mg/kg	0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1
Chrysene	mg/kg	0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8

Speciated Phenols in Soil [AN420] Tested: 15/7/2020

PARAMETER	UOM	LOR	0407_TP103_0.1_20(701 SOIL - 1/7/2020 SE208659.005	0407_TP103_0.3_20(701 SOIL - 1/7/2020 SE208659.006	0407_TP113_0.1_20(701 SOIL - 1/7/2020 SE208659.007	0407_TP113_0.5_20(701 SOIL - 1/7/2020 SE208659.008	0407_TP123_0.1_20(701 SOIL - 1/7/2020 SE208659.009
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_TP123_0.3_20(701 SOIL - 1/7/2020 SE208659.010	0407_TP133_0.1_20(701 SOIL - 1/7/2020 SE208659.011	0407_TP133_0.5_20(701 SOIL - 1/7/2020 SE208659.012	0407_QC185_20070(SOIL - 1/7/2020 SE208659.013	0407_TP267_0.1_20(701 SOIL - 1/7/2020 SE208659.014
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

Speciated Phenols in Soil [AN420] Tested: 15/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP267_0.5_20(701 SOIL - 1/7/2020 SE208659.015	0407_TP268_0.1_20(701 SOIL - 1/7/2020 SE208659.016	0407_TP268_0.5_20(701 SOIL - 1/7/2020 SE208659.017	0407_QC187_20070 SOIL - 1/7/2020 SE208659.018	0407_TP269_0.1_20(701 SOIL - 1/7/2020 SE208659.019
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_TP269_0.3_20(701 SOIL - 1/7/2020 SE208659.020
Phenol	mg/kg	0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
Total Cresol	mg/kg	1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5
4-nitrophenol	mg/kg	1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
Pentachlorophenol	mg/kg	0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2
4-chloro-3-methylphenol	mg/kg	2	<2

OC Pesticides in Soil [AN420] Tested: 15/7/2020

PARAMETER	UOM	LOR	0407_BH037_0.1_20701 SOIL - 1/7/2020 SE208659.001	0407_BH037_0.5_20701 SOIL - 1/7/2020 SE208659.002	0407_TP103_0.1_20701 SOIL - 1/7/2020 SE208659.005	0407_TP103_0.3_20701 SOIL - 1/7/2020 SE208659.006	0407_TP113_0.1_20701 SOIL - 1/7/2020 SE208659.007
Hexachlorobenzene (HCB)	mg/kg	0.1	-	-	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	-	-	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	-	-	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	-	-	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	-	-	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	-	-	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	-	-	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	-	-	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	-	-	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	-	-	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	-	-	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	-	-	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	-	-	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	-	-	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	-	-	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	-	-	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	-	-	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	-	-	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	-	-	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	-	-	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	-	-	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	-	-	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	-	-	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	-	-	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	-	-	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	-	-	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	-	-	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	-	-	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 15/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP113_0.5_20(701 SOIL - 1/7/2020 SE208659.008	0407_TP123_0.1_20(701 SOIL - 1/7/2020 SE208659.009	0407_TP123_0.3_20(701 SOIL - 1/7/2020 SE208659.010	0407_TP133_0.1_20(701 SOIL - 1/7/2020 SE208659.011	0407_TP133_0.5_20(701 SOIL - 1/7/2020 SE208659.012
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 15/7/2020 (continued)

PARAMETER	UOM	LOR	0407_QC185_20070 SOIL - 1/7/2020 SE208659.013	0407_TP267_0.1_20(701 SOIL - 1/7/2020 SE208659.014	0407_TP267_0.5_20(701 SOIL - 1/7/2020 SE208659.015	0407_TP268_0.1_20(701 SOIL - 1/7/2020 SE208659.016	0407_TP268_0.5_20(701 SOIL - 1/7/2020 SE208659.017
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	**0.3**	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	**0.1**	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	**0.3**	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 15/7/2020 (continued)

PARAMETER	UOM	LOR	0407_QC187_20070 SOIL - 1/7/2020 SE208659.018	0407_TP269_0.1_20 701 SOIL - 1/7/2020 SE208659.019	0407_TP269_0.3_20 701 SOIL - 1/7/2020 SE208659.020
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	**0.5**	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1

OP Pesticides in Soil [AN420] Tested: 15/7/2020

PARAMETER	UOM	LOR	0407_TP103_0.1_20(701 SOIL - 1/7/2020 SE208659.005	0407_TP103_0.3_20(701 SOIL - 1/7/2020 SE208659.006	0407_TP113_0.1_20(701 SOIL - 1/7/2020 SE208659.007	0407_TP113_0.5_20(701 SOIL - 1/7/2020 SE208659.008	0407_TP123_0.1_20(701 SOIL - 1/7/2020 SE208659.009
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP123_0.3_20(701 SOIL - 1/7/2020 SE208659.010	0407_TP133_0.1_20(701 SOIL - 1/7/2020 SE208659.011	0407_TP133_0.5_20(701 SOIL - 1/7/2020 SE208659.012	0407_QC185_20070 SOIL - 1/7/2020 SE208659.013	0407_TP267_0.1_20(701 SOIL - 1/7/2020 SE208659.014
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP267_0.5_20(701 SOIL - 1/7/2020 SE208659.015	0407_TP268_0.1_20(701 SOIL - 1/7/2020 SE208659.016	0407_TP268_0.5_20(701 SOIL - 1/7/2020 SE208659.017	0407_QC187_20070 SOIL - 1/7/2020 SE208659.018	0407_TP269_0.1_20(701 SOIL - 1/7/2020 SE208659.019
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

OP Pesticides in Soil [AN420] Tested: 15/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP269_0.3_20(701 SOIL - 1/7/2020 SE208659.020
Dichlorvos	mg/kg	0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2
Malathion	mg/kg	0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2
Methidathion	mg/kg	0.5	<0.5
Ethion	mg/kg	0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7

PCBs in Soil [AN420] Tested: 15/7/2020

PARAMETER	UOM	LOR	0407_BH037_0.1_20701 SOIL - 1/7/2020 SE208659.001	0407_BH037_0.5_20701 SOIL - 1/7/2020 SE208659.002	0407_TP103_0.1_20701 SOIL - 1/7/2020 SE208659.005	0407_TP103_0.3_20701 SOIL - 1/7/2020 SE208659.006	0407_TP113_0.1_20701 SOIL - 1/7/2020 SE208659.007
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP113_0.5_20701 SOIL - 1/7/2020 SE208659.008	0407_TP123_0.1_20701 SOIL - 1/7/2020 SE208659.009	0407_TP123_0.3_20701 SOIL - 1/7/2020 SE208659.010	0407_TP133_0.1_20701 SOIL - 1/7/2020 SE208659.011	0407_TP133_0.5_20701 SOIL - 1/7/2020 SE208659.012
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_QC185_20070 SOIL - 1/7/2020 SE208659.013	0407_TP267_0.1_20701 SOIL - 1/7/2020 SE208659.014	0407_TP267_0.5_20701 SOIL - 1/7/2020 SE208659.015	0407_TP268_0.1_20701 SOIL - 1/7/2020 SE208659.016	0407_TP268_0.5_20701 SOIL - 1/7/2020 SE208659.017
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PCBs in Soil [AN420] Tested: 15/7/2020 (continued)

PARAMETER	UOM	LOR	0407_QC187_20070 SOIL - 1/7/2020 SE208659.018	0407_TP269_0.1_20 701 SOIL - 1/7/2020 SE208659.019	0407_TP269_0.3_20 701 SOIL - 1/7/2020 SE208659.020
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 16/7/2020

PARAMETER	UOM	LOR	0407_BH037_0.1_20(701 SOIL - 1/7/2020 SE208659.001	0407_BH037_0.5_20(701 SOIL - 1/7/2020 SE208659.002	0407_TP103_0.1_20(701 SOIL - 1/7/2020 SE208659.005	0407_TP103_0.3_20(701 SOIL - 1/7/2020 SE208659.006	0407_TP113_0.1_20(701 SOIL - 1/7/2020 SE208659.007
Arsenic, As	mg/kg	1	1	<1	<1	<1	<1
Cadmium, Cd	mg/kg	0.3	0.7	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	7.0	<0.5	2.1	2.5	1.4
Copper, Cu	mg/kg	0.5	39	0.5	6.7	8.1	2.9
Lead, Pb	mg/kg	1	56	<1	39	66	35
Nickel, Ni	mg/kg	0.5	20	<0.5	1.1	1.5	0.7
Zinc, Zn	mg/kg	2	110	<2.0	39	39	14

PARAMETER	UOM	LOR	0407_TP113_0.5_20(701 SOIL - 1/7/2020 SE208659.008	0407_TP123_0.1_20(701 SOIL - 1/7/2020 SE208659.009	0407_TP123_0.3_20(701 SOIL - 1/7/2020 SE208659.010	0407_TP133_0.1_20(701 SOIL - 1/7/2020 SE208659.011	0407_TP133_0.5_20(701 SOIL - 1/7/2020 SE208659.012
Arsenic, As	mg/kg	1	<1	<1	<1	<1	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	<0.5	2.7	1.1	0.9	0.5
Copper, Cu	mg/kg	0.5	<0.5	7.0	8.1	3.5	2.2
Lead, Pb	mg/kg	1	<1	71	94	17	12
Nickel, Ni	mg/kg	0.5	<0.5	0.9	1.2	<0.5	<0.5
Zinc, Zn	mg/kg	2	<2.0	47	36	18	6.0

PARAMETER	UOM	LOR	0407_QC185_20070 SOIL - 1/7/2020 SE208659.013	0407_TP267_0.1_20(701 SOIL - 1/7/2020 SE208659.014	0407_TP267_0.5_20(701 SOIL - 1/7/2020 SE208659.015	0407_TP268_0.1_20(701 SOIL - 1/7/2020 SE208659.016	0407_TP268_0.5_20(701 SOIL - 1/7/2020 SE208659.017
Arsenic, As	mg/kg	1	<1	<1	<1	7	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	0.5	<0.3
Chromium, Cr	mg/kg	0.5	0.8	2.8	2.0	32	1.6
Copper, Cu	mg/kg	0.5	3.3	17	0.8	34	2.5
Lead, Pb	mg/kg	1	17	39	4	170	6
Nickel, Ni	mg/kg	0.5	<0.5	1.6	0.8	8.2	1.3
Zinc, Zn	mg/kg	2	17	36	14	310	8.0

PARAMETER	UOM	LOR	0407_QC187_20070 SOIL - 1/7/2020 SE208659.018	0407_TP269_0.1_20(701 SOIL - 1/7/2020 SE208659.019	0407_TP269_0.3_20(701 SOIL - 1/7/2020 SE208659.020
Arsenic, As	mg/kg	1	<1	1	<1
Cadmium, Cd	mg/kg	0.3	<0.3	1.0	<0.3
Chromium, Cr	mg/kg	0.5	2.9	10	2.1
Copper, Cu	mg/kg	0.5	4.0	94	11
Lead, Pb	mg/kg	1	11	340	30
Nickel, Ni	mg/kg	0.5	1.7	6.1	1.5
Zinc, Zn	mg/kg	2	16	1400	130

Mercury in Soil [AN312] Tested: 16/7/2020

PARAMETER	UOM	LOR	0407_BH037_0.1_20701 SOIL - 1/7/2020 SE208659.001	0407_BH037_0.5_20701 SOIL - 1/7/2020 SE208659.002	0407_TP103_0.1_20701 SOIL - 1/7/2020 SE208659.005	0407_TP103_0.3_20701 SOIL - 1/7/2020 SE208659.006	0407_TP113_0.1_20701 SOIL - 1/7/2020 SE208659.007
Mercury	mg/kg	0.05	**0.06**	<0.05	**0.05**	<0.05	<0.05

PARAMETER	UOM	LOR	0407_TP113_0.5_20701 SOIL - 1/7/2020 SE208659.008	0407_TP123_0.1_20701 SOIL - 1/7/2020 SE208659.009	0407_TP123_0.3_20701 SOIL - 1/7/2020 SE208659.010	0407_TP133_0.1_20701 SOIL - 1/7/2020 SE208659.011	0407_TP133_0.5_20701 SOIL - 1/7/2020 SE208659.012
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_QC185_20070 SOIL - 1/7/2020 SE208659.013	0407_TP267_0.1_20701 SOIL - 1/7/2020 SE208659.014	0407_TP267_0.5_20701 SOIL - 1/7/2020 SE208659.015	0407_TP268_0.1_20701 SOIL - 1/7/2020 SE208659.016	0407_TP268_0.5_20701 SOIL - 1/7/2020 SE208659.017
Mercury	mg/kg	0.05	<0.05	**0.13**	<0.05	**0.34**	<0.05

PARAMETER	UOM	LOR	0407_QC187_20070 SOIL - 1/7/2020 SE208659.018	0407_TP269_0.1_20701 SOIL - 1/7/2020 SE208659.019	0407_TP269_0.3_20701 SOIL - 1/7/2020 SE208659.020
Mercury	mg/kg	0.05	**0.07**	**0.08**	<0.05

Moisture Content [AN002] Tested: 15/7/2020

PARAMETER	UOM	LOR	0407_BH037_0.1_20(701 SOIL - 1/7/2020 SE208659.001	0407_BH037_0.5_20(701 SOIL - 1/7/2020 SE208659.002	0407_QC416_20063(SOIL - 1/7/2020 SE208659.003	0407_TP103_0.1_20(701 SOIL - 1/7/2020 SE208659.005	0407_TP103_0.3_20(701 SOIL - 1/7/2020 SE208659.006
% Moisture	%w/w	1	18.1	8.6	<1.0	6.1	5.2

PARAMETER	UOM	LOR	0407_TP113_0.1_20(701 SOIL - 1/7/2020 SE208659.007	0407_TP113_0.5_20(701 SOIL - 1/7/2020 SE208659.008	0407_TP123_0.1_20(701 SOIL - 1/7/2020 SE208659.009	0407_TP123_0.3_20(701 SOIL - 1/7/2020 SE208659.010	0407_TP133_0.1_20(701 SOIL - 1/7/2020 SE208659.011
% Moisture	%w/w	1	6.4	4.4	8.2	5.7	6.7

PARAMETER	UOM	LOR	0407_TP133_0.5_20(701 SOIL - 1/7/2020 SE208659.012	0407_QC185_20070 SOIL - 1/7/2020 SE208659.013	0407_TP267_0.1_20(701 SOIL - 1/7/2020 SE208659.014	0407_TP267_0.5_20(701 SOIL - 1/7/2020 SE208659.015	0407_TP268_0.1_20(701 SOIL - 1/7/2020 SE208659.016
% Moisture	%w/w	1	4.9	7.2	5.9	5.7	14.9

PARAMETER	UOM	LOR	0407_TP268_0.5_20(701 SOIL - 1/7/2020 SE208659.017	0407_QC187_20070 SOIL - 1/7/2020 SE208659.018	0407_TP269_0.1_20(701 SOIL - 1/7/2020 SE208659.019	0407_TP269_0.3_20(701 SOIL - 1/7/2020 SE208659.020
% Moisture	%w/w	1	14.3	15.1	8.5	8.4

Fibre Identification in soil [AN602] Tested: 20/7/2020

PARAMETER	UOM	LOR	0407_TP103_0.1_20(701 SOIL - 1/7/2020 SE208659.005	0407_TP103_0.3_20(701 SOIL - 1/7/2020 SE208659.006	0407_TP113_0.1_20(701 SOIL - 1/7/2020 SE208659.007	0407_TP113_0.5_20(701 SOIL - 1/7/2020 SE208659.008	0407_TP123_0.1_20(701 SOIL - 1/7/2020 SE208659.009
Asbestos Detected	No unit	-	No	No	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	0407_TP123_0.3_20(701 SOIL - 1/7/2020 SE208659.010	0407_TP133_0.1_20(701 SOIL - 1/7/2020 SE208659.011	0407_TP133_0.5_20(701 SOIL - 1/7/2020 SE208659.012	0407_TP267_0.1_20(701 SOIL - 1/7/2020 SE208659.014	0407_TP267_0.5_20(701 SOIL - 1/7/2020 SE208659.015
Asbestos Detected	No unit	-	No	No	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	0407_TP268_0.1_20(701 SOIL - 1/7/2020 SE208659.016	0407_TP268_0.5_20(701 SOIL - 1/7/2020 SE208659.017	0407_TP269_0.1_20(701 SOIL - 1/7/2020 SE208659.019	0407_TP269_0.3_20(701 SOIL - 1/7/2020 SE208659.020
Asbestos Detected	No unit	-	Yes	No	Yes	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 20/7/2020

PARAMETER	UOM	LOR	0407_TP103_0.1_20(701 SOIL - 1/7/2020 SE208659.005	0407_TP103_0.3_20(701 SOIL - 1/7/2020 SE208659.006	0407_TP113_0.1_20(701 SOIL - 1/7/2020 SE208659.007	0407_TP113_0.5_20(701 SOIL - 1/7/2020 SE208659.008	0407_TP123_0.1_20(701 SOIL - 1/7/2020 SE208659.009
Total Sample Weight*	g	1	**644**	**703**	**705**	**750**	**691**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP123_0.3_20(701 SOIL - 1/7/2020 SE208659.010	0407_TP133_0.1_20(701 SOIL - 1/7/2020 SE208659.011	0407_TP133_0.5_20(701 SOIL - 1/7/2020 SE208659.012	0407_TP267_0.1_20(701 SOIL - 1/7/2020 SE208659.014	0407_TP267_0.5_20(701 SOIL - 1/7/2020 SE208659.015
Total Sample Weight*	g	1	**751**	**672**	**756**	**716**	**699**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP268_0.1_20(701 SOIL - 1/7/2020 SE208659.016	0407_TP268_0.5_20(701 SOIL - 1/7/2020 SE208659.017	0407_TP269_0.1_20(701 SOIL - 1/7/2020 SE208659.019	0407_TP269_0.3_20(701 SOIL - 1/7/2020 SE208659.020
Total Sample Weight*	g	1	**648**	**751**	**670**	**725**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	**0.0116**	<0.00001	**0.0461**	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	**0.0195**	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	**0.002**	<0.001	**0.007**	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	**0.003**	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	**0.002**	<0.001	**0.010**	<0.001
Fibre Type*	No unit	-	-	-	-	-

Fibre ID in bulk materials [AN602] Tested: 21/7/2020

PARAMETER	UOM	LOR	0407_TP269_0.1_ACM_200701 MATERIAL - 1/7/2020 SE208659.021	0407_TP269_0.3_ACM_200701 MATERIAL - 1/7/2020 SE208659.022
Asbestos Detected	No unit	-	Yes	Yes

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid, mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents .
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples, Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.
AN605	This technique gravimetrically determines the mass of Bonded Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight. Any fibrous asbestos (FA) found in this fraction will be added to the 2-7mm fraction and its mass recorded there.

AN605	This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free/respirable fibres which are only observed by standard trace analysis as per AN602.
AN605	Bonded asbestos containing material (Bonded ACM) comprises asbestos-containing-material which is sound in condition. Fibrous asbestos (FA) comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material. Asbestos fines (AF) includes free fibres, small fibre bundles and also small fragments of bonded ACM that passes through a 7mm sieve - which implies that the bonded ACM fragments have a substantial degree of damage which increases the potential for fibre release.
AN-605	Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009 and NEPM 1999 (2013) schedule B1 section 4..

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	16

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208659 R0**
Date Received	01 Jul 2020
Date Reported	22 Jul 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.

Sample #16: Asbestos found in approx 4x3x2mm cement sheet fragments in >2mm portion.
Sample #19: Approx 5-6x1mm fibre bundles found loose in sample and asbestos found in approx 7x4x3mm cement sheet fragments.

Asbestos analysed by Approved Identifiers Ravee Sivasubramaniam and Yusuf Kuthpudin .

VPH - Tripspikes control vial has been openned thus benzene not recovered within acceptance criteria .

SIGNATORIES

[redacted]

Chemist | Senior Chemist | Organic Section Head

[redacted]

Hygiene Team Leader | Asbestos Analyst

RESULTS

Fibre Identification in soil

Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE208659.005	0407_TP103_0.1 _200701	Soil	644g Sand, Soil, Rocks, Plant matter	01 Jul 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208659.006	0407_TP103_0.3 _200701	Soil	703g Sand, Soil, Rocks, Plant matter	01 Jul 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208659.007	0407_TP113_0.1 _200701	Soil	705g Sand, Soil, Plant matter	01 Jul 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208659.008	0407_TP113_0.5 _200701	Soil	750g Sand, Soil	01 Jul 2020	No Asbestos Found	<0.01
SE208659.009	0407_TP123_0.1 _200701	Soil	691g Sand, Soil, Rocks, Plant matter	01 Jul 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208659.010	0407_TP123_0.3 _200701	Soil	751g Sand, Soil	01 Jul 2020	No Asbestos Found	<0.01
SE208659.011	0407_TP133_0.1 _200701	Soil	672g Sand, Soil, Plant matter	01 Jul 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208659.012	0407_TP133_0.5 _200701	Soil	756g Sand, Soil, Rocks	01 Jul 2020	No Asbestos Found	<0.01
SE208659.014	0407_TP267_0.1 _200701	Soil	716g Sand, Soil, Rocks	01 Jul 2020	No Asbestos Found	<0.01
SE208659.015	0407_TP267_0.5 _200701	Soil	699g Sand	01 Jul 2020	No Asbestos Found	<0.01
SE208659.016	0407_TP268_0.1 _200701	Soil	648g Sand, Soil, Rocks	01 Jul 2020	Chrysotile & Crocidolite Asbestos Found Organic Fibres Detected	<0.01
SE208659.017	0407_TP268_0.5 _200701	Soil	751g Sand, Soil, Rocks	01 Jul 2020	No Asbestos Found	<0.01
SE208659.019	0407_TP269_0.1 _200701	Soil	670g Sand, Soil, Rocks, Plant matter	01 Jul 2020	Chrysotile Asbestos Found Organic Fibres Detected	<0.01
SE208659.020	0407_TP269_0.3 _200701	Soil	725g Sand, Soil, Rocks	01 Jul 2020	No Asbestos Found	<0.01

RESULTS

Fibre ID in bulk materials — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE208659.021	0407_TP269_0.1 _ACM_200701	Other	50x30x3mm Cement Sheet Fragments	01 Jul 2020	Chrysotile Asbestos Detected	
SE208659.022	0407_TP269_0.3 _ACM_200701	Other	60x50x5mm Cement Sheet Fragment	01 Jul 2020	Chrysotile Asbestos Detected	

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 20/7/2020

PARAMETER	UOM	LOR	0407_TP103_0.1_20(701 SOIL - 1/7/2020 SE208659.005	0407_TP103_0.3_20(701 SOIL - 1/7/2020 SE208659.006	0407_TP113_0.1_20(701 SOIL - 1/7/2020 SE208659.007	0407_TP113_0.5_20(701 SOIL - 1/7/2020 SE208659.008	0407_TP123_0.1_20(701 SOIL - 1/7/2020 SE208659.009
Total Sample Weight*	g	1	644	703	705	750	691
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP123_0.3_20(701 SOIL - 1/7/2020 SE208659.010	0407_TP133_0.1_20(701 SOIL - 1/7/2020 SE208659.011	0407_TP133_0.5_20(701 SOIL - 1/7/2020 SE208659.012	0407_TP267_0.1_20(701 SOIL - 1/7/2020 SE208659.014	0407_TP267_0.5_20(701 SOIL - 1/7/2020 SE208659.015
Total Sample Weight*	g	1	751	672	756	716	699
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP268_0.1_20(701 SOIL - 1/7/2020 SE208659.016	0407_TP268_0.5_20(701 SOIL - 1/7/2020 SE208659.017	0407_TP269_0.1_20(701 SOIL - 1/7/2020 SE208659.019	0407_TP269_0.3_20(701 SOIL - 1/7/2020 SE208659.020
Total Sample Weight*	g	1	648	751	670	725
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	0.0116	<0.00001	0.0461	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	0.0195	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	0.002	<0.001	0.007	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	0.003	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	0.002	<0.001	0.010	<0.001
Fibre Type*	No unit	-	-	-	-	-

METHOD SUMMARY

METHOD	METHODOLOGY SUMMARY
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples , Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable ’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.
AN605	This technique gravimetrically determines the mass of Bonded Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight. Any fibrous asbestos (FA) found in this fraction will be added to the 2-7mm fraction and its mass recorded there.
AN605	This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free/respirable fibres which are only observed by standard trace analysis as per AN602.
AN605	Bonded asbestos containing material (Bonded ACM) comprises asbestos-containing-material which is sound in condition. Fibrous asbestos (FA) comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material. Asbestos fines (AF) includes free fibres, small fibre bundles and also small fragments of bonded ACM that passes through a 7mm sieve - which implies that the bonded ACM fragments have a substantial degree of damage which increases the potential for fibre release.
AN-605	Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009 and NEPM 1999 (2013) schedule B1 section 4..

FOOTNOTES

Amosite	-	Brown Asbestos	NA	-	Not Analysed
Chrysotile	-	White Asbestos	LNR	-	Listed, Not Required
Crocidolite	-	Blue Asbestos	*	-	NATA accreditation does not cover the performance of this service.
Amphiboles	-	Amosite and/or Crocidolite	**	-	Indicative data, theoretical holding time exceeded.

(In reference to soil samples only) This report does not comply with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment and Remediation and Management of Asbestos Contaminated sites in Western Australia - May 2009.

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.

Where reported: 'Asbestos Detected': Asbestos detected by polarised light microscopy, including dispersion staining.
Where reported: 'No Asbestos Found': No Asbestos Found by polarised light microscopy, including dispersion staining.
Where reported: 'UMF Detected': Mineral fibres of unknown type detected by polarised light microscopy, including dispersion staining. Confirmation by another independent analytical technique may be necessary.

Even after disintegration it can be very difficult, or impossible, to detect the presence of asbestos in some asbestos-containing bulk materials using polarised light microscopy. This is due to the low grade or small length or diameter of asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE208659 R0

CLIENT DETAILS		LABORATORY DETAILS	
Contact	[redacted]	Manager	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD	Laboratory	SGS Alexandria Environmental
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066	Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	[redacted]	Telephone	+61 2 8594 0400
Facsimile		Facsimile	+61 2 8594 0499
Email		Email	au.environmental.sydney@sgs.com
Project	**610.30041 Randwick Barracks**	SGS Reference	**SE208659 R0**
Order Number	(Not specified)	Date Received	01 Jul 2020
Samples	22	Date Reported	22 Jul 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Duplicate	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	3 items
Matrix Spike	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	1 item
	VOC's in Soil	1 item

SAMPLE SUMMARY

HOLDING TIME SUMMARY

SE208659 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Fibre ID in bulk materials

Method: ME-(AU)-[ENV]AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP269_0.1_ACM_200	SE208659.021	LB204725	01 Jul 2020	01 Jul 2020	01 Jul 2021	21 Jul 2020	01 Jul 2021	21 Jul 2020
0407_TP269_0.3_ACM_200	SE208659.022	LB204725	01 Jul 2020	01 Jul 2020	01 Jul 2021	21 Jul 2020	01 Jul 2021	21 Jul 2020

Fibre Identification in soil

Method: ME-(AU)-[ENV]AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP103_0.1_200701	SE208659.005	LB204666	01 Jul 2020	01 Jul 2020	01 Jul 2021	20 Jul 2020	01 Jul 2021	21 Jul 2020
0407_TP103_0.3_200701	SE208659.006	LB204666	01 Jul 2020	01 Jul 2020	01 Jul 2021	20 Jul 2020	01 Jul 2021	21 Jul 2020
0407_TP113_0.1_200701	SE208659.007	LB204666	01 Jul 2020	01 Jul 2020	01 Jul 2021	20 Jul 2020	01 Jul 2021	21 Jul 2020
0407_TP113_0.5_200701	SE208659.008	LB204666	01 Jul 2020	01 Jul 2020	01 Jul 2021	20 Jul 2020	01 Jul 2021	21 Jul 2020
0407_TP123_0.1_200701	SE208659.009	LB204666	01 Jul 2020	01 Jul 2020	01 Jul 2021	20 Jul 2020	01 Jul 2021	21 Jul 2020
0407_TP123_0.3_200701	SE208659.010	LB204666	01 Jul 2020	01 Jul 2020	01 Jul 2021	20 Jul 2020	01 Jul 2021	21 Jul 2020
0407_TP133_0.1_200701	SE208659.011	LB204666	01 Jul 2020	01 Jul 2020	01 Jul 2021	20 Jul 2020	01 Jul 2021	21 Jul 2020
0407_TP133_0.5_200701	SE208659.012	LB204666	01 Jul 2020	01 Jul 2020	01 Jul 2021	20 Jul 2020	01 Jul 2021	21 Jul 2020
0407_TP267_0.1_200701	SE208659.014	LB204666	01 Jul 2020	01 Jul 2020	01 Jul 2021	20 Jul 2020	01 Jul 2021	21 Jul 2020
0407_TP267_0.5_200701	SE208659.015	LB204666	01 Jul 2020	01 Jul 2020	01 Jul 2021	20 Jul 2020	01 Jul 2021	21 Jul 2020
0407_TP268_0.1_200701	SE208659.016	LB204666	01 Jul 2020	01 Jul 2020	01 Jul 2021	20 Jul 2020	01 Jul 2021	21 Jul 2020
0407_TP268_0.5_200701	SE208659.017	LB204666	01 Jul 2020	01 Jul 2020	01 Jul 2021	20 Jul 2020	01 Jul 2021	21 Jul 2020
0407_TP269_0.1_200701	SE208659.019	LB204666	01 Jul 2020	01 Jul 2020	01 Jul 2021	20 Jul 2020	01 Jul 2021	21 Jul 2020
0407_TP269_0.3_200701	SE208659.020	LB204666	01 Jul 2020	01 Jul 2020	01 Jul 2021	20 Jul 2020	01 Jul 2021	21 Jul 2020

Gravimetric Determination of Asbestos in Soil

Method: ME-(AU)-[ENV]AN605

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP103_0.1_200701	SE208659.005	LB204666	01 Jul 2020	01 Jul 2020	28 Dec 2020	20 Jul 2020	28 Dec 2020	21 Jul 2020
0407_TP103_0.3_200701	SE208659.006	LB204666	01 Jul 2020	01 Jul 2020	28 Dec 2020	20 Jul 2020	28 Dec 2020	21 Jul 2020
0407_TP113_0.1_200701	SE208659.007	LB204666	01 Jul 2020	01 Jul 2020	28 Dec 2020	20 Jul 2020	28 Dec 2020	21 Jul 2020
0407_TP113_0.5_200701	SE208659.008	LB204666	01 Jul 2020	01 Jul 2020	28 Dec 2020	20 Jul 2020	28 Dec 2020	21 Jul 2020
0407_TP123_0.1_200701	SE208659.009	LB204666	01 Jul 2020	01 Jul 2020	28 Dec 2020	20 Jul 2020	28 Dec 2020	21 Jul 2020
0407_TP123_0.3_200701	SE208659.010	LB204666	01 Jul 2020	01 Jul 2020	28 Dec 2020	20 Jul 2020	28 Dec 2020	21 Jul 2020
0407_TP133_0.1_200701	SE208659.011	LB204666	01 Jul 2020	01 Jul 2020	28 Dec 2020	20 Jul 2020	28 Dec 2020	21 Jul 2020
0407_TP133_0.5_200701	SE208659.012	LB204666	01 Jul 2020	01 Jul 2020	28 Dec 2020	20 Jul 2020	28 Dec 2020	21 Jul 2020
0407_TP267_0.1_200701	SE208659.014	LB204666	01 Jul 2020	01 Jul 2020	28 Dec 2020	20 Jul 2020	28 Dec 2020	21 Jul 2020
0407_TP267_0.5_200701	SE208659.015	LB204666	01 Jul 2020	01 Jul 2020	28 Dec 2020	20 Jul 2020	28 Dec 2020	21 Jul 2020
0407_TP268_0.1_200701	SE208659.016	LB204666	01 Jul 2020	01 Jul 2020	28 Dec 2020	20 Jul 2020	28 Dec 2020	21 Jul 2020
0407_TP268_0.5_200701	SE208659.017	LB204666	01 Jul 2020	01 Jul 2020	28 Dec 2020	20 Jul 2020	28 Dec 2020	21 Jul 2020
0407_TP269_0.1_200701	SE208659.019	LB204666	01 Jul 2020	01 Jul 2020	28 Dec 2020	20 Jul 2020	28 Dec 2020	21 Jul 2020
0407_TP269_0.3_200701	SE208659.020	LB204666	01 Jul 2020	01 Jul 2020	28 Dec 2020	20 Jul 2020	28 Dec 2020	21 Jul 2020

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH037_0.1_200701	SE208659.001	LB204502	01 Jul 2020	01 Jul 2020	29 Jul 2020	16 Jul 2020	29 Jul 2020	21 Jul 2020
0407_BH037_0.5_200701	SE208659.002	LB204502	01 Jul 2020	01 Jul 2020	29 Jul 2020	16 Jul 2020	29 Jul 2020	21 Jul 2020
0407_TP103_0.1_200701	SE208659.005	LB204502	01 Jul 2020	01 Jul 2020	29 Jul 2020	16 Jul 2020	29 Jul 2020	21 Jul 2020
0407_TP103_0.3_200701	SE208659.006	LB204502	01 Jul 2020	01 Jul 2020	29 Jul 2020	16 Jul 2020	29 Jul 2020	21 Jul 2020
0407_TP113_0.1_200701	SE208659.007	LB204502	01 Jul 2020	01 Jul 2020	29 Jul 2020	16 Jul 2020	29 Jul 2020	21 Jul 2020
0407_TP113_0.5_200701	SE208659.008	LB204502	01 Jul 2020	01 Jul 2020	29 Jul 2020	16 Jul 2020	29 Jul 2020	21 Jul 2020
0407_TP123_0.1_200701	SE208659.009	LB204502	01 Jul 2020	01 Jul 2020	29 Jul 2020	16 Jul 2020	29 Jul 2020	21 Jul 2020
0407_TP123_0.3_200701	SE208659.010	LB204502	01 Jul 2020	01 Jul 2020	29 Jul 2020	16 Jul 2020	29 Jul 2020	21 Jul 2020
0407_TP133_0.1_200701	SE208659.011	LB204502	01 Jul 2020	01 Jul 2020	29 Jul 2020	16 Jul 2020	29 Jul 2020	21 Jul 2020
0407_TP133_0.5_200701	SE208659.012	LB204502	01 Jul 2020	01 Jul 2020	29 Jul 2020	16 Jul 2020	29 Jul 2020	21 Jul 2020
0407_QC185_200701	SE208659.013	LB204502	01 Jul 2020	01 Jul 2020	29 Jul 2020	16 Jul 2020	29 Jul 2020	21 Jul 2020
0407_TP267_0.1_200701	SE208659.014	LB204502	01 Jul 2020	01 Jul 2020	29 Jul 2020	16 Jul 2020	29 Jul 2020	21 Jul 2020
0407_TP267_0.5_200701	SE208659.015	LB204502	01 Jul 2020	01 Jul 2020	29 Jul 2020	16 Jul 2020	29 Jul 2020	21 Jul 2020
0407_TP268_0.1_200701	SE208659.016	LB204502	01 Jul 2020	01 Jul 2020	29 Jul 2020	16 Jul 2020	29 Jul 2020	21 Jul 2020
0407_TP268_0.5_200701	SE208659.017	LB204502	01 Jul 2020	01 Jul 2020	29 Jul 2020	16 Jul 2020	29 Jul 2020	21 Jul 2020
0407_QC187_200701	SE208659.018	LB204502	01 Jul 2020	01 Jul 2020	29 Jul 2020	16 Jul 2020	29 Jul 2020	21 Jul 2020
0407_TP269_0.1_200701	SE208659.019	LB204502	01 Jul 2020	01 Jul 2020	29 Jul 2020	16 Jul 2020	29 Jul 2020	21 Jul 2020
0407_TP269_0.3_200701	SE208659.020	LB204502	01 Jul 2020	01 Jul 2020	29 Jul 2020	16 Jul 2020	29 Jul 2020	21 Jul 2020

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH037_0.1_200701	SE208659.001	LB204415	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	20 Jul 2020	20 Jul 2020
0407_BH037_0.5_200701	SE208659.002	LB204415	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	20 Jul 2020	20 Jul 2020

HOLDING TIME SUMMARY

SE208659 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Moisture Content (continued)

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC416_200630	SE208659.003	LB204415	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	20 Jul 2020	20 Jul 2020
0407_TP103_0.1_200701	SE208659.005	LB204415	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	20 Jul 2020	20 Jul 2020
0407_TP103_0.3_200701	SE208659.006	LB204415	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	20 Jul 2020	20 Jul 2020
0407_TP113_0.1_200701	SE208659.007	LB204415	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	20 Jul 2020	20 Jul 2020
0407_TP113_0.5_200701	SE208659.008	LB204415	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	20 Jul 2020	20 Jul 2020
0407_TP123_0.1_200701	SE208659.009	LB204415	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	20 Jul 2020	20 Jul 2020
0407_TP123_0.3_200701	SE208659.010	LB204415	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	20 Jul 2020	20 Jul 2020
0407_TP133_0.1_200701	SE208659.011	LB204415	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	20 Jul 2020	20 Jul 2020
0407_TP133_0.5_200701	SE208659.012	LB204415	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	20 Jul 2020	20 Jul 2020
0407_QC185_200701	SE208659.013	LB204415	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	20 Jul 2020	20 Jul 2020
0407_TP267_0.1_200701	SE208659.014	LB204415	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	20 Jul 2020	20 Jul 2020
0407_TP267_0.5_200701	SE208659.015	LB204415	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	20 Jul 2020	20 Jul 2020
0407_TP268_0.1_200701	SE208659.016	LB204415	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	20 Jul 2020	20 Jul 2020
0407_TP268_0.5_200701	SE208659.017	LB204415	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	20 Jul 2020	20 Jul 2020
0407_QC187_200701	SE208659.018	LB204415	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	20 Jul 2020	20 Jul 2020
0407_TP269_0.1_200701	SE208659.019	LB204415	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	20 Jul 2020	20 Jul 2020
0407_TP269_0.3_200701	SE208659.020	LB204415	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	20 Jul 2020	20 Jul 2020

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH037_0.1_200701	SE208659.001	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_BH037_0.5_200701	SE208659.002	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP103_0.1_200701	SE208659.005	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP103_0.3_200701	SE208659.006	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP113_0.1_200701	SE208659.007	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP113_0.5_200701	SE208659.008	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP123_0.1_200701	SE208659.009	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP123_0.3_200701	SE208659.010	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP133_0.1_200701	SE208659.011	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP133_0.5_200701	SE208659.012	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_QC185_200701	SE208659.013	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP267_0.1_200701	SE208659.014	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP267_0.5_200701	SE208659.015	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP268_0.1_200701	SE208659.016	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP268_0.5_200701	SE208659.017	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_QC187_200701	SE208659.018	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP269_0.1_200701	SE208659.019	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP269_0.3_200701	SE208659.020	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH037_0.1_200701	SE208659.001	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_BH037_0.5_200701	SE208659.002	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP103_0.1_200701	SE208659.005	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP103_0.3_200701	SE208659.006	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP113_0.1_200701	SE208659.007	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP113_0.5_200701	SE208659.008	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP123_0.1_200701	SE208659.009	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP123_0.3_200701	SE208659.010	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP133_0.1_200701	SE208659.011	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP133_0.5_200701	SE208659.012	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_QC185_200701	SE208659.013	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP267_0.1_200701	SE208659.014	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP267_0.5_200701	SE208659.015	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP268_0.1_200701	SE208659.016	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP268_0.5_200701	SE208659.017	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_QC187_200701	SE208659.018	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP269_0.1_200701	SE208659.019	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP269_0.3_200701	SE208659.020	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020

HOLDING TIME SUMMARY

SE208659 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH037_0.1_200701	SE208659.001	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_BH037_0.5_200701	SE208659.002	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP103_0.1_200701	SE208659.005	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP103_0.3_200701	SE208659.006	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP113_0.1_200701	SE208659.007	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP113_0.5_200701	SE208659.008	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP123_0.1_200701	SE208659.009	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP123_0.3_200701	SE208659.010	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP133_0.1_200701	SE208659.011	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP133_0.5_200701	SE208659.012	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_QC185_200701	SE208659.013	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP267_0.1_200701	SE208659.014	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP267_0.5_200701	SE208659.015	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP268_0.1_200701	SE208659.016	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP268_0.5_200701	SE208659.017	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_QC187_200701	SE208659.018	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP269_0.1_200701	SE208659.019	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP269_0.3_200701	SE208659.020	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH037_0.1_200701	SE208659.001	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_BH037_0.5_200701	SE208659.002	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP103_0.1_200701	SE208659.005	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP103_0.3_200701	SE208659.006	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP113_0.1_200701	SE208659.007	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP113_0.5_200701	SE208659.008	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP123_0.1_200701	SE208659.009	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP123_0.3_200701	SE208659.010	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP133_0.1_200701	SE208659.011	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP133_0.5_200701	SE208659.012	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_QC185_200701	SE208659.013	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP267_0.1_200701	SE208659.014	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP267_0.5_200701	SE208659.015	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP268_0.1_200701	SE208659.016	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP268_0.5_200701	SE208659.017	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_QC187_200701	SE208659.018	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP269_0.1_200701	SE208659.019	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP269_0.3_200701	SE208659.020	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH037_0.1_200701	SE208659.001	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_BH037_0.5_200701	SE208659.002	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP103_0.1_200701	SE208659.005	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP103_0.3_200701	SE208659.006	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP113_0.1_200701	SE208659.007	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP113_0.5_200701	SE208659.008	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP123_0.1_200701	SE208659.009	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP123_0.3_200701	SE208659.010	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP133_0.1_200701	SE208659.011	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP133_0.5_200701	SE208659.012	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_QC185_200701	SE208659.013	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP267_0.1_200701	SE208659.014	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP267_0.5_200701	SE208659.015	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP268_0.1_200701	SE208659.016	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP268_0.5_200701	SE208659.017	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_QC187_200701	SE208659.018	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP269_0.1_200701	SE208659.019	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP269_0.3_200701	SE208659.020	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020

HOLDING TIME SUMMARY

SE208659 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH037_0.1_200701	SE208659.001	LB204496	01 Jul 2020	01 Jul 2020	28 Dec 2020	16 Jul 2020	28 Dec 2020	20 Jul 2020
0407_BH037_0.5_200701	SE208659.002	LB204496	01 Jul 2020	01 Jul 2020	28 Dec 2020	16 Jul 2020	28 Dec 2020	20 Jul 2020
0407_TP103_0.1_200701	SE208659.005	LB204496	01 Jul 2020	01 Jul 2020	28 Dec 2020	16 Jul 2020	28 Dec 2020	20 Jul 2020
0407_TP103_0.3_200701	SE208659.006	LB204496	01 Jul 2020	01 Jul 2020	28 Dec 2020	16 Jul 2020	28 Dec 2020	20 Jul 2020
0407_TP113_0.1_200701	SE208659.007	LB204496	01 Jul 2020	01 Jul 2020	28 Dec 2020	16 Jul 2020	28 Dec 2020	20 Jul 2020
0407_TP113_0.5_200701	SE208659.008	LB204496	01 Jul 2020	01 Jul 2020	28 Dec 2020	16 Jul 2020	28 Dec 2020	20 Jul 2020
0407_TP123_0.1_200701	SE208659.009	LB204496	01 Jul 2020	01 Jul 2020	28 Dec 2020	16 Jul 2020	28 Dec 2020	20 Jul 2020
0407_TP123_0.3_200701	SE208659.010	LB204496	01 Jul 2020	01 Jul 2020	28 Dec 2020	16 Jul 2020	28 Dec 2020	20 Jul 2020
0407_TP133_0.1_200701	SE208659.011	LB204496	01 Jul 2020	01 Jul 2020	28 Dec 2020	16 Jul 2020	28 Dec 2020	20 Jul 2020
0407_TP133_0.5_200701	SE208659.012	LB204496	01 Jul 2020	01 Jul 2020	28 Dec 2020	16 Jul 2020	28 Dec 2020	20 Jul 2020
0407_QC185_200701	SE208659.013	LB204496	01 Jul 2020	01 Jul 2020	28 Dec 2020	16 Jul 2020	28 Dec 2020	20 Jul 2020
0407_TP267_0.1_200701	SE208659.014	LB204496	01 Jul 2020	01 Jul 2020	28 Dec 2020	16 Jul 2020	28 Dec 2020	20 Jul 2020
0407_TP267_0.5_200701	SE208659.015	LB204496	01 Jul 2020	01 Jul 2020	28 Dec 2020	16 Jul 2020	28 Dec 2020	20 Jul 2020
0407_TP268_0.1_200701	SE208659.016	LB204496	01 Jul 2020	01 Jul 2020	28 Dec 2020	16 Jul 2020	28 Dec 2020	20 Jul 2020
0407_TP268_0.5_200701	SE208659.017	LB204496	01 Jul 2020	01 Jul 2020	28 Dec 2020	16 Jul 2020	28 Dec 2020	20 Jul 2020
0407_QC187_200701	SE208659.018	LB204496	01 Jul 2020	01 Jul 2020	28 Dec 2020	16 Jul 2020	28 Dec 2020	20 Jul 2020
0407_TP269_0.1_200701	SE208659.019	LB204496	01 Jul 2020	01 Jul 2020	28 Dec 2020	16 Jul 2020	28 Dec 2020	20 Jul 2020
0407_TP269_0.3_200701	SE208659.020	LB204496	01 Jul 2020	01 Jul 2020	28 Dec 2020	16 Jul 2020	28 Dec 2020	20 Jul 2020

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH037_0.1_200701	SE208659.001	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_BH037_0.5_200701	SE208659.002	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP103_0.1_200701	SE208659.005	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP103_0.3_200701	SE208659.006	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP113_0.1_200701	SE208659.007	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP113_0.5_200701	SE208659.008	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP123_0.1_200701	SE208659.009	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP123_0.3_200701	SE208659.010	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP133_0.1_200701	SE208659.011	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP133_0.5_200701	SE208659.012	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_QC185_200701	SE208659.013	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP267_0.1_200701	SE208659.014	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP267_0.5_200701	SE208659.015	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP268_0.1_200701	SE208659.016	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP268_0.5_200701	SE208659.017	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_QC187_200701	SE208659.018	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP269_0.1_200701	SE208659.019	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP269_0.3_200701	SE208659.020	LB204417	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH037_0.1_200701	SE208659.001	LB204416	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_BH037_0.5_200701	SE208659.002	LB204416	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_QC416_200630	SE208659.003	LB204416	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_QC516_200630	SE208659.004	LB204416	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP103_0.1_200701	SE208659.005	LB204416	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	22 Jul 2020
0407_TP103_0.3_200701	SE208659.006	LB204416	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	22 Jul 2020
0407_TP113_0.1_200701	SE208659.007	LB204416	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	22 Jul 2020
0407_TP113_0.5_200701	SE208659.008	LB204416	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	22 Jul 2020
0407_TP123_0.1_200701	SE208659.009	LB204416	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	22 Jul 2020
0407_TP123_0.3_200701	SE208659.010	LB204416	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	22 Jul 2020
0407_TP133_0.1_200701	SE208659.011	LB204416	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	22 Jul 2020
0407_TP133_0.5_200701	SE208659.012	LB204416	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	22 Jul 2020
0407_QC185_200701	SE208659.013	LB204416	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	22 Jul 2020
0407_TP267_0.1_200701	SE208659.014	LB204416	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	22 Jul 2020
0407_TP267_0.5_200701	SE208659.015	LB204416	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	22 Jul 2020
0407_TP268_0.1_200701	SE208659.016	LB204416	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	22 Jul 2020
0407_TP268_0.5_200701	SE208659.017	LB204416	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	22 Jul 2020
0407_QC187_200701	SE208659.018	LB204416	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	22 Jul 2020
0407_TP269_0.1_200701	SE208659.019	LB204416	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	22 Jul 2020

HOLDING TIME SUMMARY

SE208659 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP269_0.3_200701	SE208659.020	LB204416	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	22 Jul 2020

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH037_0.1_200701	SE208659.001	LB204416	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_BH037_0.5_200701	SE208659.002	LB204416	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_QC416_200630	SE208659.003	LB204416	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_QC516_200630	SE208659.004	LB204416	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	22 Jul 2020
0407_TP103_0.1_200701	SE208659.005	LB204416	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP103_0.3_200701	SE208659.006	LB204416	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP113_0.1_200701	SE208659.007	LB204416	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP113_0.5_200701	SE208659.008	LB204416	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP123_0.1_200701	SE208659.009	LB204416	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP123_0.3_200701	SE208659.010	LB204416	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP133_0.1_200701	SE208659.011	LB204416	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP133_0.5_200701	SE208659.012	LB204416	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_QC185_200701	SE208659.013	LB204416	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP267_0.1_200701	SE208659.014	LB204416	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP267_0.5_200701	SE208659.015	LB204416	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP268_0.1_200701	SE208659.016	LB204416	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP268_0.5_200701	SE208659.017	LB204416	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_QC187_200701	SE208659.018	LB204416	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP269_0.1_200701	SE208659.019	LB204416	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020
0407_TP269_0.3_200701	SE208659.020	LB204416	01 Jul 2020	01 Jul 2020	15 Jul 2020	15 Jul 2020	24 Aug 2020	21 Jul 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP103_0.1_200701	SE208659.005	%	60 - 130%	97
	0407_TP103_0.3_200701	SE208659.006	%	60 - 130%	96
	0407_TP113_0.1_200701	SE208659.007	%	60 - 130%	97
	0407_TP113_0.5_200701	SE208659.008	%	60 - 130%	89
	0407_TP123_0.1_200701	SE208659.009	%	60 - 130%	95
	0407_TP123_0.3_200701	SE208659.010	%	60 - 130%	93
	0407_TP133_0.1_200701	SE208659.011	%	60 - 130%	95
	0407_TP133_0.5_200701	SE208659.012	%	60 - 130%	92
	0407_QC185_200701	SE208659.013	%	60 - 130%	97
	0407_TP267_0.1_200701	SE208659.014	%	60 - 130%	97
	0407_TP267_0.5_200701	SE208659.015	%	60 - 130%	94
	0407_TP268_0.1_200701	SE208659.016	%	60 - 130%	95
	0407_TP268_0.5_200701	SE208659.017	%	60 - 130%	95
	0407_QC187_200701	SE208659.018	%	60 - 130%	94
	0407_TP269_0.1_200701	SE208659.019	%	60 - 130%	89
	0407_TP269_0.3_200701	SE208659.020	%	60 - 130%	85

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP103_0.1_200701	SE208659.005	%	60 - 130%	88
	0407_TP103_0.3_200701	SE208659.006	%	60 - 130%	86
	0407_TP113_0.1_200701	SE208659.007	%	60 - 130%	84
	0407_TP113_0.5_200701	SE208659.008	%	60 - 130%	85
	0407_TP123_0.1_200701	SE208659.009	%	60 - 130%	89
	0407_TP123_0.3_200701	SE208659.010	%	60 - 130%	87
	0407_TP133_0.1_200701	SE208659.011	%	60 - 130%	83
	0407_TP133_0.5_200701	SE208659.012	%	60 - 130%	87
	0407_QC185_200701	SE208659.013	%	60 - 130%	87
	0407_TP267_0.1_200701	SE208659.014	%	60 - 130%	83
	0407_TP267_0.5_200701	SE208659.015	%	60 - 130%	87
	0407_TP268_0.1_200701	SE208659.016	%	60 - 130%	88
	0407_TP268_0.5_200701	SE208659.017	%	60 - 130%	87
	0407_QC187_200701	SE208659.018	%	60 - 130%	79
	0407_TP269_0.1_200701	SE208659.019	%	60 - 130%	83
	0407_TP269_0.3_200701	SE208659.020	%	60 - 130%	89
d14-p-terphenyl (Surrogate)	0407_TP103_0.1_200701	SE208659.005	%	60 - 130%	89
	0407_TP103_0.3_200701	SE208659.006	%	60 - 130%	91
	0407_TP113_0.1_200701	SE208659.007	%	60 - 130%	89
	0407_TP113_0.5_200701	SE208659.008	%	60 - 130%	88
	0407_TP123_0.1_200701	SE208659.009	%	60 - 130%	93
	0407_TP123_0.3_200701	SE208659.010	%	60 - 130%	89
	0407_TP133_0.1_200701	SE208659.011	%	60 - 130%	81
	0407_TP133_0.5_200701	SE208659.012	%	60 - 130%	88
	0407_QC185_200701	SE208659.013	%	60 - 130%	87
	0407_TP267_0.1_200701	SE208659.014	%	60 - 130%	82
	0407_TP267_0.5_200701	SE208659.015	%	60 - 130%	88
	0407_TP268_0.1_200701	SE208659.016	%	60 - 130%	93
	0407_TP268_0.5_200701	SE208659.017	%	60 - 130%	87
	0407_QC187_200701	SE208659.018	%	60 - 130%	83
	0407_TP269_0.1_200701	SE208659.019	%	60 - 130%	85
	0407_TP269_0.3_200701	SE208659.020	%	60 - 130%	93

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP103_0.1_200701	SE208659.005	%	70 - 130%	88
	0407_TP103_0.3_200701	SE208659.006	%	70 - 130%	86
	0407_TP113_0.1_200701	SE208659.007	%	70 - 130%	84
	0407_TP113_0.5_200701	SE208659.008	%	70 - 130%	85
	0407_TP123_0.1_200701	SE208659.009	%	70 - 130%	89
	0407_TP123_0.3_200701	SE208659.010	%	70 - 130%	87
	0407_TP133_0.1_200701	SE208659.011	%	70 - 130%	83
	0407_TP133_0.5_200701	SE208659.012	%	70 - 130%	87

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued) — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_QC185_200701	SE208659.013	%	70 - 130%	87
	0407_TP267_0.1_200701	SE208659.014	%	70 - 130%	83
	0407_TP267_0.5_200701	SE208659.015	%	70 - 130%	87
	0407_TP268_0.1_200701	SE208659.016	%	70 - 130%	88
	0407_TP268_0.5_200701	SE208659.017	%	70 - 130%	87
	0407_QC187_200701	SE208659.018	%	70 - 130%	79
	0407_TP269_0.1_200701	SE208659.019	%	70 - 130%	83
	0407_TP269_0.3_200701	SE208659.020	%	70 - 130%	89
d14-p-terphenyl (Surrogate)	0407_TP103_0.1_200701	SE208659.005	%	70 - 130%	89
	0407_TP103_0.3_200701	SE208659.006	%	70 - 130%	91
	0407_TP113_0.1_200701	SE208659.007	%	70 - 130%	89
	0407_TP113_0.5_200701	SE208659.008	%	70 - 130%	88
	0407_TP123_0.1_200701	SE208659.009	%	70 - 130%	93
	0407_TP123_0.3_200701	SE208659.010	%	70 - 130%	89
	0407_TP133_0.1_200701	SE208659.011	%	70 - 130%	81
	0407_TP133_0.5_200701	SE208659.012	%	70 - 130%	88
	0407_QC185_200701	SE208659.013	%	70 - 130%	87
	0407_TP267_0.1_200701	SE208659.014	%	70 - 130%	82
	0407_TP267_0.5_200701	SE208659.015	%	70 - 130%	88
	0407_TP268_0.1_200701	SE208659.016	%	70 - 130%	93
	0407_TP268_0.5_200701	SE208659.017	%	70 - 130%	87
	0407_QC187_200701	SE208659.018	%	70 - 130%	83
	0407_TP269_0.1_200701	SE208659.019	%	70 - 130%	85
	0407_TP269_0.3_200701	SE208659.020	%	70 - 130%	93
d5-nitrobenzene (Surrogate)	0407_TP103_0.1_200701	SE208659.005	%	70 - 130%	83
	0407_TP103_0.3_200701	SE208659.006	%	70 - 130%	85
	0407_TP113_0.1_200701	SE208659.007	%	70 - 130%	84
	0407_TP113_0.5_200701	SE208659.008	%	70 - 130%	85
	0407_TP123_0.1_200701	SE208659.009	%	70 - 130%	90
	0407_TP123_0.3_200701	SE208659.010	%	70 - 130%	85
	0407_TP133_0.1_200701	SE208659.011	%	70 - 130%	81
	0407_TP133_0.5_200701	SE208659.012	%	70 - 130%	85
	0407_QC185_200701	SE208659.013	%	70 - 130%	84
	0407_TP267_0.1_200701	SE208659.014	%	70 - 130%	82
	0407_TP267_0.5_200701	SE208659.015	%	70 - 130%	84
	0407_TP268_0.1_200701	SE208659.016	%	70 - 130%	83
	0407_TP268_0.5_200701	SE208659.017	%	70 - 130%	84
	0407_QC187_200701	SE208659.018	%	70 - 130%	76
	0407_TP269_0.1_200701	SE208659.019	%	70 - 130%	80
	0407_TP269_0.3_200701	SE208659.020	%	70 - 130%	88

PCBs in Soil — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_BH037_0.1_200701	SE208659.001	%	60 - 130%	100
	0407_BH037_0.5_200701	SE208659.002	%	60 - 130%	99
	0407_TP103_0.1_200701	SE208659.005	%	60 - 130%	97
	0407_TP103_0.3_200701	SE208659.006	%	60 - 130%	96
	0407_TP113_0.1_200701	SE208659.007	%	60 - 130%	97
	0407_TP113_0.5_200701	SE208659.008	%	60 - 130%	89
	0407_TP123_0.1_200701	SE208659.009	%	60 - 130%	95
	0407_TP123_0.3_200701	SE208659.010	%	60 - 130%	93
	0407_TP133_0.1_200701	SE208659.011	%	60 - 130%	95
	0407_TP133_0.5_200701	SE208659.012	%	60 - 130%	92
	0407_QC185_200701	SE208659.013	%	60 - 130%	97
	0407_TP267_0.1_200701	SE208659.014	%	60 - 130%	97
	0407_TP267_0.5_200701	SE208659.015	%	60 - 130%	94
	0407_TP268_0.1_200701	SE208659.016	%	60 - 130%	95
	0407_TP268_0.5_200701	SE208659.017	%	60 - 130%	95
	0407_QC187_200701	SE208659.018	%	60 - 130%	94
	0407_TP269_0.1_200701	SE208659.019	%	60 - 130%	89
	0407_TP269_0.3_200701	SE208659.020	%	60 - 130%	85

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil — **Method: ME-(AU)-[ENV]AN420**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	0407_TP103_0.1_200701	SE208659.005	%	70 - 130%	96
	0407_TP103_0.3_200701	SE208659.006	%	70 - 130%	99
	0407_TP113_0.1_200701	SE208659.007	%	70 - 130%	98
	0407_TP113_0.5_200701	SE208659.008	%	70 - 130%	91
	0407_TP123_0.1_200701	SE208659.009	%	70 - 130%	93
	0407_TP123_0.3_200701	SE208659.010	%	70 - 130%	91
	0407_TP133_0.1_200701	SE208659.011	%	70 - 130%	95
	0407_TP133_0.5_200701	SE208659.012	%	70 - 130%	90
	0407_QC185_200701	SE208659.013	%	70 - 130%	93
	0407_TP267_0.1_200701	SE208659.014	%	70 - 130%	116
	0407_TP267_0.5_200701	SE208659.015	%	70 - 130%	74
	0407_TP268_0.1_200701	SE208659.016	%	70 - 130%	90
	0407_TP268_0.5_200701	SE208659.017	%	70 - 130%	82
	0407_QC187_200701	SE208659.018	%	70 - 130%	82
	0407_TP269_0.1_200701	SE208659.019	%	70 - 130%	116
	0407_TP269_0.3_200701	SE208659.020	%	70 - 130%	112
d5-phenol (Surrogate)	0407_TP103_0.1_200701	SE208659.005	%	50 - 130%	81
	0407_TP103_0.3_200701	SE208659.006	%	50 - 130%	76
	0407_TP113_0.1_200701	SE208659.007	%	50 - 130%	74
	0407_TP113_0.5_200701	SE208659.008	%	50 - 130%	76
	0407_TP123_0.1_200701	SE208659.009	%	50 - 130%	74
	0407_TP123_0.3_200701	SE208659.010	%	50 - 130%	75
	0407_TP133_0.1_200701	SE208659.011	%	50 - 130%	77
	0407_TP133_0.5_200701	SE208659.012	%	50 - 130%	76
	0407_QC185_200701	SE208659.013	%	50 - 130%	80
	0407_TP267_0.1_200701	SE208659.014	%	50 - 130%	76
	0407_TP267_0.5_200701	SE208659.015	%	50 - 130%	78
	0407_TP268_0.1_200701	SE208659.016	%	50 - 130%	71
	0407_TP268_0.5_200701	SE208659.017	%	50 - 130%	76
	0407_QC187_200701	SE208659.018	%	50 - 130%	78
	0407_TP269_0.1_200701	SE208659.019	%	50 - 130%	80
	0407_TP269_0.3_200701	SE208659.020	%	50 - 130%	80

VOC's in Soil — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_BH037_0.1_200701	SE208659.001	%	60 - 130%	68
	0407_BH037_0.5_200701	SE208659.002	%	60 - 130%	71
	0407_QC416_200630	SE208659.003	%	60 - 130%	74
	0407_QC516_200630	SE208659.004	%	60 - 130%	71
	0407_TP103_0.1_200701	SE208659.005	%	60 - 130%	64
	0407_TP103_0.3_200701	SE208659.006	%	60 - 130%	67
	0407_TP113_0.1_200701	SE208659.007	%	60 - 130%	67
	0407_TP113_0.5_200701	SE208659.008	%	60 - 130%	68
	0407_TP123_0.1_200701	SE208659.009	%	60 - 130%	68
	0407_TP123_0.3_200701	SE208659.010	%	60 - 130%	69
	0407_TP133_0.1_200701	SE208659.011	%	60 - 130%	76
	0407_TP133_0.5_200701	SE208659.012	%	60 - 130%	66
	0407_QC185_200701	SE208659.013	%	60 - 130%	66
	0407_TP267_0.1_200701	SE208659.014	%	60 - 130%	78
	0407_TP267_0.5_200701	SE208659.015	%	60 - 130%	66
	0407_TP268_0.1_200701	SE208659.016	%	60 - 130%	83
	0407_TP268_0.5_200701	SE208659.017	%	60 - 130%	67
	0407_QC187_200701	SE208659.018	%	60 - 130%	66
	0407_TP269_0.1_200701	SE208659.019	%	60 - 130%	67
	0407_TP269_0.3_200701	SE208659.020	%	60 - 130%	67
d4-1,2-dichloroethane (Surrogate)	0407_BH037_0.1_200701	SE208659.001	%	60 - 130%	74
	0407_BH037_0.5_200701	SE208659.002	%	60 - 130%	77
	0407_QC416_200630	SE208659.003	%	60 - 130%	79
	0407_QC516_200630	SE208659.004	%	60 - 130%	82
	0407_TP103_0.1_200701	SE208659.005	%	60 - 130%	72
	0407_TP103_0.3_200701	SE208659.006	%	60 - 130%	73

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d4-1,2-dichloroethane (Surrogate)	0407_TP113_0.1_200701	SE208659.007	%	60 - 130%	78
	0407_TP113_0.5_200701	SE208659.008	%	60 - 130%	78
	0407_TP123_0.1_200701	SE208659.009	%	60 - 130%	79
	0407_TP123_0.3_200701	SE208659.010	%	60 - 130%	76
	0407_TP133_0.1_200701	SE208659.011	%	60 - 130%	87
	0407_TP133_0.5_200701	SE208659.012	%	60 - 130%	74
	0407_QC185_200701	SE208659.013	%	60 - 130%	74
	0407_TP267_0.1_200701	SE208659.014	%	60 - 130%	87
	0407_TP267_0.5_200701	SE208659.015	%	60 - 130%	76
	0407_TP268_0.1_200701	SE208659.016	%	60 - 130%	73
	0407_TP268_0.5_200701	SE208659.017	%	60 - 130%	76
	0407_QC187_200701	SE208659.018	%	60 - 130%	75
	0407_TP269_0.1_200701	SE208659.019	%	60 - 130%	77
	0407_TP269_0.3_200701	SE208659.020	%	60 - 130%	77
d8-toluene (Surrogate)	0407_BH037_0.1_200701	SE208659.001	%	60 - 130%	73
	0407_BH037_0.5_200701	SE208659.002	%	60 - 130%	76
	0407_QC416_200630	SE208659.003	%	60 - 130%	76
	0407_QC516_200630	SE208659.004	%	60 - 130%	80
	0407_TP103_0.1_200701	SE208659.005	%	60 - 130%	70
	0407_TP103_0.3_200701	SE208659.006	%	60 - 130%	71
	0407_TP113_0.1_200701	SE208659.007	%	60 - 130%	74
	0407_TP113_0.5_200701	SE208659.008	%	60 - 130%	74
	0407_TP123_0.1_200701	SE208659.009	%	60 - 130%	76
	0407_TP123_0.3_200701	SE208659.010	%	60 - 130%	75
	0407_TP133_0.1_200701	SE208659.011	%	60 - 130%	83
	0407_TP133_0.5_200701	SE208659.012	%	60 - 130%	71
	0407_QC185_200701	SE208659.013	%	60 - 130%	71
	0407_TP267_0.1_200701	SE208659.014	%	60 - 130%	82
	0407_TP267_0.5_200701	SE208659.015	%	60 - 130%	72
	0407_TP268_0.1_200701	SE208659.016	%	60 - 130%	69
	0407_TP268_0.5_200701	SE208659.017	%	60 - 130%	72
	0407_QC187_200701	SE208659.018	%	60 - 130%	71
	0407_TP269_0.1_200701	SE208659.019	%	60 - 130%	73
	0407_TP269_0.3_200701	SE208659.020	%	60 - 130%	72

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_BH037_0.1_200701	SE208659.001	%	60 - 130%	68
	0407_BH037_0.5_200701	SE208659.002	%	60 - 130%	71
	0407_QC416_200630	SE208659.003	%	60 - 130%	74
	0407_TP103_0.1_200701	SE208659.005	%	60 - 130%	64
	0407_TP103_0.3_200701	SE208659.006	%	60 - 130%	67
	0407_TP113_0.1_200701	SE208659.007	%	60 - 130%	67
	0407_TP113_0.5_200701	SE208659.008	%	60 - 130%	68
	0407_TP123_0.1_200701	SE208659.009	%	60 - 130%	68
	0407_TP123_0.3_200701	SE208659.010	%	60 - 130%	69
	0407_TP133_0.1_200701	SE208659.011	%	60 - 130%	76
	0407_TP133_0.5_200701	SE208659.012	%	60 - 130%	66
	0407_QC185_200701	SE208659.013	%	60 - 130%	66
	0407_TP267_0.1_200701	SE208659.014	%	60 - 130%	78
	0407_TP267_0.5_200701	SE208659.015	%	60 - 130%	66
	0407_TP268_0.1_200701	SE208659.016	%	60 - 130%	83
	0407_TP268_0.5_200701	SE208659.017	%	60 - 130%	67
	0407_QC187_200701	SE208659.018	%	60 - 130%	66
	0407_TP269_0.1_200701	SE208659.019	%	60 - 130%	67
	0407_TP269_0.3_200701	SE208659.020	%	60 - 130%	67
d4-1,2-dichloroethane (Surrogate)	0407_BH037_0.1_200701	SE208659.001	%	60 - 130%	74
	0407_BH037_0.5_200701	SE208659.002	%	60 - 130%	77
	0407_QC416_200630	SE208659.003	%	60 - 130%	79
	0407_TP103_0.1_200701	SE208659.005	%	60 - 130%	72
	0407_TP103_0.3_200701	SE208659.006	%	60 - 130%	73

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d4-1,2-dichloroethane (Surrogate)	0407_TP113_0.1_200701	SE208659.007	%	60 - 130%	78
	0407_TP113_0.5_200701	SE208659.008	%	60 - 130%	78
	0407_TP123_0.1_200701	SE208659.009	%	60 - 130%	79
	0407_TP123_0.3_200701	SE208659.010	%	60 - 130%	76
	0407_TP133_0.1_200701	SE208659.011	%	60 - 130%	87
	0407_TP133_0.5_200701	SE208659.012	%	60 - 130%	74
	0407_QC185_200701	SE208659.013	%	60 - 130%	74
	0407_TP267_0.1_200701	SE208659.014	%	60 - 130%	87
	0407_TP267_0.5_200701	SE208659.015	%	60 - 130%	76
	0407_TP268_0.1_200701	SE208659.016	%	60 - 130%	73
	0407_TP268_0.5_200701	SE208659.017	%	60 - 130%	76
	0407_QC187_200701	SE208659.018	%	60 - 130%	75
	0407_TP269_0.1_200701	SE208659.019	%	60 - 130%	77
	0407_TP269_0.3_200701	SE208659.020	%	60 - 130%	77
d8-toluene (Surrogate)	0407_BH037_0.1_200701	SE208659.001	%	60 - 130%	73
	0407_BH037_0.5_200701	SE208659.002	%	60 - 130%	76
	0407_QC416_200630	SE208659.003	%	60 - 130%	76
	0407_TP103_0.1_200701	SE208659.005	%	60 - 130%	70
	0407_TP103_0.3_200701	SE208659.006	%	60 - 130%	71
	0407_TP113_0.1_200701	SE208659.007	%	60 - 130%	74
	0407_TP113_0.5_200701	SE208659.008	%	60 - 130%	74
	0407_TP123_0.1_200701	SE208659.009	%	60 - 130%	76
	0407_TP123_0.3_200701	SE208659.010	%	60 - 130%	75
	0407_TP133_0.1_200701	SE208659.011	%	60 - 130%	83
	0407_TP133_0.5_200701	SE208659.012	%	60 - 130%	71
	0407_QC185_200701	SE208659.013	%	60 - 130%	71
	0407_TP267_0.1_200701	SE208659.014	%	60 - 130%	82
	0407_TP267_0.5_200701	SE208659.015	%	60 - 130%	72
	0407_TP268_0.1_200701	SE208659.016	%	60 - 130%	69
	0407_TP268_0.5_200701	SE208659.017	%	60 - 130%	72
	0407_QC187_200701	SE208659.018	%	60 - 130%	71
	0407_TP269_0.1_200701	SE208659.019	%	60 - 130%	73
	0407_TP269_0.3_200701	SE208659.020	%	60 - 130%	72

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result
LB204502.001	Mercury	mg/kg	0.05	<0.05

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB204417.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	108

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB204417.001		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	90
		d14-p-terphenyl (Surrogate)	%	-	83

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB204417.001	Naphthalene	mg/kg	0.1	<0.1
	2-methylnaphthalene	mg/kg	0.1	<0.1
	1-methylnaphthalene	mg/kg	0.1	<0.1
	Acenaphthylene	mg/kg	0.1	<0.1
	Acenaphthene	mg/kg	0.1	<0.1
	Fluorene	mg/kg	0.1	<0.1
	Phenanthrene	mg/kg	0.1	<0.1
	Anthracene	mg/kg	0.1	<0.1
	Fluoranthene	mg/kg	0.1	<0.1
	Pyrene	mg/kg	0.1	<0.1
	Benzo(a)anthracene	mg/kg	0.1	<0.1
	Chrysene	mg/kg	0.1	<0.1
	Benzo(a)pyrene	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB204417.001		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	87
		2-fluorobiphenyl (Surrogate)	%	-	90
		d14-p-terphenyl (Surrogate)	%	-	83

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB204417.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	108

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB204417.001		Phenol	mg/kg	0.5	<0.5
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5
		2-nitrophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
		Pentachlorophenol	mg/kg	0.5	<0.5
		2,4-dinitrophenol	mg/kg	2	<2
		4-chloro-3-methylphenol	mg/kg	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	97
		d5-phenol (Surrogate)	%	-	84

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB204496.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB204417.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number	Parameter	Units	LOR

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB204416.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB204416.001	Oxygenated Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	84
		d8-toluene (Surrogate)	%	-	81
		Bromofluorobenzene (Surrogate)	%	-	73
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB204416.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	84

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208659.012	LB204502.014	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE208659.020	LB204502.023	Mercury	mg/kg	0.05	<0.05	<0.05	175	0

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208659.011	LB204415.011	% Moisture	%w/w	1	6.7	6.6	45	2
SE208659.020	LB204415.021	% Moisture	%w/w	1	8.4	9.3	41	11

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208659.012	LB204417.014		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	0.14	30	0
SE208659.020	LB204417.023		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208659.020	LB204417.023		p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.13	0.14	30	10

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208659.012	LB204417.014		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	4
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	5
SE208659.020	LB204417.023		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	3
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.4	30	11

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208659.012	LB204417.014	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
		Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
		Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Pyrene	mg/kg	0.1	<0.1	<0.1	169	0
		Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	143	0
		Chrysene	mg/kg	0.1	<0.1	<0.1	139	0
		Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	173	0
		Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	185	0
		Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
		Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	<0.2	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208659.012	LB204417.014		Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	<0.3	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	<0.2	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	30	6
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	4
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	5
SE208659.020	LB204417.023		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	<0.3	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	<0.2	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	30	5
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	3
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.4	30	11

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208659.012	LB204417.014		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	0
SE208659.020	LB204417.023		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	10

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208659.014	LB204417.026		Phenol	mg/kg	0.5	<0.5	0.01	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	0	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	0	200	0
			Total Cresol	mg/kg	1.5	<1.5	0	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	0	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	0	200	0
			4-nitrophenol	mg/kg	1	<1	0	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	0	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dinitrophenol	mg/kg	2	<2	0	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	0	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	5.8	4.41	30	27
			d5-phenol (Surrogate)	mg/kg	-	1.5	1.46	30	4
SE208659.020	LB204417.023		Phenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	200	0
			Total Cresol	mg/kg	1.5	<1.5	<1.5	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	200	0
			4-nitrophenol	mg/kg	1	<1	<1	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dinitrophenol	mg/kg	2	<2	<2	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	5.6	4.3	30	26
			d5-phenol (Surrogate)	mg/kg	-	1.6	1.5	30	4

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208659.012	LB204496.014	Arsenic, As	mg/kg	1	<1	<1	200	0
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	0.5	0.6	124	7
		Copper, Cu	mg/kg	0.5	2.2	2.5	51	12
		Nickel, Ni	mg/kg	0.5	<0.5	<0.5	200	0
		Lead, Pb	mg/kg	1	12	18	37	38 ②
		Zinc, Zn	mg/kg	2	6.0	6.8	61	12
SE208659.020	LB204496.023	Arsenic, As	mg/kg	1	<1	<1	200	0
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	2.1	1.9	55	10
		Copper, Cu	mg/kg	0.5	11	6.3	36	58 ②
		Nickel, Ni	mg/kg	0.5	1.5	1.5	63	3
		Lead, Pb	mg/kg	1	30	23	34	25
		Zinc, Zn	mg/kg	2	130	56	32	79 ②

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208659.012	LB204417.014	TRH C10-C14	mg/kg	20	<20	<20	200	0
		TRH C15-C28	mg/kg	45	<45	<45	200	0
		TRH C29-C36	mg/kg	45	<45	<45	200	0
		TRH C37-C40	mg/kg	100	<100	<100	200	0
		TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
		TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208659.012	LB204417.014	TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE208659.020	LB204417.023		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208659.010	LB204416.014	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued) — Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208659.010	LB204416.014	Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.6	7.9	50	3
			d8-toluene (Surrogate)	mg/kg	-	7.5	7.5	50	0
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.9	7.0	50	1
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE208659.020	LB204416.025	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208659.020	LB204416.025	Halogenated	Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
		Aliphatics	1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.7	7.7	50	0
			d8-toluene (Surrogate)	mg/kg	-	7.2	7.3	50	1
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.7	6.8	50	1
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate	Parameter	Units	LOR

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208659.010	LB204416.014		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.6	7.9	30	3
			d8-toluene (Surrogate)	mg/kg	-	7.5	7.5	30	0
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.9	7.0	30	1
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE208659.020	LB204416.025		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.7	7.7	30	0
			d8-toluene (Surrogate)	mg/kg	-	7.2	7.3	30	1
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.7	6.8	30	1
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204502.002	Mercury	mg/kg	0.05	0.18	0.2	70 - 130	92

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204417.002		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	108
		Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	107
		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	105
		Dieldrin	mg/kg	0.2	0.2	0.2	60 - 140	103
		Endrin	mg/kg	0.2	0.2	0.2	60 - 140	104
		p,p'-DDT	mg/kg	0.1	0.1	0.2	60 - 140	73
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.15	40 - 130	97

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204417.002		Dichlorvos	mg/kg	0.5	1.9	2	60 - 140	93
		Diazinon (Dimpylate)	mg/kg	0.5	1.7	2	60 - 140	83
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.9	2	60 - 140	93
		Ethion	mg/kg	0.2	1.6	2	60 - 140	78
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	81
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	79

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204417.002		Naphthalene	mg/kg	0.1	3.8	4	60 - 140	95
		Acenaphthylene	mg/kg	0.1	3.9	4	60 - 140	99
		Acenaphthene	mg/kg	0.1	3.8	4	60 - 140	96
		Phenanthrene	mg/kg	0.1	3.9	4	60 - 140	97
		Anthracene	mg/kg	0.1	3.8	4	60 - 140	96
		Fluoranthene	mg/kg	0.1	3.1	4	60 - 140	78
		Pyrene	mg/kg	0.1	4.1	4	60 - 140	103
		Benzo(a)pyrene	mg/kg	0.1	4.5	4	60 - 140	113
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	78
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	81
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	79

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204417.002	Arochlor 1260	mg/kg	0.2	0.4	0.4	60 - 140	100

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204417.002		Phenol	mg/kg	0.5	0.8	1	70 - 130	82
		2,4-dichlorophenol	mg/kg	0.5	0.8	1	70 - 130	78
		2,4,6-trichlorophenol	mg/kg	0.5	1.1	1	70 - 130	111
		Pentachlorophenol	mg/kg	0.5	0.8	1	70 - 130	75
	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.7	5	40 - 130	93
		d5-phenol (Surrogate)	mg/kg	-	1.4	2	40 - 130	72

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204496.002	Arsenic, As	mg/kg	1	360	318.22	80 - 120	112
	Cadmium, Cd	mg/kg	0.3	5.3	5.41	80 - 120	98
	Chromium, Cr	mg/kg	0.5	37	38.31	80 - 120	96
	Copper, Cu	mg/kg	0.5	310	290	80 - 120	107
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	102
	Lead, Pb	mg/kg	1	95	89.9	80 - 120	106
	Zinc, Zn	mg/kg	2	280	273	80 - 120	103

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204417.002		TRH C10-C14	mg/kg	20	34	40	60 - 140	85
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	80
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	83
	TRH F Bands	TRH >C10-C16	mg/kg	25	34	40	60 - 140	85
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	83
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	80

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204416.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	3.4	5	60 - 140	68
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	3.7	5	60 - 140	73
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	3.3	5	60 - 140	67
	Halogenated	Chlorobenzene	mg/kg	0.1	4.7	5	60 - 140	94
	Monocyclic	Benzene	mg/kg	0.1	3.6	5	60 - 140	71
	Aromatic	Toluene	mg/kg	0.1	3.5	5	60 - 140	70
		Ethylbenzene	mg/kg	0.1	4.1	5	60 - 140	81
		m/p-xylene	mg/kg	0.2	8.3	10	60 - 140	83
		o-xylene	mg/kg	0.1	4.2	5	60 - 140	83
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.5	10	70 - 130	85
		d8-toluene (Surrogate)	mg/kg	-	8.2	10	70 - 130	82
		Bromofluorobenzene (Surrogate)	mg/kg	-	7.1	10	70 - 130	71
	Trihalomethan	Chloroform	mg/kg	0.1	3.6	5	60 - 140	73

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204416.002		TRH C6-C10	mg/kg	25	69	92.5	60 - 140	75
		TRH C6-C9	mg/kg	20	59	80	60 - 140	74
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.5	10	70 - 130	85
		Bromofluorobenzene (Surrogate)	mg/kg	-	7.1	10	70 - 130	71
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	46	62.5	60 - 140	73

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208659.001	LB204502.004	Mercury	mg/kg	0.05	0.29	0.06	0.2	115

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208659.005	LB204417.025		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	-	-
			Alpha BHC	mg/kg	0.1	<0.1	-	-
			Lindane	mg/kg	0.1	<0.1	-	-
			Heptachlor	mg/kg	0.1	<0.1	0.2	110
			Aldrin	mg/kg	0.1	<0.1	0.2	106
			Beta BHC	mg/kg	0.1	<0.1	-	-
			Delta BHC	mg/kg	0.1	<0.1	0.2	103
			Heptachlor epoxide	mg/kg	0.1	<0.1	-	-
			o,p'-DDE	mg/kg	0.1	<0.1	-	-
			Alpha Endosulfan	mg/kg	0.2	<0.2	-	-
			Gamma Chlordane	mg/kg	0.1	<0.1	-	-
			Alpha Chlordane	mg/kg	0.1	<0.1	-	-
			trans-Nonachlor	mg/kg	0.1	<0.1	-	-
			p,p'-DDE	mg/kg	0.1	<0.1	-	-
			Dieldrin	mg/kg	0.2	<0.2	0.2	106
			Endrin	mg/kg	0.2	<0.2	0.2	104
			o,p'-DDD	mg/kg	0.1	<0.1	-	-
			o,p'-DDT	mg/kg	0.1	<0.1	-	-
			Beta Endosulfan	mg/kg	0.2	<0.2	-	-
			p,p'-DDD	mg/kg	0.1	<0.1	-	-
			p,p'-DDT	mg/kg	0.1	<0.1	0.2	85
			Endosulfan sulphate	mg/kg	0.1	<0.1	-	-
			Endrin Aldehyde	mg/kg	0.1	<0.1	-	-
			Methoxychlor	mg/kg	0.1	<0.1	-	-
			Endrin Ketone	mg/kg	0.1	<0.1	-	-
			Isodrin	mg/kg	0.1	<0.1	-	-
			Mirex	mg/kg	0.1	<0.1	-	-
			Total CLP OC Pesticides	mg/kg	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	-	97

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208659.005	LB204417.024		Dichlorvos	mg/kg	0.5	<0.5	2	103
			Dimethoate	mg/kg	0.5	<0.5	-	-
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	2	83
			Fenitrothion	mg/kg	0.2	<0.2	-	-
			Malathion	mg/kg	0.2	<0.2	-	-
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	2	120
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	-	-
			Bromophos Ethyl	mg/kg	0.2	<0.2	-	-
			Methidathion	mg/kg	0.5	<0.5	-	-
			Ethion	mg/kg	0.2	<0.2	2	110
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	-	-
			Total OP Pesticides*	mg/kg	1.7	<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	-	88
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	-	96

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number	Parameter	Units	LOR	Original	Spike	Recovery%
SE208659.005	LB204417.024	Naphthalene	mg/kg	0.1	<0.1	4	100
		2-methylnaphthalene	mg/kg	0.1	<0.1	-	-
		1-methylnaphthalene	mg/kg	0.1	<0.1	-	-
		Acenaphthylene	mg/kg	0.1	<0.1	4	102
		Acenaphthene	mg/kg	0.1	<0.1	4	101
		Fluorene	mg/kg	0.1	<0.1	-	-
		Phenanthrene	mg/kg	0.1	<0.1	4	100

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208659.005	LB204417.024		Anthracene	mg/kg	0.1	<0.1	4	99
			Fluoranthene	mg/kg	0.1	<0.1	4	94
			Pyrene	mg/kg	0.1	<0.1	4	106
			Benzo(a)anthracene	mg/kg	0.1	<0.1	-	-
			Chrysene	mg/kg	0.1	<0.1	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	-	-
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	-	-
			Benzo(a)pyrene	mg/kg	0.1	<0.1	4	112
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	-	-
			Total PAH (18)	mg/kg	0.8	<0.8	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	-	86
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	-	88
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	-	96

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208659.001	LB204417.004		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1260	mg/kg	0.2	0.4	<0.2	0.4	103
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	-	-
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	-	101

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208659.005	LB204417.025		Phenol	mg/kg	0.5	<0.5	1	72
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	-	-
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	-	-
			Total Cresol	mg/kg	1.5	<1.5	-	-
			2-chlorophenol	mg/kg	0.5	<0.5	-	-
			2,4-dimethylphenol	mg/kg	0.5	<0.5	-	-
			2,6-dichlorophenol	mg/kg	0.5	<0.5	-	-
			2,4-dichlorophenol	mg/kg	0.5	<0.5	1	80
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	1	92
			2-nitrophenol	mg/kg	0.5	<0.5	-	-
			4-nitrophenol	mg/kg	1	<1	-	-
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	-	-
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	-	-
			Pentachlorophenol	mg/kg	0.5	<0.5	1	76
			2,4-dinitrophenol	mg/kg	2	<2	-	-
			4-chloro-3-methylphenol	mg/kg	2	<2	-	-
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.8	-	100
			d5-phenol (Surrogate)	mg/kg	-	1.6	-	83

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208659.001	LB204496.004	Arsenic, As	mg/kg	1	53	1	50	103
		Cadmium, Cd	mg/kg	0.3	46	0.7	50	90
		Chromium, Cr	mg/kg	0.5	55	7.0	50	96
		Copper, Cu	mg/kg	0.5	75	39	50	72
		Nickel, Ni	mg/kg	0.5	66	20	50	93
		Lead, Pb	mg/kg	1	92	56	50	72

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208659.001	LB204496.004	Zinc, Zn	mg/kg	2	140	110	50	67 ④

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208659.001	LB204417.004		TRH C10-C14	mg/kg	20	43	<20	40	108
			TRH C15-C28	mg/kg	45	<45	<45	40	108
			TRH C29-C36	mg/kg	45	51	<45	40	128
			TRH C37-C40	mg/kg	100	<100	<100	-	-
			TRH C10-C36 Total	mg/kg	110	<110	<110	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25	44	<25	40	110
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	44	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	40	135
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	-	-

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208659.001	LB204416.004	Monocyclic Aromatic	Benzene	mg/kg	0.1	3.6	<0.1	5	72
			Toluene	mg/kg	0.1	3.6	<0.1	5	72
			Ethylbenzene	mg/kg	0.1	4.6	<0.1	5	91
			m/p-xylene	mg/kg	0.2	9.2	<0.2	10	92
			o-xylene	mg/kg	0.1	4.6	<0.1	5	91
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.8	7.4	10	78
			d8-toluene (Surrogate)	mg/kg	-	7.1	7.3	10	71
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.6	6.8	10	66 ①
		Totals	Total Xylenes	mg/kg	0.3	14	<0.3	-	-
			Total BTEX	mg/kg	0.6	26	<0.6	-	-
SE208659.005	LB204416.026	Fumigants	2,2-dichloropropane	mg/kg	0.1		<0.1	-	-
			1,2-dichloropropane	mg/kg	0.1		<0.1	-	-
			cis-1,3-dichloropropene	mg/kg	0.1		<0.1	-	-
			trans-1,3-dichloropropene	mg/kg	0.1		<0.1	-	-
			1,2-dibromoethane (EDB)	mg/kg	0.1		<0.1	-	-
		Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1		<1	-	-
			Chloromethane	mg/kg	1		<1	-	-
			Vinyl chloride (Chloroethene)	mg/kg	0.1		<0.1	-	-
			Bromomethane	mg/kg	1		<1	-	-
			Chloroethane	mg/kg	1		<1	-	-
			Trichlorofluoromethane	mg/kg	1		<1	-	-
			Iodomethane	mg/kg	5		<5	-	-
			1,1-dichloroethene	mg/kg	0.1		<0.1	5	64
			Dichloromethane (Methylene chloride)	mg/kg	0.5		<0.5	-	-
			Allyl chloride	mg/kg	0.1		<0.1	-	-
			trans-1,2-dichloroethene	mg/kg	0.1		<0.1	-	-
			1,1-dichloroethane	mg/kg	0.1		<0.1	-	-
			cis-1,2-dichloroethene	mg/kg	0.1		<0.1	-	-
			Bromochloromethane	mg/kg	0.1		<0.1	-	-
			1,2-dichloroethane	mg/kg	0.1		<0.1	5	71
			1,1,1-trichloroethane	mg/kg	0.1		<0.1	-	-
			1,1-dichloropropene	mg/kg	0.1		<0.1	-	-
			Carbon tetrachloride	mg/kg	0.1		<0.1	-	-
			Dibromomethane	mg/kg	0.1		<0.1	-	-
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1		<0.1	5	64
			1,1,2-trichloroethane	mg/kg	0.1		<0.1	-	-
			1,3-dichloropropane	mg/kg	0.1		<0.1	-	-
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1		<0.1	-	-
			1,1,1,2-tetrachloroethane	mg/kg	0.1		<0.1	-	-
			cis-1,4-dichloro-2-butene	mg/kg	1		<1	-	-
			1,1,2,2-tetrachloroethane	mg/kg	0.1		<0.1	-	-
			1,2,3-trichloropropane	mg/kg	0.1		<0.1	-	-
			trans-1,4-dichloro-2-butene	mg/kg	1		<1	-	-
			1,2-dibromo-3-chloropropane	mg/kg	0.1		<0.1	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208659.005	LB204416.026	Halogenated	Hexachlorobutadiene	mg/kg	0.1		<0.1	-	-
		Halogenated	Chlorobenzene	mg/kg	0.1		<0.1	5	92
		Aromatics	Bromobenzene	mg/kg	0.1		<0.1	-	-
			2-chlorotoluene	mg/kg	0.1		<0.1	-	-
			4-chlorotoluene	mg/kg	0.1		<0.1	-	-
			1,3-dichlorobenzene	mg/kg	0.1		<0.1	-	-
			1,4-dichlorobenzene	mg/kg	0.1		<0.1	-	-
			1,2-dichlorobenzene	mg/kg	0.1		<0.1	-	-
			1,2,4-trichlorobenzene	mg/kg	0.1		<0.1	-	-
			1,2,3-trichlorobenzene	mg/kg	0.1		<0.1	-	-
		Monocyclic	Benzene	mg/kg	0.1		<0.1	5	69
		Aromatic	Toluene	mg/kg	0.1		<0.1	5	67
			Ethylbenzene	mg/kg	0.1		<0.1	5	78
			m/p-xylene	mg/kg	0.2		<0.2	10	80
			o-xylene	mg/kg	0.1		<0.1	5	81
			Styrene (Vinyl benzene)	mg/kg	0.1		<0.1	-	-
			Isopropylbenzene (Cumene)	mg/kg	0.1		<0.1	-	-
			n-propylbenzene	mg/kg	0.1		<0.1	-	-
			1,3,5-trimethylbenzene	mg/kg	0.1		<0.1	-	-
			tert-butylbenzene	mg/kg	0.1		<0.1	-	-
			1,2,4-trimethylbenzene	mg/kg	0.1		<0.1	-	-
			sec-butylbenzene	mg/kg	0.1		<0.1	-	-
			p-isopropyltoluene	mg/kg	0.1		<0.1	-	-
			n-butylbenzene	mg/kg	0.1		<0.1	-	-
		Nitrogenous	Acrylonitrile	mg/kg	0.1		<0.1	-	-
		Compounds	2-nitropropane	mg/kg	10		<10	-	-
		Oxygenated	Acetone (2-propanone)	mg/kg	10		<10	-	-
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1		<0.1	-	-
			Vinyl acetate	mg/kg	10		<10	-	-
			MEK (2-butanone)	mg/kg	10		<10	-	-
			MIBK (4-methyl-2-pentanone)	mg/kg	1		<1	-	-
			2-hexanone (MBK)	mg/kg	5		<5	-	-
		Polycyclic	Naphthalene	mg/kg	0.1		<0.1	-	-
		Sulphonated	Carbon disulfide	mg/kg	0.5		<0.5	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-		7.2	10	80
			d8-toluene (Surrogate)	mg/kg	-		7.0	10	80
			Bromofluorobenzene (Surrogate)	mg/kg	-		6.4	10	66
		Totals	Total Xylenes	mg/kg	0.3		<0.3	-	-
			Total BTEX	mg/kg	0.6		<0.6	-	-
			Total VOC*	mg/kg	24		<24	-	-
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3		<3.0	-	-
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8		<1.8	-	-
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8		<1.8	-	-
		Trihalometha	Chloroform	mg/kg	0.1		<0.1	5	71
		nes	Bromodichloromethane	mg/kg	0.1		<0.1	-	-
			Chlorodibromomethane	mg/kg	0.1		<0.1	-	-
			Bromoform	mg/kg	0.1		<0.1	-	-

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208659.001	LB204416.004		TRH C6-C10	mg/kg	25	76	<25	92.5	81
			TRH C6-C9	mg/kg	20	65	<20	80	82
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.8	7.4	10	78
			d8-toluene (Surrogate)	mg/kg	-	7.1	7.3	10	71
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.6	6.8	-	66
		VPH F	Benzene (F0)	mg/kg	0.1	3.6	<0.1	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	50	<25	62.5	80

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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000693

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 830, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
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- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☑ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ AUCKLAND: 69 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2500

CLIENT: DHA

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGER: [redacted]

PM CONTACT No: [redacted]

LABORATORY: SGS

LABORATORY ADDRESS: 340

SAMPLER: [redacted]

SAMPLER CONTACT No:

Email Reports and Invoices to: LQRS10@slrconsulting.com

Turnaround Time (TAT)

☑ Standard TAT

☐ Non Standard or Urgent TAT

Required TAT:

COC Number: 1 of 3

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	Hold.	Additional Information (Comment on any gross contamination or specific requirements)
1	0407_TP261_0.1_200630	30.6.20	Soil ✓		X		
	0407_TP261_0.5_200630					X	
	0407_TP261_1.0_200630					X	
2	0407_TP261_1.5_200630		✓		X		
	0407_TP261_2.0_200630					X	bag
	0407_TP261_2.5_200630					X	bag
3	0407_TP262_0.1_200630		✓		X		
	0407_TP262_0.5_200630					X	
4	0407_TP262_1.0_200630		✓		X		
	0407_TP262_1.5_200630					X	
	0407_TP262_2.0_200630					X	bag
	0407_TP262_2.5_200630	*				X	

SGS EHS Sydney COC

SE208160

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	Received by	Sign [redacted]	Date / Time 30/06/20	Temperature Received:
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time @ 4.30	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

000694

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CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

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- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 King Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☑ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
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- ☐ AUCKLAND: 69 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT: DHA	LABORATORY: SGS	Turnaround Time (TAT)	COC Number 2 of 3
PROJECT: Randwick Barracks	LABORATORY ADDRESS: 3910	☑ Standard TAT	
PROJECT NUMBER: 610.30071	SAMPLER: [redacted]	☐ Non Standard or Urgent TAT	
PROJECT MANAGER: [redacted]	SAMPLER CONTACT No:	Required TAT:	
PM CONTACT No:	Email Reports and Invoices to: LQR3910@slrconsulting.com		

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	Asbestos	Hold	Additional Information (Comment on any gross contamination or specific requirements)
5	0407_TP271_0.1_200630	30.6.20	Soil ✓		X			
	0407_TP271_0.5_200630						X	
6	0407_TP271_1.0_200630		✓		X		X	
	0407_TP271_1.5_200630						X	bag
	0407_TP271_2.0_200630						X	
7	0407_TP261_A01_200630		ACM		X			
	0407_TP261_A02_200630						X	
	0407_TP261_A03_200630						X	
	0407_TP261_A04_200630						X	
	0407_TP261_A05_200630						X	
	0407_TP261_A06_200630						X	
8	0407_TP261_A07_200630				X			

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	Received by	Sign [redacted]	Date / Time 30/06/20	Temperature Received:
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time 04.20	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

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CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

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- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
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- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT:	DHA	LABORATORY:	SGS
PROJECT:	Randwick Barrack	LABORATORY ADDRESS:	SYD
PROJECT NUMBER:	610.30041	SAMPLER:	[redacted]
PROJECT MANAGER:	[redacted]	SAMPLER CONTACT No:	
PM CONTACT No:		Email Reports and Invoices to:	LQRSYD@slrconsulting.com

Turnaround Time (TAT)

- ☑ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT:

COC Number 3 of 3

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	Asbestos						Hold	Additional Information (Comment on any gross contamination or specific requirements)
9	0407_TP271_A01_200630	30620	ACM			X							
10	0407_TP262_A01_200630		⊥			X							
11	0407_QC182_200630		Soil		X								
	0407_QC282_200630		⊥	Please forward to Eurofins for "Suite A"									
	0407_TP262_A02_200630		ACM									X	
12	0407_TP262_A03_200630		ACM			X							

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	Received by	Sign [redacted]	Date / Time 30/06/20	Temperature Received:
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time @4.30	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

SAMPLE RECEIPT ADVICE

SE208160

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000683--000685**
Samples	12

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Tue 30/6/2020
Report Due	Thu 9/7/2020
SGS Reference	**SE208160**

SUBMISSION DETAILS

This is to confirm that 12 samples were received on Tuesday 30/6/2020. Results are expected to be ready by COB Thursday 9/7/2020. Please quote SGS reference SE208160 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	7 Soi;, 5 Material
Date documentation received	30/6/2020	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	3.5°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

10 Soil and 1 Materialhave been placed on hold as no tests have been assigned for them by the client. These samples will not be processed.

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SAMPLE RECEIPT ADVICE

SE208160

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	Speciated Phenols in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
001	0407_TP261_0.1_200630	29	14	26	11	18	10	81	7
002	0407_TP261_1.5_200630	29	14	26	11	18	10	81	7
003	0407_TP262_0.1_200630	29	14	26	11	18	10	81	7
004	0407_TP262_1.0_200630	29	14	26	11	18	10	81	7
005	0407_TP271_0.1_200630	29	14	26	11	18	10	81	7
006	0407_TP271_1.0_200630	29	14	26	11	18	10	81	7
011	0407_QC1182_200630	29	14	26	11	18	10	81	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE208160

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Fibre Identification in soil	Gravimetric Determination of Asbestos in Soil	Mercury in Soil	Moisture Content	Total Recoverable Elements in Soil/Waste
001	0407_TP261_0.1_200630	2	9	1	1	7
002	0407_TP261_1.5_200630	2	9	1	1	7
003	0407_TP262_0.1_200630	2	9	1	1	7
004	0407_TP262_1.0_200630	2	9	1	1	7
005	0407_TP271_0.1_200630	2	9	1	1	7
006	0407_TP271_1.0_200630	2	9	1	1	7
011	0407_QC1182_200630	-	-	1	1	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE208160

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Fibre ID in bulk materials
007	0407_TP261_A01_200630	1
008	0407_TP261_A07_200630	1
009	0407_TP271_A01_200630	1
010	0407_TP262_A01_200630	1
012	0407_TP262_A03_200630	1

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000683--000685**
Samples	12

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208160 R0**
Date Received	30/6/2020
Date Reported	10/7/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.

Sample #2: Asbestos found in approx 5x3x2mm cement sheet fragments in >2mm portion.

Asbestos analysed by Approved Identifiers Ravee Sivasubramaniam and Yusuf Kuthpudin .

SIGNATORIES

[redacted]

Chemist | Senior Organic Chemist/Metals Chemist | Metals/Inorganics Team Leader

[redacted]

Organic Section Head | Asbestos Analyst

VOC's in Soil [AN433] Tested: 6/7/2020

PARAMETER	UOM	LOR	0407_TP261_0.1_20(630 SOIL - 30/6/2020 SE208160.001	0407_TP261_1.5_20(630 SOIL - 30/6/2020 SE208160.002	0407_TP262_0.1_20(630 SOIL - 30/6/2020 SE208160.003	0407_TP262_1.0_20(630 SOIL - 30/6/2020 SE208160.004	0407_TP271_0.1_20(630 SOIL - 30/6/2020 SE208160.005
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 6/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP261_0.1_20(630 SOIL - 30/6/2020 SE208160.001	0407_TP261_1.5_20(630 SOIL - 30/6/2020 SE208160.002	0407_TP262_0.1_20(630 SOIL - 30/6/2020 SE208160.003	0407_TP262_1.0_20(630 SOIL - 30/6/2020 SE208160.004	0407_TP271_0.1_20(630 SOIL - 30/6/2020 SE208160.005
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 6/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP271_1.0_20630 SOIL - 30/6/2020 SE208160.006	0407_QC1182_20063 SOIL - 30/6/2020 SE208160.011
Benzene	mg/kg	0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1
Chloromethane	mg/kg	1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1
Chloroethane	mg/kg	1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10
Iodomethane	mg/kg	5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1

VOC's in Soil [AN433] Tested: 6/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP271_1.0_20630 SOIL - 30/6/2020 SE208160.006	0407_QC1182_20063 SOIL - 30/6/2020 SE208160.011
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 6/7/2020

PARAMETER	UOM	LOR	0407_TP261_0.1_20(630 SOIL - 30/6/2020 SE208160.001	0407_TP261_1.5_20(630 SOIL - 30/6/2020 SE208160.002	0407_TP262_0.1_20(630 SOIL - 30/6/2020 SE208160.003	0407_TP262_1.0_20(630 SOIL - 30/6/2020 SE208160.004	0407_TP271_0.1_20(630 SOIL - 30/6/2020 SE208160.005
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP271_1.0_20(630 SOIL - 30/6/2020 SE208160.006	0407_QC1182_20063 SOIL - 30/6/2020 SE208160.011
Benzene (F0)	mg/kg	0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 6/7/2020

PARAMETER	UOM	LOR	0407_TP261_0.1_20(630 SOIL - 30/6/2020 SE208160.001	0407_TP261_1.5_20(630 SOIL - 30/6/2020 SE208160.002	0407_TP262_0.1_20(630 SOIL - 30/6/2020 SE208160.003	0407_TP262_1.0_20(630 SOIL - 30/6/2020 SE208160.004	0407_TP271_0.1_20(630 SOIL - 30/6/2020 SE208160.005
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP271_1.0_20(630 SOIL - 30/6/2020 SE208160.006	0407_QC1182_20063 SOIL - 30/6/2020 SE208160.011
TRH C10-C14	mg/kg	20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 6/7/2020

PARAMETER	UOM	LOR	0407_TP261_0.1_20(630 SOIL - 30/6/2020 SE208160.001	0407_TP261_1.5_20(630 SOIL - 30/6/2020 SE208160.002	0407_TP262_0.1_20(630 SOIL - 30/6/2020 SE208160.003	0407_TP262_1.0_20(630 SOIL - 30/6/2020 SE208160.004	0407_TP271_0.1_20(630 SOIL - 30/6/2020 SE208160.005
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	0.3	0.2	0.2	0.3	0.2
Anthracene	mg/kg	0.1	0.1	<0.1	<0.1	0.1	<0.1
Fluoranthene	mg/kg	0.1	0.8	0.4	0.5	0.7	0.6
Pyrene	mg/kg	0.1	1.0	0.6	0.7	0.9	0.7
Benzo(a)anthracene	mg/kg	0.1	0.3	0.2	0.3	0.3	0.3
Chrysene	mg/kg	0.1	0.3	0.2	0.3	0.3	0.3
Benzo(b&j)fluoranthene	mg/kg	0.1	0.5	0.3	0.4	0.4	0.4
Benzo(k)fluoranthene	mg/kg	0.1	0.2	0.1	0.2	0.2	0.2
Benzo(a)pyrene	mg/kg	0.1	0.4	0.3	0.3	0.4	0.4
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.3	0.1	0.2	0.2	0.2
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	0.3	0.1	0.2	0.2	0.2
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	0.5	0.3	0.4	0.5	0.5
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	0.6	0.4	0.5	0.6	0.6
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	0.6	0.4	0.5	0.6	0.5
Total PAH (18)	mg/kg	0.8	4.4	2.5	3.1	4.2	3.3
Total PAH (NEPM/WHO 16)	mg/kg	0.8	4.4	2.5	3.1	4.2	3.3

PARAMETER	UOM	LOR	0407_TP271_1.0_20(630 SOIL - 30/6/2020 SE208160.006	0407_QC1182_20063 SOIL - 30/6/2020 SE208160.011
Naphthalene	mg/kg	0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	0.3
Anthracene	mg/kg	0.1	<0.1	0.1
Fluoranthene	mg/kg	0.1	0.1	0.7
Pyrene	mg/kg	0.1	0.2	0.9
Benzo(a)anthracene	mg/kg	0.1	0.1	0.3
Chrysene	mg/kg	0.1	0.1	0.3
Benzo(b&j)fluoranthene	mg/kg	0.1	0.2	0.4
Benzo(k)fluoranthene	mg/kg	0.1	0.1	0.2
Benzo(a)pyrene	mg/kg	0.1	0.2	0.4
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	0.2
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	0.2
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	0.2	0.5
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	0.3	0.6
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	0.3	0.5
Total PAH (18)	mg/kg	0.8	1.0	4.0
Total PAH (NEPM/WHO 16)	mg/kg	0.8	1.0	4.0

Speciated Phenols in Soil [AN420] Tested: 6/7/2020

PARAMETER	UOM	LOR	0407_TP261_0.1_20(630 SOIL - 30/6/2020 SE208160.001	0407_TP261_1.5_20(630 SOIL - 30/6/2020 SE208160.002	0407_TP262_0.1_20(630 SOIL - 30/6/2020 SE208160.003	0407_TP262_1.0_20(630 SOIL - 30/6/2020 SE208160.004	0407_TP271_0.1_20(630 SOIL - 30/6/2020 SE208160.005
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_TP271_1.0_20(630 SOIL - 30/6/2020 SE208160.006	0407_QC1182_20063 SOIL - 30/6/2020 SE208160.011
Phenol	mg/kg	0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2

OC Pesticides in Soil [AN420] Tested: 6/7/2020

PARAMETER	UOM	LOR	0407_TP261_0.1_20(630 SOIL - 30/6/2020 SE208160.001	0407_TP261_1.5_20(630 SOIL - 30/6/2020 SE208160.002	0407_TP262_0.1_20(630 SOIL - 30/6/2020 SE208160.003	0407_TP262_1.0_20(630 SOIL - 30/6/2020 SE208160.004	0407_TP271_0.1_20(630 SOIL - 30/6/2020 SE208160.005
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 6/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP271_1.0_20630 SOIL - 30/6/2020 SE208160.006	0407_QC1182_20063 SOIL - 30/6/2020 SE208160.011
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1

OP Pesticides in Soil [AN420] Tested: 6/7/2020

PARAMETER	UOM	LOR	0407_TP261_0.1_20(630 SOIL - 30/6/2020 SE208160.001	0407_TP261_1.5_20(630 SOIL - 30/6/2020 SE208160.002	0407_TP262_0.1_20(630 SOIL - 30/6/2020 SE208160.003	0407_TP262_1.0_20(630 SOIL - 30/6/2020 SE208160.004	0407_TP271_0.1_20(630 SOIL - 30/6/2020 SE208160.005
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP271_1.0_20(630 SOIL - 30/6/2020 SE208160.006	0407_QC1182_20063 SOIL - 30/6/2020 SE208160.011
Dichlorvos	mg/kg	0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7

PCBs in Soil [AN420] Tested: 6/7/2020

PARAMETER	UOM	LOR	0407_TP261_0.1_20(630 SOIL - 30/6/2020 SE208160.001	0407_TP261_1.5_20(630 SOIL - 30/6/2020 SE208160.002	0407_TP262_0.1_20(630 SOIL - 30/6/2020 SE208160.003	0407_TP262_1.0_20(630 SOIL - 30/6/2020 SE208160.004	0407_TP271_0.1_20(630 SOIL - 30/6/2020 SE208160.005
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP271_1.0_20(630 SOIL - 30/6/2020 SE208160.006	0407_QC1182_20063 SOIL - 30/6/2020 SE208160.011
Arochlor 1016	mg/kg	0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 7/7/2020

PARAMETER	UOM	LOR	0407_TP261_0.1_20(630 SOIL - 30/6/2020 SE208160.001	0407_TP261_1.5_20(630 SOIL - 30/6/2020 SE208160.002	0407_TP262_0.1_20(630 SOIL - 30/6/2020 SE208160.003	0407_TP262_1.0_20(630 SOIL - 30/6/2020 SE208160.004	0407_TP271_0.1_20(630 SOIL - 30/6/2020 SE208160.005
Arsenic, As	mg/kg	1	2	2	2	1	1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	4.7	4.8	4.9	2.7	3.8
Copper, Cu	mg/kg	0.5	30	11	18	8.2	42
Lead, Pb	mg/kg	1	44	83	76	88	26
Nickel, Ni	mg/kg	0.5	13	8.9	3.1	2.3	19
Zinc, Zn	mg/kg	2	57	60	68	67	44

PARAMETER	UOM	LOR	0407_TP271_1.0_20(630 SOIL - 30/6/2020 SE208160.006	0407_QC1182_20063 SOIL - 30/6/2020 SE208160.011
Arsenic, As	mg/kg	1	<1	1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	0.9	3.1
Copper, Cu	mg/kg	0.5	3.8	8.8
Lead, Pb	mg/kg	1	5	98
Nickel, Ni	mg/kg	0.5	1.0	4.1
Zinc, Zn	mg/kg	2	14	83

Mercury in Soil [AN312] Tested: 7/7/2020

PARAMETER	UOM	LOR	0407_TP261_0.1_20(630 SOIL - 30/6/2020 SE208160.001	0407_TP261_1.5_20(630 SOIL - 30/6/2020 SE208160.002	0407_TP262_0.1_20(630 SOIL - 30/6/2020 SE208160.003	0407_TP262_1.0_20(630 SOIL - 30/6/2020 SE208160.004	0407_TP271_0.1_20(630 SOIL - 30/6/2020 SE208160.005
Mercury	mg/kg	0.05	<0.05	**0.09**	**0.10**	**0.12**	<0.05

PARAMETER	UOM	LOR	0407_TP271_1.0_20(630 SOIL - 30/6/2020 SE208160.006	0407_QC1182_20063 SOIL - 30/6/2020 SE208160.011
Mercury	mg/kg	0.05	<0.05	**0.14**

Moisture Content [AN002] Tested: 6/7/2020

PARAMETER	UOM	LOR	0407_TP261_0.1_20(630 SOIL - 30/6/2020 SE208160.001	0407_TP261_1.5_20(630 SOIL - 30/6/2020 SE208160.002	0407_TP262_0.1_20(630 SOIL - 30/6/2020 SE208160.003	0407_TP262_1.0_20(630 SOIL - 30/6/2020 SE208160.004	0407_TP271_0.1_20(630 SOIL - 30/6/2020 SE208160.005
% Moisture	%w/w	1	6.4	7.4	11.6	9.4	12.6

PARAMETER	UOM	LOR	0407_TP271_1.0_20(630 SOIL - 30/6/2020 SE208160.006	0407_QC1182_20063 SOIL - 30/6/2020 SE208160.011
% Moisture	%w/w	1	5.1	10.3

Fibre Identification in soil [AN602] Tested: 8/7/2020

PARAMETER	UOM	LOR	0407_TP261_0.1_20(630 SOIL - 30/6/2020 SE208160.001	0407_TP261_1.5_20(630 SOIL - 30/6/2020 SE208160.002	0407_TP262_0.1_20(630 SOIL - 30/6/2020 SE208160.003	0407_TP262_1.0_20(630 SOIL - 30/6/2020 SE208160.004	0407_TP271_0.1_20(630 SOIL - 30/6/2020 SE208160.005
Asbestos Detected	No unit	-	No	Yes	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	0407_TP271_1.0_20(630 SOIL - 30/6/2020 SE208160.006
Asbestos Detected	No unit	-	No
Estimated Fibres*	%w/w	0.01	<0.01

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 8/7/2020

PARAMETER	UOM	LOR	0407_TP261_0.1_20(630 SOIL - 30/6/2020 SE208160.001	0407_TP261_1.5_20(630 SOIL - 30/6/2020 SE208160.002	0407_TP262_0.1_20(630 SOIL - 30/6/2020 SE208160.003	0407_TP262_1.0_20(630 SOIL - 30/6/2020 SE208160.004	0407_TP271_0.1_20(630 SOIL - 30/6/2020 SE208160.005
Total Sample Weight*	g	1	**562**	**674**	**613**	**733**	**637**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	**0.0416**	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	**0.006**	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	**0.006**	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP271_1.0_20(630 SOIL - 30/6/2020 SE208160.006
Total Sample Weight*	g	1	**748**
Bonded ACM in >7mm Sample*	g	0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001
Fibre Type*	No unit	-	-

Fibre ID in bulk materials [AN602] Tested: 9/7/2020

PARAMETER	UOM	LOR	0407_TP261_A01_200630 MATERIAL - 30/6/2020 SE208160.007	0407_TP261_A07_200630 MATERIAL - 30/6/2020 SE208160.008	0407_TP271_A01_200630 MATERIAL - 30/6/2020 SE208160.009	0407_TP262_A01_200630 MATERIAL - 30/6/2020 SE208160.010	0407_TP262_A03_20630 MATERIAL - 30/6/2020 SE208160.012
Asbestos Detected	No unit	-	Yes	Yes	Yes	Yes	Yes

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid, mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents.
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples, Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.
AN605	This technique gravimetrically determines the mass of Bonded Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight. Any fibrous asbestos (FA) found in this fraction will be added to the 2-7mm fraction and its mass recorded there.

AN605	This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free/respirable fibres which are only observed by standard trace analysis as per AN602.
AN605	Bonded asbestos containing material (Bonded ACM) comprises asbestos-containing-material which is sound in condition. Fibrous asbestos (FA) comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material. Asbestos fines (AF) includes free fibres, small fibre bundles and also small fragments of bonded ACM that passes through a 7mm sieve - which implies that the bonded ACM fragments have a substantial degree of damage which increases the potential for fibre release.
AN-605	Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009 and NEPM 1999 (2013) schedule B1 section 4..

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000683--000685**
Samples	11

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208160 R0**
Date Received	30 Jun 2020
Date Reported	10 Jul 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.

Sample #2: Asbestos found in approx 5x3x2mm cement sheet fragments in >2mm portion.

Asbestos analysed by Approved Identifiers Ravee Sivasubramaniam and Yusuf Kuthpudin .

SIGNATORIES

[redacted]

Chemist | Senior Organic Chemist/Metals Chemis | Organic Section Head

[redacted]

Asbestos Analyst

RESULTS

Fibre Identification in soil — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE208160.001	0407_TP261_0.1 _200630	Soil	562g Sand, Soil, Rocks	30 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208160.002	0407_TP261_1.5 _200630	Soil	674g Sand, Soil, Rocks	30 Jun 2020	Chrysotile Asbestos Found Organic Fibres Detected	<0.01
SE208160.003	0407_TP262_0.1 _200630	Soil	613g Sand, Soil, Rocks	30 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208160.004	0407_TP262_1.0 _200630	Soil	733g Sand, Soil, Rocks	30 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208160.005	0407_TP271_0.1 _200630	Soil	637g Sand, Soil, Rocks	30 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208160.006	0407_TP271_1.0 _200630	Soil	748g Sand, Soil, Rocks	30 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01

RESULTS

Fibre ID in bulk materials — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE208160.007	0407_TP261_A01_200630	Other	50x30x8mm Cement Sheet Fragment	30 Jun 2020	Chrysotile Asbestos Detected	
SE208160.008	0407_TP261_A07_200630	Other	40x30x3mm Cement Sheet Fragment	30 Jun 2020	Chrysotile Asbestos Detected	
SE208160.009	0407_TP271_A01_200630	Other	60x40x8mm Cement Sheet Fragment	30 Jun 2020	Chrysotile Asbestos Detected	
SE208160.010	0407_TP262_A01_200630	Other	35x30x3mm Cement Sheet Fragment	30 Jun 2020	Chrysotile Asbestos Detected	
SE208160.012	0407_TP262_A03_200630	Other	70x50x3mm Cement Sheet Fragment	30 Jun 2020	Chrysotile Asbestos Detected	

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 8/7/2020

PARAMETER	UOM	LOR	0407_TP261_0.1_20(630 SOIL - 30/6/2020 SE208160.001	0407_TP261_1.5_20(630 SOIL - 30/6/2020 SE208160.002	0407_TP262_0.1_20(630 SOIL - 30/6/2020 SE208160.003	0407_TP262_1.0_20(630 SOIL - 30/6/2020 SE208160.004	0407_TP271_0.1_20(630 SOIL - 30/6/2020 SE208160.005
Total Sample Weight*	g	1	**562**	**674**	**613**	**733**	**637**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	**0.0416**	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	**0.006**	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	**0.006**	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP271_1.0_20(630 SOIL - 30/6/2020 SE208160.006
Total Sample Weight*	g	1	**748**
Bonded ACM in >7mm Sample*	g	0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001
Fibre Type*	No unit	-	-

METHOD SUMMARY

METHOD	METHODOLOGY SUMMARY
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples , Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable ’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.
AN605	This technique gravimetrically determines the mass of Bonded Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight. Any fibrous asbestos (FA) found in this fraction will be added to the 2-7mm fraction and its mass recorded there.
AN605	This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free/respirable fibres which are only observed by standard trace analysis as per AN602.
AN605	Bonded asbestos containing material (Bonded ACM) comprises asbestos-containing-material which is sound in condition. Fibrous asbestos (FA) comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material. Asbestos fines (AF) includes free fibres, small fibre bundles and also small fragments of bonded ACM that passes through a 7mm sieve - which implies that the bonded ACM fragments have a substantial degree of damage which increases the potential for fibre release.
AN-605	Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009 and NEPM 1999 (2013) schedule B1 section 4..

FOOTNOTES

Amosite	-	Brown Asbestos	NA	-	Not Analysed
Chrysotile	-	White Asbestos	LNR	-	Listed, Not Required
Crocidolite	-	Blue Asbestos	*	-	NATA accreditation does not cover the performance of this service.
Amphiboles	-	Amosite and/or Crocidolite	**	-	Indicative data, theoretical holding time exceeded.

(In reference to soil samples only) This report does not comply with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment and Remediation and Management of Asbestos Contaminated sites in Western Australia - May 2009.

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.

Where reported: 'Asbestos Detected': Asbestos detected by polarised light microscopy, including dispersion staining.
Where reported: 'No Asbestos Found': No Asbestos Found by polarised light microscopy, including dispersion staining.
Where reported: 'UMF Detected': Mineral fibres of unknown type detected by polarised light microscopy, including dispersion staining. Confirmation by another independent analytical technique may be necessary.

Even after disintegration it can be very difficult, or impossible, to detect the presence of asbestos in some asbestos-containing bulk materials using polarised light microscopy. This is due to the low grade or small length or diameter of asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE208160 R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000683--000685**
Samples	12

LABORATORY DETAILS

Manager	[redacted]
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Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208160 R0**
Date Received	30 Jun 2020
Date Reported	10 Jul 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Matrix Spike	VOC's in Soil	1 item

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	7 Soi;, 5 Material
Date documentation received	30/6/2020	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	3.5°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE208160 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Fibre ID in bulk materials

Method: ME-(AU)-[ENV]AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP261_A01_200630	SE208160.007	LB203845	30 Jun 2020	30 Jun 2020	30 Jun 2021	09 Jul 2020	30 Jun 2021	09 Jul 2020
0407_TP261_A07_200630	SE208160.008	LB203845	30 Jun 2020	30 Jun 2020	30 Jun 2021	09 Jul 2020	30 Jun 2021	09 Jul 2020
0407_TP271_A01_200630	SE208160.009	LB203845	30 Jun 2020	30 Jun 2020	30 Jun 2021	09 Jul 2020	30 Jun 2021	09 Jul 2020
0407_TP262_A01_200630	SE208160.010	LB203845	30 Jun 2020	30 Jun 2020	30 Jun 2021	09 Jul 2020	30 Jun 2021	09 Jul 2020
0407_TP262_A03_200630	SE208160.012	LB203845	30 Jun 2020	30 Jun 2020	30 Jun 2021	09 Jul 2020	30 Jun 2021	09 Jul 2020

Fibre Identification in soil

Method: ME-(AU)-[ENV]AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP261_0.1_200630	SE208160.001	LB203791	30 Jun 2020	30 Jun 2020	30 Jun 2021	08 Jul 2020	30 Jun 2021	09 Jul 2020
0407_TP261_1.5_200630	SE208160.002	LB203791	30 Jun 2020	30 Jun 2020	30 Jun 2021	08 Jul 2020	30 Jun 2021	09 Jul 2020
0407_TP262_0.1_200630	SE208160.003	LB203791	30 Jun 2020	30 Jun 2020	30 Jun 2021	08 Jul 2020	30 Jun 2021	09 Jul 2020
0407_TP262_1.0_200630	SE208160.004	LB203791	30 Jun 2020	30 Jun 2020	30 Jun 2021	08 Jul 2020	30 Jun 2021	09 Jul 2020
0407_TP271_0.1_200630	SE208160.005	LB203791	30 Jun 2020	30 Jun 2020	30 Jun 2021	08 Jul 2020	30 Jun 2021	09 Jul 2020
0407_TP271_1.0_200630	SE208160.006	LB203791	30 Jun 2020	30 Jun 2020	30 Jun 2021	08 Jul 2020	30 Jun 2021	09 Jul 2020

Gravimetric Determination of Asbestos in Soil

Method: ME-(AU)-[ENV]AN605

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP261_0.1_200630	SE208160.001	LB203791	30 Jun 2020	30 Jun 2020	27 Dec 2020	08 Jul 2020	27 Dec 2020	09 Jul 2020
0407_TP261_1.5_200630	SE208160.002	LB203791	30 Jun 2020	30 Jun 2020	27 Dec 2020	08 Jul 2020	27 Dec 2020	09 Jul 2020
0407_TP262_0.1_200630	SE208160.003	LB203791	30 Jun 2020	30 Jun 2020	27 Dec 2020	08 Jul 2020	27 Dec 2020	09 Jul 2020
0407_TP262_1.0_200630	SE208160.004	LB203791	30 Jun 2020	30 Jun 2020	27 Dec 2020	08 Jul 2020	27 Dec 2020	09 Jul 2020
0407_TP271_0.1_200630	SE208160.005	LB203791	30 Jun 2020	30 Jun 2020	27 Dec 2020	08 Jul 2020	27 Dec 2020	09 Jul 2020
0407_TP271_1.0_200630	SE208160.006	LB203791	30 Jun 2020	30 Jun 2020	27 Dec 2020	08 Jul 2020	27 Dec 2020	09 Jul 2020

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP261_0.1_200630	SE208160.001	LB203676	30 Jun 2020	30 Jun 2020	28 Jul 2020	07 Jul 2020	28 Jul 2020	09 Jul 2020
0407_TP261_1.5_200630	SE208160.002	LB203676	30 Jun 2020	30 Jun 2020	28 Jul 2020	07 Jul 2020	28 Jul 2020	09 Jul 2020
0407_TP262_0.1_200630	SE208160.003	LB203676	30 Jun 2020	30 Jun 2020	28 Jul 2020	07 Jul 2020	28 Jul 2020	09 Jul 2020
0407_TP262_1.0_200630	SE208160.004	LB203676	30 Jun 2020	30 Jun 2020	28 Jul 2020	07 Jul 2020	28 Jul 2020	09 Jul 2020
0407_TP271_0.1_200630	SE208160.005	LB203676	30 Jun 2020	30 Jun 2020	28 Jul 2020	07 Jul 2020	28 Jul 2020	09 Jul 2020
0407_TP271_1.0_200630	SE208160.006	LB203676	30 Jun 2020	30 Jun 2020	28 Jul 2020	07 Jul 2020	28 Jul 2020	09 Jul 2020
0407_QC1182_200630	SE208160.011	LB203676	30 Jun 2020	30 Jun 2020	28 Jul 2020	07 Jul 2020	28 Jul 2020	09 Jul 2020

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP261_0.1_200630	SE208160.001	LB203624	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_TP261_1.5_200630	SE208160.002	LB203624	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_TP262_0.1_200630	SE208160.003	LB203624	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_TP262_1.0_200630	SE208160.004	LB203624	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_TP271_0.1_200630	SE208160.005	LB203624	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_TP271_1.0_200630	SE208160.006	LB203624	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020
0407_QC1182_200630	SE208160.011	LB203624	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	11 Jul 2020	08 Jul 2020

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP261_0.1_200630	SE208160.001	LB203622	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP261_1.5_200630	SE208160.002	LB203622	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP262_0.1_200630	SE208160.003	LB203622	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP262_1.0_200630	SE208160.004	LB203622	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP271_0.1_200630	SE208160.005	LB203622	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP271_1.0_200630	SE208160.006	LB203622	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_QC1182_200630	SE208160.011	LB203622	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP261_0.1_200630	SE208160.001	LB203622	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	15 Aug 2020	10 Jul 2020
0407_TP261_1.5_200630	SE208160.002	LB203622	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	15 Aug 2020	10 Jul 2020
0407_TP262_0.1_200630	SE208160.003	LB203622	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	15 Aug 2020	10 Jul 2020
0407_TP262_1.0_200630	SE208160.004	LB203622	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	15 Aug 2020	10 Jul 2020
0407_TP271_0.1_200630	SE208160.005	LB203622	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	15 Aug 2020	10 Jul 2020
0407_TP271_1.0_200630	SE208160.006	LB203622	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	15 Aug 2020	10 Jul 2020
0407_QC1182_200630	SE208160.011	LB203622	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	15 Aug 2020	10 Jul 2020

HOLDING TIME SUMMARY

SE208160 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP261_0.1_200630	SE208160.001	LB203622	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	15 Aug 2020	10 Jul 2020
0407_TP261_1.5_200630	SE208160.002	LB203622	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	15 Aug 2020	10 Jul 2020
0407_TP262_0.1_200630	SE208160.003	LB203622	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	15 Aug 2020	10 Jul 2020
0407_TP262_1.0_200630	SE208160.004	LB203622	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	15 Aug 2020	10 Jul 2020
0407_TP271_0.1_200630	SE208160.005	LB203622	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	15 Aug 2020	10 Jul 2020
0407_TP271_1.0_200630	SE208160.006	LB203622	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	15 Aug 2020	10 Jul 2020
0407_QC1182_200630	SE208160.011	LB203622	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	15 Aug 2020	10 Jul 2020

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP261_0.1_200630	SE208160.001	LB203622	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP261_1.5_200630	SE208160.002	LB203622	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP262_0.1_200630	SE208160.003	LB203622	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP262_1.0_200630	SE208160.004	LB203622	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP271_0.1_200630	SE208160.005	LB203622	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP271_1.0_200630	SE208160.006	LB203622	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_QC1182_200630	SE208160.011	LB203622	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP261_0.1_200630	SE208160.001	LB203622	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP261_1.5_200630	SE208160.002	LB203622	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP262_0.1_200630	SE208160.003	LB203622	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP262_1.0_200630	SE208160.004	LB203622	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP271_0.1_200630	SE208160.005	LB203622	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP271_1.0_200630	SE208160.006	LB203622	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_QC1182_200630	SE208160.011	LB203622	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP261_0.1_200630	SE208160.001	LB203670	30 Jun 2020	30 Jun 2020	27 Dec 2020	07 Jul 2020	27 Dec 2020	08 Jul 2020
0407_TP261_1.5_200630	SE208160.002	LB203670	30 Jun 2020	30 Jun 2020	27 Dec 2020	07 Jul 2020	27 Dec 2020	08 Jul 2020
0407_TP262_0.1_200630	SE208160.003	LB203670	30 Jun 2020	30 Jun 2020	27 Dec 2020	07 Jul 2020	27 Dec 2020	08 Jul 2020
0407_TP262_1.0_200630	SE208160.004	LB203670	30 Jun 2020	30 Jun 2020	27 Dec 2020	07 Jul 2020	27 Dec 2020	08 Jul 2020
0407_TP271_0.1_200630	SE208160.005	LB203670	30 Jun 2020	30 Jun 2020	27 Dec 2020	07 Jul 2020	27 Dec 2020	08 Jul 2020
0407_TP271_1.0_200630	SE208160.006	LB203670	30 Jun 2020	30 Jun 2020	27 Dec 2020	07 Jul 2020	27 Dec 2020	08 Jul 2020
0407_QC1182_200630	SE208160.011	LB203670	30 Jun 2020	30 Jun 2020	27 Dec 2020	07 Jul 2020	27 Dec 2020	08 Jul 2020

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP261_0.1_200630	SE208160.001	LB203622	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP261_1.5_200630	SE208160.002	LB203622	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP262_0.1_200630	SE208160.003	LB203622	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP262_1.0_200630	SE208160.004	LB203622	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP271_0.1_200630	SE208160.005	LB203622	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP271_1.0_200630	SE208160.006	LB203622	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_QC1182_200630	SE208160.011	LB203622	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP261_0.1_200630	SE208160.001	LB203620	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP261_1.5_200630	SE208160.002	LB203620	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP262_0.1_200630	SE208160.003	LB203620	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP262_1.0_200630	SE208160.004	LB203620	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP271_0.1_200630	SE208160.005	LB203620	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP271_1.0_200630	SE208160.006	LB203620	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_QC1182_200630	SE208160.011	LB203620	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP261_0.1_200630	SE208160.001	LB203620	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP261_1.5_200630	SE208160.002	LB203620	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP262_0.1_200630	SE208160.003	LB203620	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Volatile Petroleum Hydrocarbons in Soil (continued) **Method: ME-(AU)-[ENV]AN433**

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP262_1.0_200630	SE208160.004	LB203620	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP271_0.1_200630	SE208160.005	LB203620	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_TP271_1.0_200630	SE208160.006	LB203620	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020
0407_QC1182_200630	SE208160.011	LB203620	30 Jun 2020	30 Jun 2020	14 Jul 2020	06 Jul 2020	15 Aug 2020	09 Jul 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP261_0.1_200630	SE208160.001	%	60 - 130%	107
	0407_TP261_1.5_200630	SE208160.002	%	60 - 130%	105
	0407_TP262_0.1_200630	SE208160.003	%	60 - 130%	107
	0407_TP262_1.0_200630	SE208160.004	%	60 - 130%	107
	0407_TP271_0.1_200630	SE208160.005	%	60 - 130%	109
	0407_TP271_1.0_200630	SE208160.006	%	60 - 130%	105
	0407_QC1182_200630	SE208160.011	%	60 - 130%	107

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP261_0.1_200630	SE208160.001	%	60 - 130%	76
	0407_TP261_1.5_200630	SE208160.002	%	60 - 130%	74
	0407_TP262_0.1_200630	SE208160.003	%	60 - 130%	76
	0407_TP262_1.0_200630	SE208160.004	%	60 - 130%	74
	0407_TP271_0.1_200630	SE208160.005	%	60 - 130%	76
	0407_TP271_1.0_200630	SE208160.006	%	60 - 130%	74
	0407_QC1182_200630	SE208160.011	%	60 - 130%	82
d14-p-terphenyl (Surrogate)	0407_TP261_0.1_200630	SE208160.001	%	60 - 130%	86
	0407_TP261_1.5_200630	SE208160.002	%	60 - 130%	84
	0407_TP262_0.1_200630	SE208160.003	%	60 - 130%	86
	0407_TP262_1.0_200630	SE208160.004	%	60 - 130%	84
	0407_TP271_0.1_200630	SE208160.005	%	60 - 130%	84
	0407_TP271_1.0_200630	SE208160.006	%	60 - 130%	88
	0407_QC1182_200630	SE208160.011	%	60 - 130%	84

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP261_0.1_200630	SE208160.001	%	70 - 130%	76
	0407_TP261_1.5_200630	SE208160.002	%	70 - 130%	74
	0407_TP262_0.1_200630	SE208160.003	%	70 - 130%	76
	0407_TP262_1.0_200630	SE208160.004	%	70 - 130%	74
	0407_TP271_0.1_200630	SE208160.005	%	70 - 130%	76
	0407_TP271_1.0_200630	SE208160.006	%	70 - 130%	74
	0407_QC1182_200630	SE208160.011	%	70 - 130%	82
d14-p-terphenyl (Surrogate)	0407_TP261_0.1_200630	SE208160.001	%	70 - 130%	86
	0407_TP261_1.5_200630	SE208160.002	%	70 - 130%	84
	0407_TP262_0.1_200630	SE208160.003	%	70 - 130%	86
	0407_TP262_1.0_200630	SE208160.004	%	70 - 130%	84
	0407_TP271_0.1_200630	SE208160.005	%	70 - 130%	84
	0407_TP271_1.0_200630	SE208160.006	%	70 - 130%	88
	0407_QC1182_200630	SE208160.011	%	70 - 130%	84
d5-nitrobenzene (Surrogate)	0407_TP261_0.1_200630	SE208160.001	%	70 - 130%	82
	0407_TP261_1.5_200630	SE208160.002	%	70 - 130%	80
	0407_TP262_0.1_200630	SE208160.003	%	70 - 130%	84
	0407_TP262_1.0_200630	SE208160.004	%	70 - 130%	82
	0407_TP271_0.1_200630	SE208160.005	%	70 - 130%	82
	0407_TP271_1.0_200630	SE208160.006	%	70 - 130%	82
	0407_QC1182_200630	SE208160.011	%	70 - 130%	82

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP261_0.1_200630	SE208160.001	%	60 - 130%	107
	0407_TP261_1.5_200630	SE208160.002	%	60 - 130%	105
	0407_TP262_0.1_200630	SE208160.003	%	60 - 130%	107
	0407_TP262_1.0_200630	SE208160.004	%	60 - 130%	107
	0407_TP271_0.1_200630	SE208160.005	%	60 - 130%	109
	0407_TP271_1.0_200630	SE208160.006	%	60 - 130%	105
	0407_QC1182_200630	SE208160.011	%	60 - 130%	107

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	0407_TP261_0.1_200630	SE208160.001	%	70 - 130%	85
	0407_TP261_1.5_200630	SE208160.002	%	70 - 130%	83
	0407_TP262_0.1_200630	SE208160.003	%	70 - 130%	86
	0407_TP262_1.0_200630	SE208160.004	%	70 - 130%	80
	0407_TP271_0.1_200630	SE208160.005	%	70 - 130%	81
	0407_TP271_1.0_200630	SE208160.006	%	70 - 130%	80
	0407_QC1182_200630	SE208160.011	%	70 - 130%	79
d5-phenol (Surrogate)	0407_TP261_0.1_200630	SE208160.001	%	50 - 130%	86
	0407_TP261_1.5_200630	SE208160.002	%	50 - 130%	86
	0407_TP262_0.1_200630	SE208160.003	%	50 - 130%	84
	0407_TP262_1.0_200630	SE208160.004	%	50 - 130%	89
	0407_TP271_0.1_200630	SE208160.005	%	50 - 130%	75
	0407_TP271_1.0_200630	SE208160.006	%	50 - 130%	89
	0407_QC1182_200630	SE208160.011	%	50 - 130%	99

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP261_0.1_200630	SE208160.001	%	60 - 130%	75
	0407_TP261_1.5_200630	SE208160.002	%	60 - 130%	71
	0407_TP262_0.1_200630	SE208160.003	%	60 - 130%	74
	0407_TP262_1.0_200630	SE208160.004	%	60 - 130%	72
	0407_TP271_0.1_200630	SE208160.005	%	60 - 130%	73
	0407_TP271_1.0_200630	SE208160.006	%	60 - 130%	79
	0407_QC1182_200630	SE208160.011	%	60 - 130%	68
d4-1,2-dichloroethane (Surrogate)	0407_TP261_0.1_200630	SE208160.001	%	60 - 130%	92
	0407_TP261_1.5_200630	SE208160.002	%	60 - 130%	91
	0407_TP262_0.1_200630	SE208160.003	%	60 - 130%	88
	0407_TP262_1.0_200630	SE208160.004	%	60 - 130%	95
	0407_TP271_0.1_200630	SE208160.005	%	60 - 130%	85
	0407_TP271_1.0_200630	SE208160.006	%	60 - 130%	96
	0407_QC1182_200630	SE208160.011	%	60 - 130%	82
d8-toluene (Surrogate)	0407_TP261_0.1_200630	SE208160.001	%	60 - 130%	86
	0407_TP261_1.5_200630	SE208160.002	%	60 - 130%	86
	0407_TP262_0.1_200630	SE208160.003	%	60 - 130%	84
	0407_TP262_1.0_200630	SE208160.004	%	60 - 130%	89
	0407_TP271_0.1_200630	SE208160.005	%	60 - 130%	80
	0407_TP271_1.0_200630	SE208160.006	%	60 - 130%	86
	0407_QC1182_200630	SE208160.011	%	60 - 130%	73

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP261_0.1_200630	SE208160.001	%	60 - 130%	75
	0407_TP261_1.5_200630	SE208160.002	%	60 - 130%	71
	0407_TP262_0.1_200630	SE208160.003	%	60 - 130%	74
	0407_TP262_1.0_200630	SE208160.004	%	60 - 130%	72
	0407_TP271_0.1_200630	SE208160.005	%	60 - 130%	73
	0407_TP271_1.0_200630	SE208160.006	%	60 - 130%	79
	0407_QC1182_200630	SE208160.011	%	60 - 130%	68
d4-1,2-dichloroethane (Surrogate)	0407_TP261_0.1_200630	SE208160.001	%	60 - 130%	92
	0407_TP261_1.5_200630	SE208160.002	%	60 - 130%	91
	0407_TP262_0.1_200630	SE208160.003	%	60 - 130%	88
	0407_TP262_1.0_200630	SE208160.004	%	60 - 130%	95
	0407_TP271_0.1_200630	SE208160.005	%	60 - 130%	85
	0407_TP271_1.0_200630	SE208160.006	%	60 - 130%	96
	0407_QC1182_200630	SE208160.011	%	60 - 130%	82
d8-toluene (Surrogate)	0407_TP261_0.1_200630	SE208160.001	%	60 - 130%	86
	0407_TP261_1.5_200630	SE208160.002	%	60 - 130%	86
	0407_TP262_0.1_200630	SE208160.003	%	60 - 130%	84
	0407_TP262_1.0_200630	SE208160.004	%	60 - 130%	89
	0407_TP271_0.1_200630	SE208160.005	%	60 - 130%	80
	0407_TP271_1.0_200630	SE208160.006	%	60 - 130%	86
	0407_QC1182_200630	SE208160.011	%	60 - 130%	73

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result
LB203676.001	Mercury	mg/kg	0.05	<0.05

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203622.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	97

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203622.001		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	92
		d14-p-terphenyl (Surrogate)	%	-	96

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB203622.001	Naphthalene	mg/kg	0.1	<0.1
	2-methylnaphthalene	mg/kg	0.1	<0.1
	1-methylnaphthalene	mg/kg	0.1	<0.1
	Acenaphthylene	mg/kg	0.1	<0.1
	Acenaphthene	mg/kg	0.1	<0.1
	Fluorene	mg/kg	0.1	<0.1
	Phenanthrene	mg/kg	0.1	<0.1
	Anthracene	mg/kg	0.1	<0.1
	Fluoranthene	mg/kg	0.1	<0.1
	Pyrene	mg/kg	0.1	<0.1
	Benzo(a)anthracene	mg/kg	0.1	<0.1
	Chrysene	mg/kg	0.1	<0.1
	Benzo(a)pyrene	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203622.001		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	90
		2-fluorobiphenyl (Surrogate)	%	-	92
		d14-p-terphenyl (Surrogate)	%	-	96

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203622.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	97

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203622.001		Phenol	mg/kg	0.5	<0.5
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5
		2-nitrophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
		Pentachlorophenol	mg/kg	0.5	<0.5
		2,4-dinitrophenol	mg/kg	2	<2
		4-chloro-3-methylphenol	mg/kg	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	83
		d5-phenol (Surrogate)	%	-	91

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB203670.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB203622.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number	Parameter	Units	LOR

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB203620.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10

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VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB203620.001	Oxygenated Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	100
		d8-toluene (Surrogate)	%	-	89
		Bromofluorobenzene (Surrogate)	%	-	80
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB203620.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	100

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208160.011	LB203676.023	Mercury	mg/kg	0.05	0.14	0.15	65	6
SE208202.010	LB203676.014	Mercury	mg/kg	0.05	0.011240396	50.011939281	2 200	0

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208160.005	LB203624.011	% Moisture	%w/w	1	12.6	12.1	38	4
SE208320.007	LB203624.021	% Moisture	%w/w	1	9.366636931	37.6923076923	42	20

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208160.005	LB203622.014		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.16	0.17	30	2
SE208320.007	LB203622.024		Hexachlorobenzene (HCB)	mg/kg	0.1	0	0	200	0
			Alpha BHC	mg/kg	0.1	0	0	200	0
			Lindane	mg/kg	0.1	0	0	200	0
			Heptachlor	mg/kg	0.1	0	0	200	0
			Aldrin	mg/kg	0.1	0	0	200	0
			Beta BHC	mg/kg	0.1	0	0	200	0
			Delta BHC	mg/kg	0.1	0	0	200	0
			Heptachlor epoxide	mg/kg	0.1	0	0	200	0
			o,p'-DDE	mg/kg	0.1	0	0	200	0
			Alpha Endosulfan	mg/kg	0.2	0	0	200	0
			Gamma Chlordane	mg/kg	0.1	0	0	200	0
			Alpha Chlordane	mg/kg	0.1	0	0	200	0
			trans-Nonachlor	mg/kg	0.1	0	0	200	0
			p,p'-DDE	mg/kg	0.1	0	0	200	0
			Dieldrin	mg/kg	0.2	0	0	200	0
			Endrin	mg/kg	0.2	0	0	200	0
			o,p'-DDD	mg/kg	0.1	0	0	200	0
			o,p'-DDT	mg/kg	0.1	0	0	200	0
			Beta Endosulfan	mg/kg	0.2	0	0	200	0
			p,p'-DDD	mg/kg	0.1	0	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208320.007	LB203622.024		p,p'-DDT	mg/kg	0.1	0	0	200	0
			Endosulfan sulphate	mg/kg	0.1	0	0	200	0
			Endrin Aldehyde	mg/kg	0.1	0	0	200	0
			Methoxychlor	mg/kg	0.1	0	0	200	0
			Endrin Ketone	mg/kg	0.1	0	0	200	0
			Isodrin	mg/kg	0.1	0	0	200	0
			Mirex	mg/kg	0.1	0	0	200	0
			Total CLP OC Pesticides	mg/kg	1	0	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.154	0.159	30	3

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208160.005	LB203622.014		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	3
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	0
SE208320.007	LB203622.024		Dichlorvos	mg/kg	0.5	0	0	200	0
			Dimethoate	mg/kg	0.5	0.04	0.04	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	0.02	0.02	200	0
			Fenitrothion	mg/kg	0.2	0	0	200	0
			Malathion	mg/kg	0.2	0	0	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	0.09	0	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	0.18	0.11	168	0
			Bromophos Ethyl	mg/kg	0.2	0.02	0.01	200	0
			Methidathion	mg/kg	0.5	0	0	200	0
			Ethion	mg/kg	0.2	0.01	0	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	0	0	200	0
			Total OP Pesticides*	mg/kg	1.7	0	0	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.39	0.39	30	0
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.44	0.45	30	2

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208160.005	LB203622.014	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthylene	mg/kg	0.1	<0.1	0.1	135	0
		Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
		Phenanthrene	mg/kg	0.1	0.2	0.3	75	45
		Anthracene	mg/kg	0.1	<0.1	0.1	125	18
		Fluoranthene	mg/kg	0.1	0.6	0.8	44	41
		Pyrene	mg/kg	0.1	0.7	1.0	42	37
		Benzo(a)anthracene	mg/kg	0.1	0.3	0.4	62	39
		Chrysene	mg/kg	0.1	0.3	0.4	62	35
		Benzo(b&j)fluoranthene	mg/kg	0.1	0.4	0.5	53	23
		Benzo(k)fluoranthene	mg/kg	0.1	0.2	0.3	78	57
		Benzo(a)pyrene	mg/kg	0.1	0.4	0.5	53	37
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.2	0.3	66	36
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(ghi)perylene	mg/kg	0.1	0.2	0.4	64	37
		Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	0.5	0.7	46	37

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208160.005	LB203622.014		Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	0.6	0.8	55	31
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	0.5	0.7	43	34
			Total PAH (18)	mg/kg	0.8	3.3	5.0	49	42
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	30	0
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	3
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	0
SE208320.007	LB203622.024		Naphthalene	mg/kg	0.1	0	0	200	0
			2-methylnaphthalene	mg/kg	0.1	0	0	200	0
			1-methylnaphthalene	mg/kg	0.1	0	0	200	0
			Acenaphthylene	mg/kg	0.1	0.01	0	200	0
			Acenaphthene	mg/kg	0.1	0	0	200	0
			Fluorene	mg/kg	0.1	0	0	200	0
			Phenanthrene	mg/kg	0.1	0.01	0.01	200	0
			Anthracene	mg/kg	0.1	0.01	0.01	200	0
			Fluoranthene	mg/kg	0.1	0.05	0	200	0
			Pyrene	mg/kg	0.1	0.03	0.01	200	0
			Benzo(a)anthracene	mg/kg	0.1	0.05	0.01	200	0
			Chrysene	mg/kg	0.1	0.04	0.01	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	0.02	0	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	0.02	0	200	0
			Benzo(a)pyrene	mg/kg	0.1	0	0	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0	0	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	0.01	0	200	0
			Benzo(ghi)perylene	mg/kg	0.1	0	0	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	0	0	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	0.242	0.242	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	0.121	0.121	175	0
			Total PAH (18)	mg/kg	0.8	0	0	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.42	0.42	30	0
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.39	0.39	30	0
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.44	0.45	30	2

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208160.005	LB203622.014		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	2
SE208320.007	LB203622.024		Arochlor 1016	mg/kg	0.2	0	0	200	0
			Arochlor 1221	mg/kg	0.2	0	0	200	0
			Arochlor 1232	mg/kg	0.2	0	0	200	0
			Arochlor 1242	mg/kg	0.2	0	0	200	0
			Arochlor 1248	mg/kg	0.2	0	0	200	0
			Arochlor 1254	mg/kg	0.2	0	0	200	0
			Arochlor 1260	mg/kg	0.2	0	0	200	0
			Arochlor 1262	mg/kg	0.2	0	0	200	0
			Arochlor 1268	mg/kg	0.2	0	0	200	0
			Total PCBs (Arochlors)	mg/kg	1	0	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.154	0.159	30	3

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208160.005	LB203622.014		Phenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	200	0
			Total Cresol	mg/kg	1.5	<1.5	<1.5	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	200	0
			4-nitrophenol	mg/kg	1	<1	<1	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dinitrophenol	mg/kg	2	<2	<2	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.1	4.1	30	0
			d5-phenol (Surrogate)	mg/kg	-	1.5	2.0	30	27

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208202.010	LB203670.014	Arsenic, As	mg/kg	1	3.49456469602	.9195205128	61	18
		Cadmium, Cd	mg/kg	0.3	0.034521525300	.0146341880	200	0
		Chromium, Cr	mg/kg	0.5	8.204780249406	.9930512820	37	16
		Copper, Cu	mg/kg	0.5	2.883040532403	.2885111111	46	13
		Nickel, Ni	mg/kg	0.5	2.991043590303	.3768388888	46	12
		Lead, Pb	mg/kg	1	11.929652836001	.8803474356	38	0
		Zinc, Zn	mg/kg	2	19.806478594202	.0202717948	40	11
SE208318.001	LB203670.024	Chromium, Cr	mg/kg	0.5	12	12	34	5
		Copper, Cu	mg/kg	0.5	9.1	11	35	17
		Lead, Pb	mg/kg	1	13	15	37	14
		Zinc, Zn	mg/kg	2	37	42	35	14

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208160.005	LB203622.014		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE208320.007	LB203622.024		TRH C10-C14	mg/kg	20	0	0	200	0
			TRH C15-C28	mg/kg	45	0	0	200	0
			TRH C29-C36	mg/kg	45	0	0	200	0
			TRH C37-C40	mg/kg	100	0	0	200	0
			TRH C10-C36 Total	mg/kg	110	0	0	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	0	0	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	0	0	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	0	0	200	0
			TRH >C16-C34 (F3)	mg/kg	90	0	0	200	0
			TRH >C34-C40 (F4)	mg/kg	120	0	0	200	0

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208160.005	LB203620.014	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208160.005	LB203620.014	Fumigants	1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208160.005	LB203620.014	Oxygenated	2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.5	8.5	50	1
			d8-toluene (Surrogate)	mg/kg	-	8.0	7.8	50	2
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.3	7.5	50	3
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethanes	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
			Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE208320.007	LB203620.024	Monocyclic Aromatic	Benzene	mg/kg	0.1	0	0	200	0
			Toluene	mg/kg	0.1	0.002704383	4 0.0024445664	200	0
			Ethylbenzene	mg/kg	0.1	0.001113729	7 0.0011078497	200	0
			m/p-xylene	mg/kg	0.2	0.003096344	8 0.0030802345	200	0
			o-xylene	mg/kg	0.1	0.001105751	6 0.0009903359	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	0.002061420	6 0.0024333343	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.02328395	0 18.4918635284	50	17
			d8-toluene (Surrogate)	mg/kg	-	8.536181125	4 7.7993332902	50	9
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.929805438	2 7.4120648174	50	7
		Totals	Total Xylenes	mg/kg	0.3	0.004202096	4 0.0040705704	200	0
			Total BTEX	mg/kg	0.6	0	0	200	0

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208160.005	LB203620.014		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.5	8.5	30	1
			d8-toluene (Surrogate)	mg/kg	-	8.0	7.8	30	2
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.3	7.5	30	3
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE208320.007	LB203620.024		TRH C6-C10	mg/kg	25	0	0.5085815770	200	0
			TRH C6-C9	mg/kg	20	0	0.4592182563	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.02328395	0 18.4918635284	30	17
			d8-toluene (Surrogate)	mg/kg	-	8.536181125	4 7.7993332902	30	9
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.929805438	2 7.4120648174	30	7
		VPH F Bands	Benzene (F0)	mg/kg	0.1	0	0	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	0	0.5085815770	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203676.002	Mercury	mg/kg	0.05	0.22	0.2	70 - 130	111

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203622.002		Heptachlor	mg/kg	0.1	0.3	0.2	60 - 140	128
		Aldrin	mg/kg	0.1	0.3	0.2	60 - 140	126
		Delta BHC	mg/kg	0.1	0.3	0.2	60 - 140	127
		Dieldrin	mg/kg	0.2	0.3	0.2	60 - 140	126
		Endrin	mg/kg	0.2	0.3	0.2	60 - 140	130
		p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	121
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.15	40 - 130	100

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203622.002		Dichlorvos	mg/kg	0.5	1.7	2	60 - 140	85
		Diazinon (Dimpylate)	mg/kg	0.5	1.7	2	60 - 140	85
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.9	2	60 - 140	95
		Ethion	mg/kg	0.2	1.5	2	60 - 140	77
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	88
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	86

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203622.002		Naphthalene	mg/kg	0.1	4.4	4	60 - 140	111
		Acenaphthylene	mg/kg	0.1	4.2	4	60 - 140	104
		Acenaphthene	mg/kg	0.1	4.7	4	60 - 140	116
		Phenanthrene	mg/kg	0.1	4.6	4	60 - 140	114
		Anthracene	mg/kg	0.1	4.3	4	60 - 140	108
		Fluoranthene	mg/kg	0.1	4.2	4	60 - 140	105
		Pyrene	mg/kg	0.1	4.2	4	60 - 140	106
		Benzo(a)pyrene	mg/kg	0.1	4.6	4	60 - 140	116
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	90
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	88
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	86

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203622.002	Arochlor 1260	mg/kg	0.2	0.4	0.4	60 - 140	99

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203622.002		Phenol	mg/kg	0.5	0.8	1	70 - 130	76
		2,4-dichlorophenol	mg/kg	0.5	0.8	1	70 - 130	75
		2,4,6-trichlorophenol	mg/kg	0.5	0.9	1	70 - 130	94
		Pentachlorophenol	mg/kg	0.5	0.9	1	70 - 130	85
	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.3	5	40 - 130	86
		d5-phenol (Surrogate)	mg/kg	-	1.7	2	40 - 130	84

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203670.002	Arsenic, As	mg/kg	1	350	318.22	80 - 120	109
	Cadmium, Cd	mg/kg	0.3	5.4	5.41	80 - 120	99
	Chromium, Cr	mg/kg	0.5	40	38.31	80 - 120	103
	Copper, Cu	mg/kg	0.5	310	290	80 - 120	105
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	102
	Lead, Pb	mg/kg	1	97	89.9	80 - 120	108
	Zinc, Zn	mg/kg	2	290	273	80 - 120	105

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203622.002		TRH C10-C14	mg/kg	20	44	40	60 - 140	110
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	100
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	105
	TRH F Bands	TRH >C10-C16	mg/kg	25	43	40	60 - 140	108
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	95
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	125

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203620.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	5.3	5	60 - 140	105
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	3.9	5	60 - 140	77
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	3.4	5	60 - 140	68
	Halogenated	Chlorobenzene	mg/kg	0.1	4.6	5	60 - 140	92
	Monocyclic	Benzene	mg/kg	0.1	3.5	5	60 - 140	70
	Aromatic	Toluene	mg/kg	0.1	3.7	5	60 - 140	74
		Ethylbenzene	mg/kg	0.1	4.4	5	60 - 140	89
		m/p-xylene	mg/kg	0.2	9.1	10	60 - 140	91
		o-xylene	mg/kg	0.1	4.5	5	60 - 140	90
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.1	10	70 - 130	101
		d8-toluene (Surrogate)	mg/kg	-	9.0	10	70 - 130	90
		Bromofluorobenzene (Surrogate)	mg/kg	-	7.4	10	70 - 130	74
	Trihalomethan	Chloroform	mg/kg	0.1	3.6	5	60 - 140	72

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203620.002		TRH C6-C10	mg/kg	25	65	92.5	60 - 140	71
		TRH C6-C9	mg/kg	20	58	80	60 - 140	73
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.1	10	70 - 130	101
		Bromofluorobenzene (Surrogate)	mg/kg	-	7.4	10	70 - 130	74
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	40	62.5	60 - 140	64

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208202.001	LB203676.004	Mercury	mg/kg	0.05	0.22	0.02189375608	0.2	101

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208254.001	LB203622.004	Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	0	-	-
		Alpha BHC	mg/kg	0.1	<0.1	0	-	-
		Lindane	mg/kg	0.1	<0.1	0	-	-
		Heptachlor	mg/kg	0.1	0.2	0	0.2	80
		Aldrin	mg/kg	0.1	0.2	0	0.2	77
		Beta BHC	mg/kg	0.1	<0.1	0	-	-
		Delta BHC	mg/kg	0.1	0.2	0	0.2	79
		Heptachlor epoxide	mg/kg	0.1	<0.1	0	-	-
		o,p'-DDE	mg/kg	0.1	<0.1	0	-	-
		Alpha Endosulfan	mg/kg	0.2	<0.2	0	-	-
		Gamma Chlordane	mg/kg	0.1	<0.1	0	-	-
		Alpha Chlordane	mg/kg	0.1	<0.1	0	-	-
		trans-Nonachlor	mg/kg	0.1	<0.1	0	-	-
		p,p'-DDE	mg/kg	0.1	<0.1	0	-	-
		Dieldrin	mg/kg	0.2	<0.2	0	0.2	75
		Endrin	mg/kg	0.2	<0.2	0	0.2	77
		o,p'-DDD	mg/kg	0.1	<0.1	0	-	-
		o,p'-DDT	mg/kg	0.1	<0.1	0	-	-
		Beta Endosulfan	mg/kg	0.2	<0.2	0	-	-
		p,p'-DDD	mg/kg	0.1	<0.1	0	-	-
		p,p'-DDT	mg/kg	0.1	0.1	0	0.2	71
		Endosulfan sulphate	mg/kg	0.1	<0.1	0	-	-
		Endrin Aldehyde	mg/kg	0.1	<0.1	0	-	-
		Methoxychlor	mg/kg	0.1	<0.1	0	-	-
		Endrin Ketone	mg/kg	0.1	<0.1	0	-	-
		Isodrin	mg/kg	0.1	<0.1	0	-	-
		Mirex	mg/kg	0.1	<0.1	0	-	-
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.17	0.162	-	111

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number	Parameter	Units	LOR	Original	Spike	Recovery%
SE208160.001	LB203622.025	Dichlorvos	mg/kg	0.5	<0.5	2	92
		Dimethoate	mg/kg	0.5	<0.5	-	-
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5	2	90
		Fenitrothion	mg/kg	0.2	<0.2	-	-
		Malathion	mg/kg	0.2	<0.2	-	-
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	2	96
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	-	-
		Bromophos Ethyl	mg/kg	0.2	<0.2	-	-
		Methidathion	mg/kg	0.5	<0.5	-	-
		Ethion	mg/kg	0.2	<0.2	2	99
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	-	-
		Total OP Pesticides*	mg/kg	1.7	<1.7	-	-
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	-	78
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	-	78

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number	Parameter	Units	LOR	Original	Spike	Recovery%
SE208160.001	LB203622.025	Naphthalene	mg/kg	0.1	<0.1	4	97
		2-methylnaphthalene	mg/kg	0.1	<0.1	-	-
		1-methylnaphthalene	mg/kg	0.1	<0.1	-	-
		Acenaphthylene	mg/kg	0.1	<0.1	4	96
		Acenaphthene	mg/kg	0.1	<0.1	4	99
		Fluorene	mg/kg	0.1	<0.1	-	-
		Phenanthrene	mg/kg	0.1	0.3	4	109
		Anthracene	mg/kg	0.1	0.1	4	101

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208160.001	LB203622.025		Fluoranthene	mg/kg	0.1	0.8	4	93
			Pyrene	mg/kg	0.1	1.0	4	105
			Benzo(a)anthracene	mg/kg	0.1	0.3	-	-
			Chrysene	mg/kg	0.1	0.3	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1	0.5	-	-
			Benzo(k)fluoranthene	mg/kg	0.1	0.2	-	-
			Benzo(a)pyrene	mg/kg	0.1	0.4	4	103
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.3	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	0.3	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	0.5	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	0.6	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	0.6	-	-
			Total PAH (18)	mg/kg	0.8	4.4	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	-	82
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	-	78
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	-	78

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208254.001	LB203622.004		Arochlor 1016	mg/kg	0.2	<0.2	0	-	-
			Arochlor 1221	mg/kg	0.2	<0.2	0	-	-
			Arochlor 1232	mg/kg	0.2	<0.2	0	-	-
			Arochlor 1242	mg/kg	0.2	<0.2	0	-	-
			Arochlor 1248	mg/kg	0.2	<0.2	0	-	-
			Arochlor 1254	mg/kg	0.2	<0.2	0	-	-
			Arochlor 1260	mg/kg	0.2	0.3	0	0.4	86
			Arochlor 1262	mg/kg	0.2	<0.2	0	-	-
			Arochlor 1268	mg/kg	0.2	<0.2	0	-	-
			Total PCBs (Arochlors)	mg/kg	1	<1	0	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0.162	-	115

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208254.001	LB203622.004		Phenol	mg/kg	0.5	0.8	0.01	1	80
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	0	-	-
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	0	-	-
			Total Cresol	mg/kg	1.5	<1.5	0	-	-
			2-chlorophenol	mg/kg	0.5	<0.5	0	-	-
			2,4-dimethylphenol	mg/kg	0.5	<0.5	0	-	-
			2,6-dichlorophenol	mg/kg	0.5	<0.5	0	-	-
			2,4-dichlorophenol	mg/kg	0.5	0.8	0	1	78
			2,4,6-trichlorophenol	mg/kg	0.5	1.1	0	1	111
			2-nitrophenol	mg/kg	0.5	<0.5	0	-	-
			4-nitrophenol	mg/kg	1	<1	0	-	-
			2,4,5-trichlorophenol	mg/kg	0.5	0.8	0	-	-
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	0	-	-
			Pentachlorophenol	mg/kg	0.5	1.0	0	1	102
			2,4-dinitrophenol	mg/kg	2	<2	0	-	-
			4-chloro-3-methylphenol	mg/kg	2	<2	0	-	-
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.2	4.24	-	83
			d5-phenol (Surrogate)	mg/kg	-	1.8	1.68	-	90

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208202.001	LB203670.004	Arsenic, As	mg/kg	1	41	3.65746913089	50	75
		Cadmium, Cd	mg/kg	0.3	38	0.03097605600	50	76
		Chromium, Cr	mg/kg	0.5	49	8.78056461520	50	80
		Copper, Cu	mg/kg	0.5	45	4.56323195361	50	81
		Nickel, Ni	mg/kg	0.5	45	4.11350551092	50	81
		Lead, Pb	mg/kg	1	59	20.77001917994	50	76
		Zinc, Zn	mg/kg	2	62	26.35775550429	50	71

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208160.001	LB203622.025		TRH C10-C14	mg/kg	20	<20	40	98
			TRH C15-C28	mg/kg	45	<45	40	100
			TRH C29-C36	mg/kg	45	<45	40	113
			TRH C37-C40	mg/kg	100	<100	-	-
			TRH C10-C36 Total	mg/kg	110	<110	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	40	93
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	<90	40	113
			TRH >C34-C40 (F4)	mg/kg	120	<120	-	-

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208254.001	LB203620.004	Monocyclic	Benzene	mg/kg	0.1	3.4	0.00923136116	5	67
		Aromatic	Toluene	mg/kg	0.1	3.4	0.01164838027	5	68
			Ethylbenzene	mg/kg	0.1	4.1	0.02587243136	5	81
			m/p-xylene	mg/kg	0.2	8.3	0.06229122435	10	82
			o-xylene	mg/kg	0.1	4.2	0.02939651673	5	83
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	0.00626169699	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.3	9.27796297341	10	93
			d8-toluene (Surrogate)	mg/kg	-	8.4	8.31287633589	10	84
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.9	7.45031081230	10	69 ①
		Totals	Total Xylenes	mg/kg	0.3	13	0.09168774108	-	-
			Total BTEX	mg/kg	0.6	23	0	-	-

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208254.001	LB203620.004		TRH C6-C10	mg/kg	25	62	0	92.5	67
			TRH C6-C9	mg/kg	20	55	0	80	69
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.3	9.27796297341	10	93
			d8-toluene (Surrogate)	mg/kg	-	8.4	8.31287633589	10	84
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.9	7.45031081230	-	69
		VPH F	Benzene (F0)	mg/kg	0.1	3.4	0.00923136116	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	39	0	62.5	62

MATRIX SPIKE DUPLICATES

SE208160 R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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This test report shall not be reproduced, except in full.

000661

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☑ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT: DHA

PROJECT: 610.30041

PROJECT NUMBER: Randwick Bastacks

PROJECT MANAGER: [redacted]

PM CONTACT No:

LABORATORY: SGS

LABORATORY ADDRESS: Sydney

SAMPLER: [redacted]

SAMPLER CONTACT No:

Email Reports and Invoices to: LARSYD@slrconsulting.com

Turnaround Time (TAT)

☑ Standard TAT

☐ Non Standard or Urgent TAT

Required TAT:

COC Number 1 of 3

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	Asbestos	TRH C6-C10 BTEXN	Hold.	Additional Information (Comment on any gross contamination or specific requirements)
1	RWBB_TP17_0.1_200615	15.6.20	Soil		X	X			
2	RWBB_TP17_0.5_200615				X	X			
	RWBB_TP17_1.0_200615							X	
3	RWBB_TP18_0.1_200615				X	X			
4	RWBB_TP18_0.5_200615				X	X			
	RWBB_TP18_1.0_200615							X	
5	RWBB_TP09_0.1_200615				X	X			
6	RWBB_TP09_0.5_200615				X	X			
7	RWBB_QCH01_200615						X		Trip Spike
8	RWBB_QC501_200615						X		Trip Blank
9	RWBB_QC103_200616	16.6.20	Soil		X				
10	RWBB_QC203_200616	"	"		X				

SGS EHS Sydney COC

SE207591

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	Received by	Sign [redacted]	Date / Time 16/6 16.30	Temperature Received:
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

source: [Untitled].pdf page: 1 SGS Ref: SE207591_COC

000662

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

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- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT: DHA

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.300

PROJECT MANAGER:

PM CONTACT No:

COMMENTS OR ADDITIONAL DIRECTIONS

LABORATORY: SGS

LABORATORY ADDRESS: Sydney

SAMPLER: [redacted]

SAMPLER CONTACT No:

Email Reports and Invoices to: LARSMD@slrconsulting.com

Turnaround Time (TAT)
- ☑ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT:

COC Number: 2 of 3

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: Suite A	Hold.	Additional Information (Comment on any gross contamination or specific requirements)
11	RWBB_QC105_200616	16-6-20	Soil.		X		
12	RWBB_QC205_200616				X		
13	RWBB_TP06_0.1_200616				X		
14	RWBB_TP06_0.5_200616				X		
	RWBB_TP06_1.0_200616					X	
15	RWBB_TP07_0.1_200616				X		
16	RWBB_TP07_0.5_200616				X		
	RWBB_TP07_1.0_200616					X	
17	RWBB_TP08_0.1_200616				X		
18	RWBB_TP08_0.5_200616				X		
19	RWBB_TP26_0.1_200616				X		
20	RWBB_TP26_0.5_200616				X		

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	Received by	Sign [redacted]	Date / Time 16/6 16.30	Temperature Received: 11°C
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

000663

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

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- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT: DHA

PROJECT: Randwick Barracks

PROJECT NUMBER: 610_30041

PROJECT MANAGER: [redacted]

PM CONTACT No:

LABORATORY: SCS

LABORATORY ADDRESS: Sydney

SAMPLER: [redacted]

SAMPLER CONTACT No: [redacted]

Email Reports and Invoices to: LARSYD@slrconsulting.com

Turnaround Time (TAT): ☑ Standard TAT ☐ Non Standard or Urgent TAT

Required TAT:

COC Number: 3 of 3

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

	No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	Asbestos						Hold	Additional Information (Comment on any gross contamination or specific requirements)
		RWBB_TP26_1.0_200616	16.6.20	Soil									X	
21	21	RWBB_TP27_0.1_200616				X								
22	22	RWBB_TP27_0.5_200616				X								
23	23	RWBB_TP35_0.1_200616				X								
24	24	RWBB_TP35_0.5_200616				X								
25	25	RWBB_TP36_0.1_200616				X								
26	26	RWBB_TP36_0.5_200616				X								
		RWBB_TP36_1.0_200616											X	
		RWBB_TP26_A01_200616		ACM									X	
27	27	RWBB_TP26_A02_200616					X							
		RWBB_TP26_A03_200616											X	
28	28	RWBB_TP26_A05_200616					X							

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	Received by	Sign [redacted]	Date / Time 16/6 16:30	Temperature Received: 11°C
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

SAMPLE RECEIPT ADVICE

SE207591

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000661--000663**
Samples	28

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Tue 16/6/2020
Report Due	Tue 23/6/2020
SGS Reference	**SE207591**

SUBMISSION DETAILS

This is to confirm that 28 samples were received on Tuesday 16/6/2020. Results are expected to be ready by COB Tuesday 23/6/2020. Please quote SGS reference SE207591 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	24 Soil, 2 Material
Date documentation received	16/6/2020	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	11°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

6 Soil and 2 Material have been placed on hold as no tests have been assigned for them by the client. These samples will not be processed.

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SAMPLE RECEIPT ADVICE

SE207591

CLIENT DETAILS

Client SLR CONSULTING AUSTRALIA PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	Speciated Phenols in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
001	0407_TP17_0.1_200615	29	14	26	11	18	10	81	7
002	0407_TP17_0.5_200615	29	14	26	11	18	10	81	7
003	0407_TP18_0.1_200615	29	14	26	11	18	10	81	7
004	0407_TP18_0.5_200615	29	14	26	11	18	10	81	7
005	0407_TP19_0.1_200615	29	14	26	11	18	10	81	7
006	0407_TP19_0.5_200615	29	14	26	11	18	10	81	7
007	0407_QC401_200615	-	-	-	-	-	-	11	-
008	0407_QC501_200615	-	-	-	-	-	-	8	6
009	0407_QC103_200616	29	14	26	11	18	10	81	7
011	0407_QC105_200616	29	14	26	11	18	10	81	7
013	0407_TP06_0.1_200616	29	14	26	11	18	10	81	7
014	0407_TP06_0.5_200616	29	14	26	11	18	10	81	7
015	0407_TP07_0.1_200616	29	14	26	11	18	10	81	7
016	0407_TP07_0.5_200616	29	14	26	11	18	10	81	7
017	0407_TP08_0.1_200616	29	14	26	11	18	10	81	7
018	0407_TP08_0.5_200616	29	14	26	11	18	10	81	7
019	0407_TP26_0.1_200616	29	14	26	11	18	10	81	7
020	0407_TP26_0.5_200616	29	14	26	11	18	10	81	7
021	0407_TP27_0.1_200616	29	14	26	11	18	10	81	7
022	0407_TP27_0.5_200616	29	14	26	11	18	10	81	7
023	0407_TP35_0.1_200616	29	14	26	11	18	10	81	7
024	0407_TP35_0.5_200616	29	14	26	11	18	10	81	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE207591

CLIENT DETAILS

Client SLR CONSULTING AUSTRALIA PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	Speciated Phenols in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
025	0407_TP36_0.1_200616	29	14	26	11	18	10	81	7
026	0407_TP36_0.5_200616	29	14	26	11	18	10	81	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
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SAMPLE RECEIPT ADVICE

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CLIENT DETAILS

Client SLR CONSULTING AUSTRALIA PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Fibre Identification in soil	Gravimetric Determination of Asbestos in Soil	Mercury in Soil	Moisture Content	Total Recoverable Elements in Soil/Waste
001	0407_TP17_0.1_200615	2	9	1	1	7
002	0407_TP17_0.5_200615	2	9	1	1	7
003	0407_TP18_0.1_200615	2	9	1	1	7
004	0407_TP18_0.5_200615	2	9	1	1	7
005	0407_TP19_0.1_200615	2	9	1	1	7
006	0407_TP19_0.5_200615	-	-	1	1	7
008	0407_QC501_200615	-	-	-	1	-
009	0407_QC103_200616	-	-	1	1	7
011	0407_QC105_200616	-	-	1	1	7
013	0407_TP06_0.1_200616	2	9	1	1	7
014	0407_TP06_0.5_200616	2	9	1	1	7
015	0407_TP07_0.1_200616	2	9	1	1	7
016	0407_TP07_0.5_200616	2	9	1	1	7
017	0407_TP08_0.1_200616	2	9	1	1	7
018	0407_TP08_0.5_200616	-	-	1	1	7
019	0407_TP26_0.1_200616	2	9	1	1	7
020	0407_TP26_0.5_200616	2	9	1	1	7
021	0407_TP27_0.1_200616	2	9	1	1	7
022	0407_TP27_0.5_200616	-	-	1	1	7
023	0407_TP35_0.1_200616	-	-	1	1	7
024	0407_TP35_0.5_200616	-	-	1	1	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
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SAMPLE RECEIPT ADVICE

SE207591

CLIENT DETAILS

Client SLR CONSULTING AUSTRALIA PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Fibre Identification in soil	Gravimetric Determination of Asbestos in Soil	Mercury in Soil	Moisture Content	Total Recoverable Elements in Soil/Waste
025	0407_TP36_0.1_200616	2	9	1	1	7
026	0407_TP36_0.5_200616	-	-	1	1	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
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Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE207591

CLIENT DETAILS

Client SLR CONSULTING AUSTRALIA PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Fibre ID in bulk materials
027	0407_TP26_A02_200616	1
028	0407_TP26_A03_200616	1

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000661--000663**
Samples	28

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207591 R0**
Date Received	16/6/2020
Date Reported	23/6/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.

Sample #2: Asbestos found as approx 5x3x2mm cement sheet fragments in >2mm portion.
Sample #19: Asbestos found as approx 7x4x2mm bituminous membrane in >2mm portion.
Sample #20: Asbestos found in approx 8x4x2mm cement sheet fragments in >2mm portion.
Sample #25: Asbestos found in approx 4x3x2mm cement sheet fragments in >2mm portion.

Asbestos analysed by Approved Identifier Ravee Sivasubramaniam and Yusuf Kuthpudin .

SIGNATORIES

[redacted]

Chemist | Senior Organic Chemist/Metals Chemist | Metals/Inorganics Team Leader

[redacted]

Organic Section Head | Asbestos Analyst

VOC's in Soil [AN433] Tested: 18/6/2020

PARAMETER	UOM	LOR	0407_TP17_0.1_200(15 SOIL - 15/6/2020 SE207591.001	0407_TP17_0.5_200(15 SOIL - 15/6/2020 SE207591.002	0407_TP18_0.1_200(15 SOIL - 15/6/2020 SE207591.003	0407_TP18_0.5_200(15 SOIL - 15/6/2020 SE207591.004	0407_TP19_0.1_200(15 SOIL - 15/6/2020 SE207591.005
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 18/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP17_0.1_200(15 SOIL - 15/6/2020 SE207591.001	0407_TP17_0.5_200(15 SOIL - 15/6/2020 SE207591.002	0407_TP18_0.1_200(15 SOIL - 15/6/2020 SE207591.003	0407_TP18_0.5_200(15 SOIL - 15/6/2020 SE207591.004	0407_TP19_0.1_200(15 SOIL - 15/6/2020 SE207591.005
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 18/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP19_0.5_200(15 SOIL - 15/6/2020 SE207591.006	0407_QC401_20061! SOIL - 15/6/2020 SE207591.007	0407_QC501_20061! SOIL - 15/6/2020 SE207591.008	0407_QC103_20061(SOIL - 15/6/2020 SE207591.009	0407_QC105_20061(SOIL - 16/6/2020 SE207591.011
Benzene	mg/kg	0.1	<0.1	<0.1	[102%]	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	[105%]	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	[106%]	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	[106%]	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	[105%]	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	-	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	-	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	-	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	-	-	<1	<1
Chloromethane	mg/kg	1	<1	-	-	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
Bromomethane	mg/kg	1	<1	-	-	<1	<1
Chloroethane	mg/kg	1	<1	-	-	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	-	-	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	-	-	<10	<10
Iodomethane	mg/kg	5	<5	-	-	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	-	-	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	-	-	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	-	-	<10	<10
MEK (2-butanone)	mg/kg	10	<10	-	-	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	-	-	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	-	-	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	-	-	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	-	-	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	-	-	<1	<1

VOC's in Soil [AN433] Tested: 18/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP19_0.5_200(15 SOIL - 15/6/2020 SE207591.006	0407_QC401_20061! SOIL - 15/6/2020 SE207591.007	0407_QC501_20061! SOIL - 15/6/2020 SE207591.008	0407_QC103_20061(SOIL - 15/6/2020 SE207591.009	0407_QC105_20061(SOIL - 16/6/2020 SE207591.011
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	-	-	<0.1	<0.1
Total VOC*	mg/kg	24	<24	-	-	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	-	-	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	-	-	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	-	-	<1.8	<1.8

VOC's in Soil [AN433] Tested: 18/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP06_0.1_200(16 SOIL - 16/6/2020 SE207591.013	0407_TP06_0.5_200(16 SOIL - 16/6/2020 SE207591.014	0407_TP07_0.1_200(16 SOIL - 16/6/2020 SE207591.015	0407_TP07_0.5_200(16 SOIL - 16/6/2020 SE207591.016	0407_TP08_0.1_200(16 SOIL - 16/6/2020 SE207591.017
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 18/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP06_0.1_200(16 SOIL - 16/6/2020 SE207591.013	0407_TP06_0.5_200(16 SOIL - 16/6/2020 SE207591.014	0407_TP07_0.1_200(16 SOIL - 16/6/2020 SE207591.015	0407_TP07_0.5_200(16 SOIL - 16/6/2020 SE207591.016	0407_TP08_0.1_200(16 SOIL - 16/6/2020 SE207591.017
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 18/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP08_0.5_200(16 SOIL - 16/6/2020 SE207591.018	0407_TP26_0.1_200(16 SOIL - 16/6/2020 SE207591.019	0407_TP26_0.5_200(16 SOIL - 16/6/2020 SE207591.020	0407_TP27_0.1_200(16 SOIL - 16/6/2020 SE207591.021	0407_TP27_0.5_200(16 SOIL - 16/6/2020 SE207591.022
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 18/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP08_0.5_200(16 SOIL - 16/6/2020 SE207591.018	0407_TP26_0.1_200(16 SOIL - 16/6/2020 SE207591.019	0407_TP26_0.5_200(16 SOIL - 16/6/2020 SE207591.020	0407_TP27_0.1_200(16 SOIL - 16/6/2020 SE207591.021	0407_TP27_0.5_200(16 SOIL - 16/6/2020 SE207591.022
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 18/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP35_0.1_200(16 SOIL - 16/6/2020 SE207591.023	0407_TP35_0.5_200(16 SOIL - 16/6/2020 SE207591.024	0407_TP36_0.1_200(16 SOIL - 16/6/2020 SE207591.025	0407_TP36_0.5_200(16 SOIL - 16/6/2020 SE207591.026
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 18/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP35_0.1_200(16 SOIL - 16/6/2020 SE207591.023	0407_TP35_0.5_200(16 SOIL - 16/6/2020 SE207591.024	0407_TP36_0.1_200(16 SOIL - 16/6/2020 SE207591.025	0407_TP36_0.5_200(16 SOIL - 16/6/2020 SE207591.026
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 18/6/2020

PARAMETER	UOM	LOR	0407_TP17_0.1_200(15 SOIL - 15/6/2020 SE207591.001	0407_TP17_0.5_200(15 SOIL - 15/6/2020 SE207591.002	0407_TP18_0.1_200(15 SOIL - 15/6/2020 SE207591.003	0407_TP18_0.5_200(15 SOIL - 15/6/2020 SE207591.004	0407_TP19_0.1_200(15 SOIL - 15/6/2020 SE207591.005
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP19_0.5_200(15 SOIL - 15/6/2020 SE207591.006	0407_QC501_20061(SOIL - 15/6/2020 SE207591.008	0407_QC103_20061(SOIL - 15/6/2020 SE207591.009	0407_QC105_20061(SOIL - 16/6/2020 SE207591.011	0407_TP06_0.1_200(16 SOIL - 16/6/2020 SE207591.013
Benzene (F0)	mg/kg	0.1	<0.1	-	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	-	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	-	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	-	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP06_0.5_200(16 SOIL - 16/6/2020 SE207591.014	0407_TP07_0.1_200(16 SOIL - 16/6/2020 SE207591.015	0407_TP07_0.5_200(16 SOIL - 16/6/2020 SE207591.016	0407_TP08_0.1_200(16 SOIL - 16/6/2020 SE207591.017	0407_TP08_0.5_200(16 SOIL - 16/6/2020 SE207591.018
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP26_0.1_200(16 SOIL - 16/6/2020 SE207591.019	0407_TP26_0.5_200(16 SOIL - 16/6/2020 SE207591.020	0407_TP27_0.1_200(16 SOIL - 16/6/2020 SE207591.021	0407_TP27_0.5_200(16 SOIL - 16/6/2020 SE207591.022	0407_TP35_0.1_200(16 SOIL - 16/6/2020 SE207591.023
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP35_0.5_200(16 SOIL - 16/6/2020 SE207591.024	0407_TP36_0.1_200(16 SOIL - 16/6/2020 SE207591.025	0407_TP36_0.5_200(16 SOIL - 16/6/2020 SE207591.026
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 19/6/2020

PARAMETER	UOM	LOR	0407_TP17_0.1_200(15 SOIL - 15/6/2020 SE207591.001	0407_TP17_0.5_200(15 SOIL - 15/6/2020 SE207591.002	0407_TP18_0.1_200(15 SOIL - 15/6/2020 SE207591.003	0407_TP18_0.5_200(15 SOIL - 15/6/2020 SE207591.004	0407_TP19_0.1_200(15 SOIL - 15/6/2020 SE207591.005
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP19_0.5_200(15 SOIL - 15/6/2020 SE207591.006	0407_QC103_20061(SOIL - 15/6/2020 SE207591.009	0407_QC105_20061(SOIL - 16/6/2020 SE207591.011	0407_TP06_0.1_200(16 SOIL - 16/6/2020 SE207591.013	0407_TP06_0.5_200(16 SOIL - 16/6/2020 SE207591.014
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP07_0.1_200(16 SOIL - 16/6/2020 SE207591.015	0407_TP07_0.5_200(16 SOIL - 16/6/2020 SE207591.016	0407_TP08_0.1_200(16 SOIL - 16/6/2020 SE207591.017	0407_TP08_0.5_200(16 SOIL - 16/6/2020 SE207591.018	0407_TP26_0.1_200(16 SOIL - 16/6/2020 SE207591.019
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP26_0.5_200(16 SOIL - 16/6/2020 SE207591.020	0407_TP27_0.1_200(16 SOIL - 16/6/2020 SE207591.021	0407_TP27_0.5_200(16 SOIL - 16/6/2020 SE207591.022	0407_TP35_0.1_200(16 SOIL - 16/6/2020 SE207591.023	0407_TP35_0.5_200(16 SOIL - 16/6/2020 SE207591.024
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP36_0.1_200(16 SOIL - 16/6/2020 SE207591.025	0407_TP36_0.5_200(16 SOIL - 16/6/2020 SE207591.026
TRH C10-C14	mg/kg	20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 19/6/2020

PARAMETER	UOM	LOR	0407_TP17_0.1_200(15 SOIL - 15/6/2020 SE207591.001	0407_TP17_0.5_200(15 SOIL - 15/6/2020 SE207591.002	0407_TP18_0.1_200(15 SOIL - 15/6/2020 SE207591.003	0407_TP18_0.5_200(15 SOIL - 15/6/2020 SE207591.004	0407_TP19_0.1_200(15 SOIL - 15/6/2020 SE207591.005
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PARAMETER	UOM	LOR	0407_TP19_0.5_200(15 SOIL - 15/6/2020 SE207591.006	0407_QC103_20061(SOIL - 15/6/2020 SE207591.009	0407_QC105_20061(SOIL - 16/6/2020 SE207591.011	0407_TP06_0.1_200(16 SOIL - 16/6/2020 SE207591.013	0407_TP06_0.5_200(16 SOIL - 16/6/2020 SE207591.014
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.1**	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.3**	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.3**	**0.1**
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.2**	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.2**	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.2**	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.2**	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.2**	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	**0.2**	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	**0.3**	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	**0.3**	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	**1.5**	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	**1.5**	<0.8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP07_0.1_200(16 SOIL - 16/6/2020 SE207591.015	0407_TP07_0.5_200(16 SOIL - 16/6/2020 SE207591.016	0407_TP08_0.1_200(16 SOIL - 16/6/2020 SE207591.017	0407_TP08_0.5_200(16 SOIL - 16/6/2020 SE207591.018	0407_TP26_0.1_200(16 SOIL - 16/6/2020 SE207591.019
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	0.1	<0.1	0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	0.4	<0.1	0.5	<0.1	<0.1
Anthracene	mg/kg	0.1	0.2	<0.1	0.2	<0.1	<0.1
Fluoranthene	mg/kg	0.1	1.7	0.1	1.5	<0.1	<0.1
Pyrene	mg/kg	0.1	1.8	0.2	1.6	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	0.9	<0.1	0.8	<0.1	<0.1
Chrysene	mg/kg	0.1	1.0	<0.1	0.9	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	1.4	<0.1	1.3	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	0.7	<0.1	0.6	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	1.4	0.1	1.2	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	1.0	<0.1	0.7	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	1.0	<0.1	0.7	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	2.0	<0.2	1.5	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	2.0	<0.3	1.6	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	2.0	<0.2	1.6	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	12	<0.8	10	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	12	<0.8	10	<0.8	<0.8

PARAMETER	UOM	LOR	0407_TP26_0.5_200(16 SOIL - 16/6/2020 SE207591.020	0407_TP27_0.1_200(16 SOIL - 16/6/2020 SE207591.021	0407_TP27_0.5_200(16 SOIL - 16/6/2020 SE207591.022	0407_TP35_0.1_200(16 SOIL - 16/6/2020 SE207591.023	0407_TP35_0.5_200(16 SOIL - 16/6/2020 SE207591.024
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP36_0.1_200(16 SOIL - 16/6/2020 SE207591.025	0407_TP36_0.5_200(16 SOIL - 16/6/2020 SE207591.026
Naphthalene	mg/kg	0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8

Speciated Phenols in Soil [AN420] Tested: 19/6/2020

PARAMETER	UOM	LOR	0407_TP17_0.1_200(15 SOIL - 15/6/2020 SE207591.001	0407_TP17_0.5_200(15 SOIL - 15/6/2020 SE207591.002	0407_TP18_0.1_200(15 SOIL - 15/6/2020 SE207591.003	0407_TP18_0.5_200(15 SOIL - 15/6/2020 SE207591.004	0407_TP19_0.1_200(15 SOIL - 15/6/2020 SE207591.005
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_TP19_0.5_200(15 SOIL - 15/6/2020 SE207591.006	0407_QC103_20061(SOIL - 15/6/2020 SE207591.009	0407_QC105_20061(SOIL - 16/6/2020 SE207591.011	0407_TP06_0.1_200(16 SOIL - 16/6/2020 SE207591.013	0407_TP06_0.5_200(16 SOIL - 16/6/2020 SE207591.014
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

Speciated Phenols in Soil [AN420] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP07_0.1_200(16 SOIL - 16/6/2020 SE207591.015	0407_TP07_0.5_200(16 SOIL - 16/6/2020 SE207591.016	0407_TP08_0.1_200(16 SOIL - 16/6/2020 SE207591.017	0407_TP08_0.5_200(16 SOIL - 16/6/2020 SE207591.018	0407_TP26_0.1_200(16 SOIL - 16/6/2020 SE207591.019
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_TP26_0.5_200(16 SOIL - 16/6/2020 SE207591.020	0407_TP27_0.1_200(16 SOIL - 16/6/2020 SE207591.021	0407_TP27_0.5_200(16 SOIL - 16/6/2020 SE207591.022	0407_TP35_0.1_200(16 SOIL - 16/6/2020 SE207591.023	0407_TP35_0.5_200(16 SOIL - 16/6/2020 SE207591.024
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

Speciated Phenols in Soil [AN420] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP36_0.1_200(16 SOIL - 16/6/2020 SE207591.025	0407_TP36_0.5_200(16 SOIL - 16/6/2020 SE207591.026
Phenol	mg/kg	0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2

OC Pesticides in Soil [AN420] Tested: 19/6/2020

PARAMETER	UOM	LOR	0407_TP17_0.1_200(15 SOIL - 15/6/2020 SE207591.001	0407_TP17_0.5_200(15 SOIL - 15/6/2020 SE207591.002	0407_TP18_0.1_200(15 SOIL - 15/6/2020 SE207591.003	0407_TP18_0.5_200(15 SOIL - 15/6/2020 SE207591.004	0407_TP19_0.1_200(15 SOIL - 15/6/2020 SE207591.005
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP19_0.5_200(15 SOIL - 15/6/2020 SE207591.006	0407_QC103_20061(SOIL - 15/6/2020 SE207591.009	0407_QC105_20061(SOIL - 16/6/2020 SE207591.011	0407_TP06_0.1_200(16 SOIL - 16/6/2020 SE207591.013	0407_TP06_0.5_200(16 SOIL - 16/6/2020 SE207591.014
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP07_0.1_200(16 SOIL - 16/6/2020 SE207591.015	0407_TP07_0.5_200(16 SOIL - 16/6/2020 SE207591.016	0407_TP08_0.1_200(16 SOIL - 16/6/2020 SE207591.017	0407_TP08_0.5_200(16 SOIL - 16/6/2020 SE207591.018	0407_TP26_0.1_200(16 SOIL - 16/6/2020 SE207591.019
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP26_0.5_200(16 SOIL - 16/6/2020 SE207591.020	0407_TP27_0.1_200(16 SOIL - 16/6/2020 SE207591.021	0407_TP27_0.5_200(16 SOIL - 16/6/2020 SE207591.022	0407_TP35_0.1_200(16 SOIL - 16/6/2020 SE207591.023	0407_TP35_0.5_200(16 SOIL - 16/6/2020 SE207591.024
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP36_0.1_20016 SOIL - 16/6/2020 SE207591.025	0407_TP36_0.5_20016 SOIL - 16/6/2020 SE207591.026
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1

OP Pesticides in Soil [AN420] Tested: 19/6/2020

PARAMETER	UOM	LOR	0407_TP17_0.1_200(15 SOIL - 15/6/2020 SE207591.001	0407_TP17_0.5_200(15 SOIL - 15/6/2020 SE207591.002	0407_TP18_0.1_200(15 SOIL - 15/6/2020 SE207591.003	0407_TP18_0.5_200(15 SOIL - 15/6/2020 SE207591.004	0407_TP19_0.1_200(15 SOIL - 15/6/2020 SE207591.005
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP19_0.5_200(15 SOIL - 15/6/2020 SE207591.006	0407_QC103_20061(SOIL - 15/6/2020 SE207591.009	0407_QC105_20061(SOIL - 16/6/2020 SE207591.011	0407_TP06_0.1_200(16 SOIL - 16/6/2020 SE207591.013	0407_TP06_0.5_200(16 SOIL - 16/6/2020 SE207591.014
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP07_0.1_200(16 SOIL - 16/6/2020 SE207591.015	0407_TP07_0.5_200(16 SOIL - 16/6/2020 SE207591.016	0407_TP08_0.1_200(16 SOIL - 16/6/2020 SE207591.017	0407_TP08_0.5_200(16 SOIL - 16/6/2020 SE207591.018	0407_TP26_0.1_200(16 SOIL - 16/6/2020 SE207591.019
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

OP Pesticides in Soil [AN420] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP26_0.5_200(16 SOIL - 16/6/2020 SE207591.020	0407_TP27_0.1_200(16 SOIL - 16/6/2020 SE207591.021	0407_TP27_0.5_200(16 SOIL - 16/6/2020 SE207591.022	0407_TP35_0.1_200(16 SOIL - 16/6/2020 SE207591.023	0407_TP35_0.5_200(16 SOIL - 16/6/2020 SE207591.024
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP36_0.1_200(16 SOIL - 16/6/2020 SE207591.025	0407_TP36_0.5_200(16 SOIL - 16/6/2020 SE207591.026
Dichlorvos	mg/kg	0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7

PCBs in Soil [AN420] Tested: 19/6/2020

PARAMETER	UOM	LOR	0407_TP17_0.1_200(15 SOIL - 15/6/2020 SE207591.001	0407_TP17_0.5_200(15 SOIL - 15/6/2020 SE207591.002	0407_TP18_0.1_200(15 SOIL - 15/6/2020 SE207591.003	0407_TP18_0.5_200(15 SOIL - 15/6/2020 SE207591.004	0407_TP19_0.1_200(15 SOIL - 15/6/2020 SE207591.005
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP19_0.5_200(15 SOIL - 15/6/2020 SE207591.006	0407_QC103_20061(SOIL - 15/6/2020 SE207591.009	0407_QC105_20061(SOIL - 16/6/2020 SE207591.011	0407_TP06_0.1_200(16 SOIL - 16/6/2020 SE207591.013	0407_TP06_0.5_200(16 SOIL - 16/6/2020 SE207591.014
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP07_0.1_200(16 SOIL - 16/6/2020 SE207591.015	0407_TP07_0.5_200(16 SOIL - 16/6/2020 SE207591.016	0407_TP08_0.1_200(16 SOIL - 16/6/2020 SE207591.017	0407_TP08_0.5_200(16 SOIL - 16/6/2020 SE207591.018	0407_TP26_0.1_200(16 SOIL - 16/6/2020 SE207591.019
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PCBs in Soil [AN420] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP26_0.5_200(16 SOIL - 16/6/2020 SE207591.020	0407_TP27_0.1_200(16 SOIL - 16/6/2020 SE207591.021	0407_TP27_0.5_200(16 SOIL - 16/6/2020 SE207591.022	0407_TP35_0.1_200(16 SOIL - 16/6/2020 SE207591.023	0407_TP35_0.5_200(16 SOIL - 16/6/2020 SE207591.024
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP36_0.1_200(16 SOIL - 16/6/2020 SE207591.025	0407_TP36_0.5_200(16 SOIL - 16/6/2020 SE207591.026
Arochlor 1016	mg/kg	0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 18/6/2020

PARAMETER	UOM	LOR	0407_TP17_0.1_200(15 SOIL - 15/6/2020 SE207591.001	0407_TP17_0.5_200(15 SOIL - 15/6/2020 SE207591.002	0407_TP18_0.1_200(15 SOIL - 15/6/2020 SE207591.003	0407_TP18_0.5_200(15 SOIL - 15/6/2020 SE207591.004	0407_TP19_0.1_200(15 SOIL - 15/6/2020 SE207591.005
Arsenic, As	mg/kg	1	3	<1	3	3	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	6.9	2.3	5.2	7.7	1.2
Copper, Cu	mg/kg	0.5	9.9	5.1	7.9	7.1	3.4
Lead, Pb	mg/kg	1	16	13	18	19	7
Nickel, Ni	mg/kg	0.5	3.5	3.2	2.5	2.7	1.1
Zinc, Zn	mg/kg	2	20	30	17	19	10

PARAMETER	UOM	LOR	0407_TP19_0.5_200(15 SOIL - 15/6/2020 SE207591.006	0407_QC103_20061(SOIL - 15/6/2020 SE207591.009	0407_QC105_20061(SOIL - 16/6/2020 SE207591.011	0407_TP06_0.1_200(16 SOIL - 16/6/2020 SE207591.013	0407_TP06_0.5_200(16 SOIL - 16/6/2020 SE207591.014
Arsenic, As	mg/kg	1	<1	<1	<1	2	1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	<0.5	3.5	2.1	4.2	3.4
Copper, Cu	mg/kg	0.5	1.1	3.5	1.3	4.8	3.2
Lead, Pb	mg/kg	1	2	17	1	24	17
Nickel, Ni	mg/kg	0.5	<0.5	0.6	1.6	0.7	0.7
Zinc, Zn	mg/kg	2	3.7	10	2.4	14	10

PARAMETER	UOM	LOR	0407_TP07_0.1_200(16 SOIL - 16/6/2020 SE207591.015	0407_TP07_0.5_200(16 SOIL - 16/6/2020 SE207591.016	0407_TP08_0.1_200(16 SOIL - 16/6/2020 SE207591.017	0407_TP08_0.5_200(16 SOIL - 16/6/2020 SE207591.018	0407_TP26_0.1_200(16 SOIL - 16/6/2020 SE207591.019
Arsenic, As	mg/kg	1	<1	1	<1	<1	1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	3.4	5.5	2.8	0.6	10
Copper, Cu	mg/kg	0.5	22	11	14	1.4	6.8
Lead, Pb	mg/kg	1	70	18	50	2	8
Nickel, Ni	mg/kg	0.5	9.2	4.2	9.1	<0.5	7.1
Zinc, Zn	mg/kg	2	50	23	39	3.4	24

PARAMETER	UOM	LOR	0407_TP26_0.5_200(16 SOIL - 16/6/2020 SE207591.020	0407_TP27_0.1_200(16 SOIL - 16/6/2020 SE207591.021	0407_TP27_0.5_200(16 SOIL - 16/6/2020 SE207591.022	0407_TP35_0.1_200(16 SOIL - 16/6/2020 SE207591.023	0407_TP35_0.5_200(16 SOIL - 16/6/2020 SE207591.024
Arsenic, As	mg/kg	1	<1	<1	<1	<1	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	4.3	2.5	1.3	<0.5	<0.5
Copper, Cu	mg/kg	0.5	1.3	2.7	<0.5	1.7	<0.5
Lead, Pb	mg/kg	1	2	2	<1	3	<1
Nickel, Ni	mg/kg	0.5	3.7	3.7	0.6	0.5	<0.5
Zinc, Zn	mg/kg	2	3.5	3.5	<2.0	5.8	<2.0

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 18/6/2020

(continued)

PARAMETER	UOM	LOR	0407_TP36_0.1_20016 SOIL - 16/6/2020 SE207591.025	0407_TP36_0.5_20016 SOIL - 16/6/2020 SE207591.026
Arsenic, As	mg/kg	1	1	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	2.2	<0.5
Copper, Cu	mg/kg	0.5	3.6	<0.5
Lead, Pb	mg/kg	1	6	1
Nickel, Ni	mg/kg	0.5	3.5	<0.5
Zinc, Zn	mg/kg	2	11	<2.0

Mercury in Soil [AN312] Tested: 18/6/2020

PARAMETER	UOM	LOR	0407_TP17_0.1_20015 SOIL - 15/6/2020 SE207591.001	0407_TP17_0.5_20015 SOIL - 15/6/2020 SE207591.002	0407_TP18_0.1_20015 SOIL - 15/6/2020 SE207591.003	0407_TP18_0.5_20015 SOIL - 15/6/2020 SE207591.004	0407_TP19_0.1_20015 SOIL - 15/6/2020 SE207591.005
Mercury	mg/kg	0.05	**0.06**	<0.05	**0.11**	**0.14**	<0.05

PARAMETER	UOM	LOR	0407_TP19_0.5_20015 SOIL - 15/6/2020 SE207591.006	0407_QC103_20061 SOIL - 15/6/2020 SE207591.009	0407_QC105_20061 SOIL - 16/6/2020 SE207591.011	0407_TP06_0.1_20016 SOIL - 16/6/2020 SE207591.013	0407_TP06_0.5_20016 SOIL - 16/6/2020 SE207591.014
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	**0.06**	<0.05

PARAMETER	UOM	LOR	0407_TP07_0.1_20016 SOIL - 16/6/2020 SE207591.015	0407_TP07_0.5_20016 SOIL - 16/6/2020 SE207591.016	0407_TP08_0.1_20016 SOIL - 16/6/2020 SE207591.017	0407_TP08_0.5_20016 SOIL - 16/6/2020 SE207591.018	0407_TP26_0.1_20016 SOIL - 16/6/2020 SE207591.019
Mercury	mg/kg	0.05	**0.08**	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_TP26_0.5_20016 SOIL - 16/6/2020 SE207591.020	0407_TP27_0.1_20016 SOIL - 16/6/2020 SE207591.021	0407_TP27_0.5_20016 SOIL - 16/6/2020 SE207591.022	0407_TP35_0.1_20016 SOIL - 16/6/2020 SE207591.023	0407_TP35_0.5_20016 SOIL - 16/6/2020 SE207591.024
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_TP36_0.1_20016 SOIL - 16/6/2020 SE207591.025	0407_TP36_0.5_20016 SOIL - 16/6/2020 SE207591.026
Mercury	mg/kg	0.05	<0.05	<0.05

Moisture Content [AN002] Tested: 18/6/2020

PARAMETER	UOM	LOR	0407_TP17_0.1_200(15 SOIL - 15/6/2020 SE207591.001	0407_TP17_0.5_200(15 SOIL - 15/6/2020 SE207591.002	0407_TP18_0.1_200(15 SOIL - 15/6/2020 SE207591.003	0407_TP18_0.5_200(15 SOIL - 15/6/2020 SE207591.004	0407_TP19_0.1_200(15 SOIL - 15/6/2020 SE207591.005
% Moisture	%w/w	1	13.2	19.7	11.4	5.7	9.4

PARAMETER	UOM	LOR	0407_TP19_0.5_200(15 SOIL - 15/6/2020 SE207591.006	0407_QC501_20061(SOIL - 15/6/2020 SE207591.008	0407_QC103_20061(SOIL - 15/6/2020 SE207591.009	0407_QC105_20061(SOIL - 16/6/2020 SE207591.011	0407_TP06_0.1_200(16 SOIL - 16/6/2020 SE207591.013
% Moisture	%w/w	1	19.1	<1.0	8.1	5.8	9.5

PARAMETER	UOM	LOR	0407_TP06_0.5_200(16 SOIL - 16/6/2020 SE207591.014	0407_TP07_0.1_200(16 SOIL - 16/6/2020 SE207591.015	0407_TP07_0.5_200(16 SOIL - 16/6/2020 SE207591.016	0407_TP08_0.1_200(16 SOIL - 16/6/2020 SE207591.017	0407_TP08_0.5_200(16 SOIL - 16/6/2020 SE207591.018
% Moisture	%w/w	1	7.6	10.0	8.5	6.1	4.5

PARAMETER	UOM	LOR	0407_TP26_0.1_200(16 SOIL - 16/6/2020 SE207591.019	0407_TP26_0.5_200(16 SOIL - 16/6/2020 SE207591.020	0407_TP27_0.1_200(16 SOIL - 16/6/2020 SE207591.021	0407_TP27_0.5_200(16 SOIL - 16/6/2020 SE207591.022	0407_TP35_0.1_200(16 SOIL - 16/6/2020 SE207591.023
% Moisture	%w/w	1	3.5	4.7	6.4	3.9	3.5

PARAMETER	UOM	LOR	0407_TP35_0.5_200(16 SOIL - 16/6/2020 SE207591.024	0407_TP36_0.1_200(16 SOIL - 16/6/2020 SE207591.025	0407_TP36_0.5_200(16 SOIL - 16/6/2020 SE207591.026
% Moisture	%w/w	1	3.6	5.0	3.7

Fibre Identification in soil [AN602] Tested: 22/6/2020

PARAMETER	UOM	LOR	0407_TP17_0.1_200(15 SOIL - 15/6/2020 SE207591.001	0407_TP17_0.5_200(15 SOIL - 15/6/2020 SE207591.002	0407_TP18_0.1_200(15 SOIL - 15/6/2020 SE207591.003	0407_TP18_0.5_200(15 SOIL - 15/6/2020 SE207591.004	0407_TP19_0.1_200(15 SOIL - 15/6/2020 SE207591.005
Asbestos Detected	No unit	-	No	Yes	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	0407_TP06_0.1_200(16 SOIL - 16/6/2020 SE207591.013	0407_TP06_0.5_200(16 SOIL - 16/6/2020 SE207591.014	0407_TP07_0.1_200(16 SOIL - 16/6/2020 SE207591.015	0407_TP07_0.5_200(16 SOIL - 16/6/2020 SE207591.016	0407_TP08_0.1_200(16 SOIL - 16/6/2020 SE207591.017
Asbestos Detected	No unit	-	No	No	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	0407_TP26_0.1_200(16 SOIL - 16/6/2020 SE207591.019	0407_TP26_0.5_200(16 SOIL - 16/6/2020 SE207591.020	0407_TP27_0.1_200(16 SOIL - 16/6/2020 SE207591.021	0407_TP36_0.1_200(16 SOIL - 16/6/2020 SE207591.025
Asbestos Detected	No unit	-	Yes	Yes	No	Yes
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 22/6/2020

PARAMETER	UOM	LOR	0407_TP17_0.1_200(15 SOIL - 15/6/2020 SE207591.001	0407_TP17_0.5_200(15 SOIL - 15/6/2020 SE207591.002	0407_TP18_0.1_200(15 SOIL - 15/6/2020 SE207591.003	0407_TP18_0.5_200(15 SOIL - 15/6/2020 SE207591.004	0407_TP19_0.1_200(15 SOIL - 15/6/2020 SE207591.005
Total Sample Weight*	g	1	**771**	**539**	**815**	**967**	**921**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	**0.0326**	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	**0.006**	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	**0.006**	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP06_0.1_200(16 SOIL - 16/6/2020 SE207591.013	0407_TP06_0.5_200(16 SOIL - 16/6/2020 SE207591.014	0407_TP07_0.1_200(16 SOIL - 16/6/2020 SE207591.015	0407_TP07_0.5_200(16 SOIL - 16/6/2020 SE207591.016	0407_TP08_0.1_200(16 SOIL - 16/6/2020 SE207591.017
Total Sample Weight*	g	1	**606**	**538**	**940**	**831**	**692**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP26_0.1_200(16 SOIL - 16/6/2020 SE207591.019	0407_TP26_0.5_200(16 SOIL - 16/6/2020 SE207591.020	0407_TP27_0.1_200(16 SOIL - 16/6/2020 SE207591.021	0407_TP36_0.1_200(16 SOIL - 16/6/2020 SE207591.025
Total Sample Weight*	g	1	**864**	**813**	**671**	**730**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	**0.0206**	**0.0727**	<0.00001	**0.0149**
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	**0.002**	**0.009**	<0.001	**0.002**
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	**0.002**	**0.009**	<0.001	**0.002**
Fibre Type*	No unit	-	-	-	-	-

Fibre ID in bulk materials [AN602] Tested: 22/6/2020

PARAMETER	UOM	LOR	0407_TP26_A02_20016 MATERIAL - 16/6/2020 SE207591.027	0407_TP26_A03_20016 MATERIAL - 16/6/2020 SE207591.028
Asbestos Detected	No unit	-	Yes	Yes

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid, mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents .
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples, Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.
AN605	This technique gravimetrically determines the mass of Bonded Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight. Any fibrous asbestos (FA) found in this fraction will be added to the 2-7mm fraction and its mass recorded there.

AN605	This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free/respirable fibres which are only observed by standard trace analysis as per AN602.
AN605	Bonded asbestos containing material (Bonded ACM) comprises asbestos-containing-material which is sound in condition. Fibrous asbestos (FA) comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material. Asbestos fines (AF) includes free fibres, small fibre bundles and also small fragments of bonded ACM that passes through a 7mm sieve - which implies that the bonded ACM fragments have a substantial degree of damage which increases the potential for fibre release.
AN-605	Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009 and NEPM 1999 (2013) schedule B1 section 4..

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000661--000663**
Samples	16

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207591 R0**
Date Received	16 Jun 2020
Date Reported	23 Jun 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.

Sample #2: Asbestos found as approx 5x3x2mm cement sheet fragments in >2mm portion.
Sample #19: Asbestos found as approx 7x4x2mm bituminous membrane in >2mm portion.
Sample #20: Asbestos found in approx 8x4x2mm cement sheet fragments in >2mm portion.
Sample #25: Asbestos found in approx 4x3x2mm cement sheet fragments in >2mm portion.

Asbestos analysed by Approved Identifier Ravee Sivasubramaniam and Yusuf Kuthpudin .

SIGNATORIES

[redacted]

Chemist | Senior Organic Chemist/Metals Chemis | Organic Section Head

[redacted]

Asbestos Analyst

RESULTS

Fibre Identification in soil — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE207591.001	0407_TP17_0.1_200615	Soil	771g Sand, Soil, Rocks	15 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE207591.002	0407_TP17_0.5_200615	Soil	539g Sand, Soil, Rocks	15 Jun 2020	Chrysotile Asbestos Found	<0.01
SE207591.003	0407_TP18_0.1_200615	Soil	815g Sand, Soil, Rocks	15 Jun 2020	No Asbestos Found	<0.01
SE207591.004	0407_TP18_0.5_200615	Soil	967g Sand, Soil, Rocks	15 Jun 2020	No Asbestos Found	<0.01
SE207591.005	0407_TP19_0.1_200615	Soil	921g Sand, Soil, Rocks	15 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE207591.013	0407_TP06_0.1_200616	Soil	606g Sand, Rocks	16 Jun 2020	No Asbestos Found	<0.01
SE207591.014	0407_TP06_0.5_200616	Soil	538g Sand, Rocks	16 Jun 2020	No Asbestos Found	<0.01
SE207591.015	0407_TP07_0.1_200616	Soil	940g Sand, Soil, Rocks	16 Jun 2020	No Asbestos Found	<0.01
SE207591.016	0407_TP07_0.5_200616	Soil	831g Sand, Soil, Rocks	16 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE207591.017	0407_TP08_0.1_200616	Soil	692g Sand, Soil, Rocks	16 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE207591.019	0407_TP26_0.1_200616	Soil	864g Sand, Soil, Rocks	16 Jun 2020	Chrysotile Asbestos Found	<0.01
SE207591.020	0407_TP26_0.5_200616	Soil	813g Sand, Soil, Rocks	16 Jun 2020	Chrysotile Asbestos Found Organic Fibres Detected	<0.01
SE207591.021	0407_TP27_0.1_200616	Soil	671g Sand, Soil, Rocks	16 Jun 2020	No Asbestos Found	<0.01
SE207591.025	0407_TP36_0.1_200616	Soil	730g Sand, Soil, Rocks	16 Jun 2020	Chrysotile Asbestos Found	<0.01

RESULTS

Fibre ID in bulk materials — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE207591.027	0407_TP26_A02 _200616	Other	50x30x5mm Cement Sheet Fragment	16 Jun 2020	Chrysotile Asbestos Detected	
SE207591.028	0407_TP26_A03 _200616	Other	30x20x6mm Cement Sheet Fragment	16 Jun 2020	Chrysotile Asbestos Detected	

METHOD SUMMARY

SE207591 R0

METHOD	METHODOLOGY SUMMARY
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples , Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable ’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.

FOOTNOTES

Amosite	-	Brown Asbestos	NA	-	Not Analysed
Chrysotile	-	White Asbestos	LNR	-	Listed, Not Required
Crocidolite	-	Blue Asbestos	*	-	NATA accreditation does not cover the performance of this service .
Amphiboles	-	Amosite and/or Crocidolite	**	-	Indicative data, theoretical holding time exceeded.

(In reference to soil samples only) This report does not comply with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment and Remediation and Management of Asbestos Contaminated sites in Western Australia - May 2009.

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.

Where reported: 'Asbestos Detected': Asbestos detected by polarised light microscopy, including dispersion staining.
Where reported: 'No Asbestos Found': No Asbestos Found by polarised light microscopy , including dispersion staining.
Where reported: 'UMF Detected': Mineral fibres of unknown type detected by polarised light microscopy, including dispersion staining. Confirmation by another independent analytical technique may be necessary.

Even after disintegration it can be very difficult, or impossible, to detect the presence of asbestos in some asbestos -containing bulk materials using polarised light microscopy. This is due to the low grade or small length or diameter of asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety .

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STATEMENT OF QA/QC PERFORMANCE

SE207591 R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000661--000663**
Samples	28

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
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Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207591 R0**
Date Received	16 Jun 2020
Date Reported	23 Jun 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Matrix Spike	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	3 items

SAMPLE SUMMARY

HOLDING TIME SUMMARY

SE207591 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Fibre ID in bulk materials

Method: ME-(AU)-[ENV]AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP26_A02_200616	SE207591.027	LB202449	16 Jun 2020	16 Jun 2020	16 Jun 2021	22 Jun 2020	16 Jun 2021	23 Jun 2020
0407_TP26_A03_200616	SE207591.028	LB202449	16 Jun 2020	16 Jun 2020	16 Jun 2021	22 Jun 2020	16 Jun 2021	23 Jun 2020

Fibre Identification in soil

Method: ME-(AU)-[ENV]AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP17_0.1_200615	SE207591.001	LB202411	15 Jun 2020	16 Jun 2020	15 Jun 2021	22 Jun 2020	15 Jun 2021	23 Jun 2020
0407_TP17_0.5_200615	SE207591.002	LB202411	15 Jun 2020	16 Jun 2020	15 Jun 2021	22 Jun 2020	15 Jun 2021	23 Jun 2020
0407_TP18_0.1_200615	SE207591.003	LB202411	15 Jun 2020	16 Jun 2020	15 Jun 2021	22 Jun 2020	15 Jun 2021	23 Jun 2020
0407_TP18_0.5_200615	SE207591.004	LB202411	15 Jun 2020	16 Jun 2020	15 Jun 2021	22 Jun 2020	15 Jun 2021	23 Jun 2020
0407_TP19_0.1_200615	SE207591.005	LB202411	15 Jun 2020	16 Jun 2020	15 Jun 2021	22 Jun 2020	15 Jun 2021	23 Jun 2020
0407_TP19_0.5_200615	SE207591.006	LB202411	15 Jun 2020	16 Jun 2020	15 Jun 2021	22 Jun 2020	15 Jun 2021	23 Jun 2020
0407_TP06_0.1_200616	SE207591.013	LB202411	16 Jun 2020	16 Jun 2020	16 Jun 2021	22 Jun 2020	16 Jun 2021	23 Jun 2020
0407_TP06_0.5_200616	SE207591.014	LB202411	16 Jun 2020	16 Jun 2020	16 Jun 2021	22 Jun 2020	16 Jun 2021	23 Jun 2020
0407_TP07_0.1_200616	SE207591.015	LB202411	16 Jun 2020	16 Jun 2020	16 Jun 2021	22 Jun 2020	16 Jun 2021	23 Jun 2020
0407_TP07_0.5_200616	SE207591.016	LB202411	16 Jun 2020	16 Jun 2020	16 Jun 2021	22 Jun 2020	16 Jun 2021	23 Jun 2020
0407_TP08_0.1_200616	SE207591.017	LB202411	16 Jun 2020	16 Jun 2020	16 Jun 2021	22 Jun 2020	16 Jun 2021	23 Jun 2020
0407_TP08_0.5_200616	SE207591.018	LB202411	16 Jun 2020	16 Jun 2020	16 Jun 2021	22 Jun 2020	16 Jun 2021	23 Jun 2020
0407_TP26_0.1_200616	SE207591.019	LB202411	16 Jun 2020	16 Jun 2020	16 Jun 2021	22 Jun 2020	16 Jun 2021	23 Jun 2020
0407_TP26_0.5_200616	SE207591.020	LB202411	16 Jun 2020	16 Jun 2020	16 Jun 2021	22 Jun 2020	16 Jun 2021	23 Jun 2020
0407_TP27_0.1_200616	SE207591.021	LB202411	16 Jun 2020	16 Jun 2020	16 Jun 2021	22 Jun 2020	16 Jun 2021	23 Jun 2020
0407_TP27_0.5_200616	SE207591.022	LB202411	16 Jun 2020	16 Jun 2020	16 Jun 2021	22 Jun 2020	16 Jun 2021	23 Jun 2020
0407_TP35_0.1_200616	SE207591.023	LB202411	16 Jun 2020	16 Jun 2020	16 Jun 2021	22 Jun 2020	16 Jun 2021	23 Jun 2020
0407_TP35_0.5_200616	SE207591.024	LB202411	16 Jun 2020	16 Jun 2020	16 Jun 2021	22 Jun 2020	16 Jun 2021	23 Jun 2020
0407_TP36_0.1_200616	SE207591.025	LB202411	16 Jun 2020	16 Jun 2020	16 Jun 2021	22 Jun 2020	16 Jun 2021	23 Jun 2020
0407_TP36_0.5_200616	SE207591.026	LB202411	16 Jun 2020	16 Jun 2020	16 Jun 2021	22 Jun 2020	16 Jun 2021	23 Jun 2020

Gravimetric Determination of Asbestos in Soil

Method: ME-(AU)-[ENV]AN605

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP17_0.1_200615	SE207591.001	LB202411	15 Jun 2020	16 Jun 2020	12 Dec 2020	22 Jun 2020	12 Dec 2020	23 Jun 2020
0407_TP17_0.5_200615	SE207591.002	LB202411	15 Jun 2020	16 Jun 2020	12 Dec 2020	22 Jun 2020	12 Dec 2020	23 Jun 2020
0407_TP18_0.1_200615	SE207591.003	LB202411	15 Jun 2020	16 Jun 2020	12 Dec 2020	22 Jun 2020	12 Dec 2020	23 Jun 2020
0407_TP18_0.5_200615	SE207591.004	LB202411	15 Jun 2020	16 Jun 2020	12 Dec 2020	22 Jun 2020	12 Dec 2020	23 Jun 2020
0407_TP19_0.1_200615	SE207591.005	LB202411	15 Jun 2020	16 Jun 2020	12 Dec 2020	22 Jun 2020	12 Dec 2020	23 Jun 2020
0407_TP19_0.5_200615	SE207591.006	LB202411	15 Jun 2020	16 Jun 2020	12 Dec 2020	22 Jun 2020	12 Dec 2020	23 Jun 2020
0407_TP06_0.1_200616	SE207591.013	LB202411	16 Jun 2020	16 Jun 2020	13 Dec 2020	22 Jun 2020	13 Dec 2020	23 Jun 2020
0407_TP06_0.5_200616	SE207591.014	LB202411	16 Jun 2020	16 Jun 2020	13 Dec 2020	22 Jun 2020	13 Dec 2020	23 Jun 2020
0407_TP07_0.1_200616	SE207591.015	LB202411	16 Jun 2020	16 Jun 2020	13 Dec 2020	22 Jun 2020	13 Dec 2020	23 Jun 2020
0407_TP07_0.5_200616	SE207591.016	LB202411	16 Jun 2020	16 Jun 2020	13 Dec 2020	22 Jun 2020	13 Dec 2020	23 Jun 2020
0407_TP08_0.1_200616	SE207591.017	LB202411	16 Jun 2020	16 Jun 2020	13 Dec 2020	22 Jun 2020	13 Dec 2020	23 Jun 2020
0407_TP08_0.5_200616	SE207591.018	LB202411	16 Jun 2020	16 Jun 2020	13 Dec 2020	22 Jun 2020	13 Dec 2020	23 Jun 2020
0407_TP26_0.1_200616	SE207591.019	LB202411	16 Jun 2020	16 Jun 2020	13 Dec 2020	22 Jun 2020	13 Dec 2020	23 Jun 2020
0407_TP26_0.5_200616	SE207591.020	LB202411	16 Jun 2020	16 Jun 2020	13 Dec 2020	22 Jun 2020	13 Dec 2020	23 Jun 2020
0407_TP27_0.1_200616	SE207591.021	LB202411	16 Jun 2020	16 Jun 2020	13 Dec 2020	22 Jun 2020	13 Dec 2020	23 Jun 2020
0407_TP27_0.5_200616	SE207591.022	LB202411	16 Jun 2020	16 Jun 2020	13 Dec 2020	22 Jun 2020	13 Dec 2020	23 Jun 2020
0407_TP35_0.1_200616	SE207591.023	LB202411	16 Jun 2020	16 Jun 2020	13 Dec 2020	22 Jun 2020	13 Dec 2020	23 Jun 2020
0407_TP35_0.5_200616	SE207591.024	LB202411	16 Jun 2020	16 Jun 2020	13 Dec 2020	22 Jun 2020	13 Dec 2020	23 Jun 2020
0407_TP36_0.1_200616	SE207591.025	LB202411	16 Jun 2020	16 Jun 2020	13 Dec 2020	22 Jun 2020	13 Dec 2020	23 Jun 2020
0407_TP36_0.5_200616	SE207591.026	LB202411	16 Jun 2020	16 Jun 2020	13 Dec 2020	22 Jun 2020	13 Dec 2020	23 Jun 2020

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP17_0.1_200615	SE207591.001	LB202300	15 Jun 2020	16 Jun 2020	13 Jul 2020	18 Jun 2020	13 Jul 2020	19 Jun 2020
0407_TP17_0.5_200615	SE207591.002	LB202300	15 Jun 2020	16 Jun 2020	13 Jul 2020	18 Jun 2020	13 Jul 2020	19 Jun 2020
0407_TP18_0.1_200615	SE207591.003	LB202300	15 Jun 2020	16 Jun 2020	13 Jul 2020	18 Jun 2020	13 Jul 2020	19 Jun 2020
0407_TP18_0.5_200615	SE207591.004	LB202300	15 Jun 2020	16 Jun 2020	13 Jul 2020	18 Jun 2020	13 Jul 2020	19 Jun 2020
0407_TP19_0.1_200615	SE207591.005	LB202300	15 Jun 2020	16 Jun 2020	13 Jul 2020	18 Jun 2020	13 Jul 2020	19 Jun 2020
0407_TP19_0.5_200615	SE207591.006	LB202300	15 Jun 2020	16 Jun 2020	13 Jul 2020	18 Jun 2020	13 Jul 2020	19 Jun 2020
0407_QC103_200616	SE207591.009	LB202300	15 Jun 2020	16 Jun 2020	13 Jul 2020	18 Jun 2020	13 Jul 2020	19 Jun 2020
0407_QC105_200616	SE207591.011	LB202300	16 Jun 2020	16 Jun 2020	14 Jul 2020	18 Jun 2020	14 Jul 2020	19 Jun 2020
0407_TP06_0.1_200616	SE207591.013	LB202300	16 Jun 2020	16 Jun 2020	14 Jul 2020	18 Jun 2020	14 Jul 2020	19 Jun 2020
0407_TP06_0.5_200616	SE207591.014	LB202300	16 Jun 2020	16 Jun 2020	14 Jul 2020	18 Jun 2020	14 Jul 2020	19 Jun 2020

HOLDING TIME SUMMARY

SE207591 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Mercury in Soil (continued)

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP07_0.1_200616	SE207591.015	LB202300	16 Jun 2020	16 Jun 2020	14 Jul 2020	18 Jun 2020	14 Jul 2020	19 Jun 2020
0407_TP07_0.5_200616	SE207591.016	LB202300	16 Jun 2020	16 Jun 2020	14 Jul 2020	18 Jun 2020	14 Jul 2020	19 Jun 2020
0407_TP08_0.1_200616	SE207591.017	LB202300	16 Jun 2020	16 Jun 2020	14 Jul 2020	18 Jun 2020	14 Jul 2020	19 Jun 2020
0407_TP08_0.5_200616	SE207591.018	LB202300	16 Jun 2020	16 Jun 2020	14 Jul 2020	18 Jun 2020	14 Jul 2020	19 Jun 2020
0407_TP26_0.1_200616	SE207591.019	LB202300	16 Jun 2020	16 Jun 2020	14 Jul 2020	18 Jun 2020	14 Jul 2020	19 Jun 2020
0407_TP26_0.5_200616	SE207591.020	LB202300	16 Jun 2020	16 Jun 2020	14 Jul 2020	18 Jun 2020	14 Jul 2020	19 Jun 2020
0407_TP27_0.1_200616	SE207591.021	LB202300	16 Jun 2020	16 Jun 2020	14 Jul 2020	18 Jun 2020	14 Jul 2020	19 Jun 2020
0407_TP27_0.5_200616	SE207591.022	LB202300	16 Jun 2020	16 Jun 2020	14 Jul 2020	18 Jun 2020	14 Jul 2020	19 Jun 2020
0407_TP35_0.1_200616	SE207591.023	LB202300	16 Jun 2020	16 Jun 2020	14 Jul 2020	18 Jun 2020	14 Jul 2020	19 Jun 2020
0407_TP35_0.5_200616	SE207591.024	LB202371	16 Jun 2020	16 Jun 2020	14 Jul 2020	19 Jun 2020	14 Jul 2020	22 Jun 2020
0407_TP36_0.1_200616	SE207591.025	LB202371	16 Jun 2020	16 Jun 2020	14 Jul 2020	19 Jun 2020	14 Jul 2020	22 Jun 2020
0407_TP36_0.5_200616	SE207591.026	LB202371	16 Jun 2020	16 Jun 2020	14 Jul 2020	19 Jun 2020	14 Jul 2020	22 Jun 2020

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP17_0.1_200615	SE207591.001	LB202296	15 Jun 2020	16 Jun 2020	29 Jun 2020	18 Jun 2020	23 Jun 2020	22 Jun 2020
0407_TP17_0.5_200615	SE207591.002	LB202296	15 Jun 2020	16 Jun 2020	29 Jun 2020	18 Jun 2020	23 Jun 2020	22 Jun 2020
0407_TP18_0.1_200615	SE207591.003	LB202296	15 Jun 2020	16 Jun 2020	29 Jun 2020	18 Jun 2020	23 Jun 2020	22 Jun 2020
0407_TP18_0.5_200615	SE207591.004	LB202296	15 Jun 2020	16 Jun 2020	29 Jun 2020	18 Jun 2020	23 Jun 2020	22 Jun 2020
0407_TP19_0.1_200615	SE207591.005	LB202296	15 Jun 2020	16 Jun 2020	29 Jun 2020	18 Jun 2020	23 Jun 2020	22 Jun 2020
0407_TP19_0.5_200615	SE207591.006	LB202296	15 Jun 2020	16 Jun 2020	29 Jun 2020	18 Jun 2020	23 Jun 2020	22 Jun 2020
0407_QC501_200615	SE207591.008	LB202296	15 Jun 2020	16 Jun 2020	29 Jun 2020	18 Jun 2020	23 Jun 2020	22 Jun 2020
0407_QC103_200616	SE207591.009	LB202296	15 Jun 2020	16 Jun 2020	29 Jun 2020	18 Jun 2020	23 Jun 2020	22 Jun 2020
0407_QC105_200616	SE207591.011	LB202296	16 Jun 2020	16 Jun 2020	30 Jun 2020	18 Jun 2020	23 Jun 2020	22 Jun 2020
0407_TP06_0.1_200616	SE207591.013	LB202296	16 Jun 2020	16 Jun 2020	30 Jun 2020	18 Jun 2020	23 Jun 2020	22 Jun 2020
0407_TP06_0.5_200616	SE207591.014	LB202296	16 Jun 2020	16 Jun 2020	30 Jun 2020	18 Jun 2020	23 Jun 2020	22 Jun 2020
0407_TP07_0.1_200616	SE207591.015	LB202296	16 Jun 2020	16 Jun 2020	30 Jun 2020	18 Jun 2020	23 Jun 2020	22 Jun 2020
0407_TP07_0.5_200616	SE207591.016	LB202296	16 Jun 2020	16 Jun 2020	30 Jun 2020	18 Jun 2020	23 Jun 2020	22 Jun 2020
0407_TP08_0.1_200616	SE207591.017	LB202296	16 Jun 2020	16 Jun 2020	30 Jun 2020	18 Jun 2020	23 Jun 2020	22 Jun 2020
0407_TP08_0.5_200616	SE207591.018	LB202296	16 Jun 2020	16 Jun 2020	30 Jun 2020	18 Jun 2020	23 Jun 2020	22 Jun 2020
0407_TP26_0.1_200616	SE207591.019	LB202296	16 Jun 2020	16 Jun 2020	30 Jun 2020	18 Jun 2020	23 Jun 2020	22 Jun 2020
0407_TP26_0.5_200616	SE207591.020	LB202296	16 Jun 2020	16 Jun 2020	30 Jun 2020	18 Jun 2020	23 Jun 2020	22 Jun 2020
0407_TP27_0.1_200616	SE207591.021	LB202296	16 Jun 2020	16 Jun 2020	30 Jun 2020	18 Jun 2020	23 Jun 2020	22 Jun 2020
0407_TP27_0.5_200616	SE207591.022	LB202296	16 Jun 2020	16 Jun 2020	30 Jun 2020	18 Jun 2020	23 Jun 2020	22 Jun 2020
0407_TP35_0.1_200616	SE207591.023	LB202296	16 Jun 2020	16 Jun 2020	30 Jun 2020	18 Jun 2020	23 Jun 2020	22 Jun 2020
0407_TP35_0.5_200616	SE207591.024	LB202296	16 Jun 2020	16 Jun 2020	30 Jun 2020	18 Jun 2020	23 Jun 2020	22 Jun 2020
0407_TP36_0.1_200616	SE207591.025	LB202296	16 Jun 2020	16 Jun 2020	30 Jun 2020	18 Jun 2020	23 Jun 2020	22 Jun 2020
0407_TP36_0.5_200616	SE207591.026	LB202296	16 Jun 2020	16 Jun 2020	30 Jun 2020	18 Jun 2020	23 Jun 2020	22 Jun 2020

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP17_0.1_200615	SE207591.001	LB202318	15 Jun 2020	16 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP17_0.5_200615	SE207591.002	LB202318	15 Jun 2020	16 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP18_0.1_200615	SE207591.003	LB202318	15 Jun 2020	16 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP18_0.5_200615	SE207591.004	LB202318	15 Jun 2020	16 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP19_0.1_200615	SE207591.005	LB202318	15 Jun 2020	16 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP19_0.5_200615	SE207591.006	LB202318	15 Jun 2020	16 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_QC103_200616	SE207591.009	LB202318	15 Jun 2020	16 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_QC105_200616	SE207591.011	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP06_0.1_200616	SE207591.013	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP06_0.5_200616	SE207591.014	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP07_0.1_200616	SE207591.015	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP07_0.5_200616	SE207591.016	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP08_0.1_200616	SE207591.017	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP08_0.5_200616	SE207591.018	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP26_0.1_200616	SE207591.019	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP26_0.5_200616	SE207591.020	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP27_0.1_200616	SE207591.021	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP27_0.5_200616	SE207591.022	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP35_0.1_200616	SE207591.023	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP35_0.5_200616	SE207591.024	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP36_0.1_200616	SE207591.025	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP36_0.5_200616	SE207591.026	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP17_0.1_200615	SE207591.001	LB202318	15 Jun 2020	16 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP17_0.5_200615	SE207591.002	LB202318	15 Jun 2020	16 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP18_0.1_200615	SE207591.003	LB202318	15 Jun 2020	16 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP18_0.5_200615	SE207591.004	LB202318	15 Jun 2020	16 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP19_0.1_200615	SE207591.005	LB202318	15 Jun 2020	16 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP19_0.5_200615	SE207591.006	LB202318	15 Jun 2020	16 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_QC103_200616	SE207591.009	LB202318	15 Jun 2020	16 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_QC105_200616	SE207591.011	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP06_0.1_200616	SE207591.013	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP06_0.5_200616	SE207591.014	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP07_0.1_200616	SE207591.015	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP07_0.5_200616	SE207591.016	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP08_0.1_200616	SE207591.017	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP08_0.5_200616	SE207591.018	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP26_0.1_200616	SE207591.019	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP26_0.5_200616	SE207591.020	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP27_0.1_200616	SE207591.021	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP27_0.5_200616	SE207591.022	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP35_0.1_200616	SE207591.023	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP35_0.5_200616	SE207591.024	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP36_0.1_200616	SE207591.025	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP36_0.5_200616	SE207591.026	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP17_0.1_200615	SE207591.001	LB202318	15 Jun 2020	16 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP17_0.5_200615	SE207591.002	LB202318	15 Jun 2020	16 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP18_0.1_200615	SE207591.003	LB202318	15 Jun 2020	16 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP18_0.5_200615	SE207591.004	LB202318	15 Jun 2020	16 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP19_0.1_200615	SE207591.005	LB202318	15 Jun 2020	16 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP19_0.5_200615	SE207591.006	LB202318	15 Jun 2020	16 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_QC103_200616	SE207591.009	LB202318	15 Jun 2020	16 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_QC105_200616	SE207591.011	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP06_0.1_200616	SE207591.013	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP06_0.5_200616	SE207591.014	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP07_0.1_200616	SE207591.015	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP07_0.5_200616	SE207591.016	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP08_0.1_200616	SE207591.017	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP08_0.5_200616	SE207591.018	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP26_0.1_200616	SE207591.019	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP26_0.5_200616	SE207591.020	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP27_0.1_200616	SE207591.021	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP27_0.5_200616	SE207591.022	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP35_0.1_200616	SE207591.023	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP35_0.5_200616	SE207591.024	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP36_0.1_200616	SE207591.025	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP36_0.5_200616	SE207591.026	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP17_0.1_200615	SE207591.001	LB202318	15 Jun 2020	16 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP17_0.5_200615	SE207591.002	LB202318	15 Jun 2020	16 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP18_0.1_200615	SE207591.003	LB202318	15 Jun 2020	16 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP18_0.5_200615	SE207591.004	LB202318	15 Jun 2020	16 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP19_0.1_200615	SE207591.005	LB202318	15 Jun 2020	16 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP19_0.5_200615	SE207591.006	LB202318	15 Jun 2020	16 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020

HOLDING TIME SUMMARY

SE207591 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

PCBs in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC103_200616	SE207591.009	LB202318	15 Jun 2020	16 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_QC105_200616	SE207591.011	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP06_0.1_200616	SE207591.013	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP06_0.5_200616	SE207591.014	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP07_0.1_200616	SE207591.015	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP07_0.5_200616	SE207591.016	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP08_0.1_200616	SE207591.017	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP08_0.5_200616	SE207591.018	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP26_0.1_200616	SE207591.019	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP26_0.5_200616	SE207591.020	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP27_0.1_200616	SE207591.021	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP27_0.5_200616	SE207591.022	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP35_0.1_200616	SE207591.023	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP35_0.5_200616	SE207591.024	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP36_0.1_200616	SE207591.025	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP36_0.5_200616	SE207591.026	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP17_0.1_200615	SE207591.001	LB202318	15 Jun 2020	16 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP17_0.5_200615	SE207591.002	LB202318	15 Jun 2020	16 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP18_0.1_200615	SE207591.003	LB202318	15 Jun 2020	16 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP18_0.5_200615	SE207591.004	LB202318	15 Jun 2020	16 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP19_0.1_200615	SE207591.005	LB202318	15 Jun 2020	16 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP19_0.5_200615	SE207591.006	LB202318	15 Jun 2020	16 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_QC103_200616	SE207591.009	LB202318	15 Jun 2020	16 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_QC105_200616	SE207591.011	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP06_0.1_200616	SE207591.013	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP06_0.5_200616	SE207591.014	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP07_0.1_200616	SE207591.015	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP07_0.5_200616	SE207591.016	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP08_0.1_200616	SE207591.017	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP08_0.5_200616	SE207591.018	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP26_0.1_200616	SE207591.019	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP26_0.5_200616	SE207591.020	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP27_0.1_200616	SE207591.021	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP27_0.5_200616	SE207591.022	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP35_0.1_200616	SE207591.023	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP35_0.5_200616	SE207591.024	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP36_0.1_200616	SE207591.025	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP36_0.5_200616	SE207591.026	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP17_0.1_200615	SE207591.001	LB202298	15 Jun 2020	16 Jun 2020	12 Dec 2020	18 Jun 2020	12 Dec 2020	22 Jun 2020
0407_TP17_0.5_200615	SE207591.002	LB202298	15 Jun 2020	16 Jun 2020	12 Dec 2020	18 Jun 2020	12 Dec 2020	22 Jun 2020
0407_TP18_0.1_200615	SE207591.003	LB202298	15 Jun 2020	16 Jun 2020	12 Dec 2020	18 Jun 2020	12 Dec 2020	22 Jun 2020
0407_TP18_0.5_200615	SE207591.004	LB202298	15 Jun 2020	16 Jun 2020	12 Dec 2020	18 Jun 2020	12 Dec 2020	22 Jun 2020
0407_TP19_0.1_200615	SE207591.005	LB202298	15 Jun 2020	16 Jun 2020	12 Dec 2020	18 Jun 2020	12 Dec 2020	22 Jun 2020
0407_TP19_0.5_200615	SE207591.006	LB202298	15 Jun 2020	16 Jun 2020	12 Dec 2020	18 Jun 2020	12 Dec 2020	22 Jun 2020
0407_QC103_200616	SE207591.009	LB202298	15 Jun 2020	16 Jun 2020	12 Dec 2020	18 Jun 2020	12 Dec 2020	22 Jun 2020
0407_QC105_200616	SE207591.011	LB202298	16 Jun 2020	16 Jun 2020	13 Dec 2020	18 Jun 2020	13 Dec 2020	22 Jun 2020
0407_TP06_0.1_200616	SE207591.013	LB202298	16 Jun 2020	16 Jun 2020	13 Dec 2020	18 Jun 2020	13 Dec 2020	22 Jun 2020
0407_TP06_0.5_200616	SE207591.014	LB202298	16 Jun 2020	16 Jun 2020	13 Dec 2020	18 Jun 2020	13 Dec 2020	22 Jun 2020
0407_TP07_0.1_200616	SE207591.015	LB202298	16 Jun 2020	16 Jun 2020	13 Dec 2020	18 Jun 2020	13 Dec 2020	22 Jun 2020
0407_TP07_0.5_200616	SE207591.016	LB202298	16 Jun 2020	16 Jun 2020	13 Dec 2020	18 Jun 2020	13 Dec 2020	22 Jun 2020
0407_TP08_0.1_200616	SE207591.017	LB202298	16 Jun 2020	16 Jun 2020	13 Dec 2020	18 Jun 2020	13 Dec 2020	22 Jun 2020
0407_TP08_0.5_200616	SE207591.018	LB202298	16 Jun 2020	16 Jun 2020	13 Dec 2020	18 Jun 2020	13 Dec 2020	22 Jun 2020
0407_TP26_0.1_200616	SE207591.019	LB202298	16 Jun 2020	16 Jun 2020	13 Dec 2020	18 Jun 2020	13 Dec 2020	22 Jun 2020
0407_TP26_0.5_200616	SE207591.020	LB202298	16 Jun 2020	16 Jun 2020	13 Dec 2020	18 Jun 2020	13 Dec 2020	22 Jun 2020
0407_TP27_0.1_200616	SE207591.021	LB202298	16 Jun 2020	16 Jun 2020	13 Dec 2020	18 Jun 2020	13 Dec 2020	22 Jun 2020

HOLDING TIME SUMMARY

SE207591 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP27_0.5_200616	SE207591.022	LB202298	16 Jun 2020	16 Jun 2020	13 Dec 2020	18 Jun 2020	13 Dec 2020	22 Jun 2020
0407_TP35_0.1_200616	SE207591.023	LB202298	16 Jun 2020	16 Jun 2020	13 Dec 2020	18 Jun 2020	13 Dec 2020	22 Jun 2020
0407_TP35_0.5_200616	SE207591.024	LB202370	16 Jun 2020	16 Jun 2020	13 Dec 2020	19 Jun 2020	13 Dec 2020	22 Jun 2020
0407_TP36_0.1_200616	SE207591.025	LB202370	16 Jun 2020	16 Jun 2020	13 Dec 2020	19 Jun 2020	13 Dec 2020	22 Jun 2020
0407_TP36_0.5_200616	SE207591.026	LB202370	16 Jun 2020	16 Jun 2020	13 Dec 2020	19 Jun 2020	13 Dec 2020	22 Jun 2020

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP17_0.1_200615	SE207591.001	LB202318	15 Jun 2020	16 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP17_0.5_200615	SE207591.002	LB202318	15 Jun 2020	16 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP18_0.1_200615	SE207591.003	LB202318	15 Jun 2020	16 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP18_0.5_200615	SE207591.004	LB202318	15 Jun 2020	16 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP19_0.1_200615	SE207591.005	LB202318	15 Jun 2020	16 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP19_0.5_200615	SE207591.006	LB202318	15 Jun 2020	16 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_QC103_200616	SE207591.009	LB202318	15 Jun 2020	16 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_QC105_200616	SE207591.011	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP06_0.1_200616	SE207591.013	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP06_0.5_200616	SE207591.014	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP07_0.1_200616	SE207591.015	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP07_0.5_200616	SE207591.016	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP08_0.1_200616	SE207591.017	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP08_0.5_200616	SE207591.018	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP26_0.1_200616	SE207591.019	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP26_0.5_200616	SE207591.020	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP27_0.1_200616	SE207591.021	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP27_0.5_200616	SE207591.022	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP35_0.1_200616	SE207591.023	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP35_0.5_200616	SE207591.024	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP36_0.1_200616	SE207591.025	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020
0407_TP36_0.5_200616	SE207591.026	LB202318	16 Jun 2020	16 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	22 Jun 2020

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP17_0.1_200615	SE207591.001	LB202290	15 Jun 2020	16 Jun 2020	29 Jun 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP17_0.5_200615	SE207591.002	LB202290	15 Jun 2020	16 Jun 2020	29 Jun 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP18_0.1_200615	SE207591.003	LB202290	15 Jun 2020	16 Jun 2020	29 Jun 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP18_0.5_200615	SE207591.004	LB202290	15 Jun 2020	16 Jun 2020	29 Jun 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP19_0.1_200615	SE207591.005	LB202290	15 Jun 2020	16 Jun 2020	29 Jun 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP19_0.5_200615	SE207591.006	LB202290	15 Jun 2020	16 Jun 2020	29 Jun 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_QC401_200615	SE207591.007	LB202290	15 Jun 2020	16 Jun 2020	29 Jun 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_QC501_200615	SE207591.008	LB202290	15 Jun 2020	16 Jun 2020	29 Jun 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_QC103_200616	SE207591.009	LB202290	15 Jun 2020	16 Jun 2020	29 Jun 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_QC105_200616	SE207591.011	LB202290	16 Jun 2020	16 Jun 2020	30 Jun 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP06_0.1_200616	SE207591.013	LB202290	16 Jun 2020	16 Jun 2020	30 Jun 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP06_0.5_200616	SE207591.014	LB202290	16 Jun 2020	16 Jun 2020	30 Jun 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP07_0.1_200616	SE207591.015	LB202290	16 Jun 2020	16 Jun 2020	30 Jun 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP07_0.5_200616	SE207591.016	LB202290	16 Jun 2020	16 Jun 2020	30 Jun 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP08_0.1_200616	SE207591.017	LB202290	16 Jun 2020	16 Jun 2020	30 Jun 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP08_0.5_200616	SE207591.018	LB202290	16 Jun 2020	16 Jun 2020	30 Jun 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP26_0.1_200616	SE207591.019	LB202290	16 Jun 2020	16 Jun 2020	30 Jun 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP26_0.5_200616	SE207591.020	LB202290	16 Jun 2020	16 Jun 2020	30 Jun 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP27_0.1_200616	SE207591.021	LB202290	16 Jun 2020	16 Jun 2020	30 Jun 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP27_0.5_200616	SE207591.022	LB202290	16 Jun 2020	16 Jun 2020	30 Jun 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP35_0.1_200616	SE207591.023	LB202290	16 Jun 2020	16 Jun 2020	30 Jun 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP35_0.5_200616	SE207591.024	LB202290	16 Jun 2020	16 Jun 2020	30 Jun 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP36_0.1_200616	SE207591.025	LB202290	16 Jun 2020	16 Jun 2020	30 Jun 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_TP36_0.5_200616	SE207591.026	LB202290	16 Jun 2020	16 Jun 2020	30 Jun 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref

HOLDING TIME SUMMARY

SE207591 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Volatile Petroleum Hydrocarbons in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP17_0.1_200615	SE207591.001	LB202290	15 Jun 2020	16 Jun 2020	29 Jun 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP17_0.5_200615	SE207591.002	LB202290	15 Jun 2020	16 Jun 2020	29 Jun 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP18_0.1_200615	SE207591.003	LB202290	15 Jun 2020	16 Jun 2020	29 Jun 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP18_0.5_200615	SE207591.004	LB202290	15 Jun 2020	16 Jun 2020	29 Jun 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP19_0.1_200615	SE207591.005	LB202290	15 Jun 2020	16 Jun 2020	29 Jun 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP19_0.5_200615	SE207591.006	LB202290	15 Jun 2020	16 Jun 2020	29 Jun 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_QC401_200615	SE207591.007	LB202290	15 Jun 2020	16 Jun 2020	29 Jun 2020	18 Jun 2020	28 Jul 2020	23 Jun 2020
0407_QC501_200615	SE207591.008	LB202290	15 Jun 2020	16 Jun 2020	29 Jun 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_QC103_200616	SE207591.009	LB202290	15 Jun 2020	16 Jun 2020	29 Jun 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_QC105_200616	SE207591.011	LB202290	16 Jun 2020	16 Jun 2020	30 Jun 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP06_0.1_200616	SE207591.013	LB202290	16 Jun 2020	16 Jun 2020	30 Jun 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP06_0.5_200616	SE207591.014	LB202290	16 Jun 2020	16 Jun 2020	30 Jun 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP07_0.1_200616	SE207591.015	LB202290	16 Jun 2020	16 Jun 2020	30 Jun 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP07_0.5_200616	SE207591.016	LB202290	16 Jun 2020	16 Jun 2020	30 Jun 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP08_0.1_200616	SE207591.017	LB202290	16 Jun 2020	16 Jun 2020	30 Jun 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP08_0.5_200616	SE207591.018	LB202290	16 Jun 2020	16 Jun 2020	30 Jun 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP26_0.1_200616	SE207591.019	LB202290	16 Jun 2020	16 Jun 2020	30 Jun 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP26_0.5_200616	SE207591.020	LB202290	16 Jun 2020	16 Jun 2020	30 Jun 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP27_0.1_200616	SE207591.021	LB202290	16 Jun 2020	16 Jun 2020	30 Jun 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP27_0.5_200616	SE207591.022	LB202290	16 Jun 2020	16 Jun 2020	30 Jun 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP35_0.1_200616	SE207591.023	LB202290	16 Jun 2020	16 Jun 2020	30 Jun 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP35_0.5_200616	SE207591.024	LB202290	16 Jun 2020	16 Jun 2020	30 Jun 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP36_0.1_200616	SE207591.025	LB202290	16 Jun 2020	16 Jun 2020	30 Jun 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020
0407_TP36_0.5_200616	SE207591.026	LB202290	16 Jun 2020	16 Jun 2020	30 Jun 2020	18 Jun 2020	28 Jul 2020	22 Jun 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP17_0.1_200615	SE207591.001	%	60 - 130%	107
	0407_TP17_0.5_200615	SE207591.002	%	60 - 130%	109
	0407_TP18_0.1_200615	SE207591.003	%	60 - 130%	106
	0407_TP18_0.5_200615	SE207591.004	%	60 - 130%	100
	0407_TP19_0.1_200615	SE207591.005	%	60 - 130%	101
	0407_TP19_0.5_200615	SE207591.006	%	60 - 130%	107
	0407_QC103_200616	SE207591.009	%	60 - 130%	99
	0407_QC105_200616	SE207591.011	%	60 - 130%	99
	0407_TP06_0.1_200616	SE207591.013	%	60 - 130%	104
	0407_TP06_0.5_200616	SE207591.014	%	60 - 130%	99
	0407_TP07_0.1_200616	SE207591.015	%	60 - 130%	101
	0407_TP07_0.5_200616	SE207591.016	%	60 - 130%	104
	0407_TP08_0.1_200616	SE207591.017	%	60 - 130%	102
	0407_TP08_0.5_200616	SE207591.018	%	60 - 130%	100
	0407_TP26_0.1_200616	SE207591.019	%	60 - 130%	101
	0407_TP26_0.5_200616	SE207591.020	%	60 - 130%	103
	0407_TP27_0.1_200616	SE207591.021	%	60 - 130%	102
	0407_TP27_0.5_200616	SE207591.022	%	60 - 130%	99
	0407_TP35_0.1_200616	SE207591.023	%	60 - 130%	99
	0407_TP35_0.5_200616	SE207591.024	%	60 - 130%	97
	0407_TP36_0.1_200616	SE207591.025	%	60 - 130%	99
	0407_TP36_0.5_200616	SE207591.026	%	60 - 130%	101

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP17_0.1_200615	SE207591.001	%	60 - 130%	93
	0407_TP17_0.5_200615	SE207591.002	%	60 - 130%	84
	0407_TP18_0.1_200615	SE207591.003	%	60 - 130%	80
	0407_TP18_0.5_200615	SE207591.004	%	60 - 130%	81
	0407_TP19_0.1_200615	SE207591.005	%	60 - 130%	79
	0407_TP19_0.5_200615	SE207591.006	%	60 - 130%	79
	0407_QC103_200616	SE207591.009	%	60 - 130%	84
	0407_QC105_200616	SE207591.011	%	60 - 130%	78
	0407_TP06_0.1_200616	SE207591.013	%	60 - 130%	89
	0407_TP06_0.5_200616	SE207591.014	%	60 - 130%	86
	0407_TP07_0.1_200616	SE207591.015	%	60 - 130%	88
	0407_TP07_0.5_200616	SE207591.016	%	60 - 130%	89
	0407_TP08_0.1_200616	SE207591.017	%	60 - 130%	85
	0407_TP08_0.5_200616	SE207591.018	%	60 - 130%	83
	0407_TP26_0.1_200616	SE207591.019	%	60 - 130%	84
	0407_TP26_0.5_200616	SE207591.020	%	60 - 130%	79
	0407_TP27_0.1_200616	SE207591.021	%	60 - 130%	89
	0407_TP27_0.5_200616	SE207591.022	%	60 - 130%	80
	0407_TP35_0.1_200616	SE207591.023	%	60 - 130%	86
	0407_TP35_0.5_200616	SE207591.024	%	60 - 130%	84
	0407_TP36_0.1_200616	SE207591.025	%	60 - 130%	96
	0407_TP36_0.5_200616	SE207591.026	%	60 - 130%	91
d14-p-terphenyl (Surrogate)	0407_TP17_0.1_200615	SE207591.001	%	60 - 130%	93
	0407_TP17_0.5_200615	SE207591.002	%	60 - 130%	88
	0407_TP18_0.1_200615	SE207591.003	%	60 - 130%	92
	0407_TP18_0.5_200615	SE207591.004	%	60 - 130%	98
	0407_TP19_0.1_200615	SE207591.005	%	60 - 130%	78
	0407_TP19_0.5_200615	SE207591.006	%	60 - 130%	86
	0407_QC103_200616	SE207591.009	%	60 - 130%	88
	0407_QC105_200616	SE207591.011	%	60 - 130%	91
	0407_TP06_0.1_200616	SE207591.013	%	60 - 130%	82
	0407_TP06_0.5_200616	SE207591.014	%	60 - 130%	86
	0407_TP07_0.1_200616	SE207591.015	%	60 - 130%	100
	0407_TP07_0.5_200616	SE207591.016	%	60 - 130%	84
	0407_TP08_0.1_200616	SE207591.017	%	60 - 130%	91
	0407_TP08_0.5_200616	SE207591.018	%	60 - 130%	82

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OP Pesticides in Soil (continued) — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d14-p-terphenyl (Surrogate)	0407_TP26_0.1_200616	SE207591.019	%	60 - 130%	92
	0407_TP26_0.5_200616	SE207591.020	%	60 - 130%	89
	0407_TP27_0.1_200616	SE207591.021	%	60 - 130%	89
	0407_TP27_0.5_200616	SE207591.022	%	60 - 130%	92
	0407_TP35_0.1_200616	SE207591.023	%	60 - 130%	91
	0407_TP35_0.5_200616	SE207591.024	%	60 - 130%	90
	0407_TP36_0.1_200616	SE207591.025	%	60 - 130%	88
	0407_TP36_0.5_200616	SE207591.026	%	60 - 130%	82

PAH (Polynuclear Aromatic Hydrocarbons) in Soil — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP17_0.1_200615	SE207591.001	%	70 - 130%	93
	0407_TP17_0.5_200615	SE207591.002	%	70 - 130%	84
	0407_TP18_0.1_200615	SE207591.003	%	70 - 130%	80
	0407_TP18_0.5_200615	SE207591.004	%	70 - 130%	81
	0407_TP19_0.1_200615	SE207591.005	%	70 - 130%	79
	0407_TP19_0.5_200615	SE207591.006	%	70 - 130%	79
	0407_QC103_200616	SE207591.009	%	70 - 130%	84
	0407_QC105_200616	SE207591.011	%	70 - 130%	78
	0407_TP06_0.1_200616	SE207591.013	%	70 - 130%	89
	0407_TP06_0.5_200616	SE207591.014	%	70 - 130%	86
	0407_TP07_0.1_200616	SE207591.015	%	70 - 130%	88
	0407_TP07_0.5_200616	SE207591.016	%	70 - 130%	89
	0407_TP08_0.1_200616	SE207591.017	%	70 - 130%	85
	0407_TP08_0.5_200616	SE207591.018	%	70 - 130%	83
	0407_TP26_0.1_200616	SE207591.019	%	70 - 130%	84
	0407_TP26_0.5_200616	SE207591.020	%	70 - 130%	79
	0407_TP27_0.1_200616	SE207591.021	%	70 - 130%	89
	0407_TP27_0.5_200616	SE207591.022	%	70 - 130%	80
	0407_TP35_0.1_200616	SE207591.023	%	70 - 130%	86
	0407_TP35_0.5_200616	SE207591.024	%	70 - 130%	84
	0407_TP36_0.1_200616	SE207591.025	%	70 - 130%	96
	0407_TP36_0.5_200616	SE207591.026	%	70 - 130%	91
d14-p-terphenyl (Surrogate)	0407_TP17_0.1_200615	SE207591.001	%	70 - 130%	93
	0407_TP17_0.5_200615	SE207591.002	%	70 - 130%	88
	0407_TP18_0.1_200615	SE207591.003	%	70 - 130%	92
	0407_TP18_0.5_200615	SE207591.004	%	70 - 130%	98
	0407_TP19_0.1_200615	SE207591.005	%	70 - 130%	78
	0407_TP19_0.5_200615	SE207591.006	%	70 - 130%	86
	0407_QC103_200616	SE207591.009	%	70 - 130%	88
	0407_QC105_200616	SE207591.011	%	70 - 130%	91
	0407_TP06_0.1_200616	SE207591.013	%	70 - 130%	82
	0407_TP06_0.5_200616	SE207591.014	%	70 - 130%	86
	0407_TP07_0.1_200616	SE207591.015	%	70 - 130%	100
	0407_TP07_0.5_200616	SE207591.016	%	70 - 130%	84
	0407_TP08_0.1_200616	SE207591.017	%	70 - 130%	91
	0407_TP08_0.5_200616	SE207591.018	%	70 - 130%	82
	0407_TP26_0.1_200616	SE207591.019	%	70 - 130%	92
	0407_TP26_0.5_200616	SE207591.020	%	70 - 130%	89
	0407_TP27_0.1_200616	SE207591.021	%	70 - 130%	89
	0407_TP27_0.5_200616	SE207591.022	%	70 - 130%	92
	0407_TP35_0.1_200616	SE207591.023	%	70 - 130%	91
	0407_TP35_0.5_200616	SE207591.024	%	70 - 130%	90
	0407_TP36_0.1_200616	SE207591.025	%	70 - 130%	88
	0407_TP36_0.5_200616	SE207591.026	%	70 - 130%	82
d5-nitrobenzene (Surrogate)	0407_TP17_0.1_200615	SE207591.001	%	70 - 130%	90
	0407_TP17_0.5_200615	SE207591.002	%	70 - 130%	88
	0407_TP18_0.1_200615	SE207591.003	%	70 - 130%	90
	0407_TP18_0.5_200615	SE207591.004	%	70 - 130%	92
	0407_TP19_0.1_200615	SE207591.005	%	70 - 130%	86
	0407_TP19_0.5_200615	SE207591.006	%	70 - 130%	86

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d5-nitrobenzene (Surrogate)	0407_QC103_200616	SE207591.009	%	70 - 130%	89
	0407_QC105_200616	SE207591.011	%	70 - 130%	88
	0407_TP06_0.1_200616	SE207591.013	%	70 - 130%	87
	0407_TP06_0.5_200616	SE207591.014	%	70 - 130%	89
	0407_TP07_0.1_200616	SE207591.015	%	70 - 130%	98
	0407_TP07_0.5_200616	SE207591.016	%	70 - 130%	89
	0407_TP08_0.1_200616	SE207591.017	%	70 - 130%	91
	0407_TP08_0.5_200616	SE207591.018	%	70 - 130%	84
	0407_TP26_0.1_200616	SE207591.019	%	70 - 130%	85
	0407_TP26_0.5_200616	SE207591.020	%	70 - 130%	92
	0407_TP27_0.1_200616	SE207591.021	%	70 - 130%	85
	0407_TP27_0.5_200616	SE207591.022	%	70 - 130%	86
	0407_TP35_0.1_200616	SE207591.023	%	70 - 130%	88
	0407_TP35_0.5_200616	SE207591.024	%	70 - 130%	88
	0407_TP36_0.1_200616	SE207591.025	%	70 - 130%	88
	0407_TP36_0.5_200616	SE207591.026	%	70 - 130%	84

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP17_0.1_200615	SE207591.001	%	60 - 130%	107
	0407_TP17_0.5_200615	SE207591.002	%	60 - 130%	109
	0407_TP18_0.1_200615	SE207591.003	%	60 - 130%	106
	0407_TP18_0.5_200615	SE207591.004	%	60 - 130%	100
	0407_TP19_0.1_200615	SE207591.005	%	60 - 130%	101
	0407_TP19_0.5_200615	SE207591.006	%	60 - 130%	107
	0407_QC103_200616	SE207591.009	%	60 - 130%	99
	0407_QC105_200616	SE207591.011	%	60 - 130%	99
	0407_TP06_0.1_200616	SE207591.013	%	60 - 130%	104
	0407_TP06_0.5_200616	SE207591.014	%	60 - 130%	99
	0407_TP07_0.1_200616	SE207591.015	%	60 - 130%	101
	0407_TP07_0.5_200616	SE207591.016	%	60 - 130%	104
	0407_TP08_0.1_200616	SE207591.017	%	60 - 130%	102
	0407_TP08_0.5_200616	SE207591.018	%	60 - 130%	100
	0407_TP26_0.1_200616	SE207591.019	%	60 - 130%	101
	0407_TP26_0.5_200616	SE207591.020	%	60 - 130%	103
	0407_TP27_0.1_200616	SE207591.021	%	60 - 130%	102
	0407_TP27_0.5_200616	SE207591.022	%	60 - 130%	99
	0407_TP35_0.1_200616	SE207591.023	%	60 - 130%	99
	0407_TP35_0.5_200616	SE207591.024	%	60 - 130%	97
	0407_TP36_0.1_200616	SE207591.025	%	60 - 130%	99
	0407_TP36_0.5_200616	SE207591.026	%	60 - 130%	101

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	0407_TP17_0.1_200615	SE207591.001	%	70 - 130%	99
	0407_TP17_0.5_200615	SE207591.002	%	70 - 130%	94
	0407_TP18_0.1_200615	SE207591.003	%	70 - 130%	96
	0407_TP18_0.5_200615	SE207591.004	%	70 - 130%	94
	0407_TP19_0.1_200615	SE207591.005	%	70 - 130%	95
	0407_TP19_0.5_200615	SE207591.006	%	70 - 130%	92
	0407_QC103_200616	SE207591.009	%	70 - 130%	93
	0407_QC105_200616	SE207591.011	%	70 - 130%	91
	0407_TP06_0.1_200616	SE207591.013	%	70 - 130%	97
	0407_TP06_0.5_200616	SE207591.014	%	70 - 130%	95
	0407_TP07_0.1_200616	SE207591.015	%	70 - 130%	95
	0407_TP07_0.5_200616	SE207591.016	%	70 - 130%	92
	0407_TP08_0.1_200616	SE207591.017	%	70 - 130%	96
	0407_TP08_0.5_200616	SE207591.018	%	70 - 130%	97
	0407_TP26_0.1_200616	SE207591.019	%	70 - 130%	95
	0407_TP26_0.5_200616	SE207591.020	%	70 - 130%	93
	0407_TP27_0.1_200616	SE207591.021	%	70 - 130%	93
	0407_TP27_0.5_200616	SE207591.022	%	70 - 130%	92

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil (continued) — **Method: ME-(AU)-[ENV]AN420**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	0407_TP35_0.1_200616	SE207591.023	%	70 - 130%	96
	0407_TP35_0.5_200616	SE207591.024	%	70 - 130%	94
	0407_TP36_0.1_200616	SE207591.025	%	70 - 130%	89
	0407_TP36_0.5_200616	SE207591.026	%	70 - 130%	92
d5-phenol (Surrogate)	0407_TP17_0.1_200615	SE207591.001	%	50 - 130%	81
	0407_TP17_0.5_200615	SE207591.002	%	50 - 130%	83
	0407_TP18_0.1_200615	SE207591.003	%	50 - 130%	71
	0407_TP18_0.5_200615	SE207591.004	%	50 - 130%	72
	0407_TP19_0.1_200615	SE207591.005	%	50 - 130%	80
	0407_TP19_0.5_200615	SE207591.006	%	50 - 130%	79
	0407_QC103_200616	SE207591.009	%	50 - 130%	79
	0407_QC105_200616	SE207591.011	%	50 - 130%	81
	0407_TP06_0.1_200616	SE207591.013	%	50 - 130%	84
	0407_TP06_0.5_200616	SE207591.014	%	50 - 130%	83
	0407_TP07_0.1_200616	SE207591.015	%	50 - 130%	78
	0407_TP07_0.5_200616	SE207591.016	%	50 - 130%	77
	0407_TP08_0.1_200616	SE207591.017	%	50 - 130%	79
	0407_TP08_0.5_200616	SE207591.018	%	50 - 130%	82
	0407_TP26_0.1_200616	SE207591.019	%	50 - 130%	82
	0407_TP26_0.5_200616	SE207591.020	%	50 - 130%	82
	0407_TP27_0.1_200616	SE207591.021	%	50 - 130%	83
	0407_TP27_0.5_200616	SE207591.022	%	50 - 130%	79
	0407_TP35_0.1_200616	SE207591.023	%	50 - 130%	81
	0407_TP35_0.5_200616	SE207591.024	%	50 - 130%	79
	0407_TP36_0.1_200616	SE207591.025	%	50 - 130%	79
	0407_TP36_0.5_200616	SE207591.026	%	50 - 130%	79

VOC's in Soil — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP17_0.1_200615	SE207591.001	%	60 - 130%	73
	0407_TP17_0.5_200615	SE207591.002	%	60 - 130%	68
	0407_TP18_0.1_200615	SE207591.003	%	60 - 130%	72
	0407_TP18_0.5_200615	SE207591.004	%	60 - 130%	77
	0407_TP19_0.1_200615	SE207591.005	%	60 - 130%	73
	0407_TP19_0.5_200615	SE207591.006	%	60 - 130%	70
	0407_QC401_200615	SE207591.007	%	60 - 130%	78
	0407_QC501_200615	SE207591.008	%	60 - 130%	70
	0407_QC103_200616	SE207591.009	%	60 - 130%	77
	0407_QC105_200616	SE207591.011	%	60 - 130%	73
	0407_TP06_0.1_200616	SE207591.013	%	60 - 130%	74
	0407_TP06_0.5_200616	SE207591.014	%	60 - 130%	70
	0407_TP07_0.1_200616	SE207591.015	%	60 - 130%	74
	0407_TP07_0.5_200616	SE207591.016	%	60 - 130%	74
	0407_TP08_0.1_200616	SE207591.017	%	60 - 130%	73
	0407_TP08_0.5_200616	SE207591.018	%	60 - 130%	75
	0407_TP26_0.1_200616	SE207591.019	%	60 - 130%	75
	0407_TP26_0.5_200616	SE207591.020	%	60 - 130%	72
	0407_TP27_0.1_200616	SE207591.021	%	60 - 130%	77
	0407_TP27_0.5_200616	SE207591.022	%	60 - 130%	75
	0407_TP35_0.1_200616	SE207591.023	%	60 - 130%	76
	0407_TP35_0.5_200616	SE207591.024	%	60 - 130%	73
	0407_TP36_0.1_200616	SE207591.025	%	60 - 130%	74
	0407_TP36_0.5_200616	SE207591.026	%	60 - 130%	78
d4-1,2-dichloroethane (Surrogate)	0407_TP17_0.1_200615	SE207591.001	%	60 - 130%	93
	0407_TP17_0.5_200615	SE207591.002	%	60 - 130%	91
	0407_TP18_0.1_200615	SE207591.003	%	60 - 130%	92
	0407_TP18_0.5_200615	SE207591.004	%	60 - 130%	99
	0407_TP19_0.1_200615	SE207591.005	%	60 - 130%	96
	0407_TP19_0.5_200615	SE207591.006	%	60 - 130%	92
	0407_QC401_200615	SE207591.007	%	60 - 130%	100
	0407_QC501_200615	SE207591.008	%	60 - 130%	101

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d4-1,2-dichloroethane (Surrogate)	0407_QC103_200616	SE207591.009	%	60 - 130%	100
	0407_QC105_200616	SE207591.011	%	60 - 130%	95
	0407_TP06_0.1_200616	SE207591.013	%	60 - 130%	95
	0407_TP06_0.5_200616	SE207591.014	%	60 - 130%	91
	0407_TP07_0.1_200616	SE207591.015	%	60 - 130%	96
	0407_TP07_0.5_200616	SE207591.016	%	60 - 130%	95
	0407_TP08_0.1_200616	SE207591.017	%	60 - 130%	96
	0407_TP08_0.5_200616	SE207591.018	%	60 - 130%	99
	0407_TP26_0.1_200616	SE207591.019	%	60 - 130%	99
	0407_TP26_0.5_200616	SE207591.020	%	60 - 130%	94
	0407_TP27_0.1_200616	SE207591.021	%	60 - 130%	103
	0407_TP27_0.5_200616	SE207591.022	%	60 - 130%	99
	0407_TP35_0.1_200616	SE207591.023	%	60 - 130%	100
	0407_TP35_0.5_200616	SE207591.024	%	60 - 130%	97
	0407_TP36_0.1_200616	SE207591.025	%	60 - 130%	100
	0407_TP36_0.5_200616	SE207591.026	%	60 - 130%	102
d8-toluene (Surrogate)	0407_TP17_0.1_200615	SE207591.001	%	60 - 130%	95
	0407_TP17_0.5_200615	SE207591.002	%	60 - 130%	92
	0407_TP18_0.1_200615	SE207591.003	%	60 - 130%	93
	0407_TP18_0.5_200615	SE207591.004	%	60 - 130%	101
	0407_TP19_0.1_200615	SE207591.005	%	60 - 130%	96
	0407_TP19_0.5_200615	SE207591.006	%	60 - 130%	91
	0407_QC401_200615	SE207591.007	%	60 - 130%	101
	0407_QC501_200615	SE207591.008	%	60 - 130%	101
	0407_QC103_200616	SE207591.009	%	60 - 130%	101
	0407_QC105_200616	SE207591.011	%	60 - 130%	95
	0407_TP06_0.1_200616	SE207591.013	%	60 - 130%	95
	0407_TP06_0.5_200616	SE207591.014	%	60 - 130%	92
	0407_TP07_0.1_200616	SE207591.015	%	60 - 130%	96
	0407_TP07_0.5_200616	SE207591.016	%	60 - 130%	96
	0407_TP08_0.1_200616	SE207591.017	%	60 - 130%	96
	0407_TP08_0.5_200616	SE207591.018	%	60 - 130%	99
	0407_TP26_0.1_200616	SE207591.019	%	60 - 130%	99
	0407_TP26_0.5_200616	SE207591.020	%	60 - 130%	94
	0407_TP27_0.1_200616	SE207591.021	%	60 - 130%	103
	0407_TP27_0.5_200616	SE207591.022	%	60 - 130%	99
	0407_TP35_0.1_200616	SE207591.023	%	60 - 130%	100
	0407_TP35_0.5_200616	SE207591.024	%	60 - 130%	98
	0407_TP36_0.1_200616	SE207591.025	%	60 - 130%	100
	0407_TP36_0.5_200616	SE207591.026	%	60 - 130%	102

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP17_0.1_200615	SE207591.001	%	60 - 130%	73
	0407_TP17_0.5_200615	SE207591.002	%	60 - 130%	68
	0407_TP18_0.1_200615	SE207591.003	%	60 - 130%	72
	0407_TP18_0.5_200615	SE207591.004	%	60 - 130%	77
	0407_TP19_0.1_200615	SE207591.005	%	60 - 130%	73
	0407_TP19_0.5_200615	SE207591.006	%	60 - 130%	70
	0407_QC501_200615	SE207591.008	%	60 - 130%	70
	0407_QC103_200616	SE207591.009	%	60 - 130%	77
	0407_QC105_200616	SE207591.011	%	60 - 130%	73
	0407_TP06_0.1_200616	SE207591.013	%	60 - 130%	74
	0407_TP06_0.5_200616	SE207591.014	%	60 - 130%	70
	0407_TP07_0.1_200616	SE207591.015	%	60 - 130%	74
	0407_TP07_0.5_200616	SE207591.016	%	60 - 130%	74
	0407_TP08_0.1_200616	SE207591.017	%	60 - 130%	73
	0407_TP08_0.5_200616	SE207591.018	%	60 - 130%	75
	0407_TP26_0.1_200616	SE207591.019	%	60 - 130%	75
	0407_TP26_0.5_200616	SE207591.020	%	60 - 130%	72
	0407_TP27_0.1_200616	SE207591.021	%	60 - 130%	77

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP27_0.5_200616	SE207591.022	%	60 - 130%	75
	0407_TP35_0.1_200616	SE207591.023	%	60 - 130%	76
	0407_TP35_0.5_200616	SE207591.024	%	60 - 130%	73
	0407_TP36_0.1_200616	SE207591.025	%	60 - 130%	74
	0407_TP36_0.5_200616	SE207591.026	%	60 - 130%	78
d4-1,2-dichloroethane (Surrogate)	0407_TP17_0.1_200615	SE207591.001	%	60 - 130%	93
	0407_TP17_0.5_200615	SE207591.002	%	60 - 130%	91
	0407_TP18_0.1_200615	SE207591.003	%	60 - 130%	92
	0407_TP18_0.5_200615	SE207591.004	%	60 - 130%	99
	0407_TP19_0.1_200615	SE207591.005	%	60 - 130%	96
	0407_TP19_0.5_200615	SE207591.006	%	60 - 130%	92
	0407_QC501_200615	SE207591.008	%	60 - 130%	101
	0407_QC103_200616	SE207591.009	%	60 - 130%	100
	0407_QC105_200616	SE207591.011	%	60 - 130%	95
	0407_TP06_0.1_200616	SE207591.013	%	60 - 130%	95
	0407_TP06_0.5_200616	SE207591.014	%	60 - 130%	91
	0407_TP07_0.1_200616	SE207591.015	%	60 - 130%	96
	0407_TP07_0.5_200616	SE207591.016	%	60 - 130%	95
	0407_TP08_0.1_200616	SE207591.017	%	60 - 130%	96
	0407_TP08_0.5_200616	SE207591.018	%	60 - 130%	99
	0407_TP26_0.1_200616	SE207591.019	%	60 - 130%	99
	0407_TP26_0.5_200616	SE207591.020	%	60 - 130%	94
	0407_TP27_0.1_200616	SE207591.021	%	60 - 130%	103
	0407_TP27_0.5_200616	SE207591.022	%	60 - 130%	99
	0407_TP35_0.1_200616	SE207591.023	%	60 - 130%	100
	0407_TP35_0.5_200616	SE207591.024	%	60 - 130%	97
	0407_TP36_0.1_200616	SE207591.025	%	60 - 130%	100
	0407_TP36_0.5_200616	SE207591.026	%	60 - 130%	102
d8-toluene (Surrogate)	0407_TP17_0.1_200615	SE207591.001	%	60 - 130%	95
	0407_TP17_0.5_200615	SE207591.002	%	60 - 130%	92
	0407_TP18_0.1_200615	SE207591.003	%	60 - 130%	93
	0407_TP18_0.5_200615	SE207591.004	%	60 - 130%	101
	0407_TP19_0.1_200615	SE207591.005	%	60 - 130%	96
	0407_TP19_0.5_200615	SE207591.006	%	60 - 130%	91
	0407_QC501_200615	SE207591.008	%	60 - 130%	101
	0407_QC103_200616	SE207591.009	%	60 - 130%	101
	0407_QC105_200616	SE207591.011	%	60 - 130%	95
	0407_TP06_0.1_200616	SE207591.013	%	60 - 130%	95
	0407_TP06_0.5_200616	SE207591.014	%	60 - 130%	92
	0407_TP07_0.1_200616	SE207591.015	%	60 - 130%	96
	0407_TP07_0.5_200616	SE207591.016	%	60 - 130%	96
	0407_TP08_0.1_200616	SE207591.017	%	60 - 130%	96
	0407_TP08_0.5_200616	SE207591.018	%	60 - 130%	99
	0407_TP26_0.1_200616	SE207591.019	%	60 - 130%	99
	0407_TP26_0.5_200616	SE207591.020	%	60 - 130%	94
	0407_TP27_0.1_200616	SE207591.021	%	60 - 130%	103
	0407_TP27_0.5_200616	SE207591.022	%	60 - 130%	99
	0407_TP35_0.1_200616	SE207591.023	%	60 - 130%	100
	0407_TP35_0.5_200616	SE207591.024	%	60 - 130%	98
	0407_TP36_0.1_200616	SE207591.025	%	60 - 130%	100
	0407_TP36_0.5_200616	SE207591.026	%	60 - 130%	102

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result
LB202300.001	Mercury	mg/kg	0.05	<0.05
LB202371.001	Mercury	mg/kg	0.05	<0.05

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202318.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	103

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202318.001		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	97
		d14-p-terphenyl (Surrogate)	%	-	88

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB202318.001	Naphthalene	mg/kg	0.1	<0.1
	2-methylnaphthalene	mg/kg	0.1	<0.1
	1-methylnaphthalene	mg/kg	0.1	<0.1
	Acenaphthylene	mg/kg	0.1	<0.1
	Acenaphthene	mg/kg	0.1	<0.1
	Fluorene	mg/kg	0.1	<0.1
	Phenanthrene	mg/kg	0.1	<0.1
	Anthracene	mg/kg	0.1	<0.1
	Fluoranthene	mg/kg	0.1	<0.1
	Pyrene	mg/kg	0.1	<0.1
	Benzo(a)anthracene	mg/kg	0.1	<0.1
	Chrysene	mg/kg	0.1	<0.1
	Benzo(a)pyrene	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202318.001		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	94
		2-fluorobiphenyl (Surrogate)	%	-	97
		d14-p-terphenyl (Surrogate)	%	-	88

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202318.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	103

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202318.001		Phenol	mg/kg	0.5	<0.5
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5
		2-nitrophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
		Pentachlorophenol	mg/kg	0.5	<0.5
		2,4-dinitrophenol	mg/kg	2	<2
		4-chloro-3-methylphenol	mg/kg	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	97
		d5-phenol (Surrogate)	%	-	88

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB202298.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0
LB202370.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB202318.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB202290.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB202290.001	Monocyclic Aromatic Hydrocarbons	tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10
		MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	99
		d8-toluene (Surrogate)	%	-	101
		Bromofluorobenzene (Surrogate)	%	-	75
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB202290.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	99

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207591.014	LB202300.014	Mercury	mg/kg	0.05	<0.05	0.05	136	7
SE207591.023	LB202300.024	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE207591.026	LB202371.020	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE207681.003	LB202371.014	Mercury	mg/kg	0.05	<0.05	<0.05	200	0

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207591.013	LB202296.011	% Moisture	%w/w	1	9.5	8.5	41	11
SE207591.023	LB202296.022	% Moisture	%w/w	1	3.5	4.2	56	19
SE207591.026	LB202296.026	% Moisture	%w/w	1	3.7	4.0	56	7

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207591.014	LB202318.014		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.15	30	1
SE207591.022	LB202318.034		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	0	200	0
			Alpha BHC	mg/kg	0.1	<0.1	0	200	0
			Lindane	mg/kg	0.1	<0.1	0	200	0
			Heptachlor	mg/kg	0.1	<0.1	0	200	0
			Aldrin	mg/kg	0.1	<0.1	0	200	0
			Beta BHC	mg/kg	0.1	<0.1	0	200	0
			Delta BHC	mg/kg	0.1	<0.1	0	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	0	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	0	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	0	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Dieldrin	mg/kg	0.2	<0.2	0	200	0
			Endrin	mg/kg	0.2	<0.2	0	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207591.022	LB202318.034		p,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	0	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	0	200	0
			Methoxychlor	mg/kg	0.1	<0.1	0	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	0	200	0
			Isodrin	mg/kg	0.1	<0.1	0	200	0
			Mirex	mg/kg	0.1	<0.1	0	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.153	30	3
SE207591.026	LB202318.031		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.16	30	3

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207591.022	LB202318.033		Dichlorvos	mg/kg	0.5	NVL	NVL	NVL	NVL
			Dimethoate	mg/kg	0.5	NVL	NVL	NVL	NVL
			Diazinon (Dimpylate)	mg/kg	0.5	NVL	NVL	NVL	NVL
			Fenitrothion	mg/kg	0.2	NVL	NVL	NVL	NVL
			Malathion	mg/kg	0.2	NVL	NVL	NVL	NVL
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	NVL	NVL	NVL	NVL
			Parathion-ethyl (Parathion)	mg/kg	0.2	NVL	NVL	NVL	NVL
			Bromophos Ethyl	mg/kg	0.2	NVL	NVL	NVL	NVL
			Methidathion	mg/kg	0.5	NVL	NVL	NVL	NVL
			Ethion	mg/kg	0.2	NVL	NVL	NVL	NVL
			Azinphos-methyl (Guthion)	mg/kg	0.2	NVL	NVL	NVL	NVL
			Total OP Pesticides*	mg/kg	1.7	NVL	NVL	NVL	NVL
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	NVL	NVL	NVL	NVL
			d14-p-terphenyl (Surrogate)	mg/kg	-	NVL	NVL	NVL	NVL
SE207591.026	LB202318.031		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207591.026	LB202318.031		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	4
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	4

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207591.022	LB202318.033		Naphthalene	mg/kg	0.1	<0.1	0.0007368396	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	0	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	0	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	0.0003304065	200	0
			Acenaphthene	mg/kg	0.1	<0.1	0.0001992928	200	0
			Fluorene	mg/kg	0.1	<0.1	0	200	0
			Phenanthrene	mg/kg	0.1	<0.1	0.0010525451	200	0
			Anthracene	mg/kg	0.1	<0.1	0.0008599803	200	0
			Fluoranthene	mg/kg	0.1	<0.1	0	200	0
			Pyrene	mg/kg	0.1	<0.1	0	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	0.0049294571	200	0
			Chrysene	mg/kg	0.1	<0.1	0.0045036328	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	0	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	0	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	0.0039193501	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	0	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	0	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	0	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	0	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	0.242	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	0.121	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	0	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4377854915	30	1
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4049504277	30	2
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.4190135926	30	10
SE207591.026	LB202318.031		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	<0.3	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	<0.2	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	30	5
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	4

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207591.026	LB202318.031	Surrogates	d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	4

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207591.014	LB202318.014		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	1
SE207591.022	LB202318.033		Arochlor 1016	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	0	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0.153	30	3
SE207591.026	LB202318.031		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	3

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207591.014	LB202318.014		Phenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	200	0
			Total Cresol	mg/kg	1.5	<1.5	<1.5	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	200	0
			4-nitrophenol	mg/kg	1	<1	<1	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dinitrophenol	mg/kg	2	<2	<2	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.8	4.8	30	0
			d5-phenol (Surrogate)	mg/kg	-	1.7	1.6	30	1
SE207591.026	LB202318.031		Phenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	200	0
			Total Cresol	mg/kg	1.5	<1.5	<1.5	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207591.026	LB202318.031		2-chlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	200	0
			4-nitrophenol	mg/kg	1	<1	<1	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dinitrophenol	mg/kg	2	<2	<2	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.6	4.5	30	2
			d5-phenol (Surrogate)	mg/kg	-	1.6	1.6	30	0

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207591.014	LB202298.014	Arsenic, As	mg/kg	1	1	<1	138	13
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	3.4	2.5	47	31
		Copper, Cu	mg/kg	0.5	3.2	2.9	46	10
		Nickel, Ni	mg/kg	0.5	0.7	0.6	107	12
		Lead, Pb	mg/kg	1	17	13	37	29
		Zinc, Zn	mg/kg	2	10	11	49	11
SE207591.023	LB202298.024	Arsenic, As	mg/kg	1	<1	<1	200	0
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	<0.5	<0.5	177	0
		Copper, Cu	mg/kg	0.5	1.7	1.4	63	20
		Nickel, Ni	mg/kg	0.5	0.5	<0.5	147	3
		Lead, Pb	mg/kg	1	3	2	73	41
		Zinc, Zn	mg/kg	2	5.8	3.9	71	38
SE207591.026	LB202370.020	Arsenic, As	mg/kg	1	<1	<1	198	0
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	<0.5	<0.5	165	0
		Copper, Cu	mg/kg	0.5	<0.5	0.5	131	9
		Nickel, Ni	mg/kg	0.5	<0.5	<0.5	200	0
		Lead, Pb	mg/kg	1	1	1	103	0
		Zinc, Zn	mg/kg	2	<2.0	<2.0	187	0
SE207681.003	LB202370.014	Arsenic, As	mg/kg	1	5	5	50	1
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	12	12	34	6
		Copper, Cu	mg/kg	0.5	11	12	34	5
		Nickel, Ni	mg/kg	0.5	12	12	34	3
		Lead, Pb	mg/kg	1	18	19	35	4
		Zinc, Zn	mg/kg	2	61	61	33	0

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207591.014	LB202318.014		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE207591.022	LB202318.033		TRH C10-C14	mg/kg	20	<20	0	200	0
			TRH C15-C28	mg/kg	45	<45	0	200	0
			TRH C29-C36	mg/kg	45	<45	0	200	0
			TRH C37-C40	mg/kg	100	<100	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207591.022	LB202318.033		TRH C10-C36 Total	mg/kg	110	<110	0	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	0	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	0	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	0	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	0	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	0	200	0
SE207591.026	LB202318.031		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207591.011	LB202290.015	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207591.011	LB202290.015	Halogenated	1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.5	9.7	50	1
			d8-toluene (Surrogate)	mg/kg	-	9.5	9.8	50	3
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.3	7.5	50	3
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE207591.022	LB202290.029	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued) — Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207591.022	LB202290.029	Halogenated	Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
		Aliphatics	Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.9	9.7	50	2
			d8-toluene (Surrogate)	mg/kg	-	9.9	9.6	50	3
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.5	7.4	50	2
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE207591.026	LB202290.033	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued) — Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207591.026	LB202290.033	Fumigants	cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207591.026	LB202290.033	Oxygenated	MEK (2-butanone)	mg/kg	10	<10	<10	200	0
		Compounds	MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.2	9.5	50	7
			d8-toluene (Surrogate)	mg/kg	-	10.2	9.4	50	8
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.8	7.2	50	8
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207591.011	LB202290.015		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.5	9.7	30	1
			d8-toluene (Surrogate)	mg/kg	-	9.5	9.8	30	3
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.3	7.5	30	3
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE207591.022	LB202290.029		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.9	9.7	30	2
			d8-toluene (Surrogate)	mg/kg	-	9.9	9.6	30	3
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.5	7.4	30	2
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE207591.026	LB202290.033		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.2	9.5	30	7
			d8-toluene (Surrogate)	mg/kg	-	10.2	9.4	30	8
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.8	7.2	30	8
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202300.002	Mercury	mg/kg	0.05	0.23	0.2	70 - 130	117
LB202371.002	Mercury	mg/kg	0.05	0.22	0.2	70 - 130	108

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202318.002		Heptachlor	mg/kg	0.1	0.3	0.2	60 - 140	130
		Aldrin	mg/kg	0.1	0.3	0.2	60 - 140	130
		Delta BHC	mg/kg	0.1	0.3	0.2	60 - 140	130
		Dieldrin	mg/kg	0.2	0.3	0.2	60 - 140	127
		Endrin	mg/kg	0.2	0.2	0.2	60 - 140	123
		p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	106
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.16	0.15	40 - 130	106

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202318.002		Dichlorvos	mg/kg	0.5	1.7	2	60 - 140	83
		Diazinon (Dimpylate)	mg/kg	0.5	2.0	2	60 - 140	101
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.0	2	60 - 140	99
		Ethion	mg/kg	0.2	1.7	2	60 - 140	87
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	83
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	82

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202318.002		Naphthalene	mg/kg	0.1	4.6	4	60 - 140	116
		Acenaphthylene	mg/kg	0.1	4.4	4	60 - 140	110
		Acenaphthene	mg/kg	0.1	4.7	4	60 - 140	117
		Phenanthrene	mg/kg	0.1	4.7	4	60 - 140	119
		Anthracene	mg/kg	0.1	4.4	4	60 - 140	111
		Fluoranthene	mg/kg	0.1	4.7	4	60 - 140	119
		Pyrene	mg/kg	0.1	4.6	4	60 - 140	116
		Benzo(a)pyrene	mg/kg	0.1	4.9	4	60 - 140	121
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	87
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	83
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	82

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202318.002	Arochlor 1260	mg/kg	0.2	0.4	0.4	60 - 140	97

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202318.002		Phenol	mg/kg	0.5	0.8	1	70 - 130	76
		2,4-dichlorophenol	mg/kg	0.5	1.0	1	70 - 130	96
		2,4,6-trichlorophenol	mg/kg	0.5	0.8	1	70 - 130	81
		Pentachlorophenol	mg/kg	0.5	0.8	1	70 - 130	80
	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.9	5	40 - 130	98
		d5-phenol (Surrogate)	mg/kg	-	1.7	2	40 - 130	85

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202298.002	Arsenic, As	mg/kg	1	320	318.22	80 - 120	102
	Cadmium, Cd	mg/kg	0.3	5.4	5.41	80 - 120	100
	Chromium, Cr	mg/kg	0.5	35	38.31	80 - 120	92
	Copper, Cu	mg/kg	0.5	300	290	80 - 120	103
	Nickel, Ni	mg/kg	0.5	180	187	80 - 120	98
	Lead, Pb	mg/kg	1	95	89.9	80 - 120	106
	Zinc, Zn	mg/kg	2	280	273	80 - 120	101
LB202370.002	Arsenic, As	mg/kg	1	330	318.22	80 - 120	105
	Cadmium, Cd	mg/kg	0.3	4.7	5.41	80 - 120	87
	Chromium, Cr	mg/kg	0.5	39	38.31	80 - 120	101

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202370.002		Copper, Cu	mg/kg	0.5	290	290	80 - 120	102
		Nickel, Ni	mg/kg	0.5	190	187	80 - 120	100
		Lead, Pb	mg/kg	1	92	89.9	80 - 120	102
		Zinc, Zn	mg/kg	2	280	273	80 - 120	101

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202318.002		TRH C10-C14	mg/kg	20	42	40	60 - 140	105
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	90
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	75
	TRH F Bands	TRH >C10-C16	mg/kg	25	39	40	60 - 140	98
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	98
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	85

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202290.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	3.6	5	60 - 140	71
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	4.2	5	60 - 140	85
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	4.0	5	60 - 140	80
	Halogenated	Chlorobenzene	mg/kg	0.1	4.8	5	60 - 140	95
	Monocyclic	Benzene	mg/kg	0.1	4.0	5	60 - 140	81
	Aromatic	Toluene	mg/kg	0.1	4.0	5	60 - 140	81
		Ethylbenzene	mg/kg	0.1	4.2	5	60 - 140	83
		m/p-xylene	mg/kg	0.2	8.3	10	60 - 140	83
		o-xylene	mg/kg	0.1	4.2	5	60 - 140	84
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.7	10	70 - 130	107
		d8-toluene (Surrogate)	mg/kg	-	10.9	10	70 - 130	109
		Bromofluorobenzene (Surrogate)	mg/kg	-	7.7	10	70 - 130	77
	Trihalomethan	Chloroform	mg/kg	0.1	4.1	5	60 - 140	83

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202290.002		TRH C6-C10	mg/kg	25	67	92.5	60 - 140	72
		TRH C6-C9	mg/kg	20	58	80	60 - 140	72
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.7	10	70 - 130	107
		Bromofluorobenzene (Surrogate)	mg/kg	-	7.7	10	70 - 130	77
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	42	62.5	60 - 140	67

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207591.001	LB202300.004	Mercury	mg/kg	0.05	0.24	0.06	0.2	87

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE207591.003	LB202318.035		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	-	-
			Alpha BHC	mg/kg	0.1	<0.1	-	-
			Lindane	mg/kg	0.1	<0.1	-	-
			Heptachlor	mg/kg	0.1	<0.1	0.2	135
			Aldrin	mg/kg	0.1	<0.1	0.2	134
			Beta BHC	mg/kg	0.1	<0.1	-	-
			Delta BHC	mg/kg	0.1	<0.1	0.2	135
			Heptachlor epoxide	mg/kg	0.1	<0.1	-	-
			o,p'-DDE	mg/kg	0.1	<0.1	-	-
			Alpha Endosulfan	mg/kg	0.2	<0.2	-	-
			Gamma Chlordane	mg/kg	0.1	<0.1	-	-
			Alpha Chlordane	mg/kg	0.1	<0.1	-	-
			trans-Nonachlor	mg/kg	0.1	<0.1	-	-
			p,p'-DDE	mg/kg	0.1	<0.1	-	-
			Dieldrin	mg/kg	0.2	<0.2	0.2	130
			Endrin	mg/kg	0.2	<0.2	0.2	126
			o,p'-DDD	mg/kg	0.1	<0.1	-	-
			o,p'-DDT	mg/kg	0.1	<0.1	-	-
			Beta Endosulfan	mg/kg	0.2	<0.2	-	-
			p,p'-DDD	mg/kg	0.1	<0.1	-	-
			p,p'-DDT	mg/kg	0.1	<0.1	0.2	108
			Endosulfan sulphate	mg/kg	0.1	<0.1	-	-
			Endrin Aldehyde	mg/kg	0.1	<0.1	-	-
			Methoxychlor	mg/kg	0.1	<0.1	-	-
			Endrin Ketone	mg/kg	0.1	<0.1	-	-
			Isodrin	mg/kg	0.1	<0.1	-	-
			Mirex	mg/kg	0.1	<0.1	-	-
			Total CLP OC Pesticides	mg/kg	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.16	-	102

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE207591.002	LB202318.032		Dichlorvos	mg/kg	0.5	<0.5	2	80
			Dimethoate	mg/kg	0.5	<0.5	-	-
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	2	96
			Fenitrothion	mg/kg	0.2	<0.2	-	-
			Malathion	mg/kg	0.2	<0.2	-	-
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	2	93
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	-	-
			Bromophos Ethyl	mg/kg	0.2	<0.2	-	-
			Methidathion	mg/kg	0.5	<0.5	-	-
			Ethion	mg/kg	0.2	<0.2	2	80
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	-	-
			Total OP Pesticides*	mg/kg	1.7	<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	-	88
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	-	82

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number	Parameter	Units	LOR	Original	Spike	Recovery%
SE207591.002	LB202318.032	Naphthalene	mg/kg	0.1	<0.1	4	118
		2-methylnaphthalene	mg/kg	0.1	<0.1	-	-
		1-methylnaphthalene	mg/kg	0.1	<0.1	-	-
		Acenaphthylene	mg/kg	0.1	<0.1	4	111
		Acenaphthene	mg/kg	0.1	<0.1	4	118
		Fluorene	mg/kg	0.1	<0.1	-	-
		Phenanthrene	mg/kg	0.1	<0.1	4	114

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE207591.002	LB202318.032		Anthracene	mg/kg	0.1	<0.1	4	111
			Fluoranthene	mg/kg	0.1	<0.1	4	116
			Pyrene	mg/kg	0.1	<0.1	4	115
			Benzo(a)anthracene	mg/kg	0.1	<0.1	-	-
			Chrysene	mg/kg	0.1	<0.1	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	-	-
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	-	-
			Benzo(a)pyrene	mg/kg	0.1	<0.1	4	115
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	-	-
			Total PAH (18)	mg/kg	0.8	<0.8	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	-	84
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	-	88
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	-	82

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE207591.003	LB202318.034		Arochlor 1016	mg/kg	0.2	<0.2	-	-
			Arochlor 1221	mg/kg	0.2	<0.2	-	-
			Arochlor 1232	mg/kg	0.2	<0.2	-	-
			Arochlor 1242	mg/kg	0.2	<0.2	-	-
			Arochlor 1248	mg/kg	0.2	<0.2	-	-
			Arochlor 1254	mg/kg	0.2	<0.2	-	-
			Arochlor 1260	mg/kg	0.2	<0.2	0.4	100
			Arochlor 1262	mg/kg	0.2	<0.2	-	-
			Arochlor 1268	mg/kg	0.2	<0.2	-	-
			Total PCBs (Arochlors)	mg/kg	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	-	101

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207591.001	LB202318.004		Phenol	mg/kg	0.5	0.7	<0.5	1	72
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	-	-
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	-	-
			Total Cresol	mg/kg	1.5	<1.5	<1.5	-	-
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	-	-
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	-	-
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	-	-
			2,4-dichlorophenol	mg/kg	0.5	0.9	<0.5	1	92
			2,4,6-trichlorophenol	mg/kg	0.5	0.8	<0.5	1	79
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	-	-
			4-nitrophenol	mg/kg	1	<1	<1	-	-
			2,4,5-trichlorophenol	mg/kg	0.5	0.7	<0.5	-	-
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	-	-
			Pentachlorophenol	mg/kg	0.5	0.7	<0.5	1	73
			2,4-dinitrophenol	mg/kg	2	<2	<2	-	-
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	-	-
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.8	5.0	-	95
			d5-phenol (Surrogate)	mg/kg	-	1.6	1.6	-	80

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207591.001	LB202298.004	Arsenic, As	mg/kg	1	NVL	NVL	NVL	NVL
		Cadmium, Cd	mg/kg	0.3	51	<0.3	50	103
		Chromium, Cr	mg/kg	0.5	NVL	NVL	NVL	NVL
		Copper, Cu	mg/kg	0.5	69	9.9	50	118
		Nickel, Ni	mg/kg	0.5	NVL	NVL	NVL	NVL
		Lead, Pb	mg/kg	1	74	16	50	116

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207591.001	LB202298.004	Zinc, Zn	mg/kg	2	80	20	50	120
SE207725.001	LB202370.004	Arsenic, As	mg/kg	1	52	6	50	92
		Cadmium, Cd	mg/kg	0.3	44	<0.3	50	87
		Chromium, Cr	mg/kg	0.5	63	18	50	91
		Copper, Cu	mg/kg	0.5	100	29	50	145 ④
		Nickel, Ni	mg/kg	0.5	54	7.1	50	94
		Lead, Pb	mg/kg	1	100	84	50	42 ④
		Zinc, Zn	mg/kg	2	200	130	50	143 ④

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE207591.002	LB202318.032		TRH C10-C14	mg/kg	20	<20	40	120
			TRH C15-C28	mg/kg	45	<45	40	78
			TRH C29-C36	mg/kg	45	<45	40	98
			TRH C37-C40	mg/kg	100	<100	-	-
			TRH C10-C36 Total	mg/kg	110	<110	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	40	115
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	<90	40	118
			TRH >C34-C40 (F4)	mg/kg	120	<120	-	-

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207591.001	LB202290.004	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	-	-
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	-	-
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	-	-
			Bromomethane	mg/kg	1	<1	<1	-	-
			Chloroethane	mg/kg	1	<1	<1	-	-
			Trichlorofluoromethane	mg/kg	1	<1	<1	-	-
			Iodomethane	mg/kg	5	<5	<5	-	-
			1,1-dichloroethene	mg/kg	0.1	3.5	<0.1	5	70
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	-	-
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloroethane	mg/kg	0.1	4.1	<0.1	5	82
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	-	-
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	3.9	<0.1	5	78
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	-	-
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated	Chlorobenzene	mg/kg	0.1	4.7	<0.1	5	93
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207591.001	LB202290.004	Halogenated	4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-
		Aromatics	1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Monocyclic	Benzene	mg/kg	0.1	3.7	<0.1	5	73
		Aromatic	Toluene	mg/kg	0.1	3.7	<0.1	5	74
			Ethylbenzene	mg/kg	0.1	3.9	<0.1	5	77
			m/p-xylene	mg/kg	0.2	7.8	<0.2	10	77
			o-xylene	mg/kg	0.1	4.0	<0.1	5	79
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	-	-
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	-	-
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	-	-
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	-	-
		Compounds	2-nitropropane	mg/kg	10	<10	<10	-	-
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	-	-
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	-	-
			Vinyl acetate	mg/kg	10	<10	<10	-	-
			MEK (2-butanone)	mg/kg	10	<10	<10	-	-
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	-	-
			2-hexanone (MBK)	mg/kg	5	<5	<5	-	-
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.9	9.3	10	99
			d8-toluene (Surrogate)	mg/kg	-	9.9	9.5	10	99
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.0	7.3	10	70
		Totals	Total Xylenes	mg/kg	0.3	12	<0.3	-	-
			Total BTEX	mg/kg	0.6	23	<0.6	-	-
			Total VOC*	mg/kg	24	45	<24	-	-
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	-	-
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	20	<1.8	-	-
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	20	<1.8	-	-
		Trihalometha	Chloroform	mg/kg	0.1	4.0	<0.1	5	80
		nes	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Bromoform	mg/kg	0.1	<0.1	<0.1	-	-

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207591.001	LB202290.005		TRH C6-C10	mg/kg	25	62	<25	92.5	67
			TRH C6-C9	mg/kg	20	56	<20	80	70
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.9	9.3	10	99
			d8-toluene (Surrogate)	mg/kg	-	9.9	9.5	10	99
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.0	7.3	-	70
		VPH F	Benzene (F0)	mg/kg	0.1	3.7	<0.1	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	39	<25	62.5	62

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

QC Sample	Sample Number	Parameter	Units	LOR

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

E-MAILED 17/7 @ 10.19

SLR

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CLIENT: Defence Housing Australia

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGER [redacted]

PM CONTACT No [redacted]

LABORATORY: SGS Australia

LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015

SAMPLER: MR

SAMPLER CONTACT No [redacted]

Email Reports and Invoices to: LQRSYD@slrconsulting.com ; [redacted]

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number of

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only	HOLD	Suite E and H	Heavy metals, TPH/BTEXN, PAH, VOC/SVOCs and PFAS	Suite D, MTBEs	Additional Information (Comment on any gross contamination or specific requirements)
1	0407_TP156_0.1_200629	29-06-2020	Soil		x								
2	0407_TP156_0.2_200629	29-06-2020	Soil		x								
	0407_TP156_0.3_200629	29-06-2020	Soil						x				
	0407_TP156_0.7_200629	29-06-2020	Soil						x				
3	0407_TP156_0.2_ACM_200629	29-06-2020	Soil					x					
4	0407_TP170_0.1_200629	29-06-2020	Soil		x								
5	0407_TP170_0.3_200629	29-06-2020	Soil		x								
	0407_TP170_0.5_200629	29-06-2020	Soil						x				
	0407_TP170_1.0_200629	29-06-2020	Soil						x				
	0407_TP170_0.3_ACM_200629	29-06-2020	Soil					x					
6	0407_QC178_200629	29-06-2020	Soil		x								
	0407_QC278_200629	29-06-2020	Soil										Please send to Eurofins for analysis of Suite A

SGS EHS Sydney COC

SE208847

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time	29-06-2020	**Received by**	Sign [redacted]	Date / Time	29/06/20 @ 4.30
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	

Temperature Received:

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

SLR

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CLIENT: Defence Housing Australia

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PROJECT NUMBER: 610.30041

PROJECT MANAGER: [redacted]

PM CONTACT No: [redacted]

LABORATORY: SGS Australia

LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015

SAMPLER: [redacted]

SAMPLER CONTACT No: [redacted]

Email Reports and Invoices to: LQRSYD@slrconsulting.com ; [redacted]

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number of

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only	HOLD	Suite E and H	Heavy metals, TPH/BTEXN, PAH, VOC/SVOCs and PFAS	Suite D, MTBEs	Additional Information (Comment on any gross contamination or specific requirements)
7	0407_TP186_0.1_200629	29-06-2020	Soil		x								
8	0407_TP186_0.3_200629	29-06-2020	Soil		x								
	0407_TP186_0.5_200629	29-06-2020	Soil						x				
	0407_TP186_1.0_200629	29-06-2020	Soil						x				
9	0407_TP187_0.1_200629	29-06-2020	Soil		x								
10	0407_TP187_0.3_200629	29-06-2020	Soil		x								
	0407_TP187_0.5_200629	29-06-2020	Soil						x				
	0407_TP187_0.9_200629	29-06-2020	Soil						x				
11	0407_TP188_0.1_200629	29-06-2020	Soil		x								
12	0407_TP188_0.5_200629	29-06-2020	Soil		x								

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time	29-06-2020	**Received by**	Sign [redacted]	Date / Time	29/06/20
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	@ 4:30
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	

Temperature Received:

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	12

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208847 R0**
Date Received	29/6/2020
Date Reported	27/7/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.

Sample #2: Asbestos found in approx 6x4x2mm fibrous material in >2mm portion.
Sample #4: Asbestos found in approx 3x2x2mm cement sheet fragments in >2mm portion.
Sample #11: Asbestos found in approx 4x2x2mm cement sheet fragment in >2mm portion.

Asbestos analysed by Approved Identifiers Ravee Sivasubramaniam and Yusuf Kuthpudin .

SIGNATORIES

[redacted]

Chemist | Senior Organic Chemist/Metals Chemist | Senior Chemist

[redacted]

Organic Section Head | Hygiene Team Leader | Asbestos Analyst

VOC's in Soil [AN433] Tested: 21/7/2020

PARAMETER	UOM	LOR	0407_TP156_0.1_20629 SOIL - 29/6/2020 SE208847.001	0407_TP156_0.2_20629 SOIL - 29/6/2020 SE208847.002	0407_TP170_0.1_20629 SOIL - 29/6/2020 SE208847.004	0407_TP170_0.3_20629 SOIL - 29/6/2020 SE208847.005	0407_QC178_20062 SOIL - 29/6/2020 SE208847.006
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 21/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP156_0.1_20629 SOIL - 29/6/2020 SE208847.001	0407_TP156_0.2_20629 SOIL - 29/6/2020 SE208847.002	0407_TP170_0.1_20629 SOIL - 29/6/2020 SE208847.004	0407_TP170_0.3_20629 SOIL - 29/6/2020 SE208847.005	0407_QC178_20062 SOIL - 29/6/2020 SE208847.006
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 21/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP186_0.1_20(629 SOIL - 29/6/2020 SE208847.007	0407_TP186_0.3_20(629 SOIL - 29/6/2020 SE208847.008	0407_TP187_0.1_20(629 SOIL - 29/6/2020 SE208847.009	0407_TP187_0.3_20(629 SOIL - 29/6/2020 SE208847.010	0407_TP188_0.1_20(629 SOIL - 29/6/2020 SE208847.011
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 21/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP186_0.1_20(629 SOIL - 29/6/2020 SE208847.007	0407_TP186_0.3_20(629 SOIL - 29/6/2020 SE208847.008	0407_TP187_0.1_20(629 SOIL - 29/6/2020 SE208847.009	0407_TP187_0.3_20(629 SOIL - 29/6/2020 SE208847.010	0407_TP188_0.1_20(629 SOIL - 29/6/2020 SE208847.011
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 21/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP188_0.5_20(629 SOIL - 29/6/2020 SE208847.012
Benzene	mg/kg	0.1	<0.1
Toluene	mg/kg	0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2
o-xylene	mg/kg	0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
Chloromethane	mg/kg	1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
Bromomethane	mg/kg	1	<1
Chloroethane	mg/kg	1	<1
Trichlorofluoromethane	mg/kg	1	<1
Acetone (2-propanone)	mg/kg	10	<10
Iodomethane	mg/kg	5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1
Vinyl acetate	mg/kg	10	<10
MEK (2-butanone)	mg/kg	10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1
Chloroform	mg/kg	0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
2-nitropropane	mg/kg	10	<10
Bromodichloromethane	mg/kg	0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1
Bromoform	mg/kg	0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1

VOC's in Soil [AN433] Tested: 21/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP188_0.5_20(629 SOIL - 29/6/2020 SE208847.012
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
Total VOC*	mg/kg	24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 21/7/2020

PARAMETER	UOM	LOR	0407_TP156_0.1_20(629 SOIL - 29/6/2020 SE208847.001	0407_TP156_0.2_20(629 SOIL - 29/6/2020 SE208847.002	0407_TP170_0.1_20(629 SOIL - 29/6/2020 SE208847.004	0407_TP170_0.3_20(629 SOIL - 29/6/2020 SE208847.005	0407_QC178_20062(SOIL - 29/6/2020 SE208847.006
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP186_0.1_20(629 SOIL - 29/6/2020 SE208847.007	0407_TP186_0.3_20(629 SOIL - 29/6/2020 SE208847.008	0407_TP187_0.1_20(629 SOIL - 29/6/2020 SE208847.009	0407_TP187_0.3_20(629 SOIL - 29/6/2020 SE208847.010	0407_TP188_0.1_20(629 SOIL - 29/6/2020 SE208847.011
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP188_0.5_20(629 SOIL - 29/6/2020 SE208847.012
Benzene (F0)	mg/kg	0.1	<0.1
TRH C6-C9	mg/kg	20	<20
TRH C6-C10	mg/kg	25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 21/7/2020

PARAMETER	UOM	LOR	0407_TP156_0.1_20(629 SOIL - 29/6/2020 SE208847.001	0407_TP156_0.2_20(629 SOIL - 29/6/2020 SE208847.002	0407_TP170_0.1_20(629 SOIL - 29/6/2020 SE208847.004	0407_TP170_0.3_20(629 SOIL - 29/6/2020 SE208847.005	0407_QC178_20062(SOIL - 29/6/2020 SE208847.006
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP186_0.1_20(629 SOIL - 29/6/2020 SE208847.007	0407_TP186_0.3_20(629 SOIL - 29/6/2020 SE208847.008	0407_TP187_0.1_20(629 SOIL - 29/6/2020 SE208847.009	0407_TP187_0.3_20(629 SOIL - 29/6/2020 SE208847.010	0407_TP188_0.1_20(629 SOIL - 29/6/2020 SE208847.011
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	**46**	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP188_0.5_20(629 SOIL - 29/6/2020 SE208847.012
TRH C10-C14	mg/kg	20	<20
TRH C15-C28	mg/kg	45	<45
TRH C29-C36	mg/kg	45	<45
TRH C37-C40	mg/kg	100	<100
TRH >C10-C16	mg/kg	25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120
TRH C10-C36 Total	mg/kg	110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 21/7/2020

PARAMETER	UOM	LOR	0407_TP156_0.1_20(629 SOIL - 29/6/2020 SE208847.001	0407_TP156_0.2_20(629 SOIL - 29/6/2020 SE208847.002	0407_TP170_0.1_20(629 SOIL - 29/6/2020 SE208847.004	0407_TP170_0.3_20(629 SOIL - 29/6/2020 SE208847.005	0407_QC178_20062(SOIL - 29/6/2020 SE208847.006
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	0.2	0.2
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	0.4	0.3	1.0	1.2
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	0.3	0.3
Fluoranthene	mg/kg	0.1	0.1	0.7	0.8	1.8	2.0
Pyrene	mg/kg	0.1	0.1	0.8	0.8	1.7	1.9
Benzo(a)anthracene	mg/kg	0.1	<0.1	0.3	0.4	0.9	1.0
Chrysene	mg/kg	0.1	<0.1	0.3	0.5	0.9	1.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	0.3	0.7	1.1	1.3
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	0.1	0.3	0.4	0.5
Benzo(a)pyrene	mg/kg	0.1	<0.1	0.3	0.6	0.9	1.0
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	0.1	0.3	0.4	0.5
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	0.2	0.5	0.4	0.6
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	0.4	0.8	1.1	1.4
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	0.5	0.9	1.2	1.5
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	0.4	0.9	1.2	1.4
Total PAH (18)	mg/kg	0.8	<0.8	3.6	5.4	9.8	12
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	3.6	5.4	9.8	12

PARAMETER	UOM	LOR	0407_TP186_0.1_20(629 SOIL - 29/6/2020 SE208847.007	0407_TP186_0.3_20(629 SOIL - 29/6/2020 SE208847.008	0407_TP187_0.1_20(629 SOIL - 29/6/2020 SE208847.009	0407_TP187_0.3_20(629 SOIL - 29/6/2020 SE208847.010	0407_TP188_0.1_20(629 SOIL - 29/6/2020 SE208847.011
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	0.2	0.2	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	1.7	0.9	0.4	0.5	0.2
Anthracene	mg/kg	0.1	0.4	0.3	0.1	0.1	<0.1
Fluoranthene	mg/kg	0.1	5.3	2.9	0.8	0.5	0.6
Pyrene	mg/kg	0.1	5.5	3.1	0.9	0.6	0.6
Benzo(a)anthracene	mg/kg	0.1	1.9	1.5	0.4	0.2	0.2
Chrysene	mg/kg	0.1	2.2	1.7	0.5	0.3	0.2
Benzo(b&j)fluoranthene	mg/kg	0.1	3.7	3.0	0.7	0.3	0.3
Benzo(k)fluoranthene	mg/kg	0.1	1.3	0.9	0.2	0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	2.9	2.3	0.5	0.2	0.2
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	2.3	1.9	0.3	0.1	0.1
Dibenzo(ah)anthracene	mg/kg	0.1	0.2	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	2.5	2.0	0.4	0.1	0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	4.1	3.1	0.7	0.3	0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	4.1	3.2	0.8	0.4	0.4
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	4.1	3.1	0.7	0.4	0.3
Total PAH (18)	mg/kg	0.8	30	21	5.2	3.0	2.6
Total PAH (NEPM/WHO 16)	mg/kg	0.8	30	21	5.2	3.0	2.6

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 21/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP188_0.5_20(629 SOIL - 29/6/2020 SE208847.012
Naphthalene	mg/kg	0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1
Fluorene	mg/kg	0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1
Anthracene	mg/kg	0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1
Pyrene	mg/kg	0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1
Chrysene	mg/kg	0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8

Speciated Phenols in Soil [AN420] Tested: 21/7/2020

PARAMETER	UOM	LOR	0407_TP156_0.1_20(629 SOIL - 29/6/2020 SE208847.001	0407_TP156_0.2_20(629 SOIL - 29/6/2020 SE208847.002	0407_TP170_0.1_20(629 SOIL - 29/6/2020 SE208847.004	0407_TP170_0.3_20(629 SOIL - 29/6/2020 SE208847.005	0407_QC178_20062(SOIL - 29/6/2020 SE208847.006
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_TP186_0.1_20(629 SOIL - 29/6/2020 SE208847.007	0407_TP186_0.3_20(629 SOIL - 29/6/2020 SE208847.008	0407_TP187_0.1_20(629 SOIL - 29/6/2020 SE208847.009	0407_TP187_0.3_20(629 SOIL - 29/6/2020 SE208847.010	0407_TP188_0.1_20(629 SOIL - 29/6/2020 SE208847.011
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

Speciated Phenols in Soil [AN420] Tested: 21/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP188_0.5_20(629 SOIL - 29/6/2020 SE208847.012
Phenol	mg/kg	0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
Total Cresol	mg/kg	1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5
4-nitrophenol	mg/kg	1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
Pentachlorophenol	mg/kg	0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2
4-chloro-3-methylphenol	mg/kg	2	<2

OC Pesticides in Soil [AN420] Tested: 21/7/2020

PARAMETER	UOM	LOR	0407_TP156_0.1_20629 SOIL - 29/6/2020 SE208847.001	0407_TP156_0.2_20629 SOIL - 29/6/2020 SE208847.002	0407_TP170_0.1_20629 SOIL - 29/6/2020 SE208847.004	0407_TP170_0.3_20629 SOIL - 29/6/2020 SE208847.005	0407_QC178_200629 SOIL - 29/6/2020 SE208847.006
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 21/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP186_0.1_20(629 SOIL - 29/6/2020 SE208847.007	0407_TP186_0.3_20(629 SOIL - 29/6/2020 SE208847.008	0407_TP187_0.1_20(629 SOIL - 29/6/2020 SE208847.009	0407_TP187_0.3_20(629 SOIL - 29/6/2020 SE208847.010	0407_TP188_0.1_20(629 SOIL - 29/6/2020 SE208847.011
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 21/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP188_0.5_20(629 SOIL - 29/6/2020 SE208847.012
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1
Lindane	mg/kg	0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1
Aldrin	mg/kg	0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2
Endrin	mg/kg	0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1
Isodrin	mg/kg	0.1	<0.1
Mirex	mg/kg	0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1

OP Pesticides in Soil [AN420] Tested: 21/7/2020

PARAMETER	UOM	LOR	0407_TP156_0.1_20(629 SOIL - 29/6/2020 SE208847.001	0407_TP156_0.2_20(629 SOIL - 29/6/2020 SE208847.002	0407_TP170_0.1_20(629 SOIL - 29/6/2020 SE208847.004	0407_TP170_0.3_20(629 SOIL - 29/6/2020 SE208847.005	0407_QC178_20062(SOIL - 29/6/2020 SE208847.006
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP186_0.1_20(629 SOIL - 29/6/2020 SE208847.007	0407_TP186_0.3_20(629 SOIL - 29/6/2020 SE208847.008	0407_TP187_0.1_20(629 SOIL - 29/6/2020 SE208847.009	0407_TP187_0.3_20(629 SOIL - 29/6/2020 SE208847.010	0407_TP188_0.1_20(629 SOIL - 29/6/2020 SE208847.011
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP188_0.5_20(629 SOIL - 29/6/2020 SE208847.012
Dichlorvos	mg/kg	0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2
Malathion	mg/kg	0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2
Methidathion	mg/kg	0.5	<0.5
Ethion	mg/kg	0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7

PCBs in Soil [AN420] Tested: 21/7/2020

PARAMETER	UOM	LOR	0407_TP156_0.1_20(629 SOIL - 29/6/2020 SE208847.001	0407_TP156_0.2_20(629 SOIL - 29/6/2020 SE208847.002	0407_TP170_0.1_20(629 SOIL - 29/6/2020 SE208847.004	0407_TP170_0.3_20(629 SOIL - 29/6/2020 SE208847.005	0407_QC178_20062(SOIL - 29/6/2020 SE208847.006
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP186_0.1_20(629 SOIL - 29/6/2020 SE208847.007	0407_TP186_0.3_20(629 SOIL - 29/6/2020 SE208847.008	0407_TP187_0.1_20(629 SOIL - 29/6/2020 SE208847.009	0407_TP187_0.3_20(629 SOIL - 29/6/2020 SE208847.010	0407_TP188_0.1_20(629 SOIL - 29/6/2020 SE208847.011
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP188_0.5_20(629 SOIL - 29/6/2020 SE208847.012
Arochlor 1016	mg/kg	0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 21/7/2020

PARAMETER	UOM	LOR	0407_TP156_0.1_20(629 SOIL - 29/6/2020 SE208847.001	0407_TP156_0.2_20(629 SOIL - 29/6/2020 SE208847.002	0407_TP170_0.1_20(629 SOIL - 29/6/2020 SE208847.004	0407_TP170_0.3_20(629 SOIL - 29/6/2020 SE208847.005	0407_QC178_20062(SOIL - 29/6/2020 SE208847.006
Arsenic, As	mg/kg	1	2	3	3	4	3
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	6.8	6.0	6.4	5.6	6.6
Copper, Cu	mg/kg	0.5	17	25	24	8.1	25
Lead, Pb	mg/kg	1	30	55	60	30	65
Nickel, Ni	mg/kg	0.5	2.9	3.6	5.3	3.3	5.5
Zinc, Zn	mg/kg	2	55	77	100	32	110

PARAMETER	UOM	LOR	0407_TP186_0.1_20(629 SOIL - 29/6/2020 SE208847.007	0407_TP186_0.3_20(629 SOIL - 29/6/2020 SE208847.008	0407_TP187_0.1_20(629 SOIL - 29/6/2020 SE208847.009	0407_TP187_0.3_20(629 SOIL - 29/6/2020 SE208847.010	0407_TP188_0.1_20(629 SOIL - 29/6/2020 SE208847.011
Arsenic, As	mg/kg	1	2	1	5	2	8
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	9.7	6.4	9.9	3.9	22
Copper, Cu	mg/kg	0.5	54	14	35	14	56
Lead, Pb	mg/kg	1	45	25	81	45	120
Nickel, Ni	mg/kg	0.5	35	4.4	7.6	1.6	11
Zinc, Zn	mg/kg	2	73	37	170	67	300

PARAMETER	UOM	LOR	0407_TP188_0.5_20(629 SOIL - 29/6/2020 SE208847.012
Arsenic, As	mg/kg	1	<1
Cadmium, Cd	mg/kg	0.3	<0.3
Chromium, Cr	mg/kg	0.5	<0.5
Copper, Cu	mg/kg	0.5	0.6
Lead, Pb	mg/kg	1	1
Nickel, Ni	mg/kg	0.5	<0.5
Zinc, Zn	mg/kg	2	100

Mercury in Soil [AN312] Tested: 21/7/2020

PARAMETER	UOM	LOR	0407_TP156_0.1_20(629 SOIL - 29/6/2020 SE208847.001	0407_TP156_0.2_20(629 SOIL - 29/6/2020 SE208847.002	0407_TP170_0.1_20(629 SOIL - 29/6/2020 SE208847.004	0407_TP170_0.3_20(629 SOIL - 29/6/2020 SE208847.005	0407_QC178_20062(SOIL - 29/6/2020 SE208847.006
Mercury	mg/kg	0.05	**0.08**	**0.07**	**0.23**	**0.07**	**0.22**

PARAMETER	UOM	LOR	0407_TP186_0.1_20(629 SOIL - 29/6/2020 SE208847.007	0407_TP186_0.3_20(629 SOIL - 29/6/2020 SE208847.008	0407_TP187_0.1_20(629 SOIL - 29/6/2020 SE208847.009	0407_TP187_0.3_20(629 SOIL - 29/6/2020 SE208847.010	0407_TP188_0.1_20(629 SOIL - 29/6/2020 SE208847.011
Mercury	mg/kg	0.05	<0.05	<0.05	**0.15**	**0.09**	**0.16**

PARAMETER	UOM	LOR	0407_TP188_0.5_20(629 SOIL - 29/6/2020 SE208847.012
Mercury	mg/kg	0.05	<0.05

Moisture Content [AN002] Tested: 21/7/2020

PARAMETER	UOM	LOR	0407_TP156_0.1_20(629 SOIL - 29/6/2020 SE208847.001	0407_TP156_0.2_20(629 SOIL - 29/6/2020 SE208847.002	0407_TP170_0.1_20(629 SOIL - 29/6/2020 SE208847.004	0407_TP170_0.3_20(629 SOIL - 29/6/2020 SE208847.005	0407_QC178_20062(SOIL - 29/6/2020 SE208847.006
% Moisture	%w/w	1	20.6	13.6	17.8	14.1	18.5

PARAMETER	UOM	LOR	0407_TP186_0.1_20(629 SOIL - 29/6/2020 SE208847.007	0407_TP186_0.3_20(629 SOIL - 29/6/2020 SE208847.008	0407_TP187_0.1_20(629 SOIL - 29/6/2020 SE208847.009	0407_TP187_0.3_20(629 SOIL - 29/6/2020 SE208847.010	0407_TP188_0.1_20(629 SOIL - 29/6/2020 SE208847.011
% Moisture	%w/w	1	19.8	10.5	18.3	20.5	26.3

PARAMETER	UOM	LOR	0407_TP188_0.5_20(629 SOIL - 29/6/2020 SE208847.012
% Moisture	%w/w	1	19.9

Fibre Identification in soil [AN602] Tested: 23/7/2020

PARAMETER	UOM	LOR	0407_TP156_0.1_20(629 SOIL - 29/6/2020 SE208847.001	0407_TP156_0.2_20(629 SOIL - 29/6/2020 SE208847.002	0407_TP170_0.1_20(629 SOIL - 29/6/2020 SE208847.004	0407_TP170_0.3_20(629 SOIL - 29/6/2020 SE208847.005	0407_TP186_0.1_20(629 SOIL - 29/6/2020 SE208847.007
Asbestos Detected	No unit	-	No	Yes	Yes	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	0407_TP186_0.3_20(629 SOIL - 29/6/2020 SE208847.008	0407_TP187_0.1_20(629 SOIL - 29/6/2020 SE208847.009	0407_TP187_0.3_20(629 SOIL - 29/6/2020 SE208847.010	0407_TP188_0.1_20(629 SOIL - 29/6/2020 SE208847.011	0407_TP188_0.5_20(629 SOIL - 29/6/2020 SE208847.012
Asbestos Detected	No unit	-	No	No	No	Yes	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 23/7/2020

PARAMETER	UOM	LOR	0407_TP156_0.1_20(629 SOIL - 29/6/2020 SE208847.001	0407_TP156_0.2_20(629 SOIL - 29/6/2020 SE208847.002	0407_TP170_0.1_20(629 SOIL - 29/6/2020 SE208847.004	0407_TP170_0.3_20(629 SOIL - 29/6/2020 SE208847.005	0407_TP186_0.1_20(629 SOIL - 29/6/2020 SE208847.007
Total Sample Weight*	g	1	**566**	**720**	**675**	**680**	**771**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	**0.0350**	**0.0260**	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	**0.005**	**0.004**	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	**0.005**	**0.004**	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP186_0.3_20(629 SOIL - 29/6/2020 SE208847.008	0407_TP187_0.1_20(629 SOIL - 29/6/2020 SE208847.009	0407_TP187_0.3_20(629 SOIL - 29/6/2020 SE208847.010	0407_TP188_0.1_20(629 SOIL - 29/6/2020 SE208847.011	0407_TP188_0.5_20(629 SOIL - 29/6/2020 SE208847.012
Total Sample Weight*	g	1	**681**	**592**	**740**	**599**	**823**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	**0.0231**	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	**0.004**	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	**0.004**	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

Fibre ID in bulk materials [AN602] Tested: 24/7/2020

PARAMETER	UOM	LOR	0407_TP156_0.2_ACM_200629 MATERIAL - 29/6/2020 SE208847.003
Asbestos Detected	No unit	-	Yes

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid , mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser . Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC /MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents .
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup /fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS /ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples, Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable ’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.
AN605	This technique gravimetrically determines the mass of Bonded Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight. Any fibrous asbestos (FA) found in this fraction will be added to the 2-7mm fraction and its mass recorded there.

AN605	This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free/respirable fibres which are only observed by standard trace analysis as per AN602.
AN605	Bonded asbestos containing material (Bonded ACM) comprises asbestos-containing-material which is sound in condition. Fibrous asbestos (FA) comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material. Asbestos fines (AF) includes free fibres, small fibre bundles and also small fragments of bonded ACM that passes through a 7mm sieve - which implies that the bonded ACM fragments have a substantial degree of damage which increases the potential for fibre release.
AN-605	Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009 and NEPM 1999 (2013) schedule B1 section 4..

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

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Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	11

LABORATORY DETAILS

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Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208847 R0**
Date Received	29 Jun 2020
Date Reported	27 Jul 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.

Sample #2: Asbestos found in approx 6x4x2mm fibrous material in >2mm portion.
Sample #4: Asbestos found in approx 3x2x2mm cement sheet fragments in >2mm portion.
Sample #11: Asbestos found in approx 4x2x2mm cement sheet fragment in >2mm portion.

Asbestos analysed by Approved Identifiers Ravee Sivasubramaniam and Yusuf Kuthpudin .

SIGNATORIES

[redacted]

Chemist | Senior Organic Chemist/Metals Chemis | Senior Chemist

[redacted]

Organic Section Head | Hygiene Team Leader | Asbestos Analyst

RESULTS

Fibre Identification in soil — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE208847.001	0407_TP156_0.1 _200629	Soil	566g Sand, Soil, Rocks	29 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208847.002	0407_TP156_0.2 _200629	Soil	720g Sand, Soil, Rocks	29 Jun 2020	Chrysotile Asbestos Found Organic Fibres Detected	<0.01
SE208847.004	0407_TP170_0.1 _200629	Soil	675g Sand, Soil, Rocks	29 Jun 2020	Chrysotile Asbestos Found Organic Fibres Detected	<0.01
SE208847.005	0407_TP170_0.3 _200629	Soil	680g Sand, Soil, Rocks	29 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208847.007	0407_TP186_0.1 _200629	Soil	771g Sand, Soil, Rocks, Plant matter	29 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208847.008	0407_TP186_0.3 _200629	Soil	681g Sand, Soil, Rocks, Plant matter	29 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208847.009	0407_TP187_0.1 _200629	Soil	592g Sand, Soil, Rocks	29 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208847.010	0407_TP187_0.3 _200629	Soil	740g Sand, Soil, Rocks	29 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208847.011	0407_TP188_0.1 _200629	Soil	599g Sand, Soil, Rocks	29 Jun 2020	Chrysotile Asbestos Found Synthetic Mineral Fibres Detected Organic Fibres Detected	<0.01
SE208847.012	0407_TP188_0.5 _200629	Soil	823g Sand	29 Jun 2020	No Asbestos Found	<0.01

RESULTS

Fibre ID in bulk materials — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE208847.003	0407_TP156_0.2 _ACM_200629	Other	110x60x4mm Cement Sheet Fragments x 3	29 Jun 2020	Chrysotile Asbestos Detected	

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 23/7/2020

PARAMETER	UOM	LOR	0407_TP156_0.1_20(629 SOIL - 29/6/2020 SE208847.001	0407_TP156_0.2_20(629 SOIL - 29/6/2020 SE208847.002	0407_TP170_0.1_20(629 SOIL - 29/6/2020 SE208847.004	0407_TP170_0.3_20(629 SOIL - 29/6/2020 SE208847.005	0407_TP186_0.1_20(629 SOIL - 29/6/2020 SE208847.007
Total Sample Weight*	g	1	566	720	675	680	771
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	0.0350	0.0260	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	0.005	0.004	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	0.005	0.004	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP186_0.3_20(629 SOIL - 29/6/2020 SE208847.008	0407_TP187_0.1_20(629 SOIL - 29/6/2020 SE208847.009	0407_TP187_0.3_20(629 SOIL - 29/6/2020 SE208847.010	0407_TP188_0.1_20(629 SOIL - 29/6/2020 SE208847.011	0407_TP188_0.5_20(629 SOIL - 29/6/2020 SE208847.012
Total Sample Weight*	g	1	681	592	740	599	823
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	0.0231	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	0.004	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	0.004	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

METHOD SUMMARY

METHOD	METHODOLOGY SUMMARY
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples , Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable ’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.
AN605	This technique gravimetrically determines the mass of Bonded Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight. Any fibrous asbestos (FA) found in this fraction will be added to the 2-7mm fraction and its mass recorded there.
AN605	This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free/respirable fibres which are only observed by standard trace analysis as per AN602.
AN605	Bonded asbestos containing material (Bonded ACM) comprises asbestos-containing-material which is sound in condition. Fibrous asbestos (FA) comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material. Asbestos fines (AF) includes free fibres, small fibre bundles and also small fragments of bonded ACM that passes through a 7mm sieve - which implies that the bonded ACM fragments have a substantial degree of damage which increases the potential for fibre release.
AN-605	Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009 and NEPM 1999 (2013) schedule B1 section 4..

FOOTNOTES

Amosite	-	Brown Asbestos	NA	-	Not Analysed
Chrysotile	-	White Asbestos	LNR	-	Listed, Not Required
Crocidolite	-	Blue Asbestos	*	-	NATA accreditation does not cover the performance of this service.
Amphiboles	-	Amosite and/or Crocidolite	**	-	Indicative data, theoretical holding time exceeded.

(In reference to soil samples only) This report does not comply with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment and Remediation and Management of Asbestos Contaminated sites in Western Australia - May 2009.

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.

Where reported: 'Asbestos Detected': Asbestos detected by polarised light microscopy, including dispersion staining.
Where reported: 'No Asbestos Found': No Asbestos Found by polarised light microscopy, including dispersion staining.
Where reported: 'UMF Detected': Mineral fibres of unknown type detected by polarised light microscopy, including dispersion staining. Confirmation by another independent analytical technique may be necessary.

Even after disintegration it can be very difficult, or impossible, to detect the presence of asbestos in some asbestos-containing bulk materials using polarised light microscopy. This is due to the low grade or small length or diameter of asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE208847 R0

CLIENT DETAILS

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Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	12

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SGS Reference	**SE208847 R0**
Date Received	29 Jun 2020
Date Reported	27 Jul 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Extraction Date	Moisture Content	11 items
	OC Pesticides in Soil	11 items
	OP Pesticides in Soil	11 items
	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	11 items
	PCBs in Soil	11 items
	Speciated Phenols in Soil	11 items
	TRH (Total Recoverable Hydrocarbons) in Soil	11 items
	VOC's in Soil	11 items
	Volatile Petroleum Hydrocarbons in Soil	11 items
Matrix Spike	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	1 item

SAMPLE SUMMARY

HOLDING TIME SUMMARY

SE208847 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Fibre ID in bulk materials

Method: ME-(AU)-[ENV]AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP156_0.2_ACM_200	SE208847.003	LB205065	29 Jun 2020	29 Jun 2020	29 Jun 2021	24 Jul 2020	29 Jun 2021	24 Jul 2020

Fibre Identification in soil

Method: ME-(AU)-[ENV]AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP156_0.1_200629	SE208847.001	LB205003	29 Jun 2020	29 Jun 2020	29 Jun 2021	23 Jul 2020	29 Jun 2021	27 Jul 2020
0407_TP156_0.2_200629	SE208847.002	LB205003	29 Jun 2020	29 Jun 2020	29 Jun 2021	23 Jul 2020	29 Jun 2021	27 Jul 2020
0407_TP170_0.1_200629	SE208847.004	LB205003	29 Jun 2020	29 Jun 2020	29 Jun 2021	23 Jul 2020	29 Jun 2021	27 Jul 2020
0407_TP170_0.3_200629	SE208847.005	LB205003	29 Jun 2020	29 Jun 2020	29 Jun 2021	23 Jul 2020	29 Jun 2021	27 Jul 2020
0407_TP186_0.1_200629	SE208847.007	LB205003	29 Jun 2020	29 Jun 2020	29 Jun 2021	23 Jul 2020	29 Jun 2021	27 Jul 2020
0407_TP186_0.3_200629	SE208847.008	LB205003	29 Jun 2020	29 Jun 2020	29 Jun 2021	23 Jul 2020	29 Jun 2021	27 Jul 2020
0407_TP187_0.1_200629	SE208847.009	LB205003	29 Jun 2020	29 Jun 2020	29 Jun 2021	23 Jul 2020	29 Jun 2021	27 Jul 2020
0407_TP187_0.3_200629	SE208847.010	LB205003	29 Jun 2020	29 Jun 2020	29 Jun 2021	23 Jul 2020	29 Jun 2021	27 Jul 2020
0407_TP188_0.1_200629	SE208847.011	LB205003	29 Jun 2020	29 Jun 2020	29 Jun 2021	23 Jul 2020	29 Jun 2021	27 Jul 2020
0407_TP188_0.5_200629	SE208847.012	LB205003	29 Jun 2020	29 Jun 2020	29 Jun 2021	23 Jul 2020	29 Jun 2021	27 Jul 2020

Gravimetric Determination of Asbestos in Soil

Method: ME-(AU)-[ENV]AN605

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP156_0.1_200629	SE208847.001	LB205003	29 Jun 2020	29 Jun 2020	26 Dec 2020	23 Jul 2020	26 Dec 2020	27 Jul 2020
0407_TP156_0.2_200629	SE208847.002	LB205003	29 Jun 2020	29 Jun 2020	26 Dec 2020	23 Jul 2020	26 Dec 2020	27 Jul 2020
0407_TP170_0.1_200629	SE208847.004	LB205003	29 Jun 2020	29 Jun 2020	26 Dec 2020	23 Jul 2020	26 Dec 2020	27 Jul 2020
0407_TP170_0.3_200629	SE208847.005	LB205003	29 Jun 2020	29 Jun 2020	26 Dec 2020	23 Jul 2020	26 Dec 2020	27 Jul 2020
0407_TP186_0.1_200629	SE208847.007	LB205003	29 Jun 2020	29 Jun 2020	26 Dec 2020	23 Jul 2020	26 Dec 2020	27 Jul 2020
0407_TP186_0.3_200629	SE208847.008	LB205003	29 Jun 2020	29 Jun 2020	26 Dec 2020	23 Jul 2020	26 Dec 2020	27 Jul 2020
0407_TP187_0.1_200629	SE208847.009	LB205003	29 Jun 2020	29 Jun 2020	26 Dec 2020	23 Jul 2020	26 Dec 2020	27 Jul 2020
0407_TP187_0.3_200629	SE208847.010	LB205003	29 Jun 2020	29 Jun 2020	26 Dec 2020	23 Jul 2020	26 Dec 2020	27 Jul 2020
0407_TP188_0.1_200629	SE208847.011	LB205003	29 Jun 2020	29 Jun 2020	26 Dec 2020	23 Jul 2020	26 Dec 2020	27 Jul 2020
0407_TP188_0.5_200629	SE208847.012	LB205003	29 Jun 2020	29 Jun 2020	26 Dec 2020	23 Jul 2020	26 Dec 2020	27 Jul 2020

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP156_0.1_200629	SE208847.001	LB204775	29 Jun 2020	29 Jun 2020	27 Jul 2020	21 Jul 2020	27 Jul 2020	23 Jul 2020
0407_TP156_0.2_200629	SE208847.002	LB204775	29 Jun 2020	29 Jun 2020	27 Jul 2020	21 Jul 2020	27 Jul 2020	23 Jul 2020
0407_TP170_0.1_200629	SE208847.004	LB204775	29 Jun 2020	29 Jun 2020	27 Jul 2020	21 Jul 2020	27 Jul 2020	23 Jul 2020
0407_TP170_0.3_200629	SE208847.005	LB204775	29 Jun 2020	29 Jun 2020	27 Jul 2020	21 Jul 2020	27 Jul 2020	23 Jul 2020
0407_QC178_200629	SE208847.006	LB204775	29 Jun 2020	29 Jun 2020	27 Jul 2020	21 Jul 2020	27 Jul 2020	23 Jul 2020
0407_TP186_0.1_200629	SE208847.007	LB204775	29 Jun 2020	29 Jun 2020	27 Jul 2020	21 Jul 2020	27 Jul 2020	23 Jul 2020
0407_TP186_0.3_200629	SE208847.008	LB204775	29 Jun 2020	29 Jun 2020	27 Jul 2020	21 Jul 2020	27 Jul 2020	23 Jul 2020
0407_TP187_0.1_200629	SE208847.009	LB204775	29 Jun 2020	29 Jun 2020	27 Jul 2020	21 Jul 2020	27 Jul 2020	23 Jul 2020
0407_TP187_0.3_200629	SE208847.010	LB204775	29 Jun 2020	29 Jun 2020	27 Jul 2020	21 Jul 2020	27 Jul 2020	23 Jul 2020
0407_TP188_0.1_200629	SE208847.011	LB204775	29 Jun 2020	29 Jun 2020	27 Jul 2020	21 Jul 2020	27 Jul 2020	23 Jul 2020
0407_TP188_0.5_200629	SE208847.012	LB204775	29 Jun 2020	29 Jun 2020	27 Jul 2020	21 Jul 2020	27 Jul 2020	23 Jul 2020

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP156_0.1_200629	SE208847.001	LB204761	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	26 Jul 2020	23 Jul 2020
0407_TP156_0.2_200629	SE208847.002	LB204761	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	26 Jul 2020	23 Jul 2020
0407_TP170_0.1_200629	SE208847.004	LB204761	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	26 Jul 2020	23 Jul 2020
0407_TP170_0.3_200629	SE208847.005	LB204761	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	26 Jul 2020	23 Jul 2020
0407_QC178_200629	SE208847.006	LB204761	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	26 Jul 2020	23 Jul 2020
0407_TP186_0.1_200629	SE208847.007	LB204761	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	26 Jul 2020	23 Jul 2020
0407_TP186_0.3_200629	SE208847.008	LB204761	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	26 Jul 2020	23 Jul 2020
0407_TP187_0.1_200629	SE208847.009	LB204761	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	26 Jul 2020	23 Jul 2020
0407_TP187_0.3_200629	SE208847.010	LB204761	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	26 Jul 2020	23 Jul 2020
0407_TP188_0.1_200629	SE208847.011	LB204761	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	26 Jul 2020	23 Jul 2020
0407_TP188_0.5_200629	SE208847.012	LB204761	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	26 Jul 2020	23 Jul 2020

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP156_0.1_200629	SE208847.001	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP156_0.2_200629	SE208847.002	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP170_0.1_200629	SE208847.004	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020

HOLDING TIME SUMMARY

SE208847 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP170_0.3_200629	SE208847.005	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_QC178_200629	SE208847.006	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP186_0.1_200629	SE208847.007	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP186_0.3_200629	SE208847.008	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP187_0.1_200629	SE208847.009	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP187_0.3_200629	SE208847.010	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP188_0.1_200629	SE208847.011	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP188_0.5_200629	SE208847.012	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP156_0.1_200629	SE208847.001	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP156_0.2_200629	SE208847.002	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP170_0.1_200629	SE208847.004	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP170_0.3_200629	SE208847.005	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_QC178_200629	SE208847.006	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP186_0.1_200629	SE208847.007	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP186_0.3_200629	SE208847.008	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP187_0.1_200629	SE208847.009	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP187_0.3_200629	SE208847.010	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP188_0.1_200629	SE208847.011	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP188_0.5_200629	SE208847.012	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP156_0.1_200629	SE208847.001	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP156_0.2_200629	SE208847.002	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP170_0.1_200629	SE208847.004	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP170_0.3_200629	SE208847.005	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_QC178_200629	SE208847.006	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP186_0.1_200629	SE208847.007	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP186_0.3_200629	SE208847.008	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP187_0.1_200629	SE208847.009	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP187_0.3_200629	SE208847.010	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP188_0.1_200629	SE208847.011	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP188_0.5_200629	SE208847.012	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP156_0.1_200629	SE208847.001	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP156_0.2_200629	SE208847.002	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP170_0.1_200629	SE208847.004	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP170_0.3_200629	SE208847.005	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_QC178_200629	SE208847.006	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP186_0.1_200629	SE208847.007	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP186_0.3_200629	SE208847.008	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP187_0.1_200629	SE208847.009	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP187_0.3_200629	SE208847.010	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP188_0.1_200629	SE208847.011	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP188_0.5_200629	SE208847.012	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP156_0.1_200629	SE208847.001	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	23 Jul 2020
0407_TP156_0.2_200629	SE208847.002	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	23 Jul 2020
0407_TP170_0.1_200629	SE208847.004	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	23 Jul 2020
0407_TP170_0.3_200629	SE208847.005	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	23 Jul 2020
0407_QC178_200629	SE208847.006	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	23 Jul 2020
0407_TP186_0.1_200629	SE208847.007	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	23 Jul 2020
0407_TP186_0.3_200629	SE208847.008	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	23 Jul 2020
0407_TP187_0.1_200629	SE208847.009	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	23 Jul 2020
0407_TP187_0.3_200629	SE208847.010	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	23 Jul 2020

HOLDING TIME SUMMARY

SE208847 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP188_0.1_200629	SE208847.011	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	23 Jul 2020
0407_TP188_0.5_200629	SE208847.012	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	23 Jul 2020

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP156_0.1_200629	SE208847.001	LB204773	29 Jun 2020	29 Jun 2020	26 Dec 2020	21 Jul 2020	26 Dec 2020	23 Jul 2020
0407_TP156_0.2_200629	SE208847.002	LB204773	29 Jun 2020	29 Jun 2020	26 Dec 2020	21 Jul 2020	26 Dec 2020	23 Jul 2020
0407_TP170_0.1_200629	SE208847.004	LB204773	29 Jun 2020	29 Jun 2020	26 Dec 2020	21 Jul 2020	26 Dec 2020	23 Jul 2020
0407_TP170_0.3_200629	SE208847.005	LB204773	29 Jun 2020	29 Jun 2020	26 Dec 2020	21 Jul 2020	26 Dec 2020	23 Jul 2020
0407_QC178_200629	SE208847.006	LB204773	29 Jun 2020	29 Jun 2020	26 Dec 2020	21 Jul 2020	26 Dec 2020	23 Jul 2020
0407_TP186_0.1_200629	SE208847.007	LB204773	29 Jun 2020	29 Jun 2020	26 Dec 2020	21 Jul 2020	26 Dec 2020	23 Jul 2020
0407_TP186_0.3_200629	SE208847.008	LB204773	29 Jun 2020	29 Jun 2020	26 Dec 2020	21 Jul 2020	26 Dec 2020	23 Jul 2020
0407_TP187_0.1_200629	SE208847.009	LB204773	29 Jun 2020	29 Jun 2020	26 Dec 2020	21 Jul 2020	26 Dec 2020	23 Jul 2020
0407_TP187_0.3_200629	SE208847.010	LB204773	29 Jun 2020	29 Jun 2020	26 Dec 2020	21 Jul 2020	26 Dec 2020	23 Jul 2020
0407_TP188_0.1_200629	SE208847.011	LB204773	29 Jun 2020	29 Jun 2020	26 Dec 2020	21 Jul 2020	26 Dec 2020	23 Jul 2020
0407_TP188_0.5_200629	SE208847.012	LB204773	29 Jun 2020	29 Jun 2020	26 Dec 2020	21 Jul 2020	26 Dec 2020	23 Jul 2020

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP156_0.1_200629	SE208847.001	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP156_0.2_200629	SE208847.002	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP170_0.1_200629	SE208847.004	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP170_0.3_200629	SE208847.005	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_QC178_200629	SE208847.006	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP186_0.1_200629	SE208847.007	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP186_0.3_200629	SE208847.008	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP187_0.1_200629	SE208847.009	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP187_0.3_200629	SE208847.010	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP188_0.1_200629	SE208847.011	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP188_0.5_200629	SE208847.012	LB204759	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP156_0.1_200629	SE208847.001	LB204758	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP156_0.2_200629	SE208847.002	LB204758	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP170_0.1_200629	SE208847.004	LB204758	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP170_0.3_200629	SE208847.005	LB204758	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_QC178_200629	SE208847.006	LB204758	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP186_0.1_200629	SE208847.007	LB204758	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP186_0.3_200629	SE208847.008	LB204758	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP187_0.1_200629	SE208847.009	LB204758	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP187_0.3_200629	SE208847.010	LB204758	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP188_0.1_200629	SE208847.011	LB204758	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP188_0.5_200629	SE208847.012	LB204758	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP156_0.1_200629	SE208847.001	LB204758	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP156_0.2_200629	SE208847.002	LB204758	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP170_0.1_200629	SE208847.004	LB204758	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP170_0.3_200629	SE208847.005	LB204758	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_QC178_200629	SE208847.006	LB204758	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP186_0.1_200629	SE208847.007	LB204758	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP186_0.3_200629	SE208847.008	LB204758	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP187_0.1_200629	SE208847.009	LB204758	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP187_0.3_200629	SE208847.010	LB204758	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP188_0.1_200629	SE208847.011	LB204758	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020
0407_TP188_0.5_200629	SE208847.012	LB204758	29 Jun 2020	29 Jun 2020	13 Jul 2020	21 Jul 2020†	30 Aug 2020	24 Jul 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP156_0.1_200629	SE208847.001	%	60 - 130%	104
	0407_TP156_0.2_200629	SE208847.002	%	60 - 130%	103
	0407_TP170_0.1_200629	SE208847.004	%	60 - 130%	107
	0407_TP170_0.3_200629	SE208847.005	%	60 - 130%	100
	0407_QC178_200629	SE208847.006	%	60 - 130%	103
	0407_TP186_0.1_200629	SE208847.007	%	60 - 130%	103
	0407_TP186_0.3_200629	SE208847.008	%	60 - 130%	100
	0407_TP187_0.1_200629	SE208847.009	%	60 - 130%	107
	0407_TP187_0.3_200629	SE208847.010	%	60 - 130%	99
	0407_TP188_0.1_200629	SE208847.011	%	60 - 130%	106
	0407_TP188_0.5_200629	SE208847.012	%	60 - 130%	99

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP156_0.1_200629	SE208847.001	%	60 - 130%	83
	0407_TP156_0.2_200629	SE208847.002	%	60 - 130%	86
	0407_TP170_0.1_200629	SE208847.004	%	60 - 130%	87
	0407_TP170_0.3_200629	SE208847.005	%	60 - 130%	85
	0407_QC178_200629	SE208847.006	%	60 - 130%	84
	0407_TP186_0.1_200629	SE208847.007	%	60 - 130%	88
	0407_TP186_0.3_200629	SE208847.008	%	60 - 130%	85
	0407_TP187_0.1_200629	SE208847.009	%	60 - 130%	89
	0407_TP187_0.3_200629	SE208847.010	%	60 - 130%	85
	0407_TP188_0.1_200629	SE208847.011	%	60 - 130%	83
	0407_TP188_0.5_200629	SE208847.012	%	60 - 130%	87
d14-p-terphenyl (Surrogate)	0407_TP156_0.1_200629	SE208847.001	%	60 - 130%	79
	0407_TP156_0.2_200629	SE208847.002	%	60 - 130%	85
	0407_TP170_0.1_200629	SE208847.004	%	60 - 130%	85
	0407_TP170_0.3_200629	SE208847.005	%	60 - 130%	80
	0407_QC178_200629	SE208847.006	%	60 - 130%	82
	0407_TP186_0.1_200629	SE208847.007	%	60 - 130%	87
	0407_TP186_0.3_200629	SE208847.008	%	60 - 130%	86
	0407_TP187_0.1_200629	SE208847.009	%	60 - 130%	86
	0407_TP187_0.3_200629	SE208847.010	%	60 - 130%	86
	0407_TP188_0.1_200629	SE208847.011	%	60 - 130%	84
	0407_TP188_0.5_200629	SE208847.012	%	60 - 130%	84

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP156_0.1_200629	SE208847.001	%	70 - 130%	83
	0407_TP156_0.2_200629	SE208847.002	%	70 - 130%	86
	0407_TP170_0.1_200629	SE208847.004	%	70 - 130%	87
	0407_TP170_0.3_200629	SE208847.005	%	70 - 130%	85
	0407_QC178_200629	SE208847.006	%	70 - 130%	84
	0407_TP186_0.1_200629	SE208847.007	%	70 - 130%	88
	0407_TP186_0.3_200629	SE208847.008	%	70 - 130%	85
	0407_TP187_0.1_200629	SE208847.009	%	70 - 130%	89
	0407_TP187_0.3_200629	SE208847.010	%	70 - 130%	85
	0407_TP188_0.1_200629	SE208847.011	%	70 - 130%	83
	0407_TP188_0.5_200629	SE208847.012	%	70 - 130%	87
d14-p-terphenyl (Surrogate)	0407_TP156_0.1_200629	SE208847.001	%	70 - 130%	79
	0407_TP156_0.2_200629	SE208847.002	%	70 - 130%	85
	0407_TP170_0.1_200629	SE208847.004	%	70 - 130%	85
	0407_TP170_0.3_200629	SE208847.005	%	70 - 130%	80
	0407_QC178_200629	SE208847.006	%	70 - 130%	82
	0407_TP186_0.1_200629	SE208847.007	%	70 - 130%	87
	0407_TP186_0.3_200629	SE208847.008	%	70 - 130%	86
	0407_TP187_0.1_200629	SE208847.009	%	70 - 130%	86
	0407_TP187_0.3_200629	SE208847.010	%	70 - 130%	86
	0407_TP188_0.1_200629	SE208847.011	%	70 - 130%	84
	0407_TP188_0.5_200629	SE208847.012	%	70 - 130%	84
d5-nitrobenzene (Surrogate)	0407_TP156_0.1_200629	SE208847.001	%	70 - 130%	79

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d5-nitrobenzene (Surrogate)	0407_TP156_0.2_200629	SE208847.002	%	70 - 130%	81
	0407_TP170_0.1_200629	SE208847.004	%	70 - 130%	82
	0407_TP170_0.3_200629	SE208847.005	%	70 - 130%	81
	0407_QC178_200629	SE208847.006	%	70 - 130%	79
	0407_TP186_0.1_200629	SE208847.007	%	70 - 130%	83
	0407_TP186_0.3_200629	SE208847.008	%	70 - 130%	83
	0407_TP187_0.1_200629	SE208847.009	%	70 - 130%	86
	0407_TP187_0.3_200629	SE208847.010	%	70 - 130%	89
	0407_TP188_0.1_200629	SE208847.011	%	70 - 130%	84
	0407_TP188_0.5_200629	SE208847.012	%	70 - 130%	83

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP156_0.1_200629	SE208847.001	%	60 - 130%	104
	0407_TP156_0.2_200629	SE208847.002	%	60 - 130%	103
	0407_TP170_0.1_200629	SE208847.004	%	60 - 130%	107
	0407_TP170_0.3_200629	SE208847.005	%	60 - 130%	100
	0407_QC178_200629	SE208847.006	%	60 - 130%	103
	0407_TP186_0.1_200629	SE208847.007	%	60 - 130%	103
	0407_TP186_0.3_200629	SE208847.008	%	60 - 130%	100
	0407_TP187_0.1_200629	SE208847.009	%	60 - 130%	107
	0407_TP187_0.3_200629	SE208847.010	%	60 - 130%	99
	0407_TP188_0.1_200629	SE208847.011	%	60 - 130%	106
	0407_TP188_0.5_200629	SE208847.012	%	60 - 130%	99

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	0407_TP156_0.1_200629	SE208847.001	%	70 - 130%	93
	0407_TP156_0.2_200629	SE208847.002	%	70 - 130%	90
	0407_TP170_0.1_200629	SE208847.004	%	70 - 130%	88
	0407_TP170_0.3_200629	SE208847.005	%	70 - 130%	83
	0407_QC178_200629	SE208847.006	%	70 - 130%	81
	0407_TP186_0.1_200629	SE208847.007	%	70 - 130%	86
	0407_TP186_0.3_200629	SE208847.008	%	70 - 130%	92
	0407_TP187_0.1_200629	SE208847.009	%	70 - 130%	87
	0407_TP187_0.3_200629	SE208847.010	%	70 - 130%	83
	0407_TP188_0.1_200629	SE208847.011	%	70 - 130%	80
	0407_TP188_0.5_200629	SE208847.012	%	70 - 130%	79
d5-phenol (Surrogate)	0407_TP156_0.1_200629	SE208847.001	%	50 - 130%	71
	0407_TP156_0.2_200629	SE208847.002	%	50 - 130%	74
	0407_TP170_0.1_200629	SE208847.004	%	50 - 130%	80
	0407_TP170_0.3_200629	SE208847.005	%	50 - 130%	77
	0407_QC178_200629	SE208847.006	%	50 - 130%	81
	0407_TP186_0.1_200629	SE208847.007	%	50 - 130%	81
	0407_TP186_0.3_200629	SE208847.008	%	50 - 130%	83
	0407_TP187_0.1_200629	SE208847.009	%	50 - 130%	82
	0407_TP187_0.3_200629	SE208847.010	%	50 - 130%	83
	0407_TP188_0.1_200629	SE208847.011	%	50 - 130%	76
	0407_TP188_0.5_200629	SE208847.012	%	50 - 130%	85

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP156_0.1_200629	SE208847.001	%	60 - 130%	75
	0407_TP156_0.2_200629	SE208847.002	%	60 - 130%	74
	0407_TP170_0.1_200629	SE208847.004	%	60 - 130%	80
	0407_TP170_0.3_200629	SE208847.005	%	60 - 130%	82
	0407_QC178_200629	SE208847.006	%	60 - 130%	81
	0407_TP186_0.1_200629	SE208847.007	%	60 - 130%	81
	0407_TP186_0.3_200629	SE208847.008	%	60 - 130%	79
	0407_TP187_0.1_200629	SE208847.009	%	60 - 130%	77
	0407_TP187_0.3_200629	SE208847.010	%	60 - 130%	74
	0407_TP188_0.1_200629	SE208847.011	%	60 - 130%	84

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP188_0.5_200629	SE208847.012	%	60 - 130%	82
d4-1,2-dichloroethane (Surrogate)	0407_TP156_0.1_200629	SE208847.001	%	60 - 130%	86
	0407_TP156_0.2_200629	SE208847.002	%	60 - 130%	85
	0407_TP170_0.1_200629	SE208847.004	%	60 - 130%	83
	0407_TP170_0.3_200629	SE208847.005	%	60 - 130%	81
	0407_QC178_200629	SE208847.006	%	60 - 130%	81
	0407_TP186_0.1_200629	SE208847.007	%	60 - 130%	82
	0407_TP186_0.3_200629	SE208847.008	%	60 - 130%	84
	0407_TP187_0.1_200629	SE208847.009	%	60 - 130%	89
	0407_TP187_0.3_200629	SE208847.010	%	60 - 130%	69
	0407_TP188_0.1_200629	SE208847.011	%	60 - 130%	82
	0407_TP188_0.5_200629	SE208847.012	%	60 - 130%	81
d8-toluene (Surrogate)	0407_TP156_0.1_200629	SE208847.001	%	60 - 130%	73
	0407_TP156_0.2_200629	SE208847.002	%	60 - 130%	77
	0407_TP170_0.1_200629	SE208847.004	%	60 - 130%	72
	0407_TP170_0.3_200629	SE208847.005	%	60 - 130%	72
	0407_QC178_200629	SE208847.006	%	60 - 130%	73
	0407_TP186_0.1_200629	SE208847.007	%	60 - 130%	74
	0407_TP186_0.3_200629	SE208847.008	%	60 - 130%	79
	0407_TP187_0.1_200629	SE208847.009	%	60 - 130%	79
	0407_TP187_0.3_200629	SE208847.010	%	60 - 130%	71
	0407_TP188_0.1_200629	SE208847.011	%	60 - 130%	74
	0407_TP188_0.5_200629	SE208847.012	%	60 - 130%	74

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP156_0.1_200629	SE208847.001	%	60 - 130%	75
	0407_TP156_0.2_200629	SE208847.002	%	60 - 130%	74
	0407_TP170_0.1_200629	SE208847.004	%	60 - 130%	80
	0407_TP170_0.3_200629	SE208847.005	%	60 - 130%	82
	0407_QC178_200629	SE208847.006	%	60 - 130%	81
	0407_TP186_0.1_200629	SE208847.007	%	60 - 130%	81
	0407_TP186_0.3_200629	SE208847.008	%	60 - 130%	79
	0407_TP187_0.1_200629	SE208847.009	%	60 - 130%	77
	0407_TP187_0.3_200629	SE208847.010	%	60 - 130%	74
	0407_TP188_0.1_200629	SE208847.011	%	60 - 130%	84
	0407_TP188_0.5_200629	SE208847.012	%	60 - 130%	82
d4-1,2-dichloroethane (Surrogate)	0407_TP156_0.1_200629	SE208847.001	%	60 - 130%	86
	0407_TP156_0.2_200629	SE208847.002	%	60 - 130%	85
	0407_TP170_0.1_200629	SE208847.004	%	60 - 130%	83
	0407_TP170_0.3_200629	SE208847.005	%	60 - 130%	81
	0407_QC178_200629	SE208847.006	%	60 - 130%	81
	0407_TP186_0.1_200629	SE208847.007	%	60 - 130%	82
	0407_TP186_0.3_200629	SE208847.008	%	60 - 130%	84
	0407_TP187_0.1_200629	SE208847.009	%	60 - 130%	89
	0407_TP187_0.3_200629	SE208847.010	%	60 - 130%	69
	0407_TP188_0.1_200629	SE208847.011	%	60 - 130%	82
	0407_TP188_0.5_200629	SE208847.012	%	60 - 130%	81
d8-toluene (Surrogate)	0407_TP156_0.1_200629	SE208847.001	%	60 - 130%	73
	0407_TP156_0.2_200629	SE208847.002	%	60 - 130%	77
	0407_TP170_0.1_200629	SE208847.004	%	60 - 130%	72
	0407_TP170_0.3_200629	SE208847.005	%	60 - 130%	72
	0407_QC178_200629	SE208847.006	%	60 - 130%	73
	0407_TP186_0.1_200629	SE208847.007	%	60 - 130%	74
	0407_TP186_0.3_200629	SE208847.008	%	60 - 130%	79
	0407_TP187_0.1_200629	SE208847.009	%	60 - 130%	79
	0407_TP187_0.3_200629	SE208847.010	%	60 - 130%	71
	0407_TP188_0.1_200629	SE208847.011	%	60 - 130%	74
	0407_TP188_0.5_200629	SE208847.012	%	60 - 130%	74

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result
LB204775.001	Mercury	mg/kg	0.05	<0.05

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB204759.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	93

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB204759.001		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	94
		d14-p-terphenyl (Surrogate)	%	-	93

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB204759.001	Naphthalene	mg/kg	0.1	<0.1
	2-methylnaphthalene	mg/kg	0.1	<0.1
	1-methylnaphthalene	mg/kg	0.1	<0.1
	Acenaphthylene	mg/kg	0.1	<0.1
	Acenaphthene	mg/kg	0.1	<0.1
	Fluorene	mg/kg	0.1	<0.1
	Phenanthrene	mg/kg	0.1	<0.1
	Anthracene	mg/kg	0.1	<0.1
	Fluoranthene	mg/kg	0.1	<0.1
	Pyrene	mg/kg	0.1	<0.1
	Benzo(a)anthracene	mg/kg	0.1	<0.1
	Chrysene	mg/kg	0.1	<0.1
	Benzo(a)pyrene	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB204759.001		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	89
		2-fluorobiphenyl (Surrogate)	%	-	94
		d14-p-terphenyl (Surrogate)	%	-	93

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB204759.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	93

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB204759.001		Phenol	mg/kg	0.5	<0.5
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5
		2-nitrophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
		Pentachlorophenol	mg/kg	0.5	<0.5
		2,4-dinitrophenol	mg/kg	2	<2
		4-chloro-3-methylphenol	mg/kg	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	100
		d5-phenol (Surrogate)	%	-	82

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB204773.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB204759.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number	Parameter	Units	LOR

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Sample Number		Parameter	Units	LOR	Result
LB204758.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB204758.001	Oxygenated Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	82
		d8-toluene (Surrogate)	%	-	78
		Bromofluorobenzene (Surrogate)	%	-	81
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB204758.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	82

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208847.005	LB204775.014	Mercury	mg/kg	0.05	0.07	0.07	99	1
SE208847.012	LB204775.022	Mercury	mg/kg	0.05	<0.05	<0.05	200	0

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208847.011	LB204761.011	% Moisture	%w/w	1	26.3	25.7	34	2
SE208918.003	LB204761.016	% Moisture	%w/w	1	10.5	10.2	40	3

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208847.011	LB204759.014		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.16	0.15	30	7
SE208918.003	LB204759.019		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208918.003	LB204759.019		p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.15	30	1

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208847.012	LB204759.022		Dichlorvos	mg/kg	0.5	<0.5	0	200	0
			Dimethoate	mg/kg	0.5	<0.5	0	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	0	200	0
			Fenitrothion	mg/kg	0.2	<0.2	0	200	0
			Malathion	mg/kg	0.2	<0.2	0	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	0	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	0	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	0	200	0
			Methidathion	mg/kg	0.5	<0.5	0	200	0
			Ethion	mg/kg	0.2	<0.2	0	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	0	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	0	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4288479847	30	1
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4090818314	30	2

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208847.012	LB204759.022		Naphthalene	mg/kg	0.1	<0.1	0	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	0	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	0	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	0	200	0
			Acenaphthene	mg/kg	0.1	<0.1	0	200	0
			Fluorene	mg/kg	0.1	<0.1	0	200	0
			Phenanthrene	mg/kg	0.1	<0.1	0	200	0
			Anthracene	mg/kg	0.1	<0.1	0	200	0
			Fluoranthene	mg/kg	0.1	<0.1	0	200	0
			Pyrene	mg/kg	0.1	<0.1	0	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	0	200	0
			Chrysene	mg/kg	0.1	<0.1	0	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	0	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	0	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	0	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	0	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	0	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	0	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	0	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	0.242	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	0.121	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	0	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4156724054	30	0
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4332792410	30	0
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4193827104	30	0

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208847.011	LB204759.014	Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PCBs in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208847.011	LB204759.014		Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	7
SE208918.003	LB204759.019		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	1

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208847.012	LB204759.020		Phenol	mg/kg	0.5	<0.5	0	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	0	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	0	200	0
			Total Cresol	mg/kg	1.5	<1.5	0	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	0	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	0	200	0
			4-nitrophenol	mg/kg	1	<1	0	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	0	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dinitrophenol	mg/kg	2	<2	0	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	0	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.9	3.79	30	4
			d5-phenol (Surrogate)	mg/kg	-	1.7	1.63	30	4

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208847.005	LB204773.014	Arsenic, As	mg/kg	1	4	3	58	15
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	5.6	4.8	40	15
		Copper, Cu	mg/kg	0.5	8.1	6.5	37	22
		Nickel, Ni	mg/kg	0.5	3.3	2.8	46	14
		Lead, Pb	mg/kg	1	30	30	33	1
		Zinc, Zn	mg/kg	2	32	29	37	8
SE208847.012	LB204773.022	Arsenic, As	mg/kg	1	<1	<1	200	0
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	<0.5	<0.5	200	0
		Copper, Cu	mg/kg	0.5	0.6	0.7	107	22
		Nickel, Ni	mg/kg	0.5	<0.5	<0.5	200	0
		Lead, Pb	mg/kg	1	1	1	106	17
		Zinc, Zn	mg/kg	2	100	120	32	14

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208847.011	LB204759.014	TRH C10-C14	mg/kg	20	<20	<20	200	0
		TRH C15-C28	mg/kg	45	<45	<45	200	0
		TRH C29-C36	mg/kg	45	<45	<45	200	0
		TRH C37-C40	mg/kg	100	<100	<100	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208847.011	LB204759.014		TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE208918.003	LB204759.019		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208847.011	LB204758.014	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208847.011	LB204758.014	Halogenated	1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.2	7.3	50	12
			d8-toluene (Surrogate)	mg/kg	-	7.4	7.1	50	4
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.4	7.4	50	13
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE208918.003	LB204758.019	Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.1	7.9	50	3
			d8-toluene (Surrogate)	mg/kg	-	7.2	7.7	50	7
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.1	7.9	50	2
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208847.011	LB204758.014		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.2	7.3	30	12
			d8-toluene (Surrogate)	mg/kg	-	7.4	7.1	30	4
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.4	7.4	30	13
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE208918.003	LB204758.019		TRH C6-C10	mg/kg	25	<25	<25	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208918.003	LB204758.019		TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.1	7.9	30	3
			d8-toluene (Surrogate)	mg/kg	-	7.2	7.7	30	7
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.1	7.9	30	2
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204775.002	Mercury	mg/kg	0.05	0.19	0.2	70 - 130	96

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204759.002		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	78
		Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	93
		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	93
		Dieldrin	mg/kg	0.2	<0.2	0.2	60 - 140	92
		Endrin	mg/kg	0.2	<0.2	0.2	60 - 140	88
		p,p'-DDT	mg/kg	0.1	0.1	0.2	60 - 140	71
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.15	40 - 130	98

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204759.002		Dichlorvos	mg/kg	0.5	2.1	2	60 - 140	103
		Diazinon (Dimpylate)	mg/kg	0.5	1.9	2	60 - 140	97
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.0	2	60 - 140	100
		Ethion	mg/kg	0.2	1.3	2	60 - 140	65
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	86
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	79

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204759.002		Naphthalene	mg/kg	0.1	4.5	4	60 - 140	112
		Acenaphthylene	mg/kg	0.1	4.6	4	60 - 140	116
		Acenaphthene	mg/kg	0.1	4.6	4	60 - 140	115
		Phenanthrene	mg/kg	0.1	4.7	4	60 - 140	118
		Anthracene	mg/kg	0.1	4.6	4	60 - 140	114
		Fluoranthene	mg/kg	0.1	4.4	4	60 - 140	111
		Pyrene	mg/kg	0.1	4.6	4	60 - 140	116
		Benzo(a)pyrene	mg/kg	0.1	4.8	4	60 - 140	119
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	82
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	86
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	79

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204759.002	Arochlor 1260	mg/kg	0.2	0.5	0.4	60 - 140	119

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204759.002		Phenol	mg/kg	0.5	0.7	1	70 - 130	71
		2,4-dichlorophenol	mg/kg	0.5	0.8	1	70 - 130	75
		2,4,6-trichlorophenol	mg/kg	0.5	0.9	1	70 - 130	86
		Pentachlorophenol	mg/kg	0.5	0.8	1	70 - 130	75
	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.6	5	40 - 130	92
		d5-phenol (Surrogate)	mg/kg	-	1.5	2	40 - 130	76

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204773.002	Arsenic, As	mg/kg	1	340	318.22	80 - 120	106
	Cadmium, Cd	mg/kg	0.3	5.4	5.41	80 - 120	100
	Chromium, Cr	mg/kg	0.5	39	38.31	80 - 120	102
	Copper, Cu	mg/kg	0.5	310	290	80 - 120	105
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	101
	Lead, Pb	mg/kg	1	95	89.9	80 - 120	105
	Zinc, Zn	mg/kg	2	280	273	80 - 120	103

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204759.002		TRH C10-C14	mg/kg	20	32	40	60 - 140	80
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	75
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	88
	TRH F Bands	TRH >C10-C16	mg/kg	25	32	40	60 - 140	80
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	78
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	100

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204758.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	3.9	5	60 - 140	78
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	4.3	5	60 - 140	86
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	4.1	5	60 - 140	81
	Halogenated	Chlorobenzene	mg/kg	0.1	5.0	5	60 - 140	101
	Monocyclic	Benzene	mg/kg	0.1	4.2	5	60 - 140	85
	Aromatic	Toluene	mg/kg	0.1	4.1	5	60 - 140	82
		Ethylbenzene	mg/kg	0.1	4.2	5	60 - 140	83
		m/p-xylene	mg/kg	0.2	8.3	10	60 - 140	83
		o-xylene	mg/kg	0.1	4.2	5	60 - 140	84
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.8	10	70 - 130	78
		d8-toluene (Surrogate)	mg/kg	-	7.4	10	70 - 130	74
		Bromofluorobenzene (Surrogate)	mg/kg	-	7.9	10	70 - 130	79
	Trihalomethan	Chloroform	mg/kg	0.1	4.1	5	60 - 140	82

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204758.002		TRH C6-C10	mg/kg	25	67	92.5	60 - 140	73
		TRH C6-C9	mg/kg	20	61	80	60 - 140	76
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.8	10	70 - 130	78
		Bromofluorobenzene (Surrogate)	mg/kg	-	7.9	10	70 - 130	79
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	42	62.5	60 - 140	68

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208788.001	LB204775.004	Mercury	mg/kg	0.05	0.20	<0.05	0.2	93

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208847.004	LB204759.021		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	-	-
			Alpha BHC	mg/kg	0.1	<0.1	-	-
			Lindane	mg/kg	0.1	<0.1	-	-
			Heptachlor	mg/kg	0.1	<0.1	0.2	97
			Aldrin	mg/kg	0.1	<0.1	0.2	111
			Beta BHC	mg/kg	0.1	<0.1	-	-
			Delta BHC	mg/kg	0.1	<0.1	0.2	112
			Heptachlor epoxide	mg/kg	0.1	<0.1	-	-
			o,p'-DDE	mg/kg	0.1	<0.1	-	-
			Alpha Endosulfan	mg/kg	0.2	<0.2	-	-
			Gamma Chlordane	mg/kg	0.1	<0.1	-	-
			Alpha Chlordane	mg/kg	0.1	<0.1	-	-
			trans-Nonachlor	mg/kg	0.1	<0.1	-	-
			p,p'-DDE	mg/kg	0.1	<0.1	-	-
			Dieldrin	mg/kg	0.2	<0.2	0.2	133
			Endrin	mg/kg	0.2	<0.2	0.2	105
			o,p'-DDD	mg/kg	0.1	<0.1	-	-
			o,p'-DDT	mg/kg	0.1	<0.1	-	-
			Beta Endosulfan	mg/kg	0.2	<0.2	-	-
			p,p'-DDD	mg/kg	0.1	<0.1	-	-
			p,p'-DDT	mg/kg	0.1	<0.1	0.2	80
			Endosulfan sulphate	mg/kg	0.1	<0.1	-	-
			Endrin Aldehyde	mg/kg	0.1	<0.1	-	-
			Methoxychlor	mg/kg	0.1	<0.1	-	-
			Endrin Ketone	mg/kg	0.1	<0.1	-	-
			Isodrin	mg/kg	0.1	<0.1	-	-
			Mirex	mg/kg	0.1	<0.1	-	-
			Total CLP OC Pesticides	mg/kg	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.16	-	98

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208847.002	LB204759.021		Dichlorvos	mg/kg	0.5	<0.5	2	99
			Dimethoate	mg/kg	0.5	<0.5	-	-
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	2	95
			Fenitrothion	mg/kg	0.2	<0.2	-	-
			Malathion	mg/kg	0.2	<0.2	-	-
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	2	107
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	-	-
			Bromophos Ethyl	mg/kg	0.2	<0.2	-	-
			Methidathion	mg/kg	0.5	<0.5	-	-
			Ethion	mg/kg	0.2	<0.2	2	65
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	-	-
			Total OP Pesticides*	mg/kg	1.7	<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	-	87
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	-	86

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number	Parameter	Units	LOR	Original	Spike	Recovery%
SE208847.002	LB204759.021	Naphthalene	mg/kg	0.1	<0.1	4	111
		2-methylnaphthalene	mg/kg	0.1	<0.1	-	-
		1-methylnaphthalene	mg/kg	0.1	<0.1	-	-
		Acenaphthylene	mg/kg	0.1	<0.1	4	113
		Acenaphthene	mg/kg	0.1	<0.1	4	115
		Fluorene	mg/kg	0.1	<0.1	-	-
		Phenanthrene	mg/kg	0.1	0.4	4	112

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208847.002	LB204759.021		Anthracene	mg/kg	0.1	<0.1	4	109
			Fluoranthene	mg/kg	0.1	0.7	4	104
			Pyrene	mg/kg	0.1	0.8	4	103
			Benzo(a)anthracene	mg/kg	0.1	0.3	-	-
			Chrysene	mg/kg	0.1	0.3	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1	0.3	-	-
			Benzo(k)fluoranthene	mg/kg	0.1	0.1	-	-
			Benzo(a)pyrene	mg/kg	0.1	0.3	4	108
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	0.4	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	0.5	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	0.4	-	-
			Total PAH (18)	mg/kg	0.8	3.6	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	-	79
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	-	87
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	-	86

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208847.004	LB204759.020		Arochlor 1016	mg/kg	0.2	<0.2	-	-
			Arochlor 1221	mg/kg	0.2	<0.2	-	-
			Arochlor 1232	mg/kg	0.2	<0.2	-	-
			Arochlor 1242	mg/kg	0.2	<0.2	-	-
			Arochlor 1248	mg/kg	0.2	<0.2	-	-
			Arochlor 1254	mg/kg	0.2	<0.2	-	-
			Arochlor 1260	mg/kg	0.2	<0.2	0.4	116
			Arochlor 1262	mg/kg	0.2	<0.2	-	-
			Arochlor 1268	mg/kg	0.2	<0.2	-	-
			Total PCBs (Arochlors)	mg/kg	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	-	103

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208847.001	LB204759.004		Phenol	mg/kg	0.5	0.8	<0.5	1	83
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	-	-
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	-	-
			Total Cresol	mg/kg	1.5	<1.5	<1.5	-	-
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	-	-
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	-	-
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	-	-
			2,4-dichlorophenol	mg/kg	0.5	0.7	<0.5	1	73
			2,4,6-trichlorophenol	mg/kg	0.5	0.9	<0.5	1	88
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	-	-
			4-nitrophenol	mg/kg	1	<1	<1	-	-
			2,4,5-trichlorophenol	mg/kg	0.5	0.8	<0.5	-	-
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	-	-
			Pentachlorophenol	mg/kg	0.5	0.7	<0.5	1	73
			2,4-dinitrophenol	mg/kg	2	<2	<2	-	-
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	-	-
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.6	4.7	-	92
			d5-phenol (Surrogate)	mg/kg	-	1.6	1.4	-	80

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208788.001	LB204773.004	Arsenic, As	mg/kg	1	55	7	50	97
		Cadmium, Cd	mg/kg	0.3	44	<0.3	50	87
		Chromium, Cr	mg/kg	0.5	100	58	50	88
		Copper, Cu	mg/kg	0.5	60	20	50	80
		Nickel, Ni	mg/kg	0.5	87	51	50	71
		Lead, Pb	mg/kg	1	56	8	50	96

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208788.001	LB204773.004	Zinc, Zn	mg/kg	2	270	42	50	454 ⓓ

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208847.002	LB204759.020		TRH C10-C14	mg/kg	20	<20	40	80
			TRH C15-C28	mg/kg	45	<45	40	90
			TRH C29-C36	mg/kg	45	<45	40	95
			TRH C37-C40	mg/kg	100	<100	-	-
			TRH C10-C36 Total	mg/kg	110	<110	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	40	80
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	<90	40	100
			TRH >C34-C40 (F4)	mg/kg	120	<120	-	-

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208847.001	LB204758.004	Monocyclic Aromatic	Benzene	mg/kg	0.1	4.2	<0.1	5	84
			Toluene	mg/kg	0.1	4.3	<0.1	5	86
			Ethylbenzene	mg/kg	0.1	4.5	<0.1	5	90
			m/p-xylene	mg/kg	0.2	9.0	<0.2	10	90
			o-xylene	mg/kg	0.1	4.7	<0.1	5	93
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.5	8.6	10	85
			d8-toluene (Surrogate)	mg/kg	-	7.2	7.3	10	72
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.2	7.5	10	72
		Totals	Total Xylenes	mg/kg	0.3	14	<0.3	-	-
			Total BTEX	mg/kg	0.6	27	<0.6	-	-
SE208847.002	LB204758.020	Fumigants	2,2-dichloropropane	mg/kg	0.1		<0.1	-	-
			1,2-dichloropropane	mg/kg	0.1		<0.1	-	-
			cis-1,3-dichloropropene	mg/kg	0.1		<0.1	-	-
			trans-1,3-dichloropropene	mg/kg	0.1		<0.1	-	-
			1,2-dibromoethane (EDB)	mg/kg	0.1		<0.1	-	-
		Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1		<1	-	-
			Chloromethane	mg/kg	1		<1	-	-
			Vinyl chloride (Chloroethene)	mg/kg	0.1		<0.1	-	-
			Bromomethane	mg/kg	1		<1	-	-
			Chloroethane	mg/kg	1		<1	-	-
			Trichlorofluoromethane	mg/kg	1		<1	-	-
			Iodomethane	mg/kg	5		<5	-	-
			1,1-dichloroethene	mg/kg	0.1		<0.1	5	85
			Dichloromethane (Methylene chloride)	mg/kg	0.5		<0.5	-	-
			Allyl chloride	mg/kg	0.1		<0.1	-	-
			trans-1,2-dichloroethene	mg/kg	0.1		<0.1	-	-
			1,1-dichloroethane	mg/kg	0.1		<0.1	-	-
			cis-1,2-dichloroethene	mg/kg	0.1		<0.1	-	-
			Bromochloromethane	mg/kg	0.1		<0.1	-	-
			1,2-dichloroethane	mg/kg	0.1		<0.1	5	92
			1,1,1-trichloroethane	mg/kg	0.1		<0.1	-	-
			1,1-dichloropropene	mg/kg	0.1		<0.1	-	-
			Carbon tetrachloride	mg/kg	0.1		<0.1	-	-
			Dibromomethane	mg/kg	0.1		<0.1	-	-
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1		<0.1	5	83
			1,1,2-trichloroethane	mg/kg	0.1		<0.1	-	-
			1,3-dichloropropane	mg/kg	0.1		<0.1	-	-
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1		<0.1	-	-
			1,1,1,2-tetrachloroethane	mg/kg	0.1		<0.1	-	-
			cis-1,4-dichloro-2-butene	mg/kg	1		<1	-	-
			1,1,2,2-tetrachloroethane	mg/kg	0.1		<0.1	-	-
			1,2,3-trichloropropane	mg/kg	0.1		<0.1	-	-
			trans-1,4-dichloro-2-butene	mg/kg	1		<1	-	-
			1,2-dibromo-3-chloropropane	mg/kg	0.1		<0.1	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208847.002	LB204758.020	Halogenated	Hexachlorobutadiene	mg/kg	0.1		<0.1	-	-
		Halogenated Aromatics	Chlorobenzene	mg/kg	0.1		<0.1	5	100
			Bromobenzene	mg/kg	0.1		<0.1	-	-
			2-chlorotoluene	mg/kg	0.1		<0.1	-	-
			4-chlorotoluene	mg/kg	0.1		<0.1	-	-
			1,3-dichlorobenzene	mg/kg	0.1		<0.1	-	-
			1,4-dichlorobenzene	mg/kg	0.1		<0.1	-	-
			1,2-dichlorobenzene	mg/kg	0.1		<0.1	-	-
			1,2,4-trichlorobenzene	mg/kg	0.1		<0.1	-	-
			1,2,3-trichlorobenzene	mg/kg	0.1		<0.1	-	-
		Monocyclic Aromatic	Benzene	mg/kg	0.1		<0.1	5	93
			Toluene	mg/kg	0.1		<0.1	5	86
			Ethylbenzene	mg/kg	0.1		<0.1	5	84
			m/p-xylene	mg/kg	0.2		<0.2	10	86
			o-xylene	mg/kg	0.1		<0.1	5	85
			Styrene (Vinyl benzene)	mg/kg	0.1		<0.1	-	-
			Isopropylbenzene (Cumene)	mg/kg	0.1		<0.1	-	-
			n-propylbenzene	mg/kg	0.1		<0.1	-	-
			1,3,5-trimethylbenzene	mg/kg	0.1		<0.1	-	-
			tert-butylbenzene	mg/kg	0.1		<0.1	-	-
			1,2,4-trimethylbenzene	mg/kg	0.1		<0.1	-	-
			sec-butylbenzene	mg/kg	0.1		<0.1	-	-
			p-isopropyltoluene	mg/kg	0.1		<0.1	-	-
			n-butylbenzene	mg/kg	0.1		<0.1	-	-
		Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1		<0.1	-	-
			2-nitropropane	mg/kg	10		<10	-	-
		Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10		<10	-	-
			MtBE (Methyl-tert-butyl ether)	mg/kg	0.1		<0.1	-	-
			Vinyl acetate	mg/kg	10		<10	-	-
			MEK (2-butanone)	mg/kg	10		<10	-	-
			MIBK (4-methyl-2-pentanone)	mg/kg	1		<1	-	-
			2-hexanone (MBK)	mg/kg	5		<5	-	-
		Polycyclic	Naphthalene	mg/kg	0.1		<0.1	-	-
		Sulphonated	Carbon disulfide	mg/kg	0.5		<0.5	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-		8.5	10	83
			d8-toluene (Surrogate)	mg/kg	-		7.7	10	70
			Bromofluorobenzene (Surrogate)	mg/kg	-		7.4	10	78
		Totals	Total Xylenes	mg/kg	0.3		<0.3	-	-
			Total BTEX	mg/kg	0.6		<0.6	-	-
			Total VOC*	mg/kg	24		<24	-	-
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3		<3.0	-	-
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8		<1.8	-	-
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8		<1.8	-	-
		Trihalomethanes	Chloroform	mg/kg	0.1		<0.1	5	86
			Bromodichloromethane	mg/kg	0.1		<0.1	-	-
			Chlorodibromomethane	mg/kg	0.1		<0.1	-	-
			Bromoform	mg/kg	0.1		<0.1	-	-

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208847.001	LB204758.004		TRH C6-C10	mg/kg	25	65	<25	92.5	70
			TRH C6-C9	mg/kg	20	59	<20	80	73
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.5	8.6	10	85
			d8-toluene (Surrogate)	mg/kg	-	7.2	7.3	10	72
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.2	7.5	-	72
		VPH F Bands	Benzene (F0)	mg/kg	0.1	4.2	<0.1	-	-
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	38	<25	62.5	61

MATRIX SPIKE DUPLICATES

SE208847 R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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source:Sydney.pdf page:3 SDS Ref: SE209052_COC

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

E-MAILED 22/7 @ 3.05

SLR

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☒ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ TOWNSVILLE: 514 Stuart Street, Townsville, QLD 4810
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0820
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ

CLIENT: Defence Housing Australia	**LABORATORY:** SGS Australia
PROJECT: Randwick Barracks	**LABORATORY ADDRESS:** Unit 16/33 Maddox St, Alexandria NSW 2015
PROJECT NUMBER: 610.30041	**SAMPLER** [redacted]
PROJECT MANAGER [redacted]	**SAMPLER CONTACT No:** [redacted]
PM CONTACT [redacted]	**Email Reports and Invoices to:** LQRSYD@slrconsulting.com [redacted]
COMMENTS OR ADDITIONAL DIRECTIONS	

Turnaround Time (TAT)

☐ Standard TAT

☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number of

SGS EHS Sydney COC

SE209052

	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: Asbestos (presence / absence)	PFAS (Basic / Short Suite)	TRH / BTEXN	PAHs	PCBs	OCPs / OPPs	VOCs / SVOCs	CH / VHH	Additional Information (Comment on any gross contamination or specific requirements)
1	0407_WD_GW02_200721	21-07-2020	Soil		x	x	x	x	x	x	x	x	
2	0407_WD_GW07_200721	21-07-2020	Soil		x	x	x	x	x	x	x	x	
3	0407_WD_GW06_200721	21-07-2020	Soil		x	x	x	x	x	x	x	x	
4	0407_WD_GW09_200721	21-07-2020	Soil		x	x	x	x	x	x	x	x	
5	0407_WD_GW03_200721	21-07-2020	Soil		x	x	x	x	x	x	x	x	
6	0407_WD_GW04_200721	21-07-2020	Soil		x	x	x	x	x	x	x	x	
7	0407_WD_GW01_200721	21-07-2020	Soil		x	x	x	x	x	x	x	x	
8	0407_WD_GW05_200721	21-07-2020	Soil		x	x	x	x	x	x	x	x	
9	0407_WD_GW11_200721	21-07-2020	Soil		x	x	x	x	x	x	x	x	
10	0407_WD_GW14_200721	21-07-2020	Water			x	x	x	x	x	x	x	
11	0407_WD_GW15_200721	21-07-2020	Water			x	x	x	x	x	x	x	
12	0407_WD_GW16_200721	21-07-2020	Water			x	x	x	x	x	x	x	

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	MR	Date / Time	21-07-2020	**Received by**	Sign [redacted]	Date / Time	21/07/20
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	12.40
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	

Temperature Received:

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
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- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0820
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐

SLR

CLIENT: Defence Housing Australia	**LABORATORY: SGS Australia**	**Turnaround Time (TAT)**	**COC Number**
PROJECT: Randwick Barracks	**LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015**		**of**
PROJECT NUMBER: 610.30041	**SAMPLER: MR**	☐ Standard TAT	
PROJECT MANAGER: [redacted]	**SAMPLER CONTACT No: [redacted]**	☐ Non Standard or Urgent TAT	
PM CONTACT No: [redacted]	**Email Reports and Invoices to: LQRSYD@slrconsulting.com ; [redacted]**	**Required TAT: Standard**	

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Asbestos (presence / absence)	PFAS (Basic / Short Suite)	TRH / BTEXN	PAHs	PCBs	OCPs / OPPs	VOCs / SVOCs	CH / VHH	Additional Information (Comment on any gross contamination or specific requirements)
13	0407_WD_GW17_200721	21-07-2020	Water			x	x	x	x	x	x	x	
14	0407_WD_GW18_200721	21-07-2020	Soil		x	x	x	x	x	x	x	x	
15	0407_WD_GW13a_200721	21-07-2020	Soil		x	x	x	x	x	x	x	x	
16	0407_WD_GW13b_200721	21-07-2020	Water			x	x	x	x	x	x	x	
17	0407_WD_GW12_200721	21-07-2020	Soil		x	x	x	x	x	x	x	x	
18	0407_WD1_200721	21-07-2020	Soil		x	x	x	x	x	x	x	x	

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 21-07-2020	**Received by**	Sign [redacted]	Date / Time 21/07/20	**Temperature Received:**
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time 12.40	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

SAMPLE RECEIPT ADVICE

SE209052

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	18

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Tue 21/7/2020
Report Due	Tue 28/7/2020
SGS Reference	**SE209052**

SUBMISSION DETAILS

This is to confirm that 18 samples were received on Tuesday 21/7/2020. Results are expected to be ready by COB Tuesday 28/7/2020. Please quote SGS reference SE209052 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	13 Soil, 5 Water
Date documentation received	22/7/2020 @3:05PM	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	1.3°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

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SAMPLE RECEIPT ADVICE

SE209052

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Moisture Content	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
001	0407_WD_GW02_200721	1	29	14	26	11	10	81	7
002	0407_WD_GW07_200721	1	29	14	26	11	10	81	7
003	0407_WD_GW06_200721	1	29	14	26	11	10	81	7
004	0407_WD_GW09_200721	1	29	14	26	11	10	81	7
005	0407_WD_GW03_200721	1	29	14	26	11	10	81	7
006	0407_WD_GW04_200721	1	29	14	26	11	10	81	7
007	0407_WD_GW01_200721	1	29	14	26	11	10	81	7
008	0407_WD_GW05_200721	1	29	14	26	11	10	81	7
009	0407_WD_GW11_200721	1	29	14	26	11	10	81	7
014	0407_WD_GW18_200721	1	29	14	26	11	10	81	7
015	0407_WD_GW13a_200721	1	29	14	26	11	10	81	7
017	0407_WD_GW12_200721	1	29	14	26	11	10	81	7
018	0407_WD1_200721	1	29	14	26	11	10	81	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE209052

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Fibre Identification in soil	Per- and Polyfluoroalkyl Substances (PFAS) in	TRH (Total Recoverable Hydrocarbons) in Water	VOCs in Water	Volatile Petroleum Hydrocarbons in Water
001	0407_WD_GW02_200721	1	55	-	-	-
002	0407_WD_GW07_200721	1	55	-	-	-
003	0407_WD_GW06_200721	1	55	-	-	-
004	0407_WD_GW09_200721	1	55	-	-	-
005	0407_WD_GW03_200721	1	55	-	-	-
006	0407_WD_GW04_200721	1	55	-	-	-
007	0407_WD_GW01_200721	1	55	-	-	-
008	0407_WD_GW05_200721	1	55	-	-	-
009	0407_WD_GW11_200721	1	55	-	-	-
010	0407_WD_GW14_200721	-	-	9	79	7
011	0407_WD_GW15_200721	-	-	9	79	7
012	0407_WD_GW16_200721	-	-	9	79	7
013	0407_WD_GW17_200721	-	-	9	79	7
014	0407_WD_GW18_200721	1	55	-	-	-
015	0407_WD_GW13a_200721	1	55	-	-	-
016	0407_WD_GW13b_200721	-	-	9	79	7
017	0407_WD_GW12_200721	1	55	-	-	-
018	0407_WD1_200721	1	55	-	-	-

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE209052

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Water	OP Pesticides in Water	PAH (Polynuclear Aromatic Hydrocarbons) in Water	PCBs in Water	Per- and Polyfluoroalkyl Substances (PFAS) in
010	0407_WD_GW14_200721	28	13	22	11	55
011	0407_WD_GW15_200721	28	13	22	11	55
012	0407_WD_GW16_200721	28	13	22	11	55
013	0407_WD_GW17_200721	28	13	22	11	55
016	0407_WD_GW13b_200721	28	13	22	11	55

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	18

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE209052 R0**
Date Received	21/7/2020
Date Reported	3/8/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

PAH - The Limit of Reporting (LOR) has been raised due to interferences from the sample matrix.
PFAS subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420. Report No: ME315821
MA-1523 Majority of surrogates are within acceptance criteria.

No respirable fibres detected in all soil samples using trace analysis technique.

A portion of the sample supplied has been sub-sampled for asbestos analysis in soil according to SGS In-house procedures due to large volume.
We therefore cannot guarantee that the sub-sample is representative of the entire sample supplied. SGS Environmental Services recommends supplying approximately 50-100g of sample in a separate container.

Asbestos analysed by Approved Identifier Yusuf Kuthpudin.

SIGNATORIES

[redacted]

Chemist | Organic Section Head | Asbestos Analyst

VOC's in Soil [AN433] Tested: 24/7/2020

PARAMETER	UOM	LOR	0407_WD_GW02_20721 SOIL - 21/7/2020 SE209052.001	0407_WD_GW07_20721 SOIL - 21/7/2020 SE209052.002	0407_WD_GW06_20721 SOIL - 21/7/2020 SE209052.003	0407_WD_GW09_20721 SOIL - 21/7/2020 SE209052.004	0407_WD_GW03_20721 SOIL - 21/7/2020 SE209052.005
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 24/7/2020 (continued)

PARAMETER	UOM	LOR	0407_WD_GW02_20721 SOIL - 21/7/2020 SE209052.001	0407_WD_GW07_20721 SOIL - 21/7/2020 SE209052.002	0407_WD_GW06_20721 SOIL - 21/7/2020 SE209052.003	0407_WD_GW09_20721 SOIL - 21/7/2020 SE209052.004	0407_WD_GW03_20721 SOIL - 21/7/2020 SE209052.005
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 24/7/2020 (continued)

PARAMETER	UOM	LOR	0407_WD_GW04_20 721 SOIL - 21/7/2020 SE209052.006	0407_WD_GW01_20 721 SOIL - 21/7/2020 SE209052.007	0407_WD_GW05_20 721 SOIL - 21/7/2020 SE209052.008	0407_WD_GW11_20 721 SOIL - 21/7/2020 SE209052.009	0407_WD_GW18_20 721 SOIL - 21/7/2020 SE209052.014
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 24/7/2020 (continued)

PARAMETER	UOM	LOR	0407_WD_GW04_20721 SOIL - 21/7/2020 SE209052.006	0407_WD_GW01_20721 SOIL - 21/7/2020 SE209052.007	0407_WD_GW05_20721 SOIL - 21/7/2020 SE209052.008	0407_WD_GW11_20721 SOIL - 21/7/2020 SE209052.009	0407_WD_GW18_20721 SOIL - 21/7/2020 SE209052.014
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 24/7/2020 (continued)

PARAMETER	UOM	LOR	0407_WD_GW13a_20721 SOIL - 21/7/2020 SE209052.015	0407_WD_GW12_20721 SOIL - 21/7/2020 SE209052.017	0407_WD1_200721 SOIL - 21/7/2020 SE209052.018
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1

VOC's in Soil [AN433] Tested: 24/7/2020 (continued)

PARAMETER	UOM	LOR	0407_WD_GW13a_20721 SOIL - 21/7/2020 SE209052.015	0407_WD_GW12_20721 SOIL - 21/7/2020 SE209052.017	0407_WD1_200721 SOIL - 21/7/2020 SE209052.018
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 24/7/2020

PARAMETER	UOM	LOR	0407_WD_GW02_200721 SOIL - 21/7/2020 SE209052.001	0407_WD_GW07_200721 SOIL - 21/7/2020 SE209052.002	0407_WD_GW06_200721 SOIL - 21/7/2020 SE209052.003	0407_WD_GW09_200721 SOIL - 21/7/2020 SE209052.004	0407_WD_GW03_200721 SOIL - 21/7/2020 SE209052.005
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_WD_GW04_200721 SOIL - 21/7/2020 SE209052.006	0407_WD_GW01_200721 SOIL - 21/7/2020 SE209052.007	0407_WD_GW05_200721 SOIL - 21/7/2020 SE209052.008	0407_WD_GW11_200721 SOIL - 21/7/2020 SE209052.009	0407_WD_GW18_200721 SOIL - 21/7/2020 SE209052.014
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_WD_GW13a_20 0721 SOIL - 21/7/2020 SE209052.015	0407_WD_GW12_200721 SOIL - 21/7/2020 SE209052.017	0407_WD1_200721 SOIL - 21/7/2020 SE209052.018
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 24/7/2020

PARAMETER	UOM	LOR	0407_WD_GW02_200721 SOIL - 21/7/2020 SE209052.001	0407_WD_GW07_200721 SOIL - 21/7/2020 SE209052.002	0407_WD_GW06_200721 SOIL - 21/7/2020 SE209052.003	0407_WD_GW09_200721 SOIL - 21/7/2020 SE209052.004	0407_WD_GW03_200721 SOIL - 21/7/2020 SE209052.005
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_WD_GW04_200721 SOIL - 21/7/2020 SE209052.006	0407_WD_GW01_200721 SOIL - 21/7/2020 SE209052.007	0407_WD_GW05_200721 SOIL - 21/7/2020 SE209052.008	0407_WD_GW11_200721 SOIL - 21/7/2020 SE209052.009	0407_WD_GW18_200721 SOIL - 21/7/2020 SE209052.014
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_WD_GW13a_20721 SOIL - 21/7/2020 SE209052.015	0407_WD_GW12_200721 SOIL - 21/7/2020 SE209052.017	0407_WD1_200721 SOIL - 21/7/2020 SE209052.018
TRH C10-C14	mg/kg	20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 24/7/2020

PARAMETER	UOM	LOR	0407_WD_GW02_20721 SOIL - 21/7/2020 SE209052.001	0407_WD_GW07_20721 SOIL - 21/7/2020 SE209052.002	0407_WD_GW06_20721 SOIL - 21/7/2020 SE209052.003	0407_WD_GW09_20721 SOIL - 21/7/2020 SE209052.004	0407_WD_GW03_20721 SOIL - 21/7/2020 SE209052.005
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PARAMETER	UOM	LOR	0407_WD_GW04_20721 SOIL - 21/7/2020 SE209052.006	0407_WD_GW01_20721 SOIL - 21/7/2020 SE209052.007	0407_WD_GW05_20721 SOIL - 21/7/2020 SE209052.008	0407_WD_GW11_20721 SOIL - 21/7/2020 SE209052.009	0407_WD_GW18_20721 SOIL - 21/7/2020 SE209052.014
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 24/7/2020 (continued)

PARAMETER	UOM	LOR	0407_WD_GW13a_20721 SOIL - 21/7/2020 SE209052.015	0407_WD_GW12_20721 SOIL - 21/7/2020 SE209052.017	0407_WD1_200721 SOIL - 21/7/2020 SE209052.018
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8

OC Pesticides in Soil [AN420] Tested: 24/7/2020

PARAMETER	UOM	LOR	0407_WD_GW02_20721 SOIL - 21/7/2020 SE209052.001	0407_WD_GW07_20721 SOIL - 21/7/2020 SE209052.002	0407_WD_GW06_20721 SOIL - 21/7/2020 SE209052.003	0407_WD_GW09_20721 SOIL - 21/7/2020 SE209052.004	0407_WD_GW03_20721 SOIL - 21/7/2020 SE209052.005
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 24/7/2020 (continued)

PARAMETER	UOM	LOR	0407_WD_GW04_20 721 SOIL - 21/7/2020 SE209052.006	0407_WD_GW01_20 721 SOIL - 21/7/2020 SE209052.007	0407_WD_GW05_20 721 SOIL - 21/7/2020 SE209052.008	0407_WD_GW11_20 721 SOIL - 21/7/2020 SE209052.009	0407_WD_GW18_20 721 SOIL - 21/7/2020 SE209052.014
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 24/7/2020 (continued)

PARAMETER	UOM	LOR	0407_WD_GW13a_20721 SOIL - 21/7/2020 SE209052.015	0407_WD_GW12_20721 SOIL - 21/7/2020 SE209052.017	0407_WD1_200721 SOIL - 21/7/2020 SE209052.018
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1

OP Pesticides in Soil [AN420] Tested: 24/7/2020

PARAMETER	UOM	LOR	0407_WD_GW02_20721 SOIL - 21/7/2020 SE209052.001	0407_WD_GW07_20721 SOIL - 21/7/2020 SE209052.002	0407_WD_GW06_20721 SOIL - 21/7/2020 SE209052.003	0407_WD_GW09_20721 SOIL - 21/7/2020 SE209052.004	0407_WD_GW03_20721 SOIL - 21/7/2020 SE209052.005
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_WD_GW04_20721 SOIL - 21/7/2020 SE209052.006	0407_WD_GW01_20721 SOIL - 21/7/2020 SE209052.007	0407_WD_GW05_20721 SOIL - 21/7/2020 SE209052.008	0407_WD_GW11_20721 SOIL - 21/7/2020 SE209052.009	0407_WD_GW18_20721 SOIL - 21/7/2020 SE209052.014
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_WD_GW13a_20721 SOIL - 21/7/2020 SE209052.015	0407_WD_GW12_20721 SOIL - 21/7/2020 SE209052.017	0407_WD1_200721 SOIL - 21/7/2020 SE209052.018
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7

PCBs in Soil [AN420] Tested: 24/7/2020

PARAMETER	UOM	LOR	0407_WD_GW02_200721 SOIL - 21/7/2020 SE209052.001	0407_WD_GW07_200721 SOIL - 21/7/2020 SE209052.002	0407_WD_GW06_200721 SOIL - 21/7/2020 SE209052.003	0407_WD_GW09_200721 SOIL - 21/7/2020 SE209052.004	0407_WD_GW03_200721 SOIL - 21/7/2020 SE209052.005
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_WD_GW04_200721 SOIL - 21/7/2020 SE209052.006	0407_WD_GW01_200721 SOIL - 21/7/2020 SE209052.007	0407_WD_GW05_200721 SOIL - 21/7/2020 SE209052.008	0407_WD_GW11_200721 SOIL - 21/7/2020 SE209052.009	0407_WD_GW18_200721 SOIL - 21/7/2020 SE209052.014
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_WD_GW13a_20721 SOIL - 21/7/2020 SE209052.015	0407_WD_GW12_200721 SOIL - 21/7/2020 SE209052.017	0407_WD1_200721 SOIL - 21/7/2020 SE209052.018
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1

Full 8270 SVOC in Soil [AN420] Tested: 24/7/2020

PARAMETER	UOM	LOR	0407_WD_GW02_20 721 SOIL - 21/7/2020 SE209052.001	0407_WD_GW07_20 721 SOIL - 21/7/2020 SE209052.002	0407_WD_GW06_20 721 SOIL - 21/7/2020 SE209052.003	0407_WD_GW09_20 721 SOIL - 21/7/2020 SE209052.004	0407_WD_GW03_20 721 SOIL - 21/7/2020 SE209052.005
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j&k)fluoranthene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ, <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
2-acetylaminofluorene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
7,12-dimethyl-benz(a)anthracene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3-methylcholanthrene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha-BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta-BHC	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Delta-BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Gamma-BHC (Lindane)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Alpha-endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Beta-endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha-chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Gamma-chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carbophenothion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chlorfenvinphos-cis	mg/kg	2	<2	<2	<2	<2	<2
Chlorfenvinphos-trans	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos-methyl	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Co-Ral (Coumaphos)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Demeton-S-methyl	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Full 8270 SVOC in Soil [AN420] Tested: 24/7/2020 (continued)

PARAMETER	UOM	LOR	0407_WD_GW02_20721 SOIL - 21/7/2020 SE209052.001	0407_WD_GW07_20721 SOIL - 21/7/2020 SE209052.002	0407_WD_GW06_20721 SOIL - 21/7/2020 SE209052.003	0407_WD_GW09_20721 SOIL - 21/7/2020 SE209052.004	0407_WD_GW03_20721 SOIL - 21/7/2020 SE209052.005
Disulfoton (Di-syston)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
EPN*	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Ethoprophos (ethoprop or prophos)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Famphur (Famophos)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenamiphos (Phenamiphos)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenchlorophos (Ronnel)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Fenthion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Malathion (Maldison)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Mevinphos-cis/trans	mg/kg	1	<1	<1	<1	<1	<1
o,o,o-triethyl phosphorothioate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Parathion ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion methyl	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phorate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pirimiphos-ethyl	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pirimiphos-methyl	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Profenofos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Prothiophos (Tokuthion)*	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Sulfotepp	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Tetrachlorvinphos (Stirophos)*	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PCB Congener C28	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C52	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C101	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C118	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C138	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C153	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C180	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,3-dichlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,4-dichlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Hexachlorobutadiene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Hexachlorocyclopentadiene	mg/kg	1	<1	<1	<1	<1	<1
Hexachloroethane	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Hexachloroproprene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pentachlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pentachloroethane	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2,3,5 and 1,2,4,5 -tetrachlorobenzene	mg/kg	1	<1	<1	<1	<1	<1
1,2,3,4-tetrachlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1/2-Chloronaphthalene	mg/kg	1	<1	<1	<1	<1	<1
1,2,4-trichlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bis(2-ethylhexyl)phthalate	mg/kg	5	<5	<5	<5	<5	<5
Bis(2-ethylhexyl)adipate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Butyl benzyl phthalate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Di-n-butyl phthalate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diethyl phthalate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethyl phthalate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dioctyl phthalate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Carbofuran	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Carbaryl	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Trifluralin	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
N-nitroso-di-n-butylamine (NDBA)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
N-nitroso-diethylamine (NDEA)	mg/kg	1	<1	<1	<1	<1	<1
N-nitroso-di-n-propylamine (NDPA)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Full 8270 SVOC in Soil [AN420] Tested: 24/7/2020 (continued)

PARAMETER	UOM	LOR	0407_WD_GW02_20721 SOIL - 21/7/2020 SE209052.001	0407_WD_GW07_20721 SOIL - 21/7/2020 SE209052.002	0407_WD_GW06_20721 SOIL - 21/7/2020 SE209052.003	0407_WD_GW09_20721 SOIL - 21/7/2020 SE209052.004	0407_WD_GW03_20721 SOIL - 21/7/2020 SE209052.005
N-nitroso-morpholine (NMOR)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
N-nitroso-piperidine (NPIP)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
N-nitroso-pyrrolidine (NPYR)	mg/kg	1	<1	<1	<1	<1	<1
4-amino biphenyl	mg/kg	1	<1	<1	<1	<1	<1
Acetophenone	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,3-dinitrobenzene	mg/kg	1	<1	<1	<1	<1	<1
2,4-dinitrotoluene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dinitrotoluene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Isophorone	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Nitrobenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
p-(dimethylamino) azobenzene	mg/kg	1	<1	<1	<1	<1	<1
Phenacetin	mg/kg	1	<1	<1	<1	<1	<1
Pentachloronitrobenzene (quintozene)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Aniline	mg/kg	3	<3	<3	<3	<3	<3
4-chloroaniline	mg/kg	1	<1	<1	<1	<1	<1
2-nitroaniline	mg/kg	1	<1	<1	<1	<1	<1
3-nitroaniline	mg/kg	1	<1	<1	<1	<1	<1
4-nitroaniline	mg/kg	1	<1	<1	<1	<1	<1
Diphenylamine	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
o-toluidine	mg/kg	1	<1	<1	<1	<1	<1
5-nitro-o-toluidine	mg/kg	1	<1	<1	<1	<1	<1
1-naphthylamine	mg/kg	1	<1	<1	<1	<1	<1
2-naphthylamine	mg/kg	1	<1	<1	<1	<1	<1
Bis(2-chloroethoxy) methane	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bis(2-chloroethyl) ether	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bis(2-chloroisopropyl) ether	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-chlorophenyl phenyl ether	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-bromophenyl phenyl ether	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Methyl methanesulfonate	mg/kg	1	<1	<1	<1	<1	<1
Ethyl methanesulfonate	mg/kg	1	<1	<1	<1	<1	<1
Dibenzofuran	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benzyl alcohol	mg/kg	1	<1	<1	<1	<1	<1
Safrole	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Isosafrole Isomer 1	mg/kg	1	<1	<1	<1	<1	<1
Isosafrole Isomer 2	mg/kg	1	<1	<1	<1	<1	<1
1,4-naphthoquinone	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Thionazin	mg/kg	1	<1	<1	<1	<1	<1
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
Carcinogenic PAHs, BaP TEQ, <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ, <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
2,3,4,6-tetrachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Total (Alpha+Beta+SO4) Endosulfan*	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2

Full 8270 SVOC in Soil [AN420] Tested: 24/7/2020 (continued)

PARAMETER	UOM	LOR	0407_WD_GW04_20 721 SOIL - 21/7/2020 SE209052.006	0407_WD_GW01_20 721 SOIL - 21/7/2020 SE209052.007	0407_WD_GW05_20 721 SOIL - 21/7/2020 SE209052.008	0407_WD_GW11_20 721 SOIL - 21/7/2020 SE209052.009	0407_WD_GW18_20 721 SOIL - 21/7/2020 SE209052.014
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j&k)fluoranthene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ, <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
2-acetylaminofluorene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
7,12-dimethyl-benz(a)anthracene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3-methylcholanthrene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha-BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta-BHC	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Delta-BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Gamma-BHC (Lindane)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Alpha-endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Beta-endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha-chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Gamma-chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carbophenothion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chlorfenvinphos-cis	mg/kg	2	<2	<2	<2	<2	<2
Chlorfenvinphos-trans	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos-methyl	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Co-Ral (Coumaphos)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Demeton-S-methyl	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Full 8270 SVOC in Soil [AN420] Tested: 24/7/2020 (continued)

PARAMETER	UOM	LOR	0407_WD_GW04_20721 SOIL - 21/7/2020 SE209052.006	0407_WD_GW01_20721 SOIL - 21/7/2020 SE209052.007	0407_WD_GW05_20721 SOIL - 21/7/2020 SE209052.008	0407_WD_GW11_20721 SOIL - 21/7/2020 SE209052.009	0407_WD_GW18_20721 SOIL - 21/7/2020 SE209052.014
Disulfoton (Di-syston)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
EPN*	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Ethoprophos (ethoprop or prophos)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Famphur (Famophos)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenamiphos (Phenamiphos)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenchlorophos (Ronnel)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Fenthion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Malathion (Maldison)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Mevinphos-cis/trans	mg/kg	1	<1	<1	<1	<1	<1
o,o,o-triethyl phosphorothioate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Parathion ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion methyl	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phorate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pirimiphos-ethyl	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pirimiphos-methyl	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Profenofos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Prothiophos (Tokuthion)*	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Sulfotepp	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Tetrachlorvinphos (Stirophos)*	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PCB Congener C28	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C52	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C101	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C118	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C138	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C153	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C180	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,3-dichlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,4-dichlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Hexachlorobutadiene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Hexachlorocyclopentadiene	mg/kg	1	<1	<1	<1	<1	<1
Hexachloroethane	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Hexachloroproprene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pentachlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pentachloroethane	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2,3,5 and 1,2,4,5 -tetrachlorobenzene	mg/kg	1	<1	<1	<1	<1	<1
1,2,3,4-tetrachlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1/2-Chloronaphthalene	mg/kg	1	<1	<1	<1	<1	<1
1,2,4-trichlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bis(2-ethylhexyl)phthalate	mg/kg	5	<5	<5	<5	<5	<5
Bis(2-ethylhexyl)adipate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Butyl benzyl phthalate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Di-n-butyl phthalate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diethyl phthalate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethyl phthalate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dioctyl phthalate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Carbofuran	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Carbaryl	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Trifluralin	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
N-nitroso-di-n-butylamine (NDBA)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
N-nitroso-diethylamine (NDEA)	mg/kg	1	<1	<1	<1	<1	<1
N-nitroso-di-n-propylamine (NDPA)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Full 8270 SVOC in Soil [AN420] Tested: 24/7/2020 (continued)

PARAMETER	UOM	LOR	0407_WD_GW04_20721 SOIL - 21/7/2020 SE209052.006	0407_WD_GW01_20721 SOIL - 21/7/2020 SE209052.007	0407_WD_GW05_20721 SOIL - 21/7/2020 SE209052.008	0407_WD_GW11_20721 SOIL - 21/7/2020 SE209052.009	0407_WD_GW18_20721 SOIL - 21/7/2020 SE209052.014
N-nitroso-morpholine (NMOR)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
N-nitroso-piperidine (NPIP)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
N-nitroso-pyrrolidine (NPYR)	mg/kg	1	<1	<1	<1	<1	<1
4-amino biphenyl	mg/kg	1	<1	<1	<1	<1	<1
Acetophenone	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,3-dinitrobenzene	mg/kg	1	<1	<1	<1	<1	<1
2,4-dinitrotoluene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dinitrotoluene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Isophorone	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Nitrobenzene	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
p-(dimethylamino) azobenzene	mg/kg	1	<1	<1	<1	<1	<1
Phenacetin	mg/kg	1	<1	<1	<1	<1	<1
Pentachloronitrobenzene (quintozene)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Aniline	mg/kg	3	<3	<3	<3	<3	<3
4-chloroaniline	mg/kg	1	<1	<1	<1	<1	<1
2-nitroaniline	mg/kg	1	<1	<1	<1	<1	<1
3-nitroaniline	mg/kg	1	<1	<1	<1	<1	<1
4-nitroaniline	mg/kg	1	<1	<1	<1	<1	<1
Diphenylamine	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
o-toluidine	mg/kg	1	<1	<1	<1	<1	<1
5-nitro-o-toluidine	mg/kg	1	<1	<1	<1	<1	<1
1-naphthylamine	mg/kg	1	<1	<1	<1	<1	<1
2-naphthylamine	mg/kg	1	<1	<1	<1	<1	<1
Bis(2-chloroethoxy) methane	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bis(2-chloroethyl) ether	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bis(2-chloroisopropyl) ether	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-chlorophenyl phenyl ether	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-bromophenyl phenyl ether	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Methyl methanesulfonate	mg/kg	1	<1	<1	<1	<1	<1
Ethyl methanesulfonate	mg/kg	1	<1	<1	<1	<1	<1
Dibenzofuran	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Benzyl alcohol	mg/kg	1	<1	<1	<1	<1	<1
Safrole	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Isosafrole Isomer 1	mg/kg	1	<1	<1	<1	<1	<1
Isosafrole Isomer 2	mg/kg	1	<1	<1	<1	<1	<1
1,4-naphthoquinone	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Thionazin	mg/kg	1	<1	<1	<1	<1	<1
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
Carcinogenic PAHs, BaP TEQ, <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ, <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
2,3,4,6-tetrachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Total (Alpha+Beta+SO4) Endosulfan*	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2

Full 8270 SVOC in Soil [AN420] Tested: 24/7/2020 (continued)

PARAMETER	UOM	LOR	0407_WD_GW13a_20721 SOIL - 21/7/2020 SE209052.015	0407_WD_GW12_20721 SOIL - 21/7/2020 SE209052.017	0407_WD1_200721 SOIL - 21/7/2020 SE209052.018
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1
Benzo(b&j&k)fluoranthene	mg/kg	0.2	<0.2	<0.2	<0.2
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ, <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2
2-acetylaminofluorene	mg/kg	0.5	<0.5	<0.5	<0.5
7,12-dimethyl-benz(a)anthracene	mg/kg	0.5	<0.5	<0.5	<0.5
3-methylcholanthrene	mg/kg	0.5	<0.5	<0.5	<0.5
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1
Alpha-BHC	mg/kg	0.1	<0.1	<0.1	<0.1
Beta-BHC	mg/kg	0.5	<0.5	<0.5	<0.5
Delta-BHC	mg/kg	0.1	<0.1	<0.1	<0.1
Gamma-BHC (Lindane)	mg/kg	0.1	<0.1	<0.1	<0.1
p,p-DDD	mg/kg	0.1	<0.1	<0.1	<0.1
p,p-DDE	mg/kg	0.1	<0.1	<0.1	<0.1
p,p-DDT	mg/kg	0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2
Alpha-endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2
Beta-endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1
Alpha-chlordane	mg/kg	0.1	<0.1	<0.1	<0.1
Gamma-chlordane	mg/kg	0.1	<0.1	<0.1	<0.1
Endrin ketone	mg/kg	0.1	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2
Bromophos ethyl	mg/kg	0.2	<0.2	<0.2	<0.2
Carbophenothion	mg/kg	0.5	<0.5	<0.5	<0.5
Chlorfenvinphos-cis	mg/kg	2	<2	<2	<2
Chlorfenvinphos-trans	mg/kg	0.5	<0.5	<0.5	<0.5
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2
Chlorpyrifos-methyl	mg/kg	0.5	<0.5	<0.5	<0.5
Co-Ral (Coumaphos)	mg/kg	0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5
Demeton-S-methyl	mg/kg	0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5

Full 8270 SVOC in Soil [AN420] Tested: 24/7/2020 (continued)

PARAMETER	UOM	LOR	0407_WD_GW13a_20721 SOIL - 21/7/2020 SE209052.015	0407_WD_GW12_20721 SOIL - 21/7/2020 SE209052.017	0407_WD1_200721 SOIL - 21/7/2020 SE209052.018
Disulfoton (Di-syston)	mg/kg	0.5	<0.5	<0.5	<0.5
EPN*	mg/kg	0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2
Ethoprophos (ethoprop or prophos)	mg/kg	0.5	<0.5	<0.5	<0.5
Famphur (Famophos)	mg/kg	0.5	<0.5	<0.5	<0.5
Fenamiphos (Phenamiphos)	mg/kg	0.5	<0.5	<0.5	<0.5
Fenchlorophos (Ronnel)	mg/kg	0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2
Fenthion	mg/kg	0.5	<0.5	<0.5	<0.5
Malathion (Maldison)	mg/kg	0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5
Mevinphos-cis/trans	mg/kg	1	<1	<1	<1
o,o,o-triethyl phosphorothioate	mg/kg	0.5	<0.5	<0.5	<0.5
Parathion ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2
Parathion methyl	mg/kg	0.5	<0.5	<0.5	<0.5
Phorate	mg/kg	0.5	<0.5	<0.5	<0.5
Pirimiphos-ethyl	mg/kg	0.5	<0.5	<0.5	<0.5
Pirimiphos-methyl	mg/kg	0.5	<0.5	<0.5	<0.5
Profenofos	mg/kg	0.5	<0.5	<0.5	<0.5
Prothiophos (Tokuthion)*	mg/kg	0.5	<0.5	<0.5	<0.5
Sulfotepp	mg/kg	0.5	<0.5	<0.5	<0.5
Tetrachlorvinphos (Stirophos)*	mg/kg	0.5	<0.5	<0.5	<0.5
PCB Congener C28	mg/kg	0.1	<0.1	<0.1	<0.1
PCB Congener C52	mg/kg	0.1	<0.1	<0.1	<0.1
PCB Congener C101	mg/kg	0.1	<0.1	<0.1	<0.1
PCB Congener C118	mg/kg	0.1	<0.1	<0.1	<0.1
PCB Congener C138	mg/kg	0.1	<0.1	<0.1	<0.1
PCB Congener C153	mg/kg	0.1	<0.1	<0.1	<0.1
PCB Congener C180	mg/kg	0.1	<0.1	<0.1	<0.1
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5
1,3-dichlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5
1,4-dichlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5
Hexachlorobutadiene	mg/kg	0.5	<0.5	<0.5	<0.5
Hexachlorocyclopentadiene	mg/kg	1	<1	<1	<1
Hexachloroethane	mg/kg	0.5	<0.5	<0.5	<0.5
Hexachloroproprene	mg/kg	0.5	<0.5	<0.5	<0.5
Pentachlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5
Pentachloroethane	mg/kg	0.5	<0.5	<0.5	<0.5
1,2,3,5 and 1,2,4,5 -tetrachlorobenzene	mg/kg	1	<1	<1	<1
1,2,3,4-tetrachlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5
1/2-Chloronaphthalene	mg/kg	1	<1	<1	<1
1,2,4-trichlorobenzene	mg/kg	0.5	<0.5	<0.5	<0.5
Bis(2-ethylhexyl)phthalate	mg/kg	5	<5	<5	<5
Bis(2-ethylhexyl)adipate	mg/kg	0.5	<0.5	<0.5	<0.5
Butyl benzyl phthalate	mg/kg	0.5	<0.5	<0.5	<0.5
Di-n-butyl phthalate	mg/kg	0.5	<0.5	<0.5	<0.5
Diethyl phthalate	mg/kg	0.5	<0.5	<0.5	<0.5
Dimethyl phthalate	mg/kg	0.5	<0.5	<0.5	<0.5
Dioctyl phthalate	mg/kg	0.5	<0.5	<0.5	<0.5
Carbofuran	mg/kg	0.5	<0.5	<0.5	<0.5
Carbaryl	mg/kg	0.5	<0.5	<0.5	<0.5
Trifluralin	mg/kg	0.5	<0.5	<0.5	<0.5
N-nitroso-di-n-butylamine (NDBA)	mg/kg	0.5	<0.5	<0.5	<0.5
N-nitroso-diethylamine (NDEA)	mg/kg	1	<1	<1	<1
N-nitroso-di-n-propylamine (NDPA)	mg/kg	0.5	<0.5	<0.5	<0.5

Full 8270 SVOC in Soil [AN420] Tested: 24/7/2020 (continued)

PARAMETER	UOM	LOR	0407_WD_GW13a_20721 SOIL - 21/7/2020 SE209052.015	0407_WD_GW12_20721 SOIL - 21/7/2020 SE209052.017	0407_WD1_200721 SOIL - 21/7/2020 SE209052.018
N-nitroso-morpholine (NMOR)	mg/kg	0.5	<0.5	<0.5	<0.5
N-nitroso-piperidine (NPIP)	mg/kg	0.5	<0.5	<0.5	<0.5
N-nitroso-pyrrolidine (NPYR)	mg/kg	1	<1	<1	<1
4-amino biphenyl	mg/kg	1	<1	<1	<1
Acetophenone	mg/kg	0.5	<0.5	<0.5	<0.5
1,3-dinitrobenzene	mg/kg	1	<1	<1	<1
2,4-dinitrotoluene	mg/kg	0.5	<0.5	<0.5	<0.5
2,6-dinitrotoluene	mg/kg	0.5	<0.5	<0.5	<0.5
Isophorone	mg/kg	0.5	<0.5	<0.5	<0.5
Nitrobenzene	mg/kg	0.5	<0.5	<0.5	<0.5
p-(dimethylamino) azobenzene	mg/kg	1	<1	<1	<1
Phenacetin	mg/kg	1	<1	<1	<1
Pentachloronitrobenzene (quintozene)	mg/kg	0.5	<0.5	<0.5	<0.5
Aniline	mg/kg	3	<3	<3	<3
4-chloroaniline	mg/kg	1	<1	<1	<1
2-nitroaniline	mg/kg	1	<1	<1	<1
3-nitroaniline	mg/kg	1	<1	<1	<1
4-nitroaniline	mg/kg	1	<1	<1	<1
Diphenylamine	mg/kg	0.5	<0.5	<0.5	<0.5
o-toluidine	mg/kg	1	<1	<1	<1
5-nitro-o-toluidine	mg/kg	1	<1	<1	<1
1-naphthylamine	mg/kg	1	<1	<1	<1
2-naphthylamine	mg/kg	1	<1	<1	<1
Bis(2-chloroethoxy) methane	mg/kg	0.5	<0.5	<0.5	<0.5
Bis(2-chloroethyl) ether	mg/kg	0.5	<0.5	<0.5	<0.5
Bis(2-chloroisopropyl) ether	mg/kg	0.5	<0.5	<0.5	<0.5
4-chlorophenyl phenyl ether	mg/kg	0.5	<0.5	<0.5	<0.5
4-bromophenyl phenyl ether	mg/kg	0.5	<0.5	<0.5	<0.5
Methyl methanesulfonate	mg/kg	1	<1	<1	<1
Ethyl methanesulfonate	mg/kg	1	<1	<1	<1
Dibenzofuran	mg/kg	0.5	<0.5	<0.5	<0.5
Benzyl alcohol	mg/kg	1	<1	<1	<1
Safrole	mg/kg	0.5	<0.5	<0.5	<0.5
Isosafrole Isomer 1	mg/kg	1	<1	<1	<1
Isosafrole Isomer 2	mg/kg	1	<1	<1	<1
1,4-naphthoquinone	mg/kg	0.5	<0.5	<0.5	<0.5
Thionazin	mg/kg	1	<1	<1	<1
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1
Carcinogenic PAHs, BaP TEQ, <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ, <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2
2,3,4,6-tetrachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
Total (Alpha+Beta+SO4) Endosulfan*	mg/kg	0.2	<0.2	<0.2	<0.2

Moisture Content [AN002] Tested: 24/7/2020

PARAMETER	UOM	LOR	0407_WD_GW02_200721 SOIL - 21/7/2020 SE209052.001	0407_WD_GW07_200721 SOIL - 21/7/2020 SE209052.002	0407_WD_GW06_200721 SOIL - 21/7/2020 SE209052.003	0407_WD_GW09_200721 SOIL - 21/7/2020 SE209052.004	0407_WD_GW03_200721 SOIL - 21/7/2020 SE209052.005
% Moisture	%w/w	1	8.1	5.4	5.3	3.8	10.0

PARAMETER	UOM	LOR	0407_WD_GW04_200721 SOIL - 21/7/2020 SE209052.006	0407_WD_GW01_200721 SOIL - 21/7/2020 SE209052.007	0407_WD_GW05_200721 SOIL - 21/7/2020 SE209052.008	0407_WD_GW11_200721 SOIL - 21/7/2020 SE209052.009	0407_WD_GW18_200721 SOIL - 21/7/2020 SE209052.014
% Moisture	%w/w	1	4.7	3.2	25.3	20.3	23.0

PARAMETER	UOM	LOR	0407_WD_GW13a_20200721 SOIL - 21/7/2020 SE209052.015	0407_WD_GW12_200721 SOIL - 21/7/2020 SE209052.017	0407_WD1_200721 SOIL - 21/7/2020 SE209052.018
% Moisture	%w/w	1	18.3	25.6	24.6

Fibre Identification in soil [AN602] Tested: 27/7/2020

PARAMETER	UOM	LOR	0407_WD_GW02_200721 SOIL - 21/7/2020 SE209052.001	0407_WD_GW07_200721 SOIL - 21/7/2020 SE209052.002	0407_WD_GW06_200721 SOIL - 21/7/2020 SE209052.003	0407_WD_GW09_200721 SOIL - 21/7/2020 SE209052.004	0407_WD_GW03_200721 SOIL - 21/7/2020 SE209052.005
Asbestos Detected	No unit	-	No	No	No	No	No

PARAMETER	UOM	LOR	0407_WD_GW04_200721 SOIL - 21/7/2020 SE209052.006	0407_WD_GW01_200721 SOIL - 21/7/2020 SE209052.007	0407_WD_GW05_200721 SOIL - 21/7/2020 SE209052.008	0407_WD_GW11_200721 SOIL - 21/7/2020 SE209052.009	0407_WD_GW18_200721 SOIL - 21/7/2020 SE209052.014
Asbestos Detected	No unit	-	No	No	No	No	No

PARAMETER	UOM	LOR	0407_WD_GW13a_20 0721 SOIL - 21/7/2020 SE209052.015	0407_WD_GW12_200721 SOIL - 21/7/2020 SE209052.017	0407_WD1_200721 SOIL - 21/7/2020 SE209052.018
Asbestos Detected	No unit	-	No	No	No

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level [MA-1523] Tested: 28/7/2020

PARAMETER	UOM	LOR	0407_WD_GW02_20721 SOIL - 21/7/2020 SE209052.001	0407_WD_GW07_20721 SOIL - 21/7/2020 SE209052.002	0407_WD_GW06_20721 SOIL - 21/7/2020 SE209052.003	0407_WD_GW09_20721 SOIL - 21/7/2020 SE209052.004	0407_WD_GW03_20721 SOIL - 21/7/2020 SE209052.005
Perfluorobutanoic acid (PFBA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorononanoic acid (PFNA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorodecanoic acid (PFDA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sum PFOS and PFHXS	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorononane sulfonate (PFNS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.001	<0.001	<0.001	<0.001	<0.001	<0.001

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level [MA-1523] Tested: 28/7/2020 (continued)

PARAMETER	UOM	LOR	0407_WD_GW04_20721 SOIL - 21/7/2020 SE209052.006	0407_WD_GW01_20721 SOIL - 21/7/2020 SE209052.007	0407_WD_GW05_20721 SOIL - 21/7/2020 SE209052.008	0407_WD_GW11_20721 SOIL - 21/7/2020 SE209052.009	0407_WD_GW18_20721 SOIL - 21/7/2020 SE209052.014
Perfluorobutanoic acid (PFBA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorononanoic acid (PFNA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorodecanoic acid (PFDA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0001	**0.0003**	<0.0001	<0.0001	<0.0001	**0.0001**
Sum PFOS and PFHXS	mg/kg	0.0001	**0.0003**	<0.0001	<0.0001	<0.0001	**0.0001**
Perfluorononane sulfonate (PFNS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.001	<0.001	<0.001	<0.001	<0.001	<0.001

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level [MA-1523] Tested: 28/7/2020 (continued)

PARAMETER	UOM	LOR	0407_WD_GW13a_20721 SOIL - 21/7/2020 SE209052.015	0407_WD_GW12_20721 SOIL - 21/7/2020 SE209052.017	0407_WD1_200721 SOIL - 21/7/2020 SE209052.018
Perfluorobutanoic acid (PFBA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0005	<0.0005	<0.0005	<0.0005
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluorononanoic acid (PFNA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluorodecanoic acid (PFDA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0001	<0.0001	<0.0001	**0.0002**
Sum PFOS and PFHXS	mg/kg	0.0001	<0.0001	<0.0001	**0.0002**
Perfluorononane sulfonate (PFNS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.001	<0.001	<0.001	<0.001
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.001	<0.001	<0.001	<0.001
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.001	<0.001	<0.001	<0.001
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.001	<0.001	<0.001	<0.001
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.001	<0.001	<0.001	<0.001
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.001	<0.001	<0.001	<0.001
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002	<0.002	<0.002	<0.002
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002	<0.002	<0.002	<0.002
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.001	<0.001	<0.001	<0.001
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.001	<0.001	<0.001	<0.001

VOCs in Water [AN433] Tested: 24/7/2020

PARAMETER	UOM	LOR	0407_WD_GW14_20721 WATER - 21/7/2020 SE209052.010	0407_WD_GW15_20721 WATER - 21/7/2020 SE209052.011	0407_WD_GW16_20721 WATER - 21/7/2020 SE209052.012	0407_WD_GW17_20721 WATER - 21/7/2020 SE209052.013	0407_WD_GW13b_20721 WATER - 21/7/2020 SE209052.016
Benzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Toluene	µg/L	0.5	<0.5	<0.5	**0.9**	**3.7**	**0.6**
Ethylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
m/p-xylene	µg/L	1	<1	<1	<1	<1	<1
o-xylene	µg/L	0.5	<0.5	**0.7**	<0.5	<0.5	<0.5
Total Xylenes	µg/L	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
Total BTEX	µg/L	3	<3	<3	<3	**4**	<3
Naphthalene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dichlorodifluoromethane (CFC-12)	µg/L	5	<5	<5	<5	<5	<5
Chloromethane	µg/L	5	<5	<5	<5	<5	<5
Vinyl chloride (Chloroethene)	µg/L	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Bromomethane	µg/L	10	<10	<10	<10	<10	<10
Chloroethane	µg/L	5	<5	<5	<5	<5	<5
Trichlorofluoromethane	µg/L	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	µg/L	10	<10	<10	<10	<10	<10
Iodomethane	µg/L	5	<5	<5	<5	<5	<5
1,1-dichloroethene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Acrylonitrile	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dichloromethane (Methylene chloride)	µg/L	5	<5	<5	<5	<5	<5
Allyl chloride	µg/L	2	<2	<2	<2	<2	<2
Carbon disulfide	µg/L	2	<2	<2	<2	<2	<2
trans-1,2-dichloroethene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MtBE (Methyl-tert-butyl ether)	µg/L	2	<2	<2	<2	<2	<2
1,1-dichloroethane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Vinyl acetate	µg/L	10	<10	<10	<10	<10	<10
MEK (2-butanone)	µg/L	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromochloromethane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroform (THM)	µg/L	0.5	**12**	**26**	**39**	**17**	**14**
2,2-dichloropropane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-dichloroethane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-trichloroethane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1-dichloropropene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Carbon tetrachloride	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-dichloropropane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitropropane	µg/L	100	<100	<100	<100	<100	<100
Bromodichloromethane (THM)	µg/L	0.5	<0.5	**5.4**	**7.1**	**3.5**	**1.0**
MIBK (4-methyl-2-pentanone)	µg/L	5	<5	<5	<5	<5	<5
cis-1,3-dichloropropene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,3-dichloropropene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-trichloroethane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,3-dichloropropane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane (THM)	µg/L	0.5	<0.5	**1.5**	**1.8**	**1.0**	<0.5
2-hexanone (MBK)	µg/L	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	**0.9**	<0.5	<0.5	<0.5	**0.8**
1,1,1,2-tetrachloroethane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chlorobenzene	µg/L	0.5	**6.1**	<0.5	<0.5	<0.5	**4.1**
Bromoform (THM)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
cis-1,4-dichloro-2-butene	µg/L	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2,2-tetrachloroethane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2,3-trichloropropane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,4-dichloro-2-butene	µg/L	1	<1	<1	<1	<1	<1

VOCs in Water [AN433] Tested: 24/7/2020 (continued)

PARAMETER	UOM	LOR	0407_WD_GW14_20721 WATER - 21/7/2020 SE209052.010	0407_WD_GW15_20721 WATER - 21/7/2020 SE209052.011	0407_WD_GW16_20721 WATER - 21/7/2020 SE209052.012	0407_WD_GW17_20721 WATER - 21/7/2020 SE209052.013	0407_WD_GW13b_20721 WATER - 21/7/2020 SE209052.016
Isopropylbenzene (Cumene)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromobenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
n-propylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-chlorotoluene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-chlorotoluene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,3,5-trimethylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
tert-butylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2,4-trimethylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
sec-butylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,3-dichlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,4-dichlorobenzene	µg/L	0.3	**0.9**	<0.3	<0.3	<0.3	**0.4**
p-isopropyltoluene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-dichlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
n-butylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-dibromo-3-chloropropane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2,4-trichlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Hexachlorobutadiene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2,3-trichlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Total VOC	µg/L	10	**22**	**35**	**51**	**26**	**22**

Volatile Petroleum Hydrocarbons in Water [AN433] Tested: 24/7/2020

PARAMETER	UOM	LOR	0407_WD_GW14_20721 WATER - 21/7/2020 SE209052.010	0407_WD_GW15_20721 WATER - 21/7/2020 SE209052.011	0407_WD_GW16_20721 WATER - 21/7/2020 SE209052.012	0407_WD_GW17_20721 WATER - 21/7/2020 SE209052.013	0407_WD_GW13b_20721 WATER - 21/7/2020 SE209052.016
TRH C6-C9	µg/L	40	<40	<40	<40	<40	<40
Benzene (F0)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TRH C6-C10	µg/L	50	<50	<50	<50	<50	<50
TRH C6-C10 minus BTEX (F1)	µg/L	50	<50	<50	<50	<50	<50

TRH (Total Recoverable Hydrocarbons) in Water [AN403] Tested: 24/7/2020

PARAMETER	UOM	LOR	0407_WD_GW14_20721 WATER - 21/7/2020 SE209052.010	0407_WD_GW15_20721 WATER - 21/7/2020 SE209052.011	0407_WD_GW16_20721 WATER - 21/7/2020 SE209052.012	0407_WD_GW17_20721 WATER - 21/7/2020 SE209052.013	0407_WD_GW13b_20721 WATER - 21/7/2020 SE209052.016
TRH C10-C14	µg/L	50	<50	600000	14000	6200	<50
TRH C15-C28	µg/L	200	<200	120000	3700	1700	<200
TRH C29-C36	µg/L	200	<200	4500	870	610	<200
TRH C37-C40	µg/L	200	<200	1300	280	410	<200
TRH >C10-C16	µg/L	60	<60	700000	16000	7200	<60
TRH >C10-C16 - Naphthalene (F2)	µg/L	60	<60	700000	16000	7200	<60
TRH >C16-C34 (F3)	µg/L	500	<500	12000	1700	1100	<500
TRH >C34-C40 (F4)	µg/L	500	<500	2000	520	640	<500
TRH C10-C40	µg/L	320	<320	720000	18000	9000	<320

PAH (Polynuclear Aromatic Hydrocarbons) in Water [AN420] Tested: 24/7/2020

PARAMETER	UOM	LOR	0407_WD_GW14_20721 WATER - 21/7/2020 SE209052.010	0407_WD_GW15_20721 WATER - 21/7/2020 SE209052.011	0407_WD_GW16_20721 WATER - 21/7/2020 SE209052.012	0407_WD_GW17_20721 WATER - 21/7/2020 SE209052.013	0407_WD_GW13b_20721 WATER - 21/7/2020 SE209052.016
Naphthalene	µg/L	0.1	**0.3**	<0.1	<0.1	<0.2↑	<0.1
2-methylnaphthalene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	µg/L	0.1	<0.1	<0.1	<0.2↑	<0.1	<0.1
Acenaphthylene	µg/L	0.1	<0.1	<0.5↑	<0.2↑	<0.1	<0.1
Acenaphthene	µg/L	0.1	<0.1	<0.1	<0.2↑	<0.1	<0.1
Fluorene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	µg/L	0.1	<0.1	<0.6↑	<0.1	<0.1	<0.1
Anthracene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	µg/L	0.1	<0.1	<0.2↑	<0.2↑	<0.1	<0.1
Pyrene	µg/L	0.1	<0.1	<0.2↑	<0.1	<0.1	<0.1
Benzo(a)anthracene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total PAH (18)	µg/L	1	<1	<2↑	<1	<1	<1

PCBs in Water [AN420] Tested: 27/7/2020

PARAMETER	UOM	LOR	0407_WD_GW14_20721 WATER - 21/7/2020 SE209052.010	0407_WD_GW15_20721 WATER - 21/7/2020 SE209052.011	0407_WD_GW16_20721 WATER - 21/7/2020 SE209052.012	0407_WD_GW17_20721 WATER - 21/7/2020 SE209052.013	0407_WD_GW13b_20721 WATER - 21/7/2020 SE209052.016
Arochlor 1016	µg/L	1	<1	<1	<1	<1	<1
Arochlor 1221	µg/L	1	<1	<1	<1	<1	<1
Arochlor 1232	µg/L	1	<1	<1	<1	<1	<1
Arochlor 1242	µg/L	1	<1	<1	<1	<1	<1
Arochlor 1248	µg/L	1	<1	<1	<1	<1	<1
Arochlor 1254	µg/L	1	<1	<1	<1	<1	<1
Arochlor 1260	µg/L	1	<1	<1	<1	<1	<1
Arochlor 1262	µg/L	1	<1	<1	<1	<1	<1
Arochlor 1268	µg/L	1	<1	<1	<1	<1	<1
Total Arochlors*	µg/L	5	<5	<5	<5	<5	<5

OC Pesticides in Water [AN420] Tested: 27/7/2020

PARAMETER	UOM	LOR	0407_WD_GW14_20721 WATER - 21/7/2020 SE209052.010	0407_WD_GW15_20721 WATER - 21/7/2020 SE209052.011	0407_WD_GW16_20721 WATER - 21/7/2020 SE209052.012	0407_WD_GW17_20721 WATER - 21/7/2020 SE209052.013	0407_WD_GW13b_20721 WATER - 21/7/2020 SE209052.016
Hexachlorobenzene (HCB)	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane (gamma BHC)	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Gamma Chlordane	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDD	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDD	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin aldehyde	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin ketone	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1

OP Pesticides in Water [AN420] Tested: 24/7/2020

PARAMETER	UOM	LOR	0407_WD_GW14_20721 WATER - 21/7/2020 SE209052.010	0407_WD_GW15_20721 WATER - 21/7/2020 SE209052.011	0407_WD_GW16_20721 WATER - 21/7/2020 SE209052.012	0407_WD_GW17_20721 WATER - 21/7/2020 SE209052.013	0407_WD_GW13b_20721 WATER - 21/7/2020 SE209052.016
Dichlorvos	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	µg/L	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	µg/L	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	µg/L	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	µg/L	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	µg/L	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	µg/L	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl	µg/L	0.2	<0.2	<0.2	<0.2	<0.2	<0.2

Full 8270 SVOC in Water [AN420] Tested: 27/7/2020

PARAMETER	UOM	LOR	0407_WD_GW14_20721 WATER - 21/7/2020 SE209052.010	0407_WD_GW15_20721 WATER - 21/7/2020 SE209052.011	0407_WD_GW16_20721 WATER - 21/7/2020 SE209052.012	0407_WD_GW17_20721 WATER - 21/7/2020 SE209052.013	0407_WD_GW13b_20721 WATER - 21/7/2020 SE209052.016
Acenaphthene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Benzofluoranthenes (b&j&k)	µg/L	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(b&j)fluoranthene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	µg/L	0.1	**0.2**	<0.1	<0.1	<0.1	<0.1
Phenanthrene	µg/L	0.1	<0.1	**0.1**	<0.1	<0.1	<0.1
Pyrene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-acetylaminofluorene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
7,12-dimethyl-benz(a)anthracene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3-methylcholanthrene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Aldrin	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha-BHC	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta-BHC	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta-BHC	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Gamma-BHC (Lindane)	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p-DDD	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p-DDE	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p-DDT	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha-endosulfan	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta-endosulfan	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha-chlordane	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Gamma-chlordane	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin ketone	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	µg/L	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos ethyl	µg/L	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carbophenothion	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chlorfenvinphos-cis	µg/L	5	<5	<5	<5	<5	<5
Chlorfenvinphos-trans	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chlorpyrifos (Chlorpyrifos Ethyl)	µg/L	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos-methyl	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Co-Ral (Coumaphos)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dichlorvos	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1/2-Chloronaphthalene	µg/L	1	<1	<1	<1	<1	<1
Demeton-S-methyl	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Full 8270 SVOC in Water [AN420] Tested: 27/7/2020 (continued)

PARAMETER	UOM	LOR	0407_WD_GW14_20721 WATER - 21/7/2020 SE209052.010	0407_WD_GW15_20721 WATER - 21/7/2020 SE209052.011	0407_WD_GW16_20721 WATER - 21/7/2020 SE209052.012	0407_WD_GW17_20721 WATER - 21/7/2020 SE209052.013	0407_WD_GW13b_20721 WATER - 21/7/2020 SE209052.016
Disulfoton (Di-syston)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
EPN*	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	µg/L	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Ethoprophos (Ethoprop or Prophos)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Famphur (Famophos)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenamiphos (Phenamiphos)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenchlorophos (Ronnel)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	µg/L	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Fenthion	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Malathion (Maldison)	µg/L	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Mevinphos-cis/trans	µg/L	1	<1	<1	<1	<1	<1
o,o,o-triethyl phosphorothioate	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Parathion ethyl (Parathion)	µg/L	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion methyl	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phorate	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pirimiphos-ethyl	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pirimiphos-methyl	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Profenofos	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Prothiophos (Tokuthion)*	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Sulfotepp	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Tetrachlorvinphos (Stirophos)*	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PCB Congener C28	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C52	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C101	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C118	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C138	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C153	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
PCB Congener C180	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobenzene (HCB)	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,3-dichlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,4-dichlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Hexachlorobutadiene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Hexachlorocyclopentadiene	µg/L	2	<2	<2	<2	<2	<2
Hexachloroethane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Hexachloroproprene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pentachlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pentachloroethane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2,3,5 and 1,2,4,5-tetrachlorobenzene	µg/L	1	<1	<1	<1	<1	<1
1,2,3,4-tetrachlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2,4-trichlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bis(2-ethylhexyl)phthalate	µg/L	50	<50	<50	<50	<50	<50
Bis(2-ethylhexyl)adipate	µg/L	1	<1	<1	<1	<1	<1
Butyl benzyl phthalate	µg/L	1	<1	<1	<1	<1	<1
Di-n-butyl phthalate	µg/L	10	<10	<10	<10	<10	<10
Diethyl phthalate	µg/L	5	<5	<5	<5	<5	<5
Dimethyl phthalate	µg/L	1	<1	<1	<1	<1	<1
Dioctyl phthalate	µg/L	1	<1	<1	<1	<1	<1
Carbofuran	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Carbaryl	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Trifluralin	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
N-nitroso-di-n-butylamine (NDBA)	µg/L	1	<1	<1	<1	<1	<1
N-nitroso-diethylamine (NDEA)	µg/L	1	<1	<1	<1	<1	<1
N-nitroso-di-n-propylamine (NDPA)	µg/L	1	<1	<1	<1	<1	<1
N-nitroso-morpholine (NMOR)	µg/L	1	<1	<1	<1	<1	<1

Full 8270 SVOC in Water [AN420] Tested: 27/7/2020 (continued)

PARAMETER	UOM	LOR	0407_WD_GW14_20721 WATER - 21/7/2020 SE209052.010	0407_WD_GW15_20721 WATER - 21/7/2020 SE209052.011	0407_WD_GW16_20721 WATER - 21/7/2020 SE209052.012	0407_WD_GW17_20721 WATER - 21/7/2020 SE209052.013	0407_WD_GW13b_20721 WATER - 21/7/2020 SE209052.016
N-nitroso-piperidine (NPIP)	µg/L	1	<1	<1	<1	<1	<1
N-nitroso-pyrrolidine (NPYR)	µg/L	1	<1	<1	<1	<1	<1
4-amino biphenyl	µg/L	1	<1	<1	<1	<1	<1
Acetophenone	µg/L	1	<1	<1	<1	<1	<1
1,3-dinitrobenzene	µg/L	1	<1	<1	<1	<1	<1
2,4-dinitrotoluene	µg/L	1	<1	<1	<1	<1	<1
2,6-dinitrotoluene	µg/L	1	<1	<1	<1	<1	<1
Isophorone	µg/L	1	<1	<1	<1	<1	<1
Nitrobenzene	µg/L	1	<1	<1	<1	<1	<1
p-(dimethylamino) azobenzene	µg/L	1	<1	<1	<1	<1	<1
Phenacetin	µg/L	1	<1	<1	<1	<1	<1
Pentachloronitrobenzene (quintozene)	µg/L	1	<1	<1	<1	<1	<1
Aniline	µg/L	5	<5	<5	<5	<5	<5
4-chloroaniline	µg/L	1	<1	<1	<1	<1	<1
2-nitroaniline	µg/L	1	<1	<1	<1	<1	<1
3-nitroaniline	µg/L	1	<1	<1	<1	<1	<1
4-nitroaniline	µg/L	1	<1	<1	<1	<1	<1
Diphenylamine	µg/L	1	<1	<1	<1	<1	<1
o-Toluidine	µg/L	1	<1	<1	<1	<1	<1
5-nitro-o-toluidine	µg/L	1	<1	<1	<1	<1	<1
1-naphthylamine	µg/L	2	<2	<2	<2	<2	<2
2-naphthylamine	µg/L	2	<2	<2	<2	<2	<2
Bis(2-chloroethoxy) methane	µg/L	1	<1	<1	<1	<1	<1
Bis(2-chloroethyl) ether	µg/L	1	<1	<1	<1	<1	<1
Bis(2-chloroisopropyl) ether	µg/L	1	<1	<1	<1	<1	<1
4-chlorophenyl phenyl ether	µg/L	1	<1	<1	<1	<1	<1
4-bromophenyl phenyl ether	µg/L	1	<1	<1	<1	<1	<1
Methyl methanesulfonate	µg/L	1	<1	<1	<1	<1	<1
Ethyl methanesulfonate	µg/L	1	<1	<1	<1	<1	<1
Dibenzofuran	µg/L	1	<1	<1	<1	<1	<1
Benzyl alcohol	µg/L	1	<1	<1	<1	<1	<1
Safrole	µg/L	1	<1	<1	<1	<1	<1
Isosafrole Isomer 1	µg/L	1	<1	<1	<1	<1	<1
Isosafrole Isomer 2	µg/L	1	<1	<1	<1	<1	<1
1,4-naphthoquinone	µg/L	1	<1	<1	<1	<1	<1
Thionazin	µg/L	1	<1	<1	<1	<1	<1
3/4-methyl phenol (m/p-cresol)	µg/L	1	<1	<1	<1	<1	<1
2-methyl phenol (o-cresol)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6 and 2,3,5,6-tetrachlorophenol	µg/L	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-chloro-3-methylphenol	µg/L	2	<2	<2	<2	<2	<2
2-chlorophenol	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Phenol	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Pentachlorophenol	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	µg/L	1	<1	<1	<1	<1	<1
Total Endosulfan (alpha+beta+sulfate)	µg/L	0.2	<0.2	<0.2	<0.2	<0.2	<0.2

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples - Low Level [MA-1523] Tested: 28/7/2020

PARAMETER	UOM	LOR	0407_WD_GW14_20721 WATER - 21/7/2020 SE209052.010	0407_WD_GW15_20721 WATER - 21/7/2020 SE209052.011	0407_WD_GW16_20721 WATER - 21/7/2020 SE209052.012	0407_WD_GW17_20721 WATER - 21/7/2020 SE209052.013	0407_WD_GW13b_20721 WATER - 21/7/2020 SE209052.016
Perfluorobutanoic acid (PFBA)	µg/L	0.0005	**0.0026**	**0.0009**	**0.0042**	**0.0021**	<0.0005
Perfluoropentanoic acid (PFPeA)	µg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Perfluorohexanoic acid (PFHxA)	µg/L	0.0005	**0.0014**	**0.0010**	**0.0010**	**0.0017**	**0.0016**
Perfluoroheptanoic acid (PFHpA)	µg/L	0.0005	**0.0005**	<0.0005	<0.0005	**0.0007**	**0.0008**
Perfluorooctanoic Acid (PFOA)	µg/L	0.0005	**0.0010**	**0.0006**	**0.0010**	**0.0013**	**0.0006**
Perfluorononanoic acid (PFNA)	µg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Perfluorodecanoic acid (PFDA)	µg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Perfluoroundecanoic acid (PFUnA)	µg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Perfluorododecanoic acid (PFDoA)	µg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Perfluorohexadecanoic acid (PFHxDA)	µg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Perfluorobutane sulfonate (PFBS)	µg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Perfluoropentane sulfonate (PFPeS)	µg/L	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Perfluorohexane sulfonate (PFHxS)	µg/L	0.0002	**0.0016**	**0.0012**	**0.0024**	**0.0033**	**0.0027**
Perfluoroheptane sulfonate (PFHpS)	µg/L	0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorooctane sulfonate (PFOS)	µg/L	0.0002	**0.0033**	**0.0009**	**0.0024**	**0.0015**	**0.0051**
Sum of PFHxS and PFOS	µg/L	0.0002	**0.0049**	**0.0021**	**0.0048**	**0.0047**	**0.0078**
Perfluorononane sulfonate (PFNS)	µg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Perfluorodecane sulfonate (PFDS)	µg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Perfluorododecane sulfonate (PFDoS)	µg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	µg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	µg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	µg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	µg/L	0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	µg/L	0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
2-(N-Methylperfluorooctane sulfonamido)-ethanol	µg/L	0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	µg/L	0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
N-Methylperfluorooctanesulfonamidoacetic acid	µg/L	0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025
N-Ethylperfluorooctanesulfonamidoacetic Acid	µg/L	0.0025	<0.0025	<0.0025	<0.0025	<0.0025	<0.0025

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents .
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples, Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable ’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.
MA-1523	This method covers the analysis of per- and polyfluoroalkyl substances (PFAS) in aqueous, solid and biosolid samples and solvent extracts, determined as the total of linear and branched isomers. After spiking with isotopically labelled quantification surrogates and clean-up via SPE cartridges sample extracts are analysed by liquid chromatography/mass spectrometry (LC-MS/MS). PFAS concentrations are determined by isotope dilution quantification.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

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Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	13

LABORATORY DETAILS

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SGS Reference	**SE209052 R0**
Date Received	21 Jul 2020
Date Reported	03 Aug 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

PAH - The Limit of Reporting (LOR) has been raised due to interferences from the sample matrix.
PFAS subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420. Report No: ME315821
MA-1523 Majority of surrogates are within acceptance criteria.

No respirable fibres detected in all soil samples using trace analysis technique.

A portion of the sample supplied has been sub-sampled for asbestos analysis in soil according to SGS In-house procedures due to large volume.
We therefore cannot guarantee that the sub-sample is representative of the entire sample supplied. SGS Environmental Services recommends supplying approximately 50-100g of sample in a separate container.

Asbestos analysed by Approved Identifier Yusuf Kuthpudin.

SIGNATORIES

[redacted]

Chemist | Organic Section Head | Asbestos Analyst

RESULTS

Fibre Identification in soil — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE209052.001	0407_WD_GW02_200721	Soil	259g Sand	21 Jul 2020	No Asbestos Found	
SE209052.002	0407_WD_GW07_200721	Soil	269g Sand	21 Jul 2020	No Asbestos Found	
SE209052.003	0407_WD_GW06_200721	Soil	252g Sand, Soil	21 Jul 2020	No Asbestos Found	
SE209052.004	0407_WD_GW09_200721	Soil	249g Sand	21 Jul 2020	No Asbestos Found	
SE209052.005	0407_WD_GW03_200721	Soil	213g Sand, Soil, Plant matter	21 Jul 2020	No Asbestos Found Organic Fibres Detected	
SE209052.006	0407_WD_GW04_200721	Soil	275g Sand	21 Jul 2020	No Asbestos Found	
SE209052.007	0407_WD_GW01_200721	Soil	247g Sand, Soil	21 Jul 2020	No Asbestos Found	
SE209052.008	0407_WD_GW05_200721	Soil	196g Sand, Soil, Rocks	21 Jul 2020	No Asbestos Found	
SE209052.009	0407_WD_GW11_200721	Soil	247g Sand, Soil	21 Jul 2020	No Asbestos Found	
SE209052.014	0407_WD_GW18_200721	Soil	229g Sand, Soil, Rocks	21 Jul 2020	No Asbestos Found Organic Fibres Detected	
SE209052.015	0407_WD_GW13a_200721	Soil	201g Clay, Sand	21 Jul 2020	No Asbestos Found	
SE209052.017	0407_WD_GW12_200721	Soil	230g Sand, Soil, Rocks	21 Jul 2020	No Asbestos Found Organic Fibres Detected	
SE209052.018	0407_WD1_200721	Soil	258g Sand, Soil, Rocks	21 Jul 2020	No Asbestos Found Organic Fibres Detected	

METHOD SUMMARY

SE209052 R0

METHOD	METHODOLOGY SUMMARY
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples , Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable ’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.

FOOTNOTES

Amosite	-	Brown Asbestos	NA	-	Not Analysed
Chrysotile	-	White Asbestos	LNR	-	Listed, Not Required
Crocidolite	-	Blue Asbestos	*	-	NATA accreditation does not cover the performance of this service .
Amphiboles	-	Amosite and/or Crocidolite	**	-	Indicative data, theoretical holding time exceeded.

(In reference to soil samples only) This report does not comply with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment and Remediation and Management of Asbestos Contaminated sites in Western Australia - May 2009.

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.

Where reported: 'Asbestos Detected': Asbestos detected by polarised light microscopy, including dispersion staining.
Where reported: 'No Asbestos Found': No Asbestos Found by polarised light microscopy , including dispersion staining.
Where reported: 'UMF Detected': Mineral fibres of unknown type detected by polarised light microscopy, including dispersion staining. Confirmation by another independent analytical technique may be necessary.

Even after disintegration it can be very difficult, or impossible, to detect the presence of asbestos in some asbestos -containing bulk materials using polarised light microscopy. This is due to the low grade or small length or diameter of asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety .

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This test report shall not be reproduced, except in full.

STATEMENT OF QA/QC PERFORMANCE

SE209052 R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	18

LABORATORY DETAILS

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Laboratory	SGS Alexandria Environmental
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Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE209052 R0**
Date Received	21 Jul 2020
Date Reported	03 Aug 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Surrogate	Full 8270 SVOC in Soil	1 item
	Full 8270 SVOC in Water	1 item
	OP Pesticides in Water	1 item
	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	1 item
	PAH (Polynuclear Aromatic Hydrocarbons) in Water	1 item
	Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples - Low Level	13 items
	Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level	19 items
Matrix Spike	VOCs in Water	1 item
	Volatile Petroleum Hydrocarbons in Water	1 item

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	13 Soil, 5 Water
Date documentation received	22/7/2020 @3:05PM	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	1.3°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE209052 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Fibre Identification in soil

Method: ME-(AU)-[ENV]AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_WD_GW02_200721	SE209052.001	LB205276	21 Jul 2020	21 Jul 2020	21 Jul 2021	27 Jul 2020	21 Jul 2021	28 Jul 2020
0407_WD_GW07_200721	SE209052.002	LB205276	21 Jul 2020	21 Jul 2020	21 Jul 2021	27 Jul 2020	21 Jul 2021	28 Jul 2020
0407_WD_GW06_200721	SE209052.003	LB205276	21 Jul 2020	21 Jul 2020	21 Jul 2021	27 Jul 2020	21 Jul 2021	28 Jul 2020
0407_WD_GW09_200721	SE209052.004	LB205276	21 Jul 2020	21 Jul 2020	21 Jul 2021	27 Jul 2020	21 Jul 2021	28 Jul 2020
0407_WD_GW03_200721	SE209052.005	LB205276	21 Jul 2020	21 Jul 2020	21 Jul 2021	27 Jul 2020	21 Jul 2021	28 Jul 2020
0407_WD_GW04_200721	SE209052.006	LB205276	21 Jul 2020	21 Jul 2020	21 Jul 2021	27 Jul 2020	21 Jul 2021	28 Jul 2020
0407_WD_GW01_200721	SE209052.007	LB205276	21 Jul 2020	21 Jul 2020	21 Jul 2021	27 Jul 2020	21 Jul 2021	28 Jul 2020
0407_WD_GW05_200721	SE209052.008	LB205276	21 Jul 2020	21 Jul 2020	21 Jul 2021	27 Jul 2020	21 Jul 2021	28 Jul 2020
0407_WD_GW11_200721	SE209052.009	LB205276	21 Jul 2020	21 Jul 2020	21 Jul 2021	27 Jul 2020	21 Jul 2021	28 Jul 2020
0407_WD_GW18_200721	SE209052.014	LB205276	21 Jul 2020	21 Jul 2020	21 Jul 2021	27 Jul 2020	21 Jul 2021	28 Jul 2020
0407_WD_GW13a_200721	SE209052.015	LB205276	21 Jul 2020	21 Jul 2020	21 Jul 2021	27 Jul 2020	21 Jul 2021	28 Jul 2020
0407_WD_GW12_200721	SE209052.017	LB205276	21 Jul 2020	21 Jul 2020	21 Jul 2021	27 Jul 2020	21 Jul 2021	28 Jul 2020
0407_WD1_200721	SE209052.018	LB205276	21 Jul 2020	21 Jul 2020	21 Jul 2021	27 Jul 2020	21 Jul 2021	28 Jul 2020

Full 8270 SVOC in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_WD_GW02_200721	SE209052.001	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	28 Jul 2020
0407_WD_GW07_200721	SE209052.002	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	28 Jul 2020
0407_WD_GW06_200721	SE209052.003	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	28 Jul 2020
0407_WD_GW09_200721	SE209052.004	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	28 Jul 2020
0407_WD_GW03_200721	SE209052.005	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	28 Jul 2020
0407_WD_GW04_200721	SE209052.006	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	28 Jul 2020
0407_WD_GW01_200721	SE209052.007	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	28 Jul 2020
0407_WD_GW05_200721	SE209052.008	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	28 Jul 2020
0407_WD_GW11_200721	SE209052.009	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	28 Jul 2020
0407_WD_GW18_200721	SE209052.014	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	28 Jul 2020
0407_WD_GW13a_200721	SE209052.015	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	28 Jul 2020
0407_WD_GW12_200721	SE209052.017	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	28 Jul 2020
0407_WD1_200721	SE209052.018	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	28 Jul 2020

Full 8270 SVOC in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_WD_GW14_200721	SE209052.010	LB205232	21 Jul 2020	21 Jul 2020	28 Jul 2020	27 Jul 2020	05 Sep 2020	28 Jul 2020
0407_WD_GW15_200721	SE209052.011	LB205232	21 Jul 2020	21 Jul 2020	28 Jul 2020	27 Jul 2020	05 Sep 2020	28 Jul 2020
0407_WD_GW16_200721	SE209052.012	LB205232	21 Jul 2020	21 Jul 2020	28 Jul 2020	27 Jul 2020	05 Sep 2020	28 Jul 2020
0407_WD_GW17_200721	SE209052.013	LB205232	21 Jul 2020	21 Jul 2020	28 Jul 2020	27 Jul 2020	05 Sep 2020	28 Jul 2020
0407_WD_GW13b_200721	SE209052.016	LB205232	21 Jul 2020	21 Jul 2020	28 Jul 2020	27 Jul 2020	05 Sep 2020	28 Jul 2020

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_WD_GW02_200721	SE209052.001	LB205074	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	29 Jul 2020	27 Jul 2020
0407_WD_GW07_200721	SE209052.002	LB205074	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	29 Jul 2020	27 Jul 2020
0407_WD_GW06_200721	SE209052.003	LB205074	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	29 Jul 2020	27 Jul 2020
0407_WD_GW09_200721	SE209052.004	LB205074	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	29 Jul 2020	27 Jul 2020
0407_WD_GW03_200721	SE209052.005	LB205074	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	29 Jul 2020	27 Jul 2020
0407_WD_GW04_200721	SE209052.006	LB205074	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	29 Jul 2020	27 Jul 2020
0407_WD_GW01_200721	SE209052.007	LB205074	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	29 Jul 2020	27 Jul 2020
0407_WD_GW05_200721	SE209052.008	LB205074	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	29 Jul 2020	27 Jul 2020
0407_WD_GW11_200721	SE209052.009	LB205074	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	29 Jul 2020	27 Jul 2020
0407_WD_GW18_200721	SE209052.014	LB205074	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	29 Jul 2020	27 Jul 2020
0407_WD_GW13a_200721	SE209052.015	LB205074	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	29 Jul 2020	27 Jul 2020
0407_WD_GW12_200721	SE209052.017	LB205074	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	29 Jul 2020	27 Jul 2020
0407_WD1_200721	SE209052.018	LB205074	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	29 Jul 2020	27 Jul 2020

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_WD_GW02_200721	SE209052.001	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW07_200721	SE209052.002	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW06_200721	SE209052.003	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW09_200721	SE209052.004	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW03_200721	SE209052.005	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW04_200721	SE209052.006	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020

HOLDING TIME SUMMARY

SE209052 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_WD_GW01_200721	SE209052.007	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW05_200721	SE209052.008	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW11_200721	SE209052.009	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW18_200721	SE209052.014	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW13a_200721	SE209052.015	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW12_200721	SE209052.017	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD1_200721	SE209052.018	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020

OC Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_WD_GW14_200721	SE209052.010	LB205232	21 Jul 2020	21 Jul 2020	28 Jul 2020	27 Jul 2020	05 Sep 2020	28 Jul 2020
0407_WD_GW15_200721	SE209052.011	LB205232	21 Jul 2020	21 Jul 2020	28 Jul 2020	27 Jul 2020	05 Sep 2020	28 Jul 2020
0407_WD_GW16_200721	SE209052.012	LB205232	21 Jul 2020	21 Jul 2020	28 Jul 2020	27 Jul 2020	05 Sep 2020	28 Jul 2020
0407_WD_GW17_200721	SE209052.013	LB205232	21 Jul 2020	21 Jul 2020	28 Jul 2020	27 Jul 2020	05 Sep 2020	28 Jul 2020
0407_WD_GW13b_200721	SE209052.016	LB205232	21 Jul 2020	21 Jul 2020	28 Jul 2020	27 Jul 2020	05 Sep 2020	28 Jul 2020

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_WD_GW02_200721	SE209052.001	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW07_200721	SE209052.002	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW06_200721	SE209052.003	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	28 Jul 2020
0407_WD_GW09_200721	SE209052.004	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	28 Jul 2020
0407_WD_GW03_200721	SE209052.005	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	28 Jul 2020
0407_WD_GW04_200721	SE209052.006	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	28 Jul 2020
0407_WD_GW01_200721	SE209052.007	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	28 Jul 2020
0407_WD_GW05_200721	SE209052.008	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	28 Jul 2020
0407_WD_GW11_200721	SE209052.009	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	28 Jul 2020
0407_WD_GW18_200721	SE209052.014	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW13a_200721	SE209052.015	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	28 Jul 2020
0407_WD_GW12_200721	SE209052.017	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	28 Jul 2020
0407_WD1_200721	SE209052.018	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	28 Jul 2020

OP Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_WD_GW14_200721	SE209052.010	LB205062	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW15_200721	SE209052.011	LB205062	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW16_200721	SE209052.012	LB205062	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW17_200721	SE209052.013	LB205062	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW13b_200721	SE209052.016	LB205062	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_WD_GW02_200721	SE209052.001	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW07_200721	SE209052.002	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW06_200721	SE209052.003	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	28 Jul 2020
0407_WD_GW09_200721	SE209052.004	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	28 Jul 2020
0407_WD_GW03_200721	SE209052.005	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	28 Jul 2020
0407_WD_GW04_200721	SE209052.006	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	28 Jul 2020
0407_WD_GW01_200721	SE209052.007	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	28 Jul 2020
0407_WD_GW05_200721	SE209052.008	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	28 Jul 2020
0407_WD_GW11_200721	SE209052.009	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	28 Jul 2020
0407_WD_GW18_200721	SE209052.014	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW13a_200721	SE209052.015	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	28 Jul 2020
0407_WD_GW12_200721	SE209052.017	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	28 Jul 2020
0407_WD1_200721	SE209052.018	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	28 Jul 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_WD_GW14_200721	SE209052.010	LB205062	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW15_200721	SE209052.011	LB205062	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW16_200721	SE209052.012	LB205062	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW17_200721	SE209052.013	LB205062	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020

HOLDING TIME SUMMARY

SE209052 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

PAH (Polynuclear Aromatic Hydrocarbons) in Water (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_WD_GW13b_200721	SE209052.016	LB205062	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_WD_GW02_200721	SE209052.001	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW07_200721	SE209052.002	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW06_200721	SE209052.003	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW09_200721	SE209052.004	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW03_200721	SE209052.005	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW04_200721	SE209052.006	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW01_200721	SE209052.007	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW05_200721	SE209052.008	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW11_200721	SE209052.009	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW18_200721	SE209052.014	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW13a_200721	SE209052.015	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW12_200721	SE209052.017	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD1_200721	SE209052.018	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020

PCBs in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_WD_GW14_200721	SE209052.010	LB205232	21 Jul 2020	21 Jul 2020	28 Jul 2020	27 Jul 2020	05 Sep 2020	28 Jul 2020
0407_WD_GW15_200721	SE209052.011	LB205232	21 Jul 2020	21 Jul 2020	28 Jul 2020	27 Jul 2020	05 Sep 2020	28 Jul 2020
0407_WD_GW16_200721	SE209052.012	LB205232	21 Jul 2020	21 Jul 2020	28 Jul 2020	27 Jul 2020	05 Sep 2020	28 Jul 2020
0407_WD_GW17_200721	SE209052.013	LB205232	21 Jul 2020	21 Jul 2020	28 Jul 2020	27 Jul 2020	05 Sep 2020	28 Jul 2020
0407_WD_GW13b_200721	SE209052.016	LB205232	21 Jul 2020	21 Jul 2020	28 Jul 2020	27 Jul 2020	05 Sep 2020	28 Jul 2020

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_WD_GW02_200721	SE209052.001	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW07_200721	SE209052.002	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW06_200721	SE209052.003	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW09_200721	SE209052.004	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW03_200721	SE209052.005	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW04_200721	SE209052.006	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW01_200721	SE209052.007	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW05_200721	SE209052.008	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW11_200721	SE209052.009	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW18_200721	SE209052.014	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW13a_200721	SE209052.015	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW12_200721	SE209052.017	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD1_200721	SE209052.018	LB205126	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_WD_GW14_200721	SE209052.010	LB205062	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW15_200721	SE209052.011	LB205062	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW16_200721	SE209052.012	LB205062	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW17_200721	SE209052.013	LB205062	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW13b_200721	SE209052.016	LB205062	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_WD_GW02_200721	SE209052.001	LB205072	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW07_200721	SE209052.002	LB205072	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW06_200721	SE209052.003	LB205072	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW09_200721	SE209052.004	LB205072	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW03_200721	SE209052.005	LB205072	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW04_200721	SE209052.006	LB205072	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW01_200721	SE209052.007	LB205072	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW05_200721	SE209052.008	LB205072	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW11_200721	SE209052.009	LB205072	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW18_200721	SE209052.014	LB205072	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_WD_GW13a_200721	SE209052.015	LB205072	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW12_200721	SE209052.017	LB205072	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD1_200721	SE209052.018	LB205072	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_WD_GW14_200721	SE209052.010	LB205182	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW15_200721	SE209052.011	LB205182	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW16_200721	SE209052.012	LB205182	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW17_200721	SE209052.013	LB205182	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW13b_200721	SE209052.016	LB205182	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_WD_GW02_200721	SE209052.001	LB205072	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW07_200721	SE209052.002	LB205072	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW06_200721	SE209052.003	LB205072	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW09_200721	SE209052.004	LB205072	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW03_200721	SE209052.005	LB205072	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW04_200721	SE209052.006	LB205072	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW01_200721	SE209052.007	LB205072	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW05_200721	SE209052.008	LB205072	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW11_200721	SE209052.009	LB205072	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW18_200721	SE209052.014	LB205072	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW13a_200721	SE209052.015	LB205072	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW12_200721	SE209052.017	LB205072	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD1_200721	SE209052.018	LB205072	21 Jul 2020	21 Jul 2020	04 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_WD_GW14_200721	SE209052.010	LB205182	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW15_200721	SE209052.011	LB205182	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW16_200721	SE209052.012	LB205182	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW17_200721	SE209052.013	LB205182	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
0407_WD_GW13b_200721	SE209052.016	LB205182	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Full 8270 SVOC in Soil — **Method: ME-(AU)-[ENV]AN420**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-tribromophenol (Surrogate)	0407_WD_GW02_200721	SE209052.001	%	70 - 130%	101
	0407_WD_GW07_200721	SE209052.002	%	70 - 130%	74
	0407_WD_GW06_200721	SE209052.003	%	70 - 130%	73
	0407_WD_GW09_200721	SE209052.004	%	70 - 130%	101
	0407_WD_GW03_200721	SE209052.005	%	70 - 130%	108
	0407_WD_GW04_200721	SE209052.006	%	70 - 130%	103
	0407_WD_GW01_200721	SE209052.007	%	70 - 130%	104
	0407_WD_GW05_200721	SE209052.008	%	70 - 130%	102
	0407_WD_GW11_200721	SE209052.009	%	70 - 130%	98
	0407_WD_GW18_200721	SE209052.014	%	70 - 130%	84
	0407_WD_GW13a_200721	SE209052.015	%	70 - 130%	92
	0407_WD_GW12_200721	SE209052.017	%	70 - 130%	96
	0407_WD1_200721	SE209052.018	%	70 - 130%	99
2-fluorobiphenyl (Surrogate)	0407_WD_GW02_200721	SE209052.001	%	70 - 130%	116
	0407_WD_GW07_200721	SE209052.002	%	70 - 130%	102
	0407_WD_GW06_200721	SE209052.003	%	70 - 130%	76
	0407_WD_GW09_200721	SE209052.004	%	70 - 130%	110
	0407_WD_GW03_200721	SE209052.005	%	70 - 130%	120
	0407_WD_GW04_200721	SE209052.006	%	70 - 130%	102
	0407_WD_GW01_200721	SE209052.007	%	70 - 130%	116
	0407_WD_GW05_200721	SE209052.008	%	70 - 130%	114
	0407_WD_GW11_200721	SE209052.009	%	70 - 130%	120
	0407_WD_GW18_200721	SE209052.014	%	70 - 130%	120
	0407_WD_GW13a_200721	SE209052.015	%	70 - 130%	116
	0407_WD_GW12_200721	SE209052.017	%	70 - 130%	128
	0407_WD1_200721	SE209052.018	%	70 - 130%	96
d14-p-terphenyl (Surrogate)	0407_WD_GW02_200721	SE209052.001	%	70 - 130%	94
	0407_WD_GW07_200721	SE209052.002	%	70 - 130%	90
	0407_WD_GW06_200721	SE209052.003	%	70 - 130%	86
	0407_WD_GW09_200721	SE209052.004	%	70 - 130%	90
	0407_WD_GW03_200721	SE209052.005	%	70 - 130%	96
	0407_WD_GW04_200721	SE209052.006	%	70 - 130%	94
	0407_WD_GW01_200721	SE209052.007	%	70 - 130%	74
	0407_WD_GW05_200721	SE209052.008	%	70 - 130%	88
	0407_WD_GW11_200721	SE209052.009	%	70 - 130%	74
	0407_WD_GW18_200721	SE209052.014	%	70 - 130%	88
	0407_WD_GW13a_200721	SE209052.015	%	70 - 130%	70
	0407_WD_GW12_200721	SE209052.017	%	70 - 130%	88
	0407_WD1_200721	SE209052.018	%	70 - 130%	90
d5-nitrobenzene (Surrogate)	0407_WD_GW02_200721	SE209052.001	%	70 - 130%	84
	0407_WD_GW07_200721	SE209052.002	%	70 - 130%	78
	0407_WD_GW06_200721	SE209052.003	%	70 - 130%	74
	0407_WD_GW09_200721	SE209052.004	%	70 - 130%	72
	0407_WD_GW03_200721	SE209052.005	%	70 - 130%	72
	0407_WD_GW04_200721	SE209052.006	%	70 - 130%	68 †
	0407_WD_GW01_200721	SE209052.007	%	70 - 130%	90
	0407_WD_GW05_200721	SE209052.008	%	70 - 130%	82
	0407_WD_GW11_200721	SE209052.009	%	70 - 130%	76
	0407_WD_GW18_200721	SE209052.014	%	70 - 130%	86
	0407_WD_GW13a_200721	SE209052.015	%	70 - 130%	84
	0407_WD_GW12_200721	SE209052.017	%	70 - 130%	88
	0407_WD1_200721	SE209052.018	%	70 - 130%	76
d5-phenol (Surrogate)	0407_WD_GW02_200721	SE209052.001	%	70 - 130%	71
	0407_WD_GW07_200721	SE209052.002	%	70 - 130%	76
	0407_WD_GW06_200721	SE209052.003	%	70 - 130%	74
	0407_WD_GW09_200721	SE209052.004	%	70 - 130%	74
	0407_WD_GW03_200721	SE209052.005	%	70 - 130%	76
	0407_WD_GW04_200721	SE209052.006	%	70 - 130%	72
	0407_WD_GW01_200721	SE209052.007	%	70 - 130%	72
	0407_WD_GW05_200721	SE209052.008	%	70 - 130%	74
	0407_WD_GW11_200721	SE209052.009	%	70 - 130%	73

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Full 8270 SVOC in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d5-phenol (Surrogate)	0407_WD_GW18_200721	SE209052.014	%	70 - 130%	72
	0407_WD_GW13a_200721	SE209052.015	%	70 - 130%	72
	0407_WD_GW12_200721	SE209052.017	%	70 - 130%	72
	0407_WD1_200721	SE209052.018	%	70 - 130%	72

Full 8270 SVOC in Water

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	0407_WD_GW14_200721	SE209052.010	%	40 - 130%	73
	0407_WD_GW15_200721	SE209052.011	%	40 - 130%	98
	0407_WD_GW16_200721	SE209052.012	%	40 - 130%	57
	0407_WD_GW17_200721	SE209052.013	%	40 - 130%	82
	0407_WD_GW13b_200721	SE209052.016	%	40 - 130%	85
2-fluorobiphenyl (Surrogate)	0407_WD_GW14_200721	SE209052.010	%	40 - 130%	104
	0407_WD_GW15_200721	SE209052.011	%	40 - 130%	6 ①
	0407_WD_GW16_200721	SE209052.012	%	40 - 130%	46
	0407_WD_GW17_200721	SE209052.013	%	40 - 130%	68
	0407_WD_GW13b_200721	SE209052.016	%	40 - 130%	78
d14-p-terphenyl (Surrogate)	0407_WD_GW14_200721	SE209052.010	%	40 - 130%	96
	0407_WD_GW15_200721	SE209052.011	%	40 - 130%	56
	0407_WD_GW16_200721	SE209052.012	%	40 - 130%	68
	0407_WD_GW17_200721	SE209052.013	%	40 - 130%	84
	0407_WD_GW13b_200721	SE209052.016	%	40 - 130%	92
d5-nitrobenzene (Surrogate)	0407_WD_GW14_200721	SE209052.010	%	40 - 130%	40
	0407_WD_GW15_200721	SE209052.011	%	40 - 130%	42
	0407_WD_GW16_200721	SE209052.012	%	40 - 130%	48
	0407_WD_GW17_200721	SE209052.013	%	40 - 130%	42
	0407_WD_GW13b_200721	SE209052.016	%	40 - 130%	50
d5-phenol (Surrogate)	0407_WD_GW14_200721	SE209052.010	%	20 - 130%	40
	0407_WD_GW15_200721	SE209052.011	%	20 - 130%	44
	0407_WD_GW16_200721	SE209052.012	%	20 - 130%	40
	0407_WD_GW17_200721	SE209052.013	%	20 - 130%	41
	0407_WD_GW13b_200721	SE209052.016	%	20 - 130%	46

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_WD_GW02_200721	SE209052.001	%	60 - 130%	107
	0407_WD_GW07_200721	SE209052.002	%	60 - 130%	102
	0407_WD_GW06_200721	SE209052.003	%	60 - 130%	101
	0407_WD_GW09_200721	SE209052.004	%	60 - 130%	102
	0407_WD_GW03_200721	SE209052.005	%	60 - 130%	103
	0407_WD_GW04_200721	SE209052.006	%	60 - 130%	96
	0407_WD_GW01_200721	SE209052.007	%	60 - 130%	97
	0407_WD_GW05_200721	SE209052.008	%	60 - 130%	102
	0407_WD_GW11_200721	SE209052.009	%	60 - 130%	100
	0407_WD_GW18_200721	SE209052.014	%	60 - 130%	97
	0407_WD_GW13a_200721	SE209052.015	%	60 - 130%	99
	0407_WD_GW12_200721	SE209052.017	%	60 - 130%	99
	0407_WD1_200721	SE209052.018	%	60 - 130%	96

OC Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_WD_GW14_200721	SE209052.010	%	40 - 130%	74
	0407_WD_GW15_200721	SE209052.011	%	40 - 130%	92
	0407_WD_GW16_200721	SE209052.012	%	40 - 130%	80
	0407_WD_GW17_200721	SE209052.013	%	40 - 130%	72
	0407_WD_GW13b_200721	SE209052.016	%	40 - 130%	70

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_WD_GW02_200721	SE209052.001	%	60 - 130%	116
	0407_WD_GW07_200721	SE209052.002	%	60 - 130%	102
	0407_WD_GW06_200721	SE209052.003	%	60 - 130%	76
	0407_WD_GW09_200721	SE209052.004	%	60 - 130%	110

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_WD_GW03_200721	SE209052.005	%	60 - 130%	120
	0407_WD_GW04_200721	SE209052.006	%	60 - 130%	102
	0407_WD_GW01_200721	SE209052.007	%	60 - 130%	116
	0407_WD_GW05_200721	SE209052.008	%	60 - 130%	114
	0407_WD_GW11_200721	SE209052.009	%	60 - 130%	120
	0407_WD_GW18_200721	SE209052.014	%	60 - 130%	120
	0407_WD_GW13a_200721	SE209052.015	%	60 - 130%	116
	0407_WD_GW12_200721	SE209052.017	%	60 - 130%	128
	0407_WD1_200721	SE209052.018	%	60 - 130%	96
d14-p-terphenyl (Surrogate)	0407_WD_GW02_200721	SE209052.001	%	60 - 130%	94
	0407_WD_GW07_200721	SE209052.002	%	60 - 130%	90
	0407_WD_GW06_200721	SE209052.003	%	60 - 130%	86
	0407_WD_GW09_200721	SE209052.004	%	60 - 130%	90
	0407_WD_GW03_200721	SE209052.005	%	60 - 130%	96
	0407_WD_GW04_200721	SE209052.006	%	60 - 130%	94
	0407_WD_GW01_200721	SE209052.007	%	60 - 130%	74
	0407_WD_GW05_200721	SE209052.008	%	60 - 130%	88
	0407_WD_GW11_200721	SE209052.009	%	60 - 130%	74
	0407_WD_GW18_200721	SE209052.014	%	60 - 130%	88
	0407_WD_GW13a_200721	SE209052.015	%	60 - 130%	70
	0407_WD_GW12_200721	SE209052.017	%	60 - 130%	88
	0407_WD1_200721	SE209052.018	%	60 - 130%	90

OP Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_WD_GW14_200721	SE209052.010	%	40 - 130%	68
	0407_WD_GW15_200721	SE209052.011	%	40 - 130%	0
	0407_WD_GW16_200721	SE209052.012	%	40 - 130%	50
	0407_WD_GW17_200721	SE209052.013	%	40 - 130%	60
	0407_WD_GW13b_200721	SE209052.016	%	40 - 130%	66
d14-p-terphenyl (Surrogate)	0407_WD_GW14_200721	SE209052.010	%	40 - 130%	100
	0407_WD_GW15_200721	SE209052.011	%	40 - 130%	84
	0407_WD_GW16_200721	SE209052.012	%	40 - 130%	104
	0407_WD_GW17_200721	SE209052.013	%	40 - 130%	106
	0407_WD_GW13b_200721	SE209052.016	%	40 - 130%	98

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_WD_GW02_200721	SE209052.001	%	70 - 130%	116
	0407_WD_GW07_200721	SE209052.002	%	70 - 130%	102
	0407_WD_GW06_200721	SE209052.003	%	70 - 130%	76
	0407_WD_GW09_200721	SE209052.004	%	70 - 130%	110
	0407_WD_GW03_200721	SE209052.005	%	70 - 130%	120
	0407_WD_GW04_200721	SE209052.006	%	70 - 130%	102
	0407_WD_GW01_200721	SE209052.007	%	70 - 130%	116
	0407_WD_GW05_200721	SE209052.008	%	70 - 130%	114
	0407_WD_GW11_200721	SE209052.009	%	70 - 130%	120
	0407_WD_GW18_200721	SE209052.014	%	70 - 130%	120
	0407_WD_GW13a_200721	SE209052.015	%	70 - 130%	116
	0407_WD_GW12_200721	SE209052.017	%	70 - 130%	128
	0407_WD1_200721	SE209052.018	%	70 - 130%	96
d14-p-terphenyl (Surrogate)	0407_WD_GW02_200721	SE209052.001	%	70 - 130%	94
	0407_WD_GW07_200721	SE209052.002	%	70 - 130%	90
	0407_WD_GW06_200721	SE209052.003	%	70 - 130%	86
	0407_WD_GW09_200721	SE209052.004	%	70 - 130%	90
	0407_WD_GW03_200721	SE209052.005	%	70 - 130%	96
	0407_WD_GW04_200721	SE209052.006	%	70 - 130%	94
	0407_WD_GW01_200721	SE209052.007	%	70 - 130%	74
	0407_WD_GW05_200721	SE209052.008	%	70 - 130%	88
	0407_WD_GW11_200721	SE209052.009	%	70 - 130%	74
	0407_WD_GW18_200721	SE209052.014	%	70 - 130%	88
	0407_WD_GW13a_200721	SE209052.015	%	70 - 130%	70

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d14-p-terphenyl (Surrogate)	0407_WD_GW12_200721	SE209052.017	%	70 - 130%	88
	0407_WD1_200721	SE209052.018	%	70 - 130%	90
d5-nitrobenzene (Surrogate)	0407_WD_GW02_200721	SE209052.001	%	70 - 130%	84
	0407_WD_GW07_200721	SE209052.002	%	70 - 130%	78
	0407_WD_GW06_200721	SE209052.003	%	70 - 130%	74
	0407_WD_GW09_200721	SE209052.004	%	70 - 130%	72
	0407_WD_GW03_200721	SE209052.005	%	70 - 130%	72
	0407_WD_GW04_200721	SE209052.006	%	70 - 130%	68 †
	0407_WD_GW01_200721	SE209052.007	%	70 - 130%	90
	0407_WD_GW05_200721	SE209052.008	%	70 - 130%	82
	0407_WD_GW11_200721	SE209052.009	%	70 - 130%	76
	0407_WD_GW18_200721	SE209052.014	%	70 - 130%	86
	0407_WD_GW13a_200721	SE209052.015	%	70 - 130%	84
	0407_WD_GW12_200721	SE209052.017	%	70 - 130%	88
	0407_WD1_200721	SE209052.018	%	70 - 130%	76

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_WD_GW14_200721	SE209052.010	%	40 - 130%	68
	0407_WD_GW15_200721	SE209052.011	%	40 - 130%	0 ⓘ
	0407_WD_GW16_200721	SE209052.012	%	40 - 130%	50
	0407_WD_GW17_200721	SE209052.013	%	40 - 130%	60
	0407_WD_GW13b_200721	SE209052.016	%	40 - 130%	66
d14-p-terphenyl (Surrogate)	0407_WD_GW14_200721	SE209052.010	%	40 - 130%	100
	0407_WD_GW15_200721	SE209052.011	%	40 - 130%	84
	0407_WD_GW16_200721	SE209052.012	%	40 - 130%	104
	0407_WD_GW17_200721	SE209052.013	%	40 - 130%	106
	0407_WD_GW13b_200721	SE209052.016	%	40 - 130%	98
d5-nitrobenzene (Surrogate)	0407_WD_GW14_200721	SE209052.010	%	40 - 130%	60
	0407_WD_GW15_200721	SE209052.011	%	40 - 130%	72
	0407_WD_GW16_200721	SE209052.012	%	40 - 130%	66
	0407_WD_GW17_200721	SE209052.013	%	40 - 130%	66
	0407_WD_GW13b_200721	SE209052.016	%	40 - 130%	58

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_WD_GW02_200721	SE209052.001	%	60 - 130%	107
	0407_WD_GW07_200721	SE209052.002	%	60 - 130%	102
	0407_WD_GW06_200721	SE209052.003	%	60 - 130%	101
	0407_WD_GW09_200721	SE209052.004	%	60 - 130%	102
	0407_WD_GW03_200721	SE209052.005	%	60 - 130%	103
	0407_WD_GW04_200721	SE209052.006	%	60 - 130%	96
	0407_WD_GW01_200721	SE209052.007	%	60 - 130%	97
	0407_WD_GW05_200721	SE209052.008	%	60 - 130%	102
	0407_WD_GW11_200721	SE209052.009	%	60 - 130%	100
	0407_WD_GW18_200721	SE209052.014	%	60 - 130%	97
	0407_WD_GW13a_200721	SE209052.015	%	60 - 130%	99
	0407_WD_GW12_200721	SE209052.017	%	60 - 130%	99
	0407_WD1_200721	SE209052.018	%	60 - 130%	96

PCBs in Water

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (Surrogate)	0407_WD_GW14_200721	SE209052.010	%	40 - 130%	74
	0407_WD_GW15_200721	SE209052.011	%	40 - 130%	92
	0407_WD_GW16_200721	SE209052.012	%	40 - 130%	80
	0407_WD_GW17_200721	SE209052.013	%	40 - 130%	72
	0407_WD_GW13b_200721	SE209052.016	%	40 - 130%	70

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples - Low Level

Method: MA-1523

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C2_PFTeDA) Surrogate	0407_WD_GW14_200721	SE209052.010	%	10 - 150%	86
	0407_WD_GW15_200721	SE209052.011	%	10 - 150%	72
	0407_WD_GW16_200721	SE209052.012	%	10 - 150%	83

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples - Low Level (continued) **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C2_PFTeDA) Surrogate	0407_WD_GW17_200721	SE209052.013	%	10 - 150%	60
	0407_WD_GW13b_200721	SE209052.016	%	10 - 150%	91
(13C2-4:2 FTS) Surrogate	0407_WD_GW14_200721	SE209052.010	%	10 - 150%	97
	0407_WD_GW15_200721	SE209052.011	%	10 - 150%	131
	0407_WD_GW16_200721	SE209052.012	%	10 - 150%	139
	0407_WD_GW17_200721	SE209052.013	%	10 - 150%	122
	0407_WD_GW13b_200721	SE209052.016	%	10 - 150%	123
(13C2-6:2 FTS) Surrogate	0407_WD_GW14_200721	SE209052.010	%	10 - 150%	101
	0407_WD_GW15_200721	SE209052.011	%	10 - 150%	123
	0407_WD_GW16_200721	SE209052.012	%	10 - 150%	133
	0407_WD_GW17_200721	SE209052.013	%	10 - 150%	116
	0407_WD_GW13b_200721	SE209052.016	%	10 - 150%	110
(13C2-8:2 FTS) Surrogate	0407_WD_GW14_200721	SE209052.010	%	10 - 150%	173 †
	0407_WD_GW15_200721	SE209052.011	%	10 - 150%	195 †
	0407_WD_GW16_200721	SE209052.012	%	10 - 150%	210 †
	0407_WD_GW17_200721	SE209052.013	%	10 - 150%	207 †
	0407_WD_GW13b_200721	SE209052.016	%	10 - 150%	184 †
(13C2-PFDoA) Surrogate	0407_WD_GW14_200721	SE209052.010	%	10 - 150%	94
	0407_WD_GW15_200721	SE209052.011	%	10 - 150%	92
	0407_WD_GW16_200721	SE209052.012	%	10 - 150%	120
	0407_WD_GW17_200721	SE209052.013	%	10 - 150%	96
	0407_WD_GW13b_200721	SE209052.016	%	10 - 150%	105
(13C2-PFHxDA) Surrogate	0407_WD_GW14_200721	SE209052.010	%	10 - 150%	194 †
	0407_WD_GW15_200721	SE209052.011	%	10 - 150%	300 †
	0407_WD_GW16_200721	SE209052.012	%	10 - 150%	296 †
	0407_WD_GW17_200721	SE209052.013	%	10 - 150%	133
	0407_WD_GW13b_200721	SE209052.016	%	10 - 150%	167 †
(13C3-PFBS) Surrogate	0407_WD_GW14_200721	SE209052.010	%	10 - 150%	80
	0407_WD_GW15_200721	SE209052.011	%	10 - 150%	77
	0407_WD_GW16_200721	SE209052.012	%	10 - 150%	83
	0407_WD_GW17_200721	SE209052.013	%	10 - 150%	87
	0407_WD_GW13b_200721	SE209052.016	%	10 - 150%	88
(13C3-PFHxS) Surrogate	0407_WD_GW14_200721	SE209052.010	%	10 - 150%	95
	0407_WD_GW15_200721	SE209052.011	%	10 - 150%	94
	0407_WD_GW16_200721	SE209052.012	%	10 - 150%	98
	0407_WD_GW17_200721	SE209052.013	%	10 - 150%	100
	0407_WD_GW13b_200721	SE209052.016	%	10 - 150%	95
(13C4_PFOA) Surrogate	0407_WD_GW14_200721	SE209052.010	%	10 - 150%	100
	0407_WD_GW15_200721	SE209052.011	%	10 - 150%	118
	0407_WD_GW16_200721	SE209052.012	%	10 - 150%	105
	0407_WD_GW17_200721	SE209052.013	%	10 - 150%	105
	0407_WD_GW13b_200721	SE209052.016	%	10 - 150%	108
(13C4-PFBA) Surrogate	0407_WD_GW14_200721	SE209052.010	%	10 - 150%	110
	0407_WD_GW15_200721	SE209052.011	%	10 - 150%	106
	0407_WD_GW16_200721	SE209052.012	%	10 - 150%	105
	0407_WD_GW17_200721	SE209052.013	%	10 - 150%	110
	0407_WD_GW13b_200721	SE209052.016	%	10 - 150%	103
(13C4-PFHpA) Surrogate	0407_WD_GW14_200721	SE209052.010	%	10 - 150%	115
	0407_WD_GW15_200721	SE209052.011	%	10 - 150%	112
	0407_WD_GW16_200721	SE209052.012	%	10 - 150%	112
	0407_WD_GW17_200721	SE209052.013	%	10 - 150%	112
	0407_WD_GW13b_200721	SE209052.016	%	10 - 150%	102
(13C5-PFHxA) Surrogate	0407_WD_GW14_200721	SE209052.010	%	10 - 150%	101
	0407_WD_GW15_200721	SE209052.011	%	10 - 150%	106
	0407_WD_GW16_200721	SE209052.012	%	10 - 150%	110
	0407_WD_GW17_200721	SE209052.013	%	10 - 150%	97
	0407_WD_GW13b_200721	SE209052.016	%	10 - 150%	108
(13C5-PFPeA) Surrogate	0407_WD_GW14_200721	SE209052.010	%	10 - 150%	152 †
	0407_WD_GW15_200721	SE209052.011	%	10 - 150%	158 †
	0407_WD_GW16_200721	SE209052.012	%	10 - 150%	160 †
	0407_WD_GW17_200721	SE209052.013	%	10 - 150%	162 †

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples - Low Level (continued) — **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C5-PFPeA) Surrogate	0407_WD_GW13b_200721	SE209052.016	%	10 - 150%	148
(13C6-PFDA) Surrogate	0407_WD_GW14_200721	SE209052.010	%	10 - 150%	85
	0407_WD_GW15_200721	SE209052.011	%	10 - 150%	85
	0407_WD_GW16_200721	SE209052.012	%	10 - 150%	87
	0407_WD_GW17_200721	SE209052.013	%	10 - 150%	93
	0407_WD_GW13b_200721	SE209052.016	%	10 - 150%	83
(13C7-PFUdA) Surrogate	0407_WD_GW14_200721	SE209052.010	%	10 - 150%	99
	0407_WD_GW15_200721	SE209052.011	%	10 - 150%	98
	0407_WD_GW16_200721	SE209052.012	%	10 - 150%	108
	0407_WD_GW17_200721	SE209052.013	%	10 - 150%	100
	0407_WD_GW13b_200721	SE209052.016	%	10 - 150%	112
(13C8-PFOS) Surrogate	0407_WD_GW14_200721	SE209052.010	%	10 - 150%	98
	0407_WD_GW15_200721	SE209052.011	%	10 - 150%	112
	0407_WD_GW16_200721	SE209052.012	%	10 - 150%	106
	0407_WD_GW17_200721	SE209052.013	%	10 - 150%	104
	0407_WD_GW13b_200721	SE209052.016	%	10 - 150%	89
(13C8-PFOSA) Surrogate	0407_WD_GW14_200721	SE209052.010	%	10 - 150%	34
	0407_WD_GW15_200721	SE209052.011	%	10 - 150%	33
	0407_WD_GW16_200721	SE209052.012	%	10 - 150%	38
	0407_WD_GW17_200721	SE209052.013	%	10 - 150%	34
	0407_WD_GW13b_200721	SE209052.016	%	10 - 150%	34
(13C9-PFNA) Surrogate	0407_WD_GW14_200721	SE209052.010	%	10 - 150%	91
	0407_WD_GW15_200721	SE209052.011	%	10 - 150%	97
	0407_WD_GW16_200721	SE209052.012	%	10 - 150%	97
	0407_WD_GW17_200721	SE209052.013	%	10 - 150%	90
	0407_WD_GW13b_200721	SE209052.016	%	10 - 150%	92
(D3-N-MeFOSA) Surrogate	0407_WD_GW14_200721	SE209052.010	%	10 - 150%	23
	0407_WD_GW15_200721	SE209052.011	%	10 - 150%	27
	0407_WD_GW16_200721	SE209052.012	%	10 - 150%	34
	0407_WD_GW17_200721	SE209052.013	%	10 - 150%	23
	0407_WD_GW13b_200721	SE209052.016	%	10 - 150%	27
(D3-N-MeFOSAA) Surrogate	0407_WD_GW14_200721	SE209052.010	%	10 - 150%	80
	0407_WD_GW15_200721	SE209052.011	%	10 - 150%	104
	0407_WD_GW16_200721	SE209052.012	%	10 - 150%	86
	0407_WD_GW17_200721	SE209052.013	%	10 - 150%	87
	0407_WD_GW13b_200721	SE209052.016	%	10 - 150%	73
(D5-N-EtFOSA) Surrogate	0407_WD_GW14_200721	SE209052.010	%	10 - 150%	26
	0407_WD_GW15_200721	SE209052.011	%	10 - 150%	26
	0407_WD_GW16_200721	SE209052.012	%	10 - 150%	30
	0407_WD_GW17_200721	SE209052.013	%	10 - 150%	22
	0407_WD_GW13b_200721	SE209052.016	%	10 - 150%	24
(D5-N-EtFOSAA) Surrogate	0407_WD_GW14_200721	SE209052.010	%	10 - 150%	66
	0407_WD_GW15_200721	SE209052.011	%	10 - 150%	78
	0407_WD_GW16_200721	SE209052.012	%	10 - 150%	78
	0407_WD_GW17_200721	SE209052.013	%	10 - 150%	95
	0407_WD_GW13b_200721	SE209052.016	%	10 - 150%	66
(D7-N-MeFOSE) Surrogate	0407_WD_GW14_200721	SE209052.010	%	10 - 150%	21
	0407_WD_GW15_200721	SE209052.011	%	10 - 150%	53
	0407_WD_GW16_200721	SE209052.012	%	10 - 150%	39
	0407_WD_GW17_200721	SE209052.013	%	10 - 150%	29
	0407_WD_GW13b_200721	SE209052.016	%	10 - 150%	25
(D9-N-EtFOSE) Surrogate	0407_WD_GW14_200721	SE209052.010	%	10 - 150%	21
	0407_WD_GW15_200721	SE209052.011	%	10 - 150%	38
	0407_WD_GW16_200721	SE209052.012	%	10 - 150%	27
	0407_WD_GW17_200721	SE209052.013	%	10 - 150%	22
	0407_WD_GW13b_200721	SE209052.016	%	10 - 150%	21

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level — **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C2-4:2FTS) Surrogate	0407_WD_GW02_200721	SE209052.001	%	10 - 150%	133
	0407_WD_GW07_200721	SE209052.002	%	10 - 150%	132

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level (continued) **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C2-4:2FTS) Surrogate	0407_WD_GW06_200721	SE209052.003	%	10 - 150%	140
	0407_WD_GW09_200721	SE209052.004	%	10 - 150%	131
	0407_WD_GW03_200721	SE209052.005	%	10 - 150%	133
	0407_WD_GW04_200721	SE209052.006	%	10 - 150%	123
	0407_WD_GW01_200721	SE209052.007	%	10 - 150%	137
	0407_WD_GW05_200721	SE209052.008	%	10 - 150%	124
	0407_WD_GW11_200721	SE209052.009	%	10 - 150%	174 †
	0407_WD_GW18_200721	SE209052.014	%	10 - 150%	128
	0407_WD_GW13a_200721	SE209052.015	%	10 - 150%	133
	0407_WD_GW12_200721	SE209052.017	%	10 - 150%	133
	0407_WD1_200721	SE209052.018	%	10 - 150%	125
(13C2-6:2FTS) Surrogate	0407_WD_GW02_200721	SE209052.001	%	10 - 150%	118
	0407_WD_GW07_200721	SE209052.002	%	10 - 150%	119
	0407_WD_GW06_200721	SE209052.003	%	10 - 150%	125
	0407_WD_GW09_200721	SE209052.004	%	10 - 150%	122
	0407_WD_GW03_200721	SE209052.005	%	10 - 150%	123
	0407_WD_GW04_200721	SE209052.006	%	10 - 150%	118
	0407_WD_GW01_200721	SE209052.007	%	10 - 150%	129
	0407_WD_GW05_200721	SE209052.008	%	10 - 150%	113
	0407_WD_GW11_200721	SE209052.009	%	10 - 150%	151 †
	0407_WD_GW18_200721	SE209052.014	%	10 - 150%	119
	0407_WD_GW13a_200721	SE209052.015	%	10 - 150%	123
	0407_WD_GW12_200721	SE209052.017	%	10 - 150%	138
	0407_WD1_200721	SE209052.018	%	10 - 150%	114
(13C2-8:2FTS) Surrogate	0407_WD_GW02_200721	SE209052.001	%	10 - 150%	216 †
	0407_WD_GW07_200721	SE209052.002	%	10 - 150%	254 †
	0407_WD_GW06_200721	SE209052.003	%	10 - 150%	191 †
	0407_WD_GW09_200721	SE209052.004	%	10 - 150%	261 †
	0407_WD_GW03_200721	SE209052.005	%	10 - 150%	262 †
	0407_WD_GW04_200721	SE209052.006	%	10 - 150%	252 †
	0407_WD_GW01_200721	SE209052.007	%	10 - 150%	242 †
	0407_WD_GW05_200721	SE209052.008	%	10 - 150%	240 †
	0407_WD_GW11_200721	SE209052.009	%	10 - 150%	258 †
	0407_WD_GW18_200721	SE209052.014	%	10 - 150%	261 †
	0407_WD_GW13a_200721	SE209052.015	%	10 - 150%	234 †
	0407_WD_GW12_200721	SE209052.017	%	10 - 150%	266 †
	0407_WD1_200721	SE209052.018	%	10 - 150%	274 †
(13C2-PFDoA) Surrogate	0407_WD_GW02_200721	SE209052.001	%	10 - 150%	86
	0407_WD_GW07_200721	SE209052.002	%	10 - 150%	92
	0407_WD_GW06_200721	SE209052.003	%	10 - 150%	74
	0407_WD_GW09_200721	SE209052.004	%	10 - 150%	92
	0407_WD_GW03_200721	SE209052.005	%	10 - 150%	105
	0407_WD_GW04_200721	SE209052.006	%	10 - 150%	104
	0407_WD_GW01_200721	SE209052.007	%	10 - 150%	105
	0407_WD_GW05_200721	SE209052.008	%	10 - 150%	105
	0407_WD_GW11_200721	SE209052.009	%	10 - 150%	102
	0407_WD_GW18_200721	SE209052.014	%	10 - 150%	103
	0407_WD_GW13a_200721	SE209052.015	%	10 - 150%	113
	0407_WD_GW12_200721	SE209052.017	%	10 - 150%	104
	0407_WD1_200721	SE209052.018	%	10 - 150%	92
(13C2-PFHxDA) Surrogate	0407_WD_GW02_200721	SE209052.001	%	10 - 150%	0 †
	0407_WD_GW07_200721	SE209052.002	%	10 - 150%	20
	0407_WD_GW06_200721	SE209052.003	%	10 - 150%	4 †
	0407_WD_GW09_200721	SE209052.004	%	10 - 150%	22
	0407_WD_GW03_200721	SE209052.005	%	10 - 150%	16
	0407_WD_GW04_200721	SE209052.006	%	10 - 150%	21
	0407_WD_GW01_200721	SE209052.007	%	10 - 150%	16
	0407_WD_GW05_200721	SE209052.008	%	10 - 150%	19
	0407_WD_GW11_200721	SE209052.009	%	10 - 150%	23
	0407_WD_GW18_200721	SE209052.014	%	10 - 150%	9 †
	0407_WD_GW13a_200721	SE209052.015	%	10 - 150%	16

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level (continued) **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C2-PFHxDA) Surrogate	0407_WD_GW12_200721	SE209052.017	%	10 - 150%	13
	0407_WD1_200721	SE209052.018	%	10 - 150%	7 †
(13C2-PFTeDA) Surrogate	0407_WD_GW02_200721	SE209052.001	%	10 - 130%	28
	0407_WD_GW07_200721	SE209052.002	%	10 - 130%	58
	0407_WD_GW06_200721	SE209052.003	%	10 - 130%	24
	0407_WD_GW09_200721	SE209052.004	%	10 - 130%	62
	0407_WD_GW03_200721	SE209052.005	%	10 - 130%	67
	0407_WD_GW04_200721	SE209052.006	%	10 - 130%	65
	0407_WD_GW01_200721	SE209052.007	%	10 - 130%	70
	0407_WD_GW05_200721	SE209052.008	%	10 - 130%	64
	0407_WD_GW11_200721	SE209052.009	%	10 - 130%	74
	0407_WD_GW18_200721	SE209052.014	%	10 - 130%	39
	0407_WD_GW13a_200721	SE209052.015	%	10 - 130%	69
	0407_WD_GW12_200721	SE209052.017	%	10 - 130%	67
	0407_WD1_200721	SE209052.018	%	10 - 130%	36
(13C3-PFBS) Surrogate	0407_WD_GW02_200721	SE209052.001	%	10 - 150%	75
	0407_WD_GW07_200721	SE209052.002	%	10 - 150%	71
	0407_WD_GW06_200721	SE209052.003	%	10 - 150%	77
	0407_WD_GW09_200721	SE209052.004	%	10 - 150%	69
	0407_WD_GW03_200721	SE209052.005	%	10 - 150%	74
	0407_WD_GW04_200721	SE209052.006	%	10 - 150%	68
	0407_WD_GW01_200721	SE209052.007	%	10 - 150%	72
	0407_WD_GW05_200721	SE209052.008	%	10 - 150%	67
	0407_WD_GW11_200721	SE209052.009	%	10 - 150%	74
	0407_WD_GW18_200721	SE209052.014	%	10 - 150%	72
	0407_WD_GW13a_200721	SE209052.015	%	10 - 150%	71
	0407_WD_GW12_200721	SE209052.017	%	10 - 150%	72
	0407_WD1_200721	SE209052.018	%	10 - 150%	63
(13C3-PFHxS) Surrogate	0407_WD_GW02_200721	SE209052.001	%	10 - 150%	105
	0407_WD_GW07_200721	SE209052.002	%	10 - 150%	101
	0407_WD_GW06_200721	SE209052.003	%	10 - 150%	97
	0407_WD_GW09_200721	SE209052.004	%	10 - 150%	99
	0407_WD_GW03_200721	SE209052.005	%	10 - 150%	102
	0407_WD_GW04_200721	SE209052.006	%	10 - 150%	97
	0407_WD_GW01_200721	SE209052.007	%	10 - 150%	96
	0407_WD_GW05_200721	SE209052.008	%	10 - 150%	96
	0407_WD_GW11_200721	SE209052.009	%	10 - 150%	102
	0407_WD_GW18_200721	SE209052.014	%	10 - 150%	100
	0407_WD_GW13a_200721	SE209052.015	%	10 - 150%	100
	0407_WD_GW12_200721	SE209052.017	%	10 - 150%	112
	0407_WD1_200721	SE209052.018	%	10 - 150%	100
(13C4-PFBA) Surrogate	0407_WD_GW02_200721	SE209052.001	%	10 - 150%	99
	0407_WD_GW07_200721	SE209052.002	%	10 - 150%	101
	0407_WD_GW06_200721	SE209052.003	%	10 - 150%	104
	0407_WD_GW09_200721	SE209052.004	%	10 - 150%	101
	0407_WD_GW03_200721	SE209052.005	%	10 - 150%	99
	0407_WD_GW04_200721	SE209052.006	%	10 - 150%	103
	0407_WD_GW01_200721	SE209052.007	%	10 - 150%	102
	0407_WD_GW05_200721	SE209052.008	%	10 - 150%	102
	0407_WD_GW11_200721	SE209052.009	%	10 - 150%	101
	0407_WD_GW18_200721	SE209052.014	%	10 - 150%	100
	0407_WD_GW13a_200721	SE209052.015	%	10 - 150%	101
	0407_WD_GW12_200721	SE209052.017	%	10 - 150%	100
	0407_WD1_200721	SE209052.018	%	10 - 150%	103
(13C4-PFHpA) Surrogate	0407_WD_GW02_200721	SE209052.001	%	10 - 150%	100
	0407_WD_GW07_200721	SE209052.002	%	10 - 150%	111
	0407_WD_GW06_200721	SE209052.003	%	10 - 150%	112
	0407_WD_GW09_200721	SE209052.004	%	10 - 150%	100
	0407_WD_GW03_200721	SE209052.005	%	10 - 150%	104
	0407_WD_GW04_200721	SE209052.006	%	10 - 150%	100
	0407_WD_GW01_200721	SE209052.007	%	10 - 150%	103

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level (continued) **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C4-PFHpA) Surrogate	0407_WD_GW05_200721	SE209052.008	%	10 - 150%	99
	0407_WD_GW11_200721	SE209052.009	%	10 - 150%	98
	0407_WD_GW18_200721	SE209052.014	%	10 - 150%	112
	0407_WD_GW13a_200721	SE209052.015	%	10 - 150%	106
	0407_WD_GW12_200721	SE209052.017	%	10 - 150%	100
	0407_WD1_200721	SE209052.018	%	10 - 150%	99
(13C4-PFOA) Surrogate	0407_WD_GW02_200721	SE209052.001	%	10 - 150%	96
	0407_WD_GW07_200721	SE209052.002	%	10 - 150%	107
	0407_WD_GW06_200721	SE209052.003	%	10 - 150%	109
	0407_WD_GW09_200721	SE209052.004	%	10 - 150%	105
	0407_WD_GW03_200721	SE209052.005	%	10 - 150%	101
	0407_WD_GW04_200721	SE209052.006	%	10 - 150%	99
	0407_WD_GW01_200721	SE209052.007	%	10 - 150%	105
	0407_WD_GW05_200721	SE209052.008	%	10 - 150%	102
	0407_WD_GW11_200721	SE209052.009	%	10 - 150%	97
	0407_WD_GW18_200721	SE209052.014	%	10 - 150%	110
	0407_WD_GW13a_200721	SE209052.015	%	10 - 150%	97
	0407_WD_GW12_200721	SE209052.017	%	10 - 150%	107
	0407_WD1_200721	SE209052.018	%	10 - 150%	94
(13C5_PFPeA) Surrogate	0407_WD_GW02_200721	SE209052.001	%	10 - 150%	105
	0407_WD_GW07_200721	SE209052.002	%	10 - 150%	110
	0407_WD_GW06_200721	SE209052.003	%	10 - 150%	100
	0407_WD_GW09_200721	SE209052.004	%	10 - 150%	103
	0407_WD_GW03_200721	SE209052.005	%	10 - 150%	104
	0407_WD_GW04_200721	SE209052.006	%	10 - 150%	107
	0407_WD_GW01_200721	SE209052.007	%	10 - 150%	106
	0407_WD_GW05_200721	SE209052.008	%	10 - 150%	105
	0407_WD_GW11_200721	SE209052.009	%	10 - 150%	109
	0407_WD_GW18_200721	SE209052.014	%	10 - 150%	109
	0407_WD_GW13a_200721	SE209052.015	%	10 - 150%	107
	0407_WD_GW12_200721	SE209052.017	%	10 - 150%	102
	0407_WD1_200721	SE209052.018	%	10 - 150%	110
(13C5-PFHxA) Surrogate	0407_WD_GW02_200721	SE209052.001	%	10 - 150%	90
	0407_WD_GW07_200721	SE209052.002	%	10 - 150%	95
	0407_WD_GW06_200721	SE209052.003	%	10 - 150%	112
	0407_WD_GW09_200721	SE209052.004	%	10 - 150%	88
	0407_WD_GW03_200721	SE209052.005	%	10 - 150%	92
	0407_WD_GW04_200721	SE209052.006	%	10 - 150%	86
	0407_WD_GW01_200721	SE209052.007	%	10 - 150%	93
	0407_WD_GW05_200721	SE209052.008	%	10 - 150%	95
	0407_WD_GW11_200721	SE209052.009	%	10 - 150%	87
	0407_WD_GW18_200721	SE209052.014	%	10 - 150%	96
	0407_WD_GW13a_200721	SE209052.015	%	10 - 150%	91
	0407_WD_GW12_200721	SE209052.017	%	10 - 150%	85
	0407_WD1_200721	SE209052.018	%	10 - 150%	82
(13C6-PFDA) Surrogate	0407_WD_GW02_200721	SE209052.001	%	10 - 150%	88
	0407_WD_GW07_200721	SE209052.002	%	10 - 150%	87
	0407_WD_GW06_200721	SE209052.003	%	10 - 150%	87
	0407_WD_GW09_200721	SE209052.004	%	10 - 150%	82
	0407_WD_GW03_200721	SE209052.005	%	10 - 150%	79
	0407_WD_GW04_200721	SE209052.006	%	10 - 150%	97
	0407_WD_GW01_200721	SE209052.007	%	10 - 150%	105
	0407_WD_GW05_200721	SE209052.008	%	10 - 150%	89
	0407_WD_GW11_200721	SE209052.009	%	10 - 150%	93
	0407_WD_GW18_200721	SE209052.014	%	10 - 150%	92
	0407_WD_GW13a_200721	SE209052.015	%	10 - 150%	96
	0407_WD_GW12_200721	SE209052.017	%	10 - 150%	89
	0407_WD1_200721	SE209052.018	%	10 - 150%	85
(13C7-PFUdA) Surrogate	0407_WD_GW02_200721	SE209052.001	%	10 - 150%	104
	0407_WD_GW07_200721	SE209052.002	%	10 - 150%	100
	0407_WD_GW06_200721	SE209052.003	%	10 - 150%	100

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

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Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level (continued) **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C7-PFUdA) Surrogate	0407_WD_GW09_200721	SE209052.004	%	10 - 150%	101
	0407_WD_GW03_200721	SE209052.005	%	10 - 150%	107
	0407_WD_GW04_200721	SE209052.006	%	10 - 150%	106
	0407_WD_GW01_200721	SE209052.007	%	10 - 150%	115
	0407_WD_GW05_200721	SE209052.008	%	10 - 150%	101
	0407_WD_GW11_200721	SE209052.009	%	10 - 150%	106
	0407_WD_GW18_200721	SE209052.014	%	10 - 150%	108
	0407_WD_GW13a_200721	SE209052.015	%	10 - 150%	109
	0407_WD_GW12_200721	SE209052.017	%	10 - 150%	117
	0407_WD1_200721	SE209052.018	%	10 - 150%	108
(13C8-PFOS) Surrogate	0407_WD_GW02_200721	SE209052.001	%	10 - 150%	95
	0407_WD_GW07_200721	SE209052.002	%	10 - 150%	85
	0407_WD_GW06_200721	SE209052.003	%	10 - 150%	95
	0407_WD_GW09_200721	SE209052.004	%	10 - 150%	98
	0407_WD_GW03_200721	SE209052.005	%	10 - 150%	90
	0407_WD_GW04_200721	SE209052.006	%	10 - 150%	100
	0407_WD_GW01_200721	SE209052.007	%	10 - 150%	93
	0407_WD_GW05_200721	SE209052.008	%	10 - 150%	98
	0407_WD_GW11_200721	SE209052.009	%	10 - 150%	103
	0407_WD_GW18_200721	SE209052.014	%	10 - 150%	94
	0407_WD_GW13a_200721	SE209052.015	%	10 - 150%	92
	0407_WD_GW12_200721	SE209052.017	%	10 - 150%	98
	0407_WD1_200721	SE209052.018	%	10 - 150%	103
(13C8-PFOSA) Surrogate	0407_WD_GW02_200721	SE209052.001	%	10 - 150%	46
	0407_WD_GW07_200721	SE209052.002	%	10 - 150%	41
	0407_WD_GW06_200721	SE209052.003	%	10 - 150%	46
	0407_WD_GW09_200721	SE209052.004	%	10 - 150%	51
	0407_WD_GW03_200721	SE209052.005	%	10 - 150%	56
	0407_WD_GW04_200721	SE209052.006	%	10 - 150%	44
	0407_WD_GW01_200721	SE209052.007	%	10 - 150%	52
	0407_WD_GW05_200721	SE209052.008	%	10 - 150%	52
	0407_WD_GW11_200721	SE209052.009	%	10 - 150%	54
	0407_WD_GW18_200721	SE209052.014	%	10 - 150%	48
	0407_WD_GW13a_200721	SE209052.015	%	10 - 150%	47
	0407_WD_GW12_200721	SE209052.017	%	10 - 150%	50
	0407_WD1_200721	SE209052.018	%	10 - 150%	46
(13C9-PFNA) Surrogate	0407_WD_GW02_200721	SE209052.001	%	10 - 150%	95
	0407_WD_GW07_200721	SE209052.002	%	10 - 150%	93
	0407_WD_GW06_200721	SE209052.003	%	10 - 150%	114
	0407_WD_GW09_200721	SE209052.004	%	10 - 150%	103
	0407_WD_GW03_200721	SE209052.005	%	10 - 150%	99
	0407_WD_GW04_200721	SE209052.006	%	10 - 150%	100
	0407_WD_GW01_200721	SE209052.007	%	10 - 150%	101
	0407_WD_GW05_200721	SE209052.008	%	10 - 150%	101
	0407_WD_GW11_200721	SE209052.009	%	10 - 150%	104
	0407_WD_GW18_200721	SE209052.014	%	10 - 150%	102
	0407_WD_GW13a_200721	SE209052.015	%	10 - 150%	106
	0407_WD_GW12_200721	SE209052.017	%	10 - 150%	114
	0407_WD1_200721	SE209052.018	%	10 - 150%	97
(D3-N-MeFOSA) Surrogate	0407_WD_GW02_200721	SE209052.001	%	10 - 150%	37
	0407_WD_GW07_200721	SE209052.002	%	10 - 150%	45
	0407_WD_GW06_200721	SE209052.003	%	10 - 150%	34
	0407_WD_GW09_200721	SE209052.004	%	10 - 150%	52
	0407_WD_GW03_200721	SE209052.005	%	10 - 150%	49
	0407_WD_GW04_200721	SE209052.006	%	10 - 150%	48
	0407_WD_GW01_200721	SE209052.007	%	10 - 150%	44
	0407_WD_GW05_200721	SE209052.008	%	10 - 150%	46
	0407_WD_GW11_200721	SE209052.009	%	10 - 150%	55
	0407_WD_GW18_200721	SE209052.014	%	10 - 150%	41
	0407_WD_GW13a_200721	SE209052.015	%	10 - 150%	49
	0407_WD_GW12_200721	SE209052.017	%	10 - 150%	46

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level (continued) **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(D3-N-MeFOSA) Surrogate	0407_WD1_200721	SE209052.018	%	10 - 150%	43
(D3-N-MeFOSAA) Surrogate	0407_WD_GW02_200721	SE209052.001	%	10 - 150%	88
	0407_WD_GW07_200721	SE209052.002	%	10 - 150%	116
	0407_WD_GW06_200721	SE209052.003	%	10 - 150%	112
	0407_WD_GW09_200721	SE209052.004	%	10 - 150%	121
	0407_WD_GW03_200721	SE209052.005	%	10 - 150%	110
	0407_WD_GW04_200721	SE209052.006	%	10 - 150%	103
	0407_WD_GW01_200721	SE209052.007	%	10 - 150%	109
	0407_WD_GW05_200721	SE209052.008	%	10 - 150%	105
	0407_WD_GW11_200721	SE209052.009	%	10 - 150%	125
	0407_WD_GW18_200721	SE209052.014	%	10 - 150%	126
	0407_WD_GW13a_200721	SE209052.015	%	10 - 150%	109
	0407_WD_GW12_200721	SE209052.017	%	10 - 150%	112
	0407_WD1_200721	SE209052.018	%	10 - 150%	111
(D5-N-EtFOSA) Surrogate	0407_WD_GW02_200721	SE209052.001	%	10 - 150%	34
	0407_WD_GW07_200721	SE209052.002	%	10 - 150%	44
	0407_WD_GW06_200721	SE209052.003	%	10 - 150%	21
	0407_WD_GW09_200721	SE209052.004	%	10 - 150%	50
	0407_WD_GW03_200721	SE209052.005	%	10 - 150%	51
	0407_WD_GW04_200721	SE209052.006	%	10 - 150%	44
	0407_WD_GW01_200721	SE209052.007	%	10 - 150%	48
	0407_WD_GW05_200721	SE209052.008	%	10 - 150%	41
	0407_WD_GW11_200721	SE209052.009	%	10 - 150%	52
	0407_WD_GW18_200721	SE209052.014	%	10 - 150%	37
	0407_WD_GW13a_200721	SE209052.015	%	10 - 150%	41
	0407_WD_GW12_200721	SE209052.017	%	10 - 150%	46
	0407_WD1_200721	SE209052.018	%	10 - 150%	40
(D5-N-EtFOSAA) Surrogate	0407_WD_GW02_200721	SE209052.001	%	10 - 150%	74
	0407_WD_GW07_200721	SE209052.002	%	10 - 150%	88
	0407_WD_GW06_200721	SE209052.003	%	10 - 150%	73
	0407_WD_GW09_200721	SE209052.004	%	10 - 150%	94
	0407_WD_GW03_200721	SE209052.005	%	10 - 150%	85
	0407_WD_GW04_200721	SE209052.006	%	10 - 150%	97
	0407_WD_GW01_200721	SE209052.007	%	10 - 150%	90
	0407_WD_GW05_200721	SE209052.008	%	10 - 150%	82
	0407_WD_GW11_200721	SE209052.009	%	10 - 150%	100
	0407_WD_GW18_200721	SE209052.014	%	10 - 150%	88
	0407_WD_GW13a_200721	SE209052.015	%	10 - 150%	81
	0407_WD_GW12_200721	SE209052.017	%	10 - 150%	85
	0407_WD1_200721	SE209052.018	%	10 - 150%	81
(D7-N-MeFOSE) Surrogate	0407_WD_GW02_200721	SE209052.001	%	10 - 150%	31
	0407_WD_GW07_200721	SE209052.002	%	10 - 150%	31
	0407_WD_GW06_200721	SE209052.003	%	10 - 150%	30
	0407_WD_GW09_200721	SE209052.004	%	10 - 150%	38
	0407_WD_GW03_200721	SE209052.005	%	10 - 150%	34
	0407_WD_GW04_200721	SE209052.006	%	10 - 150%	36
	0407_WD_GW01_200721	SE209052.007	%	10 - 150%	39
	0407_WD_GW05_200721	SE209052.008	%	10 - 150%	29
	0407_WD_GW11_200721	SE209052.009	%	10 - 150%	39
	0407_WD_GW18_200721	SE209052.014	%	10 - 150%	31
	0407_WD_GW13a_200721	SE209052.015	%	10 - 150%	29
	0407_WD_GW12_200721	SE209052.017	%	10 - 150%	34
	0407_WD1_200721	SE209052.018	%	10 - 150%	33
(D9-N-EtFOSE) Surrogate	0407_WD_GW02_200721	SE209052.001	%	10 - 150%	26
	0407_WD_GW07_200721	SE209052.002	%	10 - 150%	35
	0407_WD_GW06_200721	SE209052.003	%	10 - 150%	28
	0407_WD_GW09_200721	SE209052.004	%	10 - 150%	43
	0407_WD_GW03_200721	SE209052.005	%	10 - 150%	41
	0407_WD_GW04_200721	SE209052.006	%	10 - 150%	37
	0407_WD_GW01_200721	SE209052.007	%	10 - 150%	39
	0407_WD_GW05_200721	SE209052.008	%	10 - 150%	33

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level (continued) — **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(D9-N-EtFOSE) Surrogate	0407_WD_GW11_200721	SE209052.009	%	10 - 150%	38
	0407_WD_GW18_200721	SE209052.014	%	10 - 150%	35
	0407_WD_GW13a_200721	SE209052.015	%	10 - 150%	35
	0407_WD_GW12_200721	SE209052.017	%	10 - 150%	35
	0407_WD1_200721	SE209052.018	%	10 - 150%	35

VOC's in Soil — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_WD_GW02_200721	SE209052.001	%	60 - 130%	91
	0407_WD_GW07_200721	SE209052.002	%	60 - 130%	98
	0407_WD_GW06_200721	SE209052.003	%	60 - 130%	94
	0407_WD_GW09_200721	SE209052.004	%	60 - 130%	94
	0407_WD_GW03_200721	SE209052.005	%	60 - 130%	88
	0407_WD_GW04_200721	SE209052.006	%	60 - 130%	90
	0407_WD_GW01_200721	SE209052.007	%	60 - 130%	87
	0407_WD_GW05_200721	SE209052.008	%	60 - 130%	93
	0407_WD_GW11_200721	SE209052.009	%	60 - 130%	83
	0407_WD_GW18_200721	SE209052.014	%	60 - 130%	77
	0407_WD_GW13a_200721	SE209052.015	%	60 - 130%	88
	0407_WD_GW12_200721	SE209052.017	%	60 - 130%	84
	0407_WD1_200721	SE209052.018	%	60 - 130%	76
d4-1,2-dichloroethane (Surrogate)	0407_WD_GW02_200721	SE209052.001	%	60 - 130%	88
	0407_WD_GW07_200721	SE209052.002	%	60 - 130%	91
	0407_WD_GW06_200721	SE209052.003	%	60 - 130%	85
	0407_WD_GW09_200721	SE209052.004	%	60 - 130%	80
	0407_WD_GW03_200721	SE209052.005	%	60 - 130%	82
	0407_WD_GW04_200721	SE209052.006	%	60 - 130%	86
	0407_WD_GW01_200721	SE209052.007	%	60 - 130%	86
	0407_WD_GW05_200721	SE209052.008	%	60 - 130%	88
	0407_WD_GW11_200721	SE209052.009	%	60 - 130%	74
	0407_WD_GW18_200721	SE209052.014	%	60 - 130%	76
	0407_WD_GW13a_200721	SE209052.015	%	60 - 130%	79
	0407_WD_GW12_200721	SE209052.017	%	60 - 130%	76
	0407_WD1_200721	SE209052.018	%	60 - 130%	69
d8-toluene (Surrogate)	0407_WD_GW02_200721	SE209052.001	%	60 - 130%	81
	0407_WD_GW07_200721	SE209052.002	%	60 - 130%	88
	0407_WD_GW06_200721	SE209052.003	%	60 - 130%	85
	0407_WD_GW09_200721	SE209052.004	%	60 - 130%	87
	0407_WD_GW03_200721	SE209052.005	%	60 - 130%	84
	0407_WD_GW04_200721	SE209052.006	%	60 - 130%	84
	0407_WD_GW01_200721	SE209052.007	%	60 - 130%	87
	0407_WD_GW05_200721	SE209052.008	%	60 - 130%	83
	0407_WD_GW11_200721	SE209052.009	%	60 - 130%	81
	0407_WD_GW18_200721	SE209052.014	%	60 - 130%	73
	0407_WD_GW13a_200721	SE209052.015	%	60 - 130%	85
	0407_WD_GW12_200721	SE209052.017	%	60 - 130%	77
	0407_WD1_200721	SE209052.018	%	60 - 130%	72

VOCs in Water — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_WD_GW14_200721	SE209052.010	%	40 - 130%	100
	0407_WD_GW15_200721	SE209052.011	%	40 - 130%	104
	0407_WD_GW16_200721	SE209052.012	%	40 - 130%	102
	0407_WD_GW17_200721	SE209052.013	%	40 - 130%	101
	0407_WD_GW13b_200721	SE209052.016	%	40 - 130%	115
d4-1,2-dichloroethane (Surrogate)	0407_WD_GW14_200721	SE209052.010	%	40 - 130%	97
	0407_WD_GW15_200721	SE209052.011	%	40 - 130%	99
	0407_WD_GW16_200721	SE209052.012	%	40 - 130%	97
	0407_WD_GW17_200721	SE209052.013	%	40 - 130%	97
	0407_WD_GW13b_200721	SE209052.016	%	40 - 130%	101
d8-toluene (Surrogate)	0407_WD_GW14_200721	SE209052.010	%	40 - 130%	98
	0407_WD_GW15_200721	SE209052.011	%	40 - 130%	95

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOCs in Water (continued)

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d8-toluene (Surrogate)	0407_WD_GW16_200721	SE209052.012	%	40 - 130%	96
	0407_WD_GW17_200721	SE209052.013	%	40 - 130%	96
	0407_WD_GW13b_200721	SE209052.016	%	40 - 130%	97

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_WD_GW02_200721	SE209052.001	%	60 - 130%	91
	0407_WD_GW07_200721	SE209052.002	%	60 - 130%	98
	0407_WD_GW06_200721	SE209052.003	%	60 - 130%	94
	0407_WD_GW09_200721	SE209052.004	%	60 - 130%	94
	0407_WD_GW03_200721	SE209052.005	%	60 - 130%	88
	0407_WD_GW04_200721	SE209052.006	%	60 - 130%	90
	0407_WD_GW01_200721	SE209052.007	%	60 - 130%	87
	0407_WD_GW05_200721	SE209052.008	%	60 - 130%	93
	0407_WD_GW11_200721	SE209052.009	%	60 - 130%	83
	0407_WD_GW18_200721	SE209052.014	%	60 - 130%	77
	0407_WD_GW13a_200721	SE209052.015	%	60 - 130%	88
	0407_WD_GW12_200721	SE209052.017	%	60 - 130%	84
	0407_WD1_200721	SE209052.018	%	60 - 130%	76
d4-1,2-dichloroethane (Surrogate)	0407_WD_GW02_200721	SE209052.001	%	60 - 130%	88
	0407_WD_GW07_200721	SE209052.002	%	60 - 130%	91
	0407_WD_GW06_200721	SE209052.003	%	60 - 130%	85
	0407_WD_GW09_200721	SE209052.004	%	60 - 130%	80
	0407_WD_GW03_200721	SE209052.005	%	60 - 130%	82
	0407_WD_GW04_200721	SE209052.006	%	60 - 130%	86
	0407_WD_GW01_200721	SE209052.007	%	60 - 130%	86
	0407_WD_GW05_200721	SE209052.008	%	60 - 130%	88
	0407_WD_GW11_200721	SE209052.009	%	60 - 130%	74
	0407_WD_GW18_200721	SE209052.014	%	60 - 130%	76
	0407_WD_GW13a_200721	SE209052.015	%	60 - 130%	79
	0407_WD_GW12_200721	SE209052.017	%	60 - 130%	76
	0407_WD1_200721	SE209052.018	%	60 - 130%	69
d8-toluene (Surrogate)	0407_WD_GW02_200721	SE209052.001	%	60 - 130%	81
	0407_WD_GW07_200721	SE209052.002	%	60 - 130%	88
	0407_WD_GW06_200721	SE209052.003	%	60 - 130%	85
	0407_WD_GW09_200721	SE209052.004	%	60 - 130%	87
	0407_WD_GW03_200721	SE209052.005	%	60 - 130%	84
	0407_WD_GW04_200721	SE209052.006	%	60 - 130%	84
	0407_WD_GW01_200721	SE209052.007	%	60 - 130%	87
	0407_WD_GW05_200721	SE209052.008	%	60 - 130%	83
	0407_WD_GW11_200721	SE209052.009	%	60 - 130%	81
	0407_WD_GW18_200721	SE209052.014	%	60 - 130%	73
	0407_WD_GW13a_200721	SE209052.015	%	60 - 130%	85
	0407_WD_GW12_200721	SE209052.017	%	60 - 130%	77
	0407_WD1_200721	SE209052.018	%	60 - 130%	72

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_WD_GW14_200721	SE209052.010	%	40 - 130%	100
	0407_WD_GW15_200721	SE209052.011	%	40 - 130%	104
	0407_WD_GW16_200721	SE209052.012	%	40 - 130%	102
	0407_WD_GW17_200721	SE209052.013	%	40 - 130%	101
	0407_WD_GW13b_200721	SE209052.016	%	40 - 130%	115
d4-1,2-dichloroethane (Surrogate)	0407_WD_GW14_200721	SE209052.010	%	60 - 130%	97
	0407_WD_GW15_200721	SE209052.011	%	60 - 130%	99
	0407_WD_GW16_200721	SE209052.012	%	60 - 130%	97
	0407_WD_GW17_200721	SE209052.013	%	60 - 130%	97
	0407_WD_GW13b_200721	SE209052.016	%	60 - 130%	101
d8-toluene (Surrogate)	0407_WD_GW14_200721	SE209052.010	%	40 - 130%	98
	0407_WD_GW15_200721	SE209052.011	%	40 - 130%	95
	0407_WD_GW16_200721	SE209052.012	%	40 - 130%	96
	0407_WD_GW17_200721	SE209052.013	%	40 - 130%	96

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Water (continued) — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d8-toluene (Surrogate)	0407_WD_GW13b_200721	SE209052.016	%	40 - 130%	97

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Full 8270 SVOC in Soil — **Method: ME-(AU)-[ENV]AN420**

Sample Number		Parameter	Units	LOR	Result
LB205126.001	01-PAHs	Acenaphthene	mg/kg	0.1	<0.1
		Acenaphthylene	mg/kg	0.1	<0.1
		Anthracene	mg/kg	0.1	<0.1
		Benzo(a)anthracene	mg/kg	0.1	<0.1
		Benzo(b&j&k)fluoranthene	mg/kg	0.2	<0.2
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Benzo(a)pyrene	mg/kg	0.1	<0.1
		Chrysene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Fluoranthene	mg/kg	0.1	<0.1
		Fluorene	mg/kg	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		1-methylnaphthalene	mg/kg	0.1	<0.1
		2-methylnaphthalene	mg/kg	0.1	<0.1
		Naphthalene	mg/kg	0.1	<0.1
		Phenanthrene	mg/kg	0.1	<0.1
		Pyrene	mg/kg	0.1	<0.1
		2-acetylaminofluorene	mg/kg	0.5	<0.5
		7,12-dimethyl-benz(a)anthracene	mg/kg	0.5	<0.5
		3-methylcholanthrene	mg/kg	0.5	<0.5
	02-OCs	Aldrin	mg/kg	0.1	<0.1
		Alpha-BHC	mg/kg	0.1	<0.1
		Beta-BHC	mg/kg	0.5	<0.5
		Delta-BHC	mg/kg	0.1	<0.1
		Gamma-BHC (Lindane)	mg/kg	0.1	<0.1
		p,p-DDD	mg/kg	0.1	<0.1
		p,p-DDE	mg/kg	0.1	<0.1
		p,p-DDT	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Alpha-endosulfan	mg/kg	0.2	<0.2
		Beta-endosulfan	mg/kg	0.2	<0.2
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin	mg/kg	0.2	<0.2
		Heptachlor	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
		Alpha-chlordane	mg/kg	0.1	<0.1
		Gamma-chlordane	mg/kg	0.1	<0.1
		Endrin ketone	mg/kg	0.1	<0.1
	03-OPs	Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
		Bromophos ethyl	mg/kg	0.2	<0.2
		Carbophenothion	mg/kg	0.5	<0.5
		Chlorfenvinphos-cis	mg/kg	2	<2
		Chlorfenvinphos-trans	mg/kg	0.5	<0.5
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Chlorpyrifos-methyl	mg/kg	0.5	<0.5
		Co-Ral (Coumaphos)	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Dichlorvos	mg/kg	0.5	<0.5
		Demeton-S-methyl	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Disulfoton (Di-syston)	mg/kg	0.5	<0.5
		EPN*	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Ethoprophos (ethoprop or prophos)	mg/kg	0.5	<0.5
		Famphur (Famophos)	mg/kg	0.5	<0.5
		Fenamiphos (Phenamiphos)	mg/kg	0.5	<0.5
		Fenchlorophos (Ronnel)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Full 8270 SVOC in Soil (continued) — **Method: ME-(AU)-[ENV]AN420**

Sample Number		Parameter	Units	LOR	Result
LB205126.001	03-OPs	Fenthion	mg/kg	0.5	<0.5
		Malathion (Maldison)	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Mevinphos-cis/trans	mg/kg	1	<1
		o,o,o-triethyl phosphorothioate	mg/kg	0.5	<0.5
		Parathion ethyl (Parathion)	mg/kg	0.2	<0.2
		Parathion methyl	mg/kg	0.5	<0.5
		Phorate	mg/kg	0.5	<0.5
		Pirimiphos-ethyl	mg/kg	0.5	<0.5
		Pirimiphos-methyl	mg/kg	0.5	<0.5
		Profenofos	mg/kg	0.5	<0.5
		Prothiophos (Tokuthion)*	mg/kg	0.5	<0.5
		Sulfotepp	mg/kg	0.5	<0.5
		Tetrachlorvinphos (Stirophos)*	mg/kg	0.5	<0.5
	04-PCB UPAC(7) Congeners	PCB Congener C28	mg/kg	0.1	<0.1
		PCB Congener C52	mg/kg	0.1	<0.1
		PCB Congener C101	mg/kg	0.1	<0.1
		PCB Congener C118	mg/kg	0.1	<0.1
		PCB Congener C138	mg/kg	0.1	<0.1
		PCB Congener C153	mg/kg	0.1	<0.1
		PCB Congener C180	mg/kg	0.1	<0.1
	05-SVCH (Cl Benzenes, Hydrocarbons & VOCs)	Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.5	<0.5
		1,3-dichlorobenzene	mg/kg	0.5	<0.5
		1,4-dichlorobenzene	mg/kg	0.5	<0.5
		Hexachlorobutadiene	mg/kg	0.5	<0.5
		Hexachlorocyclopentadiene	mg/kg	1	<1
		Hexachloroethane	mg/kg	0.5	<0.5
		Hexachloroproprene	mg/kg	0.5	<0.5
		Pentachlorobenzene	mg/kg	0.5	<0.5
		Pentachloroethane	mg/kg	0.5	<0.5
		1,2,3,5 and 1,2,4,5 -tetrachlorobenzene	mg/kg	1	<1
		1,2,3,4-tetrachlorobenzene	mg/kg	0.5	<0.5
		1/2-Chloronaphthalene	mg/kg	1	<1
		1,2,4-trichlorobenzene	mg/kg	0.5	<0.5
	06-Phthalates	Bis(2-ethylhexyl)phthalate	mg/kg	5	<5
		Bis(2-ethylhexyl)adipate	mg/kg	0.5	<0.5
		Butyl benzyl phthalate	mg/kg	0.5	<0.5
		Di-n-butyl phthalate	mg/kg	0.5	<0.5
		Diethyl phthalate	mg/kg	0.5	<0.5
		Dimethyl phthalate	mg/kg	0.5	<0.5
		Dioctyl phthalate	mg/kg	0.5	<0.5
	07-Carbamates	Carbofuran	mg/kg	0.5	<0.5
		Carbaryl	mg/kg	0.5	<0.5
	08-Herbicides (normal)	Trifluralin	mg/kg	0.5	<0.5
	09-Nitrosamines	N-nitroso-di-n-butylamine (NDBA)	mg/kg	0.5	<0.5
		N-nitroso-diethylamine (NDEA)	mg/kg	1	<1
		N-nitroso-di-n-propylamine (NDPA)	mg/kg	0.5	<0.5
		N-nitroso-morpholine (NMOR)	mg/kg	0.5	<0.5
		N-nitroso-piperidine (NPIP)	mg/kg	0.5	<0.5
		N-nitroso-pyrrolidine (NPYR)	mg/kg	1	<1
		4-amino biphenyl	mg/kg	1	<1
	10-Nitroaromatics and Ketones	Acetophenone	mg/kg	0.5	<0.5
		1,3-dinitrobenzene	mg/kg	1	<1
		2,4-dinitrotoluene	mg/kg	0.5	<0.5
		2,6-dinitrotoluene	mg/kg	0.5	<0.5
		Isophorone	mg/kg	0.5	<0.5
		Nitrobenzene	mg/kg	0.5	<0.5
		p-(dimethylamino) azobenzene	mg/kg	1	<1
		Phenacetin	mg/kg	1	<1
		Pentachloronitrobenzene (quintozene)	mg/kg	0.5	<0.5

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Full 8270 SVOC in Soil (continued) — Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB205126.001	11-Anilines and Amines	Aniline	mg/kg	3	<3
		4-chloroaniline	mg/kg	1	<1
		2-nitroaniline	mg/kg	1	<1
		3-nitroaniline	mg/kg	1	<1
		4-nitroaniline	mg/kg	1	<1
		Diphenylamine	mg/kg	0.5	<0.5
		o-toluidine	mg/kg	1	<1
		5-nitro-o-toluidine	mg/kg	1	<1
		1-naphthylamine	mg/kg	1	<1
		2-naphthylamine	mg/kg	1	<1
	12-Haloethers	Bis(2-chloroethoxy) methane	mg/kg	0.5	<0.5
		Bis(2-chloroethyl) ether	mg/kg	0.5	<0.5
		Bis(2-chloroisopropyl) ether	mg/kg	0.5	<0.5
		4-chlorophenyl phenyl ether	mg/kg	0.5	<0.5
		4-bromophenyl phenyl ether	mg/kg	0.5	<0.5
	13-Other SVOCs	Methyl methanesulfonate	mg/kg	1	<1
		Ethyl methanesulfonate	mg/kg	1	<1
		Dibenzofuran	mg/kg	0.5	<0.5
		Benzyl alcohol	mg/kg	1	<1
		Safrole	mg/kg	0.5	<0.5
		Isosafrole Isomer 1	mg/kg	1	<1
		Isosafrole Isomer 2	mg/kg	1	<1
		1,4-naphthoquinone	mg/kg	0.5	<0.5
		Thionazin	mg/kg	1	<1
	14-Speciated Routine	3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
	Phenols	2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		4-chloro-3-methylphenol	mg/kg	2	<2
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2-nitrophenol	mg/kg	0.5	<0.5
		Phenol	mg/kg	0.5	<0.5
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5
		Pentachlorophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
	Surrogates	d5-phenol (Surrogate)	%	-	109
		d5-nitrobenzene (Surrogate)	%	-	110
		2-fluorobiphenyl (Surrogate)	%	-	108
		2,4,6-tribromophenol (Surrogate)	%	-	103
		d14-p-terphenyl (Surrogate)	%	-	122

Full 8270 SVOC in Water — Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB205232.001	01-PAHs	Acenaphthene	µg/L	0.1	<0.1
		Acenaphthylene	µg/L	0.1	<0.1
		Anthracene	µg/L	0.1	<0.1
		Benzo(a)anthracene	µg/L	0.1	<0.1
		Total Benzofluoranthenes (b&j&k)	µg/L	0.2	<0.2
		Benzo(ghi)perylene	µg/L	0.1	<0.1
		Benzo(a)pyrene	µg/L	0.1	<0.1
		Chrysene	µg/L	0.1	<0.1
		Dibenzo(ah)anthracene	µg/L	0.1	<0.1
		Fluoranthene	µg/L	0.1	<0.1
		Fluorene	µg/L	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1
		1-methylnaphthalene	µg/L	0.1	<0.1
		2-methylnaphthalene	µg/L	0.1	<0.1
		Naphthalene	µg/L	0.1	<0.1
		Phenanthrene	µg/L	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Full 8270 SVOC in Water (continued) — **Method: ME-(AU)-[ENV]AN420**

Sample Number		Parameter	Units	LOR	Result
LB205232.001	01-PAHs	Pyrene	µg/L	0.1	<0.1
		2-acetylaminofluorene	µg/L	0.5	<0.5
		7,12-dimethyl-benz(a)anthracene	µg/L	0.5	<0.5
		3-methylcholanthrene	µg/L	0.5	<0.5
	02-OCs	Aldrin	µg/L	0.1	<0.1
		Alpha-BHC	µg/L	0.1	<0.1
		Beta-BHC	µg/L	0.1	<0.1
		Delta-BHC	µg/L	0.1	<0.1
		Gamma-BHC (Lindane)	µg/L	0.1	<0.1
		p,p-DDD	µg/L	0.1	<0.1
		p,p-DDE	µg/L	0.1	<0.1
		p,p-DDT	µg/L	0.1	<0.1
		Dieldrin	µg/L	0.1	<0.1
		Alpha-endosulfan	µg/L	0.1	<0.1
		Beta-endosulfan	µg/L	0.1	<0.1
		Endosulfan sulphate	µg/L	0.1	<0.1
		Endrin	µg/L	0.1	<0.1
		Heptachlor	µg/L	0.1	<0.1
		Heptachlor epoxide	µg/L	0.1	<0.1
		Isodrin	µg/L	0.1	<0.1
		Methoxychlor	µg/L	0.1	<0.1
		Mirex	µg/L	0.1	<0.1
		Alpha-chlordane	µg/L	0.1	<0.1
		Gamma-chlordane	µg/L	0.1	<0.1
		Endrin ketone	µg/L	0.1	<0.1
	03-OPs	Azinphos-methyl (Guthion)	µg/L	0.2	<0.2
		Bromophos ethyl	µg/L	0.2	<0.2
		Carbophenothion	µg/L	0.5	<0.5
		Chlorfenvinphos-cis	µg/L	5	<5
		Chlorfenvinphos-trans	µg/L	0.5	<0.5
		Chlorpyrifos (Chlorpyrifos Ethyl)	µg/L	0.2	<0.2
		Chlorpyrifos-methyl	µg/L	0.5	<0.5
		Co-Ral (Coumaphos)	µg/L	0.5	<0.5
		Diazinon (Dimpylate)	µg/L	0.5	<0.5
		Dichlorvos	µg/L	0.5	<0.5
		Demeton-S-methyl	µg/L	0.5	<0.5
		Dimethoate	µg/L	0.5	<0.5
		Disulfoton (Di-syston)	µg/L	0.5	<0.5
		EPN*	µg/L	0.5	<0.5
		Ethion	µg/L	0.2	<0.2
		Ethoprophos (Ethoprop or Prophos)	µg/L	0.5	<0.5
		Famphur (Famophos)	µg/L	0.5	<0.5
		Fenamiphos (Phenamiphos)	µg/L	0.5	<0.5
		Fenchlorophos (Ronnel)	µg/L	0.5	<0.5
		Fenitrothion	µg/L	0.2	<0.2
		Fenthion	µg/L	0.5	<0.5
		Malathion (Maldison)	µg/L	0.2	<0.2
		Methidathion	µg/L	0.5	<0.5
		Mevinphos-cis/trans	µg/L	1	<1
		o,o,o-triethyl phosphorothioate	µg/L	0.5	<0.5
		Parathion ethyl (Parathion)	µg/L	0.2	<0.2
		Parathion methyl	µg/L	0.5	<0.5
		Phorate	µg/L	0.5	<0.5
		Pirimiphos-ethyl	µg/L	0.5	<0.5
		Pirimiphos-methyl	µg/L	0.5	<0.5
		Profenofos	µg/L	0.5	<0.5
		Prothiophos (Tokuthion)*	µg/L	0.5	<0.5
		Sulfotepp	µg/L	0.5	<0.5
		Tetrachlorvinphos (Stirophos)*	µg/L	0.5	<0.5
	04-PCB UPAC(7)	PCB Congener C28	µg/L	0.1	<0.1
	Congeners	PCB Congener C52	µg/L	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Full 8270 SVOC in Water (continued) — **Method: ME-(AU)-[ENV]AN420**

Sample Number		Parameter	Units	LOR	Result
LB205232.001	04-PCB UPAC(7) Congeners	PCB Congener C101	µg/L	0.1	<0.1
		PCB Congener C118	µg/L	0.1	<0.1
		PCB Congener C138	µg/L	0.1	<0.1
		PCB Congener C153	µg/L	0.1	<0.1
		PCB Congener C180	µg/L	0.1	<0.1
	05-SVCH (Cl Benzenes, Hydrocarbons & VOCs)	1/2-Chloronaphthalene	µg/L	1	<1
		Hexachlorobenzene (HCB)	µg/L	0.1	<0.1
		1,2-dichlorobenzene	µg/L	0.5	<0.5
		1,3-dichlorobenzene	µg/L	0.5	<0.5
		1,4-dichlorobenzene	µg/L	0.5	<0.5
		Hexachlorobutadiene	µg/L	0.5	<0.5
		Hexachlorocyclopentadiene	µg/L	2	<2
		Hexachloroethane	µg/L	0.5	<0.5
		Hexachloroproprene	µg/L	0.5	<0.5
		Pentachlorobenzene	µg/L	0.5	<0.5
		Pentachloroethane	µg/L	0.5	<0.5
		1,2,3,5 and 1,2,4,5-tetrachlorobenzene	µg/L	1	<1
		1,2,3,4-tetrachlorobenzene	µg/L	0.5	<0.5
		1,2,4-trichlorobenzene	µg/L	0.5	<0.5
	06-Phthalates	Bis(2-ethylhexyl)phthalate	µg/L	50	<50
		Bis(2-ethylhexyl)adipate	µg/L	1	<1
		Butyl benzyl phthalate	µg/L	1	<1
		Di-n-butyl phthalate	µg/L	10	<10
		Diethyl phthalate	µg/L	5	<5
		Dimethyl phthalate	µg/L	1	<1
		Dioctyl phthalate	µg/L	1	<1
	07-Carbamates	Carbofuran	µg/L	0.5	<0.5
		Carbaryl	µg/L	0.5	<0.5
	08-Herbicides (normal)	Trifluralin	µg/L	0.5	<0.5
	09-Nitrosamines	N-nitroso-di-n-butylamine (NDBA)	µg/L	1	<1
		N-nitroso-diethylamine (NDEA)	µg/L	1	<1
		N-nitroso-di-n-propylamine (NDPA)	µg/L	1	<1
		N-nitroso-morpholine (NMOR)	µg/L	1	<1
		N-nitroso-piperidine (NPIP)	µg/L	1	<1
		N-nitroso-pyrrolidine (NPYR)	µg/L	1	<1
		4-amino biphenyl	µg/L	1	<1
	10-Nitroaromatics and Ketones	Acetophenone	µg/L	1	<1
		1,3-dinitrobenzene	µg/L	1	<1
		2,4-dinitrotoluene	µg/L	1	<1
		2,6-dinitrotoluene	µg/L	1	<1
		Isophorone	µg/L	1	<1
		Nitrobenzene	µg/L	1	<1
		p-(dimethylamino) azobenzene	µg/L	1	<1
		Phenacetin	µg/L	1	<1
		Pentachloronitrobenzene (quintozene)	µg/L	1	<1
	11-Anilines and Amines	Aniline	µg/L	5	<5
		4-chloroaniline	µg/L	1	<1
		2-nitroaniline	µg/L	1	<1
		3-nitroaniline	µg/L	1	<1
		4-nitroaniline	µg/L	1	<1
		Diphenylamine	µg/L	1	<1
		o-Toluidine	µg/L	1	<1
		5-nitro-o-toluidine	µg/L	1	<1
		1-naphthylamine	µg/L	2	<2
		2-naphthylamine	µg/L	2	<2
	12-Haloethers	Bis(2-chloroethoxy) methane	µg/L	1	<1
		Bis(2-chloroethyl) ether	µg/L	1	<1
		Bis(2-chloroisopropyl) ether	µg/L	1	<1
		4-chlorophenyl phenyl ether	µg/L	1	<1
		4-bromophenyl phenyl ether	µg/L	1	<1
	13-Other SVOCs	Methyl methanesulfonate	µg/L	1	<1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Full 8270 SVOC in Water (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB205232.001	13-Other SVOCs	Ethyl methanesulfonate	µg/L	1	<1
		Dibenzofuran	µg/L	1	<1
		Benzyl alcohol	µg/L	1	<1
		Safrole	µg/L	1	<1
		Isosafrole Isomer 1	µg/L	1	<1
		Isosafrole Isomer 2	µg/L	1	<1
		1,4-naphthoquinone	µg/L	1	<1
		Thionazin	µg/L	1	<1
	14-Speciated Routine	3/4-methyl phenol (m/p-cresol)	µg/L	1	<1
	Phenols	2-methyl phenol (o-cresol)	µg/L	0.5	<0.5
		2,6-dichlorophenol	µg/L	0.5	<0.5
		2,3,4,6 and 2,3,5,6-tetrachlorophenol	µg/L	1	<1
		2,4,5-trichlorophenol	µg/L	0.5	<0.5
		4-chloro-3-methylphenol	µg/L	2	<2
		2-chlorophenol	µg/L	0.5	<0.5
		2,4-dichlorophenol	µg/L	0.5	<0.5
		2,4-dimethylphenol	µg/L	0.5	<0.5
		2-nitrophenol	µg/L	0.5	<0.5
		Phenol	µg/L	0.5	<0.5
		2,4,6-trichlorophenol	µg/L	0.5	<0.5
		Pentachlorophenol	µg/L	0.5	<0.5
		4-nitrophenol	µg/L	1	<1
	Surrogates	d5-phenol (Surrogate)	%	-	101
		d5-nitrobenzene (Surrogate)	%	-	100
		2-fluorobiphenyl (Surrogate)	%	-	100
		2,4,6-Tribromophenol (Surrogate)	%	-	104
		d14-p-terphenyl (Surrogate)	%	-	94

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB205126.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	103

OC Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB205232.001	Hexachlorobenzene (HCB)	µg/L	0.1	<0.1
	Alpha BHC	µg/L	0.1	<0.1
	Lindane (gamma BHC)	µg/L	0.1	<0.1
	Heptachlor	µg/L	0.1	<0.1
	Aldrin	µg/L	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

OC Pesticides in Water (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB205232.001		Beta BHC	µg/L	0.1	<0.1
		Delta BHC	µg/L	0.1	<0.1
		Heptachlor epoxide	µg/L	0.1	<0.1
		Alpha Endosulfan	µg/L	0.1	<0.1
		Gamma Chlordane	µg/L	0.1	<0.1
		Alpha Chlordane	µg/L	0.1	<0.1
		p,p'-DDE	µg/L	0.1	<0.1
		Dieldrin	µg/L	0.1	<0.1
		Endrin	µg/L	0.1	<0.1
		Beta Endosulfan	µg/L	0.1	<0.1
		p,p'-DDD	µg/L	0.1	<0.1
		p,p'-DDT	µg/L	0.1	<0.1
		Endosulfan sulphate	µg/L	0.1	<0.1
		Endrin aldehyde	µg/L	0.1	<0.1
		Methoxychlor	µg/L	0.1	<0.1
		Endrin ketone	µg/L	0.1	<0.1
		Isodrin	µg/L	0.1	<0.1
		Mirex	µg/L	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	89

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB205126.001		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	95
		d14-p-terphenyl (Surrogate)	%	-	95

OP Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB205062.001		Dichlorvos	µg/L	0.5	<0.5
		Dimethoate	µg/L	0.5	<0.5
		Diazinon (Dimpylate)	µg/L	0.5	<0.5
		Fenitrothion	µg/L	0.2	<0.2
		Malathion	µg/L	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	µg/L	0.2	<0.2
		Parathion-ethyl (Parathion)	µg/L	0.2	<0.2
		Bromophos Ethyl	µg/L	0.2	<0.2
		Methidathion	µg/L	0.5	<0.5
		Ethion	µg/L	0.2	<0.2
		Azinphos-methyl	µg/L	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	64
		d14-p-terphenyl (Surrogate)	%	-	84

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB205126.001	Naphthalene	mg/kg	0.1	<0.1
	2-methylnaphthalene	mg/kg	0.1	<0.1
	1-methylnaphthalene	mg/kg	0.1	<0.1
	Acenaphthylene	mg/kg	0.1	<0.1
	Acenaphthene	mg/kg	0.1	<0.1
	Fluorene	mg/kg	0.1	<0.1
	Phenanthrene	mg/kg	0.1	<0.1
	Anthracene	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB205126.001		Fluoranthene	mg/kg	0.1	<0.1
		Pyrene	mg/kg	0.1	<0.1
		Benzo(a)anthracene	mg/kg	0.1	<0.1
		Chrysene	mg/kg	0.1	<0.1
		Benzo(a)pyrene	mg/kg	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	93
		2-fluorobiphenyl (Surrogate)	%	-	95
		d14-p-terphenyl (Surrogate)	%	-	95

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB205062.001		Naphthalene	µg/L	0.1	<0.1
		2-methylnaphthalene	µg/L	0.1	<0.1
		1-methylnaphthalene	µg/L	0.1	<0.1
		Acenaphthylene	µg/L	0.1	<0.1
		Acenaphthene	µg/L	0.1	<0.1
		Fluorene	µg/L	0.1	<0.1
		Phenanthrene	µg/L	0.1	<0.1
		Anthracene	µg/L	0.1	<0.1
		Fluoranthene	µg/L	0.1	<0.1
		Pyrene	µg/L	0.1	<0.1
		Benzo(a)anthracene	µg/L	0.1	<0.1
		Chrysene	µg/L	0.1	<0.1
		Benzo(a)pyrene	µg/L	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1
		Dibenzo(ah)anthracene	µg/L	0.1	<0.1
		Benzo(ghi)perylene	µg/L	0.1	<0.1
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	62
		2-fluorobiphenyl (Surrogate)	%	-	64
		d14-p-terphenyl (Surrogate)	%	-	84

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB205126.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	103

PCBs in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB205232.001		Arochlor 1016	µg/L	1	<1
		Arochlor 1221	µg/L	1	<1
		Arochlor 1232	µg/L	1	<1
		Arochlor 1242	µg/L	1	<1
		Arochlor 1248	µg/L	1	<1
		Arochlor 1254	µg/L	1	<1
		Arochlor 1260	µg/L	1	<1
		Arochlor 1262	µg/L	1	<1
		Arochlor 1268	µg/L	1	<1

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB205126.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB205062.001	TRH C10-C14	µg/L	50	<50
	TRH C15-C28	µg/L	200	<200
	TRH C29-C36	µg/L	200	<200
	TRH C37-C40	µg/L	200	<200

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB205072.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB205072.001	Monocyclic Aromatic Hydrocarbons	m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10
		MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	87
		d8-toluene (Surrogate)	%	-	89
		Bromofluorobenzene (Surrogate)	%	-	104
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB205182.001	Fumigants	2,2-dichloropropane	µg/L	0.5	<0.5
		1,2-dichloropropane	µg/L	0.5	<0.5
		cis-1,3-dichloropropene	µg/L	0.5	<0.5
		trans-1,3-dichloropropene	µg/L	0.5	<0.5
		1,2-dibromoethane (EDB)	µg/L	0.5	<0.5
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	µg/L	5	<5
		Chloromethane	µg/L	5	<5
		Vinyl chloride (Chloroethene)	µg/L	0.3	<0.3
		Bromomethane	µg/L	10	<10
		Chloroethane	µg/L	5	<5
		Trichlorofluoromethane	µg/L	1	<1
		Iodomethane	µg/L	5	<5
		1,1-dichloroethene	µg/L	0.5	<0.5
		Dichloromethane (Methylene chloride)	µg/L	5	<5
		Allyl chloride	µg/L	2	<2
		trans-1,2-dichloroethene	µg/L	0.5	<0.5
		1,1-dichloroethane	µg/L	0.5	<0.5
		cis-1,2-dichloroethene	µg/L	0.5	<0.5
		Bromochloromethane	µg/L	0.5	<0.5
		1,2-dichloroethane	µg/L	0.5	<0.5
		1,1,1-trichloroethane	µg/L	0.5	<0.5
		1,1-dichloropropene	µg/L	0.5	<0.5
		Carbon tetrachloride	µg/L	0.5	<0.5
		Dibromomethane	µg/L	0.5	<0.5
		Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	<0.5
		1,1,2-trichloroethane	µg/L	0.5	<0.5
		1,3-dichloropropane	µg/L	0.5	<0.5

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOCs in Water (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB205182.001	Halogenated Aliphatics	Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	<0.5
		1,1,1,2-tetrachloroethane	µg/L	0.5	<0.5
		cis-1,4-dichloro-2-butene	µg/L	1	<1
		1,1,2,2-tetrachloroethane	µg/L	0.5	<0.5
		1,2,3-trichloropropane	µg/L	0.5	<0.5
		trans-1,4-dichloro-2-butene	µg/L	1	<1
		1,2-dibromo-3-chloropropane	µg/L	0.5	<0.5
		Hexachlorobutadiene	µg/L	0.5	<0.5
	Halogenated Aromatics	Chlorobenzene	µg/L	0.5	<0.5
		Bromobenzene	µg/L	0.5	<0.5
		2-chlorotoluene	µg/L	0.5	<0.5
		4-chlorotoluene	µg/L	0.5	<0.5
		1,3-dichlorobenzene	µg/L	0.5	<0.5
		1,4-dichlorobenzene	µg/L	0.3	<0.3
		1,2-dichlorobenzene	µg/L	0.5	<0.5
		1,2,4-trichlorobenzene	µg/L	0.5	<0.5
		1,2,3-trichlorobenzene	µg/L	0.5	<0.5
	Monocyclic Aromatic Hydrocarbons	Benzene	µg/L	0.5	<0.5
		Toluene	µg/L	0.5	<0.5
		Ethylbenzene	µg/L	0.5	<0.5
		m/p-xylene	µg/L	1	<1
		o-xylene	µg/L	0.5	<0.5
		Styrene (Vinyl benzene)	µg/L	0.5	<0.5
		Isopropylbenzene (Cumene)	µg/L	0.5	<0.5
		n-propylbenzene	µg/L	0.5	<0.5
		1,3,5-trimethylbenzene	µg/L	0.5	<0.5
		tert-butylbenzene	µg/L	0.5	<0.5
		1,2,4-trimethylbenzene	µg/L	0.5	<0.5
		sec-butylbenzene	µg/L	0.5	<0.5
		p-isopropyltoluene	µg/L	0.5	<0.5
		n-butylbenzene	µg/L	0.5	<0.5
	Nitrogenous Compounds	Acrylonitrile	µg/L	0.5	<0.5
	Oxygenated Compounds	Acetone (2-propanone)	µg/L	10	<10
		MtBE (Methyl-tert-butyl ether)	µg/L	2	<1
		Vinyl acetate	µg/L	10	<10
		MEK (2-butanone)	µg/L	10	<10
		MIBK (4-methyl-2-pentanone)	µg/L	5	<5
		2-hexanone (MBK)	µg/L	5	<5
	Polycyclic VOCs	Naphthalene	µg/L	0.5	<0.5
	Sulphonated	Carbon disulfide	µg/L	2	<2
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	97
		d8-toluene (Surrogate)	%	-	95
		Bromofluorobenzene (Surrogate)	%	-	99
	Trihalomethanes	Chloroform (THM)	µg/L	0.5	<0.5
		Bromodichloromethane (THM)	µg/L	0.5	<0.5
		Dibromochloromethane (THM)	µg/L	0.5	<0.5
		Bromoform (THM)	µg/L	0.5	<0.5

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB205072.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	87

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB205182.001		TRH C6-C9	µg/L	40	<40
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	97
		d8-toluene (Surrogate)	%	-	95
		Bromofluorobenzene (Surrogate)	%	-	99

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Full 8270 SVOC in Soil — **Method: ME-(AU)-[ENV]AN420**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE209052.007	LB205126.014	01-PAHs	Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(b&j&k)fluoranthene	mg/kg	0.2	<0.2	<0.2	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
			Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ, <LOR=0	mg/kg	0.2	<0.2	<0.2	200	0
			2-acetylaminofluorene	mg/kg	0.5	<0.5	<0.5	200	0
			Carcinogenic PAHs, BaP TEQ, <LOR=LOR*	mg/kg	0.3	<0.3	<0.3	134	0
			Carcinogenic PAHs, BaP TEQ, <LOR=LOR/2*	mg/kg	0.2	<0.2	<0.2	175	0
		02-OCs	Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Delta-BHC	mg/kg	0.1	<0.1	<0.1	200	0
			p,p-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			p,p-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Alpha-endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Total (Alpha+Beta+SO4) Endosulfan*	mg/kg	0.2	<0.2	<0.2	200	0
		03-OPs	Bromophos ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Carbophenothion	mg/kg	0.5	<0.5	<0.5	200	0
			Chlorfenvinphos-cis	mg/kg	2	<2	<2	200	0
			Chlorfenvinphos-trans	mg/kg	0.5	<0.5	<0.5	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Disulfoton (Di-syston)	mg/kg	0.5	<0.5	<0.5	200	0
			EPN*	mg/kg	0.5	<0.5	<0.5	200	0
			Parathion ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Pirimiphos-ethyl	mg/kg	0.5	<0.5	<0.5	200	0
			Prothiophos (Tokuthion)*	mg/kg	0.5	<0.5	<0.5	200	0
			Tetrachlorvinphos (Stirophos)*	mg/kg	0.5	<0.5	<0.5	200	0
		04-PCB	PCB Congener C101	mg/kg	0.1	<0.1	<0.1	200	0
		UPAC(7)	PCB Congener C180	mg/kg	0.1	<0.1	<0.1	200	0
		05-SVCH (Cl	Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
		Benzenes,	Pentachloroethane	mg/kg	0.5	<0.5	<0.5	200	0
			1,2,3,4-tetrachlorobenzene	mg/kg	0.5	<0.5	<0.5	200	0
		06-Phthalates	Bis(2-ethylhexyl)phthalate	mg/kg	5	<5	<5	200	0
			Bis(2-ethylhexyl)adipate	mg/kg	0.5	<0.5	<0.5	200	0
			Butyl benzyl phthalate	mg/kg	0.5	<0.5	<0.5	200	0
			Di-n-butyl phthalate	mg/kg	0.5	<0.5	<0.5	200	0
			Diethyl phthalate	mg/kg	0.5	<0.5	<0.5	200	0
		07-Carbamates	Carbofuran	mg/kg	0.5	<0.5	<0.5	200	0
			Carbaryl	mg/kg	0.5	<0.5	<0.5	200	0
		10-Nitroaromati	2,4-dinitrotoluene	mg/kg	0.5	<0.5	<0.5	200	0
		cs and	p-(dimethylamino) azobenzene	mg/kg	1	<1	<1	200	0
			Phenacetin	mg/kg	1	<1	<1	200	0
		11-Anilines	2-nitroaniline	mg/kg	1	<1	<1	200	0
		and Amines	1-naphthylamine	mg/kg	1	<1	<1	200	0
			2-naphthylamine	mg/kg	1	<1	<1	200	0
		12-Haloethers	Bis(2-chloroisopropyl) ether	mg/kg	0.5	<0.5	<0.5	200	0
			4-chlorophenyl phenyl ether	mg/kg	0.5	<0.5	<0.5	200	0
			4-bromophenyl phenyl ether	mg/kg	0.5	<0.5	<0.5	200	0
		13-Other	Thionazin	mg/kg	1	<1	<1	200	0
		Surrogates	d5-phenol (Surrogate)	mg/kg	-	1.4	1.4	30	1
			d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	30	4
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.6	0.6	30	2

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Full 8270 SVOC in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE209052.007	LB205126.014	Surrogates	2,4,6-tribromophenol (Surrogate)	mg/kg	-	5.2	4.4	30	17
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	15

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE209052.007	LB205074.011	% Moisture	%w/w	1	3.2	3.3	60	3
SE209052.018	LB205074.018	% Moisture	%w/w	1	24.6	23.6	34	4

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE209052.007	LB205126.014		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.15	30	1
SE209052.018	LB205126.021		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE209052.018	LB205126.021		Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	0.15	30	5

OC Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE209052.010	LB205232.022		Hexachlorobenzene (HCB)	µg/L	0.1	<0.1	0	200	0
			Alpha BHC	µg/L	0.1	<0.1	0	200	0
			Lindane (gamma BHC)	µg/L	0.1	<0.1	0	200	0
			Heptachlor	µg/L	0.1	<0.1	0	200	0
			Aldrin	µg/L	0.1	<0.1	0	200	0
			Beta BHC	µg/L	0.1	<0.1	0	200	0
			Delta BHC	µg/L	0.1	<0.1	0	200	0
			Heptachlor epoxide	µg/L	0.1	<0.1	0	200	0
			o,p'-DDE	µg/L	0.1	<0.1	0	200	0
			Alpha Endosulfan	µg/L	0.1	<0.1	0	200	0
			Gamma Chlordane	µg/L	0.1	<0.1	0	200	0
			Alpha Chlordane	µg/L	0.1	<0.1	0	200	0
			trans-Nonachlor	µg/L	0.1	<0.1	0	200	0
			p,p'-DDE	µg/L	0.1	<0.1	0	200	0
			Dieldrin	µg/L	0.1	<0.1	0	200	0
			Endrin	µg/L	0.1	<0.1	0	200	0
			o,p'-DDD	µg/L	0.1	<0.1	0	200	0
			o,p'-DDT	µg/L	0.1	<0.1	0	200	0
			Beta Endosulfan	µg/L	0.1	<0.1	0	200	0
			p,p'-DDD	µg/L	0.1	<0.1	0	200	0
			p,p'-DDT	µg/L	0.1	<0.1	0	200	0
			Endosulfan sulphate	µg/L	0.1	<0.1	0	200	0
			Endrin aldehyde	µg/L	0.1	<0.1	0	200	0
			Methoxychlor	µg/L	0.1	<0.1	0	200	0
			Endrin ketone	µg/L	0.1	<0.1	0	200	0
			Isodrin	µg/L	0.1	<0.1	0	200	0
			Mirex	µg/L	0.1	<0.1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	µg/L	-	0.11	0.123	30	10

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE209052.007	LB205126.014		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.6	0.6	30	2
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	15

OP Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE209052.010	LB205062.020		Dichlorvos	µg/L	0.5	<0.5	0	200	0
			Dimethoate	µg/L	0.5	<0.5	0	200	0
			Diazinon (Dimpylate)	µg/L	0.5	<0.5	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OP Pesticides in Water (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE209052.010	LB205062.020		Fenitrothion	µg/L	0.2	<0.2	0	200	0
			Malathion	µg/L	0.2	<0.2	0	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	µg/L	0.2	<0.2	0	200	0
			Parathion-ethyl (Parathion)	µg/L	0.2	<0.2	0	200	0
			Bromophos Ethyl	µg/L	0.2	<0.2	0	200	0
			Methidathion	µg/L	0.5	<0.5	0	200	0
			Ethion	µg/L	0.2	<0.2	0	200	0
			Azinphos-methyl	µg/L	0.2	<0.2	0	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	µg/L	-	0.3	0.27	30	23
			d14-p-terphenyl (Surrogate)	µg/L	-	0.5	0.39	30	25

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE209052.007	LB205126.014		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	<0.3	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	<0.2	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	30	4
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.6	0.6	30	2
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	15

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE209052.010	LB205062.020		Naphthalene	µg/L	0.1	0.3	0.22	71	20
			2-methylnaphthalene	µg/L	0.1	<0.1	0	200	0
			1-methylnaphthalene	µg/L	0.1	<0.1	0	200	0
			Acenaphthylene	µg/L	0.1	<0.1	0	200	0
			Acenaphthene	µg/L	0.1	<0.1	0	200	0
			Fluorene	µg/L	0.1	<0.1	0	200	0
			Phenanthrene	µg/L	0.1	<0.1	0	200	0
			Anthracene	µg/L	0.1	<0.1	0	200	0
			Fluoranthene	µg/L	0.1	<0.1	0	200	0
			Pyrene	µg/L	0.1	<0.1	0	200	0
			Benzo(a)anthracene	µg/L	0.1	<0.1	0	200	0
			Chrysene	µg/L	0.1	<0.1	0	200	0
			Benzo(b&j)fluoranthene	µg/L	0.1	<0.1	0	200	0
			Benzo(k)fluoranthene	µg/L	0.1	<0.1	0	200	0
			Benzo(a)pyrene	µg/L	0.1	<0.1	0	200	0
			Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1	0	200	0
			Dibenzo(ah)anthracene	µg/L	0.1	<0.1	0	200	0
			Benzo(ghi)perylene	µg/L	0.1	<0.1	0	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	µg/L	-	0.3	0.24	30	22
			2-fluorobiphenyl (Surrogate)	µg/L	-	0.3	0.27	30	23
			d14-p-terphenyl (Surrogate)	µg/L	-	0.5	0.39	30	25

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE209052.007	LB205126.014		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	1
SE209052.018	LB205126.021		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	5

PCBs in Water

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE209052.010	LB205232.022		Arochlor 1016	µg/L	1	<1	0	200	0
			Arochlor 1221	µg/L	1	<1	0	200	0
			Arochlor 1232	µg/L	1	<1	0	200	0
			Arochlor 1242	µg/L	1	<1	0	200	0
			Arochlor 1248	µg/L	1	<1	0	200	0
			Arochlor 1254	µg/L	1	<1	0	200	0
			Arochlor 1260	µg/L	1	<1	0	200	0
			Arochlor 1262	µg/L	1	<1	0	200	0
			Arochlor 1268	µg/L	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (Surrogate)	µg/L	-	0.1	0.123	30	10

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE209052.007	LB205126.014		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE209052.018	LB205126.021		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

TRH (Total Recoverable Hydrocarbons) in Water (continued)

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE209052.010	LB205062.020		TRH C10-C14	µg/L	50	<50	0	200	0
			TRH C15-C28	µg/L	200	<200	0	200	0
			TRH C29-C36	µg/L	200	<200	0	200	0
			TRH C37-C40	µg/L	200	<200	0	200	0
			TRH C10-C40	µg/L	320	<320	0	200	0
		TRH F Bands	TRH >C10-C16	µg/L	60	<60	0	200	0
			TRH >C10-C16 - Naphthalene (F2)	µg/L	60	<60	0	200	0
			TRH >C16-C34 (F3)	µg/L	500	<500	0	200	0
			TRH >C34-C40 (F4)	µg/L	500	<500	0	200	0

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE209052.007	LB205072.014	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE209052.007	LB205072.014	Monocyclic	Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.6	8.3	50	3
			d8-toluene (Surrogate)	mg/kg	-	8.7	8.3	50	5
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.7	8.9	50	3
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE209052.018	LB205072.021	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE209052.018	LB205072.021	Halogenated	cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
		Aliphatics	1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	6.9	7.3	50	6
			d8-toluene (Surrogate)	mg/kg	-	7.2	7.7	50	8
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.6	8.9	50	15
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208988.002	LB205182.022	Fumigants	2,2-dichloropropane	µg/L	0.5	<0.5	<0.5	200	0
			1,2-dichloropropane	µg/L	0.5	<0.5	<0.5	200	0
			cis-1,3-dichloropropene	µg/L	0.5	<0.5	<0.5	200	0
			trans-1,3-dichloropropene	µg/L	0.5	<0.5	<0.5	200	0
			1,2-dibromoethane (EDB)	µg/L	0.5	<0.5	<0.5	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	µg/L	5	<5	<5	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOCs in Water (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208988.002	LB205182.022	Halogenated	Chloromethane	µg/L	5	<5	<5	200	0
		Aliphatics	Vinyl chloride (Chloroethene)	µg/L	0.3	<0.3	<0.3	200	0
			Bromomethane	µg/L	10	<10	<10	200	0
			Chloroethane	µg/L	5	<5	<5	200	0
			Trichlorofluoromethane	µg/L	1	<1	<1	200	0
			Iodomethane	µg/L	5	<5	<5	200	0
			1,1-dichloroethene	µg/L	0.5	<0.5	<0.5	200	0
			Dichloromethane (Methylene chloride)	µg/L	5	<5	<5	200	0
			Allyl chloride	µg/L	2	<2	<2	200	0
			trans-1,2-dichloroethene	µg/L	0.5	<0.5	<0.5	200	0
			1,1-dichloroethane	µg/L	0.5	<0.5	<0.5	200	0
			cis-1,2-dichloroethene	µg/L	0.5	<0.5	<0.5	200	0
			Bromochloromethane	µg/L	0.5	<0.5	<0.5	200	0
			1,2-dichloroethane	µg/L	0.5	<0.5	<0.5	200	0
			1,1,1-trichloroethane	µg/L	0.5	<0.5	<0.5	200	0
			1,1-dichloropropene	µg/L	0.5	<0.5	<0.5	200	0
			Carbon tetrachloride	µg/L	0.5	<0.5	<0.5	200	0
			Dibromomethane	µg/L	0.5	<0.5	<0.5	200	0
			Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	<0.5	<0.5	200	0
			1,1,2-trichloroethane	µg/L	0.5	<0.5	<0.5	200	0
			1,3-dichloropropane	µg/L	0.5	<0.5	<0.5	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	<0.5	<0.5	200	0
			1,1,1,2-tetrachloroethane	µg/L	0.5	<0.5	<0.5	200	0
			cis-1,4-dichloro-2-butene	µg/L	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	µg/L	0.5	<0.5	<0.5	200	0
			1,2,3-trichloropropane	µg/L	0.5	<0.5	<0.5	200	0
			trans-1,4-dichloro-2-butene	µg/L	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	µg/L	0.5	<0.5	<0.5	200	0
			Hexachlorobutadiene	µg/L	0.5	<0.5	<0.5	200	0
		Halogenated	Chlorobenzene	µg/L	0.5	<0.5	<0.5	200	0
		Aromatics	Bromobenzene	µg/L	0.5	<0.5	<0.5	200	0
			2-chlorotoluene	µg/L	0.5	<0.5	<0.5	200	0
			4-chlorotoluene	µg/L	0.5	<0.5	<0.5	200	0
			1,3-dichlorobenzene	µg/L	0.5	<0.5	<0.5	200	0
			1,4-dichlorobenzene	µg/L	0.3	<0.3	<0.3	200	0
			1,2-dichlorobenzene	µg/L	0.5	<0.5	<0.5	200	0
			1,2,4-trichlorobenzene	µg/L	0.5	<0.5	<0.5	200	0
			1,2,3-trichlorobenzene	µg/L	0.5	<0.5	<0.5	200	0
		Monocyclic	Benzene	µg/L	0.5	<0.5	<0.5	200	0
		Aromatic	Toluene	µg/L	0.5	<0.5	<0.5	200	0
			Ethylbenzene	µg/L	0.5	<0.5	<0.5	200	0
			m/p-xylene	µg/L	1	<1	<1	200	0
			o-xylene	µg/L	0.5	<0.5	<0.5	200	0
			Styrene (Vinyl benzene)	µg/L	0.5	<0.5	<0.5	200	0
			Isopropylbenzene (Cumene)	µg/L	0.5	<0.5	<0.5	200	0
			n-propylbenzene	µg/L	0.5	<0.5	<0.5	200	0
			1,3,5-trimethylbenzene	µg/L	0.5	<0.5	<0.5	200	0
			tert-butylbenzene	µg/L	0.5	<0.5	<0.5	200	0
			1,2,4-trimethylbenzene	µg/L	0.5	<0.5	<0.5	200	0
			sec-butylbenzene	µg/L	0.5	<0.5	<0.5	200	0
			p-isopropyltoluene	µg/L	0.5	<0.5	<0.5	200	0
			n-butylbenzene	µg/L	0.5	<0.5	<0.5	200	0
		Nitrogenous	Acrylonitrile	µg/L	0.5	<0.5	<0.5	200	0
		Oxygenated	Acetone (2-propanone)	µg/L	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	µg/L	2	<2	<2	200	0
			Vinyl acetate	µg/L	10	<10	<10	200	0
			MEK (2-butanone)	µg/L	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	µg/L	5	<5	<5	200	0
			2-hexanone (MBK)	µg/L	5	<5	<5	200	0
		Polycyclic	Naphthalene	µg/L	0.5	<0.5	<0.5	200	0
		Sulphonated	Carbon disulfide	µg/L	2	<2	<2	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOCs in Water (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208988.002	LB205182.022	Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	0.0	0.0	30	4
			d8-toluene (Surrogate)	µg/L	-	0.0	0.0	30	7
			Bromofluorobenzene (Surrogate)	µg/L	-	0.0	0.0	30	1
		Trihalomethanes	Chloroform (THM)	µg/L	0.5	6.0	5.8	38	4
			Bromodichloromethane (THM)	µg/L	0.5	1.8	2.1	55	15
			Dibromochloromethane (THM)	µg/L	0.5	<0.5	<0.5	200	0
			Bromoform (THM)	µg/L	0.5	<0.5	<0.5	200	0
SE209052.011	LB205182.023	Fumigants	2,2-dichloropropane	µg/L	0.5	<0.5	0	200	0
			1,2-dichloropropane	µg/L	0.5	<0.5	0.0054224579	200	0
			cis-1,3-dichloropropene	µg/L	0.5	<0.5	0	200	0
			trans-1,3-dichloropropene	µg/L	0.5	<0.5	0.0076260316	200	0
			1,2-dibromoethane (EDB)	µg/L	0.5	<0.5	0	200	0
		Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	µg/L	5	<5	0	200	0
			Chloromethane	µg/L	5	<5	0.0773847576	200	0
			Vinyl chloride (Chloroethene)	µg/L	0.3	<0.3	0	200	0
			Bromomethane	µg/L	10	<10	0.0386919477	200	0
			Chloroethane	µg/L	5	<5	0	200	0
			Trichlorofluoromethane	µg/L	1	<1	0	200	0
			Iodomethane	µg/L	5	<5	0.0217007791	200	0
			1,1-dichloroethene	µg/L	0.5	<0.5	0.0075191240	200	0
			Dichloromethane (Methylene chloride)	µg/L	5	<5	0.0960802564	200	0
			Allyl chloride	µg/L	2	<2	0.0425219836	200	0
			trans-1,2-dichloroethene	µg/L	0.5	<0.5	0.1163675954	200	0
			1,1-dichloroethane	µg/L	0.5	<0.5	0.0368008149	200	0
			cis-1,2-dichloroethene	µg/L	0.5	<0.5	0.0441685339	200	0
			Bromochloromethane	µg/L	0.5	<0.5	0.0404210637	200	0
			1,2-dichloroethane	µg/L	0.5	<0.5	0.0190009836	200	0
			1,1,1-trichloroethane	µg/L	0.5	<0.5	0	200	0
			1,1-dichloropropene	µg/L	0.5	<0.5	0	200	0
			Carbon tetrachloride	µg/L	0.5	<0.5	0.0028265181	200	0
			Dibromomethane	µg/L	0.5	<0.5	0.0059130052	200	0
			Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	<0.5	0.0580657329	200	0
			1,1,2-trichloroethane	µg/L	0.5	<0.5	0	200	0
			1,3-dichloropropane	µg/L	0.5	<0.5	0.0092234586	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	<0.5	0.1873040267	200	0
			1,1,1,2-tetrachloroethane	µg/L	0.5	<0.5	0	200	0
			cis-1,4-dichloro-2-butene	µg/L	1	<1	0.1440452247	200	0
			1,1,2,2-tetrachloroethane	µg/L	0.5	<0.5	0	200	0
			1,2,3-trichloropropane	µg/L	0.5	<0.5	0.0288872898	200	0
			trans-1,4-dichloro-2-butene	µg/L	1	<1	0	200	0
			1,2-dibromo-3-chloropropane	µg/L	0.5	<0.5	0	200	0
			Hexachlorobutadiene	µg/L	0.5	<0.5	0.0022210442	200	0
		Halogenated Aromatics	Chlorobenzene	µg/L	0.5	<0.5	0.0237792090	200	0
			Bromobenzene	µg/L	0.5	<0.5	0.0057457970	200	0
			2-chlorotoluene	µg/L	0.5	<0.5	0.0190927164	200	0
			4-chlorotoluene	µg/L	0.5	<0.5	0.0192326876	200	0
			1,3-dichlorobenzene	µg/L	0.5	<0.5	0.0050586834	200	0
			1,4-dichlorobenzene	µg/L	0.3	<0.3	0.0047969503	200	0
			1,2-dichlorobenzene	µg/L	0.5	<0.5	0.0308196650	200	0
			1,2,4-trichlorobenzene	µg/L	0.5	<0.5	0.0186442638	200	0
			1,2,3-trichlorobenzene	µg/L	0.5	<0.5	0.2860550742	200	0
		Monocyclic Aromatic	Benzene	µg/L	0.5	<0.5	0.0516967858	200	0
			Toluene	µg/L	0.5	<0.5	0.2362316393	200	0
			Ethylbenzene	µg/L	0.5	<0.5	0.2360224461	200	0
			m/p-xylene	µg/L	1	<1	0.0957943017	200	0
			o-xylene	µg/L	0.5	0.7	0.6433844628	103	12
			Styrene (Vinyl benzene)	µg/L	0.5	<0.5	0	200	0
			Isopropylbenzene (Cumene)	µg/L	0.5	<0.5	0.1098795769	200	0
			n-propylbenzene	µg/L	0.5	<0.5	0.0720863037	200	0
			1,3,5-trimethylbenzene	µg/L	0.5	<0.5	0.3749396257	148	0
			tert-butylbenzene	µg/L	0.5	<0.5	0.0044740788	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOCs in Water (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE209052.011	LB205182.023	Monocyclic	1,2,4-trimethylbenzene	µg/L	0.5	<0.5	0.1763522777	200	0
		Aromatic	sec-butylbenzene	µg/L	0.5	<0.5	0.0161142309	200	0
			p-isopropyltoluene	µg/L	0.5	<0.5	0.0084631073	200	0
			n-butylbenzene	µg/L	0.5	<0.5	0.0192919924	200	0
		Nitrogenous	Acrylonitrile	µg/L	0.5	<0.5	0.0658259651	200	0
		Oxygenated	Acetone (2-propanone)	µg/L	10	<10	0	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	µg/L	2	<2	0.0086203135	200	0
			Vinyl acetate	µg/L	10	<10	0	200	0
			MEK (2-butanone)	µg/L	10	<10	0	200	0
			MIBK (4-methyl-2-pentanone)	µg/L	5	<5	0.5068033006	200	0
			2-hexanone (MBK)	µg/L	5	<5	0	200	0
		Polycyclic	Naphthalene	µg/L	0.5	<0.5	0.0686251475	200	0
		Sulphonated	Carbon disulfide	µg/L	2	<2	0.1122464309	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	9.9	10.1731580203	30	3
			d8-toluene (Surrogate)	µg/L	-	9.5	10.1731580203	30	6
			Bromofluorobenzene (Surrogate)	µg/L	-	10.4	10.1731580203	30	2
		Trihalomethan	Chloroform (THM)	µg/L	0.5	26	22.7107334252	32	15
		es	Bromodichloromethane (THM)	µg/L	0.5	5.4	5.4284091756	39	0
			Dibromochloromethane (THM)	µg/L	0.5	1.5	1.6798644330	61	11
			Bromoform (THM)	µg/L	0.5	<0.5	0.1289751052	200	0

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE209052.007	LB205072.014		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.6	8.3	30	3
			d8-toluene (Surrogate)	mg/kg	-	8.7	8.3	30	5
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.7	8.9	30	3
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE209052.018	LB205072.021		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	6.9	7.3	30	6
			d8-toluene (Surrogate)	mg/kg	-	7.2	7.7	30	8
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.6	8.9	30	15
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208988.002	LB205182.019		TRH C6-C10	µg/L	50	<50	<50	200	0
			TRH C6-C9	µg/L	40	<40	<40	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	0.0	0.0	30	4
			d8-toluene (Surrogate)	µg/L	-	0.0	0.0	30	1
			Bromofluorobenzene (Surrogate)	µg/L	-	0.0	0.0	30	15
		VPH F Bands	Benzene (F0)	µg/L	0.5	<0.5	<0.5	200	0
			TRH C6-C10 minus BTEX (F1)	µg/L	50	<50	<50	200	0
SE209052.011	LB205182.020		TRH C6-C10	µg/L	50	<50	14.0068497090	200	0
			TRH C6-C9	µg/L	40	<40	11.7468505177	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	9.9	10.1731580203	30	3
			d8-toluene (Surrogate)	µg/L	-	9.5	9.6439508269	30	1
			Bromofluorobenzene (Surrogate)	µg/L	-	10.4	11.2041788240	30	8
		VPH F Bands	Benzene (F0)	µg/L	0.5	<0.5	0.0516967858	200	0
			TRH C6-C10 minus BTEX (F1)	µg/L	50	<50	13.3634652462	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Full 8270 SVOC in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205126.002	01-PAHs	Acenaphthene	mg/kg	0.1	4.9	4	70 - 130	123
		Acenaphthylene	mg/kg	0.1	4.8	4	70 - 130	121
		Anthracene	mg/kg	0.1	5.0	4	70 - 130	124
		Benzo(a)pyrene	mg/kg	0.1	4.7	4	70 - 130	118
		Fluoranthene	mg/kg	0.1	5.2	4	70 - 130	129
		Naphthalene	mg/kg	0.1	3.8	4	70 - 130	96
		Phenanthrene	mg/kg	0.1	4.9	4	70 - 130	123
		Pyrene	mg/kg	0.1	5.0	4	70 - 130	125
	02-OCs	Aldrin	mg/kg	0.1	0.8	1	70 - 130	78
		Delta-BHC	mg/kg	0.1	0.9	1	70 - 130	85
		p,p-DDT	mg/kg	0.1	0.7	1	70 - 130	74
		Dieldrin	mg/kg	0.2	1.1	1	70 - 130	105
		Endrin	mg/kg	0.2	0.9	1	70 - 130	90
		Heptachlor	mg/kg	0.1	0.7	1	70 - 130	72
	03-OPs	Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.0	2	70 - 130	100
		Diazinon (Dimpylate)	mg/kg	0.5	2.1	2	70 - 130	105
		Dichlorvos	mg/kg	0.5	1.7	2	70 - 130	86
		Ethion	mg/kg	0.2	1.6	2	70 - 130	81
	05-SVCH (Cl	Hexachlorobenzene (HCB)	mg/kg	0.1	1.0	1	70 - 130	99
	Benzenes,	Hexachlorobutadiene	mg/kg	0.5	1.1	1	70 - 130	105
		Hexachloroethane	mg/kg	0.5	1.0	1	70 - 130	98
		Pentachlorobenzene	mg/kg	0.5	0.9	1	70 - 130	94
		1,2,3,4-tetrachlorobenzene	mg/kg	0.5	1.0	1	70 - 130	99
	06-Phthalates	Bis(2-ethylhexyl)phthalate	mg/kg	5	<5	4	70 - 130	110
		Butyl benzyl phthalate	mg/kg	0.5	3.8	4	70 - 130	94
		Di-n-butyl phthalate	mg/kg	0.5	4.0	4	70 - 130	99
		Diethyl phthalate	mg/kg	0.5	3.9	4	70 - 130	98
		Dimethyl phthalate	mg/kg	0.5	3.8	4	70 - 130	96
		Dioctyl phthalate	mg/kg	0.5	4.4	4	70 - 130	111
	07-Carbamates	Carbofuran	mg/kg	0.5	0.8	1	70 - 130	84
	09-Nitrosamine	N-nitroso-di-n-propylamine (NDPA)	mg/kg	0.5	2.4	2	70 - 130	118
	10-Nitroaromati	Pentachloronitrobenzene (quintozene)	mg/kg	0.5	0.8	1	70 - 130	81
	14-Speciated	2,4-dichlorophenol	mg/kg	0.5	0.7	1	70 - 130	72
	Routine	Phenol	mg/kg	0.5	0.7	1	70 - 130	72
		2,4,6-trichlorophenol	mg/kg	0.5	0.8	1	70 - 130	80
		Pentachlorophenol	mg/kg	0.5	0.7	1	70 - 130	70
	Surrogates	d5-phenol (Surrogate)	mg/kg	-	1.8	2	40 - 130	92
		d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	94
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	90
		2,4,6-tribromophenol (Surrogate)	mg/kg	-	5.0	5	40 - 130	99
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	94

Full 8270 SVOC in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205232.002	01-PAHs	Acenaphthene	µg/L	0.1	36	40	60 - 140	90
		Acenaphthylene	µg/L	0.1	35	40	60 - 140	87
		Anthracene	µg/L	0.1	37	40	60 - 140	92
		Benzo(a)pyrene	µg/L	0.1	42	40	60 - 140	106
		Fluoranthene	µg/L	0.1	40	40	60 - 140	100
		Naphthalene	µg/L	0.1	29	40	60 - 140	73
		Phenanthrene	µg/L	0.1	36	40	60 - 140	89
		Pyrene	µg/L	0.1	38	40	60 - 140	96
	02-OCs	Aldrin	µg/L	0.1	3.4	4	60 - 140	85
		Delta-BHC	µg/L	0.1	4.0	4	60 - 140	100
		p,p-DDT	µg/L	0.1	3.1	4	60 - 140	78
		Dieldrin	µg/L	0.1	4.3	4	60 - 140	107
		Endrin	µg/L	0.1	3.4	4	60 - 140	84
		Heptachlor	µg/L	0.1	3.2	4	60 - 140	80
	03-OPs	Chlorpyrifos (Chlorpyrifos Ethyl)	µg/L	0.2	6.8	8	60 - 140	85
		Diazinon (Dimpylate)	µg/L	0.5	7.5	8	60 - 140	94
		Dichlorvos	µg/L	0.5	6.7	8	60 - 140	84

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Full 8270 SVOC in Water (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205232.002	03-OPs	Ethion	µg/L	0.2	6.1	8	60 - 140	76
	05-SVCH (Cl	Hexachlorobenzene (HCB)	µg/L	0.1	4.3	4	60 - 140	108
	Benzenes,	Hexachlorobutadiene	µg/L	0.5	4.4	4	60 - 140	109
		Hexachloroethane	µg/L	0.5	4.3	4	60 - 140	107
		Pentachlorobenzene	µg/L	0.5	4.2	4	60 - 140	106
		1,2,3,4-tetrachlorobenzene	µg/L	0.5	4.3	4	60 - 140	108
	06-Phthalates	Bis(2-ethylhexyl)phthalate	µg/L	50	<50	8	60 - 140	111
		Butyl benzyl phthalate	µg/L	1	8	8	60 - 140	96
		Di-n-butyl phthalate	µg/L	10	<10	8	60 - 140	109
		Diethyl phthalate	µg/L	5	9	8	60 - 140	116
		Dimethyl phthalate	µg/L	1	8	8	60 - 140	106
		Dioctyl phthalate	µg/L	1	9	8	60 - 140	108
	09-Nitrosamine	N-nitroso-di-n-propylamine (NDPA)	µg/L	1	41	32	60 - 140	130
	10-Nitroaromati	Pentachloronitrobenzene (quintozene)	µg/L	1	5	4	60 - 140	129
	14-Speciated	2,4-dichlorophenol	µg/L	0.5	46	40	60 - 140	116
	Routine	Phenol	µg/L	0.5	31	40	60 - 140	78
		2,4,6-trichlorophenol	µg/L	0.5	37	40	60 - 140	93
		Pentachlorophenol	µg/L	0.5	32	40	60 - 140	80
	Surrogates	d5-phenol (Surrogate)	µg/L	-	2.2	2	40 - 130	109
		d5-nitrobenzene (Surrogate)	µg/L	-	0.5	0.5	40 - 130	106
		2-fluorobiphenyl (Surrogate)	µg/L	-	0.5	0.5	40 - 130	106
		2,4,6-Tribromophenol (Surrogate)	µg/L	-	5.4	5	40 - 130	108
		d14-p-terphenyl (Surrogate)	µg/L	-	0.5	0.5	40 - 130	94

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205126.002		Heptachlor	mg/kg	0.1	0.3	0.2	60 - 140	127
		Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	116
		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	115
		Dieldrin	mg/kg	0.2	0.2	0.2	60 - 140	117
		Endrin	mg/kg	0.2	0.2	0.2	60 - 140	116
		p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	101
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.15	40 - 130	100

OC Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205232.002		Heptachlor	µg/L	0.1	0.1	0.2	60 - 140	71
		Aldrin	µg/L	0.1	0.2	0.2	60 - 140	95
		Delta BHC	µg/L	0.1	0.2	0.2	60 - 140	87
		Dieldrin	µg/L	0.1	0.2	0.2	60 - 140	95
		Endrin	µg/L	0.1	0.2	0.2	60 - 140	80
		p,p'-DDT	µg/L	0.1	0.1	0.2	60 - 140	73
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	µg/L	-	0.14	0.15	40 - 130	96

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205126.002		Dichlorvos	mg/kg	0.5	1.4	2	60 - 140	68
		Diazinon (Dimpylate)	mg/kg	0.5	1.6	2	60 - 140	81
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.1	2	60 - 140	105
		Ethion	mg/kg	0.2	1.7	2	60 - 140	85
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	89
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	92

OP Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205062.002		Dichlorvos	µg/L	0.5	7.2	8	60 - 140	91
		Diazinon (Dimpylate)	µg/L	0.5	7.1	8	60 - 140	88
		Chlorpyrifos (Chlorpyrifos Ethyl)	µg/L	0.2	7.2	8	60 - 140	90
		Ethion	µg/L	0.2	6.2	8	60 - 140	78
	Surrogates	2-fluorobiphenyl (Surrogate)	µg/L	-	0.3	0.5	40 - 130	66
		d14-p-terphenyl (Surrogate)	µg/L	-	0.4	0.5	40 - 130	70

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205126.002		Naphthalene	mg/kg	0.1	4.6	4	60 - 140	116
		Acenaphthylene	mg/kg	0.1	4.8	4	60 - 140	121
		Acenaphthene	mg/kg	0.1	4.9	4	60 - 140	123
		Phenanthrene	mg/kg	0.1	4.9	4	60 - 140	123
		Anthracene	mg/kg	0.1	5.0	4	60 - 140	124
		Fluoranthene	mg/kg	0.1	5.2	4	60 - 140	129
		Pyrene	mg/kg	0.1	5.0	4	60 - 140	125
		Benzo(a)pyrene	mg/kg	0.1	5.3	4	60 - 140	132
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	92
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	89
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	92

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205062.002		Naphthalene	µg/L	0.1	27	40	60 - 140	67
		Acenaphthylene	µg/L	0.1	28	40	60 - 140	70
		Acenaphthene	µg/L	0.1	27	40	60 - 140	69
		Phenanthrene	µg/L	0.1	30	40	60 - 140	75
		Anthracene	µg/L	0.1	30	40	60 - 140	75
		Fluoranthene	µg/L	0.1	30	40	60 - 140	76
		Pyrene	µg/L	0.1	32	40	60 - 140	79
		Benzo(a)pyrene	µg/L	0.1	33	40	60 - 140	84
	Surrogates	d5-nitrobenzene (Surrogate)	µg/L	-	0.3	0.5	40 - 130	66
		2-fluorobiphenyl (Surrogate)	µg/L	-	0.3	0.5	40 - 130	66
		d14-p-terphenyl (Surrogate)	µg/L	-	0.4	0.5	40 - 130	70

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205126.002	Arochlor 1260	mg/kg	0.2	0.3	0.4	60 - 140	83

PCBs in Water

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205232.002	Arochlor 1260	µg/L	1	<1	0.4	60 - 140	80

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205126.002		TRH C10-C14	mg/kg	20	30	40	60 - 140	75
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	110
		TRH C29-C36	mg/kg	45	49	40	60 - 140	123
	TRH F Bands	TRH >C10-C16	mg/kg	25	30	40	60 - 140	75
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	105
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	100

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205062.002		TRH C10-C14	µg/L	50	1000	1200	60 - 140	87
		TRH C15-C28	µg/L	200	1300	1200	60 - 140	107
		TRH C29-C36	µg/L	200	1300	1200	60 - 140	109
	TRH F Bands	TRH >C10-C16	µg/L	60	1200	1200	60 - 140	99
		TRH >C16-C34 (F3)	µg/L	500	1300	1200	60 - 140	111
		TRH >C34-C40 (F4)	µg/L	500	670	600	60 - 140	111

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205072.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	4.0	5	60 - 140	80
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	4.4	5	60 - 140	87
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	4.3	5	60 - 140	85
	Halogenated	Chlorobenzene	mg/kg	0.1	5.2	5	60 - 140	104
	Monocyclic	Benzene	mg/kg	0.1	4.6	5	60 - 140	91
	Aromatic	Toluene	mg/kg	0.1	4.4	5	60 - 140	89

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205072.002	Monocyclic	Ethylbenzene	mg/kg	0.1	4.5	5	60 - 140	89
	Aromatic	m/p-xylene	mg/kg	0.2	8.9	10	60 - 140	89
		o-xylene	mg/kg	0.1	4.4	5	60 - 140	88
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.0	10	70 - 130	90
		d8-toluene (Surrogate)	mg/kg	-	9.2	10	70 - 130	92
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.6	10	70 - 130	96
	Trihalomethan	Chloroform	mg/kg	0.1	4.0	5	60 - 140	80

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205182.002	Halogenated	1,1-dichloroethene	µg/L	0.5	57	45.45	60 - 140	125
	Aliphatics	1,2-dichloroethane	µg/L	0.5	51	45.45	60 - 140	112
		Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	49	45.45	60 - 140	109
	Halogenated	Chlorobenzene	µg/L	0.5	55	45.45	60 - 140	120
	Monocyclic	Benzene	µg/L	0.5	43	45.45	60 - 140	94
	Aromatic	Toluene	µg/L	0.5	45	45.45	60 - 140	98
		Ethylbenzene	µg/L	0.5	44	45.45	60 - 140	97
		m/p-xylene	µg/L	1	88	90.9	60 - 140	97
		o-xylene	µg/L	0.5	45	45.45	60 - 140	98
	Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	10.3	10	60 - 140	103
		d8-toluene (Surrogate)	µg/L	-	9.9	10	70 - 130	99
		Bromofluorobenzene (Surrogate)	µg/L	-	10.0	10	70 - 130	100
	Trihalomethan	Chloroform (THM)	µg/L	0.5	56	45.45	60 - 140	123

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205072.002		TRH C6-C10	mg/kg	25	67	92.5	60 - 140	73
		TRH C6-C9	mg/kg	20	61	80	60 - 140	76
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.0	10	70 - 130	90
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.6	10	70 - 130	96
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	40	62.5	60 - 140	65

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205182.002		TRH C6-C10	µg/L	50	690	946.63	60 - 140	73
		TRH C6-C9	µg/L	40	600	818.71	60 - 140	73
	Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	10.3	10	60 - 140	103
		d8-toluene (Surrogate)	µg/L	-	9.9	10	70 - 130	99
		Bromofluorobenzene (Surrogate)	µg/L	-	10.0	10	70 - 130	100
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	µg/L	50	430	639.67	60 - 140	67

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE209092.001	LB205126.004		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	-	-
			Lindane	mg/kg	0.1	<0.1	<0.1	-	-
			Heptachlor	mg/kg	0.1	0.2	<0.1	0.2	120
			Aldrin	mg/kg	0.1	0.2	<0.1	0.2	116
			Beta BHC	mg/kg	0.1	<0.1	<0.1	-	-
			Delta BHC	mg/kg	0.1	0.2	<0.1	0.2	114
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	-	-
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	-	-
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	-	-
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	-	-
			Dieldrin	mg/kg	0.2	0.3	<0.2	0.2	138
			Endrin	mg/kg	0.2	0.2	<0.2	0.2	117
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	-	-
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	-	-
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	-	-
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	-	-
			p,p'-DDT	mg/kg	0.1	0.2	<0.1	0.2	103
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	-	-
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	-	-
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	-	-
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	-	-
			Isodrin	mg/kg	0.1	<0.1	<0.1	-	-
			Mirex	mg/kg	0.1	<0.1	<0.1	-	-
			Total CLP OC Pesticides	mg/kg	1	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.16	-	100

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE209092.001	LB205126.004		Dichlorvos	mg/kg	0.5	1.2	<0.5	2	62
			Dimethoate	mg/kg	0.5	<0.5	<0.5	-	-
			Diazinon (Dimpylate)	mg/kg	0.5	1.6	<0.5	2	82
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	-	-
			Malathion	mg/kg	0.2	<0.2	<0.2	-	-
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.1	<0.2	2	103
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	-	-
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	-	-
			Methidathion	mg/kg	0.5	<0.5	<0.5	-	-
			Ethion	mg/kg	0.2	1.7	<0.2	2	87
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	-	-
			Total OP Pesticides*	mg/kg	1.7	6.7	<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	82
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	89

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE209092.001	LB205126.004	Naphthalene	mg/kg	0.1	4.5	<0.1	4	112
		2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Acenaphthylene	mg/kg	0.1	4.8	<0.1	4	119
		Acenaphthene	mg/kg	0.1	4.7	<0.1	4	119
		Fluorene	mg/kg	0.1	<0.1	<0.1	-	-
		Phenanthrene	mg/kg	0.1	4.7	<0.1	4	118
		Anthracene	mg/kg	0.1	4.8	<0.1	4	121
		Fluoranthene	mg/kg	0.1	5.2	<0.1	4	130
		Pyrene	mg/kg	0.1	5.0	<0.1	4	124
		Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
		Chrysene	mg/kg	0.1	<0.1	<0.1	-	-
		Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE209092.001	LB205126.004		Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(a)pyrene	mg/kg	0.1	5.2	<0.1	4	130
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	5.2	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	5.3	<0.3	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	5.3	<0.2	-	-
			Total PAH (18)	mg/kg	0.8	39	<0.8	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	-	83
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	82
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	89

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE209092.001	LB205126.004		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1260	mg/kg	0.2	0.3	<0.2	0.4	84
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	-	-
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	-	102

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE209092.001	LB205126.004		TRH C10-C14	mg/kg	20	31	<20	40	78
			TRH C15-C28	mg/kg	45	<45	<45	40	83
			TRH C29-C36	mg/kg	45	<45	<45	40	88
			TRH C37-C40	mg/kg	100	<100	<100	-	-
			TRH C10-C36 Total	mg/kg	110	<110	<110	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25	30	<25	40	75
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	30	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	40	78
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	-	-

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE209052.001	LB205072.022	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	-	-
			1,2-dichloropropane	mg/kg	0.1	<0.1	-	-
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	-	-
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	-	-
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	-	-
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	-	-
		Aliphatics	Chloromethane	mg/kg	1	<1	-	-
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	-	-
			Bromomethane	mg/kg	1	<1	-	-
			Chloroethane	mg/kg	1	<1	-	-
			Trichlorofluoromethane	mg/kg	1	<1	-	-
			Iodomethane	mg/kg	5	<5	-	-
			1,1-dichloroethene	mg/kg	0.1	<0.1	5	79
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	-	-
			Allyl chloride	mg/kg	0.1	<0.1	-	-
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	-	-
			1,1-dichloroethane	mg/kg	0.1	<0.1	-	-
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	-	-
			Bromochloromethane	mg/kg	0.1	<0.1	-	-
			1,2-dichloroethane	mg/kg	0.1	<0.1	5	85

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE209052.001	LB205072.022	Halogenated Aliphatics	1,1,1-trichloroethane	mg/kg	0.1	<0.1	-	-
			1,1-dichloropropene	mg/kg	0.1	<0.1	-	-
			Carbon tetrachloride	mg/kg	0.1	<0.1	-	-
			Dibromomethane	mg/kg	0.1	<0.1	-	-
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	5	76
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	-	-
			1,3-dichloropropane	mg/kg	0.1	<0.1	-	-
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	-	-
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	-	-
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	-	-
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	-	-
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	-	-
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	-	-
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	-	-
			Hexachlorobutadiene	mg/kg	0.1	<0.1	-	-
		Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1	5	104
			Bromobenzene	mg/kg	0.1	<0.1	-	-
			2-chlorotoluene	mg/kg	0.1	<0.1	-	-
			4-chlorotoluene	mg/kg	0.1	<0.1	-	-
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	-	-
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	-	-
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	-	-
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	-	-
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	-	-
		Monocyclic Aromatic	Benzene	mg/kg	0.1	<0.1	5	76
			Toluene	mg/kg	0.1	<0.1	5	76
			Ethylbenzene	mg/kg	0.1	<0.1	5	76
			m/p-xylene	mg/kg	0.2	<0.2	10	77
			o-xylene	mg/kg	0.1	<0.1	5	75
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	-	-
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	-	-
			n-propylbenzene	mg/kg	0.1	<0.1	-	-
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	-	-
			tert-butylbenzene	mg/kg	0.1	<0.1	-	-
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	-	-
			sec-butylbenzene	mg/kg	0.1	<0.1	-	-
			p-isopropyltoluene	mg/kg	0.1	<0.1	-	-
			n-butylbenzene	mg/kg	0.1	<0.1	-	-
		Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1	-	-
			2-nitropropane	mg/kg	10	<10	-	-
		Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10	-	-
			MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	-	-
			Vinyl acetate	mg/kg	10	<10	-	-
			MEK (2-butanone)	mg/kg	10	<10	-	-
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	-	-
			2-hexanone (MBK)	mg/kg	5	<5	-	-
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	-	-
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.8	10	82
			d8-toluene (Surrogate)	mg/kg	-	8.1	10	80
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.1	10	84
		Totals	Total Xylenes	mg/kg	0.3	<0.3	-	-
			Total BTEX	mg/kg	0.6	<0.6	-	-
			Total VOC*	mg/kg	24	<24	-	-
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	-	-
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	-	-
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	-	-
		Trihalomethanes	Chloroform	mg/kg	0.1	<0.1	5	75
			Bromodichloromethane	mg/kg	0.1	<0.1	-	-
			Chlorodibromomethane	mg/kg	0.1	<0.1	-	-
			Bromoform	mg/kg	0.1	<0.1	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOCs in Water

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208932.001	LB205182.021	Fumigants	2,2-dichloropropane	µg/L	0.5	<0.5	<0.5	-	-
			1,2-dichloropropane	µg/L	0.5	<0.5	<0.5	-	-
			cis-1,3-dichloropropene	µg/L	0.5	<0.5	<0.5	-	-
			trans-1,3-dichloropropene	µg/L	0.5	<0.5	<0.5	-	-
			1,2-dibromoethane (EDB)	µg/L	0.5	<0.5	<0.5	-	-
		Halogenated	Dichlorodifluoromethane (CFC-12)	µg/L	5	<5	<5	-	-
		Aliphatics	Chloromethane	µg/L	5	<5	<5	-	-
			Vinyl chloride (Chloroethene)	µg/L	0.3	<0.3	<0.3	-	-
			Bromomethane	µg/L	10	<10	<10	-	-
			Chloroethane	µg/L	5	<5	<5	-	-
			Trichlorofluoromethane	µg/L	1	<1	<1	-	-
			Iodomethane	µg/L	5	<5	<5	-	-
			1,1-dichloroethene	µg/L	0.5	51	<0.5	45.45	111
			Dichloromethane (Methylene chloride)	µg/L	5	<5	<5	-	-
			Allyl chloride	µg/L	2	<2	<2	-	-
			trans-1,2-dichloroethene	µg/L	0.5	<0.5	<0.5	-	-
			1,1-dichloroethane	µg/L	0.5	<0.5	<0.5	-	-
			cis-1,2-dichloroethene	µg/L	0.5	<0.5	<0.5	-	-
			Bromochloromethane	µg/L	0.5	<0.5	<0.5	-	-
			1,2-dichloroethane	µg/L	0.5	54	<0.5	45.45	118
			1,1,1-trichloroethane	µg/L	0.5	<0.5	<0.5	-	-
			1,1-dichloropropene	µg/L	0.5	<0.5	<0.5	-	-
			Carbon tetrachloride	µg/L	0.5	<0.5	<0.5	-	-
			Dibromomethane	µg/L	0.5	<0.5	<0.5	-	-
			Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	54	<0.5	45.45	119
			1,1,2-trichloroethane	µg/L	0.5	<0.5	<0.5	-	-
			1,3-dichloropropane	µg/L	0.5	<0.5	<0.5	-	-
			Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	<0.5	<0.5	-	-
			1,1,1,2-tetrachloroethane	µg/L	0.5	<0.5	<0.5	-	-
			cis-1,4-dichloro-2-butene	µg/L	1	<1	<1	-	-
			1,1,2,2-tetrachloroethane	µg/L	0.5	<0.5	<0.5	-	-
			1,2,3-trichloropropane	µg/L	0.5	<0.5	<0.5	-	-
			trans-1,4-dichloro-2-butene	µg/L	1	<1	<1	-	-
			1,2-dibromo-3-chloropropane	µg/L	0.5	<0.5	<0.5	-	-
			Hexachlorobutadiene	µg/L	0.5	<0.5	<0.5	-	-
		Halogenated	Chlorobenzene	µg/L	0.5	59	<0.5	45.45	129
		Aromatics	Bromobenzene	µg/L	0.5	<0.5	<0.5	-	-
			2-chlorotoluene	µg/L	0.5	<0.5	<0.5	-	-
			4-chlorotoluene	µg/L	0.5	<0.5	<0.5	-	-
			1,3-dichlorobenzene	µg/L	0.5	<0.5	<0.5	-	-
			1,4-dichlorobenzene	µg/L	0.3	<0.3	<0.3	-	-
			1,2-dichlorobenzene	µg/L	0.5	<0.5	<0.5	-	-
			1,2,4-trichlorobenzene	µg/L	0.5	<0.5	<0.5	-	-
			1,2,3-trichlorobenzene	µg/L	0.5	<0.5	<0.5	-	-
		Monocyclic	Benzene	µg/L	0.5	48	<0.5	45.45	105
		Aromatic	Toluene	µg/L	0.5	53	<0.5	45.45	116
			Ethylbenzene	µg/L	0.5	50	<0.5	45.45	109
			m/p-xylene	µg/L	1	100	<1	90.9	112
			o-xylene	µg/L	0.5	51	<0.5	45.45	112
			Styrene (Vinyl benzene)	µg/L	0.5	<0.5	<0.5	-	-
			Isopropylbenzene (Cumene)	µg/L	0.5	<0.5	<0.5	-	-
			n-propylbenzene	µg/L	0.5	<0.5	<0.5	-	-
			1,3,5-trimethylbenzene	µg/L	0.5	<0.5	<0.5	-	-
			tert-butylbenzene	µg/L	0.5	<0.5	<0.5	-	-
			1,2,4-trimethylbenzene	µg/L	0.5	<0.5	<0.5	-	-
			sec-butylbenzene	µg/L	0.5	<0.5	<0.5	-	-
			p-isopropyltoluene	µg/L	0.5	<0.5	<0.5	-	-
			n-butylbenzene	µg/L	0.5	<0.5	<0.5	-	-
		Nitrogenous	Acrylonitrile	µg/L	0.5	<0.5	<0.5	-	-
		Oxygenated	Acetone (2-propanone)	µg/L	10	<10	<10	-	-
		Compounds	MtBE (Methyl-tert-butyl ether)	µg/L	2	<2	<2	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOCs in Water (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208932.001	LB205182.021	Oxygenated	Vinyl acetate	µg/L	10	<10	<10	-	-
		Compounds	MEK (2-butanone)	µg/L	10	<10	<10	-	-
			MIBK (4-methyl-2-pentanone)	µg/L	5	<5	<5	-	-
			2-hexanone (MBK)	µg/L	5	<5	<5	-	-
		Polycyclic	Naphthalene	µg/L	0.5	<0.5	<0.5	-	-
		Sulphonated	Carbon disulfide	µg/L	2	<2	<2	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	0.0	9.9	-	120
			d8-toluene (Surrogate)	µg/L	-	0.0	9.5	-	120
			Bromofluorobenzene (Surrogate)	µg/L	-	0.0	10.3	-	120
		Trihalometha	Chloroform (THM)	µg/L	0.5	67	<0.5	45.45	147 ④
		nes	Bromodichloromethane (THM)	µg/L	0.5	<0.5	<0.5	-	-
			Dibromochloromethane (THM)	µg/L	0.5	<0.5	<0.5	-	-
			Bromoform (THM)	µg/L	0.5	<0.5	<0.5	-	-

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE209052.001	LB205072.022		TRH C6-C10	mg/kg	25	<25	92.5	75
			TRH C6-C9	mg/kg	20	<20	80	84
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.8	10	82
			d8-toluene (Surrogate)	mg/kg	-	8.1	10	80
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.1	-	84
		VPH F	Benzene (F0)	mg/kg	0.1	<0.1	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	62.5	75

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208932.001	LB205182.018		TRH C6-C10	µg/L	50	640	<50	946.63	67
			TRH C6-C9	µg/L	40	550	<40	818.71	65
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	0.0	9.9	-	120
			d8-toluene (Surrogate)	µg/L	-	0.0	9.5	-	101
			Bromofluorobenzene (Surrogate)	µg/L	-	0.0	10.3	-	110
		VPH F	Benzene (F0)	µg/L	0.5	48	<0.5	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	µg/L	50	340	<50	639.67	51 ④

MATRIX SPIKE DUPLICATES

SE209052 R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

SLR

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 7, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☑ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: C/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT:	DHA
PROJECT:	Randwick Barracks
PROJECT NUMBER:	610.30041
PROJECT MANAGER:	[redacted]
PM CONTACT No:	
COMMENTS OR ADDITIONAL DIRECTIONS	

LABORATORY:	SGS
LABORATORY ADDRESS:	S4D
SAMPLER:	[redacted]
SAMPLER CONTACT No:	
Email Reports and Invoices to:	LQRS4D@slrconsulting.com

Turnaround Time (TAT)

☑ Standard TAT

☐ Non Standard or Urgent TAT

Required TAT:

COC Number: 1 of 1

Additional Information *(Comment on any gross contamination or specific requirements)*

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	TDS	major cations/Anions	Suite A	Suite C	Suite B	PFAS
1	GW13a	21.7.20	water		X	X	X	X		
2	GW018				X	X	X			
3	GW017				X	X			X	
4	GW012				X	X	X			X
5	QC189				X	X				
6	QC188				X	X				
	QC288				~~X~~	~~X~~	Please forward as to Eurofins for same QC188			
7	GW136				X	X	X	X		

SGS EHS Sydney COC

SE208988

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	Received by	Sign [redacted]	Date / Time 21/07/20	Temperature Received:
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time @ 12:40	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

SAMPLE RECEIPT ADVICE

SE208988

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	7

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Tue 21/7/2020
Report Due	Thu 30/7/2020
SGS Reference	**SE208988**

SUBMISSION DETAILS

This is to confirm that 7 samples were received on Tuesday 21/7/2020. Results are expected to be ready by COB Thursday 30/7/2020. Please quote SGS reference SE208988 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	7 Water
Date documentation received	21/7/2020	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	1.2°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

PFAS subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420. Report No; ME315800. Results may be delayed. Report No: ME315837

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SAMPLE RECEIPT ADVICE

SE208988

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Full 8270 SVOC in Water	OC Pesticides in Water	OP Pesticides in Water	PAH (Polynuclear Aromatic Hydrocarbons) in Water	PCBs in Water	Speciated Phenols in Water	TRH (Total Recoverable Hydrocarbons) in Water	VOCs in Water	Volatile Petroleum Hydrocarbons in Water
001	GW13a	-	28	13	22	11	18	9	78	7
002	GW018	-	28	13	22	11	18	9	78	7
003	GW017	-	-	-	-	11	-	9	78	7
004	GW012	-	28	13	22	11	18	9	78	7
005	QC309	168	-	-	22	-	-	9	78	7
007	GW13b	-	28	13	22	11	18	9	78	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE208988

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Alkalinity	Ammonia Nitrogen by Discrete Analyser	Anions by Ion Chromatography in Water	Filterable Reactive Phosphorus (FRP)	Nitrite in Water	Sulfide by Titration in Water	TKN Kjeldahl Digestion by Discrete Analyser	Total Dissolved Solids (TDS) in water	Total Phosphorus by Kjeldahl Digestion DA in
001	GW13a	1	1	3	1	1	1	2	1	1
002	GW018	1	1	3	1	1	1	2	1	1
003	GW017	1	-	2	-	-	-	-	1	-
004	GW012	1	-	2	-	-	-	-	1	-
005	QC309	1	-	2	-	-	-	-	1	-
006	QC188	1	-	2	-	-	-	-	1	-
007	GW13b	1	1	3	1	1	1	2	1	1

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE208988

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Mercury (dissolved) in Water	Metals in Water (Dissolved) by ICPOES	Per- and Polyfluoroalkyl Substances (PFAS) in	Trace Metals (Dissolved) in Water by ICPMS
001	GW13a	1	4	55	11
002	GW018	1	4	-	7
003	GW017	1	4	-	7
004	GW012	1	4	55	7
005	QC309	-	4	-	-
006	QC188	-	4	-	-
007	GW13b	1	4	55	11

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS		LABORATORY DETAILS	
Contact	[redacted]	Manager	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD	Laboratory	SGS Alexandria Environmental
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066	Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	[redacted]	Telephone	+61 2 8594 0400
Facsimile		Facsimile	+61 2 8594 0499
Email		Email	au.environmental.sydney@sgs.com
Project	**610.30041 Randwick Barracks**	SGS Reference	**SE208988 R1**
Order Number	**610.30041**	Date Received	21 Jul 2020
Samples	7	Date Reported	04 Aug 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

Sulphide - LOR raised for sample #1 and #7 due to insufficient sample provided.
This report cancels and supersedes the report No.SE208988 R0 dated 3rd August 2020 issued by SGS Environment, Health and Safety due to amendment of sample id #7.

SIGNATORIES

[redacted]

Chemist | Senior Organic Chemist/Metals Chemis | Metals/Inorganics Team Leader

[redacted]

Senior Chemist | Organic Section Head | Inorganic/Metals Chemist

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE208988.001 Water 21 Jul 2020 GW13a	SE208988.002 Water 21 Jul 2020 GW018	SE208988.003 Water 21 Jul 2020 GW017	SE208988.004 Water 21 Jul 2020 GW012
VOCs in Water Method: AN433 Tested: 24/7/2020							
Fumigants							
2,2-dichloropropane	µg/L	0.5		<0.5	<0.5	<0.5	<0.5
1,2-dichloropropane	µg/L	0.5		<0.5	<0.5	<0.5	<0.5
cis-1,3-dichloropropene	µg/L	0.5		<0.5	<0.5	<0.5	<0.5
trans-1,3-dichloropropene	µg/L	0.5		<0.5	<0.5	<0.5	<0.5
1,2-dibromoethane (EDB)	µg/L	0.5		<0.5	<0.5	<0.5	<0.5
Halogenated Aliphatics							
Dichlorodifluoromethane (CFC-12)	µg/L	5		<5	<5	<5	<5
Chloromethane	µg/L	5		<5	<5	<5	<5
Vinyl chloride (Chloroethene)	µg/L	0.3		<0.3	<0.3	<0.3	<0.3
Bromomethane	µg/L	10		<10	<10	<10	<10
Chloroethane	µg/L	5		<5	<5	<5	<5
Trichlorofluoromethane	µg/L	1		<1	<1	<1	<1
Iodomethane	µg/L	5		<5	<5	<5	<5
1,1-dichloroethene	µg/L	0.5		<0.5	<0.5	<0.5	<0.5
Dichloromethane (Methylene chloride)	µg/L	5		<5	<5	<5	<5
Allyl chloride	µg/L	2		<2	<2	<2	<2
trans-1,2-dichloroethene	µg/L	0.5		<0.5	<0.5	<0.5	<0.5
1,1-dichloroethane	µg/L	0.5		<0.5	<0.5	<0.5	<0.5
cis-1,2-dichloroethene	µg/L	0.5		<0.5	<0.5	<0.5	<0.5
Bromochloromethane	µg/L	0.5		<0.5	<0.5	<0.5	<0.5
1,2-dichloroethane	µg/L	0.5		<0.5	<0.5	<0.5	<0.5
1,1,1-trichloroethane	µg/L	0.5		<0.5	<0.5	<0.5	<0.5
1,1-dichloropropene	µg/L	0.5		<0.5	<0.5	<0.5	<0.5
Carbon tetrachloride	µg/L	0.5		<0.5	<0.5	<0.5	<0.5
Dibromomethane	µg/L	0.5		<0.5	<0.5	<0.5	<0.5
Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5		<0.5	<0.5	<0.5	<0.5
1,1,2-trichloroethane	µg/L	0.5		<0.5	<0.5	<0.5	<0.5
1,3-dichloropropane	µg/L	0.5		<0.5	<0.5	<0.5	<0.5
Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5		<0.5	<0.5	<0.5	<0.5
1,1,1,2-tetrachloroethane	µg/L	0.5		<0.5	<0.5	<0.5	<0.5
cis-1,4-dichloro-2-butene	µg/L	1		<1	<1	<1	<1
1,1,2,2-tetrachloroethane	µg/L	0.5		<0.5	<0.5	<0.5	<0.5
1,2,3-trichloropropane	µg/L	0.5		<0.5	<0.5	<0.5	<0.5
trans-1,4-dichloro-2-butene	µg/L	1		<1	<1	<1	<1
1,2-dibromo-3-chloropropane	µg/L	0.5		<0.5	<0.5	<0.5	<0.5
Hexachlorobutadiene	µg/L	0.5		<0.5	<0.5	<0.5	<0.5
Halogenated Aromatics							
Chlorobenzene	µg/L	0.5		<0.5	<0.5	<0.5	<0.5
Bromobenzene	µg/L	0.5		<0.5	<0.5	<0.5	<0.5
2-chlorotoluene	µg/L	0.5		<0.5	<0.5	<0.5	<0.5
4-chlorotoluene	µg/L	0.5		<0.5	<0.5	<0.5	<0.5
1,3-dichlorobenzene	µg/L	0.5		<0.5	<0.5	<0.5	<0.5
1,4-dichlorobenzene	µg/L	0.3		<0.3	<0.3	<0.3	<0.3
1,2-dichlorobenzene	µg/L	0.5		<0.5	<0.5	<0.5	<0.5
1,2,4-trichlorobenzene	µg/L	0.5		<0.5	<0.5	<0.5	<0.5
1,2,3-trichlorobenzene	µg/L	0.5		<0.5	<0.5	<0.5	<0.5
Monocyclic Aromatic Hydrocarbons							
Benzene	µg/L	0.5		<0.5	<0.5	<0.5	<0.5
Toluene	µg/L	0.5		<0.5	<0.5	<0.5	<0.5
Ethylbenzene	µg/L	0.5		<0.5	<0.5	<0.5	<0.5
m/p-xylene	µg/L	1		<1	<1	<1	<1
o-xylene	µg/L	0.5		<0.5	<0.5	<0.5	<0.5
Styrene (Vinyl benzene)	µg/L	0.5		<0.5	<0.5	<0.5	<0.5
Isopropylbenzene (Cumene)	µg/L	0.5		<0.5	<0.5	<0.5	<0.5
n-propylbenzene	µg/L	0.5		<0.5	<0.5	<0.5	<0.5

Parameter	Units	LOR	Sample Number: SE208988.001 Sample Matrix: Water Sample Date: 21 Jul 2020 Sample Name: GW13a	SE208988.002 Water 21 Jul 2020 GW018	SE208988.003 Water 21 Jul 2020 GW017	SE208988.004 Water 21 Jul 2020 GW012
VOCs in Water Method: AN433 Tested: 24/7/2020 (continued)						
1,3,5-trimethylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
tert-butylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
1,2,4-trimethylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
sec-butylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
p-isopropyltoluene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
n-butylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
Nitrogenous Compounds						
Acrylonitrile	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
2-nitropropane	µg/L	100	<100	<100	<100	<100
Oxygenated Compounds						
Acetone (2-propanone)	µg/L	10	<10	<10	<10	<10
MtBE (Methyl-tert-butyl ether)	µg/L	2	<2	<2	<2	<2
Vinyl acetate	µg/L	10	<10	<10	<10	<10
MEK (2-butanone)	µg/L	10	<10	<10	<10	<10
MIBK (4-methyl-2-pentanone)	µg/L	5	<5	<5	<5	<5
2-hexanone (MBK)	µg/L	5	<5	<5	<5	<5
Polycyclic VOCs						
Naphthalene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
Sulphonated Compounds						
Carbon disulfide	µg/L	2	<2	<2	<2	<2
Surrogates						
d4-1,2-dichloroethane (Surrogate)	%	-	**99**	**98**	**100**	**99**
d8-toluene (Surrogate)	%	-	**95**	**96**	**94**	**95**
Bromofluorobenzene (Surrogate)	%	-	**103**	**101**	**101**	**103**
Totals						
Total Xylenes	µg/L	1.5	<1.5	<1.5	<1.5	<1.5
Total BTEX	µg/L	3	<3	<3	<3	<3
Total VOC	µg/L	10	<10	<10	<10	<10

Parameter	Units	LOR	Sample Number: SE208988.001 Sample Matrix: Water Sample Date: 21 Jul 2020 Sample Name: GW13a	SE208988.002 Water 21 Jul 2020 GW018	SE208988.003 Water 21 Jul 2020 GW017	SE208988.004 Water 21 Jul 2020 GW012
VOCs in Water Method: AN433 Tested: 24/7/2020 (continued)						
Trihalomethanes						
Chloroform (THM)	µg/L	0.5	**0.7**	**6.0**	<0.5	<0.5
Bromodichloromethane (THM)	µg/L	0.5	<0.5	**1.8**	<0.5	<0.5
Dibromochloromethane (THM)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
Bromoform (THM)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
Volatile Petroleum Hydrocarbons in Water Method: AN433 Tested: 24/7/2020						
TRH C6-C10	µg/L	50	<50	<50	<50	<50
TRH C6-C9	µg/L	40	<40	<40	<40	<40
Surrogates						
d4-1,2-dichloroethane (Surrogate)	%	-	**99**	**98**	**100**	**99**
d8-toluene (Surrogate)	%	-	**95**	**96**	**94**	**95**
Bromofluorobenzene (Surrogate)	%	-	**103**	**101**	**101**	**103**
VPH F Bands						
Benzene (F0)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
TRH C6-C10 minus BTEX (F1)	µg/L	50	<50	<50	<50	<50
TRH (Total Recoverable Hydrocarbons) in Water Method: AN403 Tested: 24/7/2020						
TRH C10-C14	µg/L	50	<50	<50	<50	<50
TRH C15-C28	µg/L	200	<200	<200	<200	<200
TRH C29-C36	µg/L	200	<200	<200	<200	<200
TRH C37-C40	µg/L	200	<200	<200	<200	<200
TRH C10-C40	µg/L	320	<320	<320	<320	<320
TRH F Bands						
TRH >C10-C16	µg/L	60	<60	<60	<60	<60
TRH >C10-C16 - Naphthalene (F2)	µg/L	60	<60	<60	<60	<60
TRH >C16-C34 (F3)	µg/L	500	<500	<500	<500	<500
TRH >C34-C40 (F4)	µg/L	500	<500	<500	<500	<500

Parameter	Units	LOR	Sample Number: SE208988.001 Sample Matrix: Water Sample Date: 21 Jul 2020 Sample Name: GW13a	SE208988.002 Water 21 Jul 2020 GW018	SE208988.003 Water 21 Jul 2020 GW017	SE208988.004 Water 21 Jul 2020 GW012
PAH (Polynuclear Aromatic Hydrocarbons) in Water Method: AN420 Tested: 24/7/2020						
Naphthalene	µg/L	0.1	<0.1	<0.1	-	<0.1
2-methylnaphthalene	µg/L	0.1	<0.1	<0.1	-	<0.1
1-methylnaphthalene	µg/L	0.1	<0.1	<0.1	-	<0.1
Acenaphthylene	µg/L	0.1	<0.1	<0.1	-	<0.1
Acenaphthene	µg/L	0.1	<0.1	<0.1	-	<0.1
Fluorene	µg/L	0.1	<0.1	<0.1	-	<0.1
Phenanthrene	µg/L	0.1	<0.1	<0.1	-	<0.1
Anthracene	µg/L	0.1	<0.1	<0.1	-	<0.1
Fluoranthene	µg/L	0.1	<0.1	<0.1	-	<0.1
Pyrene	µg/L	0.1	<0.1	<0.1	-	<0.1
Benzo(a)anthracene	µg/L	0.1	<0.1	<0.1	-	<0.1
Chrysene	µg/L	0.1	<0.1	<0.1	-	<0.1
Benzo(b&j)fluoranthene	µg/L	0.1	<0.1	<0.1	-	<0.1
Benzo(k)fluoranthene	µg/L	0.1	<0.1	<0.1	-	<0.1
Benzo(a)pyrene	µg/L	0.1	<0.1	<0.1	-	<0.1
Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1	<0.1	-	<0.1
Dibenzo(ah)anthracene	µg/L	0.1	<0.1	<0.1	-	<0.1
Benzo(ghi)perylene	µg/L	0.1	<0.1	<0.1	-	<0.1
Total PAH (18)	µg/L	1	<1	<1	-	<1
Surrogates						
d5-nitrobenzene (Surrogate)	%	-	**46**	**40**	-	**40**
2-fluorobiphenyl (Surrogate)	%	-	**58**	**72**	-	**82**
d14-p-terphenyl (Surrogate)	%	-	**56**	**90**	-	**94**
Speciated Phenols in Water Method: AN420 Tested: 24/7/2020						
Phenol	µg/L	0.5	<0.5	<0.5	-	<0.5
2-methyl phenol (o-cresol)	µg/L	0.5	<0.5	<0.5	-	<0.5
3/4-methyl phenol (m/p-cresol)	µg/L	1	<1	<1	-	<1
Total Cresol	µg/L	1.5	<1.5	<1.5	-	<1.5
2-chlorophenol	µg/L	0.5	<0.5	<0.5	-	<0.5
2,4-dimethylphenol	µg/L	0.5	<0.5	<0.5	-	<0.5
2,6-dichlorophenol	µg/L	0.5	<0.5	<0.5	-	<0.5
2,4-dichlorophenol	µg/L	0.5	<0.5	<0.5	-	<0.5
2,4,6-trichlorophenol	µg/L	0.5	<0.5	<0.5	-	<0.5
2-nitrophenol	µg/L	0.5	<0.5	<0.5	-	<0.5
4-nitrophenol	µg/L	1	<1	<1	-	<1
2,4,5-trichlorophenol	µg/L	0.5	<0.5	<0.5	-	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	µg/L	1	<1	<1	-	<1
Pentachlorophenol	µg/L	0.5	<0.5	<0.5	-	<0.5
2,4-dinitrophenol	µg/L	2	<2	<2	-	<2
4-chloro-3-methylphenol	µg/L	2	<2	<2	-	<2
Surrogates						
2,4,6-Tribromophenol (Surrogate)	%	-	**43**	**64**	-	**71**
d5-phenol (Surrogate)	%	-	**41**	**42**	-	**47**
OC Pesticides in Water Method: AN420 Tested: 24/7/2020						
Alpha BHC	µg/L	0.1	<0.1	<0.1	-	<0.1
Hexachlorobenzene (HCB)	µg/L	0.1	<0.1	<0.1	-	<0.1
Beta BHC	µg/L	0.1	<0.1	<0.1	-	<0.1
Lindane (gamma BHC)	µg/L	0.1	<0.1	<0.1	-	<0.1
Delta BHC	µg/L	0.1	<0.1	<0.1	-	<0.1
Heptachlor	µg/L	0.1	<0.1	<0.1	-	<0.1
Aldrin	µg/L	0.1	<0.1	<0.1	-	<0.1
Heptachlor epoxide	µg/L	0.1	<0.1	<0.1	-	<0.1
Gamma Chlordane	µg/L	0.1	<0.1	<0.1	-	<0.1
Alpha Chlordane	µg/L	0.1	<0.1	<0.1	-	<0.1
Alpha Endosulfan	µg/L	0.1	<0.1	<0.1	-	<0.1
o,p'-DDE	µg/L	0.1	<0.1	<0.1	-	<0.1

Parameter	Units	LOR	Sample Number: SE208988.001 Sample Matrix: Water Sample Date: 21 Jul 2020 Sample Name: GW13a	SE208988.002 Water 21 Jul 2020 GW018	SE208988.003 Water 21 Jul 2020 GW017	SE208988.004 Water 21 Jul 2020 GW012
OC Pesticides in Water Method: AN420 Tested: 24/7/2020 (continued)						
p,p'-DDE	µg/L	0.1	<0.1	<0.1	-	<0.1
Dieldrin	µg/L	0.1	<0.1	<0.1	-	<0.1
Endrin	µg/L	0.1	<0.1	<0.1	-	<0.1
Beta Endosulfan	µg/L	0.1	<0.1	<0.1	-	<0.1
o,p'-DDD	µg/L	0.1	<0.1	<0.1	-	<0.1
p,p'-DDD	µg/L	0.1	<0.1	<0.1	-	<0.1
Endosulfan sulphate	µg/L	0.1	<0.1	<0.1	-	<0.1
o,p'-DDT	µg/L	0.1	<0.1	<0.1	-	<0.1
p,p'-DDT	µg/L	0.1	<0.1	<0.1	-	<0.1
Endrin ketone	µg/L	0.1	<0.1	<0.1	-	<0.1
Methoxychlor	µg/L	0.1	<0.1	<0.1	-	<0.1
trans-Nonachlor	µg/L	0.1	<0.1	<0.1	-	<0.1
Endrin aldehyde	µg/L	0.1	<0.1	<0.1	-	<0.1
Isodrin	µg/L	0.1	<0.1	<0.1	-	<0.1
Mirex	µg/L	0.1	<0.1	<0.1	-	<0.1
Surrogates						
Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	**51**	**89**	-	**99**
OP Pesticides in Water Method: AN420 Tested: 24/7/2020						
Dichlorvos	µg/L	0.5	<0.5	<0.5	-	<0.5
Dimethoate	µg/L	0.5	<0.5	<0.5	-	<0.5
Diazinon (Dimpylate)	µg/L	0.5	<0.5	<0.5	-	<0.5
Fenitrothion	µg/L	0.2	<0.2	<0.2	-	<0.2
Malathion	µg/L	0.2	<0.2	<0.2	-	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	µg/L	0.2	**1.2**	<0.2	-	<0.2
Parathion-ethyl (Parathion)	µg/L	0.2	<0.2	<0.2	-	<0.2
Bromophos Ethyl	µg/L	0.2	<0.2	<0.2	-	<0.2
Methidathion	µg/L	0.5	<0.5	<0.5	-	<0.5
Ethion	µg/L	0.2	<0.2	<0.2	-	<0.2
Azinphos-methyl	µg/L	0.2	<0.2	<0.2	-	<0.2
Surrogates						
2-fluorobiphenyl (Surrogate)	%	-	**58**	**72**	-	**82**
d14-p-terphenyl (Surrogate)	%	-	**56**	**90**	-	**94**
PCBs in Water Method: AN420 Tested: 24/7/2020						
Arochlor 1016	µg/L	1	<1	<1	<1	<1
Arochlor 1221	µg/L	1	<1	<1	<1	<1
Arochlor 1232	µg/L	1	<1	<1	<1	<1
Arochlor 1242	µg/L	1	<1	<1	<1	<1
Arochlor 1248	µg/L	1	<1	<1	<1	<1
Arochlor 1254	µg/L	1	<1	<1	<1	<1
Arochlor 1260	µg/L	1	<1	<1	<1	<1
Arochlor 1262	µg/L	1	<1	<1	<1	<1
Arochlor 1268	µg/L	1	<1	<1	<1	<1
Total Arochlors*	µg/L	5	<5	<5	<5	<5
Surrogates						
Tetrachloro-m-xylene (Surrogate)	%	-	**51**	**89**	**61**	**99**

Parameter	Units	LOR	Sample Number: SE208988.001 Sample Matrix: Water Sample Date: 21 Jul 2020 Sample Name: GW13a	SE208988.002 Water 21 Jul 2020 GW018	SE208988.003 Water 21 Jul 2020 GW017	SE208988.004 Water 21 Jul 2020 GW012
Full 8270 SVOC in Water Method: AN420 Tested: 29/7/2020						
PAHs						
Acenaphthene	µg/L	0.1	-	-	-	-
Acenaphthylene	µg/L	0.1	-	-	-	-
Anthracene	µg/L	0.1	-	-	-	-
Benzo(a)anthracene	µg/L	0.1	-	-	-	-
Total Benzofluoranthenes (b&j&k)	µg/L	0.2	-	-	-	-
Benzo(b&j)fluoranthene	µg/L	0.1	-	-	-	-
Benzo(k)fluoranthene	µg/L	0.1	-	-	-	-
Benzo(ghi)perylene	µg/L	0.1	-	-	-	-
Benzo(a)pyrene	µg/L	0.1	-	-	-	-
Chrysene	µg/L	0.1	-	-	-	-
Dibenzo(ah)anthracene	µg/L	0.1	-	-	-	-
Fluoranthene	µg/L	0.1	-	-	-	-
Fluorene	µg/L	0.1	-	-	-	-
Indeno(1,2,3-cd)pyrene	µg/L	0.1	-	-	-	-
1-methylnaphthalene	µg/L	0.1	-	-	-	-
2-methylnaphthalene	µg/L	0.1	-	-	-	-
Naphthalene	µg/L	0.1	-	-	-	-
Phenanthrene	µg/L	0.1	-	-	-	-
Pyrene	µg/L	0.1	-	-	-	-
2-acetylaminofluorene	µg/L	0.5	-	-	-	-
7,12-dimethyl-benz(a)anthracene	µg/L	0.5	-	-	-	-
3-methylcholanthrene	µg/L	0.5	-	-	-	-
OCs						
Aldrin	µg/L	0.1	-	-	-	-
Alpha-BHC	µg/L	0.1	-	-	-	-
Beta-BHC	µg/L	0.1	-	-	-	-
Delta-BHC	µg/L	0.1	-	-	-	-
Gamma-BHC (Lindane)	µg/L	0.1	-	-	-	-
p,p-DDD	µg/L	0.1	-	-	-	-
p,p-DDE	µg/L	0.1	-	-	-	-
p,p-DDT	µg/L	0.1	-	-	-	-
Dieldrin	µg/L	0.1	-	-	-	-
Alpha-endosulfan	µg/L	0.1	-	-	-	-
Beta-endosulfan	µg/L	0.1	-	-	-	-
Endosulfan sulphate	µg/L	0.1	-	-	-	-
Endrin	µg/L	0.1	-	-	-	-
Heptachlor	µg/L	0.1	-	-	-	-
Heptachlor epoxide	µg/L	0.1	-	-	-	-
Isodrin	µg/L	0.1	-	-	-	-
Methoxychlor	µg/L	0.1	-	-	-	-
Mirex	µg/L	0.1	-	-	-	-
Alpha-chlordane	µg/L	0.1	-	-	-	-
Gamma-chlordane	µg/L	0.1	-	-	-	-
Endrin ketone	µg/L	0.1	-	-	-	-
Total Endosulfan (alpha+beta+sulfate)	µg/L	0.2	-	-	-	-
OPs						
Azinphos-methyl (Guthion)	µg/L	0.2	-	-	-	-
Bromophos ethyl	µg/L	0.2	-	-	-	-
Carbophenothion	µg/L	0.5	-	-	-	-
Chlorfenvinphos-cis	µg/L	5	-	-	-	-
Chlorfenvinphos-trans	µg/L	0.5	-	-	-	-
Chlorpyrifos (Chlorpyrifos Ethyl)	µg/L	0.2	-	-	-	-
Chlorpyrifos-methyl	µg/L	0.5	-	-	-	-
Co-Ral (Coumaphos)	µg/L	0.5	-	-	-	-
Diazinon (Dimpylate)	µg/L	0.5	-	-	-	-
Dichlorvos	µg/L	0.5	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name SE208988.001 Water 21 Jul 2020 GW13a	SE208988.002 Water 21 Jul 2020 GW018	SE208988.003 Water 21 Jul 2020 GW017	SE208988.004 Water 21 Jul 2020 GW012
Full 8270 SVOC in Water Method: AN420 Tested: 29/7/2020 (continued)						
Demeton-S-methyl	µg/L	0.5	-	-	-	-
Dimethoate	µg/L	0.5	-	-	-	-
Disulfoton (Di-syston)	µg/L	0.5	-	-	-	-
EPN*	µg/L	0.5	-	-	-	-
Ethion	µg/L	0.2	-	-	-	-
Ethoprophos (Ethoprop or Prophos)	µg/L	0.5	-	-	-	-
Famphur (Famophos)	µg/L	0.5	-	-	-	-
Fenamiphos (Phenamiphos)	µg/L	0.5	-	-	-	-
Fenchlorophos (Ronnel)	µg/L	0.5	-	-	-	-
Fenitrothion	µg/L	0.2	-	-	-	-
Fenthion	µg/L	0.5	-	-	-	-
Malathion (Maldison)	µg/L	0.2	-	-	-	-
Methidathion	µg/L	0.5	-	-	-	-
Mevinphos-cis/trans	µg/L	1	-	-	-	-
o,o,o-triethyl phosphorothioate	µg/L	0.5	-	-	-	-
Parathion ethyl (Parathion)	µg/L	0.2	-	-	-	-
Parathion methyl	µg/L	0.5	-	-	-	-
Phorate	µg/L	0.5	-	-	-	-
Pirimiphos-ethyl	µg/L	0.5	-	-	-	-
Pirimiphos-methyl	µg/L	0.5	-	-	-	-
Profenofos	µg/L	0.5	-	-	-	-
Prothiophos (Tokuthion)*	µg/L	0.5	-	-	-	-
Sulfotepp	µg/L	0.5	-	-	-	-
Tetrachlorvinphos (Stirophos)*	µg/L	0.5	-	-	-	-
PCB UPAC(7) Congeners						
PCB Congener C28	µg/L	0.1	-	-	-	-
PCB Congener C52	µg/L	0.1	-	-	-	-
PCB Congener C101	µg/L	0.1	-	-	-	-
PCB Congener C118	µg/L	0.1	-	-	-	-
PCB Congener C138	µg/L	0.1	-	-	-	-
PCB Congener C153	µg/L	0.1	-	-	-	-
PCB Congener C180	µg/L	0.1	-	-	-	-
SVCH (Cl Benzenes, Hydrocarbons & VOCs)						
1/2-Chloronaphthalene	µg/L	1	-	-	-	-
Hexachlorobenzene (HCB)	µg/L	0.1	-	-	-	-
1,2-dichlorobenzene	µg/L	0.5	-	-	-	-
1,3-dichlorobenzene	µg/L	0.5	-	-	-	-
1,4-dichlorobenzene	µg/L	0.5	-	-	-	-
Hexachlorobutadiene	µg/L	0.5	-	-	-	-
Hexachlorocyclopentadiene	µg/L	2	-	-	-	-
Hexachloroethane	µg/L	0.5	-	-	-	-
Hexachloroproprene	µg/L	0.5	-	-	-	-
Pentachlorobenzene	µg/L	0.5	-	-	-	-
Pentachloroethane	µg/L	0.5	-	-	-	-
1,2,3,5 and 1,2,4,5-tetrachlorobenzene	µg/L	1	-	-	-	-
1,2,3,4-tetrachlorobenzene	µg/L	0.5	-	-	-	-
1,2,4-trichlorobenzene	µg/L	0.5	-	-	-	-
Phthalates						
Bis(2-ethylhexyl)phthalate	µg/L	50	-	-	-	-
Bis(2-ethylhexyl)adipate	µg/L	1	-	-	-	-
Butyl benzyl phthalate	µg/L	1	-	-	-	-
Di-n-butyl phthalate	µg/L	10	-	-	-	-
Diethyl phthalate	µg/L	5	-	-	-	-
Dimethyl phthalate	µg/L	1	-	-	-	-
Dioctyl phthalate	µg/L	1	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE208988.001 Water 21 Jul 2020 GW13a	SE208988.002 Water 21 Jul 2020 GW018	SE208988.003 Water 21 Jul 2020 GW017	SE208988.004 Water 21 Jul 2020 GW012
Full 8270 SVOC in Water Method: AN420 Tested: 29/7/2020 (continued)							
Carbamates							
Carbofuran	µg/L	0.5		-	-	-	-
Carbaryl	µg/L	0.5		-	-	-	-
Herbicides (normal)							
Trifluralin	µg/L	0.5		-	-	-	-
Nitrosamines							
N-nitroso-di-n-butylamine (NDBA)	µg/L	1		-	-	-	-
N-nitroso-diethylamine (NDEA)	µg/L	1		-	-	-	-
N-nitroso-di-n-propylamine (NDPA)	µg/L	1		-	-	-	-
N-nitroso-morpholine (NMOR)	µg/L	1		-	-	-	-
N-nitroso-piperidine (NPIP)	µg/L	1		-	-	-	-
N-nitroso-pyrrolidine (NPYR)	µg/L	1		-	-	-	-
4-amino biphenyl	µg/L	1		-	-	-	-
Nitroaromatics and Ketones							
Acetophenone	µg/L	1		-	-	-	-
1,3-dinitrobenzene	µg/L	1		-	-	-	-
2,4-dinitrotoluene	µg/L	1		-	-	-	-
2,6-dinitrotoluene	µg/L	1		-	-	-	-
Isophorone	µg/L	1		-	-	-	-
Nitrobenzene	µg/L	1		-	-	-	-
p-(dimethylamino) azobenzene	µg/L	1		-	-	-	-
Phenacetin	µg/L	1		-	-	-	-
Pentachloronitrobenzene (quintozene)	µg/L	1		-	-	-	-
Anilines and Amines							
Aniline	µg/L	5		-	-	-	-
4-chloroaniline	µg/L	1		-	-	-	-
2-nitroaniline	µg/L	1		-	-	-	-
3-nitroaniline	µg/L	1		-	-	-	-
4-nitroaniline	µg/L	1		-	-	-	-
Diphenylamine	µg/L	1		-	-	-	-
o-Toluidine	µg/L	1		-	-	-	-
5-nitro-o-toluidine	µg/L	1		-	-	-	-
1-naphthylamine	µg/L	2		-	-	-	-
2-naphthylamine	µg/L	2		-	-	-	-
Haloethers							
Bis(2-chloroethoxy) methane	µg/L	1		-	-	-	-
Bis(2-chloroethyl) ether	µg/L	1		-	-	-	-
Bis(2-chloroisopropyl) ether	µg/L	1		-	-	-	-
4-chlorophenyl phenyl ether	µg/L	1		-	-	-	-
4-bromophenyl phenyl ether	µg/L	1		-	-	-	-
Other SVOCs							
Methyl methanesulfonate	µg/L	1		-	-	-	-
Ethyl methanesulfonate	µg/L	1		-	-	-	-
Dibenzofuran	µg/L	1		-	-	-	-
Benzyl alcohol	µg/L	1		-	-	-	-
Safrole	µg/L	1		-	-	-	-
Isosafrole Isomer 1	µg/L	1		-	-	-	-
Isosafrole Isomer 2	µg/L	1		-	-	-	-
1,4-naphthoquinone	µg/L	1		-	-	-	-
Thionazin	µg/L	1		-	-	-	-

Parameter	Units	LOR	Sample Number: SE208988.001 Sample Matrix: Water Sample Date: 21 Jul 2020 Sample Name: GW13a	SE208988.002 Water 21 Jul 2020 GW018	SE208988.003 Water 21 Jul 2020 GW017	SE208988.004 Water 21 Jul 2020 GW012
Full 8270 SVOC in Water Method: AN420 Tested: 29/7/2020 (continued)						
Speciated Routine Phenols						
3/4-methyl phenol (m/p-cresol)	µg/L	1	-	-	-	-
2-methyl phenol (o-cresol)	µg/L	0.5	-	-	-	-
2,6-dichlorophenol	µg/L	0.5	-	-	-	-
2,3,4,6 and 2,3,5,6-tetrachlorophenol	µg/L	1	-	-	-	-
2,4,5-trichlorophenol	µg/L	0.5	-	-	-	-
4-chloro-3-methylphenol	µg/L	2	-	-	-	-
2-chlorophenol	µg/L	0.5	-	-	-	-
2,4-dichlorophenol	µg/L	0.5	-	-	-	-
2,4-dimethylphenol	µg/L	0.5	-	-	-	-
2-nitrophenol	µg/L	0.5	-	-	-	-
Phenol	µg/L	0.5	-	-	-	-
2,4,6-trichlorophenol	µg/L	0.5	-	-	-	-
Pentachlorophenol	µg/L	0.5	-	-	-	-
4-nitrophenol	µg/L	1	-	-	-	-
Surrogates						
d5-phenol (Surrogate)	%	-	-	-	-	-
d5-nitrobenzene (Surrogate)	%	-	-	-	-	-
2-fluorobiphenyl (Surrogate)	%	-	-	-	-	-
2,4,6-Tribromophenol (Surrogate)	%	-	-	-	-	-
d14-p-terphenyl (Surrogate)	%	-	-	-	-	-
Anions by Ion Chromatography in Water Method: AN245 Tested: 24/7/2020						
Chloride	mg/L	1	**180**	**25**	**79**	**17**
Sulfate, SO4	mg/L	1	**150**	**16**	**51**	**140**
Nitrate Nitrogen, NO3-N	mg/L	0.005	**0.010**	**2.5**	-	-
Nitrite in Water Method: AN277 Tested: 24/7/2020						
Nitrite Nitrogen, NO2 as N	mg/L	0.005	<0.005	<0.005	-	-
TKN Kjeldahl Digestion by Discrete Analyser Method: AN292 Tested: 27/7/2020						
Total Kjeldahl Nitrogen	mg/L	0.05	**42**	**0.46**	-	-
Total Nitrogen (calc)	mg/L	0.05	**42**	**2.9**	-	-
Ammonia Nitrogen by Discrete Analyser (Aquakem) Method: AN291 Tested: 24/7/2020						
Ammonia Nitrogen, NH_3 as N	mg/L	0.005	**0.48**	**0.014**	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE208988.001 Water 21 Jul 2020 GW13a	SE208988.002 Water 21 Jul 2020 GW018	SE208988.003 Water 21 Jul 2020 GW017	SE208988.004 Water 21 Jul 2020 GW012
Total Phosphorus by Kjeldahl Digestion DA in Water Method: AN279/AN293(Sydney only) Tested: 27/7/2020							
Total Phosphorus (Kjeldahl Digestion) as P	mg/L	0.02		**3.7**	**0.03**	-	-
Filterable Reactive Phosphorus (FRP) Method: AN278 Tested: 24/7/2020							
Filterable Reactive Phosphorus as P	mg/L	0.005		<0.005	<0.005	-	-
Alkalinity Method: AN135 Tested: 23/7/2020							
Total Alkalinity as CaCO3	mg/L	5		**11**	**16**	<5	**9**
Total Dissolved Solids (TDS) in water Method: AN113 Tested: 24/7/2020							
Total Dissolved Solids Dried at 175-185°C	mg/L	10		**770**	**130**	**290**	**320**
Sulfide by Titration in Water Method: AN149 Tested: 27/7/2020							
Sulfide	mg/L	0.5		<1.0↑	<0.5	-	-
Metals in Water (Dissolved) by ICPOES Method: AN320 Tested: 24/7/2020							
Calcium, Ca	mg/L	0.2		**25**	**10**	**14**	**51**
Magnesium, Mg	mg/L	0.1		**5.3**	**1.5**	**5.8**	**6.0**
Potassium, K	mg/L	0.1		**20**	**4.3**	**2.2**	**3.3**
Sodium, Na	mg/L	0.5		**100**	**16**	**48**	**11**

Parameter	Units	LOR	Sample Number: SE208988.001 Sample Matrix: Water Sample Date: 21 Jul 2020 Sample Name: GW13a	SE208988.002 Water 21 Jul 2020 GW018	SE208988.003 Water 21 Jul 2020 GW017	SE208988.004 Water 21 Jul 2020 GW012
Trace Metals (Dissolved) in Water by ICPMS Method: AN318 Tested: 23/7/2020						
Arsenic, As	µg/L	1	**1**	<1	<1	<1
Beryllium, Be	µg/L	1	<1	-	-	-
Boron, B	µg/L	5	**50**	-	-	-
Cadmium, Cd	µg/L	0.1	<0.1	<0.1	<0.1	<0.1
Chromium, Cr	µg/L	1	**2**	<1	**1**	<1
Cobalt, Co	µg/L	1	**31**	-	-	-
Copper, Cu	µg/L	1	**9**	<1	**5**	**7**
Lead, Pb	µg/L	1	<1	<1	**5**	<1
Manganese, Mn	µg/L	1	**230**	-	-	-
Nickel, Ni	µg/L	1	**17**	<1	**1**	**2**
Zinc, Zn	µg/L	5	**36**	<5	**21**	**15**
Mercury (dissolved) in Water Method: AN311(Perth)/AN312 Tested: 24/7/2020						
Mercury	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples - Low Level Method: MA-1523 Tested: 27/7/2020						
Perfluorobutanoic acid (PFBA)	µg/L	0.0005	**0.083**	-	-	<0.0005
Perfluoropentanoic acid (PFPeA)	µg/L	0.0005	**0.083**	-	-	**0.0008**
Perfluorohexanoic acid (PFHxA)	µg/L	0.0005	**0.099**	-	-	**0.0049**
Perfluoroheptanoic acid (PFHpA)	µg/L	0.0005	**0.023**	-	-	**0.0046**
Perfluorooctanoic Acid (PFOA)	µg/L	0.0005	**0.021**	-	-	**0.020**
Perfluorononanoic acid (PFNA)	µg/L	0.001	<0.001	-	-	<0.001
Perfluorodecanoic acid (PFDA)	µg/L	0.001	<0.001	-	-	<0.001
Perfluoroundecanoic acid (PFUnA)	µg/L	0.001	<0.001	-	-	<0.001
Perfluorododecanoic acid (PFDoA)	µg/L	0.001	<0.001	-	-	<0.001
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.001	<0.001	-	-	<0.001
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.001	<0.001	-	-	<0.001
Perfluorohexadecanoic acid (PFHxDA)	µg/L	0.002	<0.002	-	-	<0.002
Perfluorobutane sulfonate (PFBS)	µg/L	0.001	**0.010**	-	-	**0.001**
Perfluoropentane sulfonate (PFPeS)	µg/L	0.001	**0.011**	-	-	**0.001**
Perfluorohexane sulfonate (PFHxS)	µg/L	0.0002	**0.12**	-	-	**0.071**
Perfluoroheptane sulfonate (PFHpS)	µg/L	0.0002	**0.0006**	-	-	**0.0013**
Perfluorooctane sulfonate (PFOS)	µg/L	0.0002	**0.017**	-	-	**0.099**
Sum of PFHxS and PFOS	µg/L	0.0002	**0.13**	-	-	**0.17**
Perfluorononane sulfonate (PFNS)	µg/L	0.0005	<0.0005	-	-	<0.0005
Perfluorodecane sulfonate (PFDS)	µg/L	0.0005	<0.0005	-	-	<0.0005
Perfluorododecane sulfonate (PFDoS)	µg/L	0.0005	<0.0005	-	-	<0.0005
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	µg/L	0.0005	<0.0005	-	-	<0.0005
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	µg/L	0.0005	<0.0005	-	-	<0.0005
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	µg/L	0.0005	<0.0005	-	-	<0.0005
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.002	<0.002	-	-	<0.002
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	µg/L	0.0025	<0.0025	-	-	<0.0025
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	µg/L	0.0025	<0.0025	-	-	<0.0025
2-(N-Methylperfluorooctane sulfonamido)-ethanol	µg/L	0.0025	<0.0025	-	-	<0.0025
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	µg/L	0.0025	<0.0025	-	-	<0.0025
N-Methylperfluorooctanesulfonamidoacetic acid	µg/L	0.0025	<0.0025	-	-	<0.0025
N-Ethylperfluorooctanesulfonamidoacetic Acid	µg/L	0.0025	<0.0025	-	-	<0.0025
(13C4-PFBA) Surrogate	%	-	**102**	-	-	**101**
(13C5-PFPeA) Surrogate	%	-	**120**	-	-	**95**
(13C5-PFHxA) Surrogate	%	-	**133**	-	-	**127**
(13C4-PFHpA) Surrogate	%	-	**109**	-	-	**105**
(13C4_PFOA) Surrogate	%	-	**109**	-	-	**109**
(13C9-PFNA) Surrogate	%	-	**109**	-	-	**98**
(13C6-PFDA) Surrogate	%	-	**109**	-	-	**118**
(13C7-PFUdA) Surrogate	%	-	**99**	-	-	**91**
(13C2-PFDoA) Surrogate	%	-	**89**	-	-	**90**
(13C2_PFTeDA) Surrogate	%	-	**56**	-	-	**65**
(13C2-PFHxDA) Surrogate	%	-	**25**	-	-	**40**

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE208988.001 Water 21 Jul 2020 GW13a	SE208988.002 Water 21 Jul 2020 GW018	SE208988.003 Water 21 Jul 2020 GW017	SE208988.004 Water 21 Jul 2020 GW012
Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples - Low Level	**Method: MA-1523**	**Tested: 27/7/2020**	**(continued)**				
(13C3-PFBS) Surrogate	%	-		**123**	-	-	**110**
(13C3-PFHxS) Surrogate	%	-		**108**	-	-	**103**
(13C8-PFOS) Surrogate	%	-		**86**	-	-	**90**
(13C2-4:2 FTS) Surrogate	%	-		**188**	-	-	**297**
(13C2-6:2 FTS) Surrogate	%	-		**227**	-	-	**276**
(13C2-8:2 FTS) Surrogate	%	-		**162**	-	-	**241**
(13C8-PFOSA) Surrogate	%	-		**71**	-	-	**73**
(D3-N-MeFOSA) Surrogate	%	-		**61**	-	-	**63**
(D5-N-EtFOSA) Surrogate	%	-		**64**	-	-	**68**
(D7-N-MeFOSE) Surrogate	%	-		**71**	-	-	**64**
(D9-N-EtFOSE) Surrogate	%	-		**62**	-	-	**60**
(D3-N-MeFOSAA) Surrogate	%	-		**91**	-	-	**89**
(D5-N-EtFOSAA) Surrogate	%	-		**113**	-	-	**88**

Parameter	Units	LOR	Sample Number: SE208988.005 Sample Matrix: Water Sample Date: 21 Jul 2020 Sample Name: QC309	SE208988.006 Water 21 Jul 2020 QC188	SE208988.007 Water 21 Jul 2020 GW13b
VOCs in Water Method: AN433 Tested: 27/7/2020					
Fumigants					
2,2-dichloropropane	µg/L	0.5	<0.5	-	<0.5
1,2-dichloropropane	µg/L	0.5	<0.5	-	<0.5
cis-1,3-dichloropropene	µg/L	0.5	<0.5	-	<0.5
trans-1,3-dichloropropene	µg/L	0.5	<0.5	-	<0.5
1,2-dibromoethane (EDB)	µg/L	0.5	<0.5	-	<0.5
Halogenated Aliphatics					
Dichlorodifluoromethane (CFC-12)	µg/L	5	<5	-	<5
Chloromethane	µg/L	5	<5	-	<5
Vinyl chloride (Chloroethene)	µg/L	0.3	<0.3	-	<0.3
Bromomethane	µg/L	10	<10	-	<10
Chloroethane	µg/L	5	<5	-	<5
Trichlorofluoromethane	µg/L	1	<1	-	<1
Iodomethane	µg/L	5	<5	-	<5
1,1-dichloroethene	µg/L	0.5	<0.5	-	<0.5
Dichloromethane (Methylene chloride)	µg/L	5	<5	-	<5
Allyl chloride	µg/L	2	<2	-	<2
trans-1,2-dichloroethene	µg/L	0.5	<0.5	-	<0.5
1,1-dichloroethane	µg/L	0.5	<0.5	-	<0.5
cis-1,2-dichloroethene	µg/L	0.5	<0.5	-	<0.5
Bromochloromethane	µg/L	0.5	<0.5	-	<0.5
1,2-dichloroethane	µg/L	0.5	<0.5	-	<0.5
1,1,1-trichloroethane	µg/L	0.5	<0.5	-	<0.5
1,1-dichloropropene	µg/L	0.5	<0.5	-	<0.5
Carbon tetrachloride	µg/L	0.5	<0.5	-	<0.5
Dibromomethane	µg/L	0.5	<0.5	-	<0.5
Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	<0.5	-	<0.5
1,1,2-trichloroethane	µg/L	0.5	<0.5	-	<0.5
1,3-dichloropropane	µg/L	0.5	<0.5	-	<0.5
Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	<0.5	-	<0.5
1,1,1,2-tetrachloroethane	µg/L	0.5	<0.5	-	<0.5
cis-1,4-dichloro-2-butene	µg/L	1	<1	-	<1
1,1,2,2-tetrachloroethane	µg/L	0.5	<0.5	-	<0.5
1,2,3-trichloropropane	µg/L	0.5	<0.5	-	<0.5
trans-1,4-dichloro-2-butene	µg/L	1	<1	-	<1
1,2-dibromo-3-chloropropane	µg/L	0.5	<0.5	-	<0.5
Hexachlorobutadiene	µg/L	0.5	<0.5	-	<0.5
Halogenated Aromatics					
Chlorobenzene	µg/L	0.5	<0.5	-	<0.5
Bromobenzene	µg/L	0.5	<0.5	-	<0.5
2-chlorotoluene	µg/L	0.5	<0.5	-	<0.5
4-chlorotoluene	µg/L	0.5	<0.5	-	<0.5
1,3-dichlorobenzene	µg/L	0.5	<0.5	-	<0.5
1,4-dichlorobenzene	µg/L	0.3	<0.3	-	<0.3
1,2-dichlorobenzene	µg/L	0.5	<0.5	-	<0.5
1,2,4-trichlorobenzene	µg/L	0.5	<0.5	-	<0.5
1,2,3-trichlorobenzene	µg/L	0.5	<0.5	-	<0.5
Monocyclic Aromatic Hydrocarbons					
Benzene	µg/L	0.5	<0.5	-	<0.5
Toluene	µg/L	0.5	<0.5	-	<0.5
Ethylbenzene	µg/L	0.5	<0.5	-	<0.5
m/p-xylene	µg/L	1	<1	-	<1
o-xylene	µg/L	0.5	<0.5	-	<0.5
Styrene (Vinyl benzene)	µg/L	0.5	<0.5	-	<0.5
Isopropylbenzene (Cumene)	µg/L	0.5	<0.5	-	<0.5
n-propylbenzene	µg/L	0.5	<0.5	-	<0.5

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name SE208988.005 Water 21 Jul 2020 QC309	SE208988.006 Water 21 Jul 2020 QC188	SE208988.007 Water 21 Jul 2020 GW13b
VOCs in Water Method: AN433 Tested: 24/7/2020 (continued)					
1,3,5-trimethylbenzene	µg/L	0.5	<0.5	-	<0.5
tert-butylbenzene	µg/L	0.5	<0.5	-	<0.5
1,2,4-trimethylbenzene	µg/L	0.5	<0.5	-	<0.5
sec-butylbenzene	µg/L	0.5	<0.5	-	<0.5
p-isopropyltoluene	µg/L	0.5	<0.5	-	<0.5
n-butylbenzene	µg/L	0.5	<0.5	-	<0.5
Nitrogenous Compounds					
Acrylonitrile	µg/L	0.5	<0.5	-	<0.5
2-nitropropane	µg/L	100	<100	-	<100
Oxygenated Compounds					
Acetone (2-propanone)	µg/L	10	<10	-	<10
MtBE (Methyl-tert-butyl ether)	µg/L	2	<2	-	<2
Vinyl acetate	µg/L	10	<10	-	<10
MEK (2-butanone)	µg/L	10	<10	-	<10
MIBK (4-methyl-2-pentanone)	µg/L	5	<5	-	<5
2-hexanone (MBK)	µg/L	5	<5	-	<5
Polycyclic VOCs					
Naphthalene	µg/L	0.5	<0.5	-	<0.5
Sulphonated Compounds					
Carbon disulfide	µg/L	2	<2	-	<2
Surrogates					
d4-1,2-dichloroethane (Surrogate)	%	-	**101**	-	**99**
d8-toluene (Surrogate)	%	-	**102**	-	**94**
Bromofluorobenzene (Surrogate)	%	-	**104**	-	**102**
Totals					
Total Xylenes	µg/L	1.5	<1.5	-	<1.5
Total BTEX	µg/L	3	<3	-	<3
Total VOC	µg/L	10	<10	-	<10

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE208988.005 Water 21 Jul 2020 QC309	SE208988.006 Water 21 Jul 2020 QC188	SE208988.007 Water 21 Jul 2020 GW13b
VOCs in Water Method: AN433 Tested: 27/7/2020 (continued)						
Trihalomethanes						
Chloroform (THM)	µg/L	0.5		<0.5	-	**2.4**
Bromodichloromethane (THM)	µg/L	0.5		<0.5	-	<0.5
Dibromochloromethane (THM)	µg/L	0.5		<0.5	-	<0.5
Bromoform (THM)	µg/L	0.5		<0.5	-	<0.5
Volatile Petroleum Hydrocarbons in Water Method: AN433 Tested: 27/7/2020						
TRH C6-C10	µg/L	50		<50	-	<50
TRH C6-C9	µg/L	40		<40	-	<40
Surrogates						
d4-1,2-dichloroethane (Surrogate)	%	-		**101**	-	**99**
d8-toluene (Surrogate)	%	-		**102**	-	**94**
Bromofluorobenzene (Surrogate)	%	-		**104**	-	**102**
VPH F Bands						
Benzene (F0)	µg/L	0.5		<0.5	-	<0.5
TRH C6-C10 minus BTEX (F1)	µg/L	50		<50	-	<50
TRH (Total Recoverable Hydrocarbons) in Water Method: AN403 Tested: 27/7/2020						
TRH C10-C14	µg/L	50		<50	-	<50
TRH C15-C28	µg/L	200		<200	-	<200
TRH C29-C36	µg/L	200		<200	-	<200
TRH C37-C40	µg/L	200		<200	-	<200
TRH C10-C40	µg/L	320		<320	-	<320
TRH F Bands						
TRH >C10-C16	µg/L	60		<60	-	<60
TRH >C10-C16 - Naphthalene (F2)	µg/L	60		<60	-	<60
TRH >C16-C34 (F3)	µg/L	500		<500	-	<500
TRH >C34-C40 (F4)	µg/L	500		<500	-	<500

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE208988.005 Water 21 Jul 2020 QC309	SE208988.006 Water 21 Jul 2020 QC188	SE208988.007 Water 21 Jul 2020 GW13b
PAH (Polynuclear Aromatic Hydrocarbons) in Water Method: AN420 Tested: 27/7/2020						
Naphthalene	µg/L	0.1		<0.1	-	<0.1
2-methylnaphthalene	µg/L	0.1		<0.1	-	<0.1
1-methylnaphthalene	µg/L	0.1		<0.1	-	<0.1
Acenaphthylene	µg/L	0.1		<0.1	-	<0.1
Acenaphthene	µg/L	0.1		<0.1	-	<0.1
Fluorene	µg/L	0.1		<0.1	-	<0.1
Phenanthrene	µg/L	0.1		<0.1	-	<0.1
Anthracene	µg/L	0.1		<0.1	-	<0.1
Fluoranthene	µg/L	0.1		<0.1	-	<0.1
Pyrene	µg/L	0.1		<0.1	-	<0.1
Benzo(a)anthracene	µg/L	0.1		<0.1	-	<0.1
Chrysene	µg/L	0.1		<0.1	-	<0.1
Benzo(b&j)fluoranthene	µg/L	0.1		<0.1	-	<0.1
Benzo(k)fluoranthene	µg/L	0.1		<0.1	-	<0.1
Benzo(a)pyrene	µg/L	0.1		<0.1	-	<0.1
Indeno(1,2,3-cd)pyrene	µg/L	0.1		<0.1	-	<0.1
Dibenzo(ah)anthracene	µg/L	0.1		<0.1	-	<0.1
Benzo(ghi)perylene	µg/L	0.1		<0.1	-	<0.1
Total PAH (18)	µg/L	1		<1	-	<1
Surrogates						
d5-nitrobenzene (Surrogate)	%	-		**72**	-	**40**
2-fluorobiphenyl (Surrogate)	%	-		**82**	-	**80**
d14-p-terphenyl (Surrogate)	%	-		**108**	-	**88**
Speciated Phenols in Water Method: AN420 Tested: 27/7/2020						
Phenol	µg/L	0.5		-	-	<0.5
2-methyl phenol (o-cresol)	µg/L	0.5		-	-	<0.5
3/4-methyl phenol (m/p-cresol)	µg/L	1		-	-	<1
Total Cresol	µg/L	1.5		-	-	<1.5
2-chlorophenol	µg/L	0.5		-	-	<0.5
2,4-dimethylphenol	µg/L	0.5		-	-	<0.5
2,6-dichlorophenol	µg/L	0.5		-	-	<0.5
2,4-dichlorophenol	µg/L	0.5		-	-	<0.5
2,4,6-trichlorophenol	µg/L	0.5		-	-	<0.5
2-nitrophenol	µg/L	0.5		-	-	<0.5
4-nitrophenol	µg/L	1		-	-	<1
2,4,5-trichlorophenol	µg/L	0.5		-	-	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	µg/L	1		-	-	<1
Pentachlorophenol	µg/L	0.5		-	-	<0.5
2,4-dinitrophenol	µg/L	2		-	-	<2
4-chloro-3-methylphenol	µg/L	2		-	-	<2
Surrogates						
2,4,6-Tribromophenol (Surrogate)	%	-		-	-	**66**
d5-phenol (Surrogate)	%	-		-	-	**46**
OC Pesticides in Water Method: AN420 Tested: 27/7/2020						
Alpha BHC	µg/L	0.1		-	-	<0.1
Hexachlorobenzene (HCB)	µg/L	0.1		-	-	<0.1
Beta BHC	µg/L	0.1		-	-	<0.1
Lindane (gamma BHC)	µg/L	0.1		-	-	<0.1
Delta BHC	µg/L	0.1		-	-	<0.1
Heptachlor	µg/L	0.1		-	-	<0.1
Aldrin	µg/L	0.1		-	-	<0.1
Heptachlor epoxide	µg/L	0.1		-	-	<0.1
Gamma Chlordane	µg/L	0.1		-	-	<0.1
Alpha Chlordane	µg/L	0.1		-	-	<0.1
Alpha Endosulfan	µg/L	0.1		-	-	<0.1
o,p'-DDE	µg/L	0.1		-	-	<0.1

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE208988.005 Water 21 Jul 2020 QC309	SE208988.006 Water 21 Jul 2020 QC188	SE208988.007 Water 21 Jul 2020 GW13b
OC Pesticides in Water Method: AN420 Tested: 24/7/2020 (continued)						
p,p'-DDE	µg/L	0.1		-	-	<0.1
Dieldrin	µg/L	0.1		-	-	<0.1
Endrin	µg/L	0.1		-	-	<0.1
Beta Endosulfan	µg/L	0.1		-	-	<0.1
o,p'-DDD	µg/L	0.1		-	-	<0.1
p,p'-DDD	µg/L	0.1		-	-	<0.1
Endosulfan sulphate	µg/L	0.1		-	-	<0.1
o,p'-DDT	µg/L	0.1		-	-	<0.1
p,p'-DDT	µg/L	0.1		-	-	<0.1
Endrin ketone	µg/L	0.1		-	-	<0.1
Methoxychlor	µg/L	0.1		-	-	<0.1
trans-Nonachlor	µg/L	0.1		-	-	<0.1
Endrin aldehyde	µg/L	0.1		-	-	<0.1
Isodrin	µg/L	0.1		-	-	<0.1
Mirex	µg/L	0.1		-	-	<0.1
Surrogates						
Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-		-	-	**96**
OP Pesticides in Water Method: AN420 Tested: 27/7/2020						
Dichlorvos	µg/L	0.5		-	-	<0.5
Dimethoate	µg/L	0.5		-	-	<0.5
Diazinon (Dimpylate)	µg/L	0.5		-	-	<0.5
Fenitrothion	µg/L	0.2		-	-	<0.2
Malathion	µg/L	0.2		-	-	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	µg/L	0.2		-	-	<0.2
Parathion-ethyl (Parathion)	µg/L	0.2		-	-	<0.2
Bromophos Ethyl	µg/L	0.2		-	-	<0.2
Methidathion	µg/L	0.5		-	-	<0.5
Ethion	µg/L	0.2		-	-	<0.2
Azinphos-methyl	µg/L	0.2		-	-	<0.2
Surrogates						
2-fluorobiphenyl (Surrogate)	%	-		-	-	**80**
d14-p-terphenyl (Surrogate)	%	-		-	-	**88**
PCBs in Water Method: AN420 Tested: 27/7/2020						
Arochlor 1016	µg/L	1		-	-	<1
Arochlor 1221	µg/L	1		-	-	<1
Arochlor 1232	µg/L	1		-	-	<1
Arochlor 1242	µg/L	1		-	-	<1
Arochlor 1248	µg/L	1		-	-	<1
Arochlor 1254	µg/L	1		-	-	<1
Arochlor 1260	µg/L	1		-	-	<1
Arochlor 1262	µg/L	1		-	-	<1
Arochlor 1268	µg/L	1		-	-	<1
Total Arochlors*	µg/L	5		-	-	<5

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE208988.005 Water 21 Jul 2020 QC309	SE208988.006 Water 21 Jul 2020 QC188	SE208988.007 Water 21 Jul 2020 GW13b
PCBs in Water Method: AN420 Tested: 27/7/2020 (continued)						
Surrogates						
Tetrachloro-m-xylene (Surrogate)	%	-		-	-	**96**
Full 8270 SVOC in Water Method: AN420 Tested: 27/7/2020						
PAHs						
Acenaphthene	µg/L	0.1		<0.1	-	-
Acenaphthylene	µg/L	0.1		<0.1	-	-
Anthracene	µg/L	0.1		<0.1	-	-
Benzo(a)anthracene	µg/L	0.1		<0.1	-	-
Total Benzofluoranthenes (b&j&k)	µg/L	0.2		<0.2	-	-
Benzo(b&j)fluoranthene	µg/L	0.1		<0.1	-	-
Benzo(k)fluoranthene	µg/L	0.1		<0.1	-	-
Benzo(ghi)perylene	µg/L	0.1		<0.1	-	-
Benzo(a)pyrene	µg/L	0.1		<0.1	-	-
Chrysene	µg/L	0.1		<0.1	-	-
Dibenzo(ah)anthracene	µg/L	0.1		<0.1	-	-
Fluoranthene	µg/L	0.1		<0.1	-	-
Fluorene	µg/L	0.1		<0.1	-	-
Indeno(1,2,3-cd)pyrene	µg/L	0.1		<0.1	-	-
1-methylnaphthalene	µg/L	0.1		<0.1	-	-
2-methylnaphthalene	µg/L	0.1		<0.1	-	-
Naphthalene	µg/L	0.1		<0.1	-	-
Phenanthrene	µg/L	0.1		<0.1	-	-
Pyrene	µg/L	0.1		<0.1	-	-
2-acetylaminofluorene	µg/L	0.5		<0.5	-	-
7,12-dimethyl-benz(a)anthracene	µg/L	0.5		<0.5	-	-
3-methylcholanthrene	µg/L	0.5		<0.5	-	-
OCs						
Aldrin	µg/L	0.1		<0.1	-	-
Alpha-BHC	µg/L	0.1		<0.1	-	-
Beta-BHC	µg/L	0.1		<0.1	-	-
Delta-BHC	µg/L	0.1		<0.1	-	-
Gamma-BHC (Lindane)	µg/L	0.1		<0.1	-	-
p,p-DDD	µg/L	0.1		<0.1	-	-
p,p-DDE	µg/L	0.1		<0.1	-	-
p,p-DDT	µg/L	0.1		<0.1	-	-
Dieldrin	µg/L	0.1		<0.1	-	-
Alpha-endosulfan	µg/L	0.1		<0.1	-	-
Beta-endosulfan	µg/L	0.1		<0.1	-	-
Endosulfan sulphate	µg/L	0.1		<0.1	-	-
Endrin	µg/L	0.1		<0.1	-	-
Heptachlor	µg/L	0.1		<0.1	-	-
Heptachlor epoxide	µg/L	0.1		<0.1	-	-
Isodrin	µg/L	0.1		<0.1	-	-
Methoxychlor	µg/L	0.1		<0.1	-	-
Mirex	µg/L	0.1		<0.1	-	-
Alpha-chlordane	µg/L	0.1		<0.1	-	-
Gamma-chlordane	µg/L	0.1		<0.1	-	-
Endrin ketone	µg/L	0.1		<0.1	-	-
Total Endosulfan (alpha+beta+sulfate)	µg/L	0.2		<0.2	-	-
OPs						
Azinphos-methyl (Guthion)	µg/L	0.2		<0.2	-	-
Bromophos ethyl	µg/L	0.2		<0.2	-	-
Carbophenothion	µg/L	0.5		<0.5	-	-
Chlorfenvinphos-cis	µg/L	5		<5	-	-
Chlorfenvinphos-trans	µg/L	0.5		<0.5	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name SE208988.005 Water 21 Jul 2020 QC309	SE208988.006 Water 21 Jul 2020 QC188	SE208988.007 Water 21 Jul 2020 GW13b
Full 8270 SVOC in Water Method: AN420 Tested: 29/7/2020 (continued)					
Chlorpyrifos (Chlorpyrifos Ethyl)	µg/L	0.2	<0.2	-	-
Chlorpyrifos-methyl	µg/L	0.5	<0.5	-	-
Co-Ral (Coumaphos)	µg/L	0.5	<0.5	-	-
Diazinon (Dimpylate)	µg/L	0.5	<0.5	-	-
Dichlorvos	µg/L	0.5	<0.5	-	-
Demeton-S-methyl	µg/L	0.5	<0.5	-	-
Dimethoate	µg/L	0.5	<0.5	-	-
Disulfoton (Di-syston)	µg/L	0.5	<0.5	-	-
EPN*	µg/L	0.5	<0.5	-	-
Ethion	µg/L	0.2	<0.2	-	-
Ethoprophos (Ethoprop or Prophos)	µg/L	0.5	<0.5	-	-
Famphur (Famophos)	µg/L	0.5	<0.5	-	-
Fenamiphos (Phenamiphos)	µg/L	0.5	<0.5	-	-
Fenchlorophos (Ronnel)	µg/L	0.5	<0.5	-	-
Fenitrothion	µg/L	0.2	<0.2	-	-
Fenthion	µg/L	0.5	<0.5	-	-
Malathion (Maldison)	µg/L	0.2	<0.2	-	-
Methidathion	µg/L	0.5	<0.5	-	-
Mevinphos-cis/trans	µg/L	1	<1	-	-
o,o,o-triethyl phosphorothioate	µg/L	0.5	<0.5	-	-
Parathion ethyl (Parathion)	µg/L	0.2	<0.2	-	-
Parathion methyl	µg/L	0.5	<0.5	-	-
Phorate	µg/L	0.5	<0.5	-	-
Pirimiphos-ethyl	µg/L	0.5	<0.5	-	-
Pirimiphos-methyl	µg/L	0.5	<0.5	-	-
Profenofos	µg/L	0.5	<0.5	-	-
Prothiophos (Tokuthion)*	µg/L	0.5	<0.5	-	-
Sulfotepp	µg/L	0.5	<0.5	-	-
Tetrachlorvinphos (Stirophos)*	µg/L	0.5	<0.5	-	-
PCB UPAC(7) Congeners					
PCB Congener C28	µg/L	0.1	<0.1	-	-
PCB Congener C52	µg/L	0.1	<0.1	-	-
PCB Congener C101	µg/L	0.1	<0.1	-	-
PCB Congener C118	µg/L	0.1	<0.1	-	-
PCB Congener C138	µg/L	0.1	<0.1	-	-
PCB Congener C153	µg/L	0.1	<0.1	-	-
PCB Congener C180	µg/L	0.1	<0.1	-	-
SVCH (Cl Benzenes, Hydrocarbons & VOCs)					
1/2-Chloronaphthalene	µg/L	1	<1	-	-
Hexachlorobenzene (HCB)	µg/L	0.1	<0.1	-	-
1,2-dichlorobenzene	µg/L	0.5	<0.5	-	-
1,3-dichlorobenzene	µg/L	0.5	<0.5	-	-
1,4-dichlorobenzene	µg/L	0.5	<0.5	-	-
Hexachlorobutadiene	µg/L	0.5	<0.5	-	-
Hexachlorocyclopentadiene	µg/L	2	<2	-	-
Hexachloroethane	µg/L	0.5	<0.5	-	-
Hexachloroproprene	µg/L	0.5	<0.5	-	-
Pentachlorobenzene	µg/L	0.5	<0.5	-	-
Pentachloroethane	µg/L	0.5	<0.5	-	-
1,2,3,5 and 1,2,4,5-tetrachlorobenzene	µg/L	1	<1	-	-
1,2,3,4-tetrachlorobenzene	µg/L	0.5	<0.5	-	-
1,2,4-trichlorobenzene	µg/L	0.5	<0.5	-	-
Phthalates					
Bis(2-ethylhexyl)phthalate	µg/L	50	<50	-	-
Bis(2-ethylhexyl)adipate	µg/L	1	<1	-	-
Butyl benzyl phthalate	µg/L	1	<1	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE208988.005 Water 21 Jul 2020 QC309	SE208988.006 Water 21 Jul 2020 QC188	SE208988.007 Water 21 Jul 2020 GW13b
Full 8270 SVOC in Water Method: AN420 Tested: 29/7/2020 (continued)						
Di-n-butyl phthalate	µg/L	10		<10	-	-
Diethyl phthalate	µg/L	5		<5	-	-
Dimethyl phthalate	µg/L	1		<1	-	-
Dioctyl phthalate	µg/L	1		<1	-	-
Carbamates						
Carbofuran	µg/L	0.5		<0.5	-	-
Carbaryl	µg/L	0.5		<0.5	-	-
Herbicides (normal)						
Trifluralin	µg/L	0.5		<0.5	-	-
Nitrosamines						
N-nitroso-di-n-butylamine (NDBA)	µg/L	1		<1	-	-
N-nitroso-diethylamine (NDEA)	µg/L	1		<1	-	-
N-nitroso-di-n-propylamine (NDPA)	µg/L	1		<1	-	-
N-nitroso-morpholine (NMOR)	µg/L	1		<1	-	-
N-nitroso-piperidine (NPIP)	µg/L	1		<1	-	-
N-nitroso-pyrrolidine (NPYR)	µg/L	1		<1	-	-
4-amino biphenyl	µg/L	1		<1	-	-
Nitroaromatics and Ketones						
Acetophenone	µg/L	1		<1	-	-
1,3-dinitrobenzene	µg/L	1		<1	-	-
2,4-dinitrotoluene	µg/L	1		<1	-	-
2,6-dinitrotoluene	µg/L	1		<1	-	-
Isophorone	µg/L	1		<1	-	-
Nitrobenzene	µg/L	1		<1	-	-
p-(dimethylamino) azobenzene	µg/L	1		<1	-	-
Phenacetin	µg/L	1		<1	-	-
Pentachloronitrobenzene (quintozene)	µg/L	1		<1	-	-
Anilines and Amines						
Aniline	µg/L	5		<5	-	-
4-chloroaniline	µg/L	1		<1	-	-
2-nitroaniline	µg/L	1		<1	-	-
3-nitroaniline	µg/L	1		<1	-	-
4-nitroaniline	µg/L	1		<1	-	-
Diphenylamine	µg/L	1		<1	-	-
o-Toluidine	µg/L	1		<1	-	-
5-nitro-o-toluidine	µg/L	1		<1	-	-
1-naphthylamine	µg/L	2		<2	-	-
2-naphthylamine	µg/L	2		<2	-	-
Haloethers						
Bis(2-chloroethoxy) methane	µg/L	1		<1	-	-
Bis(2-chloroethyl) ether	µg/L	1		<1	-	-
Bis(2-chloroisopropyl) ether	µg/L	1		<1	-	-
4-chlorophenyl phenyl ether	µg/L	1		<1	-	-
4-bromophenyl phenyl ether	µg/L	1		<1	-	-

Parameter	Units	LOR	Sample Number: SE208988.005 Sample Matrix: Water Sample Date: 21 Jul 2020 Sample Name: QC309	SE208988.006 Water 21 Jul 2020 QC188	SE208988.007 Water 21 Jul 2020 GW13b
Full 8270 SVOC in Water Method: AN420 Tested: 27/7/2020 (continued)					
Other SVOCs					
Methyl methanesulfonate	µg/L	1	<1	-	-
Ethyl methanesulfonate	µg/L	1	<1	-	-
Dibenzofuran	µg/L	1	<1	-	-
Benzyl alcohol	µg/L	1	<1	-	-
Safrole	µg/L	1	<1	-	-
Isosafrole Isomer 1	µg/L	1	<1	-	-
Isosafrole Isomer 2	µg/L	1	<1	-	-
1,4-naphthoquinone	µg/L	1	<1	-	-
Thionazin	µg/L	1	<1	-	-
Speciated Routine Phenols					
3/4-methyl phenol (m/p-cresol)	µg/L	1	<1	-	-
2-methyl phenol (o-cresol)	µg/L	0.5	<0.5	-	-
2,6-dichlorophenol	µg/L	0.5	<0.5	-	-
2,3,4,6 and 2,3,5,6-tetrachlorophenol	µg/L	1	<1	-	-
2,4,5-trichlorophenol	µg/L	0.5	<0.5	-	-
4-chloro-3-methylphenol	µg/L	2	<2	-	-
2-chlorophenol	µg/L	0.5	<0.5	-	-
2,4-dichlorophenol	µg/L	0.5	<0.5	-	-
2,4-dimethylphenol	µg/L	0.5	<0.5	-	-
2-nitrophenol	µg/L	0.5	<0.5	-	-
Phenol	µg/L	0.5	<0.5	-	-
2,4,6-trichlorophenol	µg/L	0.5	<0.5	-	-
Pentachlorophenol	µg/L	0.5	<0.5	-	-
4-nitrophenol	µg/L	1	<1	-	-
Surrogates					
d5-phenol (Surrogate)	%	-	**57**	-	-
d5-nitrobenzene (Surrogate)	%	-	**54**	-	-
2-fluorobiphenyl (Surrogate)	%	-	**104**	-	-
2,4,6-Tribromophenol (Surrogate)	%	-	**89**	-	-
d14-p-terphenyl (Surrogate)	%	-	**114**	-	-
Anions by Ion Chromatography in Water Method: AN245 Tested: 24/7/2020					
Chloride	mg/L	1	<1.0	**65**	**65**
Sulfate, SO4	mg/L	1	<1.0	**28**	**27**
Nitrate Nitrogen, NO3-N	mg/L	0.005	-	-	<0.005
Nitrite in Water Method: AN277 Tested: 24/7/2020					
Nitrite Nitrogen, NO2 as N	mg/L	0.005	-	-	<0.005
TKN Kjeldahl Digestion by Discrete Analyser Method: AN292 Tested: 28/7/2020					
Total Kjeldahl Nitrogen	mg/L	0.05	-	-	**0.29**
Total Nitrogen (calc)	mg/L	0.05	-	-	**0.30**

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE208988.005 Water 21 Jul 2020 QC309	SE208988.006 Water 21 Jul 2020 QC188	SE208988.007 Water 21 Jul 2020 GW13b
Ammonia Nitrogen by Discrete Analyser (Aquakem) Method: AN291 Tested: 24/7/2020						
Ammonia Nitrogen, NH_3 as N	mg/L	0.005		-	-	**0.024**
Total Phosphorus by Kjeldahl Digestion DA in Water Method: AN279/AN293(Sydney only) Tested: 28/7/2020						
Total Phosphorus (Kjeldahl Digestion) as P	mg/L	0.02		-	-	**0.06**
Filterable Reactive Phosphorus (FRP) Method: AN278 Tested: 24/7/2020						
Filterable Reactive Phosphorus as P	mg/L	0.005		-	-	<0.005
Alkalinity Method: AN135 Tested: 23/7/2020						
Total Alkalinity as CaCO3	mg/L	5		<5	**16**	**19**
Total Dissolved Solids (TDS) in water Method: AN113 Tested: 24/7/2020						
Total Dissolved Solids Dried at 175-185°C	mg/L	10		<10	**240**	**230**
Sulfide by Titration in Water Method: AN149 Tested: 27/7/2020						
Sulfide	mg/L	0.5		-	-	<1.0↑

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE208988.005 Water 21 Jul 2020 QC309	SE208988.006 Water 21 Jul 2020 QC188	SE208988.007 Water 21 Jul 2020 GW13b
Metals in Water (Dissolved) by ICPOES Method: AN320 Tested: 24/7/2020						
Calcium, Ca	mg/L	0.2		<0.2	**5.4**	**5.4**
Magnesium, Mg	mg/L	0.1		<0.1	**6.8**	**6.9**
Potassium, K	mg/L	0.1		<0.1	**1.7**	**1.7**
Sodium, Na	mg/L	0.5		<0.5	**41**	**42**
Trace Metals (Dissolved) in Water by ICPMS Method: AN318 Tested: 23/7/2020						
Arsenic, As	µg/L	1		-	-	**13**
Beryllium, Be	µg/L	1		-	-	<1
Boron, B	µg/L	5		-	-	**24**
Cadmium, Cd	µg/L	0.1		-	-	<0.1
Chromium, Cr	µg/L	1		-	-	**1**
Cobalt, Co	µg/L	1		-	-	**2**
Copper, Cu	µg/L	1		-	-	<1
Lead, Pb	µg/L	1		-	-	<1
Manganese, Mn	µg/L	1		-	-	**440**
Nickel, Ni	µg/L	1		-	-	**2**
Zinc, Zn	µg/L	5		-	-	<5
Mercury (dissolved) in Water Method: AN311(Perth)/AN312 Tested: 24/7/2020						
Mercury	mg/L	0.0001		-	-	<0.0001
Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples - Low Level Method: MA-1523 Tested: 27/7/2020						
Perfluorobutanoic acid (PFBA)	µg/L	0.0005		-	-	<0.0005
Perfluoropentanoic acid (PFPeA)	µg/L	0.0005		-	-	**0.0009**
Perfluorohexanoic acid (PFHxA)	µg/L	0.0005		-	-	**0.0011**
Perfluoroheptanoic acid (PFHpA)	µg/L	0.0005		-	-	<0.0005
Perfluorooctanoic Acid (PFOA)	µg/L	0.0005		-	-	<0.0005
Perfluorononanoic acid (PFNA)	µg/L	0.001		-	-	<0.001
Perfluorodecanoic acid (PFDA)	µg/L	0.001		-	-	<0.001
Perfluoroundecanoic acid (PFUnA)	µg/L	0.001		-	-	<0.001
Perfluorododecanoic acid (PFDoA)	µg/L	0.001		-	-	<0.001
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.001		-	-	<0.001
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.001		-	-	<0.001
Perfluorohexadecanoic acid (PFHxDA)	µg/L	0.002		-	-	<0.002
Perfluorobutane sulfonate (PFBS)	µg/L	0.001		-	-	<0.001
Perfluoropentane sulfonate (PFPeS)	µg/L	0.001		-	-	<0.001
Perfluorohexane sulfonate (PFHxS)	µg/L	0.0002		-	-	**0.0064**
Perfluoroheptane sulfonate (PFHpS)	µg/L	0.0002		-	-	<0.0002
Perfluorooctane sulfonate (PFOS)	µg/L	0.0002		-	-	**0.0011**
Sum of PFHxS and PFOS	µg/L	0.0002		-	-	**0.0074**
Perfluorononane sulfonate (PFNS)	µg/L	0.0005		-	-	<0.0005
Perfluorodecane sulfonate (PFDS)	µg/L	0.0005		-	-	<0.0005
Perfluorododecane sulfonate (PFDoS)	µg/L	0.0005		-	-	<0.0005
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	µg/L	0.0005		-	-	<0.0005
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	µg/L	0.0005		-	-	**0.0012**
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	µg/L	0.0005		-	-	<0.0005
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.002		-	-	<0.002
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	µg/L	0.0025		-	-	<0.0025
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	µg/L	0.0025		-	-	<0.0025
2-(N-Methylperfluorooctane sulfonamido)-ethanol	µg/L	0.0025		-	-	<0.0025
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	µg/L	0.0025		-	-	<0.0025
N-Methylperfluorooctanesulfonamidoacetic acid	µg/L	0.0025		-	-	<0.0025
N-Ethylperfluorooctanesulfonamidoacetic Acid	µg/L	0.0025		-	-	<0.0025
(13C4-PFBA) Surrogate	%	-		-	-	**100**
(13C5-PFPeA) Surrogate	%	-		-	-	**95**
(13C5-PFHxA) Surrogate	%	-		-	-	**126**
(13C4-PFHpA) Surrogate	%	-		-	-	**104**

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	SE208988.005 Water 21 Jul 2020 QC309	SE208988.006 Water 21 Jul 2020 QC188	SE208988.007 Water 21 Jul 2020 GW13b
Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples - Low Level	**Method: MA-1523**	**Tested: 27/7/2020**	**(continued)**			
(13C4_PFOA) Surrogate	%	-	-	-	-	**111**
(13C9-PFNA) Surrogate	%	-	-	-	-	**103**
(13C6-PFDA) Surrogate	%	-	-	-	-	**105**
(13C7-PFUdA) Surrogate	%	-	-	-	-	**92**
(13C2-PFDoA) Surrogate	%	-	-	-	-	**79**
(13C2_PFTeDA) Surrogate	%	-	-	-	-	**89**
(13C2-PFHxDA) Surrogate	%	-	-	-	-	**94**
(13C3-PFBS) Surrogate	%	-	-	-	-	**116**
(13C3-PFHxS) Surrogate	%	-	-	-	-	**95**
(13C8-PFOS) Surrogate	%	-	-	-	-	**104**
(13C2-4:2 FTS) Surrogate	%	-	-	-	-	**147**
(13C2-6:2 FTS) Surrogate	%	-	-	-	-	**134**
(13C2-8:2 FTS) Surrogate	%	-	-	-	-	**103**
(13C8-PFOSA) Surrogate	%	-	-	-	-	**84**
(D3-N-MeFOSA) Surrogate	%	-	-	-	-	**68**
(D5-N-EtFOSA) Surrogate	%	-	-	-	-	**83**
(D7-N-MeFOSE) Surrogate	%	-	-	-	-	**78**
(D9-N-EtFOSE) Surrogate	%	-	-	-	-	**72**
(D3-N-MeFOSAA) Surrogate	%	-	-	-	-	**90**
(D5-N-EtFOSAA) Surrogate	%	-	-	-	-	**87**

QC SUMMARY

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Alkalinity Method: ME-(AU)-[ENV]AN135

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Total Alkalinity as CaCO3	LB205043	mg/L	5	<5	0 - 5%	99%

Ammonia Nitrogen by Discrete Analyser (Aquakem) Method: ME-(AU)-[ENV]AN291

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Ammonia Nitrogen, NH_3 as N	LB205143	mg/L	0.005	<0.005	1%	98%	95%

Anions by Ion Chromatography in Water Method: ME-(AU)-[ENV]AN245

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Chloride	LB205058	mg/L	1	<1.0	2%	95%
Sulfate, SO4	LB205058	mg/L	1	<1.0	2%	93%
Nitrate Nitrogen, NO3-N	LB205058	mg/L	0.005	<0.005		94%

Filterable Reactive Phosphorus (FRP) Method: ME-(AU)-[ENV]AN278

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Filterable Reactive Phosphorus as P	LB205143	mg/L	0.005	<0.005	3%	111%	101%

Full 8270 SVOC in Water Method: ME-(AU)-[ENV]AN420

PAHs

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Acenaphthene	LB205232	µg/L	0.1	<0.1	90%
Acenaphthylene	LB205232	µg/L	0.1	<0.1	87%
Anthracene	LB205232	µg/L	0.1	<0.1	92%
Benzo(a)anthracene	LB205232	µg/L	0.1	<0.1	NA
Total Benzofluoranthenes (b&j&k)	LB205232	µg/L	0.2	<0.2	NA
Benzo(b&j)fluoranthene	LB205232	µg/L	0.1	<0.1	NA
Benzo(k)fluoranthene	LB205232	µg/L	0.1	<0.1	NA
Benzo(ghi)perylene	LB205232	µg/L	0.1	<0.1	NA
Benzo(a)pyrene	LB205232	µg/L	0.1	<0.1	106%
Chrysene	LB205232	µg/L	0.1	<0.1	NA
Dibenzo(ah)anthracene	LB205232	µg/L	0.1	<0.1	NA
Fluoranthene	LB205232	µg/L	0.1	<0.1	100%
Fluorene	LB205232	µg/L	0.1	<0.1	NA
Indeno(1,2,3-cd)pyrene	LB205232	µg/L	0.1	<0.1	NA
1-methylnaphthalene	LB205232	µg/L	0.1	<0.1	NA
2-methylnaphthalene	LB205232	µg/L	0.1	<0.1	NA
Naphthalene	LB205232	µg/L	0.1	<0.1	73%
Phenanthrene	LB205232	µg/L	0.1	<0.1	89%
Pyrene	LB205232	µg/L	0.1	<0.1	96%
2-acetylaminofluorene	LB205232	µg/L	0.5	<0.5	NA
7,12-dimethyl-benz(a)anthracene	LB205232	µg/L	0.5	<0.5	NA
3-methylcholanthrene	LB205232	µg/L	0.5	<0.5	NA

OCs

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Aldrin	LB205232	µg/L	0.1	<0.1	85%
Alpha-BHC	LB205232	µg/L	0.1	<0.1	NA
Beta-BHC	LB205232	µg/L	0.1	<0.1	NA
Delta-BHC	LB205232	µg/L	0.1	<0.1	100%
Gamma-BHC (Lindane)	LB205232	µg/L	0.1	<0.1	NA
p,p-DDD	LB205232	µg/L	0.1	<0.1	NA
p,p-DDE	LB205232	µg/L	0.1	<0.1	NA
p,p-DDT	LB205232	µg/L	0.1	<0.1	78%

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Full 8270 SVOC in Water Method: ME-(AU)-[ENV]AN420 (continued)

				MB	LCS %Recovery
Dieldrin	LB205232	µg/L	0.1	<0.1	107%
Alpha-endosulfan	LB205232	µg/L	0.1	<0.1	NA
Beta-endosulfan	LB205232	µg/L	0.1	<0.1	NA
Endosulfan sulphate	LB205232	µg/L	0.1	<0.1	NA
Endrin	LB205232	µg/L	0.1	<0.1	84%
Heptachlor	LB205232	µg/L	0.1	<0.1	80%
Heptachlor epoxide	LB205232	µg/L	0.1	<0.1	NA
Isodrin	LB205232	µg/L	0.1	<0.1	NA
Methoxychlor	LB205232	µg/L	0.1	<0.1	NA
Mirex	LB205232	µg/L	0.1	<0.1	NA
Alpha-chlordane	LB205232	µg/L	0.1	<0.1	NA
Gamma-chlordane	LB205232	µg/L	0.1	<0.1	NA
Endrin ketone	LB205232	µg/L	0.1	<0.1	NA
Total Endosulfan (alpha+beta+sulfate)	LB205232	µg/L	0.2	<0.2	

OPs

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Azinphos-methyl (Guthion)	LB205232	µg/L	0.2	<0.2	NA
Bromophos ethyl	LB205232	µg/L	0.2	<0.2	NA
Carbophenothion	LB205232	µg/L	0.5	<0.5	NA
Chlorfenvinphos-cis	LB205232	µg/L	5	<5	NA
Chlorfenvinphos-trans	LB205232	µg/L	0.5	<0.5	NA
Chlorpyrifos (Chlorpyrifos Ethyl)	LB205232	µg/L	0.2	<0.2	85%
Chlorpyrifos-methyl	LB205232	µg/L	0.5	<0.5	NA
Co-Ral (Coumaphos)	LB205232	µg/L	0.5	<0.5	NA
Diazinon (Dimpylate)	LB205232	µg/L	0.5	<0.5	94%
Dichlorvos	LB205232	µg/L	0.5	<0.5	84%
Demeton-S-methyl	LB205232	µg/L	0.5	<0.5	NA
Dimethoate	LB205232	µg/L	0.5	<0.5	NA
Disulfoton (Di-syston)	LB205232	µg/L	0.5	<0.5	NA
EPN*	LB205232	µg/L	0.5	<0.5	NA
Ethion	LB205232	µg/L	0.2	<0.2	76%
Ethoprophos (Ethoprop or Prophos)	LB205232	µg/L	0.5	<0.5	NA
Famphur (Famophos)	LB205232	µg/L	0.5	<0.5	NA
Fenamiphos (Phenamiphos)	LB205232	µg/L	0.5	<0.5	NA
Fenchlorophos (Ronnel)	LB205232	µg/L	0.5	<0.5	NA
Fenitrothion	LB205232	µg/L	0.2	<0.2	NA
Fenthion	LB205232	µg/L	0.5	<0.5	NA
Malathion (Maldison)	LB205232	µg/L	0.2	<0.2	NA
Methidathion	LB205232	µg/L	0.5	<0.5	NA
Mevinphos-cis/trans	LB205232	µg/L	1	<1	NA
o,o,o-triethyl phosphorothioate	LB205232	µg/L	0.5	<0.5	NA
Parathion ethyl (Parathion)	LB205232	µg/L	0.2	<0.2	NA
Parathion methyl	LB205232	µg/L	0.5	<0.5	NA
Phorate	LB205232	µg/L	0.5	<0.5	NA
Pirimiphos-ethyl	LB205232	µg/L	0.5	<0.5	NA
Pirimiphos-methyl	LB205232	µg/L	0.5	<0.5	NA
Profenofos	LB205232	µg/L	0.5	<0.5	NA
Prothiophos (Tokuthion)*	LB205232	µg/L	0.5	<0.5	NA
Sulfotepp	LB205232	µg/L	0.5	<0.5	NA
Tetrachlorvinphos (Stirophos)*	LB205232	µg/L	0.5	<0.5	NA

PCB UPAC(7) Congeners

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
PCB Congener C28	LB205232	µg/L	0.1	<0.1	NA
PCB Congener C52	LB205232	µg/L	0.1	<0.1	NA

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Full 8270 SVOC in Water Method: ME-(AU)-[ENV]AN420 (continued)

				MB	LCS %Recovery
PCB Congener C101	LB205232	µg/L	0.1	<0.1	NA
PCB Congener C118	LB205232	µg/L	0.1	<0.1	NA
PCB Congener C138	LB205232	µg/L	0.1	<0.1	NA
PCB Congener C153	LB205232	µg/L	0.1	<0.1	NA
PCB Congener C180	LB205232	µg/L	0.1	<0.1	NA

SVCH (Cl Benzenes, Hydrocarbons & VOCs)

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
1/2-Chloronaphthalene	LB205232	µg/L	1	<1	NA
Hexachlorobenzene (HCB)	LB205232	µg/L	0.1	<0.1	108%
1,2-dichlorobenzene	LB205232	µg/L	0.5	<0.5	NA
1,3-dichlorobenzene	LB205232	µg/L	0.5	<0.5	NA
1,4-dichlorobenzene	LB205232	µg/L	0.5	<0.5	NA
Hexachlorobutadiene	LB205232	µg/L	0.5	<0.5	109%
Hexachlorocyclopentadiene	LB205232	µg/L	2	<2	NA
Hexachloroethane	LB205232	µg/L	0.5	<0.5	107%
Hexachloroproprene	LB205232	µg/L	0.5	<0.5	NA
Pentachlorobenzene	LB205232	µg/L	0.5	<0.5	106%
Pentachloroethane	LB205232	µg/L	0.5	<0.5	NA
1,2,3,5 and 1,2,4,5-tetrachlorobenzene	LB205232	µg/L	1	<1	NA
1,2,3,4-tetrachlorobenzene	LB205232	µg/L	0.5	<0.5	108%
1,2,4-trichlorobenzene	LB205232	µg/L	0.5	<0.5	NA

Phthalates

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Bis(2-ethylhexyl)phthalate	LB205232	µg/L	50	<50	111%
Bis(2-ethylhexyl)adipate	LB205232	µg/L	1	<1	NA
Butyl benzyl phthalate	LB205232	µg/L	1	<1	96%
Di-n-butyl phthalate	LB205232	µg/L	10	<10	109%
Diethyl phthalate	LB205232	µg/L	5	<5	116%
Dimethyl phthalate	LB205232	µg/L	1	<1	106%
Dioctyl phthalate	LB205232	µg/L	1	<1	108%

Carbamates

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Carbofuran	LB205232	µg/L	0.5	<0.5	NA
Carbaryl	LB205232	µg/L	0.5	<0.5	NA

Herbicides (normal)

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Trifluralin	LB205232	µg/L	0.5	<0.5	NA

Nitrosamines

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
N-nitroso-di-n-butylamine (NDBA)	LB205232	µg/L	1	<1	NA
N-nitroso-diethylamine (NDEA)	LB205232	µg/L	1	<1	NA
N-nitroso-di-n-propylamine (NDPA)	LB205232	µg/L	1	<1	130%
N-nitroso-morpholine (NMOR)	LB205232	µg/L	1	<1	NA
N-nitroso-piperidine (NPIP)	LB205232	µg/L	1	<1	NA
N-nitroso-pyrrolidine (NPYR)	LB205232	µg/L	1	<1	NA
4-amino biphenyl	LB205232	µg/L	1	<1	NA

Nitroaromatics and Ketones

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Full 8270 SVOC in Water Method: ME-(AU)-[ENV]AN420 (continued)

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Acetophenone	LB205232	µg/L	1	<1	NA
1,3-dinitrobenzene	LB205232	µg/L	1	<1	NA
2,4-dinitrotoluene	LB205232	µg/L	1	<1	NA
2,6-dinitrotoluene	LB205232	µg/L	1	<1	NA
Isophorone	LB205232	µg/L	1	<1	NA
Nitrobenzene	LB205232	µg/L	1	<1	NA
p-(dimethylamino) azobenzene	LB205232	µg/L	1	<1	NA
Phenacetin	LB205232	µg/L	1	<1	NA
Pentachloronitrobenzene (quintozene)	LB205232	µg/L	1	<1	129%

Anilines and Amines

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Aniline	LB205232	µg/L	5	<5	NA
4-chloroaniline	LB205232	µg/L	1	<1	NA
2-nitroaniline	LB205232	µg/L	1	<1	NA
3-nitroaniline	LB205232	µg/L	1	<1	NA
4-nitroaniline	LB205232	µg/L	1	<1	NA
Diphenylamine	LB205232	µg/L	1	<1	NA
o-Toluidine	LB205232	µg/L	1	<1	NA
5-nitro-o-toluidine	LB205232	µg/L	1	<1	NA
1-naphthylamine	LB205232	µg/L	2	<2	NA
2-naphthylamine	LB205232	µg/L	2	<2	NA

Haloethers

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Bis(2-chloroethoxy) methane	LB205232	µg/L	1	<1	NA
Bis(2-chloroethyl) ether	LB205232	µg/L	1	<1	NA
Bis(2-chloroisopropyl) ether	LB205232	µg/L	1	<1	NA
4-chlorophenyl phenyl ether	LB205232	µg/L	1	<1	NA
4-bromophenyl phenyl ether	LB205232	µg/L	1	<1	NA

Other SVOCs

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Methyl methanesulfonate	LB205232	µg/L	1	<1	NA
Ethyl methanesulfonate	LB205232	µg/L	1	<1	NA
Dibenzofuran	LB205232	µg/L	1	<1	NA
Benzyl alcohol	LB205232	µg/L	1	<1	NA
Safrole	LB205232	µg/L	1	<1	NA
Isosafrole Isomer 1	LB205232	µg/L	1	<1	NA
Isosafrole Isomer 2	LB205232	µg/L	1	<1	NA
1,4-naphthoquinone	LB205232	µg/L	1	<1	NA
Thionazin	LB205232	µg/L	1	<1	NA

Speciated Routine Phenols

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
3/4-methyl phenol (m/p-cresol)	LB205232	µg/L	1	<1	NA
2-methyl phenol (o-cresol)	LB205232	µg/L	0.5	<0.5	NA
2,6-dichlorophenol	LB205232	µg/L	0.5	<0.5	NA
2,3,4,6 and 2,3,5,6-tetrachlorophenol	LB205232	µg/L	1	<1	NA
2,4,5-trichlorophenol	LB205232	µg/L	0.5	<0.5	NA
4-chloro-3-methylphenol	LB205232	µg/L	2	<2	NA
2-chlorophenol	LB205232	µg/L	0.5	<0.5	NA
2,4-dichlorophenol	LB205232	µg/L	0.5	<0.5	116%
2,4-dimethylphenol	LB205232	µg/L	0.5	<0.5	NA

QC SUMMARY

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Full 8270 SVOC in Water Method: ME-(AU)-[ENV]AN420 (continued)

				MB	LCS %Recovery
2-nitrophenol	LB205232	µg/L	0.5	<0.5	NA
Phenol	LB205232	µg/L	0.5	<0.5	78%
2,4,6-trichlorophenol	LB205232	µg/L	0.5	<0.5	93%
Pentachlorophenol	LB205232	µg/L	0.5	<0.5	80%
4-nitrophenol	LB205232	µg/L	1	<1	NA

Surrogates

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
d5-phenol (Surrogate)	LB205232	%	-	101%	109%
d5-nitrobenzene (Surrogate)	LB205232	%	-	100%	106%
2-fluorobiphenyl (Surrogate)	LB205232	%	-	100%	106%
2,4,6-Tribromophenol (Surrogate)	LB205232	%	-	104%	108%
d14-p-terphenyl (Surrogate)	LB205232	%	-	94%	94%

Mercury (dissolved) in Water Method: ME-(AU)-[ENV]AN311(Perth)/AN312

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Mercury	LB205054	mg/L	0.0001	<0.0001	0 - 196%	84%	86%

Metals in Water (Dissolved) by ICPOES Method: ME-(AU)-[ENV]AN320

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Calcium, Ca	LB205078	mg/L	0.2	<0.2	1%	100%	100%
Magnesium, Mg	LB205078	mg/L	0.1	<0.1		97%	100%
Potassium, K	LB205078	mg/L	0.1	<0.1		94%	93%
Sodium, Na	LB205078	mg/L	0.5	<0.5		104%	109%

QC SUMMARY

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Nitrite in Water Method: ME-(AU)-[ENV]AN277

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Nitrite Nitrogen, NO2 as N	LB205143	mg/L	0.005	<0.005	5%	113%	107%

OC Pesticides in Water Method: ME-(AU)-[ENV]AN420

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Alpha BHC	LB205062	µg/L	0.1	<0.1		NA
	LB205232	µg/L	0.1	<0.1	0%	NA
Hexachlorobenzene (HCB)	LB205062	µg/L	0.1	<0.1		NA
	LB205232	µg/L	0.1	<0.1	0%	NA
Beta BHC	LB205062	µg/L	0.1	<0.1		NA
	LB205232	µg/L	0.1	<0.1	0%	NA
Lindane (gamma BHC)	LB205062	µg/L	0.1	<0.1		NA
	LB205232	µg/L	0.1	<0.1	0%	NA
Delta BHC	LB205062	µg/L	0.1	<0.1		87%
	LB205232	µg/L	0.1	<0.1	0%	87%
Heptachlor	LB205062	µg/L	0.1	<0.1		71%
	LB205232	µg/L	0.1	<0.1	0%	71%
Aldrin	LB205062	µg/L	0.1	<0.1		95%
	LB205232	µg/L	0.1	<0.1	0%	95%
Heptachlor epoxide	LB205062	µg/L	0.1	<0.1		NA
	LB205232	µg/L	0.1	<0.1	0%	NA
Gamma Chlordane	LB205062	µg/L	0.1	<0.1		NA
	LB205232	µg/L	0.1	<0.1	0%	NA
Alpha Chlordane	LB205062	µg/L	0.1	<0.1		NA
	LB205232	µg/L	0.1	<0.1	0%	NA
Alpha Endosulfan	LB205062	µg/L	0.1	<0.1		NA
	LB205232	µg/L	0.1	<0.1	0%	NA
o,p'-DDE	LB205062	µg/L	0.1	<0.1		NA
	LB205232	µg/L	0.1	<0.1	0%	NA
p,p'-DDE	LB205062	µg/L	0.1	<0.1		NA
	LB205232	µg/L	0.1	<0.1	0%	NA
Dieldrin	LB205062	µg/L	0.1	<0.1		95%
	LB205232	µg/L	0.1	<0.1	0%	95%
Endrin	LB205062	µg/L	0.1	<0.1		80%
	LB205232	µg/L	0.1	<0.1	0%	80%
Beta Endosulfan	LB205062	µg/L	0.1	<0.1		NA
	LB205232	µg/L	0.1	<0.1	0%	NA
o,p'-DDD	LB205062	µg/L	0.1	<0.1		NA
	LB205232	µg/L	0.1	<0.1	0%	NA
p,p'-DDD	LB205062	µg/L	0.1	<0.1		NA
	LB205232	µg/L	0.1	<0.1	0%	NA
Endosulfan sulphate	LB205062	µg/L	0.1	<0.1		NA
	LB205232	µg/L	0.1	<0.1	0%	NA
o,p'-DDT	LB205062	µg/L	0.1	<0.1		NA
	LB205232	µg/L	0.1	<0.1	0%	NA
p,p'-DDT	LB205062	µg/L	0.1	<0.1		73%
	LB205232	µg/L	0.1	<0.1	0%	73%
Endrin ketone	LB205062	µg/L	0.1	<0.1		NA
	LB205232	µg/L	0.1	<0.1	0%	NA
Methoxychlor	LB205062	µg/L	0.1	<0.1		NA
	LB205232	µg/L	0.1	<0.1	0%	NA
trans-Nonachlor	LB205062	µg/L	0.1	<0.1		NA
	LB205232	µg/L	0.1	<0.1	0%	NA
Endrin aldehyde	LB205062	µg/L	0.1	<0.1		NA
	LB205232	µg/L	0.1	<0.1	0%	NA
Isodrin	LB205062	µg/L	0.1	<0.1		NA

QC SUMMARY

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

OC Pesticides in Water **Method: ME-(AU)-[ENV]AN420 (continued)**

				MB	DUP %RPD	LCS %Recovery
Isodrin	LB205232	µg/L	0.1	<0.1	0%	NA
Mirex	LB205062	µg/L	0.1	<0.1		NA
	LB205232	µg/L	0.1	<0.1	0%	NA

Surrogates

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Tetrachloro-m-xylene (TCMX) (Surrogate)	LB205062	%	-	89%		96%
	LB205232	%	-	89%	10%	96%

QC SUMMARY

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

OP Pesticides in Water **Method: ME-(AU)-[ENV]AN420**

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Dichlorvos	LB205062	µg/L	0.5	<0.5	0%	91%
	LB205232	µg/L	0.5	<0.5		84%
Dimethoate	LB205062	µg/L	0.5	<0.5	0%	NA
	LB205232	µg/L	0.5	<0.5		NA
Diazinon (Dimpylate)	LB205062	µg/L	0.5	<0.5	0%	88%
	LB205232	µg/L	0.5	<0.5		94%
Fenitrothion	LB205062	µg/L	0.2	<0.2	0%	NA
	LB205232	µg/L	0.2	<0.2		NA
Malathion	LB205062	µg/L	0.2	<0.2	0%	NA
	LB205232	µg/L	0.2	<0.2		NA
Chlorpyrifos (Chlorpyrifos Ethyl)	LB205062	µg/L	0.2	<0.2	0%	90%
	LB205232	µg/L	0.2	<0.2		85%
Parathion-ethyl (Parathion)	LB205062	µg/L	0.2	<0.2	0%	NA
	LB205232	µg/L	0.2	<0.2		NA
Bromophos Ethyl	LB205062	µg/L	0.2	<0.2	0%	NA
	LB205232	µg/L	0.2	<0.2		NA
Methidathion	LB205062	µg/L	0.5	<0.5	0%	NA
	LB205232	µg/L	0.5	<0.5		NA
Ethion	LB205062	µg/L	0.2	<0.2	0%	78%
	LB205232	µg/L	0.2	<0.2		76%
Azinphos-methyl	LB205062	µg/L	0.2	<0.2	0%	NA
	LB205232	µg/L	0.2	<0.2		NA

Surrogates

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
2-fluorobiphenyl (Surrogate)	LB205062	%	-	64%	23%	66%
	LB205232	%	-	68%		74%
d14-p-terphenyl (Surrogate)	LB205062	%	-	84%	25%	70%
	LB205232	%	-	94%		92%

QC SUMMARY

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

PAH (Polynuclear Aromatic Hydrocarbons) in Water **Method: ME-(AU)-[ENV]AN420**

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Naphthalene	LB205062	µg/L	0.1	<0.1	20%	67%
	LB205232	µg/L	0.1	<0.1		73%
2-methylnaphthalene	LB205062	µg/L	0.1	<0.1	0%	NA
	LB205232	µg/L	0.1	<0.1		NA
1-methylnaphthalene	LB205062	µg/L	0.1	<0.1	0%	NA
	LB205232	µg/L	0.1	<0.1		NA
Acenaphthylene	LB205062	µg/L	0.1	<0.1	0%	70%
	LB205232	µg/L	0.1	<0.1		87%
Acenaphthene	LB205062	µg/L	0.1	<0.1	0%	69%
	LB205232	µg/L	0.1	<0.1		90%
Fluorene	LB205062	µg/L	0.1	<0.1	0%	NA
	LB205232	µg/L	0.1	<0.1		NA
Phenanthrene	LB205062	µg/L	0.1	<0.1	0%	75%
	LB205232	µg/L	0.1	<0.1		89%
Anthracene	LB205062	µg/L	0.1	<0.1	0%	75%
	LB205232	µg/L	0.1	<0.1		92%
Fluoranthene	LB205062	µg/L	0.1	<0.1	0%	76%
	LB205232	µg/L	0.1	<0.1		100%
Pyrene	LB205062	µg/L	0.1	<0.1	0%	79%
	LB205232	µg/L	0.1	<0.1		96%
Benzo(a)anthracene	LB205062	µg/L	0.1	<0.1	0%	NA
	LB205232	µg/L	0.1	<0.1		NA
Chrysene	LB205062	µg/L	0.1	<0.1	0%	NA
	LB205232	µg/L	0.1	<0.1		NA
Benzo(b&j)fluoranthene	LB205062	µg/L	0.1	<0.1	0%	NA
	LB205232	µg/L	0.1	<0.1		NA
Benzo(k)fluoranthene	LB205062	µg/L	0.1	<0.1	0%	NA
	LB205232	µg/L	0.1	<0.1		NA
Benzo(a)pyrene	LB205062	µg/L	0.1	<0.1	0%	84%
	LB205232	µg/L	0.1	<0.1		106%
Indeno(1,2,3-cd)pyrene	LB205062	µg/L	0.1	<0.1	0%	NA
	LB205232	µg/L	0.1	<0.1		NA
Dibenzo(ah)anthracene	LB205062	µg/L	0.1	<0.1	0%	NA
	LB205232	µg/L	0.1	<0.1		NA
Benzo(ghi)perylene	LB205062	µg/L	0.1	<0.1	0%	NA
	LB205232	µg/L	0.1	<0.1		NA
Total PAH (18)	LB205062	µg/L	1	<1		
	LB205232	µg/L	1	<1		

Surrogates

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
d5-nitrobenzene (Surrogate)	LB205062	%	-	62%	22%	66%
	LB205232	%	-	60%		64%
2-fluorobiphenyl (Surrogate)	LB205062	%	-	64%	23%	66%
	LB205232	%	-	68%		74%
d14-p-terphenyl (Surrogate)	LB205062	%	-	84%	25%	70%
	LB205232	%	-	94%		92%

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

PCBs in Water Method: ME-(AU)-[ENV]AN420

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Arochlor 1016	LB205062	µg/L	1	<1		NA
	LB205232	µg/L	1	<1	0%	NA
Arochlor 1221	LB205062	µg/L	1	<1		NA
	LB205232	µg/L	1	<1	0%	NA
Arochlor 1232	LB205062	µg/L	1	<1		NA
	LB205232	µg/L	1	<1	0%	NA
Arochlor 1242	LB205062	µg/L	1	<1		NA
	LB205232	µg/L	1	<1	0%	NA
Arochlor 1248	LB205062	µg/L	1	<1		NA
	LB205232	µg/L	1	<1	0%	NA
Arochlor 1254	LB205062	µg/L	1	<1		NA
	LB205232	µg/L	1	<1	0%	NA
Arochlor 1260	LB205062	µg/L	1	<1		80%
	LB205232	µg/L	1	<1	0%	80%
Arochlor 1262	LB205062	µg/L	1	<1		NA
	LB205232	µg/L	1	<1	0%	NA
Arochlor 1268	LB205062	µg/L	1	<1		NA
	LB205232	µg/L	1	<1	0%	NA
Total Arochlors*	LB205062	µg/L	5	<5		
	LB205232	µg/L	5	<5		

Surrogates

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Tetrachloro-m-xylene (Surrogate)	LB205062	%	-	89%		95%
	LB205232	%	-	89%	10%	95%

Speciated Phenols in Water Method: ME-(AU)-[ENV]AN420

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Phenol	LB205062	µg/L	0.5	<0.5	80%
2-methyl phenol (o-cresol)	LB205062	µg/L	0.5	<0.5	NA
3/4-methyl phenol (m/p-cresol)	LB205062	µg/L	1	<1	NA
Total Cresol	LB205062	µg/L	1.5	<1.5	NA
2-chlorophenol	LB205062	µg/L	0.5	<0.5	NA
2,4-dimethylphenol	LB205062	µg/L	0.5	<0.5	NA
2,6-dichlorophenol	LB205062	µg/L	0.5	<0.5	NA
2,4-dichlorophenol	LB205062	µg/L	0.5	<0.5	87%
2,4,6-trichlorophenol	LB205062	µg/L	0.5	<0.5	103%
2-nitrophenol	LB205062	µg/L	0.5	<0.5	NA
4-nitrophenol	LB205062	µg/L	1	<1	NA
2,4,5-trichlorophenol	LB205062	µg/L	0.5	<0.5	NA
2,3,4,6/2,3,5,6-tetrachlorophenol	LB205062	µg/L	1	<1	NA
Pentachlorophenol	LB205062	µg/L	0.5	<0.5	60%
2,4-dinitrophenol	LB205062	µg/L	2	<2	NA
4-chloro-3-methylphenol	LB205062	µg/L	2	<2	NA

Surrogates

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
2,4,6-Tribromophenol (Surrogate)	LB205062	%	-	90%	95%
	LB205232	%	-	%	
d5-phenol (Surrogate)	LB205062	%	-	83%	95%
	LB205232	%	-	%	

QC SUMMARY

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Sulfide by Titration in Water **Method: ME-(AU)-[ENV]AN149**

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Sulfide	LB205237	mg/L	0.5	<0.5	88%

TKN Kjeldahl Digestion by Discrete Analyser **Method: ME-(AU)-[ENV]AN292**

Parameter	QC Reference	Units	LOR	DUP %RPD
Total Kjeldahl Nitrogen	LB205247	mg/L	0.05	2 - 10%

Total Dissolved Solids (TDS) in water **Method: ME-(AU)-[ENV]AN113**

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Total Dissolved Solids Dried at 175-185°C	LB205144	mg/L	10	<10	5 - 8%	105%

Total Phosphorus by Kjeldahl Digestion DA in Water **Method: ME-(AU)-[ENV]AN279/AN293(Sydney only)**

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Total Phosphorus (Kjeldahl Digestion) as P	LB205247	mg/L	0.02	<0.02	0 - 1%	113%

Trace Metals (Dissolved) in Water by ICPMS **Method: ME-(AU)-[ENV]AN318**

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Arsenic, As	LB205041	µg/L	1	<1	2%	92%	95%
Beryllium, Be	LB205041	µg/L	1	<1	0%	106%	
Boron, B	LB205041	µg/L	5	<5	2%	116%	
Cadmium, Cd	LB205041	µg/L	0.1	<0.1	0%	101%	103%
Chromium, Cr	LB205041	µg/L	1	<1	1%	102%	105%
Cobalt, Co	LB205041	µg/L	1	<1	2%	102%	
Copper, Cu	LB205041	µg/L	1	<1	0%	104%	107%
Lead, Pb	LB205041	µg/L	1	<1	0%	100%	102%
Manganese, Mn	LB205041	µg/L	1	<1	1%	101%	
Nickel, Ni	LB205041	µg/L	1	<1	0%	98%	104%
Zinc, Zn	LB205041	µg/L	5	<5	0%	108%	111%

QC SUMMARY

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

TRH (Total Recoverable Hydrocarbons) in Water **Method: ME-(AU)-[ENV]AN403**

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
TRH C10-C14	LB205062	µg/L	50	<50	0%	87%
	LB205232	µg/L	50	<50		90%
TRH C15-C28	LB205062	µg/L	200	<200	0%	107%
	LB205232	µg/L	200	<200		109%
TRH C29-C36	LB205062	µg/L	200	<200	0%	109%
	LB205232	µg/L	200	<200		110%
TRH C37-C40	LB205062	µg/L	200	<200	0%	NA
	LB205232	µg/L	200	<200		NA
TRH C10-C40	LB205062	µg/L	320	<320	0%	NA
	LB205232	µg/L	320	<320		NA

TRH F Bands

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
TRH >C10-C16	LB205062	µg/L	60	<60	0%	99%
	LB205232	µg/L	60	<60		101%
TRH >C10-C16 - Naphthalene (F2)	LB205062	µg/L	60	<60	0%	NA
	LB205232	µg/L	60	<60		NA
TRH >C16-C34 (F3)	LB205062	µg/L	500	<500	0%	111%
	LB205232	µg/L	500	<500		117%
TRH >C34-C40 (F4)	LB205062	µg/L	500	<500	0%	111%
	LB205232	µg/L	500	<500		102%

VOCs in Water **Method: ME-(AU)-[ENV]AN433**

Fumigants

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
2,2-dichloropropane	LB205182	µg/L	0.5	<0.5	0%	NA	NA
	LB205221	µg/L	0.5	<0.5		NA	
1,2-dichloropropane	LB205182	µg/L	0.5	<0.5	0%	NA	NA
	LB205221	µg/L	0.5	<0.5		NA	
cis-1,3-dichloropropene	LB205182	µg/L	0.5	<0.5	0%	NA	NA
	LB205221	µg/L	0.5	<0.5		NA	
trans-1,3-dichloropropene	LB205182	µg/L	0.5	<0.5	0%	NA	NA
	LB205221	µg/L	0.5	<0.5		NA	
1,2-dibromoethane (EDB)	LB205182	µg/L	0.5	<0.5	0%	NA	NA
	LB205221	µg/L	0.5	<0.5		NA	

Halogenated Aliphatics

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Dichlorodifluoromethane (CFC-12)	LB205182	µg/L	5	<5	0%	NA	NA
	LB205221	µg/L	5	<5		NA	
Chloromethane	LB205182	µg/L	5	<5	0%	NA	NA
	LB205221	µg/L	5	<5		NA	
Vinyl chloride (Chloroethene)	LB205182	µg/L	0.3	<0.3	0%	NA	NA
	LB205221	µg/L	0.3	<0.3		NA	
Bromomethane	LB205182	µg/L	10	<10	0%	NA	NA
	LB205221	µg/L	10	<10		NA	
Chloroethane	LB205182	µg/L	5	<5	0%	NA	NA
	LB205221	µg/L	5	<5		NA	
Trichlorofluoromethane	LB205182	µg/L	1	<1	0%	NA	NA
	LB205221	µg/L	1	<1		NA	
Iodomethane	LB205182	µg/L	5	<5	0%	NA	NA
	LB205221	µg/L	5	<5		NA	
1,1-dichloroethene	LB205182	µg/L	0.5	<0.5	0%	125%	111%
	LB205221	µg/L	0.5	<0.5		102%	
Dichloromethane (Methylene chloride)	LB205182	µg/L	5	<5	0%	NA	NA

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

VOCs in Water Method: ME-(AU)-[ENV]AN433 (continued)

				MB	DUP %RPD	LCS %Recovery	MS %Recovery
Dichloromethane (Methylene chloride)	LB205221	µg/L	5	<5		NA	
Allyl chloride	LB205182	µg/L	2	<2	0%	NA	NA
	LB205221	µg/L	2	<2		NA	
trans-1,2-dichloroethene	LB205182	µg/L	0.5	<0.5	0%	NA	NA
	LB205221	µg/L	0.5	<0.5		NA	
1,1-dichloroethane	LB205182	µg/L	0.5	<0.5	0%	NA	NA
	LB205221	µg/L	0.5	<0.5		NA	
cis-1,2-dichloroethene	LB205182	µg/L	0.5	<0.5	0%	NA	NA
	LB205221	µg/L	0.5	<0.5		NA	
Bromochloromethane	LB205182	µg/L	0.5	<0.5	0%	NA	NA
	LB205221	µg/L	0.5	<0.5		NA	
1,2-dichloroethane	LB205182	µg/L	0.5	<0.5	0%	112%	118%
	LB205221	µg/L	0.5	<0.5		116%	
1,1,1-trichloroethane	LB205182	µg/L	0.5	<0.5	0%	NA	NA
	LB205221	µg/L	0.5	<0.5		NA	
1,1-dichloropropene	LB205182	µg/L	0.5	<0.5	0%	NA	NA
	LB205221	µg/L	0.5	<0.5		NA	
Carbon tetrachloride	LB205182	µg/L	0.5	<0.5	0%	NA	NA
	LB205221	µg/L	0.5	<0.5		NA	
Dibromomethane	LB205182	µg/L	0.5	<0.5	0%	NA	NA
	LB205221	µg/L	0.5	<0.5		NA	
Trichloroethene (Trichloroethylene,TCE)	LB205182	µg/L	0.5	<0.5	0%	109%	119%
	LB205221	µg/L	0.5	<0.5		116%	
1,1,2-trichloroethane	LB205182	µg/L	0.5	<0.5	0%	NA	NA
	LB205221	µg/L	0.5	<0.5		NA	
1,3-dichloropropane	LB205182	µg/L	0.5	<0.5	0%	NA	NA
	LB205221	µg/L	0.5	<0.5		NA	
Tetrachloroethene (Perchloroethylene,PCE)	LB205182	µg/L	0.5	<0.5	0%	NA	NA
	LB205221	µg/L	0.5	<0.5		NA	
1,1,1,2-tetrachloroethane	LB205182	µg/L	0.5	<0.5	0%	NA	NA
	LB205221	µg/L	0.5	<0.5		NA	
cis-1,4-dichloro-2-butene	LB205182	µg/L	1	<1	0%	NA	NA
	LB205221	µg/L	1	<1		NA	
1,1,2,2-tetrachloroethane	LB205182	µg/L	0.5	<0.5	0%	NA	NA
	LB205221	µg/L	0.5	<0.5		NA	
1,2,3-trichloropropane	LB205182	µg/L	0.5	<0.5	0%	NA	NA
	LB205221	µg/L	0.5	<0.5		NA	
trans-1,4-dichloro-2-butene	LB205182	µg/L	1	<1	0%	NA	NA
	LB205221	µg/L	1	<1		NA	
1,2-dibromo-3-chloropropane	LB205182	µg/L	0.5	<0.5	0%	NA	NA
	LB205221	µg/L	0.5	<0.5		NA	
Hexachlorobutadiene	LB205182	µg/L	0.5	<0.5	0%	NA	NA
	LB205221	µg/L	0.5	<0.5		NA	

Halogenated Aromatics

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Chlorobenzene	LB205182	µg/L	0.5	<0.5	0%	120%	129%
	LB205221	µg/L	0.5	<0.5		126%	
Bromobenzene	LB205182	µg/L	0.5	<0.5	0%	NA	NA
	LB205221	µg/L	0.5	<0.5		NA	
2-chlorotoluene	LB205182	µg/L	0.5	<0.5	0%	NA	NA
	LB205221	µg/L	0.5	<0.5		NA	
4-chlorotoluene	LB205182	µg/L	0.5	<0.5	0%	NA	NA
	LB205221	µg/L	0.5	<0.5		NA	
1,3-dichlorobenzene	LB205182	µg/L	0.5	<0.5	0%	NA	NA
	LB205221	µg/L	0.5	<0.5		NA	

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

VOCs in Water Method: ME-(AU)-[ENV]AN433 (continued)

				MB	DUP %RPD	LCS %Recovery	MS %Recovery
1,4-dichlorobenzene	LB205182	µg/L	0.3	<0.3	0%	NA	NA
	LB205221	µg/L	0.3	<0.3		NA	
1,2-dichlorobenzene	LB205182	µg/L	0.5	<0.5	0%	NA	NA
	LB205221	µg/L	0.5	<0.5		NA	
1,2,4-trichlorobenzene	LB205182	µg/L	0.5	<0.5	0%	NA	NA
	LB205221	µg/L	0.5	<0.5		NA	
1,2,3-trichlorobenzene	LB205182	µg/L	0.5	<0.5	0%	NA	NA
	LB205221	µg/L	0.5	<0.5		NA	

Monocyclic Aromatic Hydrocarbons

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Benzene	LB205182	µg/L	0.5	<0.5	0%	94%	105%
	LB205221	µg/L	0.5	<0.5		98%	110%
Toluene	LB205182	µg/L	0.5	<0.5	0%	98%	116%
	LB205221	µg/L	0.5	<0.5		110%	105%
Ethylbenzene	LB205182	µg/L	0.5	<0.5	0%	97%	109%
	LB205221	µg/L	0.5	<0.5		101%	108%
m/p-xylene	LB205182	µg/L	1	<1	0%	97%	112%
	LB205221	µg/L	1	<1		104%	108%
o-xylene	LB205182	µg/L	0.5	<0.5	0 - 12%	98%	112%
	LB205221	µg/L	0.5	<0.5		105%	106%
Styrene (Vinyl benzene)	LB205182	µg/L	0.5	<0.5	0%	NA	NA
	LB205221	µg/L	0.5	<0.5		NA	
Isopropylbenzene (Cumene)	LB205182	µg/L	0.5	<0.5	0%	NA	NA
	LB205221	µg/L	0.5	<0.5		NA	
n-propylbenzene	LB205182	µg/L	0.5	<0.5	0%	NA	NA
	LB205221	µg/L	0.5	<0.5		NA	
1,3,5-trimethylbenzene	LB205182	µg/L	0.5	<0.5	0%	NA	NA
	LB205221	µg/L	0.5	<0.5		NA	
tert-butylbenzene	LB205182	µg/L	0.5	<0.5	0%	NA	NA
	LB205221	µg/L	0.5	<0.5		NA	
1,2,4-trimethylbenzene	LB205182	µg/L	0.5	<0.5	0%	NA	NA
	LB205221	µg/L	0.5	<0.5		NA	
sec-butylbenzene	LB205182	µg/L	0.5	<0.5	0%	NA	NA
	LB205221	µg/L	0.5	<0.5		NA	
p-isopropyltoluene	LB205182	µg/L	0.5	<0.5	0%	NA	NA
	LB205221	µg/L	0.5	<0.5		NA	
n-butylbenzene	LB205182	µg/L	0.5	<0.5	0%	NA	NA
	LB205221	µg/L	0.5	<0.5		NA	

Nitrogenous Compounds

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Acrylonitrile	LB205182	µg/L	0.5	<0.5	0%	NA	NA
	LB205221	µg/L	0.5	<0.5		NA	
2-nitropropane	LB205182	µg/L	100	<100			
	LB205221	µg/L	100	<100			

Oxygenated Compounds

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Acetone (2-propanone)	LB205182	µg/L	10	<10	0%	NA	NA
	LB205221	µg/L	10	<10		NA	
MtBE (Methyl-tert-butyl ether)	LB205182	µg/L	2	<1	0%	NA	NA
	LB205221	µg/L	2	<1		NA	
Vinyl acetate	LB205182	µg/L	10	<10	0%	NA	NA
	LB205221	µg/L	10	<10		NA	
MEK (2-butanone)	LB205182	µg/L	10	<10	0%	NA	NA

QC SUMMARY

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

VOCs in Water Method: ME-(AU)-[ENV]AN433 (continued)

				MB	DUP %RPD	LCS %Recovery	MS %Recovery
MEK (2-butanone)	LB205221	µg/L	10	<10		NA	
MIBK (4-methyl-2-pentanone)	LB205182	µg/L	5	<5	0%	NA	NA
	LB205221	µg/L	5	<5		NA	
2-hexanone (MBK)	LB205182	µg/L	5	<5	0%	NA	NA
	LB205221	µg/L	5	<5		NA	

Polycyclic VOCs

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Naphthalene	LB205182	µg/L	0.5	<0.5	0%	NA	NA
	LB205221	µg/L	0.5	<0.5		NA	NA

Sulphonated Compounds

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Carbon disulfide	LB205182	µg/L	2	<2	0%	NA	NA
	LB205221	µg/L	2	<2		NA	

Surrogates

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
d4-1,2-dichloroethane (Surrogate)	LB205182	%	-	97%	3 - 4%	103%	120%
	LB205221	%	-	102%		105%	102%
d8-toluene (Surrogate)	LB205182	%	-	95%	6 - 7%	99%	120%
	LB205221	%	-	94%		108%	96%
Bromofluorobenzene (Surrogate)	LB205182	%	-	99%	1 - 2%	100%	120%
	LB205221	%	-	109%		121%	100%

Totals

Parameter	QC Reference	Units	LOR	MB
Total Xylenes	LB205182	µg/L	1.5	<1.5
	LB205221	µg/L	1.5	<1.5
Total BTEX	LB205182	µg/L	3	<3
	LB205221	µg/L	3	<3
Total VOC	LB205182	µg/L	10	<10
	LB205221	µg/L	10	<10

Trihalomethanes

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Chloroform (THM)	LB205182	µg/L	0.5	<0.5	4 - 15%	123%	147%
	LB205221	µg/L	0.5	<0.5		122%	
Bromodichloromethane (THM)	LB205182	µg/L	0.5	<0.5	0 - 15%	NA	NA
	LB205221	µg/L	0.5	<0.5		NA	
Dibromochloromethane (THM)	LB205182	µg/L	0.5	<0.5	0 - 11%	NA	NA
	LB205221	µg/L	0.5	<0.5		NA	
Bromoform (THM)	LB205182	µg/L	0.5	<0.5	0%	NA	NA
	LB205221	µg/L	0.5	<0.5		NA	

QC SUMMARY

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Volatile Petroleum Hydrocarbons in Water **Method: ME-(AU)-[ENV]AN433**

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
TRH C6-C10	LB205182	µg/L	50	<50	0%	73%	67%
	LB205221	µg/L	50	<50	0%	78%	88%
TRH C6-C9	LB205182	µg/L	40	<40	0%	73%	65%
	LB205221	µg/L	40	<40	0%	78%	90%

Surrogates

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
d4-1,2-dichloroethane (Surrogate)	LB205182	%	-	97%	3 - 4%	103%	120%
	LB205221	%	-	102%	3 - 7%	105%	102%
d8-toluene (Surrogate)	LB205182	%	-	95%	1%	99%	101%
	LB205221	%	-	94%	4 - 13%	108%	96%
Bromofluorobenzene (Surrogate)	LB205182	%	-	99%	8 - 15%	100%	110%
	LB205221	%	-	109%	0 - 4%	121%	100%

VPH F Bands

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery
Benzene (F0)	LB205182	µg/L	0.5	<0.5	0%	NA	NA
	LB205221	µg/L	0.5	<0.5	0%	NA	NA
TRH C6-C10 minus BTEX (F1)	LB205182	µg/L	50	<50	0%	67%	51%
	LB205221	µg/L	50	<50	0%	71%	85%

METHOD SUMMARY

METHOD	METHODOLOGY SUMMARY
AN020	Unpreserved water sample is filtered through a 0.45µm membrane filter and acidified with nitric acid similar to APHA3030B.
AN113	Total Dissolved Solids: A well-mixed filtered sample of known volume is evaporated to dryness at 180°C and the residue weighed. Approximate methods for correlating chemical analysis with dissolved solids are available. Reference APHA 2540 C.
AN113	The Total Dissolved Solids residue may also be ignited at 550 C and volatile TDS (Organic TDS) and non-volatile TDS (Inorganic) can be determined.
AN135	Alkalinity (and forms of) by Titration: The sample is titrated with standard acid to pH 8.3 (P titre) and pH 4.5 (T titre) and permanent and/or total alkalinity calculated. The results are expressed as equivalents of calcium carbonate or recalculated as bicarbonate, carbonate and hydroxide. Reference APHA 2320. Internal Reference AN135
AN149	sulfide by Iodometric Titration: sulfide is precipitated as zinc sulfide to overcome interferences with sulphite and thiosulfate. After filtration, sulfide is determined titrimetrically. Reference APHA 4500-S2-
AN245	Anions by Ion Chromatography: A water sample is injected into an eluent stream that passes through the ion chromatographic system where the anions of interest ie Br, Cl, NO2, NO3 and SO4 are separated on their relative affinities for the active sites on the column packing material. Changes to the conductivity and the UV-visible absorbance of the eluent enable identification and quantitation of the anions based on their retention time and peak height or area. APHA 4110 B
AN277/WC250.312	Nitrite ions, when reacted with a reagent containing sulphanilamide and N-(1-naphthyl)-ethylenediamine dihydrochloride produce a highly coloured azo dye that is measured photometrically at 540nm.
AN278	Filterable Reactive Phosphorus by DA (determined on filtered sample): Orthophosphate reacts with ammonium molybdate (Mo VI) and potassium antimonyl tartrate (Sb III) in acid medium to form an antimony-phosphomolybdate complex. This complex is subsequently reduced with ascorbic acid to form a blue colour and the absorbance is read at 880 nm. The sensitivity of the automated method is 10-20 times that of the macro method. Reference APHA 4500-P F
AN279/AN293(Sydney)	The sample is digested with Sulphuric acid, K2SO4 and CuSO4. All forms of phosphorus are converted into orthophosphate. The digest is cooled and placed on the discrete analyser for colorimetric analysis.
AN281	An unfiltered water or soil sample is first digested in a block digestor with sulfuric acid, K2SO4 and CuSO4. The ammonia produced following digestion is then measured colourimetrically using the Aquakem 250 Discrete Analyser. A portion of the digested sample is buffered to an alkaline pH, and interfering cations are complexed. The ammonia then reacts with salicylate and hypochlorite to give a blue colour whose absorbance is measured at 660nm and compared with calibration standards. This is proportional to the concentration of Total Kjeldahl Nitrogen in the original sample.
AN291	Ammonia in solution reacts with hypochlorite ions from Sodium Dichloroisocyanuate, and salicylate in the presence of Sodium Nitroprusside to form indophenol blue and measured at 670 nm by Discrete Analyser.
AN311(Perth)/AN312	Mercury by Cold Vapour AAS in Waters: Mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500.
AN318	Determination of elements at trace level in waters by ICP-MS technique,, referenced to USEPA 6020B and USEPA 200.8 (5.4).

METHOD SUMMARY

METHOD	METHODOLOGY SUMMARY
AN320	Metals by ICP-OES: Samples are preserved with 10% nitric acid for a wide range of metals and some non-metals. This solution is measured by Inductively Coupled Plasma. Solutions are aspirated into an argon plasma at 8000-10000K and emit characteristic energy or light as a result of electron transitions through unique energy levels. The emitted light is focused onto a diffraction grating where it is separated into components .
AN320	Photomultipliers or CCDs are used to measure the light intensity at specific wavelengths. This intensity is directly proportional to concentration. Corrections are required to compensate for spectral overlap between elements. Reference APHA 3120 B.
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). Where F2 is corrected for Naphthalene, the VOC data for Naphthalene is used.
AN403	Additionally, the volatile C6-C9/C6-C10 fractions may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoveerable Hydrocarbons - Silica (TRH-Silica) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents.
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.
Calculation	Free and Total Carbon Dioxide may be calculated using alkalinity forms only when the samples TDS is <500mg/L. If TDS is >500mg/L free or total carbon dioxide cannot be reported . APHA4500CO2 D.
MA-1523	This method covers the analysis of per- and polyfluoroalkyl substances (PFAS) in aqueous, solid and biosolid samples and solvent extracts, determined as the total of linear and branched isomers. After spiking with isotopically labelled quantification surrogates and clean-up via SPE cartridges sample extracts are analysed by liquid chromatography/mass spectrometry (LC-MS/MS). PFAS concentrations are determined by isotope dilution quantification.

FOOTNOTES

IS	Insufficient sample for analysis.	LOR	Limit of Reporting
LNR	Sample listed, but not received.	↑↓	Raised or Lowered Limit of Reporting
*	NATA accreditation does not cover the performance of this service.	QFH	QC result is above the upper tolerance
		QFL	QC result is below the lower tolerance
**	Indicative data, theoretical holding time exceeded.	-	The sample was not analysed for this analyte
		NVL	Not Validated

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calcuated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

This document is issued by the Company under its General Conditions of Service accessible at www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

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STATEMENT OF QA/QC PERFORMANCE

SE208988 R1

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	7

LABORATORY DETAILS

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Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208988 R1**
Date Received	21 Jul 2020
Date Reported	04 Aug 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Surrogate	Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples - Low Level	6 items
Duplicate	Total Dissolved Solids (TDS) in water	1 item
Matrix Spike	VOCs in Water	1 item
	Volatile Petroleum Hydrocarbons in Water	1 item

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	7 Water
Date documentation received	21/7/2020	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	1.2°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

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SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Alkalinity

Method: ME-(AU)-[ENV]AN135

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW13a	SE208988.001	LB205043	21 Jul 2020	21 Jul 2020	04 Aug 2020	23 Jul 2020	04 Aug 2020	24 Jul 2020
GW018	SE208988.002	LB205043	21 Jul 2020	21 Jul 2020	04 Aug 2020	23 Jul 2020	04 Aug 2020	24 Jul 2020
GW017	SE208988.003	LB205043	21 Jul 2020	21 Jul 2020	04 Aug 2020	23 Jul 2020	04 Aug 2020	24 Jul 2020
GW012	SE208988.004	LB205043	21 Jul 2020	21 Jul 2020	04 Aug 2020	23 Jul 2020	04 Aug 2020	24 Jul 2020
QC309	SE208988.005	LB205043	21 Jul 2020	21 Jul 2020	04 Aug 2020	23 Jul 2020	04 Aug 2020	24 Jul 2020
QC188	SE208988.006	LB205043	21 Jul 2020	21 Jul 2020	04 Aug 2020	23 Jul 2020	04 Aug 2020	24 Jul 2020
GW13b	SE208988.007	LB205043	21 Jul 2020	21 Jul 2020	04 Aug 2020	23 Jul 2020	04 Aug 2020	24 Jul 2020

Ammonia Nitrogen by Discrete Analyser (Aquakem)

Method: ME-(AU)-[ENV]AN291

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW13a	SE208988.001	LB205143	21 Jul 2020	21 Jul 2020	18 Aug 2020	24 Jul 2020	18 Aug 2020	24 Jul 2020
GW018	SE208988.002	LB205143	21 Jul 2020	21 Jul 2020	18 Aug 2020	24 Jul 2020	18 Aug 2020	24 Jul 2020
GW13b	SE208988.007	LB205143	21 Jul 2020	21 Jul 2020	18 Aug 2020	24 Jul 2020	18 Aug 2020	24 Jul 2020

Anions by Ion Chromatography in Water

Method: ME-(AU)-[ENV]AN245

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW13a	SE208988.001	LB205058	21 Jul 2020	21 Jul 2020	18 Aug 2020	24 Jul 2020	18 Aug 2020	27 Jul 2020
GW018	SE208988.002	LB205058	21 Jul 2020	21 Jul 2020	18 Aug 2020	24 Jul 2020	18 Aug 2020	27 Jul 2020
GW017	SE208988.003	LB205058	21 Jul 2020	21 Jul 2020	18 Aug 2020	24 Jul 2020	18 Aug 2020	27 Jul 2020
GW012	SE208988.004	LB205058	21 Jul 2020	21 Jul 2020	18 Aug 2020	24 Jul 2020	18 Aug 2020	27 Jul 2020
QC309	SE208988.005	LB205058	21 Jul 2020	21 Jul 2020	18 Aug 2020	24 Jul 2020	18 Aug 2020	27 Jul 2020
QC188	SE208988.006	LB205058	21 Jul 2020	21 Jul 2020	18 Aug 2020	24 Jul 2020	18 Aug 2020	27 Jul 2020
GW13b	SE208988.007	LB205058	21 Jul 2020	21 Jul 2020	18 Aug 2020	24 Jul 2020	18 Aug 2020	27 Jul 2020

Filterable Reactive Phosphorus (FRP)

Method: ME-(AU)-[ENV]AN278

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW13a	SE208988.001	LB205143	21 Jul 2020	21 Jul 2020	18 Aug 2020	24 Jul 2020	18 Aug 2020	24 Jul 2020
GW018	SE208988.002	LB205143	21 Jul 2020	21 Jul 2020	18 Aug 2020	24 Jul 2020	18 Aug 2020	24 Jul 2020
GW13b	SE208988.007	LB205143	21 Jul 2020	21 Jul 2020	18 Aug 2020	24 Jul 2020	18 Aug 2020	24 Jul 2020

Full 8270 SVOC in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
QC309	SE208988.005	LB205232	21 Jul 2020	21 Jul 2020	28 Jul 2020	27 Jul 2020	05 Sep 2020	29 Jul 2020

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW13a	SE208988.001	LB205054	21 Jul 2020	21 Jul 2020	18 Aug 2020	24 Jul 2020	18 Aug 2020	24 Jul 2020
GW018	SE208988.002	LB205054	21 Jul 2020	21 Jul 2020	18 Aug 2020	24 Jul 2020	18 Aug 2020	24 Jul 2020
GW017	SE208988.003	LB205054	21 Jul 2020	21 Jul 2020	18 Aug 2020	24 Jul 2020	18 Aug 2020	24 Jul 2020
GW012	SE208988.004	LB205054	21 Jul 2020	21 Jul 2020	18 Aug 2020	24 Jul 2020	18 Aug 2020	24 Jul 2020
GW13b	SE208988.007	LB205054	21 Jul 2020	21 Jul 2020	18 Aug 2020	24 Jul 2020	18 Aug 2020	24 Jul 2020

Metals in Water (Dissolved) by ICPOES

Method: ME-(AU)-[ENV]AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW13a	SE208988.001	LB205078	21 Jul 2020	21 Jul 2020	17 Jan 2021	24 Jul 2020	17 Jan 2021	24 Jul 2020
GW018	SE208988.002	LB205078	21 Jul 2020	21 Jul 2020	17 Jan 2021	24 Jul 2020	17 Jan 2021	24 Jul 2020
GW017	SE208988.003	LB205078	21 Jul 2020	21 Jul 2020	17 Jan 2021	24 Jul 2020	17 Jan 2021	24 Jul 2020
GW012	SE208988.004	LB205078	21 Jul 2020	21 Jul 2020	17 Jan 2021	24 Jul 2020	17 Jan 2021	24 Jul 2020
QC309	SE208988.005	LB205078	21 Jul 2020	21 Jul 2020	17 Jan 2021	24 Jul 2020	17 Jan 2021	24 Jul 2020
QC188	SE208988.006	LB205078	21 Jul 2020	21 Jul 2020	17 Jan 2021	24 Jul 2020	17 Jan 2021	24 Jul 2020
GW13b	SE208988.007	LB205078	21 Jul 2020	21 Jul 2020	17 Jan 2021	24 Jul 2020	17 Jan 2021	24 Jul 2020

Nitrite in Water

Method: ME-(AU)-[ENV]AN277

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW13a	SE208988.001	LB205143	21 Jul 2020	21 Jul 2020	25 Jul 2020	24 Jul 2020	25 Jul 2020	24 Jul 2020
GW018	SE208988.002	LB205143	21 Jul 2020	21 Jul 2020	25 Jul 2020	24 Jul 2020	25 Jul 2020	24 Jul 2020
GW13b	SE208988.007	LB205143	21 Jul 2020	21 Jul 2020	25 Jul 2020	24 Jul 2020	25 Jul 2020	24 Jul 2020

OC Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW13a	SE208988.001	LB205062	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	28 Jul 2020
GW018	SE208988.002	LB205062	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	28 Jul 2020
GW017	SE208988.003	LB205062	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	28 Jul 2020

HOLDING TIME SUMMARY

SE208988 R1

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

OC Pesticides in Water (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW012	SE208988.004	LB205062	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	28 Jul 2020
QC309	SE208988.005	LB205232	21 Jul 2020	21 Jul 2020	28 Jul 2020	27 Jul 2020	05 Sep 2020	28 Jul 2020
GW13b	SE208988.007	LB205062	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	28 Jul 2020

OP Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW13a	SE208988.001	LB205062	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
GW018	SE208988.002	LB205062	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
GW017	SE208988.003	LB205062	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	28 Jul 2020
GW012	SE208988.004	LB205062	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
QC309	SE208988.005	LB205232	21 Jul 2020	21 Jul 2020	28 Jul 2020	27 Jul 2020	05 Sep 2020	28 Jul 2020
GW13b	SE208988.007	LB205062	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW13a	SE208988.001	LB205062	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
GW018	SE208988.002	LB205062	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
GW017	SE208988.003	LB205062	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	29 Jul 2020
GW012	SE208988.004	LB205062	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
QC309	SE208988.005	LB205232	21 Jul 2020	21 Jul 2020	28 Jul 2020	27 Jul 2020	05 Sep 2020	29 Jul 2020
GW13b	SE208988.007	LB205062	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020

PCBs in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW13a	SE208988.001	LB205062	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	28 Jul 2020
GW018	SE208988.002	LB205062	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	28 Jul 2020
GW017	SE208988.003	LB205062	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	28 Jul 2020
GW012	SE208988.004	LB205062	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	28 Jul 2020
QC309	SE208988.005	LB205232	21 Jul 2020	21 Jul 2020	28 Jul 2020	27 Jul 2020	05 Sep 2020	28 Jul 2020
GW13b	SE208988.007	LB205062	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	28 Jul 2020

Speciated Phenols in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW13a	SE208988.001	LB205062	21 Jul 2020	21 Jul 2020	11 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
GW018	SE208988.002	LB205062	21 Jul 2020	21 Jul 2020	11 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
GW017	SE208988.003	LB205062	21 Jul 2020	21 Jul 2020	11 Aug 2020	24 Jul 2020	02 Sep 2020	29 Jul 2020
GW012	SE208988.004	LB205062	21 Jul 2020	21 Jul 2020	11 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
QC309	SE208988.005	LB205232	21 Jul 2020	21 Jul 2020	11 Aug 2020	27 Jul 2020	05 Sep 2020	29 Jul 2020
GW13b	SE208988.007	LB205062	21 Jul 2020	21 Jul 2020	11 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020

Sulfide by Titration in Water

Method: ME-(AU)-[ENV]AN149

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW13a	SE208988.001	LB205237	21 Jul 2020	21 Jul 2020	28 Jul 2020	27 Jul 2020	28 Jul 2020	27 Jul 2020
GW018	SE208988.002	LB205237	21 Jul 2020	21 Jul 2020	28 Jul 2020	27 Jul 2020	28 Jul 2020	27 Jul 2020
GW13b	SE208988.007	LB205237	21 Jul 2020	21 Jul 2020	28 Jul 2020	27 Jul 2020	28 Jul 2020	27 Jul 2020

TKN Kjeldahl Digestion by Discrete Analyser

Method: ME-(AU)-[ENV]AN292

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW13a	SE208988.001	LB205247	21 Jul 2020	21 Jul 2020	18 Aug 2020	27 Jul 2020	18 Aug 2020	28 Jul 2020
GW018	SE208988.002	LB205247	21 Jul 2020	21 Jul 2020	18 Aug 2020	27 Jul 2020	18 Aug 2020	28 Jul 2020
GW13b	SE208988.007	LB205247	21 Jul 2020	21 Jul 2020	18 Aug 2020	27 Jul 2020	18 Aug 2020	28 Jul 2020

Total Dissolved Solids (TDS) in water

Method: ME-(AU)-[ENV]AN113

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW13a	SE208988.001	LB205144	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	28 Jul 2020	27 Jul 2020
GW018	SE208988.002	LB205144	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	28 Jul 2020	27 Jul 2020
GW017	SE208988.003	LB205144	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	28 Jul 2020	27 Jul 2020
GW012	SE208988.004	LB205144	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	28 Jul 2020	27 Jul 2020
QC309	SE208988.005	LB205144	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	28 Jul 2020	27 Jul 2020
QC188	SE208988.006	LB205144	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	28 Jul 2020	27 Jul 2020
GW13b	SE208988.007	LB205144	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	28 Jul 2020	27 Jul 2020

Total Phosphorus by Kjeldahl Digestion DA in Water

Method: ME-(AU)-[ENV]AN279/AN293(Sydney only)

Sample Name	Sample No.	QC Ref

HOLDING TIME SUMMARY

SE208988 R1

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Total Phosphorus by Kjeldahl Digestion DA in Water (continued)

Method: ME-(AU)-[ENV]AN279/AN293(Sydney only)

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW13a	SE208988.001	LB205247	21 Jul 2020	21 Jul 2020	18 Aug 2020	27 Jul 2020	18 Aug 2020	28 Jul 2020
GW018	SE208988.002	LB205247	21 Jul 2020	21 Jul 2020	18 Aug 2020	27 Jul 2020	18 Aug 2020	28 Jul 2020
GW13b	SE208988.007	LB205247	21 Jul 2020	21 Jul 2020	18 Aug 2020	27 Jul 2020	18 Aug 2020	28 Jul 2020

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW13a	SE208988.001	LB205041	21 Jul 2020	21 Jul 2020	17 Jan 2021	23 Jul 2020	17 Jan 2021	23 Jul 2020
GW018	SE208988.002	LB205041	21 Jul 2020	21 Jul 2020	17 Jan 2021	23 Jul 2020	17 Jan 2021	23 Jul 2020
GW017	SE208988.003	LB205041	21 Jul 2020	21 Jul 2020	17 Jan 2021	23 Jul 2020	17 Jan 2021	23 Jul 2020
GW012	SE208988.004	LB205041	21 Jul 2020	21 Jul 2020	17 Jan 2021	23 Jul 2020	17 Jan 2021	23 Jul 2020
GW13b	SE208988.007	LB205041	21 Jul 2020	21 Jul 2020	17 Jan 2021	23 Jul 2020	17 Jan 2021	23 Jul 2020

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW13a	SE208988.001	LB205062	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
GW018	SE208988.002	LB205062	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
GW017	SE208988.003	LB205062	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
GW012	SE208988.004	LB205062	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
QC309	SE208988.005	LB205232	21 Jul 2020	21 Jul 2020	28 Jul 2020	27 Jul 2020	05 Sep 2020	28 Jul 2020
GW13b	SE208988.007	LB205062	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW13a	SE208988.001	LB205182	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
GW018	SE208988.002	LB205182	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
GW017	SE208988.003	LB205182	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
GW012	SE208988.004	LB205182	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
QC309	SE208988.005	LB205221	21 Jul 2020	21 Jul 2020	28 Jul 2020	27 Jul 2020	05 Sep 2020	28 Jul 2020
GW13b	SE208988.007	LB205182	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW13a	SE208988.001	LB205182	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
GW018	SE208988.002	LB205182	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
GW017	SE208988.003	LB205182	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
GW012	SE208988.004	LB205182	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
QC309	SE208988.005	LB205221	21 Jul 2020	21 Jul 2020	28 Jul 2020	27 Jul 2020	05 Sep 2020	28 Jul 2020
GW13b	SE208988.007	LB205182	21 Jul 2020	21 Jul 2020	28 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Full 8270 SVOC in Water

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	QC309	SE208988.005	%	40 - 130%	89
2-fluorobiphenyl (Surrogate)	QC309	SE208988.005	%	40 - 130%	104
d14-p-terphenyl (Surrogate)	QC309	SE208988.005	%	40 - 130%	114
d5-nitrobenzene (Surrogate)	QC309	SE208988.005	%	40 - 130%	54
d5-phenol (Surrogate)	QC309	SE208988.005	%	20 - 130%	57

OC Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	GW13a	SE208988.001	%	40 - 130%	51
	GW018	SE208988.002	%	40 - 130%	89
	GW012	SE208988.004	%	40 - 130%	99
	GW13b	SE208988.007	%	40 - 130%	96

OP Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	GW13a	SE208988.001	%	40 - 130%	58
	GW018	SE208988.002	%	40 - 130%	72
	GW012	SE208988.004	%	40 - 130%	82
	GW13b	SE208988.007	%	40 - 130%	80
d14-p-terphenyl (Surrogate)	GW13a	SE208988.001	%	40 - 130%	56
	GW018	SE208988.002	%	40 - 130%	90
	GW012	SE208988.004	%	40 - 130%	94
	GW13b	SE208988.007	%	40 - 130%	88

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	GW13a	SE208988.001	%	40 - 130%	58
	GW018	SE208988.002	%	40 - 130%	72
	GW012	SE208988.004	%	40 - 130%	82
	QC309	SE208988.005	%	40 - 130%	82
	GW13b	SE208988.007	%	40 - 130%	80
d14-p-terphenyl (Surrogate)	GW13a	SE208988.001	%	40 - 130%	56
	GW018	SE208988.002	%	40 - 130%	90
	GW012	SE208988.004	%	40 - 130%	94
	QC309	SE208988.005	%	40 - 130%	108
	GW13b	SE208988.007	%	40 - 130%	88
d5-nitrobenzene (Surrogate)	GW13a	SE208988.001	%	40 - 130%	46
	GW018	SE208988.002	%	40 - 130%	40
	GW012	SE208988.004	%	40 - 130%	40
	QC309	SE208988.005	%	40 - 130%	72
	GW13b	SE208988.007	%	40 - 130%	40

PCBs in Water

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (Surrogate)	GW13a	SE208988.001	%	40 - 130%	51
	GW018	SE208988.002	%	40 - 130%	89
	GW017	SE208988.003	%	40 - 130%	61
	GW012	SE208988.004	%	40 - 130%	99
	GW13b	SE208988.007	%	40 - 130%	96

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples - Low Level

Method: MA-1523

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C2_PFTeDA) Surrogate	GW13a	SE208988.001	%	10 - 150%	56
	GW012	SE208988.004	%	10 - 150%	65
	GW13b	SE208988.007	%	10 - 150%	89
(13C2-4:2 FTS) Surrogate	GW13a	SE208988.001	%	10 - 150%	188 †
	GW012	SE208988.004	%	10 - 150%	297 †
	GW13b	SE208988.007	%	10 - 150%	147
(13C2-6:2 FTS) Surrogate	GW13a	SE208988.001	%	10 - 150%	227 †
	GW012	SE208988.004	%	10 - 150%	276 †
	GW13b	SE208988.007	%	10 - 150%	134
(13C2-8:2 FTS) Surrogate	GW13a	SE208988.001	%	10 - 150%	162 †
	GW012	SE208988.004	%	10 - 150%	241 †

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples - Low Level (continued) **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C2-8:2 FTS) Surrogate	GW13b	SE208988.007	%	10 - 150%	103
(13C2-PFDoA) Surrogate	GW13a	SE208988.001	%	10 - 150%	89
	GW012	SE208988.004	%	10 - 150%	90
	GW13b	SE208988.007	%	10 - 150%	79
(13C2-PFHxDA) Surrogate	GW13a	SE208988.001	%	10 - 150%	25
	GW012	SE208988.004	%	10 - 150%	40
	GW13b	SE208988.007	%	10 - 150%	94
(13C3-PFBS) Surrogate	GW13a	SE208988.001	%	10 - 150%	123
	GW012	SE208988.004	%	10 - 150%	110
	GW13b	SE208988.007	%	10 - 150%	116
(13C3-PFHxS) Surrogate	GW13a	SE208988.001	%	10 - 150%	108
	GW012	SE208988.004	%	10 - 150%	103
	GW13b	SE208988.007	%	10 - 150%	95
(13C4_PFOA) Surrogate	GW13a	SE208988.001	%	10 - 150%	109
	GW012	SE208988.004	%	10 - 150%	109
	GW13b	SE208988.007	%	10 - 150%	111
(13C4-PFBA) Surrogate	GW13a	SE208988.001	%	10 - 150%	102
	GW012	SE208988.004	%	10 - 150%	101
	GW13b	SE208988.007	%	10 - 150%	100
(13C4-PFHpA) Surrogate	GW13a	SE208988.001	%	10 - 150%	109
	GW012	SE208988.004	%	10 - 150%	105
	GW13b	SE208988.007	%	10 - 150%	104
(13C5-PFHxA) Surrogate	GW13a	SE208988.001	%	10 - 150%	133
	GW012	SE208988.004	%	10 - 150%	127
	GW13b	SE208988.007	%	10 - 150%	126
(13C5-PFPeA) Surrogate	GW13a	SE208988.001	%	10 - 150%	120
	GW012	SE208988.004	%	10 - 150%	95
	GW13b	SE208988.007	%	10 - 150%	95
(13C6-PFDA) Surrogate	GW13a	SE208988.001	%	10 - 150%	109
	GW012	SE208988.004	%	10 - 150%	118
	GW13b	SE208988.007	%	10 - 150%	105
(13C7-PFUdA) Surrogate	GW13a	SE208988.001	%	10 - 150%	99
	GW012	SE208988.004	%	10 - 150%	91
	GW13b	SE208988.007	%	10 - 150%	92
(13C8-PFOS) Surrogate	GW13a	SE208988.001	%	10 - 150%	86
	GW012	SE208988.004	%	10 - 150%	90
	GW13b	SE208988.007	%	10 - 150%	104
(13C8-PFOSA) Surrogate	GW13a	SE208988.001	%	10 - 150%	71
	GW012	SE208988.004	%	10 - 150%	73
	GW13b	SE208988.007	%	10 - 150%	84
(13C9-PFNA) Surrogate	GW13a	SE208988.001	%	10 - 150%	109
	GW012	SE208988.004	%	10 - 150%	98
	GW13b	SE208988.007	%	10 - 150%	103
(D3-N-MeFOSA) Surrogate	GW13a	SE208988.001	%	10 - 150%	61
	GW012	SE208988.004	%	10 - 150%	63
	GW13b	SE208988.007	%	10 - 150%	68
(D3-N-MeFOSAA) Surrogate	GW13a	SE208988.001	%	10 - 150%	91
	GW012	SE208988.004	%	10 - 150%	89
	GW13b	SE208988.007	%	10 - 150%	90
(D5-N-EtFOSA) Surrogate	GW13a	SE208988.001	%	10 - 150%	64
	GW012	SE208988.004	%	10 - 150%	68
	GW13b	SE208988.007	%	10 - 150%	83
(D5-N-EtFOSAA) Surrogate	GW13a	SE208988.001	%	10 - 150%	113
	GW012	SE208988.004	%	10 - 150%	88
	GW13b	SE208988.007	%	10 - 150%	87
(D7-N-MeFOSE) Surrogate	GW13a	SE208988.001	%	10 - 150%	71
	GW012	SE208988.004	%	10 - 150%	64
	GW13b	SE208988.007	%	10 - 150%	78
(D9-N-EtFOSE) Surrogate	GW13a	SE208988.001	%	10 - 150%	62
	GW012	SE208988.004	%	10 - 150%	60
	GW13b	SE208988.007	%	10 - 150%	72

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Water

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	GW13a	SE208988.001	%	40 - 130%	43
	GW018	SE208988.002	%	40 - 130%	64
	GW012	SE208988.004	%	40 - 130%	71
	GW13b	SE208988.007	%	40 - 130%	66
d5-phenol (Surrogate)	GW13a	SE208988.001	%	20 - 90%	41
	GW018	SE208988.002	%	20 - 90%	42
	GW012	SE208988.004	%	20 - 90%	47
	GW13b	SE208988.007	%	20 - 90%	46

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	GW13a	SE208988.001	%	40 - 130%	103
	GW018	SE208988.002	%	40 - 130%	101
	GW017	SE208988.003	%	40 - 130%	101
	GW012	SE208988.004	%	40 - 130%	103
	QC309	SE208988.005	%	40 - 130%	104
	GW13b	SE208988.007	%	40 - 130%	102
d4-1,2-dichloroethane (Surrogate)	GW13a	SE208988.001	%	40 - 130%	99
	GW018	SE208988.002	%	40 - 130%	98
	GW017	SE208988.003	%	40 - 130%	100
	GW012	SE208988.004	%	40 - 130%	99
	QC309	SE208988.005	%	40 - 130%	101
	GW13b	SE208988.007	%	40 - 130%	99
d8-toluene (Surrogate)	GW13a	SE208988.001	%	40 - 130%	95
	GW018	SE208988.002	%	40 - 130%	96
	GW017	SE208988.003	%	40 - 130%	94
	GW012	SE208988.004	%	40 - 130%	95
	QC309	SE208988.005	%	40 - 130%	102
	GW13b	SE208988.007	%	40 - 130%	94

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	GW13a	SE208988.001	%	40 - 130%	103
	GW018	SE208988.002	%	40 - 130%	101
	GW017	SE208988.003	%	40 - 130%	101
	GW012	SE208988.004	%	40 - 130%	103
	QC309	SE208988.005	%	40 - 130%	104
	GW13b	SE208988.007	%	40 - 130%	102
d4-1,2-dichloroethane (Surrogate)	GW13a	SE208988.001	%	60 - 130%	99
	GW018	SE208988.002	%	60 - 130%	98
	GW017	SE208988.003	%	60 - 130%	100
	GW012	SE208988.004	%	60 - 130%	99
	QC309	SE208988.005	%	60 - 130%	101
	GW13b	SE208988.007	%	60 - 130%	99
d8-toluene (Surrogate)	GW13a	SE208988.001	%	40 - 130%	95
	GW018	SE208988.002	%	40 - 130%	96
	GW017	SE208988.003	%	40 - 130%	94
	GW012	SE208988.004	%	40 - 130%	95
	QC309	SE208988.005	%	40 - 130%	102
	GW13b	SE208988.007	%	40 - 130%	94

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Alkalinity

Method: ME-(AU)-[ENV]AN135

Sample Number	Parameter	Units	LOR	Result
LB205043.001	Total Alkalinity as CaCO3	mg/L	5	<5

Ammonia Nitrogen by Discrete Analyser (Aquakem)

Method: ME-(AU)-[ENV]AN291

Sample Number	Parameter	Units	LOR	Result
LB205143.001	Ammonia Nitrogen, NH_3 as N	mg/L	0.005	<0.005

Anions by Ion Chromatography in Water

Method: ME-(AU)-[ENV]AN245

Sample Number	Parameter	Units	LOR	Result
LB205058.001	Chloride	mg/L	1	<1.0
	Sulfate, SO4	mg/L	1	<1.0
	Nitrate Nitrogen, NO3-N	mg/L	0.005	<0.005

Filterable Reactive Phosphorus (FRP)

Method: ME-(AU)-[ENV]AN278

Sample Number	Parameter	Units	LOR	Result
LB205143.001	Filterable Reactive Phosphorus as P	mg/L	0.005	<0.005

Full 8270 SVOC in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB205232.001	01-PAHs	Acenaphthene	µg/L	0.1	<0.1
		Acenaphthylene	µg/L	0.1	<0.1
		Anthracene	µg/L	0.1	<0.1
		Benzo(a)anthracene	µg/L	0.1	<0.1
		Total Benzofluoranthenes (b&j&k)	µg/L	0.2	<0.2
		Benzo(ghi)perylene	µg/L	0.1	<0.1
		Benzo(a)pyrene	µg/L	0.1	<0.1
		Chrysene	µg/L	0.1	<0.1
		Dibenzo(ah)anthracene	µg/L	0.1	<0.1
		Fluoranthene	µg/L	0.1	<0.1
		Fluorene	µg/L	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1
		1-methylnaphthalene	µg/L	0.1	<0.1
		2-methylnaphthalene	µg/L	0.1	<0.1
		Naphthalene	µg/L	0.1	<0.1
		Phenanthrene	µg/L	0.1	<0.1
		Pyrene	µg/L	0.1	<0.1
		2-acetylaminofluorene	µg/L	0.5	<0.5
		7,12-dimethyl-benz(a)anthracene	µg/L	0.5	<0.5
		3-methylcholanthrene	µg/L	0.5	<0.5
	02-OCs	Aldrin	µg/L	0.1	<0.1
		Alpha-BHC	µg/L	0.1	<0.1
		Beta-BHC	µg/L	0.1	<0.1
		Delta-BHC	µg/L	0.1	<0.1
		Gamma-BHC (Lindane)	µg/L	0.1	<0.1
		p,p-DDD	µg/L	0.1	<0.1
		p,p-DDE	µg/L	0.1	<0.1
		p,p-DDT	µg/L	0.1	<0.1
		Dieldrin	µg/L	0.1	<0.1
		Alpha-endosulfan	µg/L	0.1	<0.1
		Beta-endosulfan	µg/L	0.1	<0.1
		Endosulfan sulphate	µg/L	0.1	<0.1
		Endrin	µg/L	0.1	<0.1
		Heptachlor	µg/L	0.1	<0.1
		Heptachlor epoxide	µg/L	0.1	<0.1
		Isodrin	µg/L	0.1	<0.1
		Methoxychlor	µg/L	0.1	<0.1
		Mirex	µg/L	0.1	<0.1
		Alpha-chlordane	µg/L	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Full 8270 SVOC in Water (continued) **Method: ME-(AU)-[ENV]AN420**

Sample Number		Parameter	Units	LOR	Result
LB205232.001	02-OCs	Gamma-chlordane	µg/L	0.1	<0.1
		Endrin ketone	µg/L	0.1	<0.1
	03-OPs	Azinphos-methyl (Guthion)	µg/L	0.2	<0.2
		Bromophos ethyl	µg/L	0.2	<0.2
		Carbophenothion	µg/L	0.5	<0.5
		Chlorfenvinphos-cis	µg/L	5	<5
		Chlorfenvinphos-trans	µg/L	0.5	<0.5
		Chlorpyrifos (Chlorpyrifos Ethyl)	µg/L	0.2	<0.2
		Chlorpyrifos-methyl	µg/L	0.5	<0.5
		Co-Ral (Coumaphos)	µg/L	0.5	<0.5
		Diazinon (Dimpylate)	µg/L	0.5	<0.5
		Dichlorvos	µg/L	0.5	<0.5
		Demeton-S-methyl	µg/L	0.5	<0.5
		Dimethoate	µg/L	0.5	<0.5
		Disulfoton (Di-syston)	µg/L	0.5	<0.5
		EPN*	µg/L	0.5	<0.5
		Ethion	µg/L	0.2	<0.2
		Ethoprophos (Ethoprop or Prophos)	µg/L	0.5	<0.5
		Famphur (Famophos)	µg/L	0.5	<0.5
		Fenamiphos (Phenamiphos)	µg/L	0.5	<0.5
		Fenchlorophos (Ronnel)	µg/L	0.5	<0.5
		Fenitrothion	µg/L	0.2	<0.2
		Fenthion	µg/L	0.5	<0.5
		Malathion (Maldison)	µg/L	0.2	<0.2
		Methidathion	µg/L	0.5	<0.5
		Mevinphos-cis/trans	µg/L	1	<1
		o,o,o-triethyl phosphorothioate	µg/L	0.5	<0.5
		Parathion ethyl (Parathion)	µg/L	0.2	<0.2
		Parathion methyl	µg/L	0.5	<0.5
		Phorate	µg/L	0.5	<0.5
		Pirimiphos-ethyl	µg/L	0.5	<0.5
		Pirimiphos-methyl	µg/L	0.5	<0.5
		Profenofos	µg/L	0.5	<0.5
		Prothiophos (Tokuthion)*	µg/L	0.5	<0.5
		Sulfotepp	µg/L	0.5	<0.5
		Tetrachlorvinphos (Stirophos)*	µg/L	0.5	<0.5
	04-PCB UPAC(7) Congeners	PCB Congener C28	µg/L	0.1	<0.1
		PCB Congener C52	µg/L	0.1	<0.1
		PCB Congener C101	µg/L	0.1	<0.1
		PCB Congener C118	µg/L	0.1	<0.1
		PCB Congener C138	µg/L	0.1	<0.1
		PCB Congener C153	µg/L	0.1	<0.1
		PCB Congener C180	µg/L	0.1	<0.1
	05-SVCH (Cl Benzenes, Hydrocarbons & VOCs)	1/2-Chloronaphthalene	µg/L	1	<1
		Hexachlorobenzene (HCB)	µg/L	0.1	<0.1
		1,2-dichlorobenzene	µg/L	0.5	<0.5
		1,3-dichlorobenzene	µg/L	0.5	<0.5
		1,4-dichlorobenzene	µg/L	0.5	<0.5
		Hexachlorobutadiene	µg/L	0.5	<0.5
		Hexachlorocyclopentadiene	µg/L	2	<2
		Hexachloroethane	µg/L	0.5	<0.5
		Hexachloroproprene	µg/L	0.5	<0.5
		Pentachlorobenzene	µg/L	0.5	<0.5
		Pentachloroethane	µg/L	0.5	<0.5
		1,2,3,5 and 1,2,4,5-tetrachlorobenzene	µg/L	1	<1
		1,2,3,4-tetrachlorobenzene	µg/L	0.5	<0.5
		1,2,4-trichlorobenzene	µg/L	0.5	<0.5
	06-Phthalates	Bis(2-ethylhexyl)phthalate	µg/L	50	<50
		Bis(2-ethylhexyl)adipate	µg/L	1	<1
		Butyl benzyl phthalate	µg/L	1	<1
		Di-n-butyl phthalate	µg/L	10	<10

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Full 8270 SVOC in Water (continued) — **Method: ME-(AU)-[ENV]AN420**

Sample Number		Parameter	Units	LOR	Result
LB205232.001	06-Phthalates	Diethyl phthalate	µg/L	5	<5
		Dimethyl phthalate	µg/L	1	<1
		Dioctyl phthalate	µg/L	1	<1
	07-Carbamates	Carbofuran	µg/L	0.5	<0.5
		Carbaryl	µg/L	0.5	<0.5
	08-Herbicides (normal)	Trifluralin	µg/L	0.5	<0.5
	09-Nitrosamines	N-nitroso-di-n-butylamine (NDBA)	µg/L	1	<1
		N-nitroso-diethylamine (NDEA)	µg/L	1	<1
		N-nitroso-di-n-propylamine (NDPA)	µg/L	1	<1
		N-nitroso-morpholine (NMOR)	µg/L	1	<1
		N-nitroso-piperidine (NPIP)	µg/L	1	<1
		N-nitroso-pyrrolidine (NPYR)	µg/L	1	<1
		4-amino biphenyl	µg/L	1	<1
	10-Nitroaromatics and	Acetophenone	µg/L	1	<1
	Ketones	1,3-dinitrobenzene	µg/L	1	<1
		2,4-dinitrotoluene	µg/L	1	<1
		2,6-dinitrotoluene	µg/L	1	<1
		Isophorone	µg/L	1	<1
		Nitrobenzene	µg/L	1	<1
		p-(dimethylamino) azobenzene	µg/L	1	<1
		Phenacetin	µg/L	1	<1
		Pentachloronitrobenzene (quintozene)	µg/L	1	<1
	11-Anilines and Amines	Aniline	µg/L	5	<5
		4-chloroaniline	µg/L	1	<1
		2-nitroaniline	µg/L	1	<1
		3-nitroaniline	µg/L	1	<1
		4-nitroaniline	µg/L	1	<1
		Diphenylamine	µg/L	1	<1
		o-Toluidine	µg/L	1	<1
		5-nitro-o-toluidine	µg/L	1	<1
		1-naphthylamine	µg/L	2	<2
		2-naphthylamine	µg/L	2	<2
	12-Haloethers	Bis(2-chloroethoxy) methane	µg/L	1	<1
		Bis(2-chloroethyl) ether	µg/L	1	<1
		Bis(2-chloroisopropyl) ether	µg/L	1	<1
		4-chlorophenyl phenyl ether	µg/L	1	<1
		4-bromophenyl phenyl ether	µg/L	1	<1
	13-Other SVOCs	Methyl methanesulfonate	µg/L	1	<1
		Ethyl methanesulfonate	µg/L	1	<1
		Dibenzofuran	µg/L	1	<1
		Benzyl alcohol	µg/L	1	<1
		Safrole	µg/L	1	<1
		Isosafrole Isomer 1	µg/L	1	<1
		Isosafrole Isomer 2	µg/L	1	<1
		1,4-naphthoquinone	µg/L	1	<1
		Thionazin	µg/L	1	<1
	14-Speciated Routine	3/4-methyl phenol (m/p-cresol)	µg/L	1	<1
	Phenols	2-methyl phenol (o-cresol)	µg/L	0.5	<0.5
		2,6-dichlorophenol	µg/L	0.5	<0.5
		2,3,4,6 and 2,3,5,6-tetrachlorophenol	µg/L	1	<1
		2,4,5-trichlorophenol	µg/L	0.5	<0.5
		4-chloro-3-methylphenol	µg/L	2	<2
		2-chlorophenol	µg/L	0.5	<0.5
		2,4-dichlorophenol	µg/L	0.5	<0.5
		2,4-dimethylphenol	µg/L	0.5	<0.5
		2-nitrophenol	µg/L	0.5	<0.5
		Phenol	µg/L	0.5	<0.5
		2,4,6-trichlorophenol	µg/L	0.5	<0.5
		Pentachlorophenol	µg/L	0.5	<0.5
		4-nitrophenol	µg/L	1	<1
	Surrogates	d5-phenol (Surrogate)	%	-	101

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Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Full 8270 SVOC in Water (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB205232.001	Surrogates	d5-nitrobenzene (Surrogate)	%	-	100
		2-fluorobiphenyl (Surrogate)	%	-	100
		2,4,6-Tribromophenol (Surrogate)	%	-	104
		d14-p-terphenyl (Surrogate)	%	-	94

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

Sample Number	Parameter	Units	LOR	Result
LB205054.001	Mercury	mg/L	0.0001	<0.0001

Metals in Water (Dissolved) by ICPOES

Method: ME-(AU)-[ENV]AN320

Sample Number	Parameter	Units	LOR	Result
LB205078.001	Calcium, Ca	mg/L	0.2	<0.2
	Magnesium, Mg	mg/L	0.1	<0.1
	Potassium, K	mg/L	0.1	<0.1
	Sodium, Na	mg/L	0.5	<0.5

Nitrite in Water

Method: ME-(AU)-[ENV]AN277

Sample Number	Parameter	Units	LOR	Result
LB205143.001	Nitrite Nitrogen, NO2 as N	mg/L	0.005	<0.005

OC Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB205062.001		Alpha BHC	µg/L	0.1	<0.1
		Hexachlorobenzene (HCB)	µg/L	0.1	<0.1
		Beta BHC	µg/L	0.1	<0.1
		Lindane (gamma BHC)	µg/L	0.1	<0.1
		Delta BHC	µg/L	0.1	<0.1
		Heptachlor	µg/L	0.1	<0.1
		Aldrin	µg/L	0.1	<0.1
		Heptachlor epoxide	µg/L	0.1	<0.1
		Gamma Chlordane	µg/L	0.1	<0.1
		Alpha Chlordane	µg/L	0.1	<0.1
		Alpha Endosulfan	µg/L	0.1	<0.1
		p,p'-DDE	µg/L	0.1	<0.1
		Dieldrin	µg/L	0.1	<0.1
		Endrin	µg/L	0.1	<0.1
		Beta Endosulfan	µg/L	0.1	<0.1
		p,p'-DDD	µg/L	0.1	<0.1
		Endosulfan sulphate	µg/L	0.1	<0.1
		p,p'-DDT	µg/L	0.1	<0.1
		Endrin ketone	µg/L	0.1	<0.1
		Methoxychlor	µg/L	0.1	<0.1
		Endrin aldehyde	µg/L	0.1	<0.1
		Isodrin	µg/L	0.1	<0.1
		Mirex	µg/L	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	89

OP Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB205062.001	Dichlorvos	µg/L	0.5	<0.5
	Dimethoate	µg/L	0.5	<0.5
	Diazinon (Dimpylate)	µg/L	0.5	<0.5
	Fenitrothion	µg/L	0.2	<0.2
	Malathion	µg/L	0.2	<0.2
	Chlorpyrifos (Chlorpyrifos Ethyl)	µg/L	0.2	<0.2
	Parathion-ethyl (Parathion)	µg/L	0.2	<0.2
	Bromophos Ethyl	µg/L	0.2	<0.2
	Methidathion	µg/L	0.5	<0.5
	Ethion	µg/L	0.2	<0.2

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OP Pesticides in Water (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB205062.001		Azinphos-methyl	µg/L	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	64
		d14-p-terphenyl (Surrogate)	%	-	84

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB205062.001		Naphthalene	µg/L	0.1	<0.1
		2-methylnaphthalene	µg/L	0.1	<0.1
		1-methylnaphthalene	µg/L	0.1	<0.1
		Acenaphthylene	µg/L	0.1	<0.1
		Acenaphthene	µg/L	0.1	<0.1
		Fluorene	µg/L	0.1	<0.1
		Phenanthrene	µg/L	0.1	<0.1
		Anthracene	µg/L	0.1	<0.1
		Fluoranthene	µg/L	0.1	<0.1
		Pyrene	µg/L	0.1	<0.1
		Benzo(a)anthracene	µg/L	0.1	<0.1
		Chrysene	µg/L	0.1	<0.1
		Benzo(a)pyrene	µg/L	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1
		Dibenzo(ah)anthracene	µg/L	0.1	<0.1
		Benzo(ghi)perylene	µg/L	0.1	<0.1
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	62
		2-fluorobiphenyl (Surrogate)	%	-	64
		d14-p-terphenyl (Surrogate)	%	-	84
LB205232.001		Naphthalene	µg/L	0.1	<0.1
		2-methylnaphthalene	µg/L	0.1	<0.1
		1-methylnaphthalene	µg/L	0.1	<0.1
		Acenaphthylene	µg/L	0.1	<0.1
		Acenaphthene	µg/L	0.1	<0.1
		Fluorene	µg/L	0.1	<0.1
		Phenanthrene	µg/L	0.1	<0.1
		Anthracene	µg/L	0.1	<0.1
		Fluoranthene	µg/L	0.1	<0.1
		Pyrene	µg/L	0.1	<0.1
		Benzo(a)anthracene	µg/L	0.1	<0.1
		Chrysene	µg/L	0.1	<0.1
		Benzo(a)pyrene	µg/L	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1
		Dibenzo(ah)anthracene	µg/L	0.1	<0.1
		Benzo(ghi)perylene	µg/L	0.1	<0.1
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	60
		2-fluorobiphenyl (Surrogate)	%	-	68
		d14-p-terphenyl (Surrogate)	%	-	94

PCBs in Water

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB205062.001	Arochlor 1016	µg/L	1	<1
	Arochlor 1221	µg/L	1	<1
	Arochlor 1232	µg/L	1	<1
	Arochlor 1242	µg/L	1	<1
	Arochlor 1248	µg/L	1	<1
	Arochlor 1254	µg/L	1	<1
	Arochlor 1260	µg/L	1	<1
	Arochlor 1262	µg/L	1	<1
	Arochlor 1268	µg/L	1	<1

Speciated Phenols in Water

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB205062.001	Phenol	µg/L	0.5	<0.5
	2-methyl phenol (o-cresol)	µg/L	0.5	<0.5
	3/4-methyl phenol (m/p-cresol)	µg/L	1	<1

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Speciated Phenols in Water (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB205062.001		2-chlorophenol	µg/L	0.5	<0.5
		2,4-dimethylphenol	µg/L	0.5	<0.5
		2,6-dichlorophenol	µg/L	0.5	<0.5
		2,4-dichlorophenol	µg/L	0.5	<0.5
		2,4,6-trichlorophenol	µg/L	0.5	<0.5
		2-nitrophenol	µg/L	0.5	<0.5
		4-nitrophenol	µg/L	1	<1
		2,4,5-trichlorophenol	µg/L	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	µg/L	1	<1
		Pentachlorophenol	µg/L	0.5	<0.5
		2,4-dinitrophenol	µg/L	2	<2
		4-chloro-3-methylphenol	µg/L	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	90
		d5-phenol (Surrogate)	%	-	83

Sulfide by Titration in Water

Method: ME-(AU)-[ENV]AN149

Sample Number	Parameter	Units	LOR	Result
LB205237.001	Sulfide	mg/L	0.5	<0.5

Total Dissolved Solids (TDS) in water

Method: ME-(AU)-[ENV]AN113

Sample Number	Parameter	Units	LOR	Result
LB205144.001	Total Dissolved Solids Dried at 175-185°C	mg/L	10	<10

Total Phosphorus by Kjeldahl Digestion DA in Water

Method: ME-(AU)-[ENV]AN279/AN293(Sydney only)

Sample Number	Parameter	Units	LOR	Result
LB205247.001	Total Phosphorus (Kjeldahl Digestion) as P	mg/L	0.02	<0.02

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Sample Number	Parameter	Units	LOR	Result
LB205041.001	Arsenic, As	µg/L	1	<1
	Beryllium, Be	µg/L	1	<1
	Boron, B	µg/L	5	<5
	Cadmium, Cd	µg/L	0.1	<0.1
	Chromium, Cr	µg/L	1	<1
	Cobalt, Co	µg/L	1	<1
	Copper, Cu	µg/L	1	<1
	Lead, Pb	µg/L	1	<1
	Manganese, Mn	µg/L	1	<1
	Nickel, Ni	µg/L	1	<1
	Zinc, Zn	µg/L	5	<5

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB205062.001	TRH C10-C14	µg/L	50	<50
	TRH C15-C28	µg/L	200	<200
	TRH C29-C36	µg/L	200	<200
	TRH C37-C40	µg/L	200	<200
LB205232.001	TRH C10-C14	µg/L	50	<50
	TRH C15-C28	µg/L	200	<200
	TRH C29-C36	µg/L	200	<200
	TRH C37-C40	µg/L	200	<200

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB205182.001	Fumigants	2,2-dichloropropane	µg/L	0.5	<0.5
		1,2-dichloropropane	µg/L	0.5	<0.5
		cis-1,3-dichloropropene	µg/L	0.5	<0.5
		trans-1,3-dichloropropene	µg/L	0.5	<0.5

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VOCs in Water (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB205182.001	Fumigants	1,2-dibromoethane (EDB)	µg/L	0.5	<0.5
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	µg/L	5	<5
		Chloromethane	µg/L	5	<5
		Vinyl chloride (Chloroethene)	µg/L	0.3	<0.3
		Bromomethane	µg/L	10	<10
		Chloroethane	µg/L	5	<5
		Trichlorofluoromethane	µg/L	1	<1
		Iodomethane	µg/L	5	<5
		1,1-dichloroethene	µg/L	0.5	<0.5
		Dichloromethane (Methylene chloride)	µg/L	5	<5
		Allyl chloride	µg/L	2	<2
		trans-1,2-dichloroethene	µg/L	0.5	<0.5
		1,1-dichloroethane	µg/L	0.5	<0.5
		cis-1,2-dichloroethene	µg/L	0.5	<0.5
		Bromochloromethane	µg/L	0.5	<0.5
		1,2-dichloroethane	µg/L	0.5	<0.5
		1,1,1-trichloroethane	µg/L	0.5	<0.5
		1,1-dichloropropene	µg/L	0.5	<0.5
		Carbon tetrachloride	µg/L	0.5	<0.5
		Dibromomethane	µg/L	0.5	<0.5
		Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	<0.5
		1,1,2-trichloroethane	µg/L	0.5	<0.5
		1,3-dichloropropane	µg/L	0.5	<0.5
		Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	<0.5
		1,1,1,2-tetrachloroethane	µg/L	0.5	<0.5
		cis-1,4-dichloro-2-butene	µg/L	1	<1
		1,1,2,2-tetrachloroethane	µg/L	0.5	<0.5
		1,2,3-trichloropropane	µg/L	0.5	<0.5
		trans-1,4-dichloro-2-butene	µg/L	1	<1
		1,2-dibromo-3-chloropropane	µg/L	0.5	<0.5
		Hexachlorobutadiene	µg/L	0.5	<0.5
	Halogenated Aromatics	Chlorobenzene	µg/L	0.5	<0.5
		Bromobenzene	µg/L	0.5	<0.5
		2-chlorotoluene	µg/L	0.5	<0.5
		4-chlorotoluene	µg/L	0.5	<0.5
		1,3-dichlorobenzene	µg/L	0.5	<0.5
		1,4-dichlorobenzene	µg/L	0.3	<0.3
		1,2-dichlorobenzene	µg/L	0.5	<0.5
		1,2,4-trichlorobenzene	µg/L	0.5	<0.5
		1,2,3-trichlorobenzene	µg/L	0.5	<0.5
	Monocyclic Aromatic Hydrocarbons	Benzene	µg/L	0.5	<0.5
		Toluene	µg/L	0.5	<0.5
		Ethylbenzene	µg/L	0.5	<0.5
		m/p-xylene	µg/L	1	<1
		o-xylene	µg/L	0.5	<0.5
		Styrene (Vinyl benzene)	µg/L	0.5	<0.5
		Isopropylbenzene (Cumene)	µg/L	0.5	<0.5
		n-propylbenzene	µg/L	0.5	<0.5
		1,3,5-trimethylbenzene	µg/L	0.5	<0.5
		tert-butylbenzene	µg/L	0.5	<0.5
		1,2,4-trimethylbenzene	µg/L	0.5	<0.5
		sec-butylbenzene	µg/L	0.5	<0.5
		p-isopropyltoluene	µg/L	0.5	<0.5
		n-butylbenzene	µg/L	0.5	<0.5
	Nitrogenous Compounds	Acrylonitrile	µg/L	0.5	<0.5
	Oxygenated Compounds	Acetone (2-propanone)	µg/L	10	<10
		MtBE (Methyl-tert-butyl ether)	µg/L	2	<1
		Vinyl acetate	µg/L	10	<10
		MEK (2-butanone)	µg/L	10	<10
		MIBK (4-methyl-2-pentanone)	µg/L	5	<5
		2-hexanone (MBK)	µg/L	5	<5

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VOCs in Water (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB205182.001	Polycyclic VOCs	Naphthalene	µg/L	0.5	<0.5
	Sulphonated	Carbon disulfide	µg/L	2	<2
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	97
		d8-toluene (Surrogate)	%	-	95
		Bromofluorobenzene (Surrogate)	%	-	99
	Trihalomethanes	Chloroform (THM)	µg/L	0.5	<0.5
		Bromodichloromethane (THM)	µg/L	0.5	<0.5
		Dibromochloromethane (THM)	µg/L	0.5	<0.5
		Bromoform (THM)	µg/L	0.5	<0.5
LB205221.001	Fumigants	2,2-dichloropropane	µg/L	0.5	<0.5
		1,2-dichloropropane	µg/L	0.5	<0.5
		cis-1,3-dichloropropene	µg/L	0.5	<0.5
		trans-1,3-dichloropropene	µg/L	0.5	<0.5
		1,2-dibromoethane (EDB)	µg/L	0.5	<0.5
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	µg/L	5	<5
		Chloromethane	µg/L	5	<5
		Vinyl chloride (Chloroethene)	µg/L	0.3	<0.3
		Bromomethane	µg/L	10	<10
		Chloroethane	µg/L	5	<5
		Trichlorofluoromethane	µg/L	1	<1
		Iodomethane	µg/L	5	<5
		1,1-dichloroethene	µg/L	0.5	<0.5
		Dichloromethane (Methylene chloride)	µg/L	5	<5
		Allyl chloride	µg/L	2	<2
		trans-1,2-dichloroethene	µg/L	0.5	<0.5
		1,1-dichloroethane	µg/L	0.5	<0.5
		cis-1,2-dichloroethene	µg/L	0.5	<0.5
		Bromochloromethane	µg/L	0.5	<0.5
		1,2-dichloroethane	µg/L	0.5	<0.5
		1,1,1-trichloroethane	µg/L	0.5	<0.5
		1,1-dichloropropene	µg/L	0.5	<0.5
		Carbon tetrachloride	µg/L	0.5	<0.5
		Dibromomethane	µg/L	0.5	<0.5
		Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	<0.5
		1,1,2-trichloroethane	µg/L	0.5	<0.5
		1,3-dichloropropane	µg/L	0.5	<0.5
		Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	<0.5
		1,1,1,2-tetrachloroethane	µg/L	0.5	<0.5
		cis-1,4-dichloro-2-butene	µg/L	1	<1
		1,1,2,2-tetrachloroethane	µg/L	0.5	<0.5
		1,2,3-trichloropropane	µg/L	0.5	<0.5
		trans-1,4-dichloro-2-butene	µg/L	1	<1
		1,2-dibromo-3-chloropropane	µg/L	0.5	<0.5
		Hexachlorobutadiene	µg/L	0.5	<0.5
	Halogenated Aromatics	Chlorobenzene	µg/L	0.5	<0.5
		Bromobenzene	µg/L	0.5	<0.5
		2-chlorotoluene	µg/L	0.5	<0.5
		4-chlorotoluene	µg/L	0.5	<0.5
		1,3-dichlorobenzene	µg/L	0.5	<0.5
		1,4-dichlorobenzene	µg/L	0.3	<0.3
		1,2-dichlorobenzene	µg/L	0.5	<0.5
		1,2,4-trichlorobenzene	µg/L	0.5	<0.5
		1,2,3-trichlorobenzene	µg/L	0.5	<0.5
	Monocyclic Aromatic Hydrocarbons	Benzene	µg/L	0.5	<0.5
		Toluene	µg/L	0.5	<0.5
		Ethylbenzene	µg/L	0.5	<0.5
		m/p-xylene	µg/L	1	<1
		o-xylene	µg/L	0.5	<0.5
		Styrene (Vinyl benzene)	µg/L	0.5	<0.5
		Isopropylbenzene (Cumene)	µg/L	0.5	<0.5
		n-propylbenzene	µg/L	0.5	<0.5

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOCs in Water (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB205221.001	Monocyclic Aromatic Hydrocarbons	1,3,5-trimethylbenzene	µg/L	0.5	<0.5
		tert-butylbenzene	µg/L	0.5	<0.5
		1,2,4-trimethylbenzene	µg/L	0.5	<0.5
		sec-butylbenzene	µg/L	0.5	<0.5
		p-isopropyltoluene	µg/L	0.5	<0.5
		n-butylbenzene	µg/L	0.5	<0.5
	Nitrogenous Compounds	Acrylonitrile	µg/L	0.5	<0.5
	Oxygenated Compounds	Acetone (2-propanone)	µg/L	10	<10
		MtBE (Methyl-tert-butyl ether)	µg/L	2	<1
		Vinyl acetate	µg/L	10	<10
		MEK (2-butanone)	µg/L	10	<10
		MIBK (4-methyl-2-pentanone)	µg/L	5	<5
		2-hexanone (MBK)	µg/L	5	<5
	Polycyclic VOCs	Naphthalene	µg/L	0.5	<0.5
	Sulphonated	Carbon disulfide	µg/L	2	<2
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	102
		d8-toluene (Surrogate)	%	-	94
		Bromofluorobenzene (Surrogate)	%	-	109
	Trihalomethanes	Chloroform (THM)	µg/L	0.5	<0.5
		Bromodichloromethane (THM)	µg/L	0.5	<0.5
		Dibromochloromethane (THM)	µg/L	0.5	<0.5
		Bromoform (THM)	µg/L	0.5	<0.5

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB205182.001		TRH C6-C9	µg/L	40	<40
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	97
		d8-toluene (Surrogate)	%	-	95
		Bromofluorobenzene (Surrogate)	%	-	99
LB205221.001		TRH C6-C9	µg/L	40	<40
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	102
		d8-toluene (Surrogate)	%	-	94
		Bromofluorobenzene (Surrogate)	%	-	109

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Alkalinity

Method: ME-(AU)-[ENV]AN135

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208974.001	LB205043.019	Total Alkalinity as CaCO3	mg/L	5	110	110	20	5
SE209001.001	LB205043.018	Total Alkalinity as CaCO3	mg/L	5	<5	<5	200	0

Ammonia Nitrogen by Discrete Analyser (Aquakem)

Method: ME-(AU)-[ENV]AN291

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE209070.002	LB205143.014	Ammonia Nitrogen, NH_3 as N	mg/L	0.005	0.49	0.49	17	1

Anions by Ion Chromatography in Water

Method: ME-(AU)-[ENV]AN245

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208980.001	LB205058.021	Sulfate, SO4	mg/L	1	6.5	6.7	30	2
SE208988.003	LB205058.015	Chloride	mg/L	1	79	78	15	2
		Sulfate, SO4	mg/L	1	51	50	17	2

Filterable Reactive Phosphorus (FRP)

Method: ME-(AU)-[ENV]AN278

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE209070.002	LB205143.014	Filterable Reactive Phosphorus as P	mg/L	0.005	0.10	0.10	20	3

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208988.002	LB205054.014	Mercury	µg/L	0.0001	<0.0001	<0.0001	200	196
SE209037.012	LB205054.019	Mercury	µg/L	0.0001	<0.0001	<0.0001	200	0

Metals in Water (Dissolved) by ICPOES

Method: ME-(AU)-[ENV]AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE209078.001	LB205078.014	Calcium, Ca	mg/L	0.2	260	260	15	1

Nitrite in Water

Method: ME-(AU)-[ENV]AN277

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE209070.002	LB205143.014	Nitrite Nitrogen, NO2 as N	mg/L	0.005	0.015	0.016	47	5

OP Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE209052.010	LB205062.020		Dichlorvos	µg/L	0.5	<0.5	0	200	0
			Dimethoate	µg/L	0.5	<0.5	0	200	0
			Diazinon (Dimpylate)	µg/L	0.5	<0.5	0	200	0
			Fenitrothion	µg/L	0.2	<0.2	0	200	0
			Malathion	µg/L	0.2	<0.2	0	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	µg/L	0.2	<0.2	0	200	0
			Parathion-ethyl (Parathion)	µg/L	0.2	<0.2	0	200	0
			Bromophos Ethyl	µg/L	0.2	<0.2	0	200	0
			Methidathion	µg/L	0.5	<0.5	0	200	0
			Ethion	µg/L	0.2	<0.2	0	200	0
			Azinphos-methyl	µg/L	0.2	<0.2	0	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	µg/L	-	0.3	0.27	30	23
			d14-p-terphenyl (Surrogate)	µg/L	-	0.5	0.39	30	25

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE209052.010	LB205062.020	Naphthalene	µg/L	0.1	0.3	0.22	71	20
		2-methylnaphthalene	µg/L	0.1	<0.1	0	200	0
		1-methylnaphthalene	µg/L	0.1	<0.1	0	200	0
		Acenaphthylene	µg/L	0.1	<0.1	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Water (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE209052.010	LB205062.020		Acenaphthene	µg/L	0.1	<0.1	0	200	0
			Fluorene	µg/L	0.1	<0.1	0	200	0
			Phenanthrene	µg/L	0.1	<0.1	0	200	0
			Anthracene	µg/L	0.1	<0.1	0	200	0
			Fluoranthene	µg/L	0.1	<0.1	0	200	0
			Pyrene	µg/L	0.1	<0.1	0	200	0
			Benzo(a)anthracene	µg/L	0.1	<0.1	0	200	0
			Chrysene	µg/L	0.1	<0.1	0	200	0
			Benzo(b&j)fluoranthene	µg/L	0.1	<0.1	0	200	0
			Benzo(k)fluoranthene	µg/L	0.1	<0.1	0	200	0
			Benzo(a)pyrene	µg/L	0.1	<0.1	0	200	0
			Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1	0	200	0
			Dibenzo(ah)anthracene	µg/L	0.1	<0.1	0	200	0
			Benzo(ghi)perylene	µg/L	0.1	<0.1	0	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	µg/L	-	0.3	0.24	30	22
			2-fluorobiphenyl (Surrogate)	µg/L	-	0.3	0.27	30	23
			d14-p-terphenyl (Surrogate)	µg/L	-	0.5	0.39	30	25

TKN Kjeldahl Digestion by Discrete Analyser

Method: ME-(AU)-[ENV]AN292

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208934.006	LB205247.014	Total Kjeldahl Nitrogen	mg/L	0.05	0.31	0.34	30	10
SE208988.007	LB205247.032	Total Kjeldahl Nitrogen	mg/L	0.05	0.29	0.29	32	2

Total Dissolved Solids (TDS) in water

Method: ME-(AU)-[ENV]AN113

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208980.001	LB205144.014	Total Dissolved Solids Dried at 175-185°C	mg/L	10	1900	)60.000000000	16	8
	LB205144.025	Total Dissolved Solids Dried at 175-185°C	mg/L	10	1900	793.000000000	16	6
SE208988.005	LB205144.028	Total Dissolved Solids Dried at 175-185°C	mg/L	10	<10	59	45	142 †
SE209051.007	LB205144.030	Total Dissolved Solids Dried at 175-185°C	mg/L	10	44.000000000	51.000000000	22	5
SE209078.001	LB205144.024	Total Dissolved Solids Dried at 175-185°C	mg/L	10	4400	4700	15	5

Total Phosphorus by Kjeldahl Digestion DA in Water

Method: ME-(AU)-[ENV]AN279/AN293(Sydney only)

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208934.006	LB205247.014	Total Phosphorus (Kjeldahl Digestion) as P	mg/L	0.02	0.15	0.15	28	1
SE208988.007	LB205247.032	Total Phosphorus (Kjeldahl Digestion) as P	mg/L	0.02	0.06	0.06	49	0

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208988.007	LB205041.011	Arsenic, As	µg/L	1	13	14	22	2
		Beryllium, Be	µg/L	1	<1	<1	200	0
		Boron, B	µg/L	5	24	23	36	2
		Cadmium, Cd	µg/L	0.1	<0.1	<0.1	200	0
		Chromium, Cr	µg/L	1	1	1	92	1
		Cobalt, Co	µg/L	1	2	2	56	2
		Copper, Cu	µg/L	1	<1	<1	200	0
		Lead, Pb	µg/L	1	<1	<1	200	0
		Manganese, Mn	µg/L	1	440	440	15	1
		Nickel, Ni	µg/L	1	2	2	81	0
		Zinc, Zn	µg/L	5	<5	<5	140	0

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE209052.010	LB205062.020		TRH C10-C14	µg/L	50	<50	0	200	0
			TRH C15-C28	µg/L	200	<200	0	200	0
			TRH C29-C36	µg/L	200	<200	0	200	0
			TRH C37-C40	µg/L	200	<200	0	200	0
			TRH C10-C40	µg/L	320	<320	0	200	0
		TRH F Bands	TRH >C10-C16	µg/L	60	<60	0	200	0
			TRH >C10-C16 - Naphthalene (F2)	µg/L	60	<60	0	200	0
			TRH >C16-C34 (F3)	µg/L	500	<500	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

TRH (Total Recoverable Hydrocarbons) in Water (continued)

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE209052.010	LB205062.020	TRH F Bands	TRH >C34-C40 (F4)	µg/L	500	<500	0	200	0

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208988.002	LB205182.022	Fumigants	2,2-dichloropropane	µg/L	0.5	<0.5	<0.5	200	0
			1,2-dichloropropane	µg/L	0.5	<0.5	<0.5	200	0
			cis-1,3-dichloropropene	µg/L	0.5	<0.5	<0.5	200	0
			trans-1,3-dichloropropene	µg/L	0.5	<0.5	<0.5	200	0
			1,2-dibromoethane (EDB)	µg/L	0.5	<0.5	<0.5	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	µg/L	5	<5	<5	200	0
		Aliphatics	Chloromethane	µg/L	5	<5	<5	200	0
			Vinyl chloride (Chloroethene)	µg/L	0.3	<0.3	<0.3	200	0
			Bromomethane	µg/L	10	<10	<10	200	0
			Chloroethane	µg/L	5	<5	<5	200	0
			Trichlorofluoromethane	µg/L	1	<1	<1	200	0
			Iodomethane	µg/L	5	<5	<5	200	0
			1,1-dichloroethene	µg/L	0.5	<0.5	<0.5	200	0
			Dichloromethane (Methylene chloride)	µg/L	5	<5	<5	200	0
			Allyl chloride	µg/L	2	<2	<2	200	0
			trans-1,2-dichloroethene	µg/L	0.5	<0.5	<0.5	200	0
			1,1-dichloroethane	µg/L	0.5	<0.5	<0.5	200	0
			cis-1,2-dichloroethene	µg/L	0.5	<0.5	<0.5	200	0
			Bromochloromethane	µg/L	0.5	<0.5	<0.5	200	0
			1,2-dichloroethane	µg/L	0.5	<0.5	<0.5	200	0
			1,1,1-trichloroethane	µg/L	0.5	<0.5	<0.5	200	0
			1,1-dichloropropene	µg/L	0.5	<0.5	<0.5	200	0
			Carbon tetrachloride	µg/L	0.5	<0.5	<0.5	200	0
			Dibromomethane	µg/L	0.5	<0.5	<0.5	200	0
			Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	<0.5	<0.5	200	0
			1,1,2-trichloroethane	µg/L	0.5	<0.5	<0.5	200	0
			1,3-dichloropropane	µg/L	0.5	<0.5	<0.5	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	<0.5	<0.5	200	0
			1,1,1,2-tetrachloroethane	µg/L	0.5	<0.5	<0.5	200	0
			cis-1,4-dichloro-2-butene	µg/L	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	µg/L	0.5	<0.5	<0.5	200	0
			1,2,3-trichloropropane	µg/L	0.5	<0.5	<0.5	200	0
			trans-1,4-dichloro-2-butene	µg/L	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	µg/L	0.5	<0.5	<0.5	200	0
			Hexachlorobutadiene	µg/L	0.5	<0.5	<0.5	200	0
		Halogenated	Chlorobenzene	µg/L	0.5	<0.5	<0.5	200	0
		Aromatics	Bromobenzene	µg/L	0.5	<0.5	<0.5	200	0
			2-chlorotoluene	µg/L	0.5	<0.5	<0.5	200	0
			4-chlorotoluene	µg/L	0.5	<0.5	<0.5	200	0
			1,3-dichlorobenzene	µg/L	0.5	<0.5	<0.5	200	0
			1,4-dichlorobenzene	µg/L	0.3	<0.3	<0.3	200	0
			1,2-dichlorobenzene	µg/L	0.5	<0.5	<0.5	200	0
			1,2,4-trichlorobenzene	µg/L	0.5	<0.5	<0.5	200	0
			1,2,3-trichlorobenzene	µg/L	0.5	<0.5	<0.5	200	0
		Monocyclic	Benzene	µg/L	0.5	<0.5	<0.5	200	0
		Aromatic	Toluene	µg/L	0.5	<0.5	<0.5	200	0
			Ethylbenzene	µg/L	0.5	<0.5	<0.5	200	0
			m/p-xylene	µg/L	1	<1	<1	200	0
			o-xylene	µg/L	0.5	<0.5	<0.5	200	0
			Styrene (Vinyl benzene)	µg/L	0.5	<0.5	<0.5	200	0
			Isopropylbenzene (Cumene)	µg/L	0.5	<0.5	<0.5	200	0
			n-propylbenzene	µg/L	0.5	<0.5	<0.5	200	0
			1,3,5-trimethylbenzene	µg/L	0.5	<0.5	<0.5	200	0
			tert-butylbenzene	µg/L	0.5	<0.5	<0.5	200	0
			1,2,4-trimethylbenzene	µg/L	0.5	<0.5	<0.5	200	0
			sec-butylbenzene	µg/L	0.5	<0.5	<0.5	200	0
			p-isopropyltoluene	µg/L	0.5	<0.5	<0.5	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOCs in Water (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208988.002	LB205182.022	Monocyclic	n-butylbenzene	µg/L	0.5	<0.5	<0.5	200	0
		Nitrogenous	Acrylonitrile	µg/L	0.5	<0.5	<0.5	200	0
		Oxygenated	Acetone (2-propanone)	µg/L	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	µg/L	2	<2	<2	200	0
			Vinyl acetate	µg/L	10	<10	<10	200	0
			MEK (2-butanone)	µg/L	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	µg/L	5	<5	<5	200	0
			2-hexanone (MBK)	µg/L	5	<5	<5	200	0
		Polycyclic	Naphthalene	µg/L	0.5	<0.5	<0.5	200	0
		Sulphonated	Carbon disulfide	µg/L	2	<2	<2	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	0.0	0.0	30	4
			d8-toluene (Surrogate)	µg/L	-	0.0	0.0	30	7
			Bromofluorobenzene (Surrogate)	µg/L	-	0.0	0.0	30	1
		Trihalomethan	Chloroform (THM)	µg/L	0.5	6.0	5.8	38	4
		es	Bromodichloromethane (THM)	µg/L	0.5	1.8	2.1	55	15
			Dibromochloromethane (THM)	µg/L	0.5	<0.5	<0.5	200	0
			Bromoform (THM)	µg/L	0.5	<0.5	<0.5	200	0
SE209052.011	LB205182.023	Fumigants	2,2-dichloropropane	µg/L	0.5	<0.5	0	200	0
			1,2-dichloropropane	µg/L	0.5	<0.5	0.0054224579	200	0
			cis-1,3-dichloropropene	µg/L	0.5	<0.5	0	200	0
			trans-1,3-dichloropropene	µg/L	0.5	<0.5	0.0076260316	200	0
			1,2-dibromoethane (EDB)	µg/L	0.5	<0.5	0	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	µg/L	5	<5	0	200	0
		Aliphatics	Chloromethane	µg/L	5	<5	0.0773847576	200	0
			Vinyl chloride (Chloroethene)	µg/L	0.3	<0.3	0	200	0
			Bromomethane	µg/L	10	<10	0.0386919477	200	0
			Chloroethane	µg/L	5	<5	0	200	0
			Trichlorofluoromethane	µg/L	1	<1	0	200	0
			Iodomethane	µg/L	5	<5	0.0217007791	200	0
			1,1-dichloroethene	µg/L	0.5	<0.5	0.0075191240	200	0
			Dichloromethane (Methylene chloride)	µg/L	5	<5	0.0960802564	200	0
			Allyl chloride	µg/L	2	<2	0.0425219836	200	0
			trans-1,2-dichloroethene	µg/L	0.5	<0.5	0.1163675954	200	0
			1,1-dichloroethane	µg/L	0.5	<0.5	0.0368008149	200	0
			cis-1,2-dichloroethene	µg/L	0.5	<0.5	0.0441685339	200	0
			Bromochloromethane	µg/L	0.5	<0.5	0.0404210637	200	0
			1,2-dichloroethane	µg/L	0.5	<0.5	0.0190009836	200	0
			1,1,1-trichloroethane	µg/L	0.5	<0.5	0	200	0
			1,1-dichloropropene	µg/L	0.5	<0.5	0	200	0
			Carbon tetrachloride	µg/L	0.5	<0.5	0.0028265181	200	0
			Dibromomethane	µg/L	0.5	<0.5	0.0059130052	200	0
			Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	<0.5	0.0580657329	200	0
			1,1,2-trichloroethane	µg/L	0.5	<0.5	0	200	0
			1,3-dichloropropane	µg/L	0.5	<0.5	0.0092234586	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	<0.5	0.1873040267	200	0
			1,1,1,2-tetrachloroethane	µg/L	0.5	<0.5	0	200	0
			cis-1,4-dichloro-2-butene	µg/L	1	<1	0.1440452247	200	0
			1,1,2,2-tetrachloroethane	µg/L	0.5	<0.5	0	200	0
			1,2,3-trichloropropane	µg/L	0.5	<0.5	0.0288872898	200	0
			trans-1,4-dichloro-2-butene	µg/L	1	<1	0	200	0
			1,2-dibromo-3-chloropropane	µg/L	0.5	<0.5	0	200	0
			Hexachlorobutadiene	µg/L	0.5	<0.5	0.0022210442	200	0
		Halogenated	Chlorobenzene	µg/L	0.5	<0.5	0.0237792090	200	0
		Aromatics	Bromobenzene	µg/L	0.5	<0.5	0.0057457970	200	0
			2-chlorotoluene	µg/L	0.5	<0.5	0.0190927164	200	0
			4-chlorotoluene	µg/L	0.5	<0.5	0.0192326876	200	0
			1,3-dichlorobenzene	µg/L	0.5	<0.5	0.0050586834	200	0
			1,4-dichlorobenzene	µg/L	0.3	<0.3	0.0047969503	200	0
			1,2-dichlorobenzene	µg/L	0.5	<0.5	0.0308196650	200	0
			1,2,4-trichlorobenzene	µg/L	0.5	<0.5	0.0186442638	200	0
			1,2,3-trichlorobenzene	µg/L	0.5	<0.5	0.2860550742	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOCs in Water (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE209052.011	LB205182.023	Monocyclic	Benzene	µg/L	0.5	<0.5	0.0516967858	200	0
		Aromatic	Toluene	µg/L	0.5	<0.5	0.2362316393	200	0
			Ethylbenzene	µg/L	0.5	<0.5	0.2360224461	200	0
			m/p-xylene	µg/L	1	<1	0.0957943017	200	0
			o-xylene	µg/L	0.5	0.7	0.6433844628	103	12
			Styrene (Vinyl benzene)	µg/L	0.5	<0.5	0	200	0
			Isopropylbenzene (Cumene)	µg/L	0.5	<0.5	0.1098795769	200	0
			n-propylbenzene	µg/L	0.5	<0.5	0.0720863037	200	0
			1,3,5-trimethylbenzene	µg/L	0.5	<0.5	0.3749396257	148	0
			tert-butylbenzene	µg/L	0.5	<0.5	0.0044740788	200	0
			1,2,4-trimethylbenzene	µg/L	0.5	<0.5	0.1763522777	200	0
			sec-butylbenzene	µg/L	0.5	<0.5	0.0161142309	200	0
			p-isopropyltoluene	µg/L	0.5	<0.5	0.0084631073	200	0
			n-butylbenzene	µg/L	0.5	<0.5	0.0192919924	200	0
		Nitrogenous	Acrylonitrile	µg/L	0.5	<0.5	0.0658259651	200	0
		Oxygenated	Acetone (2-propanone)	µg/L	10	<10	0	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	µg/L	2	<2	0.0086203135	200	0
			Vinyl acetate	µg/L	10	<10	0	200	0
			MEK (2-butanone)	µg/L	10	<10	0	200	0
			MIBK (4-methyl-2-pentanone)	µg/L	5	<5	0.5068033006	200	0
			2-hexanone (MBK)	µg/L	5	<5	0	200	0
		Polycyclic	Naphthalene	µg/L	0.5	<0.5	0.0686251475	200	0
		Sulphonated	Carbon disulfide	µg/L	2	<2	0.1122464309	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	9.9	10.173158020:	30	3
			d8-toluene (Surrogate)	µg/L	-	9.5	10.173158020:	30	6
			Bromofluorobenzene (Surrogate)	µg/L	-	10.4	10.173158020:	30	2
		Trihalomethan	Chloroform (THM)	µg/L	0.5	26	22.7107334252	32	15
		es	Bromodichloromethane (THM)	µg/L	0.5	5.4	5.4284091756	39	0
			Dibromochloromethane (THM)	µg/L	0.5	1.5	1.6798644330	61	11
			Bromoform (THM)	µg/L	0.5	<0.5	0.1289751052	200	0

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208937.001	LB205221.023		TRH C6-C10	µg/L	50	<50	<50	200	0
			TRH C6-C9	µg/L	40	<50	<50	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	0.0	0.0	30	3
			d8-toluene (Surrogate)	µg/L	-	0.0	0.0	30	4
			Bromofluorobenzene (Surrogate)	µg/L	-	0.0	0.0	30	4
		VPH F Bands	Benzene (F0)	µg/L	0.5	<0.5	<0.5	200	0
			TRH C6-C10 minus BTEX (F1)	µg/L	50	<50	<50	200	0
SE208942.001	LB205221.024		TRH C6-C10	µg/L	50	<50	<50	200	0
			TRH C6-C9	µg/L	40	<50	<50	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	0.0	0.0	30	7
			d8-toluene (Surrogate)	µg/L	-	0.0	0.0	30	13
			Bromofluorobenzene (Surrogate)	µg/L	-	0.0	0.0	30	0
		VPH F Bands	Benzene (F0)	µg/L	0.5	<0.5	<0.5	200	0
			TRH C6-C10 minus BTEX (F1)	µg/L	50	<50	<50	200	0
SE208988.002	LB205182.019		TRH C6-C10	µg/L	50	<50	<50	200	0
			TRH C6-C9	µg/L	40	<40	<40	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	0.0	0.0	30	4
			d8-toluene (Surrogate)	µg/L	-	0.0	0.0	30	1
			Bromofluorobenzene (Surrogate)	µg/L	-	0.0	0.0	30	15
		VPH F Bands	Benzene (F0)	µg/L	0.5	<0.5	<0.5	200	0
			TRH C6-C10 minus BTEX (F1)	µg/L	50	<50	<50	200	0
SE209052.011	LB205182.020		TRH C6-C10	µg/L	50	<50	14.006849709(	200	0
			TRH C6-C9	µg/L	40	<40	11.7468505177	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	9.9	10.173158020:	30	3
			d8-toluene (Surrogate)	µg/L	-	9.5	9.6439508269	30	1
			Bromofluorobenzene (Surrogate)	µg/L	-	10.4	11.204178824(	30	8
		VPH F Bands	Benzene (F0)	µg/L	0.5	<0.5	0.0516967858	200	0
			TRH C6-C10 minus BTEX (F1)	µg/L	50	<50	13.3634652462	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Alkalinity

Method: ME-(AU)-[ENV]AN135

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205043.002	Total Alkalinity as CaCO3	mg/L	5	59	59.5	76 - 124	99

Ammonia Nitrogen by Discrete Analyser (Aquakem)

Method: ME-(AU)-[ENV]AN291

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205143.002	Ammonia Nitrogen, NH_3 as N	mg/L	0.005	2.5	2.5	80 - 120	98

Anions by Ion Chromatography in Water

Method: ME-(AU)-[ENV]AN245

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205058.002	Chloride	mg/L	1	19	20	80 - 120	95
	Sulfate, SO4	mg/L	1	19	20	80 - 120	93
	Nitrate Nitrogen, NO3-N	mg/L	0.005	1.9	2	80 - 120	94

Filterable Reactive Phosphorus (FRP)

Method: ME-(AU)-[ENV]AN278

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205143.002	Filterable Reactive Phosphorus as P	mg/L	0.005	0.11	0.1	80 - 120	111

Full 8270 SVOC in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205232.002	01-PAHs	Acenaphthene	µg/L	0.1	36	40	60 - 140	90
		Acenaphthylene	µg/L	0.1	35	40	60 - 140	87
		Anthracene	µg/L	0.1	37	40	60 - 140	92
		Benzo(a)pyrene	µg/L	0.1	42	40	60 - 140	106
		Fluoranthene	µg/L	0.1	40	40	60 - 140	100
		Naphthalene	µg/L	0.1	29	40	60 - 140	73
		Phenanthrene	µg/L	0.1	36	40	60 - 140	89
		Pyrene	µg/L	0.1	38	40	60 - 140	96
	02-OCs	Aldrin	µg/L	0.1	3.4	4	60 - 140	85
		Delta-BHC	µg/L	0.1	4.0	4	60 - 140	100
		p,p-DDT	µg/L	0.1	3.1	4	60 - 140	78
		Dieldrin	µg/L	0.1	4.3	4	60 - 140	107
		Endrin	µg/L	0.1	3.4	4	60 - 140	84
		Heptachlor	µg/L	0.1	3.2	4	60 - 140	80
	03-OPs	Chlorpyrifos (Chlorpyrifos Ethyl)	µg/L	0.2	6.8	8	60 - 140	85
		Diazinon (Dimpylate)	µg/L	0.5	7.5	8	60 - 140	94
		Dichlorvos	µg/L	0.5	6.7	8	60 - 140	84
		Ethion	µg/L	0.2	6.1	8	60 - 140	76
	05-SVCH (Cl	Hexachlorobenzene (HCB)	µg/L	0.1	4.3	4	60 - 140	108
	Benzenes,	Hexachlorobutadiene	µg/L	0.5	4.4	4	60 - 140	109
		Hexachloroethane	µg/L	0.5	4.3	4	60 - 140	107
		Pentachlorobenzene	µg/L	0.5	4.2	4	60 - 140	106
		1,2,3,4-tetrachlorobenzene	µg/L	0.5	4.3	4	60 - 140	108
	06-Phthalates	Bis(2-ethylhexyl)phthalate	µg/L	50	<50	8	60 - 140	111
		Butyl benzyl phthalate	µg/L	1	8	8	60 - 140	96
		Di-n-butyl phthalate	µg/L	10	<10	8	60 - 140	109
		Diethyl phthalate	µg/L	5	9	8	60 - 140	116
		Dimethyl phthalate	µg/L	1	8	8	60 - 140	106
		Dioctyl phthalate	µg/L	1	9	8	60 - 140	108
	09-Nitrosamine	N-nitroso-di-n-propylamine (NDPA)	µg/L	1	41	32	60 - 140	130
	10-Nitroaromati	Pentachloronitrobenzene (quintozene)	µg/L	1	5	4	60 - 140	129
	14-Speciated	2,4-dichlorophenol	µg/L	0.5	46	40	60 - 140	116
	Routine	Phenol	µg/L	0.5	31	40	60 - 140	78
		2,4,6-trichlorophenol	µg/L	0.5	37	40	60 - 140	93
		Pentachlorophenol	µg/L	0.5	32	40	60 - 140	80
	Surrogates	d5-phenol (Surrogate)	µg/L	-	2.2	2	40 - 130	109
		d5-nitrobenzene (Surrogate)	µg/L	-	0.5	0.5	40 - 130	106
		2-fluorobiphenyl (Surrogate)	µg/L	-	0.5	0.5	40 - 130	106
		2,4,6-Tribromophenol (Surrogate)	µg/L	-	5.4	5	40 - 130	108

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Full 8270 SVOC in Water (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205232.002	Surrogates	d14-p-terphenyl (Surrogate)	µg/L	-	0.5	0.5	40 - 130	94

Metals in Water (Dissolved) by ICPOES

Method: ME-(AU)-[ENV]AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205078.002	Calcium, Ca	mg/L	0.2	51	50.5	80 - 120	100
	Magnesium, Mg	mg/L	0.1	49	50.5	80 - 120	97
	Potassium, K	mg/L	0.1	52	55	80 - 120	94
	Sodium, Na	mg/L	0.5	52	50.5	80 - 120	104

Nitrite in Water

Method: ME-(AU)-[ENV]AN277

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205143.002	Nitrite Nitrogen, NO2 as N	mg/L	0.005	0.11	0.1	80 - 120	113

OC Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205062.002		Delta BHC	µg/L	0.1	0.2	0.2	60 - 140	87
		Heptachlor	µg/L	0.1	0.1	0.2	60 - 140	71
		Aldrin	µg/L	0.1	0.2	0.2	60 - 140	95
		Dieldrin	µg/L	0.1	0.2	0.2	60 - 140	95
		Endrin	µg/L	0.1	0.2	0.2	60 - 140	80
		p,p'-DDT	µg/L	0.1	0.1	0.2	60 - 140	73
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	µg/L	-	0.14	0.15	40 - 130	96

OP Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205062.002		Dichlorvos	µg/L	0.5	7.2	8	60 - 140	91
		Diazinon (Dimpylate)	µg/L	0.5	7.1	8	60 - 140	88
		Chlorpyrifos (Chlorpyrifos Ethyl)	µg/L	0.2	7.2	8	60 - 140	90
		Ethion	µg/L	0.2	6.2	8	60 - 140	78
	Surrogates	2-fluorobiphenyl (Surrogate)	µg/L	-	0.3	0.5	40 - 130	66
		d14-p-terphenyl (Surrogate)	µg/L	-	0.4	0.5	40 - 130	70

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205062.002		Naphthalene	µg/L	0.1	27	40	60 - 140	67
		Acenaphthylene	µg/L	0.1	28	40	60 - 140	70
		Acenaphthene	µg/L	0.1	27	40	60 - 140	69
		Phenanthrene	µg/L	0.1	30	40	60 - 140	75
		Anthracene	µg/L	0.1	30	40	60 - 140	75
		Fluoranthene	µg/L	0.1	30	40	60 - 140	76
		Pyrene	µg/L	0.1	32	40	60 - 140	79
		Benzo(a)pyrene	µg/L	0.1	33	40	60 - 140	84
	Surrogates	d5-nitrobenzene (Surrogate)	µg/L	-	0.3	0.5	40 - 130	66
		2-fluorobiphenyl (Surrogate)	µg/L	-	0.3	0.5	40 - 130	66
		d14-p-terphenyl (Surrogate)	µg/L	-	0.4	0.5	40 - 130	70
LB205232.002		Naphthalene	µg/L	0.1	29	40	60 - 140	73
		Acenaphthylene	µg/L	0.1	35	40	60 - 140	87
		Acenaphthene	µg/L	0.1	36	40	60 - 140	90
		Phenanthrene	µg/L	0.1	36	40	60 - 140	89
		Anthracene	µg/L	0.1	37	40	60 - 140	92
		Fluoranthene	µg/L	0.1	40	40	60 - 140	100
		Pyrene	µg/L	0.1	38	40	60 - 140	96
		Benzo(a)pyrene	µg/L	0.1	42	40	60 - 140	106
	Surrogates	d5-nitrobenzene (Surrogate)	µg/L	-	0.3	0.5	40 - 130	64
		2-fluorobiphenyl (Surrogate)	µg/L	-	0.4	0.5	40 - 130	74
		d14-p-terphenyl (Surrogate)	µg/L	-	0.5	0.5	40 - 130	92

PCBs in Water

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205062.002	Arochlor 1260	µg/L	1	<1	0.4	60 - 140	80

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Speciated Phenols in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205062.002		Phenol	µg/L	0.5	32	40	60 - 140	80
		2,4-dichlorophenol	µg/L	0.5	35	40	60 - 140	87
		2,4,6-trichlorophenol	µg/L	0.5	41	40	60 - 140	103
		Pentachlorophenol	µg/L	0.5	24	40	60 - 140	60
	Surrogates	2,4,6-Tribromophenol (Surrogate)	µg/L	-	4.7	5	40 - 130	95
		d5-phenol (Surrogate)	µg/L	-	1.9	2	40 - 130	95

Sulfide by Titration in Water

Method: ME-(AU)-[ENV]AN149

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205237.002	Sulfide	mg/L	0.5	88	100	70 - 130	88

Total Dissolved Solids (TDS) in water

Method: ME-(AU)-[ENV]AN113

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205144.002	Total Dissolved Solids Dried at 175-185°C	mg/L	10	310	293	81 - 119	105

Total Phosphorus by Kjeldahl Digestion DA in Water

Method: ME-(AU)-[ENV]AN279/AN293(Sydney only)

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205247.002	Total Phosphorus (Kjeldahl Digestion) as P	mg/L	0.02	1.1	1	80 - 120	113

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205041.002	Arsenic, As	µg/L	1	18	20	80 - 120	92
	Beryllium, Be	µg/L	1	21	20	80 - 120	106
	Boron, B	µg/L	5	23	20	80 - 120	116
	Cadmium, Cd	µg/L	0.1	20	20	80 - 120	101
	Chromium, Cr	µg/L	1	20	20	80 - 120	102
	Cobalt, Co	µg/L	1	20	20	80 - 120	102
	Copper, Cu	µg/L	1	21	20	80 - 120	104
	Lead, Pb	µg/L	1	20	20	80 - 120	100
	Manganese, Mn	µg/L	1	20	20	80 - 120	101
	Nickel, Ni	µg/L	1	20	20	80 - 120	98
	Zinc, Zn	µg/L	5	22	20	80 - 120	108

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205062.002		TRH C10-C14	µg/L	50	1000	1200	60 - 140	87
		TRH C15-C28	µg/L	200	1300	1200	60 - 140	107
		TRH C29-C36	µg/L	200	1300	1200	60 - 140	109
	TRH F Bands	TRH >C10-C16	µg/L	60	1200	1200	60 - 140	99
		TRH >C16-C34 (F3)	µg/L	500	1300	1200	60 - 140	111
		TRH >C34-C40 (F4)	µg/L	500	670	600	60 - 140	111
LB205232.002		TRH C10-C14	µg/L	50	1100	1200	60 - 140	90
		TRH C15-C28	µg/L	200	1300	1200	60 - 140	109
		TRH C29-C36	µg/L	200	1300	1200	60 - 140	110
	TRH F Bands	TRH >C10-C16	µg/L	60	1200	1200	60 - 140	101
		TRH >C16-C34 (F3)	µg/L	500	1400	1200	60 - 140	117
		TRH >C34-C40 (F4)	µg/L	500	610	600	60 - 140	102

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205182.002	Halogenated	1,1-dichloroethene	µg/L	0.5	57	45.45	60 - 140	125
	Aliphatics	1,2-dichloroethane	µg/L	0.5	51	45.45	60 - 140	112
		Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	49	45.45	60 - 140	109
	Halogenated	Chlorobenzene	µg/L	0.5	55	45.45	60 - 140	120
	Monocyclic	Benzene	µg/L	0.5	43	45.45	60 - 140	94
	Aromatic	Toluene	µg/L	0.5	45	45.45	60 - 140	98
		Ethylbenzene	µg/L	0.5	44	45.45	60 - 140	97
		m/p-xylene	µg/L	1	88	90.9	60 - 140	97

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOCs in Water (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205182.002	Monocyclic	o-xylene	µg/L	0.5	45	45.45	60 - 140	98
	Trihalomethan	Chloroform (THM)	µg/L	0.5	56	45.45	60 - 140	123
LB205221.002	Halogenated	1,1-dichloroethene	µg/L	0.5	46	45.45	60 - 140	102
	Aliphatics	1,2-dichloroethane	µg/L	0.5	53	45.45	60 - 140	116
		Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	53	45.45	60 - 140	116
	Halogenated	Chlorobenzene	µg/L	0.5	57	45.45	60 - 140	126
	Monocyclic	Benzene	µg/L	0.5	45	45.45	60 - 140	98
	Aromatic	Toluene	µg/L	0.5	50	45.45	60 - 140	110
		Ethylbenzene	µg/L	0.5	46	45.45	60 - 140	101
		m/p-xylene	µg/L	1	94	90.9	60 - 140	104
		o-xylene	µg/L	0.5	48	45.45	60 - 140	105
	Trihalomethan	Chloroform (THM)	µg/L	0.5	55	45.45	60 - 140	122

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205182.002		TRH C6-C10	µg/L	50	690	946.63	60 - 140	73
		TRH C6-C9	µg/L	40	600	818.71	60 - 140	73
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	µg/L	50	430	639.67	60 - 140	67
LB205221.002		TRH C6-C10	µg/L	50	740	946.63	60 - 140	78
		TRH C6-C9	µg/L	40	640	818.71	60 - 140	78
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	µg/L	50	450	639.67	60 - 140	71

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Ammonia Nitrogen by Discrete Analyser (Aquakem)

Method: ME-(AU)-[ENV]AN291

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208988.001	LB205143.004	Ammonia Nitrogen, NH_3 as N	mg/L	0.005	2.9	0.48	2.5	95

Filterable Reactive Phosphorus (FRP)

Method: ME-(AU)-[ENV]AN278

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208988.001	LB205143.004	Filterable Reactive Phosphorus as P	mg/L	0.005	0.10	<0.005	0.1	101

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208922.001	LB205054.004	Mercury	mg/L	0.0001	0.0069	<0.0001	0.008	86

Metals in Water (Dissolved) by ICPOES

Method: ME-(AU)-[ENV]AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208988.001	LB205078.004	Calcium, Ca	mg/L	0.2	75	25	50.5	100
		Magnesium, Mg	mg/L	0.1	56	5.3	50.5	100
		Potassium, K	mg/L	0.1	71	20	55	93
		Sodium, Na	mg/L	0.5	150	100	50.5	109

Nitrite in Water

Method: ME-(AU)-[ENV]AN277

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208988.001	LB205143.004	Nitrite Nitrogen, NO2 as N	mg/L	0.005	0.11	<0.005	0.1	107

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208951.010	LB205041.004	Arsenic, As	µg/L	1	19	<1	20	95
		Cadmium, Cd	µg/L	0.1	21	<0.1	20	103
		Chromium, Cr	µg/L	1	21	<1	20	105
		Copper, Cu	µg/L	1	22	<1	20	107
		Lead, Pb	µg/L	1	21	<1	20	102
		Nickel, Ni	µg/L	1	21	<1	20	104
		Zinc, Zn	µg/L	5	24	<5	20	111

VOCs in Water

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208932.001	LB205182.021	Fumigants	2,2-dichloropropane	µg/L	0.5	<0.5	<0.5	-	-
			1,2-dichloropropane	µg/L	0.5	<0.5	<0.5	-	-
			cis-1,3-dichloropropene	µg/L	0.5	<0.5	<0.5	-	-
			trans-1,3-dichloropropene	µg/L	0.5	<0.5	<0.5	-	-
			1,2-dibromoethane (EDB)	µg/L	0.5	<0.5	<0.5	-	-
		Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	µg/L	5	<5	<5	-	-
			Chloromethane	µg/L	5	<5	<5	-	-
			Vinyl chloride (Chloroethene)	µg/L	0.3	<0.3	<0.3	-	-
			Bromomethane	µg/L	10	<10	<10	-	-
			Chloroethane	µg/L	5	<5	<5	-	-
			Trichlorofluoromethane	µg/L	1	<1	<1	-	-
			Iodomethane	µg/L	5	<5	<5	-	-
			1,1-dichloroethene	µg/L	0.5	51	<0.5	45.45	111
			Dichloromethane (Methylene chloride)	µg/L	5	<5	<5	-	-
			Allyl chloride	µg/L	2	<2	<2	-	-
			trans-1,2-dichloroethene	µg/L	0.5	<0.5	<0.5	-	-
			1,1-dichloroethane	µg/L	0.5	<0.5	<0.5	-	-
			cis-1,2-dichloroethene	µg/L	0.5	<0.5	<0.5	-	-
			Bromochloromethane	µg/L	0.5	<0.5	<0.5	-	-
			1,2-dichloroethane	µg/L	0.5	54	<0.5	45.45	118
			1,1,1-trichloroethane	µg/L	0.5	<0.5	<0.5	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOCs in Water (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208932.001	LB205182.021	Halogenated	1,1-dichloropropene	µg/L	0.5	<0.5	<0.5	-	-
		Aliphatics	Carbon tetrachloride	µg/L	0.5	<0.5	<0.5	-	-
			Dibromomethane	µg/L	0.5	<0.5	<0.5	-	-
			Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	54	<0.5	45.45	119
			1,1,2-trichloroethane	µg/L	0.5	<0.5	<0.5	-	-
			1,3-dichloropropane	µg/L	0.5	<0.5	<0.5	-	-
			Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	<0.5	<0.5	-	-
			1,1,1,2-tetrachloroethane	µg/L	0.5	<0.5	<0.5	-	-
			cis-1,4-dichloro-2-butene	µg/L	1	<1	<1	-	-
			1,1,2,2-tetrachloroethane	µg/L	0.5	<0.5	<0.5	-	-
			1,2,3-trichloropropane	µg/L	0.5	<0.5	<0.5	-	-
			trans-1,4-dichloro-2-butene	µg/L	1	<1	<1	-	-
			1,2-dibromo-3-chloropropane	µg/L	0.5	<0.5	<0.5	-	-
			Hexachlorobutadiene	µg/L	0.5	<0.5	<0.5	-	-
		Halogenated	Chlorobenzene	µg/L	0.5	59	<0.5	45.45	129
		Aromatics	Bromobenzene	µg/L	0.5	<0.5	<0.5	-	-
			2-chlorotoluene	µg/L	0.5	<0.5	<0.5	-	-
			4-chlorotoluene	µg/L	0.5	<0.5	<0.5	-	-
			1,3-dichlorobenzene	µg/L	0.5	<0.5	<0.5	-	-
			1,4-dichlorobenzene	µg/L	0.3	<0.3	<0.3	-	-
			1,2-dichlorobenzene	µg/L	0.5	<0.5	<0.5	-	-
			1,2,4-trichlorobenzene	µg/L	0.5	<0.5	<0.5	-	-
			1,2,3-trichlorobenzene	µg/L	0.5	<0.5	<0.5	-	-
		Monocyclic	Benzene	µg/L	0.5	48	<0.5	45.45	105
		Aromatic	Toluene	µg/L	0.5	53	<0.5	45.45	116
			Ethylbenzene	µg/L	0.5	50	<0.5	45.45	109
			m/p-xylene	µg/L	1	100	<1	90.9	112
			o-xylene	µg/L	0.5	51	<0.5	45.45	112
			Styrene (Vinyl benzene)	µg/L	0.5	<0.5	<0.5	-	-
			Isopropylbenzene (Cumene)	µg/L	0.5	<0.5	<0.5	-	-
			n-propylbenzene	µg/L	0.5	<0.5	<0.5	-	-
			1,3,5-trimethylbenzene	µg/L	0.5	<0.5	<0.5	-	-
			tert-butylbenzene	µg/L	0.5	<0.5	<0.5	-	-
			1,2,4-trimethylbenzene	µg/L	0.5	<0.5	<0.5	-	-
			sec-butylbenzene	µg/L	0.5	<0.5	<0.5	-	-
			p-isopropyltoluene	µg/L	0.5	<0.5	<0.5	-	-
			n-butylbenzene	µg/L	0.5	<0.5	<0.5	-	-
		Nitrogenous	Acrylonitrile	µg/L	0.5	<0.5	<0.5	-	-
		Oxygenated	Acetone (2-propanone)	µg/L	10	<10	<10	-	-
		Compounds	MtBE (Methyl-tert-butyl ether)	µg/L	2	<2	<2	-	-
			Vinyl acetate	µg/L	10	<10	<10	-	-
			MEK (2-butanone)	µg/L	10	<10	<10	-	-
			MIBK (4-methyl-2-pentanone)	µg/L	5	<5	<5	-	-
			2-hexanone (MBK)	µg/L	5	<5	<5	-	-
		Polycyclic	Naphthalene	µg/L	0.5	<0.5	<0.5	-	-
		Sulphonated	Carbon disulfide	µg/L	2	<2	<2	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/L	-	0.0	9.9	-	120
			d8-toluene (Surrogate)	mg/L	-	0.0	9.5	-	120
			Bromofluorobenzene (Surrogate)	mg/L	-	0.0	10.3	-	120
		Trihalometha	Chloroform (THM)	µg/L	0.5	67	<0.5	45.45	147 ④
		nes	Bromodichloromethane (THM)	µg/L	0.5	<0.5	<0.5	-	-
			Dibromochloromethane (THM)	µg/L	0.5	<0.5	<0.5	-	-
			Bromoform (THM)	µg/L	0.5	<0.5	<0.5	-	-
SE208979.001	LB205221.025	Monocyclic	Benzene	µg/L	0.5	50	<0.5	45.45	110
		Aromatic	Toluene	µg/L	0.5	48	<0.5	45.45	105
			Ethylbenzene	µg/L	0.5	49	<0.5	45.45	108
			m/p-xylene	µg/L	1	98	<1	90.9	108
			o-xylene	µg/L	0.5	48	<0.5	45.45	106
		Polycyclic	Naphthalene	µg/L	0.5	43	<0.5	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/L	-	0.0	10	-	102
			d8-toluene (Surrogate)	mg/L	-	0.0	10	-	96

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOCs in Water (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208979.001	LB205221.025	Surrogates	Bromofluorobenzene (Surrogate)	mg/L	-	0.0	10	-	100

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208932.001	LB205182.018		TRH C6-C10	µg/L	50	640	<50	946.63	67
			TRH C6-C9	µg/L	40	550	<40	818.71	65
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/L	-	0.0	9.9	-	120
			d8-toluene (Surrogate)	mg/L	-	0.0	9.5	-	101
			Bromofluorobenzene (Surrogate)	mg/L	-	0.0	10.3	-	110
		VPH F	Benzene (F0)	µg/L	0.5	48	<0.5	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	µg/L	50	340	<50	639.67	51 ④
SE208979.001	LB205221.025		TRH C6-C10	µg/L	50	840	<50	946.63	88
			TRH C6-C9	µg/L	40	740	<40	818.71	90
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/L	-	0.0	10	-	102
			d8-toluene (Surrogate)	mg/L	-	0.0	10	-	96
			Bromofluorobenzene (Surrogate)	mg/L	-	0.0	10	-	100
		VPH F	Benzene (F0)	µg/L	0.5	50	<0.5	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	µg/L	50	540	<50	639.67	85

MATRIX SPIKE DUPLICATES

SE208988 R1

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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SLR Consulting Australia Pty Ltd

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- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 23 Parap Rd, Darwin, NT 0820
- ☐ GOLD COAST: 191 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 7, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☑ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: C/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT:	DHA
PROJECT:	Randwick Barracks
PROJECT NUMBER:	610.30041
PROJECT MANAGER:	[redacted]
PM CONTACT No:	
LABORATORY:	SGS
LABORATORY ADDRESS:	340
SAMPLER:	[redacted]
SAMPLER CONTACT No:	
Email Reports and Invoices to:	LQRSYD@slrconsulting.com

Turnaround Time (TAT)
- ☑ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT:

COC Number: 1 of 3

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	Hold	Additional Information (Comment on any gross contamination or specific requirements)
1	0407_TP101_0.1_200625	25.6.20	Soil	bag	X		
2	0407_TP101_0.5_200625				X		
	0407_TP101_1.0_200625					X	
3	0407_TP244_0.1_200625			bag	X		
4	0407_TP244_0.5_200625				X		
	0407_TP244_1.0_200625					X	
5	0407_TP243_01_200625			bag	X		
6	0407_TP243_0.5_200625				X		
	0407_TP243_1.0_200625				#	X	
7	0407_TP242_0.1_200625			bag	X		
8	0407_TP242_0.5_200625				X		
	0407_TP242_1.0_200625					X	

SGS EHS Sydney COC

SE208081

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	Received by	Sign [redacted]	Date / Time 25/06/20	Temperature Received:
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time 04:30	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

000684

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)
- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☑ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: C/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT:	DHA
PROJECT:	Randwick Barracks
PROJECT NUMBER:	610.30641
PROJECT MANAGER:	[redacted]
PM CONTACT No:	
LABORATORY:	SGS
LABORATORY ADDRESS:	Syd
SAMPLER:	[redacted]
SAMPLER CONTACT No:	
Email Reports and Invoices to:	LQR3Dslrconsulting.com

Turnaround Time (TAT)
- ☑ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT:

COC Number: 2 of 3

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: Suite A	Hold	Additional Information (Comment on any gross contamination or specific requirements)
9	0407_TP240_0.1_200625	25/6/20	Soil	bag	X		
10	0407_TP240_0.5_200625			bag	X		
	0407_TP240_1.0_200625					X	
11	0407_TP239_0.1_200625			bag	X		
12	0407_TP239_0.5_200625			bag	X		
	0407_TP239_1.0_200625					X	
13	0407_TP238_0.1_200625			bag	X		
14	0407_TP238_0.5_200625				X		
	0407_TP238_1.0_200625					X	
15	0407_TP241_0.1_200625			bag	X		
16	0407_TP241_0.5_200625			bag	X		
	0407_TP241_1.0_200625					X	

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	Received by	Sign [redacted]	Date / Time 25/6/20	Temperature Received:
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time @4.3°	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

000685

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 3 Dunmoyle Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☑ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT: DHA	**LABORATORY:** SGS	**Turnaround Time (TAT)**	**COC Number** 3 of 3
PROJECT: Randwick Barracks	**LABORATORY ADDRESS:** SYD	☐ Standard TAT	
PROJECT NUMBER:	**SAMPLER:** [redacted]	☐ Non Standard or Urgent TAT	
PROJECT MANAGER:	**SAMPLER CONTACT No:**	**Required TAT:**	
PM CONTACT No:	**Email Reports and Invoices to:** LQRSYD@slrconsulting.com		

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: Suite A	[redacted]	Asbestos	Hold	Additional Information (Comment on any gross contamination or specific requirements)
17	0407_TP241_A01_200625	25.6.20	ACM				X		
	0407_TP241_A02_200625							X	
18	0407_QC164_200625		Soil		X	[redacted]			
19	0407_QC165_200625				X	[redacted]			
	0407_QC264_200625*			*	Please forward to Eurofins for Suite A cost [redacted]				
	0407_QC265_200625*								

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	**Received by**	Sign [redacted]	Date / Time 25/6/20	**Temperature Received:**
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time 04:30	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

SAMPLE RECEIPT ADVICE

SE208081

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000683--000685**
Samples	19

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Thu 25/6/2020
Report Due	Fri 3/7/2020
SGS Reference	**SE208081**

SUBMISSION DETAILS

This is to confirm that 19 samples were received on Thursday 25/6/2020. Results are expected to be ready by COB Friday 3/7/2020. Please quote SGS reference SE208081 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	18 Soil, 1 Material
Date documentation received	25/6/2020	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	4.7°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

8 Soil and 1 Material have been placed on hold as no tests have been assigned for them by the client. These samples will not be processed.

This document is issued by the Company under its General Conditions of Service accessible at www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

SAMPLE RECEIPT ADVICE

SE208081

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	Speciated Phenols in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
001	0407_TP101_0.1_200625	29	14	26	11	18	10	81	7
002	0407_TP101_0.5_200625	29	14	26	11	18	10	81	7
003	0407_TP244_0.1_200625	29	14	26	11	18	10	81	7
004	0407_TP244_0.5_200625	29	14	26	11	18	10	81	7
005	0407_TP243_0.1_200625	29	14	26	11	18	10	81	7
006	0407_TP243_0.5_200625	29	14	26	11	18	10	81	7
007	0407_TP242_0.1_200625	29	14	26	11	18	10	81	7
008	0407_TP242_0.5_200625	29	14	26	11	18	10	81	7
009	0407_TP240_0.1_200625	29	14	26	11	18	10	81	7
010	0407_TP240_0.5_200625	29	14	26	11	18	10	81	7
011	0407_TP239_0.1_200625	29	14	26	11	18	10	81	7
012	0407_TP239_0.5_200625	29	14	26	11	18	10	81	7
013	0407_TP238_0.1_200625	29	14	26	11	18	10	81	7
014	0407_TP238_0.5_200625	29	14	26	11	18	10	81	7
015	0407_TP241_0.1_200625	29	14	26	11	18	10	81	7
016	0407_TP241_0.5_200625	29	14	26	11	18	10	81	7
018	0407_QC164_200625	29	14	26	11	18	10	81	7
019	0407_QC165_200625	29	14	26	11	18	10	81	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE208081

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Fibre Identification in soil	Gravimetric Determination of Asbestos in Soil	Mercury in Soil	Moisture Content	Total Recoverable Elements in Soil/Waste
001	0407_TP101_0.1_200625	2	9	1	1	7
002	0407_TP101_0.5_200625	-	-	1	1	7
003	0407_TP244_0.1_200625	2	9	1	1	7
004	0407_TP244_0.5_200625	-	-	1	1	7
005	0407_TP243_0.1_200625	2	9	1	1	7
006	0407_TP243_0.5_200625	-	-	1	1	7
007	0407_TP242_0.1_200625	2	9	1	1	7
008	0407_TP242_0.5_200625	-	-	1	1	7
009	0407_TP240_0.1_200625	2	9	1	1	7
010	0407_TP240_0.5_200625	2	9	1	1	7
011	0407_TP239_0.1_200625	2	9	1	1	7
012	0407_TP239_0.5_200625	2	9	1	1	7
013	0407_TP238_0.1_200625	2	9	1	1	7
014	0407_TP238_0.5_200625	-	-	1	1	7
015	0407_TP241_0.1_200625	2	9	1	1	7
016	0407_TP241_0.5_200625	2	9	1	1	7
018	0407_QC164_200625	-	-	1	1	7
019	0407_QC165_200625	-	-	1	1	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE208081

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Fibre ID in bulk materials
017	0407_TP241_A01_200625	1

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000683--000685**
Samples	19

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208081 R0**
Date Received	25/6/2020
Date Reported	6/7/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.

Sample #3: Asbestos found as 4x3x2mm cement sheet fragment in >2mm portion.
Sample #7: Asbestos found as 10x3x2mm cement sheet fragments x2 in >2mm portion.
Sample #11: Asbestos found as 2x2x2mm cement sheet fragment in >2mm portion.
Sample #15: Asbestos found as 15x14x3mm cement sheet fragment x3 in >2mm portion.
Asbestos analysed by Approved Identifier Ravee Sivasubramaniam .

SIGNATORIES

[redacted]

Senior Organic Chemist/Metals Chemist | Metals/Inorganics Team Leader | Senior Chemist

[redacted]

Organic Section Head | Hygiene Team Leader

VOC's in Soil [AN433] Tested: 1/7/2020

PARAMETER	UOM	LOR	0407_TP101_0.1_20(625 SOIL - 25/6/2020 SE208081.001	0407_TP101_0.5_20(625 SOIL - 25/6/2020 SE208081.002	0407_TP244_0.1_20(625 SOIL - 25/6/2020 SE208081.003	0407_TP244_0.5_20(625 SOIL - 25/6/2020 SE208081.004	0407_TP243_0.1_20(625 SOIL - 25/6/2020 SE208081.005
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP101_0.1_20(625 SOIL - 25/6/2020 SE208081.001	0407_TP101_0.5_20(625 SOIL - 25/6/2020 SE208081.002	0407_TP244_0.1_20(625 SOIL - 25/6/2020 SE208081.003	0407_TP244_0.5_20(625 SOIL - 25/6/2020 SE208081.004	0407_TP243_0.1_20(625 SOIL - 25/6/2020 SE208081.005
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP243_0.5_20(625 SOIL - 25/6/2020 SE208081.006	0407_TP242_0.1_20(625 SOIL - 25/6/2020 SE208081.007	0407_TP242_0.5_20(625 SOIL - 25/6/2020 SE208081.008	0407_TP240_0.1_20(625 SOIL - 25/6/2020 SE208081.009	0407_TP240_0.5_20(625 SOIL - 25/6/2020 SE208081.010
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP243_0.5_20(625 SOIL - 25/6/2020 SE208081.006	0407_TP242_0.1_20(625 SOIL - 25/6/2020 SE208081.007	0407_TP242_0.5_20(625 SOIL - 25/6/2020 SE208081.008	0407_TP240_0.1_20(625 SOIL - 25/6/2020 SE208081.009	0407_TP240_0.5_20(625 SOIL - 25/6/2020 SE208081.010
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP239_0.1_20(625 SOIL - 25/6/2020 SE208081.011	0407_TP239_0.5_20(625 SOIL - 25/6/2020 SE208081.012	0407_TP238_0.1_20(625 SOIL - 25/6/2020 SE208081.013	0407_TP238_0.5_20(625 SOIL - 25/6/2020 SE208081.014	0407_TP241_0.1_20(625 SOIL - 25/6/2020 SE208081.015
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP239_0.1_20(625 SOIL - 25/6/2020 SE208081.011	0407_TP239_0.5_20(625 SOIL - 25/6/2020 SE208081.012	0407_TP238_0.1_20(625 SOIL - 25/6/2020 SE208081.013	0407_TP238_0.5_20(625 SOIL - 25/6/2020 SE208081.014	0407_TP241_0.1_20(625 SOIL - 25/6/2020 SE208081.015
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP241_0.5_20625 SOIL - 25/6/2020 SE208081.016	0407_QC164_20062 SOIL - 25/6/2020 SE208081.018	0407_QC165_20062 SOIL - 25/6/2020 SE208081.019
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1

VOC's in Soil [AN433] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP241_0.5_20625 SOIL - 25/6/2020 SE208081.016	0407_QC164_20062 SOIL - 25/6/2020 SE208081.018	0407_QC165_20062 SOIL - 25/6/2020 SE208081.019
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 1/7/2020

PARAMETER	UOM	LOR	0407_TP101_0.1_20(625 SOIL - 25/6/2020 SE208081.001	0407_TP101_0.5_20(625 SOIL - 25/6/2020 SE208081.002	0407_TP244_0.1_20(625 SOIL - 25/6/2020 SE208081.003	0407_TP244_0.5_20(625 SOIL - 25/6/2020 SE208081.004	0407_TP243_0.1_20(625 SOIL - 25/6/2020 SE208081.005
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP243_0.5_20(625 SOIL - 25/6/2020 SE208081.006	0407_TP242_0.1_20(625 SOIL - 25/6/2020 SE208081.007	0407_TP242_0.5_20(625 SOIL - 25/6/2020 SE208081.008	0407_TP240_0.1_20(625 SOIL - 25/6/2020 SE208081.009	0407_TP240_0.5_20(625 SOIL - 25/6/2020 SE208081.010
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP239_0.1_20(625 SOIL - 25/6/2020 SE208081.011	0407_TP239_0.5_20(625 SOIL - 25/6/2020 SE208081.012	0407_TP238_0.1_20(625 SOIL - 25/6/2020 SE208081.013	0407_TP238_0.5_20(625 SOIL - 25/6/2020 SE208081.014	0407_TP241_0.1_20(625 SOIL - 25/6/2020 SE208081.015
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP241_0.5_20(625 SOIL - 25/6/2020 SE208081.016	0407_QC164_20062! SOIL - 25/6/2020 SE208081.018	0407_QC165_20062! SOIL - 25/6/2020 SE208081.019
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 1/7/2020

PARAMETER	UOM	LOR	0407_TP101_0.1_20(625 SOIL - 25/6/2020 SE208081.001	0407_TP101_0.5_20(625 SOIL - 25/6/2020 SE208081.002	0407_TP244_0.1_20(625 SOIL - 25/6/2020 SE208081.003	0407_TP244_0.5_20(625 SOIL - 25/6/2020 SE208081.004	0407_TP243_0.1_20(625 SOIL - 25/6/2020 SE208081.005
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	**79**	**49**	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP243_0.5_20(625 SOIL - 25/6/2020 SE208081.006	0407_TP242_0.1_20(625 SOIL - 25/6/2020 SE208081.007	0407_TP242_0.5_20(625 SOIL - 25/6/2020 SE208081.008	0407_TP240_0.1_20(625 SOIL - 25/6/2020 SE208081.009	0407_TP240_0.5_20(625 SOIL - 25/6/2020 SE208081.010
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	**59**	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	**130**	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	**160**	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	**190**	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP239_0.1_20(625 SOIL - 25/6/2020 SE208081.011	0407_TP239_0.5_20(625 SOIL - 25/6/2020 SE208081.012	0407_TP238_0.1_20(625 SOIL - 25/6/2020 SE208081.013	0407_TP238_0.5_20(625 SOIL - 25/6/2020 SE208081.014	0407_TP241_0.1_20(625 SOIL - 25/6/2020 SE208081.015
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	**140**	<45	**53**	<45	<45
TRH C29-C36	mg/kg	45	**100**	<45	**67**	<45	**65**
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	**210**	<90	**100**	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	**240**	<110	**120**	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	**210**	<210	<210	<210	<210

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP241_0.5_20(625 SOIL - 25/6/2020 SE208081.016	0407_QC164_20062! SOIL - 25/6/2020 SE208081.018	0407_QC165_20062! SOIL - 25/6/2020 SE208081.019
TRH C10-C14	mg/kg	20	**23**	<20	<20
TRH C15-C28	mg/kg	45	<45	**49**	<45
TRH C29-C36	mg/kg	45	**86**	**140**	<45
TRH C37-C40	mg/kg	100	<100	<100	<100
TRH >C10-C16	mg/kg	25	**25**	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	**25**	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	**110**	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	**190**	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 1/7/2020

PARAMETER	UOM	LOR	0407_TP101_0.1_20(625 SOIL - 25/6/2020 SE208081.001	0407_TP101_0.5_20(625 SOIL - 25/6/2020 SE208081.002	0407_TP244_0.1_20(625 SOIL - 25/6/2020 SE208081.003	0407_TP244_0.5_20(625 SOIL - 25/6/2020 SE208081.004	0407_TP243_0.1_20(625 SOIL - 25/6/2020 SE208081.005
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	**0.1**	<0.1	**0.1**	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	**0.3**	<0.1	**0.3**	<0.1	**0.2**
Pyrene	mg/kg	0.1	**0.3**	<0.1	**0.3**	<0.1	**0.2**
Benzo(a)anthracene	mg/kg	0.1	**0.2**	<0.1	**0.2**	<0.1	**0.1**
Chrysene	mg/kg	0.1	**0.2**	<0.1	**0.2**	<0.1	**0.1**
Benzo(b&j)fluoranthene	mg/kg	0.1	**0.2**	<0.1	**0.2**	<0.1	**0.1**
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	**0.2**	<0.1	**0.1**
Benzo(a)pyrene	mg/kg	0.1	**0.2**	<0.1	**0.3**	<0.1	**0.2**
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	**0.1**	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	**0.1**	<0.1	**0.1**	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	**0.2**	<0.2	**0.3**	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	**0.3**	<0.3	**0.4**	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	**0.3**	<0.2	**0.4**	<0.2	**0.2**
Total PAH (18)	mg/kg	0.8	**1.7**	<0.8	**2.0**	<0.8	**0.9**
Total PAH (NEPM/WHO 16)	mg/kg	0.8	**1.7**	<0.8	**2.0**	<0.8	**0.9**

PARAMETER	UOM	LOR	0407_TP243_0.5_20(625 SOIL - 25/6/2020 SE208081.006	0407_TP242_0.1_20(625 SOIL - 25/6/2020 SE208081.007	0407_TP242_0.5_20(625 SOIL - 25/6/2020 SE208081.008	0407_TP240_0.1_20(625 SOIL - 25/6/2020 SE208081.009	0407_TP240_0.5_20(625 SOIL - 25/6/2020 SE208081.010
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.2**	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	**0.1**	<0.1	**0.5**	<0.1
Pyrene	mg/kg	0.1	<0.1	**0.1**	<0.1	**0.4**	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.2**	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.2**	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.3**	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.2**	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.3**	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.1**	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.1**	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	**0.4**	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	**0.5**	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	**0.4**	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	**2.6**	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	**2.6**	<0.8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP239_0.1_20(625 SOIL - 25/6/2020 SE208081.011	0407_TP239_0.5_20(625 SOIL - 25/6/2020 SE208081.012	0407_TP238_0.1_20(625 SOIL - 25/6/2020 SE208081.013	0407_TP238_0.5_20(625 SOIL - 25/6/2020 SE208081.014	0407_TP241_0.1_20(625 SOIL - 25/6/2020 SE208081.015
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	0.2	<0.1	0.7	<0.1	0.2
Anthracene	mg/kg	0.1	<0.1	<0.1	0.3	<0.1	<0.1
Fluoranthene	mg/kg	0.1	0.5	<0.1	2.3	<0.1	0.3
Pyrene	mg/kg	0.1	0.5	<0.1	2.7	<0.1	0.4
Benzo(a)anthracene	mg/kg	0.1	0.3	<0.1	1.1	<0.1	0.2
Chrysene	mg/kg	0.1	0.3	<0.1	1.1	<0.1	0.2
Benzo(b&j)fluoranthene	mg/kg	0.1	0.3	<0.1	1.0	<0.1	0.2
Benzo(k)fluoranthene	mg/kg	0.1	0.2	<0.1	1.1	<0.1	0.1
Benzo(a)pyrene	mg/kg	0.1	0.3	<0.1	1.5	<0.1	0.2
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.1	<0.1	0.6	<0.1	0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	0.2	<0.1	0.7	<0.1	0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	0.4	<0.2	1.9	<0.2	0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	0.5	<0.3	2.0	<0.3	0.4
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	0.5	<0.2	1.9	<0.2	0.4
Total PAH (18)	mg/kg	0.8	2.9	<0.8	13	<0.8	2.2
Total PAH (NEPM/WHO 16)	mg/kg	0.8	2.9	<0.8	13	<0.8	2.2

PARAMETER	UOM	LOR	0407_TP241_0.5_20(625 SOIL - 25/6/2020 SE208081.016	0407_QC164_20062 SOIL - 25/6/2020 SE208081.018	0407_QC165_20062 SOIL - 25/6/2020 SE208081.019
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	0.4	<0.1
Pyrene	mg/kg	0.1	<0.1	0.4	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	0.2	<0.1
Chrysene	mg/kg	0.1	<0.1	0.2	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	0.3	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	0.3	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	0.3	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	0.4	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	0.4	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	2.3	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	2.3	<0.8

Speciated Phenols in Soil [AN420] Tested: 1/7/2020

PARAMETER	UOM	LOR	0407_TP101_0.1_20(625 SOIL - 25/6/2020 SE208081.001	0407_TP101_0.5_20(625 SOIL - 25/6/2020 SE208081.002	0407_TP244_0.1_20(625 SOIL - 25/6/2020 SE208081.003	0407_TP244_0.5_20(625 SOIL - 25/6/2020 SE208081.004	0407_TP243_0.1_20(625 SOIL - 25/6/2020 SE208081.005
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_TP243_0.5_20(625 SOIL - 25/6/2020 SE208081.006	0407_TP242_0.1_20(625 SOIL - 25/6/2020 SE208081.007	0407_TP242_0.5_20(625 SOIL - 25/6/2020 SE208081.008	0407_TP240_0.1_20(625 SOIL - 25/6/2020 SE208081.009	0407_TP240_0.5_20(625 SOIL - 25/6/2020 SE208081.010
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

Speciated Phenols in Soil [AN420] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP239_0.1_20(625 SOIL - 25/6/2020 SE208081.011	0407_TP239_0.5_20(625 SOIL - 25/6/2020 SE208081.012	0407_TP238_0.1_20(625 SOIL - 25/6/2020 SE208081.013	0407_TP238_0.5_20(625 SOIL - 25/6/2020 SE208081.014	0407_TP241_0.1_20(625 SOIL - 25/6/2020 SE208081.015
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_TP241_0.5_20(625 SOIL - 25/6/2020 SE208081.016	0407_QC164_20062 SOIL - 25/6/2020 SE208081.018	0407_QC165_20062 SOIL - 25/6/2020 SE208081.019
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2

OC Pesticides in Soil [AN420] Tested: 1/7/2020

PARAMETER	UOM	LOR	0407_TP101_0.1_20(625 SOIL - 25/6/2020 SE208081.001	0407_TP101_0.5_20(625 SOIL - 25/6/2020 SE208081.002	0407_TP244_0.1_20(625 SOIL - 25/6/2020 SE208081.003	0407_TP244_0.5_20(625 SOIL - 25/6/2020 SE208081.004	0407_TP243_0.1_20(625 SOIL - 25/6/2020 SE208081.005
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP243_0.5_20(625 SOIL - 25/6/2020 SE208081.006	0407_TP242_0.1_20(625 SOIL - 25/6/2020 SE208081.007	0407_TP242_0.5_20(625 SOIL - 25/6/2020 SE208081.008	0407_TP240_0.1_20(625 SOIL - 25/6/2020 SE208081.009	0407_TP240_0.5_20(625 SOIL - 25/6/2020 SE208081.010
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP239_0.1_20(625 SOIL - 25/6/2020 SE208081.011	0407_TP239_0.5_20(625 SOIL - 25/6/2020 SE208081.012	0407_TP238_0.1_20(625 SOIL - 25/6/2020 SE208081.013	0407_TP238_0.5_20(625 SOIL - 25/6/2020 SE208081.014	0407_TP241_0.1_20(625 SOIL - 25/6/2020 SE208081.015
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP241_0.5_20625 SOIL - 25/6/2020 SE208081.016	0407_QC164_20062 SOIL - 25/6/2020 SE208081.018	0407_QC165_20062 SOIL - 25/6/2020 SE208081.019
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1

OP Pesticides in Soil [AN420] Tested: 1/7/2020

PARAMETER	UOM	LOR	0407_TP101_0.1_20(625 SOIL - 25/6/2020 SE208081.001	0407_TP101_0.5_20(625 SOIL - 25/6/2020 SE208081.002	0407_TP244_0.1_20(625 SOIL - 25/6/2020 SE208081.003	0407_TP244_0.5_20(625 SOIL - 25/6/2020 SE208081.004	0407_TP243_0.1_20(625 SOIL - 25/6/2020 SE208081.005
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP243_0.5_20(625 SOIL - 25/6/2020 SE208081.006	0407_TP242_0.1_20(625 SOIL - 25/6/2020 SE208081.007	0407_TP242_0.5_20(625 SOIL - 25/6/2020 SE208081.008	0407_TP240_0.1_20(625 SOIL - 25/6/2020 SE208081.009	0407_TP240_0.5_20(625 SOIL - 25/6/2020 SE208081.010
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP239_0.1_20(625 SOIL - 25/6/2020 SE208081.011	0407_TP239_0.5_20(625 SOIL - 25/6/2020 SE208081.012	0407_TP238_0.1_20(625 SOIL - 25/6/2020 SE208081.013	0407_TP238_0.5_20(625 SOIL - 25/6/2020 SE208081.014	0407_TP241_0.1_20(625 SOIL - 25/6/2020 SE208081.015
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

OP Pesticides in Soil [AN420] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP241_0.5_20625 SOIL - 25/6/2020 SE208081.016	0407_QC164_20062 SOIL - 25/6/2020 SE208081.018	0407_QC165_20062 SOIL - 25/6/2020 SE208081.019
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7

PCBs in Soil [AN420] Tested: 1/7/2020

PARAMETER	UOM	LOR	0407_TP101_0.1_20(625 SOIL - 25/6/2020 SE208081.001	0407_TP101_0.5_20(625 SOIL - 25/6/2020 SE208081.002	0407_TP244_0.1_20(625 SOIL - 25/6/2020 SE208081.003	0407_TP244_0.5_20(625 SOIL - 25/6/2020 SE208081.004	0407_TP243_0.1_20(625 SOIL - 25/6/2020 SE208081.005
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP243_0.5_20(625 SOIL - 25/6/2020 SE208081.006	0407_TP242_0.1_20(625 SOIL - 25/6/2020 SE208081.007	0407_TP242_0.5_20(625 SOIL - 25/6/2020 SE208081.008	0407_TP240_0.1_20(625 SOIL - 25/6/2020 SE208081.009	0407_TP240_0.5_20(625 SOIL - 25/6/2020 SE208081.010
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP239_0.1_20(625 SOIL - 25/6/2020 SE208081.011	0407_TP239_0.5_20(625 SOIL - 25/6/2020 SE208081.012	0407_TP238_0.1_20(625 SOIL - 25/6/2020 SE208081.013	0407_TP238_0.5_20(625 SOIL - 25/6/2020 SE208081.014	0407_TP241_0.1_20(625 SOIL - 25/6/2020 SE208081.015
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PCBs in Soil [AN420] Tested: 1/7/2020 (continued)

PARAMETER	UOM	LOR	0407_TP241_0.5_20625 SOIL - 25/6/2020 SE208081.016	0407_QC164_20062 SOIL - 25/6/2020 SE208081.018	0407_QC165_20062 SOIL - 25/6/2020 SE208081.019
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 1/7/2020

PARAMETER	UOM	LOR	0407_TP101_0.1_20(625 SOIL - 25/6/2020 SE208081.001	0407_TP101_0.5_20(625 SOIL - 25/6/2020 SE208081.002	0407_TP244_0.1_20(625 SOIL - 25/6/2020 SE208081.003	0407_TP244_0.5_20(625 SOIL - 25/6/2020 SE208081.004	0407_TP243_0.1_20(625 SOIL - 25/6/2020 SE208081.005
Arsenic, As	mg/kg	1	6	1	6	<1	8
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	0.3	<0.3	0.4
Chromium, Cr	mg/kg	0.5	17	2.6	46	2.0	19
Copper, Cu	mg/kg	0.5	57	1.3	67	0.8	95
Lead, Pb	mg/kg	1	55	1	130	1	120
Nickel, Ni	mg/kg	0.5	9.4	1.2	14	0.8	12
Zinc, Zn	mg/kg	2	170	6.2	340	2.0	300

PARAMETER	UOM	LOR	0407_TP243_0.5_20(625 SOIL - 25/6/2020 SE208081.006	0407_TP242_0.1_20(625 SOIL - 25/6/2020 SE208081.007	0407_TP242_0.5_20(625 SOIL - 25/6/2020 SE208081.008	0407_TP240_0.1_20(625 SOIL - 25/6/2020 SE208081.009	0407_TP240_0.5_20(625 SOIL - 25/6/2020 SE208081.010
Arsenic, As	mg/kg	1	<1	6	<1	8	<1
Cadmium, Cd	mg/kg	0.3	<0.3	0.6	<0.3	0.5	<0.3
Chromium, Cr	mg/kg	0.5	<0.5	21	<0.5	22	<0.5
Copper, Cu	mg/kg	0.5	1.2	74	<0.5	52	1.6
Lead, Pb	mg/kg	1	<1	190	<1	120	4
Nickel, Ni	mg/kg	0.5	<0.5	15	<0.5	10	<0.5
Zinc, Zn	mg/kg	2	<2.0	500	2.8	280	8.0

PARAMETER	UOM	LOR	0407_TP239_0.1_20(625 SOIL - 25/6/2020 SE208081.011	0407_TP239_0.5_20(625 SOIL - 25/6/2020 SE208081.012	0407_TP238_0.1_20(625 SOIL - 25/6/2020 SE208081.013	0407_TP238_0.5_20(625 SOIL - 25/6/2020 SE208081.014	0407_TP241_0.1_20(625 SOIL - 25/6/2020 SE208081.015
Arsenic, As	mg/kg	1	6	<1	14	<1	6
Cadmium, Cd	mg/kg	0.3	0.4	<0.3	0.5	<0.3	0.4
Chromium, Cr	mg/kg	0.5	33	<0.5	18	<0.5	21
Copper, Cu	mg/kg	0.5	62	1.4	61	<0.5	72
Lead, Pb	mg/kg	1	120	2	140	<1	130
Nickel, Ni	mg/kg	0.5	12	<0.5	11	<0.5	13
Zinc, Zn	mg/kg	2	290	13	380	2.4	340

PARAMETER	UOM	LOR	0407_TP241_0.5_20(625 SOIL - 25/6/2020 SE208081.016	0407_QC164_20062(SOIL - 25/6/2020 SE208081.018	0407_QC165_20062(SOIL - 25/6/2020 SE208081.019
Arsenic, As	mg/kg	1	3	5	1
Cadmium, Cd	mg/kg	0.3	1.6	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	34	20	2.1
Copper, Cu	mg/kg	0.5	260	45	1.3
Lead, Pb	mg/kg	1	1100	91	1
Nickel, Ni	mg/kg	0.5	16	16	1.0
Zinc, Zn	mg/kg	2	3500	230	2.4

Mercury in Soil [AN312] Tested: 1/7/2020

PARAMETER	UOM	LOR	0407_TP101_0.1_20(625 SOIL - 25/6/2020 SE208081.001	0407_TP101_0.5_20(625 SOIL - 25/6/2020 SE208081.002	0407_TP244_0.1_20(625 SOIL - 25/6/2020 SE208081.003	0407_TP244_0.5_20(625 SOIL - 25/6/2020 SE208081.004	0407_TP243_0.1_20(625 SOIL - 25/6/2020 SE208081.005
Mercury	mg/kg	0.05	**0.10**	<0.05	**0.11**	<0.05	**0.10**

PARAMETER	UOM	LOR	0407_TP243_0.5_20(625 SOIL - 25/6/2020 SE208081.006	0407_TP242_0.1_20(625 SOIL - 25/6/2020 SE208081.007	0407_TP242_0.5_20(625 SOIL - 25/6/2020 SE208081.008	0407_TP240_0.1_20(625 SOIL - 25/6/2020 SE208081.009	0407_TP240_0.5_20(625 SOIL - 25/6/2020 SE208081.010
Mercury	mg/kg	0.05	<0.05	**0.08**	<0.05	**0.15**	<0.05

PARAMETER	UOM	LOR	0407_TP239_0.1_20(625 SOIL - 25/6/2020 SE208081.011	0407_TP239_0.5_20(625 SOIL - 25/6/2020 SE208081.012	0407_TP238_0.1_20(625 SOIL - 25/6/2020 SE208081.013	0407_TP238_0.5_20(625 SOIL - 25/6/2020 SE208081.014	0407_TP241_0.1_20(625 SOIL - 25/6/2020 SE208081.015
Mercury	mg/kg	0.05	**0.14**	<0.05	**0.10**	<0.05	**0.13**

PARAMETER	UOM	LOR	0407_TP241_0.5_20(625 SOIL - 25/6/2020 SE208081.016	0407_QC164_20062! SOIL - 25/6/2020 SE208081.018	0407_QC165_20062! SOIL - 25/6/2020 SE208081.019
Mercury	mg/kg	0.05	**0.10**	**0.11**	<0.05

Moisture Content [AN002] Tested: 1/7/2020

PARAMETER	UOM	LOR	0407_TP101_0.1_20(625 SOIL - 25/6/2020 SE208081.001	0407_TP101_0.5_20(625 SOIL - 25/6/2020 SE208081.002	0407_TP244_0.1_20(625 SOIL - 25/6/2020 SE208081.003	0407_TP244_0.5_20(625 SOIL - 25/6/2020 SE208081.004	0407_TP243_0.1_20(625 SOIL - 25/6/2020 SE208081.005
% Moisture	%w/w	1	20.5	3.4	17.9	3.7	24.1

PARAMETER	UOM	LOR	0407_TP243_0.5_20(625 SOIL - 25/6/2020 SE208081.006	0407_TP242_0.1_20(625 SOIL - 25/6/2020 SE208081.007	0407_TP242_0.5_20(625 SOIL - 25/6/2020 SE208081.008	0407_TP240_0.1_20(625 SOIL - 25/6/2020 SE208081.009	0407_TP240_0.5_20(625 SOIL - 25/6/2020 SE208081.010
% Moisture	%w/w	1	3.2	27.3	19.5	18.6	4.2

PARAMETER	UOM	LOR	0407_TP239_0.1_20(625 SOIL - 25/6/2020 SE208081.011	0407_TP239_0.5_20(625 SOIL - 25/6/2020 SE208081.012	0407_TP238_0.1_20(625 SOIL - 25/6/2020 SE208081.013	0407_TP238_0.5_20(625 SOIL - 25/6/2020 SE208081.014	0407_TP241_0.1_20(625 SOIL - 25/6/2020 SE208081.015
% Moisture	%w/w	1	15.8	3.9	19.1	3.5	26.3

PARAMETER	UOM	LOR	0407_TP241_0.5_20(625 SOIL - 25/6/2020 SE208081.016	0407_QC164_20062! SOIL - 25/6/2020 SE208081.018	0407_QC165_20062! SOIL - 25/6/2020 SE208081.019
% Moisture	%w/w	1	50.6	25.1	3.8

Fibre Identification in soil [AN602] Tested: 2/7/2020

PARAMETER	UOM	LOR	0407_TP101_0.1_20(625 SOIL - 25/6/2020 SE208081.001	0407_TP244_0.1_20(625 SOIL - 25/6/2020 SE208081.003	0407_TP243_0.1_20(625 SOIL - 25/6/2020 SE208081.005	0407_TP242_0.1_20(625 SOIL - 25/6/2020 SE208081.007	0407_TP240_0.1_20(625 SOIL - 25/6/2020 SE208081.009
Asbestos Detected	No unit	-	No	Yes	No	Yes	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	0407_TP240_0.5_20(625 SOIL - 25/6/2020 SE208081.010	0407_TP239_0.1_20(625 SOIL - 25/6/2020 SE208081.011	0407_TP239_0.5_20(625 SOIL - 25/6/2020 SE208081.012	0407_TP238_0.1_20(625 SOIL - 25/6/2020 SE208081.013	0407_TP241_0.1_20(625 SOIL - 25/6/2020 SE208081.015
Asbestos Detected	No unit	-	No	Yes	No	No	Yes
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	**>0.01**

PARAMETER	UOM	LOR	0407_TP241_0.5_20(625 SOIL - 25/6/2020 SE208081.016
Asbestos Detected	No unit	-	No
Estimated Fibres*	%w/w	0.01	<0.01

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 2/7/2020

PARAMETER	UOM	LOR	0407_TP101_0.1_20(625 SOIL - 25/6/2020 SE208081.001	0407_TP244_0.1_20(625 SOIL - 25/6/2020 SE208081.003	0407_TP243_0.1_20(625 SOIL - 25/6/2020 SE208081.005	0407_TP242_0.1_20(625 SOIL - 25/6/2020 SE208081.007	0407_TP240_0.1_20(625 SOIL - 25/6/2020 SE208081.009
Total Sample Weight*	g	1	**433**	**437**	**385**	**391**	**418**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	**0.00794**	<0.00001	**0.0363**	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	**0.002**	<0.001	**0.009**	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	**0.002**	<0.001	**0.009**	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP240_0.5_20(625 SOIL - 25/6/2020 SE208081.010	0407_TP239_0.1_20(625 SOIL - 25/6/2020 SE208081.011	0407_TP239_0.5_20(625 SOIL - 25/6/2020 SE208081.012	0407_TP238_0.1_20(625 SOIL - 25/6/2020 SE208081.013	0407_TP241_0.1_20(625 SOIL - 25/6/2020 SE208081.015
Total Sample Weight*	g	1	**756**	**454**	**774**	**426**	**391**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	**0.00415**	<0.00001	<0.00001	**0.287**
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	**0.073**
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	**0.073**
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP241_0.5_20(625 SOIL - 25/6/2020 SE208081.016
Total Sample Weight*	g	1	**611**
Bonded ACM in >7mm Sample*	g	0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001
Fibre Type*	No unit	-	-

Fibre ID in bulk materials [AN602] Tested: 3/7/2020

PARAMETER	UOM	LOR	0407_TP241_A01_20625 MATERIAL - 25/6/2020 SE208081.017
Asbestos Detected	No unit	-	Yes

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid, mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents .
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples, Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.
AN605	This technique gravimetrically determines the mass of Bonded Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight. Any fibrous asbestos (FA) found in this fraction will be added to the 2-7mm fraction and its mass recorded there.

AN605	This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free/respirable fibres which are only observed by standard trace analysis as per AN602.
AN605	Bonded asbestos containing material (Bonded ACM) comprises asbestos-containing-material which is sound in condition. Fibrous asbestos (FA) comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material. Asbestos fines (AF) includes free fibres, small fibre bundles and also small fragments of bonded ACM that passes through a 7mm sieve - which implies that the bonded ACM fragments have a substantial degree of damage which increases the potential for fibre release.
AN-605	Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009 and NEPM 1999 (2013) schedule B1 section 4..

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000683--000685**
Samples	12

LABORATORY DETAILS

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Address	Unit 16, 33 Maddox St Alexandria NSW 2015
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Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208081 R0**
Date Received	25 Jun 2020
Date Reported	06 Jul 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.

Sample #3: Asbestos found as 4x3x2mm cement sheet fragment in >2mm portion.
Sample #7: Asbestos found as 10x3x2mm cement sheet fragments x2 in >2mm portion.
Sample #11: Asbestos found as 2x2x2mm cement sheet fragment in >2mm portion.
Sample #15: Asbestos found as 15x14x3mm cement sheet fragment x3 in >2mm portion.
Asbestos analysed by Approved Identifier Ravee Sivasubramaniam .

SIGNATORIES

[redacted]

Senior Organic Chemist/Metals Chemis Senior Chemist Organic Section Head

[redacted]

Hygiene Team Leader

RESULTS

Fibre Identification in soil — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE208081.001	0407_TP101_0.1 _200625	Soil	433g Clay,Sand,Soil, Rocks,Plant Matter	25 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208081.003	0407_TP244_0.1 _200625	Soil	437g Clay,Sand,Soil, Plant Matter	25 Jun 2020	Chrysotile Asbestos Found Synthetic Mineral Fibres Detected Organic Fibres Detected	<0.01
SE208081.005	0407_TP243_0.1 _200625	Soil	385g Clay,Sand,Soil, Rocks,Plant Matter	25 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208081.007	0407_TP242_0.1 _200625	Soil	391g Clay,Sand,Soil, Rocks,Plant Matter	25 Jun 2020	Chrysotile Asbestos Found Synthetic Mineral Fibres Detected Organic Fibres Detected	<0.01
SE208081.009	0407_TP240_0.1 _200625	Soil	418g Clay,Sand,Soil, Rocks,Plant Matter	25 Jun 2020	No Asbestos Found Synthetic Mineral Fibres Detected Organic Fibres Detected	<0.01
SE208081.010	0407_TP240_0.5 _200625	Soil	756g Sand	25 Jun 2020	No Asbestos Found	<0.01
SE208081.011	0407_TP239_0.1 _200625	Soil	454g Clay,Sand,Soil, Rocks,Plant Matter	25 Jun 2020	Chrysotile Asbestos Found Synthetic Mineral Fibres Detected Organic Fibres Detected	<0.01
SE208081.012	0407_TP239_0.5 _200625	Soil	774g Sand	25 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE208081.013	0407_TP238_0.1 _200625	Soil	426g Clay,Sand,Soil, Rocks,Plant Matter	25 Jun 2020	No Asbestos Found Synthetic Mineral Fibres Detected Organic Fibres Detected	<0.01
SE208081.015	0407_TP241_0.1 _200625	Soil	391g Clay,Sand,Soil, Rocks,Plant Matter	25 Jun 2020	Chrysotile Asbestos Found Synthetic Mineral Fibres Detected Organic Fibres Detected	>0.01
SE208081.016	0407_TP241_0.5 _200625	Soil	611g Sand,Plant Matter	25 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01

ANALYTICAL REPORT

SE208081 R0

RESULTS

Fibre ID in bulk materials — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE208081.017	0407_TP241_A01_200625	Other	70x50x6mm Cement Sheet Fragment	25 Jun 2020	Chrysotile Asbestos Detected	

METHOD SUMMARY

SE208081 R0

METHOD	METHODOLOGY SUMMARY
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples , Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable ’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.

FOOTNOTES

Amosite	-	Brown Asbestos	NA	-	Not Analysed
Chrysotile	-	White Asbestos	LNR	-	Listed, Not Required
Crocidolite	-	Blue Asbestos	*	-	NATA accreditation does not cover the performance of this service .
Amphiboles	-	Amosite and/or Crocidolite	**	-	Indicative data, theoretical holding time exceeded.

(In reference to soil samples only) This report does not comply with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment and Remediation and Management of Asbestos Contaminated sites in Western Australia - May 2009.

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.

Where reported: 'Asbestos Detected': Asbestos detected by polarised light microscopy, including dispersion staining.
Where reported: 'No Asbestos Found': No Asbestos Found by polarised light microscopy , including dispersion staining.
Where reported: 'UMF Detected': Mineral fibres of unknown type detected by polarised light microscopy, including dispersion staining. Confirmation by another independent analytical technique may be necessary.

Even after disintegration it can be very difficult, or impossible, to detect the presence of asbestos in some asbestos -containing bulk materials using polarised light microscopy. This is due to the low grade or small length or diameter of asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety .

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STATEMENT OF QA/QC PERFORMANCE

SE208081 R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000683--000685**
Samples	19

LABORATORY DETAILS

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Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208081 R0**
Date Received	25 Jun 2020
Date Reported	06 Jul 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Matrix Spike	OP Pesticides in Soil	1 item
	TRH (Total Recoverable Hydrocarbons) in Soil	1 item

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	18 Soil, 1 Material
Date documentation received	25/6/2020	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	4.7°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE208081 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Fibre ID in bulk materials

Method: ME-(AU)-[ENV]AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP241_A01_200625	SE208081.017	LB203364	25 Jun 2020	25 Jun 2020	25 Jun 2021	03 Jul 2020	25 Jun 2021	03 Jul 2020

Fibre Identification in soil

Method: ME-(AU)-[ENV]AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP101_0.1_200625	SE208081.001	LB203336	25 Jun 2020	25 Jun 2020	25 Jun 2021	02 Jul 2020	25 Jun 2021	03 Jul 2020
0407_TP244_0.1_200625	SE208081.003	LB203336	25 Jun 2020	25 Jun 2020	25 Jun 2021	02 Jul 2020	25 Jun 2021	03 Jul 2020
0407_TP243_0.1_200625	SE208081.005	LB203336	25 Jun 2020	25 Jun 2020	25 Jun 2021	02 Jul 2020	25 Jun 2021	03 Jul 2020
0407_TP242_0.1_200625	SE208081.007	LB203336	25 Jun 2020	25 Jun 2020	25 Jun 2021	02 Jul 2020	25 Jun 2021	03 Jul 2020
0407_TP240_0.1_200625	SE208081.009	LB203336	25 Jun 2020	25 Jun 2020	25 Jun 2021	02 Jul 2020	25 Jun 2021	03 Jul 2020
0407_TP240_0.5_200625	SE208081.010	LB203336	25 Jun 2020	25 Jun 2020	25 Jun 2021	02 Jul 2020	25 Jun 2021	03 Jul 2020
0407_TP239_0.1_200625	SE208081.011	LB203336	25 Jun 2020	25 Jun 2020	25 Jun 2021	02 Jul 2020	25 Jun 2021	03 Jul 2020
0407_TP239_0.5_200625	SE208081.012	LB203336	25 Jun 2020	25 Jun 2020	25 Jun 2021	02 Jul 2020	25 Jun 2021	03 Jul 2020
0407_TP238_0.1_200625	SE208081.013	LB203336	25 Jun 2020	25 Jun 2020	25 Jun 2021	02 Jul 2020	25 Jun 2021	03 Jul 2020
0407_TP241_0.1_200625	SE208081.015	LB203336	25 Jun 2020	25 Jun 2020	25 Jun 2021	02 Jul 2020	25 Jun 2021	03 Jul 2020
0407_TP241_0.5_200625	SE208081.016	LB203336	25 Jun 2020	25 Jun 2020	25 Jun 2021	02 Jul 2020	25 Jun 2021	03 Jul 2020

Gravimetric Determination of Asbestos in Soil

Method: ME-(AU)-[ENV]AN605

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP101_0.1_200625	SE208081.001	LB203336	25 Jun 2020	25 Jun 2020	22 Dec 2020	02 Jul 2020	22 Dec 2020	03 Jul 2020
0407_TP244_0.1_200625	SE208081.003	LB203336	25 Jun 2020	25 Jun 2020	22 Dec 2020	02 Jul 2020	22 Dec 2020	03 Jul 2020
0407_TP243_0.1_200625	SE208081.005	LB203336	25 Jun 2020	25 Jun 2020	22 Dec 2020	02 Jul 2020	22 Dec 2020	03 Jul 2020
0407_TP242_0.1_200625	SE208081.007	LB203336	25 Jun 2020	25 Jun 2020	22 Dec 2020	02 Jul 2020	22 Dec 2020	03 Jul 2020
0407_TP240_0.1_200625	SE208081.009	LB203336	25 Jun 2020	25 Jun 2020	22 Dec 2020	02 Jul 2020	22 Dec 2020	03 Jul 2020
0407_TP240_0.5_200625	SE208081.010	LB203336	25 Jun 2020	25 Jun 2020	22 Dec 2020	02 Jul 2020	22 Dec 2020	03 Jul 2020
0407_TP239_0.1_200625	SE208081.011	LB203336	25 Jun 2020	25 Jun 2020	22 Dec 2020	02 Jul 2020	22 Dec 2020	03 Jul 2020
0407_TP239_0.5_200625	SE208081.012	LB203336	25 Jun 2020	25 Jun 2020	22 Dec 2020	02 Jul 2020	22 Dec 2020	03 Jul 2020
0407_TP238_0.1_200625	SE208081.013	LB203336	25 Jun 2020	25 Jun 2020	22 Dec 2020	02 Jul 2020	22 Dec 2020	03 Jul 2020
0407_TP241_0.1_200625	SE208081.015	LB203336	25 Jun 2020	25 Jun 2020	22 Dec 2020	02 Jul 2020	22 Dec 2020	03 Jul 2020
0407_TP241_0.5_200625	SE208081.016	LB203336	25 Jun 2020	25 Jun 2020	22 Dec 2020	02 Jul 2020	22 Dec 2020	03 Jul 2020

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP101_0.1_200625	SE208081.001	LB203271	25 Jun 2020	25 Jun 2020	23 Jul 2020	01 Jul 2020	23 Jul 2020	03 Jul 2020
0407_TP101_0.5_200625	SE208081.002	LB203271	25 Jun 2020	25 Jun 2020	23 Jul 2020	01 Jul 2020	23 Jul 2020	03 Jul 2020
0407_TP244_0.1_200625	SE208081.003	LB203271	25 Jun 2020	25 Jun 2020	23 Jul 2020	01 Jul 2020	23 Jul 2020	03 Jul 2020
0407_TP244_0.5_200625	SE208081.004	LB203271	25 Jun 2020	25 Jun 2020	23 Jul 2020	01 Jul 2020	23 Jul 2020	03 Jul 2020
0407_TP243_0.1_200625	SE208081.005	LB203271	25 Jun 2020	25 Jun 2020	23 Jul 2020	01 Jul 2020	23 Jul 2020	03 Jul 2020
0407_TP243_0.5_200625	SE208081.006	LB203271	25 Jun 2020	25 Jun 2020	23 Jul 2020	01 Jul 2020	23 Jul 2020	03 Jul 2020
0407_TP242_0.1_200625	SE208081.007	LB203271	25 Jun 2020	25 Jun 2020	23 Jul 2020	01 Jul 2020	23 Jul 2020	03 Jul 2020
0407_TP242_0.5_200625	SE208081.008	LB203271	25 Jun 2020	25 Jun 2020	23 Jul 2020	01 Jul 2020	23 Jul 2020	03 Jul 2020
0407_TP240_0.1_200625	SE208081.009	LB203271	25 Jun 2020	25 Jun 2020	23 Jul 2020	01 Jul 2020	23 Jul 2020	03 Jul 2020
0407_TP240_0.5_200625	SE208081.010	LB203271	25 Jun 2020	25 Jun 2020	23 Jul 2020	01 Jul 2020	23 Jul 2020	03 Jul 2020
0407_TP239_0.1_200625	SE208081.011	LB203271	25 Jun 2020	25 Jun 2020	23 Jul 2020	01 Jul 2020	23 Jul 2020	03 Jul 2020
0407_TP239_0.5_200625	SE208081.012	LB203271	25 Jun 2020	25 Jun 2020	23 Jul 2020	01 Jul 2020	23 Jul 2020	03 Jul 2020
0407_TP238_0.1_200625	SE208081.013	LB203271	25 Jun 2020	25 Jun 2020	23 Jul 2020	01 Jul 2020	23 Jul 2020	03 Jul 2020
0407_TP238_0.5_200625	SE208081.014	LB203271	25 Jun 2020	25 Jun 2020	23 Jul 2020	01 Jul 2020	23 Jul 2020	03 Jul 2020
0407_TP241_0.1_200625	SE208081.015	LB203271	25 Jun 2020	25 Jun 2020	23 Jul 2020	01 Jul 2020	23 Jul 2020	03 Jul 2020
0407_TP241_0.5_200625	SE208081.016	LB203271	25 Jun 2020	25 Jun 2020	23 Jul 2020	01 Jul 2020	23 Jul 2020	03 Jul 2020
0407_QC164_200625	SE208081.018	LB203271	25 Jun 2020	25 Jun 2020	23 Jul 2020	01 Jul 2020	23 Jul 2020	03 Jul 2020
0407_QC165_200625	SE208081.019	LB203271	25 Jun 2020	25 Jun 2020	23 Jul 2020	01 Jul 2020	23 Jul 2020	03 Jul 2020

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP101_0.1_200625	SE208081.001	LB203285	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	06 Jul 2020	03 Jul 2020
0407_TP101_0.5_200625	SE208081.002	LB203285	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	06 Jul 2020	03 Jul 2020
0407_TP244_0.1_200625	SE208081.003	LB203285	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	06 Jul 2020	03 Jul 2020
0407_TP244_0.5_200625	SE208081.004	LB203285	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	06 Jul 2020	03 Jul 2020
0407_TP243_0.1_200625	SE208081.005	LB203285	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	06 Jul 2020	03 Jul 2020
0407_TP243_0.5_200625	SE208081.006	LB203285	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	06 Jul 2020	03 Jul 2020
0407_TP242_0.1_200625	SE208081.007	LB203285	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	06 Jul 2020	03 Jul 2020
0407_TP242_0.5_200625	SE208081.008	LB203285	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	06 Jul 2020	03 Jul 2020

HOLDING TIME SUMMARY

SE208081 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Moisture Content (continued)

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP240_0.1_200625	SE208081.009	LB203285	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	06 Jul 2020	03 Jul 2020
0407_TP240_0.5_200625	SE208081.010	LB203285	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	06 Jul 2020	03 Jul 2020
0407_TP239_0.1_200625	SE208081.011	LB203285	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	06 Jul 2020	03 Jul 2020
0407_TP239_0.5_200625	SE208081.012	LB203285	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	06 Jul 2020	03 Jul 2020
0407_TP238_0.1_200625	SE208081.013	LB203285	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	06 Jul 2020	03 Jul 2020
0407_TP238_0.5_200625	SE208081.014	LB203285	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	06 Jul 2020	03 Jul 2020
0407_TP241_0.1_200625	SE208081.015	LB203285	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	06 Jul 2020	03 Jul 2020
0407_TP241_0.5_200625	SE208081.016	LB203285	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	06 Jul 2020	03 Jul 2020
0407_QC164_200625	SE208081.018	LB203285	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	06 Jul 2020	03 Jul 2020
0407_QC165_200625	SE208081.019	LB203285	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	06 Jul 2020	03 Jul 2020

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP101_0.1_200625	SE208081.001	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	04 Jul 2020
0407_TP101_0.5_200625	SE208081.002	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	04 Jul 2020
0407_TP244_0.1_200625	SE208081.003	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	04 Jul 2020
0407_TP244_0.5_200625	SE208081.004	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	04 Jul 2020
0407_TP243_0.1_200625	SE208081.005	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	04 Jul 2020
0407_TP243_0.5_200625	SE208081.006	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	04 Jul 2020
0407_TP242_0.1_200625	SE208081.007	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	04 Jul 2020
0407_TP242_0.5_200625	SE208081.008	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	04 Jul 2020
0407_TP240_0.1_200625	SE208081.009	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	04 Jul 2020
0407_TP240_0.5_200625	SE208081.010	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	04 Jul 2020
0407_TP239_0.1_200625	SE208081.011	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	04 Jul 2020
0407_TP239_0.5_200625	SE208081.012	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	04 Jul 2020
0407_TP238_0.1_200625	SE208081.013	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	04 Jul 2020
0407_TP238_0.5_200625	SE208081.014	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	04 Jul 2020
0407_TP241_0.1_200625	SE208081.015	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	04 Jul 2020
0407_TP241_0.5_200625	SE208081.016	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	04 Jul 2020
0407_QC164_200625	SE208081.018	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	04 Jul 2020
0407_QC165_200625	SE208081.019	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	04 Jul 2020

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP101_0.1_200625	SE208081.001	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP101_0.5_200625	SE208081.002	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP244_0.1_200625	SE208081.003	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP244_0.5_200625	SE208081.004	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP243_0.1_200625	SE208081.005	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP243_0.5_200625	SE208081.006	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP242_0.1_200625	SE208081.007	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP242_0.5_200625	SE208081.008	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP240_0.1_200625	SE208081.009	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP240_0.5_200625	SE208081.010	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP239_0.1_200625	SE208081.011	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP239_0.5_200625	SE208081.012	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP238_0.1_200625	SE208081.013	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP238_0.5_200625	SE208081.014	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP241_0.1_200625	SE208081.015	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP241_0.5_200625	SE208081.016	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_QC164_200625	SE208081.018	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_QC165_200625	SE208081.019	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP101_0.1_200625	SE208081.001	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP101_0.5_200625	SE208081.002	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP244_0.1_200625	SE208081.003	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP244_0.5_200625	SE208081.004	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP243_0.1_200625	SE208081.005	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP243_0.5_200625	SE208081.006	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP242_0.1_200625	SE208081.007	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP242_0.5_200625	SE208081.008	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP240_0.1_200625	SE208081.009	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP240_0.5_200625	SE208081.010	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP239_0.1_200625	SE208081.011	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP239_0.5_200625	SE208081.012	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP238_0.1_200625	SE208081.013	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP238_0.5_200625	SE208081.014	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP241_0.1_200625	SE208081.015	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP241_0.5_200625	SE208081.016	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_QC164_200625	SE208081.018	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_QC165_200625	SE208081.019	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP101_0.1_200625	SE208081.001	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	04 Jul 2020
0407_TP101_0.5_200625	SE208081.002	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	04 Jul 2020
0407_TP244_0.1_200625	SE208081.003	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	04 Jul 2020
0407_TP244_0.5_200625	SE208081.004	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	04 Jul 2020
0407_TP243_0.1_200625	SE208081.005	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	04 Jul 2020
0407_TP243_0.5_200625	SE208081.006	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	04 Jul 2020
0407_TP242_0.1_200625	SE208081.007	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	04 Jul 2020
0407_TP242_0.5_200625	SE208081.008	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	04 Jul 2020
0407_TP240_0.1_200625	SE208081.009	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	04 Jul 2020
0407_TP240_0.5_200625	SE208081.010	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	04 Jul 2020
0407_TP239_0.1_200625	SE208081.011	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	04 Jul 2020
0407_TP239_0.5_200625	SE208081.012	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	04 Jul 2020
0407_TP238_0.1_200625	SE208081.013	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	04 Jul 2020
0407_TP238_0.5_200625	SE208081.014	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	04 Jul 2020
0407_TP241_0.1_200625	SE208081.015	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	04 Jul 2020
0407_TP241_0.5_200625	SE208081.016	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	04 Jul 2020
0407_QC164_200625	SE208081.018	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	04 Jul 2020
0407_QC165_200625	SE208081.019	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	04 Jul 2020

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP101_0.1_200625	SE208081.001	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	03 Jul 2020
0407_TP101_0.5_200625	SE208081.002	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	03 Jul 2020
0407_TP244_0.1_200625	SE208081.003	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	03 Jul 2020
0407_TP244_0.5_200625	SE208081.004	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	03 Jul 2020
0407_TP243_0.1_200625	SE208081.005	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	03 Jul 2020
0407_TP243_0.5_200625	SE208081.006	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	03 Jul 2020
0407_TP242_0.1_200625	SE208081.007	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	03 Jul 2020
0407_TP242_0.5_200625	SE208081.008	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	03 Jul 2020
0407_TP240_0.1_200625	SE208081.009	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	03 Jul 2020
0407_TP240_0.5_200625	SE208081.010	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	03 Jul 2020
0407_TP239_0.1_200625	SE208081.011	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	03 Jul 2020
0407_TP239_0.5_200625	SE208081.012	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	03 Jul 2020
0407_TP238_0.1_200625	SE208081.013	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	03 Jul 2020
0407_TP238_0.5_200625	SE208081.014	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	03 Jul 2020
0407_TP241_0.1_200625	SE208081.015	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	03 Jul 2020
0407_TP241_0.5_200625	SE208081.016	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	03 Jul 2020
0407_QC164_200625	SE208081.018	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	03 Jul 2020
0407_QC165_200625	SE208081.019	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	03 Jul 2020

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP101_0.1_200625	SE208081.001	LB203268	25 Jun 2020	25 Jun 2020	22 Dec 2020	01 Jul 2020	22 Dec 2020	03 Jul 2020
0407_TP101_0.5_200625	SE208081.002	LB203268	25 Jun 2020	25 Jun 2020	22 Dec 2020	01 Jul 2020	22 Dec 2020	03 Jul 2020
0407_TP244_0.1_200625	SE208081.003	LB203268	25 Jun 2020	25 Jun 2020	22 Dec 2020	01 Jul 2020	22 Dec 2020	03 Jul 2020
0407_TP244_0.5_200625	SE208081.004	LB203268	25 Jun 2020	25 Jun 2020	22 Dec 2020	01 Jul 2020	22 Dec 2020	03 Jul 2020

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP243_0.1_200625	SE208081.005	LB203268	25 Jun 2020	25 Jun 2020	22 Dec 2020	01 Jul 2020	22 Dec 2020	03 Jul 2020
0407_TP243_0.5_200625	SE208081.006	LB203268	25 Jun 2020	25 Jun 2020	22 Dec 2020	01 Jul 2020	22 Dec 2020	03 Jul 2020
0407_TP242_0.1_200625	SE208081.007	LB203268	25 Jun 2020	25 Jun 2020	22 Dec 2020	01 Jul 2020	22 Dec 2020	03 Jul 2020
0407_TP242_0.5_200625	SE208081.008	LB203268	25 Jun 2020	25 Jun 2020	22 Dec 2020	01 Jul 2020	22 Dec 2020	03 Jul 2020
0407_TP240_0.1_200625	SE208081.009	LB203268	25 Jun 2020	25 Jun 2020	22 Dec 2020	01 Jul 2020	22 Dec 2020	03 Jul 2020
0407_TP240_0.5_200625	SE208081.010	LB203268	25 Jun 2020	25 Jun 2020	22 Dec 2020	01 Jul 2020	22 Dec 2020	03 Jul 2020
0407_TP239_0.1_200625	SE208081.011	LB203268	25 Jun 2020	25 Jun 2020	22 Dec 2020	01 Jul 2020	22 Dec 2020	03 Jul 2020
0407_TP239_0.5_200625	SE208081.012	LB203268	25 Jun 2020	25 Jun 2020	22 Dec 2020	01 Jul 2020	22 Dec 2020	03 Jul 2020
0407_TP238_0.1_200625	SE208081.013	LB203268	25 Jun 2020	25 Jun 2020	22 Dec 2020	01 Jul 2020	22 Dec 2020	03 Jul 2020
0407_TP238_0.5_200625	SE208081.014	LB203268	25 Jun 2020	25 Jun 2020	22 Dec 2020	01 Jul 2020	22 Dec 2020	03 Jul 2020
0407_TP241_0.1_200625	SE208081.015	LB203268	25 Jun 2020	25 Jun 2020	22 Dec 2020	01 Jul 2020	22 Dec 2020	03 Jul 2020
0407_TP241_0.5_200625	SE208081.016	LB203268	25 Jun 2020	25 Jun 2020	22 Dec 2020	01 Jul 2020	22 Dec 2020	03 Jul 2020
0407_QC164_200625	SE208081.018	LB203268	25 Jun 2020	25 Jun 2020	22 Dec 2020	01 Jul 2020	22 Dec 2020	03 Jul 2020
0407_QC165_200625	SE208081.019	LB203268	25 Jun 2020	25 Jun 2020	22 Dec 2020	01 Jul 2020	22 Dec 2020	03 Jul 2020

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP101_0.1_200625	SE208081.001	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	03 Jul 2020
0407_TP101_0.5_200625	SE208081.002	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	03 Jul 2020
0407_TP244_0.1_200625	SE208081.003	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	03 Jul 2020
0407_TP244_0.5_200625	SE208081.004	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	03 Jul 2020
0407_TP243_0.1_200625	SE208081.005	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	03 Jul 2020
0407_TP243_0.5_200625	SE208081.006	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	03 Jul 2020
0407_TP242_0.1_200625	SE208081.007	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	03 Jul 2020
0407_TP242_0.5_200625	SE208081.008	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	03 Jul 2020
0407_TP240_0.1_200625	SE208081.009	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	03 Jul 2020
0407_TP240_0.5_200625	SE208081.010	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	03 Jul 2020
0407_TP239_0.1_200625	SE208081.011	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	03 Jul 2020
0407_TP239_0.5_200625	SE208081.012	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	03 Jul 2020
0407_TP238_0.1_200625	SE208081.013	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	03 Jul 2020
0407_TP238_0.5_200625	SE208081.014	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	03 Jul 2020
0407_TP241_0.1_200625	SE208081.015	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	03 Jul 2020
0407_TP241_0.5_200625	SE208081.016	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	03 Jul 2020
0407_QC164_200625	SE208081.018	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	03 Jul 2020
0407_QC165_200625	SE208081.019	LB203282	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	03 Jul 2020

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP101_0.1_200625	SE208081.001	LB203278	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP101_0.5_200625	SE208081.002	LB203278	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP244_0.1_200625	SE208081.003	LB203278	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP244_0.5_200625	SE208081.004	LB203278	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP243_0.1_200625	SE208081.005	LB203278	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP243_0.5_200625	SE208081.006	LB203278	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP242_0.1_200625	SE208081.007	LB203278	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP242_0.5_200625	SE208081.008	LB203278	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP240_0.1_200625	SE208081.009	LB203278	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP240_0.5_200625	SE208081.010	LB203278	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP239_0.1_200625	SE208081.011	LB203278	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP239_0.5_200625	SE208081.012	LB203278	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP238_0.1_200625	SE208081.013	LB203278	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP238_0.5_200625	SE208081.014	LB203278	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP241_0.1_200625	SE208081.015	LB203278	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_TP241_0.5_200625	SE208081.016	LB203278	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_QC164_200625	SE208081.018	LB203278	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020
0407_QC165_200625	SE208081.019	LB203278	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	06 Jul 2020

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP101_0.1_200625	SE208081.001	LB203278	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP101_0.5_200625	SE208081.002	LB203278	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Volatile Petroleum Hydrocarbons in Soil (continued) **Method: ME-(AU)-[ENV]AN433**

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP244_0.1_200625	SE208081.003	LB203278	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP244_0.5_200625	SE208081.004	LB203278	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP243_0.1_200625	SE208081.005	LB203278	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP243_0.5_200625	SE208081.006	LB203278	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP242_0.1_200625	SE208081.007	LB203278	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP242_0.5_200625	SE208081.008	LB203278	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP240_0.1_200625	SE208081.009	LB203278	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP240_0.5_200625	SE208081.010	LB203278	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP239_0.1_200625	SE208081.011	LB203278	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP239_0.5_200625	SE208081.012	LB203278	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP238_0.1_200625	SE208081.013	LB203278	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP238_0.5_200625	SE208081.014	LB203278	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP241_0.1_200625	SE208081.015	LB203278	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_TP241_0.5_200625	SE208081.016	LB203278	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_QC164_200625	SE208081.018	LB203278	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020
0407_QC165_200625	SE208081.019	LB203278	25 Jun 2020	25 Jun 2020	09 Jul 2020	01 Jul 2020	10 Aug 2020	05 Jul 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP101_0.1_200625	SE208081.001	%	60 - 130%	107
	0407_TP101_0.5_200625	SE208081.002	%	60 - 130%	100
	0407_TP244_0.1_200625	SE208081.003	%	60 - 130%	109
	0407_TP244_0.5_200625	SE208081.004	%	60 - 130%	107
	0407_TP243_0.1_200625	SE208081.005	%	60 - 130%	107
	0407_TP243_0.5_200625	SE208081.006	%	60 - 130%	101
	0407_TP242_0.1_200625	SE208081.007	%	60 - 130%	111
	0407_TP242_0.5_200625	SE208081.008	%	60 - 130%	115
	0407_TP240_0.1_200625	SE208081.009	%	60 - 130%	103
	0407_TP240_0.5_200625	SE208081.010	%	60 - 130%	101
	0407_TP239_0.1_200625	SE208081.011	%	60 - 130%	104
	0407_TP239_0.5_200625	SE208081.012	%	60 - 130%	105
	0407_TP238_0.1_200625	SE208081.013	%	60 - 130%	111
	0407_TP238_0.5_200625	SE208081.014	%	60 - 130%	95
	0407_TP241_0.1_200625	SE208081.015	%	60 - 130%	97
	0407_TP241_0.5_200625	SE208081.016	%	60 - 130%	109
	0407_QC164_200625	SE208081.018	%	60 - 130%	107
	0407_QC165_200625	SE208081.019	%	60 - 130%	107

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP101_0.1_200625	SE208081.001	%	60 - 130%	82
	0407_TP101_0.5_200625	SE208081.002	%	60 - 130%	91
	0407_TP244_0.1_200625	SE208081.003	%	60 - 130%	78
	0407_TP244_0.5_200625	SE208081.004	%	60 - 130%	82
	0407_TP243_0.1_200625	SE208081.005	%	60 - 130%	81
	0407_TP243_0.5_200625	SE208081.006	%	60 - 130%	84
	0407_TP242_0.1_200625	SE208081.007	%	60 - 130%	119
	0407_TP242_0.5_200625	SE208081.008	%	60 - 130%	85
	0407_TP240_0.1_200625	SE208081.009	%	60 - 130%	89
	0407_TP240_0.5_200625	SE208081.010	%	60 - 130%	71
	0407_TP239_0.1_200625	SE208081.011	%	60 - 130%	86
	0407_TP239_0.5_200625	SE208081.012	%	60 - 130%	86
	0407_TP238_0.1_200625	SE208081.013	%	60 - 130%	71
	0407_TP238_0.5_200625	SE208081.014	%	60 - 130%	79
	0407_TP241_0.1_200625	SE208081.015	%	60 - 130%	72
	0407_TP241_0.5_200625	SE208081.016	%	60 - 130%	92
	0407_QC164_200625	SE208081.018	%	60 - 130%	93
	0407_QC165_200625	SE208081.019	%	60 - 130%	78
d14-p-terphenyl (Surrogate)	0407_TP101_0.1_200625	SE208081.001	%	60 - 130%	83
	0407_TP101_0.5_200625	SE208081.002	%	60 - 130%	88
	0407_TP244_0.1_200625	SE208081.003	%	60 - 130%	85
	0407_TP244_0.5_200625	SE208081.004	%	60 - 130%	94
	0407_TP243_0.1_200625	SE208081.005	%	60 - 130%	86
	0407_TP243_0.5_200625	SE208081.006	%	60 - 130%	79
	0407_TP242_0.1_200625	SE208081.007	%	60 - 130%	119
	0407_TP242_0.5_200625	SE208081.008	%	60 - 130%	80
	0407_TP240_0.1_200625	SE208081.009	%	60 - 130%	83
	0407_TP240_0.5_200625	SE208081.010	%	60 - 130%	72
	0407_TP239_0.1_200625	SE208081.011	%	60 - 130%	86
	0407_TP239_0.5_200625	SE208081.012	%	60 - 130%	87
	0407_TP238_0.1_200625	SE208081.013	%	60 - 130%	86
	0407_TP238_0.5_200625	SE208081.014	%	60 - 130%	86
	0407_TP241_0.1_200625	SE208081.015	%	60 - 130%	79
	0407_TP241_0.5_200625	SE208081.016	%	60 - 130%	81
	0407_QC164_200625	SE208081.018	%	60 - 130%	83
	0407_QC165_200625	SE208081.019	%	60 - 130%	86

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued) — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP101_0.1_200625	SE208081.001	%	70 - 130%	82
	0407_TP101_0.5_200625	SE208081.002	%	70 - 130%	91
	0407_TP244_0.1_200625	SE208081.003	%	70 - 130%	78
	0407_TP244_0.5_200625	SE208081.004	%	70 - 130%	82
	0407_TP243_0.1_200625	SE208081.005	%	70 - 130%	81
	0407_TP243_0.5_200625	SE208081.006	%	70 - 130%	84
	0407_TP242_0.1_200625	SE208081.007	%	70 - 130%	119
	0407_TP242_0.5_200625	SE208081.008	%	70 - 130%	85
	0407_TP240_0.1_200625	SE208081.009	%	70 - 130%	89
	0407_TP240_0.5_200625	SE208081.010	%	70 - 130%	71
	0407_TP239_0.1_200625	SE208081.011	%	70 - 130%	86
	0407_TP239_0.5_200625	SE208081.012	%	70 - 130%	86
	0407_TP238_0.1_200625	SE208081.013	%	70 - 130%	71
	0407_TP238_0.5_200625	SE208081.014	%	70 - 130%	79
	0407_TP241_0.1_200625	SE208081.015	%	70 - 130%	72
	0407_TP241_0.5_200625	SE208081.016	%	70 - 130%	92
	0407_QC164_200625	SE208081.018	%	70 - 130%	93
	0407_QC165_200625	SE208081.019	%	70 - 130%	78
d14-p-terphenyl (Surrogate)	0407_TP101_0.1_200625	SE208081.001	%	70 - 130%	83
	0407_TP101_0.5_200625	SE208081.002	%	70 - 130%	88
	0407_TP244_0.1_200625	SE208081.003	%	70 - 130%	85
	0407_TP244_0.5_200625	SE208081.004	%	70 - 130%	94
	0407_TP243_0.1_200625	SE208081.005	%	70 - 130%	86
	0407_TP243_0.5_200625	SE208081.006	%	70 - 130%	79
	0407_TP242_0.1_200625	SE208081.007	%	70 - 130%	119
	0407_TP242_0.5_200625	SE208081.008	%	70 - 130%	80
	0407_TP240_0.1_200625	SE208081.009	%	70 - 130%	83
	0407_TP240_0.5_200625	SE208081.010	%	70 - 130%	72
	0407_TP239_0.1_200625	SE208081.011	%	70 - 130%	86
	0407_TP239_0.5_200625	SE208081.012	%	70 - 130%	87
	0407_TP238_0.1_200625	SE208081.013	%	70 - 130%	86
	0407_TP238_0.5_200625	SE208081.014	%	70 - 130%	86
	0407_TP241_0.1_200625	SE208081.015	%	70 - 130%	79
	0407_TP241_0.5_200625	SE208081.016	%	70 - 130%	81
	0407_QC164_200625	SE208081.018	%	70 - 130%	83
	0407_QC165_200625	SE208081.019	%	70 - 130%	86
d5-nitrobenzene (Surrogate)	0407_TP101_0.1_200625	SE208081.001	%	70 - 130%	79
	0407_TP101_0.5_200625	SE208081.002	%	70 - 130%	79
	0407_TP244_0.1_200625	SE208081.003	%	70 - 130%	79
	0407_TP244_0.5_200625	SE208081.004	%	70 - 130%	82
	0407_TP243_0.1_200625	SE208081.005	%	70 - 130%	77
	0407_TP243_0.5_200625	SE208081.006	%	70 - 130%	78
	0407_TP242_0.1_200625	SE208081.007	%	70 - 130%	108
	0407_TP242_0.5_200625	SE208081.008	%	70 - 130%	78
	0407_TP240_0.1_200625	SE208081.009	%	70 - 130%	76
	0407_TP240_0.5_200625	SE208081.010	%	70 - 130%	86
	0407_TP239_0.1_200625	SE208081.011	%	70 - 130%	80
	0407_TP239_0.5_200625	SE208081.012	%	70 - 130%	78
	0407_TP238_0.1_200625	SE208081.013	%	70 - 130%	78
	0407_TP238_0.5_200625	SE208081.014	%	70 - 130%	71
	0407_TP241_0.1_200625	SE208081.015	%	70 - 130%	71
	0407_TP241_0.5_200625	SE208081.016	%	70 - 130%	74
	0407_QC164_200625	SE208081.018	%	70 - 130%	83
	0407_QC165_200625	SE208081.019	%	70 - 130%	74

PCBs in Soil — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP101_0.1_200625	SE208081.001	%	60 - 130%	107
	0407_TP101_0.5_200625	SE208081.002	%	60 - 130%	100
	0407_TP244_0.1_200625	SE208081.003	%	60 - 130%	109
	0407_TP244_0.5_200625	SE208081.004	%	60 - 130%	107

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PCBs in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP243_0.1_200625	SE208081.005	%	60 - 130%	107
	0407_TP243_0.5_200625	SE208081.006	%	60 - 130%	101
	0407_TP242_0.1_200625	SE208081.007	%	60 - 130%	111
	0407_TP242_0.5_200625	SE208081.008	%	60 - 130%	115
	0407_TP240_0.1_200625	SE208081.009	%	60 - 130%	103
	0407_TP240_0.5_200625	SE208081.010	%	60 - 130%	101
	0407_TP239_0.1_200625	SE208081.011	%	60 - 130%	104
	0407_TP239_0.5_200625	SE208081.012	%	60 - 130%	105
	0407_TP238_0.1_200625	SE208081.013	%	60 - 130%	111
	0407_TP238_0.5_200625	SE208081.014	%	60 - 130%	95
	0407_TP241_0.1_200625	SE208081.015	%	60 - 130%	97
	0407_TP241_0.5_200625	SE208081.016	%	60 - 130%	109
	0407_QC164_200625	SE208081.018	%	60 - 130%	107
	0407_QC165_200625	SE208081.019	%	60 - 130%	107

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	0407_TP101_0.1_200625	SE208081.001	%	70 - 130%	77
	0407_TP101_0.5_200625	SE208081.002	%	70 - 130%	74
	0407_TP244_0.1_200625	SE208081.003	%	70 - 130%	75
	0407_TP244_0.5_200625	SE208081.004	%	70 - 130%	88
	0407_TP243_0.1_200625	SE208081.005	%	70 - 130%	74
	0407_TP243_0.5_200625	SE208081.006	%	70 - 130%	78
	0407_TP242_0.1_200625	SE208081.007	%	70 - 130%	77
	0407_TP242_0.5_200625	SE208081.008	%	70 - 130%	78
	0407_TP240_0.1_200625	SE208081.009	%	70 - 130%	77
	0407_TP240_0.5_200625	SE208081.010	%	70 - 130%	78
	0407_TP239_0.1_200625	SE208081.011	%	70 - 130%	73
	0407_TP239_0.5_200625	SE208081.012	%	70 - 130%	73
	0407_TP238_0.1_200625	SE208081.013	%	70 - 130%	82
	0407_TP238_0.5_200625	SE208081.014	%	70 - 130%	75
	0407_TP241_0.1_200625	SE208081.015	%	70 - 130%	78
	0407_TP241_0.5_200625	SE208081.016	%	70 - 130%	87
	0407_QC164_200625	SE208081.018	%	70 - 130%	84
	0407_QC165_200625	SE208081.019	%	70 - 130%	76
d5-phenol (Surrogate)	0407_TP101_0.1_200625	SE208081.001	%	50 - 130%	75
	0407_TP101_0.5_200625	SE208081.002	%	50 - 130%	73
	0407_TP244_0.1_200625	SE208081.003	%	50 - 130%	71
	0407_TP244_0.5_200625	SE208081.004	%	50 - 130%	79
	0407_TP243_0.1_200625	SE208081.005	%	50 - 130%	76
	0407_TP243_0.5_200625	SE208081.006	%	50 - 130%	74
	0407_TP242_0.1_200625	SE208081.007	%	50 - 130%	71
	0407_TP242_0.5_200625	SE208081.008	%	50 - 130%	79
	0407_TP240_0.1_200625	SE208081.009	%	50 - 130%	89
	0407_TP240_0.5_200625	SE208081.010	%	50 - 130%	70
	0407_TP239_0.1_200625	SE208081.011	%	50 - 130%	72
	0407_TP239_0.5_200625	SE208081.012	%	50 - 130%	73
	0407_TP238_0.1_200625	SE208081.013	%	50 - 130%	72
	0407_TP238_0.5_200625	SE208081.014	%	50 - 130%	74
	0407_TP241_0.1_200625	SE208081.015	%	50 - 130%	72
	0407_TP241_0.5_200625	SE208081.016	%	50 - 130%	71
	0407_QC164_200625	SE208081.018	%	50 - 130%	77
	0407_QC165_200625	SE208081.019	%	50 - 130%	76

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP101_0.1_200625	SE208081.001	%	60 - 130%	95
	0407_TP101_0.5_200625	SE208081.002	%	60 - 130%	97
	0407_TP244_0.1_200625	SE208081.003	%	60 - 130%	74
	0407_TP244_0.5_200625	SE208081.004	%	60 - 130%	85
	0407_TP243_0.1_200625	SE208081.005	%	60 - 130%	89
	0407_TP243_0.5_200625	SE208081.006	%	60 - 130%	96

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP242_0.1_200625	SE208081.007	%	60 - 130%	84
	0407_TP242_0.5_200625	SE208081.008	%	60 - 130%	83
	0407_TP240_0.1_200625	SE208081.009	%	60 - 130%	86
	0407_TP240_0.5_200625	SE208081.010	%	60 - 130%	102
	0407_TP239_0.1_200625	SE208081.011	%	60 - 130%	95
	0407_TP239_0.5_200625	SE208081.012	%	60 - 130%	87
	0407_TP238_0.1_200625	SE208081.013	%	60 - 130%	92
	0407_TP238_0.5_200625	SE208081.014	%	60 - 130%	91
	0407_TP241_0.1_200625	SE208081.015	%	60 - 130%	82
	0407_TP241_0.5_200625	SE208081.016	%	60 - 130%	74
	0407_QC164_200625	SE208081.018	%	60 - 130%	93
	0407_QC165_200625	SE208081.019	%	60 - 130%	95
d4-1,2-dichloroethane (Surrogate)	0407_TP101_0.1_200625	SE208081.001	%	60 - 130%	89
	0407_TP101_0.5_200625	SE208081.002	%	60 - 130%	101
	0407_TP244_0.1_200625	SE208081.003	%	60 - 130%	69
	0407_TP244_0.5_200625	SE208081.004	%	60 - 130%	87
	0407_TP243_0.1_200625	SE208081.005	%	60 - 130%	94
	0407_TP243_0.5_200625	SE208081.006	%	60 - 130%	84
	0407_TP242_0.1_200625	SE208081.007	%	60 - 130%	82
	0407_TP242_0.5_200625	SE208081.008	%	60 - 130%	86
	0407_TP240_0.1_200625	SE208081.009	%	60 - 130%	92
	0407_TP240_0.5_200625	SE208081.010	%	60 - 130%	93
	0407_TP239_0.1_200625	SE208081.011	%	60 - 130%	89
	0407_TP239_0.5_200625	SE208081.012	%	60 - 130%	88
	0407_TP238_0.1_200625	SE208081.013	%	60 - 130%	86
	0407_TP238_0.5_200625	SE208081.014	%	60 - 130%	95
	0407_TP241_0.1_200625	SE208081.015	%	60 - 130%	86
	0407_TP241_0.5_200625	SE208081.016	%	60 - 130%	77
	0407_QC164_200625	SE208081.018	%	60 - 130%	81
	0407_QC165_200625	SE208081.019	%	60 - 130%	96
d8-toluene (Surrogate)	0407_TP101_0.1_200625	SE208081.001	%	60 - 130%	82
	0407_TP101_0.5_200625	SE208081.002	%	60 - 130%	87
	0407_TP244_0.1_200625	SE208081.003	%	60 - 130%	75
	0407_TP244_0.5_200625	SE208081.004	%	60 - 130%	84
	0407_TP243_0.1_200625	SE208081.005	%	60 - 130%	83
	0407_TP243_0.5_200625	SE208081.006	%	60 - 130%	87
	0407_TP242_0.1_200625	SE208081.007	%	60 - 130%	78
	0407_TP242_0.5_200625	SE208081.008	%	60 - 130%	82
	0407_TP240_0.1_200625	SE208081.009	%	60 - 130%	88
	0407_TP240_0.5_200625	SE208081.010	%	60 - 130%	90
	0407_TP239_0.1_200625	SE208081.011	%	60 - 130%	86
	0407_TP239_0.5_200625	SE208081.012	%	60 - 130%	87
	0407_TP238_0.1_200625	SE208081.013	%	60 - 130%	82
	0407_TP238_0.5_200625	SE208081.014	%	60 - 130%	89
	0407_TP241_0.1_200625	SE208081.015	%	60 - 130%	81
	0407_TP241_0.5_200625	SE208081.016	%	60 - 130%	75
	0407_QC164_200625	SE208081.018	%	60 - 130%	80
	0407_QC165_200625	SE208081.019	%	60 - 130%	86

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP101_0.1_200625	SE208081.001	%	60 - 130%	95
	0407_TP101_0.5_200625	SE208081.002	%	60 - 130%	97
	0407_TP244_0.1_200625	SE208081.003	%	60 - 130%	74
	0407_TP244_0.5_200625	SE208081.004	%	60 - 130%	85
	0407_TP243_0.1_200625	SE208081.005	%	60 - 130%	89
	0407_TP243_0.5_200625	SE208081.006	%	60 - 130%	96
	0407_TP242_0.1_200625	SE208081.007	%	60 - 130%	84
	0407_TP242_0.5_200625	SE208081.008	%	60 - 130%	83
	0407_TP240_0.1_200625	SE208081.009	%	60 - 130%	86
	0407_TP240_0.5_200625	SE208081.010	%	60 - 130%	102

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP239_0.1_200625	SE208081.011	%	60 - 130%	95
	0407_TP239_0.5_200625	SE208081.012	%	60 - 130%	87
	0407_TP238_0.1_200625	SE208081.013	%	60 - 130%	92
	0407_TP238_0.5_200625	SE208081.014	%	60 - 130%	91
	0407_TP241_0.1_200625	SE208081.015	%	60 - 130%	82
	0407_TP241_0.5_200625	SE208081.016	%	60 - 130%	74
	0407_QC164_200625	SE208081.018	%	60 - 130%	93
	0407_QC165_200625	SE208081.019	%	60 - 130%	95
d4-1,2-dichloroethane (Surrogate)	0407_TP101_0.1_200625	SE208081.001	%	60 - 130%	89
	0407_TP101_0.5_200625	SE208081.002	%	60 - 130%	101
	0407_TP244_0.1_200625	SE208081.003	%	60 - 130%	69
	0407_TP244_0.5_200625	SE208081.004	%	60 - 130%	87
	0407_TP243_0.1_200625	SE208081.005	%	60 - 130%	94
	0407_TP243_0.5_200625	SE208081.006	%	60 - 130%	84
	0407_TP242_0.1_200625	SE208081.007	%	60 - 130%	82
	0407_TP242_0.5_200625	SE208081.008	%	60 - 130%	86
	0407_TP240_0.1_200625	SE208081.009	%	60 - 130%	92
	0407_TP240_0.5_200625	SE208081.010	%	60 - 130%	93
	0407_TP239_0.1_200625	SE208081.011	%	60 - 130%	89
	0407_TP239_0.5_200625	SE208081.012	%	60 - 130%	88
	0407_TP238_0.1_200625	SE208081.013	%	60 - 130%	86
	0407_TP238_0.5_200625	SE208081.014	%	60 - 130%	95
	0407_TP241_0.1_200625	SE208081.015	%	60 - 130%	86
	0407_TP241_0.5_200625	SE208081.016	%	60 - 130%	77
	0407_QC164_200625	SE208081.018	%	60 - 130%	81
	0407_QC165_200625	SE208081.019	%	60 - 130%	96
d8-toluene (Surrogate)	0407_TP101_0.1_200625	SE208081.001	%	60 - 130%	82
	0407_TP101_0.5_200625	SE208081.002	%	60 - 130%	87
	0407_TP244_0.1_200625	SE208081.003	%	60 - 130%	75
	0407_TP244_0.5_200625	SE208081.004	%	60 - 130%	84
	0407_TP243_0.1_200625	SE208081.005	%	60 - 130%	83
	0407_TP243_0.5_200625	SE208081.006	%	60 - 130%	87
	0407_TP242_0.1_200625	SE208081.007	%	60 - 130%	78
	0407_TP242_0.5_200625	SE208081.008	%	60 - 130%	82
	0407_TP240_0.1_200625	SE208081.009	%	60 - 130%	88
	0407_TP240_0.5_200625	SE208081.010	%	60 - 130%	90
	0407_TP239_0.1_200625	SE208081.011	%	60 - 130%	86
	0407_TP239_0.5_200625	SE208081.012	%	60 - 130%	87
	0407_TP238_0.1_200625	SE208081.013	%	60 - 130%	82
	0407_TP238_0.5_200625	SE208081.014	%	60 - 130%	89
	0407_TP241_0.1_200625	SE208081.015	%	60 - 130%	81
	0407_TP241_0.5_200625	SE208081.016	%	60 - 130%	75
	0407_QC164_200625	SE208081.018	%	60 - 130%	80
	0407_QC165_200625	SE208081.019	%	60 - 130%	86

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result
LB203271.001	Mercury	mg/kg	0.05	<0.05

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203282.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	93

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203282.001		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	78
		d14-p-terphenyl (Surrogate)	%	-	96

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB203282.001	Naphthalene	mg/kg	0.1	<0.1
	2-methylnaphthalene	mg/kg	0.1	<0.1
	1-methylnaphthalene	mg/kg	0.1	<0.1
	Acenaphthylene	mg/kg	0.1	<0.1
	Acenaphthene	mg/kg	0.1	<0.1
	Fluorene	mg/kg	0.1	<0.1
	Phenanthrene	mg/kg	0.1	<0.1
	Anthracene	mg/kg	0.1	<0.1
	Fluoranthene	mg/kg	0.1	<0.1
	Pyrene	mg/kg	0.1	<0.1
	Benzo(a)anthracene	mg/kg	0.1	<0.1
	Chrysene	mg/kg	0.1	<0.1
	Benzo(a)pyrene	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203282.001		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	89
		2-fluorobiphenyl (Surrogate)	%	-	78
		d14-p-terphenyl (Surrogate)	%	-	96

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203282.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	93

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB203282.001		Phenol	mg/kg	0.5	<0.5
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5
		2-nitrophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
		Pentachlorophenol	mg/kg	0.5	<0.5
		2,4-dinitrophenol	mg/kg	2	<2
		4-chloro-3-methylphenol	mg/kg	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	78
		d5-phenol (Surrogate)	%	-	96

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB203268.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB203282.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number	Parameter	Units	LOR

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB203278.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB203278.001	Oxygenated Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	91
		d8-toluene (Surrogate)	%	-	86
		Bromofluorobenzene (Surrogate)	%	-	89
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB203278.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	91

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208081.010	LB203271.014	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE208081.019	LB203271.023	Mercury	mg/kg	0.05	<0.05	<0.05	200	0

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208081.010	LB203285.011	% Moisture	%w/w	1	4.2	4.2	54	1
SE208081.019	LB203285.020	% Moisture	%w/w	1	3.8	3.1	59	21

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208081.010	LB203282.014		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.15	30	2
SE208081.014	LB203282.024		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	0	200	0
			Alpha BHC	mg/kg	0.1	<0.1	0	200	0
			Lindane	mg/kg	0.1	<0.1	0	200	0
			Heptachlor	mg/kg	0.1	<0.1	0	200	0
			Aldrin	mg/kg	0.1	<0.1	0	200	0
			Beta BHC	mg/kg	0.1	<0.1	0	200	0
			Delta BHC	mg/kg	0.1	<0.1	0	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	0	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	0	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	0	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Dieldrin	mg/kg	0.2	<0.2	0	200	0
			Endrin	mg/kg	0.2	<0.2	0	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	0	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208081.014	LB203282.024		p,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	0	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	0	200	0
			Methoxychlor	mg/kg	0.1	<0.1	0	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	0	200	0
			Isodrin	mg/kg	0.1	<0.1	0	200	0
			Mirex	mg/kg	0.1	<0.1	0	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	0.162	30	13

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208081.014	LB203282.025		Dichlorvos	mg/kg	0.5	<0.5	0	200	0
			Dimethoate	mg/kg	0.5	<0.5	0	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	0.0130486675	200	0
			Fenitrothion	mg/kg	0.2	<0.2	0	200	0
			Malathion	mg/kg	0.2	<0.2	0	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	0	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	0	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	0	200	0
			Methidathion	mg/kg	0.5	<0.5	0	200	0
			Ethion	mg/kg	0.2	<0.2	0	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	0	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	0	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.3613494873	30	9
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.3690876178	30	15

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208081.014	LB203282.025		Naphthalene	mg/kg	0.1	<0.1	0.0014480949	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	0	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	0	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	0	200	0
			Acenaphthene	mg/kg	0.1	<0.1	0	200	0
			Fluorene	mg/kg	0.1	<0.1	0	200	0
			Phenanthrene	mg/kg	0.1	<0.1	0.0011278054	200	0
			Anthracene	mg/kg	0.1	<0.1	0.0010832213	200	0
			Fluoranthene	mg/kg	0.1	<0.1	0	200	0
			Pyrene	mg/kg	0.1	<0.1	0	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	0	200	0
			Chrysene	mg/kg	0.1	<0.1	0	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	0	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	0	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	0.0051987215	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	0	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	0	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	0	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	0	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	0.242	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	0.121	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	0	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.3274935390	30	8
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.3613494873	30	9
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.3690876178	30	15

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208081.010	LB203282.014	Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
		Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PCBs in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208081.010	LB203282.014		Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	2
SE208081.014	LB203282.024		Arochlor 1016	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	0	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0.162	30	13

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208081.010	LB203282.014		Phenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	200	0
			Total Cresol	mg/kg	1.5	<1.5	<1.5	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	200	0
			4-nitrophenol	mg/kg	1	<1	<1	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dinitrophenol	mg/kg	2	<2	<2	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.9	3.8	30	3
			d5-phenol (Surrogate)	mg/kg	-	1.4	1.9	30	28
SE208081.014	LB203282.024		Phenol	mg/kg	0.5	<0.5	0	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	0	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	0	200	0
			Total Cresol	mg/kg	1.5	<1.5	0	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	0	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	0	200	0
			4-nitrophenol	mg/kg	1	<1	0	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	0	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dinitrophenol	mg/kg	2	<2	0	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	0	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.7	3.75	30	1
			d5-phenol (Surrogate)	mg/kg	-	1.5	1.44	30	2

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate		Parameter	Units	LOR

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208081.010	LB203268.014	Arsenic, As	mg/kg	1	<1	<1	200	0
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	<0.5	<0.5	191	0
		Copper, Cu	mg/kg	0.5	1.6	1.8	59	11
		Nickel, Ni	mg/kg	0.5	<0.5	<0.5	200	0
		Lead, Pb	mg/kg	1	4	3	59	13
		Zinc, Zn	mg/kg	2	8.0	11	51	29
SE208081.019	LB203268.023	Arsenic, As	mg/kg	1	1	<1	143	3
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	2.1	2.0	54	5
		Copper, Cu	mg/kg	0.5	1.3	0.7	80	54
		Nickel, Ni	mg/kg	0.5	1.0	0.8	86	16
		Lead, Pb	mg/kg	1	1	1	116	11
		Zinc, Zn	mg/kg	2	2.4	3.0	104	20

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208081.010	LB203282.014		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE208081.014	LB203282.025		TRH C10-C14	mg/kg	20	<20	0	200	0
			TRH C15-C28	mg/kg	45	<45	0	200	0
			TRH C29-C36	mg/kg	45	<45	0	200	0
			TRH C37-C40	mg/kg	100	<100	0	200	0
			TRH C10-C36 Total	mg/kg	110	<110	0	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	0	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	0	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	0	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	0	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	0	200	0

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208081.010	LB203278.014	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued) — Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208081.010	LB203278.014	Halogenated	Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
		Aliphatics	Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.3	9.1	50	3
			d8-toluene (Surrogate)	mg/kg	-	9.0	8.2	50	9
			Bromofluorobenzene (Surrogate)	mg/kg	-	10.2	8.9	50	13
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE208081.019	LB203278.023	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued) — Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208081.019	LB203278.023	Fumigants	cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0

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VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208081.019	LB203278.023	Oxygenated	MEK (2-butanone)	mg/kg	10	<10	<10	200	0
		Compounds	MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.6	9.3	50	3
			d8-toluene (Surrogate)	mg/kg	-	8.6	9.2	50	6
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.5	10.6	50	12
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208081.010	LB203278.014		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.3	9.1	30	3
			d8-toluene (Surrogate)	mg/kg	-	9.0	8.2	30	9
			Bromofluorobenzene (Surrogate)	mg/kg	-	10.2	8.9	30	13
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE208081.019	LB203278.023		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.6	9.3	30	3
			d8-toluene (Surrogate)	mg/kg	-	8.6	9.2	30	6
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.5	10.6	30	12
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203271.002	Mercury	mg/kg	0.05	0.23	0.2	70 - 130	113

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203282.002		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	122
		Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	123
		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	122
		Dieldrin	mg/kg	0.2	0.2	0.2	60 - 140	123
		Endrin	mg/kg	0.2	0.2	0.2	60 - 140	122
		p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	104
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.15	40 - 130	102

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203282.002		Dichlorvos	mg/kg	0.5	1.4	2	60 - 140	69
		Diazinon (Dimpylate)	mg/kg	0.5	1.9	2	60 - 140	96
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.7	2	60 - 140	87
		Ethion	mg/kg	0.2	1.4	2	60 - 140	71
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	90
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	91

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203282.002		Naphthalene	mg/kg	0.1	4.5	4	60 - 140	112
		Acenaphthylene	mg/kg	0.1	4.2	4	60 - 140	106
		Acenaphthene	mg/kg	0.1	4.7	4	60 - 140	116
		Phenanthrene	mg/kg	0.1	4.2	4	60 - 140	105
		Anthracene	mg/kg	0.1	4.4	4	60 - 140	111
		Fluoranthene	mg/kg	0.1	4.3	4	60 - 140	107
		Pyrene	mg/kg	0.1	4.4	4	60 - 140	110
		Benzo(a)pyrene	mg/kg	0.1	4.9	4	60 - 140	124
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	97
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	90
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	91

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203282.002	Arochlor 1260	mg/kg	0.2	0.5	0.4	60 - 140	130

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203282.002		Phenol	mg/kg	0.5	0.8	1	70 - 130	75
		2,4-dichlorophenol	mg/kg	0.5	0.8	1	70 - 130	75
		2,4,6-trichlorophenol	mg/kg	0.5	1.0	1	70 - 130	102
		Pentachlorophenol	mg/kg	0.5	0.8	1	70 - 130	78
	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.8	5	40 - 130	76
		d5-phenol (Surrogate)	mg/kg	-	1.5	2	40 - 130	74

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203268.002	Arsenic, As	mg/kg	1	320	318.22	80 - 120	102
	Cadmium, Cd	mg/kg	0.3	5.0	5.41	80 - 120	93
	Chromium, Cr	mg/kg	0.5	38	38.31	80 - 120	99
	Copper, Cu	mg/kg	0.5	300	290	80 - 120	102
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	101
	Lead, Pb	mg/kg	1	94	89.9	80 - 120	104
	Zinc, Zn	mg/kg	2	270	273	80 - 120	100

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203282.002		TRH C10-C14	mg/kg	20	40	40	60 - 140	100
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	93
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	75
	TRH F Bands	TRH >C10-C16	mg/kg	25	40	40	60 - 140	100
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	88
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	65

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203278.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	4.7	5	60 - 140	95
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	5.4	5	60 - 140	108
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	5.3	5	60 - 140	106
	Halogenated	Chlorobenzene	mg/kg	0.1	5.0	5	60 - 140	99
	Monocyclic	Benzene	mg/kg	0.1	5.3	5	60 - 140	107
	Aromatic	Toluene	mg/kg	0.1	5.4	5	60 - 140	108
		Ethylbenzene	mg/kg	0.1	5.4	5	60 - 140	109
		m/p-xylene	mg/kg	0.2	11	10	60 - 140	109
		o-xylene	mg/kg	0.1	5.6	5	60 - 140	111
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.9	10	70 - 130	109
		d8-toluene (Surrogate)	mg/kg	-	9.7	10	70 - 130	97
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.3	10	70 - 130	93
	Trihalomethan	Chloroform	mg/kg	0.1	5.2	5	60 - 140	105

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB203278.002		TRH C6-C10	mg/kg	25	74	92.5	60 - 140	81
		TRH C6-C9	mg/kg	20	65	80	60 - 140	81
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.9	10	70 - 130	109
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.3	10	70 - 130	93
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	42	62.5	60 - 140	67

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208081.002	LB203282.025		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	-	-
			Alpha BHC	mg/kg	0.1	<0.1	-	-
			Lindane	mg/kg	0.1	<0.1	-	-
			Heptachlor	mg/kg	0.1	<0.1	0.2	130
			Aldrin	mg/kg	0.1	<0.1	0.2	125
			Beta BHC	mg/kg	0.1	<0.1	-	-
			Delta BHC	mg/kg	0.1	<0.1	0.2	127
			Heptachlor epoxide	mg/kg	0.1	<0.1	-	-
			o,p'-DDE	mg/kg	0.1	<0.1	-	-
			Alpha Endosulfan	mg/kg	0.2	<0.2	-	-
			Gamma Chlordane	mg/kg	0.1	<0.1	-	-
			Alpha Chlordane	mg/kg	0.1	<0.1	-	-
			trans-Nonachlor	mg/kg	0.1	<0.1	-	-
			p,p'-DDE	mg/kg	0.1	<0.1	-	-
			Dieldrin	mg/kg	0.2	<0.2	0.2	122
			Endrin	mg/kg	0.2	<0.2	0.2	129
			o,p'-DDD	mg/kg	0.1	<0.1	-	-
			o,p'-DDT	mg/kg	0.1	<0.1	-	-
			Beta Endosulfan	mg/kg	0.2	<0.2	-	-
			p,p'-DDD	mg/kg	0.1	<0.1	-	-
			p,p'-DDT	mg/kg	0.1	<0.1	0.2	107
			Endosulfan sulphate	mg/kg	0.1	<0.1	-	-
			Endrin Aldehyde	mg/kg	0.1	<0.1	-	-
			Methoxychlor	mg/kg	0.1	<0.1	-	-
			Endrin Ketone	mg/kg	0.1	<0.1	-	-
			Isodrin	mg/kg	0.1	<0.1	-	-
			Mirex	mg/kg	0.1	<0.1	-	-
			Total CLP OC Pesticides	mg/kg	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	-	101

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208081.002	LB203282.024		Dichlorvos	mg/kg	0.5	<0.5	2	58 †
			Dimethoate	mg/kg	0.5	<0.5	-	-
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	2	86
			Fenitrothion	mg/kg	0.2	<0.2	-	-
			Malathion	mg/kg	0.2	<0.2	-	-
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	2	93
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	-	-
			Bromophos Ethyl	mg/kg	0.2	<0.2	-	-
			Methidathion	mg/kg	0.5	<0.5	-	-
			Ethion	mg/kg	0.2	<0.2	2	76
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	-	-
			Total OP Pesticides*	mg/kg	1.7	<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	-	77
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	-	80

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number	Parameter	Units	LOR	Original	Spike	Recovery%
SE208081.002	LB203282.024	Naphthalene	mg/kg	0.1	<0.1	4	99
		2-methylnaphthalene	mg/kg	0.1	<0.1	-	-
		1-methylnaphthalene	mg/kg	0.1	<0.1	-	-
		Acenaphthylene	mg/kg	0.1	<0.1	4	102
		Acenaphthene	mg/kg	0.1	<0.1	4	100
		Fluorene	mg/kg	0.1	<0.1	-	-
		Phenanthrene	mg/kg	0.1	<0.1	4	97
		Anthracene	mg/kg	0.1	<0.1	4	104
		Fluoranthene	mg/kg	0.1	<0.1	4	98
		Pyrene	mg/kg	0.1	<0.1	4	100
		Benzo(a)anthracene	mg/kg	0.1	<0.1	-	-
		Chrysene	mg/kg	0.1	<0.1	-	-
		Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208081.002	LB203282.024		Benzo(k)fluoranthene	mg/kg	0.1	<0.1	-	-
			Benzo(a)pyrene	mg/kg	0.1	<0.1	4	109
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	-	-
			Total PAH (18)	mg/kg	0.8	<0.8	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	-	78
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	-	77
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	-	80

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208081.002	LB203282.025		Arochlor 1016	mg/kg	0.2	<0.2	-	-
			Arochlor 1221	mg/kg	0.2	<0.2	-	-
			Arochlor 1232	mg/kg	0.2	<0.2	-	-
			Arochlor 1242	mg/kg	0.2	<0.2	-	-
			Arochlor 1248	mg/kg	0.2	<0.2	-	-
			Arochlor 1254	mg/kg	0.2	<0.2	-	-
			Arochlor 1260	mg/kg	0.2	<0.2	0.4	130
			Arochlor 1262	mg/kg	0.2	<0.2	-	-
			Arochlor 1268	mg/kg	0.2	<0.2	-	-
			Total PCBs (Arochlors)	mg/kg	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	-	95

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208081.001	LB203282.004		Phenol	mg/kg	0.5	0.7	<0.5	1	73
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	-	-
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	-	-
			Total Cresol	mg/kg	1.5	<1.5	<1.5	-	-
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	-	-
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	-	-
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	-	-
			2,4-dichlorophenol	mg/kg	0.5	0.9	<0.5	1	86
			2,4,6-trichlorophenol	mg/kg	0.5	0.9	<0.5	1	92
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	-	-
			4-nitrophenol	mg/kg	1	<1	<1	-	-
			2,4,5-trichlorophenol	mg/kg	0.5	0.8	<0.5	-	-
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	-	-
			Pentachlorophenol	mg/kg	0.5	0.7	<0.5	1	74
			2,4-dinitrophenol	mg/kg	2	<2	<2	-	-
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	-	-
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.9	3.8	-	79
			d5-phenol (Surrogate)	mg/kg	-	1.5	1.5	-	75

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208081.002	LB203282.024		TRH C10-C14	mg/kg	20	<20	40	93
			TRH C15-C28	mg/kg	45	<45	40	88
			TRH C29-C36	mg/kg	45	49	40	-13 ⑥
			TRH C37-C40	mg/kg	100	<100	-	-
			TRH C10-C36 Total	mg/kg	110	<110	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	40	93
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	<90	40	93
			TRH >C34-C40 (F4)	mg/kg	120	<120	-	-

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number	Parameter	Units	LOR

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208081.001	LB203278.004	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	-	-
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	-	-
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	-	-
			Bromomethane	mg/kg	1	<1	<1	-	-
			Chloroethane	mg/kg	1	<1	<1	-	-
			Trichlorofluoromethane	mg/kg	1	<1	<1	-	-
			Iodomethane	mg/kg	5	<5	<5	-	-
			1,1-dichloroethene	mg/kg	0.1	4.6	<0.1	5	92
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	-	-
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloroethane	mg/kg	0.1	4.8	<0.1	5	96
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	-	-
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	4.9	<0.1	5	97
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	-	-
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated	Chlorobenzene	mg/kg	0.1	5.1	<0.1	5	101
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Monocyclic	Benzene	mg/kg	0.1	4.7	<0.1	5	94
		Aromatic	Toluene	mg/kg	0.1	5.0	<0.1	5	99
			Ethylbenzene	mg/kg	0.1	4.9	<0.1	5	97
			m/p-xylene	mg/kg	0.2	9.9	<0.2	10	99
			o-xylene	mg/kg	0.1	5.0	<0.1	5	100
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	-	-
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	-	-
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	-	-
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	-	-
		Compounds	2-nitropropane	mg/kg	10	<10	<10	-	-
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208081.001	LB203278.004	Oxygenated	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	-	-
		Compounds	Vinyl acetate	mg/kg	10	<10	<10	-	-
			MEK (2-butanone)	mg/kg	10	<10	<10	-	-
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	-	-
			2-hexanone (MBK)	mg/kg	5	<5	<5	-	-
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.2	8.9	10	92
			d8-toluene (Surrogate)	mg/kg	-	8.1	8.2	10	81
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.1	9.5	10	81
		Totals	Total Xylenes	mg/kg	0.3	15	<0.3	-	-
			Total BTEX	mg/kg	0.6	29	<0.6	-	-
			Total VOC*	mg/kg	24	54	<24	-	-
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	-	-
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	24	<1.8	-	-
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	24	<1.8	-	-
		Trihalometha	Chloroform	mg/kg	0.1	4.8	<0.1	5	97
		nes	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Bromoform	mg/kg	0.1	<0.1	<0.1	-	-

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208081.001	LB203278.004		TRH C6-C10	mg/kg	25	74	<25	92.5	80
			TRH C6-C9	mg/kg	20	64	<20	80	79
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.2	8.9	10	92
			d8-toluene (Surrogate)	mg/kg	-	8.1	8.2	10	81
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.1	9.5	-	81
		VPH F	Benzene (F0)	mg/kg	0.1	4.7	<0.1	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	45	<25	62.5	71

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

SLR

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
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- ☐ TOWNSVILLE: 514 Stuart Street, Townsville, QLD 4810
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0820
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ

CLIENT: Defence Housing Australia	**LABORATORY: SGS Australia**	**Turnaround Time (TAT)**	**COC Number**
PROJECT: Randwick Barracks	**LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015**		**of**
PROJECT NUMBER: 610.30041	**SAMPLER:** [redacted]	☐ Standard TAT	
PROJECT MANAGER: [redacted]	**SAMPLER CONTACT No:** [redacted]	☐ Non Standard or Urgent TAT	
PM CONTACT No [redacted]	**Email Reports and Invoices to: LQRSYD@slrconsulting.com** [redacted]	**Required TAT: Standard**	

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS	Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only	HOLD				Additional Information (Comment on any gross contamination or specific requirements)
1	0407_TP78_0.1-0.5_200619	19-06-2020	Soil						x					Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
2	0407_TP79_0.1-0.5_200619	19-06-2020	Soil						x					
3	0407_TP80_0.1-0.5_200619	19-06-2020	Soil						x					
4	0407_TP88_0.1-0.5_200619	19-06-2020	Soil						x					
5	0407_TP89_0.1-0.5_200619	19-06-2020	Soil						x					
6	0407_TP90_0.1-0.5_200619	19-06-2020	Soil						x					
7	0407_TP108_0.1-0.6_200619	19-06-2020	Soil						x					
8	0407_TP109_0.1-0.5_200619	19-06-2020	Soil						x					
9	0407_TP110_0.1-0.5_200619	19-06-2020	Soil						x					
10	0407_TP98_0.1-0.5_200619	19-06-2020	Soil						x					
11	0407_TP99_0.1-0.5_200619	19-06-2020	Soil						x					
12	0407_TP100_0.1-0.5_200619	19-06-2020	Soil						x					

SGS EHS Sydney COC

SE207874

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 19-06-2020	**Received by**	Sign [redacted]	Date / Time 22/06/20	**Temperature Received:**
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time @ 4-30	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

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SLR Consulting Australia Pty Ltd

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- ☒ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
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- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ

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CLIENT: Defence Housing Australia	**LABORATORY: SGS Australia**	**Turnaround Time (TAT)**	**COC Number**
PROJECT: Randwick Barracks	**LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015**		**of**
PROJECT NUMBER: 610.30041	**SAMPLER: MR**	☐ Standard TAT	
PROJECT MANAGER: [redacted]	**SAMPLER CONTACT No:** [redacted]	☐ Non Standard or Urgent TAT	
PM CONTACT No: [redacted]	**Email Reports and Invoices to: LQRSYD@slrconsulting.com ;** [redacted]	**Required TAT: Standard**	

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only	HOLD				Additional Information (Comment on any gross contamination or specific requirements)
13	0407_TP131_0.1-0.5_200618	18-06-2020	Soil					x					Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
14	0407_TP118_0.1-0.5_200619	19-06-2020	Soil					x					
15	0407_TP119_0.1-0.5_200619	19-06-2020	Soil					x					
16	0407_TP120_0.1-0.5_200619	19-06-2020	Soil					x					
17	0407_TP121_0.1-0.7_200619	19-06-2020	Soil					x					
18	0407_TP148_0.1-0.5_200618	18-06-2020	Soil					x					
19	0407_TP149_0.1-0.5_200618	18-06-2020	Soil					x					
20	0407_TP162_0.1-0.5_200618	18-06-2020	Soil					x					
21	0407_TP150_0.1-0.5_200618	18-06-2020	Soil					x					
22	0407_TP163_0.1-0.5_200618	18-06-2020	Soil					x					
23	0407_TP164_0.1-0.5_200618	18-06-2020	Soil					x					
24	0407_TP176_0.1-0.5_200618	18-06-2020	Soil					x					

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 19-06-2020	**Received by**	Sign [redacted]	Date / Time 22/06/20	**Temperature Received:**
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time 0/1.30	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

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ABN 29 001 584 612

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- ☐

CLIENT: Defence Housing Australia	**LABORATORY: SGS Australia**	**Turnaround Time (TAT)**	**COC Number**
PROJECT: Randwick Barracks	**LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015**		**of**
PROJECT NUMBER: 610.30041	**SAMPLER: MR**	☐ Standard TAT	
PROJECT MANAGER: [redacted]	**SAMPLER CONTACT No:** [redacted]	☐ Non Standard or Urgent TAT	
PM CONTACT No: [redacted]	**Email Reports and Invoices to: LQRSYD@slrconsulting.com ;** [redacted]	**Required TAT: Standard**	

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only	HOLD				Additional Information (Comment on any gross contamination or specific requirements)
25	0407_TP177_0.1-0.5_200618	18-06-2020	Soil					x					Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
26	0407_TP178_0.1-0.5_200618	18-06-2020	Soil					x					
27	0407_TP189_0.1-0.5_200618	18-06-2020	Soil					x					
28	0407_TP190_0.1-0.5_200618	18-06-2020	Soil					x					
29	0407_TP191_0.1-0.5_200618	18-06-2020	Soil					x					

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 19-06-2020	**Received by**	Sign [redacted]	Date / Time 22/06/20	**Temperature Received:**
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time 0947	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

SAMPLE RECEIPT ADVICE

SE207874

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	32

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Mon 22/6/2020
Report Due	Tue 30/6/2020
SGS Reference	**SE207874**

SUBMISSION DETAILS

This is to confirm that 32 samples were received on Monday 22/6/2020. Results are expected to be ready by COB Tuesday 30/6/2020. Please quote SGS reference SE207874 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	Client	Sample cooling method	None
Samples received in correct containers	Yes	Sample counts by matrix	32 Soil
Date documentation received	22/6/2020	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	16.3°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

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SAMPLE RECEIPT ADVICE

SE207874

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Fibre Identification in soil	Gravimetric Determination of Asbestos in Soil
001	0407_TP78_0.1-0.5_200619	2	9
002	0407_TP79_0.1-0.5_200619	2	9
003	0407_TP80_0.1-0.5_200619	2	9
004	0407_TP88_0.1-0.5_200619	2	9
005	0407_TP89_0.1-0.5_200619	2	9
006	0407_TP90_0.1-0.5_200619	2	9
007	0407_TP108_0.1-0.6_200619	2	9
008	0407_TP109_0.1-0.5_200619	2	9
009	0407_TP110_0.1-0.5_200619	2	9
010	0407_TP98_0.1-0.5_200619	2	9
011	0407_TP99_0.1-0.5_200619	2	9
012	0407_TP100_0.1-0.5_200619	2	9
013	0407_TP131_0.1-0.5_200618	2	9
014	0407_TP118_0.1-0.5_200619	2	9
015	0407_TP119_0.1-0.5_200619	2	9
016	0407_TP120_0.1-0.5_200619	2	9
017	0407_TP121_0.1-0.7_200619	2	9
018	0407_TP148_0.1-0.5_200618	2	9
019	0407_TP149_0.1-0.5_200618	2	9
020	0407_TP162_0.1-0.5_200618	2	9
021	0407_TP150_0.1-0.5_200618	2	9
022	0407_TP163_0.1-0.5_200618	2	9
023	0407_TP164_0.1-0.5_200618	2	9
024	0407_TP176_0.1-0.5_200618	2	9

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE207874

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Fibre Identification in soil	Gravimetric Determination of Asbestos in Soil
025	0407_TP177_0.1-0.5_200618	2	9
026	0407_TP178_0.1-0.5_200618	2	9
027	0407_TP189_0.1-0.5_200618	2	9
028	0407_TP190_0.1-0.5_200618	2	9
029	0407_TP191_0.1-0.5_200618	2	9
030	0407_TP128_0.1-0.5_200618	2	9
031	0407_TP129_0.1-0.8_200618	2	9
032	0407_TP130_0.1-0.5_200620	2	9

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	32

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207874 R0**
Date Received	22/6/2020
Date Reported	30/6/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.

Asbestos analysed by Approved Identifiers Ravee Sivasubramaniam and Yusuf Kuthpudin

SIGNATORIES

[redacted]

Asbestos Analyst

Fibre Identification in soil [AN602] Tested: 29/6/2020

PARAMETER	UOM	LOR	0407_TP78_0.1-0.5_00619 SOIL - 19/6/2020 SE207874.001	0407_TP79_0.1-0.5_00619 SOIL - 19/6/2020 SE207874.002	0407_TP80_0.1-0.5_00619 SOIL - 19/6/2020 SE207874.003	0407_TP88_0.1-0.5_00619 SOIL - 19/6/2020 SE207874.004	0407_TP89_0.1-0.5_00619 SOIL - 19/6/2020 SE207874.005
Asbestos Detected	No unit	-	No	No	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	0407_TP90_0.1-0.5_00619 SOIL - 19/6/2020 SE207874.006	0407_TP108_0.1-0.6_200619 SOIL - 19/6/2020 SE207874.007	0407_TP109_0.1-0.5_200619 SOIL - 19/6/2020 SE207874.008	0407_TP110_0.1-0.5_200619 SOIL - 19/6/2020 SE207874.009	0407_TP98_0.1-0.5_00619 SOIL - 19/6/2020 SE207874.010
Asbestos Detected	No unit	-	No	No	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	0407_TP99_0.1-0.5_00619 SOIL - 19/6/2020 SE207874.011	0407_TP100_0.1-0.5_200619 SOIL - 19/6/2020 SE207874.012	0407_TP131_0.1-0.5_200618 SOIL - 18/6/2020 SE207874.013	0407_TP118_0.1-0.5_200619 SOIL - 19/6/2020 SE207874.014	0407_TP119_0.1-0.5_200619 SOIL - 19/6/2020 SE207874.015
Asbestos Detected	No unit	-	No	No	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	0407_TP120_0.1-0.5_200619 SOIL - 19/6/2020 SE207874.016	0407_TP121_0.1-0.7_200619 SOIL - 19/6/2020 SE207874.017	0407_TP148_0.1-0.5_200618 SOIL - 18/6/2020 SE207874.018	0407_TP149_0.1-0.5_200618 SOIL - 18/6/2020 SE207874.019	0407_TP162_0.1-0.5_200618 SOIL - 18/6/2020 SE207874.020
Asbestos Detected	No unit	-	No	No	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	0407_TP150_0.1-0.5_200618 SOIL - 18/6/2020 SE207874.021	0407_TP163_0.1-0.5_200618 SOIL - 18/6/2020 SE207874.022	0407_TP164_0.1-0.5_200618 SOIL - 18/6/2020 SE207874.023	0407_TP176_0.1-0.5_200618 SOIL - 18/6/2020 SE207874.024	0407_TP177_0.1-0.5_200618 SOIL - 18/6/2020 SE207874.025
Asbestos Detected	No unit	-	No	No	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	0407_TP178_0.1-0.5_200618 SOIL - 18/6/2020 SE207874.026	0407_TP189_0.1-0.5_200618 SOIL - 18/6/2020 SE207874.027	0407_TP190_0.1-0.5_200618 SOIL - 18/6/2020 SE207874.028	0407_TP191_0.1-0.5_200618 SOIL - 18/6/2020 SE207874.029	0407_TP128_0.1-0.5_200618 SOIL - 18/6/2020 SE207874.030
Asbestos Detected	No unit	-	No	No	No	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

PARAMETER	UOM	LOR	0407_TP129_0.1-0.8_200618 SOIL - 18/6/2020 SE207874.031	0407_TP130_0.1-0.5_200620 SOIL - 20/6/2020 SE207874.032
Asbestos Detected	No unit	-	No	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 29/6/2020

PARAMETER	UOM	LOR	0407_TP78_0.1-0.5_00619 SOIL - 19/6/2020 SE207874.001	0407_TP79_0.1-0.5_00619 SOIL - 19/6/2020 SE207874.002	0407_TP80_0.1-0.5_00619 SOIL - 19/6/2020 SE207874.003	0407_TP88_0.1-0.5_00619 SOIL - 19/6/2020 SE207874.004	0407_TP89_0.1-0.5_00619 SOIL - 19/6/2020 SE207874.005
Total Sample Weight*	g	1	**1461**	**1302**	**1288**	**1366**	**1146**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP90_0.1-0.5_00619 SOIL - 19/6/2020 SE207874.006	0407_TP108_0.1-0.6_200619 SOIL - 19/6/2020 SE207874.007	0407_TP109_0.1-0.5_200619 SOIL - 19/6/2020 SE207874.008	0407_TP110_0.1-0.5_200619 SOIL - 19/6/2020 SE207874.009	0407_TP98_0.1-0.5_00619 SOIL - 19/6/2020 SE207874.010
Total Sample Weight*	g	1	**1402**	**1418**	**1181**	**1192**	**1317**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP99_0.1-0.5_00619 SOIL - 19/6/2020 SE207874.011	0407_TP100_0.1-0.5_200619 SOIL - 19/6/2020 SE207874.012	0407_TP131_0.1-0.5_200618 SOIL - 18/6/2020 SE207874.013	0407_TP118_0.1-0.5_200619 SOIL - 19/6/2020 SE207874.014	0407_TP119_0.1-0.5_200619 SOIL - 19/6/2020 SE207874.015
Total Sample Weight*	g	1	**1255**	**1309**	**1257**	**1292**	**1356**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP120_0.1-0.5_200619 SOIL - 19/6/2020 SE207874.016	0407_TP121_0.1-0.7_200619 SOIL - 19/6/2020 SE207874.017	0407_TP148_0.1-0.5_200618 SOIL - 18/6/2020 SE207874.018	0407_TP149_0.1-0.5_200618 SOIL - 18/6/2020 SE207874.019	0407_TP162_0.1-0.5_200618 SOIL - 18/6/2020 SE207874.020
Total Sample Weight*	g	1	**1512**	**1690**	**1235**	**1305**	**1104**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP150_0.1-0.5 200618 SOIL - 18/6/2020 SE207874.021	0407_TP163_0.1-0.5 200618 SOIL - 18/6/2020 SE207874.022	0407_TP164_0.1-0.5 200618 SOIL - 18/6/2020 SE207874.023	0407_TP176_0.1-0.5 200618 SOIL - 18/6/2020 SE207874.024	0407_TP177_0.1-0.5 200618 SOIL - 18/6/2020 SE207874.025
Total Sample Weight*	g	1	**1305**	**1325**	**1176**	**1140**	**1134**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP178_0.1-0.5 200618 SOIL - 18/6/2020 SE207874.026	0407_TP189_0.1-0.5 200618 SOIL - 18/6/2020 SE207874.027	0407_TP190_0.1-0.5 200618 SOIL - 18/6/2020 SE207874.028	0407_TP191_0.1-0.5 200618 SOIL - 18/6/2020 SE207874.029	0407_TP128_0.1-0.5 200618 SOIL - 18/6/2020 SE207874.030
Total Sample Weight*	g	1	**1154**	**1105**	**992**	**945**	**1173**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP129_0.1-0.8 200618 SOIL - 18/6/2020 SE207874.031	0407_TP130_0.1-0.5 200620 SOIL - 20/6/2020 SE207874.032
Total Sample Weight*	g	1	**977**	**1238**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-

METHOD	METHODOLOGY SUMMARY
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples, Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.
AN605	This technique gravimetrically determines the mass of Bonded Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight. Any fibrous asbestos (FA) found in this fraction will be added to the 2-7mm fraction and its mass recorded there.
AN605	This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free/respirable fibres which are only observed by standard trace analysis as per AN602.
AN605	Bonded asbestos containing material (Bonded ACM) comprises asbestos-containing-material which is sound in condition. Fibrous asbestos (FA) comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material. Asbestos fines (AF) includes free fibres, small fibre bundles and also small fragments of bonded ACM that passes through a 7mm sieve - which implies that the bonded ACM fragments have a substantial degree of damage which increases the potential for fibre release.
AN-605	Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009 and NEPM 1999 (2013) schedule B1 section 4..

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	32

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207874 R0**
Date Received	22 Jun 2020
Date Reported	30 Jun 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

No respirable fibres detected in all soil samples using trace analysis technique.

Asbestos analysed by Approved Identifiers Ravee Sivasubramaniam and Yusuf Kuthpudin

SIGNATORIES

[redacted]

Asbestos Analyst

RESULTS

Fibre Identification in soil — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE207874.001	0407_TP78_0.1-0.5_200619	Soil	1461g Sand, Soil	19 Jun 2020	No Asbestos Found	<0.01
SE207874.002	0407_TP79_0.1-0.5_200619	Soil	1302g Sand, Soil	19 Jun 2020	No Asbestos Found	<0.01
SE207874.003	0407_TP80_0.1-0.5_200619	Soil	1288g Sand, Soil	19 Jun 2020	No Asbestos Found	<0.01
SE207874.004	0407_TP88_0.1-0.5_200619	Soil	1366g Sand	19 Jun 2020	No Asbestos Found	<0.01
SE207874.005	0407_TP89_0.1-0.5_200619	Soil	1146g Sand, Soil	19 Jun 2020	No Asbestos Found	<0.01
SE207874.006	0407_TP90_0.1-0.5_200619	Soil	1402g Sand	19 Jun 2020	No Asbestos Found	<0.01
SE207874.007	0407_TP108_0.1-0.6_200619	Soil	1418g Sand, Soil	19 Jun 2020	No Asbestos Found	<0.01
SE207874.008	0407_TP109_0.1-0.5_200619	Soil	1181g Sand, Soil	19 Jun 2020	No Asbestos Found	<0.01
SE207874.009	0407_TP110_0.1-0.5_200619	Soil	1192g Sand, Soil, Rocks	19 Jun 2020	No Asbestos Found	<0.01
SE207874.010	0407_TP98_0.1-0.5_200619	Soil	1317g Sand, Soil	19 Jun 2020	No Asbestos Found	<0.01
SE207874.011	0407_TP99_0.1-0.5_200619	Soil	1255g Sand	19 Jun 2020	No Asbestos Found	<0.01
SE207874.012	0407_TP100_0.1-0.5_200619	Soil	1309g Sand, Soil	19 Jun 2020	No Asbestos Found	<0.01
SE207874.013	0407_TP131_0.1-0.5_200618	Soil	1257g Sand, Soil	18 Jun 2020	No Asbestos Found	<0.01
SE207874.014	0407_TP118_0.1-0.5_200619	Soil	1292g Sand, Soil	19 Jun 2020	No Asbestos Found	<0.01
SE207874.015	0407_TP119_0.1-0.5_200619	Soil	1356g Sand, Soil, Rocks	19 Jun 2020	No Asbestos Found	<0.01
SE207874.016	0407_TP120_0.1-0.5_200619	Soil	1512g Sand, Rocks	19 Jun 2020	No Asbestos Found	<0.01
SE207874.017	0407_TP121_0.1-0.7_200619	Soil	1690g Sand, Rocks	19 Jun 2020	No Asbestos Found	<0.01
SE207874.018	0407_TP148_0.1-0.5_200618	Soil	1235g Sand, Soil, Rocks	18 Jun 2020	No Asbestos Found	<0.01
SE207874.019	0407_TP149_0.1-0.5_200618	Soil	1305g Sand, Rocks	18 Jun 2020	No Asbestos Found	<0.01
SE207874.020	0407_TP162_0.1-0.5_200618	Soil	1104g Sand, Soil, Rocks	18 Jun 2020	No Asbestos Found	<0.01
SE207874.021	0407_TP150_0.1-0.5_200618	Soil	1305g Sand, Soil	18 Jun 2020	No Asbestos Found	<0.01
SE207874.022	0407_TP163_0.1-0.5_200618	Soil	1325g Sand, Soil	18 Jun 2020	No Asbestos Found	<0.01
SE207874.023	0407_TP164_0.1-0.5_200618	Soil	1176g Sand, Soil, Rocks	18 Jun 2020	No Asbestos Found	<0.01
SE207874.024	0407_TP176_0.1-0.5_200618	Soil	1140g Sand, Soil, Rocks	18 Jun 2020	No Asbestos Found	<0.01
SE207874.025	0407_TP177_0.1-0.5_200618	Soil	1134g Sand, Soil, Rocks	18 Jun 2020	No Asbestos Found	<0.01
SE207874.026	0407_TP178_0.1-0.5_200618	Soil	1154g Sand, Soil, Rocks	18 Jun 2020	No Asbestos Found	<0.01
SE207874.027	0407_TP189_0.1-0.5_200618	Soil	1105g Sand, Soil, Rocks	18 Jun 2020	No Asbestos Found	<0.01

RESULTS

Fibre Identification in soil — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE207874.028	0407_TP190_0.1 -0.5_200618	Soil	992g Sand, Soil, Rocks	18 Jun 2020	No Asbestos Found	<0.01
SE207874.029	0407_TP191_0.1 -0.5_200618	Soil	945g Sand, Soil, Rocks	18 Jun 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE207874.030	0407_TP128_0.1 -0.5_200618	Soil	1173g Sand, Soil	18 Jun 2020	No Asbestos Found	<0.01
SE207874.031	0407_TP129_0.1 -0.8_200618	Soil	977g Sand, Soil, Rocks	18 Jun 2020	No Asbestos Found	<0.01
SE207874.032	0407_TP130_0.1 -0.5_200620	Soil	1238g Sand, Soil	20 Jun 2020	No Asbestos Found	<0.01

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 29/6/2020

PARAMETER	UOM	LOR	0407_TP78_0.1-0.5_00619 SOIL - 19/6/2020 SE207874.001	0407_TP79_0.1-0.5_00619 SOIL - 19/6/2020 SE207874.002	0407_TP80_0.1-0.5_00619 SOIL - 19/6/2020 SE207874.003	0407_TP88_0.1-0.5_00619 SOIL - 19/6/2020 SE207874.004	0407_TP89_0.1-0.5_00619 SOIL - 19/6/2020 SE207874.005
Total Sample Weight*	g	1	**1461**	**1302**	**1288**	**1366**	**1146**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP90_0.1-0.5_00619 SOIL - 19/6/2020 SE207874.006	0407_TP108_0.1-0.6_200619 SOIL - 19/6/2020 SE207874.007	0407_TP109_0.1-0.5_200619 SOIL - 19/6/2020 SE207874.008	0407_TP110_0.1-0.5_200619 SOIL - 19/6/2020 SE207874.009	0407_TP98_0.1-0.5_00619 SOIL - 19/6/2020 SE207874.010
Total Sample Weight*	g	1	**1402**	**1418**	**1181**	**1192**	**1317**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP99_0.1-0.5_00619 SOIL - 19/6/2020 SE207874.011	0407_TP100_0.1-0.5_200619 SOIL - 19/6/2020 SE207874.012	0407_TP131_0.1-0.5_200618 SOIL - 18/6/2020 SE207874.013	0407_TP118_0.1-0.5_200619 SOIL - 19/6/2020 SE207874.014	0407_TP119_0.1-0.5_200619 SOIL - 19/6/2020 SE207874.015
Total Sample Weight*	g	1	**1255**	**1309**	**1257**	**1292**	**1356**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP120_0.1-0.5_200619 SOIL - 19/6/2020 SE207874.016	0407_TP121_0.1-0.7_200619 SOIL - 19/6/2020 SE207874.017	0407_TP148_0.1-0.5_200618 SOIL - 18/6/2020 SE207874.018	0407_TP149_0.1-0.5_200618 SOIL - 18/6/2020 SE207874.019	0407_TP162_0.1-0.5_200618 SOIL - 18/6/2020 SE207874.020
Total Sample Weight*	g	1	**1512**	**1690**	**1235**	**1305**	**1104**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 29/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP150_0.1-0.5_200618 SOIL - 18/6/2020 SE207874.021	0407_TP163_0.1-0.5_200618 SOIL - 18/6/2020 SE207874.022	0407_TP164_0.1-0.5_200618 SOIL - 18/6/2020 SE207874.023	0407_TP176_0.1-0.5_200618 SOIL - 18/6/2020 SE207874.024	0407_TP177_0.1-0.5_200618 SOIL - 18/6/2020 SE207874.025
Total Sample Weight*	g	1	**1305**	**1325**	**1176**	**1140**	**1134**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP178_0.1-0.5_200618 SOIL - 18/6/2020 SE207874.026	0407_TP189_0.1-0.5_200618 SOIL - 18/6/2020 SE207874.027	0407_TP190_0.1-0.5_200618 SOIL - 18/6/2020 SE207874.028	0407_TP191_0.1-0.5_200618 SOIL - 18/6/2020 SE207874.029	0407_TP128_0.1-0.5_200618 SOIL - 18/6/2020 SE207874.030
Total Sample Weight*	g	1	**1154**	**1105**	**992**	**945**	**1173**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP129_0.1-0.8_200618 SOIL - 18/6/2020 SE207874.031	0407_TP130_0.1-0.5_200620 SOIL - 20/6/2020 SE207874.032
Total Sample Weight*	g	1	**977**	**1238**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-

METHOD SUMMARY

METHOD	METHODOLOGY SUMMARY
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples , Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable ’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.
AN605	This technique gravimetrically determines the mass of Bonded Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight. Any fibrous asbestos (FA) found in this fraction will be added to the 2-7mm fraction and its mass recorded there.
AN605	This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free/respirable fibres which are only observed by standard trace analysis as per AN602.
AN605	Bonded asbestos containing material (Bonded ACM) comprises asbestos-containing-material which is sound in condition. Fibrous asbestos (FA) comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material. Asbestos fines (AF) includes free fibres, small fibre bundles and also small fragments of bonded ACM that passes through a 7mm sieve - which implies that the bonded ACM fragments have a substantial degree of damage which increases the potential for fibre release.
AN-605	Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009 and NEPM 1999 (2013) schedule B1 section 4..

FOOTNOTES

Amosite	-	Brown Asbestos	NA	-	Not Analysed
Chrysotile	-	White Asbestos	LNR	-	Listed, Not Required
Crocidolite	-	Blue Asbestos	*	-	NATA accreditation does not cover the performance of this service.
Amphiboles	-	Amosite and/or Crocidolite	**	-	Indicative data, theoretical holding time exceeded.

(In reference to soil samples only) This report does not comply with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment and Remediation and Management of Asbestos Contaminated sites in Western Australia - May 2009.

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.

Where reported: 'Asbestos Detected': Asbestos detected by polarised light microscopy, including dispersion staining.
Where reported: 'No Asbestos Found': No Asbestos Found by polarised light microscopy, including dispersion staining.
Where reported: 'UMF Detected': Mineral fibres of unknown type detected by polarised light microscopy, including dispersion staining. Confirmation by another independent analytical technique may be necessary.

Even after disintegration it can be very difficult, or impossible, to detect the presence of asbestos in some asbestos-containing bulk materials using polarised light microscopy. This is due to the low grade or small length or diameter of asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE207874 R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	32

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
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Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207874 R0**
Date Received	22 Jun 2020
Date Reported	30 Jun 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met (within the SGS Alexandria Environmental laboratory).

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	Client	Sample cooling method	None
Samples received in correct containers	Yes	Sample counts by matrix	32 Soil
Date documentation received	22/6/2020	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	16.3°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE207874 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Fibre Identification in soil

Method: ME-(AU)-[ENV]AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP78_0.1-0.5_200619	SE207874.001	LB202974	19 Jun 2020	22 Jun 2020	19 Jun 2021	29 Jun 2020	19 Jun 2021	30 Jun 2020
0407_TP79_0.1-0.5_200619	SE207874.002	LB202974	19 Jun 2020	22 Jun 2020	19 Jun 2021	29 Jun 2020	19 Jun 2021	30 Jun 2020
0407_TP80_0.1-0.5_200619	SE207874.003	LB202974	19 Jun 2020	22 Jun 2020	19 Jun 2021	29 Jun 2020	19 Jun 2021	30 Jun 2020
0407_TP88_0.1-0.5_200619	SE207874.004	LB202974	19 Jun 2020	22 Jun 2020	19 Jun 2021	29 Jun 2020	19 Jun 2021	30 Jun 2020
0407_TP89_0.1-0.5_200619	SE207874.005	LB202974	19 Jun 2020	22 Jun 2020	19 Jun 2021	29 Jun 2020	19 Jun 2021	30 Jun 2020
0407_TP90_0.1-0.5_200619	SE207874.006	LB202974	19 Jun 2020	22 Jun 2020	19 Jun 2021	29 Jun 2020	19 Jun 2021	30 Jun 2020
0407_TP108_0.1-0.6_20061	SE207874.007	LB202974	19 Jun 2020	22 Jun 2020	19 Jun 2021	29 Jun 2020	19 Jun 2021	30 Jun 2020
0407_TP109_0.1-0.5_20061	SE207874.008	LB202974	19 Jun 2020	22 Jun 2020	19 Jun 2021	29 Jun 2020	19 Jun 2021	30 Jun 2020
0407_TP110_0.1-0.5_20061	SE207874.009	LB202974	19 Jun 2020	22 Jun 2020	19 Jun 2021	29 Jun 2020	19 Jun 2021	30 Jun 2020
0407_TP98_0.1-0.5_200619	SE207874.010	LB202974	19 Jun 2020	22 Jun 2020	19 Jun 2021	29 Jun 2020	19 Jun 2021	30 Jun 2020
0407_TP99_0.1-0.5_200619	SE207874.011	LB202974	19 Jun 2020	22 Jun 2020	19 Jun 2021	29 Jun 2020	19 Jun 2021	30 Jun 2020
0407_TP100_0.1-0.5_20061	SE207874.012	LB202974	19 Jun 2020	22 Jun 2020	19 Jun 2021	29 Jun 2020	19 Jun 2021	30 Jun 2020
0407_TP131_0.1-0.5_20061	SE207874.013	LB202974	18 Jun 2020	22 Jun 2020	18 Jun 2021	29 Jun 2020	18 Jun 2021	30 Jun 2020
0407_TP118_0.1-0.5_20061	SE207874.014	LB202974	19 Jun 2020	22 Jun 2020	19 Jun 2021	29 Jun 2020	19 Jun 2021	30 Jun 2020
0407_TP119_0.1-0.5_20061	SE207874.015	LB202974	19 Jun 2020	22 Jun 2020	19 Jun 2021	29 Jun 2020	19 Jun 2021	30 Jun 2020
0407_TP120_0.1-0.5_20061	SE207874.016	LB202974	19 Jun 2020	22 Jun 2020	19 Jun 2021	29 Jun 2020	19 Jun 2021	30 Jun 2020
0407_TP121_0.1-0.7_20061	SE207874.017	LB202974	19 Jun 2020	22 Jun 2020	19 Jun 2021	29 Jun 2020	19 Jun 2021	30 Jun 2020
0407_TP148_0.1-0.5_20061	SE207874.018	LB202974	18 Jun 2020	22 Jun 2020	18 Jun 2021	29 Jun 2020	18 Jun 2021	30 Jun 2020
0407_TP149_0.1-0.5_20061	SE207874.019	LB202974	18 Jun 2020	22 Jun 2020	18 Jun 2021	29 Jun 2020	18 Jun 2021	30 Jun 2020
0407_TP162_0.1-0.5_20061	SE207874.020	LB202974	18 Jun 2020	22 Jun 2020	18 Jun 2021	29 Jun 2020	18 Jun 2021	30 Jun 2020
0407_TP150_0.1-0.5_20061	SE207874.021	LB202974	18 Jun 2020	22 Jun 2020	18 Jun 2021	29 Jun 2020	18 Jun 2021	30 Jun 2020
0407_TP163_0.1-0.5_20061	SE207874.022	LB202974	18 Jun 2020	22 Jun 2020	18 Jun 2021	29 Jun 2020	18 Jun 2021	30 Jun 2020
0407_TP164_0.1-0.5_20061	SE207874.023	LB202974	18 Jun 2020	22 Jun 2020	18 Jun 2021	29 Jun 2020	18 Jun 2021	30 Jun 2020
0407_TP176_0.1-0.5_20061	SE207874.024	LB202974	18 Jun 2020	22 Jun 2020	18 Jun 2021	29 Jun 2020	18 Jun 2021	30 Jun 2020
0407_TP177_0.1-0.5_20061	SE207874.025	LB202974	18 Jun 2020	22 Jun 2020	18 Jun 2021	29 Jun 2020	18 Jun 2021	30 Jun 2020
0407_TP178_0.1-0.5_20061	SE207874.026	LB202974	18 Jun 2020	22 Jun 2020	18 Jun 2021	29 Jun 2020	18 Jun 2021	30 Jun 2020
0407_TP189_0.1-0.5_20061	SE207874.027	LB202974	18 Jun 2020	22 Jun 2020	18 Jun 2021	29 Jun 2020	18 Jun 2021	30 Jun 2020
0407_TP190_0.1-0.5_20061	SE207874.028	LB202974	18 Jun 2020	22 Jun 2020	18 Jun 2021	29 Jun 2020	18 Jun 2021	30 Jun 2020
0407_TP191_0.1-0.5_20061	SE207874.029	LB202974	18 Jun 2020	22 Jun 2020	18 Jun 2021	29 Jun 2020	18 Jun 2021	30 Jun 2020
0407_TP128_0.1-0.5_20061	SE207874.030	LB202974	18 Jun 2020	22 Jun 2020	18 Jun 2021	29 Jun 2020	18 Jun 2021	30 Jun 2020
0407_TP129_0.1-0.8_20061	SE207874.031	LB202974	18 Jun 2020	22 Jun 2020	18 Jun 2021	29 Jun 2020	18 Jun 2021	30 Jun 2020
0407_TP130_0.1-0.5_20062	SE207874.032	LB202974	20 Jun 2020	22 Jun 2020	20 Jun 2021	29 Jun 2020	20 Jun 2021	30 Jun 2020

Gravimetric Determination of Asbestos in Soil

Method: ME-(AU)-[ENV]AN605

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP78_0.1-0.5_200619	SE207874.001	LB202974	19 Jun 2020	22 Jun 2020	16 Dec 2020	29 Jun 2020	16 Dec 2020	30 Jun 2020
0407_TP79_0.1-0.5_200619	SE207874.002	LB202974	19 Jun 2020	22 Jun 2020	16 Dec 2020	29 Jun 2020	16 Dec 2020	30 Jun 2020
0407_TP80_0.1-0.5_200619	SE207874.003	LB202974	19 Jun 2020	22 Jun 2020	16 Dec 2020	29 Jun 2020	16 Dec 2020	30 Jun 2020
0407_TP88_0.1-0.5_200619	SE207874.004	LB202974	19 Jun 2020	22 Jun 2020	16 Dec 2020	29 Jun 2020	16 Dec 2020	30 Jun 2020
0407_TP89_0.1-0.5_200619	SE207874.005	LB202974	19 Jun 2020	22 Jun 2020	16 Dec 2020	29 Jun 2020	16 Dec 2020	30 Jun 2020
0407_TP90_0.1-0.5_200619	SE207874.006	LB202974	19 Jun 2020	22 Jun 2020	16 Dec 2020	29 Jun 2020	16 Dec 2020	30 Jun 2020
0407_TP108_0.1-0.6_20061	SE207874.007	LB202974	19 Jun 2020	22 Jun 2020	16 Dec 2020	29 Jun 2020	16 Dec 2020	30 Jun 2020
0407_TP109_0.1-0.5_20061	SE207874.008	LB202974	19 Jun 2020	22 Jun 2020	16 Dec 2020	29 Jun 2020	16 Dec 2020	30 Jun 2020
0407_TP110_0.1-0.5_20061	SE207874.009	LB202974	19 Jun 2020	22 Jun 2020	16 Dec 2020	29 Jun 2020	16 Dec 2020	30 Jun 2020
0407_TP98_0.1-0.5_200619	SE207874.010	LB202974	19 Jun 2020	22 Jun 2020	16 Dec 2020	29 Jun 2020	16 Dec 2020	30 Jun 2020
0407_TP99_0.1-0.5_200619	SE207874.011	LB202974	19 Jun 2020	22 Jun 2020	16 Dec 2020	29 Jun 2020	16 Dec 2020	30 Jun 2020
0407_TP100_0.1-0.5_20061	SE207874.012	LB202974	19 Jun 2020	22 Jun 2020	16 Dec 2020	29 Jun 2020	16 Dec 2020	30 Jun 2020
0407_TP131_0.1-0.5_20061	SE207874.013	LB202974	18 Jun 2020	22 Jun 2020	15 Dec 2020	29 Jun 2020	15 Dec 2020	30 Jun 2020
0407_TP118_0.1-0.5_20061	SE207874.014	LB202974	19 Jun 2020	22 Jun 2020	16 Dec 2020	29 Jun 2020	16 Dec 2020	30 Jun 2020
0407_TP119_0.1-0.5_20061	SE207874.015	LB202974	19 Jun 2020	22 Jun 2020	16 Dec 2020	29 Jun 2020	16 Dec 2020	30 Jun 2020
0407_TP120_0.1-0.5_20061	SE207874.016	LB202974	19 Jun 2020	22 Jun 2020	16 Dec 2020	29 Jun 2020	16 Dec 2020	30 Jun 2020
0407_TP121_0.1-0.7_20061	SE207874.017	LB202974	19 Jun 2020	22 Jun 2020	16 Dec 2020	29 Jun 2020	16 Dec 2020	30 Jun 2020
0407_TP148_0.1-0.5_20061	SE207874.018	LB202974	18 Jun 2020	22 Jun 2020	15 Dec 2020	29 Jun 2020	15 Dec 2020	30 Jun 2020
0407_TP149_0.1-0.5_20061	SE207874.019	LB202974	18 Jun 2020	22 Jun 2020	15 Dec 2020	29 Jun 2020	15 Dec 2020	30 Jun 2020
0407_TP162_0.1-0.5_20061	SE207874.020	LB202974	18 Jun 2020	22 Jun 2020	15 Dec 2020	29 Jun 2020	15 Dec 2020	30 Jun 2020
0407_TP150_0.1-0.5_20061	SE207874.021	LB202974	18 Jun 2020	22 Jun 2020	15 Dec 2020	29 Jun 2020	15 Dec 2020	30 Jun 2020
0407_TP163_0.1-0.5_20061	SE207874.022	LB202974	18 Jun 2020	22 Jun 2020	15 Dec 2020	29 Jun 2020	15 Dec 2020	30 Jun 2020
0407_TP164_0.1-0.5_20061	SE207874.023	LB202974	18 Jun 2020	22 Jun 2020	15 Dec 2020	29 Jun 2020	15 Dec 2020	30 Jun 2020
0407_TP176_0.1-0.5_20061	SE207874.024	LB202974	18 Jun 2020	22 Jun 2020	15 Dec 2020	29 Jun 2020	15 Dec 2020	30 Jun 2020
0407_TP177_0.1-0.5_20061	SE207874.025	LB202974	18 Jun 2020	22 Jun 2020	15 Dec 2020	29 Jun 2020	15 Dec 2020	30 Jun 2020

HOLDING TIME SUMMARY

SE207874 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Gravimetric Determination of Asbestos in Soil (continued)

Method: ME-(AU)-[ENV]AN605

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP178_0.1-0.5_20061	SE207874.026	LB202974	18 Jun 2020	22 Jun 2020	15 Dec 2020	29 Jun 2020	15 Dec 2020	30 Jun 2020
0407_TP189_0.1-0.5_20061	SE207874.027	LB202974	18 Jun 2020	22 Jun 2020	15 Dec 2020	29 Jun 2020	15 Dec 2020	30 Jun 2020
0407_TP190_0.1-0.5_20061	SE207874.028	LB202974	18 Jun 2020	22 Jun 2020	15 Dec 2020	29 Jun 2020	15 Dec 2020	30 Jun 2020
0407_TP191_0.1-0.5_20061	SE207874.029	LB202974	18 Jun 2020	22 Jun 2020	15 Dec 2020	29 Jun 2020	15 Dec 2020	30 Jun 2020
0407_TP128_0.1-0.5_20061	SE207874.030	LB202974	18 Jun 2020	22 Jun 2020	15 Dec 2020	29 Jun 2020	15 Dec 2020	30 Jun 2020
0407_TP129_0.1-0.8_20061	SE207874.031	LB202974	18 Jun 2020	22 Jun 2020	15 Dec 2020	29 Jun 2020	15 Dec 2020	30 Jun 2020
0407_TP130_0.1-0.5_20062	SE207874.032	LB202974	20 Jun 2020	22 Jun 2020	17 Dec 2020	29 Jun 2020	17 Dec 2020	30 Jun 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No surrogates were required for this job.

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

No method blanks were required for this job.

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No duplicates were required for this job.

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

No laboratory control standards were required for this job.

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spikes were required for this job.

MATRIX SPIKE DUPLICATES

SE207874 R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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ABN 29 001 584 612

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CLIENT: Defence Housing Australia	**LABORATORY:** SGS Australia
PROJECT: Randwick Barracks	**LABORATORY ADDRESS:** Unit 16/33 Maddox St, Alexandria NSW 2015
PROJECT NUMBER: 610.30041	**SAMPLER:** MR
PROJECT MANAGER: [redacted]	**SAMPLER CONTACT No:** [redacted]
PM CONTACT No: [redacted]	**Email Reports and Invoices to:** LQRSYD@slrconsulting.com ; [redacted]

Turnaround Time (TAT)
- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number of

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A (No asbestos)	PFAS	OCP/OPP Only	Asbestos Only	HOLD	Suite D	Heavy metals, TPH/BTEXN, PAH, VOC/SVOCs and PFAS		Additional Information (Comment on any gross contamination or specific requirements)
1	0407_SH015_0.2-0.3_200624	24-06-2020	Soil		x	x							Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
2	0407_SH016_0.2-0.3_200624	24-06-2020	Soil		x	x							
	0407_SH019_0.1-0.2_200624	24-06-2020	Soil						x				
3	0407_SH019_0.2-0.3_200624	24-06-2020	Soil		x	x							
4	0407_SH023_0.2-0.3_200624	24-06-2020	Soil		x	x							
5	0407_QC306_200623	24-06-2020	Water								x		
	0407_SH024_0.1-0.2_200624	24-06-2020	Soil		x	x							

SGS EHS Sydney COC

SE208848

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 25-06-2020	**Received by**	Sign [redacted]	Date / Time 25/06/20	**Temperature Received:**	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time 04:30		
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time		

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- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ

CLIENT: Defence Housing Australia	**LABORATORY: SGS Australia**	**Turnaround Time (TAT)**	**COC Number**
PROJECT: Randwick Barracks	**LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015**		**of**
PROJECT NUMBER: 610.30041	**SAMPLER: MR**	☐ Standard TAT	
PROJECT MANAGER: [redacted]	**SAMPLER CONTACT No:** [redacted]	☐ Non Standard or Urgent TAT	
PM CONTACT No: [redacted]	**Email Reports and Invoices to: LQRSYD@slrconsulting.com ;** [redacted]	**Required TAT: Standard**	

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A (No asbestos)	PFAS (HOLD)	OCP/OPP Only	Asbestos Only	HOLD	Suite F	Heavy metals, TPH/BTEXN, PAH, VOC/SVOCs and PFAS	Suite D, MTBEs	Additional Information (Comment on any gross contamination or specific requirements)
6	0407_BH011_0.1_200625	25-06-2020	Soil				x			x			Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
7	0407_BH011_0.5_200625	25-06-2020	Soil				x	x		x			
	0407_BH011_1.0_200625	25-06-2020	Soil						x				
	0407_BH011_1.2_200625	25-06-2020	Soil						x				
8	0407_QC166_200625	25-06-2020	Soil				x			x			
	0407_QC266_200625	25-06-2020	Soil										Please send to Eurofins for Suite F and OCP/OPP
9	0407_BH012_0.1_200625	25-06-2020	Soil				x	x		x			
	0407_BH012_0.3_200625	25-06-2020	Soil						x				
10	0407_BH012_0.5_200625	25-06-2020	Soil				x			x			
11	0407_BH013_0.1_200625	25-06-2020	Soil				x	x		x		x	
12	0407_BH013_0.5_200625	25-06-2020	Soil				x			x		x	

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 25-06-2020	**Received by**	Sign [redacted]	Date / Time 25/07/20	**Temperature Received:**
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time 4:30	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

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CLIENT: Defence Housing Australia	**LABORATORY: SGS Australia**	**Turnaround Time (TAT)**	**COC Number**
PROJECT: Randwick Barracks	**LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015**		**of**
PROJECT NUMBER: 610.30041	**SAMPLER: MR**	☐ Standard TAT	
PROJECT MANAGER: [redacted]	**SAMPLER CONTACT No: [redacted]**	☐ Non Standard or Urgent TAT	
PM CONTACT No: [redacted]	**Email Reports and Invoices to: LQRSYD@slrconsulting.com ; [redacted]**	**Required TAT: Standard**	

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: Suite A (No asbestos)	PFAS (HOLD)	OCP/OPP Only	Asbestos Only	HOLD	Suite D, MTBEs	Heavy metals, TPH/BTEXN, PAH, VOC/SVOCs and PFAS	Suite E and H	Additional Information (Comment on any gross contamination or specific requirements)
13	0407_SH007_0.1_200625	25-06-2020	Soil							x		x	Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
	0407_SH007_0.3_200625	25-06-2020	Soil						x				
14	0407_SH007_0.5_200625	25-06-2020	Soil							x		x	
15	0407_SH011_0.1_200625	25-06-2020	Soil							x			
16	0407_SH011_0.3_200625	25-06-2020	Soil							x			
	0407_SH011_0.5_200625	25-06-2020	Soil						x				
17	0407_SH014_0.1_200625	25-06-2020	Soil							x			

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 25-06-2020	**Received by**	Sign [redacted]	Date / Time 25/06/20	**Temperature Received:**
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time @ 4:30	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

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- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☒ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐

CLIENT: Defence Housing Australia

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGER: [redacted]

PM CONTACT No: [redacted]

LABORATORY: SGS Australia

LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015

SAMPLER: MR

SAMPLER CONTACT No: [redacted]

Email Reports and Invoices to: LQRSYD@slrconsulting.com [redacted]

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number of

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite B	PFAS (HOLD)	OCP/OPP Only	Asbestos Only	HOLD	Suite E and H	Heavy metals, TPH/BTEXN, PAH, VOC/SVOCs and PFAS	Suite D, MTBEs	Additional Information (Comment on any gross contamination or specific requirements)
18	0407_SH012_0.1_200626	26-06-2020	Soil									x	Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
19	0407_SH012_0.5_200626	26-06-2020	Soil									x	
20	0407_BH010_0.1_200626	26-06-2020	Soil							x			
	0407_BH010_0.3_200626	26-06-2020	Soil						x				
21	0407_BH010_0.5_200626	26-06-2020	Soil							x			
	0407_BH010_1.0_200626	26-06-2020	Soil						x				
	0407_BH010_1.2_200626	26-06-2020	Soil						x				
22	0407_QC308_200626	26-06-2020	Water								x		
23	0407_BH033_0.1_200626	26-06-2020	Soil		x								
	0407_BH033_0.5_200626	26-06-2020	Soil						x				
24	0407_BH033_0.7_200626	26-06-2020	Soil		x								

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time	26-06-2020	**Received by**	Sign [redacted]	Date / Time	25/06/20
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	04:30
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	

Temperature Received:

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

SLR

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☐ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Stuart Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ

CLIENT: Defence Housing Australia	**LABORATORY: SGS Australia**
PROJECT: Randwick Barracks	**LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015**
PROJECT NUMBER: 610.30041	**SAMPLER:** [redacted]
PROJECT MANAGER: [redacted]	**SAMPLER CONTACT No** [redacted]
PM CONTACT No [redacted]	**Email Reports and Invoices to: LQRSYD@slrconsulting.com** [redacted]

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number of

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite B	PFAS (HOLD)	OCP/OPP Only	Asbestos Only	HOLD	Suite E and H	Heavy metals, TPH/BTEXN, PAH, VOC/SVOCs and PFAS	Suite D, MTBEs	Additional Information (Comment on any gross contamination or specific requirements)
25	0407_BH034_0.1_200626	26-06-2020	Soil		x								Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
26	0407_BH034_0.5_200626	26-06-2020	Soil		x								
[redacted]	0407_BH038_0.1_200626	26-06-2020	Soil		x								
27	0407_BH038_0.3_200626	26-06-2020	Soil		x								
[redacted]	0407_BH039_0.1_200626	26-06-2020	Soil		x								
	0407_BH040_0.1_200626	26-06-2020	Soil						x				
28	0407_BH040_0.3_200626	26-06-2020	Soil		x								
29	0407_BH040_0.5_200626	26-06-2020	Soil		x								

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time	26-06-2020	**Received by**	Sign [redacted]	Date / Time	25/06/20
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	04:30
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	

Temperature Received:

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
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- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☒ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: G/A Cambridge Street, Richmond, Port Nelson, 7000 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ

SLR

CLIENT: Defence Housing Australia

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGER [redacted]

PM CONTACT No: [redacted]

E-MAILED 14/7/20 12:14

LABORATORY: SGS Australia

LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015

SAMPLER: GF

SAMPLER CONTACT No: [redacted]

Email Reports and Invoices to: LQRSYD@slrconsulting.com ; [redacted]

Turnaround Time (TAT)

☐ Standard TAT

☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number of

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	Asbestos ONLY	HOLD	C6-C10/BETXN	Additional Information (Comment on any gross contamination or specific requirements)
									Please hold all PFAS containers
30	0407_QC174_200626	26/06/2020	Soil	jar, pfas	x				
	0407_QC274_200626	26/06/2020	Soil	jar, pfas	x				Please send to Eurofins
31	0407_QC307_200626								

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	MR	Date / Time	18/06/2020	**Received by**	Sign	[redacted]	Date / Time	25/06/20
Relinquished By	Sign	Date / Time		**Received by**	Sign		Date / Time	@ 4:30
Relinquished By	Sign	Date / Time		**Received by**	Sign		Date / Time	

Temperature Received:

SAMPLE RECEIPT ADVICE

SE208848

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	31

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Thu 25/6/2020
Report Due	Mon 27/7/2020
SGS Reference	**SE208848**

SUBMISSION DETAILS

This is to confirm that 31 samples were received on Thursday 25/6/2020. Results are expected to be ready by COB Monday 27/7/2020. Please quote SGS reference SE208848 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	28 Soil, 3 Water
Date documentation received	17/7/2020@10:19am	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	3.7°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

PFAS subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420,
11 Soil have been placed on hold as no tests have been assigned for them by the client. These samples will not be processed.
Explosives subcontracted to Eurofins/MGT. 733254

This document is issued by the Company under its General Conditions of Service accessible at www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

SAMPLE RECEIPT ADVICE

SE208848

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	Speciated Phenols in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
001	0407_SH015_0.2-0.3_200624	29	14	26	11	18	10	81	7
002	0407_SH016_0.2-0.3_200624	29	14	26	11	18	10	81	7
003	0407_SH023_0.2-0.3_200624	29	14	26	11	18	10	81	7
005	0407_SH024_0.1-0.2_200624	29	14	26	11	18	10	81	7
006	0407_BH11_0.1_200625	29	14	-	11	-	10	81	7
007	0407_BH11_0.5_200625	29	14	-	11	-	10	81	7
008	0407_QC166_200625	29	14	-	11	-	10	81	7
009	0407_BH12_0.1_200625	29	14	-	11	-	10	81	7
010	0407_BH12_0.5_200625	29	14	-	11	-	10	81	7
011	0407_BH13_0.1_200625	29	14	26	11	18	10	81	7
012	0407_BH13_0.5_200625	29	14	26	11	18	10	81	7
013	040_SH007_0.1_200625	-	-	26	-	18	10	12	7
014	040_SH007_0.5_200625	-	-	26	-	18	10	12	7
015	040_SH011_0.1_200625	-	-	26	-	18	10	12	7
016	040_SH011_0.3_200625	-	-	26	-	18	10	12	7
017	040_SH014_0.1_200625	-	-	26	-	18	10	12	7
018	040_SH012_0.1_200626	-	-	26	-	18	10	12	7
019	040_SH012_0.5_200626	-	-	26	-	18	10	12	7
020	040_BH010_0.1_200626	-	-	26	-	-	-	-	-
021	040_BH010_0.5_200626	-	-	26	-	-	-	-	-
023	0407_BH33_0.1_200626	-	-	26	11	-	10	11	7
024	0407_BH33_0.7_200626	-	-	26	11	-	10	11	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE208848

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	Speciated Phenols in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
025	0407_BH34_0.1_200626	-	-	26	11	-	10	11	7
026	0407_BH34_0.5_200626	-	-	26	11	-	10	11	7
027	0407_BH38_0.3_200626	-	-	26	11	-	10	11	7
028	0407_BH40_0.3_200626	-	-	26	11	-	10	11	7
029	0407_BH40_0.5_200626	-	-	26	11	-	10	11	7
030	0407_QC174_200626	29	14	26	11	18	10	81	7

CONTINUED OVERLEAF

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SAMPLE RECEIPT ADVICE

SE208848

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Mercury in Soil	Moisture Content	Per- and Polyfluoroalkyl Substances (PFAS) in	Sample Subcontracted	Total Recoverable Elements in Soil/Waste	VOCs in Water
001	0407_SH015_0.2-0.3_200624	1	1	55	-	7	-
002	0407_SH016_0.2-0.3_200624	1	1	55	-	7	-
003	0407_SH023_0.2-0.3_200624	1	1	55	-	7	-
004	0407_QC306_200623	-	-	-	-	-	11
005	0407_SH024_0.1-0.2_200624	1	1	55	-	7	-
006	0407_BH11_0.1_200625	1	1	-	-	7	-
007	0407_BH11_0.5_200625	1	1	-	-	7	-
008	0407_QC166_200625	1	1	-	-	7	-
009	0407_BH12_0.1_200625	1	1	-	-	7	-
010	0407_BH12_0.5_200625	1	1	-	-	7	-
011	0407_BH13_0.1_200625	1	1	-	-	7	-
012	0407_BH13_0.5_200625	1	1	-	-	7	-
013	040_SH007_0.1_200625	1	1	-	1	11	-
014	040_SH007_0.5_200625	1	1	-	1	11	-
015	040_SH011_0.1_200625	-	1	-	-	1	-
016	040_SH011_0.3_200625	-	1	-	-	1	-
017	040_SH014_0.1_200625	-	1	-	-	1	-
018	040_SH012_0.1_200626	-	1	-	-	1	-
019	040_SH012_0.5_200626	-	1	-	-	1	-
020	040_BH010_0.1_200626	1	1	-	1	11	-
021	040_BH010_0.5_200626	1	1	-	1	11	-
022	0407_QC308_200626	-	-	-	-	-	11
023	0407_BH33_0.1_200626	1	1	-	-	7	-
024	0407_BH33_0.7_200626	1	1	-	-	7	-

CONTINUED OVERLEAF

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SAMPLE RECEIPT ADVICE

SE208848

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Mercury in Soil	Moisture Content	Total Recoverable Elements in Soil/Waste	VOCs in Water
025	0407_BH34_0.1_200626	1	1	7	-
026	0407_BH34_0.5_200626	1	1	7	-
027	0407_BH38_0.3_200626	1	1	7	-
028	0407_BH40_0.3_200626	1	1	7	-
029	0407_BH40_0.5_200626	1	1	7	-
030	0407_QC174_200626	1	1	7	-
031	0407_QC307_200626	-	-	-	11

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
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Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE208848

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Full 8270 SVOC in Water	Mercury (dissolved) in Water	PAH (Polynuclear Aromatic Hydrocarbons) in Water	Per- and Polyfluoroalkyl Substances (PFAS) in	Trace Metals (Dissolved) in Water by ICPMS	TRH (Total Recoverable Hydrocarbons) in Water	Volatile Petroleum Hydrocarbons in Water
004	0407_QC306_200623	168	1	22	55	7	9	7
022	0407_QC308_200626	168	1	22	55	7	9	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
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SAMPLE RECEIPT ADVICE

SE208848

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Full 8270 SVOC in Water	Mercury (dissolved) in Water	PAH (Polynuclear Aromatic Hydrocarbons) in Water	Per- and Polyfluoroalkyl Substances (PFAS) in	Trace Metals (Dissolved) in Water by ICPMS	TRH (Total Recoverable Hydrocarbons) in Water	Volatile Petroleum Hydrocarbons in Water
031	0407_QC307_200626	168	1	22	55	7	9	7

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	31

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208848 R0**
Date Received	25/6/2020
Date Reported	29/7/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

PFAS subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420, Report Number ME315790

MA1523: Some surrogate recovery is outside of the acceptance criteria due to sample matrix interference.

Explosives subcontracted to Eurofins/MGT. Report Number 733254

SIGNATORIES

[redacted]

Chemist | Senior Organic Chemist/Metals Chemist | Metals/Inorganics Team Leader

[redacted]

Senior Chemist | Organic Section Head

VOC's in Soil [AN433] Tested: 22/7/2020

PARAMETER	UOM	LOR	0407_SH015_0.2-0.3 200624 SOIL - 24/6/2020 SE208848.001	0407_SH016_0.2-0.3 200624 SOIL - 24/6/2020 SE208848.002	0407_SH023_0.2-0.3 200624 SOIL - 24/6/2020 SE208848.003	0407_SH024_0.1-0.2 200624 SOIL - 24/6/2020 SE208848.005	0407_BH11_0.1_200 25 SOIL - 25/6/2020 SE208848.006
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 22/7/2020 (continued)

PARAMETER	UOM	LOR	0407_SH015_0.2-0.3 200624 SOIL - 24/6/2020 SE208848.001	0407_SH016_0.2-0.3 200624 SOIL - 24/6/2020 SE208848.002	0407_SH023_0.2-0.3 200624 SOIL - 24/6/2020 SE208848.003	0407_SH024_0.1-0.2 200624 SOIL - 24/6/2020 SE208848.005	0407_BH11_0.1_200 25 SOIL - 25/6/2020 SE208848.006
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 22/7/2020 (continued)

PARAMETER	UOM	LOR	0407_BH11_0.5_20025 SOIL - 25/6/2020 SE208848.007	0407_QC166_20062 SOIL - 25/6/2020 SE208848.008	0407_BH12_0.1_20025 SOIL - 25/6/2020 SE208848.009	0407_BH12_0.5_20025 SOIL - 25/6/2020 SE208848.010	0407_BH13_0.1_20025 SOIL - 25/6/2020 SE208848.011
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 22/7/2020 (continued)

PARAMETER	UOM	LOR	0407_BH11_0.5_20025 SOIL - 25/6/2020 SE208848.007	0407_QC166_20062 SOIL - 25/6/2020 SE208848.008	0407_BH12_0.1_20025 SOIL - 25/6/2020 SE208848.009	0407_BH12_0.5_20025 SOIL - 25/6/2020 SE208848.010	0407_BH13_0.1_20025 SOIL - 25/6/2020 SE208848.011
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 22/7/2020 (continued)

PARAMETER	UOM	LOR	0407_BH13_0.5_200 25 SOIL - 25/6/2020 SE208848.012	040_SH007_0.1_200 25 SOIL - 25/6/2020 SE208848.013	040_SH007_0.5_200 25 SOIL - 25/6/2020 SE208848.014	040_SH011_0.1_200 25 SOIL - 25/6/2020 SE208848.015	040_SH011_0.3_200 25 SOIL - 25/6/2020 SE208848.016
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	-	-	-	-
Chloromethane	mg/kg	1	<1	-	-	-	-
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	-	-	-	-
Bromomethane	mg/kg	1	<1	-	-	-	-
Chloroethane	mg/kg	1	<1	-	-	-	-
Trichlorofluoromethane	mg/kg	1	<1	-	-	-	-
Acetone (2-propanone)	mg/kg	10	<10	-	-	-	-
Iodomethane	mg/kg	5	<5	-	-	-	-
1,1-dichloroethene	mg/kg	0.1	<0.1	-	-	-	-
Acrylonitrile	mg/kg	0.1	<0.1	-	-	-	-
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	-	-	-	-
Allyl chloride	mg/kg	0.1	<0.1	-	-	-	-
Carbon disulfide	mg/kg	0.5	<0.5	-	-	-	-
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	-	-	-	-
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	-	-	-	-
Vinyl acetate	mg/kg	10	<10	-	-	-	-
MEK (2-butanone)	mg/kg	10	<10	-	-	-	-
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	-	-	-	-
Bromochloromethane	mg/kg	0.1	<0.1	-	-	-	-
Chloroform	mg/kg	0.1	<0.1	-	-	-	-
2,2-dichloropropane	mg/kg	0.1	<0.1	-	-	-	-
1,2-dichloroethane	mg/kg	0.1	<0.1	-	-	-	-
1,1,1-trichloroethane	mg/kg	0.1	<0.1	-	-	-	-
1,1-dichloropropene	mg/kg	0.1	<0.1	-	-	-	-
Carbon tetrachloride	mg/kg	0.1	<0.1	-	-	-	-
Dibromomethane	mg/kg	0.1	<0.1	-	-	-	-
1,2-dichloropropane	mg/kg	0.1	<0.1	-	-	-	-
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	-	-	-	-
2-nitropropane	mg/kg	10	<10	-	-	-	-
Bromodichloromethane	mg/kg	0.1	<0.1	-	-	-	-
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	-	-	-	-
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	-	-	-	-
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	-	-	-	-
1,1,2-trichloroethane	mg/kg	0.1	<0.1	-	-	-	-
1,3-dichloropropane	mg/kg	0.1	<0.1	-	-	-	-
Chlorodibromomethane	mg/kg	0.1	<0.1	-	-	-	-
2-hexanone (MBK)	mg/kg	5	<5	-	-	-	-
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	-	-	-	-
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	-	-	-	-
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	-	-	-	-
Chlorobenzene	mg/kg	0.1	<0.1	-	-	-	-
Bromoform	mg/kg	0.1	<0.1	-	-	-	-
cis-1,4-dichloro-2-butene	mg/kg	1	<1	-	-	-	-
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	-	-	-	-
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	-	-	-	-
1,2,3-trichloropropane	mg/kg	0.1	<0.1	-	-	-	-
trans-1,4-dichloro-2-butene	mg/kg	1	<1	-	-	-	-

VOC's in Soil [AN433] Tested: 22/7/2020 (continued)

PARAMETER	UOM	LOR	0407_BH13_0.5_20025 SOIL - 25/6/2020 SE208848.012	040_SH007_0.1_20025 SOIL - 25/6/2020 SE208848.013	040_SH007_0.5_20025 SOIL - 25/6/2020 SE208848.014	040_SH011_0.1_20025 SOIL - 25/6/2020 SE208848.015	040_SH011_0.3_20025 SOIL - 25/6/2020 SE208848.016
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	-	-	-	-
Bromobenzene	mg/kg	0.1	<0.1	-	-	-	-
n-propylbenzene	mg/kg	0.1	<0.1	-	-	-	-
2-chlorotoluene	mg/kg	0.1	<0.1	-	-	-	-
4-chlorotoluene	mg/kg	0.1	<0.1	-	-	-	-
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	-	-	-	-
tert-butylbenzene	mg/kg	0.1	<0.1	-	-	-	-
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	-	-	-	-
sec-butylbenzene	mg/kg	0.1	<0.1	-	-	-	-
1,3-dichlorobenzene	mg/kg	0.1	<0.1	-	-	-	-
1,4-dichlorobenzene	mg/kg	0.1	<0.1	-	-	-	-
p-isopropyltoluene	mg/kg	0.1	<0.1	-	-	-	-
1,2-dichlorobenzene	mg/kg	0.1	<0.1	-	-	-	-
n-butylbenzene	mg/kg	0.1	<0.1	-	-	-	-
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	-	-	-	-
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	<0.1	-	-	-	-
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	-	-	-	-
Total VOC*	mg/kg	24	<24	-	-	-	-
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	-	-	-	-
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	-	-	-	-
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	-	-	-	-

VOC's in Soil [AN433] Tested: 22/7/2020 (continued)

PARAMETER	UOM	LOR	040_SH014_0.1_200 25 SOIL - 25/6/2020 SE208848.017	040_SH012_0.1_200 26 SOIL - 26/5/2020 SE208848.018	040_SH012_0.5_200 26 SOIL - 26/5/2020 SE208848.019	0407_BH33_0.1_200 26 SOIL - 26/5/2020 SE208848.023	0407_BH33_0.7_200 26 SOIL - 26/5/2020 SE208848.024
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	-	-	-	-	-
Chloromethane	mg/kg	1	-	-	-	-	-
Vinyl chloride (Chloroethene)	mg/kg	0.1	-	-	-	-	-
Bromomethane	mg/kg	1	-	-	-	-	-
Chloroethane	mg/kg	1	-	-	-	-	-
Trichlorofluoromethane	mg/kg	1	-	-	-	-	-
Acetone (2-propanone)	mg/kg	10	-	-	-	-	-
Iodomethane	mg/kg	5	-	-	-	-	-
1,1-dichloroethene	mg/kg	0.1	-	-	-	-	-
Acrylonitrile	mg/kg	0.1	-	-	-	-	-
Dichloromethane (Methylene chloride)	mg/kg	0.5	-	-	-	-	-
Allyl chloride	mg/kg	0.1	-	-	-	-	-
Carbon disulfide	mg/kg	0.5	-	-	-	-	-
trans-1,2-dichloroethene	mg/kg	0.1	-	-	-	-	-
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,1-dichloroethane	mg/kg	0.1	-	-	-	-	-
Vinyl acetate	mg/kg	10	-	-	-	-	-
MEK (2-butanone)	mg/kg	10	-	-	-	-	-
cis-1,2-dichloroethene	mg/kg	0.1	-	-	-	-	-
Bromochloromethane	mg/kg	0.1	-	-	-	-	-
Chloroform	mg/kg	0.1	-	-	-	-	-
2,2-dichloropropane	mg/kg	0.1	-	-	-	-	-
1,2-dichloroethane	mg/kg	0.1	-	-	-	-	-
1,1,1-trichloroethane	mg/kg	0.1	-	-	-	-	-
1,1-dichloropropene	mg/kg	0.1	-	-	-	-	-
Carbon tetrachloride	mg/kg	0.1	-	-	-	-	-
Dibromomethane	mg/kg	0.1	-	-	-	-	-
1,2-dichloropropane	mg/kg	0.1	-	-	-	-	-
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	-	-	-	-	-
2-nitropropane	mg/kg	10	-	-	-	-	-
Bromodichloromethane	mg/kg	0.1	-	-	-	-	-
MIBK (4-methyl-2-pentanone)	mg/kg	1	-	-	-	-	-
cis-1,3-dichloropropene	mg/kg	0.1	-	-	-	-	-
trans-1,3-dichloropropene	mg/kg	0.1	-	-	-	-	-
1,1,2-trichloroethane	mg/kg	0.1	-	-	-	-	-
1,3-dichloropropane	mg/kg	0.1	-	-	-	-	-
Chlorodibromomethane	mg/kg	0.1	-	-	-	-	-
2-hexanone (MBK)	mg/kg	5	-	-	-	-	-
1,2-dibromoethane (EDB)	mg/kg	0.1	-	-	-	-	-
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	-	-	-	-	-
1,1,1,2-tetrachloroethane	mg/kg	0.1	-	-	-	-	-
Chlorobenzene	mg/kg	0.1	-	-	-	-	-
Bromoform	mg/kg	0.1	-	-	-	-	-
cis-1,4-dichloro-2-butene	mg/kg	1	-	-	-	-	-
Styrene (Vinyl benzene)	mg/kg	0.1	-	-	-	-	-
1,1,2,2-tetrachloroethane	mg/kg	0.1	-	-	-	-	-
1,2,3-trichloropropane	mg/kg	0.1	-	-	-	-	-
trans-1,4-dichloro-2-butene	mg/kg	1	-	-	-	-	-

VOC's in Soil [AN433] Tested: 22/7/2020 (continued)

PARAMETER	UOM	LOR	040_SH014_0.1_200 25 SOIL - 25/6/2020 SE208848.017	040_SH012_0.1_200 26 SOIL - 26/5/2020 SE208848.018	040_SH012_0.5_200 26 SOIL - 26/5/2020 SE208848.019	0407_BH33_0.1_200 26 SOIL - 26/5/2020 SE208848.023	0407_BH33_0.7_200 26 SOIL - 26/5/2020 SE208848.024
Isopropylbenzene (Cumene)	mg/kg	0.1	-	-	-	-	-
Bromobenzene	mg/kg	0.1	-	-	-	-	-
n-propylbenzene	mg/kg	0.1	-	-	-	-	-
2-chlorotoluene	mg/kg	0.1	-	-	-	-	-
4-chlorotoluene	mg/kg	0.1	-	-	-	-	-
1,3,5-trimethylbenzene	mg/kg	0.1	-	-	-	-	-
tert-butylbenzene	mg/kg	0.1	-	-	-	-	-
1,2,4-trimethylbenzene	mg/kg	0.1	-	-	-	-	-
sec-butylbenzene	mg/kg	0.1	-	-	-	-	-
1,3-dichlorobenzene	mg/kg	0.1	-	-	-	-	-
1,4-dichlorobenzene	mg/kg	0.1	-	-	-	-	-
p-isopropyltoluene	mg/kg	0.1	-	-	-	-	-
1,2-dichlorobenzene	mg/kg	0.1	-	-	-	-	-
n-butylbenzene	mg/kg	0.1	-	-	-	-	-
1,2-dibromo-3-chloropropane	mg/kg	0.1	-	-	-	-	-
1,2,4-trichlorobenzene	mg/kg	0.1	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	-	-	-	-	-
1,2,3-trichlorobenzene	mg/kg	0.1	-	-	-	-	-
Total VOC*	mg/kg	24	-	-	-	-	-
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	-	-	-	-	-
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	-	-	-	-	-
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	-	-	-	-	-

VOC's in Soil [AN433] Tested: 22/7/2020 (continued)

PARAMETER	UOM	LOR	0407_BH34_0.1_20026 SOIL - 26/5/2020 SE208848.025	0407_BH34_0.5_20026 SOIL - 26/5/2020 SE208848.026	0407_BH38_0.3_20026 SOIL - 26/5/2020 SE208848.027	0407_BH40_0.3_20026 SOIL - 26/5/2020 SE208848.028	0407_BH40_0.5_20026 SOIL - 26/5/2020 SE208848.029
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	-	-	-	-	-
Chloromethane	mg/kg	1	-	-	-	-	-
Vinyl chloride (Chloroethene)	mg/kg	0.1	-	-	-	-	-
Bromomethane	mg/kg	1	-	-	-	-	-
Chloroethane	mg/kg	1	-	-	-	-	-
Trichlorofluoromethane	mg/kg	1	-	-	-	-	-
Acetone (2-propanone)	mg/kg	10	-	-	-	-	-
Iodomethane	mg/kg	5	-	-	-	-	-
1,1-dichloroethene	mg/kg	0.1	-	-	-	-	-
Acrylonitrile	mg/kg	0.1	-	-	-	-	-
Dichloromethane (Methylene chloride)	mg/kg	0.5	-	-	-	-	-
Allyl chloride	mg/kg	0.1	-	-	-	-	-
Carbon disulfide	mg/kg	0.5	-	-	-	-	-
trans-1,2-dichloroethene	mg/kg	0.1	-	-	-	-	-
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	-	-	-	-	-
1,1-dichloroethane	mg/kg	0.1	-	-	-	-	-
Vinyl acetate	mg/kg	10	-	-	-	-	-
MEK (2-butanone)	mg/kg	10	-	-	-	-	-
cis-1,2-dichloroethene	mg/kg	0.1	-	-	-	-	-
Bromochloromethane	mg/kg	0.1	-	-	-	-	-
Chloroform	mg/kg	0.1	-	-	-	-	-
2,2-dichloropropane	mg/kg	0.1	-	-	-	-	-
1,2-dichloroethane	mg/kg	0.1	-	-	-	-	-
1,1,1-trichloroethane	mg/kg	0.1	-	-	-	-	-
1,1-dichloropropene	mg/kg	0.1	-	-	-	-	-
Carbon tetrachloride	mg/kg	0.1	-	-	-	-	-
Dibromomethane	mg/kg	0.1	-	-	-	-	-
1,2-dichloropropane	mg/kg	0.1	-	-	-	-	-
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	-	-	-	-	-
2-nitropropane	mg/kg	10	-	-	-	-	-
Bromodichloromethane	mg/kg	0.1	-	-	-	-	-
MIBK (4-methyl-2-pentanone)	mg/kg	1	-	-	-	-	-
cis-1,3-dichloropropene	mg/kg	0.1	-	-	-	-	-
trans-1,3-dichloropropene	mg/kg	0.1	-	-	-	-	-
1,1,2-trichloroethane	mg/kg	0.1	-	-	-	-	-
1,3-dichloropropane	mg/kg	0.1	-	-	-	-	-
Chlorodibromomethane	mg/kg	0.1	-	-	-	-	-
2-hexanone (MBK)	mg/kg	5	-	-	-	-	-
1,2-dibromoethane (EDB)	mg/kg	0.1	-	-	-	-	-
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	-	-	-	-	-
1,1,1,2-tetrachloroethane	mg/kg	0.1	-	-	-	-	-
Chlorobenzene	mg/kg	0.1	-	-	-	-	-
Bromoform	mg/kg	0.1	-	-	-	-	-
cis-1,4-dichloro-2-butene	mg/kg	1	-	-	-	-	-
Styrene (Vinyl benzene)	mg/kg	0.1	-	-	-	-	-
1,1,2,2-tetrachloroethane	mg/kg	0.1	-	-	-	-	-
1,2,3-trichloropropane	mg/kg	0.1	-	-	-	-	-
trans-1,4-dichloro-2-butene	mg/kg	1	-	-	-	-	-

VOC's in Soil [AN433] Tested: 22/7/2020 (continued)

PARAMETER	UOM	LOR	0407_BH34_0.1_20026 SOIL - 26/5/2020 SE208848.025	0407_BH34_0.5_20026 SOIL - 26/5/2020 SE208848.026	0407_BH38_0.3_20026 SOIL - 26/5/2020 SE208848.027	0407_BH40_0.3_20026 SOIL - 26/5/2020 SE208848.028	0407_BH40_0.5_20026 SOIL - 26/5/2020 SE208848.029
Isopropylbenzene (Cumene)	mg/kg	0.1	-	-	-	-	-
Bromobenzene	mg/kg	0.1	-	-	-	-	-
n-propylbenzene	mg/kg	0.1	-	-	-	-	-
2-chlorotoluene	mg/kg	0.1	-	-	-	-	-
4-chlorotoluene	mg/kg	0.1	-	-	-	-	-
1,3,5-trimethylbenzene	mg/kg	0.1	-	-	-	-	-
tert-butylbenzene	mg/kg	0.1	-	-	-	-	-
1,2,4-trimethylbenzene	mg/kg	0.1	-	-	-	-	-
sec-butylbenzene	mg/kg	0.1	-	-	-	-	-
1,3-dichlorobenzene	mg/kg	0.1	-	-	-	-	-
1,4-dichlorobenzene	mg/kg	0.1	-	-	-	-	-
p-isopropyltoluene	mg/kg	0.1	-	-	-	-	-
1,2-dichlorobenzene	mg/kg	0.1	-	-	-	-	-
n-butylbenzene	mg/kg	0.1	-	-	-	-	-
1,2-dibromo-3-chloropropane	mg/kg	0.1	-	-	-	-	-
1,2,4-trichlorobenzene	mg/kg	0.1	-	-	-	-	-
Hexachlorobutadiene	mg/kg	0.1	-	-	-	-	-
1,2,3-trichlorobenzene	mg/kg	0.1	-	-	-	-	-
Total VOC*	mg/kg	24	-	-	-	-	-
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	-	-	-	-	-
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	-	-	-	-	-
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	-	-	-	-	-

VOC's in Soil [AN433] Tested: 22/7/2020 (continued)

PARAMETER	UOM	LOR	0407_QC174_20062(SOIL - 26/5/2020 SE208848.030
Benzene	mg/kg	0.1	<0.1
Toluene	mg/kg	0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2
o-xylene	mg/kg	0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
Chloromethane	mg/kg	1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
Bromomethane	mg/kg	1	<1
Chloroethane	mg/kg	1	<1
Trichlorofluoromethane	mg/kg	1	<1
Acetone (2-propanone)	mg/kg	10	<10
Iodomethane	mg/kg	5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1
Vinyl acetate	mg/kg	10	<10
MEK (2-butanone)	mg/kg	10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1
Chloroform	mg/kg	0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
2-nitropropane	mg/kg	10	<10
Bromodichloromethane	mg/kg	0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1
Bromoform	mg/kg	0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1

VOC's in Soil [AN433] Tested: 22/7/2020 (continued)

PARAMETER	UOM	LOR	0407_QC174_20062(SOIL - 26/5/2020 SE208848.030
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
Total VOC*	mg/kg	24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 22/7/2020

PARAMETER	UOM	LOR	0407_SH015_0.2-0.3_200624 SOIL - 24/6/2020 SE208848.001	0407_SH016_0.2-0.3_200624 SOIL - 24/6/2020 SE208848.002	0407_SH023_0.2-0.3_200624 SOIL - 24/6/2020 SE208848.003	0407_SH024_0.1-0.2_200624 SOIL - 24/6/2020 SE208848.005	0407_BH11_0.1_20025 SOIL - 25/6/2020 SE208848.006
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_BH11_0.5_20025 SOIL - 25/6/2020 SE208848.007	0407_QC166_20062 SOIL - 25/6/2020 SE208848.008	0407_BH12_0.1_20025 SOIL - 25/6/2020 SE208848.009	0407_BH12_0.5_20025 SOIL - 25/6/2020 SE208848.010	0407_BH13_0.1_20025 SOIL - 25/6/2020 SE208848.011
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_BH13_0.5_20025 SOIL - 25/6/2020 SE208848.012	040_SH007_0.1_20025 SOIL - 25/6/2020 SE208848.013	040_SH007_0.5_20025 SOIL - 25/6/2020 SE208848.014	040_SH011_0.1_20025 SOIL - 25/6/2020 SE208848.015	040_SH011_0.3_20025 SOIL - 25/6/2020 SE208848.016
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	040_SH014_0.1_20025 SOIL - 25/6/2020 SE208848.017	040_SH012_0.1_20026 SOIL - 26/5/2020 SE208848.018	040_SH012_0.5_20026 SOIL - 26/5/2020 SE208848.019	0407_BH33_0.1_20026 SOIL - 26/5/2020 SE208848.023	0407_BH33_0.7_20026 SOIL - 26/5/2020 SE208848.024
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_BH34_0.1_20026 SOIL - 26/5/2020 SE208848.025	0407_BH34_0.5_20026 SOIL - 26/5/2020 SE208848.026	0407_BH38_0.3_20026 SOIL - 26/5/2020 SE208848.027	0407_BH40_0.3_20026 SOIL - 26/5/2020 SE208848.028	0407_BH40_0.5_20026 SOIL - 26/5/2020 SE208848.029
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_QC174_20062 SOIL - 26/5/2020 SE208848.030
Benzene (F0)	mg/kg	0.1	<0.1
TRH C6-C9	mg/kg	20	<20
TRH C6-C10	mg/kg	25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 22/7/2020

PARAMETER	UOM	LOR	0407_SH015_0.2-0.3 200624 SOIL - 24/6/2020 SE208848.001	0407_SH016_0.2-0.3 200624 SOIL - 24/6/2020 SE208848.002	0407_SH023_0.2-0.3 200624 SOIL - 24/6/2020 SE208848.003	0407_SH024_0.1-0.2 200624 SOIL - 24/6/2020 SE208848.005	0407_BH11_0.1_200 25 SOIL - 25/6/2020 SE208848.006
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_BH11_0.5_200 25 SOIL - 25/6/2020 SE208848.007	0407_QC166_20062 SOIL - 25/6/2020 SE208848.008	0407_BH12_0.1_200 25 SOIL - 25/6/2020 SE208848.009	0407_BH12_0.5_200 25 SOIL - 25/6/2020 SE208848.010	0407_BH13_0.1_200 25 SOIL - 25/6/2020 SE208848.011
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_BH13_0.5_200 25 SOIL - 25/6/2020 SE208848.012	040_SH007_0.1_200 25 SOIL - 25/6/2020 SE208848.013	040_SH007_0.5_200 25 SOIL - 25/6/2020 SE208848.014	040_SH011_0.1_200 25 SOIL - 25/6/2020 SE208848.015	040_SH011_0.3_200 25 SOIL - 25/6/2020 SE208848.016
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 22/7/2020 (continued)

PARAMETER	UOM	LOR	040_SH014_0.1_20025 SOIL - 25/6/2020 SE208848.017	040_SH012_0.1_20026 SOIL - 26/5/2020 SE208848.018	040_SH012_0.5_20026 SOIL - 26/5/2020 SE208848.019	0407_BH33_0.1_20026 SOIL - 26/5/2020 SE208848.023	0407_BH33_0.7_20026 SOIL - 26/5/2020 SE208848.024
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	**73**	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	**250**	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	**110**	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	**210**	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	**210**	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	**320**	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	**420**	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_BH34_0.1_20026 SOIL - 26/5/2020 SE208848.025	0407_BH34_0.5_20026 SOIL - 26/5/2020 SE208848.026	0407_BH38_0.3_20026 SOIL - 26/5/2020 SE208848.027	0407_BH40_0.3_20026 SOIL - 26/5/2020 SE208848.028	0407_BH40_0.5_20026 SOIL - 26/5/2020 SE208848.029
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_QC174_20062(SOIL - 26/5/2020 SE208848.030
TRH C10-C14	mg/kg	20	<20
TRH C15-C28	mg/kg	45	<45
TRH C29-C36	mg/kg	45	<45
TRH C37-C40	mg/kg	100	<100
TRH >C10-C16	mg/kg	25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120
TRH C10-C36 Total	mg/kg	110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 22/7/2020

PARAMETER	UOM	LOR	0407_SH015_0.2-0.3 200624 SOIL - 24/6/2020 SE208848.001	0407_SH016_0.2-0.3 200624 SOIL - 24/6/2020 SE208848.002	0407_SH023_0.2-0.3 200624 SOIL - 24/6/2020 SE208848.003	0407_SH024_0.1-0.2 200624 SOIL - 24/6/2020 SE208848.005	0407_BH13_0.1_200 25 SOIL - 25/6/2020 SE208848.011
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	**0.2**	**0.2**	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	**0.3**	**0.3**	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	**0.3**	**0.3**	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	**0.1**	**0.1**	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	**0.1**	**0.1**	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	**0.2**	**0.1**	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	**0.1**	**0.1**	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	**0.1**	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	**0.2**	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	**0.3**	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	**0.3**	**0.2**	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	**1.6**	**1.4**	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	**1.6**	**1.4**	<0.8

PARAMETER	UOM	LOR	0407_BH13_0.5_200 25 SOIL - 25/6/2020 SE208848.012	040_SH007_0.1_200 25 SOIL - 25/6/2020 SE208848.013	040_SH007_0.5_200 25 SOIL - 25/6/2020 SE208848.014	040_SH011_0.1_200 25 SOIL - 25/6/2020 SE208848.015	040_SH011_0.3_200 25 SOIL - 25/6/2020 SE208848.016
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	**0.1**	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	**0.2**	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	**0.1**	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	**0.1**	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 22/7/2020 (continued)

PARAMETER	UOM	LOR	040_SH014_0.1_20025 SOIL - 25/6/2020 SE208848.017	040_SH012_0.1_20026 SOIL - 26/5/2020 SE208848.018	040_SH012_0.5_20026 SOIL - 26/5/2020 SE208848.019	040_BH010_0.1_20026 SOIL - 26/5/2020 SE208848.020	040_BH010_0.5_20026 SOIL - 26/5/2020 SE208848.021
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PARAMETER	UOM	LOR	0407_BH33_0.1_20026 SOIL - 26/5/2020 SE208848.023	0407_BH33_0.7_20026 SOIL - 26/5/2020 SE208848.024	0407_BH34_0.1_20026 SOIL - 26/5/2020 SE208848.025	0407_BH34_0.5_20026 SOIL - 26/5/2020 SE208848.026	0407_BH38_0.3_20026 SOIL - 26/5/2020 SE208848.027
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.1**	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.4**	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.1**	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	**0.2**	**1.1**	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	**0.2**	**1.3**	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	**0.1**	**0.5**	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	**0.1**	**0.5**	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	**0.2**	**0.7**	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	**0.3**	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	**0.2**	**0.8**	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	**0.1**	**0.5**	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	**0.1**	**0.6**	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	**0.2**	**1.0**	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	**0.3**	**1.1**	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	**0.3**	**1.0**	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	**1.3**	**7.0**	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	**1.3**	**7.0**	<0.8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 22/7/2020 (continued)

PARAMETER	UOM	LOR	0407_BH40_0.3_20026 SOIL - 26/5/2020 SE208848.028	0407_BH40_0.5_20026 SOIL - 26/5/2020 SE208848.029	0407_QC174_20062(SOIL - 26/5/2020 SE208848.030
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	**0.1**	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8

Speciated Phenols in Soil [AN420] Tested: 22/7/2020

PARAMETER	UOM	LOR	0407_SH015_0.2-0.3 200624 SOIL - 24/6/2020 SE208848.001	0407_SH016_0.2-0.3 200624 SOIL - 24/6/2020 SE208848.002	0407_SH023_0.2-0.3 200624 SOIL - 24/6/2020 SE208848.003	0407_SH024_0.1-0.2 200624 SOIL - 24/6/2020 SE208848.005	0407_BH13_0.1_200 25 SOIL - 25/6/2020 SE208848.011
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_BH13_0.5_200 25 SOIL - 25/6/2020 SE208848.012	040_SH007_0.1_200 25 SOIL - 25/6/2020 SE208848.013	040_SH007_0.5_200 25 SOIL - 25/6/2020 SE208848.014	040_SH011_0.1_200 25 SOIL - 25/6/2020 SE208848.015	040_SH011_0.3_200 25 SOIL - 25/6/2020 SE208848.016
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

Speciated Phenols in Soil [AN420] Tested: 22/7/2020 (continued)

PARAMETER	UOM	LOR	040_SH014_0.1_200 25 SOIL - 25/6/2020 SE208848.017	040_SH012_0.1_200 26 SOIL - 26/5/2020 SE208848.018	040_SH012_0.5_200 26 SOIL - 26/5/2020 SE208848.019	0407_QC174_20062 SOIL - 26/5/2020 SE208848.030
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2

OC Pesticides in Soil [AN420] Tested: 22/7/2020

PARAMETER	UOM	LOR	0407_SH015_0.2-0.3 200624 SOIL - 24/6/2020 SE208848.001	0407_SH016_0.2-0.3 200624 SOIL - 24/6/2020 SE208848.002	0407_SH023_0.2-0.3 200624 SOIL - 24/6/2020 SE208848.003	0407_SH024_0.1-0.2 200624 SOIL - 24/6/2020 SE208848.005	0407_BH11_0.1_200 25 SOIL - 25/6/2020 SE208848.006
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 22/7/2020 (continued)

PARAMETER	UOM	LOR	0407_BH11_0.5_20025 SOIL - 25/6/2020 SE208848.007	0407_QC166_20062 SOIL - 25/6/2020 SE208848.008	0407_BH12_0.1_20025 SOIL - 25/6/2020 SE208848.009	0407_BH12_0.5_20025 SOIL - 25/6/2020 SE208848.010	0407_BH13_0.1_20025 SOIL - 25/6/2020 SE208848.011
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 22/7/2020 (continued)

PARAMETER	UOM	LOR	0407_BH13_0.5_20025 SOIL - 25/6/2020 SE208848.012	040_SH007_0.1_20025 SOIL - 25/6/2020 SE208848.013	040_SH007_0.5_20025 SOIL - 25/6/2020 SE208848.014	040_SH011_0.1_20025 SOIL - 25/6/2020 SE208848.015	040_SH011_0.3_20025 SOIL - 25/6/2020 SE208848.016
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	-	-	-	-
Alpha BHC	mg/kg	0.1	<0.1	-	-	-	-
Lindane	mg/kg	0.1	<0.1	-	-	-	-
Heptachlor	mg/kg	0.1	<0.1	-	-	-	-
Aldrin	mg/kg	0.1	<0.1	-	-	-	-
Beta BHC	mg/kg	0.1	<0.1	-	-	-	-
Delta BHC	mg/kg	0.1	<0.1	-	-	-	-
Heptachlor epoxide	mg/kg	0.1	<0.1	-	-	-	-
o,p'-DDE	mg/kg	0.1	<0.1	-	-	-	-
Alpha Endosulfan	mg/kg	0.2	<0.2	-	-	-	-
Gamma Chlordane	mg/kg	0.1	<0.1	-	-	-	-
Alpha Chlordane	mg/kg	0.1	<0.1	-	-	-	-
trans-Nonachlor	mg/kg	0.1	<0.1	-	-	-	-
p,p'-DDE	mg/kg	0.1	<0.1	-	-	-	-
Dieldrin	mg/kg	0.2	<0.2	-	-	-	-
Endrin	mg/kg	0.2	<0.2	-	-	-	-
o,p'-DDD	mg/kg	0.1	<0.1	-	-	-	-
o,p'-DDT	mg/kg	0.1	<0.1	-	-	-	-
Beta Endosulfan	mg/kg	0.2	<0.2	-	-	-	-
p,p'-DDD	mg/kg	0.1	<0.1	-	-	-	-
p,p'-DDT	mg/kg	0.1	<0.1	-	-	-	-
Endosulfan sulphate	mg/kg	0.1	<0.1	-	-	-	-
Endrin Aldehyde	mg/kg	0.1	<0.1	-	-	-	-
Methoxychlor	mg/kg	0.1	<0.1	-	-	-	-
Endrin Ketone	mg/kg	0.1	<0.1	-	-	-	-
Isodrin	mg/kg	0.1	<0.1	-	-	-	-
Mirex	mg/kg	0.1	<0.1	-	-	-	-
Total CLP OC Pesticides	mg/kg	1	<1	-	-	-	-

OC Pesticides in Soil [AN420] Tested: 22/7/2020 (continued)

PARAMETER	UOM	LOR	040_SH014_0.1_200 25 SOIL - 25/6/2020 SE208848.017	040_SH012_0.1_200 26 SOIL - 26/5/2020 SE208848.018	040_SH012_0.5_200 26 SOIL - 26/5/2020 SE208848.019	040_BH010_0.1_200 26 SOIL - 26/5/2020 SE208848.020	040_BH010_0.5_200 26 SOIL - 26/5/2020 SE208848.021
Hexachlorobenzene (HCB)	mg/kg	0.1	-	-	-	-	-
Alpha BHC	mg/kg	0.1	-	-	-	-	-
Lindane	mg/kg	0.1	-	-	-	-	-
Heptachlor	mg/kg	0.1	-	-	-	-	-
Aldrin	mg/kg	0.1	-	-	-	-	-
Beta BHC	mg/kg	0.1	-	-	-	-	-
Delta BHC	mg/kg	0.1	-	-	-	-	-
Heptachlor epoxide	mg/kg	0.1	-	-	-	-	-
o,p'-DDE	mg/kg	0.1	-	-	-	-	-
Alpha Endosulfan	mg/kg	0.2	-	-	-	-	-
Gamma Chlordane	mg/kg	0.1	-	-	-	-	-
Alpha Chlordane	mg/kg	0.1	-	-	-	-	-
trans-Nonachlor	mg/kg	0.1	-	-	-	-	-
p,p'-DDE	mg/kg	0.1	-	-	-	-	-
Dieldrin	mg/kg	0.2	-	-	-	-	-
Endrin	mg/kg	0.2	-	-	-	-	-
o,p'-DDD	mg/kg	0.1	-	-	-	-	-
o,p'-DDT	mg/kg	0.1	-	-	-	-	-
Beta Endosulfan	mg/kg	0.2	-	-	-	-	-
p,p'-DDD	mg/kg	0.1	-	-	-	-	-
p,p'-DDT	mg/kg	0.1	-	-	-	-	-
Endosulfan sulphate	mg/kg	0.1	-	-	-	-	-
Endrin Aldehyde	mg/kg	0.1	-	-	-	-	-
Methoxychlor	mg/kg	0.1	-	-	-	-	-
Endrin Ketone	mg/kg	0.1	-	-	-	-	-
Isodrin	mg/kg	0.1	-	-	-	-	-
Mirex	mg/kg	0.1	-	-	-	-	-
Total CLP OC Pesticides	mg/kg	1	-	-	-	-	-

OC Pesticides in Soil [AN420] Tested: 22/7/2020 (continued)

PARAMETER	UOM	LOR	0407_BH33_0.1_20026 SOIL - 26/5/2020 SE208848.023	0407_BH33_0.7_20026 SOIL - 26/5/2020 SE208848.024	0407_BH34_0.1_20026 SOIL - 26/5/2020 SE208848.025	0407_BH34_0.5_20026 SOIL - 26/5/2020 SE208848.026	0407_BH38_0.3_20026 SOIL - 26/5/2020 SE208848.027
Hexachlorobenzene (HCB)	mg/kg	0.1	-	-	-	-	-
Alpha BHC	mg/kg	0.1	-	-	-	-	-
Lindane	mg/kg	0.1	-	-	-	-	-
Heptachlor	mg/kg	0.1	-	-	-	-	-
Aldrin	mg/kg	0.1	-	-	-	-	-
Beta BHC	mg/kg	0.1	-	-	-	-	-
Delta BHC	mg/kg	0.1	-	-	-	-	-
Heptachlor epoxide	mg/kg	0.1	-	-	-	-	-
o,p'-DDE	mg/kg	0.1	-	-	-	-	-
Alpha Endosulfan	mg/kg	0.2	-	-	-	-	-
Gamma Chlordane	mg/kg	0.1	-	-	-	-	-
Alpha Chlordane	mg/kg	0.1	-	-	-	-	-
trans-Nonachlor	mg/kg	0.1	-	-	-	-	-
p,p'-DDE	mg/kg	0.1	-	-	-	-	-
Dieldrin	mg/kg	0.2	-	-	-	-	-
Endrin	mg/kg	0.2	-	-	-	-	-
o,p'-DDD	mg/kg	0.1	-	-	-	-	-
o,p'-DDT	mg/kg	0.1	-	-	-	-	-
Beta Endosulfan	mg/kg	0.2	-	-	-	-	-
p,p'-DDD	mg/kg	0.1	-	-	-	-	-
p,p'-DDT	mg/kg	0.1	-	-	-	-	-
Endosulfan sulphate	mg/kg	0.1	-	-	-	-	-
Endrin Aldehyde	mg/kg	0.1	-	-	-	-	-
Methoxychlor	mg/kg	0.1	-	-	-	-	-
Endrin Ketone	mg/kg	0.1	-	-	-	-	-
Isodrin	mg/kg	0.1	-	-	-	-	-
Mirex	mg/kg	0.1	-	-	-	-	-
Total CLP OC Pesticides	mg/kg	1	-	-	-	-	-

OC Pesticides in Soil [AN420] Tested: 22/7/2020 (continued)

PARAMETER	UOM	LOR	0407_BH40_0.3_20026 SOIL - 26/5/2020 SE208848.028	0407_BH40_0.5_20026 SOIL - 26/5/2020 SE208848.029	0407_QC174_20062(SOIL - 26/5/2020 SE208848.030
Hexachlorobenzene (HCB)	mg/kg	0.1	-	-	<0.1
Alpha BHC	mg/kg	0.1	-	-	<0.1
Lindane	mg/kg	0.1	-	-	<0.1
Heptachlor	mg/kg	0.1	-	-	<0.1
Aldrin	mg/kg	0.1	-	-	<0.1
Beta BHC	mg/kg	0.1	-	-	<0.1
Delta BHC	mg/kg	0.1	-	-	<0.1
Heptachlor epoxide	mg/kg	0.1	-	-	<0.1
o,p'-DDE	mg/kg	0.1	-	-	<0.1
Alpha Endosulfan	mg/kg	0.2	-	-	<0.2
Gamma Chlordane	mg/kg	0.1	-	-	<0.1
Alpha Chlordane	mg/kg	0.1	-	-	<0.1
trans-Nonachlor	mg/kg	0.1	-	-	<0.1
p,p'-DDE	mg/kg	0.1	-	-	<0.1
Dieldrin	mg/kg	0.2	-	-	<0.2
Endrin	mg/kg	0.2	-	-	<0.2
o,p'-DDD	mg/kg	0.1	-	-	<0.1
o,p'-DDT	mg/kg	0.1	-	-	<0.1
Beta Endosulfan	mg/kg	0.2	-	-	<0.2
p,p'-DDD	mg/kg	0.1	-	-	<0.1
p,p'-DDT	mg/kg	0.1	-	-	<0.1
Endosulfan sulphate	mg/kg	0.1	-	-	<0.1
Endrin Aldehyde	mg/kg	0.1	-	-	<0.1
Methoxychlor	mg/kg	0.1	-	-	<0.1
Endrin Ketone	mg/kg	0.1	-	-	<0.1
Isodrin	mg/kg	0.1	-	-	<0.1
Mirex	mg/kg	0.1	-	-	<0.1
Total CLP OC Pesticides	mg/kg	1	-	-	<1

OP Pesticides in Soil [AN420] Tested: 22/7/2020

PARAMETER	UOM	LOR	0407_SH015_0.2-0.3 200624 SOIL - 24/6/2020 SE208848.001	0407_SH016_0.2-0.3 200624 SOIL - 24/6/2020 SE208848.002	0407_SH023_0.2-0.3 200624 SOIL - 24/6/2020 SE208848.003	0407_SH024_0.1-0.2 200624 SOIL - 24/6/2020 SE208848.005	0407_BH11_0.1_200 25 SOIL - 25/6/2020 SE208848.006
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_BH11_0.5_200 25 SOIL - 25/6/2020 SE208848.007	0407_QC166_20062 SOIL - 25/6/2020 SE208848.008	0407_BH12_0.1_200 25 SOIL - 25/6/2020 SE208848.009	0407_BH12_0.5_200 25 SOIL - 25/6/2020 SE208848.010	0407_BH13_0.1_200 25 SOIL - 25/6/2020 SE208848.011
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_BH13_0.5_200 25 SOIL - 25/6/2020 SE208848.012	0407_QC174_20062 SOIL - 26/5/2020 SE208848.030
Dichlorvos	mg/kg	0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7

PCBs in Soil [AN420] Tested: 22/7/2020

PARAMETER	UOM	LOR	0407_SH015_0.2-0.3 200624 SOIL - 24/6/2020 SE208848.001	0407_SH016_0.2-0.3 200624 SOIL - 24/6/2020 SE208848.002	0407_SH023_0.2-0.3 200624 SOIL - 24/6/2020 SE208848.003	0407_SH024_0.1-0.2 200624 SOIL - 24/6/2020 SE208848.005	0407_BH11_0.1_200 25 SOIL - 25/6/2020 SE208848.006
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_BH11_0.5_200 25 SOIL - 25/6/2020 SE208848.007	0407_QC166_20062 SOIL - 25/6/2020 SE208848.008	0407_BH12_0.1_200 25 SOIL - 25/6/2020 SE208848.009	0407_BH12_0.5_200 25 SOIL - 25/6/2020 SE208848.010	0407_BH13_0.1_200 25 SOIL - 25/6/2020 SE208848.011
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_BH13_0.5_200 25 SOIL - 25/6/2020 SE208848.012	040_SH007_0.1_200 25 SOIL - 25/6/2020 SE208848.013	040_SH007_0.5_200 25 SOIL - 25/6/2020 SE208848.014	040_SH011_0.1_200 25 SOIL - 25/6/2020 SE208848.015	040_SH011_0.3_200 25 SOIL - 25/6/2020 SE208848.016
Arochlor 1016	mg/kg	0.2	<0.2	-	-	-	-
Arochlor 1221	mg/kg	0.2	<0.2	-	-	-	-
Arochlor 1232	mg/kg	0.2	<0.2	-	-	-	-
Arochlor 1242	mg/kg	0.2	<0.2	-	-	-	-
Arochlor 1248	mg/kg	0.2	<0.2	-	-	-	-
Arochlor 1254	mg/kg	0.2	<0.2	-	-	-	-
Arochlor 1260	mg/kg	0.2	<0.2	-	-	-	-
Arochlor 1262	mg/kg	0.2	<0.2	-	-	-	-
Arochlor 1268	mg/kg	0.2	<0.2	-	-	-	-
Total PCBs (Arochlors)	mg/kg	1	<1	-	-	-	-

PCBs in Soil [AN420] Tested: 22/7/2020 (continued)

PARAMETER	UOM	LOR	040_SH014_0.1_20025 SOIL - 25/6/2020 SE208848.017	040_SH012_0.1_20026 SOIL - 26/5/2020 SE208848.018	040_SH012_0.5_20026 SOIL - 26/5/2020 SE208848.019	040_BH010_0.1_20026 SOIL - 26/5/2020 SE208848.020	040_BH010_0.5_20026 SOIL - 26/5/2020 SE208848.021
Arochlor 1016	mg/kg	0.2	-	-	-	-	-
Arochlor 1221	mg/kg	0.2	-	-	-	-	-
Arochlor 1232	mg/kg	0.2	-	-	-	-	-
Arochlor 1242	mg/kg	0.2	-	-	-	-	-
Arochlor 1248	mg/kg	0.2	-	-	-	-	-
Arochlor 1254	mg/kg	0.2	-	-	-	-	-
Arochlor 1260	mg/kg	0.2	-	-	-	-	-
Arochlor 1262	mg/kg	0.2	-	-	-	-	-
Arochlor 1268	mg/kg	0.2	-	-	-	-	-
Total PCBs (Arochlors)	mg/kg	1	-	-	-	-	-

PARAMETER	UOM	LOR	0407_BH33_0.1_20026 SOIL - 26/5/2020 SE208848.023	0407_BH33_0.7_20026 SOIL - 26/5/2020 SE208848.024	0407_BH34_0.1_20026 SOIL - 26/5/2020 SE208848.025	0407_BH34_0.5_20026 SOIL - 26/5/2020 SE208848.026	0407_BH38_0.3_20026 SOIL - 26/5/2020 SE208848.027
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_BH40_0.3_20026 SOIL - 26/5/2020 SE208848.028	0407_BH40_0.5_20026 SOIL - 26/5/2020 SE208848.029	0407_QC174_20062(SOIL - 26/5/2020 SE208848.030
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 22/7/2020

PARAMETER	UOM	LOR	0407_SH015_0.2-0.3 200624 SOIL - 24/6/2020 SE208848.001	0407_SH016_0.2-0.3 200624 SOIL - 24/6/2020 SE208848.002	0407_SH023_0.2-0.3 200624 SOIL - 24/6/2020 SE208848.003	0407_SH024_0.1-0.2 200624 SOIL - 24/6/2020 SE208848.005	0407_BH11_0.1_200 25 SOIL - 25/6/2020 SE208848.006
Arsenic, As	mg/kg	1	<1	<1	<1	<1	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	4.4	8.5	5.7	6.2	0.6
Copper, Cu	mg/kg	0.5	5.5	26	8.5	7.3	1.0
Lead, Pb	mg/kg	1	9	6	19	12	1
Nickel, Ni	mg/kg	0.5	6.1	11	4.6	6.4	<0.5
Zinc, Zn	mg/kg	2	14	53	37	21	4.2
Beryllium, Be	mg/kg	0.5	-	-	-	-	-
Boron, B	mg/kg	5	-	-	-	-	-
Cobalt, Co	mg/kg	0.5	-	-	-	-	-
Manganese, Mn	mg/kg	1	-	-	-	-	-

PARAMETER	UOM	LOR	0407_BH11_0.5_200 25 SOIL - 25/6/2020 SE208848.007	0407_QC166_20062 SOIL - 25/6/2020 SE208848.008	0407_BH12_0.1_200 25 SOIL - 25/6/2020 SE208848.009	0407_BH12_0.5_200 25 SOIL - 25/6/2020 SE208848.010	0407_BH13_0.1_200 25 SOIL - 25/6/2020 SE208848.011
Arsenic, As	mg/kg	1	<1	<1	<1	<1	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	<0.5	1.4	0.6	3.5	2.5
Copper, Cu	mg/kg	0.5	<0.5	0.7	1.3	5.5	17
Lead, Pb	mg/kg	1	<1	1	<1	1	2
Nickel, Ni	mg/kg	0.5	<0.5	0.7	<0.5	1.7	1.4
Zinc, Zn	mg/kg	2	<2.0	<2.0	3.8	2.8	5.9
Beryllium, Be	mg/kg	0.5	-	-	-	-	-
Boron, B	mg/kg	5	-	-	-	-	-
Cobalt, Co	mg/kg	0.5	-	-	-	-	-
Manganese, Mn	mg/kg	1	-	-	-	-	-

PARAMETER	UOM	LOR	0407_BH13_0.5_200 25 SOIL - 25/6/2020 SE208848.012	040_SH007_0.1_200 25 SOIL - 25/6/2020 SE208848.013	040_SH007_0.5_200 25 SOIL - 25/6/2020 SE208848.014	040_SH011_0.1_200 25 SOIL - 25/6/2020 SE208848.015	040_SH011_0.3_200 25 SOIL - 25/6/2020 SE208848.016
Arsenic, As	mg/kg	1	<1	<1	2	-	-
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	-	-
Chromium, Cr	mg/kg	0.5	0.6	3.0	4.6	-	-
Copper, Cu	mg/kg	0.5	2.6	3.4	2.0	-	-
Lead, Pb	mg/kg	1	7	2	2	2	<1
Nickel, Ni	mg/kg	0.5	<0.5	1.7	1.9	-	-
Zinc, Zn	mg/kg	2	6.3	7.1	3.9	-	-
Beryllium, Be	mg/kg	0.5	-	<0.5	<0.5	-	-
Boron, B	mg/kg	5	-	<5	<5	-	-
Cobalt, Co	mg/kg	0.5	-	0.8	<0.5	-	-
Manganese, Mn	mg/kg	1	-	25	7	-	-

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 22/7/2020

(continued)

PARAMETER	UOM	LOR	040_SH014_0.1_20025 SOIL - 25/6/2020 SE208848.017	040_SH012_0.1_20026 SOIL - 26/5/2020 SE208848.018	040_SH012_0.5_20026 SOIL - 26/5/2020 SE208848.019	040_BH010_0.1_20026 SOIL - 26/5/2020 SE208848.020	040_BH010_0.5_20026 SOIL - 26/5/2020 SE208848.021
Arsenic, As	mg/kg	1	-	-	-	<1	<1
Cadmium, Cd	mg/kg	0.3	-	-	-	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	-	-	-	0.5	<0.5
Copper, Cu	mg/kg	0.5	-	-	-	1.1	<0.5
Lead, Pb	mg/kg	1	2	<1	<1	3	<1
Nickel, Ni	mg/kg	0.5	-	-	-	<0.5	<0.5
Zinc, Zn	mg/kg	2	-	-	-	3.8	<2.0
Beryllium, Be	mg/kg	0.5	-	-	-	<0.5	<0.5
Boron, B	mg/kg	5	-	-	-	<5	<5
Cobalt, Co	mg/kg	0.5	-	-	-	<0.5	<0.5
Manganese, Mn	mg/kg	1	-	-	-	2	<1

PARAMETER	UOM	LOR	0407_BH33_0.1_20026 SOIL - 26/5/2020 SE208848.023	0407_BH33_0.7_20026 SOIL - 26/5/2020 SE208848.024	0407_BH34_0.1_20026 SOIL - 26/5/2020 SE208848.025	0407_BH34_0.5_20026 SOIL - 26/5/2020 SE208848.026	0407_BH38_0.3_20026 SOIL - 26/5/2020 SE208848.027
Arsenic, As	mg/kg	1	1	5	1	2	3
Cadmium, Cd	mg/kg	0.3	<0.3	0.3	<0.3	<0.3	0.5
Chromium, Cr	mg/kg	0.5	7.7	15	2.2	3.6	2.4
Copper, Cu	mg/kg	0.5	55	71	10	14	27
Lead, Pb	mg/kg	1	6	210	33	120	72
Nickel, Ni	mg/kg	0.5	97	4.4	1.8	6.0	2.4
Zinc, Zn	mg/kg	2	49	220	28	89	100
Beryllium, Be	mg/kg	0.5	-	-	-	-	-
Boron, B	mg/kg	5	-	-	-	-	-
Cobalt, Co	mg/kg	0.5	-	-	-	-	-
Manganese, Mn	mg/kg	1	-	-	-	-	-

PARAMETER	UOM	LOR	0407_BH40_0.3_20026 SOIL - 26/5/2020 SE208848.028	0407_BH40_0.5_20026 SOIL - 26/5/2020 SE208848.029	0407_QC174_20062 SOIL - 26/5/2020 SE208848.030
Arsenic, As	mg/kg	1	3	<1	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	15	0.7	0.7
Copper, Cu	mg/kg	0.5	<0.5	4.6	1.7
Lead, Pb	mg/kg	1	8	6	7
Nickel, Ni	mg/kg	0.5	<0.5	0.9	<0.5
Zinc, Zn	mg/kg	2	3.1	24	6.4
Beryllium, Be	mg/kg	0.5	-	-	-
Boron, B	mg/kg	5	-	-	-
Cobalt, Co	mg/kg	0.5	-	-	-
Manganese, Mn	mg/kg	1	-	-	-

Mercury in Soil [AN312] Tested: 22/7/2020

PARAMETER	UOM	LOR	0407_SH015_0.2-0.3 200624 SOIL - 24/6/2020 SE208848.001	0407_SH016_0.2-0.3 200624 SOIL - 24/6/2020 SE208848.002	0407_SH023_0.2-0.3 200624 SOIL - 24/6/2020 SE208848.003	0407_SH024_0.1-0.2 200624 SOIL - 24/6/2020 SE208848.005	0407_BH11_0.1_200 25 SOIL - 25/6/2020 SE208848.006
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_BH11_0.5_200 25 SOIL - 25/6/2020 SE208848.007	0407_QC166_20062 SOIL - 25/6/2020 SE208848.008	0407_BH12_0.1_200 25 SOIL - 25/6/2020 SE208848.009	0407_BH12_0.5_200 25 SOIL - 25/6/2020 SE208848.010	0407_BH13_0.1_200 25 SOIL - 25/6/2020 SE208848.011
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_BH13_0.5_200 25 SOIL - 25/6/2020 SE208848.012	040_SH007_0.1_200 25 SOIL - 25/6/2020 SE208848.013	040_SH007_0.5_200 25 SOIL - 25/6/2020 SE208848.014	040_BH010_0.1_200 26 SOIL - 26/5/2020 SE208848.020	040_BH010_0.5_200 26 SOIL - 26/5/2020 SE208848.021
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_BH33_0.1_200 26 SOIL - 26/5/2020 SE208848.023	0407_BH33_0.7_200 26 SOIL - 26/5/2020 SE208848.024	0407_BH34_0.1_200 26 SOIL - 26/5/2020 SE208848.025	0407_BH34_0.5_200 26 SOIL - 26/5/2020 SE208848.026	0407_BH38_0.3_200 26 SOIL - 26/5/2020 SE208848.027
Mercury	mg/kg	0.05	**0.08**	**1.7**	**0.13**	**0.07**	**0.07**

PARAMETER	UOM	LOR	0407_BH40_0.3_200 26 SOIL - 26/5/2020 SE208848.028	0407_BH40_0.5_200 26 SOIL - 26/5/2020 SE208848.029	0407_QC174_20062 SOIL - 26/5/2020 SE208848.030
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05

Moisture Content [AN002] Tested: 22/7/2020

PARAMETER	UOM	LOR	0407_SH015_0.2-0.3 200624 SOIL - 24/6/2020 SE208848.001	0407_SH016_0.2-0.3 200624 SOIL - 24/6/2020 SE208848.002	0407_SH023_0.2-0.3 200624 SOIL - 24/6/2020 SE208848.003	0407_SH024_0.1-0.2 200624 SOIL - 24/6/2020 SE208848.005	0407_BH11_0.1_200 25 SOIL - 25/6/2020 SE208848.006
% Moisture	%w/w	1	19.9	17.9	10.0	12.3	2.4

PARAMETER	UOM	LOR	0407_BH11_0.5_200 25 SOIL - 25/6/2020 SE208848.007	0407_QC166_20062 SOIL - 25/6/2020 SE208848.008	0407_BH12_0.1_200 25 SOIL - 25/6/2020 SE208848.009	0407_BH12_0.5_200 25 SOIL - 25/6/2020 SE208848.010	0407_BH13_0.1_200 25 SOIL - 25/6/2020 SE208848.011
% Moisture	%w/w	1	19.5	1.6	5.1	5.2	20.0

PARAMETER	UOM	LOR	0407_BH13_0.5_200 25 SOIL - 25/6/2020 SE208848.012	040_SH007_0.1_200 25 SOIL - 25/6/2020 SE208848.013	040_SH007_0.5_200 25 SOIL - 25/6/2020 SE208848.014	040_SH011_0.1_200 25 SOIL - 25/6/2020 SE208848.015	040_SH011_0.3_200 25 SOIL - 25/6/2020 SE208848.016
% Moisture	%w/w	1	2.4	8.1	6.0	3.4	3.6

PARAMETER	UOM	LOR	040_SH014_0.1_200 25 SOIL - 25/6/2020 SE208848.017	040_SH012_0.1_200 26 SOIL - 26/5/2020 SE208848.018	040_SH012_0.5_200 26 SOIL - 26/5/2020 SE208848.019	040_BH010_0.1_200 26 SOIL - 26/5/2020 SE208848.020	040_BH010_0.5_200 26 SOIL - 26/5/2020 SE208848.021
% Moisture	%w/w	1	3.4	4.0	2.7	5.6	3.3

PARAMETER	UOM	LOR	0407_BH33_0.1_200 26 SOIL - 26/5/2020 SE208848.023	0407_BH33_0.7_200 26 SOIL - 26/5/2020 SE208848.024	0407_BH34_0.1_200 26 SOIL - 26/5/2020 SE208848.025	0407_BH34_0.5_200 26 SOIL - 26/5/2020 SE208848.026	0407_BH38_0.3_200 26 SOIL - 26/5/2020 SE208848.027
% Moisture	%w/w	1	8.9	12.9	11.8	14.2	24.2

PARAMETER	UOM	LOR	0407_BH40_0.3_200 26 SOIL - 26/5/2020 SE208848.028	0407_BH40_0.5_200 26 SOIL - 26/5/2020 SE208848.029	0407_QC174_20062 SOIL - 26/5/2020 SE208848.030
% Moisture	%w/w	1	13.1	14.6	5.3

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level [MA-1523] Tested: 27/7/2020

PARAMETER	UOM	LOR	0407_SH015_0.2-0.3 200624 SOIL - 24/6/2020 SE208848.001	0407_SH016_0.2-0.3 200624 SOIL - 24/6/2020 SE208848.002	0407_SH023_0.2-0.3 200624 SOIL - 24/6/2020 SE208848.003	0407_SH024_0.1-0.2 200624 SOIL - 24/6/2020 SE208848.005
Perfluorobutanoic acid (PFBA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorononanoic acid (PFNA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorodecanoic acid (PFDA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Sum PFOS and PFHXS	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorononane sulfonate (PFNS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0001	<0.0001	<0.0001	<0.0001	<0.0001
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.001	<0.001	<0.001	<0.001	<0.001
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.001	<0.001	<0.001	<0.001	<0.001
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.001	<0.001	<0.001	<0.001	<0.001
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.001	<0.001	<0.001	<0.001	<0.001
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.001	<0.001	<0.001	<0.001	<0.001
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.001	<0.001	<0.001	<0.001	<0.001
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002	<0.002	<0.002	<0.002	<0.002
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002	<0.002	<0.002	<0.002	<0.002
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.001	<0.001	<0.001	<0.001	<0.001
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.001	<0.001	<0.001	<0.001	<0.001

Sample Subcontracted [] Tested: 29/7/2020

PARAMETER	UOM	LOR	040_SH007_0.1_200 25 SOIL - 25/6/2020 SE208848.013	040_SH007_0.5_200 25 SOIL - 25/6/2020 SE208848.014	040_BH010_0.1_200 26 SOIL - 26/5/2020 SE208848.020	040_BH010_0.5_200 26 SOIL - 26/5/2020 SE208848.021
Sample Subcontracted*	No unit	-	Subcontracted	Subcontracted	Subcontracted	Subcontracted

VOCs in Water [AN433] Tested: 24/7/2020

PARAMETER	UOM	LOR	0407_QC306_20062 WATER - 24/6/2020 SE208848.004	0407_QC308_20062 WATER - 26/5/2020 SE208848.022	0407_QC307_20062 WATER - 26/5/2020 SE208848.031
Benzene	µg/L	0.5	<0.5	<0.5	<0.5
Toluene	µg/L	0.5	<0.5	<0.5	<0.5
Ethylbenzene	µg/L	0.5	<0.5	<0.5	<0.5
m/p-xylene	µg/L	1	<1	<1	<1
o-xylene	µg/L	0.5	<0.5	<0.5	<0.5
Naphthalene	µg/L	0.5	<0.5	<0.5	<0.5
Total Xylenes	µg/L	1.5	<1.5	<1.5	<1.5
Total BTEX	µg/L	3	<3	<3	<3

Volatile Petroleum Hydrocarbons in Water [AN433] Tested: 24/7/2020

PARAMETER	UOM	LOR	0407_QC306_20062 WATER - 24/6/2020 SE208848.004	0407_QC308_20062 WATER - 26/5/2020 SE208848.022	0407_QC307_20062 WATER - 26/5/2020 SE208848.031
Benzene (F0)	µg/L	0.5	<0.5	<0.5	<0.5
TRH C6-C9	µg/L	40	<40	<40	<40
TRH C6-C10	µg/L	50	<50	<50	<50
TRH C6-C10 minus BTEX (F1)	µg/L	50	<50	<50	<50

TRH (Total Recoverable Hydrocarbons) in Water [AN403] Tested: 23/7/2020

PARAMETER	UOM	LOR	0407_QC306_20062 WATER - 24/6/2020 SE208848.004	0407_QC308_20062 WATER - 26/5/2020 SE208848.022	0407_QC307_20062 WATER - 26/5/2020 SE208848.031
TRH C10-C14	µg/L	50	<50	<50	<50
TRH C15-C28	µg/L	200	<200	<200	<200
TRH C29-C36	µg/L	200	<200	<200	<200
TRH C37-C40	µg/L	200	<200	<200	<200
TRH >C10-C16	µg/L	60	<60	<60	<60
TRH >C10-C16 - Naphthalene (F2)	µg/L	60	<60	<60	<60
TRH >C16-C34 (F3)	µg/L	500	<500	<500	<500
TRH >C34-C40 (F4)	µg/L	500	<500	<500	<500
TRH C10-C40	µg/L	320	<320	<320	<320

PAH (Polynuclear Aromatic Hydrocarbons) in Water [AN420] Tested: 23/7/2020

PARAMETER	UOM	LOR	0407_QC306_20062 WATER - 24/6/2020 SE208848.004	0407_QC308_20062 WATER - 26/5/2020 SE208848.022	0407_QC307_20062 WATER - 26/5/2020 SE208848.031
Naphthalene	µg/L	0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	µg/L	0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	µg/L	0.1	<0.1	<0.1	<0.1
Acenaphthylene	µg/L	0.1	<0.1	<0.1	<0.1
Acenaphthene	µg/L	0.1	<0.1	<0.1	<0.1
Fluorene	µg/L	0.1	<0.1	<0.1	<0.1
Phenanthrene	µg/L	0.1	<0.1	<0.1	<0.1
Anthracene	µg/L	0.1	<0.1	<0.1	<0.1
Fluoranthene	µg/L	0.1	<0.1	<0.1	<0.1
Pyrene	µg/L	0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	µg/L	0.1	<0.1	<0.1	<0.1
Chrysene	µg/L	0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	µg/L	0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	µg/L	0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	µg/L	0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	µg/L	0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	µg/L	0.1	<0.1	<0.1	<0.1
Total PAH (18)	µg/L	1	<1	<1	<1

Full 8270 SVOC in Water [AN420] Tested: 23/7/2020

PARAMETER	UOM	LOR	0407_QC306_20062 WATER - 24/6/2020 SE208848.004	0407_QC308_20062 WATER - 26/5/2020 SE208848.022	0407_QC307_20062 WATER - 26/5/2020 SE208848.031
Acenaphthene	µg/L	0.1	<0.1	<0.1	<0.1
Acenaphthylene	µg/L	0.1	<0.1	<0.1	<0.1
Anthracene	µg/L	0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	µg/L	0.1	<0.1	<0.1	<0.1
Total Benzofluoranthenes (b&j&k)	µg/L	0.2	<0.2	<0.2	<0.2
Benzo(b&j)fluoranthene	µg/L	0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	µg/L	0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	µg/L	0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	µg/L	0.1	<0.1	<0.1	<0.1
Chrysene	µg/L	0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	µg/L	0.1	<0.1	<0.1	<0.1
Fluoranthene	µg/L	0.1	<0.1	<0.1	<0.1
Fluorene	µg/L	0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	µg/L	0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	µg/L	0.1	<0.1	<0.1	<0.1
Naphthalene	µg/L	0.1	<0.1	<0.1	<0.1
Phenanthrene	µg/L	0.1	<0.1	<0.1	<0.1
Pyrene	µg/L	0.1	<0.1	<0.1	<0.1
2-acetylaminofluorene	µg/L	0.5	<0.5	<0.5	<0.5
7,12-dimethyl-benz(a)anthracene	µg/L	0.5	<0.5	<0.5	<0.5
3-methylcholanthrene	µg/L	0.5	<0.5	<0.5	<0.5
Aldrin	µg/L	0.1	<0.1	<0.1	<0.1
Alpha-BHC	µg/L	0.1	<0.1	<0.1	<0.1
Beta-BHC	µg/L	0.1	<0.1	<0.1	<0.1
Delta-BHC	µg/L	0.1	<0.1	<0.1	<0.1
Gamma-BHC (Lindane)	µg/L	0.1	<0.1	<0.1	<0.1
p,p-DDD	µg/L	0.1	<0.1	<0.1	<0.1
p,p-DDE	µg/L	0.1	<0.1	<0.1	<0.1
p,p-DDT	µg/L	0.1	<0.1	<0.1	<0.1
Dieldrin	µg/L	0.1	<0.1	<0.1	<0.1
Alpha-endosulfan	µg/L	0.1	<0.1	<0.1	<0.1
Beta-endosulfan	µg/L	0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	µg/L	0.1	<0.1	<0.1	<0.1
Endrin	µg/L	0.1	<0.1	<0.1	<0.1
Heptachlor	µg/L	0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	µg/L	0.1	<0.1	<0.1	<0.1
Isodrin	µg/L	0.1	<0.1	<0.1	<0.1
Methoxychlor	µg/L	0.1	<0.1	<0.1	<0.1
Mirex	µg/L	0.1	<0.1	<0.1	<0.1
Alpha-chlordane	µg/L	0.1	<0.1	<0.1	<0.1
Gamma-chlordane	µg/L	0.1	<0.1	<0.1	<0.1
Endrin ketone	µg/L	0.1	<0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	µg/L	0.2	<0.2	<0.2	<0.2
Bromophos ethyl	µg/L	0.2	<0.2	<0.2	<0.2
Carbophenothion	µg/L	0.5	<0.5	<0.5	<0.5
Chlorfenvinphos-cis	µg/L	5	<5	<5	<5
Chlorfenvinphos-trans	µg/L	0.5	<0.5	<0.5	<0.5
Chlorpyrifos (Chlorpyrifos Ethyl)	µg/L	0.2	<0.2	<0.2	<0.2
Chlorpyrifos-methyl	µg/L	0.5	<0.5	<0.5	<0.5
Co-Ral (Coumaphos)	µg/L	0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	µg/L	0.5	<0.5	<0.5	<0.5
Dichlorvos	µg/L	0.5	<0.5	<0.5	<0.5
1/2-Chloronaphthalene	µg/L	1	<1	<1	<1
Demeton-S-methyl	µg/L	0.5	<0.5	<0.5	<0.5
Dimethoate	µg/L	0.5	<0.5	<0.5	<0.5

Full 8270 SVOC in Water [AN420] Tested: 23/7/2020 (continued)

PARAMETER	UOM	LOR	0407_QC306_20062 WATER - 24/6/2020 SE208848.004	0407_QC308_20062 WATER - 26/5/2020 SE208848.022	0407_QC307_20062 WATER - 26/5/2020 SE208848.031
Disulfoton (Di-syston)	µg/L	0.5	<0.5	<0.5	<0.5
EPN*	µg/L	0.5	<0.5	<0.5	<0.5
Ethion	µg/L	0.2	<0.2	<0.2	<0.2
Ethoprophos (Ethoprop or Prophos)	µg/L	0.5	<0.5	<0.5	<0.5
Famphur (Famophos)	µg/L	0.5	<0.5	<0.5	<0.5
Fenamiphos (Phenamiphos)	µg/L	0.5	<0.5	<0.5	<0.5
Fenchlorophos (Ronnel)	µg/L	0.5	<0.5	<0.5	<0.5
Fenitrothion	µg/L	0.2	<0.2	<0.2	<0.2
Fenthion	µg/L	0.5	<0.5	<0.5	<0.5
Malathion (Maldison)	µg/L	0.2	<0.2	<0.2	<0.2
Methidathion	µg/L	0.5	<0.5	<0.5	<0.5
Mevinphos-cis/trans	µg/L	1	<1	<1	<1
o,o,o-triethyl phosphorothioate	µg/L	0.5	<0.5	<0.5	<0.5
Parathion ethyl (Parathion)	µg/L	0.2	<0.2	<0.2	<0.2
Parathion methyl	µg/L	0.5	<0.5	<0.5	<0.5
Phorate	µg/L	0.5	<0.5	<0.5	<0.5
Pirimiphos-ethyl	µg/L	0.5	<0.5	<0.5	<0.5
Pirimiphos-methyl	µg/L	0.5	<0.5	<0.5	<0.5
Profenofos	µg/L	0.5	<0.5	<0.5	<0.5
Prothiophos (Tokuthion)*	µg/L	0.5	<0.5	<0.5	<0.5
Sulfotepp	µg/L	0.5	<0.5	<0.5	<0.5
Tetrachlorvinphos (Stirophos)*	µg/L	0.5	<0.5	<0.5	<0.5
PCB Congener C28	µg/L	0.1	<0.1	<0.1	<0.1
PCB Congener C52	µg/L	0.1	<0.1	<0.1	<0.1
PCB Congener C101	µg/L	0.1	<0.1	<0.1	<0.1
PCB Congener C118	µg/L	0.1	<0.1	<0.1	<0.1
PCB Congener C138	µg/L	0.1	<0.1	<0.1	<0.1
PCB Congener C153	µg/L	0.1	<0.1	<0.1	<0.1
PCB Congener C180	µg/L	0.1	<0.1	<0.1	<0.1
Hexachlorobenzene (HCB)	µg/L	0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5
1,3-dichlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5
1,4-dichlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5
Hexachlorobutadiene	µg/L	0.5	<0.5	<0.5	<0.5
Hexachlorocyclopentadiene	µg/L	2	<2	<2	<2
Hexachloroethane	µg/L	0.5	<0.5	<0.5	<0.5
Hexachloroproprene	µg/L	0.5	<0.5	<0.5	<0.5
Pentachlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5
Pentachloroethane	µg/L	0.5	<0.5	<0.5	<0.5
1,2,3,5 and 1,2,4,5-tetrachlorobenzene	µg/L	1	<1	<1	<1
1,2,3,4-tetrachlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5
1,2,4-trichlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5
Bis(2-ethylhexyl)phthalate	µg/L	50	<50	<50	<50
Bis(2-ethylhexyl)adipate	µg/L	1	<1	<1	<1
Butyl benzyl phthalate	µg/L	1	<1	<1	<1
Di-n-butyl phthalate	µg/L	10	<10	<10	<10
Diethyl phthalate	µg/L	5	<5	<5	<5
Dimethyl phthalate	µg/L	1	<1	<1	<1
Dioctyl phthalate	µg/L	1	<1	<1	<1
Carbofuran	µg/L	0.5	<0.5	<0.5	<0.5
Carbaryl	µg/L	0.5	<0.5	<0.5	<0.5
Trifluralin	µg/L	0.5	<0.5	<0.5	<0.5
N-nitroso-di-n-butylamine (NDBA)	µg/L	1	<1	<1	<1
N-nitroso-diethylamine (NDEA)	µg/L	1	<1	<1	<1
N-nitroso-di-n-propylamine (NDPA)	µg/L	1	<1	<1	<1
N-nitroso-morpholine (NMOR)	µg/L	1	<1	<1	<1

Full 8270 SVOC in Water [AN420] Tested: 23/7/2020 (continued)

PARAMETER	UOM	LOR	0407_QC306_20062 WATER - 24/6/2020 SE208848.004	0407_QC308_20062 WATER - 26/5/2020 SE208848.022	0407_QC307_20062 WATER - 26/5/2020 SE208848.031
N-nitroso-piperidine (NPIP)	µg/L	1	<1	<1	<1
N-nitroso-pyrrolidine (NPYR)	µg/L	1	<1	<1	<1
4-amino biphenyl	µg/L	1	<1	<1	<1
Acetophenone	µg/L	1	<1	<1	<1
1,3-dinitrobenzene	µg/L	1	<1	<1	<1
2,4-dinitrotoluene	µg/L	1	<1	<1	<1
2,6-dinitrotoluene	µg/L	1	<1	<1	<1
Isophorone	µg/L	1	<1	<1	<1
Nitrobenzene	µg/L	1	<1	<1	<1
p-(dimethylamino) azobenzene	µg/L	1	<1	<1	<1
Phenacetin	µg/L	1	<1	<1	<1
Pentachloronitrobenzene (quintozene)	µg/L	1	<1	<1	<1
Aniline	µg/L	5	<5	<5	<5
4-chloroaniline	µg/L	1	<1	<1	<1
2-nitroaniline	µg/L	1	<1	<1	<1
3-nitroaniline	µg/L	1	<1	<1	<1
4-nitroaniline	µg/L	1	<1	<1	<1
Diphenylamine	µg/L	1	<1	<1	<1
o-Toluidine	µg/L	1	<1	<1	<1
5-nitro-o-toluidine	µg/L	1	<1	<1	<1
1-naphthylamine	µg/L	2	<2	<2	<2
2-naphthylamine	µg/L	2	<2	<2	<2
Bis(2-chloroethoxy) methane	µg/L	1	<1	<1	<1
Bis(2-chloroethyl) ether	µg/L	1	<1	<1	<1
Bis(2-chloroisopropyl) ether	µg/L	1	<1	<1	<1
4-chlorophenyl phenyl ether	µg/L	1	<1	<1	<1
4-bromophenyl phenyl ether	µg/L	1	<1	<1	<1
Methyl methanesulfonate	µg/L	1	<1	<1	<1
Ethyl methanesulfonate	µg/L	1	<1	<1	<1
Dibenzofuran	µg/L	1	<1	<1	<1
Benzyl alcohol	µg/L	1	<1	<1	<1
Safrole	µg/L	1	<1	<1	<1
Isosafrole Isomer 1	µg/L	1	<1	<1	<1
Isosafrole Isomer 2	µg/L	1	<1	<1	<1
1,4-naphthoquinone	µg/L	1	<1	<1	<1
Thionazin	µg/L	1	<1	<1	<1
3/4-methyl phenol (m/p-cresol)	µg/L	1	<1	<1	<1
2-methyl phenol (o-cresol)	µg/L	0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	µg/L	0.5	<0.5	<0.5	<0.5
2,3,4,6 and 2,3,5,6-tetrachlorophenol	µg/L	1	<1	<1	<1
2,4,5-trichlorophenol	µg/L	0.5	<0.5	<0.5	<0.5
4-chloro-3-methylphenol	µg/L	2	<2	<2	<2
2-chlorophenol	µg/L	0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	µg/L	0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	µg/L	0.5	<0.5	<0.5	<0.5
2-nitrophenol	µg/L	0.5	<0.5	<0.5	<0.5
Phenol	µg/L	0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	µg/L	0.5	<0.5	<0.5	<0.5
Pentachlorophenol	µg/L	0.5	<0.5	<0.5	<0.5
4-nitrophenol	µg/L	1	<1	<1	<1
Total Endosulfan (alpha+beta+sulfate)	µg/L	0.2	<0.2	<0.2	<0.2

Trace Metals (Dissolved) in Water by ICPMS [AN318] Tested: 22/7/2020

PARAMETER	UOM	LOR	0407_QC306_20062 WATER - 24/6/2020 SE208848.004	0407_QC308_20062 WATER - 26/5/2020 SE208848.022	0407_QC307_20062 WATER - 26/5/2020 SE208848.031
Arsenic, As	µg/L	1	<1	<1	<1
Cadmium, Cd	µg/L	0.1	<0.1	<0.1	<0.1
Chromium, Cr	µg/L	1	<1	<1	<1
Copper, Cu	µg/L	1	<1	<1	<1
Lead, Pb	µg/L	1	<1	<1	<1
Nickel, Ni	µg/L	1	<1	<1	<1
Zinc, Zn	µg/L	5	<5	<5	<5

Mercury (dissolved) in Water [AN311(Perth)/AN312] Tested: 23/7/2020

PARAMETER	UOM	LOR	0407_QC306_20062 WATER - 24/6/2020 SE208848.004	0407_QC308_20062 WATER - 26/5/2020 SE208848.022	0407_QC307_20062 WATER - 26/5/2020 SE208848.031
Mercury	mg/L	0.0001	<0.0001	<0.0001	<0.0001

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples - Low Level [MA-1523] Tested: 27/7/2020

PARAMETER	UOM	LOR	0407_QC306_20062 WATER - 24/6/2020 SE208848.004	0407_QC308_20062 WATER - 26/5/2020 SE208848.022	0407_QC307_20062 WATER - 26/5/2020 SE208848.031
Perfluorobutanoic acid (PFBA)	µg/L	0.0005	<0.0005	<0.0005	<0.0005
Perfluoropentanoic acid (PFPeA)	µg/L	0.0005	<0.0005	<0.0005	<0.0005
Perfluorohexanoic acid (PFHxA)	µg/L	0.0005	<0.0005	<0.0005	<0.0005
Perfluoroheptanoic acid (PFHpA)	µg/L	0.0005	<0.0005	<0.0005	<0.0005
Perfluorooctanoic Acid (PFOA)	µg/L	0.0005	<0.0005	<0.0005	<0.0005
Perfluorononanoic acid (PFNA)	µg/L	0.001	<0.001	<0.001	<0.001
Perfluorodecanoic acid (PFDA)	µg/L	0.001	<0.001	<0.001	<0.001
Perfluoroundecanoic acid (PFUnA)	µg/L	0.001	<0.001	<0.001	<0.001
Perfluorododecanoic acid (PFDoA)	µg/L	0.001	<0.001	<0.001	<0.001
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.001	<0.001	<0.001	<0.001
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.001	<0.001	<0.001	<0.001
Perfluorohexadecanoic acid (PFHxDA)	µg/L	0.002	<0.002	<0.002	<0.002
Perfluorobutane sulfonate (PFBS)	µg/L	0.001	<0.001	<0.001	<0.001
Perfluoropentane sulfonate (PFPeS)	µg/L	0.001	<0.001	<0.001	<0.001
Perfluorohexane sulfonate (PFHxS)	µg/L	0.0002	<0.0002	<0.0002	<0.0002
Perfluoroheptane sulfonate (PFHpS)	µg/L	0.0002	<0.0002	<0.0002	<0.0002
Perfluorooctane sulfonate (PFOS)	µg/L	0.0002	<0.0002	<0.0002	<0.0002
Sum of PFHxS and PFOS	µg/L	0.0002	<0.0002	<0.0002	<0.0002
Perfluorononane sulfonate (PFNS)	µg/L	0.0005	<0.0005	<0.0005	<0.0005
Perfluorodecane sulfonate (PFDS)	µg/L	0.0005	<0.0005	<0.0005	<0.0005
Perfluorododecane sulfonate (PFDoS)	µg/L	0.0005	<0.0005	<0.0005	<0.0005
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	µg/L	0.0005	<0.0005	<0.0005	<0.0005
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	µg/L	0.0005	<0.0005	<0.0005	<0.0005
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	µg/L	0.0005	<0.0005	<0.0005	<0.0005
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.002	<0.002	<0.002	<0.002
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	µg/L	0.0025	<0.0025	<0.0025	<0.0025
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	µg/L	0.0025	<0.0025	<0.0025	<0.0025
2-(N-Methylperfluorooctane sulfonamido)-ethanol	µg/L	0.0025	<0.0025	<0.0025	<0.0025
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	µg/L	0.0025	<0.0025	<0.0025	<0.0025
N-Methylperfluorooctanesulfonamidoacetic acid	µg/L	0.0025	<0.0025	<0.0025	<0.0025
N-Ethylperfluorooctanesulfonamidoacetic Acid	µg/L	0.0025	<0.0025	<0.0025	<0.0025

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN020	Unpreserved water sample is filtered through a 0.45µm membrane filter and acidified with nitric acid similar to APHA3030B.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
AN311(Perth)/AN312	Mercury by Cold Vapour AAS in Waters: Mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500.
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid , mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser . Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN318	Determination of elements at trace level in waters by ICP-MS technique,, referenced to USEPA 6020B and USEPA 200.8 (5.4).
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents .
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS /ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.
MA-1523	This method covers the analysis of per- and polyfluoroalkyl substances (PFAS) in aqueous, solid and biosolid samples and solvent extracts, determined as the total of linear and branched isomers. After spiking with isotopically labelled quantification surrogates and clean-up via SPE cartridges sample extracts are analysed by liquid chromatography/mass spectrometry (LC-MS/MS). PFAS concentrations are determined by isotope dilution quantification.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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Site Number 18217

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The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: **Results Environmental**

Report **733254-S**
Project name SE208848
Received Date Jul 22, 2020

Client Sample ID			**SE208848.013 040_SH007_0.1 _200625**	**SE208848.014 040_SH007_0.5 _200625**	**SE208848.020 040_BH010_0. 1_200626**	**SE208848.021 040_BH010_0. 5_200626**
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-JI35955**	**S20-JI35956**	**S20-JI35957**	**S20-JI35958**
Date Sampled			**Jun 25, 2020**	**Jun 25, 2020**	**Jun 26, 2020**	**Jun 26, 2020**
Test/Reference	LOR	Unit				
Nitroglycerine (NG)	5	mg/kg	< 5	< 5	< 5	< 5
% Moisture	1	%	7.9	5.7	4.7	3.2
Explosives						
Octahydro-1.3.5.7-tetranitro-1.3.5.7-tetrazocine (HMX)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pentaerythritol tetranitrate (PETN)	1	mg/kg	< 1	< 1	< 1	< 1
1-Chloro-2-nitrobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1-Chloro-3-nitrobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1-Chloro-4-nitrobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dinitrobenzene (1.3-DNB)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3.5-Trinitrobenzene (1.3.5-TNB)	1	mg/kg	< 1	< 1	< 1	< 1
2-Amino-4.6 dinitrotoluene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Nitrotoluene (2-NT)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4- & 2.6-Dinitrotoluene	1	mg/kg	< 1	< 1	< 1	< 1
3-Nitrotoluene (3-NT)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Amino-2.6-dinitrotoluene (4-Am-DNT)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Nitrotoluene (4-NT)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Hexahydro-1.3.5-trinitro-1.3.5-triazine (RDX)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Methyl-2.4.6-trinitrophenylnitramine (Tetryl)	1	mg/kg	< 1	< 1	< 1	< 1
Nitrobenzene (NB)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TNT	1	mg/kg	< 1	< 1	< 1	< 1

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Nitroglycerine (NG)	Melbourne	Jul 23, 2020	14 Days
- Method: USEPA Method 8332			
Explosives	Melbourne	Jul 23, 2020	14 Days
- Method: LTM-ORG-2230 Determination of Explosive by HPLC			
% Moisture	Melbourne	Jul 22, 2020	14 Days
- Method: LTM-GEN-7080 Moisture			

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Company Name: SGS Environmental Services NSW
Address: PO: 50385415
Unit 16/33 Maddox St
Alexandria NSW 2015

Project Name: SE208848

Order No.:
Report #: 733254
Phone: 02 8594 0400
Fax: 02 8594 0499

Received: Jul 22, 2020 2:00 PM
Due: Jul 29, 2020
Priority: 5 Day
Contact Name: Results Environmental

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Nitroglycerine (NG)	Moisture Set	Explosives
Melbourne Laboratory - NATA Site # 1254 & 14271						X	X	X
Sydney Laboratory - NATA Site # 18217								
Brisbane Laboratory - NATA Site # 20794								
Perth Laboratory - NATA Site # 23736								
External Laboratory								
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**			
1	SE208848.013 040_SH007_0. 1_200625	Jun 25, 2020		Soil	S20-Jl35955	X	X	X
2	SE208848.014 040_SH007_0. 5_200625	Jun 25, 2020		Soil	S20-Jl35956	X	X	X
3	SE208848.020 040_BH010_0. 1_200626	Jun 26, 2020		Soil	S20-Jl35957	X	X	X
4	SE208848.021 040_BH010_0. 5_200626	Jun 26, 2020		Soil	S20-Jl35958	X	X	X
Test Counts						4	4	4

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

****NOTE:** pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram

mg/L: milligrams per litre

ug/L: micrograms per litre

ppm: Parts per million

ppb: Parts per billion

%: Percentage

org/100mL: Organisms per 100 millilitres

NTU: Nephelometric Turbidity Units

MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version 5.3
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling.Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Nitroglycerine (NG)	mg/kg	< 5			5	Pass	
Method Blank							
Explosives							
Octahydro-1.3.5.7-tetranitro-1.3.5.7-tetrazocine (HMX)	mg/kg	< 0.5			0.5	Pass	
Pentaerythritol tetranitrate (PETN)	mg/kg	< 1			1	Pass	
1-Chloro-2-nitrobenzene	mg/kg	< 0.5			0.5	Pass	
1-Chloro-3-nitrobenzene	mg/kg	< 0.5			0.5	Pass	
1-Chloro-4-nitrobenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dinitrobenzene (1.3-DNB)	mg/kg	< 0.5			0.5	Pass	
1.3.5-Trinitrobenzene (1.3.5-TNB)	mg/kg	< 1			1	Pass	
2-Amino-4.6 dinitrotoluene	mg/kg	< 0.5			0.5	Pass	
2-Nitrotoluene (2-NT)	mg/kg	< 0.5			0.5	Pass	
2.4- & 2.6-Dinitrotoluene	mg/kg	< 1			1	Pass	
3-Nitrotoluene (3-NT)	mg/kg	< 0.5			0.5	Pass	
4-Amino-2.6-dinitrotoluene (4-Am-DNT)	mg/kg	< 0.5			0.5	Pass	
4-Nitrotoluene (4-NT)	mg/kg	< 0.5			0.5	Pass	
Hexahydro-1.3.5-trinitro-1.3.5-triazine (RDX)	mg/kg	< 0.5			0.5	Pass	
Methyl-2.4.6-trinitrophenylnitramine (Tetryl)	mg/kg	< 1			1	Pass	
Nitrobenzene (NB)	mg/kg	< 0.5			0.5	Pass	
TNT	mg/kg	< 1			1	Pass	
LCS - % Recovery							
Nitroglycerine (NG)	%	105			75-125	Pass	
LCS - % Recovery							
Explosives							
Octahydro-1.3.5.7-tetranitro-1.3.5.7-tetrazocine (HMX)	%	97			70-130	Pass	
Pentaerythritol tetranitrate (PETN)	%	83			70-130	Pass	
1.3-Dinitrobenzene (1.3-DNB)	%	94			70-130	Pass	
1.3.5-Trinitrobenzene (1.3.5-TNB)	%	99			70-130	Pass	
2-Nitrotoluene (2-NT)	%	94			70-130	Pass	
2.4- & 2.6-Dinitrotoluene	%	98			70-130	Pass	
3-Nitrotoluene (3-NT)	%	126			70-130	Pass	
4-Nitrotoluene (4-NT)	%	96			70-130	Pass	
Hexahydro-1.3.5-trinitro-1.3.5-triazine (RDX)	%	97			70-130	Pass	
Methyl-2.4.6-trinitrophenylnitramine (Tetryl)	%	106			70-130	Pass	
TNT	%	121			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Explosives				Result 1					
Octahydro-1.3.5.7-tetranitro-1.3.5.7-tetrazocine (HMX)	M20-Jl07454	NCP	%	114			70-130	Pass	
Pentaerythritol tetranitrate (PETN)	M20-Jl00529	NCP	%	int			70-130	Fail	Q08
1-Chloro-3-nitrobenzene	M20-Jl07454	NCP	%	121			70-130	Pass	
1.3-Dinitrobenzene (1.3-DNB)	M20-Jl07454	NCP	%	105			70-130	Pass	
2-Amino-4.6 dinitrotoluene	M20-Jl07454	NCP	%	121			70-130	Pass	
2-Nitrotoluene (2-NT)	M20-Jl07454	NCP	%	77			70-130	Pass	
2.4- & 2.6-Dinitrotoluene	M20-Jl07454	NCP	%	106			70-130	Pass	
3-Nitrotoluene (3-NT)	M20-Jl07454	NCP	%	128			70-130	Pass	
4-Amino-2.6-dinitrotoluene (4-Am-DNT)	M20-Jl07454	NCP	%	114			70-130	Pass	
4-Nitrotoluene (4-NT)	M20-Jl07454	NCP	%	84			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Methyl-2.4.6-trinitrophenylnitramine (Tetryl)	M20-Jl07454	NCP	%	122			70-130	Pass	
Nitrobenzene (NB)	M20-Jl07454	NCP	%	116			70-130	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
				Result 1	Result 2	RPD			
Nitroglycerine (NG)	S20-Jl35955	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Duplicate									
Explosives				Result 1	Result 2	RPD			
Octahydro-1.3.5.7-tetranitro-1.3.5.7-tetrazocine (HMX)	M20-Jl27092	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pentaerythritol tetranitrate (PETN)	M20-Jl27092	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
1-Chloro-2-nitrobenzene	M20-Jl27092	NCP	mg/kg	160	130	22	30%	Pass	
1-Chloro-3-nitrobenzene	M20-Jl27092	NCP	mg/kg	1.8	2.3	24	30%	Pass	
1-Chloro-4-nitrobenzene	M20-Jl27092	NCP	mg/kg	51	60	17	30%	Pass	
1.3-Dinitrobenzene (1.3-DNB)	M20-Jl27092	NCP	mg/kg	< 25	< 25	<1	30%	Pass	
1.3.5-Trinitrobenzene (1.3.5-TNB)	M20-Jl27092	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2-Amino-4.6 dinitrotoluene	M20-Jl27092	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Nitrotoluene (2-NT)	M20-Jl27092	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4- & 2.6-Dinitrotoluene	M20-Jl27092	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
3-Nitrotoluene (3-NT)	M20-Jl27092	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Amino-2.6-dinitrotoluene (4-Am-DNT)	M20-Jl27092	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Nitrotoluene (4-NT)	M20-Jl27092	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Hexahydro-1.3.5-trinitro-1.3.5-triazine (RDX)	M20-Jl27092	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Methyl-2.4.6-trinitrophenylnitramine (Tetryl)	M20-Jl27092	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Nitrobenzene (NB)	M20-Jl27092	NCP	mg/kg	1700	1600	4.0	30%	Pass	
TNT	M20-Jl27092	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	S20-Jl35958	CP	%	3.2	3.2	1.0	30%	Pass	

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
Q08	The matrix spike recovery is outside of the recommended acceptance criteria. An acceptable recovery was obtained for the laboratory control sample indicating a sample matrix interference.

Authorised By

[redacted]

Analytical Services Manager

Senior Analyst-Organic (VIC)

[redacted]

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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STATEMENT OF QA/QC PERFORMANCE

SE208848 R0

CLIENT DETAILS

Contact	[redacted]
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Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	31

LABORATORY DETAILS

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SGS Reference	**SE208848 R0**
Date Received	25 Jun 2020
Date Reported	29 Jul 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Extraction Date	Full 8270 SVOC in Water	3 items
	Mercury (dissolved) in Water	3 items
	Mercury in Soil	10 items
	Moisture Content	28 items
	OC Pesticides in Soil	12 items
	OP Pesticides in Soil	12 items
	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	23 items
	PAH (Polynuclear Aromatic Hydrocarbons) in Water	3 items
	PCBs in Soil	19 items
	Speciated Phenols in Soil	14 items
	TRH (Total Recoverable Hydrocarbons) in Soil	26 items
	TRH (Total Recoverable Hydrocarbons) in Water	3 items
	VOC's in Soil	26 items
	VOCs in Water	3 items

There are more than 15 quality objective exceedences. Please see report for details

SAMPLE SUMMARY

HOLDING TIME SUMMARY

SE208848 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Full 8270 SVOC in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC306_200623	SE208848.004	LB204953	24 Jun 2020	25 Jun 2020	01 Jul 2020	23 Jul 2020†	01 Sep 2020	28 Jul 2020
0407_QC308_200626	SE208848.022	LB204953	26 May 2020	25 Jun 2020	02 Jun 2020	23 Jul 2020†	01 Sep 2020	28 Jul 2020
0407_QC307_200626	SE208848.031	LB204953	26 May 2020	25 Jun 2020	02 Jun 2020	23 Jul 2020†	01 Sep 2020	28 Jul 2020

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC306_200623	SE208848.004	LB204955	24 Jun 2020	25 Jun 2020	22 Jul 2020	23 Jul 2020†	22 Jul 2020	23 Jul 2020†
0407_QC308_200626	SE208848.022	LB204955	26 May 2020	25 Jun 2020	23 Jun 2020	23 Jul 2020†	23 Jun 2020	23 Jul 2020†
0407_QC307_200626	SE208848.031	LB204955	26 May 2020	25 Jun 2020	23 Jun 2020	23 Jul 2020†	23 Jun 2020	23 Jul 2020†

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SH015_0.2-0.3_2006	SE208848.001	LB204914	24 Jun 2020	25 Jun 2020	22 Jul 2020	22 Jul 2020	22 Jul 2020	27 Jul 2020†
0407_SH016_0.2-0.3_2006	SE208848.002	LB204914	24 Jun 2020	25 Jun 2020	22 Jul 2020	22 Jul 2020	22 Jul 2020	27 Jul 2020†
0407_SH023_0.2-0.3_2006	SE208848.003	LB204914	24 Jun 2020	25 Jun 2020	22 Jul 2020	22 Jul 2020	22 Jul 2020	27 Jul 2020†
0407_SH024_0.1-0.2_2006	SE208848.005	LB204914	24 Jun 2020	25 Jun 2020	22 Jul 2020	22 Jul 2020	22 Jul 2020	27 Jul 2020†
0407_BH11_0.1_200625	SE208848.006	LB204914	25 Jun 2020	25 Jun 2020	23 Jul 2020	22 Jul 2020	23 Jul 2020	27 Jul 2020†
0407_BH11_0.5_200625	SE208848.007	LB204914	25 Jun 2020	25 Jun 2020	23 Jul 2020	22 Jul 2020	23 Jul 2020	27 Jul 2020†
0407_QC166_200625	SE208848.008	LB204914	25 Jun 2020	25 Jun 2020	23 Jul 2020	22 Jul 2020	23 Jul 2020	27 Jul 2020†
0407_BH12_0.1_200625	SE208848.009	LB204914	25 Jun 2020	25 Jun 2020	23 Jul 2020	22 Jul 2020	23 Jul 2020	27 Jul 2020†
0407_BH12_0.5_200625	SE208848.010	LB204914	25 Jun 2020	25 Jun 2020	23 Jul 2020	22 Jul 2020	23 Jul 2020	27 Jul 2020†
0407_BH13_0.1_200625	SE208848.011	LB204914	25 Jun 2020	25 Jun 2020	23 Jul 2020	22 Jul 2020	23 Jul 2020	27 Jul 2020†
0407_BH13_0.5_200625	SE208848.012	LB204914	25 Jun 2020	25 Jun 2020	23 Jul 2020	22 Jul 2020	23 Jul 2020	27 Jul 2020†
040_SH007_0.1_200625	SE208848.013	LB204914	25 Jun 2020	25 Jun 2020	23 Jul 2020	22 Jul 2020	23 Jul 2020	27 Jul 2020†
040_SH007_0.5_200625	SE208848.014	LB204914	25 Jun 2020	25 Jun 2020	23 Jul 2020	22 Jul 2020	23 Jul 2020	27 Jul 2020†
040_BH010_0.1_200626	SE208848.020	LB204914	26 May 2020	25 Jun 2020	23 Jun 2020	22 Jul 2020†	23 Jun 2020	27 Jul 2020†
040_BH010_0.5_200626	SE208848.021	LB204915	26 May 2020	25 Jun 2020	23 Jun 2020	22 Jul 2020†	23 Jun 2020	27 Jul 2020†
0407_BH33_0.1_200626	SE208848.023	LB204915	26 May 2020	25 Jun 2020	23 Jun 2020	22 Jul 2020†	23 Jun 2020	27 Jul 2020†
0407_BH33_0.7_200626	SE208848.024	LB204915	26 May 2020	25 Jun 2020	23 Jun 2020	22 Jul 2020†	23 Jun 2020	27 Jul 2020†
0407_BH34_0.1_200626	SE208848.025	LB204915	26 May 2020	25 Jun 2020	23 Jun 2020	22 Jul 2020†	23 Jun 2020	27 Jul 2020†
0407_BH34_0.5_200626	SE208848.026	LB204915	26 May 2020	25 Jun 2020	23 Jun 2020	22 Jul 2020†	23 Jun 2020	27 Jul 2020†
0407_BH38_0.3_200626	SE208848.027	LB204915	26 May 2020	25 Jun 2020	23 Jun 2020	22 Jul 2020†	23 Jun 2020	27 Jul 2020†
0407_BH40_0.3_200626	SE208848.028	LB204915	26 May 2020	25 Jun 2020	23 Jun 2020	22 Jul 2020†	23 Jun 2020	27 Jul 2020†
0407_BH40_0.5_200626	SE208848.029	LB204915	26 May 2020	25 Jun 2020	23 Jun 2020	22 Jul 2020†	23 Jun 2020	27 Jul 2020†
0407_QC174_200626	SE208848.030	LB204915	26 May 2020	25 Jun 2020	23 Jun 2020	22 Jul 2020†	23 Jun 2020	27 Jul 2020†

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SH015_0.2-0.3_2006	SE208848.001	LB204907	24 Jun 2020	25 Jun 2020	08 Jul 2020	22 Jul 2020†	27 Jul 2020	24 Jul 2020
0407_SH016_0.2-0.3_2006	SE208848.002	LB204907	24 Jun 2020	25 Jun 2020	08 Jul 2020	22 Jul 2020†	27 Jul 2020	24 Jul 2020
0407_SH023_0.2-0.3_2006	SE208848.003	LB204907	24 Jun 2020	25 Jun 2020	08 Jul 2020	22 Jul 2020†	27 Jul 2020	24 Jul 2020
0407_SH024_0.1-0.2_2006	SE208848.005	LB204907	24 Jun 2020	25 Jun 2020	08 Jul 2020	22 Jul 2020†	27 Jul 2020	24 Jul 2020
0407_BH11_0.1_200625	SE208848.006	LB204907	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	27 Jul 2020	24 Jul 2020
0407_BH11_0.5_200625	SE208848.007	LB204907	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	27 Jul 2020	24 Jul 2020
0407_QC166_200625	SE208848.008	LB204907	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	27 Jul 2020	24 Jul 2020
0407_BH12_0.1_200625	SE208848.009	LB204907	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	27 Jul 2020	24 Jul 2020
0407_BH12_0.5_200625	SE208848.010	LB204907	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	27 Jul 2020	24 Jul 2020
0407_BH13_0.1_200625	SE208848.011	LB204907	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	27 Jul 2020	24 Jul 2020
0407_BH13_0.5_200625	SE208848.012	LB204907	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	27 Jul 2020	24 Jul 2020
040_SH007_0.1_200625	SE208848.013	LB204907	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	27 Jul 2020	24 Jul 2020
040_SH007_0.5_200625	SE208848.014	LB204907	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	27 Jul 2020	24 Jul 2020
040_SH011_0.1_200625	SE208848.015	LB204907	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	27 Jul 2020	24 Jul 2020
040_SH011_0.3_200625	SE208848.016	LB204907	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	27 Jul 2020	24 Jul 2020
040_SH014_0.1_200625	SE208848.017	LB204907	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	27 Jul 2020	24 Jul 2020
040_SH012_0.1_200626	SE208848.018	LB204907	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	27 Jul 2020	24 Jul 2020
040_SH012_0.5_200626	SE208848.019	LB204907	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	27 Jul 2020	24 Jul 2020
040_BH010_0.1_200626	SE208848.020	LB204907	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	27 Jul 2020	24 Jul 2020
040_BH010_0.5_200626	SE208848.021	LB204907	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	27 Jul 2020	24 Jul 2020
0407_BH33_0.1_200626	SE208848.023	LB204907	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	27 Jul 2020	24 Jul 2020
0407_BH33_0.7_200626	SE208848.024	LB204907	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	27 Jul 2020	24 Jul 2020
0407_BH34_0.1_200626	SE208848.025	LB204908	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	27 Jul 2020	24 Jul 2020

HOLDING TIME SUMMARY

SE208848 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Moisture Content (continued)

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH34_0.5_200626	SE208848.026	LB204908	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	27 Jul 2020	24 Jul 2020
0407_BH38_0.3_200626	SE208848.027	LB204908	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	27 Jul 2020	24 Jul 2020
0407_BH40_0.3_200626	SE208848.028	LB204908	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	27 Jul 2020	24 Jul 2020
0407_BH40_0.5_200626	SE208848.029	LB204908	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	27 Jul 2020	24 Jul 2020
0407_QC174_200626	SE208848.030	LB204908	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	27 Jul 2020	24 Jul 2020

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SH015_0.2-0.3_2006	SE208848.001	LB204905	24 Jun 2020	25 Jun 2020	08 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_SH016_0.2-0.3_2006	SE208848.002	LB204905	24 Jun 2020	25 Jun 2020	08 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_SH023_0.2-0.3_2006	SE208848.003	LB204905	24 Jun 2020	25 Jun 2020	08 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_SH024_0.1-0.2_2006	SE208848.005	LB204905	24 Jun 2020	25 Jun 2020	08 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH11_0.1_200625	SE208848.006	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH11_0.5_200625	SE208848.007	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_QC166_200625	SE208848.008	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH12_0.1_200625	SE208848.009	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH12_0.5_200625	SE208848.010	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH13_0.1_200625	SE208848.011	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH13_0.5_200625	SE208848.012	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
040_SH007_0.1_200625	SE208848.013	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
040_SH007_0.5_200625	SE208848.014	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
040_SH011_0.1_200625	SE208848.015	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
040_SH011_0.3_200625	SE208848.016	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
040_SH014_0.1_200625	SE208848.017	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
040_SH012_0.1_200626	SE208848.018	LB204905	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
040_SH012_0.5_200626	SE208848.019	LB204905	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
040_BH010_0.1_200626	SE208848.020	LB204905	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
040_BH010_0.5_200626	SE208848.021	LB204905	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH33_0.1_200626	SE208848.023	LB204905	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH33_0.7_200626	SE208848.024	LB204905	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH34_0.1_200626	SE208848.025	LB204906	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH34_0.5_200626	SE208848.026	LB204906	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH38_0.3_200626	SE208848.027	LB204906	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH40_0.3_200626	SE208848.028	LB204906	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH40_0.5_200626	SE208848.029	LB204906	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_QC174_200626	SE208848.030	LB204906	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SH015_0.2-0.3_2006	SE208848.001	LB204905	24 Jun 2020	25 Jun 2020	08 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_SH016_0.2-0.3_2006	SE208848.002	LB204905	24 Jun 2020	25 Jun 2020	08 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_SH023_0.2-0.3_2006	SE208848.003	LB204905	24 Jun 2020	25 Jun 2020	08 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_SH024_0.1-0.2_2006	SE208848.005	LB204905	24 Jun 2020	25 Jun 2020	08 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH11_0.1_200625	SE208848.006	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH11_0.5_200625	SE208848.007	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_QC166_200625	SE208848.008	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH12_0.1_200625	SE208848.009	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH12_0.5_200625	SE208848.010	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH13_0.1_200625	SE208848.011	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH13_0.5_200625	SE208848.012	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
040_SH007_0.1_200625	SE208848.013	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
040_SH007_0.5_200625	SE208848.014	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
040_SH011_0.1_200625	SE208848.015	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
040_SH011_0.3_200625	SE208848.016	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
040_SH014_0.1_200625	SE208848.017	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
040_SH012_0.1_200626	SE208848.018	LB204905	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
040_SH012_0.5_200626	SE208848.019	LB204905	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
040_BH010_0.1_200626	SE208848.020	LB204905	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
040_BH010_0.5_200626	SE208848.021	LB204905	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH33_0.1_200626	SE208848.023	LB204905	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH33_0.7_200626	SE208848.024	LB204905	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020

HOLDING TIME SUMMARY

SE208848 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH34_0.1_200626	SE208848.025	LB204906	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH34_0.5_200626	SE208848.026	LB204906	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH38_0.3_200626	SE208848.027	LB204906	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH40_0.3_200626	SE208848.028	LB204906	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH40_0.5_200626	SE208848.029	LB204906	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_QC174_200626	SE208848.030	LB204906	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SH015_0.2-0.3_2006	SE208848.001	LB204905	24 Jun 2020	25 Jun 2020	08 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_SH016_0.2-0.3_2006	SE208848.002	LB204905	24 Jun 2020	25 Jun 2020	08 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_SH023_0.2-0.3_2006	SE208848.003	LB204905	24 Jun 2020	25 Jun 2020	08 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_SH024_0.1-0.2_2006	SE208848.005	LB204905	24 Jun 2020	25 Jun 2020	08 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH11_0.1_200625	SE208848.006	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH11_0.5_200625	SE208848.007	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_QC166_200625	SE208848.008	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH12_0.1_200625	SE208848.009	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH12_0.5_200625	SE208848.010	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH13_0.1_200625	SE208848.011	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH13_0.5_200625	SE208848.012	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
040_SH007_0.1_200625	SE208848.013	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
040_SH007_0.5_200625	SE208848.014	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
040_SH011_0.1_200625	SE208848.015	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
040_SH011_0.3_200625	SE208848.016	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
040_SH014_0.1_200625	SE208848.017	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
040_SH012_0.1_200626	SE208848.018	LB204905	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
040_SH012_0.5_200626	SE208848.019	LB204905	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
040_BH010_0.1_200626	SE208848.020	LB204905	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
040_BH010_0.5_200626	SE208848.021	LB204905	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH33_0.1_200626	SE208848.023	LB204905	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH33_0.7_200626	SE208848.024	LB204905	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH34_0.1_200626	SE208848.025	LB204906	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH34_0.5_200626	SE208848.026	LB204906	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH38_0.3_200626	SE208848.027	LB204906	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH40_0.3_200626	SE208848.028	LB204906	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH40_0.5_200626	SE208848.029	LB204906	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_QC174_200626	SE208848.030	LB204906	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC306_200623	SE208848.004	LB204953	24 Jun 2020	25 Jun 2020	01 Jul 2020	23 Jul 2020†	01 Sep 2020	27 Jul 2020
0407_QC308_200626	SE208848.022	LB204953	26 May 2020	25 Jun 2020	02 Jun 2020	23 Jul 2020†	01 Sep 2020	27 Jul 2020
0407_QC307_200626	SE208848.031	LB204953	26 May 2020	25 Jun 2020	02 Jun 2020	23 Jul 2020†	01 Sep 2020	27 Jul 2020

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SH015_0.2-0.3_2006	SE208848.001	LB204905	24 Jun 2020	25 Jun 2020	08 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_SH016_0.2-0.3_2006	SE208848.002	LB204905	24 Jun 2020	25 Jun 2020	08 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_SH023_0.2-0.3_2006	SE208848.003	LB204905	24 Jun 2020	25 Jun 2020	08 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_SH024_0.1-0.2_2006	SE208848.005	LB204905	24 Jun 2020	25 Jun 2020	08 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH11_0.1_200625	SE208848.006	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH11_0.5_200625	SE208848.007	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_QC166_200625	SE208848.008	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH12_0.1_200625	SE208848.009	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH12_0.5_200625	SE208848.010	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH13_0.1_200625	SE208848.011	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH13_0.5_200625	SE208848.012	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
040_SH007_0.1_200625	SE208848.013	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
040_SH007_0.5_200625	SE208848.014	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
040_SH011_0.1_200625	SE208848.015	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
040_SH011_0.3_200625	SE208848.016	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020

HOLDING TIME SUMMARY

SE208848 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

PCBs in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
040_SH014_0.1_200625	SE208848.017	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
040_SH012_0.1_200626	SE208848.018	LB204905	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
040_SH012_0.5_200626	SE208848.019	LB204905	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
040_BH010_0.1_200626	SE208848.020	LB204905	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
040_BH010_0.5_200626	SE208848.021	LB204905	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH33_0.1_200626	SE208848.023	LB204905	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH33_0.7_200626	SE208848.024	LB204905	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH34_0.1_200626	SE208848.025	LB204906	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH34_0.5_200626	SE208848.026	LB204906	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH38_0.3_200626	SE208848.027	LB204906	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH40_0.3_200626	SE208848.028	LB204906	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH40_0.5_200626	SE208848.029	LB204906	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_QC174_200626	SE208848.030	LB204906	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SH015_0.2-0.3_2006	SE208848.001	LB204905	24 Jun 2020	25 Jun 2020	08 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_SH016_0.2-0.3_2006	SE208848.002	LB204905	24 Jun 2020	25 Jun 2020	08 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_SH023_0.2-0.3_2006	SE208848.003	LB204905	24 Jun 2020	25 Jun 2020	08 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_SH024_0.1-0.2_2006	SE208848.005	LB204905	24 Jun 2020	25 Jun 2020	08 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH11_0.1_200625	SE208848.006	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	28 Jul 2020
0407_BH11_0.5_200625	SE208848.007	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	28 Jul 2020
0407_QC166_200625	SE208848.008	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	28 Jul 2020
0407_BH12_0.1_200625	SE208848.009	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	28 Jul 2020
0407_BH12_0.5_200625	SE208848.010	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	28 Jul 2020
0407_BH13_0.1_200625	SE208848.011	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH13_0.5_200625	SE208848.012	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
040_SH007_0.1_200625	SE208848.013	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
040_SH007_0.5_200625	SE208848.014	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
040_SH011_0.1_200625	SE208848.015	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
040_SH011_0.3_200625	SE208848.016	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
040_SH014_0.1_200625	SE208848.017	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
040_SH012_0.1_200626	SE208848.018	LB204905	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
040_SH012_0.5_200626	SE208848.019	LB204905	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
040_BH010_0.1_200626	SE208848.020	LB204905	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	28 Jul 2020
040_BH010_0.5_200626	SE208848.021	LB204905	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	28 Jul 2020
0407_BH33_0.1_200626	SE208848.023	LB204905	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	28 Jul 2020
0407_BH33_0.7_200626	SE208848.024	LB204905	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	28 Jul 2020
0407_BH34_0.1_200626	SE208848.025	LB204906	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	28 Jul 2020
0407_BH34_0.5_200626	SE208848.026	LB204906	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	28 Jul 2020
0407_BH38_0.3_200626	SE208848.027	LB204906	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	28 Jul 2020
0407_BH40_0.3_200626	SE208848.028	LB204906	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	28 Jul 2020
0407_BH40_0.5_200626	SE208848.029	LB204906	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	28 Jul 2020
0407_QC174_200626	SE208848.030	LB204906	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	28 Jul 2020

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SH015_0.2-0.3_2006	SE208848.001	LB204911	24 Jun 2020	25 Jun 2020	21 Dec 2020	22 Jul 2020	21 Dec 2020	24 Jul 2020
0407_SH016_0.2-0.3_2006	SE208848.002	LB204911	24 Jun 2020	25 Jun 2020	21 Dec 2020	22 Jul 2020	21 Dec 2020	24 Jul 2020
0407_SH023_0.2-0.3_2006	SE208848.003	LB204911	24 Jun 2020	25 Jun 2020	21 Dec 2020	22 Jul 2020	21 Dec 2020	24 Jul 2020
0407_SH024_0.1-0.2_2006	SE208848.005	LB204911	24 Jun 2020	25 Jun 2020	21 Dec 2020	22 Jul 2020	21 Dec 2020	24 Jul 2020
0407_BH11_0.1_200625	SE208848.006	LB204911	25 Jun 2020	25 Jun 2020	22 Dec 2020	22 Jul 2020	22 Dec 2020	24 Jul 2020
0407_BH11_0.5_200625	SE208848.007	LB204911	25 Jun 2020	25 Jun 2020	22 Dec 2020	22 Jul 2020	22 Dec 2020	24 Jul 2020
0407_QC166_200625	SE208848.008	LB204911	25 Jun 2020	25 Jun 2020	22 Dec 2020	22 Jul 2020	22 Dec 2020	24 Jul 2020
0407_BH12_0.1_200625	SE208848.009	LB204911	25 Jun 2020	25 Jun 2020	22 Dec 2020	22 Jul 2020	22 Dec 2020	24 Jul 2020
0407_BH12_0.5_200625	SE208848.010	LB204911	25 Jun 2020	25 Jun 2020	22 Dec 2020	22 Jul 2020	22 Dec 2020	24 Jul 2020
0407_BH13_0.1_200625	SE208848.011	LB204911	25 Jun 2020	25 Jun 2020	22 Dec 2020	22 Jul 2020	22 Dec 2020	24 Jul 2020
0407_BH13_0.5_200625	SE208848.012	LB204911	25 Jun 2020	25 Jun 2020	22 Dec 2020	22 Jul 2020	22 Dec 2020	24 Jul 2020
040_SH007_0.1_200625	SE208848.013	LB204911	25 Jun 2020	25 Jun 2020	22 Dec 2020	22 Jul 2020	22 Dec 2020	24 Jul 2020
040_SH007_0.5_200625	SE208848.014	LB204911	25 Jun 2020	25 Jun 2020	22 Dec 2020	22 Jul 2020	22 Dec 2020	24 Jul 2020
040_SH011_0.1_200625	SE208848.015	LB204911	25 Jun 2020	25 Jun 2020	22 Dec 2020	22 Jul 2020	22 Dec 2020	24 Jul 2020

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
040_SH011_0.3_200625	SE208848.016	LB204911	25 Jun 2020	25 Jun 2020	22 Dec 2020	22 Jul 2020	22 Dec 2020	24 Jul 2020
040_SH014_0.1_200625	SE208848.017	LB204911	25 Jun 2020	25 Jun 2020	22 Dec 2020	22 Jul 2020	22 Dec 2020	24 Jul 2020
040_SH012_0.1_200626	SE208848.018	LB204911	26 May 2020	25 Jun 2020	22 Nov 2020	22 Jul 2020	22 Nov 2020	24 Jul 2020
040_SH012_0.5_200626	SE208848.019	LB204911	26 May 2020	25 Jun 2020	22 Nov 2020	22 Jul 2020	22 Nov 2020	24 Jul 2020
040_BH010_0.1_200626	SE208848.020	LB204911	26 May 2020	25 Jun 2020	22 Nov 2020	22 Jul 2020	22 Nov 2020	24 Jul 2020
040_BH010_0.5_200626	SE208848.021	LB204912	26 May 2020	25 Jun 2020	22 Nov 2020	22 Jul 2020	22 Nov 2020	27 Jul 2020
0407_BH33_0.1_200626	SE208848.023	LB204912	26 May 2020	25 Jun 2020	22 Nov 2020	22 Jul 2020	22 Nov 2020	27 Jul 2020
0407_BH33_0.7_200626	SE208848.024	LB204912	26 May 2020	25 Jun 2020	22 Nov 2020	22 Jul 2020	22 Nov 2020	27 Jul 2020
0407_BH34_0.1_200626	SE208848.025	LB204912	26 May 2020	25 Jun 2020	22 Nov 2020	22 Jul 2020	22 Nov 2020	27 Jul 2020
0407_BH34_0.5_200626	SE208848.026	LB204912	26 May 2020	25 Jun 2020	22 Nov 2020	22 Jul 2020	22 Nov 2020	27 Jul 2020
0407_BH38_0.3_200626	SE208848.027	LB204912	26 May 2020	25 Jun 2020	22 Nov 2020	22 Jul 2020	22 Nov 2020	27 Jul 2020
0407_BH40_0.3_200626	SE208848.028	LB204912	26 May 2020	25 Jun 2020	22 Nov 2020	22 Jul 2020	22 Nov 2020	27 Jul 2020
0407_BH40_0.5_200626	SE208848.029	LB204912	26 May 2020	25 Jun 2020	22 Nov 2020	22 Jul 2020	22 Nov 2020	27 Jul 2020
0407_QC174_200626	SE208848.030	LB204912	26 May 2020	25 Jun 2020	22 Nov 2020	22 Jul 2020	22 Nov 2020	27 Jul 2020

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC306_200623	SE208848.004	LB204923	24 Jun 2020	25 Jun 2020	21 Dec 2020	22 Jul 2020	21 Dec 2020	23 Jul 2020
0407_QC308_200626	SE208848.022	LB204923	26 May 2020	25 Jun 2020	22 Nov 2020	22 Jul 2020	22 Nov 2020	23 Jul 2020
0407_QC307_200626	SE208848.031	LB204923	26 May 2020	25 Jun 2020	22 Nov 2020	22 Jul 2020	22 Nov 2020	23 Jul 2020

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SH015_0.2-0.3_2006	SE208848.001	LB204905	24 Jun 2020	25 Jun 2020	08 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_SH016_0.2-0.3_2006	SE208848.002	LB204905	24 Jun 2020	25 Jun 2020	08 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_SH023_0.2-0.3_2006	SE208848.003	LB204905	24 Jun 2020	25 Jun 2020	08 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_SH024_0.1-0.2_2006	SE208848.005	LB204905	24 Jun 2020	25 Jun 2020	08 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH11_0.1_200625	SE208848.006	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH11_0.5_200625	SE208848.007	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_QC166_200625	SE208848.008	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH12_0.1_200625	SE208848.009	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH12_0.5_200625	SE208848.010	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH13_0.1_200625	SE208848.011	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH13_0.5_200625	SE208848.012	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
040_SH007_0.1_200625	SE208848.013	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
040_SH007_0.5_200625	SE208848.014	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
040_SH011_0.1_200625	SE208848.015	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
040_SH011_0.3_200625	SE208848.016	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
040_SH014_0.1_200625	SE208848.017	LB204905	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
040_SH012_0.1_200626	SE208848.018	LB204905	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
040_SH012_0.5_200626	SE208848.019	LB204905	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
040_BH010_0.1_200626	SE208848.020	LB204905	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
040_BH010_0.5_200626	SE208848.021	LB204905	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH33_0.1_200626	SE208848.023	LB204905	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH33_0.7_200626	SE208848.024	LB204905	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	27 Jul 2020
0407_BH34_0.1_200626	SE208848.025	LB204906	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020
0407_BH34_0.5_200626	SE208848.026	LB204906	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020
0407_BH38_0.3_200626	SE208848.027	LB204906	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020
0407_BH40_0.3_200626	SE208848.028	LB204906	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020
0407_BH40_0.5_200626	SE208848.029	LB204906	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020
0407_QC174_200626	SE208848.030	LB204906	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC306_200623	SE208848.004	LB204953	24 Jun 2020	25 Jun 2020	01 Jul 2020	23 Jul 2020†	01 Sep 2020	27 Jul 2020
0407_QC308_200626	SE208848.022	LB204953	26 May 2020	25 Jun 2020	02 Jun 2020	23 Jul 2020†	01 Sep 2020	27 Jul 2020
0407_QC307_200626	SE208848.031	LB204953	26 May 2020	25 Jun 2020	02 Jun 2020	23 Jul 2020†	01 Sep 2020	27 Jul 2020

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SH015_0.2-0.3_2006	SE208848.001	LB204903	24 Jun 2020	25 Jun 2020	08 Jul 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020
0407_SH016_0.2-0.3_2006	SE208848.002	LB204903	24 Jun 2020	25 Jun 2020	08 Jul 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020

HOLDING TIME SUMMARY

SE208848 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SH023_0.2-0.3_2006	SE208848.003	LB204903	24 Jun 2020	25 Jun 2020	08 Jul 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020
0407_SH024_0.1-0.2_2006	SE208848.005	LB204903	24 Jun 2020	25 Jun 2020	08 Jul 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020
0407_BH11_0.1_200625	SE208848.006	LB204903	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020
0407_BH11_0.5_200625	SE208848.007	LB204903	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020
0407_QC166_200625	SE208848.008	LB204903	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020
0407_BH12_0.1_200625	SE208848.009	LB204903	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020
0407_BH12_0.5_200625	SE208848.010	LB204903	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020
0407_BH13_0.1_200625	SE208848.011	LB204903	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020
0407_BH13_0.5_200625	SE208848.012	LB204903	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020
040_SH007_0.1_200625	SE208848.013	LB204903	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020
040_SH007_0.5_200625	SE208848.014	LB204903	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020
040_SH011_0.1_200625	SE208848.015	LB204903	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020
040_SH011_0.3_200625	SE208848.016	LB204903	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020
040_SH014_0.1_200625	SE208848.017	LB204903	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020
040_SH012_0.1_200626	SE208848.018	LB204903	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020
040_SH012_0.5_200626	SE208848.019	LB204903	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020
0407_BH33_0.1_200626	SE208848.023	LB204903	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020
0407_BH33_0.7_200626	SE208848.024	LB204903	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020
0407_BH34_0.1_200626	SE208848.025	LB204904	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020
0407_BH34_0.5_200626	SE208848.026	LB204904	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020
0407_BH38_0.3_200626	SE208848.027	LB204904	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020
0407_BH40_0.3_200626	SE208848.028	LB204904	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020
0407_BH40_0.5_200626	SE208848.029	LB204904	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020
0407_QC174_200626	SE208848.030	LB204904	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC306_200623	SE208848.004	LB205064	24 Jun 2020	25 Jun 2020	01 Jul 2020	24 Jul 2020†	02 Sep 2020	27 Jul 2020
0407_QC308_200626	SE208848.022	LB205064	26 May 2020	25 Jun 2020	02 Jun 2020	24 Jul 2020†	02 Sep 2020	27 Jul 2020
0407_QC307_200626	SE208848.031	LB205064	26 May 2020	25 Jun 2020	02 Jun 2020	24 Jul 2020†	02 Sep 2020	27 Jul 2020

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SH015_0.2-0.3_2006	SE208848.001	LB204903	24 Jun 2020	25 Jun 2020	08 Jul 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020
0407_SH016_0.2-0.3_2006	SE208848.002	LB204903	24 Jun 2020	25 Jun 2020	08 Jul 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020
0407_SH023_0.2-0.3_2006	SE208848.003	LB204903	24 Jun 2020	25 Jun 2020	08 Jul 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020
0407_SH024_0.1-0.2_2006	SE208848.005	LB204903	24 Jun 2020	25 Jun 2020	08 Jul 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020
0407_BH11_0.1_200625	SE208848.006	LB204903	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020
0407_BH11_0.5_200625	SE208848.007	LB204903	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020
0407_QC166_200625	SE208848.008	LB204903	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020
0407_BH12_0.1_200625	SE208848.009	LB204903	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020
0407_BH12_0.5_200625	SE208848.010	LB204903	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020
0407_BH13_0.1_200625	SE208848.011	LB204903	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020
0407_BH13_0.5_200625	SE208848.012	LB204903	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020
040_SH007_0.1_200625	SE208848.013	LB204903	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020
040_SH007_0.5_200625	SE208848.014	LB204903	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020
040_SH011_0.1_200625	SE208848.015	LB204903	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020
040_SH011_0.3_200625	SE208848.016	LB204903	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020
040_SH014_0.1_200625	SE208848.017	LB204903	25 Jun 2020	25 Jun 2020	09 Jul 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020
040_SH012_0.1_200626	SE208848.018	LB204903	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020
040_SH012_0.5_200626	SE208848.019	LB204903	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020
0407_BH33_0.1_200626	SE208848.023	LB204903	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020
0407_BH33_0.7_200626	SE208848.024	LB204903	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020
0407_BH34_0.1_200626	SE208848.025	LB204904	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020
0407_BH34_0.5_200626	SE208848.026	LB204904	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020
0407_BH38_0.3_200626	SE208848.027	LB204904	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020
0407_BH40_0.3_200626	SE208848.028	LB204904	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020
0407_BH40_0.5_200626	SE208848.029	LB204904	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020
0407_QC174_200626	SE208848.030	LB204904	26 May 2020	25 Jun 2020	09 Jun 2020	22 Jul 2020†	31 Aug 2020	24 Jul 2020

HOLDING TIME SUMMARY

SE208848 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Volatile Petroleum Hydrocarbons in Water — **Method: ME-(AU)-[ENV]AN433**

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC306_200623	SE208848.004	LB205064	24 Jun 2020	25 Jun 2020	01 Jul 2020	24 Jul 2020†	02 Sep 2020	27 Jul 2020
0407_QC308_200626	SE208848.022	LB205064	26 May 2020	25 Jun 2020	02 Jun 2020	24 Jul 2020†	02 Sep 2020	27 Jul 2020
0407_QC307_200626	SE208848.031	LB205064	26 May 2020	25 Jun 2020	02 Jun 2020	24 Jul 2020†	02 Sep 2020	27 Jul 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Full 8270 SVOC in Water

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	0407_QC306_200623	SE208848.004	%	40 - 130%	71
	0407_QC308_200626	SE208848.022	%	40 - 130%	72
	0407_QC307_200626	SE208848.031	%	40 - 130%	68
2-fluorobiphenyl (Surrogate)	0407_QC306_200623	SE208848.004	%	40 - 130%	92
	0407_QC308_200626	SE208848.022	%	40 - 130%	96
	0407_QC307_200626	SE208848.031	%	40 - 130%	92
d14-p-terphenyl (Surrogate)	0407_QC306_200623	SE208848.004	%	40 - 130%	100
	0407_QC308_200626	SE208848.022	%	40 - 130%	108
	0407_QC307_200626	SE208848.031	%	40 - 130%	94
d5-nitrobenzene (Surrogate)	0407_QC306_200623	SE208848.004	%	40 - 130%	50
	0407_QC308_200626	SE208848.022	%	40 - 130%	48
	0407_QC307_200626	SE208848.031	%	40 - 130%	48
d5-phenol (Surrogate)	0407_QC306_200623	SE208848.004	%	20 - 130%	54
	0407_QC308_200626	SE208848.022	%	20 - 130%	52
	0407_QC307_200626	SE208848.031	%	20 - 130%	51

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_SH015_0.2-0.3_200624	SE208848.001	%	60 - 130%	97
	0407_SH016_0.2-0.3_200624	SE208848.002	%	60 - 130%	93
	0407_SH023_0.2-0.3_200624	SE208848.003	%	60 - 130%	96
	0407_SH024_0.1-0.2_200624	SE208848.005	%	60 - 130%	96
	0407_BH11_0.1_200625	SE208848.006	%	60 - 130%	126
	0407_BH11_0.5_200625	SE208848.007	%	60 - 130%	97
	0407_QC166_200625	SE208848.008	%	60 - 130%	89
	0407_BH12_0.1_200625	SE208848.009	%	60 - 130%	89
	0407_BH12_0.5_200625	SE208848.010	%	60 - 130%	87
	0407_BH13_0.1_200625	SE208848.011	%	60 - 130%	95
	0407_BH13_0.5_200625	SE208848.012	%	60 - 130%	87
	0407_QC174_200626	SE208848.030	%	60 - 130%	109

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_SH015_0.2-0.3_200624	SE208848.001	%	60 - 130%	84
	0407_SH016_0.2-0.3_200624	SE208848.002	%	60 - 130%	86
	0407_SH023_0.2-0.3_200624	SE208848.003	%	60 - 130%	84
	0407_SH024_0.1-0.2_200624	SE208848.005	%	60 - 130%	86
	0407_BH11_0.1_200625	SE208848.006	%	60 - 130%	87
	0407_BH11_0.5_200625	SE208848.007	%	60 - 130%	82
	0407_QC166_200625	SE208848.008	%	60 - 130%	86
	0407_BH12_0.1_200625	SE208848.009	%	60 - 130%	82
	0407_BH12_0.5_200625	SE208848.010	%	60 - 130%	86
	0407_BH13_0.1_200625	SE208848.011	%	60 - 130%	79
	0407_BH13_0.5_200625	SE208848.012	%	60 - 130%	83
	0407_QC174_200626	SE208848.030	%	60 - 130%	86
d14-p-terphenyl (Surrogate)	0407_SH015_0.2-0.3_200624	SE208848.001	%	60 - 130%	89
	0407_SH016_0.2-0.3_200624	SE208848.002	%	60 - 130%	90
	0407_SH023_0.2-0.3_200624	SE208848.003	%	60 - 130%	89
	0407_SH024_0.1-0.2_200624	SE208848.005	%	60 - 130%	91
	0407_BH11_0.1_200625	SE208848.006	%	60 - 130%	91
	0407_BH11_0.5_200625	SE208848.007	%	60 - 130%	88
	0407_QC166_200625	SE208848.008	%	60 - 130%	90
	0407_BH12_0.1_200625	SE208848.009	%	60 - 130%	93
	0407_BH12_0.5_200625	SE208848.010	%	60 - 130%	90
	0407_BH13_0.1_200625	SE208848.011	%	60 - 130%	85
	0407_BH13_0.5_200625	SE208848.012	%	60 - 130%	89
	0407_QC174_200626	SE208848.030	%	60 - 130%	94

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_SH015_0.2-0.3_200624	SE208848.001	%	70 - 130%	84
	0407_SH016_0.2-0.3_200624	SE208848.002	%	70 - 130%	86

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued) — **Method: ME-(AU)-[ENV]AN420**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_SH023_0.2-0.3_200624	SE208848.003	%	70 - 130%	84
	0407_SH024_0.1-0.2_200624	SE208848.005	%	70 - 130%	86
	0407_BH13_0.1_200625	SE208848.011	%	70 - 130%	79
	0407_BH13_0.5_200625	SE208848.012	%	70 - 130%	83
	040_SH007_0.1_200625	SE208848.013	%	70 - 130%	81
	040_SH007_0.5_200625	SE208848.014	%	70 - 130%	85
	040_SH011_0.1_200625	SE208848.015	%	70 - 130%	87
	040_SH011_0.3_200625	SE208848.016	%	70 - 130%	84
	040_SH014_0.1_200625	SE208848.017	%	70 - 130%	90
	040_SH012_0.1_200626	SE208848.018	%	70 - 130%	89
	040_SH012_0.5_200626	SE208848.019	%	70 - 130%	84
	040_BH010_0.1_200626	SE208848.020	%	70 - 130%	88
	040_BH010_0.5_200626	SE208848.021	%	70 - 130%	91
	0407_BH33_0.1_200626	SE208848.023	%	70 - 130%	84
	0407_BH33_0.7_200626	SE208848.024	%	70 - 130%	85
	0407_BH34_0.1_200626	SE208848.025	%	70 - 130%	86
	0407_BH34_0.5_200626	SE208848.026	%	70 - 130%	87
	0407_BH38_0.3_200626	SE208848.027	%	70 - 130%	81
	0407_BH40_0.3_200626	SE208848.028	%	70 - 130%	82
	0407_BH40_0.5_200626	SE208848.029	%	70 - 130%	87
	0407_QC174_200626	SE208848.030	%	70 - 130%	86
d14-p-terphenyl (Surrogate)	0407_SH015_0.2-0.3_200624	SE208848.001	%	70 - 130%	89
	0407_SH016_0.2-0.3_200624	SE208848.002	%	70 - 130%	90
	0407_SH023_0.2-0.3_200624	SE208848.003	%	70 - 130%	89
	0407_SH024_0.1-0.2_200624	SE208848.005	%	70 - 130%	91
	0407_BH13_0.1_200625	SE208848.011	%	70 - 130%	85
	0407_BH13_0.5_200625	SE208848.012	%	70 - 130%	89
	040_SH007_0.1_200625	SE208848.013	%	70 - 130%	88
	040_SH007_0.5_200625	SE208848.014	%	70 - 130%	93
	040_SH011_0.1_200625	SE208848.015	%	70 - 130%	91
	040_SH011_0.3_200625	SE208848.016	%	70 - 130%	90
	040_SH014_0.1_200625	SE208848.017	%	70 - 130%	95
	040_SH012_0.1_200626	SE208848.018	%	70 - 130%	94
	040_SH012_0.5_200626	SE208848.019	%	70 - 130%	92
	040_BH010_0.1_200626	SE208848.020	%	70 - 130%	97
	040_BH010_0.5_200626	SE208848.021	%	70 - 130%	93
	0407_BH33_0.1_200626	SE208848.023	%	70 - 130%	90
	0407_BH33_0.7_200626	SE208848.024	%	70 - 130%	93
	0407_BH34_0.1_200626	SE208848.025	%	70 - 130%	96
	0407_BH34_0.5_200626	SE208848.026	%	70 - 130%	96
	0407_BH38_0.3_200626	SE208848.027	%	70 - 130%	88
	0407_BH40_0.3_200626	SE208848.028	%	70 - 130%	90
	0407_BH40_0.5_200626	SE208848.029	%	70 - 130%	95
	0407_QC174_200626	SE208848.030	%	70 - 130%	94
d5-nitrobenzene (Surrogate)	0407_SH015_0.2-0.3_200624	SE208848.001	%	70 - 130%	88
	0407_SH016_0.2-0.3_200624	SE208848.002	%	70 - 130%	93
	0407_SH023_0.2-0.3_200624	SE208848.003	%	70 - 130%	90
	0407_SH024_0.1-0.2_200624	SE208848.005	%	70 - 130%	91
	0407_BH13_0.1_200625	SE208848.011	%	70 - 130%	85
	0407_BH13_0.5_200625	SE208848.012	%	70 - 130%	85
	040_SH007_0.1_200625	SE208848.013	%	70 - 130%	88
	040_SH007_0.5_200625	SE208848.014	%	70 - 130%	88
	040_SH011_0.1_200625	SE208848.015	%	70 - 130%	92
	040_SH011_0.3_200625	SE208848.016	%	70 - 130%	86
	040_SH014_0.1_200625	SE208848.017	%	70 - 130%	92
	040_SH012_0.1_200626	SE208848.018	%	70 - 130%	91
	040_SH012_0.5_200626	SE208848.019	%	70 - 130%	89
	040_BH010_0.1_200626	SE208848.020	%	70 - 130%	93
	040_BH010_0.5_200626	SE208848.021	%	70 - 130%	91
	0407_BH33_0.1_200626	SE208848.023	%	70 - 130%	91
	0407_BH33_0.7_200626	SE208848.024	%	70 - 130%	90

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d5-nitrobenzene (Surrogate)	0407_BH34_0.1_200626	SE208848.025	%	70 - 130%	90
	0407_BH34_0.5_200626	SE208848.026	%	70 - 130%	95
	0407_BH38_0.3_200626	SE208848.027	%	70 - 130%	86
	0407_BH40_0.3_200626	SE208848.028	%	70 - 130%	90
	0407_BH40_0.5_200626	SE208848.029	%	70 - 130%	91
	0407_QC174_200626	SE208848.030	%	70 - 130%	90

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_QC306_200623	SE208848.004	%	40 - 130%	92
	0407_QC308_200626	SE208848.022	%	40 - 130%	96
	0407_QC307_200626	SE208848.031	%	40 - 130%	92
d14-p-terphenyl (Surrogate)	0407_QC306_200623	SE208848.004	%	40 - 130%	100
	0407_QC308_200626	SE208848.022	%	40 - 130%	108
	0407_QC307_200626	SE208848.031	%	40 - 130%	94
d5-nitrobenzene (Surrogate)	0407_QC306_200623	SE208848.004	%	40 - 130%	50
	0407_QC308_200626	SE208848.022	%	40 - 130%	48
	0407_QC307_200626	SE208848.031	%	40 - 130%	48

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_SH015_0.2-0.3_200624	SE208848.001	%	60 - 130%	97
	0407_SH016_0.2-0.3_200624	SE208848.002	%	60 - 130%	93
	0407_SH023_0.2-0.3_200624	SE208848.003	%	60 - 130%	96
	0407_SH024_0.1-0.2_200624	SE208848.005	%	60 - 130%	96
	0407_BH11_0.1_200625	SE208848.006	%	60 - 130%	126
	0407_BH11_0.5_200625	SE208848.007	%	60 - 130%	97
	0407_QC166_200625	SE208848.008	%	60 - 130%	89
	0407_BH12_0.1_200625	SE208848.009	%	60 - 130%	89
	0407_BH12_0.5_200625	SE208848.010	%	60 - 130%	87
	0407_BH13_0.1_200625	SE208848.011	%	60 - 130%	95
	0407_BH13_0.5_200625	SE208848.012	%	60 - 130%	87
	0407_BH33_0.1_200626	SE208848.023	%	60 - 130%	93
	0407_BH33_0.7_200626	SE208848.024	%	60 - 130%	98
	0407_BH34_0.1_200626	SE208848.025	%	60 - 130%	107
	0407_BH34_0.5_200626	SE208848.026	%	60 - 130%	107
	0407_BH38_0.3_200626	SE208848.027	%	60 - 130%	115
	0407_BH40_0.3_200626	SE208848.028	%	60 - 130%	110
	0407_BH40_0.5_200626	SE208848.029	%	60 - 130%	111
	0407_QC174_200626	SE208848.030	%	60 - 130%	109

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples - Low Level

Method: MA-1523

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C2_PFTeDA) Surrogate	0407_QC306_200623	SE208848.004	%	10 - 150%	89
	0407_QC308_200626	SE208848.022	%	10 - 150%	91
	0407_QC307_200626	SE208848.031	%	10 - 150%	122
(13C2-4:2 FTS) Surrogate	0407_QC306_200623	SE208848.004	%	10 - 150%	215 †
	0407_QC308_200626	SE208848.022	%	10 - 150%	176 †
	0407_QC307_200626	SE208848.031	%	10 - 150%	189 †
(13C2-6:2 FTS) Surrogate	0407_QC306_200623	SE208848.004	%	10 - 150%	160 †
	0407_QC308_200626	SE208848.022	%	10 - 150%	146
	0407_QC307_200626	SE208848.031	%	10 - 150%	159 †
(13C2-8:2 FTS) Surrogate	0407_QC306_200623	SE208848.004	%	10 - 150%	135
	0407_QC308_200626	SE208848.022	%	10 - 150%	153 †
	0407_QC307_200626	SE208848.031	%	10 - 150%	126
(13C2-PFDoA) Surrogate	0407_QC306_200623	SE208848.004	%	10 - 150%	82
	0407_QC308_200626	SE208848.022	%	10 - 150%	81
	0407_QC307_200626	SE208848.031	%	10 - 150%	88
(13C2-PFHxDA) Surrogate	0407_QC306_200623	SE208848.004	%	10 - 150%	46
	0407_QC308_200626	SE208848.022	%	10 - 150%	80
	0407_QC307_200626	SE208848.031	%	10 - 150%	149
(13C3-PFBS) Surrogate	0407_QC306_200623	SE208848.004	%	10 - 150%	118

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples - Low Level (continued) **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C3-PFBS) Surrogate	0407_QC308_200626	SE208848.022	%	10 - 150%	114
	0407_QC307_200626	SE208848.031	%	10 - 150%	115
(13C3-PFHxS) Surrogate	0407_QC306_200623	SE208848.004	%	10 - 150%	99
	0407_QC308_200626	SE208848.022	%	10 - 150%	105
	0407_QC307_200626	SE208848.031	%	10 - 150%	97
(13C4_PFOA) Surrogate	0407_QC306_200623	SE208848.004	%	10 - 150%	107
	0407_QC308_200626	SE208848.022	%	10 - 150%	110
	0407_QC307_200626	SE208848.031	%	10 - 150%	113
(13C4-PFBA) Surrogate	0407_QC306_200623	SE208848.004	%	10 - 150%	101
	0407_QC308_200626	SE208848.022	%	10 - 150%	99
	0407_QC307_200626	SE208848.031	%	10 - 150%	101
(13C4-PFHpA) Surrogate	0407_QC306_200623	SE208848.004	%	10 - 150%	106
	0407_QC308_200626	SE208848.022	%	10 - 150%	106
	0407_QC307_200626	SE208848.031	%	10 - 150%	105
(13C5-PFHxA) Surrogate	0407_QC306_200623	SE208848.004	%	10 - 150%	127
	0407_QC308_200626	SE208848.022	%	10 - 150%	123
	0407_QC307_200626	SE208848.031	%	10 - 150%	128
(13C5-PFPeA) Surrogate	0407_QC306_200623	SE208848.004	%	10 - 150%	93
	0407_QC308_200626	SE208848.022	%	10 - 150%	92
	0407_QC307_200626	SE208848.031	%	10 - 150%	93
(13C6-PFDA) Surrogate	0407_QC306_200623	SE208848.004	%	10 - 150%	123
	0407_QC308_200626	SE208848.022	%	10 - 150%	109
	0407_QC307_200626	SE208848.031	%	10 - 150%	116
(13C7-PFUdA) Surrogate	0407_QC306_200623	SE208848.004	%	10 - 150%	88
	0407_QC308_200626	SE208848.022	%	10 - 150%	84
	0407_QC307_200626	SE208848.031	%	10 - 150%	90
(13C8-PFOS) Surrogate	0407_QC306_200623	SE208848.004	%	10 - 150%	106
	0407_QC308_200626	SE208848.022	%	10 - 150%	101
	0407_QC307_200626	SE208848.031	%	10 - 150%	103
(13C8-PFOSA) Surrogate	0407_QC306_200623	SE208848.004	%	10 - 150%	96
	0407_QC308_200626	SE208848.022	%	10 - 150%	82
	0407_QC307_200626	SE208848.031	%	10 - 150%	81
(13C9-PFNA) Surrogate	0407_QC306_200623	SE208848.004	%	10 - 150%	119
	0407_QC308_200626	SE208848.022	%	10 - 150%	111
	0407_QC307_200626	SE208848.031	%	10 - 150%	99
(D3-N-MeFOSA) Surrogate	0407_QC306_200623	SE208848.004	%	10 - 150%	75
	0407_QC308_200626	SE208848.022	%	10 - 150%	70
	0407_QC307_200626	SE208848.031	%	10 - 150%	70
(D3-N-MeFOSAA) Surrogate	0407_QC306_200623	SE208848.004	%	10 - 150%	111
	0407_QC308_200626	SE208848.022	%	10 - 150%	98
	0407_QC307_200626	SE208848.031	%	10 - 150%	99
(D5-N-EtFOSA) Surrogate	0407_QC306_200623	SE208848.004	%	10 - 150%	80
	0407_QC308_200626	SE208848.022	%	10 - 150%	67
	0407_QC307_200626	SE208848.031	%	10 - 150%	73
(D5-N-EtFOSAA) Surrogate	0407_QC306_200623	SE208848.004	%	10 - 150%	102
	0407_QC308_200626	SE208848.022	%	10 - 150%	101
	0407_QC307_200626	SE208848.031	%	10 - 150%	122
(D7-N-MeFOSE) Surrogate	0407_QC306_200623	SE208848.004	%	10 - 150%	96
	0407_QC308_200626	SE208848.022	%	10 - 150%	82
	0407_QC307_200626	SE208848.031	%	10 - 150%	87
(D9-N-EtFOSE) Surrogate	0407_QC306_200623	SE208848.004	%	10 - 150%	83
	0407_QC308_200626	SE208848.022	%	10 - 150%	73
	0407_QC307_200626	SE208848.031	%	10 - 150%	78

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C2-4:2FTS) Surrogate	0407_SH015_0.2-0.3_200624	SE208848.001	%	10 - 150%	186 †
	0407_SH016_0.2-0.3_200624	SE208848.002	%	10 - 150%	143
	0407_SH023_0.2-0.3_200624	SE208848.003	%	10 - 150%	139
	0407_SH024_0.1-0.2_200624	SE208848.005	%	10 - 150%	145
(13C2-6:2FTS) Surrogate	0407_SH015_0.2-0.3_200624	SE208848.001	%	10 - 150%	203 †

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level (continued) **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C2-6:2FTS) Surrogate	0407_SH016_0.2-0.3_200624	SE208848.002	%	10 - 150%	139
	0407_SH023_0.2-0.3_200624	SE208848.003	%	10 - 150%	150
	0407_SH024_0.1-0.2_200624	SE208848.005	%	10 - 150%	172 †
(13C2-8:2FTS) Surrogate	0407_SH015_0.2-0.3_200624	SE208848.001	%	10 - 150%	255 †
	0407_SH016_0.2-0.3_200624	SE208848.002	%	10 - 150%	211 †
	0407_SH023_0.2-0.3_200624	SE208848.003	%	10 - 150%	226 †
	0407_SH024_0.1-0.2_200624	SE208848.005	%	10 - 150%	246 †
(13C2-PFDoA) Surrogate	0407_SH015_0.2-0.3_200624	SE208848.001	%	10 - 150%	76
	0407_SH016_0.2-0.3_200624	SE208848.002	%	10 - 150%	76
	0407_SH023_0.2-0.3_200624	SE208848.003	%	10 - 150%	80
	0407_SH024_0.1-0.2_200624	SE208848.005	%	10 - 150%	90
(13C2-PFHxDA) Surrogate	0407_SH015_0.2-0.3_200624	SE208848.001	%	10 - 150%	5 †
	0407_SH016_0.2-0.3_200624	SE208848.002	%	10 - 150%	8 †
	0407_SH023_0.2-0.3_200624	SE208848.003	%	10 - 150%	11
	0407_SH024_0.1-0.2_200624	SE208848.005	%	10 - 150%	12
(13C2-PFTeDA) Surrogate	0407_SH015_0.2-0.3_200624	SE208848.001	%	10 - 130%	25
	0407_SH016_0.2-0.3_200624	SE208848.002	%	10 - 130%	30
	0407_SH023_0.2-0.3_200624	SE208848.003	%	10 - 130%	33
	0407_SH024_0.1-0.2_200624	SE208848.005	%	10 - 130%	46
(13C3-PFBS) Surrogate	0407_SH015_0.2-0.3_200624	SE208848.001	%	10 - 150%	82
	0407_SH016_0.2-0.3_200624	SE208848.002	%	10 - 150%	72
	0407_SH023_0.2-0.3_200624	SE208848.003	%	10 - 150%	70
	0407_SH024_0.1-0.2_200624	SE208848.005	%	10 - 150%	74
(13C3-PFHxS) Surrogate	0407_SH015_0.2-0.3_200624	SE208848.001	%	10 - 150%	100
	0407_SH016_0.2-0.3_200624	SE208848.002	%	10 - 150%	97
	0407_SH023_0.2-0.3_200624	SE208848.003	%	10 - 150%	98
	0407_SH024_0.1-0.2_200624	SE208848.005	%	10 - 150%	106
(13C4-PFBA) Surrogate	0407_SH015_0.2-0.3_200624	SE208848.001	%	10 - 150%	103
	0407_SH016_0.2-0.3_200624	SE208848.002	%	10 - 150%	106
	0407_SH023_0.2-0.3_200624	SE208848.003	%	10 - 150%	100
	0407_SH024_0.1-0.2_200624	SE208848.005	%	10 - 150%	112
(13C4-PFHpA) Surrogate	0407_SH015_0.2-0.3_200624	SE208848.001	%	10 - 150%	109
	0407_SH016_0.2-0.3_200624	SE208848.002	%	10 - 150%	113
	0407_SH023_0.2-0.3_200624	SE208848.003	%	10 - 150%	102
	0407_SH024_0.1-0.2_200624	SE208848.005	%	10 - 150%	97
(13C4-PFOA) Surrogate	0407_SH015_0.2-0.3_200624	SE208848.001	%	10 - 150%	98
	0407_SH016_0.2-0.3_200624	SE208848.002	%	10 - 150%	104
	0407_SH023_0.2-0.3_200624	SE208848.003	%	10 - 150%	100
	0407_SH024_0.1-0.2_200624	SE208848.005	%	10 - 150%	99
(13C5_PFPeA) Surrogate	0407_SH015_0.2-0.3_200624	SE208848.001	%	10 - 150%	117
	0407_SH016_0.2-0.3_200624	SE208848.002	%	10 - 150%	116
	0407_SH023_0.2-0.3_200624	SE208848.003	%	10 - 150%	110
	0407_SH024_0.1-0.2_200624	SE208848.005	%	10 - 150%	123
(13C5-PFHxA) Surrogate	0407_SH015_0.2-0.3_200624	SE208848.001	%	10 - 150%	96
	0407_SH016_0.2-0.3_200624	SE208848.002	%	10 - 150%	95
	0407_SH023_0.2-0.3_200624	SE208848.003	%	10 - 150%	77
	0407_SH024_0.1-0.2_200624	SE208848.005	%	10 - 150%	79
(13C6-PFDA) Surrogate	0407_SH015_0.2-0.3_200624	SE208848.001	%	10 - 150%	90
	0407_SH016_0.2-0.3_200624	SE208848.002	%	10 - 150%	80
	0407_SH023_0.2-0.3_200624	SE208848.003	%	10 - 150%	77
	0407_SH024_0.1-0.2_200624	SE208848.005	%	10 - 150%	92
(13C7-PFUdA) Surrogate	0407_SH015_0.2-0.3_200624	SE208848.001	%	10 - 150%	107
	0407_SH016_0.2-0.3_200624	SE208848.002	%	10 - 150%	93
	0407_SH023_0.2-0.3_200624	SE208848.003	%	10 - 150%	87
	0407_SH024_0.1-0.2_200624	SE208848.005	%	10 - 150%	95
(13C8-PFOS) Surrogate	0407_SH015_0.2-0.3_200624	SE208848.001	%	10 - 150%	117
	0407_SH016_0.2-0.3_200624	SE208848.002	%	10 - 150%	97
	0407_SH023_0.2-0.3_200624	SE208848.003	%	10 - 150%	97
	0407_SH024_0.1-0.2_200624	SE208848.005	%	10 - 150%	88
(13C8-PFOSA) Surrogate	0407_SH015_0.2-0.3_200624	SE208848.001	%	10 - 150%	48
	0407_SH016_0.2-0.3_200624	SE208848.002	%	10 - 150%	36

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level (continued)

Method: MA-1523

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C8-PFOSA) Surrogate	0407_SH023_0.2-0.3_200624	SE208848.003	%	10 - 150%	35
	0407_SH024_0.1-0.2_200624	SE208848.005	%	10 - 150%	40
(13C9-PFNA) Surrogate	0407_SH015_0.2-0.3_200624	SE208848.001	%	10 - 150%	105
	0407_SH016_0.2-0.3_200624	SE208848.002	%	10 - 150%	100
	0407_SH023_0.2-0.3_200624	SE208848.003	%	10 - 150%	86
	0407_SH024_0.1-0.2_200624	SE208848.005	%	10 - 150%	94
(D3-N-MeFOSA) Surrogate	0407_SH015_0.2-0.3_200624	SE208848.001	%	10 - 150%	53
	0407_SH016_0.2-0.3_200624	SE208848.002	%	10 - 150%	31
	0407_SH023_0.2-0.3_200624	SE208848.003	%	10 - 150%	29
	0407_SH024_0.1-0.2_200624	SE208848.005	%	10 - 150%	35
(D3-N-MeFOSAA) Surrogate	0407_SH015_0.2-0.3_200624	SE208848.001	%	10 - 150%	118
	0407_SH016_0.2-0.3_200624	SE208848.002	%	10 - 150%	107
	0407_SH023_0.2-0.3_200624	SE208848.003	%	10 - 150%	97
	0407_SH024_0.1-0.2_200624	SE208848.005	%	10 - 150%	91
(D5-N-EtFOSA) Surrogate	0407_SH015_0.2-0.3_200624	SE208848.001	%	10 - 150%	49
	0407_SH016_0.2-0.3_200624	SE208848.002	%	10 - 150%	30
	0407_SH023_0.2-0.3_200624	SE208848.003	%	10 - 150%	27
	0407_SH024_0.1-0.2_200624	SE208848.005	%	10 - 150%	40
(D5-N-EtFOSAA) Surrogate	0407_SH015_0.2-0.3_200624	SE208848.001	%	10 - 150%	122
	0407_SH016_0.2-0.3_200624	SE208848.002	%	10 - 150%	85
	0407_SH023_0.2-0.3_200624	SE208848.003	%	10 - 150%	96
	0407_SH024_0.1-0.2_200624	SE208848.005	%	10 - 150%	88
(D7-N-MeFOSE) Surrogate	0407_SH015_0.2-0.3_200624	SE208848.001	%	10 - 150%	46
	0407_SH016_0.2-0.3_200624	SE208848.002	%	10 - 150%	38
	0407_SH023_0.2-0.3_200624	SE208848.003	%	10 - 150%	26
	0407_SH024_0.1-0.2_200624	SE208848.005	%	10 - 150%	39
(D9-N-EtFOSE) Surrogate	0407_SH015_0.2-0.3_200624	SE208848.001	%	10 - 150%	59
	0407_SH016_0.2-0.3_200624	SE208848.002	%	10 - 150%	65
	0407_SH023_0.2-0.3_200624	SE208848.003	%	10 - 150%	64
	0407_SH024_0.1-0.2_200624	SE208848.005	%	10 - 150%	42

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	0407_SH015_0.2-0.3_200624	SE208848.001	%	70 - 130%	86
	0407_SH016_0.2-0.3_200624	SE208848.002	%	70 - 130%	73
	0407_SH023_0.2-0.3_200624	SE208848.003	%	70 - 130%	81
	0407_SH024_0.1-0.2_200624	SE208848.005	%	70 - 130%	77
	0407_BH13_0.1_200625	SE208848.011	%	70 - 130%	76
	0407_BH13_0.5_200625	SE208848.012	%	70 - 130%	71
	040_SH007_0.1_200625	SE208848.013	%	70 - 130%	76
	040_SH007_0.5_200625	SE208848.014	%	70 - 130%	77
	040_SH011_0.1_200625	SE208848.015	%	70 - 130%	78
	040_SH011_0.3_200625	SE208848.016	%	70 - 130%	74
	040_SH014_0.1_200625	SE208848.017	%	70 - 130%	76
	040_SH012_0.1_200626	SE208848.018	%	70 - 130%	77
	040_SH012_0.5_200626	SE208848.019	%	70 - 130%	82
	0407_QC174_200626	SE208848.030	%	70 - 130%	77
d5-phenol (Surrogate)	0407_SH015_0.2-0.3_200624	SE208848.001	%	50 - 130%	70
	0407_SH016_0.2-0.3_200624	SE208848.002	%	50 - 130%	75
	0407_SH023_0.2-0.3_200624	SE208848.003	%	50 - 130%	89
	0407_SH024_0.1-0.2_200624	SE208848.005	%	50 - 130%	84
	0407_BH13_0.1_200625	SE208848.011	%	50 - 130%	74
	0407_BH13_0.5_200625	SE208848.012	%	50 - 130%	82
	040_SH007_0.1_200625	SE208848.013	%	50 - 130%	79
	040_SH007_0.5_200625	SE208848.014	%	50 - 130%	82
	040_SH011_0.1_200625	SE208848.015	%	50 - 130%	80
	040_SH011_0.3_200625	SE208848.016	%	50 - 130%	88
	040_SH014_0.1_200625	SE208848.017	%	50 - 130%	82
	040_SH012_0.1_200626	SE208848.018	%	50 - 130%	88
	040_SH012_0.5_200626	SE208848.019	%	50 - 130%	80
	0407_QC174_200626	SE208848.030	%	50 - 130%	82

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_SH015_0.2-0.3_200624	SE208848.001	%	60 - 130%	82
	0407_SH016_0.2-0.3_200624	SE208848.002	%	60 - 130%	78
	0407_SH023_0.2-0.3_200624	SE208848.003	%	60 - 130%	78
	0407_SH024_0.1-0.2_200624	SE208848.005	%	60 - 130%	82
	0407_BH11_0.1_200625	SE208848.006	%	60 - 130%	96
	0407_BH11_0.5_200625	SE208848.007	%	60 - 130%	85
	0407_QC166_200625	SE208848.008	%	60 - 130%	85
	0407_BH12_0.1_200625	SE208848.009	%	60 - 130%	93
	0407_BH12_0.5_200625	SE208848.010	%	60 - 130%	91
	0407_BH13_0.1_200625	SE208848.011	%	60 - 130%	74
	0407_BH13_0.5_200625	SE208848.012	%	60 - 130%	87
	040_SH007_0.1_200625	SE208848.013	%	60 - 130%	88
	040_SH007_0.5_200625	SE208848.014	%	60 - 130%	83
	040_SH011_0.1_200625	SE208848.015	%	60 - 130%	82
	040_SH011_0.3_200625	SE208848.016	%	60 - 130%	84
	040_SH014_0.1_200625	SE208848.017	%	60 - 130%	80
	040_SH012_0.1_200626	SE208848.018	%	60 - 130%	93
	040_SH012_0.5_200626	SE208848.019	%	60 - 130%	97
	0407_BH33_0.1_200626	SE208848.023	%	60 - 130%	89
	0407_BH33_0.7_200626	SE208848.024	%	60 - 130%	80
	0407_BH34_0.1_200626	SE208848.025	%	60 - 130%	66
	0407_BH34_0.5_200626	SE208848.026	%	60 - 130%	69
	0407_BH38_0.3_200626	SE208848.027	%	60 - 130%	67
	0407_BH40_0.3_200626	SE208848.028	%	60 - 130%	71
	0407_BH40_0.5_200626	SE208848.029	%	60 - 130%	68
	0407_QC174_200626	SE208848.030	%	60 - 130%	73
d4-1,2-dichloroethane (Surrogate)	0407_SH015_0.2-0.3_200624	SE208848.001	%	60 - 130%	82
	0407_SH016_0.2-0.3_200624	SE208848.002	%	60 - 130%	78
	0407_SH023_0.2-0.3_200624	SE208848.003	%	60 - 130%	77
	0407_SH024_0.1-0.2_200624	SE208848.005	%	60 - 130%	72
	0407_BH11_0.1_200625	SE208848.006	%	60 - 130%	104
	0407_BH11_0.5_200625	SE208848.007	%	60 - 130%	79
	0407_QC166_200625	SE208848.008	%	60 - 130%	85
	0407_BH12_0.1_200625	SE208848.009	%	60 - 130%	101
	0407_BH12_0.5_200625	SE208848.010	%	60 - 130%	84
	0407_BH13_0.1_200625	SE208848.011	%	60 - 130%	71
	0407_BH13_0.5_200625	SE208848.012	%	60 - 130%	94
	040_SH007_0.1_200625	SE208848.013	%	60 - 130%	82
	040_SH007_0.5_200625	SE208848.014	%	60 - 130%	90
	040_SH011_0.1_200625	SE208848.015	%	60 - 130%	84
	040_SH011_0.3_200625	SE208848.016	%	60 - 130%	86
	040_SH014_0.1_200625	SE208848.017	%	60 - 130%	82
	040_SH012_0.1_200626	SE208848.018	%	60 - 130%	96
	040_SH012_0.5_200626	SE208848.019	%	60 - 130%	98
	0407_BH33_0.1_200626	SE208848.023	%	60 - 130%	83
	0407_BH33_0.7_200626	SE208848.024	%	60 - 130%	80
	0407_BH34_0.1_200626	SE208848.025	%	60 - 130%	75
	0407_BH34_0.5_200626	SE208848.026	%	60 - 130%	78
	0407_BH38_0.3_200626	SE208848.027	%	60 - 130%	77
	0407_BH40_0.3_200626	SE208848.028	%	60 - 130%	83
	0407_BH40_0.5_200626	SE208848.029	%	60 - 130%	81
	0407_QC174_200626	SE208848.030	%	60 - 130%	86
d8-toluene (Surrogate)	0407_SH015_0.2-0.3_200624	SE208848.001	%	60 - 130%	70
	0407_SH016_0.2-0.3_200624	SE208848.002	%	60 - 130%	68
	0407_SH023_0.2-0.3_200624	SE208848.003	%	60 - 130%	70
	0407_SH024_0.1-0.2_200624	SE208848.005	%	60 - 130%	71
	0407_BH11_0.1_200625	SE208848.006	%	60 - 130%	93
	0407_BH11_0.5_200625	SE208848.007	%	60 - 130%	73
	0407_QC166_200625	SE208848.008	%	60 - 130%	81
	0407_BH12_0.1_200625	SE208848.009	%	60 - 130%	94
	0407_BH12_0.5_200625	SE208848.010	%	60 - 130%	82

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d8-toluene (Surrogate)	0407_BH13_0.1_200625	SE208848.011	%	60 - 130%	66
	0407_BH13_0.5_200625	SE208848.012	%	60 - 130%	81
	040_SH007_0.1_200625	SE208848.013	%	60 - 130%	78
	040_SH007_0.5_200625	SE208848.014	%	60 - 130%	84
	040_SH011_0.1_200625	SE208848.015	%	60 - 130%	82
	040_SH011_0.3_200625	SE208848.016	%	60 - 130%	77
	040_SH014_0.1_200625	SE208848.017	%	60 - 130%	75
	040_SH012_0.1_200626	SE208848.018	%	60 - 130%	87
	040_SH012_0.5_200626	SE208848.019	%	60 - 130%	87
	0407_BH33_0.1_200626	SE208848.023	%	60 - 130%	80
	0407_BH33_0.7_200626	SE208848.024	%	60 - 130%	73
	0407_BH34_0.1_200626	SE208848.025	%	60 - 130%	73
	0407_BH34_0.5_200626	SE208848.026	%	60 - 130%	76
	0407_BH38_0.3_200626	SE208848.027	%	60 - 130%	74
	0407_BH40_0.3_200626	SE208848.028	%	60 - 130%	79
	0407_BH40_0.5_200626	SE208848.029	%	60 - 130%	76
	0407_QC174_200626	SE208848.030	%	60 - 130%	81

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_QC306_200623	SE208848.004	%	40 - 130%	102
	0407_QC308_200626	SE208848.022	%	40 - 130%	103
	0407_QC307_200626	SE208848.031	%	40 - 130%	105
d4-1,2-dichloroethane (Surrogate)	0407_QC306_200623	SE208848.004	%	40 - 130%	102
	0407_QC308_200626	SE208848.022	%	40 - 130%	73
	0407_QC307_200626	SE208848.031	%	40 - 130%	106
d8-toluene (Surrogate)	0407_QC306_200623	SE208848.004	%	40 - 130%	98
	0407_QC308_200626	SE208848.022	%	40 - 130%	98
	0407_QC307_200626	SE208848.031	%	40 - 130%	99

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_SH015_0.2-0.3_200624	SE208848.001	%	60 - 130%	82
	0407_SH016_0.2-0.3_200624	SE208848.002	%	60 - 130%	78
	0407_SH023_0.2-0.3_200624	SE208848.003	%	60 - 130%	78
	0407_SH024_0.1-0.2_200624	SE208848.005	%	60 - 130%	82
	0407_BH11_0.1_200625	SE208848.006	%	60 - 130%	96
	0407_BH11_0.5_200625	SE208848.007	%	60 - 130%	85
	0407_QC166_200625	SE208848.008	%	60 - 130%	85
	0407_BH12_0.1_200625	SE208848.009	%	60 - 130%	93
	0407_BH12_0.5_200625	SE208848.010	%	60 - 130%	91
	0407_BH13_0.1_200625	SE208848.011	%	60 - 130%	74
	0407_BH13_0.5_200625	SE208848.012	%	60 - 130%	87
	040_SH007_0.1_200625	SE208848.013	%	60 - 130%	88
	040_SH007_0.5_200625	SE208848.014	%	60 - 130%	83
	040_SH011_0.1_200625	SE208848.015	%	60 - 130%	82
	040_SH011_0.3_200625	SE208848.016	%	60 - 130%	84
	040_SH014_0.1_200625	SE208848.017	%	60 - 130%	80
	040_SH012_0.1_200626	SE208848.018	%	60 - 130%	93
	040_SH012_0.5_200626	SE208848.019	%	60 - 130%	97
	0407_BH33_0.1_200626	SE208848.023	%	60 - 130%	89
	0407_BH33_0.7_200626	SE208848.024	%	60 - 130%	80
	0407_BH34_0.1_200626	SE208848.025	%	60 - 130%	66
	0407_BH34_0.5_200626	SE208848.026	%	60 - 130%	69
	0407_BH38_0.3_200626	SE208848.027	%	60 - 130%	67
	0407_BH40_0.3_200626	SE208848.028	%	60 - 130%	71
	0407_BH40_0.5_200626	SE208848.029	%	60 - 130%	68
	0407_QC174_200626	SE208848.030	%	60 - 130%	73
d4-1,2-dichloroethane (Surrogate)	0407_SH015_0.2-0.3_200624	SE208848.001	%	60 - 130%	82
	0407_SH016_0.2-0.3_200624	SE208848.002	%	60 - 130%	78
	0407_SH023_0.2-0.3_200624	SE208848.003	%	60 - 130%	77
	0407_SH024_0.1-0.2_200624	SE208848.005	%	60 - 130%	72

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d4-1,2-dichloroethane (Surrogate)	0407_BH11_0.1_200625	SE208848.006	%	60 - 130%	104
	0407_BH11_0.5_200625	SE208848.007	%	60 - 130%	79
	0407_QC166_200625	SE208848.008	%	60 - 130%	85
	0407_BH12_0.1_200625	SE208848.009	%	60 - 130%	101
	0407_BH12_0.5_200625	SE208848.010	%	60 - 130%	84
	0407_BH13_0.1_200625	SE208848.011	%	60 - 130%	71
	0407_BH13_0.5_200625	SE208848.012	%	60 - 130%	94
	040_SH007_0.1_200625	SE208848.013	%	60 - 130%	82
	040_SH007_0.5_200625	SE208848.014	%	60 - 130%	90
	040_SH011_0.1_200625	SE208848.015	%	60 - 130%	84
	040_SH011_0.3_200625	SE208848.016	%	60 - 130%	86
	040_SH014_0.1_200625	SE208848.017	%	60 - 130%	82
	040_SH012_0.1_200626	SE208848.018	%	60 - 130%	96
	040_SH012_0.5_200626	SE208848.019	%	60 - 130%	98
	0407_BH33_0.1_200626	SE208848.023	%	60 - 130%	83
	0407_BH33_0.7_200626	SE208848.024	%	60 - 130%	80
	0407_BH34_0.1_200626	SE208848.025	%	60 - 130%	75
	0407_BH34_0.5_200626	SE208848.026	%	60 - 130%	78
	0407_BH38_0.3_200626	SE208848.027	%	60 - 130%	77
	0407_BH40_0.3_200626	SE208848.028	%	60 - 130%	83
	0407_BH40_0.5_200626	SE208848.029	%	60 - 130%	81
	0407_QC174_200626	SE208848.030	%	60 - 130%	86
d8-toluene (Surrogate)	0407_SH015_0.2-0.3_200624	SE208848.001	%	60 - 130%	70
	0407_SH016_0.2-0.3_200624	SE208848.002	%	60 - 130%	68
	0407_SH023_0.2-0.3_200624	SE208848.003	%	60 - 130%	70
	0407_SH024_0.1-0.2_200624	SE208848.005	%	60 - 130%	71
	0407_BH11_0.1_200625	SE208848.006	%	60 - 130%	93
	0407_BH11_0.5_200625	SE208848.007	%	60 - 130%	73
	0407_QC166_200625	SE208848.008	%	60 - 130%	81
	0407_BH12_0.1_200625	SE208848.009	%	60 - 130%	94
	0407_BH12_0.5_200625	SE208848.010	%	60 - 130%	82
	0407_BH13_0.1_200625	SE208848.011	%	60 - 130%	66
	0407_BH13_0.5_200625	SE208848.012	%	60 - 130%	81
	040_SH007_0.1_200625	SE208848.013	%	60 - 130%	78
	040_SH007_0.5_200625	SE208848.014	%	60 - 130%	84
	040_SH011_0.1_200625	SE208848.015	%	60 - 130%	82
	040_SH011_0.3_200625	SE208848.016	%	60 - 130%	77
	040_SH014_0.1_200625	SE208848.017	%	60 - 130%	75
	040_SH012_0.1_200626	SE208848.018	%	60 - 130%	87
	040_SH012_0.5_200626	SE208848.019	%	60 - 130%	87
	0407_BH33_0.1_200626	SE208848.023	%	60 - 130%	80
	0407_BH33_0.7_200626	SE208848.024	%	60 - 130%	73
	0407_BH34_0.1_200626	SE208848.025	%	60 - 130%	73
	0407_BH34_0.5_200626	SE208848.026	%	60 - 130%	76
	0407_BH38_0.3_200626	SE208848.027	%	60 - 130%	74
	0407_BH40_0.3_200626	SE208848.028	%	60 - 130%	79
	0407_BH40_0.5_200626	SE208848.029	%	60 - 130%	76
	0407_QC174_200626	SE208848.030	%	60 - 130%	81

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_QC306_200623	SE208848.004	%	40 - 130%	102
	0407_QC308_200626	SE208848.022	%	40 - 130%	103
	0407_QC307_200626	SE208848.031	%	40 - 130%	105
d4-1,2-dichloroethane (Surrogate)	0407_QC306_200623	SE208848.004	%	60 - 130%	102
	0407_QC308_200626	SE208848.022	%	60 - 130%	73
	0407_QC307_200626	SE208848.031	%	60 - 130%	106
d8-toluene (Surrogate)	0407_QC306_200623	SE208848.004	%	40 - 130%	98
	0407_QC308_200626	SE208848.022	%	40 - 130%	98
	0407_QC307_200626	SE208848.031	%	40 - 130%	99

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Full 8270 SVOC in Water — **Method: ME-(AU)-[ENV]AN420**

Sample Number		Parameter	Units	LOR	Result
LB204953.001	01-PAHs	Acenaphthene	µg/L	0.1	<0.1
		Acenaphthylene	µg/L	0.1	<0.1
		Anthracene	µg/L	0.1	<0.1
		Benzo(a)anthracene	µg/L	0.1	<0.1
		Total Benzofluoranthenes (b&j&k)	µg/L	0.2	<0.2
		Benzo(ghi)perylene	µg/L	0.1	<0.1
		Benzo(a)pyrene	µg/L	0.1	<0.1
		Chrysene	µg/L	0.1	<0.1
		Dibenzo(ah)anthracene	µg/L	0.1	<0.1
		Fluoranthene	µg/L	0.1	<0.1
		Fluorene	µg/L	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1
		1-methylnaphthalene	µg/L	0.1	<0.1
		2-methylnaphthalene	µg/L	0.1	<0.1
		Naphthalene	µg/L	0.1	<0.1
		Phenanthrene	µg/L	0.1	<0.1
		Pyrene	µg/L	0.1	<0.1
		2-acetylaminofluorene	µg/L	0.5	<0.5
		7,12-dimethyl-benz(a)anthracene	µg/L	0.5	<0.5
		3-methylcholanthrene	µg/L	0.5	<0.5
	02-OCs	Aldrin	µg/L	0.1	<0.1
		Alpha-BHC	µg/L	0.1	<0.1
		Beta-BHC	µg/L	0.1	<0.1
		Delta-BHC	µg/L	0.1	<0.1
		Gamma-BHC (Lindane)	µg/L	0.1	<0.1
		p,p-DDD	µg/L	0.1	<0.1
		p,p-DDE	µg/L	0.1	<0.1
		p,p-DDT	µg/L	0.1	<0.1
		Dieldrin	µg/L	0.1	<0.1
		Alpha-endosulfan	µg/L	0.1	<0.1
		Beta-endosulfan	µg/L	0.1	<0.1
		Endosulfan sulphate	µg/L	0.1	<0.1
		Endrin	µg/L	0.1	<0.1
		Heptachlor	µg/L	0.1	<0.1
		Heptachlor epoxide	µg/L	0.1	<0.1
		Isodrin	µg/L	0.1	<0.1
		Methoxychlor	µg/L	0.1	<0.1
		Mirex	µg/L	0.1	<0.1
		Alpha-chlordane	µg/L	0.1	<0.1
		Gamma-chlordane	µg/L	0.1	<0.1
		Endrin ketone	µg/L	0.1	<0.1
	03-OPs	Azinphos-methyl (Guthion)	µg/L	0.2	<0.2
		Bromophos ethyl	µg/L	0.2	<0.2
		Carbophenothion	µg/L	0.5	<0.5
		Chlorfenvinphos-cis	µg/L	5	<5
		Chlorfenvinphos-trans	µg/L	0.5	<0.5
		Chlorpyrifos (Chlorpyrifos Ethyl)	µg/L	0.2	<0.2
		Chlorpyrifos-methyl	µg/L	0.5	<0.5
		Co-Ral (Coumaphos)	µg/L	0.5	<0.5
		Diazinon (Dimpylate)	µg/L	0.5	<0.5
		Dichlorvos	µg/L	0.5	<0.5
		Demeton-S-methyl	µg/L	0.5	<0.5
		Dimethoate	µg/L	0.5	<0.5
		Disulfoton (Di-syston)	µg/L	0.5	<0.5
		EPN*	µg/L	0.5	<0.5
		Ethion	µg/L	0.2	<0.2
		Ethoprophos (Ethoprop or Prophos)	µg/L	0.5	<0.5
		Famphur (Famophos)	µg/L	0.5	<0.5
		Fenamiphos (Phenamiphos)	µg/L	0.5	<0.5
		Fenchlorophos (Ronnel)	µg/L	0.5	<0.5
		Fenitrothion	µg/L	0.2	<0.2

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Full 8270 SVOC in Water (continued) — **Method: ME-(AU)-[ENV]AN420**

Sample Number		Parameter	Units	LOR	Result
LB204953.001	03-OPs	Fenthion	µg/L	0.5	<0.5
		Malathion (Maldison)	µg/L	0.2	<0.2
		Methidathion	µg/L	0.5	<0.5
		Mevinphos-cis/trans	µg/L	1	<1
		o,o,o-triethyl phosphorothioate	µg/L	0.5	<0.5
		Parathion ethyl (Parathion)	µg/L	0.2	<0.2
		Parathion methyl	µg/L	0.5	<0.5
		Phorate	µg/L	0.5	<0.5
		Pirimiphos-ethyl	µg/L	0.5	<0.5
		Pirimiphos-methyl	µg/L	0.5	<0.5
		Profenofos	µg/L	0.5	<0.5
		Prothiophos (Tokuthion)*	µg/L	0.5	<0.5
		Sulfotepp	µg/L	0.5	<0.5
		Tetrachlorvinphos (Stirophos)*	µg/L	0.5	<0.5
	04-PCB UPAC(7) Congeners	PCB Congener C28	µg/L	0.1	<0.1
		PCB Congener C52	µg/L	0.1	<0.1
		PCB Congener C101	µg/L	0.1	<0.1
		PCB Congener C118	µg/L	0.1	<0.1
		PCB Congener C138	µg/L	0.1	<0.1
		PCB Congener C153	µg/L	0.1	<0.1
		PCB Congener C180	µg/L	0.1	<0.1
	05-SVCH (Cl Benzenes, Hydrocarbons & VOCs)	1/2-Chloronaphthalene	µg/L	1	<1
		Hexachlorobenzene (HCB)	µg/L	0.1	<0.1
		1,2-dichlorobenzene	µg/L	0.5	<0.5
		1,3-dichlorobenzene	µg/L	0.5	<0.5
		1,4-dichlorobenzene	µg/L	0.5	<0.5
		Hexachlorobutadiene	µg/L	0.5	<0.5
		Hexachlorocyclopentadiene	µg/L	2	<2
		Hexachloroethane	µg/L	0.5	<0.5
		Hexachloroproprene	µg/L	0.5	<0.5
		Pentachlorobenzene	µg/L	0.5	<0.5
		Pentachloroethane	µg/L	0.5	<0.5
		1,2,3,5 and 1,2,4,5-tetrachlorobenzene	µg/L	1	<1
		1,2,3,4-tetrachlorobenzene	µg/L	0.5	<0.5
		1,2,4-trichlorobenzene	µg/L	0.5	<0.5
	06-Phthalates	Bis(2-ethylhexyl)phthalate	µg/L	50	<50
		Bis(2-ethylhexyl)adipate	µg/L	1	<1
		Butyl benzyl phthalate	µg/L	1	<1
		Di-n-butyl phthalate	µg/L	10	<10
		Diethyl phthalate	µg/L	5	<5
		Dimethyl phthalate	µg/L	1	<1
		Dioctyl phthalate	µg/L	1	<1
	07-Carbamates	Carbofuran	µg/L	0.5	<0.5
		Carbaryl	µg/L	0.5	<0.5
	08-Herbicides (normal)	Trifluralin	µg/L	0.5	<0.5
	09-Nitrosamines	N-nitroso-di-n-butylamine (NDBA)	µg/L	1	<1
		N-nitroso-diethylamine (NDEA)	µg/L	1	<1
		N-nitroso-di-n-propylamine (NDPA)	µg/L	1	<1
		N-nitroso-morpholine (NMOR)	µg/L	1	<1
		N-nitroso-piperidine (NPIP)	µg/L	1	<1
		N-nitroso-pyrrolidine (NPYR)	µg/L	1	<1
		4-amino biphenyl	µg/L	1	<1
	10-Nitroaromatics and Ketones	Acetophenone	µg/L	1	<1
		1,3-dinitrobenzene	µg/L	1	<1
		2,4-dinitrotoluene	µg/L	1	<1
		2,6-dinitrotoluene	µg/L	1	<1
		Isophorone	µg/L	1	<1
		Nitrobenzene	µg/L	1	<1
		p-(dimethylamino) azobenzene	µg/L	1	<1
		Phenacetin	µg/L	1	<1
		Pentachloronitrobenzene (quintozene)	µg/L	1	<1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Full 8270 SVOC in Water (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB204953.001	11-Anilines and Amines	Aniline	µg/L	5	<5
		4-chloroaniline	µg/L	1	<1
		2-nitroaniline	µg/L	1	<1
		3-nitroaniline	µg/L	1	<1
		4-nitroaniline	µg/L	1	<1
		Diphenylamine	µg/L	1	<1
		o-Toluidine	µg/L	1	<1
		5-nitro-o-toluidine	µg/L	1	<1
		1-naphthylamine	µg/L	2	<2
		2-naphthylamine	µg/L	2	<2
	12-Haloethers	Bis(2-chloroethoxy) methane	µg/L	1	<1
		Bis(2-chloroethyl) ether	µg/L	1	<1
		Bis(2-chloroisopropyl) ether	µg/L	1	<1
		4-chlorophenyl phenyl ether	µg/L	1	<1
		4-bromophenyl phenyl ether	µg/L	1	<1
	13-Other SVOCs	Methyl methanesulfonate	µg/L	1	<1
		Ethyl methanesulfonate	µg/L	1	<1
		Dibenzofuran	µg/L	1	<1
		Benzyl alcohol	µg/L	1	<1
		Safrole	µg/L	1	<1
		Isosafrole Isomer 1	µg/L	1	<1
		Isosafrole Isomer 2	µg/L	1	<1
		1,4-naphthoquinone	µg/L	1	<1
		Thionazin	µg/L	1	<1
	14-Speciated Routine	3/4-methyl phenol (m/p-cresol)	µg/L	1	<1
	Phenols	2-methyl phenol (o-cresol)	µg/L	0.5	<0.5
		2,6-dichlorophenol	µg/L	0.5	<0.5
		2,3,4,6 and 2,3,5,6-tetrachlorophenol	µg/L	1	<1
		2,4,5-trichlorophenol	µg/L	0.5	<0.5
		4-chloro-3-methylphenol	µg/L	2	<2
		2-chlorophenol	µg/L	0.5	<0.5
		2,4-dichlorophenol	µg/L	0.5	<0.5
		2,4-dimethylphenol	µg/L	0.5	<0.5
		2-nitrophenol	µg/L	0.5	<0.5
		Phenol	µg/L	0.5	<0.5
		2,4,6-trichlorophenol	µg/L	0.5	<0.5
		Pentachlorophenol	µg/L	0.5	<0.5
		4-nitrophenol	µg/L	1	<1
	Surrogates	d5-phenol (Surrogate)	%	-	98
		d5-nitrobenzene (Surrogate)	%	-	82
		2-fluorobiphenyl (Surrogate)	%	-	120
		2,4,6-Tribromophenol (Surrogate)	%	-	92
		d14-p-terphenyl (Surrogate)	%	-	108

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

Sample Number	Parameter	Units	LOR	Result
LB204955.001	Mercury	mg/L	0.0001	<0.0001

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result
LB204914.001	Mercury	mg/kg	0.05	<0.05
LB204915.001	Mercury	mg/kg	0.05	<0.05

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB204905.001	Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
	Alpha BHC	mg/kg	0.1	<0.1
	Lindane	mg/kg	0.1	<0.1
	Heptachlor	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB204905.001		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	98
LB204906.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	95

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB204905.001		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	92
		d14-p-terphenyl (Surrogate)	%	-	98
LB204906.001		Dichlorvos	mg/kg	0.5	<0.5

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB204906.001		Dimethoate	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	89
		d14-p-terphenyl (Surrogate)	%	-	92

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB204905.001		Naphthalene	mg/kg	0.1	<0.1
		2-methylnaphthalene	mg/kg	0.1	<0.1
		1-methylnaphthalene	mg/kg	0.1	<0.1
		Acenaphthylene	mg/kg	0.1	<0.1
		Acenaphthene	mg/kg	0.1	<0.1
		Fluorene	mg/kg	0.1	<0.1
		Phenanthrene	mg/kg	0.1	<0.1
		Anthracene	mg/kg	0.1	<0.1
		Fluoranthene	mg/kg	0.1	<0.1
		Pyrene	mg/kg	0.1	<0.1
		Benzo(a)anthracene	mg/kg	0.1	<0.1
		Chrysene	mg/kg	0.1	<0.1
		Benzo(a)pyrene	mg/kg	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	94
		2-fluorobiphenyl (Surrogate)	%	-	92
		d14-p-terphenyl (Surrogate)	%	-	98
LB204906.001		Naphthalene	mg/kg	0.1	<0.1
		2-methylnaphthalene	mg/kg	0.1	<0.1
		1-methylnaphthalene	mg/kg	0.1	<0.1
		Acenaphthylene	mg/kg	0.1	<0.1
		Acenaphthene	mg/kg	0.1	<0.1
		Fluorene	mg/kg	0.1	<0.1
		Phenanthrene	mg/kg	0.1	<0.1
		Anthracene	mg/kg	0.1	<0.1
		Fluoranthene	mg/kg	0.1	<0.1
		Pyrene	mg/kg	0.1	<0.1
		Benzo(a)anthracene	mg/kg	0.1	<0.1
		Chrysene	mg/kg	0.1	<0.1
		Benzo(a)pyrene	mg/kg	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	92
		2-fluorobiphenyl (Surrogate)	%	-	89
		d14-p-terphenyl (Surrogate)	%	-	92

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB204953.001	Naphthalene	µg/L	0.1	<0.1
	2-methylnaphthalene	µg/L	0.1	<0.1
	1-methylnaphthalene	µg/L	0.1	<0.1
	Acenaphthylene	µg/L	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Water (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB204953.001		Acenaphthene	µg/L	0.1	<0.1
		Fluorene	µg/L	0.1	<0.1
		Phenanthrene	µg/L	0.1	<0.1
		Anthracene	µg/L	0.1	<0.1
		Fluoranthene	µg/L	0.1	<0.1
		Pyrene	µg/L	0.1	<0.1
		Benzo(a)anthracene	µg/L	0.1	<0.1
		Chrysene	µg/L	0.1	<0.1
		Benzo(a)pyrene	µg/L	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1
		Dibenzo(ah)anthracene	µg/L	0.1	<0.1
		Benzo(ghi)perylene	µg/L	0.1	<0.1
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	62
		2-fluorobiphenyl (Surrogate)	%	-	74
		d14-p-terphenyl (Surrogate)	%	-	88

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB204905.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	98
LB204906.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	95

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB204905.001		Phenol	mg/kg	0.5	<0.5
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5
		2-nitrophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
		Pentachlorophenol	mg/kg	0.5	<0.5
		2,4-dinitrophenol	mg/kg	2	<2
		4-chloro-3-methylphenol	mg/kg	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	90
		d5-phenol (Surrogate)	%	-	74
LB204906.001		Phenol	mg/kg	0.5	<0.5
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB204906.001		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5
		2-nitrophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
		Pentachlorophenol	mg/kg	0.5	<0.5
		2,4-dinitrophenol	mg/kg	2	<2
		4-chloro-3-methylphenol	mg/kg	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	72
		d5-phenol (Surrogate)	%	-	71

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB204911.001	Arsenic, As	mg/kg	1	<1
	Beryllium, Be	mg/kg	0.5	<0.5
	Cadmium, Cd	mg/kg	0.3	<0.3
	Cobalt, Co	mg/kg	0.5	<0.5
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Manganese, Mn	mg/kg	1	<1
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0
LB204912.001	Arsenic, As	mg/kg	1	<1
	Beryllium, Be	mg/kg	0.5	<0.5
	Cadmium, Cd	mg/kg	0.3	<0.3
	Cobalt, Co	mg/kg	0.5	<0.5
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Manganese, Mn	mg/kg	1	<1
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Sample Number	Parameter	Units	LOR	Result
LB204923.001	Arsenic, As	µg/L	1	<1
	Cadmium, Cd	µg/L	0.1	<0.1
	Chromium, Cr	µg/L	1	<1
	Copper, Cu	µg/L	1	<1
	Lead, Pb	µg/L	1	<1
	Nickel, Ni	µg/L	1	<1
	Zinc, Zn	µg/L	5	<5

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB204905.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110
LB204906.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB204953.001	TRH C10-C14	µg/L	50	<50
	TRH C15-C28	µg/L	200	<200
	TRH C29-C36	µg/L	200	<200
	TRH C37-C40	µg/L	200	<200

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB204903.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Sample Number		Parameter	Units	LOR	Result
LB204903.001	Monocyclic Aromatic Hydrocarbons	1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10
		MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	85
		d8-toluene (Surrogate)	%	-	78
		Bromofluorobenzene (Surrogate)	%	-	84
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1
LB204904.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB204904.001	Halogenated Aromatics	2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic	Benzene	mg/kg	0.1	<0.1
	Hydrocarbons	Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10
		MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	83
		d8-toluene (Surrogate)	%	-	81
		Bromofluorobenzene (Surrogate)	%	-	86
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB205064.001	Monocyclic Aromatic	Benzene	µg/L	0.5	<0.5
	Hydrocarbons	Toluene	µg/L	0.5	<0.5
		Ethylbenzene	µg/L	0.5	<0.5
		m/p-xylene	µg/L	1	<1
		o-xylene	µg/L	0.5	<0.5
	Polycyclic VOCs	Naphthalene	µg/L	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	77
		d8-toluene (Surrogate)	%	-	103
		Bromofluorobenzene (Surrogate)	%	-	98

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB204903.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	85
LB204904.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	83

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Volatile Petroleum Hydrocarbons in Water — **Method: ME-(AU)-[ENV]AN433**

Sample Number		Parameter	Units	LOR	Result
LB205064.001		TRH C6-C9	µg/L	40	<40
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	77
		d8-toluene (Surrogate)	%	-	103
		Bromofluorobenzene (Surrogate)	%	-	98

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208848.031	LB204955.007	Mercury	µg/L	0.0001	<0.0001	<0.0001	200	0

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208848.011	LB204914.014	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE208848.020	LB204914.019	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE208916.001	LB204915.014	Mercury	mg/kg	0.05	0.06	0.05	121	1
SE209007.007	LB204915.024	Mercury	mg/kg	0.05	<0.05	<0.05	200	0

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208848.011	LB204907.011	% Moisture	%w/w	1	20.0	19.4	35	3
SE208848.021	LB204907.022	% Moisture	%w/w	1	3.3	3.8	58	14
SE208848.024	LB204907.025	% Moisture	%w/w	1	12.9	13.7	38	6
SE209006.003	LB204908.011	% Moisture	%w/w	1	7.71730300569	0.0294543698	42	16
SE209007.007	LB204908.024	% Moisture	%w/w	1	8.31070070616	5.5157750342	43	24

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208848.008	LB204905.032		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	0	200	0
			Alpha BHC	mg/kg	0.1	<0.1	0	200	0
			Lindane	mg/kg	0.1	<0.1	0	200	0
			Heptachlor	mg/kg	0.1	<0.1	0	200	0
			Aldrin	mg/kg	0.1	<0.1	0	200	0
			Beta BHC	mg/kg	0.1	<0.1	0	200	0
			Delta BHC	mg/kg	0.1	<0.1	0	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	0	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	0	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	0	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Dieldrin	mg/kg	0.2	<0.2	0	200	0
			Endrin	mg/kg	0.2	<0.2	0	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	0	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	0	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	0	200	0
			Methoxychlor	mg/kg	0.1	<0.1	0	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	0	200	0
			Isodrin	mg/kg	0.1	<0.1	0	200	0
			Mirex	mg/kg	0.1	<0.1	0	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.13	0.134	30	1
SE209006.007	LB204906.029		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	0	200	0
			Alpha BHC	mg/kg	0.1	<0.1	0	200	0
			Lindane	mg/kg	0.1	<0.1	0	200	0
			Heptachlor	mg/kg	0.1	<0.1	0	200	0
			Aldrin	mg/kg	0.1	<0.1	0	200	0
			Beta BHC	mg/kg	0.1	<0.1	0	200	0
			Delta BHC	mg/kg	0.1	<0.1	0	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	0	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	0	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE209006.007	LB204906.029		trans-Nonachlor	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Dieldrin	mg/kg	0.2	<0.2	0	200	0
			Endrin	mg/kg	0.2	<0.2	0	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	0	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	0	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	0	200	0
			Methoxychlor	mg/kg	0.1	<0.1	0	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	0	200	0
			Isodrin	mg/kg	0.1	<0.1	0	200	0
			Mirex	mg/kg	0.1	<0.1	0	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.12	0.135	30	12

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208848.008	LB204905.032		Dichlorvos	mg/kg	0.5	<0.5	0	200	0
			Dimethoate	mg/kg	0.5	<0.5	0	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	0.0126830454	200	0
			Fenitrothion	mg/kg	0.2	<0.2	0.0096936721	200	0
			Malathion	mg/kg	0.2	<0.2	0.0066912198	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	0	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	0	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	0	200	0
			Methidathion	mg/kg	0.5	<0.5	0	200	0
			Ethion	mg/kg	0.2	<0.2	0	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	0	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	0	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4359317976	30	2
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4456219512	30	1
SE208848.012	LB204905.033		Dichlorvos	mg/kg	0.5	<0.5	0	200	0
			Dimethoate	mg/kg	0.5	<0.5	0	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	0.0008202375	200	0
			Fenitrothion	mg/kg	0.2	<0.2	0.0110676866	200	0
			Malathion	mg/kg	0.2	<0.2	0.0068200696	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	0	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	0	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	0	200	0
			Methidathion	mg/kg	0.5	<0.5	0.0011148649	200	0
			Ethion	mg/kg	0.2	<0.2	0.0293367191	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	0	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	0	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4247448454	30	3
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4455261156	30	0
SE209007.007	LB204906.027		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	7

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE209007.007	LB204906.027	Surrogates	d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	30	4

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208848.012	LB204905.033		Naphthalene	mg/kg	0.1	<0.1	0.0024229366	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	0.0011652517	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	0.0016821223	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	0.0178603119	200	0
			Acenaphthene	mg/kg	0.1	<0.1	0.0016163530	200	0
			Fluorene	mg/kg	0.1	<0.1	0.0047436990	200	0
			Phenanthrene	mg/kg	0.1	<0.1	0.0780503230	196	0
			Anthracene	mg/kg	0.1	<0.1	0.0786559339	195	0
			Fluoranthene	mg/kg	0.1	0.1	0.1734173706	94	21
			Pyrene	mg/kg	0.1	0.2	0.1940408680	86	18
			Benzo(a)anthracene	mg/kg	0.1	<0.1	0.0820583581	164	0
			Chrysene	mg/kg	0.1	0.1	0.1274832281	114	13
			Benzo(b&j)fluoranthene	mg/kg	0.1	0.1	0.1570467240	98	12
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	0.0765470717	165	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	0.1067056756	130	6
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	0.0946837574	141	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	0.0120734216	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	0.0897529964	146	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	0.1324755156	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	0.2534755156	131	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	0.1929755156	132	0
			Total PAH (18)	mg/kg	0.8	<0.8	0.8465972194	138	6
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4434864293	30	4
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4247448454	30	3
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4455261156	30	0
SE209006.004	LB204906.014		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	<0.3	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	<0.2	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	30	1
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	0
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	1
SE209007.007	LB204906.027		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE209007.007	LB204906.027		Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	<0.3	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	<0.2	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	30	4
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	7
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	30	4

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208848.008	LB204905.032		Arochlor 1016	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	0	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0.134	30	1
SE209006.007	LB204906.029		Arochlor 1016	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	0	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0.135	30	12

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208848.012	LB204905.035	Phenol	mg/kg	0.5	<0.5	0	200	0
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	0	200	0
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	0	200	0
		Total Cresol	mg/kg	1.5	<1.5	0	200	0
		2-chlorophenol	mg/kg	0.5	<0.5	0	200	0
		2,4-dimethylphenol	mg/kg	0.5	<0.5	0	200	0
		2,6-dichlorophenol	mg/kg	0.5	<0.5	0	200	0
		2,4-dichlorophenol	mg/kg	0.5	<0.5	0	200	0
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5	0	200	0
		2-nitrophenol	mg/kg	0.5	<0.5	0	200	0
		4-nitrophenol	mg/kg	1	<1	0	200	0
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5	0	200	0
		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	0	200	0
		Pentachlorophenol	mg/kg	0.5	<0.5	0	200	0
		2,4-dinitrophenol	mg/kg	2	<2	0	200	0
		4-chloro-3-methylphenol	mg/kg	2	<2	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208848.012	LB204905.035	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.5	4.12	30	15
			d5-phenol (Surrogate)	mg/kg	-	1.6	1.51	30	8
SE208848.030	LB204906.029		Phenol	mg/kg	0.5	<0.5	0	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	0	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	0	200	0
			Total Cresol	mg/kg	1.5	<1.5	0	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	0	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	0	200	0
			4-nitrophenol	mg/kg	1	<1	0	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	0	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dinitrophenol	mg/kg	2	<2	0	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	0	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.9	3.72	30	4
			d5-phenol (Surrogate)	mg/kg	-	1.6	1.73	30	6

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208848.011	LB204911.014	Arsenic, As	mg/kg	1	<1	<1	200	0
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	2.5	1.3	56	64 ②
		Copper, Cu	mg/kg	0.5	17	2.4	35	149 ②
		Nickel, Ni	mg/kg	0.5	1.4	0.7	76	64
		Lead, Pb	mg/kg	1	2	1	100	26
		Zinc, Zn	mg/kg	2	5.9	2.5	78	82 ②
SE208848.020	LB204911.024	Arsenic, As	mg/kg	1	<1	<1	200	0
		Boron, B	mg/kg	5	<5	<5	200	0
		Beryllium, Be	mg/kg	0.5	<0.5	<0.5	200	0
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Cobalt, Co	mg/kg	0.5	<0.5	<0.5	200	0
		Chromium, Cr	mg/kg	0.5	0.5	0.5	125	2
		Copper, Cu	mg/kg	0.5	1.1	1.2	75	10
		Manganese, Mn	mg/kg	1	2	2	74	0
		Nickel, Ni	mg/kg	0.5	<0.5	<0.5	200	0
		Lead, Pb	mg/kg	1	3	3	66	13
		Zinc, Zn	mg/kg	2	3.8	3.9	82	3
SE208916.001	LB204912.014	Arsenic, As	mg/kg	1	3	3	61	14
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	172	0
		Chromium, Cr	mg/kg	0.5	5.6	5.1	39	10
		Copper, Cu	mg/kg	0.5	34	33	31	1
		Nickel, Ni	mg/kg	0.5	74	66	31	12
		Lead, Pb	mg/kg	1	16	17	36	8
		Zinc, Zn	mg/kg	2	220	220	31	0
SE209007.007	LB204912.024	Arsenic, As	mg/kg	1	2	2	78	28
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	4.9	4.1	41	19
		Copper, Cu	mg/kg	0.5	10	13	34	23
		Nickel, Ni	mg/kg	0.5	6.4	6.2	38	4
		Lead, Pb	mg/kg	1	11	12	39	7
		Zinc, Zn	mg/kg	2	29	28	37	4

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208996.003	LB204923.010	Copper, Cu	µg/L	1	1	1	83	0
		Zinc, Zn	µg/L	5	<5	<5	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208848.008	LB204905.032		TRH C10-C14	mg/kg	20	<20	0	200	0
			TRH C15-C28	mg/kg	45	<45	0	200	0
			TRH C29-C36	mg/kg	45	<45	0	200	0
			TRH C37-C40	mg/kg	100	<100	0	200	0
			TRH C10-C36 Total	mg/kg	110	<110	0	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	0	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	0	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	0	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	0	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	0	200	0
SE208848.012	LB204905.033		TRH C10-C14	mg/kg	20	<20	0	200	0
			TRH C15-C28	mg/kg	45	<45	0	200	0
			TRH C29-C36	mg/kg	45	<45	0	200	0
			TRH C37-C40	mg/kg	100	<100	0	200	0
			TRH C10-C36 Total	mg/kg	110	<110	0	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	0	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	0	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	0	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	0	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	0	200	0
SE209006.004	LB204906.014		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE209007.007	LB204906.027		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208872.001	LB204953.023		TRH C10-C14	µg/L	50	<50	<50	200	0
			TRH C15-C28	µg/L	200	940	910	52	3
			TRH C29-C36	µg/L	200	<200	210	151	5
			TRH C37-C40	µg/L	200	<200	<200	200	0
			TRH C10-C40	µg/L	320	1100	1100	59	6
		TRH F Bands	TRH >C10-C16	µg/L	60	<60	<60	200	0
			TRH >C10-C16 - Naphthalene (F2)	µg/L	60	<60	<60	200	0
			TRH >C16-C34 (F3)	µg/L	500	1000	1000	78	3
			TRH >C34-C40 (F4)	µg/L	500	<500	<500	200	0

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208848.011	LB204903.014	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208848.011	LB204903.014	Halogenated	Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
		Aliphatics	Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208848.011	LB204903.014	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.1	8.6	50	19
			d8-toluene (Surrogate)	mg/kg	-	6.6	7.0	50	6
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.4	8.0	50	8
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE208848.024	LB204903.025	Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.0	7.7	50	4
			d8-toluene (Surrogate)	mg/kg	-	7.3	7.4	50	1
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.0	8.0	50	1
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
SE209006.004	LB204904.014	Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.0	9.6	50	19
			d8-toluene (Surrogate)	mg/kg	-	7.7	9.4	50	20
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.0	8.1	50	15
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
SE209007.007	LB204904.025	Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.9	8.3	50	5
			d8-toluene (Surrogate)	mg/kg	-	7.6	7.8	50	2
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.0	7.3	50	3
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208848.031	LB205064.028	Monocyclic	Benzene	µg/L	0.5	<0.5	0	200	0
		Aromatic	Toluene	µg/L	0.5	<0.5	0.053746381	200	0
			Ethylbenzene	µg/L	0.5	<0.5	0.02469164	200	0
			m/p-xylene	µg/L	1	<1	0.074976485	200	0
			o-xylene	µg/L	0.5	<0.5	0.021206412	200	0
		Polycyclic	Naphthalene	µg/L	0.5	<0.5	0.091625875	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	0.0	9.994486869	30	5
			d8-toluene (Surrogate)	µg/L	-	0.0	9.456004505	30	5
			Bromofluorobenzene (Surrogate)	µg/L	-	0.0	11.0098939	30	4
SE208922.001	LB205064.029	Monocyclic	Benzene	µg/L	0.5	<0.5	0	200	0
		Aromatic	Toluene	µg/L	0.5	<0.5	0.036269612	200	0
			Ethylbenzene	µg/L	0.5	<0.5	0.013185719	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOCs in Water (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208922.001	LB205064.029	Monocyclic	m/p-xylene	µg/L	1	<1	0.050626943	200	0
		Aromatic	o-xylene	µg/L	0.5	<0.5	0.011724711	200	0
		Polycyclic	Naphthalene	µg/L	0.5	<0.5	0.035758725	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	10.0	10.10339716	30	1
			d8-toluene (Surrogate)	µg/L	-	9.5	9.661349801	30	2
			Bromofluorobenzene (Surrogate)	µg/L	-	10.3	11.18525334	30	8

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208848.011	LB204903.014		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.1	8.6	30	19
			d8-toluene (Surrogate)	mg/kg	-	6.6	7.0	30	6
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.4	8.0	30	8
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE208848.024	LB204903.025		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.0	7.7	30	4
			d8-toluene (Surrogate)	mg/kg	-	7.3	7.4	30	1
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.0	8.0	30	1
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE209006.004	LB204904.014		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.0	9.6	30	19
			d8-toluene (Surrogate)	mg/kg	-	7.7	9.4	30	20
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.0	8.1	30	15
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE209007.007	LB204904.025		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.9	8.3	30	5
			d8-toluene (Surrogate)	mg/kg	-	7.6	7.8	30	2
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.0	7.3	30	3
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208848.031	LB205064.028		TRH C6-C10	µg/L	50	<50	0	200	0
			TRH C6-C9	µg/L	40	<40	0	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	0.0	9.994486869	30	5
			d8-toluene (Surrogate)	µg/L	-	0.0	9.456004505	30	5
			Bromofluorobenzene (Surrogate)	µg/L	-	0.0	11.0098939	30	4
		VPH F Bands	Benzene (F0)	µg/L	0.5	<0.5	0	200	0
			TRH C6-C10 minus BTEX (F1)	µg/L	50	<50	0	200	0
SE208922.001	LB205064.029		TRH C6-C10	µg/L	50	<50	0	200	0
			TRH C6-C9	µg/L	40	<40	0	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	10.0	10.10339716	30	1
			d8-toluene (Surrogate)	µg/L	-	9.5	9.661349801	30	2
			Bromofluorobenzene (Surrogate)	µg/L	-	10.3	11.18525334	30	8
		VPH F Bands	Benzene (F0)	µg/L	0.5	<0.5	0	200	0
			TRH C6-C10 minus BTEX (F1)	µg/L	50	<50	0	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Full 8270 SVOC in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204953.002	01-PAHs	Acenaphthene	µg/L	0.1	40	40	60 - 140	99
		Acenaphthylene	µg/L	0.1	41	40	60 - 140	102
		Anthracene	µg/L	0.1	36	40	60 - 140	91
		Benzo(a)pyrene	µg/L	0.1	46	40	60 - 140	116
		Fluoranthene	µg/L	0.1	36	40	60 - 140	91
		Naphthalene	µg/L	0.1	38	40	60 - 140	94
		Phenanthrene	µg/L	0.1	37	40	60 - 140	92
		Pyrene	µg/L	0.1	38	40	60 - 140	95
	02-OCs	Aldrin	µg/L	0.1	3.4	4	60 - 140	85
		Delta-BHC	µg/L	0.1	3.8	4	60 - 140	95
		p,p-DDT	µg/L	0.1	3.2	4	60 - 140	79
		Dieldrin	µg/L	0.1	4.5	4	60 - 140	111
		Endrin	µg/L	0.1	3.4	4	60 - 140	84
		Heptachlor	µg/L	0.1	3.3	4	60 - 140	82
	03-OPs	Chlorpyrifos (Chlorpyrifos Ethyl)	µg/L	0.2	10	8	60 - 140	125
		Diazinon (Dimpylate)	µg/L	0.5	11	8	60 - 140	136
		Dichlorvos	µg/L	0.5	4.9	8	60 - 140	61
		Ethion	µg/L	0.2	8.2	8	60 - 140	103
	05-SVCH (Cl	Hexachlorobenzene (HCB)	µg/L	0.1	4.2	4	60 - 140	104
	Benzenes,	Hexachlorobutadiene	µg/L	0.5	4.3	4	60 - 140	108
		Hexachloroethane	µg/L	0.5	4.3	4	60 - 140	107
		Pentachlorobenzene	µg/L	0.5	4.1	4	60 - 140	102
		1,2,3,4-tetrachlorobenzene	µg/L	0.5	4.3	4	60 - 140	106
	06-Phthalates	Bis(2-ethylhexyl)phthalate	µg/L	50	<50	8	60 - 140	126
		Butyl benzyl phthalate	µg/L	1	7	8	60 - 140	93
		Di-n-butyl phthalate	µg/L	10	<10	8	60 - 140	108
		Diethyl phthalate	µg/L	5	9	8	60 - 140	108
		Dimethyl phthalate	µg/L	1	9	8	60 - 140	107
		Dioctyl phthalate	µg/L	1	10	8	60 - 140	126
	09-Nitrosamine	N-nitroso-di-n-propylamine (NDPA)	µg/L	1	44	32	60 - 140	137
	10-Nitroaromati	Pentachloronitrobenzene (quintozene)	µg/L	1	5	4	60 - 140	123
	14-Speciated	2,4-dichlorophenol	µg/L	0.5	35	40	60 - 140	87
	Routine	Phenol	µg/L	0.5	33	40	60 - 140	83
		2,4,6-trichlorophenol	µg/L	0.5	39	40	60 - 140	98
		Pentachlorophenol	µg/L	0.5	30	40	60 - 140	76
	Surrogates	d5-phenol (Surrogate)	µg/L	-	2.3	2	40 - 130	115
		d5-nitrobenzene (Surrogate)	µg/L	-	0.5	0.5	40 - 130	102
		2-fluorobiphenyl (Surrogate)	µg/L	-	0.5	0.5	40 - 130	102
		2,4,6-Tribromophenol (Surrogate)	µg/L	-	5.1	5	40 - 130	101
		d14-p-terphenyl (Surrogate)	µg/L	-	0.4	0.5	40 - 130	86

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204914.002	Mercury	mg/kg	0.05	0.20	0.2	70 - 130	100
LB204915.002	Mercury	mg/kg	0.05	0.22	0.2	70 - 130	110

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204905.002	Heptachlor	mg/kg	0.1	0.1	0.2	60 - 140	75
	Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	101
	Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	95
	Dieldrin	mg/kg	0.2	<0.2	0.2	60 - 140	99
	Endrin	mg/kg	0.2	<0.2	0.2	60 - 140	95
	p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	76
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.11	0.15	40 - 130	71
LB204906.002	Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	80
	Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	110
	Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	101
	Dieldrin	mg/kg	0.2	0.2	0.2	60 - 140	110
	Endrin	mg/kg	0.2	<0.2	0.2	60 - 140	74
	p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	81

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204906.002	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.16	0.15	40 - 130	104

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204905.002		Dichlorvos	mg/kg	0.5	1.7	2	60 - 140	83
		Diazinon (Dimpylate)	mg/kg	0.5	1.9	2	60 - 140	93
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.8	2	60 - 140	92
		Ethion	mg/kg	0.2	2.3	2	60 - 140	113
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	87
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	88
LB204906.002		Dichlorvos	mg/kg	0.5	1.5	2	60 - 140	75
		Diazinon (Dimpylate)	mg/kg	0.5	1.8	2	60 - 140	90
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.9	2	60 - 140	97
		Ethion	mg/kg	0.2	2.2	2	60 - 140	108
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	86
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	86

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204905.002		Naphthalene	mg/kg	0.1	4.4	4	60 - 140	109
		Acenaphthylene	mg/kg	0.1	4.7	4	60 - 140	117
		Acenaphthene	mg/kg	0.1	4.4	4	60 - 140	110
		Phenanthrene	mg/kg	0.1	4.3	4	60 - 140	108
		Anthracene	mg/kg	0.1	4.3	4	60 - 140	107
		Fluoranthene	mg/kg	0.1	4.3	4	60 - 140	108
		Pyrene	mg/kg	0.1	4.7	4	60 - 140	117
		Benzo(a)pyrene	mg/kg	0.1	5.0	4	60 - 140	126
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	91
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	87
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	88
LB204906.002		Naphthalene	mg/kg	0.1	4.4	4	60 - 140	110
		Acenaphthylene	mg/kg	0.1	4.7	4	60 - 140	117
		Acenaphthene	mg/kg	0.1	4.5	4	60 - 140	112
		Phenanthrene	mg/kg	0.1	4.4	4	60 - 140	110
		Anthracene	mg/kg	0.1	4.3	4	60 - 140	108
		Fluoranthene	mg/kg	0.1	4.4	4	60 - 140	109
		Pyrene	mg/kg	0.1	4.7	4	60 - 140	117
		Benzo(a)pyrene	mg/kg	0.1	5.1	4	60 - 140	127
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	89
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	86
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	86

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204953.002		Naphthalene	µg/L	0.1	31	40	60 - 140	77
		Acenaphthylene	µg/L	0.1	31	40	60 - 140	78
		Acenaphthene	µg/L	0.1	31	40	60 - 140	78
		Phenanthrene	µg/L	0.1	35	40	60 - 140	88
		Anthracene	µg/L	0.1	31	40	60 - 140	77
		Fluoranthene	µg/L	0.1	33	40	60 - 140	82
		Pyrene	µg/L	0.1	35	40	60 - 140	88
		Benzo(a)pyrene	µg/L	0.1	37	40	60 - 140	92
	Surrogates	d5-nitrobenzene (Surrogate)	µg/L	-	0.3	0.5	40 - 130	66
		2-fluorobiphenyl (Surrogate)	µg/L	-	0.3	0.5	40 - 130	68
		d14-p-terphenyl (Surrogate)	µg/L	-	0.4	0.5	40 - 130	70

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204905.002		Arochlor 1260	mg/kg	0.2	0.3	0.4	60 - 140	78
LB204906.002		Arochlor 1260	mg/kg	0.2	0.4	0.4	60 - 140	88

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204905.002		Phenol	mg/kg	0.5	0.7	1	70 - 130	74
		2,4-dichlorophenol	mg/kg	0.5	0.8	1	70 - 130	75
		2,4,6-trichlorophenol	mg/kg	0.5	0.9	1	70 - 130	93
		Pentachlorophenol	mg/kg	0.5	0.7	1	70 - 130	74
	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.3	5	40 - 130	86
		d5-phenol (Surrogate)	mg/kg	-	1.4	2	40 - 130	70
LB204906.002		Phenol	mg/kg	0.5	0.8	1	70 - 130	81
		2,4-dichlorophenol	mg/kg	0.5	1.0	1	70 - 130	96
		2,4,6-trichlorophenol	mg/kg	0.5	1.1	1	70 - 130	112
		Pentachlorophenol	mg/kg	0.5	0.7	1	70 - 130	73
	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.8	5	40 - 130	75
		d5-phenol (Surrogate)	mg/kg	-	1.5	2	40 - 130	75

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204911.002	Arsenic, As	mg/kg	1	330	318.22	80 - 120	105
	Boron, B	mg/kg	5	38	37.13	80 - 120	102
	Beryllium, Be	mg/kg	0.5	4.7	4.17	80 - 120	112
	Cadmium, Cd	mg/kg	0.3	5.2	5.41	80 - 120	96
	Cobalt, Co	mg/kg	0.5	23	20.71	80 - 120	112
	Chromium, Cr	mg/kg	0.5	40	38.31	80 - 120	105
	Copper, Cu	mg/kg	0.5	300	290	80 - 120	105
	Manganese, Mn	mg/kg	1	720	660	80 - 120	109
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	102
	Lead, Pb	mg/kg	1	92	89.9	80 - 120	102
	Zinc, Zn	mg/kg	2	280	273	80 - 120	101
LB204912.002	Arsenic, As	mg/kg	1	330	318.22	80 - 120	102
	Boron, B	mg/kg	5	43	37.13	80 - 120	117
	Beryllium, Be	mg/kg	0.5	4.6	4.17	80 - 120	111
	Cadmium, Cd	mg/kg	0.3	5.5	5.41	80 - 120	101
	Cobalt, Co	mg/kg	0.5	20	20.71	80 - 120	96
	Chromium, Cr	mg/kg	0.5	37	38.31	80 - 120	97
	Copper, Cu	mg/kg	0.5	290	290	80 - 120	99
	Manganese, Mn	mg/kg	1	670	660	80 - 120	102
	Nickel, Ni	mg/kg	0.5	180	187	80 - 120	98
	Lead, Pb	mg/kg	1	91	89.9	80 - 120	102
	Zinc, Zn	mg/kg	2	260	273	80 - 120	97

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204923.002	Arsenic, As	µg/L	1	17	20	80 - 120	87
	Cadmium, Cd	µg/L	0.1	19	20	80 - 120	97
	Chromium, Cr	µg/L	1	20	20	80 - 120	99
	Copper, Cu	µg/L	1	20	20	80 - 120	101
	Lead, Pb	µg/L	1	19	20	80 - 120	97
	Nickel, Ni	µg/L	1	20	20	80 - 120	98
	Zinc, Zn	µg/L	5	21	20	80 - 120	106

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204905.002		TRH C10-C14	mg/kg	20	31	40	60 - 140	78
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	75
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	75
	TRH F Bands	TRH >C10-C16	mg/kg	25	31	40	60 - 140	78
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	75
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	70
LB204906.002		TRH C10-C14	mg/kg	20	33	40	60 - 140	83
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	70
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	83
	TRH F Bands	TRH >C10-C16	mg/kg	25	32	40	60 - 140	80
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	75
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	80

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204953.002		TRH C10-C14	µg/L	50	1000	1200	60 - 140	87
		TRH C15-C28	µg/L	200	1300	1200	60 - 140	107
		TRH C29-C36	µg/L	200	1300	1200	60 - 140	109
	TRH F Bands	TRH >C10-C16	µg/L	60	1200	1200	60 - 140	99
		TRH >C16-C34 (F3)	µg/L	500	1300	1200	60 - 140	111
		TRH >C34-C40 (F4)	µg/L	500	670	600	60 - 140	111

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204903.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	5.1	5	60 - 140	102
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	5.7	5	60 - 140	113
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	5.3	5	60 - 140	106
	Halogenated	Chlorobenzene	mg/kg	0.1	6.1	5	60 - 140	122
	Monocyclic	Benzene	mg/kg	0.1	4.7	5	60 - 140	93
	Aromatic	Toluene	mg/kg	0.1	4.5	5	60 - 140	89
		Ethylbenzene	mg/kg	0.1	4.4	5	60 - 140	88
		m/p-xylene	mg/kg	0.2	9.1	10	60 - 140	91
		o-xylene	mg/kg	0.1	4.5	5	60 - 140	89
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.8	10	70 - 130	78
		d8-toluene (Surrogate)	mg/kg	-	7.8	10	70 - 130	78
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.2	10	70 - 130	82
	Trihalomethan	Chloroform	mg/kg	0.1	5.1	5	60 - 140	103
LB204904.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	3.7	5	60 - 140	74
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	3.7	5	60 - 140	74
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	3.4	5	60 - 140	67
	Halogenated	Chlorobenzene	mg/kg	0.1	4.6	5	60 - 140	93
	Monocyclic	Benzene	mg/kg	0.1	3.3	5	60 - 140	67
	Aromatic	Toluene	mg/kg	0.1	3.5	5	60 - 140	70
		Ethylbenzene	mg/kg	0.1	4.1	5	60 - 140	83
		m/p-xylene	mg/kg	0.2	8.3	10	60 - 140	83
		o-xylene	mg/kg	0.1	4.2	5	60 - 140	84
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.0	10	70 - 130	90
		d8-toluene (Surrogate)	mg/kg	-	8.2	10	70 - 130	82
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.4	10	70 - 130	84
	Trihalomethan	Chloroform	mg/kg	0.1	3.7	5	60 - 140	74

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205064.002	Monocyclic	Benzene	µg/L	0.5	47	45.45	60 - 140	103
	Aromatic	Toluene	µg/L	0.5	49	45.45	60 - 140	108
		Ethylbenzene	µg/L	0.5	46	45.45	60 - 140	102
		m/p-xylene	µg/L	1	92	90.9	60 - 140	102
		o-xylene	µg/L	0.5	47	45.45	60 - 140	102

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204903.002		TRH C6-C10	mg/kg	25	68	92.5	60 - 140	74
		TRH C6-C9	mg/kg	20	62	80	60 - 140	78
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.8	10	70 - 130	78
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.2	10	70 - 130	82
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	41	62.5	60 - 140	66
LB204904.002		TRH C6-C10	mg/kg	25	65	92.5	60 - 140	70
		TRH C6-C9	mg/kg	20	56	80	60 - 140	70
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.0	10	70 - 130	90
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.4	10	70 - 130	84
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	42	62.5	60 - 140	67

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205064.002		TRH C6-C10	µg/L	50	780	946.63	60 - 140	83
		TRH C6-C9	µg/L	40	680	818.71	60 - 140	83
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	µg/L	50	500	639.67	60 - 140	79

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208848.004	LB204955.004	Mercury	mg/L	0.0001	0.0069	<0.0001	0.008	86

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208848.001	LB204914.004	Mercury	mg/kg	0.05	0.22	<0.05	0.2	105
SE208848.021	LB204915.004	Mercury	mg/kg	0.05	0.23	<0.05	0.2	107

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208848.006	LB204905.036		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	-	-
			Alpha BHC	mg/kg	0.1	<0.1	-	-
			Lindane	mg/kg	0.1	<0.1	-	-
			Heptachlor	mg/kg	0.1	<0.1	0.2	81
			Aldrin	mg/kg	0.1	<0.1	0.2	109
			Beta BHC	mg/kg	0.1	<0.1	-	-
			Delta BHC	mg/kg	0.1	<0.1	0.2	103
			Heptachlor epoxide	mg/kg	0.1	<0.1	-	-
			o,p'-DDE	mg/kg	0.1	<0.1	-	-
			Alpha Endosulfan	mg/kg	0.2	<0.2	-	-
			Gamma Chlordane	mg/kg	0.1	<0.1	-	-
			Alpha Chlordane	mg/kg	0.1	<0.1	-	-
			trans-Nonachlor	mg/kg	0.1	<0.1	-	-
			p,p'-DDE	mg/kg	0.1	<0.1	-	-
			Dieldrin	mg/kg	0.2	<0.2	0.2	109
			Endrin	mg/kg	0.2	<0.2	0.2	80
			o,p'-DDD	mg/kg	0.1	<0.1	-	-
			o,p'-DDT	mg/kg	0.1	<0.1	-	-
			Beta Endosulfan	mg/kg	0.2	<0.2	-	-
			p,p'-DDD	mg/kg	0.1	<0.1	-	-
			p,p'-DDT	mg/kg	0.1	<0.1	0.2	75
			Endosulfan sulphate	mg/kg	0.1	<0.1	-	-
			Endrin Aldehyde	mg/kg	0.1	<0.1	-	-
			Methoxychlor	mg/kg	0.1	<0.1	-	-
			Endrin Ketone	mg/kg	0.1	<0.1	-	-
			Isodrin	mg/kg	0.1	<0.1	-	-
			Mirex	mg/kg	0.1	<0.1	-	-
			Total CLP OC Pesticides	mg/kg	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.19	-	94

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208848.001	LB204905.004		Dichlorvos	mg/kg	0.5	1.2	<0.5	2	62
			Dimethoate	mg/kg	0.5	<0.5	<0.5	-	-
			Diazinon (Dimpylate)	mg/kg	0.5	1.7	<0.5	2	86
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	-	-
			Malathion	mg/kg	0.2	<0.2	<0.2	-	-
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.7	<0.2	2	83
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	-	-
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	-	-
			Methidathion	mg/kg	0.5	<0.5	<0.5	-	-
			Ethion	mg/kg	0.2	2.0	<0.2	2	102
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	-	-
			Total OP Pesticides*	mg/kg	1.7	6.7	<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	87
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	84

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number	Parameter	Units	LOR

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208848.001	LB204905.004		Naphthalene	mg/kg	0.1	4.3	<0.1	4	107
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
			Acenaphthylene	mg/kg	0.1	4.6	<0.1	4	115
			Acenaphthene	mg/kg	0.1	4.3	<0.1	4	109
			Fluorene	mg/kg	0.1	<0.1	<0.1	-	-
			Phenanthrene	mg/kg	0.1	4.2	<0.1	4	104
			Anthracene	mg/kg	0.1	4.1	<0.1	4	102
			Fluoranthene	mg/kg	0.1	4.1	<0.1	4	102
			Pyrene	mg/kg	0.1	4.5	<0.1	4	112
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Chrysene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(a)pyrene	mg/kg	0.1	5.1	<0.1	4	128
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	5.1	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	5.3	<0.3	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	5.2	<0.2	-	-
			Total PAH (18)	mg/kg	0.8	35	<0.8	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.4	-	90
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	87
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	84
SE208848.026	LB204906.028		Naphthalene	mg/kg	0.1		<0.1	4	107
			2-methylnaphthalene	mg/kg	0.1		<0.1	-	-
			1-methylnaphthalene	mg/kg	0.1		<0.1	-	-
			Acenaphthylene	mg/kg	0.1		0.1	4	118
			Acenaphthene	mg/kg	0.1		<0.1	4	112
			Fluorene	mg/kg	0.1		<0.1	-	-
			Phenanthrene	mg/kg	0.1		0.4	4	115
			Anthracene	mg/kg	0.1		0.1	4	108
			Fluoranthene	mg/kg	0.1		1.1	4	125
			Pyrene	mg/kg	0.1		1.3	4	129
			Benzo(a)anthracene	mg/kg	0.1		0.5	-	-
			Chrysene	mg/kg	0.1		0.5	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1		0.7	-	-
			Benzo(k)fluoranthene	mg/kg	0.1		0.3	-	-
			Benzo(a)pyrene	mg/kg	0.1		0.8	4	124
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1		0.5	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1		<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1		0.6	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2		1.0	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3		1.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2		1.0	-	-
			Total PAH (18)	mg/kg	0.8		7.0	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-		0.5	-	91
			2-fluorobiphenyl (Surrogate)	mg/kg	-		0.4	-	87
			d14-p-terphenyl (Surrogate)	mg/kg	-		0.5	-	87

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number	Parameter	Units	LOR	Original	Spike	Recovery%
SE208848.006	LB204905.034	Arochlor 1016	mg/kg	0.2	<0.2	-	-
		Arochlor 1221	mg/kg	0.2	<0.2	-	-
		Arochlor 1232	mg/kg	0.2	<0.2	-	-
		Arochlor 1242	mg/kg	0.2	<0.2	-	-
		Arochlor 1248	mg/kg	0.2	<0.2	-	-
		Arochlor 1254	mg/kg	0.2	<0.2	-	-
		Arochlor 1260	mg/kg	0.2	<0.2	0.4	86
		Arochlor 1262	mg/kg	0.2	<0.2	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PCBs in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208848.006	LB204905.034		Arochlor 1268	mg/kg	0.2	<0.2	-	-
			Total PCBs (Arochlors)	mg/kg	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	-	89
SE208848.026	LB204906.028		Arochlor 1016	mg/kg	0.2	<0.2	-	-
			Arochlor 1221	mg/kg	0.2	<0.2	-	-
			Arochlor 1232	mg/kg	0.2	<0.2	-	-
			Arochlor 1242	mg/kg	0.2	<0.2	-	-
			Arochlor 1248	mg/kg	0.2	<0.2	-	-
			Arochlor 1254	mg/kg	0.2	<0.2	-	-
			Arochlor 1260	mg/kg	0.2	<0.2	0.4	112
			Arochlor 1262	mg/kg	0.2	<0.2	-	-
			Arochlor 1268	mg/kg	0.2	<0.2	-	-
			Total PCBs (Arochlors)	mg/kg	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	-	107

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208848.003	LB204905.034		Phenol	mg/kg	0.5	<0.5	1	81
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	-	-
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	-	-
			Total Cresol	mg/kg	1.5	<1.5	-	-
			2-chlorophenol	mg/kg	0.5	<0.5	-	-
			2,4-dimethylphenol	mg/kg	0.5	<0.5	-	-
			2,6-dichlorophenol	mg/kg	0.5	<0.5	-	-
			2,4-dichlorophenol	mg/kg	0.5	<0.5	1	76
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	1	99
			2-nitrophenol	mg/kg	0.5	<0.5	-	-
			4-nitrophenol	mg/kg	1	<1	-	-
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	-	-
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	-	-
			Pentachlorophenol	mg/kg	0.5	<0.5	1	71
			2,4-dinitrophenol	mg/kg	2	<2	-	-
			4-chloro-3-methylphenol	mg/kg	2	<2	-	-
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.1	-	83
			d5-phenol (Surrogate)	mg/kg	-	1.8	-	85

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208848.001	LB204911.004	Arsenic, As	mg/kg	1	52	<1	50	103
		Cadmium, Cd	mg/kg	0.3	45	<0.3	50	90
		Chromium, Cr	mg/kg	0.5	54	4.4	50	100
		Copper, Cu	mg/kg	0.5	60	5.5	50	108
		Nickel, Ni	mg/kg	0.5	61	6.1	50	109
		Lead, Pb	mg/kg	1	55	9	50	91
		Zinc, Zn	mg/kg	2	61	14	50	95
SE208848.021	LB204912.004	Arsenic, As	mg/kg	1	49	<1	50	97
		Boron, B	mg/kg	5	46	<5	50	91
		Beryllium, Be	mg/kg	0.5	47	<0.5	50	93
		Cadmium, Cd	mg/kg	0.3	44	<0.3	50	87
		Cobalt, Co	mg/kg	0.5	48	<0.5	50	95
		Chromium, Cr	mg/kg	0.5	48	<0.5	50	96
		Copper, Cu	mg/kg	0.5	48	<0.5	50	96
		Manganese, Mn	mg/kg	1	48	<1	50	94
		Nickel, Ni	mg/kg	0.5	48	<0.5	50	97
		Lead, Pb	mg/kg	1	50	<1	50	98
		Zinc, Zn	mg/kg	2	50	<2.0	50	96

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208848.004	LB204923.004	Arsenic, As	µg/L	1	20	<1	20	99
		Cadmium, Cd	µg/L	0.1	21	<0.1	20	107
		Chromium, Cr	µg/L	1	22	<1	20	109

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

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Trace Metals (Dissolved) in Water by ICPMS (continued)

Method: ME-(AU)-[ENV]AN318

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208848.004	LB204923.004	Copper, Cu	µg/L	1	22	<1	20	112
		Lead, Pb	µg/L	1	21	<1	20	105
		Nickel, Ni	µg/L	1	21	<1	20	107
		Zinc, Zn	µg/L	5	25	<5	20	119

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208848.001	LB204905.004		TRH C10-C14	mg/kg	20	35	<20	40	88
			TRH C15-C28	mg/kg	45	<45	<45	40	93
			TRH C29-C36	mg/kg	45	<45	<45	40	100
			TRH C37-C40	mg/kg	100	<100	<100	-	-
			TRH C10-C36 Total	mg/kg	110	<110	<110	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25	35	<25	40	88
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	35	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	40	108
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	-	-
SE208848.026	LB204906.028		TRH C10-C14	mg/kg	20		<20	40	90
			TRH C15-C28	mg/kg	45		<45	40	80
			TRH C29-C36	mg/kg	45		<45	40	83
			TRH C37-C40	mg/kg	100		<100	-	-
			TRH C10-C36 Total	mg/kg	110		<110	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210		<210	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25		<25	40	85
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25		<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90		<90	40	88
			TRH >C34-C40 (F4)	mg/kg	120		<120	-	-

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208848.001	LB204903.004	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	-	-
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	-	-
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	-	-
			Bromomethane	mg/kg	1	<1	<1	-	-
			Chloroethane	mg/kg	1	<1	<1	-	-
			Trichlorofluoromethane	mg/kg	1	<1	<1	-	-
			Iodomethane	mg/kg	5	<5	<5	-	-
			1,1-dichloroethene	mg/kg	0.1	4.7	<0.1	5	95
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	-	-
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloroethane	mg/kg	0.1	5.4	<0.1	5	107
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	-	-
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	5.0	<0.1	5	101
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	-	-
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	-	-

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VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208848.001	LB204903.004	Halogenated Aliphatics	trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	6.3	<0.1	5	126
			Bromobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Monocyclic Aromatic	Benzene	mg/kg	0.1	4.9	<0.1	5	97
			Toluene	mg/kg	0.1	4.8	<0.1	5	96
			Ethylbenzene	mg/kg	0.1	4.4	<0.1	5	88
			m/p-xylene	mg/kg	0.2	9.1	<0.2	10	91
			o-xylene	mg/kg	0.1	4.5	<0.1	5	89
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	-	-
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	-	-
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	-	-
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	-	-
			2-nitropropane	mg/kg	10	<10	<10	-	-
		Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10	<10	-	-
			MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	-	-
			Vinyl acetate	mg/kg	10	<10	<10	-	-
			MEK (2-butanone)	mg/kg	10	<10	<10	-	-
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	-	-
			2-hexanone (MBK)	mg/kg	5	<5	<5	-	-
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.2	8.2	10	82
			d8-toluene (Surrogate)	mg/kg	-	7.3	7.0	10	73
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.2	8.2	10	82
		Totals	Total Xylenes	mg/kg	0.3	14	<0.3	-	-
			Total BTEX	mg/kg	0.6	28	<0.6	-	-
			Total VOC*	mg/kg	24	55	<24	-	-
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	-	-
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	27	<1.8	-	-
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	27	<1.8	-	-
		Trihalomethanes	Chloroform	mg/kg	0.1	5.0	<0.1	5	101
			Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Bromoform	mg/kg	0.1	<0.1	<0.1	-	-
SE208848.025	LB204904.004	Monocyclic Aromatic	Benzene	mg/kg	0.1	3.1	<0.1	5	62
			Toluene	mg/kg	0.1	3.6	<0.1	5	71
			Ethylbenzene	mg/kg	0.1	3.6	<0.1	5	72
			m/p-xylene	mg/kg	0.2	7.3	<0.2	10	73
			o-xylene	mg/kg	0.1	3.8	<0.1	5	75
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.3	7.5	10	83
			d8-toluene (Surrogate)	mg/kg	-	7.7	7.3	10	77
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.1	6.6	10	81
		Totals	Total Xylenes	mg/kg	0.3	11	<0.3	-	-
			Total BTEX	mg/kg	0.6	21	<0.6	-	-

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VOCs in Water

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208915.001	LB205064.030	Monocyclic	Benzene	µg/L	0.5	48	<0.5	45.45	106
		Aromatic	Toluene	µg/L	0.5	50	<0.5	45.45	109
			Ethylbenzene	µg/L	0.5	48	<0.5	45.45	107
			m/p-xylene	µg/L	1	99	<1	90.9	109
			o-xylene	µg/L	0.5	44	<0.5	45.45	97
		Polycyclic	Naphthalene	µg/L	0.5	<0.5	<0.5	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/L	-	10.6	10	-	106
			d8-toluene (Surrogate)	mg/L	-	9.6	9.5	-	96
			Bromofluorobenzene (Surrogate)	mg/L	-	11.5	11	-	115

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208848.001	LB204903.004		TRH C6-C10	mg/kg	25	65	<25	92.5	70
			TRH C6-C9	mg/kg	20	59	<20	80	74
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.2	8.2	10	82
			d8-toluene (Surrogate)	mg/kg	-	7.3	7.0	10	73
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.2	8.2	-	82
		VPH F	Benzene (F0)	mg/kg	0.1	4.9	<0.1	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	38	<25	62.5	60
SE208848.025	LB204904.004		TRH C6-C10	mg/kg	25	64	<25	92.5	69
			TRH C6-C9	mg/kg	20	58	<20	80	72
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.3	7.5	10	83
			d8-toluene (Surrogate)	mg/kg	-	7.7	7.3	10	77
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.1	6.6	-	81
		VPH F	Benzene (F0)	mg/kg	0.1	3.1	<0.1	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	43	<25	62.5	68

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208915.001	LB205064.030		TRH C6-C10	µg/L	50	770	<50	946.63	82
			TRH C6-C9	µg/L	40	660	<40	818.71	80
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/L	-	11	10	-	106
			d8-toluene (Surrogate)	mg/L	-	9.6	9.5	-	96
			Bromofluorobenzene (Surrogate)	mg/L	-	12	11	-	115
		VPH F	Benzene (F0)	µg/L	0.5	48	<0.5	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	µg/L	50	480	<50	639.67	75

MATRIX SPIKE DUPLICATES

SE208848 R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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Email results to Lqrsyd@slrconsulting.com

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CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one): ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000 ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227 ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305 ☐ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066 ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600 ☐ MACKAY: 21 River Street, Mackay, QLD 4740 ☐ PERTH: 303 Murray Street, Perth, WA 6000 ☐ TOWNSVILLE: 514 Stuart Street, Townsville, QLD 4810 ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ ☐ DARWIN: 21 Parap Rd, Darwin, NT 0820 ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122 ☐ ROCKHAMPTON: rockhampton@slrconsulting.com ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT: DHA

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30091.00000

PROJECT MANAGER: [redacted]

PM CONTACT No:

COMMENTS OR ADDITIONAL DIRECTIONS

LABORATORY: SGS

LABORATORY ADDRESS: ALEXANDRIA

SAMPLER: [redacted]

SAMPLER CONTACT No: [redacted]

Email Reports and Invoices to: [redacted]

Turnaround Time (TAT)

☐ Standard TAT

☐ Non Standard or Urgent TAT

Required TAT:

COC Number: 1 of 8

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A6	PFAS (HOLD)	HOLD	Additional Information (Comment on any gross contamination or specific requirements)
1	RWBB_TP078_0.1_200615	15/6/20	Soil		X	NA		
2	RWBB_TP078_0.7_200615		Soil		X			
	RWBB-TP078_1.2_200615		Soil				X	
	RWBB_TP078_0.1-0.3_200615		Ash		X			
	RWBB_TP078_0.6-0.7_200615		Ash				X	
3	RWBB_TP079_0.1_200615				X			
	RWBB_TP079_0.3_200615						X	
4	RWBB_TP079_1.0_200615				X			
	RWBB_TP079_0.1-0.2_200615						X	
	RWBB-TP079_0.3-0.4_200615				X			
5	RWBB_TP80_0.1_200615				X			
6	RWBB_TP80_0.8_200615				X			

SGS EHS Sydney COC

SE207687

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time 16/6/20	Received by	Sign [redacted]	Date / Time 17/6 16:00	Temperature Received: 11°
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

source: [Untitled].pdf page: 1 SGS Ref: SE207687_COC

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CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

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- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Devin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☐ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7010 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT:	LABORATORY: SGS	Turnaround Time (TAT)	COC Number 2 of 8
PROJECT:	LABORATORY ADDRESS:		
PROJECT NUMBER: 610.30691	SAMPLER: [redacted]	☐ Standard TAT	
PROJECT MANAGER:	SAMPLER CONTACT No: [redacted]	☐ Non Standard or Urgent TAT	
PM CONTACT No:	Email Reports and Invoices to: [redacted]	Required TAT:	

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	A	PFAS LHold	PFOH							Additional Information (Comment on any gross contamination or specific requirements)
	RWBB_TP80_1.0_200615	15/6/20	Soil			NA	X							
	RWBB_TP80_0.2-0.3_200615	↓	↓		X	↓								
	RWBB_TP80_1.0-1.1_200615						X							
7	RWBB_QC101_200615				X									
	RWBB_QC102_200615				X									
8	RWBB_TP88_0.1_200615				X									
9	RWBB_TP88_0.5_200615				X									
	RWBB_TP88_1.0_200615						X							
	RWBB_TP88_0.1-0.3_200615				X		X							
	RWBB_TP88_0.5-1.0_200615				X		X	[redacted] 16/6/20						
10	RWBB_TP89_0.1_200615				X									
11	RWBB_TP89_0.3_200615	↓	↓		X	↓								

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time 16/6/20	Received by	Sign [redacted]	Date / Time 17/6 11:00	Temperature Received: 11°C
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

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CHAIN OF CUSTODY DOCUMENTATION

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ABN 29 001 584 612

PROJECT OFFICE (Tick one)

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- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: [illegible]
- ☐ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Flinders Street, Townsville, QLD 4810
- ☐ AUCKLAND: 60 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 16 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT:

PROJECT:

PROJECT NUMBER: 610.30441

PROJECT MANAGER:

PM CONTACT No:

LABORATORY: SGS

LABORATORY ADDRESS: ~~Perth~~ Alexandria

SAMPLER: [redacted]

SAMPLER CONTACT No: [redacted]

Email Reports and Invoices to: [redacted]

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT:

COC Number 3 of 8

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	PFAS (HOLD)	HOLD						Additional Information (Comment on any gross contamination or specific requirements)
	RWBB_TP89_1.1_200615	15/6/20	Soil			NA	X						
	RWBB_TP89_0.1-0.3_200615	↓	↓		X	↓							
	RWBB_TP89_1.0-1.1_200615				X								
12	RWBB_TP90_0.1_200615				X								
13	RWBB_TP90_0.5_200615				X								
	RWBB_TP90_0.1-0.5_200615				X								
14	RWBB_TP108_0.1_200616	16/6/20			X	HOLD							
15	RWBB_TP108_0.6_200616				X								
	RWBB_TP108_[illegible]_200616						X						
	RWBB_TP108_0.1-0.2_200616				X								
	RWBB_TP109_1.6-1.7_200616				X								
16	RWBB_TP109_0.1_200616				X								

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time 16/6/20	Received by	Sign [redacted]	Date / Time 17/6 16:00	Temperature Received: 11°C
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

CHAIN OF CUSTODY DOCUMENTATION

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ABN 29 001 584 612

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- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 618 Murray Street, Perth, WA 6009
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- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2500

CLIENT:	LABORATORY: SGS
PROJECT:	LABORATORY ADDRESS:
PROJECT NUMBER: 610.30641	SAMPLER: [redacted]
PROJECT MANAGER:	SAMPLER CONTACT No: [redacted]
PM CONTACT No:	Email Reports and Invoices to: [redacted]
COMMENTS OR ADDITIONAL DIRECTIONS	

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT:

COC Number: 4 of 8

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	PFAS HOLD	HOLD	Additional Information (Comment on any gross contamination or specific requirements)
17	RWBB_GC102_200616	16/6/20	Soil		X	HOLD		
18	RWBB_GC202_200616				X			
19	RWBB_TP109_0.8_200616				X			
	RWBB_TP109_1.5_200616						X	
	RWBB_TP109_0.1-0.2_200616				X			
	RWBB_TP109_0.8-0.9_200616				X			
	RWBB_TP109_1.5-1.6_200616						X	
20	RWBB_TP110_0.1_200616				X			
	RWBB_TP110_0.6_200616						X	
21	RWBB_TP110_1.0_200616				X			
	RWBB_TP110_0.1-0.2_200616				X			
	RWBB_TP110_~~Dup~~ 0.6-0.7_200616						X	

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time 16/6/20	Received by	Sign [redacted]	Date / Time 17/6 1600	Temperature Received: 11°C
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

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ABN 29 001 584 612

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- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☐ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Stuart Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2529

CLIENT:	LABORATORY: SGS	Turnaround Time (TAT)	COC Number 5 of 8
PROJECT:	LABORATORY ADDRESS:	☐ Standard TAT	
PROJECT NUMBER: 610.30691	SAMPLER: [redacted]	☐ Non Standard or Urgent TAT	
PROJECT MANAGER:	SAMPLER CONTACT No:	Required TAT:	
PM CONTACT No:	Email Reports and Invoices to:		

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	A	PFAS (HOLD)	HOLD						Additional Information (Comment on any gross contamination or specific requirements)
	RWEB_TP110_1.0-1.1_200616	16/6/20	Soil		X	HOLD							
22	RWEB_TP98_0.1_200616				X								
23	RWEB_TP98_0.4_200616				X								
	RWEB_TP98_1.1_200616						X						
	RWEB_TP98_0.1-0.2_200616				X								
	RWEB_TP98_0.8-0.9_200616				X								
	RWEB_TP98_1.1-1.3_200616						X						
24	RWEB_TP99_0.1_200616				X								
25	RWEB_TP99_0.6_200616				X								
	RWEB_TP99_1.1_200616						X						
	RWEB_TP99_0.1-0.2_200616				X								
	RWEB_TP99_0.6-0.7_200616				X								

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time 16/6/20	Received by	Sign [redacted]	Date / Time 17/6 16:20	Temperature Received: 11°C
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

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CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

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- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☐ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT:

PROJECT:

PROJECT NUMBER: 610.30041

PROJECT MANAGER:

PM CONTACT No:

LABORATORY: SGS

LABORATORY ADDRESS:

SAMPLER: [redacted]

SAMPLER CONTACT No:

Email Reports and Invoices to:

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT:

COC Number 6 of 8

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	A	PFAS (HOLD)	HOLD							Additional Information (Comment on any gross contamination or specific requirements)
	RWBB_TP99_1.1-1.2_200616	16/6/20	Soil			HOLD	X							
26	RWBB_TP100_0.1_200616				X									
27	RWBB_TP100_0.4_200616				X									
	RWBB_TP100_@1.0_200616						X							
	RWBB_TP100_01-0.2_200616				X									
	RWBB_TP100_0.4-0.5_200616				X									
	RWBB_TP100_1.0-1.1_200616						X							
28	RWBB_TP131_0.1_200616				X									
	RWBB_TP131_0.7_200616						X							
29	RWBB_TP131_1.2_200616				X									
	RWBB_TP131_0.1-0.2_200616				X									
	RWBB_TP131_0.7-0.8_200616						X							

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	Received by	Sign [redacted]	Date / Time 17/6 16:00	Temperature Received: NE
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

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CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 7, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 430, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0820
- ☐ GOLD COAST: 144 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 3, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☐ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UNW Innovation Campus, North Wollongong, 2520

CLIENT:

PROJECT:

PROJECT NUMBER: 610.30091

PROJECT MANAGER:

PM CONTACT No:

COMMENTS OR ADDITIONAL DIRECTIONS

LABORATORY: SGS

LABORATORY ADDRESS:

SAMPLER: [redacted]

SAMPLER CONTACT No:

Email Reports and Invoices to:

Turnaround Time (TAT)

COC Number 7 of 8

☐ Standard TAT

☐ Non Standard or Urgent TAT

Required TAT:

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	A	PFAS	HOLD	Additional Information (Comment on any gross contamination or specific requirements)
	~~RWEB_TP131~~	16/6/20	Soil			HOLD	~~X~~	
	RWEB_TP131_1.2-1.3_200616				X			
	RWEB_TP128_0.1_200616				X			
	RWEB_TP128_0.3_200616						X	
30	RWEB_TP128_0.5_200616				X			
31	RWEB_TP128_0.1-0.2_200616				X			
	RWEB_TP128_0.3-0.4_200616						X	
	RWEB_TP128_0.5-0.6_200616				X			
34	RWEB_TP129_0.1_200616				X			
32	RWEB_TP129_0.4_200616				X			
	RWEB_TP129_0.6_200616						X	
	RWEB_TP129_1.4_200616						X	

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time 16/6/20	Received by	Sign [redacted]	Date / Time 17/6 16:00	Temperature Received: 11°C
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

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CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 430, Canberra, ACT 2600
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- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 23 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☐ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 88 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, Univ Innovation Campus, North Wollongong, 2520

CLIENT:	LABORATORY: SGS
PROJECT:	LABORATORY ADDRESS:
PROJECT NUMBER: 610.30091	SAMPLER: [redacted]
PROJECT MANAGER:	SAMPLER CONTACT No: [redacted]
PM CONTACT No:	Email Reports and Invoices to:

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT:

COC Number: 8 of 8

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	A	PFAS (Hold)	Hold						Additional Information (Comment on any gross contamination or specific requirements)
	RW66_TP129_0.1-0.2_200616				X	Hold							
	RW60-TP129_0.6-0.7_200616				X								
33	RW80-TP130_0.1-_200616				X								
34	RW80_TP130_0.7_200616				X								
	RW88_TP130_1.0_200616						X						
	RW80_TP130_0.1-0.2_200616				X								
	RW80_TP130_0.7-0.8_200616				X								
	RW88_TP130_1.0-1.1_200616						X						
35	RW80_QC106_200616				X								
36	RW80_QC206_200616				X								

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time 16/6/20	Received by	Sign [redacted]	Date / Time 17/6 16:00	Temperature Received: 11°C
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

[redacted] (Sydney)

From: [redacted] (Sydney)
Sent: Wednesday, 17 June 2020 7:43 PM
To: [redacted]
Cc: [redacted]
(Sydney)
Subject: RE: [EXTERNAL] 610.30041 Certain asbestos bags to be put on hold
Attachments: MR_200616-200615_COCs.pdf

Importance: High

Hi [redacted]
Thanks for your email on this. We will put these on HOLD. Let us know when you finalise the COC for testing.

Kind regards,
[redacted]
Environment, Health & Safety
Business Development Manager
NSW ACT SA VIC

SGS Australia Pty Ltd
Phone: [redacted]
Mobile:
E-mail:
View Your Results Online: SGS Engage



Carbon Neutrality

Since 2014, we are a carbon neutral company.

Find more details on carbon neutrality and renewable energy projects we support.

From: [redacted]
Sent: Wednesday, 17 June 2020 7:36 PM
To: [redacted]
Cc: [redacted]
Subject: [EXTERNAL] 610.30041 Certain asbestos bags to be put on hold

*** WARNING: this message is from an EXTERNAL SENDER. Please be cautious, particularly with links and attachments. ***

Hi [redacted]

I hope you have been well!

Could you please put the following asbestos sample bags from the COC submitted by [redacted] to SGS yesterday on HOLD? I have attached a copy of the COC to this email for reference.

- RWBB_TP078_0.1-0.3_200615
- RWBB_TP078_0.6-0.7_200615
- RWBB_TP079_0.1-0.2_200615
- RWBB_TP079_0.3-0.4_200615
- RWBB_TP080_0.2-0.3_200615
- RWBB_TP080_1.0-1.1_200615
- RWBB_TP088_0.1-0.3_200615
- RWBB_TP088_0.5-1.0_200615
- RWBB_TP089_0.1-0.3_200615
- RWBB_TP089_1.0-1.1_200615
- RWBB_TP090_0.1-0.5_200615
- RWBB_TP108_0.1-0.2_200616
- RWBB_TP108_1.6-1.7_200616
- RWBB_TP109_0.1-0.2_200616
- RWBB_TP109_0.8-0.9_200616
- RWBB_TP109_1.5-1.6_200616
- RWBB_TP110_0.1-0.2_200616
- RWBB_TP110_0.6-0.7_200616
- RWBB_TP110_1.0-1.1_200616
- RWBB_TP098_0.1-0.2_200616
- RWBB_TP098_0.8-0.9_200616
- RWBB_TP098_1.1-1.3_200616
- RWBB_TP099_0.1-0.2_200616
- RWBB_TP099_0.6-0.7_200616
- RWBB_TP099_1.1-1.2_200616
- RWBB_TP100_0.1-0.2_200616
- RWBB_TP100_0.4-0.5_200616
- RWBB_TP100_1.0-1.1_200616
- RWBB_TP131_0.1-0.2_200616
- RWBB_TP131_0.7-0.8_200616
- RWBB_TP131_1.2-1.3_200616
- RWBB_TP128_0.1-0.2_200616
- RWBB_TP128_0.3-0.4_200616
- RWBB_TP128_0.5-0.6_200616
- RWBB_TP129_0.1-0.2_200616
- RWBB_TP129_0.6-0.7_200616
- RWBB_TP130_0.1-0.2_200616
- RWBB_TP130_0.7-0.8_200616
- RWBB_TP130_1.0-1.1_200616

Sorry about the trouble. Thank you for your assistance.

SLR

[redacted]

Senior Project Consultant - Land Quality & Remediation

Please note in response to the COVID-19 Pandemic and physical distancing recommendations from the Australian Government,
SLR is encouraging staff to work remotely and implement flexible working hours if necessary.
If you have received this email outside of regular office hours, it is not expected that you will respond until your own working hours commence.

d +61 9424 2220
o +61 2 9427 8100

SAMPLE RECEIPT ADVICE

SE207687

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barrack**
Order Number	(Not specified)
Samples	36

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Wed 17/6/2020
Report Due	Wed 24/6/2020
SGS Reference	**SE207687**

SUBMISSION DETAILS

This is to confirm that 36 samples were received on Wednesday 17/6/2020. Results are expected to be ready by COB Wednesday 24/6/2020. Please quote SGS reference SE207687 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	36 Soil
Date documentation received	17/6/2020	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	11°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

16 soil and 39 Asbestos bags have been placed on hold as no tests have been assigned for them by the client. These samples will not be processed.
QC102_200615, TP100_0.1-0.2 and TP128_0.1 not received.

This document is issued by the Company under its General Conditions of Service accessible at www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

SAMPLE RECEIPT ADVICE

SE207687

CLIENT DETAILS

Client SLR CONSULTING AUSTRALIA PTY LTD

Project 610.30041 Randwick Barrack

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	Speciated Phenols in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
001	RWBB_TP078_0.1_200615	29	14	26	11	18	10	81	7
002	RWBB_TP078_0.7_200615	29	14	26	11	18	10	81	7
003	RWBB_TP079_0.1_200615	29	14	26	11	18	10	81	7
004	RWBB_TP079_1_200615	29	14	26	11	18	10	81	7
005	RWBB_TP80_0.1_200615	29	14	26	11	18	10	81	7
006	RWBB_TP80_0.8_200615	29	14	26	11	18	10	81	7
007	RWBB_QC101_200615	29	14	26	11	18	10	81	7
008	RWBB_TP88_0.1_200615	29	14	26	11	18	10	81	7
009	RWBB_TP88_0.5_200615	29	14	26	11	18	10	81	7
010	RWBB_TP89_0.1_200615	29	14	26	11	18	10	81	7
011	RWBB_TP89_0.3_200615	29	14	26	11	18	10	81	7
012	RWBB_TP90_0.1_200615	29	14	26	11	18	10	81	7
013	RWBB_TP90_0.5_200615	29	14	26	11	18	10	81	7
014	RWBB_TP108_0.1_200616	29	14	26	11	18	10	81	7
015	RWBB_TP108_0.6_200616	29	14	26	11	18	10	81	7
016	RWBB_TP109_0.1_200616	29	14	26	11	18	10	81	7
017	RWBB_QC102_200616	29	14	26	11	18	10	81	7
018	RWBB_QC202_200616	29	14	26	11	18	10	81	7
019	RWBB_TP109_0.8_200616	29	14	26	11	18	10	81	7
020	RWBB_TP110_0.1_200616	29	14	26	11	18	10	81	7
021	RWBB_TP110_1_200616	29	14	26	11	18	10	81	7
022	RWBB_TP98_0.1_200616	29	14	26	11	18	10	81	7
023	RWBB_TP98_0.8_200616	29	14	26	11	18	10	81	7
024	RWBB_TP99_0.1_200616	29	14	26	11	18	10	81	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE207687

CLIENT DETAILS

Client SLR CONSULTING AUSTRALIA PTY LTD

Project 610.30041 Randwick Barrack

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	Speciated Phenols in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
025	RWBB_TP99_0.6_200616	29	14	26	11	18	10	81	7
026	RWBB_TP100_0.1_200616	29	14	26	11	18	10	81	7
027	RWBB_TP100_0.4_200616	29	14	26	11	18	10	81	7
028	RWBB_TP131_0.1_200616	29	14	26	11	18	10	81	7
029	RWBB_TP131_1.2_200616	29	14	26	11	18	10	81	7
030	RWBB_TP128_0.5_200616	29	14	26	11	18	10	81	7
031	RWBB_TP129_0.1_200616	29	14	26	11	18	10	81	7
032	RWBB_TP129_0.4_200616	29	14	26	11	18	10	81	7
033	RWBB_TP130_0.1_200616	29	14	26	11	18	10	81	7
034	RWBB_TP130_0.7_200616	29	14	26	11	18	10	81	7
035	RWBB_QC106_200616	29	14	26	11	18	10	81	7
036	RWBB_QC206_200616	29	14	26	11	18	10	81	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
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Please indicate as soon as possible should your request differ from these details .
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SAMPLE RECEIPT ADVICE

SE207687

CLIENT DETAILS

Client SLR CONSULTING AUSTRALIA PTY LTD

Project 610.30041 Randwick Barrack

SUMMARY OF ANALYSIS

No.	Sample ID	Mercury in Soil	Moisture Content	Total Recoverable Elements in Soil/Waste
001	RWBB_TP078_0.1_200615	1	1	7
002	RWBB_TP078_0.7_200615	1	1	7
003	RWBB_TP079_0.1_200615	1	1	7
004	RWBB_TP079_1_200615	1	1	7
005	RWBB_TP80_0.1_200615	1	1	7
006	RWBB_TP80_0.8_200615	1	1	7
007	RWBB_QC101_200615	1	1	7
008	RWBB_TP88_0.1_200615	1	1	7
009	RWBB_TP88_0.5_200615	1	1	7
010	RWBB_TP89_0.1_200615	1	1	7
011	RWBB_TP89_0.3_200615	1	1	7
012	RWBB_TP90_0.1_200615	1	1	7
013	RWBB_TP90_0.5_200615	1	1	7
014	RWBB_TP108_0.1_200616	1	1	7
015	RWBB_TP108_0.6_200616	1	1	7
016	RWBB_TP109_0.1_200616	1	1	7
017	RWBB_QC102_200616	1	1	7
018	RWBB_QC202_200616	1	1	7
019	RWBB_TP109_0.8_200616	1	1	7
020	RWBB_TP110_0.1_200616	1	1	7
021	RWBB_TP110_1_200616	1	1	7
022	RWBB_TP98_0.1_200616	1	1	7
023	RWBB_TP98_0.8_200616	1	1	7
024	RWBB_TP99_0.1_200616	1	1	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
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Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE207687

CLIENT DETAILS

Client SLR CONSULTING AUSTRALIA PTY LTD

Project 610.30041 Randwick Barrack

SUMMARY OF ANALYSIS

No.	Sample ID	Mercury in Soil	Moisture Content	Total Recoverable Elements in Soil/Waste
025	RWBB_TP99_0.6_200616	1	1	7
026	RWBB_TP100_0.1_200616	1	1	7
027	RWBB_TP100_0.4_200616	1	1	7
028	RWBB_TP131_0.1_200616	1	1	7
029	RWBB_TP131_1.2_200616	1	1	7
030	RWBB_TP128_0.5_200616	1	1	7
031	RWBB_TP129_0.1_200616	1	1	7
032	RWBB_TP129_0.4_200616	1	1	7
033	RWBB_TP130_0.1_200616	1	1	7
034	RWBB_TP130_0.7_200616	1	1	7
035	RWBB_QC106_200616	1	1	7
036	RWBB_QC206_200616	1	1	7

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barrack**
Order Number	(Not specified)
Samples	36

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207687 R1**
Date Received	17/6/2020
Date Reported	1/7/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

This report cancels and supersedes the report No.se207687 R0 dated 24th June 2020 issued by SGS Environment, Health and Safety due to amendment of sample id's.

SIGNATORIES

[redacted]

Chemist | Senior Organic Chemist/Metals Chemist | Metals/Inorganics Team Leader

[redacted]

Senior Chemist | Organic Section Head

VOC's in Soil [AN433] Tested: 19/6/2020

PARAMETER	UOM	LOR	0407_TP078_0.1_20(615 SOIL - 15/6/2020 SE207687.001	0407_TP078_0.7_20(615 SOIL - 15/6/2020 SE207687.002	0407_TP079_0.1_20(615 SOIL - 15/6/2020 SE207687.003	0407_TP079_1_2006 5 SOIL - 15/6/2020 SE207687.004	0407_TP80_0.1_200(15 SOIL - 15/6/2020 SE207687.005
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP078_0.1_20(615 SOIL - 15/6/2020 SE207687.001	0407_TP078_0.7_20(615 SOIL - 15/6/2020 SE207687.002	0407_TP079_0.1_20(615 SOIL - 15/6/2020 SE207687.003	0407_TP079_1_2006 5 SOIL - 15/6/2020 SE207687.004	0407_TP80_0.1_200(15 SOIL - 15/6/2020 SE207687.005
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP80_0.8_200(15 SOIL - 15/6/2020 SE207687.006	0407_QC101_20061(SOIL - 15/6/2020 SE207687.007	0407_TP88_0.1_200(15 SOIL - 15/6/2020 SE207687.008	0407_TP88_0.5_200(15 SOIL - 15/6/2020 SE207687.009	0407_TP89_0.1_200(15 SOIL - 15/6/2020 SE207687.010
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP80_0.8_200(15 SOIL - 15/6/2020 SE207687.006	0407_QC101_20061! SOIL - 15/6/2020 SE207687.007	0407_TP88_0.1_200(15 SOIL - 15/6/2020 SE207687.008	0407_TP88_0.5_200(15 SOIL - 15/6/2020 SE207687.009	0407_TP89_0.1_200(15 SOIL - 15/6/2020 SE207687.010
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP89_0.3_200(15 SOIL - 15/6/2020 SE207687.011	0407_TP90_0.1_200(15 SOIL - 15/6/2020 SE207687.012	0407_TP90_0.5_200(15 SOIL - 15/6/2020 SE207687.013	0407_TP108_0.1_20(616 SOIL - 15/6/2020 SE207687.014	0407_TP108_0.6_20(616 SOIL - 16/6/2020 SE207687.015
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP89_0.3_200(15 SOIL - 15/6/2020 SE207687.011	0407_TP90_0.1_200(15 SOIL - 15/6/2020 SE207687.012	0407_TP90_0.5_200(15 SOIL - 15/6/2020 SE207687.013	0407_TP108_0.1_20(616 SOIL - 15/6/2020 SE207687.014	0407_TP108_0.6_20(616 SOIL - 16/6/2020 SE207687.015
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP109_0.1_20(616 SOIL - 16/6/2020 SE207687.016	0407_QC102_20061(SOIL - 16/6/2020 SE207687.017	0407_QC202_20061(SOIL - 16/6/2020 SE207687.018	0407_TP109_0.8_20(616 SOIL - 16/6/2020 SE207687.019	0407_TP110_0.1_20(616 SOIL - 16/6/2020 SE207687.020
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP109_0.1_20(616 SOIL - 16/6/2020 SE207687.016	0407_QC102_20061(SOIL - 16/6/2020 SE207687.017	0407_QC202_20061(SOIL - 16/6/2020 SE207687.018	0407_TP109_0.8_20(616 SOIL - 16/6/2020 SE207687.019	0407_TP110_0.1_20(616 SOIL - 16/6/2020 SE207687.020
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP110_1_2006 6 SOIL - 16/6/2020 SE207687.021	0407_TP98_0.1_200 16 SOIL - 16/6/2020 SE207687.022	0407_TP98_0.8_200 16 SOIL - 16/6/2020 SE207687.023	0407_TP99_0.1_200 16 SOIL - 16/6/2020 SE207687.024	0407_TP99_0.6_200 16 SOIL - 16/6/2020 SE207687.025
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP110_1_2006 6 SOIL - 16/6/2020 SE207687.021	0407_TP98_0.1_200(16 SOIL - 16/6/2020 SE207687.022	0407_TP98_0.8_200(16 SOIL - 16/6/2020 SE207687.023	0407_TP99_0.1_200(16 SOIL - 16/6/2020 SE207687.024	0407_TP99_0.6_200(16 SOIL - 16/6/2020 SE207687.025
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP100_0.1_20(616 SOIL - 16/6/2020 SE207687.026	0407_TP100_0.4_20(616 SOIL - 16/6/2020 SE207687.027	0407_TP131_0.1_20(616 SOIL - 16/6/2020 SE207687.028	0407_TP131_1.2_20(616 SOIL - 16/6/2020 SE207687.029	0407_TP128_0.5_20(616 SOIL - 16/6/2020 SE207687.030
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP100_0.1_20(616 SOIL - 16/6/2020 SE207687.026	0407_TP100_0.4_20(616 SOIL - 16/6/2020 SE207687.027	0407_TP131_0.1_20(616 SOIL - 16/6/2020 SE207687.028	0407_TP131_1.2_20(616 SOIL - 16/6/2020 SE207687.029	0407_TP128_0.5_20(616 SOIL - 16/6/2020 SE207687.030
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP129_0.1_20(616 SOIL - 16/6/2020 SE207687.031	0407_TP129_0.4_20(616 SOIL - 16/6/2020 SE207687.032	0407_TP130_0.1_20(616 SOIL - 16/6/2020 SE207687.033	0407_TP130_0.7_20(616 SOIL - 16/6/2020 SE207687.034	0407_QC106_20061(SOIL - 16/6/2020 SE207687.035
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP129_0.1_20(616 SOIL - 16/6/2020 SE207687.031	0407_TP129_0.4_20(616 SOIL - 16/6/2020 SE207687.032	0407_TP130_0.1_20(616 SOIL - 16/6/2020 SE207687.033	0407_TP130_0.7_20(616 SOIL - 16/6/2020 SE207687.034	0407_QC106_20061(SOIL - 16/6/2020 SE207687.035
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_QC206_200616 SOIL - 16/6/2020 SE207687.036
Benzene	mg/kg	0.1	<0.1
Toluene	mg/kg	0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2
o-xylene	mg/kg	0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
Chloromethane	mg/kg	1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
Bromomethane	mg/kg	1	<1
Chloroethane	mg/kg	1	<1
Trichlorofluoromethane	mg/kg	1	<1
Acetone (2-propanone)	mg/kg	10	<10
Iodomethane	mg/kg	5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1
Vinyl acetate	mg/kg	10	<10
MEK (2-butanone)	mg/kg	10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1
Chloroform	mg/kg	0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
2-nitropropane	mg/kg	10	<10
Bromodichloromethane	mg/kg	0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1
Bromoform	mg/kg	0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1

VOC's in Soil [AN433] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_QC206_200616 SOIL - 16/6/2020 SE207687.036
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
Total VOC*	mg/kg	24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 19/6/2020

PARAMETER	UOM	LOR	0407_TP078_0.1_20(615 SOIL - 15/6/2020 SE207687.001	0407_TP078_0.7_20(615 SOIL - 15/6/2020 SE207687.002	0407_TP079_0.1_20(615 SOIL - 15/6/2020 SE207687.003	0407_TP079_1_2006 5 SOIL - 15/6/2020 SE207687.004	0407_TP80_0.1_200(15 SOIL - 15/6/2020 SE207687.005
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP80_0.8_200(15 SOIL - 15/6/2020 SE207687.006	0407_QC101_20061(SOIL - 15/6/2020 SE207687.007	0407_TP88_0.1_200(15 SOIL - 15/6/2020 SE207687.008	0407_TP88_0.5_200(15 SOIL - 15/6/2020 SE207687.009	0407_TP89_0.1_200(15 SOIL - 15/6/2020 SE207687.010
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP89_0.3_200(15 SOIL - 15/6/2020 SE207687.011	0407_TP90_0.1_200(15 SOIL - 15/6/2020 SE207687.012	0407_TP90_0.5_200(15 SOIL - 15/6/2020 SE207687.013	0407_TP108_0.1_20(616 SOIL - 15/6/2020 SE207687.014	0407_TP108_0.6_20(616 SOIL - 16/6/2020 SE207687.015
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP109_0.1_20(616 SOIL - 16/6/2020 SE207687.016	0407_QC102_20061(SOIL - 16/6/2020 SE207687.017	0407_QC202_20061(SOIL - 16/6/2020 SE207687.018	0407_TP109_0.8_20(616 SOIL - 16/6/2020 SE207687.019	0407_TP110_0.1_20(616 SOIL - 16/6/2020 SE207687.020
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP110_1_2006 6 SOIL - 16/6/2020 SE207687.021	0407_TP98_0.1_200(16 SOIL - 16/6/2020 SE207687.022	0407_TP98_0.8_200(16 SOIL - 16/6/2020 SE207687.023	0407_TP99_0.1_200(16 SOIL - 16/6/2020 SE207687.024	0407_TP99_0.6_200(16 SOIL - 16/6/2020 SE207687.025
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_TP100_0.1_20(616 SOIL - 16/6/2020 SE207687.026	0407_TP100_0.4_20(616 SOIL - 16/6/2020 SE207687.027	0407_TP131_0.1_20(616 SOIL - 16/6/2020 SE207687.028	0407_TP131_1.2_20(616 SOIL - 16/6/2020 SE207687.029	0407_TP128_0.5_20(616 SOIL - 16/6/2020 SE207687.030
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP129_0.1_20(616 SOIL - 16/6/2020 SE207687.031	0407_TP129_0.4_20(616 SOIL - 16/6/2020 SE207687.032	0407_TP130_0.1_20(616 SOIL - 16/6/2020 SE207687.033	0407_TP130_0.7_20(616 SOIL - 16/6/2020 SE207687.034	0407_QC106_20061(SOIL - 16/6/2020 SE207687.035
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_QC206_20061(SOIL - 16/6/2020 SE207687.036
Benzene (F0)	mg/kg	0.1	<0.1
TRH C6-C9	mg/kg	20	<20
TRH C6-C10	mg/kg	25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 19/6/2020

PARAMETER	UOM	LOR	0407_TP078_0.1_20(615 SOIL - 15/6/2020 SE207687.001	0407_TP078_0.7_20(615 SOIL - 15/6/2020 SE207687.002	0407_TP079_0.1_20(615 SOIL - 15/6/2020 SE207687.003	0407_TP079_1_2006 5 SOIL - 15/6/2020 SE207687.004	0407_TP80_0.1_200(15 SOIL - 15/6/2020 SE207687.005
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP80_0.8_200(15 SOIL - 15/6/2020 SE207687.006	0407_QC101_20061 SOIL - 15/6/2020 SE207687.007	0407_TP88_0.1_200(15 SOIL - 15/6/2020 SE207687.008	0407_TP88_0.5_200(15 SOIL - 15/6/2020 SE207687.009	0407_TP89_0.1_200(15 SOIL - 15/6/2020 SE207687.010
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP89_0.3_200(15 SOIL - 15/6/2020 SE207687.011	0407_TP90_0.1_200(15 SOIL - 15/6/2020 SE207687.012	0407_TP90_0.5_200(15 SOIL - 15/6/2020 SE207687.013	0407_TP108_0.1_20(616 SOIL - 15/6/2020 SE207687.014	0407_TP108_0.6_20(616 SOIL - 16/6/2020 SE207687.015
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP109_0.1_20(616 SOIL - 16/6/2020 SE207687.016	0407_QC102_20061(SOIL - 16/6/2020 SE207687.017	0407_QC202_20061(SOIL - 16/6/2020 SE207687.018	0407_TP109_0.8_20(616 SOIL - 16/6/2020 SE207687.019	0407_TP110_0.1_20(616 SOIL - 16/6/2020 SE207687.020
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP110_1_2006 6 SOIL - 16/6/2020 SE207687.021	0407_TP98_0.1_200(16 SOIL - 16/6/2020 SE207687.022	0407_TP98_0.8_200(16 SOIL - 16/6/2020 SE207687.023	0407_TP99_0.1_200(16 SOIL - 16/6/2020 SE207687.024	0407_TP99_0.6_200(16 SOIL - 16/6/2020 SE207687.025
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_TP100_0.1_20(616 SOIL - 16/6/2020 SE207687.026	0407_TP100_0.4_20(616 SOIL - 16/6/2020 SE207687.027	0407_TP131_0.1_20(616 SOIL - 16/6/2020 SE207687.028	0407_TP131_1.2_20(616 SOIL - 16/6/2020 SE207687.029	0407_TP128_0.5_20(616 SOIL - 16/6/2020 SE207687.030
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP129_0.1_20(616 SOIL - 16/6/2020 SE207687.031	0407_TP129_0.4_20(616 SOIL - 16/6/2020 SE207687.032	0407_TP130_0.1_20(616 SOIL - 16/6/2020 SE207687.033	0407_TP130_0.7_20(616 SOIL - 16/6/2020 SE207687.034	0407_QC106_20061(SOIL - 16/6/2020 SE207687.035
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	93	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_QC206_20061(SOIL - 16/6/2020 SE207687.036
TRH C10-C14	mg/kg	20	<20
TRH C15-C28	mg/kg	45	<45
TRH C29-C36	mg/kg	45	<45
TRH C37-C40	mg/kg	100	<100
TRH >C10-C16	mg/kg	25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120
TRH C10-C36 Total	mg/kg	110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 19/6/2020

PARAMETER	UOM	LOR	0407_TP078_0.1_20(615 SOIL - 15/6/2020 SE207687.001	0407_TP078_0.7_20(615 SOIL - 15/6/2020 SE207687.002	0407_TP079_0.1_20(615 SOIL - 15/6/2020 SE207687.003	0407_TP079_1_2006 5 SOIL - 15/6/2020 SE207687.004	0407_TP80_0.1_200(15 SOIL - 15/6/2020 SE207687.005
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	**0.1**
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	**0.1**
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PARAMETER	UOM	LOR	0407_TP80_0.8_200(15 SOIL - 15/6/2020 SE207687.006	0407_QC101_20061 SOIL - 15/6/2020 SE207687.007	0407_TP88_0.1_200(15 SOIL - 15/6/2020 SE207687.008	0407_TP88_0.5_200(15 SOIL - 15/6/2020 SE207687.009	0407_TP89_0.1_200(15 SOIL - 15/6/2020 SE207687.010
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	**0.1**	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	**0.1**	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP89_0.3_20015 SOIL - 15/6/2020 SE207687.011	0407_TP90_0.1_20015 SOIL - 15/6/2020 SE207687.012	0407_TP90_0.5_20015 SOIL - 15/6/2020 SE207687.013	0407_TP108_0.1_20616 SOIL - 15/6/2020 SE207687.014	0407_TP108_0.6_20616 SOIL - 16/6/2020 SE207687.015
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PARAMETER	UOM	LOR	0407_TP109_0.1_20616 SOIL - 16/6/2020 SE207687.016	0407_QC102_20061 SOIL - 16/6/2020 SE207687.017	0407_QC202_20061 SOIL - 16/6/2020 SE207687.018	0407_TP109_0.8_20616 SOIL - 16/6/2020 SE207687.019	0407_TP110_0.1_20616 SOIL - 16/6/2020 SE207687.020
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP110_1_2006 6 SOIL - 16/6/2020 SE207687.021	0407_TP98_0.1_200 16 SOIL - 16/6/2020 SE207687.022	0407_TP98_0.8_200 16 SOIL - 16/6/2020 SE207687.023	0407_TP99_0.1_200 16 SOIL - 16/6/2020 SE207687.024	0407_TP99_0.6_200 16 SOIL - 16/6/2020 SE207687.025
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PARAMETER	UOM	LOR	0407_TP100_0.1_20 616 SOIL - 16/6/2020 SE207687.026	0407_TP100_0.4_20 616 SOIL - 16/6/2020 SE207687.027	0407_TP131_0.1_20 616 SOIL - 16/6/2020 SE207687.028	0407_TP131_1.2_20 616 SOIL - 16/6/2020 SE207687.029	0407_TP128_0.5_20 616 SOIL - 16/6/2020 SE207687.030
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP129_0.1_20(616 SOIL - 16/6/2020 SE207687.031	0407_TP129_0.4_20(616 SOIL - 16/6/2020 SE207687.032	0407_TP130_0.1_20(616 SOIL - 16/6/2020 SE207687.033	0407_TP130_0.7_20(616 SOIL - 16/6/2020 SE207687.034	0407_QC106_20061(SOIL - 16/6/2020 SE207687.035
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PARAMETER	UOM	LOR	0407_QC206_20061(SOIL - 16/6/2020 SE207687.036
Naphthalene	mg/kg	0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1
Fluorene	mg/kg	0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1
Anthracene	mg/kg	0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1
Pyrene	mg/kg	0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1
Chrysene	mg/kg	0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8

Speciated Phenols in Soil [AN420] Tested: 19/6/2020

PARAMETER	UOM	LOR	0407_TP078_0.1_20(615 SOIL - 15/6/2020 SE207687.001	0407_TP078_0.7_20(615 SOIL - 15/6/2020 SE207687.002	0407_TP079_0.1_20(615 SOIL - 15/6/2020 SE207687.003	0407_TP079_1_20065 SOIL - 15/6/2020 SE207687.004	0407_TP80_0.1_200(15 SOIL - 15/6/2020 SE207687.005
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_TP80_0.8_200(15 SOIL - 15/6/2020 SE207687.006	0407_QC101_20061(SOIL - 15/6/2020 SE207687.007	0407_TP88_0.1_200(15 SOIL - 15/6/2020 SE207687.008	0407_TP88_0.5_200(15 SOIL - 15/6/2020 SE207687.009	0407_TP89_0.1_200(15 SOIL - 15/6/2020 SE207687.010
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

Speciated Phenols in Soil [AN420] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP89_0.3_200(15 SOIL - 15/6/2020 SE207687.011	0407_TP90_0.1_200(15 SOIL - 15/6/2020 SE207687.012	0407_TP90_0.5_200(15 SOIL - 15/6/2020 SE207687.013	0407_TP108_0.1_20(616 SOIL - 15/6/2020 SE207687.014	0407_TP108_0.6_20(616 SOIL - 16/6/2020 SE207687.015
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_TP109_0.1_20(616 SOIL - 16/6/2020 SE207687.016	0407_QC102_20061(SOIL - 16/6/2020 SE207687.017	0407_QC202_20061(SOIL - 16/6/2020 SE207687.018	0407_TP109_0.8_20(616 SOIL - 16/6/2020 SE207687.019	0407_TP110_0.1_20(616 SOIL - 16/6/2020 SE207687.020
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

Speciated Phenols in Soil [AN420] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP110_1_2006 6 SOIL - 16/6/2020 SE207687.021	0407_TP98_0.1_200(16 SOIL - 16/6/2020 SE207687.022	0407_TP98_0.8_200(16 SOIL - 16/6/2020 SE207687.023	0407_TP99_0.1_200(16 SOIL - 16/6/2020 SE207687.024	0407_TP99_0.6_200(16 SOIL - 16/6/2020 SE207687.025
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_TP100_0.1_20(616 SOIL - 16/6/2020 SE207687.026	0407_TP100_0.4_20(616 SOIL - 16/6/2020 SE207687.027	0407_TP131_0.1_20(616 SOIL - 16/6/2020 SE207687.028	0407_TP131_1.2_20(616 SOIL - 16/6/2020 SE207687.029	0407_TP128_0.5_20(616 SOIL - 16/6/2020 SE207687.030
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

Speciated Phenols in Soil [AN420] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP129_0.1_20(616 SOIL - 16/6/2020 SE207687.031	0407_TP129_0.4_20(616 SOIL - 16/6/2020 SE207687.032	0407_TP130_0.1_20(616 SOIL - 16/6/2020 SE207687.033	0407_TP130_0.7_20(616 SOIL - 16/6/2020 SE207687.034	0407_QC106_20061(SOIL - 16/6/2020 SE207687.035
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	0407_QC206_20061(SOIL - 16/6/2020 SE207687.036
Phenol	mg/kg	0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
Total Cresol	mg/kg	1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5
4-nitrophenol	mg/kg	1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
Pentachlorophenol	mg/kg	0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2
4-chloro-3-methylphenol	mg/kg	2	<2

OC Pesticides in Soil [AN420] Tested: 19/6/2020

PARAMETER	UOM	LOR	0407_TP078_0.1_20(615 SOIL - 15/6/2020 SE207687.001	0407_TP078_0.7_20(615 SOIL - 15/6/2020 SE207687.002	0407_TP079_0.1_20(615 SOIL - 15/6/2020 SE207687.003	0407_TP079_1_2006 5 SOIL - 15/6/2020 SE207687.004	0407_TP80_0.1_200(15 SOIL - 15/6/2020 SE207687.005
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP80_0.8_200(15 SOIL - 15/6/2020 SE207687.006	0407_QC101_20061(SOIL - 15/6/2020 SE207687.007	0407_TP88_0.1_200(15 SOIL - 15/6/2020 SE207687.008	0407_TP88_0.5_200(15 SOIL - 15/6/2020 SE207687.009	0407_TP89_0.1_200(15 SOIL - 15/6/2020 SE207687.010
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP89_0.3_200(15 SOIL - 15/6/2020 SE207687.011	0407_TP90_0.1_200(15 SOIL - 15/6/2020 SE207687.012	0407_TP90_0.5_200(15 SOIL - 15/6/2020 SE207687.013	0407_TP108_0.1_20(616 SOIL - 15/6/2020 SE207687.014	0407_TP108_0.6_20(616 SOIL - 16/6/2020 SE207687.015
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP109_0.1_20(616 SOIL - 16/6/2020 SE207687.016	0407_QC102_20061(SOIL - 16/6/2020 SE207687.017	0407_QC202_20061(SOIL - 16/6/2020 SE207687.018	0407_TP109_0.8_20(616 SOIL - 16/6/2020 SE207687.019	0407_TP110_0.1_20(616 SOIL - 16/6/2020 SE207687.020
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP110_1_2006 6 SOIL - 16/6/2020 SE207687.021	0407_TP98_0.1_200(16 SOIL - 16/6/2020 SE207687.022	0407_TP98_0.8_200(16 SOIL - 16/6/2020 SE207687.023	0407_TP99_0.1_200(16 SOIL - 16/6/2020 SE207687.024	0407_TP99_0.6_200(16 SOIL - 16/6/2020 SE207687.025
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP100_0.1_20(616 SOIL - 16/6/2020 SE207687.026	0407_TP100_0.4_20(616 SOIL - 16/6/2020 SE207687.027	0407_TP131_0.1_20(616 SOIL - 16/6/2020 SE207687.028	0407_TP131_1.2_20(616 SOIL - 16/6/2020 SE207687.029	0407_TP128_0.5_20(616 SOIL - 16/6/2020 SE207687.030
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP129_0.1_20(616 SOIL - 16/6/2020 SE207687.031	0407_TP129_0.4_20(616 SOIL - 16/6/2020 SE207687.032	0407_TP130_0.1_20(616 SOIL - 16/6/2020 SE207687.033	0407_TP130_0.7_20(616 SOIL - 16/6/2020 SE207687.034	0407_QC106_20061(SOIL - 16/6/2020 SE207687.035
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_QC206_200616 SOIL - 16/6/2020 SE207687.036
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1
Lindane	mg/kg	0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1
Aldrin	mg/kg	0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2
Endrin	mg/kg	0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1
Isodrin	mg/kg	0.1	<0.1
Mirex	mg/kg	0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1

OP Pesticides in Soil [AN420] Tested: 19/6/2020

PARAMETER	UOM	LOR	0407_TP078_0.1_20(615 SOIL - 15/6/2020 SE207687.001	0407_TP078_0.7_20(615 SOIL - 15/6/2020 SE207687.002	0407_TP079_0.1_20(615 SOIL - 15/6/2020 SE207687.003	0407_TP079_1_20065 SOIL - 15/6/2020 SE207687.004	0407_TP80_0.1_200(15 SOIL - 15/6/2020 SE207687.005
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP80_0.8_200(15 SOIL - 15/6/2020 SE207687.006	0407_QC101_20061 SOIL - 15/6/2020 SE207687.007	0407_TP88_0.1_200(15 SOIL - 15/6/2020 SE207687.008	0407_TP88_0.5_200(15 SOIL - 15/6/2020 SE207687.009	0407_TP89_0.1_200(15 SOIL - 15/6/2020 SE207687.010
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP89_0.3_200(15 SOIL - 15/6/2020 SE207687.011	0407_TP90_0.1_200(15 SOIL - 15/6/2020 SE207687.012	0407_TP90_0.5_200(15 SOIL - 15/6/2020 SE207687.013	0407_TP108_0.1_20(616 SOIL - 15/6/2020 SE207687.014	0407_TP108_0.6_20(616 SOIL - 16/6/2020 SE207687.015
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

OP Pesticides in Soil [AN420] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP109_0.1_20(616 SOIL - 16/6/2020 SE207687.016	0407_QC102_20061(SOIL - 16/6/2020 SE207687.017	0407_QC202_20061(SOIL - 16/6/2020 SE207687.018	0407_TP109_0.8_20(616 SOIL - 16/6/2020 SE207687.019	0407_TP110_0.1_20(616 SOIL - 16/6/2020 SE207687.020
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP110_1_2006 6 SOIL - 16/6/2020 SE207687.021	0407_TP98_0.1_200(16 SOIL - 16/6/2020 SE207687.022	0407_TP98_0.8_200(16 SOIL - 16/6/2020 SE207687.023	0407_TP99_0.1_200(16 SOIL - 16/6/2020 SE207687.024	0407_TP99_0.6_200(16 SOIL - 16/6/2020 SE207687.025
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_TP100_0.1_20(616 SOIL - 16/6/2020 SE207687.026	0407_TP100_0.4_20(616 SOIL - 16/6/2020 SE207687.027	0407_TP131_0.1_20(616 SOIL - 16/6/2020 SE207687.028	0407_TP131_1.2_20(616 SOIL - 16/6/2020 SE207687.029	0407_TP128_0.5_20(616 SOIL - 16/6/2020 SE207687.030
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

OP Pesticides in Soil [AN420] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP129_0.1_20(616 SOIL - 16/6/2020 SE207687.031	0407_TP129_0.4_20(616 SOIL - 16/6/2020 SE207687.032	0407_TP130_0.1_20(616 SOIL - 16/6/2020 SE207687.033	0407_TP130_0.7_20(616 SOIL - 16/6/2020 SE207687.034	0407_QC106_20061(SOIL - 16/6/2020 SE207687.035
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_QC206_20061(SOIL - 16/6/2020 SE207687.036
Dichlorvos	mg/kg	0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2
Malathion	mg/kg	0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2
Methidathion	mg/kg	0.5	<0.5
Ethion	mg/kg	0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7

PCBs in Soil [AN420] Tested: 19/6/2020

PARAMETER	UOM	LOR	0407_TP078_0.1_20(615 SOIL - 15/6/2020 SE207687.001	0407_TP078_0.7_20(615 SOIL - 15/6/2020 SE207687.002	0407_TP079_0.1_20(615 SOIL - 15/6/2020 SE207687.003	0407_TP079_1_2006 5 SOIL - 15/6/2020 SE207687.004	0407_TP80_0.1_200(15 SOIL - 15/6/2020 SE207687.005
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP80_0.8_200(15 SOIL - 15/6/2020 SE207687.006	0407_QC101_20061! SOIL - 15/6/2020 SE207687.007	0407_TP88_0.1_200(15 SOIL - 15/6/2020 SE207687.008	0407_TP88_0.5_200(15 SOIL - 15/6/2020 SE207687.009	0407_TP89_0.1_200(15 SOIL - 15/6/2020 SE207687.010
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP89_0.3_200(15 SOIL - 15/6/2020 SE207687.011	0407_TP90_0.1_200(15 SOIL - 15/6/2020 SE207687.012	0407_TP90_0.5_200(15 SOIL - 15/6/2020 SE207687.013	0407_TP108_0.1_20(616 SOIL - 15/6/2020 SE207687.014	0407_TP108_0.6_20(616 SOIL - 16/6/2020 SE207687.015
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PCBs in Soil [AN420] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP109_0.1_20(616 SOIL - 16/6/2020 SE207687.016	0407_QC102_20061(SOIL - 16/6/2020 SE207687.017	0407_QC202_20061(SOIL - 16/6/2020 SE207687.018	0407_TP109_0.8_20(616 SOIL - 16/6/2020 SE207687.019	0407_TP110_0.1_20(616 SOIL - 16/6/2020 SE207687.020
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP110_1_2006 6 SOIL - 16/6/2020 SE207687.021	0407_TP98_0.1_200(16 SOIL - 16/6/2020 SE207687.022	0407_TP98_0.8_200(16 SOIL - 16/6/2020 SE207687.023	0407_TP99_0.1_200(16 SOIL - 16/6/2020 SE207687.024	0407_TP99_0.6_200(16 SOIL - 16/6/2020 SE207687.025
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP100_0.1_20(616 SOIL - 16/6/2020 SE207687.026	0407_TP100_0.4_20(616 SOIL - 16/6/2020 SE207687.027	0407_TP131_0.1_20(616 SOIL - 16/6/2020 SE207687.028	0407_TP131_1.2_20(616 SOIL - 16/6/2020 SE207687.029	0407_TP128_0.5_20(616 SOIL - 16/6/2020 SE207687.030
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PCBs in Soil [AN420] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_TP129_0.1_20(616 SOIL - 16/6/2020 SE207687.031	0407_TP129_0.4_20(616 SOIL - 16/6/2020 SE207687.032	0407_TP130_0.1_20(616 SOIL - 16/6/2020 SE207687.033	0407_TP130_0.7_20(616 SOIL - 16/6/2020 SE207687.034	0407_QC106_20061(SOIL - 16/6/2020 SE207687.035
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_QC206_20061(SOIL - 16/6/2020 SE207687.036
Arochlor 1016	mg/kg	0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 19/6/2020

PARAMETER	UOM	LOR	0407_TP078_0.1_20(615 SOIL - 15/6/2020 SE207687.001	0407_TP078_0.7_20(615 SOIL - 15/6/2020 SE207687.002	0407_TP079_0.1_20(615 SOIL - 15/6/2020 SE207687.003	0407_TP079_1_2006 5 SOIL - 15/6/2020 SE207687.004	0407_TP80_0.1_200(15 SOIL - 15/6/2020 SE207687.005
Arsenic, As	mg/kg	1	<1	<1	<1	<1	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	5.1	2.8	<0.5	0.8	2.2
Copper, Cu	mg/kg	0.5	3.5	1.0	1.6	<0.5	4.6
Lead, Pb	mg/kg	1	2	<1	4	<1	71
Nickel, Ni	mg/kg	0.5	1.5	<0.5	<0.5	<0.5	1.4
Zinc, Zn	mg/kg	2	16	<2.0	4.5	<2.0	12

PARAMETER	UOM	LOR	0407_TP80_0.8_200(15 SOIL - 15/6/2020 SE207687.006	0407_QC101_20061! SOIL - 15/6/2020 SE207687.007	0407_TP88_0.1_200(15 SOIL - 15/6/2020 SE207687.008	0407_TP88_0.5_200(15 SOIL - 15/6/2020 SE207687.009	0407_TP89_0.1_200(15 SOIL - 15/6/2020 SE207687.010
Arsenic, As	mg/kg	1	<1	<1	<1	<1	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	<0.5	0.5	0.8	<0.5	0.6
Copper, Cu	mg/kg	0.5	<0.5	2.8	2.3	<0.5	1.6
Lead, Pb	mg/kg	1	<1	8	15	<1	4
Nickel, Ni	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	0.5
Zinc, Zn	mg/kg	2	<2.0	10	5.0	<2.0	4.1

PARAMETER	UOM	LOR	0407_TP89_0.3_200(15 SOIL - 15/6/2020 SE207687.011	0407_TP90_0.1_200(15 SOIL - 15/6/2020 SE207687.012	0407_TP90_0.5_200(15 SOIL - 15/6/2020 SE207687.013	0407_TP108_0.1_20(616 SOIL - 15/6/2020 SE207687.014	0407_TP108_0.6_20(616 SOIL - 16/6/2020 SE207687.015
Arsenic, As	mg/kg	1	<1	<1	<1	<1	2
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	<0.5	1.5	<0.5	<0.5	2.2
Copper, Cu	mg/kg	0.5	<0.5	1.8	<0.5	0.7	<0.5
Lead, Pb	mg/kg	1	<1	3	<1	1	2
Nickel, Ni	mg/kg	0.5	<0.5	0.7	<0.5	<0.5	<0.5
Zinc, Zn	mg/kg	2	29	4.1	<2.0	<2.0	5.2

PARAMETER	UOM	LOR	0407_TP109_0.1_20(616 SOIL - 16/6/2020 SE207687.016	0407_QC102_20061(SOIL - 16/6/2020 SE207687.017	0407_QC202_20061(SOIL - 16/6/2020 SE207687.018	0407_TP109_0.8_20(616 SOIL - 16/6/2020 SE207687.019	0407_TP110_0.1_20(616 SOIL - 16/6/2020 SE207687.020
Arsenic, As	mg/kg	1	<1	<1	<1	2	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	<0.5	<0.5	<0.5	6.8	14
Copper, Cu	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	9.2
Lead, Pb	mg/kg	1	<1	<1	<1	3	3
Nickel, Ni	mg/kg	0.5	<0.5	<0.5	<0.5	1.6	2.5
Zinc, Zn	mg/kg	2	<2.0	<2.0	<2.0	<2.0	7.8

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 19/6/2020

(continued)

PARAMETER	UOM	LOR	0407_TP110_1_2006 6 SOIL - 16/6/2020 SE207687.021	0407_TP98_0.1_200(16 SOIL - 16/6/2020 SE207687.022	0407_TP98_0.8_200(16 SOIL - 16/6/2020 SE207687.023	0407_TP99_0.1_200(16 SOIL - 16/6/2020 SE207687.024	0407_TP99_0.6_200(16 SOIL - 16/6/2020 SE207687.025
Arsenic, As	mg/kg	1	<1	<1	<1	<1	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	**2.0**	<0.5	<0.5	<0.5	**4.3**
Copper, Cu	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	**1.8**
Lead, Pb	mg/kg	1	**1**	**1**	<1	<1	**2**
Nickel, Ni	mg/kg	0.5	**1.0**	<0.5	<0.5	<0.5	**0.9**
Zinc, Zn	mg/kg	2	<2.0	<2.0	<2.0	<2.0	**7.8**

PARAMETER	UOM	LOR	0407_TP100_0.1_20(616 SOIL - 16/6/2020 SE207687.026	0407_TP100_0.4_20(616 SOIL - 16/6/2020 SE207687.027	0407_TP131_0.1_20(616 SOIL - 16/6/2020 SE207687.028	0407_TP131_1.2_20(616 SOIL - 16/6/2020 SE207687.029	0407_TP128_0.5_20(616 SOIL - 16/6/2020 SE207687.030
Arsenic, As	mg/kg	1	<1	<1	<1	<1	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	<0.5	<0.5	<0.5	**3.4**	<0.5
Copper, Cu	mg/kg	0.5	<0.5	<0.5	<0.5	**0.8**	<0.5
Lead, Pb	mg/kg	1	<1	<1	<1	<1	<1
Nickel, Ni	mg/kg	0.5	**0.7**	<0.5	**1.3**	**1.5**	<0.5
Zinc, Zn	mg/kg	2	<2.0	<2.0	<2.0	<2.0	<2.0

PARAMETER	UOM	LOR	0407_TP129_0.1_20(616 SOIL - 16/6/2020 SE207687.031	0407_TP129_0.4_20(616 SOIL - 16/6/2020 SE207687.032	0407_TP130_0.1_20(616 SOIL - 16/6/2020 SE207687.033	0407_TP130_0.7_20(616 SOIL - 16/6/2020 SE207687.034	0407_QC106_20061(SOIL - 16/6/2020 SE207687.035
Arsenic, As	mg/kg	1	<1	<1	<1	**2**	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	**0.8**	**1.4**	<0.5	**3.9**	**0.8**
Copper, Cu	mg/kg	0.5	**8.2**	**3.5**	<0.5	<0.5	<0.5
Lead, Pb	mg/kg	1	**200**	**13**	<1	**2**	<1
Nickel, Ni	mg/kg	0.5	**1.5**	**1.6**	<0.5	**0.9**	<0.5
Zinc, Zn	mg/kg	2	**21**	**4.8**	<2.0	<2.0	<2.0

PARAMETER	UOM	LOR	0407_QC206_20061(SOIL - 16/6/2020 SE207687.036
Arsenic, As	mg/kg	1	<1
Cadmium, Cd	mg/kg	0.3	<0.3
Chromium, Cr	mg/kg	0.5	<0.5
Copper, Cu	mg/kg	0.5	<0.5
Lead, Pb	mg/kg	1	<1
Nickel, Ni	mg/kg	0.5	<0.5
Zinc, Zn	mg/kg	2	<2.0

Mercury in Soil [AN312] Tested: 19/6/2020

PARAMETER	UOM	LOR	0407_TP078_0.1_20(615 SOIL - 15/6/2020 SE207687.001	0407_TP078_0.7_20(615 SOIL - 15/6/2020 SE207687.002	0407_TP079_0.1_20(615 SOIL - 15/6/2020 SE207687.003	0407_TP079_1_2006 5 SOIL - 15/6/2020 SE207687.004	0407_TP80_0.1_200(15 SOIL - 15/6/2020 SE207687.005
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_TP80_0.8_200(15 SOIL - 15/6/2020 SE207687.006	0407_QC101_20061(SOIL - 15/6/2020 SE207687.007	0407_TP88_0.1_200(15 SOIL - 15/6/2020 SE207687.008	0407_TP88_0.5_200(15 SOIL - 15/6/2020 SE207687.009	0407_TP89_0.1_200(15 SOIL - 15/6/2020 SE207687.010
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_TP89_0.3_200(15 SOIL - 15/6/2020 SE207687.011	0407_TP90_0.1_200(15 SOIL - 15/6/2020 SE207687.012	0407_TP90_0.5_200(15 SOIL - 15/6/2020 SE207687.013	0407_TP108_0.1_20(616 SOIL - 15/6/2020 SE207687.014	0407_TP108_0.6_20(616 SOIL - 16/6/2020 SE207687.015
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_TP109_0.1_20(616 SOIL - 16/6/2020 SE207687.016	0407_QC102_20061(SOIL - 16/6/2020 SE207687.017	0407_QC202_20061(SOIL - 16/6/2020 SE207687.018	0407_TP109_0.8_20(616 SOIL - 16/6/2020 SE207687.019	0407_TP110_0.1_20(616 SOIL - 16/6/2020 SE207687.020
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_TP110_1_2006 6 SOIL - 16/6/2020 SE207687.021	0407_TP98_0.1_200(16 SOIL - 16/6/2020 SE207687.022	0407_TP98_0.8_200(16 SOIL - 16/6/2020 SE207687.023	0407_TP99_0.1_200(16 SOIL - 16/6/2020 SE207687.024	0407_TP99_0.6_200(16 SOIL - 16/6/2020 SE207687.025
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_TP100_0.1_20(616 SOIL - 16/6/2020 SE207687.026	0407_TP100_0.4_20(616 SOIL - 16/6/2020 SE207687.027	0407_TP131_0.1_20(616 SOIL - 16/6/2020 SE207687.028	0407_TP131_1.2_20(616 SOIL - 16/6/2020 SE207687.029	0407_TP128_0.5_20(616 SOIL - 16/6/2020 SE207687.030
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_TP129_0.1_20(616 SOIL - 16/6/2020 SE207687.031	0407_TP129_0.4_20(616 SOIL - 16/6/2020 SE207687.032	0407_TP130_0.1_20(616 SOIL - 16/6/2020 SE207687.033	0407_TP130_0.7_20(616 SOIL - 16/6/2020 SE207687.034	0407_QC106_20061(SOIL - 16/6/2020 SE207687.035
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

Mercury in Soil [AN312] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_QC206_200616 SOIL - 16/6/2020 SE207687.036
Mercury	mg/kg	0.05	<0.05

Moisture Content [AN002] Tested: 19/6/2020

PARAMETER	UOM	LOR	0407_TP078_0.1_20(615 SOIL - 15/6/2020 SE207687.001	0407_TP078_0.7_20(615 SOIL - 15/6/2020 SE207687.002	0407_TP079_0.1_20(615 SOIL - 15/6/2020 SE207687.003	0407_TP079_1_2006 5 SOIL - 15/6/2020 SE207687.004	0407_TP80_0.1_200(15 SOIL - 15/6/2020 SE207687.005
% Moisture	%w/w	1	<1.0	3.8	1.5	2.6	2.9

PARAMETER	UOM	LOR	0407_TP80_0.8_200(15 SOIL - 15/6/2020 SE207687.006	0407_QC101_20061(SOIL - 15/6/2020 SE207687.007	0407_TP88_0.1_200(15 SOIL - 15/6/2020 SE207687.008	0407_TP88_0.5_200(15 SOIL - 15/6/2020 SE207687.009	0407_TP89_0.1_200(15 SOIL - 15/6/2020 SE207687.010
% Moisture	%w/w	1	1.7	2.1	2.1	1.8	1.2

PARAMETER	UOM	LOR	0407_TP89_0.3_200(15 SOIL - 15/6/2020 SE207687.011	0407_TP90_0.1_200(15 SOIL - 15/6/2020 SE207687.012	0407_TP90_0.5_200(15 SOIL - 15/6/2020 SE207687.013	0407_TP108_0.1_20(616 SOIL - 15/6/2020 SE207687.014	0407_TP108_0.6_20(616 SOIL - 16/6/2020 SE207687.015
% Moisture	%w/w	1	21.9	5.7	1.9	1.9	4.8

PARAMETER	UOM	LOR	0407_TP109_0.1_20(616 SOIL - 16/6/2020 SE207687.016	0407_QC102_20061(SOIL - 16/6/2020 SE207687.017	0407_QC202_20061(SOIL - 16/6/2020 SE207687.018	0407_TP109_0.8_20(616 SOIL - 16/6/2020 SE207687.019	0407_TP110_0.1_20(616 SOIL - 16/6/2020 SE207687.020
% Moisture	%w/w	1	2.8	4.2	5.2	10.9	1.5

PARAMETER	UOM	LOR	0407_TP110_1_2006 6 SOIL - 16/6/2020 SE207687.021	0407_TP98_0.1_200(16 SOIL - 16/6/2020 SE207687.022	0407_TP98_0.8_200(16 SOIL - 16/6/2020 SE207687.023	0407_TP99_0.1_200(16 SOIL - 16/6/2020 SE207687.024	0407_TP99_0.6_200(16 SOIL - 16/6/2020 SE207687.025
% Moisture	%w/w	1	2.9	8.4	20.5	19.6	14.8

PARAMETER	UOM	LOR	0407_TP100_0.1_20(616 SOIL - 16/6/2020 SE207687.026	0407_TP100_0.4_20(616 SOIL - 16/6/2020 SE207687.027	0407_TP131_0.1_20(616 SOIL - 16/6/2020 SE207687.028	0407_TP131_1.2_20(616 SOIL - 16/6/2020 SE207687.029	0407_TP128_0.5_20(616 SOIL - 16/6/2020 SE207687.030
% Moisture	%w/w	1	3.1	3.0	2.3	3.6	4.3

PARAMETER	UOM	LOR	0407_TP129_0.1_20(616 SOIL - 16/6/2020 SE207687.031	0407_TP129_0.4_20(616 SOIL - 16/6/2020 SE207687.032	0407_TP130_0.1_20(616 SOIL - 16/6/2020 SE207687.033	0407_TP130_0.7_20(616 SOIL - 16/6/2020 SE207687.034	0407_QC106_20061(SOIL - 16/6/2020 SE207687.035
% Moisture	%w/w	1	4.6	8.8	1.5	2.9	<1.0

Moisture Content [AN002] Tested: 19/6/2020 (continued)

PARAMETER	UOM	LOR	0407_QC206_200616 SOIL - 16/6/2020 SE207687.036
% Moisture	%w/w	1	1.2

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid, mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents .
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE207687 R1

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barrack**
Order Number	(Not specified)
Samples	36

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207687 R1**
Date Received	17 Jun 2020
Date Reported	01 Jul 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Surrogate	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	3 items
Duplicate	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	2 items
Matrix Spike	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	1 item
	VOC's in Soil	1 item

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	36 Soil
Date documentation received	17/6/2020	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	11°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE207687 R1

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP078_0.1_200615	SE207687.001	LB202379	15 Jun 2020	17 Jun 2020	13 Jul 2020	19 Jun 2020	13 Jul 2020	24 Jun 2020
0407_TP078_0.7_200615	SE207687.002	LB202379	15 Jun 2020	17 Jun 2020	13 Jul 2020	19 Jun 2020	13 Jul 2020	24 Jun 2020
0407_TP079_0.1_200615	SE207687.003	LB202379	15 Jun 2020	17 Jun 2020	13 Jul 2020	19 Jun 2020	13 Jul 2020	24 Jun 2020
0407_TP079_1_200615	SE207687.004	LB202379	15 Jun 2020	17 Jun 2020	13 Jul 2020	19 Jun 2020	13 Jul 2020	24 Jun 2020
0407_TP80_0.1_200615	SE207687.005	LB202379	15 Jun 2020	17 Jun 2020	13 Jul 2020	19 Jun 2020	13 Jul 2020	24 Jun 2020
0407_TP80_0.8_200615	SE207687.006	LB202379	15 Jun 2020	17 Jun 2020	13 Jul 2020	19 Jun 2020	13 Jul 2020	24 Jun 2020
0407_QC101_200615	SE207687.007	LB202379	15 Jun 2020	17 Jun 2020	13 Jul 2020	19 Jun 2020	13 Jul 2020	24 Jun 2020
0407_TP88_0.1_200615	SE207687.008	LB202379	15 Jun 2020	17 Jun 2020	13 Jul 2020	19 Jun 2020	13 Jul 2020	24 Jun 2020
0407_TP88_0.5_200615	SE207687.009	LB202379	15 Jun 2020	17 Jun 2020	13 Jul 2020	19 Jun 2020	13 Jul 2020	24 Jun 2020
0407_TP89_0.1_200615	SE207687.010	LB202379	15 Jun 2020	17 Jun 2020	13 Jul 2020	19 Jun 2020	13 Jul 2020	24 Jun 2020
0407_TP89_0.3_200615	SE207687.011	LB202379	15 Jun 2020	17 Jun 2020	13 Jul 2020	19 Jun 2020	13 Jul 2020	24 Jun 2020
0407_TP90_0.1_200615	SE207687.012	LB202379	15 Jun 2020	17 Jun 2020	13 Jul 2020	19 Jun 2020	13 Jul 2020	24 Jun 2020
0407_TP90_0.5_200615	SE207687.013	LB202379	15 Jun 2020	17 Jun 2020	13 Jul 2020	19 Jun 2020	13 Jul 2020	24 Jun 2020
0407_TP108_0.1_200616	SE207687.014	LB202379	15 Jun 2020	17 Jun 2020	13 Jul 2020	19 Jun 2020	13 Jul 2020	24 Jun 2020
0407_TP108_0.6_200616	SE207687.015	LB202380	16 Jun 2020	17 Jun 2020	14 Jul 2020	19 Jun 2020	14 Jul 2020	24 Jun 2020
0407_TP109_0.1_200616	SE207687.016	LB202380	16 Jun 2020	17 Jun 2020	14 Jul 2020	19 Jun 2020	14 Jul 2020	24 Jun 2020
0407_QC102_200616	SE207687.017	LB202380	16 Jun 2020	17 Jun 2020	14 Jul 2020	19 Jun 2020	14 Jul 2020	24 Jun 2020
0407_QC202_200616	SE207687.018	LB202380	16 Jun 2020	17 Jun 2020	14 Jul 2020	19 Jun 2020	14 Jul 2020	24 Jun 2020
0407_TP109_0.8_200616	SE207687.019	LB202380	16 Jun 2020	17 Jun 2020	14 Jul 2020	19 Jun 2020	14 Jul 2020	24 Jun 2020
0407_TP110_0.1_200616	SE207687.020	LB202380	16 Jun 2020	17 Jun 2020	14 Jul 2020	19 Jun 2020	14 Jul 2020	24 Jun 2020
0407_TP110_1_200616	SE207687.021	LB202380	16 Jun 2020	17 Jun 2020	14 Jul 2020	19 Jun 2020	14 Jul 2020	24 Jun 2020
0407_TP98_0.1_200616	SE207687.022	LB202380	16 Jun 2020	17 Jun 2020	14 Jul 2020	19 Jun 2020	14 Jul 2020	24 Jun 2020
0407_TP98_0.8_200616	SE207687.023	LB202380	16 Jun 2020	17 Jun 2020	14 Jul 2020	19 Jun 2020	14 Jul 2020	24 Jun 2020
0407_TP99_0.1_200616	SE207687.024	LB202380	16 Jun 2020	17 Jun 2020	14 Jul 2020	19 Jun 2020	14 Jul 2020	24 Jun 2020
0407_TP99_0.6_200616	SE207687.025	LB202380	16 Jun 2020	17 Jun 2020	14 Jul 2020	19 Jun 2020	14 Jul 2020	24 Jun 2020
0407_TP100_0.1_200616	SE207687.026	LB202380	16 Jun 2020	17 Jun 2020	14 Jul 2020	19 Jun 2020	14 Jul 2020	24 Jun 2020
0407_TP100_0.4_200616	SE207687.027	LB202380	16 Jun 2020	17 Jun 2020	14 Jul 2020	19 Jun 2020	14 Jul 2020	24 Jun 2020
0407_TP131_0.1_200616	SE207687.028	LB202380	16 Jun 2020	17 Jun 2020	14 Jul 2020	19 Jun 2020	14 Jul 2020	24 Jun 2020
0407_TP131_1.2_200616	SE207687.029	LB202380	16 Jun 2020	17 Jun 2020	14 Jul 2020	19 Jun 2020	14 Jul 2020	24 Jun 2020
0407_TP128_0.5_200616	SE207687.030	LB202380	16 Jun 2020	17 Jun 2020	14 Jul 2020	19 Jun 2020	14 Jul 2020	24 Jun 2020
0407_TP129_0.1_200616	SE207687.031	LB202380	16 Jun 2020	17 Jun 2020	14 Jul 2020	19 Jun 2020	14 Jul 2020	24 Jun 2020
0407_TP129_0.4_200616	SE207687.032	LB202380	16 Jun 2020	17 Jun 2020	14 Jul 2020	19 Jun 2020	14 Jul 2020	24 Jun 2020
0407_TP130_0.1_200616	SE207687.033	LB202380	16 Jun 2020	17 Jun 2020	14 Jul 2020	19 Jun 2020	14 Jul 2020	24 Jun 2020
0407_TP130_0.7_200616	SE207687.034	LB202439	16 Jun 2020	17 Jun 2020	14 Jul 2020	22 Jun 2020	14 Jul 2020	24 Jun 2020
0407_QC106_200616	SE207687.035	LB202439	16 Jun 2020	17 Jun 2020	14 Jul 2020	22 Jun 2020	14 Jul 2020	24 Jun 2020
0407_QC206_200616	SE207687.036	LB202439	16 Jun 2020	17 Jun 2020	14 Jul 2020	22 Jun 2020	14 Jul 2020	24 Jun 2020

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP078_0.1_200615	SE207687.001	LB202339	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020
0407_TP078_0.7_200615	SE207687.002	LB202339	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020
0407_TP079_0.1_200615	SE207687.003	LB202339	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020
0407_TP079_1_200615	SE207687.004	LB202339	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020
0407_TP80_0.1_200615	SE207687.005	LB202339	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020
0407_TP80_0.8_200615	SE207687.006	LB202339	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020
0407_QC101_200615	SE207687.007	LB202339	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020
0407_TP88_0.1_200615	SE207687.008	LB202339	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020
0407_TP88_0.5_200615	SE207687.009	LB202339	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020
0407_TP89_0.1_200615	SE207687.010	LB202339	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020
0407_TP89_0.3_200615	SE207687.011	LB202339	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020
0407_TP90_0.1_200615	SE207687.012	LB202339	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020
0407_TP90_0.5_200615	SE207687.013	LB202339	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020
0407_TP108_0.1_200616	SE207687.014	LB202339	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020
0407_TP108_0.6_200616	SE207687.015	LB202339	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020
0407_TP109_0.1_200616	SE207687.016	LB202339	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020
0407_QC102_200616	SE207687.017	LB202339	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020
0407_QC202_200616	SE207687.018	LB202339	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020
0407_TP109_0.8_200616	SE207687.019	LB202339	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020
0407_TP110_0.1_200616	SE207687.020	LB202339	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020
0407_TP110_1_200616	SE207687.021	LB202340	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020

HOLDING TIME SUMMARY

SE207687 R1

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Moisture Content (continued)

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP98_0.1_200616	SE207687.022	LB202340	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020
0407_TP98_0.8_200616	SE207687.023	LB202340	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020
0407_TP99_0.1_200616	SE207687.024	LB202340	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020
0407_TP99_0.6_200616	SE207687.025	LB202340	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020
0407_TP100_0.1_200616	SE207687.026	LB202340	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020
0407_TP100_0.4_200616	SE207687.027	LB202340	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020
0407_TP131_0.1_200616	SE207687.028	LB202340	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020
0407_TP131_1.2_200616	SE207687.029	LB202340	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020
0407_TP128_0.5_200616	SE207687.030	LB202340	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020
0407_TP129_0.1_200616	SE207687.031	LB202340	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020
0407_TP129_0.4_200616	SE207687.032	LB202340	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020
0407_TP130_0.1_200616	SE207687.033	LB202340	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020
0407_TP130_0.7_200616	SE207687.034	LB202340	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020
0407_QC106_200616	SE207687.035	LB202340	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020
0407_QC206_200616	SE207687.036	LB202340	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	24 Jun 2020	23 Jun 2020

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP078_0.1_200615	SE207687.001	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP078_0.7_200615	SE207687.002	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP079_0.1_200615	SE207687.003	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP079_1_200615	SE207687.004	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP80_0.1_200615	SE207687.005	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP80_0.8_200615	SE207687.006	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_QC101_200615	SE207687.007	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP88_0.1_200615	SE207687.008	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP88_0.5_200615	SE207687.009	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP89_0.1_200615	SE207687.010	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP89_0.3_200615	SE207687.011	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP90_0.1_200615	SE207687.012	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP90_0.5_200615	SE207687.013	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP108_0.1_200616	SE207687.014	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP108_0.6_200616	SE207687.015	LB202334	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP109_0.1_200616	SE207687.016	LB202334	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_QC102_200616	SE207687.017	LB202334	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_QC202_200616	SE207687.018	LB202334	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP109_0.8_200616	SE207687.019	LB202334	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP110_0.1_200616	SE207687.020	LB202334	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP110_1_200616	SE207687.021	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP98_0.1_200616	SE207687.022	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP98_0.8_200616	SE207687.023	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP99_0.1_200616	SE207687.024	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP99_0.6_200616	SE207687.025	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP100_0.1_200616	SE207687.026	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP100_0.4_200616	SE207687.027	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP131_0.1_200616	SE207687.028	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP131_1.2_200616	SE207687.029	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP128_0.5_200616	SE207687.030	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP129_0.1_200616	SE207687.031	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP129_0.4_200616	SE207687.032	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP130_0.1_200616	SE207687.033	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP130_0.7_200616	SE207687.034	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_QC106_200616	SE207687.035	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_QC206_200616	SE207687.036	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP078_0.1_200615	SE207687.001	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP078_0.7_200615	SE207687.002	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP079_0.1_200615	SE207687.003	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP079_1_200615	SE207687.004	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020

HOLDING TIME SUMMARY

SE207687 R1

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP80_0.1_200615	SE207687.005	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP80_0.8_200615	SE207687.006	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_QC101_200615	SE207687.007	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP88_0.1_200615	SE207687.008	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP88_0.5_200615	SE207687.009	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP89_0.1_200615	SE207687.010	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP89_0.3_200615	SE207687.011	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP90_0.1_200615	SE207687.012	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP90_0.5_200615	SE207687.013	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP108_0.1_200616	SE207687.014	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP108_0.6_200616	SE207687.015	LB202334	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP109_0.1_200616	SE207687.016	LB202334	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_QC102_200616	SE207687.017	LB202334	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_QC202_200616	SE207687.018	LB202334	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP109_0.8_200616	SE207687.019	LB202334	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP110_0.1_200616	SE207687.020	LB202334	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP110_1_200616	SE207687.021	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP98_0.1_200616	SE207687.022	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP98_0.8_200616	SE207687.023	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP99_0.1_200616	SE207687.024	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP99_0.6_200616	SE207687.025	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP100_0.1_200616	SE207687.026	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP100_0.4_200616	SE207687.027	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP131_0.1_200616	SE207687.028	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP131_1.2_200616	SE207687.029	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP128_0.5_200616	SE207687.030	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP129_0.1_200616	SE207687.031	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP129_0.4_200616	SE207687.032	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP130_0.1_200616	SE207687.033	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP130_0.7_200616	SE207687.034	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_QC106_200616	SE207687.035	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_QC206_200616	SE207687.036	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP078_0.1_200615	SE207687.001	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP078_0.7_200615	SE207687.002	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP079_0.1_200615	SE207687.003	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP079_1_200615	SE207687.004	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP80_0.1_200615	SE207687.005	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP80_0.8_200615	SE207687.006	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_QC101_200615	SE207687.007	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP88_0.1_200615	SE207687.008	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP88_0.5_200615	SE207687.009	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP89_0.1_200615	SE207687.010	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP89_0.3_200615	SE207687.011	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP90_0.1_200615	SE207687.012	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP90_0.5_200615	SE207687.013	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP108_0.1_200616	SE207687.014	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP108_0.6_200616	SE207687.015	LB202334	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP109_0.1_200616	SE207687.016	LB202334	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_QC102_200616	SE207687.017	LB202334	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_QC202_200616	SE207687.018	LB202334	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP109_0.8_200616	SE207687.019	LB202334	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP110_0.1_200616	SE207687.020	LB202334	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP110_1_200616	SE207687.021	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP98_0.1_200616	SE207687.022	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP98_0.8_200616	SE207687.023	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP99_0.1_200616	SE207687.024	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP99_0.6_200616	SE207687.025	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020

HOLDING TIME SUMMARY

SE207687 R1

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP100_0.1_200616	SE207687.026	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP100_0.4_200616	SE207687.027	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP131_0.1_200616	SE207687.028	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP131_1.2_200616	SE207687.029	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP128_0.5_200616	SE207687.030	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP129_0.1_200616	SE207687.031	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP129_0.4_200616	SE207687.032	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP130_0.1_200616	SE207687.033	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP130_0.7_200616	SE207687.034	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_QC106_200616	SE207687.035	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_QC206_200616	SE207687.036	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP078_0.1_200615	SE207687.001	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP078_0.7_200615	SE207687.002	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP079_0.1_200615	SE207687.003	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP079_1_200615	SE207687.004	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP80_0.1_200615	SE207687.005	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP80_0.8_200615	SE207687.006	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_QC101_200615	SE207687.007	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP88_0.1_200615	SE207687.008	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP88_0.5_200615	SE207687.009	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP89_0.1_200615	SE207687.010	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP89_0.3_200615	SE207687.011	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP90_0.1_200615	SE207687.012	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP90_0.5_200615	SE207687.013	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP108_0.1_200616	SE207687.014	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP108_0.6_200616	SE207687.015	LB202334	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP109_0.1_200616	SE207687.016	LB202334	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_QC102_200616	SE207687.017	LB202334	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_QC202_200616	SE207687.018	LB202334	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP109_0.8_200616	SE207687.019	LB202334	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP110_0.1_200616	SE207687.020	LB202334	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP110_1_200616	SE207687.021	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP98_0.1_200616	SE207687.022	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP98_0.8_200616	SE207687.023	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP99_0.1_200616	SE207687.024	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP99_0.6_200616	SE207687.025	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP100_0.1_200616	SE207687.026	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP100_0.4_200616	SE207687.027	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP131_0.1_200616	SE207687.028	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP131_1.2_200616	SE207687.029	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP128_0.5_200616	SE207687.030	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP129_0.1_200616	SE207687.031	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP129_0.4_200616	SE207687.032	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP130_0.1_200616	SE207687.033	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP130_0.7_200616	SE207687.034	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_QC106_200616	SE207687.035	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_QC206_200616	SE207687.036	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP078_0.1_200615	SE207687.001	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP078_0.7_200615	SE207687.002	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP079_0.1_200615	SE207687.003	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP079_1_200615	SE207687.004	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP80_0.1_200615	SE207687.005	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP80_0.8_200615	SE207687.006	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_QC101_200615	SE207687.007	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP88_0.1_200615	SE207687.008	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP88_0.5_200615	SE207687.009	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP89_0.1_200615	SE207687.010	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP89_0.3_200615	SE207687.011	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP90_0.1_200615	SE207687.012	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP90_0.5_200615	SE207687.013	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP108_0.1_200616	SE207687.014	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP108_0.6_200616	SE207687.015	LB202334	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP109_0.1_200616	SE207687.016	LB202334	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_QC102_200616	SE207687.017	LB202334	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_QC202_200616	SE207687.018	LB202334	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP109_0.8_200616	SE207687.019	LB202334	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP110_0.1_200616	SE207687.020	LB202334	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP110_1_200616	SE207687.021	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP98_0.1_200616	SE207687.022	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP98_0.8_200616	SE207687.023	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP99_0.1_200616	SE207687.024	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP99_0.6_200616	SE207687.025	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP100_0.1_200616	SE207687.026	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP100_0.4_200616	SE207687.027	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP131_0.1_200616	SE207687.028	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP131_1.2_200616	SE207687.029	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP128_0.5_200616	SE207687.030	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP129_0.1_200616	SE207687.031	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP129_0.4_200616	SE207687.032	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP130_0.1_200616	SE207687.033	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP130_0.7_200616	SE207687.034	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_QC106_200616	SE207687.035	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_QC206_200616	SE207687.036	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP078_0.1_200615	SE207687.001	LB202373	15 Jun 2020	17 Jun 2020	12 Dec 2020	19 Jun 2020	12 Dec 2020	23 Jun 2020
0407_TP078_0.7_200615	SE207687.002	LB202373	15 Jun 2020	17 Jun 2020	12 Dec 2020	19 Jun 2020	12 Dec 2020	23 Jun 2020
0407_TP079_0.1_200615	SE207687.003	LB202373	15 Jun 2020	17 Jun 2020	12 Dec 2020	19 Jun 2020	12 Dec 2020	23 Jun 2020
0407_TP079_1_200615	SE207687.004	LB202373	15 Jun 2020	17 Jun 2020	12 Dec 2020	19 Jun 2020	12 Dec 2020	23 Jun 2020
0407_TP80_0.1_200615	SE207687.005	LB202373	15 Jun 2020	17 Jun 2020	12 Dec 2020	19 Jun 2020	12 Dec 2020	23 Jun 2020
0407_TP80_0.8_200615	SE207687.006	LB202373	15 Jun 2020	17 Jun 2020	12 Dec 2020	19 Jun 2020	12 Dec 2020	23 Jun 2020
0407_QC101_200615	SE207687.007	LB202373	15 Jun 2020	17 Jun 2020	12 Dec 2020	19 Jun 2020	12 Dec 2020	23 Jun 2020
0407_TP88_0.1_200615	SE207687.008	LB202373	15 Jun 2020	17 Jun 2020	12 Dec 2020	19 Jun 2020	12 Dec 2020	23 Jun 2020
0407_TP88_0.5_200615	SE207687.009	LB202373	15 Jun 2020	17 Jun 2020	12 Dec 2020	19 Jun 2020	12 Dec 2020	23 Jun 2020
0407_TP89_0.1_200615	SE207687.010	LB202373	15 Jun 2020	17 Jun 2020	12 Dec 2020	19 Jun 2020	12 Dec 2020	23 Jun 2020
0407_TP89_0.3_200615	SE207687.011	LB202373	15 Jun 2020	17 Jun 2020	12 Dec 2020	19 Jun 2020	12 Dec 2020	23 Jun 2020
0407_TP90_0.1_200615	SE207687.012	LB202373	15 Jun 2020	17 Jun 2020	12 Dec 2020	19 Jun 2020	12 Dec 2020	23 Jun 2020
0407_TP90_0.5_200615	SE207687.013	LB202373	15 Jun 2020	17 Jun 2020	12 Dec 2020	19 Jun 2020	12 Dec 2020	23 Jun 2020
0407_TP108_0.1_200616	SE207687.014	LB202373	15 Jun 2020	17 Jun 2020	12 Dec 2020	19 Jun 2020	12 Dec 2020	23 Jun 2020
0407_TP108_0.6_200616	SE207687.015	LB202374	16 Jun 2020	17 Jun 2020	13 Dec 2020	19 Jun 2020	13 Dec 2020	23 Jun 2020
0407_TP109_0.1_200616	SE207687.016	LB202374	16 Jun 2020	17 Jun 2020	13 Dec 2020	19 Jun 2020	13 Dec 2020	23 Jun 2020
0407_QC102_200616	SE207687.017	LB202374	16 Jun 2020	17 Jun 2020	13 Dec 2020	19 Jun 2020	13 Dec 2020	23 Jun 2020
0407_QC202_200616	SE207687.018	LB202374	16 Jun 2020	17 Jun 2020	13 Dec 2020	19 Jun 2020	13 Dec 2020	23 Jun 2020
0407_TP109_0.8_200616	SE207687.019	LB202374	16 Jun 2020	17 Jun 2020	13 Dec 2020	19 Jun 2020	13 Dec 2020	23 Jun 2020
0407_TP110_0.1_200616	SE207687.020	LB202374	16 Jun 2020	17 Jun 2020	13 Dec 2020	19 Jun 2020	13 Dec 2020	23 Jun 2020
0407_TP110_1_200616	SE207687.021	LB202374	16 Jun 2020	17 Jun 2020	13 Dec 2020	19 Jun 2020	13 Dec 2020	23 Jun 2020
0407_TP98_0.1_200616	SE207687.022	LB202374	16 Jun 2020	17 Jun 2020	13 Dec 2020	19 Jun 2020	13 Dec 2020	23 Jun 2020
0407_TP98_0.8_200616	SE207687.023	LB202374	16 Jun 2020	17 Jun 2020	13 Dec 2020	19 Jun 2020	13 Dec 2020	23 Jun 2020
0407_TP99_0.1_200616	SE207687.024	LB202374	16 Jun 2020	17 Jun 2020	13 Dec 2020	19 Jun 2020	13 Dec 2020	23 Jun 2020
0407_TP99_0.6_200616	SE207687.025	LB202374	16 Jun 2020	17 Jun 2020	13 Dec 2020	19 Jun 2020	13 Dec 2020	23 Jun 2020
0407_TP100_0.1_200616	SE207687.026	LB202374	16 Jun 2020	17 Jun 2020	13 Dec 2020	19 Jun 2020	13 Dec 2020	23 Jun 2020
0407_TP100_0.4_200616	SE207687.027	LB202374	16 Jun 2020	17 Jun 2020	13 Dec 2020	19 Jun 2020	13 Dec 2020	23 Jun 2020
0407_TP131_0.1_200616	SE207687.028	LB202374	16 Jun 2020	17 Jun 2020	13 Dec 2020	19 Jun 2020	13 Dec 2020	23 Jun 2020
0407_TP131_1.2_200616	SE207687.029	LB202374	16 Jun 2020	17 Jun 2020	13 Dec 2020	19 Jun 2020	13 Dec 2020	23 Jun 2020

HOLDING TIME SUMMARY

SE207687 R1

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP128_0.5_200616	SE207687.030	LB202374	16 Jun 2020	17 Jun 2020	13 Dec 2020	19 Jun 2020	13 Dec 2020	23 Jun 2020
0407_TP129_0.1_200616	SE207687.031	LB202374	16 Jun 2020	17 Jun 2020	13 Dec 2020	19 Jun 2020	13 Dec 2020	23 Jun 2020
0407_TP129_0.4_200616	SE207687.032	LB202374	16 Jun 2020	17 Jun 2020	13 Dec 2020	19 Jun 2020	13 Dec 2020	23 Jun 2020
0407_TP130_0.1_200616	SE207687.033	LB202374	16 Jun 2020	17 Jun 2020	13 Dec 2020	19 Jun 2020	13 Dec 2020	23 Jun 2020
0407_TP130_0.7_200616	SE207687.034	LB202437	16 Jun 2020	17 Jun 2020	13 Dec 2020	22 Jun 2020	13 Dec 2020	23 Jun 2020
0407_QC106_200616	SE207687.035	LB202437	16 Jun 2020	17 Jun 2020	13 Dec 2020	22 Jun 2020	13 Dec 2020	23 Jun 2020
0407_QC206_200616	SE207687.036	LB202437	16 Jun 2020	17 Jun 2020	13 Dec 2020	22 Jun 2020	13 Dec 2020	23 Jun 2020

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP078_0.1_200615	SE207687.001	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP078_0.7_200615	SE207687.002	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP079_0.1_200615	SE207687.003	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP079_1_200615	SE207687.004	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP80_0.1_200615	SE207687.005	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP80_0.8_200615	SE207687.006	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_QC101_200615	SE207687.007	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP88_0.1_200615	SE207687.008	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP88_0.5_200615	SE207687.009	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP89_0.1_200615	SE207687.010	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP89_0.3_200615	SE207687.011	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP90_0.1_200615	SE207687.012	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP90_0.5_200615	SE207687.013	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP108_0.1_200616	SE207687.014	LB202334	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP108_0.6_200616	SE207687.015	LB202334	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP109_0.1_200616	SE207687.016	LB202334	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_QC102_200616	SE207687.017	LB202334	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_QC202_200616	SE207687.018	LB202334	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP109_0.8_200616	SE207687.019	LB202334	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP110_0.1_200616	SE207687.020	LB202334	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP110_1_200616	SE207687.021	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP98_0.1_200616	SE207687.022	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP98_0.8_200616	SE207687.023	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP99_0.1_200616	SE207687.024	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP99_0.6_200616	SE207687.025	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP100_0.1_200616	SE207687.026	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP100_0.4_200616	SE207687.027	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP131_0.1_200616	SE207687.028	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP131_1.2_200616	SE207687.029	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP128_0.5_200616	SE207687.030	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP129_0.1_200616	SE207687.031	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP129_0.4_200616	SE207687.032	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP130_0.1_200616	SE207687.033	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_TP130_0.7_200616	SE207687.034	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_QC106_200616	SE207687.035	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020
0407_QC206_200616	SE207687.036	LB202335	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	23 Jun 2020

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP078_0.1_200615	SE207687.001	LB202329	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP078_0.7_200615	SE207687.002	LB202329	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP079_0.1_200615	SE207687.003	LB202329	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP079_1_200615	SE207687.004	LB202329	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP80_0.1_200615	SE207687.005	LB202329	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP80_0.8_200615	SE207687.006	LB202329	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_QC101_200615	SE207687.007	LB202329	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP88_0.1_200615	SE207687.008	LB202329	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP88_0.5_200615	SE207687.009	LB202329	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP89_0.1_200615	SE207687.010	LB202329	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP89_0.3_200615	SE207687.011	LB202329	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP90_0.1_200615	SE207687.012	LB202329	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020

HOLDING TIME SUMMARY

SE207687 R1

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP90_0.5_200615	SE207687.013	LB202329	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP108_0.1_200616	SE207687.014	LB202329	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP108_0.6_200616	SE207687.015	LB202329	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP109_0.1_200616	SE207687.016	LB202329	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_QC102_200616	SE207687.017	LB202329	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_QC202_200616	SE207687.018	LB202329	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP109_0.8_200616	SE207687.019	LB202329	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP110_0.1_200616	SE207687.020	LB202329	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP110_1_200616	SE207687.021	LB202331	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP98_0.1_200616	SE207687.022	LB202331	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP98_0.8_200616	SE207687.023	LB202331	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP99_0.1_200616	SE207687.024	LB202331	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP99_0.6_200616	SE207687.025	LB202331	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP100_0.1_200616	SE207687.026	LB202331	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP100_0.4_200616	SE207687.027	LB202331	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP131_0.1_200616	SE207687.028	LB202331	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP131_1.2_200616	SE207687.029	LB202331	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP128_0.5_200616	SE207687.030	LB202331	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP129_0.1_200616	SE207687.031	LB202331	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP129_0.4_200616	SE207687.032	LB202331	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP130_0.1_200616	SE207687.033	LB202331	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP130_0.7_200616	SE207687.034	LB202331	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_QC106_200616	SE207687.035	LB202331	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_QC206_200616	SE207687.036	LB202331	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP078_0.1_200615	SE207687.001	LB202329	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP078_0.7_200615	SE207687.002	LB202329	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP079_0.1_200615	SE207687.003	LB202329	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP079_1_200615	SE207687.004	LB202329	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP80_0.1_200615	SE207687.005	LB202329	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP80_0.8_200615	SE207687.006	LB202329	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_QC101_200615	SE207687.007	LB202329	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP88_0.1_200615	SE207687.008	LB202329	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP88_0.5_200615	SE207687.009	LB202329	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP89_0.1_200615	SE207687.010	LB202329	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP89_0.3_200615	SE207687.011	LB202329	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP90_0.1_200615	SE207687.012	LB202329	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP90_0.5_200615	SE207687.013	LB202329	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP108_0.1_200616	SE207687.014	LB202329	15 Jun 2020	17 Jun 2020	29 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP108_0.6_200616	SE207687.015	LB202329	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP109_0.1_200616	SE207687.016	LB202329	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_QC102_200616	SE207687.017	LB202329	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_QC202_200616	SE207687.018	LB202329	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP109_0.8_200616	SE207687.019	LB202329	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP110_0.1_200616	SE207687.020	LB202329	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP110_1_200616	SE207687.021	LB202331	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP98_0.1_200616	SE207687.022	LB202331	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP98_0.8_200616	SE207687.023	LB202331	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP99_0.1_200616	SE207687.024	LB202331	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP99_0.6_200616	SE207687.025	LB202331	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP100_0.1_200616	SE207687.026	LB202331	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP100_0.4_200616	SE207687.027	LB202331	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP131_0.1_200616	SE207687.028	LB202331	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP131_1.2_200616	SE207687.029	LB202331	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP128_0.5_200616	SE207687.030	LB202331	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP129_0.1_200616	SE207687.031	LB202331	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP129_0.4_200616	SE207687.032	LB202331	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_TP130_0.1_200616	SE207687.033	LB202331	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP130_0.7_200616	SE207687.034	LB202331	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_QC106_200616	SE207687.035	LB202331	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020
0407_QC206_200616	SE207687.036	LB202331	16 Jun 2020	17 Jun 2020	30 Jun 2020	19 Jun 2020	29 Jul 2020	24 Jun 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP078_0.1_200615	SE207687.001	%	60 - 130%	93
	0407_TP078_0.7_200615	SE207687.002	%	60 - 130%	95
	0407_TP079_0.1_200615	SE207687.003	%	60 - 130%	98
	0407_TP079_1_200615	SE207687.004	%	60 - 130%	99
	0407_TP80_0.1_200615	SE207687.005	%	60 - 130%	103
	0407_TP80_0.8_200615	SE207687.006	%	60 - 130%	101
	0407_QC101_200615	SE207687.007	%	60 - 130%	101
	0407_TP88_0.1_200615	SE207687.008	%	60 - 130%	99
	0407_TP88_0.5_200615	SE207687.009	%	60 - 130%	99
	0407_TP89_0.1_200615	SE207687.010	%	60 - 130%	101
	0407_TP89_0.3_200615	SE207687.011	%	60 - 130%	109
	0407_TP90_0.1_200615	SE207687.012	%	60 - 130%	100
	0407_TP90_0.5_200615	SE207687.013	%	60 - 130%	97
	0407_TP108_0.1_200616	SE207687.014	%	60 - 130%	95
	0407_TP108_0.6_200616	SE207687.015	%	60 - 130%	96
	0407_TP109_0.1_200616	SE207687.016	%	60 - 130%	101
	0407_QC102_200616	SE207687.017	%	60 - 130%	103
	0407_QC202_200616	SE207687.018	%	60 - 130%	117
	0407_TP109_0.8_200616	SE207687.019	%	60 - 130%	101
	0407_TP110_0.1_200616	SE207687.020	%	60 - 130%	100
	0407_TP110_1_200616	SE207687.021	%	60 - 130%	97
	0407_TP98_0.1_200616	SE207687.022	%	60 - 130%	101
	0407_TP98_0.8_200616	SE207687.023	%	60 - 130%	104
	0407_TP99_0.1_200616	SE207687.024	%	60 - 130%	109
	0407_TP99_0.6_200616	SE207687.025	%	60 - 130%	101
	0407_TP100_0.1_200616	SE207687.026	%	60 - 130%	99
	0407_TP100_0.4_200616	SE207687.027	%	60 - 130%	97
	0407_TP131_0.1_200616	SE207687.028	%	60 - 130%	96
	0407_TP131_1.2_200616	SE207687.029	%	60 - 130%	96
	0407_TP128_0.5_200616	SE207687.030	%	60 - 130%	99
	0407_TP129_0.1_200616	SE207687.031	%	60 - 130%	100
	0407_TP129_0.4_200616	SE207687.032	%	60 - 130%	93
	0407_TP130_0.1_200616	SE207687.033	%	60 - 130%	99
	0407_TP130_0.7_200616	SE207687.034	%	60 - 130%	103
	0407_QC106_200616	SE207687.035	%	60 - 130%	103
	0407_QC206_200616	SE207687.036	%	60 - 130%	99

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP078_0.1_200615	SE207687.001	%	60 - 130%	83
	0407_TP078_0.7_200615	SE207687.002	%	60 - 130%	75
	0407_TP079_0.1_200615	SE207687.003	%	60 - 130%	83
	0407_TP079_1_200615	SE207687.004	%	60 - 130%	84
	0407_TP80_0.1_200615	SE207687.005	%	60 - 130%	89
	0407_TP80_0.8_200615	SE207687.006	%	60 - 130%	84
	0407_QC101_200615	SE207687.007	%	60 - 130%	107
	0407_TP88_0.1_200615	SE207687.008	%	60 - 130%	88
	0407_TP88_0.5_200615	SE207687.009	%	60 - 130%	89
	0407_TP89_0.1_200615	SE207687.010	%	60 - 130%	87
	0407_TP89_0.3_200615	SE207687.011	%	60 - 130%	95
	0407_TP90_0.1_200615	SE207687.012	%	60 - 130%	82
	0407_TP90_0.5_200615	SE207687.013	%	60 - 130%	85
	0407_TP108_0.1_200616	SE207687.014	%	60 - 130%	87
	0407_TP108_0.6_200616	SE207687.015	%	60 - 130%	86
	0407_TP109_0.1_200616	SE207687.016	%	60 - 130%	106
	0407_QC102_200616	SE207687.017	%	60 - 130%	98
	0407_QC202_200616	SE207687.018	%	60 - 130%	97
	0407_TP109_0.8_200616	SE207687.019	%	60 - 130%	89
	0407_TP110_0.1_200616	SE207687.020	%	60 - 130%	85
	0407_TP110_1_200616	SE207687.021	%	60 - 130%	87
	0407_TP98_0.1_200616	SE207687.022	%	60 - 130%	72

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OP Pesticides in Soil (continued) — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP98_0.8_200616	SE207687.023	%	60 - 130%	77
	0407_TP99_0.1_200616	SE207687.024	%	60 - 130%	79
	0407_TP99_0.6_200616	SE207687.025	%	60 - 130%	75
	0407_TP100_0.1_200616	SE207687.026	%	60 - 130%	85
	0407_TP100_0.4_200616	SE207687.027	%	60 - 130%	83
	0407_TP131_0.1_200616	SE207687.028	%	60 - 130%	89
	0407_TP131_1.2_200616	SE207687.029	%	60 - 130%	77
	0407_TP128_0.5_200616	SE207687.030	%	60 - 130%	91
	0407_TP129_0.1_200616	SE207687.031	%	60 - 130%	84
	0407_TP129_0.4_200616	SE207687.032	%	60 - 130%	88
	0407_TP130_0.1_200616	SE207687.033	%	60 - 130%	86
	0407_TP130_0.7_200616	SE207687.034	%	60 - 130%	91
	0407_QC106_200616	SE207687.035	%	60 - 130%	94
	0407_QC206_200616	SE207687.036	%	60 - 130%	85
d14-p-terphenyl (Surrogate)	0407_TP078_0.1_200615	SE207687.001	%	60 - 130%	88
	0407_TP078_0.7_200615	SE207687.002	%	60 - 130%	86
	0407_TP079_0.1_200615	SE207687.003	%	60 - 130%	90
	0407_TP079_1_200615	SE207687.004	%	60 - 130%	84
	0407_TP80_0.1_200615	SE207687.005	%	60 - 130%	89
	0407_TP80_0.8_200615	SE207687.006	%	60 - 130%	85
	0407_QC101_200615	SE207687.007	%	60 - 130%	89
	0407_TP88_0.1_200615	SE207687.008	%	60 - 130%	87
	0407_TP88_0.5_200615	SE207687.009	%	60 - 130%	90
	0407_TP89_0.1_200615	SE207687.010	%	60 - 130%	87
	0407_TP89_0.3_200615	SE207687.011	%	60 - 130%	89
	0407_TP90_0.1_200615	SE207687.012	%	60 - 130%	87
	0407_TP90_0.5_200615	SE207687.013	%	60 - 130%	98
	0407_TP108_0.1_200616	SE207687.014	%	60 - 130%	94
	0407_TP108_0.6_200616	SE207687.015	%	60 - 130%	82
	0407_TP109_0.1_200616	SE207687.016	%	60 - 130%	87
	0407_QC102_200616	SE207687.017	%	60 - 130%	88
	0407_QC202_200616	SE207687.018	%	60 - 130%	94
	0407_TP109_0.8_200616	SE207687.019	%	60 - 130%	99
	0407_TP110_0.1_200616	SE207687.020	%	60 - 130%	87
	0407_TP110_1_200616	SE207687.021	%	60 - 130%	73
	0407_TP98_0.1_200616	SE207687.022	%	60 - 130%	87
	0407_TP98_0.8_200616	SE207687.023	%	60 - 130%	74
	0407_TP99_0.1_200616	SE207687.024	%	60 - 130%	86
	0407_TP99_0.6_200616	SE207687.025	%	60 - 130%	81
	0407_TP100_0.1_200616	SE207687.026	%	60 - 130%	79
	0407_TP100_0.4_200616	SE207687.027	%	60 - 130%	79
	0407_TP131_0.1_200616	SE207687.028	%	60 - 130%	81
	0407_TP131_1.2_200616	SE207687.029	%	60 - 130%	81
	0407_TP128_0.5_200616	SE207687.030	%	60 - 130%	79
	0407_TP129_0.1_200616	SE207687.031	%	60 - 130%	76
	0407_TP129_0.4_200616	SE207687.032	%	60 - 130%	72
	0407_TP130_0.1_200616	SE207687.033	%	60 - 130%	79
	0407_TP130_0.7_200616	SE207687.034	%	60 - 130%	84
	0407_QC106_200616	SE207687.035	%	60 - 130%	76
	0407_QC206_200616	SE207687.036	%	60 - 130%	76

PAH (Polynuclear Aromatic Hydrocarbons) in Soil — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP078_0.1_200615	SE207687.001	%	70 - 130%	83
	0407_TP078_0.7_200615	SE207687.002	%	70 - 130%	75
	0407_TP079_0.1_200615	SE207687.003	%	70 - 130%	83
	0407_TP079_1_200615	SE207687.004	%	70 - 130%	84
	0407_TP80_0.1_200615	SE207687.005	%	70 - 130%	89
	0407_TP80_0.8_200615	SE207687.006	%	70 - 130%	84
	0407_QC101_200615	SE207687.007	%	70 - 130%	107
	0407_TP88_0.1_200615	SE207687.008	%	70 - 130%	88

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued) — **Method: ME-(AU)-[ENV]AN420**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP88_0.5_200615	SE207687.009	%	70 - 130%	89
	0407_TP89_0.1_200615	SE207687.010	%	70 - 130%	87
	0407_TP89_0.3_200615	SE207687.011	%	70 - 130%	95
	0407_TP90_0.1_200615	SE207687.012	%	70 - 130%	82
	0407_TP90_0.5_200615	SE207687.013	%	70 - 130%	85
	0407_TP108_0.1_200616	SE207687.014	%	70 - 130%	87
	0407_TP108_0.6_200616	SE207687.015	%	70 - 130%	86
	0407_TP109_0.1_200616	SE207687.016	%	70 - 130%	106
	0407_QC102_200616	SE207687.017	%	70 - 130%	98
	0407_QC202_200616	SE207687.018	%	70 - 130%	97
	0407_TP109_0.8_200616	SE207687.019	%	70 - 130%	89
	0407_TP110_0.1_200616	SE207687.020	%	70 - 130%	85
	0407_TP110_1_200616	SE207687.021	%	70 - 130%	87
	0407_TP98_0.1_200616	SE207687.022	%	70 - 130%	72
	0407_TP98_0.8_200616	SE207687.023	%	70 - 130%	77
	0407_TP99_0.1_200616	SE207687.024	%	70 - 130%	79
	0407_TP99_0.6_200616	SE207687.025	%	70 - 130%	75
	0407_TP100_0.1_200616	SE207687.026	%	70 - 130%	85
	0407_TP100_0.4_200616	SE207687.027	%	70 - 130%	83
	0407_TP131_0.1_200616	SE207687.028	%	70 - 130%	89
	0407_TP131_1.2_200616	SE207687.029	%	70 - 130%	77
	0407_TP128_0.5_200616	SE207687.030	%	70 - 130%	91
	0407_TP129_0.1_200616	SE207687.031	%	70 - 130%	84
	0407_TP129_0.4_200616	SE207687.032	%	70 - 130%	88
	0407_TP130_0.1_200616	SE207687.033	%	70 - 130%	86
	0407_TP130_0.7_200616	SE207687.034	%	70 - 130%	91
	0407_QC106_200616	SE207687.035	%	70 - 130%	94
	0407_QC206_200616	SE207687.036	%	70 - 130%	85
d14-p-terphenyl (Surrogate)	0407_TP078_0.1_200615	SE207687.001	%	70 - 130%	88
	0407_TP078_0.7_200615	SE207687.002	%	70 - 130%	86
	0407_TP079_0.1_200615	SE207687.003	%	70 - 130%	90
	0407_TP079_1_200615	SE207687.004	%	70 - 130%	84
	0407_TP80_0.1_200615	SE207687.005	%	70 - 130%	89
	0407_TP80_0.8_200615	SE207687.006	%	70 - 130%	85
	0407_QC101_200615	SE207687.007	%	70 - 130%	89
	0407_TP88_0.1_200615	SE207687.008	%	70 - 130%	87
	0407_TP88_0.5_200615	SE207687.009	%	70 - 130%	90
	0407_TP89_0.1_200615	SE207687.010	%	70 - 130%	87
	0407_TP89_0.3_200615	SE207687.011	%	70 - 130%	89
	0407_TP90_0.1_200615	SE207687.012	%	70 - 130%	87
	0407_TP90_0.5_200615	SE207687.013	%	70 - 130%	98
	0407_TP108_0.1_200616	SE207687.014	%	70 - 130%	94
	0407_TP108_0.6_200616	SE207687.015	%	70 - 130%	82
	0407_TP109_0.1_200616	SE207687.016	%	70 - 130%	87
	0407_QC102_200616	SE207687.017	%	70 - 130%	88
	0407_QC202_200616	SE207687.018	%	70 - 130%	94
	0407_TP109_0.8_200616	SE207687.019	%	70 - 130%	99
	0407_TP110_0.1_200616	SE207687.020	%	70 - 130%	87
	0407_TP110_1_200616	SE207687.021	%	70 - 130%	73
	0407_TP98_0.1_200616	SE207687.022	%	70 - 130%	87
	0407_TP98_0.8_200616	SE207687.023	%	70 - 130%	74
	0407_TP99_0.1_200616	SE207687.024	%	70 - 130%	86
	0407_TP99_0.6_200616	SE207687.025	%	70 - 130%	81
	0407_TP100_0.1_200616	SE207687.026	%	70 - 130%	79
	0407_TP100_0.4_200616	SE207687.027	%	70 - 130%	79
	0407_TP131_0.1_200616	SE207687.028	%	70 - 130%	81
	0407_TP131_1.2_200616	SE207687.029	%	70 - 130%	81
	0407_TP128_0.5_200616	SE207687.030	%	70 - 130%	79
	0407_TP129_0.1_200616	SE207687.031	%	70 - 130%	76
	0407_TP129_0.4_200616	SE207687.032	%	70 - 130%	72
	0407_TP130_0.1_200616	SE207687.033	%	70 - 130%	79

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued) — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d14-p-terphenyl (Surrogate)	0407_TP130_0.7_200616	SE207687.034	%	70 - 130%	84
	0407_QC106_200616	SE207687.035	%	70 - 130%	76
	0407_QC206_200616	SE207687.036	%	70 - 130%	76
d5-nitrobenzene (Surrogate)	0407_TP078_0.1_200615	SE207687.001	%	70 - 130%	74
	0407_TP078_0.7_200615	SE207687.002	%	70 - 130%	72
	0407_TP079_0.1_200615	SE207687.003	%	70 - 130%	73
	0407_TP079_1_200615	SE207687.004	%	70 - 130%	74
	0407_TP80_0.1_200615	SE207687.005	%	70 - 130%	77
	0407_TP80_0.8_200615	SE207687.006	%	70 - 130%	72
	0407_QC101_200615	SE207687.007	%	70 - 130%	75
	0407_TP88_0.1_200615	SE207687.008	%	70 - 130%	76
	0407_TP88_0.5_200615	SE207687.009	%	70 - 130%	76
	0407_TP89_0.1_200615	SE207687.010	%	70 - 130%	73
	0407_TP89_0.3_200615	SE207687.011	%	70 - 130%	73
	0407_TP90_0.1_200615	SE207687.012	%	70 - 130%	74
	0407_TP90_0.5_200615	SE207687.013	%	70 - 130%	77
	0407_TP108_0.1_200616	SE207687.014	%	70 - 130%	77
	0407_TP108_0.6_200616	SE207687.015	%	70 - 130%	68 ①
	0407_TP109_0.1_200616	SE207687.016	%	70 - 130%	77
	0407_QC102_200616	SE207687.017	%	70 - 130%	66 ①
	0407_QC202_200616	SE207687.018	%	70 - 130%	78
	0407_TP109_0.8_200616	SE207687.019	%	70 - 130%	72
	0407_TP110_0.1_200616	SE207687.020	%	70 - 130%	70 ①
	0407_TP110_1_200616	SE207687.021	%	70 - 130%	83
	0407_TP98_0.1_200616	SE207687.022	%	70 - 130%	85
	0407_TP98_0.8_200616	SE207687.023	%	70 - 130%	79
	0407_TP99_0.1_200616	SE207687.024	%	70 - 130%	85
	0407_TP99_0.6_200616	SE207687.025	%	70 - 130%	84
	0407_TP100_0.1_200616	SE207687.026	%	70 - 130%	85
	0407_TP100_0.4_200616	SE207687.027	%	70 - 130%	84
	0407_TP131_0.1_200616	SE207687.028	%	70 - 130%	84
	0407_TP131_1.2_200616	SE207687.029	%	70 - 130%	83
	0407_TP128_0.5_200616	SE207687.030	%	70 - 130%	84
	0407_TP129_0.1_200616	SE207687.031	%	70 - 130%	82
	0407_TP129_0.4_200616	SE207687.032	%	70 - 130%	88
	0407_TP130_0.1_200616	SE207687.033	%	70 - 130%	91
	0407_TP130_0.7_200616	SE207687.034	%	70 - 130%	84
	0407_QC106_200616	SE207687.035	%	70 - 130%	87
	0407_QC206_200616	SE207687.036	%	70 - 130%	85

PCBs in Soil — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP078_0.1_200615	SE207687.001	%	60 - 130%	93
	0407_TP078_0.7_200615	SE207687.002	%	60 - 130%	95
	0407_TP079_0.1_200615	SE207687.003	%	60 - 130%	98
	0407_TP079_1_200615	SE207687.004	%	60 - 130%	99
	0407_TP80_0.1_200615	SE207687.005	%	60 - 130%	103
	0407_TP80_0.8_200615	SE207687.006	%	60 - 130%	101
	0407_QC101_200615	SE207687.007	%	60 - 130%	101
	0407_TP88_0.1_200615	SE207687.008	%	60 - 130%	99
	0407_TP88_0.5_200615	SE207687.009	%	60 - 130%	99
	0407_TP89_0.1_200615	SE207687.010	%	60 - 130%	101
	0407_TP89_0.3_200615	SE207687.011	%	60 - 130%	109
	0407_TP90_0.1_200615	SE207687.012	%	60 - 130%	100
	0407_TP90_0.5_200615	SE207687.013	%	60 - 130%	97
	0407_TP108_0.1_200616	SE207687.014	%	60 - 130%	95
	0407_TP108_0.6_200616	SE207687.015	%	60 - 130%	96
	0407_TP109_0.1_200616	SE207687.016	%	60 - 130%	101
	0407_QC102_200616	SE207687.017	%	60 - 130%	103
	0407_QC202_200616	SE207687.018	%	60 - 130%	117
	0407_TP109_0.8_200616	SE207687.019	%	60 - 130%	101

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PCBs in Soil (continued) — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP110_0.1_200616	SE207687.020	%	60 - 130%	100
	0407_TP110_1_200616	SE207687.021	%	60 - 130%	97
	0407_TP98_0.1_200616	SE207687.022	%	60 - 130%	101
	0407_TP98_0.8_200616	SE207687.023	%	60 - 130%	104
	0407_TP99_0.1_200616	SE207687.024	%	60 - 130%	109
	0407_TP99_0.6_200616	SE207687.025	%	60 - 130%	101
	0407_TP100_0.1_200616	SE207687.026	%	60 - 130%	99
	0407_TP100_0.4_200616	SE207687.027	%	60 - 130%	97
	0407_TP131_0.1_200616	SE207687.028	%	60 - 130%	96
	0407_TP131_1.2_200616	SE207687.029	%	60 - 130%	96
	0407_TP128_0.5_200616	SE207687.030	%	60 - 130%	99
	0407_TP129_0.1_200616	SE207687.031	%	60 - 130%	100
	0407_TP129_0.4_200616	SE207687.032	%	60 - 130%	93
	0407_TP130_0.1_200616	SE207687.033	%	60 - 130%	99
	0407_TP130_0.7_200616	SE207687.034	%	60 - 130%	103
	0407_QC106_200616	SE207687.035	%	60 - 130%	103
	0407_QC206_200616	SE207687.036	%	60 - 130%	99

Speciated Phenols in Soil — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	0407_TP078_0.1_200615	SE207687.001	%	70 - 130%	86
	0407_TP078_0.7_200615	SE207687.002	%	70 - 130%	87
	0407_TP079_0.1_200615	SE207687.003	%	70 - 130%	86
	0407_TP079_1_200615	SE207687.004	%	70 - 130%	87
	0407_TP80_0.1_200615	SE207687.005	%	70 - 130%	90
	0407_TP80_0.8_200615	SE207687.006	%	70 - 130%	86
	0407_QC101_200615	SE207687.007	%	70 - 130%	88
	0407_TP88_0.1_200615	SE207687.008	%	70 - 130%	90
	0407_TP88_0.5_200615	SE207687.009	%	70 - 130%	86
	0407_TP89_0.1_200615	SE207687.010	%	70 - 130%	85
	0407_TP89_0.3_200615	SE207687.011	%	70 - 130%	89
	0407_TP90_0.1_200615	SE207687.012	%	70 - 130%	88
	0407_TP90_0.5_200615	SE207687.013	%	70 - 130%	85
	0407_TP108_0.1_200616	SE207687.014	%	70 - 130%	88
	0407_TP108_0.6_200616	SE207687.015	%	70 - 130%	92
	0407_TP109_0.1_200616	SE207687.016	%	70 - 130%	88
	0407_QC102_200616	SE207687.017	%	70 - 130%	92
	0407_QC202_200616	SE207687.018	%	70 - 130%	88
	0407_TP109_0.8_200616	SE207687.019	%	70 - 130%	86
	0407_TP110_0.1_200616	SE207687.020	%	70 - 130%	85
	0407_TP110_1_200616	SE207687.021	%	70 - 130%	88
	0407_TP98_0.1_200616	SE207687.022	%	70 - 130%	87
	0407_TP98_0.8_200616	SE207687.023	%	70 - 130%	82
	0407_TP99_0.1_200616	SE207687.024	%	70 - 130%	80
	0407_TP99_0.6_200616	SE207687.025	%	70 - 130%	86
	0407_TP100_0.1_200616	SE207687.026	%	70 - 130%	85
	0407_TP100_0.4_200616	SE207687.027	%	70 - 130%	84
	0407_TP131_0.1_200616	SE207687.028	%	70 - 130%	82
	0407_TP131_1.2_200616	SE207687.029	%	70 - 130%	85
	0407_TP128_0.5_200616	SE207687.030	%	70 - 130%	81
	0407_TP129_0.1_200616	SE207687.031	%	70 - 130%	86
	0407_TP129_0.4_200616	SE207687.032	%	70 - 130%	85
	0407_TP130_0.1_200616	SE207687.033	%	70 - 130%	85
	0407_TP130_0.7_200616	SE207687.034	%	70 - 130%	91
	0407_QC106_200616	SE207687.035	%	70 - 130%	86
	0407_QC206_200616	SE207687.036	%	70 - 130%	84
d5-phenol (Surrogate)	0407_TP078_0.1_200615	SE207687.001	%	50 - 130%	76
	0407_TP078_0.7_200615	SE207687.002	%	50 - 130%	75
	0407_TP079_0.1_200615	SE207687.003	%	50 - 130%	73
	0407_TP079_1_200615	SE207687.004	%	50 - 130%	73
	0407_TP80_0.1_200615	SE207687.005	%	50 - 130%	73

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d5-phenol (Surrogate)	0407_TP80_0.8_200615	SE207687.006	%	50 - 130%	72
	0407_QC101_200615	SE207687.007	%	50 - 130%	72
	0407_TP88_0.1_200615	SE207687.008	%	50 - 130%	74
	0407_TP88_0.5_200615	SE207687.009	%	50 - 130%	74
	0407_TP89_0.1_200615	SE207687.010	%	50 - 130%	73
	0407_TP89_0.3_200615	SE207687.011	%	50 - 130%	74
	0407_TP90_0.1_200615	SE207687.012	%	50 - 130%	73
	0407_TP90_0.5_200615	SE207687.013	%	50 - 130%	73
	0407_TP108_0.1_200616	SE207687.014	%	50 - 130%	73
	0407_TP108_0.6_200616	SE207687.015	%	50 - 130%	74
	0407_TP109_0.1_200616	SE207687.016	%	50 - 130%	75
	0407_QC102_200616	SE207687.017	%	50 - 130%	77
	0407_QC202_200616	SE207687.018	%	50 - 130%	73
	0407_TP109_0.8_200616	SE207687.019	%	50 - 130%	72
	0407_TP110_0.1_200616	SE207687.020	%	50 - 130%	72
	0407_TP110_1_200616	SE207687.021	%	50 - 130%	74
	0407_TP98_0.1_200616	SE207687.022	%	50 - 130%	74
	0407_TP98_0.8_200616	SE207687.023	%	50 - 130%	73
	0407_TP99_0.1_200616	SE207687.024	%	50 - 130%	71
	0407_TP99_0.6_200616	SE207687.025	%	50 - 130%	74
	0407_TP100_0.1_200616	SE207687.026	%	50 - 130%	74
	0407_TP100_0.4_200616	SE207687.027	%	50 - 130%	74
	0407_TP131_0.1_200616	SE207687.028	%	50 - 130%	75
	0407_TP131_1.2_200616	SE207687.029	%	50 - 130%	75
	0407_TP128_0.5_200616	SE207687.030	%	50 - 130%	75
	0407_TP129_0.1_200616	SE207687.031	%	50 - 130%	74
	0407_TP129_0.4_200616	SE207687.032	%	50 - 130%	74
	0407_TP130_0.1_200616	SE207687.033	%	50 - 130%	75
	0407_TP130_0.7_200616	SE207687.034	%	50 - 130%	75
	0407_QC106_200616	SE207687.035	%	50 - 130%	74
	0407_QC206_200616	SE207687.036	%	50 - 130%	75

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP078_0.1_200615	SE207687.001	%	60 - 130%	76
	0407_TP078_0.7_200615	SE207687.002	%	60 - 130%	73
	0407_TP079_0.1_200615	SE207687.003	%	60 - 130%	76
	0407_TP079_1_200615	SE207687.004	%	60 - 130%	76
	0407_TP80_0.1_200615	SE207687.005	%	60 - 130%	72
	0407_TP80_0.8_200615	SE207687.006	%	60 - 130%	72
	0407_QC101_200615	SE207687.007	%	60 - 130%	81
	0407_TP88_0.1_200615	SE207687.008	%	60 - 130%	76
	0407_TP88_0.5_200615	SE207687.009	%	60 - 130%	71
	0407_TP89_0.1_200615	SE207687.010	%	60 - 130%	69
	0407_TP89_0.3_200615	SE207687.011	%	60 - 130%	70
	0407_TP90_0.1_200615	SE207687.012	%	60 - 130%	70
	0407_TP90_0.5_200615	SE207687.013	%	60 - 130%	70
	0407_TP108_0.1_200616	SE207687.014	%	60 - 130%	79
	0407_TP108_0.6_200616	SE207687.015	%	60 - 130%	67
	0407_TP109_0.1_200616	SE207687.016	%	60 - 130%	72
	0407_QC102_200616	SE207687.017	%	60 - 130%	72
	0407_QC202_200616	SE207687.018	%	60 - 130%	72
	0407_TP109_0.8_200616	SE207687.019	%	60 - 130%	73
	0407_TP110_0.1_200616	SE207687.020	%	60 - 130%	70
	0407_TP110_1_200616	SE207687.021	%	60 - 130%	74
	0407_TP98_0.1_200616	SE207687.022	%	60 - 130%	65
	0407_TP98_0.8_200616	SE207687.023	%	60 - 130%	64
	0407_TP99_0.1_200616	SE207687.024	%	60 - 130%	65
	0407_TP99_0.6_200616	SE207687.025	%	60 - 130%	66
	0407_TP100_0.1_200616	SE207687.026	%	60 - 130%	65
	0407_TP100_0.4_200616	SE207687.027	%	60 - 130%	72

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued) **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP131_0.1_200616	SE207687.028	%	60 - 130%	73
	0407_TP131_1.2_200616	SE207687.029	%	60 - 130%	72
	0407_TP128_0.5_200616	SE207687.030	%	60 - 130%	76
	0407_TP129_0.1_200616	SE207687.031	%	60 - 130%	75
	0407_TP129_0.4_200616	SE207687.032	%	60 - 130%	64
	0407_TP130_0.1_200616	SE207687.033	%	60 - 130%	71
	0407_TP130_0.7_200616	SE207687.034	%	60 - 130%	73
	0407_QC106_200616	SE207687.035	%	60 - 130%	73
	0407_QC206_200616	SE207687.036	%	60 - 130%	70
d4-1,2-dichloroethane (Surrogate)	0407_TP078_0.1_200615	SE207687.001	%	60 - 130%	102
	0407_TP078_0.7_200615	SE207687.002	%	60 - 130%	99
	0407_TP079_0.1_200615	SE207687.003	%	60 - 130%	103
	0407_TP079_1_200615	SE207687.004	%	60 - 130%	102
	0407_TP80_0.1_200615	SE207687.005	%	60 - 130%	98
	0407_TP80_0.8_200615	SE207687.006	%	60 - 130%	98
	0407_QC101_200615	SE207687.007	%	60 - 130%	111
	0407_TP88_0.1_200615	SE207687.008	%	60 - 130%	104
	0407_TP88_0.5_200615	SE207687.009	%	60 - 130%	96
	0407_TP89_0.1_200615	SE207687.010	%	60 - 130%	95
	0407_TP89_0.3_200615	SE207687.011	%	60 - 130%	97
	0407_TP90_0.1_200615	SE207687.012	%	60 - 130%	95
	0407_TP90_0.5_200615	SE207687.013	%	60 - 130%	95
	0407_TP108_0.1_200616	SE207687.014	%	60 - 130%	105
	0407_TP108_0.6_200616	SE207687.015	%	60 - 130%	92
	0407_TP109_0.1_200616	SE207687.016	%	60 - 130%	98
	0407_QC102_200616	SE207687.017	%	60 - 130%	99
	0407_QC202_200616	SE207687.018	%	60 - 130%	98
	0407_TP109_0.8_200616	SE207687.019	%	60 - 130%	98
	0407_TP110_0.1_200616	SE207687.020	%	60 - 130%	95
	0407_TP110_1_200616	SE207687.021	%	60 - 130%	101
	0407_TP98_0.1_200616	SE207687.022	%	60 - 130%	90
	0407_TP98_0.8_200616	SE207687.023	%	60 - 130%	91
	0407_TP99_0.1_200616	SE207687.024	%	60 - 130%	93
	0407_TP99_0.6_200616	SE207687.025	%	60 - 130%	92
	0407_TP100_0.1_200616	SE207687.026	%	60 - 130%	97
	0407_TP100_0.4_200616	SE207687.027	%	60 - 130%	101
	0407_TP131_0.1_200616	SE207687.028	%	60 - 130%	102
	0407_TP131_1.2_200616	SE207687.029	%	60 - 130%	99
	0407_TP128_0.5_200616	SE207687.030	%	60 - 130%	105
	0407_TP129_0.1_200616	SE207687.031	%	60 - 130%	106
	0407_TP129_0.4_200616	SE207687.032	%	60 - 130%	91
	0407_TP130_0.1_200616	SE207687.033	%	60 - 130%	101
	0407_TP130_0.7_200616	SE207687.034	%	60 - 130%	101
	0407_QC106_200616	SE207687.035	%	60 - 130%	102
	0407_QC206_200616	SE207687.036	%	60 - 130%	99
d8-toluene (Surrogate)	0407_TP078_0.1_200615	SE207687.001	%	60 - 130%	104
	0407_TP078_0.7_200615	SE207687.002	%	60 - 130%	99
	0407_TP079_0.1_200615	SE207687.003	%	60 - 130%	103
	0407_TP079_1_200615	SE207687.004	%	60 - 130%	103
	0407_TP80_0.1_200615	SE207687.005	%	60 - 130%	98
	0407_TP80_0.8_200615	SE207687.006	%	60 - 130%	99
	0407_QC101_200615	SE207687.007	%	60 - 130%	111
	0407_TP88_0.1_200615	SE207687.008	%	60 - 130%	104
	0407_TP88_0.5_200615	SE207687.009	%	60 - 130%	95
	0407_TP89_0.1_200615	SE207687.010	%	60 - 130%	94
	0407_TP89_0.3_200615	SE207687.011	%	60 - 130%	96
	0407_TP90_0.1_200615	SE207687.012	%	60 - 130%	95
	0407_TP90_0.5_200615	SE207687.013	%	60 - 130%	95
	0407_TP108_0.1_200616	SE207687.014	%	60 - 130%	104
	0407_TP108_0.6_200616	SE207687.015	%	60 - 130%	91
	0407_TP109_0.1_200616	SE207687.016	%	60 - 130%	98

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d8-toluene (Surrogate)	0407_QC102_200616	SE207687.017	%	60 - 130%	98
	0407_QC202_200616	SE207687.018	%	60 - 130%	98
	0407_TP109_0.8_200616	SE207687.019	%	60 - 130%	98
	0407_TP110_0.1_200616	SE207687.020	%	60 - 130%	94
	0407_TP110_1_200616	SE207687.021	%	60 - 130%	102
	0407_TP98_0.1_200616	SE207687.022	%	60 - 130%	89
	0407_TP98_0.8_200616	SE207687.023	%	60 - 130%	88
	0407_TP99_0.1_200616	SE207687.024	%	60 - 130%	88
	0407_TP99_0.6_200616	SE207687.025	%	60 - 130%	92
	0407_TP100_0.1_200616	SE207687.026	%	60 - 130%	96
	0407_TP100_0.4_200616	SE207687.027	%	60 - 130%	99
	0407_TP131_0.1_200616	SE207687.028	%	60 - 130%	101
	0407_TP131_1.2_200616	SE207687.029	%	60 - 130%	99
	0407_TP128_0.5_200616	SE207687.030	%	60 - 130%	105
	0407_TP129_0.1_200616	SE207687.031	%	60 - 130%	105
	0407_TP129_0.4_200616	SE207687.032	%	60 - 130%	89
	0407_TP130_0.1_200616	SE207687.033	%	60 - 130%	99
	0407_TP130_0.7_200616	SE207687.034	%	60 - 130%	100
	0407_QC106_200616	SE207687.035	%	60 - 130%	101
	0407_QC206_200616	SE207687.036	%	60 - 130%	98

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP078_0.1_200615	SE207687.001	%	60 - 130%	76
	0407_TP078_0.7_200615	SE207687.002	%	60 - 130%	73
	0407_TP079_0.1_200615	SE207687.003	%	60 - 130%	76
	0407_TP079_1_200615	SE207687.004	%	60 - 130%	76
	0407_TP80_0.1_200615	SE207687.005	%	60 - 130%	72
	0407_TP80_0.8_200615	SE207687.006	%	60 - 130%	72
	0407_QC101_200615	SE207687.007	%	60 - 130%	81
	0407_TP88_0.1_200615	SE207687.008	%	60 - 130%	76
	0407_TP88_0.5_200615	SE207687.009	%	60 - 130%	71
	0407_TP89_0.1_200615	SE207687.010	%	60 - 130%	69
	0407_TP89_0.3_200615	SE207687.011	%	60 - 130%	70
	0407_TP90_0.1_200615	SE207687.012	%	60 - 130%	70
	0407_TP90_0.5_200615	SE207687.013	%	60 - 130%	70
	0407_TP108_0.1_200616	SE207687.014	%	60 - 130%	79
	0407_TP108_0.6_200616	SE207687.015	%	60 - 130%	67
	0407_TP109_0.1_200616	SE207687.016	%	60 - 130%	72
	0407_QC102_200616	SE207687.017	%	60 - 130%	72
	0407_QC202_200616	SE207687.018	%	60 - 130%	72
	0407_TP109_0.8_200616	SE207687.019	%	60 - 130%	73
	0407_TP110_0.1_200616	SE207687.020	%	60 - 130%	70
	0407_TP110_1_200616	SE207687.021	%	60 - 130%	74
	0407_TP98_0.1_200616	SE207687.022	%	60 - 130%	65
	0407_TP98_0.8_200616	SE207687.023	%	60 - 130%	64
	0407_TP99_0.1_200616	SE207687.024	%	60 - 130%	65
	0407_TP99_0.6_200616	SE207687.025	%	60 - 130%	66
	0407_TP100_0.1_200616	SE207687.026	%	60 - 130%	65
	0407_TP100_0.4_200616	SE207687.027	%	60 - 130%	72
	0407_TP131_0.1_200616	SE207687.028	%	60 - 130%	73
	0407_TP131_1.2_200616	SE207687.029	%	60 - 130%	72
	0407_TP128_0.5_200616	SE207687.030	%	60 - 130%	76
	0407_TP129_0.1_200616	SE207687.031	%	60 - 130%	75
	0407_TP129_0.4_200616	SE207687.032	%	60 - 130%	64
	0407_TP130_0.1_200616	SE207687.033	%	60 - 130%	71
	0407_TP130_0.7_200616	SE207687.034	%	60 - 130%	73
	0407_QC106_200616	SE207687.035	%	60 - 130%	73
	0407_QC206_200616	SE207687.036	%	60 - 130%	70
d4-1,2-dichloroethane (Surrogate)	0407_TP078_0.1_200615	SE207687.001	%	60 - 130%	102
	0407_TP078_0.7_200615	SE207687.002	%	60 - 130%	99

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d4-1,2-dichloroethane (Surrogate)	0407_TP079_0.1_200615	SE207687.003	%	60 - 130%	103
	0407_TP079_1_200615	SE207687.004	%	60 - 130%	102
	0407_TP80_0.1_200615	SE207687.005	%	60 - 130%	98
	0407_TP80_0.8_200615	SE207687.006	%	60 - 130%	98
	0407_QC101_200615	SE207687.007	%	60 - 130%	111
	0407_TP88_0.1_200615	SE207687.008	%	60 - 130%	104
	0407_TP88_0.5_200615	SE207687.009	%	60 - 130%	96
	0407_TP89_0.1_200615	SE207687.010	%	60 - 130%	95
	0407_TP89_0.3_200615	SE207687.011	%	60 - 130%	97
	0407_TP90_0.1_200615	SE207687.012	%	60 - 130%	95
	0407_TP90_0.5_200615	SE207687.013	%	60 - 130%	95
	0407_TP108_0.1_200616	SE207687.014	%	60 - 130%	105
	0407_TP108_0.6_200616	SE207687.015	%	60 - 130%	92
	0407_TP109_0.1_200616	SE207687.016	%	60 - 130%	98
	0407_QC102_200616	SE207687.017	%	60 - 130%	99
	0407_QC202_200616	SE207687.018	%	60 - 130%	98
	0407_TP109_0.8_200616	SE207687.019	%	60 - 130%	98
	0407_TP110_0.1_200616	SE207687.020	%	60 - 130%	95
	0407_TP110_1_200616	SE207687.021	%	60 - 130%	101
	0407_TP98_0.1_200616	SE207687.022	%	60 - 130%	90
	0407_TP98_0.8_200616	SE207687.023	%	60 - 130%	91
	0407_TP99_0.1_200616	SE207687.024	%	60 - 130%	93
	0407_TP99_0.6_200616	SE207687.025	%	60 - 130%	92
	0407_TP100_0.1_200616	SE207687.026	%	60 - 130%	97
	0407_TP100_0.4_200616	SE207687.027	%	60 - 130%	101
	0407_TP131_0.1_200616	SE207687.028	%	60 - 130%	102
	0407_TP131_1.2_200616	SE207687.029	%	60 - 130%	99
	0407_TP128_0.5_200616	SE207687.030	%	60 - 130%	105
	0407_TP129_0.1_200616	SE207687.031	%	60 - 130%	106
	0407_TP129_0.4_200616	SE207687.032	%	60 - 130%	91
	0407_TP130_0.1_200616	SE207687.033	%	60 - 130%	101
	0407_TP130_0.7_200616	SE207687.034	%	60 - 130%	101
	0407_QC106_200616	SE207687.035	%	60 - 130%	102
	0407_QC206_200616	SE207687.036	%	60 - 130%	99
d8-toluene (Surrogate)	0407_TP078_0.1_200615	SE207687.001	%	60 - 130%	104
	0407_TP078_0.7_200615	SE207687.002	%	60 - 130%	99
	0407_TP079_0.1_200615	SE207687.003	%	60 - 130%	103
	0407_TP079_1_200615	SE207687.004	%	60 - 130%	103
	0407_TP80_0.1_200615	SE207687.005	%	60 - 130%	98
	0407_TP80_0.8_200615	SE207687.006	%	60 - 130%	99
	0407_QC101_200615	SE207687.007	%	60 - 130%	111
	0407_TP88_0.1_200615	SE207687.008	%	60 - 130%	104
	0407_TP88_0.5_200615	SE207687.009	%	60 - 130%	95
	0407_TP89_0.1_200615	SE207687.010	%	60 - 130%	94
	0407_TP89_0.3_200615	SE207687.011	%	60 - 130%	96
	0407_TP90_0.1_200615	SE207687.012	%	60 - 130%	95
	0407_TP90_0.5_200615	SE207687.013	%	60 - 130%	95
	0407_TP108_0.1_200616	SE207687.014	%	60 - 130%	104
	0407_TP108_0.6_200616	SE207687.015	%	60 - 130%	91
	0407_TP109_0.1_200616	SE207687.016	%	60 - 130%	98
	0407_QC102_200616	SE207687.017	%	60 - 130%	98
	0407_QC202_200616	SE207687.018	%	60 - 130%	98
	0407_TP109_0.8_200616	SE207687.019	%	60 - 130%	98
	0407_TP110_0.1_200616	SE207687.020	%	60 - 130%	94
	0407_TP110_1_200616	SE207687.021	%	60 - 130%	102
	0407_TP98_0.1_200616	SE207687.022	%	60 - 130%	89
	0407_TP98_0.8_200616	SE207687.023	%	60 - 130%	88
	0407_TP99_0.1_200616	SE207687.024	%	60 - 130%	88
	0407_TP99_0.6_200616	SE207687.025	%	60 - 130%	92
	0407_TP100_0.1_200616	SE207687.026	%	60 - 130%	96
	0407_TP100_0.4_200616	SE207687.027	%	60 - 130%	99

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d8-toluene (Surrogate)	0407_TP131_0.1_200616	SE207687.028	%	60 - 130%	101
	0407_TP131_1.2_200616	SE207687.029	%	60 - 130%	99
	0407_TP128_0.5_200616	SE207687.030	%	60 - 130%	105
	0407_TP129_0.1_200616	SE207687.031	%	60 - 130%	105
	0407_TP129_0.4_200616	SE207687.032	%	60 - 130%	89
	0407_TP130_0.1_200616	SE207687.033	%	60 - 130%	99
	0407_TP130_0.7_200616	SE207687.034	%	60 - 130%	100
	0407_QC106_200616	SE207687.035	%	60 - 130%	101
	0407_QC206_200616	SE207687.036	%	60 - 130%	98

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result
LB202379.001	Mercury	mg/kg	0.05	<0.05
LB202380.001	Mercury	mg/kg	0.05	<0.05
LB202439.001	Mercury	mg/kg	0.05	<0.05

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202334.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	99
LB202335.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	99

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB202334.001	Dichlorvos	mg/kg	0.5	<0.5
	Dimethoate	mg/kg	0.5	<0.5
	Diazinon (Dimpylate)	mg/kg	0.5	<0.5
	Fenitrothion	mg/kg	0.2	<0.2
	Malathion	mg/kg	0.2	<0.2

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202334.001		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	85
		d14-p-terphenyl (Surrogate)	%	-	102
LB202335.001		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	93
		d14-p-terphenyl (Surrogate)	%	-	87

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202334.001		Naphthalene	mg/kg	0.1	<0.1
		2-methylnaphthalene	mg/kg	0.1	<0.1
		1-methylnaphthalene	mg/kg	0.1	<0.1
		Acenaphthylene	mg/kg	0.1	<0.1
		Acenaphthene	mg/kg	0.1	<0.1
		Fluorene	mg/kg	0.1	<0.1
		Phenanthrene	mg/kg	0.1	<0.1
		Anthracene	mg/kg	0.1	<0.1
		Fluoranthene	mg/kg	0.1	<0.1
		Pyrene	mg/kg	0.1	<0.1
		Benzo(a)anthracene	mg/kg	0.1	<0.1
		Chrysene	mg/kg	0.1	<0.1
		Benzo(a)pyrene	mg/kg	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	84
		2-fluorobiphenyl (Surrogate)	%	-	85
		d14-p-terphenyl (Surrogate)	%	-	102
LB202335.001		Naphthalene	mg/kg	0.1	<0.1
		2-methylnaphthalene	mg/kg	0.1	<0.1
		1-methylnaphthalene	mg/kg	0.1	<0.1
		Acenaphthylene	mg/kg	0.1	<0.1
		Acenaphthene	mg/kg	0.1	<0.1
		Fluorene	mg/kg	0.1	<0.1
		Phenanthrene	mg/kg	0.1	<0.1
		Anthracene	mg/kg	0.1	<0.1
		Fluoranthene	mg/kg	0.1	<0.1
		Pyrene	mg/kg	0.1	<0.1
		Benzo(a)anthracene	mg/kg	0.1	<0.1
		Chrysene	mg/kg	0.1	<0.1
		Benzo(a)pyrene	mg/kg	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202335.001	Surrogates	d5-nitrobenzene (Surrogate)	%	-	92
		2-fluorobiphenyl (Surrogate)	%	-	93
		d14-p-terphenyl (Surrogate)	%	-	87

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202334.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	99
LB202335.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	99

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202334.001		Phenol	mg/kg	0.5	<0.5
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5
		2-nitrophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
		Pentachlorophenol	mg/kg	0.5	<0.5
		2,4-dinitrophenol	mg/kg	2	<2
		4-chloro-3-methylphenol	mg/kg	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	87
		d5-phenol (Surrogate)	%	-	80
LB202335.001		Phenol	mg/kg	0.5	<0.5
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5
		2-nitrophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
		Pentachlorophenol	mg/kg	0.5	<0.5
		2,4-dinitrophenol	mg/kg	2	<2

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB202335.001		4-chloro-3-methylphenol	mg/kg	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	98
		d5-phenol (Surrogate)	%	-	89

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB202373.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0
LB202374.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0
LB202437.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB202334.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110
LB202335.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB202329.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB202329.001	Halogenated Aliphatics	1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10
		MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	101
		d8-toluene (Surrogate)	%	-	102
		Bromofluorobenzene (Surrogate)	%	-	75
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1
LB202331.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB202331.001	Fumigants	cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10
		MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB202331.001	Oxygenated Compounds	MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	102
		d8-toluene (Surrogate)	%	-	102
		Bromofluorobenzene (Surrogate)	%	-	74
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB202329.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	101
LB202331.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	102

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207687.005	LB202379.014	Mercury	mg/kg	0.05	<0.05	<0.05	137	0
SE207687.014	LB202379.024	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE207687.024	LB202380.014	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE207687.033	LB202380.024	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE207687.036	LB202439.007	Mercury	mg/kg	0.05	<0.05	<0.05	200	0

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207687.010	LB202339.011	% Moisture	%w/w	1	1.2	1.3	110	1
SE207687.020	LB202339.022	% Moisture	%w/w	1	1.5	1.7	93	10
SE207687.030	LB202340.011	% Moisture	%w/w	1	4.3	4.1	54	5
SE207687.036	LB202340.018	% Moisture	%w/w	1	1.2	1.2	115	4

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207687.010	LB202334.014		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.15	30	1
SE207687.020	LB202334.027		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil (continued) — **Method: ME-(AU)-[ENV]AN420**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207687.020	LB202334.027		Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.17	30	14
SE207687.030	LB202335.014		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.15	30	0
SE207687.036	LB202335.021		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207687.036	LB202335.021		Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.16	30	5

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207687.010	LB202334.014		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	30	5
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	4
SE207687.020	LB202334.027		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	30	17
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	0
SE207687.030	LB202335.014		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.4	30	2
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	11

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207687.010	LB202334.014	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluorene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207687.010	LB202334.014		Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	<0.3	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	<0.2	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	30	0
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	30	5
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	4
SE207687.020	LB202334.027		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	<0.2	200	0
				TEQ (mg/kg)	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	<0.3	134	0
				TEQ (mg/kg)	0.3	<0.3	<0.3	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	<0.2	175	0
				TEQ (mg/kg)	0.2	<0.2	<0.2	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.3	0.3	30	3
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	30	17
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	0
SE207687.030	LB202335.014		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207687.030	LB202335.014		Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	<0.3	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	<0.2	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	30	2
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.4	30	2
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	11

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207687.010	LB202334.014		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	1
SE207687.020	LB202334.027		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	14
SE207687.030	LB202335.014		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	0
SE207687.036	LB202335.021		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	5

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil (continued) — **Method: ME-(AU)-[ENV]AN420**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207687.010	LB202334.014		Phenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	200	0
			Total Cresol	mg/kg	1.5	<1.5	<1.5	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	200	0
			4-nitrophenol	mg/kg	1	<1	<1	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dinitrophenol	mg/kg	2	<2	<2	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.3	4.3	30	1
			d5-phenol (Surrogate)	mg/kg	-	1.5	1.5	30	1
SE207687.020	LB202334.027		Phenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	200	0
			Total Cresol	mg/kg	1.5	<1.5	<1.5	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	200	0
			4-nitrophenol	mg/kg	1	<1	<1	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dinitrophenol	mg/kg	2	<2	<2	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.2	4.2	30	0
			d5-phenol (Surrogate)	mg/kg	-	1.4	1.5	30	2
SE207687.030	LB202335.014		Phenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	200	0
			Total Cresol	mg/kg	1.5	<1.5	<1.5	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	200	0
			4-nitrophenol	mg/kg	1	<1	<1	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dinitrophenol	mg/kg	2	<2	<2	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.1	4.0	30	2
			d5-phenol (Surrogate)	mg/kg	-	1.5	1.5	30	2
SE207687.036	LB202335.021		Phenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	200	0
			Total Cresol	mg/kg	1.5	<1.5	<1.5	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207687.036	LB202335.021		2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	200	0
			4-nitrophenol	mg/kg	1	<1	<1	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dinitrophenol	mg/kg	2	<2	<2	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.2	4.3	30	2
			d5-phenol (Surrogate)	mg/kg	-	1.5	1.5	30	1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207687.005	LB202373.014	Arsenic, As	mg/kg	1	<1	<1	200	0
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	2.2	0.7	65	100 ②
		Copper, Cu	mg/kg	0.5	4.6	5.1	40	11
		Nickel, Ni	mg/kg	0.5	1.4	0.7	79	65
		Lead, Pb	mg/kg	1	71	150	31	74 ②
		Zinc, Zn	mg/kg	2	12	11	47	9
SE207687.014	LB202373.024	Arsenic, As	mg/kg	1	<1	<1	200	0
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	<0.5	<0.5	188	0
		Copper, Cu	mg/kg	0.5	0.7	0.6	110	7
		Nickel, Ni	mg/kg	0.5	<0.5	<0.5	179	0
		Lead, Pb	mg/kg	1	1	1	106	20
		Zinc, Zn	mg/kg	2	<2.0	<2.0	160	0
SE207687.024	LB202374.014	Arsenic, As	mg/kg	1	<1	<1	200	0
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	<0.5	<0.5	200	0
		Copper, Cu	mg/kg	0.5	<0.5	<0.5	200	0
		Nickel, Ni	mg/kg	0.5	<0.5	<0.5	200	0
		Lead, Pb	mg/kg	1	<1	<1	200	0
		Zinc, Zn	mg/kg	2	<2.0	<2.0	200	0
SE207687.033	LB202374.024	Arsenic, As	mg/kg	1	<1	<1	200	0
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	<0.5	<0.5	200	0
		Copper, Cu	mg/kg	0.5	<0.5	<0.5	200	0
		Nickel, Ni	mg/kg	0.5	<0.5	<0.5	200	0
		Lead, Pb	mg/kg	1	<1	<1	200	0
		Zinc, Zn	mg/kg	2	<2.0	<2.0	200	0
SE207687.036	LB202437.024	Arsenic, As	mg/kg	1	<1	<1	200	0
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	<0.5	<0.5	190	0
		Copper, Cu	mg/kg	0.5	<0.5	<0.5	200	0
		Nickel, Ni	mg/kg	0.5	<0.5	<0.5	200	0
		Lead, Pb	mg/kg	1	<1	<1	200	0
		Zinc, Zn	mg/kg	2	<2.0	<2.0	200	0
SE207726.017	LB202437.014	Lead, Pb	mg/kg	1	31	29	33	5

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207687.010	LB202334.014		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207687.010	LB202334.014	TRH F Bands	TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE207687.020	LB202334.027		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE207687.030	LB202335.014		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE207687.036	LB202335.021		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207687.010	LB202329.014	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207687.010	LB202329.014	Halogenated	Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
		Aliphatics	1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.5	9.8	50	4
			d8-toluene (Surrogate)	mg/kg	-	9.4	9.8	50	4
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.9	7.2	50	5
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE207687.020	LB202329.025	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207687.020	LB202329.025	Halogenated	Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
		Aliphatics	Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207687.020	LB202329.025	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.5	8.5	50	11
			d8-toluene (Surrogate)	mg/kg	-	9.4	8.4	50	11
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.0	6.4	50	10
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethanes	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
			Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE207687.030	LB202331.014	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
			Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic Aromatic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
			Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued) — Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207687.030	LB202331.014	Monocyclic	o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.5	9.7	50	8
			d8-toluene (Surrogate)	mg/kg	-	10.5	9.5	50	9
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.6	7.0	50	8
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE207687.036	LB202331.021	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207687.036	LB202331.021	Halogenated	1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
		Aliphatics	cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.9	10.1	50	1
			d8-toluene (Surrogate)	mg/kg	-	9.8	10.0	50	2
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.0	7.2	50	2
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207687.010	LB202329.014		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.5	9.8	30	4
			d8-toluene (Surrogate)	mg/kg	-	9.4	9.8	30	4
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.9	7.2	30	5

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207687.010	LB202329.014	VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE207687.020	LB202329.025		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.5	8.5	30	11
			d8-toluene (Surrogate)	mg/kg	-	9.4	8.4	30	11
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.0	6.4	30	10
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE207687.030	LB202331.014		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.5	9.7	30	8
			d8-toluene (Surrogate)	mg/kg	-	10.5	9.5	30	9
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.6	7.0	30	8
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE207687.036	LB202331.021		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.9	10.1	30	1
			d8-toluene (Surrogate)	mg/kg	-	9.8	10.0	30	2
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.0	7.2	30	2
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202379.002	Mercury	mg/kg	0.05	0.20	0.2	70 - 130	100
LB202380.002	Mercury	mg/kg	0.05	0.19	0.2	70 - 130	95
LB202439.002	Mercury	mg/kg	0.05	0.22	0.2	70 - 130	112

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202334.002		Heptachlor	mg/kg	0.1	0.3	0.2	60 - 140	135
		Aldrin	mg/kg	0.1	0.3	0.2	60 - 140	135
		Delta BHC	mg/kg	0.1	0.3	0.2	60 - 140	131
		Dieldrin	mg/kg	0.2	0.3	0.2	60 - 140	134
		Endrin	mg/kg	0.2	0.3	0.2	60 - 140	132
		p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	122
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.16	0.15	40 - 130	105
LB202335.002		Heptachlor	mg/kg	0.1	0.3	0.2	60 - 140	130
		Aldrin	mg/kg	0.1	0.3	0.2	60 - 140	129
		Delta BHC	mg/kg	0.1	0.3	0.2	60 - 140	128
		Dieldrin	mg/kg	0.2	0.3	0.2	60 - 140	129
		Endrin	mg/kg	0.2	0.3	0.2	60 - 140	128
		p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	115
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.15	40 - 130	102

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202334.002		Dichlorvos	mg/kg	0.5	1.3	2	60 - 140	66
		Diazinon (Dimpylate)	mg/kg	0.5	1.7	2	60 - 140	85
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.2	2	60 - 140	109
		Ethion	mg/kg	0.2	1.3	2	60 - 140	66
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	100
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	91
LB202335.002		Dichlorvos	mg/kg	0.5	1.5	2	60 - 140	75
		Diazinon (Dimpylate)	mg/kg	0.5	2.0	2	60 - 140	98
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.9	2	60 - 140	94
		Ethion	mg/kg	0.2	1.5	2	60 - 140	77
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	89
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	78

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202334.002		Naphthalene	mg/kg	0.1	5.3	4	60 - 140	131
		Acenaphthylene	mg/kg	0.1	5.1	4	60 - 140	128
		Acenaphthene	mg/kg	0.1	5.1	4	60 - 140	128
		Phenanthrene	mg/kg	0.1	5.4	4	60 - 140	135
		Anthracene	mg/kg	0.1	4.6	4	60 - 140	115
		Fluoranthene	mg/kg	0.1	5.3	4	60 - 140	134
		Pyrene	mg/kg	0.1	5.4	4	60 - 140	134
		Benzo(a)pyrene	mg/kg	0.1	5.4	4	60 - 140	134
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	93
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	100
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	91
LB202335.002		Naphthalene	mg/kg	0.1	4.8	4	60 - 140	121
		Acenaphthylene	mg/kg	0.1	4.5	4	60 - 140	113
		Acenaphthene	mg/kg	0.1	4.7	4	60 - 140	117
		Phenanthrene	mg/kg	0.1	4.8	4	60 - 140	121
		Anthracene	mg/kg	0.1	4.4	4	60 - 140	110
		Fluoranthene	mg/kg	0.1	4.8	4	60 - 140	119
		Pyrene	mg/kg	0.1	4.7	4	60 - 140	119
		Benzo(a)pyrene	mg/kg	0.1	4.7	4	60 - 140	118
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	89
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	89
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	78

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PCBs in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202334.002		Arochlor 1260	mg/kg	0.2	0.4	0.4	60 - 140	111
LB202335.002		Arochlor 1260	mg/kg	0.2	0.4	0.4	60 - 140	104

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202334.002		Phenol	mg/kg	0.5	0.7	1	70 - 130	71
		2,4-dichlorophenol	mg/kg	0.5	0.8	1	70 - 130	79
		2,4,6-trichlorophenol	mg/kg	0.5	0.8	1	70 - 130	79
		Pentachlorophenol	mg/kg	0.5	0.8	1	70 - 130	77
	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.5	5	40 - 130	90
		d5-phenol (Surrogate)	mg/kg	-	1.6	2	40 - 130	79
LB202335.002		Phenol	mg/kg	0.5	0.7	1	70 - 130	73
		2,4-dichlorophenol	mg/kg	0.5	0.9	1	70 - 130	88
		2,4,6-trichlorophenol	mg/kg	0.5	0.8	1	70 - 130	77
		Pentachlorophenol	mg/kg	0.5	0.7	1	70 - 130	73
	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.9	5	40 - 130	79
		d5-phenol (Surrogate)	mg/kg	-	1.4	2	40 - 130	71

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202373.002	Arsenic, As	mg/kg	1	340	318.22	80 - 120	105
	Cadmium, Cd	mg/kg	0.3	5.0	5.41	80 - 120	92
	Chromium, Cr	mg/kg	0.5	39	38.31	80 - 120	101
	Copper, Cu	mg/kg	0.5	300	290	80 - 120	103
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	101
	Lead, Pb	mg/kg	1	94	89.9	80 - 120	105
	Zinc, Zn	mg/kg	2	280	273	80 - 120	102
LB202374.002	Arsenic, As	mg/kg	1	330	318.22	80 - 120	105
	Cadmium, Cd	mg/kg	0.3	5.0	5.41	80 - 120	93
	Chromium, Cr	mg/kg	0.5	37	38.31	80 - 120	97
	Copper, Cu	mg/kg	0.5	300	290	80 - 120	104
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	100
	Lead, Pb	mg/kg	1	95	89.9	80 - 120	106
	Zinc, Zn	mg/kg	2	280	273	80 - 120	103
LB202437.002	Arsenic, As	mg/kg	1	320	318.22	80 - 120	101
	Cadmium, Cd	mg/kg	0.3	5.0	5.41	80 - 120	93
	Chromium, Cr	mg/kg	0.5	37	38.31	80 - 120	97
	Copper, Cu	mg/kg	0.5	300	290	80 - 120	104
	Nickel, Ni	mg/kg	0.5	180	187	80 - 120	96
	Lead, Pb	mg/kg	1	88	89.9	80 - 120	98
	Zinc, Zn	mg/kg	2	260	273	80 - 120	97

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202334.002		TRH C10-C14	mg/kg	20	42	40	60 - 140	105
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	85
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	75
	TRH F Bands	TRH >C10-C16	mg/kg	25	40	40	60 - 140	100
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	78
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	85
LB202335.002		TRH C10-C14	mg/kg	20	50	40	60 - 140	125
		TRH C15-C28	mg/kg	45	46	40	60 - 140	115
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	93
	TRH F Bands	TRH >C10-C16	mg/kg	25	49	40	60 - 140	123
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	108
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	85

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202329.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	3.4	5	60 - 140	69
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	4.0	5	60 - 140	81
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	3.9	5	60 - 140	78

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202329.002	Halogenated	Chlorobenzene	mg/kg	0.1	4.6	5	60 - 140	93
	Monocyclic	Benzene	mg/kg	0.1	4.1	5	60 - 140	83
	Aromatic	Toluene	mg/kg	0.1	4.2	5	60 - 140	84
		Ethylbenzene	mg/kg	0.1	4.4	5	60 - 140	88
		m/p-xylene	mg/kg	0.2	8.7	10	60 - 140	87
		o-xylene	mg/kg	0.1	4.5	5	60 - 140	90
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.7	10	70 - 130	87
		d8-toluene (Surrogate)	mg/kg	-	8.4	10	70 - 130	84
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.6	10	70 - 130	96
	Trihalomethan	Chloroform	mg/kg	0.1	4.0	5	60 - 140	80
LB202331.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	3.7	5	60 - 140	75
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	4.3	5	60 - 140	86
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	4.1	5	60 - 140	82
	Halogenated	Chlorobenzene	mg/kg	0.1	4.8	5	60 - 140	96
	Monocyclic	Benzene	mg/kg	0.1	4.3	5	60 - 140	87
	Aromatic	Toluene	mg/kg	0.1	4.2	5	60 - 140	84
		Ethylbenzene	mg/kg	0.1	4.1	5	60 - 140	83
		m/p-xylene	mg/kg	0.2	8.3	10	60 - 140	83
		o-xylene	mg/kg	0.1	4.2	5	60 - 140	84
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	11.1	10	70 - 130	111
		d8-toluene (Surrogate)	mg/kg	-	11.1	10	70 - 130	111
		Bromofluorobenzene (Surrogate)	mg/kg	-	7.5	10	70 - 130	75
	Trihalomethan	Chloroform	mg/kg	0.1	4.5	5	60 - 140	89

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB202329.002		TRH C6-C10	mg/kg	25	66	92.5	60 - 140	72
		TRH C6-C9	mg/kg	20	57	80	60 - 140	72
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.7	10	70 - 130	87
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.6	10	70 - 130	96
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	40	62.5	60 - 140	64
LB202331.002		TRH C6-C10	mg/kg	25	74	92.5	60 - 140	80
		TRH C6-C9	mg/kg	20	64	80	60 - 140	80
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	11.1	10	70 - 130	111
		Bromofluorobenzene (Surrogate)	mg/kg	-	7.5	10	70 - 130	75
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	49	62.5	60 - 140	78

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207687.015	LB202380.004	Mercury	mg/kg	0.05	0.19	<0.05	0.2	93
SE207687.034	LB202439.004	Mercury	mg/kg	0.05	0.20	<0.05	0.2	99
SE207691.001	LB202379.004	Mercury	mg/kg	0.05	0.18	<0.05	0.2	89

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207687.001	LB202334.004		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	-	-
			Lindane	mg/kg	0.1	<0.1	<0.1	-	-
			Heptachlor	mg/kg	0.1	0.3	<0.1	0.2	136
			Aldrin	mg/kg	0.1	0.3	<0.1	0.2	133
			Beta BHC	mg/kg	0.1	<0.1	<0.1	-	-
			Delta BHC	mg/kg	0.1	0.3	<0.1	0.2	130
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	-	-
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	-	-
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	-	-
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	-	-
			Dieldrin	mg/kg	0.2	0.3	<0.2	0.2	132
			Endrin	mg/kg	0.2	0.3	<0.2	0.2	132
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	-	-
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	-	-
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	-	-
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	-	-
			p,p'-DDT	mg/kg	0.1	0.2	<0.1	0.2	122
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	-	-
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	-	-
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	-	-
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	-	-
			Isodrin	mg/kg	0.1	<0.1	<0.1	-	-
			Mirex	mg/kg	0.1	<0.1	<0.1	-	-
			Total CLP OC Pesticides	mg/kg	1	2	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.14	0.14	-	95
SE207687.022	LB202335.022		Hexachlorobenzene (HCB)	mg/kg	0.1		<0.1	-	-
			Alpha BHC	mg/kg	0.1		<0.1	-	-
			Lindane	mg/kg	0.1		<0.1	-	-
			Heptachlor	mg/kg	0.1		<0.1	0.2	75
			Aldrin	mg/kg	0.1		<0.1	0.2	74
			Beta BHC	mg/kg	0.1		<0.1	-	-
			Delta BHC	mg/kg	0.1		<0.1	0.2	75
			Heptachlor epoxide	mg/kg	0.1		<0.1	-	-
			o,p'-DDE	mg/kg	0.1		<0.1	-	-
			Alpha Endosulfan	mg/kg	0.2		<0.2	-	-
			Gamma Chlordane	mg/kg	0.1		<0.1	-	-
			Alpha Chlordane	mg/kg	0.1		<0.1	-	-
			trans-Nonachlor	mg/kg	0.1		<0.1	-	-
			p,p'-DDE	mg/kg	0.1		<0.1	-	-
			Dieldrin	mg/kg	0.2		<0.2	0.2	75
			Endrin	mg/kg	0.2		<0.2	0.2	74
			o,p'-DDD	mg/kg	0.1		<0.1	-	-
			o,p'-DDT	mg/kg	0.1		<0.1	-	-
			Beta Endosulfan	mg/kg	0.2		<0.2	-	-
			p,p'-DDD	mg/kg	0.1		<0.1	-	-
			p,p'-DDT	mg/kg	0.1		<0.1	0.2	71
			Endosulfan sulphate	mg/kg	0.1		<0.1	-	-
			Endrin Aldehyde	mg/kg	0.1		<0.1	-	-
			Methoxychlor	mg/kg	0.1		<0.1	-	-
			Endrin Ketone	mg/kg	0.1		<0.1	-	-
			Isodrin	mg/kg	0.1		<0.1	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207687.022	LB202335.022		Mirex	mg/kg	0.1		<0.1	-	-
			Total CLP OC Pesticides	mg/kg	1		<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-		0.15	-	101

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207687.001	LB202334.004		Dichlorvos	mg/kg	0.5	1.5	<0.5	2	75
			Dimethoate	mg/kg	0.5	<0.5	<0.5	-	-
			Diazinon (Dimpylate)	mg/kg	0.5	1.6	<0.5	2	78
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	-	-
			Malathion	mg/kg	0.2	<0.2	<0.2	-	-
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.6	<0.2	2	79
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	-	-
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	-	-
			Methidathion	mg/kg	0.5	<0.5	<0.5	-	-
			Ethion	mg/kg	0.2	1.4	<0.2	2	71
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	-	-
			Total OP Pesticides*	mg/kg	1.7	6.1	<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.4	-	91
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	85
SE207687.021	LB202335.004		Dichlorvos	mg/kg	0.5	1.3	<0.5	2	67
			Dimethoate	mg/kg	0.5	<0.5	<0.5	-	-
			Diazinon (Dimpylate)	mg/kg	0.5	1.8	<0.5	2	89
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	-	-
			Malathion	mg/kg	0.2	<0.2	<0.2	-	-
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.8	<0.2	2	88
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	-	-
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	-	-
			Methidathion	mg/kg	0.5	<0.5	<0.5	-	-
			Ethion	mg/kg	0.2	1.3	<0.2	2	64
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	-	-
			Total OP Pesticides*	mg/kg	1.7	6.2	<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	89
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	78

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207687.001	LB202334.004		Naphthalene	mg/kg	0.1	5.1	<0.1	4	128
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
			Acenaphthylene	mg/kg	0.1	4.7	<0.1	4	117
			Acenaphthene	mg/kg	0.1	4.6	<0.1	4	114
			Fluorene	mg/kg	0.1	<0.1	<0.1	-	-
			Phenanthrene	mg/kg	0.1	4.9	<0.1	4	122
			Anthracene	mg/kg	0.1	4.5	<0.1	4	113
			Fluoranthene	mg/kg	0.1	4.9	<0.1	4	121
			Pyrene	mg/kg	0.1	5.0	<0.1	4	124
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Chrysene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(a)pyrene	mg/kg	0.1	5.0	<0.1	4	124
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	5.0	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	5.1	<0.3	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	5.0	<0.2	-	-
			Total PAH (18)	mg/kg	0.8	39	<0.8	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	-	79
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.4	-	91
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	85

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207687.021	LB202335.004		Naphthalene	mg/kg	0.1	5.0	<0.1	4	124
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
			Acenaphthylene	mg/kg	0.1	4.8	<0.1	4	121
			Acenaphthene	mg/kg	0.1	4.9	<0.1	4	123
			Fluorene	mg/kg	0.1	<0.1	<0.1	-	-
			Phenanthrene	mg/kg	0.1	5.0	<0.1	4	125
			Anthracene	mg/kg	0.1	4.6	<0.1	4	115
			Fluoranthene	mg/kg	0.1	5.0	<0.1	4	124
			Pyrene	mg/kg	0.1	4.8	<0.1	4	121
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Chrysene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(a)pyrene	mg/kg	0.1	4.5	<0.1	4	113
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	4.5	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	4.7	<0.3	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	4.6	<0.2	-	-
			Total PAH (18)	mg/kg	0.8	39	<0.8	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	-	81
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	89
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	78

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207687.001	LB202334.004		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1260	mg/kg	0.2	0.4	<0.2	0.4	111
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	-	-
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	-	96
SE207687.022	LB202335.022		Arochlor 1016	mg/kg	0.2		<0.2	-	-
			Arochlor 1221	mg/kg	0.2		<0.2	-	-
			Arochlor 1232	mg/kg	0.2		<0.2	-	-
			Arochlor 1242	mg/kg	0.2		<0.2	-	-
			Arochlor 1248	mg/kg	0.2		<0.2	-	-
			Arochlor 1254	mg/kg	0.2		<0.2	-	-
			Arochlor 1260	mg/kg	0.2		<0.2	0.4	108
			Arochlor 1262	mg/kg	0.2		<0.2	-	-
			Arochlor 1268	mg/kg	0.2		<0.2	-	-
			Total PCBs (Arochlors)	mg/kg	1		<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-		0	-	105

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207687.001	LB202334.004	Phenol	mg/kg	0.5	0.8	<0.5	1	77
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	-	-
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	-	-
		Total Cresol	mg/kg	1.5	<1.5	<1.5	-	-
		2-chlorophenol	mg/kg	0.5	<0.5	<0.5	-	-
		2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	-	-
		2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	-	-
		2,4-dichlorophenol	mg/kg	0.5	0.8	<0.5	1	79
		2,4,6-trichlorophenol	mg/kg	0.5	0.8	<0.5	1	75

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207687.001	LB202334.004		2-nitrophenol	mg/kg	0.5	<0.5	<0.5	-	-
			4-nitrophenol	mg/kg	1	<1	<1	-	-
			2,4,5-trichlorophenol	mg/kg	0.5	0.7	<0.5	-	-
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	-	-
			Pentachlorophenol	mg/kg	0.5	0.7	<0.5	1	71
			2,4-dinitrophenol	mg/kg	2	<2	<2	-	-
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	-	-
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.4	4.3	-	88
			d5-phenol (Surrogate)	mg/kg	-	1.5	1.5	-	77
SE207687.021	LB202335.004		Phenol	mg/kg	0.5	0.8	<0.5	1	75
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	-	-
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	-	-
			Total Cresol	mg/kg	1.5	<1.5	<1.5	-	-
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	-	-
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	-	-
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	-	-
			2,4-dichlorophenol	mg/kg	0.5	0.9	<0.5	1	85
			2,4,6-trichlorophenol	mg/kg	0.5	0.8	<0.5	1	78
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	-	-
			4-nitrophenol	mg/kg	1	<1	<1	-	-
			2,4,5-trichlorophenol	mg/kg	0.5	0.7	<0.5	-	-
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	-	-
			Pentachlorophenol	mg/kg	0.5	0.8	<0.5	1	84
			2,4-dinitrophenol	mg/kg	2	<2	<2	-	-
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	-	-
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.5	4.4	-	90
			d5-phenol (Surrogate)	mg/kg	-	1.5	1.5	-	76

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207687.015	LB202374.004	Arsenic, As	mg/kg	1	53	2	50	103
		Cadmium, Cd	mg/kg	0.3	46	<0.3	50	91
		Chromium, Cr	mg/kg	0.5	54	2.2	50	104
		Copper, Cu	mg/kg	0.5	52	<0.5	50	105
		Nickel, Ni	mg/kg	0.5	52	<0.5	50	104
		Lead, Pb	mg/kg	1	54	2	50	105
		Zinc, Zn	mg/kg	2	57	5.2	50	104
SE207691.001	LB202373.004	Arsenic, As	mg/kg	1	52	<1	50	101
		Cadmium, Cd	mg/kg	0.3	44	<0.3	50	88
		Chromium, Cr	mg/kg	0.5	53	2.5	50	100
		Copper, Cu	mg/kg	0.5	52	1.9	50	100
		Nickel, Ni	mg/kg	0.5	50	0.6	50	100
		Lead, Pb	mg/kg	1	230	220	50	7 ④
		Zinc, Zn	mg/kg	2	110	69	50	74
SE207726.008	LB202437.004	Zinc, Zn	mg/kg	2	57	21	50	72

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207687.001	LB202334.004		TRH C10-C14	mg/kg	20	46	<20	40	115
			TRH C15-C28	mg/kg	45	<45	<45	40	98
			TRH C29-C36	mg/kg	45	<45	<45	40	75
			TRH C37-C40	mg/kg	100	<100	<100	-	-
			TRH C10-C36 Total	mg/kg	110	<110	<110	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25	44	<25	40	110
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	44	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	40	80
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	-	-
SE207687.021	LB202335.004		TRH C10-C14	mg/kg	20	49	<20	40	123
			TRH C15-C28	mg/kg	45	45	<45	40	113
			TRH C29-C36	mg/kg	45	<45	<45	40	80
			TRH C37-C40	mg/kg	100	<100	<100	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207687.021	LB202335.004		TRH C10-C36 Total	mg/kg	110	<110	<110	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25	48	<25	40	120
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	48	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	40	105
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	-	-

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207687.001	LB202329.004	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	-	-
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	-	-
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	-	-
			Bromomethane	mg/kg	1	<1	<1	-	-
			Chloroethane	mg/kg	1	<1	<1	-	-
			Trichlorofluoromethane	mg/kg	1	<1	<1	-	-
			Iodomethane	mg/kg	5	<5	<5	-	-
			1,1-dichloroethene	mg/kg	0.1	3.7	<0.1	5	74
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	-	-
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloroethane	mg/kg	0.1	4.3	<0.1	5	86
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	-	-
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	4.1	<0.1	5	82
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	-	-
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated	Chlorobenzene	mg/kg	0.1	4.8	<0.1	5	96
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Monocyclic	Benzene	mg/kg	0.1	4.1	<0.1	5	83
		Aromatic	Toluene	mg/kg	0.1	4.2	<0.1	5	84
			Ethylbenzene	mg/kg	0.1	4.2	<0.1	5	84
			m/p-xylene	mg/kg	0.2	8.4	<0.2	10	84
			o-xylene	mg/kg	0.1	4.4	<0.1	5	88
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	-	-
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	-	-
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	-	-

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VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207687.001	LB202329.004	Monocyclic Aromatic	1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	-	-
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	-	-
			2-nitropropane	mg/kg	10	<10	<10	-	-
		Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10	<10	-	-
			MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	-	-
			Vinyl acetate	mg/kg	10	<10	<10	-	-
			MEK (2-butanone)	mg/kg	10	<10	<10	-	-
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	-	-
			2-hexanone (MBK)	mg/kg	5	<5	<5	-	-
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.3	10.2	10	103
			d8-toluene (Surrogate)	mg/kg	-	10.5	10.4	10	105
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.0	7.6	10	70
		Totals	Total Xylenes	mg/kg	0.3	13	<0.3	-	-
			Total BTEX	mg/kg	0.6	25	<0.6	-	-
			Total VOC*	mg/kg	24	49	<24	-	-
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	-	-
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	21	<1.8	-	-
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	21	<1.8	-	-
		Trihalomethanes	Chloroform	mg/kg	0.1	4.3	<0.1	5	86
			Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Bromoform	mg/kg	0.1	<0.1	<0.1	-	-
SE207687.021	LB202331.004	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	-	-
			Chloromethane	mg/kg	1	<1	<1	-	-
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	-	-
			Bromomethane	mg/kg	1	<1	<1	-	-
			Chloroethane	mg/kg	1	<1	<1	-	-
			Trichlorofluoromethane	mg/kg	1	<1	<1	-	-
			Iodomethane	mg/kg	5	<5	<5	-	-
			1,1-dichloroethene	mg/kg	0.1	3.7	<0.1	5	74
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	-	-
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloroethane	mg/kg	0.1	4.3	<0.1	5	86
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	-	-
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	4.1	<0.1	5	81
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	-	-
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	-	-

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VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207687.021	LB202331.004	Halogenated Aliphatics	trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	4.7	<0.1	5	94
			Bromobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Monocyclic Aromatic	Benzene	mg/kg	0.1	4.0	<0.1	5	80
			Toluene	mg/kg	0.1	3.9	<0.1	5	78
			Ethylbenzene	mg/kg	0.1	3.9	<0.1	5	77
			m/p-xylene	mg/kg	0.2	7.8	<0.2	10	77
			o-xylene	mg/kg	0.1	3.9	<0.1	5	78
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	-	-
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	-	-
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	-	-
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	-	-
			2-nitropropane	mg/kg	10	<10	<10	-	-
		Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10	<10	-	-
			MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	-	-
			Vinyl acetate	mg/kg	10	<10	<10	-	-
			MEK (2-butanone)	mg/kg	10	<10	<10	-	-
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	-	-
			2-hexanone (MBK)	mg/kg	5	<5	<5	-	-
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.6	10.1	10	96
			d8-toluene (Surrogate)	mg/kg	-	9.4	10.2	10	94
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.2	7.4	10	62 ①
		Totals	Total Xylenes	mg/kg	0.3	12	<0.3	-	-
			Total BTEX	mg/kg	0.6	24	<0.6	-	-
			Total VOC*	mg/kg	24	48	<24	-	-
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	-	-
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	21	<1.8	-	-
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	21	<1.8	-	-
		Trihalomethanes	Chloroform	mg/kg	0.1	4.4	<0.1	5	88
			Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Bromoform	mg/kg	0.1	<0.1	<0.1	-	-

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207687.001	LB202329.004		TRH C6-C10	mg/kg	25	63	<25	92.5	68
			TRH C6-C9	mg/kg	20	55	<20	80	68
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.3	10.2	10	103
			d8-toluene (Surrogate)	mg/kg	-	10.5	10.4	10	105
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.0	7.6	-	70
		VPH F Bands	Benzene (F0)	mg/kg	0.1	4.1	<0.1	-	-
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	38	<25	62.5	60
SE207687.021	LB202331.004		TRH C6-C10	mg/kg	25	62	<25	92.5	66
			TRH C6-C9	mg/kg	20	53	<20	80	66

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207687.021	LB202331.004	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.6	10.1	10	96
			d8-toluene (Surrogate)	mg/kg	-	9.4	10.2	10	94
			Bromofluorobenzene (Surrogate)	mg/kg	-	6.2	7.4	-	62
		VPH F	Benzene (F0)	mg/kg	0.1	4.0	<0.1	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	38	<25	62.5	61

MATRIX SPIKE DUPLICATES

SE207687 R1

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Dawin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 500 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☒ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ

CLIENT: Defence Housing Australia	**LABORATORY: SGS Australia**	**Turnaround Time (TAT)**	**COC Number**
PROJECT: Randwick Barracks	**LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015**		**of**
PROJECT NUMBER: 610.30041	**SAMPLER: GF**	☐ Standard TAT	
PROJECT MANAGER [redacted]	**SAMPLER CONTACT No:** [redacted]	☐ Non Standard or Urgent TAT	
PM CONTACT No: [redacted]	**Email Reports and Invoices to: LQRSYD@slrconsulting.com ;** [redacted]	**Required TAT: Standard**	

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	Asbestos ONLY	HOLD	C6-C10/BETXN	Additional Information *(Comment on any gross contamination or specific requirements)*
	0407_QC163_200625	25/06/2020	Soil	jar, pfas	x				Please hold all PFAS containers
	0407_QC263_200625	25/06/2020	Soil	jar, pfas	x				Please send to Eurofins
	0407_QC167_200625	25/06/2020	Soil	jar, pfas	x				
	0407_QC267_200625	25/06/2020	Soil	jar, pfas	x				Please send to Eurofins
	0407_QC413_200623	23/06/2020	Trip Blank	vial				x	
	0407_QC513_200623	23/06/2020	Trip Spike	vial				x	
1	0407_162_200625	25/06/2020	Soil	jar, pfas	x				
	0407_262_200625	25/06/2020	Soil	jar, pfas	x				Please send to Eurofins

SGS EHS Sydney COC

SE209743

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time	18/06/2020	**Received by**	Sign	[redacted]	Date / Time	25/6 @4.30
Relinquished By	Sign	Date / Time		**Received by**	Sign	[redacted]	Date / Time	
Relinquished By	Sign	Date / Time		**Received by**	Sign		Date / Time	

Temperature Received: 4.7°C

SAMPLE RECEIPT ADVICE

SE209743

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	1

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Fri 7/8/2020
Report Due	Mon 10/8/2020
SGS Reference	**SE209743**

SUBMISSION DETAILS

This is to confirm that 1 sample was received on Friday 7/8/2020. Results are expected to be ready by COB Monday 10/8/2020. Please quote SGS reference SE209743 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	1 Soil
Date documentation received	7/8/2020@12:14PM	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	4.7°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

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SAMPLE RECEIPT ADVICE

SE209743

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	Speciated Phenols in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
001	0407_QC162_200625	29	14	26	11	18	10	81	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE209743

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Mercury in Soil	Moisture Content	Total Recoverable Elements in Soil/Waste
001	0407_QC162_200625	1	1	7

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	1

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE209743 R0**
Date Received	7/8/2020
Date Reported	10/8/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

SIGNATORIES

[redacted]

Chemist | Senior Organic Chemist/Metals Chemist | Metals/Inorganics Team Leader

[redacted]

Organic Section Head

VOC's in Soil [AN433] Tested: 7/8/2020

PARAMETER	UOM	LOR	0407_QC162_20062 SOIL - 25/6/2020 SE209743.001
Benzene	mg/kg	0.1	<0.1
Toluene	mg/kg	0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2
o-xylene	mg/kg	0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
Chloromethane	mg/kg	1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
Bromomethane	mg/kg	1	<1
Chloroethane	mg/kg	1	<1
Trichlorofluoromethane	mg/kg	1	<1
Acetone (2-propanone)	mg/kg	10	<10
Iodomethane	mg/kg	5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1
Vinyl acetate	mg/kg	10	<10
MEK (2-butanone)	mg/kg	10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1
Chloroform	mg/kg	0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
2-nitropropane	mg/kg	10	<10
Bromodichloromethane	mg/kg	0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1
Bromoform	mg/kg	0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1

VOC's in Soil [AN433] Tested: 7/8/2020 (continued)

PARAMETER	UOM	LOR	0407_QC162_20062 SOIL - 25/6/2020 SE209743.001
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
Total VOC*	mg/kg	24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 7/8/2020

PARAMETER	UOM	LOR	0407_QC162_20062 SOIL - 25/6/2020 SE209743.001
Benzene (F0)	mg/kg	0.1	<0.1
TRH C6-C9	mg/kg	20	<20
TRH C6-C10	mg/kg	25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 7/8/2020

PARAMETER	UOM	LOR	0407_QC162_20062 SOIL - 25/6/2020 SE209743.001
TRH C10-C14	mg/kg	20	<20
TRH C15-C28	mg/kg	45	**61**
TRH C29-C36	mg/kg	45	**51**
TRH C37-C40	mg/kg	100	<100
TRH >C10-C16	mg/kg	25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25
TRH >C16-C34 (F3)	mg/kg	90	**110**
TRH >C34-C40 (F4)	mg/kg	120	<120
TRH C10-C36 Total	mg/kg	110	**110**
TRH >C10-C40 Total (F bands)	mg/kg	210	<210

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 7/8/2020

PARAMETER	UOM	LOR	0407_QC162_20062 SOIL - 25/6/2020 SE209743.001
Naphthalene	mg/kg	0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1
Acenaphthylene	mg/kg	0.1	**0.1**
Acenaphthene	mg/kg	0.1	<0.1
Fluorene	mg/kg	0.1	<0.1
Phenanthrene	mg/kg	0.1	**0.7**
Anthracene	mg/kg	0.1	**0.1**
Fluoranthene	mg/kg	0.1	**2.4**
Pyrene	mg/kg	0.1	**2.3**
Benzo(a)anthracene	mg/kg	0.1	**0.9**
Chrysene	mg/kg	0.1	**1.4**
Benzo(b&j)fluoranthene	mg/kg	0.1	**1.6**
Benzo(k)fluoranthene	mg/kg	0.1	**1.2**
Benzo(a)pyrene	mg/kg	0.1	**1.7**
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	**1.3**
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	**1.3**
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	**2.2**
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	**2.3**
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	**2.3**
Total PAH (18)	mg/kg	0.8	**15**
Total PAH (NEPM/WHO 16)	mg/kg	0.8	**15**

Speciated Phenols in Soil [AN420] Tested: 7/8/2020

PARAMETER	UOM	LOR	0407_QC162_20062 SOIL - 25/6/2020 SE209743.001
Phenol	mg/kg	0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
Total Cresol	mg/kg	1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5
4-nitrophenol	mg/kg	1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
Pentachlorophenol	mg/kg	0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2
4-chloro-3-methylphenol	mg/kg	2	<2

OC Pesticides in Soil [AN420] Tested: 7/8/2020

PARAMETER	UOM	LOR	0407_QC162_20062 SOIL - 25/6/2020 SE209743.001
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1
Lindane	mg/kg	0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1
Aldrin	mg/kg	0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2
Endrin	mg/kg	0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1
Isodrin	mg/kg	0.1	<0.1
Mirex	mg/kg	0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1

OP Pesticides in Soil [AN420] Tested: 7/8/2020

PARAMETER	UOM	LOR	0407_QC162_20062 SOIL - 25/6/2020 SE209743.001
Dichlorvos	mg/kg	0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2
Malathion	mg/kg	0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2
Methidathion	mg/kg	0.5	<0.5
Ethion	mg/kg	0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7

PCBs in Soil [AN420] Tested: 7/8/2020

PARAMETER	UOM	LOR	0407_QC162_20062 SOIL - 25/6/2020 SE209743.001
Arochlor 1016	mg/kg	0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 10/8/2020

PARAMETER	UOM	LOR	0407_QC162_20062 SOIL - 25/6/2020 SE209743.001
Arsenic, As	mg/kg	1	**1**
Cadmium, Cd	mg/kg	0.3	<0.3
Chromium, Cr	mg/kg	0.5	**2.0**
Copper, Cu	mg/kg	0.5	**25**
Lead, Pb	mg/kg	1	**150**
Nickel, Ni	mg/kg	0.5	**1.1**
Zinc, Zn	mg/kg	2	**50**

Mercury in Soil [AN312] Tested: 10/8/2020

PARAMETER	UOM	LOR	0407_QC162_20062 SOIL - 25/6/2020 SE209743.001
Mercury	mg/kg	0.05	**0.07**

Moisture Content [AN002] Tested: 7/8/2020

PARAMETER	UOM	LOR	0407_QC162_20062 SOIL - 25/6/2020 SE209743.001
% Moisture	%w/w	1	**15.0**

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid, mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents .
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE209743 R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	1

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE209743 R0**
Date Received	07 Aug 2020
Date Reported	10 Aug 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Extraction Date	Mercury in Soil	1 item
	Moisture Content	1 item
	OC Pesticides in Soil	1 item
	OP Pesticides in Soil	1 item
	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	1 item
	PCBs in Soil	1 item
	Speciated Phenols in Soil	1 item
	TRH (Total Recoverable Hydrocarbons) in Soil	1 item
	VOC's in Soil	1 item
	Volatile Petroleum Hydrocarbons in Soil	1 item
Analysis Date	Mercury in Soil	1 item

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	1 Soil
Date documentation received	7/8/2020@12:14PM	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	4.7°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE209743 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC162_200625	SE209743.001	LB206327	25 Jun 2020	07 Aug 2020	23 Jul 2020	10 Aug 2020†	23 Jul 2020	10 Aug 2020†

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC162_200625	SE209743.001	LB206286	25 Jun 2020	07 Aug 2020	09 Jul 2020	07 Aug 2020†	12 Aug 2020	10 Aug 2020

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC162_200625	SE209743.001	LB206285	25 Jun 2020	07 Aug 2020	09 Jul 2020	07 Aug 2020†	16 Sep 2020	10 Aug 2020

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC162_200625	SE209743.001	LB206285	25 Jun 2020	07 Aug 2020	09 Jul 2020	07 Aug 2020†	16 Sep 2020	10 Aug 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC162_200625	SE209743.001	LB206285	25 Jun 2020	07 Aug 2020	09 Jul 2020	07 Aug 2020†	16 Sep 2020	10 Aug 2020

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC162_200625	SE209743.001	LB206285	25 Jun 2020	07 Aug 2020	09 Jul 2020	07 Aug 2020†	16 Sep 2020	10 Aug 2020

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC162_200625	SE209743.001	LB206285	25 Jun 2020	07 Aug 2020	09 Jul 2020	07 Aug 2020†	16 Sep 2020	10 Aug 2020

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC162_200625	SE209743.001	LB206326	25 Jun 2020	07 Aug 2020	22 Dec 2020	10 Aug 2020	22 Dec 2020	10 Aug 2020

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC162_200625	SE209743.001	LB206285	25 Jun 2020	07 Aug 2020	09 Jul 2020	07 Aug 2020†	16 Sep 2020	10 Aug 2020

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC162_200625	SE209743.001	LB206284	25 Jun 2020	07 Aug 2020	09 Jul 2020	07 Aug 2020†	16 Sep 2020	10 Aug 2020

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC162_200625	SE209743.001	LB206284	25 Jun 2020	07 Aug 2020	09 Jul 2020	07 Aug 2020†	16 Sep 2020	10 Aug 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_QC162_200625	SE209743.001	%	60 - 130%	100

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_QC162_200625	SE209743.001	%	60 - 130%	90
d14-p-terphenyl (Surrogate)	0407_QC162_200625	SE209743.001	%	60 - 130%	88

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_QC162_200625	SE209743.001	%	70 - 130%	90
d14-p-terphenyl (Surrogate)	0407_QC162_200625	SE209743.001	%	70 - 130%	88
d5-nitrobenzene (Surrogate)	0407_QC162_200625	SE209743.001	%	70 - 130%	74

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_QC162_200625	SE209743.001	%	60 - 130%	100

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	0407_QC162_200625	SE209743.001	%	70 - 130%	82
d5-phenol (Surrogate)	0407_QC162_200625	SE209743.001	%	50 - 130%	81

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_QC162_200625	SE209743.001	%	60 - 130%	76
d4-1,2-dichloroethane (Surrogate)	0407_QC162_200625	SE209743.001	%	60 - 130%	92
d8-toluene (Surrogate)	0407_QC162_200625	SE209743.001	%	60 - 130%	81

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_QC162_200625	SE209743.001	%	60 - 130%	76
d4-1,2-dichloroethane (Surrogate)	0407_QC162_200625	SE209743.001	%	60 - 130%	92
d8-toluene (Surrogate)	0407_QC162_200625	SE209743.001	%	60 - 130%	81

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result
LB206327.001	Mercury	mg/kg	0.05	<0.05

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB206285.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	99

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB206285.001		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	86
		d14-p-terphenyl (Surrogate)	%	-	80

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB206285.001	Naphthalene	mg/kg	0.1	<0.1
	2-methylnaphthalene	mg/kg	0.1	<0.1
	1-methylnaphthalene	mg/kg	0.1	<0.1
	Acenaphthylene	mg/kg	0.1	<0.1
	Acenaphthene	mg/kg	0.1	<0.1
	Fluorene	mg/kg	0.1	<0.1
	Phenanthrene	mg/kg	0.1	<0.1
	Anthracene	mg/kg	0.1	<0.1
	Fluoranthene	mg/kg	0.1	<0.1
	Pyrene	mg/kg	0.1	<0.1
	Benzo(a)anthracene	mg/kg	0.1	<0.1
	Chrysene	mg/kg	0.1	<0.1
	Benzo(a)pyrene	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB206285.001		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	86
		2-fluorobiphenyl (Surrogate)	%	-	86
		d14-p-terphenyl (Surrogate)	%	-	80

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB206285.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	99

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB206285.001		Phenol	mg/kg	0.5	<0.5
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5
		2-nitrophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
		Pentachlorophenol	mg/kg	0.5	<0.5
		2,4-dinitrophenol	mg/kg	2	<2
		4-chloro-3-methylphenol	mg/kg	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	86
		d5-phenol (Surrogate)	%	-	85

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB206326.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB206285.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number	Parameter	Units	LOR

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB206284.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB206284.001	Oxygenated Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	109
		d8-toluene (Surrogate)	%	-	95
		Bromofluorobenzene (Surrogate)	%	-	82
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB206284.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	109

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE209743.001	LB206327.004	Mercury	mg/kg	0.05	0.07	0.10	91	34

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE209743.001	LB206286.022	% Moisture	%w/w	1	15.0	14.9	37	1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE209743.001	LB206326.004	Arsenic, As	mg/kg	1	1	1	115	4
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	2.0	2.1	54	2
		Copper, Cu	mg/kg	0.5	25	25	32	1
		Nickel, Ni	mg/kg	0.5	1.1	1.1	74	2
		Lead, Pb	mg/kg	1	150	150	31	2
		Zinc, Zn	mg/kg	2	50	50	34	0

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE209743.001	LB206284.025	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE209743.001	LB206284.025	Halogenated	1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.2	10.3	50	11
			d8-toluene (Surrogate)	mg/kg	-	8.1	9.0	50	11
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.6	8.2	50	8
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE209743.001	LB206284.025		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.2	10.3	30	11
			d8-toluene (Surrogate)	mg/kg	-	8.1	9.0	30	11
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.6	8.2	30	8
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206327.002	Mercury	mg/kg	0.05	0.22	0.2	70 - 130	112

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206285.002		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	90
		Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	96
		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	93
		Dieldrin	mg/kg	0.2	<0.2	0.2	60 - 140	98
		Endrin	mg/kg	0.2	<0.2	0.2	60 - 140	91
		p,p'-DDT	mg/kg	0.1	0.1	0.2	60 - 140	70
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.13	0.15	40 - 130	85

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206285.002		Dichlorvos	mg/kg	0.5	1.5	2	60 - 140	75
		Diazinon (Dimpylate)	mg/kg	0.5	1.6	2	60 - 140	78
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.6	2	60 - 140	79
		Ethion	mg/kg	0.2	1.4	2	60 - 140	71
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	88
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	90

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206285.002		Naphthalene	mg/kg	0.1	4.1	4	60 - 140	101
		Acenaphthylene	mg/kg	0.1	3.9	4	60 - 140	98
		Acenaphthene	mg/kg	0.1	4.2	4	60 - 140	106
		Phenanthrene	mg/kg	0.1	4.7	4	60 - 140	118
		Anthracene	mg/kg	0.1	4.4	4	60 - 140	111
		Fluoranthene	mg/kg	0.1	4.5	4	60 - 140	114
		Pyrene	mg/kg	0.1	4.7	4	60 - 140	118
		Benzo(a)pyrene	mg/kg	0.1	4.4	4	60 - 140	111
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	86
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	88
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	90

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206285.002	Arochlor 1260	mg/kg	0.2	0.4	0.4	60 - 140	88

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206285.002		Phenol	mg/kg	0.5	0.8	1	70 - 130	84
		2,4-dichlorophenol	mg/kg	0.5	1.0	1	70 - 130	102
		2,4,6-trichlorophenol	mg/kg	0.5	0.8	1	70 - 130	76
		Pentachlorophenol	mg/kg	0.5	0.7	1	70 - 130	74
	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.1	5	40 - 130	81
		d5-phenol (Surrogate)	mg/kg	-	1.7	2	40 - 130	84

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206326.002	Arsenic, As	mg/kg	1	330	318.22	80 - 120	104
	Cadmium, Cd	mg/kg	0.3	5.3	5.41	80 - 120	98
	Chromium, Cr	mg/kg	0.5	39	38.31	80 - 120	102
	Copper, Cu	mg/kg	0.5	300	290	80 - 120	102
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	100
	Lead, Pb	mg/kg	1	94	89.9	80 - 120	104
	Zinc, Zn	mg/kg	2	280	273	80 - 120	102

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206285.002		TRH C10-C14	mg/kg	20	40	40	60 - 140	100
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	95
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	98
	TRH F Bands	TRH >C10-C16	mg/kg	25	41	40	60 - 140	103
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	100
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	85

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206284.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	3.4	5	60 - 140	68
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	4.1	5	60 - 140	83
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	3.6	5	60 - 140	72
	Halogenated	Chlorobenzene	mg/kg	0.1	5.2	5	60 - 140	103
	Monocyclic	Benzene	mg/kg	0.1	4.0	5	60 - 140	79
	Aromatic	Toluene	mg/kg	0.1	3.8	5	60 - 140	76
		Ethylbenzene	mg/kg	0.1	4.6	5	60 - 140	92
		m/p-xylene	mg/kg	0.2	9.2	10	60 - 140	92
		o-xylene	mg/kg	0.1	4.5	5	60 - 140	91
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	11.4	10	70 - 130	114
		d8-toluene (Surrogate)	mg/kg	-	9.8	10	70 - 130	98
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.1	10	70 - 130	81
	Trihalomethan	Chloroform	mg/kg	0.1	4.2	5	60 - 140	85

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206284.002		TRH C6-C10	mg/kg	25	81	92.5	60 - 140	88
		TRH C6-C9	mg/kg	20	70	80	60 - 140	88
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	11.4	10	70 - 130	114
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.1	10	70 - 130	81
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	55	62.5	60 - 140	89

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

QC Sample	Sample Number	Parameter	Units	LOR

MATRIX SPIKE DUPLICATES

SE209743 R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Dawin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 500 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☒ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐

CLIENT: Defence Housing Australia	**LABORATORY: SGS Australia**	**Turnaround Time (TAT)**	**COC Number**
PROJECT: Randwick Barracks	**LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015**		**of**
PROJECT NUMBER: 610.30041	**SAMPLER: GF**	☐ Standard TAT	
PROJECT MANAGER: [redacted]	**SAMPLER CONTACT No:** [redacted]	☐ Non Standard or Urgent TAT	
PM CONTACT No [redacted]	**Email Reports and Invoices to: LQRSYD@slrconsulting.com ;** [redacted]	**Required TAT: Standard**	

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	Asbestos ONLY	HOLD	C6-C10/BETXN	Additional Information (Comment on any gross contamination or specific requirements)
	0407_QC163_200625	25/06/2020	Soil	jar, pfas	x				Please hold all PFAS containers
	0407_QC263_200625	25/06/2020	Soil	jar, pfas	x				Please send to Eurofins
	0407_QC167_200625	25/06/2020	Soil	jar, pfas	x				
	0407_QC267_200625	25/06/2020	Soil	jar, pfas	x				Please send to Eurofins
	0407_QC413_200623	23/06/2020	Trip Blank	vial				x	
	0407_QC513_200623	23/06/2020	Trip Spike	vial				x	
1	0407_162_200625	25/06/2020	Soil	jar, pfas	x				
	0407_262_200625	25/06/2020	Soil	jar, pfas	x				Please send to Eurofins

SGS EHS Sydney COC

SE209743



I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time	18/06/2020	**Received by**	Sign	[redacted]	Date / Time	25/6 @4.30	**Temperature Received:** 4.7°C
Relinquished By	Sign	Date / Time		**Received by**	Sign		Date / Time		
Relinquished By	Sign	Date / Time		**Received by**	Sign		Date / Time		

SAMPLE RECEIPT ADVICE

SE209743

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	1

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Fri 7/8/2020
Report Due	Mon 10/8/2020
SGS Reference	**SE209743**

SUBMISSION DETAILS

This is to confirm that 1 sample was received on Friday 7/8/2020. Results are expected to be ready by COB Monday 10/8/2020. Please quote SGS reference SE209743 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	1 Soil
Date documentation received	7/8/2020@12:14PM	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	4.7°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

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SAMPLE RECEIPT ADVICE

SE209743

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	Speciated Phenols in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
001	0407_QC162_200625	29	14	26	11	18	10	81	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE209743

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Mercury in Soil	Moisture Content	Total Recoverable Elements in Soil/Waste
001	0407_QC162_200625	1	1	7

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	1

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE209743 R0**
Date Received	7/8/2020
Date Reported	10/8/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

SIGNATORIES

[redacted]

Chemist | Senior Organic Chemist/Metals Chemist | Metals/Inorganics Team Leader

[redacted]

Organic Section Head

VOC's in Soil [AN433] Tested: 7/8/2020

PARAMETER	UOM	LOR	0407_QC162_20062 SOIL - 25/6/2020 SE209743.001
Benzene	mg/kg	0.1	<0.1
Toluene	mg/kg	0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2
o-xylene	mg/kg	0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
Chloromethane	mg/kg	1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
Bromomethane	mg/kg	1	<1
Chloroethane	mg/kg	1	<1
Trichlorofluoromethane	mg/kg	1	<1
Acetone (2-propanone)	mg/kg	10	<10
Iodomethane	mg/kg	5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1
Vinyl acetate	mg/kg	10	<10
MEK (2-butanone)	mg/kg	10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1
Chloroform	mg/kg	0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
2-nitropropane	mg/kg	10	<10
Bromodichloromethane	mg/kg	0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1
Bromoform	mg/kg	0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1

VOC's in Soil [AN433] Tested: 7/8/2020 (continued)

PARAMETER	UOM	LOR	0407_QC162_20062 SOIL - 25/6/2020 SE209743.001
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
Total VOC*	mg/kg	24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 7/8/2020

PARAMETER	UOM	LOR	0407_QC162_20062 SOIL - 25/6/2020 SE209743.001
Benzene (F0)	mg/kg	0.1	<0.1
TRH C6-C9	mg/kg	20	<20
TRH C6-C10	mg/kg	25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 7/8/2020

PARAMETER	UOM	LOR	0407_QC162_20062 SOIL - 25/6/2020 SE209743.001
TRH C10-C14	mg/kg	20	<20
TRH C15-C28	mg/kg	45	**61**
TRH C29-C36	mg/kg	45	**51**
TRH C37-C40	mg/kg	100	<100
TRH >C10-C16	mg/kg	25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25
TRH >C16-C34 (F3)	mg/kg	90	**110**
TRH >C34-C40 (F4)	mg/kg	120	<120
TRH C10-C36 Total	mg/kg	110	**110**
TRH >C10-C40 Total (F bands)	mg/kg	210	<210

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 7/8/2020

PARAMETER	UOM	LOR	0407_QC162_20062 SOIL - 25/6/2020 SE209743.001
Naphthalene	mg/kg	0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1
Acenaphthylene	mg/kg	0.1	**0.1**
Acenaphthene	mg/kg	0.1	<0.1
Fluorene	mg/kg	0.1	<0.1
Phenanthrene	mg/kg	0.1	**0.7**
Anthracene	mg/kg	0.1	**0.1**
Fluoranthene	mg/kg	0.1	**2.4**
Pyrene	mg/kg	0.1	**2.3**
Benzo(a)anthracene	mg/kg	0.1	**0.9**
Chrysene	mg/kg	0.1	**1.4**
Benzo(b&j)fluoranthene	mg/kg	0.1	**1.6**
Benzo(k)fluoranthene	mg/kg	0.1	**1.2**
Benzo(a)pyrene	mg/kg	0.1	**1.7**
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	**1.3**
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	**1.3**
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	**2.2**
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	**2.3**
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	**2.3**
Total PAH (18)	mg/kg	0.8	**15**
Total PAH (NEPM/WHO 16)	mg/kg	0.8	**15**

Speciated Phenols in Soil [AN420] Tested: 7/8/2020

PARAMETER	UOM	LOR	0407_QC162_20062 SOIL - 25/6/2020 SE209743.001
Phenol	mg/kg	0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
Total Cresol	mg/kg	1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5
4-nitrophenol	mg/kg	1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
Pentachlorophenol	mg/kg	0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2
4-chloro-3-methylphenol	mg/kg	2	<2

OC Pesticides in Soil [AN420] Tested: 7/8/2020

PARAMETER	UOM	LOR	0407_QC162_20062 SOIL - 25/6/2020 SE209743.001
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1
Lindane	mg/kg	0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1
Aldrin	mg/kg	0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2
Endrin	mg/kg	0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1
Isodrin	mg/kg	0.1	<0.1
Mirex	mg/kg	0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1

OP Pesticides in Soil [AN420] Tested: 7/8/2020

PARAMETER	UOM	LOR	0407_QC162_20062 SOIL - 25/6/2020 SE209743.001
Dichlorvos	mg/kg	0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2
Malathion	mg/kg	0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2
Methidathion	mg/kg	0.5	<0.5
Ethion	mg/kg	0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7

PCBs in Soil [AN420] Tested: 7/8/2020

PARAMETER	UOM	LOR	0407_QC162_20062 SOIL - 25/6/2020 SE209743.001
Arochlor 1016	mg/kg	0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 10/8/2020

PARAMETER	UOM	LOR	0407_QC162_20062 SOIL - 25/6/2020 SE209743.001
Arsenic, As	mg/kg	1	**1**
Cadmium, Cd	mg/kg	0.3	<0.3
Chromium, Cr	mg/kg	0.5	**2.0**
Copper, Cu	mg/kg	0.5	**25**
Lead, Pb	mg/kg	1	**150**
Nickel, Ni	mg/kg	0.5	**1.1**
Zinc, Zn	mg/kg	2	**50**

Mercury in Soil [AN312] Tested: 10/8/2020

PARAMETER	UOM	LOR	0407_QC162_20062 SOIL - 25/6/2020 SE209743.001
Mercury	mg/kg	0.05	**0.07**

Moisture Content [AN002] Tested: 7/8/2020

PARAMETER	UOM	LOR	0407_QC162_20062 SOIL - 25/6/2020 SE209743.001
% Moisture	%w/w	1	**15.0**

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid, mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents .
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE209743 R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	1

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE209743 R0**
Date Received	07 Aug 2020
Date Reported	10 Aug 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Extraction Date	Mercury in Soil	1 item
	Moisture Content	1 item
	OC Pesticides in Soil	1 item
	OP Pesticides in Soil	1 item
	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	1 item
	PCBs in Soil	1 item
	Speciated Phenols in Soil	1 item
	TRH (Total Recoverable Hydrocarbons) in Soil	1 item
	VOC's in Soil	1 item
	Volatile Petroleum Hydrocarbons in Soil	1 item
Analysis Date	Mercury in Soil	1 item

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	1 Soil
Date documentation received	7/8/2020@12:14PM	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	4.7°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE209743 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC162_200625	SE209743.001	LB206327	25 Jun 2020	07 Aug 2020	23 Jul 2020	10 Aug 2020†	23 Jul 2020	10 Aug 2020†

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC162_200625	SE209743.001	LB206286	25 Jun 2020	07 Aug 2020	09 Jul 2020	07 Aug 2020†	12 Aug 2020	10 Aug 2020

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC162_200625	SE209743.001	LB206285	25 Jun 2020	07 Aug 2020	09 Jul 2020	07 Aug 2020†	16 Sep 2020	10 Aug 2020

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC162_200625	SE209743.001	LB206285	25 Jun 2020	07 Aug 2020	09 Jul 2020	07 Aug 2020†	16 Sep 2020	10 Aug 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC162_200625	SE209743.001	LB206285	25 Jun 2020	07 Aug 2020	09 Jul 2020	07 Aug 2020†	16 Sep 2020	10 Aug 2020

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC162_200625	SE209743.001	LB206285	25 Jun 2020	07 Aug 2020	09 Jul 2020	07 Aug 2020†	16 Sep 2020	10 Aug 2020

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC162_200625	SE209743.001	LB206285	25 Jun 2020	07 Aug 2020	09 Jul 2020	07 Aug 2020†	16 Sep 2020	10 Aug 2020

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC162_200625	SE209743.001	LB206326	25 Jun 2020	07 Aug 2020	22 Dec 2020	10 Aug 2020	22 Dec 2020	10 Aug 2020

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC162_200625	SE209743.001	LB206285	25 Jun 2020	07 Aug 2020	09 Jul 2020	07 Aug 2020†	16 Sep 2020	10 Aug 2020

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC162_200625	SE209743.001	LB206284	25 Jun 2020	07 Aug 2020	09 Jul 2020	07 Aug 2020†	16 Sep 2020	10 Aug 2020

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC162_200625	SE209743.001	LB206284	25 Jun 2020	07 Aug 2020	09 Jul 2020	07 Aug 2020†	16 Sep 2020	10 Aug 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_QC162_200625	SE209743.001	%	60 - 130%	100

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_QC162_200625	SE209743.001	%	60 - 130%	90
d14-p-terphenyl (Surrogate)	0407_QC162_200625	SE209743.001	%	60 - 130%	88

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_QC162_200625	SE209743.001	%	70 - 130%	90
d14-p-terphenyl (Surrogate)	0407_QC162_200625	SE209743.001	%	70 - 130%	88
d5-nitrobenzene (Surrogate)	0407_QC162_200625	SE209743.001	%	70 - 130%	74

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_QC162_200625	SE209743.001	%	60 - 130%	100

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	0407_QC162_200625	SE209743.001	%	70 - 130%	82
d5-phenol (Surrogate)	0407_QC162_200625	SE209743.001	%	50 - 130%	81

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_QC162_200625	SE209743.001	%	60 - 130%	76
d4-1,2-dichloroethane (Surrogate)	0407_QC162_200625	SE209743.001	%	60 - 130%	92
d8-toluene (Surrogate)	0407_QC162_200625	SE209743.001	%	60 - 130%	81

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_QC162_200625	SE209743.001	%	60 - 130%	76
d4-1,2-dichloroethane (Surrogate)	0407_QC162_200625	SE209743.001	%	60 - 130%	92
d8-toluene (Surrogate)	0407_QC162_200625	SE209743.001	%	60 - 130%	81

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result
LB206327.001	Mercury	mg/kg	0.05	<0.05

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB206285.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	99

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB206285.001		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	86
		d14-p-terphenyl (Surrogate)	%	-	80

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB206285.001	Naphthalene	mg/kg	0.1	<0.1
	2-methylnaphthalene	mg/kg	0.1	<0.1
	1-methylnaphthalene	mg/kg	0.1	<0.1
	Acenaphthylene	mg/kg	0.1	<0.1
	Acenaphthene	mg/kg	0.1	<0.1
	Fluorene	mg/kg	0.1	<0.1
	Phenanthrene	mg/kg	0.1	<0.1
	Anthracene	mg/kg	0.1	<0.1
	Fluoranthene	mg/kg	0.1	<0.1
	Pyrene	mg/kg	0.1	<0.1
	Benzo(a)anthracene	mg/kg	0.1	<0.1
	Chrysene	mg/kg	0.1	<0.1
	Benzo(a)pyrene	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB206285.001		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	86
		2-fluorobiphenyl (Surrogate)	%	-	86
		d14-p-terphenyl (Surrogate)	%	-	80

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB206285.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	99

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB206285.001		Phenol	mg/kg	0.5	<0.5
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5
		2-nitrophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
		Pentachlorophenol	mg/kg	0.5	<0.5
		2,4-dinitrophenol	mg/kg	2	<2
		4-chloro-3-methylphenol	mg/kg	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	86
		d5-phenol (Surrogate)	%	-	85

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB206326.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB206285.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number	Parameter	Units	LOR

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB206284.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB206284.001	Oxygenated Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	109
		d8-toluene (Surrogate)	%	-	95
		Bromofluorobenzene (Surrogate)	%	-	82
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB206284.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	109

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE209743.001	LB206327.004	Mercury	mg/kg	0.05	0.07	0.10	91	34

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE209743.001	LB206286.022	% Moisture	%w/w	1	15.0	14.9	37	1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE209743.001	LB206326.004	Arsenic, As	mg/kg	1	1	1	115	4
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	2.0	2.1	54	2
		Copper, Cu	mg/kg	0.5	25	25	32	1
		Nickel, Ni	mg/kg	0.5	1.1	1.1	74	2
		Lead, Pb	mg/kg	1	150	150	31	2
		Zinc, Zn	mg/kg	2	50	50	34	0

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE209743.001	LB206284.025	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE209743.001	LB206284.025	Halogenated	1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.2	10.3	50	11
			d8-toluene (Surrogate)	mg/kg	-	8.1	9.0	50	11
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.6	8.2	50	8
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE209743.001	LB206284.025		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.2	10.3	30	11
			d8-toluene (Surrogate)	mg/kg	-	8.1	9.0	30	11
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.6	8.2	30	8
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206327.002	Mercury	mg/kg	0.05	0.22	0.2	70 - 130	112

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206285.002		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	90
		Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	96
		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	93
		Dieldrin	mg/kg	0.2	<0.2	0.2	60 - 140	98
		Endrin	mg/kg	0.2	<0.2	0.2	60 - 140	91
		p,p'-DDT	mg/kg	0.1	0.1	0.2	60 - 140	70
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.13	0.15	40 - 130	85

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206285.002		Dichlorvos	mg/kg	0.5	1.5	2	60 - 140	75
		Diazinon (Dimpylate)	mg/kg	0.5	1.6	2	60 - 140	78
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.6	2	60 - 140	79
		Ethion	mg/kg	0.2	1.4	2	60 - 140	71
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	88
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	90

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206285.002		Naphthalene	mg/kg	0.1	4.1	4	60 - 140	101
		Acenaphthylene	mg/kg	0.1	3.9	4	60 - 140	98
		Acenaphthene	mg/kg	0.1	4.2	4	60 - 140	106
		Phenanthrene	mg/kg	0.1	4.7	4	60 - 140	118
		Anthracene	mg/kg	0.1	4.4	4	60 - 140	111
		Fluoranthene	mg/kg	0.1	4.5	4	60 - 140	114
		Pyrene	mg/kg	0.1	4.7	4	60 - 140	118
		Benzo(a)pyrene	mg/kg	0.1	4.4	4	60 - 140	111
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	86
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	88
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	90

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206285.002	Arochlor 1260	mg/kg	0.2	0.4	0.4	60 - 140	88

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206285.002		Phenol	mg/kg	0.5	0.8	1	70 - 130	84
		2,4-dichlorophenol	mg/kg	0.5	1.0	1	70 - 130	102
		2,4,6-trichlorophenol	mg/kg	0.5	0.8	1	70 - 130	76
		Pentachlorophenol	mg/kg	0.5	0.7	1	70 - 130	74
	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.1	5	40 - 130	81
		d5-phenol (Surrogate)	mg/kg	-	1.7	2	40 - 130	84

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206326.002	Arsenic, As	mg/kg	1	330	318.22	80 - 120	104
	Cadmium, Cd	mg/kg	0.3	5.3	5.41	80 - 120	98
	Chromium, Cr	mg/kg	0.5	39	38.31	80 - 120	102
	Copper, Cu	mg/kg	0.5	300	290	80 - 120	102
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	100
	Lead, Pb	mg/kg	1	94	89.9	80 - 120	104
	Zinc, Zn	mg/kg	2	280	273	80 - 120	102

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206285.002		TRH C10-C14	mg/kg	20	40	40	60 - 140	100
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	95
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	98
	TRH F Bands	TRH >C10-C16	mg/kg	25	41	40	60 - 140	103
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	100
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	85

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206284.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	3.4	5	60 - 140	68
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	4.1	5	60 - 140	83
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	3.6	5	60 - 140	72
	Halogenated	Chlorobenzene	mg/kg	0.1	5.2	5	60 - 140	103
	Monocyclic	Benzene	mg/kg	0.1	4.0	5	60 - 140	79
	Aromatic	Toluene	mg/kg	0.1	3.8	5	60 - 140	76
		Ethylbenzene	mg/kg	0.1	4.6	5	60 - 140	92
		m/p-xylene	mg/kg	0.2	9.2	10	60 - 140	92
		o-xylene	mg/kg	0.1	4.5	5	60 - 140	91
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	11.4	10	70 - 130	114
		d8-toluene (Surrogate)	mg/kg	-	9.8	10	70 - 130	98
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.1	10	70 - 130	81
	Trihalomethan	Chloroform	mg/kg	0.1	4.2	5	60 - 140	85

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206284.002		TRH C6-C10	mg/kg	25	81	92.5	60 - 140	88
		TRH C6-C9	mg/kg	20	70	80	60 - 140	88
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	11.4	10	70 - 130	114
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.1	10	70 - 130	81
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	55	62.5	60 - 140	89

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

QC Sample	Sample Number	Parameter	Units	LOR

MATRIX SPIKE DUPLICATES

SE209743 R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client only. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

This test report shall not be reproduced, except in full.

E-MAILED
15/10/20 7:42pm

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd
ABN 29 001 584 612

PROJECT OFFICE (Tick one)

☐	BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000	☐	GOLD COAST: 154 Varsity Parade, Varsity Lakes, QLD 4227	☐	NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305	✓	School, Sub Base Platypus, North Sydney, 2060
☐	CANBERRA: GPO Box 410, Canberra, ACT 2601	☐	MACKAY: 21 River Street, Mackay, QLD 4741	☐	PERTH: 503 Murray Street, Perth, WA 6001	☐	TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4811

☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
☐ DARWIN: 21 Parap Rd, Dawin, NT 0821

CLIENT: **Defence Housing Australia**
PROJECT: **Randwick Barracks**
PROJECT NUMBER: **610.30041**
PROJECT MANAGER: [redacted]
PM CONTACT No: [redacted]

LABORATORY: **SGS**
LABORATORY ADDRESS: **Unit 16/33 Maddox St, Alexandria NSW 2015**
SAMPLER: **JR**
SAMPLER CONTACT No: [redacted]
Email Reports and Invoices to: **LQRSYD@slrconsulting.com,** [redacted]

Turnaround Time (TAT)
✓ Standard TAT
☐ Non Standard or Urgent TAT
Required TAT: Standard

COC Number: 1 of

COMMENTS OR ADDITIONAL DIRECTIONS

SGS EHS Sydney COC
SE212391

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: Lead	Benzo(a)pyrene	Copper	PAHs	PCBs			Hold	Additional Information (Comment on any grass contamination or specific requirements)
1	0407_TP241 _BH01_0.0-0.1_20201015	15/10/2020	Soil		x								
2	0407_TP241 _BH02_0.0-0.1_20201015	15/10/2020	Soil		x								
3	0407_TP241 _BH03_0.0-0.1_20201015	15/10/2020	Soil		x								
4	0407_TP241 _BH01_0.4-0.5_20201015	15/10/2020	Soil		x								
5	0407_TP241_BH02_0.4-0.5_20201015	15/10/2020	Soil		x								
6	0407_TP241 _BH03_0.4-0.5_20201015	15/10/2020	Soil		x								
7	0407_TP111 _BH01_0.0-0.1_20201015	15/10/2020	Soil				x						
8	0407_TP111 _BH02_0.0-0.1_20201015	15/10/2020	Soil				x						
9	0407_TP111 _BH03_0.0-0.1_20201015	15/10/2020	Soil				x						
10	0407_TP111 _BH04_0.0-0.1_20201015	15/10/2020	Soil				x						
11	0407_TP111 _BH01_0.4-0.5_20201015	15/10/2020	Soil				x						
12	0407_TP111 _BH02_0.4-0.5_20201015	15/10/2020	Soil				x						
13	0407_TP111 _BH03_0.4-0.5_20201015	15/10/2020	Soil				x						
14	0407_TP111 _BH04_0.4-0.5_20201015	15/10/2020	Soil				x						
15	QC312	15/10/2020	Water		x	x	x	x	x				

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 15/10/2020 @ 1600	**Received by**	Sign [redacted]	Date / Time 15/10	Temperature Received:
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time @ 4:35	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)										
☐	BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000	☐	GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227	☐	NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305	✓	School, Sub Base Platypus, North Sydney, 2060	☐	MELBOURNE: Suite 2, 2 Dorrville Avenue, Hawthorn, VIC 3122
☐	CANBERRA: GPO Box 410, Canberra, ACT 2601	☐	MACKAY: 21 River Street, Mackay, QLD 4741	☐	PERTH: 503 Murray Street, Perth, WA 6001	☐	TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4811	☐	DARWIN: 21 Parap Rd, Darwin, NT 0821

CLIENT: Defence Housing Australia

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGER: [redacted]

PM CONTACT No: [redacted]

LABORATORY: SGS

LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015

SAMPLER: JR

SAMPLER CONTACT No: [redacted]

Email Reports and Invoices to: LQRSYD@slrconsulting.com, [redacted]

Turnaround Time (TAT): ✓ Standard TAT ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number: 2 of 2

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: Lead	Benzo(a)pyrene	Copper	PAHs	PCBs			Hold	Additional Information (Comment on any gross contamination or specific requirements)
16	0407_TP237 _BH01_0.0-0.1_20201015	15/10/2020	Soil		x								
17	0407_TP237 _BH02_0.0-0.1_20201015	15/10/2020	Soil		x								
18	0407_TP237 _BH03_0.0-0.1_20201015	15/10/2020	Soil		x								
19	0407_TP237 _BH01_0.4-0.5_20201015	15/10/2020	Soil		x								
20	0407_TP237_BH02_0.4-0.5_20201015	15/10/2020	Soil		x								
21	0407_TP237 _BH03_0.4-0.5_20201015	15/10/2020	Soil		x								
22	0407_TP162 _BH01_0.0-0.1_20201015	15/10/2020	Soil					x					
23	0407_TP162 _BH02_0.0-0.1_20201015	15/10/2020	Soil					x					
24	0407_TP162 _BH03_0.0-0.1_20201015	15/10/2020	Soil					x					
25	0407_TP162 _BH01_0.4-0.5_20201015	15/10/2020	Soil					x					
26	0407_TP162 _BH02_0.4-0.5_20201015	15/10/2020	Soil					x					
27	0407_TP162 _BH03_0.4-0.5_20201015	15/10/2020	Soil					x					

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time	15/10/2020 @ 1600	Received by	Sign [redacted]	Date / Time	15/10
Relinquished By	Sign	Date / Time		Received by	Sign	Date / Time	@ 4:35
Relinquished By	Sign	Date / Time		Received by	Sign	Date / Time	

Temperature Received:

SAMPLE RECEIPT ADVICE

SE212391

CLIENT DETAILS

Contact	LQRSYD
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	02 9427 8100
Facsimile	02 9427 8200
Email	lqrsyd@slrconsulting.com
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	27

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Thu 15/10/2020
Report Due	Thu 22/10/2020
SGS Reference	**SE212391**

SUBMISSION DETAILS

This is to confirm that 27 samples were received on Thursday 15/10/2020. Results are expected to be ready by COB Thursday 22/10/2020.
Please quote SGS reference SE212391 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	Other Lab	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	26 Soil, 1 Water
Date documentation received	15/10/2020@7:42pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	1.3°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

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SAMPLE RECEIPT ADVICE

SE212391

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Moisture Content	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Water	PCBs in Water	Total Recoverable Elements in Soil/Waste
001	0407_TP241_BH01_0.0-0.1_20201015	1	-	-	-	1
002	0407_TP241_BH02_0.0-0.1_20201015	1	-	-	-	1
003	0407_TP241_BH03_0.0-0.1_20201015	1	-	-	-	1
004	0407_TP241_BH01_0.4-0.5_20201015	1	-	-	-	1
005	0407_TP241_BH02_0.4-0.5_20201015	1	-	-	-	1
006	0407_TP241_BH03_0.4-0.5_20201015	1	-	-	-	1
007	0407_TP111_BH01_0.0-0.1_20201015	1	-	-	-	1
008	0407_TP111_BH02_0.0-0.1_20201015	1	-	-	-	1
009	0407_TP111_BH03_0.0-0.1_20201015	1	-	-	-	1
010	0407_TP111_BH04_0.0-0.1_20201015	1	-	-	-	1
011	0407_TP111_BH01_0.4-0.5_20201015	1	-	-	-	1
012	0407_TP111_BH02_0.4-0.5_20201015	1	-	-	-	1
013	0407_TP111_BH03_0.4-0.5_20201015	1	-	-	-	1
014	0407_TP111_BH04_0.4-0.5_20201015	1	-	-	-	1
015	QC312	-	-	22	11	-
016	0407_TP237_BH01_0.0-0.1_20201015	1	-	-	-	1
017	0407_TP237_BH02_0.0-0.1_20201015	1	-	-	-	1
018	0407_TP237_BH03_0.0-0.1_20201015	1	-	-	-	1
019	0407_TP237_BH01_0.4-0.5_20201015	1	-	-	-	1
020	0407_TP237_BH02_0.4-0.5_20201015	1	-	-	-	1
021	0407_TP237_BH03_0.4-0.5_20201015	1	-	-	-	1
022	0407_TP162_BH01_0.0-0.1_20201015	1	26	-	-	-
023	0407_TP162_BH02_0.0-0.1_20201015	1	26	-	-	-
024	0407_TP162_BH03_0.0-0.1_20201015	1	26	-	-	-

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE212391

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Moisture Content	PAH (Polynuclear Aromatic Hydrocarbons) in Soil
025	0407_TP162_BH01_0.4-0.5_20201015	1	26
026	0407_TP162_BH02_0.4-0.5_20201015	1	26
027	0407_TP162_BH03_0.4-0.5_20201015	1	26

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE212391

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Trace Metals (Total) in Water by ICPMS
015	QC312	2

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS		LABORATORY DETAILS	
Contact	LQRSYD	Manager	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD	Laboratory	SGS Alexandria Environmental
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066	Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	02 9427 8100	Telephone	+61 2 8594 0400
Facsimile	02 9427 8200	Facsimile	+61 2 8594 0499
Email	lqrsyd@slrconsulting.com	Email	au.environmental.sydney@sgs.com
Project	**610.30041 Randwick Barracks**	SGS Reference	**SE212391 R0**
Order Number	**610.30041**	Date Received	15/10/2020
Samples	27	Date Reported	22/10/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

SIGNATORIES

[redacted]

Senior Organic Chemist/Metals Chemist	Metals/Inorganics Team Leader	Organic Section Head

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 20/10/2020

PARAMETER	UOM	LOR	0407_TP162_BH01_(0-0.1_20201015 SOIL - 15/10/2020 SE212391.022	0407_TP162_BH02_(0-0.1_20201015 SOIL - 15/10/2020 SE212391.023	0407_TP162_BH03_(0-0.1_20201015 SOIL - 15/10/2020 SE212391.024	0407_TP162_BH01_(4-0.5_20201015 SOIL - 15/10/2020 SE212391.025	0407_TP162_BH02_(4-0.5_20201015 SOIL - 15/10/2020 SE212391.026
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	0.2	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	0.2	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	0.2	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	0.2	<0.1	1.6	0.4
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	0.6	<0.1
Phenanthrene	mg/kg	0.1	<0.1	0.8	0.3	9.1	1.9
Anthracene	mg/kg	0.1	<0.1	0.2	0.1	2.0	0.6
Fluoranthene	mg/kg	0.1	0.2	1.5	0.5	11	3.8
Pyrene	mg/kg	0.1	0.2	1.3	0.5	9.4	3.6
Benzo(a)anthracene	mg/kg	0.1	<0.1	0.6	0.2	4.3	1.4
Chrysene	mg/kg	0.1	<0.1	1.2	0.5	4.2	3.0
Benzo(b&j)fluoranthene	mg/kg	0.1	0.1	0.7	0.4	5.3	1.9
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	0.3	0.1	2.3	0.6
Benzo(a)pyrene	mg/kg	0.1	0.1	0.7	0.3	4.9	1.8
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.1	0.5	0.2	3.1	1.5
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	0.5	0.2
Benzo(ghi)perylene	mg/kg	0.1	0.1	0.5	0.2	2.8	1.5
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	1.0	0.4	7.0	2.6
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	1.1	0.5	7.0	2.6
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	1.0	0.4	7.0	2.6
Total PAH (18)	mg/kg	0.8	0.8	8.8	3.3	62	22
Total PAH (NEPM/WHO 16)	mg/kg	0.8	0.8	8.8	3.3	62	22

PARAMETER	UOM	LOR	0407_TP162_BH03_(4-0.5_20201015 SOIL - 15/10/2020 SE212391.027
Naphthalene	mg/kg	0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1
Fluorene	mg/kg	0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1
Anthracene	mg/kg	0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1
Pyrene	mg/kg	0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1
Chrysene	mg/kg	0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 19/10/2020

PARAMETER	UOM	LOR	0407_TP241_BH01_(0-0.1_20201015 SOIL - 15/10/2020 SE212391.001	0407_TP241_BH02_(0-0.1_20201015 SOIL - 15/10/2020 SE212391.002	0407_TP241_BH03_(0-0.1_20201015 SOIL - 15/10/2020 SE212391.003	0407_TP241_BH01_(4-0.5_20201015 SOIL - 15/10/2020 SE212391.004	0407_TP241_BH02_(4-0.5_20201015 SOIL - 15/10/2020 SE212391.005
Lead, Pb	mg/kg	1	99	110	730	11	6
Copper, Cu	mg/kg	0.5	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP241_BH03_(4-0.5_20201015 SOIL - 15/10/2020 SE212391.006	0407_TP111_BH01_(0-0.1_20201015 SOIL - 15/10/2020 SE212391.007	0407_TP111_BH02_(0-0.1_20201015 SOIL - 15/10/2020 SE212391.008	0407_TP111_BH03_(0-0.1_20201015 SOIL - 15/10/2020 SE212391.009	0407_TP111_BH04_(0-0.1_20201015 SOIL - 15/10/2020 SE212391.010
Lead, Pb	mg/kg	1	110	-	-	-	-
Copper, Cu	mg/kg	0.5	-	130	3.2	76	92

PARAMETER	UOM	LOR	0407_TP111_BH01_(4-0.5_20201015 SOIL - 15/10/2020 SE212391.011	0407_TP111_BH02_(4-0.5_20201015 SOIL - 15/10/2020 SE212391.012	0407_TP111_BH03_(4-0.5_20201015 SOIL - 15/10/2020 SE212391.013	0407_TP111_BH04_(4-0.5_20201015 SOIL - 15/10/2020 SE212391.014	0407_TP237_BH01_(0-0.1_20201015 SOIL - 15/10/2020 SE212391.016
Lead, Pb	mg/kg	1	-	-	-	-	97
Copper, Cu	mg/kg	0.5	10	57	11	1.5	-

PARAMETER	UOM	LOR	0407_TP237_BH02_(0-0.1_20201015 SOIL - 15/10/2020 SE212391.017	0407_TP237_BH03_(0-0.1_20201015 SOIL - 15/10/2020 SE212391.018	0407_TP237_BH01_(4-0.5_20201015 SOIL - 15/10/2020 SE212391.019	0407_TP237_BH02_(4-0.5_20201015 SOIL - 15/10/2020 SE212391.020	0407_TP237_BH03_(4-0.5_20201015 SOIL - 15/10/2020 SE212391.021
Lead, Pb	mg/kg	1	120	130	43	9	8
Copper, Cu	mg/kg	0.5	-	-	-	-	-

Moisture Content [AN002] Tested: 20/10/2020

PARAMETER	UOM	LOR	0407_TP241_BH01_(0-0.1_20201015 SOIL - 15/10/2020 SE212391.001	0407_TP241_BH02_(0-0.1_20201015 SOIL - 15/10/2020 SE212391.002	0407_TP241_BH03_(0-0.1_20201015 SOIL - 15/10/2020 SE212391.003	0407_TP241_BH01_(4-0.5_20201015 SOIL - 15/10/2020 SE212391.004	0407_TP241_BH02_(4-0.5_20201015 SOIL - 15/10/2020 SE212391.005
% Moisture	%w/w	1	12.0	14.4	5.2	2.0	3.4

PARAMETER	UOM	LOR	0407_TP241_BH03_(4-0.5_20201015 SOIL - 15/10/2020 SE212391.006	0407_TP111_BH01_(0-0.1_20201015 SOIL - 15/10/2020 SE212391.007	0407_TP111_BH02_(0-0.1_20201015 SOIL - 15/10/2020 SE212391.008	0407_TP111_BH03_(0-0.1_20201015 SOIL - 15/10/2020 SE212391.009	0407_TP111_BH04_(0-0.1_20201015 SOIL - 15/10/2020 SE212391.010
% Moisture	%w/w	1	16.8	9.9	7.9	10.9	8.8

PARAMETER	UOM	LOR	0407_TP111_BH01_(4-0.5_20201015 SOIL - 15/10/2020 SE212391.011	0407_TP111_BH02_(4-0.5_20201015 SOIL - 15/10/2020 SE212391.012	0407_TP111_BH03_(4-0.5_20201015 SOIL - 15/10/2020 SE212391.013	0407_TP111_BH04_(4-0.5_20201015 SOIL - 15/10/2020 SE212391.014	0407_TP237_BH01_(0-0.1_20201015 SOIL - 15/10/2020 SE212391.016
% Moisture	%w/w	1	8.1	17.9	6.3	5.5	9.6

PARAMETER	UOM	LOR	0407_TP237_BH02_(0-0.1_20201015 SOIL - 15/10/2020 SE212391.017	0407_TP237_BH03_(0-0.1_20201015 SOIL - 15/10/2020 SE212391.018	0407_TP237_BH01_(4-0.5_20201015 SOIL - 15/10/2020 SE212391.019	0407_TP237_BH02_(4-0.5_20201015 SOIL - 15/10/2020 SE212391.020	0407_TP237_BH03_(4-0.5_20201015 SOIL - 15/10/2020 SE212391.021
% Moisture	%w/w	1	11.6	10.7	3.5	7.4	7.7

PARAMETER	UOM	LOR	0407_TP162_BH01_(0-0.1_20201015 SOIL - 15/10/2020 SE212391.022	0407_TP162_BH02_(0-0.1_20201015 SOIL - 15/10/2020 SE212391.023	0407_TP162_BH03_(0-0.1_20201015 SOIL - 15/10/2020 SE212391.024	0407_TP162_BH01_(4-0.5_20201015 SOIL - 15/10/2020 SE212391.025	0407_TP162_BH02_(4-0.5_20201015 SOIL - 15/10/2020 SE212391.026
% Moisture	%w/w	1	14.2	2.0	7.5	4.2	1.0

PARAMETER	UOM	LOR	0407_TP162_BH03_(4-0.5_20201015 SOIL - 15/10/2020 SE212391.027
% Moisture	%w/w	1	4.2

PAH (Polynuclear Aromatic Hydrocarbons) in Water [AN420] Tested: 19/10/2020

PARAMETER	UOM	LOR	QC312 WATER - 15/10/2020 SE212391.015
Naphthalene	µg/L	0.1	<0.1
2-methylnaphthalene	µg/L	0.1	<0.1
1-methylnaphthalene	µg/L	0.1	<0.1
Acenaphthylene	µg/L	0.1	<0.1
Acenaphthene	µg/L	0.1	<0.1
Fluorene	µg/L	0.1	<0.1
Phenanthrene	µg/L	0.1	<0.1
Anthracene	µg/L	0.1	<0.1
Fluoranthene	µg/L	0.1	<0.1
Pyrene	µg/L	0.1	<0.1
Benzo(a)anthracene	µg/L	0.1	<0.1
Chrysene	µg/L	0.1	<0.1
Benzo(b&j)fluoranthene	µg/L	0.1	<0.1
Benzo(k)fluoranthene	µg/L	0.1	<0.1
Benzo(a)pyrene	µg/L	0.1	<0.1
Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1
Dibenzo(ah)anthracene	µg/L	0.1	<0.1
Benzo(ghi)perylene	µg/L	0.1	<0.1
Total PAH (18)	µg/L	1	<1

PCBs in Water [AN420] Tested: 19/10/2020

PARAMETER	UOM	LOR	QC312 WATER - 15/10/2020 SE212391.015
Arochlor 1016	µg/L	1	<1
Arochlor 1221	µg/L	1	<1
Arochlor 1232	µg/L	1	<1
Arochlor 1242	µg/L	1	<1
Arochlor 1248	µg/L	1	<1
Arochlor 1254	µg/L	1	<1
Arochlor 1260	µg/L	1	<1
Arochlor 1262	µg/L	1	<1
Arochlor 1268	µg/L	1	<1
Total Arochlors*	µg/L	5	<5

Trace Metals (Total) in Water by ICPMS [AN022/AN318] Tested: 19/10/2020

PARAMETER	UOM	LOR	QC312 WATER - 15/10/2020 SE212391.015
Total Copper	µg/L	1	<1
Total Lead	µg/L	1	<1

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN022/AN318	Following acid digestion of un filtered sample, determination of elements at trace level in waters by ICP-MS technique, referenced to USEPA 6020B and USEPA 200.8 (5.4).
AN022	The water sample is digested with Nitric Acid and made up to the original volume similar to APHA3030E.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN420	Carcinogenic PAHs may be expressed as Benzo(a)pyrene equivalents by applying the BaP toxicity equivalence factor (NEPM 1999, June 2013, B7). These can be reported as the individual PAHs and as a sum of carcinogenic PAHs. The sum is reported three ways, the first assuming all <LOR results are zero, the second assuming all < LOR results are half the LOR and the third assuming all <LOR results are the LOR.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
**	Indicative data, theoretical holding time exceeded.	NVL	Not validated.	LOR	Limit of Reporting.
***	Indicates that both * and ** apply.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE212391 R0

CLIENT DETAILS

Contact	LQRSYD
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	02 9427 8100
Facsimile	02 9427 8200
Email	lqrsyd@slrconsulting.com
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	27

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE212391 R0**
Date Received	15 Oct 2020
Date Reported	22 Oct 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Duplicate	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	1 item
Matrix Spike	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	1 item
	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	1 item

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	Other Lab	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	26 Soil, 1 Water
Date documentation received	15/10/2020@7:42pr	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	1.3°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE212391 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP241_BH01_0.0-0.1	SE212391.001	LB211608	15 Oct 2020	15 Oct 2020	29 Oct 2020	20 Oct 2020	25 Oct 2020	22 Oct 2020
0407_TP241_BH02_0.0-0.1	SE212391.002	LB211608	15 Oct 2020	15 Oct 2020	29 Oct 2020	20 Oct 2020	25 Oct 2020	22 Oct 2020
0407_TP241_BH03_0.0-0.1	SE212391.003	LB211608	15 Oct 2020	15 Oct 2020	29 Oct 2020	20 Oct 2020	25 Oct 2020	22 Oct 2020
0407_TP241_BH01_0.4-0.5	SE212391.004	LB211608	15 Oct 2020	15 Oct 2020	29 Oct 2020	20 Oct 2020	25 Oct 2020	22 Oct 2020
0407_TP241_BH02_0.4-0.5	SE212391.005	LB211608	15 Oct 2020	15 Oct 2020	29 Oct 2020	20 Oct 2020	25 Oct 2020	22 Oct 2020
0407_TP241_BH03_0.4-0.5	SE212391.006	LB211608	15 Oct 2020	15 Oct 2020	29 Oct 2020	20 Oct 2020	25 Oct 2020	22 Oct 2020
0407_TP111_BH01_0.0-0.1	SE212391.007	LB211608	15 Oct 2020	15 Oct 2020	29 Oct 2020	20 Oct 2020	25 Oct 2020	22 Oct 2020
0407_TP111_BH02_0.0-0.1	SE212391.008	LB211608	15 Oct 2020	15 Oct 2020	29 Oct 2020	20 Oct 2020	25 Oct 2020	22 Oct 2020
0407_TP111_BH03_0.0-0.1	SE212391.009	LB211608	15 Oct 2020	15 Oct 2020	29 Oct 2020	20 Oct 2020	25 Oct 2020	22 Oct 2020
0407_TP111_BH04_0.0-0.1	SE212391.010	LB211608	15 Oct 2020	15 Oct 2020	29 Oct 2020	20 Oct 2020	25 Oct 2020	22 Oct 2020
0407_TP111_BH01_0.4-0.5	SE212391.011	LB211608	15 Oct 2020	15 Oct 2020	29 Oct 2020	20 Oct 2020	25 Oct 2020	22 Oct 2020
0407_TP111_BH02_0.4-0.5	SE212391.012	LB211608	15 Oct 2020	15 Oct 2020	29 Oct 2020	20 Oct 2020	25 Oct 2020	22 Oct 2020
0407_TP111_BH03_0.4-0.5	SE212391.013	LB211608	15 Oct 2020	15 Oct 2020	29 Oct 2020	20 Oct 2020	25 Oct 2020	22 Oct 2020
0407_TP111_BH04_0.4-0.5	SE212391.014	LB211608	15 Oct 2020	15 Oct 2020	29 Oct 2020	20 Oct 2020	25 Oct 2020	22 Oct 2020
0407_TP237_BH01_0.0-0.1	SE212391.016	LB211608	15 Oct 2020	15 Oct 2020	29 Oct 2020	20 Oct 2020	25 Oct 2020	22 Oct 2020
0407_TP237_BH02_0.0-0.1	SE212391.017	LB211608	15 Oct 2020	15 Oct 2020	29 Oct 2020	20 Oct 2020	25 Oct 2020	22 Oct 2020
0407_TP237_BH03_0.0-0.1	SE212391.018	LB211608	15 Oct 2020	15 Oct 2020	29 Oct 2020	20 Oct 2020	25 Oct 2020	22 Oct 2020
0407_TP237_BH01_0.4-0.5	SE212391.019	LB211608	15 Oct 2020	15 Oct 2020	29 Oct 2020	20 Oct 2020	25 Oct 2020	22 Oct 2020
0407_TP237_BH02_0.4-0.5	SE212391.020	LB211625	15 Oct 2020	15 Oct 2020	29 Oct 2020	20 Oct 2020	25 Oct 2020	21 Oct 2020
0407_TP237_BH03_0.4-0.5	SE212391.021	LB211625	15 Oct 2020	15 Oct 2020	29 Oct 2020	20 Oct 2020	25 Oct 2020	21 Oct 2020
0407_TP162_BH01_0.0-0.1	SE212391.022	LB211625	15 Oct 2020	15 Oct 2020	29 Oct 2020	20 Oct 2020	25 Oct 2020	21 Oct 2020
0407_TP162_BH02_0.0-0.1	SE212391.023	LB211625	15 Oct 2020	15 Oct 2020	29 Oct 2020	20 Oct 2020	25 Oct 2020	21 Oct 2020
0407_TP162_BH03_0.0-0.1	SE212391.024	LB211625	15 Oct 2020	15 Oct 2020	29 Oct 2020	20 Oct 2020	25 Oct 2020	21 Oct 2020
0407_TP162_BH01_0.4-0.5	SE212391.025	LB211625	15 Oct 2020	15 Oct 2020	29 Oct 2020	20 Oct 2020	25 Oct 2020	21 Oct 2020
0407_TP162_BH02_0.4-0.5	SE212391.026	LB211625	15 Oct 2020	15 Oct 2020	29 Oct 2020	20 Oct 2020	25 Oct 2020	21 Oct 2020
0407_TP162_BH03_0.4-0.5	SE212391.027	LB211625	15 Oct 2020	15 Oct 2020	29 Oct 2020	20 Oct 2020	25 Oct 2020	21 Oct 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP162_BH01_0.0-0.1	SE212391.022	LB211624	15 Oct 2020	15 Oct 2020	29 Oct 2020	20 Oct 2020	29 Nov 2020	21 Oct 2020
0407_TP162_BH02_0.0-0.1	SE212391.023	LB211624	15 Oct 2020	15 Oct 2020	29 Oct 2020	20 Oct 2020	29 Nov 2020	21 Oct 2020
0407_TP162_BH03_0.0-0.1	SE212391.024	LB211624	15 Oct 2020	15 Oct 2020	29 Oct 2020	20 Oct 2020	29 Nov 2020	21 Oct 2020
0407_TP162_BH01_0.4-0.5	SE212391.025	LB211624	15 Oct 2020	15 Oct 2020	29 Oct 2020	20 Oct 2020	29 Nov 2020	21 Oct 2020
0407_TP162_BH02_0.4-0.5	SE212391.026	LB211624	15 Oct 2020	15 Oct 2020	29 Oct 2020	20 Oct 2020	29 Nov 2020	21 Oct 2020
0407_TP162_BH03_0.4-0.5	SE212391.027	LB211624	15 Oct 2020	15 Oct 2020	29 Oct 2020	20 Oct 2020	29 Nov 2020	21 Oct 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
QC312	SE212391.015	LB211477	15 Oct 2020	15 Oct 2020	22 Oct 2020	19 Oct 2020	28 Nov 2020	21 Oct 2020

PCBs in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
QC312	SE212391.015	LB211477	15 Oct 2020	15 Oct 2020	22 Oct 2020	19 Oct 2020	28 Nov 2020	21 Oct 2020

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP241_BH01_0.0-0.1	SE212391.001	LB211558	15 Oct 2020	15 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_TP241_BH02_0.0-0.1	SE212391.002	LB211558	15 Oct 2020	15 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_TP241_BH03_0.0-0.1	SE212391.003	LB211558	15 Oct 2020	15 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_TP241_BH01_0.4-0.5	SE212391.004	LB211558	15 Oct 2020	15 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_TP241_BH02_0.4-0.5	SE212391.005	LB211558	15 Oct 2020	15 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_TP241_BH03_0.4-0.5	SE212391.006	LB211558	15 Oct 2020	15 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_TP111_BH01_0.0-0.1	SE212391.007	LB211558	15 Oct 2020	15 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_TP111_BH02_0.0-0.1	SE212391.008	LB211558	15 Oct 2020	15 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_TP111_BH03_0.0-0.1	SE212391.009	LB211558	15 Oct 2020	15 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_TP111_BH04_0.0-0.1	SE212391.010	LB211558	15 Oct 2020	15 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_TP111_BH01_0.4-0.5	SE212391.011	LB211558	15 Oct 2020	15 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_TP111_BH02_0.4-0.5	SE212391.012	LB211558	15 Oct 2020	15 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_TP111_BH03_0.4-0.5	SE212391.013	LB211558	15 Oct 2020	15 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_TP111_BH04_0.4-0.5	SE212391.014	LB211558	15 Oct 2020	15 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020

HOLDING TIME SUMMARY

SE212391 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP237_BH01_0.0-0.1	SE212391.016	LB211558	15 Oct 2020	15 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_TP237_BH02_0.0-0.1	SE212391.017	LB211558	15 Oct 2020	15 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_TP237_BH03_0.0-0.1	SE212391.018	LB211558	15 Oct 2020	15 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_TP237_BH01_0.4-0.5	SE212391.019	LB211558	15 Oct 2020	15 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_TP237_BH02_0.4-0.5	SE212391.020	LB211640	15 Oct 2020	15 Oct 2020	13 Apr 2021	20 Oct 2020	13 Apr 2021	22 Oct 2020
0407_TP237_BH03_0.4-0.5	SE212391.021	LB211640	15 Oct 2020	15 Oct 2020	13 Apr 2021	20 Oct 2020	13 Apr 2021	22 Oct 2020

Trace Metals (Total) in Water by ICPMS

Method: ME-(AU)-[ENV]AN022/AN318

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
QC312	SE212391.015	LB211495	15 Oct 2020	15 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	20 Oct 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)		SE212391.022	%	70 - 130%	83
		SE212391.023	%	70 - 130%	83
		SE212391.024	%	70 - 130%	82
		SE212391.025	%	70 - 130%	85
		SE212391.026	%	70 - 130%	87
		SE212391.027	%	70 - 130%	79
d14-p-terphenyl (Surrogate)		SE212391.022	%	70 - 130%	88
		SE212391.023	%	70 - 130%	79
		SE212391.024	%	70 - 130%	86
		SE212391.025	%	70 - 130%	78
		SE212391.026	%	70 - 130%	85
		SE212391.027	%	70 - 130%	90
d5-nitrobenzene (Surrogate)		SE212391.022	%	70 - 130%	83
		SE212391.023	%	70 - 130%	85
		SE212391.024	%	70 - 130%	84
		SE212391.025	%	70 - 130%	83
		SE212391.026	%	70 - 130%	87
		SE212391.027	%	70 - 130%	82

PAH (Polynuclear Aromatic Hydrocarbons) in Water — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	QC312	SE212391.015	%	40 - 130%	48
d14-p-terphenyl (Surrogate)	QC312	SE212391.015	%	40 - 130%	76
d5-nitrobenzene (Surrogate)	QC312	SE212391.015	%	40 - 130%	50

PCBs in Water — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (Surrogate)	QC312	SE212391.015	%	40 - 130%	60

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB211624.001		Naphthalene	mg/kg	0.1	<0.1
		2-methylnaphthalene	mg/kg	0.1	<0.1
		1-methylnaphthalene	mg/kg	0.1	<0.1
		Acenaphthylene	mg/kg	0.1	<0.1
		Acenaphthene	mg/kg	0.1	<0.1
		Fluorene	mg/kg	0.1	<0.1
		Phenanthrene	mg/kg	0.1	<0.1
		Anthracene	mg/kg	0.1	<0.1
		Fluoranthene	mg/kg	0.1	<0.1
		Pyrene	mg/kg	0.1	<0.1
		Benzo(a)anthracene	mg/kg	0.1	<0.1
		Chrysene	mg/kg	0.1	<0.1
		Benzo(a)pyrene	mg/kg	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	89
		2-fluorobiphenyl (Surrogate)	%	-	86
		d14-p-terphenyl (Surrogate)	%	-	94

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB211477.001		Naphthalene	µg/L	0.1	<0.1
		2-methylnaphthalene	µg/L	0.1	<0.1
		1-methylnaphthalene	µg/L	0.1	<0.1
		Acenaphthylene	µg/L	0.1	<0.1
		Acenaphthene	µg/L	0.1	<0.1
		Fluorene	µg/L	0.1	<0.1
		Phenanthrene	µg/L	0.1	<0.1
		Anthracene	µg/L	0.1	<0.1
		Fluoranthene	µg/L	0.1	<0.1
		Pyrene	µg/L	0.1	<0.1
		Benzo(a)anthracene	µg/L	0.1	<0.1
		Chrysene	µg/L	0.1	<0.1
		Benzo(a)pyrene	µg/L	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1
		Dibenzo(ah)anthracene	µg/L	0.1	<0.1
		Benzo(ghi)perylene	µg/L	0.1	<0.1
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	64
		2-fluorobiphenyl (Surrogate)	%	-	72
		d14-p-terphenyl (Surrogate)	%	-	98

PCBs in Water

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB211477.001	Arochlor 1016	µg/L	1	<1
	Arochlor 1221	µg/L	1	<1
	Arochlor 1232	µg/L	1	<1
	Arochlor 1242	µg/L	1	<1
	Arochlor 1248	µg/L	1	<1
	Arochlor 1254	µg/L	1	<1
	Arochlor 1260	µg/L	1	<1
	Arochlor 1262	µg/L	1	<1
	Arochlor 1268	µg/L	1	<1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB211558.001	Copper, Cu	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
LB211640.001	Lead, Pb	mg/kg	1	<1

Trace Metals (Total) in Water by ICPMS

Method: ME-(AU)-[ENV]AN022/AN318

Sample Number	Parameter	Units	LOR

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Trace Metals (Total) in Water by ICPMS (continued)

Method: ME-(AU)-[ENV]AN022/AN318

Sample Number	Parameter	Units	LOR	Result
LB211495.001	Total Copper	µg/L	1	<1
	Total Lead	µg/L	1	<1

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212391.010	LB211608.011	% Moisture	%w/w	1	8.8	9.0	41	3
SE212391.019	LB211608.020	% Moisture	%w/w	1	3.5	4.1	56	14
SE212391.025	LB211625.011	% Moisture	%w/w	1	4.2	3.7	56	13
SE212391.027	LB211625.014	% Moisture	%w/w	1	4.2	4.1	54	2

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212391.027	LB211624.014	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
		Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
		Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
		Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	<0.2	200	0
		Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	<0.3	134	0
		Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	<0.2	175	0
		Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	30	1
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	3
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	30	5

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212391.010	LB211558.014	Copper, Cu	mg/kg	0.5	92	58	31	45 ②
SE212391.019	LB211558.023	Lead, Pb	mg/kg	1	43	44	32	2
SE212391.021	LB211640.024	Lead, Pb	mg/kg	1	8	8	42	2
SE212525.005	LB211640.014	Lead, Pb	mg/kg	1	31	35	33	11

Trace Metals (Total) in Water by ICPMS

Method: ME-(AU)-[ENV]AN022/AN318

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212340.010	LB211495.014	Total Copper	µg/L	1	2.54	3.142	50	21
		Total Lead	µg/L	1	1.705	2.27	65	28
SE212463.005	LB211495.028	Total Copper	µg/L	1	0.203	0.227	200	0
		Total Lead	µg/L	1	0.681	0.673	163	0
SE212465.001	LB211495.029	Total Copper	µg/L	1	25.329	22.866	19	10

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB211624.002		Naphthalene	mg/kg	0.1	4.4	4	60 - 140	109
		Acenaphthylene	mg/kg	0.1	4.5	4	60 - 140	111
		Acenaphthene	mg/kg	0.1	4.6	4	60 - 140	114
		Phenanthrene	mg/kg	0.1	4.5	4	60 - 140	113
		Anthracene	mg/kg	0.1	4.5	4	60 - 140	112
		Fluoranthene	mg/kg	0.1	4.5	4	60 - 140	114
		Pyrene	mg/kg	0.1	4.7	4	60 - 140	117
		Benzo(a)pyrene	mg/kg	0.1	4.5	4	60 - 140	113
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	88
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	84
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	85

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB211477.002		Naphthalene	µg/L	0.1	26	40	60 - 140	66
		Acenaphthylene	µg/L	0.1	32	40	60 - 140	81
		Acenaphthene	µg/L	0.1	31	40	60 - 140	77
		Phenanthrene	µg/L	0.1	31	40	60 - 140	77
		Anthracene	µg/L	0.1	30	40	60 - 140	75
		Fluoranthene	µg/L	0.1	31	40	60 - 140	77
		Pyrene	µg/L	0.1	31	40	60 - 140	77
		Benzo(a)pyrene	µg/L	0.1	34	40	60 - 140	86
	Surrogates	d5-nitrobenzene (Surrogate)	µg/L	-	0.3	0.5	40 - 130	60
		2-fluorobiphenyl (Surrogate)	µg/L	-	0.3	0.5	40 - 130	64
		d14-p-terphenyl (Surrogate)	µg/L	-	0.4	0.5	40 - 130	88

PCBs in Water

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB211477.002	Arochlor 1260	µg/L	1	<1	0.4	60 - 140	139

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB211558.002	Copper, Cu	mg/kg	0.5	300	290	80 - 120	105
	Lead, Pb	mg/kg	1	94	89.9	80 - 120	104
LB211640.002	Lead, Pb	mg/kg	1	92	89.9	80 - 120	102

Trace Metals (Total) in Water by ICPMS

Method: ME-(AU)-[ENV]AN022/AN318

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB211495.002	Total Copper	µg/L	1	21	20	80 - 120	107
	Total Lead	µg/L	1	19	20	80 - 120	93

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES — Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212391.001	LB211558.004	Lead, Pb	mg/kg	1	110	99	50	16 ④
SE212446.001	LB211640.004	Lead, Pb	mg/kg	1	92	94	50	-4 ④

Trace Metals (Total) in Water by ICPMS — Method: ME-(AU)-[ENV]AN022/AN318

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212340.001	LB211495.004	Total Copper	µg/L	1	21	0.815	20	103
		Total Lead	µg/L	1	20	0.106	20	98

MATRIX SPIKE DUPLICATES

SE212391 R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
***	Indicates that both * and ** apply.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd
ABN 29 001 584 612

PROJECT OFFICE (Tick one)

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- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4811
- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0821

CLIENT: Defence Housing Australia
PROJECT: Randwick Barracks
PROJECT NUMBER: 610.30041
PROJECT MANAGER: [redacted]
PM CONTACT No: [redacted]

LABORATORY: SGS
LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015
SAMPLER: MR
SAMPLER CONTACT No: [redacted]
Email Reports and Invoices to: LQRSYD@slrconsulting.com, [redacted]

Turnaround Time (TAT)
✓ Standard TAT
☐ Non Standard or Urgent TAT
Required TAT: Standard

COC Number: 1 of 1

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	TRH/BTEXN/PAHs/VOCs	Suit B and G + OCP/OPPs	Suite C	TRH fraction C6-C10 and PFAS				HOLD	Additional Information (Comment on any gross contamination or specific requirements)
1	0407_MIP_BH01_0.1-0.2_201014	14-10-2020	Soil		x								
	0407_MIP_BH01_0.6-0.7_201014	14-10-2020	Soil									x	
2	0407_MIP_BH01_1.5-1.6_201014	14-10-2020	Soil		x								
3	0407_MIP_BH02_0.1-0.2_201014	14-10-2020	Soil		x								
4	0407_MIP_BH02_0.6-0.7_201014	14-10-2020	Soil		x								
5	0407_MIP_BH03_0.1-0.2_201014	14-10-2020	Soil		x								
6	0407_MIP_BH03_0.6-0.7_201014	14-10-2020	Soil		x								
	0407_MIP_BH03_1.4-1.5_201014	14-10-2020	Soil									x	
7	0407_MIP_BH04_0.1-0.2_201014	14-10-2020	Soil		x								
	0407_MIP_BH04_0.6-0.7_201014	14-10-2020	Soil									x	
8	0407_MIP_BH04_1.4-1.5_201014	14-10-2020	Soil		x								
9	0407_QC520_201014 TS	14-10-2020	Soil					x					
10	0407_QC520_201014 TB												

SGS EHS Sydney COC
SE212392

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 15-10-2020	Received by	Sign [redacted]	Date / Time 15/10	Temperature Received:	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time @4:35		
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time		

SAMPLE RECEIPT ADVICE

SE212392

CLIENT DETAILS

Contact	LQRSYD
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	02 9427 8100
Facsimile	02 9427 8200
Email	lqrsyd@slrconsulting.com
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	10

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Thu 15/10/2020
Report Due	Thu 22/10/2020
SGS Reference	**SE212392**

SUBMISSION DETAILS

This is to confirm that 10 samples were received on Thursday 15/10/2020. Results are expected to be ready by COB Thursday 22/10/2020.
Please quote SGS reference SE212392 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	10 Soil
Date documentation received	15/10/2020@7:42pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	1.3°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

3 soil samples have been placed on hold as no tests have been assigned for them by the client. These samples will not be processed.

This document is issued by the Company under its General Conditions of Service accessible at www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

SAMPLE RECEIPT ADVICE

SE212392

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Moisture Content	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
001	0407_MIP_BH01_0.1-0.2_201014	1	26	10	81	7
002	0407_MIP_BH01_1.5-1.6_201014	1	26	10	81	7
003	0407_MIP_BH02_0.1-0.2_201014	1	26	10	81	7
004	0407_MIP_BH02_0.6-0.7_201014	1	26	10	81	7
005	0407_MIP_BH03_0.1-0.2_201014	1	26	10	81	7
006	0407_MIP_BH03_0.6-0.7_201014	1	26	10	81	7
007	0407_MIP_BH04_0.1-0.2_201014	1	26	10	81	7
008	0407_MIP_BH04_1.4-1.5_201014	1	26	10	81	7
009	0407_QC520_201014 TS	-	-	-	81	-
010	0407_QC520_201014 TB	1	-	-	81	-

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	LQRSYD
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	02 9427 8100
Facsimile	02 9427 8200
Email	lqrsyd@slrconsulting.com
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	10

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE212392 R0**
Date Received	15/10/2020
Date Reported	22/10/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

SIGNATORIES

[redacted]

Organic Section Head

VOC's in Soil [AN433] Tested: 19/10/2020

PARAMETER	UOM	LOR	0407_MIP_BH01_0.1 0.2_201014 SOIL - 14/10/2020 SE212392.001	0407_MIP_BH01_1.5 1.6_201014 SOIL - 14/10/2020 SE212392.002	0407_MIP_BH02_0.1 0.2_201014 SOIL - 14/10/2020 SE212392.003	0407_MIP_BH02_0.6 0.7_201014 SOIL - 14/10/2020 SE212392.004	0407_MIP_BH03_0.1 0.2_201014 SOIL - 14/10/2020 SE212392.005
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 19/10/2020 (continued)

PARAMETER	UOM	LOR	0407_MIP_BH01_0.1 0.2_201014 SOIL - 14/10/2020 SE212392.001	0407_MIP_BH01_1.5 1.6_201014 SOIL - 14/10/2020 SE212392.002	0407_MIP_BH02_0.1 0.2_201014 SOIL - 14/10/2020 SE212392.003	0407_MIP_BH02_0.6 0.7_201014 SOIL - 14/10/2020 SE212392.004	0407_MIP_BH03_0.1 0.2_201014 SOIL - 14/10/2020 SE212392.005
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 19/10/2020 (continued)

PARAMETER	UOM	LOR	0407_MIP_BH03_0.6 0.7_201014 SOIL - 14/10/2020 SE212392.006	0407_MIP_BH04_0.1 0.2_201014 SOIL - 14/10/2020 SE212392.007	0407_MIP_BH04_1.4 1.5_201014 SOIL - 14/10/2020 SE212392.008	0407_QC520_201014 TS SOIL - 14/10/2020 SE212392.009	0407_QC520_201014 TB SOIL - 14/10/2020 SE212392.010
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	[100%]	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	[95%]	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	[98%]	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	[96%]	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	[95%]	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	-	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	-	<0.6
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	-	<0.1
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	-	-
Chloromethane	mg/kg	1	<1	<1	<1	-	-
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Bromomethane	mg/kg	1	<1	<1	<1	-	-
Chloroethane	mg/kg	1	<1	<1	<1	-	-
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	-	-
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	-	-
Iodomethane	mg/kg	5	<5	<5	<5	-	-
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	-	-
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	-	-
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Vinyl acetate	mg/kg	10	<10	<10	<10	-	-
MEK (2-butanone)	mg/kg	10	<10	<10	<10	-	-
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
2-nitropropane	mg/kg	10	<10	<10	<10	-	-
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	-	-
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	-	-
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	-	-
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	-	-

VOC's in Soil [AN433] Tested: 19/10/2020 (continued)

PARAMETER	UOM	LOR	0407_MIP_BH03_0.6-0.7_201014 SOIL - 14/10/2020 SE212392.006	0407_MIP_BH04_0.1-0.2_201014 SOIL - 14/10/2020 SE212392.007	0407_MIP_BH04_1.4-1.5_201014 SOIL - 14/10/2020 SE212392.008	0407_QC520_201014 TS SOIL - 14/10/2020 SE212392.009	0407_QC520_201014 TB SOIL - 14/10/2020 SE212392.010
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Total VOC*	mg/kg	24	<24	<24	<24	-	-
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	-	-
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	-	-
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	-	-

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 19/10/2020

PARAMETER	UOM	LOR	0407_MIP_BH01_0.1_0.2_201014 SOIL - 14/10/2020 SE212392.001	0407_MIP_BH01_1.5_1.6_201014 SOIL - 14/10/2020 SE212392.002	0407_MIP_BH02_0.1_0.2_201014 SOIL - 14/10/2020 SE212392.003	0407_MIP_BH02_0.6_0.7_201014 SOIL - 14/10/2020 SE212392.004	0407_MIP_BH03_0.1_0.2_201014 SOIL - 14/10/2020 SE212392.005
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_MIP_BH03_0.6_0.7_201014 SOIL - 14/10/2020 SE212392.006	0407_MIP_BH04_0.1_0.2_201014 SOIL - 14/10/2020 SE212392.007	0407_MIP_BH04_1.4_1.5_201014 SOIL - 14/10/2020 SE212392.008	0407_QC520_201014 TB SOIL - 14/10/2020 SE212392.010
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 19/10/2020

PARAMETER	UOM	LOR	0407_MIP_BH01_0.1 0.2_201014 SOIL - 14/10/2020 SE212392.001	0407_MIP_BH01_1.5 1.6_201014 SOIL - 14/10/2020 SE212392.002	0407_MIP_BH02_0.1 0.2_201014 SOIL - 14/10/2020 SE212392.003	0407_MIP_BH02_0.6 0.7_201014 SOIL - 14/10/2020 SE212392.004	0407_MIP_BH03_0.1 0.2_201014 SOIL - 14/10/2020 SE212392.005
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_MIP_BH03_0.6 0.7_201014 SOIL - 14/10/2020 SE212392.006	0407_MIP_BH04_0.1 0.2_201014 SOIL - 14/10/2020 SE212392.007	0407_MIP_BH04_1.4 1.5_201014 SOIL - 14/10/2020 SE212392.008
TRH C10-C14	mg/kg	20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 19/10/2020

PARAMETER	UOM	LOR	0407_MIP_BH01_0.1 0.2_201014 SOIL - 14/10/2020 SE212392.001	0407_MIP_BH01_1.5 1.6_201014 SOIL - 14/10/2020 SE212392.002	0407_MIP_BH02_0.1 0.2_201014 SOIL - 14/10/2020 SE212392.003	0407_MIP_BH02_0.6 0.7_201014 SOIL - 14/10/2020 SE212392.004	0407_MIP_BH03_0.1 0.2_201014 SOIL - 14/10/2020 SE212392.005
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	<0.8	<0.8

PARAMETER	UOM	LOR	0407_MIP_BH03_0.6 0.7_201014 SOIL - 14/10/2020 SE212392.006	0407_MIP_BH04_0.1 0.2_201014 SOIL - 14/10/2020 SE212392.007	0407_MIP_BH04_1.4 1.5_201014 SOIL - 14/10/2020 SE212392.008
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	**0.1**	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8

Moisture Content [AN002] Tested: 19/10/2020

PARAMETER	UOM	LOR	0407_MIP_BH01_0.1 0.2_201014 SOIL - 14/10/2020 SE212392.001	0407_MIP_BH01_1.5 1.6_201014 SOIL - 14/10/2020 SE212392.002	0407_MIP_BH02_0.1 0.2_201014 SOIL - 14/10/2020 SE212392.003	0407_MIP_BH02_0.6 0.7_201014 SOIL - 14/10/2020 SE212392.004	0407_MIP_BH03_0.1 0.2_201014 SOIL - 14/10/2020 SE212392.005
% Moisture	%w/w	1	<1.0	**4.9**	<1.0	<1.0	**2.3**

PARAMETER	UOM	LOR	0407_MIP_BH03_0.6 0.7_201014 SOIL - 14/10/2020 SE212392.006	0407_MIP_BH04_0.1 0.2_201014 SOIL - 14/10/2020 SE212392.007	0407_MIP_BH04_1.4 1.5_201014 SOIL - 14/10/2020 SE212392.008	0407_QC520_201014 TB SOIL - 14/10/2020 SE212392.010
% Moisture	%w/w	1	**4.2**	**4.8**	**1.6**	<1.0

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents .
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN420	Carcinogenic PAHs may be expressed as Benzo(a)pyrene equivalents by applying the BaP toxicity equivalence factor (NEPM 1999, June 2013, B7). These can be reported as the individual PAHs and as a sum of carcinogenic PAHs. The sum is reported three ways, the first assuming all <LOR results are zero, the second assuming all < LOR results are half the LOR and the third assuming all <LOR results are the LOR.
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		
***	Indicates that both * and ** apply.				

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE212392 R0

CLIENT DETAILS

Contact	LQRSYD
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	02 9427 8100
Facsimile	02 9427 8200
Email	lqrsyd@slrconsulting.com
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	10

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE212392 R0**
Date Received	15 Oct 2020
Date Reported	22 Oct 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met (within the SGS Alexandria Environmental laboratory).

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	10 Soil
Date documentation received	15/10/2020@7:42pr	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	1.3°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE212392 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_MIP_BH01_0.1-0.2_2	SE212392.001	LB211502	14 Oct 2020	15 Oct 2020	28 Oct 2020	19 Oct 2020	24 Oct 2020	21 Oct 2020
0407_MIP_BH01_1.5-1.6_2	SE212392.002	LB211502	14 Oct 2020	15 Oct 2020	28 Oct 2020	19 Oct 2020	24 Oct 2020	21 Oct 2020
0407_MIP_BH02_0.1-0.2_2	SE212392.003	LB211502	14 Oct 2020	15 Oct 2020	28 Oct 2020	19 Oct 2020	24 Oct 2020	21 Oct 2020
0407_MIP_BH02_0.6-0.7_2	SE212392.004	LB211502	14 Oct 2020	15 Oct 2020	28 Oct 2020	19 Oct 2020	24 Oct 2020	21 Oct 2020
0407_MIP_BH03_0.1-0.2_2	SE212392.005	LB211502	14 Oct 2020	15 Oct 2020	28 Oct 2020	19 Oct 2020	24 Oct 2020	21 Oct 2020
0407_MIP_BH03_0.6-0.7_2	SE212392.006	LB211502	14 Oct 2020	15 Oct 2020	28 Oct 2020	19 Oct 2020	24 Oct 2020	21 Oct 2020
0407_MIP_BH04_0.1-0.2_2	SE212392.007	LB211502	14 Oct 2020	15 Oct 2020	28 Oct 2020	19 Oct 2020	24 Oct 2020	21 Oct 2020
0407_MIP_BH04_1.4-1.5_2	SE212392.008	LB211502	14 Oct 2020	15 Oct 2020	28 Oct 2020	19 Oct 2020	24 Oct 2020	21 Oct 2020
0407_QC520_201014 TB	SE212392.010	LB211502	14 Oct 2020	15 Oct 2020	28 Oct 2020	19 Oct 2020	24 Oct 2020	21 Oct 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_MIP_BH01_0.1-0.2_2	SE212392.001	LB211500	14 Oct 2020	15 Oct 2020	28 Oct 2020	19 Oct 2020	28 Nov 2020	21 Oct 2020
0407_MIP_BH01_1.5-1.6_2	SE212392.002	LB211500	14 Oct 2020	15 Oct 2020	28 Oct 2020	19 Oct 2020	28 Nov 2020	21 Oct 2020
0407_MIP_BH02_0.1-0.2_2	SE212392.003	LB211500	14 Oct 2020	15 Oct 2020	28 Oct 2020	19 Oct 2020	28 Nov 2020	21 Oct 2020
0407_MIP_BH02_0.6-0.7_2	SE212392.004	LB211500	14 Oct 2020	15 Oct 2020	28 Oct 2020	19 Oct 2020	28 Nov 2020	21 Oct 2020
0407_MIP_BH03_0.1-0.2_2	SE212392.005	LB211500	14 Oct 2020	15 Oct 2020	28 Oct 2020	19 Oct 2020	28 Nov 2020	21 Oct 2020
0407_MIP_BH03_0.6-0.7_2	SE212392.006	LB211500	14 Oct 2020	15 Oct 2020	28 Oct 2020	19 Oct 2020	28 Nov 2020	21 Oct 2020
0407_MIP_BH04_0.1-0.2_2	SE212392.007	LB211500	14 Oct 2020	15 Oct 2020	28 Oct 2020	19 Oct 2020	28 Nov 2020	21 Oct 2020
0407_MIP_BH04_1.4-1.5_2	SE212392.008	LB211500	14 Oct 2020	15 Oct 2020	28 Oct 2020	19 Oct 2020	28 Nov 2020	21 Oct 2020

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_MIP_BH01_0.1-0.2_2	SE212392.001	LB211500	14 Oct 2020	15 Oct 2020	28 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_MIP_BH01_1.5-1.6_2	SE212392.002	LB211500	14 Oct 2020	15 Oct 2020	28 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_MIP_BH02_0.1-0.2_2	SE212392.003	LB211500	14 Oct 2020	15 Oct 2020	28 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_MIP_BH02_0.6-0.7_2	SE212392.004	LB211500	14 Oct 2020	15 Oct 2020	28 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_MIP_BH03_0.1-0.2_2	SE212392.005	LB211500	14 Oct 2020	15 Oct 2020	28 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_MIP_BH03_0.6-0.7_2	SE212392.006	LB211500	14 Oct 2020	15 Oct 2020	28 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_MIP_BH04_0.1-0.2_2	SE212392.007	LB211500	14 Oct 2020	15 Oct 2020	28 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_MIP_BH04_1.4-1.5_2	SE212392.008	LB211500	14 Oct 2020	15 Oct 2020	28 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_MIP_BH01_0.1-0.2_2	SE212392.001	LB211498	14 Oct 2020	15 Oct 2020	28 Oct 2020	19 Oct 2020	28 Nov 2020	21 Oct 2020
0407_MIP_BH01_1.5-1.6_2	SE212392.002	LB211498	14 Oct 2020	15 Oct 2020	28 Oct 2020	19 Oct 2020	28 Nov 2020	21 Oct 2020
0407_MIP_BH02_0.1-0.2_2	SE212392.003	LB211498	14 Oct 2020	15 Oct 2020	28 Oct 2020	19 Oct 2020	28 Nov 2020	21 Oct 2020
0407_MIP_BH02_0.6-0.7_2	SE212392.004	LB211498	14 Oct 2020	15 Oct 2020	28 Oct 2020	19 Oct 2020	28 Nov 2020	21 Oct 2020
0407_MIP_BH03_0.1-0.2_2	SE212392.005	LB211498	14 Oct 2020	15 Oct 2020	28 Oct 2020	19 Oct 2020	28 Nov 2020	21 Oct 2020
0407_MIP_BH03_0.6-0.7_2	SE212392.006	LB211498	14 Oct 2020	15 Oct 2020	28 Oct 2020	19 Oct 2020	28 Nov 2020	21 Oct 2020
0407_MIP_BH04_0.1-0.2_2	SE212392.007	LB211498	14 Oct 2020	15 Oct 2020	28 Oct 2020	19 Oct 2020	28 Nov 2020	21 Oct 2020
0407_MIP_BH04_1.4-1.5_2	SE212392.008	LB211498	14 Oct 2020	15 Oct 2020	28 Oct 2020	19 Oct 2020	28 Nov 2020	21 Oct 2020
0407_QC520_201014 TS	SE212392.009	LB211498	14 Oct 2020	15 Oct 2020	28 Oct 2020	19 Oct 2020	28 Nov 2020	21 Oct 2020
0407_QC520_201014 TB	SE212392.010	LB211498	14 Oct 2020	15 Oct 2020	28 Oct 2020	19 Oct 2020	28 Nov 2020	21 Oct 2020

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_MIP_BH01_0.1-0.2_2	SE212392.001	LB211498	14 Oct 2020	15 Oct 2020	28 Oct 2020	19 Oct 2020	28 Nov 2020	21 Oct 2020
0407_MIP_BH01_1.5-1.6_2	SE212392.002	LB211498	14 Oct 2020	15 Oct 2020	28 Oct 2020	19 Oct 2020	28 Nov 2020	21 Oct 2020
0407_MIP_BH02_0.1-0.2_2	SE212392.003	LB211498	14 Oct 2020	15 Oct 2020	28 Oct 2020	19 Oct 2020	28 Nov 2020	21 Oct 2020
0407_MIP_BH02_0.6-0.7_2	SE212392.004	LB211498	14 Oct 2020	15 Oct 2020	28 Oct 2020	19 Oct 2020	28 Nov 2020	21 Oct 2020
0407_MIP_BH03_0.1-0.2_2	SE212392.005	LB211498	14 Oct 2020	15 Oct 2020	28 Oct 2020	19 Oct 2020	28 Nov 2020	21 Oct 2020
0407_MIP_BH03_0.6-0.7_2	SE212392.006	LB211498	14 Oct 2020	15 Oct 2020	28 Oct 2020	19 Oct 2020	28 Nov 2020	21 Oct 2020
0407_MIP_BH04_0.1-0.2_2	SE212392.007	LB211498	14 Oct 2020	15 Oct 2020	28 Oct 2020	19 Oct 2020	28 Nov 2020	21 Oct 2020
0407_MIP_BH04_1.4-1.5_2	SE212392.008	LB211498	14 Oct 2020	15 Oct 2020	28 Oct 2020	19 Oct 2020	28 Nov 2020	21 Oct 2020
0407_QC520_201014 TS	SE212392.009	LB211498	14 Oct 2020	15 Oct 2020	28 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_QC520_201014 TB	SE212392.010	LB211498	14 Oct 2020	15 Oct 2020	28 Oct 2020	19 Oct 2020	28 Nov 2020	21 Oct 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)		SE212392.001	%	70 - 130%	83
		SE212392.002	%	70 - 130%	77
		SE212392.003	%	70 - 130%	92
		SE212392.004	%	70 - 130%	81
		SE212392.005	%	70 - 130%	80
		SE212392.006	%	70 - 130%	80
		SE212392.007	%	70 - 130%	81
		SE212392.008	%	70 - 130%	80
d14-p-terphenyl (Surrogate)		SE212392.001	%	70 - 130%	97
		SE212392.002	%	70 - 130%	96
		SE212392.003	%	70 - 130%	99
		SE212392.004	%	70 - 130%	90
		SE212392.005	%	70 - 130%	94
		SE212392.006	%	70 - 130%	92
		SE212392.007	%	70 - 130%	95
		SE212392.008	%	70 - 130%	96
d5-nitrobenzene (Surrogate)		SE212392.001	%	70 - 130%	82
		SE212392.002	%	70 - 130%	80
		SE212392.003	%	70 - 130%	87
		SE212392.004	%	70 - 130%	82
		SE212392.005	%	70 - 130%	83
		SE212392.006	%	70 - 130%	84
		SE212392.007	%	70 - 130%	86
		SE212392.008	%	70 - 130%	85

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)		SE212392.001	%	60 - 130%	96
		SE212392.002	%	60 - 130%	106
		SE212392.003	%	60 - 130%	97
		SE212392.004	%	60 - 130%	115
		SE212392.005	%	60 - 130%	105
		SE212392.006	%	60 - 130%	103
		SE212392.007	%	60 - 130%	105
		SE212392.008	%	60 - 130%	105
	0407_QC520_201014 TS	SE212392.009	%	60 - 130%	89
	0407_QC520_201014 TB	SE212392.010	%	60 - 130%	107
d4-1,2-dichloroethane (Surrogate)		SE212392.001	%	60 - 130%	95
		SE212392.002	%	60 - 130%	85
		SE212392.003	%	60 - 130%	88
		SE212392.004	%	60 - 130%	92
		SE212392.005	%	60 - 130%	97
		SE212392.006	%	60 - 130%	86
		SE212392.007	%	60 - 130%	99
		SE212392.008	%	60 - 130%	96
	0407_QC520_201014 TS	SE212392.009	%	60 - 130%	86
	0407_QC520_201014 TB	SE212392.010	%	60 - 130%	90
d8-toluene (Surrogate)		SE212392.001	%	60 - 130%	82
		SE212392.002	%	60 - 130%	85
		SE212392.003	%	60 - 130%	89
		SE212392.004	%	60 - 130%	92
		SE212392.005	%	60 - 130%	82
		SE212392.006	%	60 - 130%	84
		SE212392.007	%	60 - 130%	84
		SE212392.008	%	60 - 130%	94
	0407_QC520_201014 TS	SE212392.009	%	60 - 130%	84
	0407_QC520_201014 TB	SE212392.010	%	60 - 130%	91

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)		SE212392.001	%	60 - 130%	96
		SE212392.002	%	60 - 130%	106
		SE212392.003	%	60 - 130%	97
		SE212392.004	%	60 - 130%	115
		SE212392.005	%	60 - 130%	105
		SE212392.006	%	60 - 130%	103
		SE212392.007	%	60 - 130%	105
		SE212392.008	%	60 - 130%	105
	0407_QC520_201014 TB	SE212392.010	%	60 - 130%	107
d4-1,2-dichloroethane (Surrogate)		SE212392.001	%	60 - 130%	95
		SE212392.002	%	60 - 130%	85
		SE212392.003	%	60 - 130%	88
		SE212392.004	%	60 - 130%	92
		SE212392.005	%	60 - 130%	97
		SE212392.006	%	60 - 130%	86
		SE212392.007	%	60 - 130%	99
		SE212392.008	%	60 - 130%	96
	0407_QC520_201014 TB	SE212392.010	%	60 - 130%	90
d8-toluene (Surrogate)		SE212392.001	%	60 - 130%	82
		SE212392.002	%	60 - 130%	85
		SE212392.003	%	60 - 130%	89
		SE212392.004	%	60 - 130%	92
		SE212392.005	%	60 - 130%	82
		SE212392.006	%	60 - 130%	84
		SE212392.007	%	60 - 130%	84
		SE212392.008	%	60 - 130%	94
	0407_QC520_201014 TB	SE212392.010	%	60 - 130%	91

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB211500.001		Naphthalene	mg/kg	0.1	<0.1
		2-methylnaphthalene	mg/kg	0.1	<0.1
		1-methylnaphthalene	mg/kg	0.1	<0.1
		Acenaphthylene	mg/kg	0.1	<0.1
		Acenaphthene	mg/kg	0.1	<0.1
		Fluorene	mg/kg	0.1	<0.1
		Phenanthrene	mg/kg	0.1	<0.1
		Anthracene	mg/kg	0.1	<0.1
		Fluoranthene	mg/kg	0.1	<0.1
		Pyrene	mg/kg	0.1	<0.1
		Benzo(a)anthracene	mg/kg	0.1	<0.1
		Chrysene	mg/kg	0.1	<0.1
		Benzo(a)pyrene	mg/kg	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	91
		2-fluorobiphenyl (Surrogate)	%	-	87
		d14-p-terphenyl (Surrogate)	%	-	96

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB211500.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB211498.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB211498.001	Halogenated Aliphatics	1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic	Benzene	mg/kg	0.1	<0.1
	Hydrocarbons	Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10
		MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	85
		d8-toluene (Surrogate)	%	-	78
		Bromofluorobenzene (Surrogate)	%	-	97
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB211498.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	85

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212375.003	LB211502.011	% Moisture	%w/w	1	19.015509103	20.3937007874	35	7
SE212392.010	LB211502.021	% Moisture	%w/w	1	<1.0	<1.0	200	0

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212375.003	LB211500.014		Naphthalene	mg/kg	0.1	0.006175605	20.0618086201	200	0
			2-methylnaphthalene	mg/kg	0.1	0.008641148	30.2232005064	116	76
			1-methylnaphthalene	mg/kg	0.1	0.010656543	90.1740168322	138	54
			Acenaphthylene	mg/kg	0.1	0.011402226	60.0180210265	200	0
			Acenaphthene	mg/kg	0.1	0.002909203	90.0079291228	200	0
			Fluorene	mg/kg	0.1	0.004713026	60.0116745518	200	0
			Phenanthrene	mg/kg	0.1	0.102511798	40.1355862738	114	28
			Anthracene	mg/kg	0.1	0.022490586	90.0302822191	200	0
			Fluoranthene	mg/kg	0.1	0.176678925	90.2575066319	76	37
			Pyrene	mg/kg	0.1	0.171865277	80.2508601712	77	37
			Benzo(a)anthracene	mg/kg	0.1	0.056413914	20.0809849464	176	0
			Chrysene	mg/kg	0.1	0.065439422	10.0930577031	156	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	0.063905064	90.0960678928	155	0
			Benzo(k)fluoranthene	mg/kg	0.1	0.036238905	40.0508742857	200	0
			Benzo(a)pyrene	mg/kg	0.1	0.055724156	30.0833715936	174	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.042997572	00.0666361043	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	0.003845203	10.0055915691	200	0
			Benzo(ghi)perylene	mg/kg	0.1	0.043600950	00.0673965778	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	0	0	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	0.242	0.242	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	0.121	0.121	175	0
			Total PAH (18)	mg/kg	0.8	0.451056002	21.0411704157	137	26
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.393510814	90.4101267884	30	4
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.367969087	30.3995045548	30	8
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.468629976	00.4855580849	30	4
SE212392.008	LB211500.023		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	<0.3	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	<0.2	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	30	1
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	1
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	1

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Original	Duplicate	Parameter	Units	LOR

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212375.003	LB211500.014		TRH C10-C14	mg/kg	20	0	0	200	0
			TRH C15-C28	mg/kg	45	0	0	200	0
			TRH C29-C36	mg/kg	45	0	0	200	0
			TRH C37-C40	mg/kg	100	0	0	200	0
			TRH C10-C36 Total	mg/kg	110	0	0	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	0	0	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	0	0	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	0	0	200	0
			TRH >C16-C34 (F3)	mg/kg	90	0	0	200	0
			TRH >C34-C40 (F4)	mg/kg	120	0	0	200	0
SE212392.008	LB211500.023		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212375.003	LB211498.014	Monocyclic	Benzene	mg/kg	0.1	0	0	200	0
		Aromatic	Toluene	mg/kg	0.1	0	0	200	0
			Ethylbenzene	mg/kg	0.1	0	0	200	0
			m/p-xylene	mg/kg	0.2	0	0	200	0
			o-xylene	mg/kg	0.1	0	0	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	0	0	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.99302915148	8.3443266969	50	7
			d8-toluene (Surrogate)	mg/kg	-	7.72137205978	8.0613277110	50	4
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.397788344410	.5941120074	50	23
		Totals	Total Xylenes	mg/kg	0.3	0	0	200	0
			Total BTEX	mg/kg	0.6	0	0	200	0
SE212392.008	LB211498.026	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	0	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	0	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	0	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	0	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	0	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	0	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	0.1822157537	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	0	200	0
			Bromomethane	mg/kg	1	<1	0	200	0
			Chloroethane	mg/kg	1	<1	0	200	0
			Trichlorofluoromethane	mg/kg	1	<1	0	200	0
			Iodomethane	mg/kg	5	<5	0.1115810108	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	0	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	0.0051120920	200	0
			Allyl chloride	mg/kg	0.1	<0.1	0	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	0	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	0	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	0	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	0	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	0	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	0	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	0.0131226833	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	0	200	0
			Dibromomethane	mg/kg	0.1	<0.1	0	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	0	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	0	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212392.008	LB211498.026	Halogenated	Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	0	200	0
		Aliphatics	1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	0	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	0	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	0	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	0	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	0	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	0	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	0	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	0	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	0	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	0	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	0	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	0	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	0	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	0	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	0.0032842400	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	0	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	0	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	0	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	0	200	0
			m/p-xylene	mg/kg	0.2	<0.2	0	200	0
			o-xylene	mg/kg	0.1	<0.1	0	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	0	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	0	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	0	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	0	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	0	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	0	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	0	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	0	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	0	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	0	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	0	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	0.4839502334	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	0	200	0
			Vinyl acetate	mg/kg	10	<10	0	200	0
			MEK (2-butanone)	mg/kg	10	<10	0	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	0	200	0
			2-hexanone (MBK)	mg/kg	5	<5	0	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	0	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	0.0427818884	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.6	9.0104879172	50	6
			d8-toluene (Surrogate)	mg/kg	-	9.4	7.9171636306	50	17
			Bromofluorobenzene (Surrogate)	mg/kg	-	10.5	10.3284066648	50	1
		Totals	Total Xylenes	mg/kg	0.3	<0.3	0	200	0
			Total BTEX	mg/kg	0.6	<0.6	0	200	0
			Total VOC*	mg/kg	24	<24	0.8854553831	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	0.2170837824	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	0.0083963320	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	0.0083963320	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	0	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	0	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	0.0217453454	200	0
			Bromoform	mg/kg	0.1	<0.1	0.0216621358	200	0

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212375.003	LB211498.014		TRH C6-C10	mg/kg	25	0	0	200	0
			TRH C6-C9	mg/kg	20	0	0	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.99302915148	.3443266969	30	7
			d8-toluene (Surrogate)	mg/kg	-	7.72137205978	.0613277110	30	4

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212375.003	LB211498.014	Surrogates	Bromofluorobenzene (Surrogate)	mg/kg	-	8.397788344410.5941120074		30	23
		VPH F Bands	Benzene (F0)	mg/kg	0.1	0	0	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	0	0	200	0
SE212392.008	LB211498.027		TRH C6-C10	mg/kg	25	<25	0	200	0
			TRH C6-C9	mg/kg	20	<20	0	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.6	9.0104879172	30	6
			d8-toluene (Surrogate)	mg/kg	-	9.4	7.9171636306	30	17
			Bromofluorobenzene (Surrogate)	mg/kg	-	10.5	10.3284066648	30	1
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	0	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	0	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB211500.002		Naphthalene	mg/kg	0.1	4.1	4	60 - 140	103
		Acenaphthylene	mg/kg	0.1	4.2	4	60 - 140	105
		Acenaphthene	mg/kg	0.1	4.3	4	60 - 140	107
		Phenanthrene	mg/kg	0.1	4.2	4	60 - 140	106
		Anthracene	mg/kg	0.1	4.2	4	60 - 140	106
		Fluoranthene	mg/kg	0.1	4.4	4	60 - 140	109
		Pyrene	mg/kg	0.1	4.5	4	60 - 140	113
		Benzo(a)pyrene	mg/kg	0.1	4.4	4	60 - 140	110
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	87
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	85
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	86

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB211500.002		TRH C10-C14	mg/kg	20	39	40	60 - 140	98
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	83
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	75
	TRH F Bands	TRH >C10-C16	mg/kg	25	36	40	60 - 140	90
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	75
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	75

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB211498.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	4.7	5	60 - 140	94
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	5.0	5	60 - 140	100
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	4.8	5	60 - 140	96
	Halogenated	Chlorobenzene	mg/kg	0.1	5.4	5	60 - 140	107
	Monocyclic	Benzene	mg/kg	0.1	4.8	5	60 - 140	96
	Aromatic	Toluene	mg/kg	0.1	4.8	5	60 - 140	95
		Ethylbenzene	mg/kg	0.1	4.8	5	60 - 140	96
		m/p-xylene	mg/kg	0.2	9.6	10	60 - 140	96
		o-xylene	mg/kg	0.1	4.8	5	60 - 140	95
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.4	10	70 - 130	94
		d8-toluene (Surrogate)	mg/kg	-	8.7	10	70 - 130	87
		Bromofluorobenzene (Surrogate)	mg/kg	-	10.0	10	70 - 130	100
	Trihalomethan	Chloroform	mg/kg	0.1	4.7	5	60 - 140	94

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB211498.002		TRH C6-C10	mg/kg	25	73	92.5	60 - 140	79
		TRH C6-C9	mg/kg	20	64	80	60 - 140	80
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.4	10	70 - 130	94
		Bromofluorobenzene (Surrogate)	mg/kg	-	10.0	10	70 - 130	100
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	45	62.5	60 - 140	71

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212395.061	LB211500.004		TRH C10-C14	mg/kg	20	33	0	40	83
			TRH C15-C28	mg/kg	45	<45	0	40	68
			TRH C29-C36	mg/kg	45	<45	0	40	65
			TRH C37-C40	mg/kg	100	<100	0	-	-
			TRH C10-C36 Total	mg/kg	110	<110	0	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	0	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25	31	0	40	78
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	31	0	-	-
			TRH >C16-C34 (F3)	mg/kg	90	<90	0	40	70
			TRH >C34-C40 (F4)	mg/kg	120	<120	0	-	-

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212395.061	LB211498.004	Monocyclic	Benzene	mg/kg	0.1	4.6	0	5	91
		Aromatic	Toluene	mg/kg	0.1	4.7	0	5	94
			Ethylbenzene	mg/kg	0.1	4.8	0	5	96
			m/p-xylene	mg/kg	0.2	9.6	0	10	96
			o-xylene	mg/kg	0.1	4.7	0	5	94
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	0	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.2	8.75951699070	10	92
			d8-toluene (Surrogate)	mg/kg	-	8.2	8.27895535680	10	82
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.7	9.92362035289	10	97
		Totals	Total Xylenes	mg/kg	0.3	14	0	-	-
			Total BTEX	mg/kg	0.6	28	0	-	-

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212395.061	LB211498.004		TRH C6-C10	mg/kg	25	71	0	92.5	77
			TRH C6-C9	mg/kg	20	62	0	80	78
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.2	8.75951699070	10	92
			d8-toluene (Surrogate)	mg/kg	-	8.2	8.27895535680	10	82
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.7	9.92362035289	-	97
		VPH F	Benzene (F0)	mg/kg	0.1	4.6	0	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	43	0	62.5	68

MATRIX SPIKE DUPLICATES

SE212392 R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
***	Indicates that both * and ** apply.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client only. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

This test report shall not be reproduced, except in full.

E-MAILED
15/10/20 7:42pm

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd
ABN 29 001 584 612

PROJECT OFFICE (Tick one):
- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☒ SYDNEY: 202 Submarine School, Sub Base Platypus, North Sydney, 2060
- ✓ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2601
- ☐ MACKAY: 21 River Street, Mackay, QLD 4741
- ☐ PERTH: 503 Murray Street, Perth, WA 6001
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4811
- ☐ DARWIN: 23 Parap Rd, Darwin, NT 0821

CLIENT: Defence Housing Australia
PROJECT: Randwick Barracks
PROJECT NUMBER: 610.30041
PROJECT MANAGER: [redacted]
PM CONTACT No: [redacted]

LABORATORY: SGS
LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015
SAMPLER: MR
SAMPLER CONTACT No: [redacted]
Email Reports and Invoices to: LQRSYD@slrconsulting.com, mrajan@slrconsulting.com

Turnaround Time (TAT)
✓ Standard TAT
☐ Non Standard or Urgent TAT
Required TAT: Standard

COC Number: 1 of 4

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: TRH/BTEXN/PAHs/VOCs	Suit B and G + OCP/OPPs	Suite C	TRH fraction C6-C10 and PFAS				HOLD	Additional Information (Comment on any gross contamination or specific requirements)
1	0407_PSG_BH01_0.2-0.3_201015	15-10-2020	Soil			×							
2	0407_PSG_BH01_0.5-0.6_201015	15-10-2020	Soil			×							
3	0407_PSG_BH02_0.2-0.3_201015	15-10-2020	Soil			×							
4	0407_PSG_BH02_0.5-0.6_201015	15-10-2020	Soil			×							
5	0407_PSG_BH03_0.2-0.3_201015	15-10-2020	Soil			×							
6	0407_PSG_BH03_0.5-0.6_201015	15-10-2020	Soil			×							
7	0407_PSG_BH04_0.5-0.6_201015	15-10-2020	Soil			×							
8	0407_PSG_BH04_0.9-1.0_201015	15-10-2020	Soil			×							
9	0407_PSG_BH05_0.2-0.3_201015	15-10-2020	Soil			×							
10	0407_PSG_BH05_0.5-0.6_201015	15-10-2020	Soil			×							
11	0407_PSG_BH06_0.2-0.3_201015	15-10-2020	Soil			×							
12	0407_PSG_BH06_0.5-0.6_201015	15-10-2020	Soil			×							
13	0407_PSG_BH07_0.2-0.3_201015	15-10-2020	Soil			×							
14	0407_PSG_BH07_0.5-0.6_201015	15-10-2020	Soil			×							
15	0407_PSG_BH08_0.2-0.3_201015	15-10-2020	Soil			×							
16	0407_PSG_BH08_0.5-0.6_201015	15-10-2020	Soil			×							

SGS EHS Sydney COC
SE212400

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 15-10-2020	Received by	Sign [redacted]	Date / Time 15/10/20	Temperature Received: 4.3°
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☒ SYDNEY: 202 Submarine School, Sub Base Platypus, North Sydney, 2060
- ✓ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2601
- ☐ MACKAY: 21 River Street, Mackay, QLD 4741
- ☐ PERTH: 508 Murray Street, Perth, WA 6000
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4811
- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0821

CLIENT: **Defence Housing Australia**

PROJECT: **Randwick Barracks**

PROJECT NUMBER: **610.30041**

PROJECT MANAGER: [redacted]

PM CONTACT No: [redacted]

LABORATORY: **SGS**

LABORATORY ADDRESS: **Unit 16/33 Maddox St, Alexandria NSW 2015**

SAMPLER: **MR**

SAMPLER CONTACT No: [redacted]

Email Reports and Invoices to: **LQRSYD@slrconsulting.com,** [redacted]

Turnaround Time (TAT)

✓ **Standard TAT**

☐ **Non Standard or Urgent TAT**

Required TAT: Standard

COC Number: 2 of 2

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: TRH/BTEXN/PAHs/VOCs	Suit B and G + OCP/OPPs	Suite C	TRH fraction C6-C10 and PFAS				HOLD	Additional Information (Comment on any gross contamination or specific requirements)
17	0407_PSG_BH09_0.2-0.3_201015	15-10-2020	Soil			x							
18	0407_PSG_BH09_0.5-0.6_201015	15-10-2020	Soil			x							
19	0407_PSG_BH10_0.2-0.3_201015	15-10-2020	Soil			x							
20	0407_PSG_BH10_0.5-0.6_201015	15-10-2020	Soil			x							
21	0407_SEP001_BH01_0.2-0.3_201015	15-10-2020	Soil				x						
22	0407_SEP001_BH01_1.5-1.6_201015	15-10-2020	Soil				x						
	0407_SEP001_BH01_3.5-3.6_201015	15-10-2020	Soil									x	
23	0407_SEP001_BH02_0.2-0.3_201015	15-10-2020	Soil				x						
24	0407_SEP001_BH02_1.5-1.6_201015	15-10-2020	Soil				x						
	0407_SEP001_BH02_3.5-3.6_201015	15-10-2020	Soil									X	
25	0407_SEW001_0.4-0.5_201015	15-10-2020	Soil				x						
26	0407_SEW001_1.5-1.6_201015	15-10-2020	Soil				x						
	0407_SEW001_2.9-3.0_201015	15-10-2020	Soil									x	
27	0407_SEW002_0.4-0.5_201015	15-10-2020	Soil				x						
28	0407_SEW002_1.5-1.6_201015	15-10-2020	Soil				x						
	0407_SEW002_2.5-2.6_201015	15-10-2020	Soil									x	

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 15-10-2020	**Received by**	Sign [redacted]	Date / Time 15/10	**Temperature Received:** 4.2
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd
ABN 29 001 584 612

PROJECT OFFICE (Tick one)

☐ BRISBANE: Level 2, 15 Avon Terrace, Spring Hill, QLD 4000	☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227	☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305	☒ SYDNEY: 202 Submarine School, Sub Base Platypus, North Sydney, 2060	✓ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122			
☐ CANBERRA: GPO Box 410, Canberra, ACT 2601	☐ MACKAY: 21 River Street, Mackay, QLD 4741	☐ PERTH: 503 Murray Street, Perth, WA 6005	☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4811	☐ DARWIN: 21 Parap Rd, Darwin, NT 0821			

CLIENT: **Defence Housing Australia**
PROJECT: **Randwick Barracks**
PROJECT NUMBER: **610.30041**
PROJECT MANAGER: [redacted]
PM CONTACT No: [redacted]

LABORATORY: **SGS**
LABORATORY ADDRESS: **Unit 16/33 Maddox St, Alexandria NSW 2015**
SAMPLER: **MR**
SAMPLER CONTACT No: [redacted]
Email Reports and Invoices to: **LQRSYD@slrconsulting.com,** [redacted]

Turnaround Time (TAT)
✓ **Standard TAT**
☐ **Non Standard or Urgent TAT**
Required TAT: Standard

COC Number: 3 of 4

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: TRH/BTEX/N/PAHs/VOCs	Suit B and G + OCP/OPPs	Suite C	TRH fraction C6-C10 and PFAS				HOLD	Additional Information (Comment on any gross contamination or specific requirements)
29	0407_QC189_201015	15-10-2020	Soil				×						
	0407_QC289_201015	15-10-2020	Soil										Please send to Eurofins for Suite C
30	0407_STWR001_BH01_0.2-0.3_201015	15-10-2020	Soil				×						
31	0407_STWR001_BH01_1.5-1.6_201015	15-10-2020	Soil				×						
32	0407_QC191_201015	15-10-2020	Soil				×						
	0407_QC291_201015	15-10-2020	Soil										Please send to Eurofins for Suite C
33	0407_STWR001_BH02_0.2-0.3_201015	15-10-2020	Soil				×						
34	0407_STWR001_BH02_1.5-1.6_201015	15-10-2020	Soil				×						
	0407_STWR001_BH02_3.5-3.6_201015	15-10-2020	Soil									×	
35	0407_QC192_201015	15-10-2020	Soil				×						
	0407_QC292_201015	15-10-2020	Soil										Please send to Eurofins for Suite C
36	0407_STWR002_0.2-0.3_201015	15-10-2020	Soil				×						
37	0407_STWR002_0.5-0.6_201015	15-10-2020	Soil				×						
	0407_STWR002_1.9-2.0_201015	15-10-2020	Soil									×	
38	0407_QC190_201015	15-10-2020	Soil				×						
	0407_QC290_201015	15-10-2020	Soil										Please send to Eurofins for Suite C

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 15-10-2020	**Received by**	Sign [redacted]	Date / Time 15/10	**Temperature Received:**	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	4.7°	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time		

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd
ABN 29 001 584 612

PROJECT OFFICE (Tick one)

☐	BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000	☐	GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227	☐	NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305	☒	SYDNEY: 202 Submarine School, Sub Base Platypus, North Sydney, 2060
✓	MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122	☐	CANBERRA: GPO Box 410, Canberra, ACT 2601	☐	MACKAY: 21 River Street, Mackay, QLD 4741	☐	PERTH: 503 Murray Street, Perth, WA 6001
☐	TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4813	☐	DARWIN: 23 Parap Rd, Dawin, NT 0823				

CLIENT: **Defence Housing Australia**
PROJECT: **Randwick Barracks**
PROJECT NUMBER: **610.30041**
PROJECT MANAGER: [redacted]
PM CONTACT No: [redacted]

LABORATORY: **SGS**
LABORATORY ADDRESS: **Unit 16/33 Maddox St, Alexandria NSW 2015**
SAMPLER: **MR**
SAMPLER CONTACT No: [redacted]
Email Reports and Invoices to: **LQRSYD@slrconsulting.com,** [redacted]

Turnaround Time (TAT)
✓ Standard TAT
☐ Non Standard or Urgent TAT
Required TAT: Standard

COC Number: 4 of 4

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	TRH/BTEXN/PAHs/VOCs	Suit B and G + OCP/OPPs	Suite C	TRH fraction C6-C10 and PFAS				HOLD	Additional Information (Comment on any gross contamination or specific requirements)
39	0407_SYDSEW12_0.1-0.2_201015	15-10-2020	Soil				x						
40	0407_SYDSEW12_0.6-0.7_201015	15-10-2020	Soil				x						
	0407_SYDSEW12_1.9-2.0_201015	15-10-2020	Soil									x	
41	0407_SYDSEW13_0.2-0.3_201015	15-10-2020	Soil				x						
42	0407_SYDSEW13_0.6-0.7_201015	15-10-2020	Soil				x						
	0407_SYDSEW13_2.6-2.7_201015	15-10-2020	Soil									x	
43	0407_SYDSEW14_0.1-0.2_201015	15-10-2020	Soil				x						
	0407_SYDSEW14_0.6-0.7_201015	15-10-2020	Soil									x	
44	0407_SYDSEW14_1.5-1.6_201015	15-10-2020	Soil				x						
45	0407_SYDSEW15_0.2-0.3_201015	15-10-2020	Soil				x						
46	0407_SYDSEW15_0.5-0.6_201015	15-10-2020	Soil				x						
	0407_SYDSEW15_1.9-2.0_201015	15-10-2020	Soil									x	
47	0407_QC521_201015 TS	15-10-2020	Soil					x					
48	0407_QC522_201015 TB.	15-10-2020	Soil					x					

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 15-10-2020	**Received by**	Sign [redacted]	Date / Time 16/10	**Temperature Received:** 4.1°
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

SAMPLE RECEIPT ADVICE

SE212400

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	48

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Fri 16/10/2020
Report Due	Fri 23/10/2020
SGS Reference	**SE212400**

SUBMISSION DETAILS

This is to confirm that 48 samples were received on Friday 16/10/2020. Results are expected to be ready by COB Friday 23/10/2020. Please quote SGS reference SE212400 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	48 Soil
Date documentation received	15/10/2020@7:42pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	1.3°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

PFAS subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420.Asbestos samples not received.
SGS does not have capability to do Sulfide in soil samples.
Micros subcontracted to Symbio Laboratories, 2 Sirius Road, Lane Cove West NSW 2066, NATA Accreditation Number 2455.

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SAMPLE RECEIPT ADVICE

SE212400

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Nitrite Nitrogen in Soil	OC Pesticides in Soil	OP Pesticides in Soil	PCBs in Soil	Soluble Anions (1:5) in Soil by Ion Chromatography	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
001	0407_PSG_BH01_0.2-0.3_201015	-	29	14	11	-	10	81	7
002	0407_PSG_BH01_0.5-0.6_201015	-	29	14	11	-	10	81	7
003	0407_PSG_BH02_0.2-0.3_201015	-	29	14	11	-	10	81	7
004	0407_PSG_BH02_0.5-0.6_201015	-	29	14	11	-	10	81	7
005	0407_PSG_BH03_0.2-0.3_201015	-	29	14	11	-	10	81	7
006	0407_PSG_BH03_0.5-0.6_201015	-	29	14	11	-	10	81	7
007	0407_PSG_BH04_0.5-0.6_201015	-	29	14	11	-	10	81	7
008	0407_PSG_BH04_0.9-1.0_201015	-	29	14	11	-	10	81	7
009	0407_PSG_BH05_0.2-0.3_201015	-	29	14	11	-	10	81	7
010	0407_PSG_BH05_0.5-0.6_201015	-	29	14	11	-	10	81	7
011	0407_PSG_BH06_0.2-0.3_201015	-	29	14	11	-	10	81	7
012	0407_PSG_BH06_0.5-0.6_201015	-	29	14	11	-	10	81	7
013	0407_PSG_BH07_0.2-0.3_201015	-	29	14	11	-	10	81	7
014	0407_PSG_BH07_0.5-0.6_201015	-	29	14	11	-	10	81	7
015	0407_PSG_BH08_0.2-0.3_201015	-	29	14	11	-	10	81	7
016	0407_PSG_BH08_0.5-0.6_201015	-	29	14	11	-	10	81	7
017	0407_PSG_BH09_0.2-0.3_201015	-	29	14	11	-	10	81	7
018	0407_PSG_BH09_0.5-0.6_201015	-	29	14	11	-	10	81	7
019	0407_PSG_BH10_0.2-0.3_201015	-	29	14	11	-	10	81	7
020	0407_PSG_BH10_0.5-0.6_201015	-	29	14	11	-	10	81	7
021	0407_SEP001_BH01_0.2-0.3_201015	1	-	-	-	3	-	81	-
022	0407_SEP001_BH01_1.5-1.6_201015	1	-	-	-	3	-	81	-
023	0407_SEP001_BH02_0.2-0.3_201015	1	-	-	-	3	-	81	-
024	0407_SEP001_BH02_1.5-1.6_201015	1	-	-	-	3	-	81	-

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE212400

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Nitrite Nitrogen in Soil	Soluble Anions (1:5) in Soil by Ion Chromatography	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
025	0407_SEW001_0.4-0.5_201015	1	3	81	-
026	0407_SEW001_1.5-1.6_201015	1	3	81	-
027	0407_SEW002_0.4-0.5_201015	1	3	81	-
028	0407_SEW002_1.5-1.6_201015	1	3	81	-
029	0407_QC189_201015	1	3	81	-
030	0407_STWR001_BH01_0.2-0.3_201015	1	3	81	-
031	0407_STWR001_BH01_1.5-1.6_201015	1	3	81	-
032	0407_QC191_201015	1	3	81	-
033	0407_STWR001_BH02_0.2-0.3_201015	1	3	81	-
034	0407_STWR001_BH02_1.5-1.6_2001015	1	3	81	-
035	0407_QC192_201015	1	3	81	-
036	0407_STWR002_0.2-0.3_201015	1	3	81	-
037	0407_STWR002_0.5-0.6_201015	1	3	81	-
038	0407_QC190_201015	1	3	81	-
039	0407_SYDSEW12_0.1-0.2_201015	1	3	81	-
040	0407_SYDSEW12_0.5-0.7_201015	1	3	81	-
041	0407_SYDSEW13_0.2-0.3_201015	1	3	81	-
042	0407_SYDSEW13_0.6-0.7_201015	1	3	81	-
043	0407_SYDSEW14_0.1-0.2_201015	1	3	81	-
044	0407_SYDSEW14_1.5-1.6_201015	1	3	81	-
045	0407_SYDSEW15_0.2-0.3_201015	1	3	81	-
046	0407_SYDSEW15_0.5-0.6_201015	1	3	81	-
047	0407_QC521_201015	-	-	11	7
048	0407_QC522_201015	-	-	11	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE212400

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Ammonia Nitrogen (soluble) in Soil	Mercury in Soil	Moisture Content	Per- and Polyfluoroalkyl Substances (PFAS) in	TKN Kjeldahl Digestion by Discrete Analyser in Soil	Total Phosphorus by Kjeldahl Digestion DA in	Total Recoverable Elements in Soil/Waste
001	0407_PSG_BH01_0.2-0.3_201015	-	1	1	55	-	-	7
002	0407_PSG_BH01_0.5-0.6_201015	-	1	1	55	-	-	7
003	0407_PSG_BH02_0.2-0.3_201015	-	1	1	55	-	-	7
004	0407_PSG_BH02_0.5-0.6_201015	-	1	1	55	-	-	7
005	0407_PSG_BH03_0.2-0.3_201015	-	1	1	55	-	-	7
006	0407_PSG_BH03_0.5-0.6_201015	-	1	1	55	-	-	7
007	0407_PSG_BH04_0.5-0.6_201015	-	1	1	55	-	-	7
008	0407_PSG_BH04_0.9-1.0_201015	-	1	1	55	-	-	7
009	0407_PSG_BH05_0.2-0.3_201015	-	1	1	55	-	-	7
010	0407_PSG_BH05_0.5-0.6_201015	-	1	1	55	-	-	7
011	0407_PSG_BH06_0.2-0.3_201015	-	1	1	55	-	-	7
012	0407_PSG_BH06_0.5-0.6_201015	-	1	1	55	-	-	7
013	0407_PSG_BH07_0.2-0.3_201015	-	1	1	55	-	-	7
014	0407_PSG_BH07_0.5-0.6_201015	-	1	1	55	-	-	7
015	0407_PSG_BH08_0.2-0.3_201015	-	1	1	55	-	-	7
016	0407_PSG_BH08_0.5-0.6_201015	-	1	1	55	-	-	7
017	0407_PSG_BH09_0.2-0.3_201015	-	1	1	55	-	-	7
018	0407_PSG_BH09_0.5-0.6_201015	-	1	1	55	-	-	7
019	0407_PSG_BH10_0.2-0.3_201015	-	1	1	55	-	-	7
020	0407_PSG_BH10_0.5-0.6_201015	-	1	1	55	-	-	7
021	0407_SEP001_BH01_0.2-0.3_201015	1	1	1	55	2	1	11
022	0407_SEP001_BH01_1.5-1.6_201015	1	1	1	55	2	1	11
023	0407_SEP001_BH02_0.2-0.3_201015	1	1	1	55	2	1	11
024	0407_SEP001_BH02_1.5-1.6_201015	1	1	1	55	2	1	11

CONTINUED OVERLEAF

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SAMPLE RECEIPT ADVICE

SE212400

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Ammonia Nitrogen (soluble) in Soil	Mercury in Soil	Moisture Content	Per- and Polyfluoroalkyl Substances (PFAS) in	TKN Kjeldahl Digestion by Discrete Analyser in Soil	Total Phosphorus by Kjeldahl Digestion DA in	Total Recoverable Elements in Soil/Waste
025	0407_SEW001_0.4-0.5_201015	1	1	1	55	2	1	11
026	0407_SEW001_1.5-1.6_201015	1	1	1	55	2	1	11
027	0407_SEW002_0.4-0.5_201015	1	1	1	55	2	1	11
028	0407_SEW002_1.5-1.6_201015	1	1	1	55	2	1	11
029	0407_QC189_201015	1	1	1	55	2	1	11
030	0407_STWR001_BH01_0.2-0.3_201015	1	1	1	55	2	1	11
031	0407_STWR001_BH01_1.5-1.6_201015	1	1	1	55	2	1	11
032	0407_QC191_201015	1	1	1	55	2	1	11
033	0407_STWR001_BH02_0.2-0.3_201015	1	1	1	55	2	1	11
034	0407_STWR001_BH02_1.5-1.6_2001015	1	1	1	55	2	1	11
035	0407_QC192_201015	1	1	1	55	2	1	11
036	0407_STWR002_0.2-0.3_201015	1	1	1	55	2	1	11
037	0407_STWR002_0.5-0.6_201015	1	1	1	55	2	1	11
038	0407_QC190_201015	1	1	1	55	2	1	11
039	0407_SYDSEW12_0.1-0.2_201015	1	1	1	55	2	1	11
040	0407_SYDSEW12_0.5-0.7_201015	1	1	1	55	2	1	11
041	0407_SYDSEW13_0.2-0.3_201015	1	1	1	55	2	1	11
042	0407_SYDSEW13_0.6-0.7_201015	1	1	1	55	2	1	11
043	0407_SYDSEW14_0.1-0.2_201015	1	1	1	55	2	1	11
044	0407_SYDSEW14_1.5-1.6_201015	1	1	1	55	2	1	11
045	0407_SYDSEW15_0.2-0.3_201015	1	1	1	55	2	1	11
046	0407_SYDSEW15_0.5-0.6_201015	1	1	1	55	2	1	11

CONTINUED OVERLEAF

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SAMPLE RECEIPT ADVICE

SE212400

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Sample Subcontracted
021	0407_SEP001_BH01_0.2-0.3_201015	1
022	0407_SEP001_BH01_1.5-1.6_201015	1
023	0407_SEP001_BH02_0.2-0.3_201015	1
024	0407_SEP001_BH02_1.5-1.6_201015	1

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
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SAMPLE RECEIPT ADVICE

SE212400

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Sample Subcontracted
025	0407_SEW001_0.4-0.5_201015	1
026	0407_SEW001_1.5-1.6_201015	1
027	0407_SEW002_0.4-0.5_201015	1
030	0407_STWR001_BH01_0.2-0.3_201015	1
031	0407_STWR001_BH01_1.5-1.6_201015	1
033	0407_STWR001_BH02_0.2-0.3_201015	1
034	0407_STWR001_BH02_1.5-1.6_2001015	1
035	0407_QC192_201015	1
036	0407_STWR002_0.2-0.3_201015	1
037	0407_STWR002_0.5-0.6_201015	1
039	0407_SYDSEW12_0.1-0.2_201015	1
040	0407_SYDSEW12_0.5-0.7_201015	1
041	0407_SYDSEW13_0.2-0.3_201015	1
042	0407_SYDSEW13_0.6-0.7_201015	1
043	0407_SYDSEW14_0.1-0.2_201015	1
044	0407_SYDSEW14_1.5-1.6_201015	1
045	0407_SYDSEW15_0.2-0.3_201015	1
046	0407_SYDSEW15_0.5-0.6_201015	1

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	48

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE212400 R0**
Date Received	16/10/2020
Date Reported	26/10/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

Micros subcontracted to Symbio Laboratories, 2 Sirius Road, Lane Cove West NSW 2066, NATA Accreditation Number 2455. Report S958132

PFAS subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Number. 2562/14420. Report Number ME317031

Some PFAS surrogate recovery values are out of range due to sample matrix interference .

SIGNATORIES

[redacted]

Chemist | Senior Organic Chemist/Metals Chemist | Metals/Inorganics Team Leader

[redacted]

Senior Chemist | Organic Section Head | Inorganic/Metals Chemist

VOC's in Soil [AN433] Tested: 19/10/2020

PARAMETER	UOM	LOR	0407_PSG_BH01_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.001	0407_PSG_BH01_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.002	0407_PSG_BH02_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.003	0407_PSG_BH02_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.004	0407_PSG_BH03_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.005
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	**1.0**	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 19/10/2020 (continued)

PARAMETER	UOM	LOR	0407_PSG_BH01_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.001	0407_PSG_BH01_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.002	0407_PSG_BH02_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.003	0407_PSG_BH02_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.004	0407_PSG_BH03_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.005
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 19/10/2020 (continued)

PARAMETER	UOM	LOR	0407_PSG_BH03_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.006	0407_PSG_BH04_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.007	0407_PSG_BH04_0.5 1.0_201015 SOIL - 15/10/2020 SE212400.008	0407_PSG_BH05_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.009	0407_PSG_BH05_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.010
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 19/10/2020 (continued)

PARAMETER	UOM	LOR	0407_PSG_BH03_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.006	0407_PSG_BH04_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.007	0407_PSG_BH04_0.5 1.0_201015 SOIL - 15/10/2020 SE212400.008	0407_PSG_BH05_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.009	0407_PSG_BH05_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.010
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 19/10/2020 (continued)

PARAMETER	UOM	LOR	0407_PSG_BH06_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.011	0407_PSG_BH06_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.012	0407_PSG_BH07_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.013	0407_PSG_BH07_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.014	0407_PSG_BH08_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.015
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 19/10/2020 (continued)

PARAMETER	UOM	LOR	0407_PSG_BH06_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.011	0407_PSG_BH06_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.012	0407_PSG_BH07_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.013	0407_PSG_BH07_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.014	0407_PSG_BH08_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.015
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 19/10/2020 (continued)

PARAMETER	UOM	LOR	0407_PSG_BH08_0.5-0.6_201015 SOIL - 15/10/2020 SE212400.016	0407_PSG_BH09_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.017	0407_PSG_BH09_0.5-0.6_201015 SOIL - 15/10/2020 SE212400.018	0407_PSG_BH10_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.019	0407_PSG_BH10_0.5-0.6_201015 SOIL - 15/10/2020 SE212400.020
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 19/10/2020 (continued)

PARAMETER	UOM	LOR	0407_PSG_BH08_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.016	0407_PSG_BH09_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.017	0407_PSG_BH09_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.018	0407_PSG_BH10_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.019	0407_PSG_BH10_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.020
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 19/10/2020 (continued)

PARAMETER	UOM	LOR	0407_SEP001_BH01 0.2-0.3_201015 SOIL - 15/10/2020 SE212400.021	0407_SEP001_BH01 1.5-1.6_201015 SOIL - 15/10/2020 SE212400.022	0407_SEP001_BH02 0.2-0.3_201015 SOIL - 15/10/2020 SE212400.023	0407_SEP001_BH02 1.5-1.6_201015 SOIL - 15/10/2020 SE212400.024	0407_SEW001_0.4-0.5_201015 SOIL - 15/10/2020 SE212400.025
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 19/10/2020 (continued)

PARAMETER	UOM	LOR	0407_SEP001_BH01 0.2-0.3_201015 SOIL - 15/10/2020 SE212400.021	0407_SEP001_BH01 1.5-1.6_201015 SOIL - 15/10/2020 SE212400.022	0407_SEP001_BH02 0.2-0.3_201015 SOIL - 15/10/2020 SE212400.023	0407_SEP001_BH02 1.5-1.6_201015 SOIL - 15/10/2020 SE212400.024	0407_SEW001_0.4-0.5_201015 SOIL - 15/10/2020 SE212400.025
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 19/10/2020 (continued)

PARAMETER	UOM	LOR	0407_SEW001_1.5-1 6_201015 SOIL - 15/10/2020 SE212400.026	0407_SEW002_0.4-0 5_201015 SOIL - 15/10/2020 SE212400.027	0407_SEW002_1.5-1 6_201015 SOIL - 15/10/2020 SE212400.028	0407_QC189_20101 SOIL - 15/10/2020 SE212400.029	0407_STWR001_BH(1_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.030
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 19/10/2020 (continued)

PARAMETER	UOM	LOR	0407_SEW001_1.5-16_201015 SOIL - 15/10/2020 SE212400.026	0407_SEW002_0.4-05_201015 SOIL - 15/10/2020 SE212400.027	0407_SEW002_1.5-16_201015 SOIL - 15/10/2020 SE212400.028	0407_QC189_20101(SOIL - 15/10/2020 SE212400.029	0407_STWR001_BH(1_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.030
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 19/10/2020 (continued)

PARAMETER	UOM	LOR	0407_STWR001_BH(1_1.5-1.6_201015 SOIL - 15/10/2020 SE212400.031	0407_QC191_20101! SOIL - 15/10/2020 SE212400.032	0407_STWR001_BH(2_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.033	0407_STWR001_BH(2_1.5-1.6_2001015 SOIL - 15/10/2020 SE212400.034	0407_QC192_20101! SOIL - 15/10/2020 SE212400.035
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 19/10/2020 (continued)

PARAMETER	UOM	LOR	0407_STWR001_BH(1_1.5-1.6_201015 SOIL - 15/10/2020 SE212400.031	0407_QC191_20101! SOIL - 15/10/2020 SE212400.032	0407_STWR001_BH(2_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.033	0407_STWR001_BH(2_1.5-1.6_2001015 SOIL - 15/10/2020 SE212400.034	0407_QC192_20101! SOIL - 15/10/2020 SE212400.035
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 19/10/2020 (continued)

PARAMETER	UOM	LOR	0407_STWR002_0.2-.3_201015 SOIL - 15/10/2020 SE212400.036	0407_STWR002_0.5-.6_201015 SOIL - 15/10/2020 SE212400.037	0407_QC190_20101 SOIL - 15/10/2020 SE212400.038	0407_SYDSEW12_0.-0.2_201015 SOIL - 15/10/2020 SE212400.039	0407_SYDSEW12_0.-0.7_201015 SOIL - 15/10/2020 SE212400.040
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 19/10/2020 (continued)

PARAMETER	UOM	LOR	0407_STWR002_0.2-.3_201015 SOIL - 15/10/2020 SE212400.036	0407_STWR002_0.5-.6_201015 SOIL - 15/10/2020 SE212400.037	0407_QC190_20101 SOIL - 15/10/2020 SE212400.038	0407_SYDSEW12_0.-0.2_201015 SOIL - 15/10/2020 SE212400.039	0407_SYDSEW12_0.-0.7_201015 SOIL - 15/10/2020 SE212400.040
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 19/10/2020 (continued)

PARAMETER	UOM	LOR	0407_SYDSEW13_0.-0.3_201015 SOIL - 15/10/2020 SE212400.041	0407_SYDSEW13_0.-0.7_201015 SOIL - 15/10/2020 SE212400.042	0407_SYDSEW14_0.-0.2_201015 SOIL - 15/10/2020 SE212400.043	0407_SYDSEW14_1.-1.6_201015 SOIL - 15/10/2020 SE212400.044	0407_SYDSEW15_0.-0.3_201015 SOIL - 15/10/2020 SE212400.045
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 19/10/2020 (continued)

PARAMETER	UOM	LOR	0407_SYDSEW13_0.-0.3_201015 SOIL - 15/10/2020 SE212400.041	0407_SYDSEW13_0.-0.7_201015 SOIL - 15/10/2020 SE212400.042	0407_SYDSEW14_0.-0.2_201015 SOIL - 15/10/2020 SE212400.043	0407_SYDSEW14_1.-1.6_201015 SOIL - 15/10/2020 SE212400.044	0407_SYDSEW15_0.-0.3_201015 SOIL - 15/10/2020 SE212400.045
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 19/10/2020 (continued)

PARAMETER	UOM	LOR	0407_SYDSEW15_0.-0.6_201015 SOIL - 15/10/2020 SE212400.046	0407_QC521_20101 SOIL - 15/10/2020 SE212400.047	0407_QC522_20101 SOIL - 15/10/2020 SE212400.048
Benzene	mg/kg	0.1	<0.1	[117%]	<0.1
Toluene	mg/kg	0.1	<0.1	[116%]	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	[112%]	<0.1
m/p-xylene	mg/kg	0.2	<0.2	[110%]	<0.2
o-xylene	mg/kg	0.1	<0.1	[109%]	<0.1
Total Xylenes	mg/kg	0.3	<0.3	-	<0.3
Total BTEX	mg/kg	0.6	<0.6	-	<0.6
Naphthalene	mg/kg	0.1	<0.1	-	<0.1
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	-	-
Chloromethane	mg/kg	1	<1	-	-
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	-	-
Bromomethane	mg/kg	1	<1	-	-
Chloroethane	mg/kg	1	<1	-	-
Trichlorofluoromethane	mg/kg	1	<1	-	-
Acetone (2-propanone)	mg/kg	10	<10	-	-
Iodomethane	mg/kg	5	<5	-	-
1,1-dichloroethene	mg/kg	0.1	<0.1	-	-
Acrylonitrile	mg/kg	0.1	<0.1	-	-
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	-	-
Allyl chloride	mg/kg	0.1	<0.1	-	-
Carbon disulfide	mg/kg	0.5	<0.5	-	-
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	-	-
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	-	-
1,1-dichloroethane	mg/kg	0.1	<0.1	-	-
Vinyl acetate	mg/kg	10	<10	-	-
MEK (2-butanone)	mg/kg	10	<10	-	-
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	-	-
Bromochloromethane	mg/kg	0.1	<0.1	-	-
Chloroform	mg/kg	0.1	<0.1	-	-
2,2-dichloropropane	mg/kg	0.1	<0.1	-	-
1,2-dichloroethane	mg/kg	0.1	<0.1	-	-
1,1,1-trichloroethane	mg/kg	0.1	<0.1	-	-
1,1-dichloropropene	mg/kg	0.1	<0.1	-	-
Carbon tetrachloride	mg/kg	0.1	<0.1	-	-
Dibromomethane	mg/kg	0.1	<0.1	-	-
1,2-dichloropropane	mg/kg	0.1	<0.1	-	-
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	-	-
2-nitropropane	mg/kg	10	<10	-	-
Bromodichloromethane	mg/kg	0.1	<0.1	-	-
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	-	-
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	-	-
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	-	-
1,1,2-trichloroethane	mg/kg	0.1	<0.1	-	-
1,3-dichloropropane	mg/kg	0.1	<0.1	-	-
Chlorodibromomethane	mg/kg	0.1	<0.1	-	-
2-hexanone (MBK)	mg/kg	5	<5	-	-
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	-	-
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	-	-
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	-	-
Chlorobenzene	mg/kg	0.1	<0.1	-	-
Bromoform	mg/kg	0.1	<0.1	-	-
cis-1,4-dichloro-2-butene	mg/kg	1	<1	-	-
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	-	-
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	-	-
1,2,3-trichloropropane	mg/kg	0.1	<0.1	-	-
trans-1,4-dichloro-2-butene	mg/kg	1	<1	-	-

VOC's in Soil [AN433] Tested: 19/10/2020 (continued)

PARAMETER	UOM	LOR	0407_SYDSEW15_0.-0.6_201015 SOIL - 15/10/2020 SE212400.046	0407_QC521_20101 SOIL - 15/10/2020 SE212400.047	0407_QC522_20101 SOIL - 15/10/2020 SE212400.048
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	-	-
Bromobenzene	mg/kg	0.1	<0.1	-	-
n-propylbenzene	mg/kg	0.1	<0.1	-	-
2-chlorotoluene	mg/kg	0.1	<0.1	-	-
4-chlorotoluene	mg/kg	0.1	<0.1	-	-
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	-	-
tert-butylbenzene	mg/kg	0.1	<0.1	-	-
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	-	-
sec-butylbenzene	mg/kg	0.1	<0.1	-	-
1,3-dichlorobenzene	mg/kg	0.1	<0.1	-	-
1,4-dichlorobenzene	mg/kg	0.1	<0.1	-	-
p-isopropyltoluene	mg/kg	0.1	<0.1	-	-
1,2-dichlorobenzene	mg/kg	0.1	<0.1	-	-
n-butylbenzene	mg/kg	0.1	<0.1	-	-
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	-	-
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	-	-
Hexachlorobutadiene	mg/kg	0.1	<0.1	-	-
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	-	-
Total VOC*	mg/kg	24	<24	-	-
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	-	-
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	-	-
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	-	-

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 19/10/2020

PARAMETER	UOM	LOR	0407_PSG_BH01_0.2_0.3_201015 SOIL - 15/10/2020 SE212400.001	0407_PSG_BH01_0.5_0.6_201015 SOIL - 15/10/2020 SE212400.002	0407_PSG_BH02_0.2_0.3_201015 SOIL - 15/10/2020 SE212400.003	0407_PSG_BH02_0.5_0.6_201015 SOIL - 15/10/2020 SE212400.004	0407_PSG_BH03_0.2_0.3_201015 SOIL - 15/10/2020 SE212400.005
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_PSG_BH03_0.5_0.6_201015 SOIL - 15/10/2020 SE212400.006	0407_PSG_BH04_0.5_0.6_201015 SOIL - 15/10/2020 SE212400.007	0407_PSG_BH04_0.9_1.0_201015 SOIL - 15/10/2020 SE212400.008	0407_PSG_BH05_0.2_0.3_201015 SOIL - 15/10/2020 SE212400.009	0407_PSG_BH05_0.5_0.6_201015 SOIL - 15/10/2020 SE212400.010
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_PSG_BH06_0.2_0.3_201015 SOIL - 15/10/2020 SE212400.011	0407_PSG_BH06_0.5_0.6_201015 SOIL - 15/10/2020 SE212400.012	0407_PSG_BH07_0.2_0.3_201015 SOIL - 15/10/2020 SE212400.013	0407_PSG_BH07_0.5_0.6_201015 SOIL - 15/10/2020 SE212400.014	0407_PSG_BH08_0.2_0.3_201015 SOIL - 15/10/2020 SE212400.015
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_PSG_BH08_0.5_0.6_201015 SOIL - 15/10/2020 SE212400.016	0407_PSG_BH09_0.2_0.3_201015 SOIL - 15/10/2020 SE212400.017	0407_PSG_BH09_0.5_0.6_201015 SOIL - 15/10/2020 SE212400.018	0407_PSG_BH10_0.2_0.3_201015 SOIL - 15/10/2020 SE212400.019	0407_PSG_BH10_0.5_0.6_201015 SOIL - 15/10/2020 SE212400.020
TRH C6-C9	mg/kg	20	<20	<20	<20	<20	<20
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
TRH C6-C10	mg/kg	25	<25	<25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25	<25	<25

PARAMETER	UOM	LOR	0407_QC521_201015 SOIL - 15/10/2020 SE212400.047	0407_QC522_201015 SOIL - 15/10/2020 SE212400.048
TRH C6-C9	mg/kg	20	<20	<20
Benzene (F0)	mg/kg	0.1	[117%]	<0.1
TRH C6-C10	mg/kg	25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	-	<25

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 19/10/2020

PARAMETER	UOM	LOR	0407_PSG_BH01_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.001	0407_PSG_BH01_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.002	0407_PSG_BH02_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.003	0407_PSG_BH02_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.004	0407_PSG_BH03_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.005
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_PSG_BH03_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.006	0407_PSG_BH04_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.007	0407_PSG_BH04_0.5 1.0_201015 SOIL - 15/10/2020 SE212400.008	0407_PSG_BH05_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.009	0407_PSG_BH05_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.010
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

PARAMETER	UOM	LOR	0407_PSG_BH06_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.011	0407_PSG_BH06_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.012	0407_PSG_BH07_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.013	0407_PSG_BH07_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.014	0407_PSG_BH08_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.015
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 19/10/2020 (continued)

PARAMETER	UOM	LOR	0407_PSG_BH08_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.016	0407_PSG_BH09_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.017	0407_PSG_BH09_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.018	0407_PSG_BH10_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.019	0407_PSG_BH10_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.020
TRH C10-C14	mg/kg	20	<20	<20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210	<210	<210

OC Pesticides in Soil [AN420] Tested: 19/10/2020

PARAMETER	UOM	LOR	0407_PSG_BH01_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.001	0407_PSG_BH01_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.002	0407_PSG_BH02_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.003	0407_PSG_BH02_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.004	0407_PSG_BH03_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.005
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 19/10/2020 (continued)

PARAMETER	UOM	LOR	0407_PSG_BH03_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.006	0407_PSG_BH04_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.007	0407_PSG_BH04_0.5 1.0_201015 SOIL - 15/10/2020 SE212400.008	0407_PSG_BH05_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.009	0407_PSG_BH05_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.010
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 19/10/2020 (continued)

PARAMETER	UOM	LOR	0407_PSG_BH06_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.011	0407_PSG_BH06_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.012	0407_PSG_BH07_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.013	0407_PSG_BH07_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.014	0407_PSG_BH08_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.015
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OC Pesticides in Soil [AN420] Tested: 19/10/2020 (continued)

PARAMETER	UOM	LOR	0407_PSG_BH08_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.016	0407_PSG_BH09_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.017	0407_PSG_BH09_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.018	0407_PSG_BH10_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.019	0407_PSG_BH10_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.020
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1	<1	<1

OP Pesticides in Soil [AN420] Tested: 19/10/2020

PARAMETER	UOM	LOR	0407_PSG_BH01_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.001	0407_PSG_BH01_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.002	0407_PSG_BH02_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.003	0407_PSG_BH02_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.004	0407_PSG_BH03_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.005
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_PSG_BH03_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.006	0407_PSG_BH04_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.007	0407_PSG_BH04_0.9 1.0_201015 SOIL - 15/10/2020 SE212400.008	0407_PSG_BH05_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.009	0407_PSG_BH05_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.010
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PARAMETER	UOM	LOR	0407_PSG_BH06_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.011	0407_PSG_BH06_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.012	0407_PSG_BH07_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.013	0407_PSG_BH07_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.014	0407_PSG_BH08_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.015
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

OP Pesticides in Soil [AN420] Tested: 19/10/2020 (continued)

PARAMETER	UOM	LOR	0407_PSG_BH08_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.016	0407_PSG_BH09_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.017	0407_PSG_BH09_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.018	0407_PSG_BH10_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.019	0407_PSG_BH10_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.020
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7	<1.7	<1.7

PCBs in Soil [AN420] Tested: 19/10/2020

PARAMETER	UOM	LOR	0407_PSG_BH01_0.2_0.3_201015 SOIL - 15/10/2020 SE212400.001	0407_PSG_BH01_0.5_0.6_201015 SOIL - 15/10/2020 SE212400.002	0407_PSG_BH02_0.2_0.3_201015 SOIL - 15/10/2020 SE212400.003	0407_PSG_BH02_0.5_0.6_201015 SOIL - 15/10/2020 SE212400.004	0407_PSG_BH03_0.2_0.3_201015 SOIL - 15/10/2020 SE212400.005
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_PSG_BH03_0.5_0.6_201015 SOIL - 15/10/2020 SE212400.006	0407_PSG_BH04_0.5_0.6_201015 SOIL - 15/10/2020 SE212400.007	0407_PSG_BH04_0.5_1.0_201015 SOIL - 15/10/2020 SE212400.008	0407_PSG_BH05_0.2_0.3_201015 SOIL - 15/10/2020 SE212400.009	0407_PSG_BH05_0.5_0.6_201015 SOIL - 15/10/2020 SE212400.010
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_PSG_BH06_0.2_0.3_201015 SOIL - 15/10/2020 SE212400.011	0407_PSG_BH06_0.5_0.6_201015 SOIL - 15/10/2020 SE212400.012	0407_PSG_BH07_0.2_0.3_201015 SOIL - 15/10/2020 SE212400.013	0407_PSG_BH07_0.5_0.6_201015 SOIL - 15/10/2020 SE212400.014	0407_PSG_BH08_0.2_0.3_201015 SOIL - 15/10/2020 SE212400.015
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

PCBs in Soil [AN420] Tested: 19/10/2020 (continued)

PARAMETER	UOM	LOR	0407_PSG_BH08_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.016	0407_PSG_BH09_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.017	0407_PSG_BH09_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.018	0407_PSG_BH10_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.019	0407_PSG_BH10_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.020
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1	<1	<1

Soluble Anions (1:5) in Soil by Ion Chromatography [AN245] Tested: 21/10/2020

PARAMETER	UOM	LOR	0407_SEP001_BH01 0.2-0.3_201015 SOIL - 15/10/2020 SE212400.021	0407_SEP001_BH01 1.5-1.6_201015 SOIL - 15/10/2020 SE212400.022	0407_SEP001_BH02 0.2-0.3_201015 SOIL - 15/10/2020 SE212400.023	0407_SEP001_BH02 1.5-1.6_201015 SOIL - 15/10/2020 SE212400.024	0407_SEW001_0.4-0 5_201015 SOIL - 15/10/2020 SE212400.025
Nitrate Nitrogen	mg/kg	0.025	15	0.23	1.3	0.11	2.2
ortho Phosphate as P	mg/kg	0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Sulfate	mg/kg	5	44	6.5	2600	81	<5.0

PARAMETER	UOM	LOR	0407_SEW001_1.5-1 6_201015 SOIL - 15/10/2020 SE212400.026	0407_SEW002_0.4-0 5_201015 SOIL - 15/10/2020 SE212400.027	0407_SEW002_1.5-1 6_201015 SOIL - 15/10/2020 SE212400.028	0407_QC189_20101 SOIL - 15/10/2020 SE212400.029	0407_STWR001_BH 1_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.030
Nitrate Nitrogen	mg/kg	0.025	0.45	0.39	0.30	0.44	0.12
ortho Phosphate as P	mg/kg	0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Sulfate	mg/kg	5	<5.0	<5.0	<5.0	<5.0	1000

PARAMETER	UOM	LOR	0407_STWR001_BH 1_1.5-1.6_201015 SOIL - 15/10/2020 SE212400.031	0407_QC191_20101 SOIL - 15/10/2020 SE212400.032	0407_STWR001_BH 2_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.033	0407_STWR001_BH 2_1.5-1.6_2001015 SOIL - 15/10/2020 SE212400.034	0407_QC192_20101 SOIL - 15/10/2020 SE212400.035
Nitrate Nitrogen	mg/kg	0.025	0.15	0.12	0.57	0.23	0.24
ortho Phosphate as P	mg/kg	0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Sulfate	mg/kg	5	210	240	9000	62	63

PARAMETER	UOM	LOR	0407_STWR002_0.2- .3_201015 SOIL - 15/10/2020 SE212400.036	0407_STWR002_0.5- .6_201015 SOIL - 15/10/2020 SE212400.037	0407_QC190_20101 SOIL - 15/10/2020 SE212400.038	0407_SYDSEW12_0. -0.2_201015 SOIL - 15/10/2020 SE212400.039	0407_SYDSEW12_0. -0.7_201015 SOIL - 15/10/2020 SE212400.040
Nitrate Nitrogen	mg/kg	0.025	4.2	0.44	0.15	0.17	0.17
ortho Phosphate as P	mg/kg	0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Sulfate	mg/kg	5	30	20	<5.0	<5.0	<5.0

PARAMETER	UOM	LOR	0407_SYDSEW13_0. -0.3_201015 SOIL - 15/10/2020 SE212400.041	0407_SYDSEW13_0. -0.7_201015 SOIL - 15/10/2020 SE212400.042	0407_SYDSEW14_0. -0.2_201015 SOIL - 15/10/2020 SE212400.043	0407_SYDSEW14_1. -1.6_201015 SOIL - 15/10/2020 SE212400.044	0407_SYDSEW15_0. -0.3_201015 SOIL - 15/10/2020 SE212400.045
Nitrate Nitrogen	mg/kg	0.025	0.21	0.095	0.11	0.11	0.053
ortho Phosphate as P	mg/kg	0.25	<0.25	<0.25	<0.25	<0.25	<0.25
Sulfate	mg/kg	5	7.0	<5.0	<5.0	9.5	5.6

PARAMETER	UOM	LOR	0407_SYDSEW15_0. -0.6_201015 SOIL - 15/10/2020 SE212400.046
Nitrate Nitrogen	mg/kg	0.025	0.037
ortho Phosphate as P	mg/kg	0.25	<0.25
Sulfate	mg/kg	5	6.1

Nitrite Nitrogen in Soil [AN277] Tested: 21/10/2020

PARAMETER	UOM	LOR	0407_SEP001_BH01 0.2-0.3_201015 SOIL - 15/10/2020 SE212400.021	0407_SEP001_BH01 1.5-1.6_201015 SOIL - 15/10/2020 SE212400.022	0407_SEP001_BH02 0.2-0.3_201015 SOIL - 15/10/2020 SE212400.023	0407_SEP001_BH02 1.5-1.6_201015 SOIL - 15/10/2020 SE212400.024	0407_SEW001_0.4-0 5_201015 SOIL - 15/10/2020 SE212400.025
Nitrite, NO_2 as N in Soil*	mg/kg	0.05	**0.23**	<0.05	**0.07**	<0.05	<0.05

PARAMETER	UOM	LOR	0407_SEW001_1.5-1 6_201015 SOIL - 15/10/2020 SE212400.026	0407_SEW002_0.4-0 5_201015 SOIL - 15/10/2020 SE212400.027	0407_SEW002_1.5-1 6_201015 SOIL - 15/10/2020 SE212400.028	0407_QC189_20101 SOIL - 15/10/2020 SE212400.029	0407_STWR001_BH 1_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.030
Nitrite, NO_2 as N in Soil*	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_STWR001_BH 1_1.5-1.6_201015 SOIL - 15/10/2020 SE212400.031	0407_QC191_20101 SOIL - 15/10/2020 SE212400.032	0407_STWR001_BH 2_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.033	0407_STWR001_BH 2_1.5-1.6_2001015 SOIL - 15/10/2020 SE212400.034	0407_QC192_20101 SOIL - 15/10/2020 SE212400.035
Nitrite, NO_2 as N in Soil*	mg/kg	0.05	<0.05	<0.05	**0.06**	<0.05	<0.05

PARAMETER	UOM	LOR	0407_STWR002_0.2- .3_201015 SOIL - 15/10/2020 SE212400.036	0407_STWR002_0.5- .6_201015 SOIL - 15/10/2020 SE212400.037	0407_QC190_20101 SOIL - 15/10/2020 SE212400.038	0407_SYDSEW12_0. -0.2_201015 SOIL - 15/10/2020 SE212400.039	0407_SYDSEW12_0. -0.7_201015 SOIL - 15/10/2020 SE212400.040
Nitrite, NO_2 as N in Soil*	mg/kg	0.05	**0.09**	**0.11**	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_SYDSEW13_0. -0.3_201015 SOIL - 15/10/2020 SE212400.041	0407_SYDSEW13_0. -0.7_201015 SOIL - 15/10/2020 SE212400.042	0407_SYDSEW14_0. -0.2_201015 SOIL - 15/10/2020 SE212400.043	0407_SYDSEW14_1. -1.6_201015 SOIL - 15/10/2020 SE212400.044	0407_SYDSEW15_0. -0.3_201015 SOIL - 15/10/2020 SE212400.045
Nitrite, NO_2 as N in Soil*	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_SYDSEW15_0. -0.6_201015 SOIL - 15/10/2020 SE212400.046
Nitrite, NO_2 as N in Soil*	mg/kg	0.05	<0.05

TKN Kjeldahl Digestion by Discrete Analyser in Soil [AN292] Tested: 21/10/2020

PARAMETER	UOM	LOR	0407_SEP001_BH01 0.2-0.3_201015 SOIL - 15/10/2020 SE212400.021	0407_SEP001_BH01 1.5-1.6_201015 SOIL - 15/10/2020 SE212400.022	0407_SEP001_BH02 0.2-0.3_201015 SOIL - 15/10/2020 SE212400.023	0407_SEP001_BH02 1.5-1.6_201015 SOIL - 15/10/2020 SE212400.024	0407_SEW001_0.4-0 5_201015 SOIL - 15/10/2020 SE212400.025
Total Kjeldahl Nitrogen	mg/kg	40	1700	370	1300	<40	260
Total Nitrogen (calc)	mg/kg	40	1700	370	1300	<40	260

PARAMETER	UOM	LOR	0407_SEW001_1.5-1 6_201015 SOIL - 15/10/2020 SE212400.026	0407_SEW002_0.4-0 5_201015 SOIL - 15/10/2020 SE212400.027	0407_SEW002_1.5-1 6_201015 SOIL - 15/10/2020 SE212400.028	0407_QC189_20101 SOIL - 15/10/2020 SE212400.029	0407_STWR001_BH 1_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.030
Total Kjeldahl Nitrogen	mg/kg	40	340	<40	<40	<40	160
Total Nitrogen (calc)	mg/kg	40	340	<40	<40	<40	160

PARAMETER	UOM	LOR	0407_STWR001_BH 1_1.5-1.6_201015 SOIL - 15/10/2020 SE212400.031	0407_QC191_20101 SOIL - 15/10/2020 SE212400.032	0407_STWR001_BH 2_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.033	0407_STWR001_BH 2_1.5-1.6_2001015 SOIL - 15/10/2020 SE212400.034	0407_QC192_20101 SOIL - 15/10/2020 SE212400.035
Total Kjeldahl Nitrogen	mg/kg	40	510	510	1400	<40	<40
Total Nitrogen (calc)	mg/kg	40	510	510	1400	<40	<40

PARAMETER	UOM	LOR	0407_STWR002_0.2- .3_201015 SOIL - 15/10/2020 SE212400.036	0407_STWR002_0.5- .6_201015 SOIL - 15/10/2020 SE212400.037	0407_QC190_20101 SOIL - 15/10/2020 SE212400.038	0407_SYDSEW12_0. -0.2_201015 SOIL - 15/10/2020 SE212400.039	0407_SYDSEW12_0. -0.7_201015 SOIL - 15/10/2020 SE212400.040
Total Kjeldahl Nitrogen	mg/kg	40	2000	<40	<40	120	71
Total Nitrogen (calc)	mg/kg	40	2000	<40	<40	120	71

PARAMETER	UOM	LOR	0407_SYDSEW13_0. -0.3_201015 SOIL - 15/10/2020 SE212400.041	0407_SYDSEW13_0. -0.7_201015 SOIL - 15/10/2020 SE212400.042	0407_SYDSEW14_0. -0.2_201015 SOIL - 15/10/2020 SE212400.043	0407_SYDSEW14_1. -1.6_201015 SOIL - 15/10/2020 SE212400.044	0407_SYDSEW15_0. -0.3_201015 SOIL - 15/10/2020 SE212400.045
Total Kjeldahl Nitrogen	mg/kg	40	69	<40	99	<40	<40
Total Nitrogen (calc)	mg/kg	40	69	<40	99	<40	<40

PARAMETER	UOM	LOR	0407_SYDSEW15_0. -0.6_201015 SOIL - 15/10/2020 SE212400.046
Total Kjeldahl Nitrogen	mg/kg	40	<40
Total Nitrogen (calc)	mg/kg	40	<40

Total Phosphorus by Kjeldahl Digestion DA in Soil [AN279/AN293(Sydney only)] Tested: 21/10/2020

PARAMETER	UOM	LOR	0407_SEP001_BH01 0.2-0.3_201015 SOIL - 15/10/2020 SE212400.021	0407_SEP001_BH01 1.5-1.6_201015 SOIL - 15/10/2020 SE212400.022	0407_SEP001_BH02 0.2-0.3_201015 SOIL - 15/10/2020 SE212400.023	0407_SEP001_BH02 1.5-1.6_201015 SOIL - 15/10/2020 SE212400.024	0407_SEW001_0.4-0 5_201015 SOIL - 15/10/2020 SE212400.025
Total Phosphorus (Kjeldahl Digestion)	mg/kg	40	360	54	360	<40	50

PARAMETER	UOM	LOR	0407_SEW001_1.5-1 6_201015 SOIL - 15/10/2020 SE212400.026	0407_SEW002_0.4-0 5_201015 SOIL - 15/10/2020 SE212400.027	0407_SEW002_1.5-1 6_201015 SOIL - 15/10/2020 SE212400.028	0407_QC189_20101 SOIL - 15/10/2020 SE212400.029	0407_STWR001_BH 1_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.030
Total Phosphorus (Kjeldahl Digestion)	mg/kg	40	<40	<40	<40	<40	<40

PARAMETER	UOM	LOR	0407_STWR001_BH 1_1.5-1.6_201015 SOIL - 15/10/2020 SE212400.031	0407_QC191_20101 SOIL - 15/10/2020 SE212400.032	0407_STWR001_BH 2_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.033	0407_STWR001_BH 2_1.5-1.6_2001015 SOIL - 15/10/2020 SE212400.034	0407_QC192_20101 SOIL - 15/10/2020 SE212400.035
Total Phosphorus (Kjeldahl Digestion)	mg/kg	40	<40	<40	320	<40	<40

PARAMETER	UOM	LOR	0407_STWR002_0.2- .3_201015 SOIL - 15/10/2020 SE212400.036	0407_STWR002_0.5- .6_201015 SOIL - 15/10/2020 SE212400.037	0407_QC190_20101 SOIL - 15/10/2020 SE212400.038	0407_SYDSEW12_0. -0.2_201015 SOIL - 15/10/2020 SE212400.039	0407_SYDSEW12_0. -0.7_201015 SOIL - 15/10/2020 SE212400.040
Total Phosphorus (Kjeldahl Digestion)	mg/kg	40	420	<40	<40	<40	<40

PARAMETER	UOM	LOR	0407_SYDSEW13_0. -0.3_201015 SOIL - 15/10/2020 SE212400.041	0407_SYDSEW13_0. -0.7_201015 SOIL - 15/10/2020 SE212400.042	0407_SYDSEW14_0. -0.2_201015 SOIL - 15/10/2020 SE212400.043	0407_SYDSEW14_1. -1.6_201015 SOIL - 15/10/2020 SE212400.044	0407_SYDSEW15_0. -0.3_201015 SOIL - 15/10/2020 SE212400.045
Total Phosphorus (Kjeldahl Digestion)	mg/kg	40	<40	<40	<40	<40	<40

PARAMETER	UOM	LOR	0407_SYDSEW15_0. -0.6_201015 SOIL - 15/10/2020 SE212400.046
Total Phosphorus (Kjeldahl Digestion)	mg/kg	40	<40

Ammonia Nitrogen (soluble) in Soil [AN291] Tested: 21/10/2020

PARAMETER	UOM	LOR	0407_SEP001_BH01_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.021	0407_SEP001_BH01_1.5-1.6_201015 SOIL - 15/10/2020 SE212400.022	0407_SEP001_BH02_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.023	0407_SEP001_BH02_1.5-1.6_201015 SOIL - 15/10/2020 SE212400.024	0407_SEW001_0.4-0.5_201015 SOIL - 15/10/2020 SE212400.025
Ammonia Nitrogen, NH_3 as N	mg/kg	0.2	9.9	0.5	4.5	<0.2	4.6

PARAMETER	UOM	LOR	0407_SEW001_1.5-1.6_201015 SOIL - 15/10/2020 SE212400.026	0407_SEW002_0.4-0.5_201015 SOIL - 15/10/2020 SE212400.027	0407_SEW002_1.5-1.6_201015 SOIL - 15/10/2020 SE212400.028	0407_QC189_201015 SOIL - 15/10/2020 SE212400.029	0407_STWR001_BH01_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.030
Ammonia Nitrogen, NH_3 as N	mg/kg	0.2	1.2	<0.2	<0.2	<0.2	2.2

PARAMETER	UOM	LOR	0407_STWR001_BH01_1.5-1.6_201015 SOIL - 15/10/2020 SE212400.031	0407_QC191_201015 SOIL - 15/10/2020 SE212400.032	0407_STWR001_BH02_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.033	0407_STWR001_BH02_1.5-1.6_2001015 SOIL - 15/10/2020 SE212400.034	0407_QC192_201015 SOIL - 15/10/2020 SE212400.035
Ammonia Nitrogen, NH_3 as N	mg/kg	0.2	0.8	0.9	4.2	0.2	0.5

PARAMETER	UOM	LOR	0407_STWR002_0.2-.3_201015 SOIL - 15/10/2020 SE212400.036	0407_STWR002_0.5-.6_201015 SOIL - 15/10/2020 SE212400.037	0407_QC190_201015 SOIL - 15/10/2020 SE212400.038	0407_SYDSEW12_0.-0.2_201015 SOIL - 15/10/2020 SE212400.039	0407_SYDSEW12_0.-0.7_201015 SOIL - 15/10/2020 SE212400.040
Ammonia Nitrogen, NH_3 as N	mg/kg	0.2	5.9	0.2	<0.2	0.6	0.3

PARAMETER	UOM	LOR	0407_SYDSEW13_0.-0.3_201015 SOIL - 15/10/2020 SE212400.041	0407_SYDSEW13_0.-0.7_201015 SOIL - 15/10/2020 SE212400.042	0407_SYDSEW14_0.-0.2_201015 SOIL - 15/10/2020 SE212400.043	0407_SYDSEW14_1.-1.6_201015 SOIL - 15/10/2020 SE212400.044	0407_SYDSEW15_0.-0.3_201015 SOIL - 15/10/2020 SE212400.045
Ammonia Nitrogen, NH_3 as N	mg/kg	0.2	0.4	0.3	0.5	0.4	<0.2

PARAMETER	UOM	LOR	0407_SYDSEW15_0.-0.6_201015 SOIL - 15/10/2020 SE212400.046
Ammonia Nitrogen, NH_3 as N	mg/kg	0.2	0.3

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 19/10/2020

PARAMETER	UOM	LOR	0407_PSG_BH01_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.001	0407_PSG_BH01_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.002	0407_PSG_BH02_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.003	0407_PSG_BH02_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.004	0407_PSG_BH03_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.005
Arsenic, As	mg/kg	1	1	<1	2	2	2
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	5.0	2.1	10	7.8	9.4
Copper, Cu	mg/kg	0.5	21	8.3	29	33	16
Lead, Pb	mg/kg	1	29	26	34	25	45
Nickel, Ni	mg/kg	0.5	1.5	2.0	2.3	2.0	4.0
Zinc, Zn	mg/kg	2	24	14	41	45	37
Beryllium, Be	mg/kg	0.5	-	-	-	-	-
Boron, B	mg/kg	5	-	-	-	-	-
Cobalt, Co	mg/kg	0.5	-	-	-	-	-
Manganese, Mn	mg/kg	1	-	-	-	-	-

PARAMETER	UOM	LOR	0407_PSG_BH03_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.006	0407_PSG_BH04_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.007	0407_PSG_BH04_0.9 1.0_201015 SOIL - 15/10/2020 SE212400.008	0407_PSG_BH05_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.009	0407_PSG_BH05_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.010
Arsenic, As	mg/kg	1	1	1	1	1	3
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	2.7	3.7	2.2	3.4	6.9
Copper, Cu	mg/kg	0.5	9.3	8.8	12	36	51
Lead, Pb	mg/kg	1	37	17	10	25	27
Nickel, Ni	mg/kg	0.5	1.0	1.0	5.8	1.9	2.8
Zinc, Zn	mg/kg	2	25	9.1	30	32	82
Beryllium, Be	mg/kg	0.5	-	-	-	-	-
Boron, B	mg/kg	5	-	-	-	-	-
Cobalt, Co	mg/kg	0.5	-	-	-	-	-
Manganese, Mn	mg/kg	1	-	-	-	-	-

PARAMETER	UOM	LOR	0407_PSG_BH06_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.011	0407_PSG_BH06_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.012	0407_PSG_BH07_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.013	0407_PSG_BH07_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.014	0407_PSG_BH08_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.015
Arsenic, As	mg/kg	1	1	1	<1	1	1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	4.6	6.1	6.0	7.1	6.8
Copper, Cu	mg/kg	0.5	21	9.6	29	43	33
Lead, Pb	mg/kg	1	25	38	6	4	10
Nickel, Ni	mg/kg	0.5	1.9	1.3	37	57	43
Zinc, Zn	mg/kg	2	30	22	32	33	52
Beryllium, Be	mg/kg	0.5	-	-	-	-	-
Boron, B	mg/kg	5	-	-	-	-	-
Cobalt, Co	mg/kg	0.5	-	-	-	-	-
Manganese, Mn	mg/kg	1	-	-	-	-	-

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 19/10/2020

(continued)

PARAMETER	UOM	LOR	0407_PSG_BH08_0.5-0.6_201015 SOIL - 15/10/2020 SE212400.016	0407_PSG_BH09_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.017	0407_PSG_BH09_0.5-0.6_201015 SOIL - 15/10/2020 SE212400.018	0407_PSG_BH10_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.019	0407_PSG_BH10_0.5-0.6_201015 SOIL - 15/10/2020 SE212400.020
Arsenic, As	mg/kg	1	<1	<1	<1	<1	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	0.7	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	0.7	5.8	3.2	0.5	0.6
Copper, Cu	mg/kg	0.5	0.7	33	9.0	0.6	<0.5
Lead, Pb	mg/kg	1	4	5	14	1	<1
Nickel, Ni	mg/kg	0.5	<0.5	50	6.6	<0.5	<0.5
Zinc, Zn	mg/kg	2	4.9	35	42	<2.0	<2.0
Beryllium, Be	mg/kg	0.5	-	-	-	-	-
Boron, B	mg/kg	5	-	-	-	-	-
Cobalt, Co	mg/kg	0.5	-	-	-	-	-
Manganese, Mn	mg/kg	1	-	-	-	-	-

PARAMETER	UOM	LOR	0407_SEP001_BH01_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.021	0407_SEP001_BH01_1.5-1.6_201015 SOIL - 15/10/2020 SE212400.022	0407_SEP001_BH02_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.023	0407_SEP001_BH02_1.5-1.6_201015 SOIL - 15/10/2020 SE212400.024	0407_SEW001_0.4-0.5_201015 SOIL - 15/10/2020 SE212400.025
Arsenic, As	mg/kg	1	9	2	11	<1	<1
Cadmium, Cd	mg/kg	0.3	0.4	<0.3	0.4	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	28	2.8	29	1.6	1.0
Copper, Cu	mg/kg	0.5	52	0.9	110	<0.5	3.9
Lead, Pb	mg/kg	1	97	3	99	<1	6
Nickel, Ni	mg/kg	0.5	14	0.6	12	0.8	0.7
Zinc, Zn	mg/kg	2	230	10	440	<2.0	11
Beryllium, Be	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Boron, B	mg/kg	5	22	<5	22	<5	9
Cobalt, Co	mg/kg	0.5	6.3	<0.5	6.1	<0.5	<0.5
Manganese, Mn	mg/kg	1	270	1	530	<1	30

PARAMETER	UOM	LOR	0407_SEW001_1.5-1.6_201015 SOIL - 15/10/2020 SE212400.026	0407_SEW002_0.4-0.5_201015 SOIL - 15/10/2020 SE212400.027	0407_SEW002_1.5-1.6_201015 SOIL - 15/10/2020 SE212400.028	0407_QC189_20101[illegible] SOIL - 15/10/2020 SE212400.029	0407_STWR001_BH[illegible]1_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.030
Arsenic, As	mg/kg	1	<1	<1	<1	<1	8
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	0.4
Chromium, Cr	mg/kg	0.5	2.7	<0.5	0.6	<0.5	24
Copper, Cu	mg/kg	0.5	0.7	<0.5	<0.5	<0.5	79
Lead, Pb	mg/kg	1	2	<1	<1	<1	140
Nickel, Ni	mg/kg	0.5	0.8	<0.5	<0.5	<0.5	11
Zinc, Zn	mg/kg	2	2.0	<2.0	<2.0	<2.0	340
Beryllium, Be	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Boron, B	mg/kg	5	<5	<5	<5	<5	25
Cobalt, Co	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	6.2
Manganese, Mn	mg/kg	1	<1	<1	<1	<1	380

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 19/10/2020

(continued)

PARAMETER	UOM	LOR	0407_STWR001_BH(1_1.5-1.6_201015 SOIL - 15/10/2020 SE212400.031	0407_QC191_20101! SOIL - 15/10/2020 SE212400.032	0407_STWR001_BH(2_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.033	0407_STWR001_BH(2_1.5-1.6_2001015 SOIL - 15/10/2020 SE212400.034	0407_QC192_20101! SOIL - 15/10/2020 SE212400.035
Arsenic, As	mg/kg	1	<1	<1	8	<1	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	0.6	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	1.1	4.4	26	1.3	1.3
Copper, Cu	mg/kg	0.5	<0.5	2.7	79	0.6	0.6
Lead, Pb	mg/kg	1	2	14	130	1	<1
Nickel, Ni	mg/kg	0.5	<0.5	2.1	13	<0.5	<0.5
Zinc, Zn	mg/kg	2	2.8	21	420	2.6	3.3
Beryllium, Be	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Boron, B	mg/kg	5	<5	<5	30	<5	<5
Cobalt, Co	mg/kg	0.5	<0.5	<0.5	6.1	<0.5	<0.5
Manganese, Mn	mg/kg	1	<1	10	350	<1	<1

PARAMETER	UOM	LOR	0407_STWR002_0.2-.3_201015 SOIL - 15/10/2020 SE212400.036	0407_STWR002_0.5-.6_201015 SOIL - 15/10/2020 SE212400.037	0407_QC190_20101! SOIL - 15/10/2020 SE212400.038	0407_SYDSEW12_0.-0.2_201015 SOIL - 15/10/2020 SE212400.039	0407_SYDSEW12_0.-0.7_201015 SOIL - 15/10/2020 SE212400.040
Arsenic, As	mg/kg	1	8	<1	<1	<1	<1
Cadmium, Cd	mg/kg	0.3	0.4	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	22	<0.5	<0.5	23	49
Copper, Cu	mg/kg	0.5	82	<0.5	<0.5	2.0	6.7
Lead, Pb	mg/kg	1	110	<1	<1	8	1
Nickel, Ni	mg/kg	0.5	13	<0.5	<0.5	<0.5	1.8
Zinc, Zn	mg/kg	2	350	<2.0	<2.0	14	18
Beryllium, Be	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Boron, B	mg/kg	5	23	<5	<5	<5	<5
Cobalt, Co	mg/kg	0.5	6.4	<0.5	<0.5	<0.5	<0.5
Manganese, Mn	mg/kg	1	310	1	<1	3	1

PARAMETER	UOM	LOR	0407_SYDSEW13_0.-0.3_201015 SOIL - 15/10/2020 SE212400.041	0407_SYDSEW13_0.-0.7_201015 SOIL - 15/10/2020 SE212400.042	0407_SYDSEW14_0.-0.2_201015 SOIL - 15/10/2020 SE212400.043	0407_SYDSEW14_1.-1.6_201015 SOIL - 15/10/2020 SE212400.044	0407_SYDSEW15_0.-0.3_201015 SOIL - 15/10/2020 SE212400.045
Arsenic, As	mg/kg	1	<1	<1	<1	<1	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	1.7	1.8	3.0	2.2	1.1
Copper, Cu	mg/kg	0.5	<0.5	<0.5	0.9	<0.5	<0.5
Lead, Pb	mg/kg	1	<1	1	3	<1	<1
Nickel, Ni	mg/kg	0.5	1.0	1.0	<0.5	1.0	0.9
Zinc, Zn	mg/kg	2	<2.0	<2.0	8.9	<2.0	<2.0
Beryllium, Be	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Boron, B	mg/kg	5	<5	<5	<5	<5	<5
Cobalt, Co	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Manganese, Mn	mg/kg	1	1	2	2	1	<1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 19/10/2020

(continued)

PARAMETER	UOM	LOR	0407_SYDSEW15_0. -0.6_201015 SOIL - 15/10/2020 SE212400.046
Arsenic, As	mg/kg	1	<1
Cadmium, Cd	mg/kg	0.3	<0.3
Chromium, Cr	mg/kg	0.5	**1.1**
Copper, Cu	mg/kg	0.5	<0.5
Lead, Pb	mg/kg	1	<1
Nickel, Ni	mg/kg	0.5	**0.9**
Zinc, Zn	mg/kg	2	<2.0
Beryllium, Be	mg/kg	0.5	<0.5
Boron, B	mg/kg	5	<5
Cobalt, Co	mg/kg	0.5	<0.5
Manganese, Mn	mg/kg	1	<1

Mercury in Soil [AN312] Tested: 19/10/2020

PARAMETER	UOM	LOR	0407_PSG_BH01_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.001	0407_PSG_BH01_0.5-0.6_201015 SOIL - 15/10/2020 SE212400.002	0407_PSG_BH02_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.003	0407_PSG_BH02_0.5-0.6_201015 SOIL - 15/10/2020 SE212400.004	0407_PSG_BH03_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.005
Mercury	mg/kg	0.05	**0.06**	<0.05	**0.06**	<0.05	**0.10**

PARAMETER	UOM	LOR	0407_PSG_BH03_0.5-0.6_201015 SOIL - 15/10/2020 SE212400.006	0407_PSG_BH04_0.5-0.6_201015 SOIL - 15/10/2020 SE212400.007	0407_PSG_BH04_0.9-1.0_201015 SOIL - 15/10/2020 SE212400.008	0407_PSG_BH05_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.009	0407_PSG_BH05_0.5-0.6_201015 SOIL - 15/10/2020 SE212400.010
Mercury	mg/kg	0.05	**0.06**	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_PSG_BH06_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.011	0407_PSG_BH06_0.5-0.6_201015 SOIL - 15/10/2020 SE212400.012	0407_PSG_BH07_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.013	0407_PSG_BH07_0.5-0.6_201015 SOIL - 15/10/2020 SE212400.014	0407_PSG_BH08_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.015
Mercury	mg/kg	0.05	<0.05	**0.06**	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_PSG_BH08_0.5-0.6_201015 SOIL - 15/10/2020 SE212400.016	0407_PSG_BH09_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.017	0407_PSG_BH09_0.5-0.6_201015 SOIL - 15/10/2020 SE212400.018	0407_PSG_BH10_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.019	0407_PSG_BH10_0.5-0.6_201015 SOIL - 15/10/2020 SE212400.020
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_SEP001_BH01_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.021	0407_SEP001_BH01_1.5-1.6_201015 SOIL - 15/10/2020 SE212400.022	0407_SEP001_BH02_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.023	0407_SEP001_BH02_1.5-1.6_201015 SOIL - 15/10/2020 SE212400.024	0407_SEW001_0.4-0.5_201015 SOIL - 15/10/2020 SE212400.025
Mercury	mg/kg	0.05	**0.09**	<0.05	**0.11**	<0.05	<0.05

PARAMETER	UOM	LOR	0407_SEW001_1.5-1.6_201015 SOIL - 15/10/2020 SE212400.026	0407_SEW002_0.4-0.5_201015 SOIL - 15/10/2020 SE212400.027	0407_SEW002_1.5-1.6_201015 SOIL - 15/10/2020 SE212400.028	0407_QC189_201015 SOIL - 15/10/2020 SE212400.029	0407_STWR001_BH01_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.030
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	**0.08**

PARAMETER	UOM	LOR	0407_STWR001_BH01_1.5-1.6_201015 SOIL - 15/10/2020 SE212400.031	0407_QC191_201015 SOIL - 15/10/2020 SE212400.032	0407_STWR001_BH02_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.033	0407_STWR001_BH02_1.5-1.6_2001015 SOIL - 15/10/2020 SE212400.034	0407_QC192_201015 SOIL - 15/10/2020 SE212400.035
Mercury	mg/kg	0.05	<0.05	<0.05	**0.11**	<0.05	<0.05

Mercury in Soil [AN312] Tested: 19/10/2020 (continued)

PARAMETER	UOM	LOR	0407_STWR002_0.2-.3_201015 SOIL - 15/10/2020 SE212400.036	0407_STWR002_0.5-.6_201015 SOIL - 15/10/2020 SE212400.037	0407_QC190_20101 SOIL - 15/10/2020 SE212400.038	0407_SYDSEW12_0.-0.2_201015 SOIL - 15/10/2020 SE212400.039	0407_SYDSEW12_0.-0.7_201015 SOIL - 15/10/2020 SE212400.040
Mercury	mg/kg	0.05	**0.11**	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_SYDSEW13_0.-0.3_201015 SOIL - 15/10/2020 SE212400.041	0407_SYDSEW13_0.-0.7_201015 SOIL - 15/10/2020 SE212400.042	0407_SYDSEW14_0.-0.2_201015 SOIL - 15/10/2020 SE212400.043	0407_SYDSEW14_1.-1.6_201015 SOIL - 15/10/2020 SE212400.044	0407_SYDSEW15_0.-0.3_201015 SOIL - 15/10/2020 SE212400.045
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_SYDSEW15_0.-0.6_201015 SOIL - 15/10/2020 SE212400.046
Mercury	mg/kg	0.05	<0.05

Moisture Content [AN002] Tested: 19/10/2020

PARAMETER	UOM	LOR	0407_PSG_BH01_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.001	0407_PSG_BH01_0.5-0.6_201015 SOIL - 15/10/2020 SE212400.002	0407_PSG_BH02_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.003	0407_PSG_BH02_0.5-0.6_201015 SOIL - 15/10/2020 SE212400.004	0407_PSG_BH03_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.005
% Moisture	%w/w	1	3.9	3.7	5.6	5.3	5.0

PARAMETER	UOM	LOR	0407_PSG_BH03_0.5-0.6_201015 SOIL - 15/10/2020 SE212400.006	0407_PSG_BH04_0.5-0.6_201015 SOIL - 15/10/2020 SE212400.007	0407_PSG_BH04_0.9-1.0_201015 SOIL - 15/10/2020 SE212400.008	0407_PSG_BH05_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.009	0407_PSG_BH05_0.5-0.6_201015 SOIL - 15/10/2020 SE212400.010
% Moisture	%w/w	1	4.9	4.1	7.3	4.3	4.4

PARAMETER	UOM	LOR	0407_PSG_BH06_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.011	0407_PSG_BH06_0.5-0.6_201015 SOIL - 15/10/2020 SE212400.012	0407_PSG_BH07_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.013	0407_PSG_BH07_0.5-0.6_201015 SOIL - 15/10/2020 SE212400.014	0407_PSG_BH08_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.015
% Moisture	%w/w	1	4.8	4.7	2.7	3.6	3.6

PARAMETER	UOM	LOR	0407_PSG_BH08_0.5-0.6_201015 SOIL - 15/10/2020 SE212400.016	0407_PSG_BH09_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.017	0407_PSG_BH09_0.5-0.6_201015 SOIL - 15/10/2020 SE212400.018	0407_PSG_BH10_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.019	0407_PSG_BH10_0.5-0.6_201015 SOIL - 15/10/2020 SE212400.020
% Moisture	%w/w	1	8.4	3.7	5.5	1.7	2.5

PARAMETER	UOM	LOR	0407_SEP001_BH01_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.021	0407_SEP001_BH01_1.5-1.6_201015 SOIL - 15/10/2020 SE212400.022	0407_SEP001_BH02_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.023	0407_SEP001_BH02_1.5-1.6_201015 SOIL - 15/10/2020 SE212400.024	0407_SEW001_0.4-0.5_201015 SOIL - 15/10/2020 SE212400.025
% Moisture	%w/w	1	17.8	9.0	13.5	2.6	2.2

PARAMETER	UOM	LOR	0407_SEW001_1.5-1.6_201015 SOIL - 15/10/2020 SE212400.026	0407_SEW002_0.4-0.5_201015 SOIL - 15/10/2020 SE212400.027	0407_SEW002_1.5-1.6_201015 SOIL - 15/10/2020 SE212400.028	0407_QC189_20101 SOIL - 15/10/2020 SE212400.029	0407_STWR001_BH(1_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.030
% Moisture	%w/w	1	5.8	2.3	2.4	2.3	1.4

PARAMETER	UOM	LOR	0407_STWR001_BH(1_1.5-1.6_201015 SOIL - 15/10/2020 SE212400.031	0407_QC191_20101 SOIL - 15/10/2020 SE212400.032	0407_STWR001_BH(2_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.033	0407_STWR001_BH(2_1.5-1.6_2001015 SOIL - 15/10/2020 SE212400.034	0407_QC192_20101 SOIL - 15/10/2020 SE212400.035
% Moisture	%w/w	1	13.2	10.4	20.9	2.1	2.2

Moisture Content [AN002] Tested: 19/10/2020 (continued)

PARAMETER	UOM	LOR	0407_STWR002_0.2-.3_201015 SOIL - 15/10/2020 SE212400.036	0407_STWR002_0.5-.6_201015 SOIL - 15/10/2020 SE212400.037	0407_QC190_20101 SOIL - 15/10/2020 SE212400.038	0407_SYDSEW12_0.-0.2_201015 SOIL - 15/10/2020 SE212400.039	0407_SYDSEW12_0.-0.7_201015 SOIL - 15/10/2020 SE212400.040
% Moisture	%w/w	1	12.4	6.9	2.3	19.1	20.4

PARAMETER	UOM	LOR	0407_SYDSEW13_0.-0.3_201015 SOIL - 15/10/2020 SE212400.041	0407_SYDSEW13_0.-0.7_201015 SOIL - 15/10/2020 SE212400.042	0407_SYDSEW14_0.-0.2_201015 SOIL - 15/10/2020 SE212400.043	0407_SYDSEW14_1.-1.6_201015 SOIL - 15/10/2020 SE212400.044	0407_SYDSEW15_0.-0.3_201015 SOIL - 15/10/2020 SE212400.045
% Moisture	%w/w	1	4.0	2.6	<1.0	24.9	3.2

PARAMETER	UOM	LOR	0407_SYDSEW15_0.-0.6_201015 SOIL - 15/10/2020 SE212400.046
% Moisture	%w/w	1	3.4

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples [MA-1523] Tested: 26/10/2020

PARAMETER	UOM	LOR	0407_PSG_BH01_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.001	0407_PSG_BH01_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.002	0407_PSG_BH02_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.003	0407_PSG_BH02_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.004	0407_PSG_BH03_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.005
Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Perfluorononanoic acid (PFNA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorodecanoic acid (PFDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0032	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	**0.0028**
Sum PFOS and PFHXS	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	**0.0028**
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008	<0.008
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008	<0.008
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.016	<0.016	<0.016	<0.016	<0.016	<0.016
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.016	<0.016	<0.016	<0.016	<0.016	<0.016
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008	<0.008
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008	<0.008

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples [MA-1523] Tested: 26/10/2020 (continued)

PARAMETER	UOM	LOR	0407_PSG_BH03_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.006	0407_PSG_BH04_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.007	0407_PSG_BH04_0.5 1.0_201015 SOIL - 15/10/2020 SE212400.008	0407_PSG_BH05_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.009	0407_PSG_BH05_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.010
Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Perfluorononanoic acid (PFNA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorodecanoic acid (PFDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0032	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Sum PFOS and PFHXS	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008	<0.008
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008	<0.008
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.016	<0.016	<0.016	<0.016	<0.016	<0.016
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.016	<0.016	<0.016	<0.016	<0.016	<0.016
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008	<0.008
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008	<0.008

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples [MA-1523] Tested: 26/10/2020 (continued)

PARAMETER	UOM	LOR	0407_PSG_BH06_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.011	0407_PSG_BH06_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.012	0407_PSG_BH07_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.013	0407_PSG_BH07_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.014	0407_PSG_BH08_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.015
Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Perfluorononanoic acid (PFNA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorodecanoic acid (PFDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0032	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Sum PFOS and PFHXS	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008	<0.008
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008	<0.008
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.016	<0.016	<0.016	<0.016	<0.016	<0.016
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.016	<0.016	<0.016	<0.016	<0.016	<0.016
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008	<0.008
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008	<0.008

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples [MA-1523] Tested: 26/10/2020 (continued)

PARAMETER	UOM	LOR	0407_PSG_BH08_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.016	0407_PSG_BH09_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.017	0407_PSG_BH09_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.018	0407_PSG_BH10_0.2 0.3_201015 SOIL - 15/10/2020 SE212400.019	0407_PSG_BH10_0.5 0.6_201015 SOIL - 15/10/2020 SE212400.020
Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Perfluorononanoic acid (PFNA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorodecanoic acid (PFDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0032	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Sum PFOS and PFHXS	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008	<0.008
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008	<0.008
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.016	<0.016	<0.016	<0.016	<0.016	<0.016
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.016	<0.016	<0.016	<0.016	<0.016	<0.016
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008	<0.008
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008	<0.008

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples [MA-1523] Tested: 26/10/2020 (continued)

PARAMETER	UOM	LOR	0407_SEP001_BH01 0.2-0.3_201015 SOIL - 15/10/2020 SE212400.021	0407_SEP001_BH01 1.5-1.6_201015 SOIL - 15/10/2020 SE212400.022	0407_SEP001_BH02 0.2-0.3_201015 SOIL - 15/10/2020 SE212400.023	0407_SEP001_BH02 1.5-1.6_201015 SOIL - 15/10/2020 SE212400.024	0407_SEW001_0.4-0.5_201015 SOIL - 15/10/2020 SE212400.025
Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Perfluorononanoic acid (PFNA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorodecanoic acid (PFDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0032	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	<0.0016	<0.0016	**0.0062**	<0.0016	<0.0016
Sum PFOS and PFHXS	mg/kg	0.0016	<0.0016	<0.0016	**0.0062**	<0.0016	<0.0016
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008	<0.008
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008	<0.008
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.016	<0.016	<0.016	<0.016	<0.016	<0.016
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.016	<0.016	<0.016	<0.016	<0.016	<0.016
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008	<0.008
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008	<0.008

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples [MA-1523] Tested: 26/10/2020 (continued)

PARAMETER	UOM	LOR	0407_SEW001_1.5-16_201015 SOIL - 15/10/2020 SE212400.026	0407_SEW002_0.4-05_201015 SOIL - 15/10/2020 SE212400.027	0407_SEW002_1.5-16_201015 SOIL - 15/10/2020 SE212400.028	0407_QC189_20101(SOIL - 15/10/2020 SE212400.029	0407_STWR001_BH(1_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.030
Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Perfluorononanoic acid (PFNA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorodecanoic acid (PFDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0032	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	**0.0016**
Sum PFOS and PFHXS	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	**0.0016**
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008	<0.008
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008	<0.008
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.016	<0.016	<0.016	<0.016	<0.016	<0.016
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.016	<0.016	<0.016	<0.016	<0.016	<0.016
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008	<0.008
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008	<0.008

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples [MA-1523] Tested: 26/10/2020 (continued)

PARAMETER	UOM	LOR	0407_STWR001_BH(1_1.5-1.6_201015 SOIL - 15/10/2020 SE212400.031	0407_QC191_20101! SOIL - 15/10/2020 SE212400.032	0407_STWR001_BH(2_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.033	0407_STWR001_BH(2_1.5-1.6_2001015 SOIL - 15/10/2020 SE212400.034	0407_QC192_20101! SOIL - 15/10/2020 SE212400.035
Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	<0.0008	<0.0008	**0.0008**	<0.0008	<0.0008
Perfluorononanoic acid (PFNA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorodecanoic acid (PFDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0032	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	<0.0016	<0.0016	**0.0095**	<0.0016	<0.0016
Sum PFOS and PFHXS	mg/kg	0.0016	<0.0016	<0.0016	**0.0095**	<0.0016	<0.0016
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008	<0.008
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008	<0.008
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.016	<0.016	<0.016	<0.016	<0.016	<0.016
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.016	<0.016	<0.016	<0.016	<0.016	<0.016
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008	<0.008
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008	<0.008

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples [MA-1523] Tested: 26/10/2020 (continued)

PARAMETER	UOM	LOR	0407_STWR002_0.2-.3_201015 SOIL - 15/10/2020 SE212400.036	0407_STWR002_0.5-.6_201015 SOIL - 15/10/2020 SE212400.037	0407_QC190_201015 SOIL - 15/10/2020 SE212400.038	0407_SYDSEW12_0.-0.2_201015 SOIL - 15/10/2020 SE212400.039	0407_SYDSEW12_0.-0.7_201015 SOIL - 15/10/2020 SE212400.040
Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Perfluorononanoic acid (PFNA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorodecanoic acid (PFDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0032	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Sum PFOS and PFHXS	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008	<0.008
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008	<0.008
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.016	<0.016	<0.016	<0.016	<0.016	<0.016
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.016	<0.016	<0.016	<0.016	<0.016	<0.016
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008	<0.008
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008	<0.008

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples [MA-1523] Tested: 26/10/2020 (continued)

PARAMETER	UOM	LOR	0407_SYDSEW13_0.-0.3_201015 SOIL - 15/10/2020 SE212400.041	0407_SYDSEW13_0.-0.7_201015 SOIL - 15/10/2020 SE212400.042	0407_SYDSEW14_0.-0.2_201015 SOIL - 15/10/2020 SE212400.043	0407_SYDSEW14_1.-1.6_201015 SOIL - 15/10/2020 SE212400.044	0407_SYDSEW15_0.-0.3_201015 SOIL - 15/10/2020 SE212400.045
Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Perfluorononanoic acid (PFNA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorodecanoic acid (PFDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0032	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Sum PFOS and PFHXS	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008	<0.008
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008	<0.008
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.016	<0.016	<0.016	<0.016	<0.016	<0.016
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.016	<0.016	<0.016	<0.016	<0.016	<0.016
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008	<0.008
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008	<0.008

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples [MA-1523] Tested: 26/10/2020 (continued)

PARAMETER	UOM	LOR	0407_SYDSEW15_0. -0.6_201015 SOIL - 15/10/2020 SE212400.046
Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	<0.0016
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	<0.0016
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	<0.0016
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	<0.0016
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	<0.0008
Perfluorononanoic acid (PFNA)	mg/kg	0.0016	<0.0016
Perfluorodecanoic acid (PFDA)	mg/kg	0.0016	<0.0016
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0016	<0.0016
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0016	<0.0016
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0016	<0.0016
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0016	<0.0016
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0032	<0.0032
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	<0.0016
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	<0.0016
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	<0.0016
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	<0.0016
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	<0.0016
Sum PFOS and PFHXS	mg/kg	0.0016	<0.0016
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	<0.0016
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0016	<0.0016
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0016	<0.0016
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	<0.0016
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	<0.0016
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	<0.0016
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.0016	<0.0016
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.008	<0.008
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.008	<0.008
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.016	<0.016
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.016	<0.016
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.008	<0.008
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.008	<0.008

Sample Subcontracted [] Tested: 26/10/2020

PARAMETER	UOM	LOR	0407_PSG_BH01_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.001	0407_PSG_BH01_0.5-0.6_201015 SOIL - 15/10/2020 SE212400.002	0407_PSG_BH02_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.003	0407_PSG_BH02_0.5-0.6_201015 SOIL - 15/10/2020 SE212400.004	0407_PSG_BH03_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.005
Sample Subcontracted*	No unit	-	Subcontracted	Subcontracted	Subcontracted	Subcontracted	Subcontracted

PARAMETER	UOM	LOR	0407_PSG_BH03_0.5-0.6_201015 SOIL - 15/10/2020 SE212400.006	0407_PSG_BH04_0.5-0.6_201015 SOIL - 15/10/2020 SE212400.007	0407_PSG_BH04_0.9-1.0_201015 SOIL - 15/10/2020 SE212400.008	0407_PSG_BH05_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.009	0407_PSG_BH05_0.5-0.6_201015 SOIL - 15/10/2020 SE212400.010
Sample Subcontracted*	No unit	-	Subcontracted	Subcontracted	Subcontracted	Subcontracted	Subcontracted

PARAMETER	UOM	LOR	0407_PSG_BH06_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.011	0407_PSG_BH06_0.5-0.6_201015 SOIL - 15/10/2020 SE212400.012	0407_PSG_BH07_0.5-0.6_201015 SOIL - 15/10/2020 SE212400.014	0407_PSG_BH08_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.015	0407_PSG_BH08_0.5-0.6_201015 SOIL - 15/10/2020 SE212400.016
Sample Subcontracted*	No unit	-	Subcontracted	Subcontracted	Subcontracted	Subcontracted	Subcontracted

PARAMETER	UOM	LOR	0407_PSG_BH09_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.017	0407_PSG_BH09_0.5-0.6_201015 SOIL - 15/10/2020 SE212400.018	0407_PSG_BH10_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.019	0407_PSG_BH10_0.5-0.6_201015 SOIL - 15/10/2020 SE212400.020	0407_SEP001_BH01_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.021
Sample Subcontracted*	No unit	-	Subcontracted	Subcontracted	Subcontracted	Subcontracted	Subcontracted

PARAMETER	UOM	LOR	0407_SEP001_BH01_1.5-1.6_201015 SOIL - 15/10/2020 SE212400.022	0407_SEP001_BH02_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.023	0407_SEP001_BH02_1.5-1.6_201015 SOIL - 15/10/2020 SE212400.024	0407_SEW001_0.4-0.5_201015 SOIL - 15/10/2020 SE212400.025	0407_SEW001_1.5-1.6_201015 SOIL - 15/10/2020 SE212400.026
Sample Subcontracted*	No unit	-	Subcontracted	Subcontracted	Subcontracted	Subcontracted	Subcontracted

PARAMETER	UOM	LOR	0407_SEW002_0.4-0.5_201015 SOIL - 15/10/2020 SE212400.027	0407_STWR001_BH01_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.030	0407_STWR001_BH01_1.5-1.6_201015 SOIL - 15/10/2020 SE212400.031	0407_STWR001_BH02_0.2-0.3_201015 SOIL - 15/10/2020 SE212400.033	0407_STWR001_BH02_1.5-1.6_2001015 SOIL - 15/10/2020 SE212400.034
Sample Subcontracted*	No unit	-	Subcontracted	Subcontracted	Subcontracted	Subcontracted	Subcontracted

PARAMETER	UOM	LOR	0407_QC192_201015 SOIL - 15/10/2020 SE212400.035	0407_STWR002_0.2-.3_201015 SOIL - 15/10/2020 SE212400.036	0407_STWR002_0.5-.6_201015 SOIL - 15/10/2020 SE212400.037	0407_SYDSEW12_0.-0.2_201015 SOIL - 15/10/2020 SE212400.039	0407_SYDSEW12_0.-0.7_201015 SOIL - 15/10/2020 SE212400.040
Sample Subcontracted*	No unit	-	Subcontracted	Subcontracted	Subcontracted	Subcontracted	Subcontracted

Sample Subcontracted [] Tested: 26/10/2020 (continued)

PARAMETER	UOM	LOR	0407_SYDSEW13_0.-0.3_201015 SOIL - 15/10/2020 SE212400.041	0407_SYDSEW13_0.-0.7_201015 SOIL - 15/10/2020 SE212400.042	0407_SYDSEW14_0.-0.2_201015 SOIL - 15/10/2020 SE212400.043	0407_SYDSEW14_1.-1.6_201015 SOIL - 15/10/2020 SE212400.044	0407_SYDSEW15_0.-0.3_201015 SOIL - 15/10/2020 SE212400.045
Sample Subcontracted*	No unit	-	Subcontracted	Subcontracted	Subcontracted	Subcontracted	Subcontracted

PARAMETER	UOM	LOR	0407_SYDSEW15_0.-0.6_201015 SOIL - 15/10/2020 SE212400.046
Sample Subcontracted*	No unit	-	Subcontracted

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
AN245	Anions by Ion Chromatography: A water sample is injected into an eluent stream that passes through the ion chromatographic system where the anions of interest ie Br, Cl, NO2, NO3 and SO4 are separated on their relative affinities for the active sites on the column packing material. Changes to the conductivity and the UV-visible absorbance of the eluent enable identification and quantitation of the anions based on their retention time and peak height or area. APHA 4110 B
AN277	Nitrite on the extract is determined as an intense red-pink azo dye at 540 nm following diazotisation with sulphanilamide and subsequent coupling with N-(1-naphthyl) ethylenediamine dihydrochloride. The original nitrite is determined. Reference APHA 4500-NO2- B.
AN291	From the soil extract, ammonia reacts with hypochlorite ions from Sodium Dichloroisocyanuate, and salicylate in the presence of Sodium Nitroprusside to form indophenol blue and measured at 670nm.
AN292	The sample is heated in the presence of Sulphuric acid, K2SO4 and CuSO4 for two and half hours using a temperature controlled digestion block. Amino Nitrogen of many organic materials is converted to ammonium ion. Free ammonia also is converted to ammonium. The digest is cooled and placed on the Aquakem 250 discrete analyser for Ammonia determination.
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid, mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents .
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.
MA-1523	This method covers the analysis of per- and polyfluoroalkyl substances (PFAS) in aqueous, solid and biosolid samples and solvent extracts, determined as the total of linear and branched isomers. After spiking with isotopically labelled quantification surrogates and clean-up via SPE cartridges sample extracts are analysed by liquid chromatography/mass spectrometry (LC-MS/MS). PFAS concentrations are determined by isotope dilution quantification.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		
***	Indicates that both * and ** apply.				

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE212400 R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	48

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE212400 R0**
Date Received	16 Oct 2020
Date Reported	26 Oct 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Duplicate	TKN Kjeldahl Digestion by Discrete Analyser in Soil	1 item
	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	1 item
Matrix Spike	VOC's in Soil	1 item
	Volatile Petroleum Hydrocarbons in Soil	1 item

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	48 Soil
Date documentation received	15/10/2020@7:42pr	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	1.3°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE212400 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Ammonia Nitrogen (soluble) in Soil

Method: ME-(AU)-[ENV]AN291

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SEP001_BH01_0.2-0.	SE212400.021	LB211727	15 Oct 2020	16 Oct 2020	12 Nov 2020	21 Oct 2020	12 Nov 2020	22 Oct 2020
0407_SEP001_BH01_1.5-1.	SE212400.022	LB211727	15 Oct 2020	16 Oct 2020	12 Nov 2020	21 Oct 2020	12 Nov 2020	22 Oct 2020
0407_SEP001_BH02_0.2-0.	SE212400.023	LB211727	15 Oct 2020	16 Oct 2020	12 Nov 2020	21 Oct 2020	12 Nov 2020	22 Oct 2020
0407_SEP001_BH02_1.5-1.	SE212400.024	LB211727	15 Oct 2020	16 Oct 2020	12 Nov 2020	21 Oct 2020	12 Nov 2020	22 Oct 2020
0407_SEW001_0.4-0.5_201	SE212400.025	LB211727	15 Oct 2020	16 Oct 2020	12 Nov 2020	21 Oct 2020	12 Nov 2020	22 Oct 2020
0407_SEW001_1.5-1.6_201	SE212400.026	LB211727	15 Oct 2020	16 Oct 2020	12 Nov 2020	21 Oct 2020	12 Nov 2020	22 Oct 2020
0407_SEW002_0.4-0.5_201	SE212400.027	LB211727	15 Oct 2020	16 Oct 2020	12 Nov 2020	21 Oct 2020	12 Nov 2020	22 Oct 2020
0407_SEW002_1.5-1.6_201	SE212400.028	LB211727	15 Oct 2020	16 Oct 2020	12 Nov 2020	21 Oct 2020	12 Nov 2020	22 Oct 2020
0407_QC189_201015	SE212400.029	LB211727	15 Oct 2020	16 Oct 2020	12 Nov 2020	21 Oct 2020	12 Nov 2020	22 Oct 2020
0407_STWR001_BH01_0.2-	SE212400.030	LB211727	15 Oct 2020	16 Oct 2020	12 Nov 2020	21 Oct 2020	12 Nov 2020	22 Oct 2020
0407_STWR001_BH01_1.5-	SE212400.031	LB211727	15 Oct 2020	16 Oct 2020	12 Nov 2020	21 Oct 2020	12 Nov 2020	22 Oct 2020
0407_QC191_201015	SE212400.032	LB211727	15 Oct 2020	16 Oct 2020	12 Nov 2020	21 Oct 2020	12 Nov 2020	22 Oct 2020
0407_STWR001_BH02_0.2-	SE212400.033	LB211727	15 Oct 2020	16 Oct 2020	12 Nov 2020	21 Oct 2020	12 Nov 2020	22 Oct 2020
0407_STWR001_BH02_1.5-	SE212400.034	LB211727	15 Oct 2020	16 Oct 2020	12 Nov 2020	21 Oct 2020	12 Nov 2020	22 Oct 2020
0407_QC192_201015	SE212400.035	LB211727	15 Oct 2020	16 Oct 2020	12 Nov 2020	21 Oct 2020	12 Nov 2020	22 Oct 2020
0407_STWR002_0.2-0.3_20	SE212400.036	LB211727	15 Oct 2020	16 Oct 2020	12 Nov 2020	21 Oct 2020	12 Nov 2020	22 Oct 2020
0407_STWR002_0.5-0.6_20	SE212400.037	LB211727	15 Oct 2020	16 Oct 2020	12 Nov 2020	21 Oct 2020	12 Nov 2020	22 Oct 2020
0407_QC190_201015	SE212400.038	LB211727	15 Oct 2020	16 Oct 2020	12 Nov 2020	21 Oct 2020	12 Nov 2020	22 Oct 2020
0407_SYDSEW12_0.1-0.2_	SE212400.039	LB211727	15 Oct 2020	16 Oct 2020	12 Nov 2020	21 Oct 2020	12 Nov 2020	22 Oct 2020
0407_SYDSEW12_0.5-0.7_	SE212400.040	LB211727	15 Oct 2020	16 Oct 2020	12 Nov 2020	21 Oct 2020	12 Nov 2020	22 Oct 2020
0407_SYDSEW13_0.2-0.3_	SE212400.041	LB211727	15 Oct 2020	16 Oct 2020	12 Nov 2020	21 Oct 2020	12 Nov 2020	22 Oct 2020
0407_SYDSEW13_0.6-0.7_	SE212400.042	LB211727	15 Oct 2020	16 Oct 2020	12 Nov 2020	21 Oct 2020	12 Nov 2020	22 Oct 2020
0407_SYDSEW14_0.1-0.2_	SE212400.043	LB211727	15 Oct 2020	16 Oct 2020	12 Nov 2020	21 Oct 2020	12 Nov 2020	22 Oct 2020
0407_SYDSEW14_1.5-1.6_	SE212400.044	LB211727	15 Oct 2020	16 Oct 2020	12 Nov 2020	21 Oct 2020	12 Nov 2020	22 Oct 2020
0407_SYDSEW15_0.2-0.3_	SE212400.045	LB211727	15 Oct 2020	16 Oct 2020	12 Nov 2020	21 Oct 2020	12 Nov 2020	22 Oct 2020
0407_SYDSEW15_0.5-0.6_	SE212400.046	LB211727	15 Oct 2020	16 Oct 2020	12 Nov 2020	21 Oct 2020	12 Nov 2020	22 Oct 2020

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_PSG_BH01_0.2-0.3_2	SE212400.001	LB211570	15 Oct 2020	16 Oct 2020	12 Nov 2020	19 Oct 2020	12 Nov 2020	23 Oct 2020
0407_PSG_BH01_0.5-0.6_2	SE212400.002	LB211570	15 Oct 2020	16 Oct 2020	12 Nov 2020	19 Oct 2020	12 Nov 2020	23 Oct 2020
0407_PSG_BH02_0.2-0.3_2	SE212400.003	LB211570	15 Oct 2020	16 Oct 2020	12 Nov 2020	19 Oct 2020	12 Nov 2020	23 Oct 2020
0407_PSG_BH02_0.5-0.6_2	SE212400.004	LB211570	15 Oct 2020	16 Oct 2020	12 Nov 2020	19 Oct 2020	12 Nov 2020	23 Oct 2020
0407_PSG_BH03_0.2-0.3_2	SE212400.005	LB211570	15 Oct 2020	16 Oct 2020	12 Nov 2020	19 Oct 2020	12 Nov 2020	23 Oct 2020
0407_PSG_BH03_0.5-0.6_2	SE212400.006	LB211570	15 Oct 2020	16 Oct 2020	12 Nov 2020	19 Oct 2020	12 Nov 2020	23 Oct 2020
0407_PSG_BH04_0.5-0.6_2	SE212400.007	LB211570	15 Oct 2020	16 Oct 2020	12 Nov 2020	19 Oct 2020	12 Nov 2020	23 Oct 2020
0407_PSG_BH04_0.9-1.0_2	SE212400.008	LB211570	15 Oct 2020	16 Oct 2020	12 Nov 2020	19 Oct 2020	12 Nov 2020	23 Oct 2020
0407_PSG_BH05_0.2-0.3_2	SE212400.009	LB211570	15 Oct 2020	16 Oct 2020	12 Nov 2020	19 Oct 2020	12 Nov 2020	23 Oct 2020
0407_PSG_BH05_0.5-0.6_2	SE212400.010	LB211570	15 Oct 2020	16 Oct 2020	12 Nov 2020	19 Oct 2020	12 Nov 2020	23 Oct 2020
0407_PSG_BH06_0.2-0.3_2	SE212400.011	LB211570	15 Oct 2020	16 Oct 2020	12 Nov 2020	19 Oct 2020	12 Nov 2020	23 Oct 2020
0407_PSG_BH06_0.5-0.6_2	SE212400.012	LB211570	15 Oct 2020	16 Oct 2020	12 Nov 2020	19 Oct 2020	12 Nov 2020	23 Oct 2020
0407_PSG_BH07_0.2-0.3_2	SE212400.013	LB211570	15 Oct 2020	16 Oct 2020	12 Nov 2020	19 Oct 2020	12 Nov 2020	23 Oct 2020
0407_PSG_BH07_0.5-0.6_2	SE212400.014	LB211570	15 Oct 2020	16 Oct 2020	12 Nov 2020	19 Oct 2020	12 Nov 2020	23 Oct 2020
0407_PSG_BH08_0.2-0.3_2	SE212400.015	LB211570	15 Oct 2020	16 Oct 2020	12 Nov 2020	19 Oct 2020	12 Nov 2020	23 Oct 2020
0407_PSG_BH08_0.5-0.6_2	SE212400.016	LB211570	15 Oct 2020	16 Oct 2020	12 Nov 2020	19 Oct 2020	12 Nov 2020	23 Oct 2020
0407_PSG_BH09_0.2-0.3_2	SE212400.017	LB211570	15 Oct 2020	16 Oct 2020	12 Nov 2020	19 Oct 2020	12 Nov 2020	23 Oct 2020
0407_PSG_BH09_0.5-0.6_2	SE212400.018	LB211570	15 Oct 2020	16 Oct 2020	12 Nov 2020	19 Oct 2020	12 Nov 2020	23 Oct 2020
0407_PSG_BH10_0.2-0.3_2	SE212400.019	LB211570	15 Oct 2020	16 Oct 2020	12 Nov 2020	19 Oct 2020	12 Nov 2020	23 Oct 2020
0407_PSG_BH10_0.5-0.6_2	SE212400.020	LB211571	15 Oct 2020	16 Oct 2020	12 Nov 2020	19 Oct 2020	12 Nov 2020	23 Oct 2020
0407_SEP001_BH01_0.2-0.	SE212400.021	LB211571	15 Oct 2020	16 Oct 2020	12 Nov 2020	19 Oct 2020	12 Nov 2020	23 Oct 2020
0407_SEP001_BH01_1.5-1.	SE212400.022	LB211571	15 Oct 2020	16 Oct 2020	12 Nov 2020	19 Oct 2020	12 Nov 2020	23 Oct 2020
0407_SEP001_BH02_0.2-0.	SE212400.023	LB211571	15 Oct 2020	16 Oct 2020	12 Nov 2020	19 Oct 2020	12 Nov 2020	23 Oct 2020
0407_SEP001_BH02_1.5-1.	SE212400.024	LB211571	15 Oct 2020	16 Oct 2020	12 Nov 2020	19 Oct 2020	12 Nov 2020	23 Oct 2020
0407_SEW001_0.4-0.5_201	SE212400.025	LB211571	15 Oct 2020	16 Oct 2020	12 Nov 2020	19 Oct 2020	12 Nov 2020	23 Oct 2020
0407_SEW001_1.5-1.6_201	SE212400.026	LB211571	15 Oct 2020	16 Oct 2020	12 Nov 2020	19 Oct 2020	12 Nov 2020	23 Oct 2020
0407_SEW002_0.4-0.5_201	SE212400.027	LB211571	15 Oct 2020	16 Oct 2020	12 Nov 2020	19 Oct 2020	12 Nov 2020	23 Oct 2020
0407_SEW002_1.5-1.6_201	SE212400.028	LB211571	15 Oct 2020	16 Oct 2020	12 Nov 2020	19 Oct 2020	12 Nov 2020	23 Oct 2020
0407_QC189_201015	SE212400.029	LB211571	15 Oct 2020	16 Oct 2020	12 Nov 2020	19 Oct 2020	12 Nov 2020	23 Oct 2020
0407_STWR001_BH01_0.2-	SE212400.030	LB211571	15 Oct 2020	16 Oct 2020	12 Nov 2020	19 Oct 2020	12 Nov 2020	23 Oct 2020
0407_STWR001_BH01_1.5-	SE212400.031	LB211571	15 Oct 2020	16 Oct 2020	12 Nov 2020	19 Oct 2020	12 Nov 2020	23 Oct 2020

HOLDING TIME SUMMARY

SE212400 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Mercury in Soil (continued)

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC191_201015	SE212400.032	LB211571	15 Oct 2020	16 Oct 2020	12 Nov 2020	19 Oct 2020	12 Nov 2020	23 Oct 2020
0407_STWR001_BH02_0.2-	SE212400.033	LB211571	15 Oct 2020	16 Oct 2020	12 Nov 2020	19 Oct 2020	12 Nov 2020	23 Oct 2020
0407_STWR001_BH02_1.5-	SE212400.034	LB211571	15 Oct 2020	16 Oct 2020	12 Nov 2020	19 Oct 2020	12 Nov 2020	23 Oct 2020
0407_QC192_201015	SE212400.035	LB211571	15 Oct 2020	16 Oct 2020	12 Nov 2020	19 Oct 2020	12 Nov 2020	23 Oct 2020
0407_STWR002_0.2-0.3_20	SE212400.036	LB211571	15 Oct 2020	16 Oct 2020	12 Nov 2020	19 Oct 2020	12 Nov 2020	23 Oct 2020
0407_STWR002_0.5-0.6_20	SE212400.037	LB211571	15 Oct 2020	16 Oct 2020	12 Nov 2020	19 Oct 2020	12 Nov 2020	23 Oct 2020
0407_QC190_201015	SE212400.038	LB211571	15 Oct 2020	16 Oct 2020	12 Nov 2020	19 Oct 2020	12 Nov 2020	23 Oct 2020
0407_SYDSEW12_0.1-0.2_	SE212400.039	LB211572	15 Oct 2020	16 Oct 2020	12 Nov 2020	19 Oct 2020	12 Nov 2020	23 Oct 2020
0407_SYDSEW12_0.5-0.7_	SE212400.040	LB211572	15 Oct 2020	16 Oct 2020	12 Nov 2020	19 Oct 2020	12 Nov 2020	23 Oct 2020
0407_SYDSEW13_0.2-0.3_	SE212400.041	LB211572	15 Oct 2020	16 Oct 2020	12 Nov 2020	19 Oct 2020	12 Nov 2020	23 Oct 2020
0407_SYDSEW13_0.6-0.7_	SE212400.042	LB211572	15 Oct 2020	16 Oct 2020	12 Nov 2020	19 Oct 2020	12 Nov 2020	23 Oct 2020
0407_SYDSEW14_0.1-0.2_	SE212400.043	LB211572	15 Oct 2020	16 Oct 2020	12 Nov 2020	19 Oct 2020	12 Nov 2020	23 Oct 2020
0407_SYDSEW14_1.5-1.6_	SE212400.044	LB211572	15 Oct 2020	16 Oct 2020	12 Nov 2020	19 Oct 2020	12 Nov 2020	23 Oct 2020
0407_SYDSEW15_0.2-0.3_	SE212400.045	LB211572	15 Oct 2020	16 Oct 2020	12 Nov 2020	19 Oct 2020	12 Nov 2020	23 Oct 2020
0407_SYDSEW15_0.5-0.6_	SE212400.046	LB211572	15 Oct 2020	16 Oct 2020	12 Nov 2020	19 Oct 2020	12 Nov 2020	23 Oct 2020

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_PSG_BH01_0.2-0.3_2	SE212400.001	LB211524	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	24 Oct 2020	22 Oct 2020
0407_PSG_BH01_0.5-0.6_2	SE212400.002	LB211524	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	24 Oct 2020	22 Oct 2020
0407_PSG_BH02_0.2-0.3_2	SE212400.003	LB211524	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	24 Oct 2020	22 Oct 2020
0407_PSG_BH02_0.5-0.6_2	SE212400.004	LB211524	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	24 Oct 2020	22 Oct 2020
0407_PSG_BH03_0.2-0.3_2	SE212400.005	LB211524	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	24 Oct 2020	22 Oct 2020
0407_PSG_BH03_0.5-0.6_2	SE212400.006	LB211524	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	24 Oct 2020	22 Oct 2020
0407_PSG_BH04_0.5-0.6_2	SE212400.007	LB211524	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	24 Oct 2020	22 Oct 2020
0407_PSG_BH04_0.9-1.0_2	SE212400.008	LB211524	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	24 Oct 2020	22 Oct 2020
0407_PSG_BH05_0.2-0.3_2	SE212400.009	LB211524	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	24 Oct 2020	22 Oct 2020
0407_PSG_BH05_0.5-0.6_2	SE212400.010	LB211524	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	24 Oct 2020	22 Oct 2020
0407_PSG_BH06_0.2-0.3_2	SE212400.011	LB211524	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	24 Oct 2020	22 Oct 2020
0407_PSG_BH06_0.5-0.6_2	SE212400.012	LB211524	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	24 Oct 2020	22 Oct 2020
0407_PSG_BH07_0.2-0.3_2	SE212400.013	LB211524	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	24 Oct 2020	22 Oct 2020
0407_PSG_BH07_0.5-0.6_2	SE212400.014	LB211524	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	24 Oct 2020	22 Oct 2020
0407_PSG_BH08_0.2-0.3_2	SE212400.015	LB211524	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	24 Oct 2020	22 Oct 2020
0407_PSG_BH08_0.5-0.6_2	SE212400.016	LB211524	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	24 Oct 2020	22 Oct 2020
0407_PSG_BH09_0.2-0.3_2	SE212400.017	LB211524	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	24 Oct 2020	22 Oct 2020
0407_PSG_BH09_0.5-0.6_2	SE212400.018	LB211524	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	24 Oct 2020	22 Oct 2020
0407_PSG_BH10_0.2-0.3_2	SE212400.019	LB211524	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	24 Oct 2020	22 Oct 2020
0407_PSG_BH10_0.5-0.6_2	SE212400.020	LB211524	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	24 Oct 2020	22 Oct 2020
0407_SEP001_BH01_0.2-0.	SE212400.021	LB211525	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	24 Oct 2020	22 Oct 2020
0407_SEP001_BH01_1.5-1.	SE212400.022	LB211525	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	24 Oct 2020	22 Oct 2020
0407_SEP001_BH02_0.2-0.	SE212400.023	LB211525	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	24 Oct 2020	22 Oct 2020
0407_SEP001_BH02_1.5-1.	SE212400.024	LB211525	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	24 Oct 2020	22 Oct 2020
0407_SEW001_0.4-0.5_201	SE212400.025	LB211525	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	24 Oct 2020	22 Oct 2020
0407_SEW001_1.5-1.6_201	SE212400.026	LB211525	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	24 Oct 2020	22 Oct 2020
0407_SEW002_0.4-0.5_201	SE212400.027	LB211525	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	24 Oct 2020	22 Oct 2020
0407_SEW002_1.5-1.6_201	SE212400.028	LB211525	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	24 Oct 2020	22 Oct 2020
0407_QC189_201015	SE212400.029	LB211525	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	24 Oct 2020	22 Oct 2020
0407_STWR001_BH01_0.2-	SE212400.030	LB211525	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	24 Oct 2020	22 Oct 2020
0407_STWR001_BH01_1.5-	SE212400.031	LB211525	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	24 Oct 2020	22 Oct 2020
0407_QC191_201015	SE212400.032	LB211525	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	24 Oct 2020	22 Oct 2020
0407_STWR001_BH02_0.2-	SE212400.033	LB211525	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	24 Oct 2020	22 Oct 2020
0407_STWR001_BH02_1.5-	SE212400.034	LB211525	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	24 Oct 2020	22 Oct 2020
0407_QC192_201015	SE212400.035	LB211525	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	24 Oct 2020	22 Oct 2020
0407_STWR002_0.2-0.3_20	SE212400.036	LB211525	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	24 Oct 2020	22 Oct 2020
0407_STWR002_0.5-0.6_20	SE212400.037	LB211525	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	24 Oct 2020	22 Oct 2020
0407_QC190_201015	SE212400.038	LB211525	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	24 Oct 2020	22 Oct 2020
0407_SYDSEW12_0.1-0.2_	SE212400.039	LB211525	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	24 Oct 2020	22 Oct 2020
0407_SYDSEW12_0.5-0.7_	SE212400.040	LB211525	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	24 Oct 2020	22 Oct 2020
0407_SYDSEW13_0.2-0.3_	SE212400.041	LB211526	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	24 Oct 2020	22 Oct 2020
0407_SYDSEW13_0.6-0.7_	SE212400.042	LB211526	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	24 Oct 2020	22 Oct 2020

HOLDING TIME SUMMARY

SE212400 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Moisture Content (continued)

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SYDSEW14_0.1-0.2_	SE212400.043	LB211526	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	24 Oct 2020	22 Oct 2020
0407_SYDSEW14_1.5-1.6_	SE212400.044	LB211526	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	24 Oct 2020	22 Oct 2020
0407_SYDSEW15_0.2-0.3_	SE212400.045	LB211526	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	24 Oct 2020	22 Oct 2020
0407_SYDSEW15_0.5-0.6_	SE212400.046	LB211526	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	24 Oct 2020	22 Oct 2020

Nitrite Nitrogen in Soil

Method: ME-(AU)-[ENV]AN277

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SEP001_BH01_0.2-0.	SE212400.021	LB211726	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	23 Oct 2020	22 Oct 2020
0407_SEP001_BH01_1.5-1.	SE212400.022	LB211726	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	23 Oct 2020	22 Oct 2020
0407_SEP001_BH02_0.2-0.	SE212400.023	LB211726	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	23 Oct 2020	22 Oct 2020
0407_SEP001_BH02_1.5-1.	SE212400.024	LB211726	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	23 Oct 2020	22 Oct 2020
0407_SEW001_0.4-0.5_201	SE212400.025	LB211726	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	23 Oct 2020	22 Oct 2020
0407_SEW001_1.5-1.6_201	SE212400.026	LB211726	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	23 Oct 2020	22 Oct 2020
0407_SEW002_0.4-0.5_201	SE212400.027	LB211726	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	23 Oct 2020	22 Oct 2020
0407_SEW002_1.5-1.6_201	SE212400.028	LB211726	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	23 Oct 2020	22 Oct 2020
0407_QC189_201015	SE212400.029	LB211726	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	23 Oct 2020	22 Oct 2020
0407_STWR001_BH01_0.2-	SE212400.030	LB211726	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	23 Oct 2020	22 Oct 2020
0407_STWR001_BH01_1.5-	SE212400.031	LB211726	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	23 Oct 2020	22 Oct 2020
0407_QC191_201015	SE212400.032	LB211726	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	23 Oct 2020	22 Oct 2020
0407_STWR001_BH02_0.2-	SE212400.033	LB211726	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	23 Oct 2020	22 Oct 2020
0407_STWR001_BH02_1.5-	SE212400.034	LB211726	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	23 Oct 2020	22 Oct 2020
0407_QC192_201015	SE212400.035	LB211726	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	23 Oct 2020	22 Oct 2020
0407_STWR002_0.2-0.3_20	SE212400.036	LB211726	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	23 Oct 2020	22 Oct 2020
0407_STWR002_0.5-0.6_20	SE212400.037	LB211726	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	23 Oct 2020	22 Oct 2020
0407_QC190_201015	SE212400.038	LB211726	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	23 Oct 2020	22 Oct 2020
0407_SYDSEW12_0.1-0.2_	SE212400.039	LB211726	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	23 Oct 2020	22 Oct 2020
0407_SYDSEW12_0.5-0.7_	SE212400.040	LB211726	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	23 Oct 2020	22 Oct 2020
0407_SYDSEW13_0.2-0.3_	SE212400.041	LB211726	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	23 Oct 2020	22 Oct 2020
0407_SYDSEW13_0.6-0.7_	SE212400.042	LB211726	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	23 Oct 2020	22 Oct 2020
0407_SYDSEW14_0.1-0.2_	SE212400.043	LB211726	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	23 Oct 2020	22 Oct 2020
0407_SYDSEW14_1.5-1.6_	SE212400.044	LB211726	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	23 Oct 2020	22 Oct 2020
0407_SYDSEW15_0.2-0.3_	SE212400.045	LB211726	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	23 Oct 2020	22 Oct 2020
0407_SYDSEW15_0.5-0.6_	SE212400.046	LB211726	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	23 Oct 2020	22 Oct 2020

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_PSG_BH01_0.2-0.3_2	SE212400.001	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_PSG_BH01_0.5-0.6_2	SE212400.002	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_PSG_BH02_0.2-0.3_2	SE212400.003	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_PSG_BH02_0.5-0.6_2	SE212400.004	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_PSG_BH03_0.2-0.3_2	SE212400.005	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_PSG_BH03_0.5-0.6_2	SE212400.006	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_PSG_BH04_0.5-0.6_2	SE212400.007	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_PSG_BH04_0.9-1.0_2	SE212400.008	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_PSG_BH05_0.2-0.3_2	SE212400.009	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_PSG_BH05_0.5-0.6_2	SE212400.010	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_PSG_BH06_0.2-0.3_2	SE212400.011	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_PSG_BH06_0.5-0.6_2	SE212400.012	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_PSG_BH07_0.2-0.3_2	SE212400.013	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_PSG_BH07_0.5-0.6_2	SE212400.014	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_PSG_BH08_0.2-0.3_2	SE212400.015	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_PSG_BH08_0.5-0.6_2	SE212400.016	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_PSG_BH09_0.2-0.3_2	SE212400.017	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_PSG_BH09_0.5-0.6_2	SE212400.018	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_PSG_BH10_0.2-0.3_2	SE212400.019	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_PSG_BH10_0.5-0.6_2	SE212400.020	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_PSG_BH01_0.2-0.3_2	SE212400.001	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH01_0.5-0.6_2	SE212400.002	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_PSG_BH02_0.2-0.3_2	SE212400.003	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH02_0.5-0.6_2	SE212400.004	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH03_0.2-0.3_2	SE212400.005	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH03_0.5-0.6_2	SE212400.006	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH04_0.5-0.6_2	SE212400.007	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH04_0.9-1.0_2	SE212400.008	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH05_0.2-0.3_2	SE212400.009	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH05_0.5-0.6_2	SE212400.010	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH06_0.2-0.3_2	SE212400.011	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH06_0.5-0.6_2	SE212400.012	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH07_0.2-0.3_2	SE212400.013	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH07_0.5-0.6_2	SE212400.014	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH08_0.2-0.3_2	SE212400.015	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH08_0.5-0.6_2	SE212400.016	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH09_0.2-0.3_2	SE212400.017	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH09_0.5-0.6_2	SE212400.018	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH10_0.2-0.3_2	SE212400.019	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH10_0.5-0.6_2	SE212400.020	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_PSG_BH01_0.2-0.3_2	SE212400.001	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_PSG_BH01_0.5-0.6_2	SE212400.002	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_PSG_BH02_0.2-0.3_2	SE212400.003	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_PSG_BH02_0.5-0.6_2	SE212400.004	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_PSG_BH03_0.2-0.3_2	SE212400.005	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_PSG_BH03_0.5-0.6_2	SE212400.006	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_PSG_BH04_0.5-0.6_2	SE212400.007	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_PSG_BH04_0.9-1.0_2	SE212400.008	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_PSG_BH05_0.2-0.3_2	SE212400.009	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_PSG_BH05_0.5-0.6_2	SE212400.010	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_PSG_BH06_0.2-0.3_2	SE212400.011	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_PSG_BH06_0.5-0.6_2	SE212400.012	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_PSG_BH07_0.2-0.3_2	SE212400.013	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_PSG_BH07_0.5-0.6_2	SE212400.014	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_PSG_BH08_0.2-0.3_2	SE212400.015	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_PSG_BH08_0.5-0.6_2	SE212400.016	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_PSG_BH09_0.2-0.3_2	SE212400.017	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_PSG_BH09_0.5-0.6_2	SE212400.018	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_PSG_BH10_0.2-0.3_2	SE212400.019	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_PSG_BH10_0.5-0.6_2	SE212400.020	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020

Soluble Anions (1:5) in Soil by Ion Chromatography

Method: ME-(AU)-[ENV]AN245

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SEP001_BH01_0.2-0.	SE212400.021	LB211744	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	18 Nov 2020	23 Oct 2020
0407_SEP001_BH01_1.5-1.	SE212400.022	LB211744	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	18 Nov 2020	23 Oct 2020
0407_SEP001_BH02_0.2-0.	SE212400.023	LB211744	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	18 Nov 2020	23 Oct 2020
0407_SEP001_BH02_1.5-1.	SE212400.024	LB211744	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	18 Nov 2020	23 Oct 2020
0407_SEW001_0.4-0.5_201	SE212400.025	LB211744	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	18 Nov 2020	23 Oct 2020
0407_SEW001_1.5-1.6_201	SE212400.026	LB211744	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	18 Nov 2020	23 Oct 2020
0407_SEW002_0.4-0.5_201	SE212400.027	LB211744	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	18 Nov 2020	23 Oct 2020
0407_SEW002_1.5-1.6_201	SE212400.028	LB211744	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	18 Nov 2020	23 Oct 2020
0407_QC189_201015	SE212400.029	LB211744	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	18 Nov 2020	23 Oct 2020
0407_STWR001_BH01_0.2-	SE212400.030	LB211744	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	18 Nov 2020	23 Oct 2020
0407_STWR001_BH01_1.5-	SE212400.031	LB211744	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	18 Nov 2020	23 Oct 2020
0407_QC191_201015	SE212400.032	LB211744	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	18 Nov 2020	23 Oct 2020
0407_STWR001_BH02_0.2-	SE212400.033	LB211744	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	18 Nov 2020	23 Oct 2020
0407_STWR001_BH02_1.5-	SE212400.034	LB211744	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	18 Nov 2020	23 Oct 2020
0407_QC192_201015	SE212400.035	LB211744	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	18 Nov 2020	23 Oct 2020
0407_STWR002_0.2-0.3_20	SE212400.036	LB211744	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	18 Nov 2020	23 Oct 2020
0407_STWR002_0.5-0.6_20	SE212400.037	LB211744	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	18 Nov 2020	23 Oct 2020

HOLDING TIME SUMMARY

SE212400 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Soluble Anions (1:5) in Soil by Ion Chromatography (continued)

Method: ME-(AU)-[ENV]AN245

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC190_201015	SE212400.038	LB211744	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	18 Nov 2020	23 Oct 2020
0407_SYDSEW12_0.1-0.2_	SE212400.039	LB211744	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	18 Nov 2020	23 Oct 2020
0407_SYDSEW12_0.5-0.7_	SE212400.040	LB211744	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	18 Nov 2020	23 Oct 2020
0407_SYDSEW13_0.2-0.3_	SE212400.041	LB211744	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	18 Nov 2020	23 Oct 2020
0407_SYDSEW13_0.6-0.7_	SE212400.042	LB211744	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	18 Nov 2020	23 Oct 2020
0407_SYDSEW14_0.1-0.2_	SE212400.043	LB211744	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	18 Nov 2020	23 Oct 2020
0407_SYDSEW14_1.5-1.6_	SE212400.044	LB211744	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	18 Nov 2020	23 Oct 2020
0407_SYDSEW15_0.2-0.3_	SE212400.045	LB211744	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	18 Nov 2020	23 Oct 2020
0407_SYDSEW15_0.5-0.6_	SE212400.046	LB211744	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	18 Nov 2020	23 Oct 2020

TKN Kjeldahl Digestion by Discrete Analyser in Soil

Method: ME-(AU)-[ENV]AN292

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SEP001_BH01_0.2-0.	SE212400.021	LB211724	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	28 Oct 2020	23 Oct 2020
0407_SEP001_BH01_1.5-1.	SE212400.022	LB211724	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	28 Oct 2020	23 Oct 2020
0407_SEP001_BH02_0.2-0.	SE212400.023	LB211724	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	28 Oct 2020	23 Oct 2020
0407_SEP001_BH02_1.5-1.	SE212400.024	LB211724	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	28 Oct 2020	23 Oct 2020
0407_SEW001_0.4-0.5_201	SE212400.025	LB211724	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	28 Oct 2020	23 Oct 2020
0407_SEW001_1.5-1.6_201	SE212400.026	LB211724	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	28 Oct 2020	23 Oct 2020
0407_SEW002_0.4-0.5_201	SE212400.027	LB211724	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	28 Oct 2020	23 Oct 2020
0407_SEW002_1.5-1.6_201	SE212400.028	LB211724	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	28 Oct 2020	23 Oct 2020
0407_QC189_201015	SE212400.029	LB211724	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	28 Oct 2020	23 Oct 2020
0407_STWR001_BH01_0.2-	SE212400.030	LB211724	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	28 Oct 2020	23 Oct 2020
0407_STWR001_BH01_1.5-	SE212400.031	LB211725	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	28 Oct 2020	23 Oct 2020
0407_QC191_201015	SE212400.032	LB211725	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	28 Oct 2020	23 Oct 2020
0407_STWR001_BH02_0.2-	SE212400.033	LB211725	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	28 Oct 2020	23 Oct 2020
0407_STWR001_BH02_1.5-	SE212400.034	LB211725	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	28 Oct 2020	23 Oct 2020
0407_QC192_201015	SE212400.035	LB211725	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	28 Oct 2020	23 Oct 2020
0407_STWR002_0.2-0.3_20	SE212400.036	LB211725	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	28 Oct 2020	23 Oct 2020
0407_STWR002_0.5-0.6_20	SE212400.037	LB211725	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	28 Oct 2020	23 Oct 2020
0407_QC190_201015	SE212400.038	LB211725	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	28 Oct 2020	23 Oct 2020
0407_SYDSEW12_0.1-0.2_	SE212400.039	LB211725	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	28 Oct 2020	23 Oct 2020
0407_SYDSEW12_0.5-0.7_	SE212400.040	LB211725	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	28 Oct 2020	23 Oct 2020
0407_SYDSEW13_0.2-0.3_	SE212400.041	LB211725	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	28 Oct 2020	23 Oct 2020
0407_SYDSEW13_0.6-0.7_	SE212400.042	LB211725	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	28 Oct 2020	23 Oct 2020
0407_SYDSEW14_0.1-0.2_	SE212400.043	LB211725	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	28 Oct 2020	23 Oct 2020
0407_SYDSEW14_1.5-1.6_	SE212400.044	LB211725	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	28 Oct 2020	23 Oct 2020
0407_SYDSEW15_0.2-0.3_	SE212400.045	LB211725	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	28 Oct 2020	23 Oct 2020
0407_SYDSEW15_0.5-0.6_	SE212400.046	LB211725	15 Oct 2020	16 Oct 2020	22 Oct 2020	21 Oct 2020	28 Oct 2020	23 Oct 2020

Total Phosphorus by Kjeldahl Digestion DA in Soil

Method: ME-(AU)-[ENV]AN279/AN293(Sydney only)

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SEP001_BH01_0.2-0.	SE212400.021	LB211724	15 Oct 2020	16 Oct 2020	12 Nov 2020	21 Oct 2020	12 Nov 2020	22 Oct 2020
0407_SEP001_BH01_1.5-1.	SE212400.022	LB211724	15 Oct 2020	16 Oct 2020	12 Nov 2020	21 Oct 2020	12 Nov 2020	22 Oct 2020
0407_SEP001_BH02_0.2-0.	SE212400.023	LB211724	15 Oct 2020	16 Oct 2020	12 Nov 2020	21 Oct 2020	12 Nov 2020	22 Oct 2020
0407_SEP001_BH02_1.5-1.	SE212400.024	LB211724	15 Oct 2020	16 Oct 2020	12 Nov 2020	21 Oct 2020	12 Nov 2020	22 Oct 2020
0407_SEW001_0.4-0.5_201	SE212400.025	LB211724	15 Oct 2020	16 Oct 2020	12 Nov 2020	21 Oct 2020	12 Nov 2020	22 Oct 2020
0407_SEW001_1.5-1.6_201	SE212400.026	LB211724	15 Oct 2020	16 Oct 2020	12 Nov 2020	21 Oct 2020	12 Nov 2020	22 Oct 2020
0407_SEW002_0.4-0.5_201	SE212400.027	LB211724	15 Oct 2020	16 Oct 2020	12 Nov 2020	21 Oct 2020	12 Nov 2020	22 Oct 2020
0407_SEW002_1.5-1.6_201	SE212400.028	LB211724	15 Oct 2020	16 Oct 2020	12 Nov 2020	21 Oct 2020	12 Nov 2020	22 Oct 2020
0407_QC189_201015	SE212400.029	LB211724	15 Oct 2020	16 Oct 2020	12 Nov 2020	21 Oct 2020	12 Nov 2020	22 Oct 2020
0407_STWR001_BH01_0.2-	SE212400.030	LB211724	15 Oct 2020	16 Oct 2020	12 Nov 2020	21 Oct 2020	12 Nov 2020	22 Oct 2020
0407_STWR001_BH01_1.5-	SE212400.031	LB211725	15 Oct 2020	16 Oct 2020	12 Nov 2020	21 Oct 2020	12 Nov 2020	22 Oct 2020
0407_QC191_201015	SE212400.032	LB211725	15 Oct 2020	16 Oct 2020	12 Nov 2020	21 Oct 2020	12 Nov 2020	22 Oct 2020
0407_STWR001_BH02_0.2-	SE212400.033	LB211725	15 Oct 2020	16 Oct 2020	12 Nov 2020	21 Oct 2020	12 Nov 2020	22 Oct 2020
0407_STWR001_BH02_1.5-	SE212400.034	LB211725	15 Oct 2020	16 Oct 2020	12 Nov 2020	21 Oct 2020	12 Nov 2020	22 Oct 2020
0407_QC192_201015	SE212400.035	LB211725	15 Oct 2020	16 Oct 2020	12 Nov 2020	21 Oct 2020	12 Nov 2020	22 Oct 2020
0407_STWR002_0.2-0.3_20	SE212400.036	LB211725	15 Oct 2020	16 Oct 2020	12 Nov 2020	21 Oct 2020	12 Nov 2020	22 Oct 2020
0407_STWR002_0.5-0.6_20	SE212400.037	LB211725	15 Oct 2020	16 Oct 2020	12 Nov 2020	21 Oct 2020	12 Nov 2020	22 Oct 2020
0407_QC190_201015	SE212400.038	LB211725	15 Oct 2020	16 Oct 2020	12 Nov 2020	21 Oct 2020	12 Nov 2020	22 Oct 2020
0407_SYDSEW12_0.1-0.2_	SE212400.039	LB211725	15 Oct 2020	16 Oct 2020	12 Nov 2020	21 Oct 2020	12 Nov 2020	22 Oct 2020
0407_SYDSEW12_0.5-0.7_	SE212400.040	LB211725	15 Oct 2020	16 Oct 2020	12 Nov 2020	21 Oct 2020	12 Nov 2020	22 Oct 2020

HOLDING TIME SUMMARY

SE212400 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Total Phosphorus by Kjeldahl Digestion DA in Soil (continued)

Method: ME-(AU)-[ENV]AN279/AN293(Sydney only)

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SYDSEW13_0.2-0.3_	SE212400.041	LB211725	15 Oct 2020	16 Oct 2020	12 Nov 2020	21 Oct 2020	12 Nov 2020	22 Oct 2020
0407_SYDSEW13_0.6-0.7_	SE212400.042	LB211725	15 Oct 2020	16 Oct 2020	12 Nov 2020	21 Oct 2020	12 Nov 2020	22 Oct 2020
0407_SYDSEW14_0.1-0.2_	SE212400.043	LB211725	15 Oct 2020	16 Oct 2020	12 Nov 2020	21 Oct 2020	12 Nov 2020	22 Oct 2020
0407_SYDSEW14_1.5-1.6_	SE212400.044	LB211725	15 Oct 2020	16 Oct 2020	12 Nov 2020	21 Oct 2020	12 Nov 2020	22 Oct 2020
0407_SYDSEW15_0.2-0.3_	SE212400.045	LB211725	15 Oct 2020	16 Oct 2020	12 Nov 2020	21 Oct 2020	12 Nov 2020	22 Oct 2020
0407_SYDSEW15_0.5-0.6_	SE212400.046	LB211725	15 Oct 2020	16 Oct 2020	12 Nov 2020	21 Oct 2020	12 Nov 2020	22 Oct 2020

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_PSG_BH01_0.2-0.3_2	SE212400.001	LB211559	15 Oct 2020	16 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_PSG_BH01_0.5-0.6_2	SE212400.002	LB211559	15 Oct 2020	16 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_PSG_BH02_0.2-0.3_2	SE212400.003	LB211559	15 Oct 2020	16 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_PSG_BH02_0.5-0.6_2	SE212400.004	LB211559	15 Oct 2020	16 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_PSG_BH03_0.2-0.3_2	SE212400.005	LB211559	15 Oct 2020	16 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_PSG_BH03_0.5-0.6_2	SE212400.006	LB211559	15 Oct 2020	16 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_PSG_BH04_0.5-0.6_2	SE212400.007	LB211559	15 Oct 2020	16 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_PSG_BH04_0.9-1.0_2	SE212400.008	LB211559	15 Oct 2020	16 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_PSG_BH05_0.2-0.3_2	SE212400.009	LB211559	15 Oct 2020	16 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_PSG_BH05_0.5-0.6_2	SE212400.010	LB211559	15 Oct 2020	16 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_PSG_BH06_0.2-0.3_2	SE212400.011	LB211559	15 Oct 2020	16 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_PSG_BH06_0.5-0.6_2	SE212400.012	LB211559	15 Oct 2020	16 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_PSG_BH07_0.2-0.3_2	SE212400.013	LB211559	15 Oct 2020	16 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_PSG_BH07_0.5-0.6_2	SE212400.014	LB211559	15 Oct 2020	16 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_PSG_BH08_0.2-0.3_2	SE212400.015	LB211559	15 Oct 2020	16 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_PSG_BH08_0.5-0.6_2	SE212400.016	LB211559	15 Oct 2020	16 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_PSG_BH09_0.2-0.3_2	SE212400.017	LB211559	15 Oct 2020	16 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_PSG_BH09_0.5-0.6_2	SE212400.018	LB211559	15 Oct 2020	16 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_PSG_BH10_0.2-0.3_2	SE212400.019	LB211559	15 Oct 2020	16 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_PSG_BH10_0.5-0.6_2	SE212400.020	LB211560	15 Oct 2020	16 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_SEP001_BH01_0.2-0.	SE212400.021	LB211560	15 Oct 2020	16 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_SEP001_BH01_1.5-1.	SE212400.022	LB211560	15 Oct 2020	16 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_SEP001_BH02_0.2-0.	SE212400.023	LB211560	15 Oct 2020	16 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_SEP001_BH02_1.5-1.	SE212400.024	LB211560	15 Oct 2020	16 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_SEW001_0.4-0.5_201	SE212400.025	LB211560	15 Oct 2020	16 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_SEW001_1.5-1.6_201	SE212400.026	LB211560	15 Oct 2020	16 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_SEW002_0.4-0.5_201	SE212400.027	LB211560	15 Oct 2020	16 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_SEW002_1.5-1.6_201	SE212400.028	LB211560	15 Oct 2020	16 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_QC189_201015	SE212400.029	LB211560	15 Oct 2020	16 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_STWR001_BH01_0.2-	SE212400.030	LB211560	15 Oct 2020	16 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_STWR001_BH01_1.5-	SE212400.031	LB211560	15 Oct 2020	16 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_QC191_201015	SE212400.032	LB211560	15 Oct 2020	16 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_STWR001_BH02_0.2-	SE212400.033	LB211560	15 Oct 2020	16 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_STWR001_BH02_1.5-	SE212400.034	LB211560	15 Oct 2020	16 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_QC192_201015	SE212400.035	LB211560	15 Oct 2020	16 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_STWR002_0.2-0.3_20	SE212400.036	LB211560	15 Oct 2020	16 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_STWR002_0.5-0.6_20	SE212400.037	LB211560	15 Oct 2020	16 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_QC190_201015	SE212400.038	LB211560	15 Oct 2020	16 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_SYDSEW12_0.1-0.2_	SE212400.039	LB211563	15 Oct 2020	16 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_SYDSEW12_0.5-0.7_	SE212400.040	LB211563	15 Oct 2020	16 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_SYDSEW13_0.2-0.3_	SE212400.041	LB211563	15 Oct 2020	16 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_SYDSEW13_0.6-0.7_	SE212400.042	LB211563	15 Oct 2020	16 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_SYDSEW14_0.1-0.2_	SE212400.043	LB211563	15 Oct 2020	16 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_SYDSEW14_1.5-1.6_	SE212400.044	LB211563	15 Oct 2020	16 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_SYDSEW15_0.2-0.3_	SE212400.045	LB211563	15 Oct 2020	16 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020
0407_SYDSEW15_0.5-0.6_	SE212400.046	LB211563	15 Oct 2020	16 Oct 2020	13 Apr 2021	19 Oct 2020	13 Apr 2021	22 Oct 2020

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_PSG_BH01_0.2-0.3_2	SE212400.001	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH01_0.5-0.6_2	SE212400.002	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH02_0.2-0.3_2	SE212400.003	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_PSG_BH02_0.5-0.6_2	SE212400.004	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH03_0.2-0.3_2	SE212400.005	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH03_0.5-0.6_2	SE212400.006	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH04_0.5-0.6_2	SE212400.007	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH04_0.9-1.0_2	SE212400.008	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH05_0.2-0.3_2	SE212400.009	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH05_0.5-0.6_2	SE212400.010	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH06_0.2-0.3_2	SE212400.011	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH06_0.5-0.6_2	SE212400.012	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH07_0.2-0.3_2	SE212400.013	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH07_0.5-0.6_2	SE212400.014	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH08_0.2-0.3_2	SE212400.015	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH08_0.5-0.6_2	SE212400.016	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH09_0.2-0.3_2	SE212400.017	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH09_0.5-0.6_2	SE212400.018	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH10_0.2-0.3_2	SE212400.019	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH10_0.5-0.6_2	SE212400.020	LB211512	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_PSG_BH01_0.2-0.3_2	SE212400.001	LB211509	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH01_0.5-0.6_2	SE212400.002	LB211509	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH02_0.2-0.3_2	SE212400.003	LB211509	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH02_0.5-0.6_2	SE212400.004	LB211509	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH03_0.2-0.3_2	SE212400.005	LB211509	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH03_0.5-0.6_2	SE212400.006	LB211509	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH04_0.5-0.6_2	SE212400.007	LB211509	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH04_0.9-1.0_2	SE212400.008	LB211509	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH05_0.2-0.3_2	SE212400.009	LB211509	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH05_0.5-0.6_2	SE212400.010	LB211509	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH06_0.2-0.3_2	SE212400.011	LB211509	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH06_0.5-0.6_2	SE212400.012	LB211509	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH07_0.2-0.3_2	SE212400.013	LB211509	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH07_0.5-0.6_2	SE212400.014	LB211509	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH08_0.2-0.3_2	SE212400.015	LB211509	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH08_0.5-0.6_2	SE212400.016	LB211509	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH09_0.2-0.3_2	SE212400.017	LB211509	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH09_0.5-0.6_2	SE212400.018	LB211509	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH10_0.2-0.3_2	SE212400.019	LB211509	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH10_0.5-0.6_2	SE212400.020	LB211509	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_SEP001_BH01_0.2-0.	SE212400.021	LB211510	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_SEP001_BH01_1.5-1.	SE212400.022	LB211510	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_SEP001_BH02_0.2-0.	SE212400.023	LB211510	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_SEP001_BH02_1.5-1.	SE212400.024	LB211510	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_SEW001_0.4-0.5_201	SE212400.025	LB211510	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_SEW001_1.5-1.6_201	SE212400.026	LB211510	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_SEW002_0.4-0.5_201	SE212400.027	LB211510	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_SEW002_1.5-1.6_201	SE212400.028	LB211510	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_QC189_201015	SE212400.029	LB211510	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_STWR001_BH01_0.2-	SE212400.030	LB211510	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_STWR001_BH01_1.5-	SE212400.031	LB211510	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_QC191_201015	SE212400.032	LB211510	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_STWR001_BH02_0.2-	SE212400.033	LB211510	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_STWR001_BH02_1.5-	SE212400.034	LB211510	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_QC192_201015	SE212400.035	LB211510	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_STWR002_0.2-0.3_20	SE212400.036	LB211510	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_STWR002_0.5-0.6_20	SE212400.037	LB211510	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_QC190_201015	SE212400.038	LB211510	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_SYDSEW12_0.1-0.2_	SE212400.039	LB211510	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_SYDSEW12_0.5-0.7_	SE212400.040	LB211510	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020

HOLDING TIME SUMMARY

SE212400 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SYDSEW13_0.2-0.3_	SE212400.041	LB211511	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_SYDSEW13_0.6-0.7_	SE212400.042	LB211511	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_SYDSEW14_0.1-0.2_	SE212400.043	LB211511	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_SYDSEW14_1.5-1.6_	SE212400.044	LB211511	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_SYDSEW15_0.2-0.3_	SE212400.045	LB211511	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_SYDSEW15_0.5-0.6_	SE212400.046	LB211511	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_QC521_201015	SE212400.047	LB211511	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_QC522_201015	SE212400.048	LB211511	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_PSG_BH01_0.2-0.3_2	SE212400.001	LB211509	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH01_0.5-0.6_2	SE212400.002	LB211509	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH02_0.2-0.3_2	SE212400.003	LB211509	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH02_0.5-0.6_2	SE212400.004	LB211509	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH03_0.2-0.3_2	SE212400.005	LB211509	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH03_0.5-0.6_2	SE212400.006	LB211509	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH04_0.5-0.6_2	SE212400.007	LB211509	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH04_0.9-1.0_2	SE212400.008	LB211509	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH05_0.2-0.3_2	SE212400.009	LB211509	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH05_0.5-0.6_2	SE212400.010	LB211509	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH06_0.2-0.3_2	SE212400.011	LB211509	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH06_0.5-0.6_2	SE212400.012	LB211509	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH07_0.2-0.3_2	SE212400.013	LB211509	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH07_0.5-0.6_2	SE212400.014	LB211509	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH08_0.2-0.3_2	SE212400.015	LB211509	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH08_0.5-0.6_2	SE212400.016	LB211509	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH09_0.2-0.3_2	SE212400.017	LB211509	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH09_0.5-0.6_2	SE212400.018	LB211509	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH10_0.2-0.3_2	SE212400.019	LB211509	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_PSG_BH10_0.5-0.6_2	SE212400.020	LB211509	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	22 Oct 2020
0407_SEP001_BH01_0.2-0.	SE212400.021	LB211510	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_SEP001_BH01_1.5-1.	SE212400.022	LB211510	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_SEP001_BH02_0.2-0.	SE212400.023	LB211510	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_SEP001_BH02_1.5-1.	SE212400.024	LB211510	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_SEW001_0.4-0.5_201	SE212400.025	LB211510	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_SEW001_1.5-1.6_201	SE212400.026	LB211510	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_SEW002_0.4-0.5_201	SE212400.027	LB211510	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_SEW002_1.5-1.6_201	SE212400.028	LB211510	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_QC189_201015	SE212400.029	LB211510	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_STWR001_BH01_0.2-	SE212400.030	LB211510	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_STWR001_BH01_1.5-	SE212400.031	LB211510	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_QC191_201015	SE212400.032	LB211510	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_STWR001_BH02_0.2-	SE212400.033	LB211510	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_STWR001_BH02_1.5-	SE212400.034	LB211510	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_QC192_201015	SE212400.035	LB211510	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_STWR002_0.2-0.3_20	SE212400.036	LB211510	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_STWR002_0.5-0.6_20	SE212400.037	LB211510	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_QC190_201015	SE212400.038	LB211510	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_SYDSEW12_0.1-0.2_	SE212400.039	LB211510	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_SYDSEW12_0.5-0.7_	SE212400.040	LB211510	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_SYDSEW13_0.2-0.3_	SE212400.041	LB211511	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_SYDSEW13_0.6-0.7_	SE212400.042	LB211511	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_SYDSEW14_0.1-0.2_	SE212400.043	LB211511	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_SYDSEW14_1.5-1.6_	SE212400.044	LB211511	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_SYDSEW15_0.2-0.3_	SE212400.045	LB211511	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_SYDSEW15_0.5-0.6_	SE212400.046	LB211511	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_QC521_201015	SE212400.047	LB211511	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020
0407_QC522_201015	SE212400.048	LB211511	15 Oct 2020	16 Oct 2020	29 Oct 2020	19 Oct 2020	28 Nov 2020	23 Oct 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)		SE212400.001	%	60 - 130%	129
		SE212400.002	%	60 - 130%	127
		SE212400.003	%	60 - 130%	126
		SE212400.004	%	60 - 130%	127
		SE212400.005	%	60 - 130%	95
		SE212400.006	%	60 - 130%	127
		SE212400.007	%	60 - 130%	129
		SE212400.008	%	60 - 130%	128
		SE212400.009	%	60 - 130%	125
		SE212400.010	%	60 - 130%	97
		SE212400.011	%	60 - 130%	127
		SE212400.012	%	60 - 130%	129
		SE212400.013	%	60 - 130%	129
		SE212400.014	%	60 - 130%	126
		SE212400.015	%	60 - 130%	130
		SE212400.016	%	60 - 130%	128
		SE212400.017	%	60 - 130%	127
		SE212400.018	%	60 - 130%	125
		SE212400.019	%	60 - 130%	129
		SE212400.020	%	60 - 130%	130

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)		SE212400.001	%	60 - 130%	85
		SE212400.002	%	60 - 130%	90
		SE212400.003	%	60 - 130%	85
		SE212400.004	%	60 - 130%	86
		SE212400.005	%	60 - 130%	89
		SE212400.006	%	60 - 130%	83
		SE212400.007	%	60 - 130%	82
		SE212400.008	%	60 - 130%	84
		SE212400.009	%	60 - 130%	86
		SE212400.010	%	60 - 130%	82
		SE212400.011	%	60 - 130%	95
		SE212400.012	%	60 - 130%	84
		SE212400.013	%	60 - 130%	88
		SE212400.014	%	60 - 130%	83
		SE212400.015	%	60 - 130%	85
		SE212400.016	%	60 - 130%	81
		SE212400.017	%	60 - 130%	85
		SE212400.018	%	60 - 130%	86
		SE212400.019	%	60 - 130%	83
		SE212400.020	%	60 - 130%	81
d14-p-terphenyl (Surrogate)		SE212400.001	%	60 - 130%	89
		SE212400.002	%	60 - 130%	87
		SE212400.003	%	60 - 130%	88
		SE212400.004	%	60 - 130%	91
		SE212400.005	%	60 - 130%	91
		SE212400.006	%	60 - 130%	94
		SE212400.007	%	60 - 130%	93
		SE212400.008	%	60 - 130%	89
		SE212400.009	%	60 - 130%	91
		SE212400.010	%	60 - 130%	85
		SE212400.011	%	60 - 130%	94
		SE212400.012	%	60 - 130%	87
		SE212400.013	%	60 - 130%	89
		SE212400.014	%	60 - 130%	90
		SE212400.015	%	60 - 130%	89
		SE212400.016	%	60 - 130%	93
		SE212400.017	%	60 - 130%	92
		SE212400.018	%	60 - 130%	93

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d14-p-terphenyl (Surrogate)		SE212400.019	%	60 - 130%	98
		SE212400.020	%	60 - 130%	88

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)		SE212400.001	%	60 - 130%	129
		SE212400.002	%	60 - 130%	127
		SE212400.003	%	60 - 130%	126
		SE212400.004	%	60 - 130%	127
		SE212400.005	%	60 - 130%	95
		SE212400.006	%	60 - 130%	127
		SE212400.007	%	60 - 130%	129
		SE212400.008	%	60 - 130%	128
		SE212400.009	%	60 - 130%	125
		SE212400.010	%	60 - 130%	97
		SE212400.011	%	60 - 130%	127
		SE212400.012	%	60 - 130%	129
		SE212400.013	%	60 - 130%	129
		SE212400.014	%	60 - 130%	126
		SE212400.015	%	60 - 130%	130
		SE212400.016	%	60 - 130%	128
		SE212400.017	%	60 - 130%	127
		SE212400.018	%	60 - 130%	125
		SE212400.019	%	60 - 130%	129
		SE212400.020	%	60 - 130%	130

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples

Method: MA-1523

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C2_PFTeDA) Isotopically Labelled Internal Recovery Standard		SE212400.001	%	0 - 130%	44
		SE212400.002	%	0 - 130%	48
		SE212400.003	%	0 - 130%	66
		SE212400.004	%	0 - 130%	61
		SE212400.005	%	0 - 130%	43
		SE212400.006	%	0 - 130%	47
		SE212400.007	%	0 - 130%	54
		SE212400.008	%	0 - 130%	52
		SE212400.009	%	0 - 130%	48
		SE212400.010	%	0 - 130%	27
		SE212400.011	%	0 - 130%	24
		SE212400.012	%	0 - 130%	35
		SE212400.013	%	0 - 130%	30
		SE212400.014	%	0 - 130%	21
		SE212400.015	%	0 - 130%	48
		SE212400.016	%	0 - 130%	48
		SE212400.017	%	0 - 130%	39
		SE212400.018	%	0 - 130%	54
		SE212400.019	%	0 - 130%	57
		SE212400.020	%	0 - 130%	62
		SE212400.021	%	0 - 130%	37
		SE212400.022	%	0 - 130%	4
		SE212400.023	%	0 - 130%	33
		SE212400.024	%	0 - 130%	15
	0407_SEW001_0.4-0.5_201015	SE212400.025	%	0 - 130%	37
	0407_SEW001_1.5-1.6_201015	SE212400.026	%	0 - 130%	23
	0407_SEW002_0.4-0.5_201015	SE212400.027	%	0 - 130%	16
	0407_SEW002_1.5-1.6_201015	SE212400.028	%	0 - 130%	13
	0407_QC189_201015	SE212400.029	%	0 - 130%	16
		SE212400.030	%	0 - 130%	26
		SE212400.031	%	0 - 130%	28
	0407_QC191_201015	SE212400.032	%	0 - 130%	13
		SE212400.033	%	0 - 130%	47
		SE212400.034	%	0 - 130%	24

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples (continued) — **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C2_PFTeDA) Isotopically Labelled Internal Recovery Standard	0407_QC192_201015	SE212400.035	%	0 - 130%	36
		SE212400.036	%	0 - 130%	44
		SE212400.037	%	0 - 130%	37
	0407_QC190_201015	SE212400.038	%	0 - 130%	26
		SE212400.039	%	0 - 130%	55
		SE212400.040	%	0 - 130%	61
		SE212400.041	%	0 - 130%	28
		SE212400.042	%	0 - 130%	25
		SE212400.043	%	0 - 130%	34
		SE212400.044	%	0 - 130%	30
		SE212400.045	%	0 - 130%	26
		SE212400.046	%	0 - 130%	36
(13C2-4:2 FTS) Isotopically Labelled Internal Recovery Standard		SE212400.001	%	0 - 150%	90
		SE212400.002	%	0 - 150%	90
		SE212400.003	%	0 - 150%	104
		SE212400.004	%	0 - 150%	97
		SE212400.005	%	0 - 150%	103
		SE212400.006	%	0 - 150%	95
		SE212400.007	%	0 - 150%	98
		SE212400.008	%	0 - 150%	101
		SE212400.009	%	0 - 150%	100
		SE212400.010	%	0 - 150%	100
		SE212400.011	%	0 - 150%	99
		SE212400.012	%	0 - 150%	102
		SE212400.013	%	0 - 150%	93
		SE212400.014	%	0 - 150%	97
		SE212400.015	%	0 - 150%	98
		SE212400.016	%	0 - 150%	102
		SE212400.017	%	0 - 150%	98
		SE212400.018	%	0 - 150%	92
		SE212400.019	%	0 - 150%	98
		SE212400.020	%	0 - 150%	102
		SE212400.021	%	0 - 150%	105
		SE212400.022	%	0 - 150%	100
		SE212400.023	%	0 - 150%	101
		SE212400.024	%	0 - 150%	102
	0407_SEW001_0.4-0.5_201015	SE212400.025	%	0 - 150%	102
	0407_SEW001_1.5-1.6_201015	SE212400.026	%	0 - 150%	98
	0407_SEW002_0.4-0.5_201015	SE212400.027	%	0 - 150%	94
	0407_SEW002_1.5-1.6_201015	SE212400.028	%	0 - 150%	97
	0407_QC189_201015	SE212400.029	%	0 - 150%	94
		SE212400.030	%	0 - 150%	101
		SE212400.031	%	0 - 150%	95
	0407_QC191_201015	SE212400.032	%	0 - 150%	96
		SE212400.033	%	0 - 150%	105
		SE212400.034	%	0 - 150%	94
	0407_QC192_201015	SE212400.035	%	0 - 150%	94
		SE212400.036	%	0 - 150%	99
		SE212400.037	%	0 - 150%	100
	0407_QC190_201015	SE212400.038	%	0 - 150%	99
		SE212400.039	%	0 - 150%	101
		SE212400.040	%	0 - 150%	93
		SE212400.041	%	0 - 150%	95
		SE212400.042	%	0 - 150%	100
		SE212400.043	%	0 - 150%	98
		SE212400.044	%	0 - 150%	93
		SE212400.045	%	0 - 150%	91
		SE212400.046	%	0 - 150%	89
(13C2-6:2 FTS) Isotopically Labelled Internal Recovery Standard		SE212400.001	%	0 - 150%	101
		SE212400.002	%	0 - 150%	94
		SE212400.003	%	0 - 150%	114

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples (continued) **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C2-6:2 FTS) Isotopically Labelled Internal Recovery Standard		SE212400.004	%	0 - 150%	107
		SE212400.005	%	0 - 150%	104
		SE212400.006	%	0 - 150%	114
		SE212400.007	%	0 - 150%	106
		SE212400.008	%	0 - 150%	97
		SE212400.009	%	0 - 150%	105
		SE212400.010	%	0 - 150%	105
		SE212400.011	%	0 - 150%	97
		SE212400.012	%	0 - 150%	114
		SE212400.013	%	0 - 150%	100
		SE212400.014	%	0 - 150%	98
		SE212400.015	%	0 - 150%	108
		SE212400.016	%	0 - 150%	111
		SE212400.017	%	0 - 150%	101
		SE212400.018	%	0 - 150%	103
		SE212400.019	%	0 - 150%	98
		SE212400.020	%	0 - 150%	108
		SE212400.021	%	0 - 150%	102
		SE212400.022	%	0 - 150%	97
		SE212400.023	%	0 - 150%	109
		SE212400.024	%	0 - 150%	104
	0407_SEW001_0.4-0.5_201015	SE212400.025	%	0 - 150%	99
	0407_SEW001_1.5-1.6_201015	SE212400.026	%	0 - 150%	97
	0407_SEW002_0.4-0.5_201015	SE212400.027	%	0 - 150%	90
	0407_SEW002_1.5-1.6_201015	SE212400.028	%	0 - 150%	96
	0407_QC189_201015	SE212400.029	%	0 - 150%	92
		SE212400.030	%	0 - 150%	99
		SE212400.031	%	0 - 150%	92
	0407_QC191_201015	SE212400.032	%	0 - 150%	95
		SE212400.033	%	0 - 150%	103
		SE212400.034	%	0 - 150%	91
	0407_QC192_201015	SE212400.035	%	0 - 150%	95
		SE212400.036	%	0 - 150%	107
		SE212400.037	%	0 - 150%	97
	0407_QC190_201015	SE212400.038	%	0 - 150%	92
		SE212400.039	%	0 - 150%	100
		SE212400.040	%	0 - 150%	92
		SE212400.041	%	0 - 150%	92
		SE212400.042	%	0 - 150%	104
		SE212400.043	%	0 - 150%	100
		SE212400.044	%	0 - 150%	93
		SE212400.045	%	0 - 150%	94
		SE212400.046	%	0 - 150%	104
(13C2-8:2 FTS) Isotopically Labelled Internal Recovery Standard		SE212400.001	%	0 - 150%	98
		SE212400.002	%	0 - 150%	101
		SE212400.003	%	0 - 150%	120
		SE212400.004	%	0 - 150%	114
		SE212400.005	%	0 - 150%	115
		SE212400.006	%	0 - 150%	95
		SE212400.007	%	0 - 150%	98
		SE212400.008	%	0 - 150%	101
		SE212400.009	%	0 - 150%	107
		SE212400.010	%	0 - 150%	99
		SE212400.011	%	0 - 150%	97
		SE212400.012	%	0 - 150%	112
		SE212400.013	%	0 - 150%	101
		SE212400.014	%	0 - 150%	96
		SE212400.015	%	0 - 150%	120
		SE212400.016	%	0 - 150%	107
		SE212400.017	%	0 - 150%	97
		SE212400.018	%	0 - 150%	106

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples (continued) **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C2-8:2 FTS) Isotopically Labelled Internal Recovery Standard		SE212400.019	%	0 - 150%	91
		SE212400.020	%	0 - 150%	92
		SE212400.021	%	0 - 150%	111
		SE212400.022	%	0 - 150%	81
		SE212400.023	%	0 - 150%	100
		SE212400.024	%	0 - 150%	106
	0407_SEW001_0.4-0.5_201015	SE212400.025	%	0 - 150%	100
	0407_SEW001_1.5-1.6_201015	SE212400.026	%	0 - 150%	101
	0407_SEW002_0.4-0.5_201015	SE212400.027	%	0 - 150%	95
	0407_SEW002_1.5-1.6_201015	SE212400.028	%	0 - 150%	92
	0407_QC189_201015	SE212400.029	%	0 - 150%	91
		SE212400.030	%	0 - 150%	109
		SE212400.031	%	0 - 150%	90
	0407_QC191_201015	SE212400.032	%	0 - 150%	86
		SE212400.033	%	0 - 150%	94
		SE212400.034	%	0 - 150%	103
	0407_QC192_201015	SE212400.035	%	0 - 150%	89
		SE212400.036	%	0 - 150%	103
		SE212400.037	%	0 - 150%	81
	0407_QC190_201015	SE212400.038	%	0 - 150%	73
		SE212400.039	%	0 - 150%	91
		SE212400.040	%	0 - 150%	89
		SE212400.041	%	0 - 150%	98
		SE212400.042	%	0 - 150%	105
		SE212400.043	%	0 - 150%	100
		SE212400.044	%	0 - 150%	96
		SE212400.045	%	0 - 150%	112
		SE212400.046	%	0 - 150%	94
(13C2-PFDoA) Isotopically Labelled Internal Recovery Standard		SE212400.001	%	0 - 150%	85
		SE212400.002	%	0 - 150%	95
		SE212400.003	%	0 - 150%	103
		SE212400.004	%	0 - 150%	97
		SE212400.005	%	0 - 150%	87
		SE212400.006	%	0 - 150%	87
		SE212400.007	%	0 - 150%	87
		SE212400.008	%	0 - 150%	88
		SE212400.009	%	0 - 150%	79
		SE212400.010	%	0 - 150%	69
		SE212400.011	%	0 - 150%	73
		SE212400.012	%	0 - 150%	81
		SE212400.013	%	0 - 150%	82
		SE212400.014	%	0 - 150%	65
		SE212400.015	%	0 - 150%	96
		SE212400.016	%	0 - 150%	101
		SE212400.017	%	0 - 150%	92
		SE212400.018	%	0 - 150%	96
		SE212400.019	%	0 - 150%	97
		SE212400.020	%	0 - 150%	84
		SE212400.021	%	0 - 150%	85
		SE212400.022	%	0 - 150%	35
		SE212400.023	%	0 - 150%	64
		SE212400.024	%	0 - 150%	68
	0407_SEW001_0.4-0.5_201015	SE212400.025	%	0 - 150%	86
	0407_SEW001_1.5-1.6_201015	SE212400.026	%	0 - 150%	73
	0407_SEW002_0.4-0.5_201015	SE212400.027	%	0 - 150%	72
	0407_SEW002_1.5-1.6_201015	SE212400.028	%	0 - 150%	57
	0407_QC189_201015	SE212400.029	%	0 - 150%	71
		SE212400.030	%	0 - 150%	81
		SE212400.031	%	0 - 150%	71
	0407_QC191_201015	SE212400.032	%	0 - 150%	46
		SE212400.033	%	0 - 150%	83

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples (continued) — **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C2-PFDoA) Isotopically Labelled Internal Recovery Standard		SE212400.034	%	0 - 150%	66
	0407_QC192_201015	SE212400.035	%	0 - 150%	90
		SE212400.036	%	0 - 150%	108
		SE212400.037	%	0 - 150%	81
	0407_QC190_201015	SE212400.038	%	0 - 150%	69
		SE212400.039	%	0 - 150%	79
		SE212400.040	%	0 - 150%	94
		SE212400.041	%	0 - 150%	71
		SE212400.042	%	0 - 150%	63
		SE212400.043	%	0 - 150%	75
		SE212400.044	%	0 - 150%	71
		SE212400.045	%	0 - 150%	79
		SE212400.046	%	0 - 150%	72
(13C2-PFHxDA) Isotopically Labelled Internal Recovery Standard		SE212400.001	%	0 - 150%	4
		SE212400.002	%	0 - 150%	8
		SE212400.003	%	0 - 150%	9
		SE212400.004	%	0 - 150%	12
		SE212400.005	%	0 - 150%	7
		SE212400.006	%	0 - 150%	8
		SE212400.007	%	0 - 150%	11
		SE212400.008	%	0 - 150%	10
		SE212400.009	%	0 - 150%	10
		SE212400.010	%	0 - 150%	5
		SE212400.011	%	0 - 150%	6
		SE212400.012	%	0 - 150%	5
		SE212400.013	%	0 - 150%	3
		SE212400.014	%	0 - 150%	3
		SE212400.015	%	0 - 150%	8
		SE212400.016	%	0 - 150%	7
		SE212400.017	%	0 - 150%	6
		SE212400.018	%	0 - 150%	10
		SE212400.019	%	0 - 150%	12
		SE212400.020	%	0 - 150%	15
		SE212400.021	%	0 - 150%	6
		SE212400.022	%	0 - 150%	0
		SE212400.023	%	0 - 150%	7
		SE212400.024	%	0 - 150%	1
	0407_SEW001_0.4-0.5_201015	SE212400.025	%	0 - 150%	9
	0407_SEW001_1.5-1.6_201015	SE212400.026	%	0 - 150%	4
	0407_SEW002_0.4-0.5_201015	SE212400.027	%	0 - 150%	3
	0407_SEW002_1.5-1.6_201015	SE212400.028	%	0 - 150%	3
	0407_QC189_201015	SE212400.029	%	0 - 150%	2
		SE212400.030	%	0 - 150%	3
		SE212400.031	%	0 - 150%	6
	0407_QC191_201015	SE212400.032	%	0 - 150%	3
		SE212400.033	%	0 - 150%	10
		SE212400.034	%	0 - 150%	5
	0407_QC192_201015	SE212400.035	%	0 - 150%	4
		SE212400.036	%	0 - 150%	6
		SE212400.037	%	0 - 150%	4
	0407_QC190_201015	SE212400.038	%	0 - 150%	4
		SE212400.039	%	0 - 150%	10
		SE212400.040	%	0 - 150%	11
		SE212400.041	%	0 - 150%	3
		SE212400.042	%	0 - 150%	3
		SE212400.043	%	0 - 150%	6
		SE212400.044	%	0 - 150%	6
		SE212400.045	%	0 - 150%	4
		SE212400.046	%	0 - 150%	8
(13C3-PFBS) Isotopically Labelled Internal Recovery Standard		SE212400.001	%	0 - 150%	99
		SE212400.002	%	0 - 150%	98

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples (continued) — **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C3-PFBS) Isotopically Labelled Internal Recovery Standard		SE212400.003	%	0 - 150%	102
		SE212400.004	%	0 - 150%	100
		SE212400.005	%	0 - 150%	100
		SE212400.006	%	0 - 150%	101
		SE212400.007	%	0 - 150%	97
		SE212400.008	%	0 - 150%	97
		SE212400.009	%	0 - 150%	98
		SE212400.010	%	0 - 150%	102
		SE212400.011	%	0 - 150%	93
		SE212400.012	%	0 - 150%	102
		SE212400.013	%	0 - 150%	98
		SE212400.014	%	0 - 150%	97
		SE212400.015	%	0 - 150%	98
		SE212400.016	%	0 - 150%	99
		SE212400.017	%	0 - 150%	99
		SE212400.018	%	0 - 150%	99
		SE212400.019	%	0 - 150%	92
		SE212400.020	%	0 - 150%	105
		SE212400.021	%	0 - 150%	103
		SE212400.022	%	0 - 150%	107
		SE212400.023	%	0 - 150%	101
		SE212400.024	%	0 - 150%	103
	0407_SEW001_0.4-0.5_201015	SE212400.025	%	0 - 150%	106
	0407_SEW001_1.5-1.6_201015	SE212400.026	%	0 - 150%	99
	0407_SEW002_0.4-0.5_201015	SE212400.027	%	0 - 150%	100
	0407_SEW002_1.5-1.6_201015	SE212400.028	%	0 - 150%	102
	0407_QC189_201015	SE212400.029	%	0 - 150%	96
		SE212400.030	%	0 - 150%	101
		SE212400.031	%	0 - 150%	96
	0407_QC191_201015	SE212400.032	%	0 - 150%	98
		SE212400.033	%	0 - 150%	101
		SE212400.034	%	0 - 150%	99
	0407_QC192_201015	SE212400.035	%	0 - 150%	95
		SE212400.036	%	0 - 150%	103
		SE212400.037	%	0 - 150%	109
	0407_QC190_201015	SE212400.038	%	0 - 150%	96
		SE212400.039	%	0 - 150%	104
		SE212400.040	%	0 - 150%	94
		SE212400.041	%	0 - 150%	93
		SE212400.042	%	0 - 150%	103
		SE212400.043	%	0 - 150%	97
		SE212400.044	%	0 - 150%	97
		SE212400.045	%	0 - 150%	95
		SE212400.046	%	0 - 150%	96
(13C3-PFHxS) Isotopically Labelled Internal Recovery Standard		SE212400.001	%	0 - 150%	106
		SE212400.002	%	0 - 150%	103
		SE212400.003	%	0 - 150%	113
		SE212400.004	%	0 - 150%	104
		SE212400.005	%	0 - 150%	110
		SE212400.006	%	0 - 150%	94
		SE212400.007	%	0 - 150%	106
		SE212400.008	%	0 - 150%	98
		SE212400.009	%	0 - 150%	109
		SE212400.010	%	0 - 150%	108
		SE212400.011	%	0 - 150%	98
		SE212400.012	%	0 - 150%	104
		SE212400.013	%	0 - 150%	100
		SE212400.014	%	0 - 150%	99
		SE212400.015	%	0 - 150%	108
		SE212400.016	%	0 - 150%	108
		SE212400.017	%	0 - 150%	103

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples (continued) — **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C3-PFHxS) Isotopically Labelled Internal Recovery Standard		SE212400.018	%	0 - 150%	100
		SE212400.019	%	0 - 150%	106
		SE212400.020	%	0 - 150%	108
		SE212400.021	%	0 - 150%	111
		SE212400.022	%	0 - 150%	109
		SE212400.023	%	0 - 150%	106
		SE212400.024	%	0 - 150%	105
	0407_SEW001_0.4-0.5_201015	SE212400.025	%	0 - 150%	115
	0407_SEW001_1.5-1.6_201015	SE212400.026	%	0 - 150%	113
	0407_SEW002_0.4-0.5_201015	SE212400.027	%	0 - 150%	106
	0407_SEW002_1.5-1.6_201015	SE212400.028	%	0 - 150%	111
	0407_QC189_201015	SE212400.029	%	0 - 150%	107
		SE212400.030	%	0 - 150%	113
		SE212400.031	%	0 - 150%	111
	0407_QC191_201015	SE212400.032	%	0 - 150%	105
		SE212400.033	%	0 - 150%	102
		SE212400.034	%	0 - 150%	106
	0407_QC192_201015	SE212400.035	%	0 - 150%	111
		SE212400.036	%	0 - 150%	113
		SE212400.037	%	0 - 150%	109
	0407_QC190_201015	SE212400.038	%	0 - 150%	106
		SE212400.039	%	0 - 150%	110
		SE212400.040	%	0 - 150%	101
		SE212400.041	%	0 - 150%	104
		SE212400.042	%	0 - 150%	101
		SE212400.043	%	0 - 150%	107
		SE212400.044	%	0 - 150%	98
		SE212400.045	%	0 - 150%	109
		SE212400.046	%	0 - 150%	106
(13C4_PFOA) Isotopically Labelled Internal Recovery Standard		SE212400.001	%	0 - 150%	108
		SE212400.002	%	0 - 150%	107
		SE212400.003	%	0 - 150%	111
		SE212400.004	%	0 - 150%	104
		SE212400.005	%	0 - 150%	105
		SE212400.006	%	0 - 150%	94
		SE212400.007	%	0 - 150%	113
		SE212400.008	%	0 - 150%	107
		SE212400.009	%	0 - 150%	99
		SE212400.010	%	0 - 150%	107
		SE212400.011	%	0 - 150%	98
		SE212400.012	%	0 - 150%	104
		SE212400.013	%	0 - 150%	101
		SE212400.014	%	0 - 150%	106
		SE212400.015	%	0 - 150%	105
		SE212400.016	%	0 - 150%	107
		SE212400.017	%	0 - 150%	100
		SE212400.018	%	0 - 150%	105
		SE212400.019	%	0 - 150%	105
		SE212400.020	%	0 - 150%	114
		SE212400.021	%	0 - 150%	102
		SE212400.022	%	0 - 150%	101
		SE212400.023	%	0 - 150%	107
		SE212400.024	%	0 - 150%	98
	0407_SEW001_0.4-0.5_201015	SE212400.025	%	0 - 150%	104
	0407_SEW001_1.5-1.6_201015	SE212400.026	%	0 - 150%	104
	0407_SEW002_0.4-0.5_201015	SE212400.027	%	0 - 150%	107
	0407_SEW002_1.5-1.6_201015	SE212400.028	%	0 - 150%	106
	0407_QC189_201015	SE212400.029	%	0 - 150%	101
		SE212400.030	%	0 - 150%	92
		SE212400.031	%	0 - 150%	111
	0407_QC191_201015	SE212400.032	%	0 - 150%	101

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples (continued) — **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C4_PFOA) Isotopically Labelled Internal Recovery Standard		SE212400.033	%	0 - 150%	103
		SE212400.034	%	0 - 150%	105
	0407_QC192_201015	SE212400.035	%	0 - 150%	96
		SE212400.036	%	0 - 150%	107
		SE212400.037	%	0 - 150%	109
	0407_QC190_201015	SE212400.038	%	0 - 150%	99
		SE212400.039	%	0 - 150%	102
		SE212400.040	%	0 - 150%	100
		SE212400.041	%	0 - 150%	111
		SE212400.042	%	0 - 150%	105
		SE212400.043	%	0 - 150%	108
		SE212400.044	%	0 - 150%	103
		SE212400.045	%	0 - 150%	101
		SE212400.046	%	0 - 150%	98
(13C4-PFBA) Isotopically Labelled Internal Recovery Standard		SE212400.001	%	0 - 150%	104
		SE212400.002	%	0 - 150%	102
		SE212400.003	%	0 - 150%	102
		SE212400.004	%	0 - 150%	101
		SE212400.005	%	0 - 150%	102
		SE212400.006	%	0 - 150%	102
		SE212400.007	%	0 - 150%	102
		SE212400.008	%	0 - 150%	101
		SE212400.009	%	0 - 150%	108
		SE212400.010	%	0 - 150%	103
		SE212400.011	%	0 - 150%	104
		SE212400.012	%	0 - 150%	103
		SE212400.013	%	0 - 150%	104
		SE212400.014	%	0 - 150%	102
		SE212400.015	%	0 - 150%	108
		SE212400.016	%	0 - 150%	103
		SE212400.017	%	0 - 150%	102
		SE212400.018	%	0 - 150%	104
		SE212400.019	%	0 - 150%	103
		SE212400.020	%	0 - 150%	101
		SE212400.021	%	0 - 150%	103
		SE212400.022	%	0 - 150%	101
		SE212400.023	%	0 - 150%	102
		SE212400.024	%	0 - 150%	103
	0407_SEW001_0.4-0.5_201015	SE212400.025	%	0 - 150%	103
	0407_SEW001_1.5-1.6_201015	SE212400.026	%	0 - 150%	102
	0407_SEW002_0.4-0.5_201015	SE212400.027	%	0 - 150%	104
	0407_SEW002_1.5-1.6_201015	SE212400.028	%	0 - 150%	103
	0407_QC189_201015	SE212400.029	%	0 - 150%	101
		SE212400.030	%	0 - 150%	103
		SE212400.031	%	0 - 150%	101
	0407_QC191_201015	SE212400.032	%	0 - 150%	102
		SE212400.033	%	0 - 150%	106
		SE212400.034	%	0 - 150%	100
	0407_QC192_201015	SE212400.035	%	0 - 150%	104
		SE212400.036	%	0 - 150%	104
		SE212400.037	%	0 - 150%	102
	0407_QC190_201015	SE212400.038	%	0 - 150%	105
		SE212400.039	%	0 - 150%	104
		SE212400.040	%	0 - 150%	103
		SE212400.041	%	0 - 150%	103
		SE212400.042	%	0 - 150%	103
		SE212400.043	%	0 - 150%	102
		SE212400.044	%	0 - 150%	102
		SE212400.045	%	0 - 150%	105
		SE212400.046	%	0 - 150%	101
(13C4-PFHpA) Isotopically Labelled Internal Recovery Standard		SE212400.001	%	0 - 150%	103

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples (continued) — **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C4-PFHpA) Isotopically Labelled Internal Recovery Standard		SE212400.002	%	0 - 150%	108
		SE212400.003	%	0 - 150%	110
		SE212400.004	%	0 - 150%	104
		SE212400.005	%	0 - 150%	106
		SE212400.006	%	0 - 150%	96
		SE212400.007	%	0 - 150%	106
		SE212400.008	%	0 - 150%	107
		SE212400.009	%	0 - 150%	106
		SE212400.010	%	0 - 150%	111
		SE212400.011	%	0 - 150%	95
		SE212400.012	%	0 - 150%	98
		SE212400.013	%	0 - 150%	106
		SE212400.014	%	0 - 150%	108
		SE212400.015	%	0 - 150%	101
		SE212400.016	%	0 - 150%	104
		SE212400.017	%	0 - 150%	105
		SE212400.018	%	0 - 150%	109
		SE212400.019	%	0 - 150%	108
		SE212400.020	%	0 - 150%	112
		SE212400.021	%	0 - 150%	107
		SE212400.022	%	0 - 150%	107
		SE212400.023	%	0 - 150%	116
		SE212400.024	%	0 - 150%	97
	0407_SEW001_0.4-0.5_201015	SE212400.025	%	0 - 150%	109
	0407_SEW001_1.5-1.6_201015	SE212400.026	%	0 - 150%	103
	0407_SEW002_0.4-0.5_201015	SE212400.027	%	0 - 150%	103
	0407_SEW002_1.5-1.6_201015	SE212400.028	%	0 - 150%	110
	0407_QC189_201015	SE212400.029	%	0 - 150%	105
		SE212400.030	%	0 - 150%	100
		SE212400.031	%	0 - 150%	111
	0407_QC191_201015	SE212400.032	%	0 - 150%	99
		SE212400.033	%	0 - 150%	108
		SE212400.034	%	0 - 150%	110
	0407_QC192_201015	SE212400.035	%	0 - 150%	105
		SE212400.036	%	0 - 150%	112
		SE212400.037	%	0 - 150%	111
	0407_QC190_201015	SE212400.038	%	0 - 150%	106
		SE212400.039	%	0 - 150%	109
		SE212400.040	%	0 - 150%	112
		SE212400.041	%	0 - 150%	109
		SE212400.042	%	0 - 150%	106
		SE212400.043	%	0 - 150%	107
		SE212400.044	%	0 - 150%	110
		SE212400.045	%	0 - 150%	103
		SE212400.046	%	0 - 150%	111
(13C5-PFHxA) Isotopically Labelled Internal Recovery Standard		SE212400.001	%	0 - 150%	102
		SE212400.002	%	0 - 150%	103
		SE212400.003	%	0 - 150%	106
		SE212400.004	%	0 - 150%	102
		SE212400.005	%	0 - 150%	107
		SE212400.006	%	0 - 150%	94
		SE212400.007	%	0 - 150%	108
		SE212400.008	%	0 - 150%	103
		SE212400.009	%	0 - 150%	103
		SE212400.010	%	0 - 150%	107
		SE212400.011	%	0 - 150%	96
		SE212400.012	%	0 - 150%	102
		SE212400.013	%	0 - 150%	101
		SE212400.014	%	0 - 150%	104
		SE212400.015	%	0 - 150%	101
		SE212400.016	%	0 - 150%	98

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples (continued) — **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C5-PFHxA) Isotopically Labelled Internal Recovery Standard		SE212400.017	%	0 - 150%	100
		SE212400.018	%	0 - 150%	106
		SE212400.019	%	0 - 150%	102
		SE212400.020	%	0 - 150%	107
		SE212400.021	%	0 - 150%	100
		SE212400.022	%	0 - 150%	103
		SE212400.023	%	0 - 150%	105
		SE212400.024	%	0 - 150%	95
	0407_SEW001_0.4-0.5_201015	SE212400.025	%	0 - 150%	99
	0407_SEW001_1.5-1.6_201015	SE212400.026	%	0 - 150%	96
	0407_SEW002_0.4-0.5_201015	SE212400.027	%	0 - 150%	102
	0407_SEW002_1.5-1.6_201015	SE212400.028	%	0 - 150%	101
	0407_QC189_201015	SE212400.029	%	0 - 150%	96
		SE212400.030	%	0 - 150%	91
		SE212400.031	%	0 - 150%	101
	0407_QC191_201015	SE212400.032	%	0 - 150%	93
		SE212400.033	%	0 - 150%	103
		SE212400.034	%	0 - 150%	104
	0407_QC192_201015	SE212400.035	%	0 - 150%	101
		SE212400.036	%	0 - 150%	107
		SE212400.037	%	0 - 150%	107
	0407_QC190_201015	SE212400.038	%	0 - 150%	104
		SE212400.039	%	0 - 150%	104
		SE212400.040	%	0 - 150%	104
		SE212400.041	%	0 - 150%	104
		SE212400.042	%	0 - 150%	103
		SE212400.043	%	0 - 150%	98
		SE212400.044	%	0 - 150%	102
		SE212400.045	%	0 - 150%	96
		SE212400.046	%	0 - 150%	101
(13C5-PFPeA) Isotopically Labelled Internal Recovery Standard		SE212400.001	%	0 - 150%	108
		SE212400.002	%	0 - 150%	104
		SE212400.003	%	0 - 150%	106
		SE212400.004	%	0 - 150%	105
		SE212400.005	%	0 - 150%	108
		SE212400.006	%	0 - 150%	108
		SE212400.007	%	0 - 150%	104
		SE212400.008	%	0 - 150%	105
		SE212400.009	%	0 - 150%	111
		SE212400.010	%	0 - 150%	107
		SE212400.011	%	0 - 150%	105
		SE212400.012	%	0 - 150%	106
		SE212400.013	%	0 - 150%	108
		SE212400.014	%	0 - 150%	105
		SE212400.015	%	0 - 150%	112
		SE212400.016	%	0 - 150%	107
		SE212400.017	%	0 - 150%	105
		SE212400.018	%	0 - 150%	106
		SE212400.019	%	0 - 150%	108
		SE212400.020	%	0 - 150%	107
		SE212400.021	%	0 - 150%	110
		SE212400.022	%	0 - 150%	107
		SE212400.023	%	0 - 150%	108
		SE212400.024	%	0 - 150%	110
	0407_SEW001_0.4-0.5_201015	SE212400.025	%	0 - 150%	105
	0407_SEW001_1.5-1.6_201015	SE212400.026	%	0 - 150%	109
	0407_SEW002_0.4-0.5_201015	SE212400.027	%	0 - 150%	109
	0407_SEW002_1.5-1.6_201015	SE212400.028	%	0 - 150%	107
	0407_QC189_201015	SE212400.029	%	0 - 150%	108
		SE212400.030	%	0 - 150%	112
		SE212400.031	%	0 - 150%	107

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples (continued) **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C5-PFPeA) Isotopically Labelled Internal Recovery Standard	0407_QC191_201015	SE212400.032	%	0 - 150%	105
		SE212400.033	%	0 - 150%	113
		SE212400.034	%	0 - 150%	108
	0407_QC192_201015	SE212400.035	%	0 - 150%	108
		SE212400.036	%	0 - 150%	110
		SE212400.037	%	0 - 150%	104
	0407_QC190_201015	SE212400.038	%	0 - 150%	108
		SE212400.039	%	0 - 150%	108
		SE212400.040	%	0 - 150%	109
		SE212400.041	%	0 - 150%	109
		SE212400.042	%	0 - 150%	108
		SE212400.043	%	0 - 150%	108
		SE212400.044	%	0 - 150%	108
		SE212400.045	%	0 - 150%	102
		SE212400.046	%	0 - 150%	109
(13C6-PFDA) Isotopically Labelled Internal Recovery Standard		SE212400.001	%	0 - 150%	108
		SE212400.002	%	0 - 150%	109
		SE212400.003	%	0 - 150%	115
		SE212400.004	%	0 - 150%	113
		SE212400.005	%	0 - 150%	114
		SE212400.006	%	0 - 150%	102
		SE212400.007	%	0 - 150%	96
		SE212400.008	%	0 - 150%	102
		SE212400.009	%	0 - 150%	95
		SE212400.010	%	0 - 150%	95
		SE212400.011	%	0 - 150%	85
		SE212400.012	%	0 - 150%	109
		SE212400.013	%	0 - 150%	108
		SE212400.014	%	0 - 150%	105
		SE212400.015	%	0 - 150%	110
		SE212400.016	%	0 - 150%	108
		SE212400.017	%	0 - 150%	102
		SE212400.018	%	0 - 150%	107
		SE212400.019	%	0 - 150%	92
		SE212400.020	%	0 - 150%	104
		SE212400.021	%	0 - 150%	114
		SE212400.022	%	0 - 150%	84
		SE212400.023	%	0 - 150%	106
		SE212400.024	%	0 - 150%	100
	0407_SEW001_0.4-0.5_201015	SE212400.025	%	0 - 150%	107
	0407_SEW001_1.5-1.6_201015	SE212400.026	%	0 - 150%	113
	0407_SEW002_0.4-0.5_201015	SE212400.027	%	0 - 150%	108
	0407_SEW002_1.5-1.6_201015	SE212400.028	%	0 - 150%	102
	0407_QC189_201015	SE212400.029	%	0 - 150%	95
		SE212400.030	%	0 - 150%	108
		SE212400.031	%	0 - 150%	110
	0407_QC191_201015	SE212400.032	%	0 - 150%	89
		SE212400.033	%	0 - 150%	93
		SE212400.034	%	0 - 150%	117
	0407_QC192_201015	SE212400.035	%	0 - 150%	116
		SE212400.036	%	0 - 150%	116
		SE212400.037	%	0 - 150%	120
	0407_QC190_201015	SE212400.038	%	0 - 150%	97
		SE212400.039	%	0 - 150%	112
		SE212400.040	%	0 - 150%	107
		SE212400.041	%	0 - 150%	119
		SE212400.042	%	0 - 150%	102
		SE212400.043	%	0 - 150%	110
		SE212400.044	%	0 - 150%	121
		SE212400.045	%	0 - 150%	113
		SE212400.046	%	0 - 150%	94

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples (continued) — **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C7-PFUdA) Isotopically Labelled Internal Recovery Standard		SE212400.001	%	0 - 150%	99
		SE212400.002	%	0 - 150%	97
		SE212400.003	%	0 - 150%	106
		SE212400.004	%	0 - 150%	96
		SE212400.005	%	0 - 150%	95
		SE212400.006	%	0 - 150%	106
		SE212400.007	%	0 - 150%	94
		SE212400.008	%	0 - 150%	103
		SE212400.009	%	0 - 150%	91
		SE212400.010	%	0 - 150%	81
		SE212400.011	%	0 - 150%	79
		SE212400.012	%	0 - 150%	100
		SE212400.013	%	0 - 150%	95
		SE212400.014	%	0 - 150%	94
		SE212400.015	%	0 - 150%	111
		SE212400.016	%	0 - 150%	101
		SE212400.017	%	0 - 150%	96
		SE212400.018	%	0 - 150%	104
		SE212400.019	%	0 - 150%	97
		SE212400.020	%	0 - 150%	94
		SE212400.021	%	0 - 150%	110
		SE212400.022	%	0 - 150%	58
		SE212400.023	%	0 - 150%	77
		SE212400.024	%	0 - 150%	84
	0407_SEW001_0.4-0.5_201015	SE212400.025	%	0 - 150%	94
	0407_SEW001_1.5-1.6_201015	SE212400.026	%	0 - 150%	94
	0407_SEW002_0.4-0.5_201015	SE212400.027	%	0 - 150%	93
	0407_SEW002_1.5-1.6_201015	SE212400.028	%	0 - 150%	73
	0407_QC189_201015	SE212400.029	%	0 - 150%	91
		SE212400.030	%	0 - 150%	105
		SE212400.031	%	0 - 150%	87
	0407_QC191_201015	SE212400.032	%	0 - 150%	69
		SE212400.033	%	0 - 150%	87
		SE212400.034	%	0 - 150%	95
	0407_QC192_201015	SE212400.035	%	0 - 150%	101
		SE212400.036	%	0 - 150%	108
		SE212400.037	%	0 - 150%	101
	0407_QC190_201015	SE212400.038	%	0 - 150%	85
		SE212400.039	%	0 - 150%	86
		SE212400.040	%	0 - 150%	100
		SE212400.041	%	0 - 150%	92
		SE212400.042	%	0 - 150%	85
		SE212400.043	%	0 - 150%	86
		SE212400.044	%	0 - 150%	100
		SE212400.045	%	0 - 150%	94
		SE212400.046	%	0 - 150%	81
(13C8-PFOS) Isotopically Labelled Internal Recovery Standard		SE212400.001	%	0 - 150%	109
		SE212400.002	%	0 - 150%	102
		SE212400.003	%	0 - 150%	119
		SE212400.004	%	0 - 150%	111
		SE212400.005	%	0 - 150%	119
		SE212400.006	%	0 - 150%	110
		SE212400.007	%	0 - 150%	112
		SE212400.008	%	0 - 150%	114
		SE212400.009	%	0 - 150%	104
		SE212400.010	%	0 - 150%	104
		SE212400.011	%	0 - 150%	123
		SE212400.012	%	0 - 150%	103
		SE212400.013	%	0 - 150%	101
		SE212400.014	%	0 - 150%	119
		SE212400.015	%	0 - 150%	109

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples (continued) **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C8-PFOS) Isotopically Labelled Internal Recovery Standard		SE212400.016	%	0 - 150%	113
		SE212400.017	%	0 - 150%	120
		SE212400.018	%	0 - 150%	115
		SE212400.019	%	0 - 150%	135
		SE212400.020	%	0 - 150%	122
		SE212400.021	%	0 - 150%	107
		SE212400.022	%	0 - 150%	107
		SE212400.023	%	0 - 150%	94
		SE212400.024	%	0 - 150%	115
	0407_SEW001_0.4-0.5_201015	SE212400.025	%	0 - 150%	113
	0407_SEW001_1.5-1.6_201015	SE212400.026	%	0 - 150%	104
	0407_SEW002_0.4-0.5_201015	SE212400.027	%	0 - 150%	122
	0407_SEW002_1.5-1.6_201015	SE212400.028	%	0 - 150%	113
	0407_QC189_201015	SE212400.029	%	0 - 150%	112
		SE212400.030	%	0 - 150%	103
		SE212400.031	%	0 - 150%	120
	0407_QC191_201015	SE212400.032	%	0 - 150%	110
		SE212400.033	%	0 - 150%	100
		SE212400.034	%	0 - 150%	136
	0407_QC192_201015	SE212400.035	%	0 - 150%	138
		SE212400.036	%	0 - 150%	123
		SE212400.037	%	0 - 150%	117
	0407_QC190_201015	SE212400.038	%	0 - 150%	125
		SE212400.039	%	0 - 150%	111
		SE212400.040	%	0 - 150%	101
		SE212400.041	%	0 - 150%	97
		SE212400.042	%	0 - 150%	104
		SE212400.043	%	0 - 150%	125
		SE212400.044	%	0 - 150%	113
		SE212400.045	%	0 - 150%	124
		SE212400.046	%	0 - 150%	102
(13C8-PFOSA) Isotopically Labelled Internal Recovery Standard		SE212400.001	%	0 - 150%	68
		SE212400.002	%	0 - 150%	68
		SE212400.003	%	0 - 150%	88
		SE212400.004	%	0 - 150%	77
		SE212400.005	%	0 - 150%	79
		SE212400.006	%	0 - 150%	68
		SE212400.007	%	0 - 150%	82
		SE212400.008	%	0 - 150%	75
		SE212400.009	%	0 - 150%	78
		SE212400.010	%	0 - 150%	75
		SE212400.011	%	0 - 150%	69
		SE212400.012	%	0 - 150%	73
		SE212400.013	%	0 - 150%	71
		SE212400.014	%	0 - 150%	73
		SE212400.015	%	0 - 150%	66
		SE212400.016	%	0 - 150%	78
		SE212400.017	%	0 - 150%	70
		SE212400.018	%	0 - 150%	77
		SE212400.019	%	0 - 150%	81
		SE212400.020	%	0 - 150%	78
		SE212400.021	%	0 - 150%	67
		SE212400.022	%	0 - 150%	66
		SE212400.023	%	0 - 150%	50
		SE212400.024	%	0 - 150%	71
	0407_SEW001_0.4-0.5_201015	SE212400.025	%	0 - 150%	60
	0407_SEW001_1.5-1.6_201015	SE212400.026	%	0 - 150%	59
	0407_SEW002_0.4-0.5_201015	SE212400.027	%	0 - 150%	54
	0407_SEW002_1.5-1.6_201015	SE212400.028	%	0 - 150%	62
	0407_QC189_201015	SE212400.029	%	0 - 150%	65
		SE212400.030	%	0 - 150%	63

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples (continued) **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C8-PFOSA) Isotopically Labelled Internal Recovery Standard		SE212400.031	%	0 - 150%	68
	0407_QC191_201015	SE212400.032	%	0 - 150%	73
		SE212400.033	%	0 - 150%	64
		SE212400.034	%	0 - 150%	77
	0407_QC192_201015	SE212400.035	%	0 - 150%	74
		SE212400.036	%	0 - 150%	77
		SE212400.037	%	0 - 150%	69
	0407_QC190_201015	SE212400.038	%	0 - 150%	66
		SE212400.039	%	0 - 150%	61
		SE212400.040	%	0 - 150%	71
		SE212400.041	%	0 - 150%	58
		SE212400.042	%	0 - 150%	75
		SE212400.043	%	0 - 150%	80
		SE212400.044	%	0 - 150%	73
		SE212400.045	%	0 - 150%	71
		SE212400.046	%	0 - 150%	64
(13C9-PFNA) Isotopically Labelled Internal Recovery Standard		SE212400.001	%	0 - 150%	95
		SE212400.002	%	0 - 150%	96
		SE212400.003	%	0 - 150%	108
		SE212400.004	%	0 - 150%	108
		SE212400.005	%	0 - 150%	101
		SE212400.006	%	0 - 150%	115
		SE212400.007	%	0 - 150%	103
		SE212400.008	%	0 - 150%	102
		SE212400.009	%	0 - 150%	103
		SE212400.010	%	0 - 150%	108
		SE212400.011	%	0 - 150%	103
		SE212400.012	%	0 - 150%	102
		SE212400.013	%	0 - 150%	107
		SE212400.014	%	0 - 150%	96
		SE212400.015	%	0 - 150%	102
		SE212400.016	%	0 - 150%	102
		SE212400.017	%	0 - 150%	101
		SE212400.018	%	0 - 150%	106
		SE212400.019	%	0 - 150%	104
		SE212400.020	%	0 - 150%	97
		SE212400.021	%	0 - 150%	102
		SE212400.022	%	0 - 150%	93
		SE212400.023	%	0 - 150%	105
		SE212400.024	%	0 - 150%	96
	0407_SEW001_0.4-0.5_201015	SE212400.025	%	0 - 150%	93
	0407_SEW001_1.5-1.6_201015	SE212400.026	%	0 - 150%	102
	0407_SEW002_0.4-0.5_201015	SE212400.027	%	0 - 150%	94
	0407_SEW002_1.5-1.6_201015	SE212400.028	%	0 - 150%	92
	0407_QC189_201015	SE212400.029	%	0 - 150%	96
		SE212400.030	%	0 - 150%	98
		SE212400.031	%	0 - 150%	98
	0407_QC191_201015	SE212400.032	%	0 - 150%	103
		SE212400.033	%	0 - 150%	98
		SE212400.034	%	0 - 150%	105
	0407_QC192_201015	SE212400.035	%	0 - 150%	102
		SE212400.036	%	0 - 150%	113
		SE212400.037	%	0 - 150%	100
	0407_QC190_201015	SE212400.038	%	0 - 150%	103
		SE212400.039	%	0 - 150%	102
		SE212400.040	%	0 - 150%	103
		SE212400.041	%	0 - 150%	93
		SE212400.042	%	0 - 150%	101
		SE212400.043	%	0 - 150%	104
		SE212400.044	%	0 - 150%	101
		SE212400.045	%	0 - 150%	101

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples (continued) **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C9-PFNA) Isotopically Labelled Internal Recovery Standard		SE212400.046	%	0 - 150%	100
(D3-N-MeFOSA) Isotopically Labelled Internal Recovery Standard		SE212400.001	%	0 - 150%	45
		SE212400.002	%	0 - 150%	47
		SE212400.003	%	0 - 150%	52
		SE212400.004	%	0 - 150%	50
		SE212400.005	%	0 - 150%	44
		SE212400.006	%	0 - 150%	48
		SE212400.007	%	0 - 150%	56
		SE212400.008	%	0 - 150%	45
		SE212400.009	%	0 - 150%	47
		SE212400.010	%	0 - 150%	38
		SE212400.011	%	0 - 150%	45
		SE212400.012	%	0 - 150%	43
		SE212400.013	%	0 - 150%	43
		SE212400.014	%	0 - 150%	40
		SE212400.015	%	0 - 150%	44
		SE212400.016	%	0 - 150%	52
		SE212400.017	%	0 - 150%	52
		SE212400.018	%	0 - 150%	56
		SE212400.019	%	0 - 150%	57
		SE212400.020	%	0 - 150%	49
		SE212400.021	%	0 - 150%	25
		SE212400.022	%	0 - 150%	13
		SE212400.023	%	0 - 150%	26
		SE212400.024	%	0 - 150%	35
	0407_SEW001_0.4-0.5_201015	SE212400.025	%	0 - 150%	34
	0407_SEW001_1.5-1.6_201015	SE212400.026	%	0 - 150%	30
	0407_SEW002_0.4-0.5_201015	SE212400.027	%	0 - 150%	6
	0407_SEW002_1.5-1.6_201015	SE212400.028	%	0 - 150%	14
	0407_QC189_201015	SE212400.029	%	0 - 150%	12
		SE212400.030	%	0 - 150%	19
		SE212400.031	%	0 - 150%	33
	0407_QC191_201015	SE212400.032	%	0 - 150%	28
		SE212400.033	%	0 - 150%	22
		SE212400.034	%	0 - 150%	35
	0407_QC192_201015	SE212400.035	%	0 - 150%	31
		SE212400.036	%	0 - 150%	38
		SE212400.037	%	0 - 150%	18
	0407_QC190_201015	SE212400.038	%	0 - 150%	20
		SE212400.039	%	0 - 150%	22
		SE212400.040	%	0 - 150%	26
		SE212400.041	%	0 - 150%	30
		SE212400.042	%	0 - 150%	34
		SE212400.043	%	0 - 150%	44
		SE212400.044	%	0 - 150%	36
		SE212400.045	%	0 - 150%	19
		SE212400.046	%	0 - 150%	32
(D3-N-MeFOSAA) Isotopically Labelled Internal Recovery Standard		SE212400.001	%	0 - 150%	118
		SE212400.002	%	0 - 150%	124
		SE212400.003	%	0 - 150%	139
		SE212400.004	%	0 - 150%	142
		SE212400.005	%	0 - 150%	144
		SE212400.006	%	0 - 150%	120
		SE212400.007	%	0 - 150%	135
		SE212400.008	%	0 - 150%	128
		SE212400.009	%	0 - 150%	140
		SE212400.010	%	0 - 150%	135
		SE212400.011	%	0 - 150%	136
		SE212400.012	%	0 - 150%	104
		SE212400.013	%	0 - 150%	114
		SE212400.014	%	0 - 150%	131

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples (continued) **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(D3-N-MeFOSAA) Isotopically Labelled Internal Recovery Standard		SE212400.015	%	0 - 150%	105
		SE212400.016	%	0 - 150%	150
		SE212400.017	%	0 - 150%	116
		SE212400.018	%	0 - 150%	128
		SE212400.019	%	0 - 150%	147
		SE212400.020	%	0 - 150%	134
		SE212400.021	%	0 - 150%	106
		SE212400.022	%	0 - 150%	102
		SE212400.023	%	0 - 150%	116
		SE212400.024	%	0 - 150%	114
	0407_SEW001_0.4-0.5_201015	SE212400.025	%	0 - 150%	128
	0407_SEW001_1.5-1.6_201015	SE212400.026	%	0 - 150%	98
	0407_SEW002_0.4-0.5_201015	SE212400.027	%	0 - 150%	121
	0407_SEW002_1.5-1.6_201015	SE212400.028	%	0 - 150%	125
	0407_QC189_201015	SE212400.029	%	0 - 150%	123
		SE212400.030	%	0 - 150%	119
		SE212400.031	%	0 - 150%	113
	0407_QC191_201015	SE212400.032	%	0 - 150%	112
		SE212400.033	%	0 - 150%	125
		SE212400.034	%	0 - 150%	129
	0407_QC192_201015	SE212400.035	%	0 - 150%	141
		SE212400.036	%	0 - 150%	141
		SE212400.037	%	0 - 150%	116
	0407_QC190_201015	SE212400.038	%	0 - 150%	128
		SE212400.039	%	0 - 150%	99
		SE212400.040	%	0 - 150%	103
		SE212400.041	%	0 - 150%	133
		SE212400.042	%	0 - 150%	135
		SE212400.043	%	0 - 150%	149
		SE212400.044	%	0 - 150%	123
		SE212400.045	%	0 - 150%	150
		SE212400.046	%	0 - 150%	111
(D5-N-EtFOSA) Isotopically Labelled Internal Recovery Standard		SE212400.001	%	0 - 150%	32
		SE212400.002	%	0 - 150%	36
		SE212400.003	%	0 - 150%	49
		SE212400.004	%	0 - 150%	42
		SE212400.005	%	0 - 150%	31
		SE212400.006	%	0 - 150%	35
		SE212400.007	%	0 - 150%	45
		SE212400.008	%	0 - 150%	33
		SE212400.009	%	0 - 150%	45
		SE212400.010	%	0 - 150%	28
		SE212400.011	%	0 - 150%	39
		SE212400.012	%	0 - 150%	35
		SE212400.013	%	0 - 150%	32
		SE212400.014	%	0 - 150%	27
		SE212400.015	%	0 - 150%	46
		SE212400.016	%	0 - 150%	48
		SE212400.017	%	0 - 150%	39
		SE212400.018	%	0 - 150%	48
		SE212400.019	%	0 - 150%	52
		SE212400.020	%	0 - 150%	44
		SE212400.021	%	0 - 150%	15
		SE212400.022	%	0 - 150%	7
		SE212400.023	%	0 - 150%	19
		SE212400.024	%	0 - 150%	26
	0407_SEW001_0.4-0.5_201015	SE212400.025	%	0 - 150%	25
	0407_SEW001_1.5-1.6_201015	SE212400.026	%	0 - 150%	19
	0407_SEW002_0.4-0.5_201015	SE212400.027	%	0 - 150%	3
	0407_SEW002_1.5-1.6_201015	SE212400.028	%	0 - 150%	10
	0407_QC189_201015	SE212400.029	%	0 - 150%	8

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples (continued) — **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(D5-N-EtFOSA) Isotopically Labelled Internal Recovery Standard		SE212400.030	%	0 - 150%	13
		SE212400.031	%	0 - 150%	21
	0407_QC191_201015	SE212400.032	%	0 - 150%	24
		SE212400.033	%	0 - 150%	19
		SE212400.034	%	0 - 150%	28
	0407_QC192_201015	SE212400.035	%	0 - 150%	22
		SE212400.036	%	0 - 150%	29
		SE212400.037	%	0 - 150%	10
	0407_QC190_201015	SE212400.038	%	0 - 150%	11
		SE212400.039	%	0 - 150%	15
		SE212400.040	%	0 - 150%	20
		SE212400.041	%	0 - 150%	22
		SE212400.042	%	0 - 150%	29
		SE212400.043	%	0 - 150%	36
		SE212400.044	%	0 - 150%	24
		SE212400.045	%	0 - 150%	15
		SE212400.046	%	0 - 150%	27
(D5-N-EtFOSAA) Isotopically Labelled Internal Recovery Standard		SE212400.001	%	0 - 150%	149
		SE212400.002	%	0 - 150%	106
		SE212400.003	%	0 - 150%	132
		SE212400.004	%	0 - 150%	148
		SE212400.005	%	0 - 150%	148
		SE212400.006	%	0 - 150%	115
		SE212400.007	%	0 - 150%	119
		SE212400.008	%	0 - 150%	128
		SE212400.009	%	0 - 150%	140
		SE212400.010	%	0 - 150%	128
		SE212400.011	%	0 - 150%	107
		SE212400.012	%	0 - 150%	98
		SE212400.013	%	0 - 150%	109
		SE212400.014	%	0 - 150%	95
		SE212400.015	%	0 - 150%	143
		SE212400.016	%	0 - 150%	118
		SE212400.017	%	0 - 150%	109
		SE212400.018	%	0 - 150%	107
		SE212400.019	%	0 - 150%	146
		SE212400.020	%	0 - 150%	123
		SE212400.021	%	0 - 150%	106
		SE212400.022	%	0 - 150%	91
		SE212400.023	%	0 - 150%	94
		SE212400.024	%	0 - 150%	96
	0407_SEW001_0.4-0.5_201015	SE212400.025	%	0 - 150%	110
	0407_SEW001_1.5-1.6_201015	SE212400.026	%	0 - 150%	81
	0407_SEW002_0.4-0.5_201015	SE212400.027	%	0 - 150%	94
	0407_SEW002_1.5-1.6_201015	SE212400.028	%	0 - 150%	98
	0407_QC189_201015	SE212400.029	%	0 - 150%	129
		SE212400.030	%	0 - 150%	117
		SE212400.031	%	0 - 150%	95
	0407_QC191_201015	SE212400.032	%	0 - 150%	86
		SE212400.033	%	0 - 150%	107
		SE212400.034	%	0 - 150%	134
	0407_QC192_201015	SE212400.035	%	0 - 150%	146
		SE212400.036	%	0 - 150%	113
		SE212400.037	%	0 - 150%	98
	0407_QC190_201015	SE212400.038	%	0 - 150%	84
		SE212400.039	%	0 - 150%	95
		SE212400.040	%	0 - 150%	108
		SE212400.041	%	0 - 150%	108
		SE212400.042	%	0 - 150%	113
		SE212400.043	%	0 - 150%	117
		SE212400.044	%	0 - 150%	130

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples (continued) — **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(D5-N-EtFOSAA) Isotopically Labelled Internal Recovery Standard		SE212400.045	%	0 - 150%	131
		SE212400.046	%	0 - 150%	109
(D7-N-MeFOSE) Isotopically Labelled Internal Recovery Standard		SE212400.001	%	0 - 150%	70
		SE212400.002	%	0 - 150%	71
		SE212400.003	%	0 - 150%	80
		SE212400.004	%	0 - 150%	87
		SE212400.005	%	0 - 150%	79
		SE212400.006	%	0 - 150%	61
		SE212400.007	%	0 - 150%	77
		SE212400.008	%	0 - 150%	72
		SE212400.009	%	0 - 150%	78
		SE212400.010	%	0 - 150%	63
		SE212400.011	%	0 - 150%	66
		SE212400.012	%	0 - 150%	66
		SE212400.013	%	0 - 150%	66
		SE212400.014	%	0 - 150%	68
		SE212400.015	%	0 - 150%	71
		SE212400.016	%	0 - 150%	73
		SE212400.017	%	0 - 150%	69
		SE212400.018	%	0 - 150%	73
		SE212400.019	%	0 - 150%	83
		SE212400.020	%	0 - 150%	77
		SE212400.021	%	0 - 150%	57
		SE212400.022	%	0 - 150%	42
		SE212400.023	%	0 - 150%	49
		SE212400.024	%	0 - 150%	62
	0407_SEW001_0.4-0.5_201015	SE212400.025	%	0 - 150%	58
	0407_SEW001_1.5-1.6_201015	SE212400.026	%	0 - 150%	52
	0407_SEW002_0.4-0.5_201015	SE212400.027	%	0 - 150%	31
	0407_SEW002_1.5-1.6_201015	SE212400.028	%	0 - 150%	46
	0407_QC189_201015	SE212400.029	%	0 - 150%	46
		SE212400.030	%	0 - 150%	54
		SE212400.031	%	0 - 150%	57
	0407_QC191_201015	SE212400.032	%	0 - 150%	58
		SE212400.033	%	0 - 150%	53
		SE212400.034	%	0 - 150%	75
	0407_QC192_201015	SE212400.035	%	0 - 150%	63
		SE212400.036	%	0 - 150%	69
		SE212400.037	%	0 - 150%	53
	0407_QC190_201015	SE212400.038	%	0 - 150%	54
		SE212400.039	%	0 - 150%	54
		SE212400.040	%	0 - 150%	54
		SE212400.041	%	0 - 150%	57
		SE212400.042	%	0 - 150%	62
		SE212400.043	%	0 - 150%	74
		SE212400.044	%	0 - 150%	61
		SE212400.045	%	0 - 150%	68
		SE212400.046	%	0 - 150%	53
(D9-N-EtFOSE) Isotopically Labelled Internal Recovery Standard		SE212400.001	%	0 - 150%	62
		SE212400.002	%	0 - 150%	63
		SE212400.003	%	0 - 150%	73
		SE212400.004	%	0 - 150%	69
		SE212400.005	%	0 - 150%	66
		SE212400.006	%	0 - 150%	51
		SE212400.007	%	0 - 150%	64
		SE212400.008	%	0 - 150%	56
		SE212400.009	%	0 - 150%	58
		SE212400.010	%	0 - 150%	54
		SE212400.011	%	0 - 150%	57
		SE212400.012	%	0 - 150%	59
		SE212400.013	%	0 - 150%	49

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples (continued)

Method: MA-1523

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(D9-N-EtFOSE) Isotopically Labelled Internal Recovery Standard		SE212400.014	%	0 - 150%	51
		SE212400.015	%	0 - 150%	63
		SE212400.016	%	0 - 150%	69
		SE212400.017	%	0 - 150%	54
		SE212400.018	%	0 - 150%	64
		SE212400.019	%	0 - 150%	67
		SE212400.020	%	0 - 150%	65
		SE212400.021	%	0 - 150%	43
		SE212400.022	%	0 - 150%	29
		SE212400.023	%	0 - 150%	37
		SE212400.024	%	0 - 150%	50
	0407_SEW001_0.4-0.5_201015	SE212400.025	%	0 - 150%	53
	0407_SEW001_1.5-1.6_201015	SE212400.026	%	0 - 150%	39
	0407_SEW002_0.4-0.5_201015	SE212400.027	%	0 - 150%	16
	0407_SEW002_1.5-1.6_201015	SE212400.028	%	0 - 150%	29
	0407_QC189_201015	SE212400.029	%	0 - 150%	32
		SE212400.030	%	0 - 150%	38
		SE212400.031	%	0 - 150%	39
	0407_QC191_201015	SE212400.032	%	0 - 150%	43
		SE212400.033	%	0 - 150%	37
		SE212400.034	%	0 - 150%	56
	0407_QC192_201015	SE212400.035	%	0 - 150%	48
		SE212400.036	%	0 - 150%	67
		SE212400.037	%	0 - 150%	36
	0407_QC190_201015	SE212400.038	%	0 - 150%	37
		SE212400.039	%	0 - 150%	41
		SE212400.040	%	0 - 150%	51
		SE212400.041	%	0 - 150%	44
		SE212400.042	%	0 - 150%	47
		SE212400.043	%	0 - 150%	61
		SE212400.044	%	0 - 150%	48
		SE212400.045	%	0 - 150%	46
		SE212400.046	%	0 - 150%	37

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)		SE212400.001	%	60 - 130%	87
		SE212400.002	%	60 - 130%	85
		SE212400.003	%	60 - 130%	88
		SE212400.004	%	60 - 130%	83
		SE212400.005	%	60 - 130%	89
		SE212400.006	%	60 - 130%	84
		SE212400.007	%	60 - 130%	91
		SE212400.008	%	60 - 130%	86
		SE212400.009	%	60 - 130%	92
		SE212400.010	%	60 - 130%	89
		SE212400.011	%	60 - 130%	87
		SE212400.012	%	60 - 130%	98
		SE212400.013	%	60 - 130%	88
		SE212400.014	%	60 - 130%	88
		SE212400.015	%	60 - 130%	87
		SE212400.016	%	60 - 130%	91
		SE212400.017	%	60 - 130%	91
		SE212400.018	%	60 - 130%	83
		SE212400.019	%	60 - 130%	91
		SE212400.020	%	60 - 130%	88
		SE212400.021	%	60 - 130%	91
		SE212400.022	%	60 - 130%	98
		SE212400.023	%	60 - 130%	85
		SE212400.024	%	60 - 130%	98
	0407_SEW001_0.4-0.5_201015	SE212400.025	%	60 - 130%	92

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued) **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_SEW001_1.5-1.6_201015	SE212400.026	%	60 - 130%	88
	0407_SEW002_0.4-0.5_201015	SE212400.027	%	60 - 130%	101
	0407_SEW002_1.5-1.6_201015	SE212400.028	%	60 - 130%	100
	0407_QC189_201015	SE212400.029	%	60 - 130%	90
		SE212400.030	%	60 - 130%	97
		SE212400.031	%	60 - 130%	89
	0407_QC191_201015	SE212400.032	%	60 - 130%	94
		SE212400.033	%	60 - 130%	87
		SE212400.034	%	60 - 130%	99
	0407_QC192_201015	SE212400.035	%	60 - 130%	95
		SE212400.036	%	60 - 130%	91
		SE212400.037	%	60 - 130%	85
	0407_QC190_201015	SE212400.038	%	60 - 130%	107
		SE212400.039	%	60 - 130%	85
		SE212400.040	%	60 - 130%	82
		SE212400.041	%	60 - 130%	92
		SE212400.042	%	60 - 130%	85
		SE212400.043	%	60 - 130%	87
		SE212400.044	%	60 - 130%	73
		SE212400.045	%	60 - 130%	90
		SE212400.046	%	60 - 130%	80
	0407_QC521_201015	SE212400.047	%	60 - 130%	82
	0407_QC522_201015	SE212400.048	%	60 - 130%	100
d4-1,2-dichloroethane (Surrogate)		SE212400.001	%	60 - 130%	86
		SE212400.002	%	60 - 130%	87
		SE212400.003	%	60 - 130%	93
		SE212400.004	%	60 - 130%	83
		SE212400.005	%	60 - 130%	98
		SE212400.006	%	60 - 130%	74
		SE212400.007	%	60 - 130%	92
		SE212400.008	%	60 - 130%	92
		SE212400.009	%	60 - 130%	90
		SE212400.010	%	60 - 130%	89
		SE212400.011	%	60 - 130%	91
		SE212400.012	%	60 - 130%	92
		SE212400.013	%	60 - 130%	96
		SE212400.014	%	60 - 130%	69
		SE212400.015	%	60 - 130%	94
		SE212400.016	%	60 - 130%	87
		SE212400.017	%	60 - 130%	96
		SE212400.018	%	60 - 130%	91
		SE212400.019	%	60 - 130%	93
		SE212400.020	%	60 - 130%	97
		SE212400.021	%	60 - 130%	94
		SE212400.022	%	60 - 130%	100
		SE212400.023	%	60 - 130%	92
		SE212400.024	%	60 - 130%	90
	0407_SEW001_0.4-0.5_201015	SE212400.025	%	60 - 130%	104
	0407_SEW001_1.5-1.6_201015	SE212400.026	%	60 - 130%	98
	0407_SEW002_0.4-0.5_201015	SE212400.027	%	60 - 130%	104
	0407_SEW002_1.5-1.6_201015	SE212400.028	%	60 - 130%	102
	0407_QC189_201015	SE212400.029	%	60 - 130%	95
		SE212400.030	%	60 - 130%	109
		SE212400.031	%	60 - 130%	98
	0407_QC191_201015	SE212400.032	%	60 - 130%	104
		SE212400.033	%	60 - 130%	87
		SE212400.034	%	60 - 130%	96
	0407_QC192_201015	SE212400.035	%	60 - 130%	98
		SE212400.036	%	60 - 130%	89
		SE212400.037	%	60 - 130%	98
	0407_QC190_201015	SE212400.038	%	60 - 130%	97

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d4-1,2-dichloroethane (Surrogate)		SE212400.039	%	60 - 130%	92
		SE212400.040	%	60 - 130%	87
		SE212400.041	%	60 - 130%	88
		SE212400.042	%	60 - 130%	89
		SE212400.043	%	60 - 130%	86
		SE212400.044	%	60 - 130%	78
		SE212400.045	%	60 - 130%	100
		SE212400.046	%	60 - 130%	79
	0407_QC521_201015	SE212400.047	%	60 - 130%	96
	0407_QC522_201015	SE212400.048	%	60 - 130%	105
d8-toluene (Surrogate)		SE212400.001	%	60 - 130%	76
		SE212400.002	%	60 - 130%	82
		SE212400.003	%	60 - 130%	82
		SE212400.004	%	60 - 130%	82
		SE212400.005	%	60 - 130%	96
		SE212400.006	%	60 - 130%	72
		SE212400.007	%	60 - 130%	84
		SE212400.008	%	60 - 130%	73
		SE212400.009	%	60 - 130%	84
		SE212400.010	%	60 - 130%	79
		SE212400.011	%	60 - 130%	80
		SE212400.012	%	60 - 130%	82
		SE212400.013	%	60 - 130%	85
		SE212400.014	%	60 - 130%	83
		SE212400.015	%	60 - 130%	83
		SE212400.016	%	60 - 130%	75
		SE212400.017	%	60 - 130%	84
		SE212400.018	%	60 - 130%	82
		SE212400.019	%	60 - 130%	85
		SE212400.020	%	60 - 130%	90
		SE212400.021	%	60 - 130%	90
		SE212400.022	%	60 - 130%	84
		SE212400.023	%	60 - 130%	82
		SE212400.024	%	60 - 130%	89
	0407_SEW001_0.4-0.5_201015	SE212400.025	%	60 - 130%	85
	0407_SEW001_1.5-1.6_201015	SE212400.026	%	60 - 130%	91
	0407_SEW002_0.4-0.5_201015	SE212400.027	%	60 - 130%	91
	0407_SEW002_1.5-1.6_201015	SE212400.028	%	60 - 130%	93
	0407_QC189_201015	SE212400.029	%	60 - 130%	80
		SE212400.030	%	60 - 130%	86
		SE212400.031	%	60 - 130%	77
	0407_QC191_201015	SE212400.032	%	60 - 130%	90
		SE212400.033	%	60 - 130%	83
		SE212400.034	%	60 - 130%	82
	0407_QC192_201015	SE212400.035	%	60 - 130%	88
		SE212400.036	%	60 - 130%	76
		SE212400.037	%	60 - 130%	79
	0407_QC190_201015	SE212400.038	%	60 - 130%	91
		SE212400.039	%	60 - 130%	85
		SE212400.040	%	60 - 130%	80
		SE212400.041	%	60 - 130%	75
		SE212400.042	%	60 - 130%	85
		SE212400.043	%	60 - 130%	87
		SE212400.044	%	60 - 130%	64
		SE212400.045	%	60 - 130%	84
		SE212400.046	%	60 - 130%	81
	0407_QC521_201015	SE212400.047	%	60 - 130%	91
	0407_QC522_201015	SE212400.048	%	60 - 130%	98

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)		SE212400.001	%	60 - 130%	87
		SE212400.002	%	60 - 130%	85
		SE212400.003	%	60 - 130%	88
		SE212400.004	%	60 - 130%	83
		SE212400.005	%	60 - 130%	89
		SE212400.006	%	60 - 130%	84
		SE212400.007	%	60 - 130%	91
		SE212400.008	%	60 - 130%	86
		SE212400.009	%	60 - 130%	92
		SE212400.010	%	60 - 130%	89
		SE212400.011	%	60 - 130%	87
		SE212400.012	%	60 - 130%	98
		SE212400.013	%	60 - 130%	88
		SE212400.014	%	60 - 130%	88
		SE212400.015	%	60 - 130%	87
		SE212400.016	%	60 - 130%	91
		SE212400.017	%	60 - 130%	91
		SE212400.018	%	60 - 130%	83
		SE212400.019	%	60 - 130%	91
		SE212400.020	%	60 - 130%	88
	0407_QC521_201015	SE212400.047	%	60 - 130%	82
	0407_QC522_201015	SE212400.048	%	60 - 130%	100
d4-1,2-dichloroethane (Surrogate)		SE212400.001	%	60 - 130%	86
		SE212400.002	%	60 - 130%	87
		SE212400.003	%	60 - 130%	93
		SE212400.004	%	60 - 130%	83
		SE212400.005	%	60 - 130%	98
		SE212400.006	%	60 - 130%	74
		SE212400.007	%	60 - 130%	92
		SE212400.008	%	60 - 130%	92
		SE212400.009	%	60 - 130%	90
		SE212400.010	%	60 - 130%	89
		SE212400.011	%	60 - 130%	91
		SE212400.012	%	60 - 130%	92
		SE212400.013	%	60 - 130%	96
		SE212400.014	%	60 - 130%	69
		SE212400.015	%	60 - 130%	94
		SE212400.016	%	60 - 130%	87
		SE212400.017	%	60 - 130%	96
		SE212400.018	%	60 - 130%	91
		SE212400.019	%	60 - 130%	93
		SE212400.020	%	60 - 130%	97
	0407_QC521_201015	SE212400.047	%	60 - 130%	96
	0407_QC522_201015	SE212400.048	%	60 - 130%	105
d8-toluene (Surrogate)		SE212400.001	%	60 - 130%	76
		SE212400.002	%	60 - 130%	82
		SE212400.003	%	60 - 130%	82
		SE212400.004	%	60 - 130%	82
		SE212400.005	%	60 - 130%	96
		SE212400.006	%	60 - 130%	72
		SE212400.007	%	60 - 130%	84
		SE212400.008	%	60 - 130%	73
		SE212400.009	%	60 - 130%	84
		SE212400.010	%	60 - 130%	79
		SE212400.011	%	60 - 130%	80
		SE212400.012	%	60 - 130%	82
		SE212400.013	%	60 - 130%	85
		SE212400.014	%	60 - 130%	83
		SE212400.015	%	60 - 130%	83
		SE212400.016	%	60 - 130%	75
		SE212400.017	%	60 - 130%	84

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d8-toluene (Surrogate)		SE212400.018	%	60 - 130%	82
		SE212400.019	%	60 - 130%	85
		SE212400.020	%	60 - 130%	90
	0407_QC521_201015	SE212400.047	%	60 - 130%	91
	0407_QC522_201015	SE212400.048	%	60 - 130%	98

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

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Ammonia Nitrogen (soluble) in Soil

Method: ME-(AU)-[ENV]AN291

Sample Number	Parameter	Units	LOR	Result
LB211727.001	Ammonia Nitrogen, NH_3 as N	mg/kg	0.2	<0.2

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result
LB211570.001	Mercury	mg/kg	0.05	<0.05
LB211571.001	Mercury	mg/kg	0.05	<0.05
LB211572.001	Mercury	mg/kg	0.05	<0.05

Nitrite Nitrogen in Soil

Method: ME-(AU)-[ENV]AN277

Sample Number	Parameter	Units	LOR	Result
LB211726.027	Nitrite, NO_2 as N in Soil*	mg/kg	0.05	0

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB211512.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	123

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB211512.001		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	87
		d14-p-terphenyl (Surrogate)	%	-	95

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR

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PCBs in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB211512.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	123

Soluble Anions (1:5) in Soil by Ion Chromatography

Method: ME-(AU)-[ENV]AN245

Sample Number	Parameter	Units	LOR	Result
LB211744.001	Nitrate Nitrogen	mg/kg	0.025	<0.025
	Sulfate	mg/kg	5	<5.0

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB211559.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0
LB211560.001	Arsenic, As	mg/kg	1	<1
	Beryllium, Be	mg/kg	0.5	<0.5
	Cadmium, Cd	mg/kg	0.3	<0.3
	Cobalt, Co	mg/kg	0.5	<0.5
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Manganese, Mn	mg/kg	1	<1
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0
LB211563.001	Arsenic, As	mg/kg	1	<1
	Beryllium, Be	mg/kg	0.5	<0.5
	Cadmium, Cd	mg/kg	0.3	<0.3
	Cobalt, Co	mg/kg	0.5	<0.5
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Manganese, Mn	mg/kg	1	<1
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB211512.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB211509.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1

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VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB211509.001	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10
		MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5

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VOC's in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Sample Number		Parameter	Units	LOR	Result
LB211509.001	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	95
		d8-toluene (Surrogate)	%	-	88
		Bromofluorobenzene (Surrogate)	%	-	80
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1
LB211510.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB211510.001	Monocyclic Aromatic Hydrocarbons	Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10
		MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	92
		d8-toluene (Surrogate)	%	-	84
		Bromofluorobenzene (Surrogate)	%	-	87
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1
LB211511.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB211511.001	Halogenated Aliphatics	trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic	Benzene	mg/kg	0.1	<0.1
	Hydrocarbons	Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10
		MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	93
		d8-toluene (Surrogate)	%	-	82
		Bromofluorobenzene (Surrogate)	%	-	81
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB211509.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	95
LB211511.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	93

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Ammonia Nitrogen (soluble) in Soil

Method: ME-(AU)-[ENV]AN291

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212400.030	LB211727.014	Ammonia Nitrogen, NH_3 as N	mg/kg	0.2	2.2	2.1	39	4
SE212400.040	LB211727.027	Ammonia Nitrogen, NH_3 as N	mg/kg	0.2	0.3	0.4	81	25
SE212400.046	LB211727.035	Ammonia Nitrogen, NH_3 as N	mg/kg	0.2	0.3	0.3	110	0

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212398.039	LB211572.014	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE212400.010	LB211570.014	Mercury	mg/kg	0.05	<0.05	<0.05	157	0
SE212400.019	LB211570.024	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE212400.029	LB211571.014	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE212400.038	LB211571.024	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE212437.001	LB211572.024	Mercury	mg/kg	0.05	0.06	0.07	105	10

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212398.037	LB211526.011	% Moisture	%w/w	1	14	15	37	3
SE212400.010	LB211524.011	% Moisture	%w/w	1	4.4	5.6	50	25
SE212400.020	LB211524.022	% Moisture	%w/w	1	2.5	2.2	73	13
SE212400.030	LB211525.011	% Moisture	%w/w	1	1.4	2.2	86	42
SE212400.040	LB211525.022	% Moisture	%w/w	1	20.4	20.3	35	0
SE212400.046	LB211526.022	% Moisture	%w/w	1	3.4	3.2	60	4
SE212437.001	LB211526.024	% Moisture	%w/w	1	15.0	14.2	37	5

Nitrite Nitrogen in Soil

Method: ME-(AU)-[ENV]AN277

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212400.030	LB211726.029	Nitrite, NO_2 as N in Soil*	mg/kg	0.05	<0.05	0.0060860885	200	0
SE212400.040	LB211726.030	Nitrite, NO_2 as N in Soil*	mg/kg	0.05	<0.05	0.0175890909	200	0
SE212400.046	LB211726.031	Nitrite, NO_2 as N in Soil*	mg/kg	0.05	<0.05	0.0015521659	200	0

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212400.010	LB211512.014		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.15	30	0
SE212400.020	LB211512.027		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212400.020	LB211512.027		Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.20	0.19	30	3

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212400.010	LB211512.014		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	30	10
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	3
SE212400.020	LB211512.027		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	9
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	30	3

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate	Parameter	Units	LOR

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PCBs in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212400.010	LB211512.014		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	0
SE212400.020	LB211512.027		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	30	3

Soluble Anions (1:5) in Soil by Ion Chromatography

Method: ME-(AU)-[ENV]AN245

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212400.030	LB211744.014	Nitrate Nitrogen	mg/kg	0.025	0.12	0.14	69	18
		ortho Phosphate as P	mg/kg	0.25	<0.25	<0.25	200	0
		Sulfate	mg/kg	5	1000	1300	30	24
SE212400.040	LB211744.027	Nitrate Nitrogen	mg/kg	0.025	0.17	0.16	60	12
		ortho Phosphate as P	mg/kg	0.25	<0.25	<0.25	200	0
		Sulfate	mg/kg	5	<5.0	<5.0	191	0
SE212400.046	LB211744.035	Nitrate Nitrogen	mg/kg	0.025	0.037	0.039	161	0
		ortho Phosphate as P	mg/kg	0.25	<0.25	<0.25	200	0
		Sulfate	mg/kg	5	6.1	5.5	116	9

TKN Kjeldahl Digestion by Discrete Analyser in Soil

Method: ME-(AU)-[ENV]AN292

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212400.030	LB211724.014	Total Kjeldahl Nitrogen	mg/kg	40	160	280	39	54 ②
SE212400.040	LB211725.014	Total Kjeldahl Nitrogen	mg/kg	40	71	67	59	6
SE212400.046	LB211725.021	Total Kjeldahl Nitrogen	mg/kg	40	<40	<40	118	9

Total Phosphorus by Kjeldahl Digestion DA in Soil

Method: ME-(AU)-[ENV]AN279/AN293(Sydney only)

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212400.030	LB211724.014	Total Phosphorus (Kjeldahl Digestion)	mg/kg	40	<40	<40	85	40
SE212400.040	LB211725.014	Total Phosphorus (Kjeldahl Digestion)	mg/kg	40	<40	<40	163	0
SE212400.046	LB211725.021	Total Phosphorus (Kjeldahl Digestion)	mg/kg	40	<40	<40	195	0

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212398.039	LB211563.014	Arsenic, As	mg/kg	1	1	1	100	1
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	17	15	33	12
		Copper, Cu	mg/kg	0.5	5.1	5.2	40	3
		Nickel, Ni	mg/kg	0.5	7.2	7.0	37	3
		Lead, Pb	mg/kg	1	10	10	40	3
		Zinc, Zn	mg/kg	2	12	12	47	4
SE212400.010	LB211559.014	Arsenic, As	mg/kg	1	3	2	70	21
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	6.9	5.7	38	20
		Copper, Cu	mg/kg	0.5	51	47	31	8
		Nickel, Ni	mg/kg	0.5	2.8	2.6	48	9
		Lead, Pb	mg/kg	1	27	26	34	2

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212400.010	LB211559.014		Zinc, Zn	mg/kg	2	82	66	33	21
SE212400.019	LB211559.024		Arsenic, As	mg/kg	1	<1	<1	200	0
			Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
			Chromium, Cr	mg/kg	0.5	0.5	<0.5	133	6
			Copper, Cu	mg/kg	0.5	0.6	0.6	109	5
			Nickel, Ni	mg/kg	0.5	<0.5	<0.5	154	0
			Lead, Pb	mg/kg	1	1	1	114	9
			Zinc, Zn	mg/kg	2	<2.0	<2.0	149	0
SE212400.029	LB211560.014		Arsenic, As	mg/kg	1	<1	<1	200	0
			Boron, B	mg/kg	5	<5	<5	200	0
			Beryllium, Be	mg/kg	0.5	<0.5	<0.5	200	0
			Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
			Cobalt, Co	mg/kg	0.5	<0.5	<0.5	200	0
			Chromium, Cr	mg/kg	0.5	<0.5	<0.5	200	0
			Copper, Cu	mg/kg	0.5	<0.5	<0.5	200	0
			Manganese, Mn	mg/kg	1	<1	<1	200	0
			Nickel, Ni	mg/kg	0.5	<0.5	<0.5	200	0
			Lead, Pb	mg/kg	1	<1	<1	200	0
			Zinc, Zn	mg/kg	2	<2.0	<2.0	200	0
SE212400.038	LB211560.024		Arsenic, As	mg/kg	1	<1	<1	200	0
			Boron, B	mg/kg	5	<5	<5	200	0
			Beryllium, Be	mg/kg	0.5	<0.5	<0.5	200	0
			Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
			Cobalt, Co	mg/kg	0.5	<0.5	<0.5	200	0
			Chromium, Cr	mg/kg	0.5	<0.5	<0.5	200	0
			Copper, Cu	mg/kg	0.5	<0.5	<0.5	200	0
			Manganese, Mn	mg/kg	1	<1	<1	147	0
			Nickel, Ni	mg/kg	0.5	<0.5	<0.5	200	0
			Lead, Pb	mg/kg	1	<1	<1	200	0
			Zinc, Zn	mg/kg	2	<2.0	<2.0	200	0
SE212437.001	LB211563.024		Arsenic, As	mg/kg	1	4	4	53	4
			Cadmium, Cd	mg/kg	0.3	<0.3	0.4	150	25
			Chromium, Cr	mg/kg	0.5	19	17	33	14
			Copper, Cu	mg/kg	0.5	25	29	32	15
			Nickel, Ni	mg/kg	0.5	4.7	4.9	40	5
			Lead, Pb	mg/kg	1	94	110	31	13
			Zinc, Zn	mg/kg	2	74	110	32	41 ②

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212400.010	LB211512.014		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE212400.020	LB211512.027		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212398.040	LB211511.014	Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.2	9.5	50	3
			d8-toluene (Surrogate)	mg/kg	-	7.8	8.3	50	5
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.4	7.7	50	9
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
SE212400.010	LB211509.014	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212400.010	LB211509.014	Monocyclic	Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.9	9.0	50	0
			d8-toluene (Surrogate)	mg/kg	-	7.9	8.4	50	6
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.9	8.1	50	10
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE212400.020	LB211509.025	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212400.020	LB211509.025	Halogenated	1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
		Aliphatics	1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.7	9.1	50	7
			d8-toluene (Surrogate)	mg/kg	-	9.0	8.6	50	4
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.8	9.6	50	8
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE212400.030	LB211510.014	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212400.030	LB211510.014	Halogenated	Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
		Aliphatics	Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.9	9.4	50	14
			d8-toluene (Surrogate)	mg/kg	-	8.6	8.3	50	4
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.7	9.1	50	6

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212400.030	LB211510.014	Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethanes	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
			Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE212400.040	LB211510.025	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
			Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic Aromatic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
			Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212400.040	LB211510.025	Monocyclic	n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.7	8.5	50	2
			d8-toluene (Surrogate)	mg/kg	-	8.0	7.6	50	6
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.2	7.7	50	7
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE212437.001	LB211511.025	Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.6	9.3	50	8
			d8-toluene (Surrogate)	mg/kg	-	8.3	8.3	50	0
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.1	9.6	50	17
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212398.040	LB211511.014		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.2	9.5	30	3
			d8-toluene (Surrogate)	mg/kg	-	7.8	8.3	30	5
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.4	7.7	30	9
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE212400.010	LB211509.014		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.9	9.0	30	0
			d8-toluene (Surrogate)	mg/kg	-	7.9	8.4	30	6
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.9	8.1	30	10
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE212400.020	LB211509.025		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.7	9.1	30	7

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212400.020	LB211509.025	Surrogates	d8-toluene (Surrogate)	mg/kg	-	9.0	8.6	30	4
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.8	9.6	30	8
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE212437.001	LB211511.025		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.6	9.3	30	8
			d8-toluene (Surrogate)	mg/kg	-	8.3	8.3	30	0
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.1	9.6	30	17
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Ammonia Nitrogen (soluble) in Soil

Method: ME-(AU)-[ENV]AN291

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB211727.002	Ammonia Nitrogen, NH_3 as N	mg/kg	0.2	4.9	5	80 - 120	98

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB211570.002	Mercury	mg/kg	0.05	0.24	0.2	70 - 130	121
LB211571.002	Mercury	mg/kg	0.05	0.25	0.2	70 - 130	126
LB211572.002	Mercury	mg/kg	0.05	0.25	0.2	70 - 130	126

Nitrite Nitrogen in Soil

Method: ME-(AU)-[ENV]AN277

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB211726.028	Nitrite, NO_2 as N in Soil*	mg/kg	0.05	NA	0.5	70 - 130	121

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB211512.002		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	110
		Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	106
		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	102
		Dieldrin	mg/kg	0.2	0.2	0.2	60 - 140	105
		Endrin	mg/kg	0.2	0.2	0.2	60 - 140	104
		p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	75
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.15	40 - 130	103

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB211512.002		Dichlorvos	mg/kg	0.5	2.1	2	60 - 140	105
		Diazinon (Dimpylate)	mg/kg	0.5	2.2	2	60 - 140	109
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.7	2	60 - 140	133
		Ethion	mg/kg	0.2	2.3	2	60 - 140	113
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	84
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	85

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB211512.002	Arochlor 1260	mg/kg	0.2	0.5	0.4	60 - 140	136

Soluble Anions (1:5) in Soil by Ion Chromatography

Method: ME-(AU)-[ENV]AN245

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB211744.002	Nitrate Nitrogen	mg/kg	0.025	9.1	10	70 - 130	91
	Sulfate	mg/kg	5	91	100	70 - 130	91

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB211559.002	Arsenic, As	mg/kg	1	340	318.22	80 - 120	107
	Cadmium, Cd	mg/kg	0.3	5.2	5.41	80 - 120	95
	Chromium, Cr	mg/kg	0.5	38	38.31	80 - 120	99
	Copper, Cu	mg/kg	0.5	300	290	80 - 120	103
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	101
	Lead, Pb	mg/kg	1	94	89.9	80 - 120	104
	Zinc, Zn	mg/kg	2	280	273	80 - 120	101
LB211560.002	Arsenic, As	mg/kg	1	340	318.22	80 - 120	107
	Boron, B	mg/kg	5	37	37.13	80 - 120	99
	Beryllium, Be	mg/kg	0.5	4.2	4.17	80 - 120	102
	Cadmium, Cd	mg/kg	0.3	5.0	5.41	80 - 120	93
	Cobalt, Co	mg/kg	0.5	21	20.71	80 - 120	101
	Chromium, Cr	mg/kg	0.5	38	38.31	80 - 120	98
	Copper, Cu	mg/kg	0.5	300	290	80 - 120	104
	Manganese, Mn	mg/kg	1	720	660	80 - 120	109

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB211560.002		Nickel, Ni	mg/kg	0.5	190	187	80 - 120	101
		Lead, Pb	mg/kg	1	94	89.9	80 - 120	105
		Zinc, Zn	mg/kg	2	280	273	80 - 120	101
LB211563.002		Arsenic, As	mg/kg	1	330	318.22	80 - 120	104
		Boron, B	mg/kg	5	34	37.13	80 - 120	92
		Beryllium, Be	mg/kg	0.5	4.2	4.17	80 - 120	101
		Cadmium, Cd	mg/kg	0.3	4.7	5.41	80 - 120	86
		Cobalt, Co	mg/kg	0.5	21	20.71	80 - 120	99
		Chromium, Cr	mg/kg	0.5	38	38.31	80 - 120	98
		Copper, Cu	mg/kg	0.5	300	290	80 - 120	102
		Manganese, Mn	mg/kg	1	700	660	80 - 120	107
		Nickel, Ni	mg/kg	0.5	190	187	80 - 120	101
		Lead, Pb	mg/kg	1	93	89.9	80 - 120	103
		Zinc, Zn	mg/kg	2	270	273	80 - 120	100

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB211512.002		TRH C10-C14	mg/kg	20	38	40	60 - 140	95
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	83
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	75
	TRH F Bands	TRH >C10-C16	mg/kg	25	36	40	60 - 140	90
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	75
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	80

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB211509.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	5.4	5	60 - 140	108
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	6.2	5	60 - 140	124
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	5.4	5	60 - 140	108
	Halogenated	Chlorobenzene	mg/kg	0.1	6.4	5	60 - 140	128
	Monocyclic	Benzene	mg/kg	0.1	6.2	5	60 - 140	125
	Aromatic	Toluene	mg/kg	0.1	6.0	5	60 - 140	121
		Ethylbenzene	mg/kg	0.1	6.2	5	60 - 140	124
		m/p-xylene	mg/kg	0.2	12	10	60 - 140	122
		o-xylene	mg/kg	0.1	6.2	5	60 - 140	123
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.6	10	70 - 130	106
		d8-toluene (Surrogate)	mg/kg	-	9.3	10	70 - 130	93
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.5	10	70 - 130	95
	Trihalomethan	Chloroform	mg/kg	0.1	5.7	5	60 - 140	114
LB211510.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	5.2	5	60 - 140	104
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	6.2	5	60 - 140	124
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	5.8	5	60 - 140	116
	Halogenated	Chlorobenzene	mg/kg	0.1	6.4	5	60 - 140	128
	Monocyclic	Benzene	mg/kg	0.1	5.7	5	60 - 140	114
	Aromatic	Toluene	mg/kg	0.1	6.1	5	60 - 140	122
		Ethylbenzene	mg/kg	0.1	6.3	5	60 - 140	126
		m/p-xylene	mg/kg	0.2	12	10	60 - 140	121
		o-xylene	mg/kg	0.1	6.1	5	60 - 140	123
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.4	10	70 - 130	104
		d8-toluene (Surrogate)	mg/kg	-	10.1	10	70 - 130	101
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.0	10	70 - 130	90
	Trihalomethan	Chloroform	mg/kg	0.1	5.6	5	60 - 140	113
LB211511.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	5.0	5	60 - 140	100
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	5.3	5	60 - 140	107
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	5.9	5	60 - 140	118
	Halogenated	Chlorobenzene	mg/kg	0.1	5.8	5	60 - 140	117
	Monocyclic	Benzene	mg/kg	0.1	5.3	5	60 - 140	107
	Aromatic	Toluene	mg/kg	0.1	5.1	5	60 - 140	103
		Ethylbenzene	mg/kg	0.1	5.2	5	60 - 140	103
		m/p-xylene	mg/kg	0.2	10	10	60 - 140	104
		o-xylene	mg/kg	0.1	5.3	5	60 - 140	105
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.6	10	70 - 130	96

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB211511.002	Surrogates	d8-toluene (Surrogate)	mg/kg	-	8.3	10	70 - 130	83
		Bromofluorobenzene (Surrogate)	mg/kg	-	7.5	10	70 - 130	75
	Trihalomethan	Chloroform	mg/kg	0.1	4.9	5	60 - 140	98

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB211509.002		TRH C6-C10	mg/kg	25	79	92.5	60 - 140	85
		TRH C6-C9	mg/kg	20	69	80	60 - 140	86
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.6	10	70 - 130	106
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.5	10	70 - 130	95
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	42	62.5	60 - 140	67
LB211511.002		TRH C6-C10	mg/kg	25	80	92.5	60 - 140	87
		TRH C6-C9	mg/kg	20	70	80	60 - 140	87
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.6	10	70 - 130	96
		Bromofluorobenzene (Surrogate)	mg/kg	-	7.5	10	70 - 130	75
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	49	62.5	60 - 140	79

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Ammonia Nitrogen (soluble) in Soil

Method: ME-(AU)-[ENV]AN291

QC Sample	Sample Number	Parameter	Units	LOR	Original	Spike	Recovery%
SE212400.046	LB211727.036	Ammonia Nitrogen, NH_3 as N	mg/kg	0.2	0.3	5	99

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212398.003	LB211572.004	Mercury	mg/kg	0.05	0.24	<0.05	0.2	114
SE212400.020	LB211571.004	Mercury	mg/kg	0.05	0.23	<0.05	0.2	113

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212400.001	LB211512.004		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	-	-
			Lindane	mg/kg	0.1	<0.1	<0.1	-	-
			Heptachlor	mg/kg	0.1	0.2	<0.1	0.2	109
			Aldrin	mg/kg	0.1	0.2	<0.1	0.2	104
			Beta BHC	mg/kg	0.1	<0.1	<0.1	-	-
			Delta BHC	mg/kg	0.1	0.2	<0.1	0.2	100
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	-	-
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	-	-
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	-	-
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	-	-
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	-	-
			Dieldrin	mg/kg	0.2	0.2	<0.2	0.2	107
			Endrin	mg/kg	0.2	0.2	<0.2	0.2	103
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	-	-
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	-	-
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	-	-
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	-	-
			p,p'-DDT	mg/kg	0.1	0.2	<0.1	0.2	81
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	-	-
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	-	-
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	-	-
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	-	-
			Isodrin	mg/kg	0.1	<0.1	<0.1	-	-
			Mirex	mg/kg	0.1	<0.1	<0.1	-	-
			Total CLP OC Pesticides	mg/kg	1	1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.16	0.19	-	103

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE212400.002	LB211512.028		Dichlorvos	mg/kg	0.5	<0.5	2	99
			Dimethoate	mg/kg	0.5	<0.5	-	-
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	2	104
			Fenitrothion	mg/kg	0.2	<0.2	-	-
			Malathion	mg/kg	0.2	<0.2	-	-
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	2	136
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	-	-
			Bromophos Ethyl	mg/kg	0.2	<0.2	-	-
			Methidathion	mg/kg	0.5	<0.5	-	-
			Ethion	mg/kg	0.2	<0.2	2	113
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	-	-
			Total OP Pesticides*	mg/kg	1.7	<1.7	-	-
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	-	89
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	-	90

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number	Parameter	Units	LOR

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PCBs in Soil (continued)

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212400.001	LB211512.004		Arochlor 1016	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1221	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1232	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1242	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1248	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1254	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1260	mg/kg	0.2	0.4	<0.2	0.4	101
			Arochlor 1262	mg/kg	0.2	<0.2	<0.2	-	-
			Arochlor 1268	mg/kg	0.2	<0.2	<0.2	-	-
			Total PCBs (Arochlors)	mg/kg	1	<1	<1	-	-
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0	-	128

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212398.003	LB211563.004	Arsenic, As	mg/kg	1	43	2	50	80
		Cadmium, Cd	mg/kg	0.3	40	<0.3	50	79
		Chromium, Cr	mg/kg	0.5	61	19	50	84
		Copper, Cu	mg/kg	0.5	49	7.2	50	84
		Nickel, Ni	mg/kg	0.5	50	7.7	50	84
		Lead, Pb	mg/kg	1	59	12	50	94
		Zinc, Zn	mg/kg	2	63	21	50	82
SE212400.001	LB211559.004	Arsenic, As	mg/kg	1	47	1	50	91
		Cadmium, Cd	mg/kg	0.3	42	<0.3	50	83
		Chromium, Cr	mg/kg	0.5	51	5.0	50	92
		Copper, Cu	mg/kg	0.5	67	21	50	92
		Nickel, Ni	mg/kg	0.5	47	1.5	50	91
		Lead, Pb	mg/kg	1	74	29	50	89
		Zinc, Zn	mg/kg	2	68	24	50	88
SE212400.020	LB211560.004	Arsenic, As	mg/kg	1	51	<1	50	101
		Cadmium, Cd	mg/kg	0.3	47	<0.3	50	93
		Chromium, Cr	mg/kg	0.5	52	0.6	50	103
		Copper, Cu	mg/kg	0.5	52	<0.5	50	103
		Nickel, Ni	mg/kg	0.5	52	<0.5	50	103
		Lead, Pb	mg/kg	1	52	<1	50	103
		Zinc, Zn	mg/kg	2	52	<2.0	50	102

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE212400.002	LB211512.028		TRH C10-C14	mg/kg	20	<20	40	93
			TRH C15-C28	mg/kg	45	<45	40	75
			TRH C29-C36	mg/kg	45	<45	40	60
			TRH C37-C40	mg/kg	100	<100	-	-
			TRH C10-C36 Total	mg/kg	110	<110	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	40	85
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	<90	40	68
			TRH >C34-C40 (F4)	mg/kg	120	<120	-	-

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212398.028	LB211511.004	Monocyclic	Benzene	mg/kg	0.1	4.2	<0.1	5	83
		Aromatic	Toluene	mg/kg	0.1	4.2	<0.1	5	84
			Ethylbenzene	mg/kg	0.1	4.4	<0.1	5	87
			m/p-xylene	mg/kg	0.2	8.8	<0.2	10	88
			o-xylene	mg/kg	0.1	4.6	<0.1	5	91
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.5	9.2	10	86
			d8-toluene (Surrogate)	mg/kg	-	6.9	7.3	10	69 ①
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.5	8.5	10	85
		Totals	Total Xylenes	mg/kg	0.3	13	<0.3	-	-
			Total BTEX	mg/kg	0.6	26	<0.6	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212400.001	LB211509.004	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	-	-
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	-	-
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	-	-
			Bromomethane	mg/kg	1	<1	<1	-	-
			Chloroethane	mg/kg	1	<1	<1	-	-
			Trichlorofluoromethane	mg/kg	1	<1	<1	-	-
			Iodomethane	mg/kg	5	<5	<5	-	-
			1,1-dichloroethene	mg/kg	0.1	5.2	<0.1	5	104
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	-	-
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloroethane	mg/kg	0.1	5.8	<0.1	5	115
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	-	-
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	5.6	<0.1	5	111
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	-	-
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated	Chlorobenzene	mg/kg	0.1	6.1	<0.1	5	121
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Monocyclic	Benzene	mg/kg	0.1	5.2	<0.1	5	104
		Aromatic	Toluene	mg/kg	0.1	5.2	<0.1	5	103
			Ethylbenzene	mg/kg	0.1	5.3	<0.1	5	106
			m/p-xylene	mg/kg	0.2	10	<0.2	10	105
			o-xylene	mg/kg	0.1	5.4	<0.1	5	107
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	-	-
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	-	-
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	-	-
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	-	-
		Compounds	2-nitropropane	mg/kg	10	<10	<10	-	-
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

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VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212400.001	LB211509.004	Oxygenated Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	-	-
			Vinyl acetate	mg/kg	10	<10	<10	-	-
			MEK (2-butanone)	mg/kg	10	<10	<10	-	-
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	-	-
			2-hexanone (MBK)	mg/kg	5	<5	<5	-	-
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.0	8.6	10	90
			d8-toluene (Surrogate)	mg/kg	-	8.5	7.6	10	85
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.5	8.7	10	85
		Totals	Total Xylenes	mg/kg	0.3	16	<0.3	-	-
			Total BTEX	mg/kg	0.6	32	<0.6	-	-
			Total VOC*	mg/kg	24	60	<24	-	-
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	-	-
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	28	<1.8	-	-
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	28	<1.8	-	-
		Trihalomethanes	Chloroform	mg/kg	0.1	5.5	<0.1	5	110
			Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Bromoform	mg/kg	0.1	<0.1	<0.1	-	-
SE212400.021	LB211510.004	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	-	-
			Chloromethane	mg/kg	1	<1	<1	-	-
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	-	-
			Bromomethane	mg/kg	1	<1	<1	-	-
			Chloroethane	mg/kg	1	<1	<1	-	-
			Trichlorofluoromethane	mg/kg	1	<1	<1	-	-
			Iodomethane	mg/kg	5	<5	<5	-	-
			1,1-dichloroethene	mg/kg	0.1	5.1	<0.1	5	102
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	-	-
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloroethane	mg/kg	0.1	6.0	<0.1	5	121
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	-	-
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	5.3	<0.1	5	107
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	-	-
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	6.2	<0.1	5	125
			Bromobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-

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VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212400.021	LB211510.004	Halogenated	1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Aromatics	1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Monocyclic	Benzene	mg/kg	0.1	4.9	<0.1	5	98
		Aromatic	Toluene	mg/kg	0.1	5.1	<0.1	5	102
			Ethylbenzene	mg/kg	0.1	5.2	<0.1	5	105
			m/p-xylene	mg/kg	0.2	10	<0.2	10	103
			o-xylene	mg/kg	0.1	5.4	<0.1	5	109
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	-	-
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	-	-
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	-	-
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	-	-
		Compounds	2-nitropropane	mg/kg	10	<10	<10	-	-
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	-	-
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	-	-
			Vinyl acetate	mg/kg	10	<10	<10	-	-
			MEK (2-butanone)	mg/kg	10	<10	<10	-	-
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	-	-
			2-hexanone (MBK)	mg/kg	5	<5	<5	-	-
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.2	9.4	10	92
			d8-toluene (Surrogate)	mg/kg	-	8.5	9.0	10	85
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.1	9.1	10	81
		Totals	Total Xylenes	mg/kg	0.3	16	<0.3	-	-
			Total BTEX	mg/kg	0.6	31	<0.6	-	-
			Total VOC*	mg/kg	24	60	<24	-	-
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	-	-
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	28	<1.8	-	-
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	28	<1.8	-	-
		Trihalometha	Chloroform	mg/kg	0.1	5.5	<0.1	5	110
		nes	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Bromoform	mg/kg	0.1	<0.1	<0.1	-	-

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212398.028	LB211511.004		TRH C6-C10	mg/kg	25	66	<25	92.5	72
			TRH C6-C9	mg/kg	20	58	<20	80	72
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.5	9.2	10	86
			d8-toluene (Surrogate)	mg/kg	-	6.9	7.3	10	69 ①
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.5	8.5	-	85
		VPH F	Benzene (F0)	mg/kg	0.1	4.2	<0.1	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	40	<25	62.5	64
SE212400.001	LB211509.004		TRH C6-C10	mg/kg	25	79	<25	92.5	86
			TRH C6-C9	mg/kg	20	69	<20	80	87
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.0	8.6	10	90
			d8-toluene (Surrogate)	mg/kg	-	8.5	7.6	10	85
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.5	8.7	-	85
		VPH F	Benzene (F0)	mg/kg	0.1	5.2	<0.1	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	48	<25	62.5	76

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
***	Indicates that both * and ** apply.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client only. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

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E-MAILED
16/10 @ 6.47pm

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd
ABN 29 001 584 612

PROJECT OFFICE (Tick one)

☐ BRISBANE: Level 2, 13 Astor Terrace, Spring Hill, QLD 4000	☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227	☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305	✓ School, Sub Base Platypus, North Sydney, 2060	☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122			
☐ CANBERRA: GPO Box 410, Canberra, ACT 2601	☐ MACKAY: 21 River Street, Mackay, QLD 4741	☐ PERTH: 503 Murray Street, Perth, WA 6001	☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4811	☐ DARWIN: 21 Parap Rd, Darwin, NT 0821			

CLIENT: **Defence Housing Australia**
PROJECT: **Randwick Barracks**
PROJECT NUMBER: **610.30041**
PROJECT MANAGER: [redacted]
PM CONTACT No: [redacted]

LABORATORY: **SGS**
LABORATORY ADDRESS: **Unit 16/33 Maddox St, Alexandria NSW 2015**
SAMPLER: [redacted]
SAMPLER CONTACT No [redacted]
Email Reports and Invoices to: **LQRSYD@slrconsulting.com,** [redacted]

Turnaround Time (TAT): ✓ Standard TAT ☐ Non Standard or Urgent TAT
Required TAT: Standard

COC Number: 1 of 2

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: Lead	Benzo(a)pyrene	Copper	PAHs	PCBs			Hold	Additional Information (Comment on any gross contamination or specific requirements)
1	0407_TP259_BH01_0.0-0.1_20201016	16/10/2020	Soil		x								
2	0407_TP259_BH02_0.0-0.1_20201016	16/10/2020	Soil		x								
3	0407_TP259_BH03_0.0-0.1_20201016	16/10/2020	Soil		x								
4	0407_TP259_BH01_0.4-0.5_20201016	16/10/2020	Soil		x								
5	0407_TP259_BH02_0.4-0.5_20201016	16/10/2020	Soil		x								
6	0407_TP259_BH03_0.4-0.5_20201016	16/10/2020	Soil		x								
7	0407_TP209_BH01_0.0-0.1_20201016	16/10/2020	Soil			x							
8	0407_TP209_BH02_0.0-0.1_20201016	16/10/2020	Soil			x							
9	0407_TP209_BH03_0.0-0.1_20201016	16/10/2020	Soil			x							
10	0407_TP209_BH04_0.0-0.1_20201016	16/10/2020	Soil			x							
11	0407_TP209_BH01_0.3-0.4_20201016	16/10/2020	Soil			x							
12	0407_TP209_BH02_0.3-0.4_20201016	16/10/2020	Soil			x							
13	0407_TP209_BH03_0.4-0.5_20201016	16/10/2020	Soil			x							
14	QC313	16/10/2020	Water		x	x	x	x	x				

SGS EHS Sydney COC
SE212450

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 16/10/2020 @ 1600	Received by	Sign [redacted]	Date / Time 16/10/20	Temperature Received:
Relinquished By	Sign	Date / Time	Received by	Sign [redacted]	Date / Time @ 4.10	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one):

- ☐ BRISBANE: Level 2, 15 Astor Terrace, South Brisbane QLD 4000
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes QLD 4227
- ☐ NEWCASTLE: 10 Kings Road, New Lambton NSW 2305
- ✓ School, Sub Base Platypus, North Sydney, 2060
- ☐ MELBOURNE: Level 2, 2 Domville Avenue, Hawthorn VIC 3122
- ☐ CANBERRA: GPO Box 410, Canberra ACT 2601
- ☐ MACKAY: 21 River Street, Mackay QLD 4740
- ☐ PERTH: 50 Kitchener Street, Perth WA 6000
- ☐ TOWNSVILLE: 12 Cannan Street, Townsville QLD 4810
- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0821

CLIENT: Defence Housing Australia

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGER: [redacted]

PM CONTACT No [redacted]

LABORATORY: SGS

LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015

SAMPLER: JR

SAMPLER CONTACT No: [redacted]

Email Reports and Invoices to: LQRSYD@slrconsulting.com, [redacted]

Turnaround Time (TAT)

✓ Standard TAT

☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number: 2 of 2

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: Lead	Benzo(a)pyrene	Copper	PAHs	PCBs			Hold	Additional Information (Comment on any gross contamination or specific requirements)
15	0407_TP197_BH01_0.0-0.1_20201016	16/10/2020	Soil			x							
16	0407_TP197_BH02_0.0-0.1_20201016	16/10/2020	Soil			x							
17	0407_TP197_BH03_0.0-0.1_20201016	16/10/2020	Soil			x							
18	0407_TP197_BH01_0.4-0.5_20201016	16/10/2020	Soil			x							
19	0407_TP197_BH02_0.4-0.5_20201016	16/10/2020	Soil			x							
20	0407_TP197_BH03_0.4-0.5_20201016	16/10/2020	Soil			x							
21	0407_TP197_BH04_0.0-0.1_20201016	16/10/2020	Soil			x							
22	0407_TP197_BH04_0.4-0.5_20201016	16/10/2020	Soil			x							

I attest that the proper field sampling procedures were used during the collection of these samples

Relinquished By Sampler	[redacted]	Date / Time	16/10/2020 @ 1500	Received by	Sign [redacted]	Date / Time 16/10/20
Relinquished By	Sign	Date / Time		Received by	Sign [redacted]	Date / Time @ 4:10
Relinquished By	Sign	Date / Time		Received by	Sign	Date / Time

Temperature Received:

SAMPLE RECEIPT ADVICE

SE212450

CLIENT DETAILS

Contact	LQRSYD
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	02 9427 8100
Facsimile	02 9427 8200
Email	lqrsyd@slrconsulting.com
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	22

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Fri 16/10/2020
Report Due	Fri 23/10/2020
SGS Reference	**SE212450**

SUBMISSION DETAILS

This is to confirm that 22 samples were received on Friday 16/10/2020. Results are expected to be ready by COB Friday 23/10/2020. Please quote SGS reference SE212450 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	Other Lab	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	21 Soil, 1 Water
Date documentation received	16/10/2020@6:42pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	1.4°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

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SAMPLE RECEIPT ADVICE

SE212450

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Moisture Content	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Water	PCBs in Water	Total Recoverable Elements in Soil/Waste
001	0407_TP259_BH01_0.0-0.1_20201016	1	-	-	-	1
002	0407_TP259_BH02_0.0-0.1_20201016	1	-	-	-	1
003	0407_TP259_BH03_0.0-0.1_20201016	1	-	-	-	1
004	0407_TP259_BH01_0.4-0.5_20201016	1	-	-	-	1
005	0407_TP259_BH02_0.4-0.5_20201016	1	-	-	-	1
006	0407_TP259_BH03_0.4-0.5_20201016	1	-	-	-	1
007	0407_TP209_BH01_0.0-0.1_20201016	1	4	-	-	-
008	0407_TP209_BH02_0.0-0.1_20201016	1	4	-	-	-
009	0407_TP209_BH03_0.0-0.1_20201016	1	4	-	-	-
010	0407_TP209_BH04_0.0-0.1_20201016	1	4	-	-	-
011	0407_TP209_BH01_0.3-0.4_20201016.	1	4	-	-	-
012	0407_TP209_BH02_0.3-0.4_20201016	1	4	-	-	-
013	0407_TP209_BH03_0.4-0.5_20201016	1	4	-	-	-
014	QC313	-	-	22	11	-
015	0407_TP197_BH01_0.0-0.1_20201016	1	4	-	-	-
016	0407_TP197_BH02_0.0-0.1_20201016	1	4	-	-	-
017	0407_TP197_BH03_0.0-0.1_20201016	1	4	-	-	-
018	0407_TP197_BH01_0.4-0.5_20201016	1	4	-	-	-
019	0407_TP197_BH02_0.4-0.5_20201016	1	4	-	-	-
020	0407_TP197_BH03_0.4-0.5_20201016	1	4	-	-	-
021	0407_TP197_BH04_0.0-0.1_20201016	1	4	-	-	-
022	0407_TP197_BH04_0.4-0.5_20201016	1	4	-	-	-

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE212450

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Trace Metals (Dissolved) in Water by ICPMS
014	QC313	2

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	LQRSYD
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	02 9427 8100
Facsimile	02 9427 8200
Email	lqrsyd@slrconsulting.com
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	22

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE212450 R0**
Date Received	16/10/2020
Date Reported	23/10/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

SIGNATORIES

[redacted]

Senior Organic Chemist/Metals Chemist | Metals/Inorganics Team Leader | Organic Section Head

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 20/10/2020

PARAMETER	UOM	LOR	0407_TP209_BH01_(0-0.1_20201016 SOIL - 16/10/2020 SE212450.007	0407_TP209_BH02_(0-0.1_20201016 SOIL - 16/10/2020 SE212450.008	0407_TP209_BH03_(0-0.1_20201016 SOIL - 16/10/2020 SE212450.009	0407_TP209_BH04_(0-0.1_20201016 SOIL - 16/10/2020 SE212450.010	0407_TP209_BH01_(3-0.4_20201016. SOIL - 16/10/2020 SE212450.011
Benzo(a)pyrene	mg/kg	0.1	**5.4**	**27**	**3.1**	**6.0**	**3.1**

PARAMETER	UOM	LOR	0407_TP209_BH02_(3-0.4_20201016 SOIL - 16/10/2020 SE212450.012	0407_TP209_BH03_(4-0.5_20201016 SOIL - 16/10/2020 SE212450.013	0407_TP197_BH01_(0-0.1_20201016 SOIL - 16/10/2020 SE212450.015	0407_TP197_BH02_(0-0.1_20201016 SOIL - 16/10/2020 SE212450.016	0407_TP197_BH03_(0-0.1_20201016 SOIL - 16/10/2020 SE212450.017
Benzo(a)pyrene	mg/kg	0.1	**6.7**	**2.2**	**2.7**	**1.8**	**2.5**

PARAMETER	UOM	LOR	0407_TP197_BH01_(4-0.5_20201016 SOIL - 16/10/2020 SE212450.018	0407_TP197_BH02_(4-0.5_20201016 SOIL - 16/10/2020 SE212450.019	0407_TP197_BH03_(4-0.5_20201016 SOIL - 16/10/2020 SE212450.020	0407_TP197_BH04_(0-0.1_20201016 SOIL - 16/10/2020 SE212450.021	0407_TP197_BH04_(4-0.5_20201016 SOIL - 16/10/2020 SE212450.022
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	**0.2**	**2.6**	<0.1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 20/10/2020

PARAMETER	UOM	LOR	0407_TP259_BH01_(0-0.1_20201016 SOIL - 16/10/2020 SE212450.001	0407_TP259_BH02_(0-0.1_20201016 SOIL - 16/10/2020 SE212450.002	0407_TP259_BH03_(0-0.1_20201016 SOIL - 16/10/2020 SE212450.003	0407_TP259_BH01_(4-0.5_20201016 SOIL - 16/10/2020 SE212450.004	0407_TP259_BH02_(4-0.5_20201016 SOIL - 16/10/2020 SE212450.005
Lead, Pb	mg/kg	1	150	91	90	3	9

PARAMETER	UOM	LOR	0407_TP259_BH03_(4-0.5_20201016 SOIL - 16/10/2020 SE212450.006
Lead, Pb	mg/kg	1	1

Moisture Content [AN002] Tested: 20/10/2020

PARAMETER	UOM	LOR	0407_TP259_BH01_(0-0.1_20201016 SOIL - 16/10/2020 SE212450.001	0407_TP259_BH02_(0-0.1_20201016 SOIL - 16/10/2020 SE212450.002	0407_TP259_BH03_(0-0.1_20201016 SOIL - 16/10/2020 SE212450.003	0407_TP259_BH01_(4-0.5_20201016 SOIL - 16/10/2020 SE212450.004	0407_TP259_BH02_(4-0.5_20201016 SOIL - 16/10/2020 SE212450.005
% Moisture	%w/w	1	<1.0	1.3	<1.0	3.2	3.1

PARAMETER	UOM	LOR	0407_TP259_BH03_(4-0.5_20201016 SOIL - 16/10/2020 SE212450.006	0407_TP209_BH01_(0-0.1_20201016 SOIL - 16/10/2020 SE212450.007	0407_TP209_BH02_(0-0.1_20201016 SOIL - 16/10/2020 SE212450.008	0407_TP209_BH03_(0-0.1_20201016 SOIL - 16/10/2020 SE212450.009	0407_TP209_BH04_(0-0.1_20201016 SOIL - 16/10/2020 SE212450.010
% Moisture	%w/w	1	3.1	7.7	3.7	5.5	4.2

PARAMETER	UOM	LOR	0407_TP209_BH01_(3-0.4_20201016. SOIL - 16/10/2020 SE212450.011	0407_TP209_BH02_(3-0.4_20201016 SOIL - 16/10/2020 SE212450.012	0407_TP209_BH03_(4-0.5_20201016 SOIL - 16/10/2020 SE212450.013	0407_TP197_BH01_(0-0.1_20201016 SOIL - 16/10/2020 SE212450.015	0407_TP197_BH02_(0-0.1_20201016 SOIL - 16/10/2020 SE212450.016
% Moisture	%w/w	1	2.5	5.8	3.3	9.8	17.6

PARAMETER	UOM	LOR	0407_TP197_BH03_(0-0.1_20201016 SOIL - 16/10/2020 SE212450.017	0407_TP197_BH01_(4-0.5_20201016 SOIL - 16/10/2020 SE212450.018	0407_TP197_BH02_(4-0.5_20201016 SOIL - 16/10/2020 SE212450.019	0407_TP197_BH03_(4-0.5_20201016 SOIL - 16/10/2020 SE212450.020	0407_TP197_BH04_(0-0.1_20201016 SOIL - 16/10/2020 SE212450.021
% Moisture	%w/w	1	18.2	4.5	5.0	5.2	7.8

PARAMETER	UOM	LOR	0407_TP197_BH04_(4-0.5_20201016 SOIL - 16/10/2020 SE212450.022
% Moisture	%w/w	1	3.6

PAH (Polynuclear Aromatic Hydrocarbons) in Water [AN420] Tested: 20/10/2020

PARAMETER	UOM	LOR	QC313 WATER - 16/10/2020 SE212450.014
Naphthalene	µg/L	0.1	<0.1
2-methylnaphthalene	µg/L	0.1	<0.1
1-methylnaphthalene	µg/L	0.1	<0.1
Acenaphthylene	µg/L	0.1	<0.1
Acenaphthene	µg/L	0.1	<0.1
Fluorene	µg/L	0.1	<0.1
Phenanthrene	µg/L	0.1	<0.1
Anthracene	µg/L	0.1	<0.1
Fluoranthene	µg/L	0.1	<0.1
Pyrene	µg/L	0.1	<0.1
Benzo(a)anthracene	µg/L	0.1	<0.1
Chrysene	µg/L	0.1	<0.1
Benzo(b&j)fluoranthene	µg/L	0.1	<0.1
Benzo(k)fluoranthene	µg/L	0.1	<0.1
Benzo(a)pyrene	µg/L	0.1	<0.1
Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1
Dibenzo(ah)anthracene	µg/L	0.1	<0.1
Benzo(ghi)perylene	µg/L	0.1	<0.1
Total PAH (18)	µg/L	1	<1

PCBs in Water [AN420] Tested: 20/10/2020

PARAMETER	UOM	LOR	QC313 WATER - 16/10/2020 SE212450.014
Arochlor 1016	µg/L	1	<1
Arochlor 1221	µg/L	1	<1
Arochlor 1232	µg/L	1	<1
Arochlor 1242	µg/L	1	<1
Arochlor 1248	µg/L	1	<1
Arochlor 1254	µg/L	1	<1
Arochlor 1260	µg/L	1	<1
Arochlor 1262	µg/L	1	<1
Arochlor 1268	µg/L	1	<1
Total Arochlors*	µg/L	5	<5

Trace Metals (Dissolved) in Water by ICPMS [AN318] Tested: 19/10/2020

PARAMETER	UOM	LOR	QC313 WATER - 16/10/2020 SE212450.014
Lead, Pb	µg/L	1	<1
Copper, Cu	µg/L	1	<1

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN020	Unpreserved water sample is filtered through a 0.45µm membrane filter and acidified with nitric acid similar to APHA3030B.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
AN318	Determination of elements at trace level in waters by ICP-MS technique,, referenced to USEPA 6020B and USEPA 200.8 (5.4).
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN420	Carcinogenic PAHs may be expressed as Benzo(a)pyrene equivalents by applying the BaP toxicity equivalence factor (NEPM 1999, June 2013, B7). These can be reported as the individual PAHs and as a sum of carcinogenic PAHs. The sum is reported three ways, the first assuming all <LOR results are zero, the second assuming all < LOR results are half the LOR and the third assuming all <LOR results are the LOR.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
**	Indicative data, theoretical holding time exceeded.	NVL	Not validated.	LOR	Limit of Reporting.
***	Indicates that both * and ** apply.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

This document is issued by the Company under its General Conditions of Service accessible at www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

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STATEMENT OF QA/QC PERFORMANCE

SE212450 R0

CLIENT DETAILS

Contact	LQRSYD
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	02 9427 8100
Facsimile	02 9427 8200
Email	lqrsyd@slrconsulting.com
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	22

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE212450 R0**
Date Received	16 Oct 2020
Date Reported	23 Oct 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Surrogate	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	10 items

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	Other Lab	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	21 Soil, 1 Water
Date documentation received	16/10/2020@6:42pr	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	1.4°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE212450 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP259_BH01_0.0-0.1	SE212450.001	LB211681	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	25 Oct 2020	23 Oct 2020
0407_TP259_BH02_0.0-0.1	SE212450.002	LB211681	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	25 Oct 2020	23 Oct 2020
0407_TP259_BH03_0.0-0.1	SE212450.003	LB211681	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	25 Oct 2020	23 Oct 2020
0407_TP259_BH01_0.4-0.5	SE212450.004	LB211681	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	25 Oct 2020	23 Oct 2020
0407_TP259_BH02_0.4-0.5	SE212450.005	LB211681	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	25 Oct 2020	23 Oct 2020
0407_TP259_BH03_0.4-0.5	SE212450.006	LB211681	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	25 Oct 2020	23 Oct 2020
0407_TP209_BH01_0.0-0.1	SE212450.007	LB211681	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	25 Oct 2020	23 Oct 2020
0407_TP209_BH02_0.0-0.1	SE212450.008	LB211681	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	25 Oct 2020	23 Oct 2020
0407_TP209_BH03_0.0-0.1	SE212450.009	LB211681	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	25 Oct 2020	23 Oct 2020
0407_TP209_BH04_0.0-0.1	SE212450.010	LB211681	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	25 Oct 2020	23 Oct 2020
0407_TP209_BH01_0.3-0.4	SE212450.011	LB211681	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	25 Oct 2020	23 Oct 2020
0407_TP209_BH02_0.3-0.4	SE212450.012	LB211681	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	25 Oct 2020	23 Oct 2020
0407_TP209_BH03_0.4-0.5	SE212450.013	LB211681	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	25 Oct 2020	23 Oct 2020
0407_TP197_BH01_0.0-0.1	SE212450.015	LB211681	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	25 Oct 2020	23 Oct 2020
0407_TP197_BH02_0.0-0.1	SE212450.016	LB211681	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	25 Oct 2020	23 Oct 2020
0407_TP197_BH03_0.0-0.1	SE212450.017	LB211681	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	25 Oct 2020	23 Oct 2020
0407_TP197_BH01_0.4-0.5	SE212450.018	LB211681	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	25 Oct 2020	23 Oct 2020
0407_TP197_BH02_0.4-0.5	SE212450.019	LB211681	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	25 Oct 2020	23 Oct 2020
0407_TP197_BH03_0.4-0.5	SE212450.020	LB211681	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	25 Oct 2020	23 Oct 2020
0407_TP197_BH04_0.0-0.1	SE212450.021	LB211681	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	25 Oct 2020	23 Oct 2020
0407_TP197_BH04_0.4-0.5	SE212450.022	LB211681	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	25 Oct 2020	23 Oct 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP209_BH01_0.0-0.1	SE212450.007	LB211684	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	23 Oct 2020
0407_TP209_BH02_0.0-0.1	SE212450.008	LB211684	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	23 Oct 2020
0407_TP209_BH03_0.0-0.1	SE212450.009	LB211684	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	23 Oct 2020
0407_TP209_BH04_0.0-0.1	SE212450.010	LB211684	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	23 Oct 2020
0407_TP209_BH01_0.3-0.4	SE212450.011	LB211684	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	23 Oct 2020
0407_TP209_BH02_0.3-0.4	SE212450.012	LB211684	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	23 Oct 2020
0407_TP209_BH03_0.4-0.5	SE212450.013	LB211684	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	23 Oct 2020
0407_TP197_BH01_0.0-0.1	SE212450.015	LB211684	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	23 Oct 2020
0407_TP197_BH02_0.0-0.1	SE212450.016	LB211684	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	23 Oct 2020
0407_TP197_BH03_0.0-0.1	SE212450.017	LB211684	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	23 Oct 2020
0407_TP197_BH01_0.4-0.5	SE212450.018	LB211684	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	23 Oct 2020
0407_TP197_BH02_0.4-0.5	SE212450.019	LB211684	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	23 Oct 2020
0407_TP197_BH03_0.4-0.5	SE212450.020	LB211684	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	23 Oct 2020
0407_TP197_BH04_0.0-0.1	SE212450.021	LB211684	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	23 Oct 2020
0407_TP197_BH04_0.4-0.5	SE212450.022	LB211684	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	23 Oct 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
QC313	SE212450.014	LB211597	16 Oct 2020	16 Oct 2020	23 Oct 2020	20 Oct 2020	29 Nov 2020	21 Oct 2020

PCBs in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
QC313	SE212450.014	LB211597	16 Oct 2020	16 Oct 2020	23 Oct 2020	20 Oct 2020	29 Nov 2020	22 Oct 2020

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP259_BH01_0.0-0.1	SE212450.001	LB211689	16 Oct 2020	16 Oct 2020	14 Apr 2021	20 Oct 2020	14 Apr 2021	23 Oct 2020
0407_TP259_BH02_0.0-0.1	SE212450.002	LB211689	16 Oct 2020	16 Oct 2020	14 Apr 2021	20 Oct 2020	14 Apr 2021	23 Oct 2020
0407_TP259_BH03_0.0-0.1	SE212450.003	LB211689	16 Oct 2020	16 Oct 2020	14 Apr 2021	20 Oct 2020	14 Apr 2021	23 Oct 2020
0407_TP259_BH01_0.4-0.5	SE212450.004	LB211689	16 Oct 2020	16 Oct 2020	14 Apr 2021	20 Oct 2020	14 Apr 2021	23 Oct 2020
0407_TP259_BH02_0.4-0.5	SE212450.005	LB211689	16 Oct 2020	16 Oct 2020	14 Apr 2021	20 Oct 2020	14 Apr 2021	23 Oct 2020
0407_TP259_BH03_0.4-0.5	SE212450.006	LB211689	16 Oct 2020	16 Oct 2020	14 Apr 2021	20 Oct 2020	14 Apr 2021	23 Oct 2020

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Sample Name	Sample No.	QC Ref

HOLDING TIME SUMMARY

SE212450 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

Trace Metals (Dissolved) in Water by ICPMS (continued) — **Method: ME-(AU)-[ENV]AN318**

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
QC313	SE212450.014	LB211533	16 Oct 2020	16 Oct 2020	14 Apr 2021	19 Oct 2020	14 Apr 2021	20 Oct 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)		SE212450.007	%	70 - 130%	90
		SE212450.008	%	70 - 130%	99
		SE212450.009	%	70 - 130%	96
		SE212450.010	%	70 - 130%	92
		SE212450.011	%	70 - 130%	93
		SE212450.012	%	70 - 130%	84
		SE212450.013	%	70 - 130%	93
		SE212450.015	%	70 - 130%	92
		SE212450.016	%	70 - 130%	90
		SE212450.017	%	70 - 130%	92
		SE212450.018	%	70 - 130%	86
		SE212450.019	%	70 - 130%	74
		SE212450.020	%	70 - 130%	83
		SE212450.021	%	70 - 130%	90
		SE212450.022	%	70 - 130%	84
d14-p-terphenyl (Surrogate)		SE212450.007	%	70 - 130%	87
		SE212450.008	%	70 - 130%	91
		SE212450.009	%	70 - 130%	95
		SE212450.010	%	70 - 130%	86
		SE212450.011	%	70 - 130%	94
		SE212450.012	%	70 - 130%	80
		SE212450.013	%	70 - 130%	95
		SE212450.015	%	70 - 130%	89
		SE212450.016	%	70 - 130%	93
		SE212450.017	%	70 - 130%	90
		SE212450.018	%	70 - 130%	80
		SE212450.019	%	70 - 130%	88
		SE212450.020	%	70 - 130%	86
		SE212450.021	%	70 - 130%	86
		SE212450.022	%	70 - 130%	90
d5-nitrobenzene (Surrogate)		SE212450.007	%	70 - 130%	49 ①
		SE212450.008	%	70 - 130%	51 ①
		SE212450.009	%	70 - 130%	57 ①
		SE212450.010	%	70 - 130%	55 ①
		SE212450.011	%	70 - 130%	60 ①
		SE212450.012	%	70 - 130%	46 ①
		SE212450.013	%	70 - 130%	54 ①
		SE212450.015	%	70 - 130%	53 ①
		SE212450.016	%	70 - 130%	51 ①
		SE212450.017	%	70 - 130%	51 ①
		SE212450.018	%	70 - 130%	85
		SE212450.019	%	70 - 130%	85
		SE212450.020	%	70 - 130%	84
		SE212450.021	%	70 - 130%	92
		SE212450.022	%	70 - 130%	90

PAH (Polynuclear Aromatic Hydrocarbons) in Water — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	QC313	SE212450.014	%	40 - 130%	58
d14-p-terphenyl (Surrogate)	QC313	SE212450.014	%	40 - 130%	90
d5-nitrobenzene (Surrogate)	QC313	SE212450.014	%	40 - 130%	48

PCBs in Water — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (Surrogate)	QC313	SE212450.014	%	40 - 130%	66

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB211684.001		Benzo(a)pyrene	mg/kg	0.1	<0.1
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	58
		2-fluorobiphenyl (Surrogate)	%	-	86
		d14-p-terphenyl (Surrogate)	%	-	92

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB211597.001		Naphthalene	µg/L	0.1	<0.1
		2-methylnaphthalene	µg/L	0.1	<0.1
		1-methylnaphthalene	µg/L	0.1	<0.1
		Acenaphthylene	µg/L	0.1	<0.1
		Acenaphthene	µg/L	0.1	<0.1
		Fluorene	µg/L	0.1	<0.1
		Phenanthrene	µg/L	0.1	<0.1
		Anthracene	µg/L	0.1	<0.1
		Fluoranthene	µg/L	0.1	<0.1
		Pyrene	µg/L	0.1	<0.1
		Benzo(a)anthracene	µg/L	0.1	<0.1
		Chrysene	µg/L	0.1	<0.1
		Benzo(a)pyrene	µg/L	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1
		Dibenzo(ah)anthracene	µg/L	0.1	<0.1
		Benzo(ghi)perylene	µg/L	0.1	<0.1
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	68
		2-fluorobiphenyl (Surrogate)	%	-	72
		d14-p-terphenyl (Surrogate)	%	-	98

PCBs in Water

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB211597.001	Arochlor 1016	µg/L	1	<1
	Arochlor 1221	µg/L	1	<1
	Arochlor 1232	µg/L	1	<1
	Arochlor 1242	µg/L	1	<1
	Arochlor 1248	µg/L	1	<1
	Arochlor 1254	µg/L	1	<1
	Arochlor 1260	µg/L	1	<1
	Arochlor 1262	µg/L	1	<1
	Arochlor 1268	µg/L	1	<1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB211689.001	Lead, Pb	mg/kg	1	<1

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Sample Number	Parameter	Units	LOR	Result
LB211533.001	Copper, Cu	µg/L	1	<1
	Lead, Pb	µg/L	1	<1

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212450.010	LB211681.011	% Moisture	%w/w	1	4.2	4.4	53	6
SE212450.021	LB211681.022	% Moisture	%w/w	1	7.8	8.5	42	8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212450.017	LB211684.014		Benzo(a)pyrene	mg/kg	0.1	2.5	2.4	34	3
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.3	0.3	30	7
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	2
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	1
SE212450.022	LB211684.028		Benzo(a)pyrene	mg/kg	0.1	<0.1	0.0504720431	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.4314745019	30	4
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4202577922	30	0
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4482649390	30	0

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212450.006	LB211689.024	Lead, Pb	mg/kg	1	1	<1	116	35
SE212503.003	LB211689.014	Lead, Pb	mg/kg	1	280	370	30	29

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212450.014	LB211533.012	Copper, Cu	µg/L	1	<1	<1	200	0
		Lead, Pb	µg/L	1	<1	<1	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB211684.002		Benzo(a)pyrene	mg/kg	0.1	4.3	4	60 - 140	107
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.3	0.5	40 - 130	57
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	93
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	88

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB211597.002		Naphthalene	µg/L	0.1	29	40	60 - 140	72
		Acenaphthylene	µg/L	0.1	33	40	60 - 140	82
		Acenaphthene	µg/L	0.1	32	40	60 - 140	79
		Phenanthrene	µg/L	0.1	32	40	60 - 140	81
		Anthracene	µg/L	0.1	31	40	60 - 140	78
		Fluoranthene	µg/L	0.1	34	40	60 - 140	84
		Pyrene	µg/L	0.1	35	40	60 - 140	88
		Benzo(a)pyrene	µg/L	0.1	36	40	60 - 140	90
	Surrogates	d5-nitrobenzene (Surrogate)	µg/L	-	0.3	0.5	40 - 130	62
		2-fluorobiphenyl (Surrogate)	µg/L	-	0.3	0.5	40 - 130	68
		d14-p-terphenyl (Surrogate)	µg/L	-	0.5	0.5	40 - 130	92

PCBs in Water

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB211597.002	Arochlor 1260	µg/L	1	<1	0.4	60 - 140	139

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB211689.002	Lead, Pb	mg/kg	1	94	89.9	80 - 120	104

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB211533.002	Copper, Cu	µg/L	1	21	20	80 - 120	106
	Lead, Pb	µg/L	1	18	20	80 - 120	91

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212450.007	LB211684.004		Benzo(a)pyrene	mg/kg	0.1	9.4	5.4	4	99
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.2	0.2	-	46
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	-	99
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	89

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212509.001	LB211689.004	Lead, Pb	mg/kg	1	50	2	50	95

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212444.001	LB211533.004	Lead, Pb	µg/L	1	19	<1	20	93

MATRIX SPIKE DUPLICATES

SE212450 R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
***	Indicates that both * and ** apply.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.
①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client only. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

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E-MAILED
16/10@6:42pm

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd
ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☒ SYDNEY: 202 Submarine School, Sub Base Platypus, North Sydney, 2060
- ✓ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2601
- ☐ MACKAY: 21 River Street, Mackay, QLD 4741
- ☐ PERTH: 503 Murray Street, Perth, WA 6001
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4811
- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0821

CLIENT: Defence Housing Australia
PROJECT: Randwick Barracks
PROJECT NUMBER: 610.30041
PROJECT MANAGER: [redacted]
PM CONTACT No: [redacted]

LABORATORY: SGS
LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015
SAMPLER: [redacted]
SAMPLER CONTACT No: [redacted]
Email Reports and Invoices to: LQRSYD@slrconsulting.com, [redacted]

Turnaround Time (TAT)
✓ Standard TAT
☐ Non Standard or Urgent TAT
Required TAT: Standard

COC Number: 1 of 3

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: TRH/BTEXN/PAHs/VOC	Suit B and G + OCP/OPPs	Suite C	TRH fraction C6-C10 and PFAS				HOLD	Additional Information (Comment on any gross contamination or specific requirements)
	0407_SYDSEW01_0.1-0.2_201016	16-10-2020	Soil									x	
1	0407_SYDSEW01_0.6-0.7_201016	16-10-2020	Soil				x						
	0407_SYDSEW01_1.7-1.8_201016	16-10-2020	Soil									x	
2	0407_SYDSEW01_2.8-2.9_201016	16-10-2020	Soil				x						
3	0407_SYDSEW02_0.1-0.2_201016	16-10-2020	Soil				x						
4	0407_SYDSEW02_0.6-0.7_201016	16-10-2020	Soil				x						
	0407_SYDSEW02_1.7-1.8_201016	16-10-2020	Soil									x	
	0407_SYDSEW02_2.8-2.9_201016	16-10-2020	Soil									X	
5	0407_SYDSEW03_0.1-0.2_201016	16-10-2020	Soil				x						
	0407_SYDSEW03_0.6-0.7_201016	16-10-2020	Soil									X	
6	0407_SYDSEW03_1.7-1.8_201016	16-10-2020	Soil				x						
	0407_SYDSEW03_2.8-2.9_201016	16-10-2020	Soil									x	
7	0407_SYDSEW04_0.1-0.2_201016	16-10-2020	Soil				x						
8	0407_SYDSEW04_0.6-0.7_201016	16-10-2020	Soil				x						
	0407_SYDSEW04_1.7-1.8_201016	16-10-2020	Soil									x	

SGS EHS Sydney COC
SE212451

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 16-10-2020	Received by	[redacted]	Date / Time 16/10/20	Temperature Received:
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time 6:42pm 16/10	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

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SLR Consulting Australia Pty Ltd
ABN 29 001 584 612

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- ✓ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2601
- ☐ MACKAY: 21 River Street, Mackay, QLD 4741
- ☐ PERTH: 503 Murray Street, Perth, WA 6001
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4811
- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0821

CLIENT: Defence Housing Australia
PROJECT: Randwick Barracks
PROJECT NUMBER: 610.30041
PROJECT MANAGER: [redacted]
PM CONTACT No [redacted]

LABORATORY: SGS
LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015
SAMPLER: [redacted]
SAMPLER CONTACT No [redacted]
Email Reports and Invoices to: LQRSYD@slrconsulting.com, [redacted]

Turnaround Time (TAT)
✓ Standard TAT
☐ Non Standard or Urgent TAT
Required TAT: Standard

COC Number: 2 of 3

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: TRH/BTEXN/PAHs/VOCs	Suit B and G + OCP/OPPs	Suite C	TRH fraction C6-C10 and PFAS				HOLD	Additional Information (Comment on any gross contamination or specific requirements)
9	0407_SYDSEW05_0.2-0.3_201016	16-10-2020	Soil				×						
10	0407_SYDSEW05_0.6-0.7_201016	16-10-2020	Soil				×						
	0407_SYDSEW05_1.8-1.9_201016	16-10-2020	Soil									×	
11	0407_SYDSEW06_0.2-0.3_201016	16-10-2020	Soil				×						
	0407_SYDSEW06_0.6-0.7_201016	16-10-2020	Soil									×	
	0407_SYDSEW06_1.8-1.9_201016	16-10-2020	Soil									×	
12	0407_SYDSEW06_2.9-3.0_201016	16-10-2020	Soil				×						
13	0407_QC193_201016	16-10-2020	Soil				×						
	0407_QC293_201016	16-10-2020	Soil										Please send to Eurofins for Suite C
14	0407_SYDSEW07_0.2-0.3_201016	16-10-2020	Soil				×						
15	0407_SYDSEW07_0.6-0.7_201016	16-10-2020	Soil				×						
	0407_SYDSEW07_1.7-1.8_201016 fa ●	16-10-2020	Soil									×	
	0407_SYDSEW07_3.0-3.1_201016	16-10-2020	Soil									×	
16	0407_SYDSEW08_0.2-0.3_201016	16-10-2020	Soil				×						
	0407_SYDSEW08_0.6-0.7_201016	16-10-2020	Soil									×	
17	0407_SYDSEW08_1.7-1.8_201016	16-10-2020	Soil				×						

I attest that the proper field sampling procedures were used during the collection of these samples.

						Temperature Received:
Relinquished By Sampler	[redacted]	Date / Time 16-10-2020	Received by	Sig [redacted]	Date / Time 16/10/20	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time 21:10	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

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CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

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CLIENT: Defence Housing Australia

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGER: [redacted]

PM CONTACT No: [redacted]

LABORATORY: SGS

LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015

SAMPLER [redacted]

SAMPLER CONTACT No: [redacted]

Email Reports and Invoices to: LQRSYD@slrconsulting.com, [redacted]

Turnaround Time (TAT)

✓ Standard TAT

☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number 3 of 3

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	TRH/BTEXN/PAHs/VOC	Suit B and G + OCP/OPPs	Suite C	TRH fraction C6-C10 and PFAS				HOLD	Additional Information (Comment on any gross contamination or specific requirements)
18	0407_SYDSEW09_0.2-0.3_201016	16-10-2020	Soil				x						
19	0407_SYDSEW09_0.6-0.7_201016	16-10-2020	Soil				x						
20	0407_SYDSEW10_0.2-0.3_201016	16-10-2020	Soil				x						
21	0407_SYDSEW10_0.6-0.7_201016	16-10-2020	Soil				x						
	0407_SYDSEW10_1.5-1.6_201016	16-10-2020	Soil									x	
22	0407_SYDSEW11_0.1-0.2_201016	16-10-2020	Soil				x						
	0407_SYDSEW11_0.6-0.7_201016	16-10-2020	Soil									x	
23	0407_SYDSEW11_1.8-1.9_201016	16-10-2020	Soil				x						
24	0407_QC523_201016 TS	16-10-2020	Soil					x					
25	0407_QC523_201016 TB												

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 16-10-2020	Received by	Sig [redacted]	Date / Time 16/10/20	Temperature Received:
Relinquished By	Sign	Date / Time	Received by	Sig [redacted]	Date / Time 04:16	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

SAMPLE RECEIPT ADVICE

SE212451

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	25

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Fri 16/10/2020
Report Due	Mon 26/10/2020
SGS Reference	**SE212451**

SUBMISSION DETAILS

This is to confirm that 25 samples were received on Friday 16/10/2020. Results are expected to be ready by COB Monday 26/10/2020. Please quote SGS reference SE212451 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	25 Soil
Date documentation received	16/10/2020@6:42pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	1.2°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

PFAS subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420.Asbestos samples not received.
SGS does not have capability to do Sulfide in soil samples.
Micros subcontracted to Symbio Laboratories, 2 Sirius Road, Lane Cove West NSW 2066, NATA Accreditation Number 2455.
14 samples have been placed on hold as no tests have been assigned for them by the client. These samples will not be processed.
Extra sample 0407_SYDSEW01_2.3-2.4 received.

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SAMPLE RECEIPT ADVICE

SE212451

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Ammonia Nitrogen (soluble) in Soil	Nitrite Nitrogen in Soil	Soluble Anions (1:5) in Soil by Ion Chromatography	TKN Kjeldahl Digestion by Discrete Analyser in Soil	Total Phosphorus by Kjeldahl Digestion DA in	Total Recoverable Elements in Soil/Waste	VOC's in Soil
001	0407_SYDSEW01_0.6-0.7_201016	1	1	3	2	1	11	81
002	0407_SYDSEW01_2.8-2.9_201016	1	1	3	2	1	11	81
003	0407_SYDSEW02_0.1-0.2_201016	1	1	3	2	1	11	81
004	0407_SYDSEW02_0.6-0.7_201016	1	1	3	2	1	11	81
005	0407_SYDSEW03_0.1-0.2_201016	1	1	3	2	1	11	81
006	0407_SYDSEW03_1.7-1.8_201016	1	1	3	2	1	11	81
007	0407_SYDSEW04_0.1-0.2_201016	1	1	3	2	1	11	81
008	0407_SYDSEW04_0.6-0.7_201016	1	1	3	2	1	11	81
009	0407_SYDSEW05_0.2-0.3_201016	1	1	3	2	1	11	81
010	0407_SYDSEW05_0.6-0.7_201016	1	1	3	2	1	11	81
011	0407_SYDSEW06_0.2-0.3_201016	1	1	3	2	1	11	81
012	0407_SYDSEW06_2.9-3.0_201016	1	1	3	2	1	11	81
013	0407_QC193_201016	1	1	3	2	1	11	81
014	0407_SYDSEW07_0.2-0.3_201016	1	1	3	2	1	11	81
015	0407_SYDSEW07_0.6-0.7_201016	1	1	3	2	1	11	81
016	0407_SYDSEW08_0.2-0.3_201016	1	1	3	2	1	11	81
017	0407_SYDSEW08_1.7-1.8_201016	1	1	3	2	1	11	81
018	0407_SYDSEW09_0.2-0.3_201016	1	1	3	2	1	11	81
019	0407_SYDSEW09_0.6-0.7_201016	1	1	3	2	1	11	81
020	0407_SYDSEW10_0.2-0.3_201016	1	1	3	2	1	11	81
021	0407_SYDSEW10_0.6-0.7_201016	1	1	3	2	1	11	81
022	0407_SYDSEW11_0.1-0.2_201016	1	1	3	2	1	11	81
023	0407_SYDSEW11_1.8-1.9_201016	1	1	3	2	1	11	81
024	0407_QC523_201016 TS	-	-	-	-	-	-	11

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE212451

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
025	0407_QC523_201016 TB	11	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
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Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE212451

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Mercury in Soil	Moisture Content	Per- and Polyfluoroalkyl Substances (PFAS) in	Sample Subcontracted
001	0407_SYDSEW01_0.6-0.7_201016	1	1	55	1
002	0407_SYDSEW01_2.8-2.9_201016	1	1	55	1
003	0407_SYDSEW02_0.1-0.2_201016	1	1	55	1
004	0407_SYDSEW02_0.6-0.7_201016	1	1	55	1
005	0407_SYDSEW03_0.1-0.2_201016	1	1	55	1
006	0407_SYDSEW03_1.7-1.8_201016	1	1	55	1
007	0407_SYDSEW04_0.1-0.2_201016	1	1	55	1
008	0407_SYDSEW04_0.6-0.7_201016	1	1	55	1
009	0407_SYDSEW05_0.2-0.3_201016	1	1	55	1
010	0407_SYDSEW05_0.6-0.7_201016	1	1	55	1
011	0407_SYDSEW06_0.2-0.3_201016	1	1	55	1
012	0407_SYDSEW06_2.9-3.0_201016	1	1	55	1
013	0407_QC193_201016	1	1	55	-
014	0407_SYDSEW07_0.2-0.3_201016	1	1	55	1
015	0407_SYDSEW07_0.6-0.7_201016	1	1	55	1
016	0407_SYDSEW08_0.2-0.3_201016	1	1	55	1
017	0407_SYDSEW08_1.7-1.8_201016	1	1	55	1
018	0407_SYDSEW09_0.2-0.3_201016	1	1	55	1
019	0407_SYDSEW09_0.6-0.7_201016	1	1	55	1
020	0407_SYDSEW10_0.2-0.3_201016	1	1	55	1
021	0407_SYDSEW10_0.6-0.7_201016	1	1	55	1
022	0407_SYDSEW11_0.1-0.2_201016	1	1	55	1
023	0407_SYDSEW11_1.8-1.9_201016	1	1	55	1

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
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Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE212451

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Moisture Content
025	0407_QC523_201016 TB	1

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	25

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE212451 R0**
Date Received	16/10/2020
Date Reported	26/10/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

PFAS subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Number. 2562/14420. Report Number ME317004
MA-1523 Majority of surrogates are within acceptance criteria.
Micros subcontracted to Symbio Laboratories, 2 Sirius Road, Lane Cove West NSW 2066, NATA Accreditation Number 2455. Report Number S959863.

SIGNATORIES

[redacted]

Senior Organic Chemist/Metals Chemist | Metals/Inorganics Team Leader | Organic Section Head

[redacted]

Inorganic/Metals Chemist

VOC's in Soil [AN433] Tested: 20/10/2020

PARAMETER	UOM	LOR	0407_SYDSEW01_0.-0.7_201016 SOIL - 16/10/2020 SE212451.001	0407_SYDSEW01_2.-2.9_201016 SOIL - 16/10/2020 SE212451.002	0407_SYDSEW02_0.-0.2_201016 SOIL - 16/10/2020 SE212451.003	0407_SYDSEW02_0.-0.7_201016 SOIL - 16/10/2020 SE212451.004	0407_SYDSEW03_0.-0.2_201016 SOIL - 16/10/2020 SE212451.005
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 20/10/2020 (continued)

PARAMETER	UOM	LOR	0407_SYDSEW01_0.-0.7_201016 SOIL - 16/10/2020 SE212451.001	0407_SYDSEW01_2.-2.9_201016 SOIL - 16/10/2020 SE212451.002	0407_SYDSEW02_0.-0.2_201016 SOIL - 16/10/2020 SE212451.003	0407_SYDSEW02_0.-0.7_201016 SOIL - 16/10/2020 SE212451.004	0407_SYDSEW03_0.-0.2_201016 SOIL - 16/10/2020 SE212451.005
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 20/10/2020 (continued)

PARAMETER	UOM	LOR	0407_SYDSEW03_1.-1.8_201016 SOIL - 16/10/2020 SE212451.006	0407_SYDSEW04_0.-0.2_201016 SOIL - 16/10/2020 SE212451.007	0407_SYDSEW04_0.-0.7_201016 SOIL - 16/10/2020 SE212451.008	0407_SYDSEW05_0.-0.3_201016 SOIL - 16/10/2020 SE212451.009	0407_SYDSEW05_0.-0.7_201016 SOIL - 16/10/2020 SE212451.010
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 20/10/2020 (continued)

PARAMETER	UOM	LOR	0407_SYDSEW03_1.-1.8_201016 SOIL - 16/10/2020 SE212451.006	0407_SYDSEW04_0.-0.2_201016 SOIL - 16/10/2020 SE212451.007	0407_SYDSEW04_0.-0.7_201016 SOIL - 16/10/2020 SE212451.008	0407_SYDSEW05_0.-0.3_201016 SOIL - 16/10/2020 SE212451.009	0407_SYDSEW05_0.-0.7_201016 SOIL - 16/10/2020 SE212451.010
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 20/10/2020 (continued)

PARAMETER	UOM	LOR	0407_SYDSEW06_0.-0.3_201016 SOIL - 16/10/2020 SE212451.011	0407_SYDSEW06_2.-3.0_201016 SOIL - 16/10/2020 SE212451.012	0407_QC193_20101 SOIL - 16/10/2020 SE212451.013	0407_SYDSEW07_0.-0.3_201016 SOIL - 16/10/2020 SE212451.014	0407_SYDSEW07_0.-0.7_201016 SOIL - 16/10/2020 SE212451.015
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 20/10/2020 (continued)

PARAMETER	UOM	LOR	0407_SYDSEW06_0.-0.3_201016 SOIL - 16/10/2020 SE212451.011	0407_SYDSEW06_2.-3.0_201016 SOIL - 16/10/2020 SE212451.012	0407_QC193_20101 SOIL - 16/10/2020 SE212451.013	0407_SYDSEW07_0.-0.3_201016 SOIL - 16/10/2020 SE212451.014	0407_SYDSEW07_0.-0.7_201016 SOIL - 16/10/2020 SE212451.015
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 20/10/2020 (continued)

PARAMETER	UOM	LOR	0407_SYDSEW08_0.-0.3_201016 SOIL - 16/10/2020 SE212451.016	0407_SYDSEW08_1.-1.8_201016 SOIL - 16/10/2020 SE212451.017	0407_SYDSEW09_0.-0.3_201016 SOIL - 16/10/2020 SE212451.018	0407_SYDSEW09_0.-0.7_201016 SOIL - 16/10/2020 SE212451.019	0407_SYDSEW10_0.-0.3_201016 SOIL - 16/10/2020 SE212451.020
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	<1	<1

VOC's in Soil [AN433] Tested: 20/10/2020 (continued)

PARAMETER	UOM	LOR	0407_SYDSEW08_0.-0.3_201016 SOIL - 16/10/2020 SE212451.016	0407_SYDSEW08_1.-1.8_201016 SOIL - 16/10/2020 SE212451.017	0407_SYDSEW09_0.-0.3_201016 SOIL - 16/10/2020 SE212451.018	0407_SYDSEW09_0.-0.7_201016 SOIL - 16/10/2020 SE212451.019	0407_SYDSEW10_0.-0.3_201016 SOIL - 16/10/2020 SE212451.020
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	<1.8	<1.8

VOC's in Soil [AN433] Tested: 20/10/2020 (continued)

PARAMETER	UOM	LOR	0407_SYDSEW10_0.-0.7_201016 SOIL - 16/10/2020 SE212451.021	0407_SYDSEW11_0.-0.2_201016 SOIL - 16/10/2020 SE212451.022	0407_SYDSEW11_1.-1.9_201016 SOIL - 16/10/2020 SE212451.023	0407_QC523_201016 TS SOIL - 16/10/2020 SE212451.024	0407_QC523_201016 TB SOIL - 16/10/2020 SE212451.025
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1	[124%]	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1	[123%]	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	[129%]	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2	[127%]	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1	[128%]	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3	-	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6	-	<0.6
Naphthalene	mg/kg	0.1	<0.1	**0.2**	<0.1	-	<0.1
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	-	-
Chloromethane	mg/kg	1	<1	<1	<1	-	-
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Bromomethane	mg/kg	1	<1	<1	<1	-	-
Chloroethane	mg/kg	1	<1	<1	<1	-	-
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	-	-
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	-	-
Iodomethane	mg/kg	5	<5	<5	<5	-	-
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	-	-
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	-	-
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Vinyl acetate	mg/kg	10	<10	<10	<10	-	-
MEK (2-butanone)	mg/kg	10	<10	<10	<10	-	-
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
2-nitropropane	mg/kg	10	<10	<10	<10	-	-
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	-	-
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	-	-
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	-	-
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	-	-

VOC's in Soil [AN433] Tested: 20/10/2020 (continued)

PARAMETER	UOM	LOR	0407_SYDSEW10_0.-0.7_201016 SOIL - 16/10/2020 SE212451.021	0407_SYDSEW11_0.-0.2_201016 SOIL - 16/10/2020 SE212451.022	0407_SYDSEW11_1.-1.9_201016 SOIL - 16/10/2020 SE212451.023	0407_QC523_201016 TS SOIL - 16/10/2020 SE212451.024	0407_QC523_201016 TB SOIL - 16/10/2020 SE212451.025
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-	-
Total VOC*	mg/kg	24	<24	<24	<24	-	-
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	-	-
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	-	-
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	-	-

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 20/10/2020

PARAMETER	UOM	LOR	0407_QC523_201016 TB SOIL - 16/10/2020 SE212451.025
TRH C6-C9	mg/kg	20	<20
Benzene (F0)	mg/kg	0.1	<0.1
TRH C6-C10	mg/kg	25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25

Soluble Anions (1:5) in Soil by Ion Chromatography [AN245] Tested: 23/10/2020

PARAMETER	UOM	LOR	0407_SYDSEW01_0.-0.7_201016 SOIL - 16/10/2020 SE212451.001	0407_SYDSEW01_2.-2.9_201016 SOIL - 16/10/2020 SE212451.002	0407_SYDSEW02_0.-0.2_201016 SOIL - 16/10/2020 SE212451.003	0407_SYDSEW02_0.-0.7_201016 SOIL - 16/10/2020 SE212451.004	0407_SYDSEW03_0.-0.2_201016 SOIL - 16/10/2020 SE212451.005
Nitrate Nitrogen	mg/kg	0.025	0.28	2.7	0.24	0.43	1.1
ortho Phosphate as P	mg/kg	0.25	<0.25	<0.25	<0.25	0.36	<0.25
Sulfate	mg/kg	5	14	750	6100	89	7500

PARAMETER	UOM	LOR	0407_SYDSEW03_1.-1.8_201016 SOIL - 16/10/2020 SE212451.006	0407_SYDSEW04_0.-0.2_201016 SOIL - 16/10/2020 SE212451.007	0407_SYDSEW04_0.-0.7_201016 SOIL - 16/10/2020 SE212451.008	0407_SYDSEW05_0.-0.3_201016 SOIL - 16/10/2020 SE212451.009	0407_SYDSEW05_0.-0.7_201016 SOIL - 16/10/2020 SE212451.010
Nitrate Nitrogen	mg/kg	0.025	0.17	2.6	0.41	7.8	0.71
ortho Phosphate as P	mg/kg	0.25	<0.25	<0.25	<0.25	1.1	<0.25
Sulfate	mg/kg	5	44	8000	410	82	5.9

PARAMETER	UOM	LOR	0407_SYDSEW06_0.-0.3_201016 SOIL - 16/10/2020 SE212451.011	0407_SYDSEW06_2.-3.0_201016 SOIL - 16/10/2020 SE212451.012	0407_QC193_20101 SOIL - 16/10/2020 SE212451.013	0407_SYDSEW07_0.-0.3_201016 SOIL - 16/10/2020 SE212451.014	0407_SYDSEW07_0.-0.7_201016 SOIL - 16/10/2020 SE212451.015
Nitrate Nitrogen	mg/kg	0.025	9.6	0.32	0.29	1.0	0.57
ortho Phosphate as P	mg/kg	0.25	1.6	<0.25	<0.25	<0.25	<0.25
Sulfate	mg/kg	5	44	12	8.8	3400	300

PARAMETER	UOM	LOR	0407_SYDSEW08_0.-0.3_201016 SOIL - 16/10/2020 SE212451.016	0407_SYDSEW08_1.-1.8_201016 SOIL - 16/10/2020 SE212451.017	0407_SYDSEW09_0.-0.3_201016 SOIL - 16/10/2020 SE212451.018	0407_SYDSEW09_0.-0.7_201016 SOIL - 16/10/2020 SE212451.019	0407_SYDSEW10_0.-0.3_201016 SOIL - 16/10/2020 SE212451.020
Nitrate Nitrogen	mg/kg	0.025	8.1	2.7	7.2	8.9	5.2
ortho Phosphate as P	mg/kg	0.25	<0.25	<0.25	<0.25	<0.25	0.29
Sulfate	mg/kg	5	9.6	95	140	130	76

PARAMETER	UOM	LOR	0407_SYDSEW10_0.-0.7_201016 SOIL - 16/10/2020 SE212451.021	0407_SYDSEW11_0.-0.2_201016 SOIL - 16/10/2020 SE212451.022	0407_SYDSEW11_1.-1.9_201016 SOIL - 16/10/2020 SE212451.023
Nitrate Nitrogen	mg/kg	0.025	0.47	1.5	0.088
ortho Phosphate as P	mg/kg	0.25	<0.25	<0.25	<0.25
Sulfate	mg/kg	5	<5.0	<5.0	<5.0

Nitrite Nitrogen in Soil [AN277] Tested: 23/10/2020

PARAMETER	UOM	LOR	0407_SYDSEW01_0.0 -0.7_201016 SOIL - 16/10/2020 SE212451.001	0407_SYDSEW01_2.0 -2.9_201016 SOIL - 16/10/2020 SE212451.002	0407_SYDSEW02_0.0 -0.2_201016 SOIL - 16/10/2020 SE212451.003	0407_SYDSEW02_0.0 -0.7_201016 SOIL - 16/10/2020 SE212451.004	0407_SYDSEW03_0.0 -0.2_201016 SOIL - 16/10/2020 SE212451.005
Nitrite, NO_2 as N in Soil*	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_SYDSEW03_1.0 -1.8_201016 SOIL - 16/10/2020 SE212451.006	0407_SYDSEW04_0.0 -0.2_201016 SOIL - 16/10/2020 SE212451.007	0407_SYDSEW04_0.0 -0.7_201016 SOIL - 16/10/2020 SE212451.008	0407_SYDSEW05_0.0 -0.3_201016 SOIL - 16/10/2020 SE212451.009	0407_SYDSEW05_0.0 -0.7_201016 SOIL - 16/10/2020 SE212451.010
Nitrite, NO_2 as N in Soil*	mg/kg	0.05	<0.05	**0.06**	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_SYDSEW06_0.0 -0.3_201016 SOIL - 16/10/2020 SE212451.011	0407_SYDSEW06_2.0 -3.0_201016 SOIL - 16/10/2020 SE212451.012	0407_QC193_20101 SOIL - 16/10/2020 SE212451.013	0407_SYDSEW07_0.0 -0.3_201016 SOIL - 16/10/2020 SE212451.014	0407_SYDSEW07_0.0 -0.7_201016 SOIL - 16/10/2020 SE212451.015
Nitrite, NO_2 as N in Soil*	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_SYDSEW08_0.0 -0.3_201016 SOIL - 16/10/2020 SE212451.016	0407_SYDSEW08_1.0 -1.8_201016 SOIL - 16/10/2020 SE212451.017	0407_SYDSEW09_0.0 -0.3_201016 SOIL - 16/10/2020 SE212451.018	0407_SYDSEW09_0.0 -0.7_201016 SOIL - 16/10/2020 SE212451.019	0407_SYDSEW10_0.0 -0.3_201016 SOIL - 16/10/2020 SE212451.020
Nitrite, NO_2 as N in Soil*	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	**0.14**

PARAMETER	UOM	LOR	0407_SYDSEW10_0.0 -0.7_201016 SOIL - 16/10/2020 SE212451.021	0407_SYDSEW11_0.0 -0.2_201016 SOIL - 16/10/2020 SE212451.022	0407_SYDSEW11_1.0 -1.9_201016 SOIL - 16/10/2020 SE212451.023
Nitrite, NO_2 as N in Soil*	mg/kg	0.05	**0.05**	<0.05	**0.06**

TKN Kjeldahl Digestion by Discrete Analyser in Soil [AN292] Tested: 23/10/2020

PARAMETER	UOM	LOR	0407_SYDSEW01_0.0-0.7_201016 SOIL - 16/10/2020 SE212451.001	0407_SYDSEW01_2.0-2.9_201016 SOIL - 16/10/2020 SE212451.002	0407_SYDSEW02_0.0-0.2_201016 SOIL - 16/10/2020 SE212451.003	0407_SYDSEW02_0.0-0.7_201016 SOIL - 16/10/2020 SE212451.004	0407_SYDSEW03_0.0-0.2_201016 SOIL - 16/10/2020 SE212451.005
Total Kjeldahl Nitrogen	mg/kg	40	95	890	520	130	1600
Total Nitrogen (calc)	mg/kg	40	95	890	520	130	1600

PARAMETER	UOM	LOR	0407_SYDSEW03_1.0-1.8_201016 SOIL - 16/10/2020 SE212451.006	0407_SYDSEW04_0.0-0.2_201016 SOIL - 16/10/2020 SE212451.007	0407_SYDSEW04_0.0-0.7_201016 SOIL - 16/10/2020 SE212451.008	0407_SYDSEW05_0.0-0.3_201016 SOIL - 16/10/2020 SE212451.009	0407_SYDSEW05_0.0-0.7_201016 SOIL - 16/10/2020 SE212451.010
Total Kjeldahl Nitrogen	mg/kg	40	<40	1500	370	300	330
Total Nitrogen (calc)	mg/kg	40	<40	1500	370	300	330

PARAMETER	UOM	LOR	0407_SYDSEW06_0.0-0.3_201016 SOIL - 16/10/2020 SE212451.011	0407_SYDSEW06_2.0-3.0_201016 SOIL - 16/10/2020 SE212451.012	0407_QC193_20101 SOIL - 16/10/2020 SE212451.013	0407_SYDSEW07_0.0-0.3_201016 SOIL - 16/10/2020 SE212451.014	0407_SYDSEW07_0.0-0.7_201016 SOIL - 16/10/2020 SE212451.015
Total Kjeldahl Nitrogen	mg/kg	40	500	43	<40	1800	110
Total Nitrogen (calc)	mg/kg	40	510	43	<40	1800	110

PARAMETER	UOM	LOR	0407_SYDSEW08_0.0-0.3_201016 SOIL - 16/10/2020 SE212451.016	0407_SYDSEW08_1.0-1.8_201016 SOIL - 16/10/2020 SE212451.017	0407_SYDSEW09_0.0-0.3_201016 SOIL - 16/10/2020 SE212451.018	0407_SYDSEW09_0.0-0.7_201016 SOIL - 16/10/2020 SE212451.019	0407_SYDSEW10_0.0-0.3_201016 SOIL - 16/10/2020 SE212451.020
Total Kjeldahl Nitrogen	mg/kg	40	1100	200	920	3600	350
Total Nitrogen (calc)	mg/kg	40	1100	210	930	3600	350

PARAMETER	UOM	LOR	0407_SYDSEW10_0.0-0.7_201016 SOIL - 16/10/2020 SE212451.021	0407_SYDSEW11_0.0-0.2_201016 SOIL - 16/10/2020 SE212451.022	0407_SYDSEW11_1.0-1.9_201016 SOIL - 16/10/2020 SE212451.023
Total Kjeldahl Nitrogen	mg/kg	40	180	650	<40
Total Nitrogen (calc)	mg/kg	40	180	660	<40

Total Phosphorus by Kjeldahl Digestion DA in Soil [AN279/AN293(Sydney only)] Tested: 23/10/2020

PARAMETER	UOM	LOR	0407_SYDSEW01_0.-0.7_201016 SOIL - 16/10/2020 SE212451.001	0407_SYDSEW01_2.-2.9_201016 SOIL - 16/10/2020 SE212451.002	0407_SYDSEW02_0.-0.2_201016 SOIL - 16/10/2020 SE212451.003	0407_SYDSEW02_0.-0.7_201016 SOIL - 16/10/2020 SE212451.004	0407_SYDSEW03_0.-0.2_201016 SOIL - 16/10/2020 SE212451.005
Total Phosphorus (Kjeldahl Digestion)	mg/kg	40	<40	**140**	**110**	**59**	**380**

PARAMETER	UOM	LOR	0407_SYDSEW03_1.-1.8_201016 SOIL - 16/10/2020 SE212451.006	0407_SYDSEW04_0.-0.2_201016 SOIL - 16/10/2020 SE212451.007	0407_SYDSEW04_0.-0.7_201016 SOIL - 16/10/2020 SE212451.008	0407_SYDSEW05_0.-0.3_201016 SOIL - 16/10/2020 SE212451.009	0407_SYDSEW05_0.-0.7_201016 SOIL - 16/10/2020 SE212451.010
Total Phosphorus (Kjeldahl Digestion)	mg/kg	40	<40	**520**	<40	**110**	<40

PARAMETER	UOM	LOR	0407_SYDSEW06_0.-0.3_201016 SOIL - 16/10/2020 SE212451.011	0407_SYDSEW06_2.-3.0_201016 SOIL - 16/10/2020 SE212451.012	0407_QC193_20101 SOIL - 16/10/2020 SE212451.013	0407_SYDSEW07_0.-0.3_201016 SOIL - 16/10/2020 SE212451.014	0407_SYDSEW07_0.-0.7_201016 SOIL - 16/10/2020 SE212451.015
Total Phosphorus (Kjeldahl Digestion)	mg/kg	40	**310**	<40	<40	**280**	<40

PARAMETER	UOM	LOR	0407_SYDSEW08_0.-0.3_201016 SOIL - 16/10/2020 SE212451.016	0407_SYDSEW08_1.-1.8_201016 SOIL - 16/10/2020 SE212451.017	0407_SYDSEW09_0.-0.3_201016 SOIL - 16/10/2020 SE212451.018	0407_SYDSEW09_0.-0.7_201016 SOIL - 16/10/2020 SE212451.019	0407_SYDSEW10_0.-0.3_201016 SOIL - 16/10/2020 SE212451.020
Total Phosphorus (Kjeldahl Digestion)	mg/kg	40	**92**	<40	**110**	**100**	**46**

PARAMETER	UOM	LOR	0407_SYDSEW10_0.-0.7_201016 SOIL - 16/10/2020 SE212451.021	0407_SYDSEW11_0.-0.2_201016 SOIL - 16/10/2020 SE212451.022	0407_SYDSEW11_1.-1.9_201016 SOIL - 16/10/2020 SE212451.023
Total Phosphorus (Kjeldahl Digestion)	mg/kg	40	<40	**79**	<40

Ammonia Nitrogen (soluble) in Soil [AN291] Tested: 23/10/2020

PARAMETER	UOM	LOR	0407_SYDSEW01_0.-0.7_201016 SOIL - 16/10/2020 SE212451.001	0407_SYDSEW01_2.-2.9_201016 SOIL - 16/10/2020 SE212451.002	0407_SYDSEW02_0.-0.2_201016 SOIL - 16/10/2020 SE212451.003	0407_SYDSEW02_0.-0.7_201016 SOIL - 16/10/2020 SE212451.004	0407_SYDSEW03_0.-0.2_201016 SOIL - 16/10/2020 SE212451.005
Ammonia Nitrogen, NH_3 as N	mg/kg	0.2	<0.2	**0.6**	**0.8**	<0.2	**2.6**

PARAMETER	UOM	LOR	0407_SYDSEW03_1.-1.8_201016 SOIL - 16/10/2020 SE212451.006	0407_SYDSEW04_0.-0.2_201016 SOIL - 16/10/2020 SE212451.007	0407_SYDSEW04_0.-0.7_201016 SOIL - 16/10/2020 SE212451.008	0407_SYDSEW05_0.-0.3_201016 SOIL - 16/10/2020 SE212451.009	0407_SYDSEW05_0.-0.7_201016 SOIL - 16/10/2020 SE212451.010
Ammonia Nitrogen, NH_3 as N	mg/kg	0.2	<0.2	**5.2**	**0.3**	**0.3**	<0.2

PARAMETER	UOM	LOR	0407_SYDSEW06_0.-0.3_201016 SOIL - 16/10/2020 SE212451.011	0407_SYDSEW06_2.-3.0_201016 SOIL - 16/10/2020 SE212451.012	0407_QC193_20101 SOIL - 16/10/2020 SE212451.013	0407_SYDSEW07_0.-0.3_201016 SOIL - 16/10/2020 SE212451.014	0407_SYDSEW07_0.-0.7_201016 SOIL - 16/10/2020 SE212451.015
Ammonia Nitrogen, NH_3 as N	mg/kg	0.2	**0.8**	<0.2	<0.2	**5.4**	<0.2

PARAMETER	UOM	LOR	0407_SYDSEW08_0.-0.3_201016 SOIL - 16/10/2020 SE212451.016	0407_SYDSEW08_1.-1.8_201016 SOIL - 16/10/2020 SE212451.017	0407_SYDSEW09_0.-0.3_201016 SOIL - 16/10/2020 SE212451.018	0407_SYDSEW09_0.-0.7_201016 SOIL - 16/10/2020 SE212451.019	0407_SYDSEW10_0.-0.3_201016 SOIL - 16/10/2020 SE212451.020
Ammonia Nitrogen, NH_3 as N	mg/kg	0.2	**0.9**	**4.1**	**1.6**	**1.2**	**1.7**

PARAMETER	UOM	LOR	0407_SYDSEW10_0.-0.7_201016 SOIL - 16/10/2020 SE212451.021	0407_SYDSEW11_0.-0.2_201016 SOIL - 16/10/2020 SE212451.022	0407_SYDSEW11_1.-1.9_201016 SOIL - 16/10/2020 SE212451.023
Ammonia Nitrogen, NH_3 as N	mg/kg	0.2	<0.2	**0.9**	<0.2

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 20/10/2020

PARAMETER	UOM	LOR	0407_SYDSEW01_0.-0.7_201016 SOIL - 16/10/2020 SE212451.001	0407_SYDSEW01_2.-2.9_201016 SOIL - 16/10/2020 SE212451.002	0407_SYDSEW02_0.-0.2_201016 SOIL - 16/10/2020 SE212451.003	0407_SYDSEW02_0.-0.7_201016 SOIL - 16/10/2020 SE212451.004	0407_SYDSEW03_0.-0.2_201016 SOIL - 16/10/2020 SE212451.005
Arsenic, As	mg/kg	1	<1	12	5	<1	6
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	1.1	27	11	0.9	17
Copper, Cu	mg/kg	0.5	0.7	5.9	30	2.5	65
Lead, Pb	mg/kg	1	6	33	51	19	110
Nickel, Ni	mg/kg	0.5	0.6	19	6.1	0.6	12
Zinc, Zn	mg/kg	2	6.3	20	190	6.8	490
Beryllium, Be	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Boron, B	mg/kg	5	<5	6	15	<5	29
Cobalt, Co	mg/kg	0.5	<0.5	1.9	3.4	<0.5	7.7
Manganese, Mn	mg/kg	1	2	10	170	5	420

PARAMETER	UOM	LOR	0407_SYDSEW03_1.-1.8_201016 SOIL - 16/10/2020 SE212451.006	0407_SYDSEW04_0.-0.2_201016 SOIL - 16/10/2020 SE212451.007	0407_SYDSEW04_0.-0.7_201016 SOIL - 16/10/2020 SE212451.008	0407_SYDSEW05_0.-0.3_201016 SOIL - 16/10/2020 SE212451.009	0407_SYDSEW05_0.-0.7_201016 SOIL - 16/10/2020 SE212451.010
Arsenic, As	mg/kg	1	<1	8	1	<1	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	<0.5	22	2.4	1.7	2.0
Copper, Cu	mg/kg	0.5	<0.5	43	<0.5	8.8	<0.5
Lead, Pb	mg/kg	1	<1	100	2	85	2
Nickel, Ni	mg/kg	0.5	<0.5	9.4	<0.5	1.4	<0.5
Zinc, Zn	mg/kg	2	<2.0	290	2.1	65	3.2
Beryllium, Be	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Boron, B	mg/kg	5	<5	32	7	<5	<5
Cobalt, Co	mg/kg	0.5	<0.5	6.0	<0.5	1.0	<0.5
Manganese, Mn	mg/kg	1	<1	290	<1	40	<1

PARAMETER	UOM	LOR	0407_SYDSEW06_0.-0.3_201016 SOIL - 16/10/2020 SE212451.011	0407_SYDSEW06_2.-3.0_201016 SOIL - 16/10/2020 SE212451.012	0407_QC193_20101 SOIL - 16/10/2020 SE212451.013	0407_SYDSEW07_0.-0.3_201016 SOIL - 16/10/2020 SE212451.014	0407_SYDSEW07_0.-0.7_201016 SOIL - 16/10/2020 SE212451.015
Arsenic, As	mg/kg	1	1	<1	<1	5	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	1.9	1.7	1.8	19	<0.5
Copper, Cu	mg/kg	0.5	48	<0.5	<0.5	31	3.1
Lead, Pb	mg/kg	1	350	<1	1	97	40
Nickel, Ni	mg/kg	0.5	2.5	1.4	1.4	5.5	<0.5
Zinc, Zn	mg/kg	2	110	5.4	5.9	140	5.0
Beryllium, Be	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Boron, B	mg/kg	5	<5	<5	<5	17	<5
Cobalt, Co	mg/kg	0.5	0.7	<0.5	<0.5	3.2	<0.5
Manganese, Mn	mg/kg	1	73	2	2	170	8

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 20/10/2020

(continued)

PARAMETER	UOM	LOR	0407_SYDSEW08_0.-0.3_201016 SOIL - 16/10/2020 SE212451.016	0407_SYDSEW08_1.-1.8_201016 SOIL - 16/10/2020 SE212451.017	0407_SYDSEW09_0.-0.3_201016 SOIL - 16/10/2020 SE212451.018	0407_SYDSEW09_0.-0.7_201016 SOIL - 16/10/2020 SE212451.019	0407_SYDSEW10_0.-0.3_201016 SOIL - 16/10/2020 SE212451.020
Arsenic, As	mg/kg	1	2	<1	<1	6	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	4.6	6.7	7.8	17	0.8
Copper, Cu	mg/kg	0.5	5.7	1.1	1.0	0.6	1.6
Lead, Pb	mg/kg	1	25	10	11	16	5
Nickel, Ni	mg/kg	0.5	1.6	5.4	1.4	5.1	0.6
Zinc, Zn	mg/kg	2	22	2.8	6.2	11	3.2
Beryllium, Be	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Boron, B	mg/kg	5	<5	<5	6	7	<5
Cobalt, Co	mg/kg	0.5	<0.5	1.2	<0.5	1.0	<0.5
Manganese, Mn	mg/kg	1	10	3	11	9	4

PARAMETER	UOM	LOR	0407_SYDSEW10_0.-0.7_201016 SOIL - 16/10/2020 SE212451.021	0407_SYDSEW11_0.-0.2_201016 SOIL - 16/10/2020 SE212451.022	0407_SYDSEW11_1.-1.9_201016 SOIL - 16/10/2020 SE212451.023
Arsenic, As	mg/kg	1	<1	2	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	0.6	9.6	0.7
Copper, Cu	mg/kg	0.5	<0.5	7.5	<0.5
Lead, Pb	mg/kg	1	1	38	2
Nickel, Ni	mg/kg	0.5	<0.5	2.3	<0.5
Zinc, Zn	mg/kg	2	<2.0	61	2.1
Beryllium, Be	mg/kg	0.5	<0.5	<0.5	<0.5
Boron, B	mg/kg	5	<5	<5	<5
Cobalt, Co	mg/kg	0.5	<0.5	<0.5	<0.5
Manganese, Mn	mg/kg	1	<1	28	1

Mercury in Soil [AN312] Tested: 20/10/2020

PARAMETER	UOM	LOR	0407_SYDSEW01_0.0-0.7_201016 SOIL - 16/10/2020 SE212451.001	0407_SYDSEW01_2.0-2.9_201016 SOIL - 16/10/2020 SE212451.002	0407_SYDSEW02_0.0-0.2_201016 SOIL - 16/10/2020 SE212451.003	0407_SYDSEW02_0.0-0.7_201016 SOIL - 16/10/2020 SE212451.004	0407_SYDSEW03_0.0-0.2_201016 SOIL - 16/10/2020 SE212451.005
Mercury	mg/kg	0.05	<0.05	**0.08**	**0.05**	<0.05	**0.07**

PARAMETER	UOM	LOR	0407_SYDSEW03_1.0-1.8_201016 SOIL - 16/10/2020 SE212451.006	0407_SYDSEW04_0.0-0.2_201016 SOIL - 16/10/2020 SE212451.007	0407_SYDSEW04_0.0-0.7_201016 SOIL - 16/10/2020 SE212451.008	0407_SYDSEW05_0.0-0.3_201016 SOIL - 16/10/2020 SE212451.009	0407_SYDSEW05_0.0-0.7_201016 SOIL - 16/10/2020 SE212451.010
Mercury	mg/kg	0.05	<0.05	**0.10**	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_SYDSEW06_0.0-0.3_201016 SOIL - 16/10/2020 SE212451.011	0407_SYDSEW06_2.0-3.0_201016 SOIL - 16/10/2020 SE212451.012	0407_QC193_20101 SOIL - 16/10/2020 SE212451.013	0407_SYDSEW07_0.0-0.3_201016 SOIL - 16/10/2020 SE212451.014	0407_SYDSEW07_0.0-0.7_201016 SOIL - 16/10/2020 SE212451.015
Mercury	mg/kg	0.05	**0.09**	<0.05	<0.05	**0.06**	<0.05

PARAMETER	UOM	LOR	0407_SYDSEW08_0.0-0.3_201016 SOIL - 16/10/2020 SE212451.016	0407_SYDSEW08_1.0-1.8_201016 SOIL - 16/10/2020 SE212451.017	0407_SYDSEW09_0.0-0.3_201016 SOIL - 16/10/2020 SE212451.018	0407_SYDSEW09_0.0-0.7_201016 SOIL - 16/10/2020 SE212451.019	0407_SYDSEW10_0.0-0.3_201016 SOIL - 16/10/2020 SE212451.020
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	**0.05**	<0.05

PARAMETER	UOM	LOR	0407_SYDSEW10_0.0-0.7_201016 SOIL - 16/10/2020 SE212451.021	0407_SYDSEW11_0.0-0.2_201016 SOIL - 16/10/2020 SE212451.022	0407_SYDSEW11_1.0-1.9_201016 SOIL - 16/10/2020 SE212451.023
Mercury	mg/kg	0.05	<0.05	**0.06**	<0.05

Moisture Content [AN002] Tested: 20/10/2020

PARAMETER	UOM	LOR	0407_SYDSEW01_0.0-0.7_201016 SOIL - 16/10/2020 SE212451.001	0407_SYDSEW01_2.0-2.9_201016 SOIL - 16/10/2020 SE212451.002	0407_SYDSEW02_0.0-0.2_201016 SOIL - 16/10/2020 SE212451.003	0407_SYDSEW02_0.0-0.7_201016 SOIL - 16/10/2020 SE212451.004	0407_SYDSEW03_0.0-0.2_201016 SOIL - 16/10/2020 SE212451.005
% Moisture	%w/w	1	3.9	35.5	3.0	2.9	21.2

PARAMETER	UOM	LOR	0407_SYDSEW03_1.0-1.8_201016 SOIL - 16/10/2020 SE212451.006	0407_SYDSEW04_0.0-0.2_201016 SOIL - 16/10/2020 SE212451.007	0407_SYDSEW04_0.0-0.7_201016 SOIL - 16/10/2020 SE212451.008	0407_SYDSEW05_0.0-0.3_201016 SOIL - 16/10/2020 SE212451.009	0407_SYDSEW05_0.0-0.7_201016 SOIL - 16/10/2020 SE212451.010
% Moisture	%w/w	1	3.1	13.8	6.9	6.1	7.2

PARAMETER	UOM	LOR	0407_SYDSEW06_0.0-0.3_201016 SOIL - 16/10/2020 SE212451.011	0407_SYDSEW06_2.0-3.0_201016 SOIL - 16/10/2020 SE212451.012	0407_QC193_201016 SOIL - 16/10/2020 SE212451.013	0407_SYDSEW07_0.0-0.3_201016 SOIL - 16/10/2020 SE212451.014	0407_SYDSEW07_0.0-0.7_201016 SOIL - 16/10/2020 SE212451.015
% Moisture	%w/w	1	5.6	3.2	3.1	16.0	21.8

PARAMETER	UOM	LOR	0407_SYDSEW08_0.0-0.3_201016 SOIL - 16/10/2020 SE212451.016	0407_SYDSEW08_1.0-1.8_201016 SOIL - 16/10/2020 SE212451.017	0407_SYDSEW09_0.0-0.3_201016 SOIL - 16/10/2020 SE212451.018	0407_SYDSEW09_0.0-0.7_201016 SOIL - 16/10/2020 SE212451.019	0407_SYDSEW10_0.0-0.3_201016 SOIL - 16/10/2020 SE212451.020
% Moisture	%w/w	1	9.2	11.7	23.8	26.6	3.9

PARAMETER	UOM	LOR	0407_SYDSEW10_0.0-0.7_201016 SOIL - 16/10/2020 SE212451.021	0407_SYDSEW11_0.0-0.2_201016 SOIL - 16/10/2020 SE212451.022	0407_SYDSEW11_1.0-1.9_201016 SOIL - 16/10/2020 SE212451.023	0407_QC523_201016 TB SOIL - 16/10/2020 SE212451.025
% Moisture	%w/w	1	6.1	7.7	22.0	<1.0

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples [MA-1523] Tested: 26/10/2020

PARAMETER	UOM	LOR	0407_SYDSEW01_0.-0.7_201016 SOIL - 16/10/2020 SE212451.001	0407_SYDSEW01_2.-2.9_201016 SOIL - 16/10/2020 SE212451.002	0407_SYDSEW02_0.-0.2_201016 SOIL - 16/10/2020 SE212451.003	0407_SYDSEW02_0.-0.7_201016 SOIL - 16/10/2020 SE212451.004	0407_SYDSEW03_0.-0.2_201016 SOIL - 16/10/2020 SE212451.005
Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Perfluorononanoic acid (PFNA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorodecanoic acid (PFDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0032	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	**0.0049**
Sum PFOS and PFHXS	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	**0.0049**
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008	<0.008
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008	<0.008
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.016	<0.016	<0.016	<0.016	<0.016	<0.016
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.016	<0.016	<0.016	<0.016	<0.016	<0.016
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008	<0.008
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008	<0.008

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples [MA-1523] Tested: 26/10/2020 (continued)

PARAMETER	UOM	LOR	0407_SYDSEW03_1.-1.8_201016 SOIL - 16/10/2020 SE212451.006	0407_SYDSEW04_0.-0.2_201016 SOIL - 16/10/2020 SE212451.007	0407_SYDSEW04_0.-0.7_201016 SOIL - 16/10/2020 SE212451.008	0407_SYDSEW05_0.-0.3_201016 SOIL - 16/10/2020 SE212451.009	0407_SYDSEW05_0.-0.7_201016 SOIL - 16/10/2020 SE212451.010
Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Perfluorononanoic acid (PFNA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorodecanoic acid (PFDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0032	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Sum PFOS and PFHXS	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008	<0.008
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008	<0.008
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.016	<0.016	<0.016	<0.016	<0.016	<0.016
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.016	<0.016	<0.016	<0.016	<0.016	<0.016
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008	<0.008
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008	<0.008

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples [MA-1523] Tested: 26/10/2020 (continued)

PARAMETER	UOM	LOR	0407_SYDSEW06_0.-0.3_201016 SOIL - 16/10/2020 SE212451.011	0407_SYDSEW06_2.-3.0_201016 SOIL - 16/10/2020 SE212451.012	0407_QC193_20101 SOIL - 16/10/2020 SE212451.013	0407_SYDSEW07_0.-0.3_201016 SOIL - 16/10/2020 SE212451.014	0407_SYDSEW07_0.-0.7_201016 SOIL - 16/10/2020 SE212451.015
Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Perfluorononanoic acid (PFNA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorodecanoic acid (PFDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0032	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	**0.0017**	<0.0016
Sum PFOS and PFHXS	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	**0.0017**	<0.0016
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008	<0.008
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008	<0.008
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.016	<0.016	<0.016	<0.016	<0.016	<0.016
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.016	<0.016	<0.016	<0.016	<0.016	<0.016
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008	<0.008
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008	<0.008

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples [MA-1523] Tested: 26/10/2020 (continued)

PARAMETER	UOM	LOR	0407_SYDSEW08_0.-0.3_201016 SOIL - 16/10/2020 SE212451.016	0407_SYDSEW08_1.-1.8_201016 SOIL - 16/10/2020 SE212451.017	0407_SYDSEW09_0.-0.3_201016 SOIL - 16/10/2020 SE212451.018	0407_SYDSEW09_0.-0.7_201016 SOIL - 16/10/2020 SE212451.019	0407_SYDSEW10_0.-0.3_201016 SOIL - 16/10/2020 SE212451.020
Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Perfluorononanoic acid (PFNA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorodecanoic acid (PFDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0032	<0.0032	<0.0032	<0.0032	<0.0032	<0.0032
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Sum PFOS and PFHXS	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016	<0.0016
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008	<0.008
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008	<0.008
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.016	<0.016	<0.016	<0.016	<0.016	<0.016
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.016	<0.016	<0.016	<0.016	<0.016	<0.016
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008	<0.008
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008	<0.008

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples [MA-1523] Tested: 26/10/2020 (continued)

PARAMETER	UOM	LOR	0407_SYDSEW10_0.-0.7_201016 SOIL - 16/10/2020 SE212451.021	0407_SYDSEW11_0.-0.2_201016 SOIL - 16/10/2020 SE212451.022	0407_SYDSEW11_1.-1.9_201016 SOIL - 16/10/2020 SE212451.023
Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	<0.0008	<0.0008	<0.0008
Perfluorononanoic acid (PFNA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluorodecanoic acid (PFDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0032	<0.0032	<0.0032	<0.0032
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Sum PFOS and PFHXS	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.008	<0.008	<0.008	<0.008
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.008	<0.008	<0.008	<0.008
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.016	<0.016	<0.016	<0.016
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.016	<0.016	<0.016	<0.016
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.008	<0.008	<0.008	<0.008
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.008	<0.008	<0.008	<0.008

Sample Subcontracted [] Tested: 26/10/2020

PARAMETER	UOM	LOR	0407_SYDSEW01_0.-0.7_201016 SOIL - 16/10/2020 SE212451.001	0407_SYDSEW01_2.-2.9_201016 SOIL - 16/10/2020 SE212451.002	0407_SYDSEW02_0.-0.2_201016 SOIL - 16/10/2020 SE212451.003	0407_SYDSEW02_0.-0.7_201016 SOIL - 16/10/2020 SE212451.004	0407_SYDSEW03_0.-0.2_201016 SOIL - 16/10/2020 SE212451.005
Sample Subcontracted*	No unit	-	Symbio	Symbio	Symbio	Symbio	Symbio

PARAMETER	UOM	LOR	0407_SYDSEW03_1.-1.8_201016 SOIL - 16/10/2020 SE212451.006	0407_SYDSEW04_0.-0.2_201016 SOIL - 16/10/2020 SE212451.007	0407_SYDSEW04_0.-0.7_201016 SOIL - 16/10/2020 SE212451.008	0407_SYDSEW05_0.-0.3_201016 SOIL - 16/10/2020 SE212451.009	0407_SYDSEW05_0.-0.7_201016 SOIL - 16/10/2020 SE212451.010
Sample Subcontracted*	No unit	-	Symbio	Symbio	Symbio	Symbio	Symbio

PARAMETER	UOM	LOR	0407_SYDSEW06_0.-0.3_201016 SOIL - 16/10/2020 SE212451.011	0407_SYDSEW06_2.-3.0_201016 SOIL - 16/10/2020 SE212451.012	0407_SYDSEW07_0.-0.3_201016 SOIL - 16/10/2020 SE212451.014	0407_SYDSEW07_0.-0.7_201016 SOIL - 16/10/2020 SE212451.015	0407_SYDSEW08_0.-0.3_201016 SOIL - 16/10/2020 SE212451.016
Sample Subcontracted*	No unit	-	Symbio	Symbio	Symbio	Symbio	Symbio

PARAMETER	UOM	LOR	0407_SYDSEW08_1.-1.8_201016 SOIL - 16/10/2020 SE212451.017	0407_SYDSEW09_0.-0.3_201016 SOIL - 16/10/2020 SE212451.018	0407_SYDSEW09_0.-0.7_201016 SOIL - 16/10/2020 SE212451.019	0407_SYDSEW10_0.-0.3_201016 SOIL - 16/10/2020 SE212451.020	0407_SYDSEW10_0.-0.7_201016 SOIL - 16/10/2020 SE212451.021
Sample Subcontracted*	No unit	-	Symbio	Symbio	Symbio	Symbio	Symbio

PARAMETER	UOM	LOR	0407_SYDSEW11_0.-0.2_201016 SOIL - 16/10/2020 SE212451.022	0407_SYDSEW11_1.-1.9_201016 SOIL - 16/10/2020 SE212451.023
Sample Subcontracted*	No unit	-	Symbio	Symbio

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
AN245	Anions by Ion Chromatography: A water sample is injected into an eluent stream that passes through the ion chromatographic system where the anions of interest ie Br, Cl, NO2, NO3 and SO4 are separated on their relative affinities for the active sites on the column packing material. Changes to the conductivity and the UV-visible absorbance of the eluent enable identification and quantitation of the anions based on their retention time and peak height or area. APHA 4110 B
AN277	Nitrite on the extract is determined as an intense red-pink azo dye at 540 nm following diazotisation with sulphanilamide and subsequent coupling with N-(1-naphthyl) ethylenediamine dihydrochloride. The original nitrite is determined. Reference APHA 4500-NO2- B.
AN291	From the soil extract, ammonia reacts with hypochlorite ions from Sodium Dichloroisocyanuate, and salicylate in the presence of Sodium Nitroprusside to form indophenol blue and measured at 670nm.
AN292	The sample is heated in the presence of Sulphuric acid, K2SO4 and CuSO4 for two and half hours using a temperature controlled digestion block. Amino Nitrogen of many organic materials is converted to ammonium ion. Free ammonia also is converted to ammonium. The digest is cooled and placed on the Aquakem 250 discrete analyser for Ammonia determination.
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid, mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.
MA-1523	This method covers the analysis of per- and polyfluoroalkyl substances (PFAS) in aqueous, solid and biosolid samples and solvent extracts, determined as the total of linear and branched isomers. After spiking with isotopically labelled quantification surrogates and clean-up via SPE cartridges sample extracts are analysed by liquid chromatography/mass spectrometry (LC-MS/MS). PFAS concentrations are determined by isotope dilution quantification.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		
***	Indicates that both * and ** apply.				

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS		LABORATORY DETAILS	
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Project	**610.30041 Randwick Barracks**	SGS Reference	**ME317004 R0**
Order Number	**SE212451**	Date Received	21 Oct 2020
Samples	25	Date Reported	26 Oct 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(14420).

MA-1523 Majority of surrogates are within acceptance criteria.

SIGNATORIES

[redacted]

Australian Chemistry Manager

Parameter	Units	LOR	Sample Number: ME317004.001 Sample Matrix: Soil Sample Date: 16 Oct 2020 Sample Name: SE212451.001	ME317004.002 Soil 16 Oct 2020 SE212451.002	ME317004.003 Soil 16 Oct 2020 SE212451.003	ME317004.004 Soil 16 Oct 2020 SE212451.004
Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples	**Method: MA-1523**	**Tested: 21/10/2020**				
Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Perfluorononanoic acid (PFNA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorodecanoic acid (PFDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0032	<0.0032	<0.0032	<0.0032	<0.0032
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Sum PFOS and PFHXS	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.016	<0.016	<0.016	<0.016	<0.016
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.016	<0.016	<0.016	<0.016	<0.016
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008
(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	**101**	**99**	**100**	**102**
(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	**101**	**102**	**104**	**104**
(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	**97**	**92**	**91**	**95**
(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	**98**	**95**	**96**	**100**
(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	**98**	**90**	**99**	**99**
(13C9-PFNA) Isotopically Labelled Internal Recovery	%	-	**104**	**102**	**105**	**94**
(13C6-PFDA) Isotopically Labelled Internal Recovery	%	-	**102**	**109**	**104**	**119**
(13C7-PFUdA) Isotopically Labelled Internal Recovery	%	-	**107**	**104**	**123**	**106**
(13C2-PFDoA) Isotopically Labelled Internal Recovery	%	-	**101**	**89**	**115**	**110**
(13C2_PFTeDA) Isotopically Labelled Internal Recovery	%	-	**59**	**34**	**82**	**69**
(13C2-PFHxDA) Isotopically Labelled Internal Recovery	%	-	**12**	**7**	**38**	**15**
(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	**100**	**96**	**92**	**98**
(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	**103**	**98**	**99**	**111**
(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	**119**	**117**	**99**	**100**
(13C2-4:2 FTS) Isotopically Labelled Internal Recovery	%	-	**140**	**145**	**139**	**156**
(13C2-6:2 FTS) Isotopically Labelled Internal Recovery	%	-	**134**	**126**	**138**	**134**
(13C2-8:2 FTS) Isotopically Labelled Internal Recovery	%	-	**126**	**106**	**138**	**142**
(13C8-PFOSA) Isotopically Labelled Internal Recovery	%	-	**68**	**83**	**66**	**65**
(D3-N-MeFOSA) Isotopically Labelled Internal Recovery	%	-	**62**	**52**	**61**	**47**
(D5-N-EtFOSA) Isotopically Labelled Internal Recovery	%	-	**50**	**44**	**56**	**44**
(D7-N-MeFOSE) Isotopically Labelled Internal Recovery	%	-	**79**	**80**	**74**	**70**
(D9-N-EtFOSE) Isotopically Labelled Internal Recovery	%	-	**79**	**68**	**78**	**62**
(D3-N-MeFOSAA) Isotopically Labelled Internal Recovery	%	-	**103**	**111**	**88**	**101**
(D5-N-EtFOSAA) Isotopically Labelled Internal Recovery	%	-	**93**	**82**	**99**	**89**
Moisture Content	**Method: AN002**	**Tested: 21/10/2020**				

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME317004.001 Soil 16 Oct 2020 SE212451.001	ME317004.002 Soil 16 Oct 2020 SE212451.002	ME317004.003 Soil 16 Oct 2020 SE212451.003	ME317004.004 Soil 16 Oct 2020 SE212451.004
Moisture Content Method: AN002 Tested: 21/10/2020 (continued)							
% Moisture*	%w/w	1		**3.6**	**30.4**	**2.6**	**2.8**

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME317004.005 Soil 16 Oct 2020 SE212451.005	ME317004.006 Soil 16 Oct 2020 SE212451.006	ME317004.007 Soil 16 Oct 2020 SE212451.007	ME317004.008 Soil 16 Oct 2020 SE212451.008
Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples	**Method: MA-1523**	**Tested: 21/10/2020**					
Perfluorobutanoic acid (PFBA)	mg/kg	0.0016		<0.0016	<0.0016	<0.0016	<0.0016
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016		<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016		<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016		<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008		<0.0008	<0.0008	<0.0008	<0.0008
Perfluorononanoic acid (PFNA)	mg/kg	0.0016		<0.0016	<0.0016	<0.0016	<0.0016
Perfluorodecanoic acid (PFDA)	mg/kg	0.0016		<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0016		<0.0016	<0.0016	<0.0016	<0.0016
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0016		<0.0016	<0.0016	<0.0016	<0.0016
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0016		<0.0016	<0.0016	<0.0016	<0.0016
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0016		<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0032		<0.0032	<0.0032	<0.0032	<0.0032
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016		<0.0016	<0.0016	<0.0016	<0.0016
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016		<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016		<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016		<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016		**0.0049**	<0.0016	<0.0016	<0.0016
Sum PFOS and PFHXS	mg/kg	0.0016		**0.0049**	<0.0016	<0.0016	<0.0016
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016		<0.0016	<0.0016	<0.0016	<0.0016
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0016		<0.0016	<0.0016	<0.0016	<0.0016
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0016		<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016		<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016		<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016		<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.0016		<0.0016	<0.0016	<0.0016	<0.0016
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.008		<0.008	<0.008	<0.008	<0.008
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.008		<0.008	<0.008	<0.008	<0.008
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.016		<0.016	<0.016	<0.016	<0.016
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.016		<0.016	<0.016	<0.016	<0.016
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.008		<0.008	<0.008	<0.008	<0.008
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.008		<0.008	<0.008	<0.008	<0.008
(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-		**103**	**100**	**102**	**105**
(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-		**106**	**108**	**106**	**105**
(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-		**100**	**94**	**97**	**97**
(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-		**102**	**95**	**102**	**100**
(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-		**107**	**98**	**94**	**104**
(13C9-PFNA) Isotopically Labelled Internal Recovery	%	-		**100**	**96**	**110**	**95**
(13C6-PFDA) Isotopically Labelled Internal Recovery	%	-		**118**	**107**	**115**	**96**
(13C7-PFUdA) Isotopically Labelled Internal Recovery	%	-		**106**	**118**	**114**	**96**
(13C2-PFDoA) Isotopically Labelled Internal Recovery	%	-		**90**	**128**	**111**	**90**
(13C2_PFTeDA) Isotopically Labelled Internal Recovery	%	-		**48**	**96**	**69**	**37**
(13C2-PFHxDA) Isotopically Labelled Internal Recovery	%	-		**10**	**22**	**20**	**4**
(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-		**91**	**95**	**99**	**94**
(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-		**93**	**109**	**104**	**101**
(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-		**112**	**114**	**117**	**107**
(13C2-4:2 FTS) Isotopically Labelled Internal Recovery	%	-		**158**	**163**	**162**	**128**
(13C2-6:2 FTS) Isotopically Labelled Internal Recovery	%	-		**153**	**172**	**165**	**135**
(13C2-8:2 FTS) Isotopically Labelled Internal Recovery	%	-		**126**	**156**	**143**	**129**
(13C8-PFOSA) Isotopically Labelled Internal Recovery	%	-		**77**	**72**	**76**	**76**
(D3-N-MeFOSA) Isotopically Labelled Internal Recovery	%	-		**49**	**51**	**60**	**64**
(D5-N-EtFOSA) Isotopically Labelled Internal Recovery	%	-		**42**	**46**	**52**	**55**
(D7-N-MeFOSE) Isotopically Labelled Internal Recovery	%	-		**67**	**76**	**75**	**75**
(D9-N-EtFOSE) Isotopically Labelled Internal Recovery	%	-		**67**	**73**	**78**	**73**
(D3-N-MeFOSAA) Isotopically Labelled Internal Recovery	%	-		**109**	**106**	**100**	**100**
(D5-N-EtFOSAA) Isotopically Labelled Internal Recovery	%	-		**94**	**118**	**85**	**92**

Moisture Content **Method: AN002** **Tested: 21/10/2020**

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME317004.005 Soil 16 Oct 2020 SE212451.005	ME317004.006 Soil 16 Oct 2020 SE212451.006	ME317004.007 Soil 16 Oct 2020 SE212451.007	ME317004.008 Soil 16 Oct 2020 SE212451.008
Moisture Content Method: AN002 Tested: 21/10/2020 (continued)							
% Moisture*	%w/w	1		**18.8**	**2.9**	**11.3**	**7.0**

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME317004.009 Soil 16 Oct 2020 SE212451.009	ME317004.010 Soil 16 Oct 2020 SE212451.010	ME317004.011 Soil 16 Oct 2020 SE212451.011	ME317004.012 Soil 16 Oct 2020 SE212451.012
Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples	**Method: MA-1523**	**Tested: 21/10/2020**					
Perfluorobutanoic acid (PFBA)	mg/kg	0.0016		<0.0016	<0.0016	<0.0016	<0.0016
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016		<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016		<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016		<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008		<0.0008	<0.0008	<0.0008	<0.0008
Perfluorononanoic acid (PFNA)	mg/kg	0.0016		<0.0016	<0.0016	<0.0016	<0.0016
Perfluorodecanoic acid (PFDA)	mg/kg	0.0016		<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0016		<0.0016	<0.0016	<0.0016	<0.0016
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0016		<0.0016	<0.0016	<0.0016	<0.0016
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0016		<0.0016	<0.0016	<0.0016	<0.0016
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0016		<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0032		<0.0032	<0.0032	<0.0032	<0.0032
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016		<0.0016	<0.0016	<0.0016	<0.0016
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016		<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016		<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016		<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016		<0.0016	<0.0016	<0.0016	<0.0016
Sum PFOS and PFHXS	mg/kg	0.0016		<0.0016	<0.0016	<0.0016	<0.0016
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016		<0.0016	<0.0016	<0.0016	<0.0016
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0016		<0.0016	<0.0016	<0.0016	<0.0016
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0016		<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016		<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016		<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016		<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.0016		<0.0016	<0.0016	<0.0016	<0.0016
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.008		<0.008	<0.008	<0.008	<0.008
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.008		<0.008	<0.008	<0.008	<0.008
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.016		<0.016	<0.016	<0.016	<0.016
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.016		<0.016	<0.016	<0.016	<0.016
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.008		<0.008	<0.008	<0.008	<0.008
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.008		<0.008	<0.008	<0.008	<0.008
(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-		**101**	**100**	**105**	**100**
(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-		**106**	**104**	**107**	**103**
(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-		**100**	**91**	**96**	**93**
(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-		**101**	**91**	**96**	**101**
(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-		**104**	**95**	**102**	**97**
(13C9-PFNA) Isotopically Labelled Internal Recovery	%	-		**96**	**100**	**108**	**114**
(13C6-PFDA) Isotopically Labelled Internal Recovery	%	-		**114**	**106**	**98**	**108**
(13C7-PFUdA) Isotopically Labelled Internal Recovery	%	-		**122**	**106**	**103**	**89**
(13C2-PFDoA) Isotopically Labelled Internal Recovery	%	-		**122**	**107**	**103**	**90**
(13C2_PFTeDA) Isotopically Labelled Internal Recovery	%	-		**94**	**67**	**106**	**57**
(13C2-PFHxDA) Isotopically Labelled Internal Recovery	%	-		**30**	**13**	**20**	**8**
(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-		**98**	**95**	**94**	**95**
(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-		**101**	**101**	**102**	**100**
(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-		**98**	**105**	**99**	**113**
(13C2-4:2 FTS) Isotopically Labelled Internal Recovery	%	-		**153**	**129**	**143**	**132**
(13C2-6:2 FTS) Isotopically Labelled Internal Recovery	%	-		**136**	**146**	**141**	**127**
(13C2-8:2 FTS) Isotopically Labelled Internal Recovery	%	-		**152**	**123**	**133**	**123**
(13C8-PFOSA) Isotopically Labelled Internal Recovery	%	-		**76**	**71**	**73**	**77**
(D3-N-MeFOSA) Isotopically Labelled Internal Recovery	%	-		**58**	**52**	**51**	**61**
(D5-N-EtFOSA) Isotopically Labelled Internal Recovery	%	-		**52**	**47**	**52**	**60**
(D7-N-MeFOSE) Isotopically Labelled Internal Recovery	%	-		**77**	**74**	**73**	**79**
(D9-N-EtFOSE) Isotopically Labelled Internal Recovery	%	-		**82**	**67**	**82**	**82**
(D3-N-MeFOSAA) Isotopically Labelled Internal Recovery	%	-		**106**	**91**	**91**	**101**
(D5-N-EtFOSAA) Isotopically Labelled Internal Recovery	%	-		**105**	**91**	**97**	**95**

Moisture Content **Method: AN002** **Tested: 21/10/2020**

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME317004.009 Soil 16 Oct 2020 SE212451.009	ME317004.010 Soil 16 Oct 2020 SE212451.010	ME317004.011 Soil 16 Oct 2020 SE212451.011	ME317004.012 Soil 16 Oct 2020 SE212451.012
Moisture Content Method: AN002 Tested: 21/10/2020 (continued)							
% Moisture*	%w/w	1		**2.8**	**5.7**	**3.2**	**2.7**

Parameter	Units	LOR	Sample Number: ME317004.013 Sample Matrix: Soil Sample Date: 16 Oct 2020 Sample Name: SE212451.013	ME317004.014 Soil 16 Oct 2020 SE212451.014	ME317004.015 Soil 16 Oct 2020 SE212451.015	ME317004.016 Soil 16 Oct 2020 SE212451.016
Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples	**Method: MA-1523**	**Tested: 21/10/2020**				
Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Perfluorononanoic acid (PFNA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorodecanoic acid (PFDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0032	<0.0032	<0.0032	<0.0032	<0.0032
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	<0.0016	**0.0017**	<0.0016	<0.0016
Sum PFOS and PFHXS	mg/kg	0.0016	<0.0016	**0.0017**	<0.0016	<0.0016
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.016	<0.016	<0.016	<0.016	<0.016
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.016	<0.016	<0.016	<0.016	<0.016
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008
(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	**100**	**103**	**100**	**102**
(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	**104**	**104**	**105**	**102**
(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	**99**	**96**	**98**	**104**
(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	**96**	**100**	**101**	**99**
(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	**100**	**103**	**98**	**100**
(13C9-PFNA) Isotopically Labelled Internal Recovery	%	-	**92**	**101**	**97**	**100**
(13C6-PFDA) Isotopically Labelled Internal Recovery	%	-	**105**	**113**	**94**	**113**
(13C7-PFUdA) Isotopically Labelled Internal Recovery	%	-	**97**	**100**	**113**	**104**
(13C2-PFDoA) Isotopically Labelled Internal Recovery	%	-	**98**	**107**	**105**	**97**
(13C2_PFTeDA) Isotopically Labelled Internal Recovery	%	-	**59**	**63**	**79**	**44**
(13C2-PFHxDA) Isotopically Labelled Internal Recovery	%	-	**11**	**13**	**22**	**5**
(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	**91**	**92**	**100**	**97**
(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	**96**	**101**	**97**	**100**
(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	**128**	**97**	**92**	**97**
(13C2-4:2 FTS) Isotopically Labelled Internal Recovery	%	-	**131**	**151**	**164**	**137**
(13C2-6:2 FTS) Isotopically Labelled Internal Recovery	%	-	**127**	**141**	**160**	**125**
(13C2-8:2 FTS) Isotopically Labelled Internal Recovery	%	-	**108**	**136**	**151**	**100**
(13C8-PFOSA) Isotopically Labelled Internal Recovery	%	-	**92**	**68**	**68**	**73**
(D3-N-MeFOSA) Isotopically Labelled Internal Recovery	%	-	**70**	**60**	**46**	**59**
(D5-N-EtFOSA) Isotopically Labelled Internal Recovery	%	-	**58**	**49**	**39**	**45**
(D7-N-MeFOSE) Isotopically Labelled Internal Recovery	%	-	**98**	**70**	**64**	**71**
(D9-N-EtFOSE) Isotopically Labelled Internal Recovery	%	-	**86**	**69**	**77**	**71**
(D3-N-MeFOSAA) Isotopically Labelled Internal Recovery	%	-	**124**	**86**	**95**	**75**
(D5-N-EtFOSAA) Isotopically Labelled Internal Recovery	%	-	**106**	**83**	**89**	**66**

Moisture Content **Method: AN002** **Tested: 21/10/2020**

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME317004.013 Soil 16 Oct 2020 SE212451.013	ME317004.014 Soil 16 Oct 2020 SE212451.014	ME317004.015 Soil 16 Oct 2020 SE212451.015	ME317004.016 Soil 16 Oct 2020 SE212451.016
Moisture Content Method: AN002 Tested: 21/10/2020 (continued)							
% Moisture*	%w/w	1		**22.6**	**5.7**	**4.0**	**3.3**

Parameter	Units	LOR	Sample Number: ME317004.017 Sample Matrix: Soil Sample Date: 16 Oct 2020 Sample Name: SE212451.017	ME317004.018 Soil 16 Oct 2020 SE212451.018	ME317004.019 Soil 16 Oct 2020 SE212451.019	ME317004.020 Soil 16 Oct 2020 SE212451.020
Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples	**Method: MA-1523**	**Tested: 21/10/2020**				
Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Perfluorononanoic acid (PFNA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorodecanoic acid (PFDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0032	<0.0032	<0.0032	<0.0032	<0.0032
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Sum PFOS and PFHXS	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	<0.0016
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.016	<0.016	<0.016	<0.016	<0.016
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.016	<0.016	<0.016	<0.016	<0.016
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.008	<0.008	<0.008	<0.008	<0.008
(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	**102**	**101**	**102**	**102**
(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	**103**	**106**	**102**	**106**
(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	**97**	**101**	**100**	**102**
(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	**97**	**107**	**103**	**97**
(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	**99**	**100**	**107**	**108**
(13C9-PFNA) Isotopically Labelled Internal Recovery	%	-	**94**	**101**	**98**	**108**
(13C6-PFDA) Isotopically Labelled Internal Recovery	%	-	**102**	**103**	**101**	**111**
(13C7-PFUdA) Isotopically Labelled Internal Recovery	%	-	**104**	**88**	**113**	**107**
(13C2-PFDoA) Isotopically Labelled Internal Recovery	%	-	**91**	**87**	**95**	**104**
(13C2_PFTeDA) Isotopically Labelled Internal Recovery	%	-	**49**	**47**	**43**	**85**
(13C2-PFHxDA) Isotopically Labelled Internal Recovery	%	-	**12**	**10**	**5**	**20**
(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	**90**	**96**	**93**	**93**
(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	**97**	**110**	**110**	**102**
(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	**114**	**107**	**101**	**94**
(13C2-4:2 FTS) Isotopically Labelled Internal Recovery	%	-	**125**	**174**	**138**	**146**
(13C2-6:2 FTS) Isotopically Labelled Internal Recovery	%	-	**118**	**143**	**127**	**131**
(13C2-8:2 FTS) Isotopically Labelled Internal Recovery	%	-	**132**	**139**	**119**	**116**
(13C8-PFOSA) Isotopically Labelled Internal Recovery	%	-	**71**	**69**	**74**	**68**
(D3-N-MeFOSA) Isotopically Labelled Internal Recovery	%	-	**60**	**62**	**59**	**55**
(D5-N-EtFOSA) Isotopically Labelled Internal Recovery	%	-	**56**	**51**	**49**	**53**
(D7-N-MeFOSE) Isotopically Labelled Internal Recovery	%	-	**78**	**74**	**79**	**78**
(D9-N-EtFOSE) Isotopically Labelled Internal Recovery	%	-	**78**	**86**	**67**	**76**
(D3-N-MeFOSAA) Isotopically Labelled Internal Recovery	%	-	**103**	**109**	**79**	**94**
(D5-N-EtFOSAA) Isotopically Labelled Internal Recovery	%	-	**87**	**100**	**85**	**98**

Moisture Content **Method: AN002** **Tested: 21/10/2020**

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME317004.017 Soil 16 Oct 2020 SE212451.017	ME317004.018 Soil 16 Oct 2020 SE212451.018	ME317004.019 Soil 16 Oct 2020 SE212451.019	ME317004.020 Soil 16 Oct 2020 SE212451.020
Moisture Content Method: AN002 Tested: 21/10/2020 (continued)							
% Moisture*	%w/w	1		**7.6**	**12.1**	**17.7**	**3.3**

Parameter	Units	LOR	Sample Number: ME317004.021 Sample Matrix: Soil Sample Date: 16 Oct 2020 Sample Name: SE212451.021	ME317004.022 Soil 16 Oct 2020 SE212451.022	ME317004.023 Soil 16 Oct 2020 SE212451.023	ME317004.024 Soil 16 Oct 2020 SE212451.024
Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples	**Method: MA-1523**	**Tested: 21/10/2020**				
Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	-
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	-
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	-
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	-
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	<0.0008	<0.0008	<0.0008	-
Perfluorononanoic acid (PFNA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	-
Perfluorodecanoic acid (PFDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	-
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	-
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	-
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	-
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	-
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0032	<0.0032	<0.0032	<0.0032	-
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	-
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	-
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	-
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	-
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	-
Sum PFOS and PFHXS	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	-
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	-
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	-
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	-
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016	-
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.008	<0.008	<0.008	<0.008	-
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.008	<0.008	<0.008	<0.008	-
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.016	<0.016	<0.016	<0.016	-
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.016	<0.016	<0.016	<0.016	-
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.008	<0.008	<0.008	<0.008	-
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.008	<0.008	<0.008	<0.008	-
(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	**102**	**100**	**101**	-
(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	**106**	**104**	**104**	-
(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	**95**	**104**	**94**	-
(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	**102**	**103**	**100**	-
(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	**99**	**102**	**102**	-
(13C9-PFNA) Isotopically Labelled Internal Recovery	%	-	**104**	**110**	**104**	-
(13C6-PFDA) Isotopically Labelled Internal Recovery	%	-	**123**	**119**	**99**	-
(13C7-PFUdA) Isotopically Labelled Internal Recovery	%	-	**120**	**130**	**112**	-
(13C2-PFDoA) Isotopically Labelled Internal Recovery	%	-	**108**	**109**	**99**	-
(13C2_PFTeDA) Isotopically Labelled Internal Recovery	%	-	**72**	**69**	**47**	-
(13C2-PFHxDA) Isotopically Labelled Internal Recovery	%	-	**17**	**21**	**10**	-
(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	**94**	**94**	**95**	-
(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	**103**	**100**	**108**	-
(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	**119**	**111**	**93**	-
(13C2-4:2 FTS) Isotopically Labelled Internal Recovery	%	-	**135**	**157**	**134**	-
(13C2-6:2 FTS) Isotopically Labelled Internal Recovery	%	-	**124**	**135**	**129**	-
(13C2-8:2 FTS) Isotopically Labelled Internal Recovery	%	-	**130**	**147**	**129**	-
(13C8-PFOSA) Isotopically Labelled Internal Recovery	%	-	**74**	**73**	**70**	-
(D3-N-MeFOSA) Isotopically Labelled Internal Recovery	%	-	**58**	**50**	**48**	-
(D5-N-EtFOSA) Isotopically Labelled Internal Recovery	%	-	**56**	**56**	**40**	-
(D7-N-MeFOSE) Isotopically Labelled Internal Recovery	%	-	**77**	**80**	**66**	-
(D9-N-EtFOSE) Isotopically Labelled Internal Recovery	%	-	**74**	**78**	**58**	-
(D3-N-MeFOSAA) Isotopically Labelled Internal Recovery	%	-	**107**	**107**	**90**	-
(D5-N-EtFOSAA) Isotopically Labelled Internal Recovery	%	-	**116**	**90**	**77**	-
Moisture Content	**Method: AN002**	**Tested: 21/10/2020**				

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME317004.021 Soil 16 Oct 2020 SE212451.021	ME317004.022 Soil 16 Oct 2020 SE212451.022	ME317004.023 Soil 16 Oct 2020 SE212451.023	ME317004.024 Soil 16 Oct 2020 SE212451.024
Moisture Content Method: AN002 Tested: 26/10/2020 (continued)							
% Moisture*	%w/w	1		**5.5**	**4.2**	**5.4**	-

Parameter	Units	LOR	Sample Number ME317004.025 Sample Matrix Soil Sample Date 16 Oct 2020 Sample Name SE212451.025
Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples	**Method: MA-1523**	**Tested: 26/10/2020**	
Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	-
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	-
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	-
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	-
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	-
Perfluorononanoic acid (PFNA)	mg/kg	0.0016	-
Perfluorodecanoic acid (PFDA)	mg/kg	0.0016	-
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0016	-
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0016	-
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0016	-
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0016	-
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0032	-
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	-
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	-
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	-
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	-
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	-
Sum PFOS and PFHXS	mg/kg	0.0016	-
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	-
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0016	-
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0016	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	-
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.0016	-
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.008	-
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.008	-
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.016	-
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.016	-
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.008	-
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.008	-
(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	-
(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	-
(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	-
(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	-
(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	-
(13C9-PFNA) Isotopically Labelled Internal Recovery	%	-	-
(13C6-PFDA) Isotopically Labelled Internal Recovery	%	-	-
(13C7-PFUdA) Isotopically Labelled Internal Recovery	%	-	-
(13C2-PFDoA) Isotopically Labelled Internal Recovery	%	-	-
(13C2_PFTeDA) Isotopically Labelled Internal Recovery	%	-	-
(13C2-PFHxDA) Isotopically Labelled Internal Recovery	%	-	-
(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	-
(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	-
(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	-
(13C2-4:2 FTS) Isotopically Labelled Internal Recovery	%	-	-
(13C2-6:2 FTS) Isotopically Labelled Internal Recovery	%	-	-
(13C2-8:2 FTS) Isotopically Labelled Internal Recovery	%	-	-
(13C8-PFOSA) Isotopically Labelled Internal Recovery	%	-	-
(D3-N-MeFOSA) Isotopically Labelled Internal Recovery	%	-	-
(D5-N-EtFOSA) Isotopically Labelled Internal Recovery	%	-	-
(D7-N-MeFOSE) Isotopically Labelled Internal Recovery	%	-	-
(D9-N-EtFOSE) Isotopically Labelled Internal Recovery	%	-	-
(D3-N-MeFOSAA) Isotopically Labelled Internal Recovery	%	-	-
(D5-N-EtFOSAA) Isotopically Labelled Internal Recovery	%	-	-

Parameter	Units	LOR	Sample Number ME317004.025 Sample Matrix Soil Sample Date 16 Oct 2020 Sample Name SE212451.025
Moisture Content Method: AN002 Tested: 26/10/2020			
% Moisture*	%w/w	1	-

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Moisture Content Method: ME-(AU)-[ENV]AN002

Parameter	QC Reference	Units	LOR	DUP %RPD
% Moisture*	LB036310	%w/w	1	2 - 8%

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples Method: MA-1523

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Perfluorobutanoic acid (PFBA)	LB036308	mg/kg	0.0016	<0.0016	0%	NA
	LB036309	mg/kg	0.0016	<0.0016	0%	NA
Perfluoropentanoic acid (PFPeA)	LB036308	mg/kg	0.0016	<0.0016	0%	NA
	LB036309	mg/kg	0.0016	<0.0016	0%	NA
Perfluorohexanoic acid (PFHxA)	LB036308	mg/kg	0.0016	<0.0016	0%	NA
	LB036309	mg/kg	0.0016	<0.0016	0%	NA
Perfluoroheptanoic acid (PFHpA)	LB036308	mg/kg	0.0016	<0.0016	0%	92%
	LB036309	mg/kg	0.0016	<0.0016	0%	101%
Perfluorooctanoic Acid (PFOA)	LB036308	mg/kg	0.0008	<0.0008	0%	86%
	LB036309	mg/kg	0.0008	<0.0008	0%	91%
Perfluorononanoic acid (PFNA)	LB036308	mg/kg	0.0016	<0.0016	0%	114%
	LB036309	mg/kg	0.0016	<0.0016	0%	116%
Perfluorodecanoic acid (PFDA)	LB036308	mg/kg	0.0016	<0.0016	0%	112%
	LB036309	mg/kg	0.0016	<0.0016	0%	107%
Perfluoroundecanoic acid (PFUnA)	LB036308	mg/kg	0.0016	<0.0016	0%	104%
	LB036309	mg/kg	0.0016	<0.0016	0%	105%
Perfluorododecanoic acid (PFDoA)	LB036308	mg/kg	0.0016	<0.0016	0%	124%
	LB036309	mg/kg	0.0016	<0.0016	0%	121%
Perfluorotridecanoic acid (PFTrDA)	LB036308	mg/kg	0.0016	<0.0016	0%	
	LB036309	mg/kg	0.0016	<0.0016	0%	
Perfluorotetradecanoic acid (PFTeDA)	LB036308	mg/kg	0.0016	<0.0016	0%	NA
	LB036309	mg/kg	0.0016	<0.0016	0%	NA
Perfluorohexadecanoic acid (PFHxDA)	LB036308	mg/kg	0.0032	<0.0032	0%	NA
	LB036309	mg/kg	0.0032	<0.0032	0%	NA
Perfluorobutane sulfonate (PFBS)	LB036308	mg/kg	0.0016	<0.0016	0%	NA
	LB036309	mg/kg	0.0016	<0.0016	0%	NA
Perfluoropentane sulfonate (PFPeS)	LB036308	mg/kg	0.0016	<0.0016	0%	NA
	LB036309	mg/kg	0.0016	<0.0016	0%	NA
Perfluorohexane sulfonate (PFHxS)	LB036308	mg/kg	0.0016	<0.0016	0%	NA
	LB036309	mg/kg	0.0016	<0.0016	0%	NA
Perfluoroheptane sulfonate (PFHpS)	LB036308	mg/kg	0.0016	<0.0016	0%	NA
	LB036309	mg/kg	0.0016	<0.0016	0%	NA
Perfluorooctane sulfonate (PFOS)	LB036308	mg/kg	0.0016	<0.0016	0%	109%
	LB036309	mg/kg	0.0016	<0.0016	0%	123%
Sum PFOS and PFHXS	LB036308	mg/kg	0.0016	<0.0016	0%	NA
	LB036309	mg/kg	0.0016	<0.0016	0%	NA
Perfluorononane sulfonate (PFNS)	LB036308	mg/kg	0.0016	<0.0016	0%	NA
	LB036309	mg/kg	0.0016	<0.0016	0%	NA
Perfluorodecane sulfonate (PFDS)	LB036308	mg/kg	0.0016	<0.0016	0%	NA
	LB036309	mg/kg	0.0016	<0.0016	0%	NA
Perfluorododecane sulfonate (PFDoS)	LB036308	mg/kg	0.0016	<0.0016	0%	NA
	LB036309	mg/kg	0.0016	<0.0016	0%	NA
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	LB036308	mg/kg	0.0016	<0.0016	0%	NA
	LB036309	mg/kg	0.0016	<0.0016	0%	NA
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	LB036308	mg/kg	0.0016	<0.0016	0%	NA
	LB036309	mg/kg	0.0016	<0.0016	0%	NA
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	LB036308	mg/kg	0.0016	<0.0016	0%	NA
	LB036309	mg/kg	0.0016	<0.0016	0%	NA
Perfluorooctane sulfonamide (PFOSA)	LB036308	mg/kg	0.0016	<0.0016	0%	77%
	LB036309	mg/kg	0.0016	<0.0016	0%	67%
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	LB036308	mg/kg	0.008	<0.008	0%	NA

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples Method: MA-1523 (continued)

				MB	DUP %RPD	LCS %Recovery
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	LB036309	mg/kg	0.008	<0.008	0%	NA
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	LB036308	mg/kg	0.008	<0.008	0%	NA
	LB036309	mg/kg	0.008	<0.008	0%	NA
2-(N-Methylperfluorooctane sulfonamido)-ethanol (N-MeFOSE)	LB036308	mg/kg	0.016	<0.016	0%	NA
	LB036309	mg/kg	0.016	<0.016	0%	NA
2-(N-Ethylperfluorooctane sulfonamido)-ethanol (N-EtFOSE)	LB036308	mg/kg	0.016	<0.016	0%	NA
	LB036309	mg/kg	0.016	<0.016	0%	NA
N-Methylperfluorooctanesulfonamidoacetic acid (N_MeFOSAA)	LB036308	mg/kg	0.008	<0.008	0%	NA
	LB036309	mg/kg	0.008	<0.008	0%	NA
N-Ethylperfluorooctanesulfonamidoacetic Acid (N-EtFOSAA)	LB036308	mg/kg	0.008	<0.008	0%	NA
	LB036309	mg/kg	0.008	<0.008	0%	NA
(13C4-PFBA) Isotopically Labelled Internal Recovery Standard	LB036308	%	-	100%	5%	102%
	LB036309	%	-	102%	0%	101%
(13C5-PFPeA) Isotopically Labelled Internal Recovery Standard	LB036308	%	-	100%	0 - 8%	103%
	LB036309	%	-	103%	6%	102%
(13C5-PFHxA) Isotopically Labelled Internal Recovery Standard	LB036308	%	-	105%	1 - 4%	104%
	LB036309	%	-	99%	2%	97%
(13C4-PFHpA) Isotopically Labelled Internal Recovery Standard	LB036308	%	-	108%	1 - 4%	105%
	LB036309	%	-	100%	6%	99%
(13C4_PFOA) Isotopically Labelled Internal Recovery Standard	LB036308	%	-	110%	1 - 3%	112%
	LB036309	%	-	101%	1%	111%
(13C9-PFNA) Isotopically Labelled Internal Recovery Standard	LB036308	%	-	102%	0 - 6%	100%
	LB036309	%	-	96%	4%	99%
(13C6-PFDA) Isotopically Labelled Internal Recovery Standard	LB036308	%	-	101%	8 - 12%	94%
	LB036309	%	-	92%	8%	107%
(13C7-PFUdA) Isotopically Labelled Internal Recovery Standard	LB036308	%	-	85%	4 - 5%	94%
	LB036309	%	-	93%	2%	110%
(13C2-PFDoA) Isotopically Labelled Internal Recovery Standard	LB036308	%	-	69%	4 - 9%	74%
	LB036309	%	-	82%	4%	102%
(13C2_PFTeDA) Isotopically Labelled Internal Recovery Standard	LB036308	%	-	28%	21 - 25%	33%
	LB036309	%	-	40%	16%	54%
(13C2-PFHxDA) Isotopically Labelled Internal Recovery Standard	LB036308	%	-	3%	7 - 31%	3%
	LB036309	%	-	7%	46%	7%
(13C3-PFBS) Isotopically Labelled Internal Recovery Standard	LB036308	%	-	102%	4 - 11%	104%
	LB036309	%	-	90%	1%	94%
(13C3-PFHxS) Isotopically Labelled Internal Recovery Standard	LB036308	%	-	100%	1 - 3%	104%
	LB036309	%	-	98%	0%	103%
(13C8-PFOS) Isotopically Labelled Internal Recovery Standard	LB036308	%	-	112%	4 - 7%	84%
	LB036309	%	-	118%	7%	111%
(13C2-4:2 FTS) Isotopically Labelled Internal Recovery Standard	LB036308	%	-	136%	4%	132%
	LB036309	%	-	123%	10%	125%
(13C2-6:2 FTS) Isotopically Labelled Internal Recovery Standard	LB036308	%	-	135%	0 - 5%	134%
	LB036309	%	-	112%	4%	118%
(13C2-8:2 FTS) Isotopically Labelled Internal Recovery Standard	LB036308	%	-	106%	2 - 12%	103%
	LB036309	%	-	113%	13%	124%
(13C8-PFOSA) Isotopically Labelled Internal Recovery Standard	LB036308	%	-	88%	6 - 20%	66%
	LB036309	%	-	77%	1%	75%
(D3-N-MeFOSA) Isotopically Labelled Internal Recovery Standard	LB036308	%	-	68%	13 - 15%	42%
	LB036309	%	-	54%	5%	47%
(D5-N-EtFOSA) Isotopically Labelled Internal Recovery Standard	LB036308	%	-	62%	3 - 7%	32%
	LB036309	%	-	61%	1%	42%
(D7-N-MeFOSE) Isotopically Labelled Internal Recovery Standard	LB036308	%	-	96%	6 - 8%	68%
	LB036309	%	-	88%	1%	65%
(D9-N-EtFOSE) Isotopically Labelled Internal Recovery Standard	LB036308	%	-	78%	5 - 10%	57%
	LB036309	%	-	79%	6%	61%
(D3-N-MeFOSAA) Isotopically Labelled Internal Recovery Standard	LB036308	%	-	126%	11 - 24%	91%

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples **Method: MA-1523 (continued)**

				MB	DUP %RPD	LCS %Recovery
(D3-N-MeFOSAA) Isotopically Labelled Internal Recovery Standard	LB036309	%	-	104%	2%	100%
(D5-N-EtFOSAA) Isotopically Labelled Internal Recovery Standard	LB036308	%	-	120%	11 - 14%	79%
	LB036309	%	-	98%	12%	98%

METHOD SUMMARY

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
MA-1523	This method covers the analysis of per- and polyfluoroalkyl substances (PFAS) in aqueous, solid and biosolid samples and solvent extracts, determined as the total of linear and branched isomers. After spiking with isotopically labelled quantification surrogates and clean-up via SPE cartridges sample extracts are analysed by liquid chromatography/mass spectrometry (LC-MS/MS). PFAS concentrations are determined by isotope dilution quantification.

FOOTNOTES

IS	Insufficient sample for analysis.	LOR	Limit of Reporting
LNR	Sample listed, but not received.	↑↓	Raised or Lowered Limit of Reporting
*	NATA accreditation does not cover the performance of this service.	QFH	QC result is above the upper tolerance
		QFL	QC result is below the lower tolerance
**	Indicative data, theoretical holding time exceeded.	-	The sample was not analysed for this analyte
***	Indicates that both * and ** apply.	NVL	Not Validated

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calcuated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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Symbio LABORATORIES

CERTIFICATE OF ANALYSIS

Certificate Number	S959863 [R00]	**Page**	1/7
Client	SGS Environmental Services - Sydney	**Registering Laboratory**	Sydney
Contact	[redacted]	**Contact**	Customer Service Team
Address	16/33 Maddox St Alexandria NSW 2015	**Address**	2 Sirius Rd, Lane Cove West, NSW 2066
		Email	admin@symbiolabs.com.au
Telephone	02 8594 0400	**Telephone**	1300 703 166
Order Number	---	**Date Samples Received**	23/10/2020
Project ID	SE212451 Soil	**Date Analysis Commenced**	23/10/2020
Sampler	Customer	**Issue Date**	26/10/2020
Client Job Reference	SE212451	**Receipt Temperature (°C)**	4.0
No. of Samples Registered	22 | Sampler: Customer	**Storage Temperature (°C)**	4.0
Priority	Normal	**Quote Number**	---

Symbio LABORATORIES
Proudly AUSTRALIAN
ABN: 82 079 645 015

NATA
Accreditation No: 2455
Accredited for compliance with ISO/IEC 17025 - Testing

This report supersedes any previous revision with this reference. This document must not be reproduced, except in full. If samples were provided by the customer, results apply only to the samples 'as received' and responsibility for representative sampling rests with the customer. Water results are reported on an 'as is' basis. Soil and sediment results are reported on a 'dry weight' basis. For other matrices the basis of reporting will be confirmed in the 'Report Comments' section. Measurement Uncertainty is available upon request or via www.symbiolabs.com.au/login. If the laboratory was authorised to conduct testing on samples received outside of the specified conditions, all test results may be impacted. Details of samples received outside of the specified conditions are mentioned in the sample description section of this test report.

Definitions

| <: Less Than | >: Greater Than | RP: Result Pending | MPN: Most Probable Number | CFU: Colony Forming Units | ---: Not Received/Not Requested | NA: Not Applicable | ND: Not Detected | LOR: Limit of Reporting | [NT]: Not Tested |

| ~: Estimated | ^ Subcontracted Analysis | TBA: To Be Advised | ** Potential Holding Time Concern | * Test not covered by NATA scope of accreditation | # Result derived from a calculation and includes results equal to or greater than the LOR

Authorised By

Name	Position	Accreditation Category
Michael Chapman	Laboratory Manager – Microbiology	Environmental and Food Microbiology

Sample Information - *Client/Sampler Supplied*

Sample ID	S959863/1	S959863/2	S959863/3	S959863/4	S959863/5
Sample Description	SE212451.001 0407_SYDSEW01_0.6-0.7_201016	SE212451.002 0407_SYDSEW01_2.8-2.9_201016	SE212451.003 0407_SYDSEW02_0.1-0.2_201016	SE212451.004 0407_SYDSEW02_0.6-0.7_201016	SE212451.005 0407_SYDSEW03_0.1-0.2_201016
Sample Date/Time	2020-10-16 00:00	2020-10-16 00:00	2020-10-16 00:00	2020-10-16 00:00	2020-10-16 00:00
Sample Matrix	Soils	Soils	Soils	Soils	Soils

Client	SGS Environmental Services - Sydney	**Project ID**	SE212451 Soil
Certificate Number	S959863 [R00]	**Sampler**	Customer
Page	2/7	**Order Number**	---

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Sample Information - *Client/Sampler Supplied*

Sample ID	S959863/6	S959863/7	S959863/8	S959863/9	S959863/10
Sample Description	SE212451.006 0407_SYDSEW03_1.7-1.8_201016	SE212451.007 0407_SYDSEW04_0.1-0.2_201016	SE212451.008 0407_SYDSEW04_0.6-0.7_201016	SE212451.009 0407_SYDSEW05_0.2-0.3_201016	SE212451.010 0407_SYDSEW05_0.6-0.7_201016
Sample Date/Time	2020-10-16 00:00	2020-10-16 00:00	2020-10-16 00:00	2020-10-16 00:00	2020-10-16 00:00
Sample Matrix	Soils	Soils	Soils	Soils	Soils

Sample ID	S959863/11	S959863/12	S959863/13	S959863/14	S959863/15
Sample Description	SE212451.011 0407_SYDSEW06_0.2-0.3_201016	SE212451.012 0407_SYDSEW06_2.9-3.0_201016	SE212451.014 0407_SYDSEW07_0.2-0.3_201016	SE212451.015 0407_SYDSEW07_0.6-0.7_201016	SE212451.016 0407_SYDSEW08_0.2-0.3_201016
Sample Date/Time	2020-10-16 00:00	2020-10-16 00:00	2020-10-16 00:00	2020-10-16 00:00	2020-10-16 00:00
Sample Matrix	Soils	Soils	Soils	Soils	Soils

Sample ID	S959863/16	S959863/17	S959863/18	S959863/19	S959863/20
Sample Description	SE212451.017 0407_SYDSEW08_1.7-1.8_201016	SE212451.018 0407_SYDSEW09_0.2-0.3_201016	SE212451.019 0407_SYDSEW09_0.6-0.7_201016	SE212451.020 0407_SYDSEW10_0.2-0.3_201016	SE212451.021 0407_SYDSEW10_0.6-0.7_201016
Sample Date/Time	2020-10-16 00:00	2020-10-16 00:00	2020-10-16 00:00	2020-10-16 00:00	2020-10-16 00:00
Sample Matrix	Soils	Soils	Soils	Soils	Soils

Sample ID	S959863/21	S959863/22
Sample Description	SE212451.022 0407_SYDSEW11_0.1-0.2_201016	SE212451.023 0407_SYDSEW11_1.8-1.9_201016
Sample Date/Time	2020-10-16 00:00	2020-10-16 00:00
Sample Matrix	Soils	Soils

Client	SGS Environmental Services - Sydney	**Project ID**	SE212451 Soil
Certificate Number	S959863 [R00]	**Sampler**	Customer
Page	3/7	**Order Number**	---

Analytical Results

Compound/Analyte	LOR	Units	SE212451.001 0407_SYDSEW01_0.6-0.7_201016	SE212451.002 0407_SYDSEW01_2.8-2.9_201016	SE212451.003 0407_SYDSEW02_0.1-0.2_201016	SE212451.004 0407_SYDSEW02_0.6-0.7_201016	SE212451.005 0407_SYDSEW03_0.1-0.2_201016
Client Sample Description							
Client Sampling date/time			16/10/2020 00:00	16/10/2020 00:00	16/10/2020 00:00	16/10/2020 00:00	16/10/2020 00:00
			S959863/1	S959863/2	S959863/3	S959863/4	S959863/5
			Results	Results	Results	Results	Results
Micro General							
M16.1 - AS 5013.10							
Salmonella spp.	ND	/25g	ND	ND	ND	ND	ND
M8.5 - AS/NZS 4276.7							
Escherichia coli	1	CFU/100mL	<1	<1	<1	<1	<1
Thermotolerant Coliforms	1	CFU/100mL	<1	<1	<1	<1	<1

Client	SGS Environmental Services - Sydney	**Project ID**	SE212451 Soil
Certificate Number	S959863 [R00]	**Sampler**	Customer
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Analytical Results

Compound/Analyte	LOR	Units	SE212451.006 0407_SYDSEW03_1.7-1.8_201016	SE212451.007 0407_SYDSEW04_0.1-0.2_201016	SE212451.008 0407_SYDSEW04_0.6-0.7_201016	SE212451.009 0407_SYDSEW05_0.2-0.3_201016	SE212451.010 0407_SYDSEW05_0.6-0.7_201016
Client Sample Description							
Client Sampling date/time			16/10/2020 00:00	16/10/2020 00:00	16/10/2020 00:00	16/10/2020 00:00	16/10/2020 00:00
			S959863/6	S959863/7	S959863/8	S959863/9	S959863/10
			Results	Results	Results	Results	Results
Micro General							
M16.1 - AS 5013.10							
Salmonella spp.	ND	/25g	ND	ND	ND	ND	ND
M8.5 - AS/NZS 4276.7							
Escherichia coli	1	CFU/100mL	<1	<1	<1	<1	<1
Thermotolerant Coliforms	1	CFU/100mL	<1	<1	<1	<1	<1

Client	SGS Environmental Services - Sydney	**Project ID**	SE212451 Soil
Certificate Number	S959863 [R00]	**Sampler**	Customer
Page	5/7	**Order Number**	---

Analytical Results

Compound/Analyte	LOR	Units	SE212451.011 0407_SYDSEW06_0.2-0.3_201016	SE212451.012 0407_SYDSEW06_2.9-3.0_201016	SE212451.014 0407_SYDSEW07_0.2-0.3_201016	SE212451.015 0407_SYDSEW07_0.6-0.7_201016	SE212451.016 0407_SYDSEW08_0.2-0.3_201016
Client Sample Description							
Client Sampling date/time			16/10/2020 00:00	16/10/2020 00:00	16/10/2020 00:00	16/10/2020 00:00	16/10/2020 00:00
			S959863/11	S959863/12	S959863/13	S959863/14	S959863/15
			Results	Results	Results	Results	Results
Micro General							
M16.1 - AS 5013.10							
Salmonella spp.	ND	/25g	ND	ND	ND	ND	ND
M8.5 - AS/NZS 4276.7							
Escherichia coli	1	CFU/100mL	<1	<1	<1	<1	<1
Thermotolerant Coliforms	1	CFU/100mL	<1	<1	<1	<1	<1

Client	SGS Environmental Services - Sydney	**Project ID**	SE212451 Soil
Certificate Number	S959863 [R00]	**Sampler**	Customer
Page	6/7	**Order Number**	---

Analytical Results

Compound/Analyte	LOR	Units	SE212451.017 0407_SYDSEW08_1.7-1.8_201016	SE212451.018 0407_SYDSEW09_0.2-0.3_201016	SE212451.019 0407_SYDSEW09_0.6-0.7_201016	SE212451.020 0407_SYDSEW10_0.2-0.3_201016	SE212451.021 0407_SYDSEW10_0.6-0.7_201016
Client Sample Description							
Client Sampling date/time			16/10/2020 00:00	16/10/2020 00:00	16/10/2020 00:00	16/10/2020 00:00	16/10/2020 00:00
			S959863/16	S959863/17	S959863/18	S959863/19	S959863/20
			Results	Results	Results	Results	Results
Micro General							
M16.1 - AS 5013.10							
Salmonella spp.	ND	/25g	Detected	ND	ND	ND	ND
M8.5 - AS/NZS 4276.7							
Escherichia coli	1	CFU/100mL	<1	<1	<1	<1	<1
Thermotolerant Coliforms	1	CFU/100mL	48	<1	<1	<1	<1

Client	SGS Environmental Services - Sydney	**Project ID**	SE212451 Soil
Certificate Number	S959863 [R00]	**Sampler**	Customer
Page	7/7	**Order Number**	---

Analytical Results

			SE212451.022 0407_SYDSEW11_0.1-0.2_201016	SE212451.023 0407_SYDSEW11_1.8-1.9_201016
		Client Sample Description		
		Client Sampling date/time	16/10/2020 00:00	16/10/2020 00:00
Compound/Analyte	LOR	Units	S959863/21	S959863/22
			Results	Results
Micro General				
M16.1 - AS 5013.10				
Salmonella spp.	ND	/25g	ND	ND
M8.5 - AS/NZS 4276.7				
Escherichia coli	1	CFU/100mL	<1	<1
Thermotolerant Coliforms	1	CFU/100mL	<1	<1

Analysis Location

All in-house analysis was completed by Symbio Laboratories - Sydney.

STATEMENT OF QA/QC PERFORMANCE

SE212451 R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	25

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE212451 R0**
Date Received	16 Oct 2020
Date Reported	26 Oct 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Analysis Date	Moisture Content	4 items
	Nitrite Nitrogen in Soil	3 items
Surrogate	Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples	16 items
Duplicate	Soluble Anions (1:5) in Soil by Ion Chromatography	1 item

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	25 Soil
Date documentation received	16/10/2020@6:42pr	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	1.2°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE212451 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Ammonia Nitrogen (soluble) in Soil

Method: ME-(AU)-[ENV]AN291

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SYDSEW01_0.6-0.7_	SE212451.001	LB211901	16 Oct 2020	16 Oct 2020	13 Nov 2020	23 Oct 2020	13 Nov 2020	23 Oct 2020
0407_SYDSEW01_2.8-2.9_	SE212451.002	LB211901	16 Oct 2020	16 Oct 2020	13 Nov 2020	23 Oct 2020	13 Nov 2020	23 Oct 2020
0407_SYDSEW02_0.1-0.2_	SE212451.003	LB211901	16 Oct 2020	16 Oct 2020	13 Nov 2020	23 Oct 2020	13 Nov 2020	23 Oct 2020
0407_SYDSEW02_0.6-0.7_	SE212451.004	LB211901	16 Oct 2020	16 Oct 2020	13 Nov 2020	23 Oct 2020	13 Nov 2020	23 Oct 2020
0407_SYDSEW03_0.1-0.2_	SE212451.005	LB211901	16 Oct 2020	16 Oct 2020	13 Nov 2020	23 Oct 2020	13 Nov 2020	23 Oct 2020
0407_SYDSEW03_1.7-1.8_	SE212451.006	LB211901	16 Oct 2020	16 Oct 2020	13 Nov 2020	23 Oct 2020	13 Nov 2020	23 Oct 2020
0407_SYDSEW04_0.1-0.2_	SE212451.007	LB211901	16 Oct 2020	16 Oct 2020	13 Nov 2020	23 Oct 2020	13 Nov 2020	23 Oct 2020
0407_SYDSEW04_0.6-0.7_	SE212451.008	LB211901	16 Oct 2020	16 Oct 2020	13 Nov 2020	23 Oct 2020	13 Nov 2020	23 Oct 2020
0407_SYDSEW05_0.2-0.3_	SE212451.009	LB211901	16 Oct 2020	16 Oct 2020	13 Nov 2020	23 Oct 2020	13 Nov 2020	23 Oct 2020
0407_SYDSEW05_0.6-0.7_	SE212451.010	LB211901	16 Oct 2020	16 Oct 2020	13 Nov 2020	23 Oct 2020	13 Nov 2020	23 Oct 2020
0407_SYDSEW06_0.2-0.3_	SE212451.011	LB211901	16 Oct 2020	16 Oct 2020	13 Nov 2020	23 Oct 2020	13 Nov 2020	23 Oct 2020
0407_SYDSEW06_2.9-3.0_	SE212451.012	LB211901	16 Oct 2020	16 Oct 2020	13 Nov 2020	23 Oct 2020	13 Nov 2020	23 Oct 2020
0407_QC193_201016	SE212451.013	LB211901	16 Oct 2020	16 Oct 2020	13 Nov 2020	23 Oct 2020	13 Nov 2020	23 Oct 2020
0407_SYDSEW07_0.2-0.3_	SE212451.014	LB211901	16 Oct 2020	16 Oct 2020	13 Nov 2020	23 Oct 2020	13 Nov 2020	23 Oct 2020
0407_SYDSEW07_0.6-0.7_	SE212451.015	LB211901	16 Oct 2020	16 Oct 2020	13 Nov 2020	23 Oct 2020	13 Nov 2020	23 Oct 2020
0407_SYDSEW08_0.2-0.3_	SE212451.016	LB211901	16 Oct 2020	16 Oct 2020	13 Nov 2020	23 Oct 2020	13 Nov 2020	23 Oct 2020
0407_SYDSEW08_1.7-1.8_	SE212451.017	LB211901	16 Oct 2020	16 Oct 2020	13 Nov 2020	23 Oct 2020	13 Nov 2020	23 Oct 2020
0407_SYDSEW09_0.2-0.3_	SE212451.018	LB211901	16 Oct 2020	16 Oct 2020	13 Nov 2020	23 Oct 2020	13 Nov 2020	23 Oct 2020
0407_SYDSEW09_0.6-0.7_	SE212451.019	LB211901	16 Oct 2020	16 Oct 2020	13 Nov 2020	23 Oct 2020	13 Nov 2020	23 Oct 2020
0407_SYDSEW10_0.2-0.3_	SE212451.020	LB211901	16 Oct 2020	16 Oct 2020	13 Nov 2020	23 Oct 2020	13 Nov 2020	23 Oct 2020
0407_SYDSEW10_0.6-0.7_	SE212451.021	LB211901	16 Oct 2020	16 Oct 2020	13 Nov 2020	23 Oct 2020	13 Nov 2020	26 Oct 2020
0407_SYDSEW11_0.1-0.2_	SE212451.022	LB211901	16 Oct 2020	16 Oct 2020	13 Nov 2020	23 Oct 2020	13 Nov 2020	26 Oct 2020
0407_SYDSEW11_1.8-1.9_	SE212451.023	LB211901	16 Oct 2020	16 Oct 2020	13 Nov 2020	23 Oct 2020	13 Nov 2020	26 Oct 2020

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SYDSEW01_0.6-0.7_	SE212451.001	LB211693	16 Oct 2020	16 Oct 2020	13 Nov 2020	20 Oct 2020	13 Nov 2020	26 Oct 2020
0407_SYDSEW01_2.8-2.9_	SE212451.002	LB211693	16 Oct 2020	16 Oct 2020	13 Nov 2020	20 Oct 2020	13 Nov 2020	26 Oct 2020
0407_SYDSEW02_0.1-0.2_	SE212451.003	LB211693	16 Oct 2020	16 Oct 2020	13 Nov 2020	20 Oct 2020	13 Nov 2020	26 Oct 2020
0407_SYDSEW02_0.6-0.7_	SE212451.004	LB211693	16 Oct 2020	16 Oct 2020	13 Nov 2020	20 Oct 2020	13 Nov 2020	26 Oct 2020
0407_SYDSEW03_0.1-0.2_	SE212451.005	LB211693	16 Oct 2020	16 Oct 2020	13 Nov 2020	20 Oct 2020	13 Nov 2020	26 Oct 2020
0407_SYDSEW03_1.7-1.8_	SE212451.006	LB211693	16 Oct 2020	16 Oct 2020	13 Nov 2020	20 Oct 2020	13 Nov 2020	26 Oct 2020
0407_SYDSEW04_0.1-0.2_	SE212451.007	LB211693	16 Oct 2020	16 Oct 2020	13 Nov 2020	20 Oct 2020	13 Nov 2020	26 Oct 2020
0407_SYDSEW04_0.6-0.7_	SE212451.008	LB211693	16 Oct 2020	16 Oct 2020	13 Nov 2020	20 Oct 2020	13 Nov 2020	26 Oct 2020
0407_SYDSEW05_0.2-0.3_	SE212451.009	LB211693	16 Oct 2020	16 Oct 2020	13 Nov 2020	20 Oct 2020	13 Nov 2020	26 Oct 2020
0407_SYDSEW05_0.6-0.7_	SE212451.010	LB211693	16 Oct 2020	16 Oct 2020	13 Nov 2020	20 Oct 2020	13 Nov 2020	26 Oct 2020
0407_SYDSEW06_0.2-0.3_	SE212451.011	LB211693	16 Oct 2020	16 Oct 2020	13 Nov 2020	20 Oct 2020	13 Nov 2020	26 Oct 2020
0407_SYDSEW06_2.9-3.0_	SE212451.012	LB211693	16 Oct 2020	16 Oct 2020	13 Nov 2020	20 Oct 2020	13 Nov 2020	26 Oct 2020
0407_QC193_201016	SE212451.013	LB211693	16 Oct 2020	16 Oct 2020	13 Nov 2020	20 Oct 2020	13 Nov 2020	26 Oct 2020
0407_SYDSEW07_0.2-0.3_	SE212451.014	LB211693	16 Oct 2020	16 Oct 2020	13 Nov 2020	20 Oct 2020	13 Nov 2020	26 Oct 2020
0407_SYDSEW07_0.6-0.7_	SE212451.015	LB211693	16 Oct 2020	16 Oct 2020	13 Nov 2020	20 Oct 2020	13 Nov 2020	26 Oct 2020
0407_SYDSEW08_0.2-0.3_	SE212451.016	LB211693	16 Oct 2020	16 Oct 2020	13 Nov 2020	20 Oct 2020	13 Nov 2020	26 Oct 2020
0407_SYDSEW08_1.7-1.8_	SE212451.017	LB211693	16 Oct 2020	16 Oct 2020	13 Nov 2020	20 Oct 2020	13 Nov 2020	26 Oct 2020
0407_SYDSEW09_0.2-0.3_	SE212451.018	LB211693	16 Oct 2020	16 Oct 2020	13 Nov 2020	20 Oct 2020	13 Nov 2020	26 Oct 2020
0407_SYDSEW09_0.6-0.7_	SE212451.019	LB211693	16 Oct 2020	16 Oct 2020	13 Nov 2020	20 Oct 2020	13 Nov 2020	26 Oct 2020
0407_SYDSEW10_0.2-0.3_	SE212451.020	LB211834	16 Oct 2020	16 Oct 2020	13 Nov 2020	22 Oct 2020	13 Nov 2020	26 Oct 2020
0407_SYDSEW10_0.6-0.7_	SE212451.021	LB211834	16 Oct 2020	16 Oct 2020	13 Nov 2020	22 Oct 2020	13 Nov 2020	26 Oct 2020
0407_SYDSEW11_0.1-0.2_	SE212451.022	LB211834	16 Oct 2020	16 Oct 2020	13 Nov 2020	22 Oct 2020	13 Nov 2020	26 Oct 2020
0407_SYDSEW11_1.8-1.9_	SE212451.023	LB211834	16 Oct 2020	16 Oct 2020	13 Nov 2020	22 Oct 2020	13 Nov 2020	26 Oct 2020

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SYDSEW01_0.6-0.7_	SE212451.001	LB211677	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	25 Oct 2020	23 Oct 2020
0407_SYDSEW01_2.8-2.9_	SE212451.002	LB211677	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	25 Oct 2020	23 Oct 2020
0407_SYDSEW02_0.1-0.2_	SE212451.003	LB211677	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	25 Oct 2020	23 Oct 2020
0407_SYDSEW02_0.6-0.7_	SE212451.004	LB211677	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	25 Oct 2020	23 Oct 2020
0407_SYDSEW03_0.1-0.2_	SE212451.005	LB211677	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	25 Oct 2020	23 Oct 2020
0407_SYDSEW03_1.7-1.8_	SE212451.006	LB211677	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	25 Oct 2020	23 Oct 2020
0407_SYDSEW04_0.1-0.2_	SE212451.007	LB211677	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	25 Oct 2020	23 Oct 2020
0407_SYDSEW04_0.6-0.7_	SE212451.008	LB211677	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	25 Oct 2020	23 Oct 2020
0407_SYDSEW05_0.2-0.3_	SE212451.009	LB211677	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	25 Oct 2020	23 Oct 2020

HOLDING TIME SUMMARY

SE212451 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Moisture Content (continued)

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SYDSEW05_0.6-0.7_	SE212451.010	LB211677	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	25 Oct 2020	23 Oct 2020
0407_SYDSEW06_0.2-0.3_	SE212451.011	LB211677	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	25 Oct 2020	23 Oct 2020
0407_SYDSEW06_2.9-3.0_	SE212451.012	LB211677	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	25 Oct 2020	23 Oct 2020
0407_QC193_201016	SE212451.013	LB211677	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	25 Oct 2020	23 Oct 2020
0407_SYDSEW07_0.2-0.3_	SE212451.014	LB211677	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	25 Oct 2020	23 Oct 2020
0407_SYDSEW07_0.6-0.7_	SE212451.015	LB211677	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	25 Oct 2020	23 Oct 2020
0407_SYDSEW08_0.2-0.3_	SE212451.016	LB211677	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	25 Oct 2020	23 Oct 2020
0407_SYDSEW08_1.7-1.8_	SE212451.017	LB211677	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	25 Oct 2020	23 Oct 2020
0407_SYDSEW09_0.2-0.3_	SE212451.018	LB211677	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	25 Oct 2020	23 Oct 2020
0407_SYDSEW09_0.6-0.7_	SE212451.019	LB211677	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	25 Oct 2020	23 Oct 2020
0407_SYDSEW10_0.2-0.3_	SE212451.020	LB211677	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	25 Oct 2020	23 Oct 2020
0407_SYDSEW10_0.6-0.7_	SE212451.021	LB211678	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	25 Oct 2020	26 Oct 2020†
0407_SYDSEW11_0.1-0.2_	SE212451.022	LB211678	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	25 Oct 2020	26 Oct 2020†
0407_SYDSEW11_1.8-1.9_	SE212451.023	LB211678	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	25 Oct 2020	26 Oct 2020†
0407_QC523_201016 TB	SE212451.025	LB211678	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	25 Oct 2020	26 Oct 2020†

Nitrite Nitrogen in Soil

Method: ME-(AU)-[ENV]AN277

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SYDSEW01_0.6-0.7_	SE212451.001	LB211900	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	25 Oct 2020	23 Oct 2020
0407_SYDSEW01_2.8-2.9_	SE212451.002	LB211900	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	25 Oct 2020	23 Oct 2020
0407_SYDSEW02_0.1-0.2_	SE212451.003	LB211900	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	25 Oct 2020	23 Oct 2020
0407_SYDSEW02_0.6-0.7_	SE212451.004	LB211900	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	25 Oct 2020	23 Oct 2020
0407_SYDSEW03_0.1-0.2_	SE212451.005	LB211900	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	25 Oct 2020	23 Oct 2020
0407_SYDSEW03_1.7-1.8_	SE212451.006	LB211900	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	25 Oct 2020	23 Oct 2020
0407_SYDSEW04_0.1-0.2_	SE212451.007	LB211900	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	25 Oct 2020	23 Oct 2020
0407_SYDSEW04_0.6-0.7_	SE212451.008	LB211900	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	25 Oct 2020	23 Oct 2020
0407_SYDSEW05_0.2-0.3_	SE212451.009	LB211900	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	25 Oct 2020	23 Oct 2020
0407_SYDSEW05_0.6-0.7_	SE212451.010	LB211900	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	25 Oct 2020	23 Oct 2020
0407_SYDSEW06_0.2-0.3_	SE212451.011	LB211900	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	25 Oct 2020	23 Oct 2020
0407_SYDSEW06_2.9-3.0_	SE212451.012	LB211900	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	25 Oct 2020	23 Oct 2020
0407_QC193_201016	SE212451.013	LB211900	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	25 Oct 2020	23 Oct 2020
0407_SYDSEW07_0.2-0.3_	SE212451.014	LB211900	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	25 Oct 2020	23 Oct 2020
0407_SYDSEW07_0.6-0.7_	SE212451.015	LB211900	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	25 Oct 2020	23 Oct 2020
0407_SYDSEW08_0.2-0.3_	SE212451.016	LB211900	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	25 Oct 2020	23 Oct 2020
0407_SYDSEW08_1.7-1.8_	SE212451.017	LB211900	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	25 Oct 2020	23 Oct 2020
0407_SYDSEW09_0.2-0.3_	SE212451.018	LB211900	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	25 Oct 2020	23 Oct 2020
0407_SYDSEW09_0.6-0.7_	SE212451.019	LB211900	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	25 Oct 2020	23 Oct 2020
0407_SYDSEW10_0.2-0.3_	SE212451.020	LB211900	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	25 Oct 2020	23 Oct 2020
0407_SYDSEW10_0.6-0.7_	SE212451.021	LB211900	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	25 Oct 2020	26 Oct 2020†
0407_SYDSEW11_0.1-0.2_	SE212451.022	LB211900	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	25 Oct 2020	26 Oct 2020†
0407_SYDSEW11_1.8-1.9_	SE212451.023	LB211900	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	25 Oct 2020	26 Oct 2020†

Soluble Anions (1:5) in Soil by Ion Chromatography

Method: ME-(AU)-[ENV]AN245

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SYDSEW01_0.6-0.7_	SE212451.001	LB211903	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	20 Nov 2020	26 Oct 2020
0407_SYDSEW01_2.8-2.9_	SE212451.002	LB211903	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	20 Nov 2020	26 Oct 2020
0407_SYDSEW02_0.1-0.2_	SE212451.003	LB211903	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	20 Nov 2020	26 Oct 2020
0407_SYDSEW02_0.6-0.7_	SE212451.004	LB211903	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	20 Nov 2020	26 Oct 2020
0407_SYDSEW03_0.1-0.2_	SE212451.005	LB211903	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	20 Nov 2020	26 Oct 2020
0407_SYDSEW03_1.7-1.8_	SE212451.006	LB211903	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	20 Nov 2020	26 Oct 2020
0407_SYDSEW04_0.1-0.2_	SE212451.007	LB211903	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	20 Nov 2020	26 Oct 2020
0407_SYDSEW04_0.6-0.7_	SE212451.008	LB211903	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	20 Nov 2020	26 Oct 2020
0407_SYDSEW05_0.2-0.3_	SE212451.009	LB211903	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	20 Nov 2020	26 Oct 2020
0407_SYDSEW05_0.6-0.7_	SE212451.010	LB211903	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	20 Nov 2020	26 Oct 2020
0407_SYDSEW06_0.2-0.3_	SE212451.011	LB211903	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	20 Nov 2020	26 Oct 2020
0407_SYDSEW06_2.9-3.0_	SE212451.012	LB211903	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	20 Nov 2020	26 Oct 2020
0407_QC193_201016	SE212451.013	LB211903	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	20 Nov 2020	26 Oct 2020
0407_SYDSEW07_0.2-0.3_	SE212451.014	LB211903	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	20 Nov 2020	26 Oct 2020
0407_SYDSEW07_0.6-0.7_	SE212451.015	LB211903	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	20 Nov 2020	26 Oct 2020
0407_SYDSEW08_0.2-0.3_	SE212451.016	LB211903	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	20 Nov 2020	26 Oct 2020
0407_SYDSEW08_1.7-1.8_	SE212451.017	LB211903	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	20 Nov 2020	26 Oct 2020

HOLDING TIME SUMMARY

SE212451 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Soluble Anions (1:5) in Soil by Ion Chromatography (continued)

Method: ME-(AU)-[ENV]AN245

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SYDSEW09_0.2-0.3_	SE212451.018	LB211903	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	20 Nov 2020	26 Oct 2020
0407_SYDSEW09_0.6-0.7_	SE212451.019	LB211903	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	20 Nov 2020	26 Oct 2020
0407_SYDSEW10_0.2-0.3_	SE212451.020	LB211903	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	20 Nov 2020	26 Oct 2020
0407_SYDSEW10_0.6-0.7_	SE212451.021	LB211903	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	20 Nov 2020	26 Oct 2020
0407_SYDSEW11_0.1-0.2_	SE212451.022	LB211903	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	20 Nov 2020	26 Oct 2020
0407_SYDSEW11_1.8-1.9_	SE212451.023	LB211903	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	20 Nov 2020	26 Oct 2020

TKN Kjeldahl Digestion by Discrete Analyser in Soil

Method: ME-(AU)-[ENV]AN292

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SYDSEW01_0.6-0.7_	SE212451.001	LB211899	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	30 Oct 2020	26 Oct 2020
0407_SYDSEW01_2.8-2.9_	SE212451.002	LB211899	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	30 Oct 2020	26 Oct 2020
0407_SYDSEW02_0.1-0.2_	SE212451.003	LB211899	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	30 Oct 2020	26 Oct 2020
0407_SYDSEW02_0.6-0.7_	SE212451.004	LB211899	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	30 Oct 2020	26 Oct 2020
0407_SYDSEW03_0.1-0.2_	SE212451.005	LB211899	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	30 Oct 2020	26 Oct 2020
0407_SYDSEW03_1.7-1.8_	SE212451.006	LB211899	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	30 Oct 2020	26 Oct 2020
0407_SYDSEW04_0.1-0.2_	SE212451.007	LB211899	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	30 Oct 2020	26 Oct 2020
0407_SYDSEW04_0.6-0.7_	SE212451.008	LB211899	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	30 Oct 2020	26 Oct 2020
0407_SYDSEW05_0.2-0.3_	SE212451.009	LB211899	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	30 Oct 2020	26 Oct 2020
0407_SYDSEW05_0.6-0.7_	SE212451.010	LB211899	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	30 Oct 2020	26 Oct 2020
0407_SYDSEW06_0.2-0.3_	SE212451.011	LB211899	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	30 Oct 2020	26 Oct 2020
0407_SYDSEW06_2.9-3.0_	SE212451.012	LB211899	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	30 Oct 2020	26 Oct 2020
0407_QC193_201016	SE212451.013	LB211899	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	30 Oct 2020	26 Oct 2020
0407_SYDSEW07_0.2-0.3_	SE212451.014	LB211899	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	30 Oct 2020	26 Oct 2020
0407_SYDSEW07_0.6-0.7_	SE212451.015	LB211899	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	30 Oct 2020	26 Oct 2020
0407_SYDSEW08_0.2-0.3_	SE212451.016	LB211899	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	30 Oct 2020	26 Oct 2020
0407_SYDSEW08_1.7-1.8_	SE212451.017	LB211899	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	30 Oct 2020	26 Oct 2020
0407_SYDSEW09_0.2-0.3_	SE212451.018	LB211899	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	30 Oct 2020	26 Oct 2020
0407_SYDSEW09_0.6-0.7_	SE212451.019	LB211899	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	30 Oct 2020	26 Oct 2020
0407_SYDSEW10_0.2-0.3_	SE212451.020	LB211899	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	30 Oct 2020	26 Oct 2020
0407_SYDSEW10_0.6-0.7_	SE212451.021	LB211899	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	30 Oct 2020	26 Oct 2020
0407_SYDSEW11_0.1-0.2_	SE212451.022	LB211899	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	30 Oct 2020	26 Oct 2020
0407_SYDSEW11_1.8-1.9_	SE212451.023	LB211899	16 Oct 2020	16 Oct 2020	23 Oct 2020	23 Oct 2020	30 Oct 2020	26 Oct 2020

Total Phosphorus by Kjeldahl Digestion DA in Soil

Method: ME-(AU)-[ENV]AN279/AN293(Sydney only)

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SYDSEW01_0.6-0.7_	SE212451.001	LB211899	16 Oct 2020	16 Oct 2020	13 Nov 2020	23 Oct 2020	13 Nov 2020	23 Oct 2020
0407_SYDSEW01_2.8-2.9_	SE212451.002	LB211899	16 Oct 2020	16 Oct 2020	13 Nov 2020	23 Oct 2020	13 Nov 2020	23 Oct 2020
0407_SYDSEW02_0.1-0.2_	SE212451.003	LB211899	16 Oct 2020	16 Oct 2020	13 Nov 2020	23 Oct 2020	13 Nov 2020	23 Oct 2020
0407_SYDSEW02_0.6-0.7_	SE212451.004	LB211899	16 Oct 2020	16 Oct 2020	13 Nov 2020	23 Oct 2020	13 Nov 2020	23 Oct 2020
0407_SYDSEW03_0.1-0.2_	SE212451.005	LB211899	16 Oct 2020	16 Oct 2020	13 Nov 2020	23 Oct 2020	13 Nov 2020	23 Oct 2020
0407_SYDSEW03_1.7-1.8_	SE212451.006	LB211899	16 Oct 2020	16 Oct 2020	13 Nov 2020	23 Oct 2020	13 Nov 2020	23 Oct 2020
0407_SYDSEW04_0.1-0.2_	SE212451.007	LB211899	16 Oct 2020	16 Oct 2020	13 Nov 2020	23 Oct 2020	13 Nov 2020	23 Oct 2020
0407_SYDSEW04_0.6-0.7_	SE212451.008	LB211899	16 Oct 2020	16 Oct 2020	13 Nov 2020	23 Oct 2020	13 Nov 2020	23 Oct 2020
0407_SYDSEW05_0.2-0.3_	SE212451.009	LB211899	16 Oct 2020	16 Oct 2020	13 Nov 2020	23 Oct 2020	13 Nov 2020	23 Oct 2020
0407_SYDSEW05_0.6-0.7_	SE212451.010	LB211899	16 Oct 2020	16 Oct 2020	13 Nov 2020	23 Oct 2020	13 Nov 2020	23 Oct 2020
0407_SYDSEW06_0.2-0.3_	SE212451.011	LB211899	16 Oct 2020	16 Oct 2020	13 Nov 2020	23 Oct 2020	13 Nov 2020	23 Oct 2020
0407_SYDSEW06_2.9-3.0_	SE212451.012	LB211899	16 Oct 2020	16 Oct 2020	13 Nov 2020	23 Oct 2020	13 Nov 2020	23 Oct 2020
0407_QC193_201016	SE212451.013	LB211899	16 Oct 2020	16 Oct 2020	13 Nov 2020	23 Oct 2020	13 Nov 2020	23 Oct 2020
0407_SYDSEW07_0.2-0.3_	SE212451.014	LB211899	16 Oct 2020	16 Oct 2020	13 Nov 2020	23 Oct 2020	13 Nov 2020	23 Oct 2020
0407_SYDSEW07_0.6-0.7_	SE212451.015	LB211899	16 Oct 2020	16 Oct 2020	13 Nov 2020	23 Oct 2020	13 Nov 2020	23 Oct 2020
0407_SYDSEW08_0.2-0.3_	SE212451.016	LB211899	16 Oct 2020	16 Oct 2020	13 Nov 2020	23 Oct 2020	13 Nov 2020	23 Oct 2020
0407_SYDSEW08_1.7-1.8_	SE212451.017	LB211899	16 Oct 2020	16 Oct 2020	13 Nov 2020	23 Oct 2020	13 Nov 2020	23 Oct 2020
0407_SYDSEW09_0.2-0.3_	SE212451.018	LB211899	16 Oct 2020	16 Oct 2020	13 Nov 2020	23 Oct 2020	13 Nov 2020	23 Oct 2020
0407_SYDSEW09_0.6-0.7_	SE212451.019	LB211899	16 Oct 2020	16 Oct 2020	13 Nov 2020	23 Oct 2020	13 Nov 2020	23 Oct 2020
0407_SYDSEW10_0.2-0.3_	SE212451.020	LB211899	16 Oct 2020	16 Oct 2020	13 Nov 2020	23 Oct 2020	13 Nov 2020	23 Oct 2020
0407_SYDSEW10_0.6-0.7_	SE212451.021	LB211899	16 Oct 2020	16 Oct 2020	13 Nov 2020	23 Oct 2020	13 Nov 2020	26 Oct 2020
0407_SYDSEW11_0.1-0.2_	SE212451.022	LB211899	16 Oct 2020	16 Oct 2020	13 Nov 2020	23 Oct 2020	13 Nov 2020	26 Oct 2020
0407_SYDSEW11_1.8-1.9_	SE212451.023	LB211899	16 Oct 2020	16 Oct 2020	13 Nov 2020	23 Oct 2020	13 Nov 2020	26 Oct 2020

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref

HOLDING TIME SUMMARY

SE212451 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SYDSEW01_0.6-0.7_	SE212451.001	LB211690	16 Oct 2020	16 Oct 2020	14 Apr 2021	20 Oct 2020	14 Apr 2021	23 Oct 2020
0407_SYDSEW01_2.8-2.9_	SE212451.002	LB211690	16 Oct 2020	16 Oct 2020	14 Apr 2021	20 Oct 2020	14 Apr 2021	23 Oct 2020
0407_SYDSEW02_0.1-0.2_	SE212451.003	LB211690	16 Oct 2020	16 Oct 2020	14 Apr 2021	20 Oct 2020	14 Apr 2021	23 Oct 2020
0407_SYDSEW02_0.6-0.7_	SE212451.004	LB211690	16 Oct 2020	16 Oct 2020	14 Apr 2021	20 Oct 2020	14 Apr 2021	23 Oct 2020
0407_SYDSEW03_0.1-0.2_	SE212451.005	LB211690	16 Oct 2020	16 Oct 2020	14 Apr 2021	20 Oct 2020	14 Apr 2021	23 Oct 2020
0407_SYDSEW03_1.7-1.8_	SE212451.006	LB211690	16 Oct 2020	16 Oct 2020	14 Apr 2021	20 Oct 2020	14 Apr 2021	23 Oct 2020
0407_SYDSEW04_0.1-0.2_	SE212451.007	LB211690	16 Oct 2020	16 Oct 2020	14 Apr 2021	20 Oct 2020	14 Apr 2021	23 Oct 2020
0407_SYDSEW04_0.6-0.7_	SE212451.008	LB211690	16 Oct 2020	16 Oct 2020	14 Apr 2021	20 Oct 2020	14 Apr 2021	23 Oct 2020
0407_SYDSEW05_0.2-0.3_	SE212451.009	LB211690	16 Oct 2020	16 Oct 2020	14 Apr 2021	20 Oct 2020	14 Apr 2021	23 Oct 2020
0407_SYDSEW05_0.6-0.7_	SE212451.010	LB211690	16 Oct 2020	16 Oct 2020	14 Apr 2021	20 Oct 2020	14 Apr 2021	23 Oct 2020
0407_SYDSEW06_0.2-0.3_	SE212451.011	LB211690	16 Oct 2020	16 Oct 2020	14 Apr 2021	20 Oct 2020	14 Apr 2021	23 Oct 2020
0407_SYDSEW06_2.9-3.0_	SE212451.012	LB211690	16 Oct 2020	16 Oct 2020	14 Apr 2021	20 Oct 2020	14 Apr 2021	23 Oct 2020
0407_QC193_201016	SE212451.013	LB211690	16 Oct 2020	16 Oct 2020	14 Apr 2021	20 Oct 2020	14 Apr 2021	23 Oct 2020
0407_SYDSEW07_0.2-0.3_	SE212451.014	LB211690	16 Oct 2020	16 Oct 2020	14 Apr 2021	20 Oct 2020	14 Apr 2021	23 Oct 2020
0407_SYDSEW07_0.6-0.7_	SE212451.015	LB211690	16 Oct 2020	16 Oct 2020	14 Apr 2021	20 Oct 2020	14 Apr 2021	23 Oct 2020
0407_SYDSEW08_0.2-0.3_	SE212451.016	LB211690	16 Oct 2020	16 Oct 2020	14 Apr 2021	20 Oct 2020	14 Apr 2021	23 Oct 2020
0407_SYDSEW08_1.7-1.8_	SE212451.017	LB211690	16 Oct 2020	16 Oct 2020	14 Apr 2021	20 Oct 2020	14 Apr 2021	23 Oct 2020
0407_SYDSEW09_0.2-0.3_	SE212451.018	LB211690	16 Oct 2020	16 Oct 2020	14 Apr 2021	20 Oct 2020	14 Apr 2021	23 Oct 2020
0407_SYDSEW09_0.6-0.7_	SE212451.019	LB211690	16 Oct 2020	16 Oct 2020	14 Apr 2021	20 Oct 2020	14 Apr 2021	23 Oct 2020
0407_SYDSEW10_0.2-0.3_	SE212451.020	LB211831	16 Oct 2020	16 Oct 2020	14 Apr 2021	22 Oct 2020	14 Apr 2021	23 Oct 2020
0407_SYDSEW10_0.6-0.7_	SE212451.021	LB211831	16 Oct 2020	16 Oct 2020	14 Apr 2021	22 Oct 2020	14 Apr 2021	26 Oct 2020
0407_SYDSEW11_0.1-0.2_	SE212451.022	LB211831	16 Oct 2020	16 Oct 2020	14 Apr 2021	22 Oct 2020	14 Apr 2021	26 Oct 2020
0407_SYDSEW11_1.8-1.9_	SE212451.023	LB211831	16 Oct 2020	16 Oct 2020	14 Apr 2021	22 Oct 2020	14 Apr 2021	26 Oct 2020

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SYDSEW01_0.6-0.7_	SE212451.001	LB211657	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	26 Oct 2020
0407_SYDSEW01_2.8-2.9_	SE212451.002	LB211657	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	26 Oct 2020
0407_SYDSEW02_0.1-0.2_	SE212451.003	LB211657	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	26 Oct 2020
0407_SYDSEW02_0.6-0.7_	SE212451.004	LB211657	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	26 Oct 2020
0407_SYDSEW03_0.1-0.2_	SE212451.005	LB211657	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	26 Oct 2020
0407_SYDSEW03_1.7-1.8_	SE212451.006	LB211657	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	26 Oct 2020
0407_SYDSEW04_0.1-0.2_	SE212451.007	LB211657	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	26 Oct 2020
0407_SYDSEW04_0.6-0.7_	SE212451.008	LB211657	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	26 Oct 2020
0407_SYDSEW05_0.2-0.3_	SE212451.009	LB211657	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	26 Oct 2020
0407_SYDSEW05_0.6-0.7_	SE212451.010	LB211657	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	26 Oct 2020
0407_SYDSEW06_0.2-0.3_	SE212451.011	LB211657	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	26 Oct 2020
0407_SYDSEW06_2.9-3.0_	SE212451.012	LB211657	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	26 Oct 2020
0407_QC193_201016	SE212451.013	LB211657	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	26 Oct 2020
0407_SYDSEW07_0.2-0.3_	SE212451.014	LB211657	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	26 Oct 2020
0407_SYDSEW07_0.6-0.7_	SE212451.015	LB211657	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	26 Oct 2020
0407_SYDSEW08_0.2-0.3_	SE212451.016	LB211657	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	26 Oct 2020
0407_SYDSEW08_1.7-1.8_	SE212451.017	LB211657	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	26 Oct 2020
0407_SYDSEW09_0.2-0.3_	SE212451.018	LB211657	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	26 Oct 2020
0407_SYDSEW09_0.6-0.7_	SE212451.019	LB211657	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	26 Oct 2020
0407_SYDSEW10_0.2-0.3_	SE212451.020	LB211657	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	26 Oct 2020
0407_SYDSEW10_0.6-0.7_	SE212451.021	LB211658	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	26 Oct 2020
0407_SYDSEW11_0.1-0.2_	SE212451.022	LB211658	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	26 Oct 2020
0407_SYDSEW11_1.8-1.9_	SE212451.023	LB211658	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	26 Oct 2020
0407_QC523_201016 TS	SE212451.024	LB211658	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	26 Oct 2020
0407_QC523_201016 TB	SE212451.025	LB211658	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	26 Oct 2020

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SYDSEW01_0.6-0.7_	SE212451.001	LB211657	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	26 Oct 2020
0407_SYDSEW01_2.8-2.9_	SE212451.002	LB211657	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	26 Oct 2020
0407_SYDSEW02_0.1-0.2_	SE212451.003	LB211657	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	26 Oct 2020
0407_SYDSEW02_0.6-0.7_	SE212451.004	LB211657	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	26 Oct 2020
0407_SYDSEW03_0.1-0.2_	SE212451.005	LB211657	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	26 Oct 2020
0407_SYDSEW03_1.7-1.8_	SE212451.006	LB211657	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	26 Oct 2020
0407_SYDSEW04_0.1-0.2_	SE212451.007	LB211657	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	26 Oct 2020

HOLDING TIME SUMMARY

SE212451 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Volatile Petroleum Hydrocarbons in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SYDSEW04_0.6-0.7_	SE212451.008	LB211657	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	26 Oct 2020
0407_SYDSEW05_0.2-0.3_	SE212451.009	LB211657	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	26 Oct 2020
0407_SYDSEW05_0.6-0.7_	SE212451.010	LB211657	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	26 Oct 2020
0407_SYDSEW06_0.2-0.3_	SE212451.011	LB211657	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	26 Oct 2020
0407_SYDSEW06_2.9-3.0_	SE212451.012	LB211657	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	26 Oct 2020
0407_QC193_201016	SE212451.013	LB211657	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	26 Oct 2020
0407_SYDSEW07_0.2-0.3_	SE212451.014	LB211657	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	26 Oct 2020
0407_SYDSEW07_0.6-0.7_	SE212451.015	LB211657	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	26 Oct 2020
0407_SYDSEW08_0.2-0.3_	SE212451.016	LB211657	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	26 Oct 2020
0407_SYDSEW08_1.7-1.8_	SE212451.017	LB211657	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	26 Oct 2020
0407_SYDSEW09_0.2-0.3_	SE212451.018	LB211657	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	26 Oct 2020
0407_SYDSEW09_0.6-0.7_	SE212451.019	LB211657	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	26 Oct 2020
0407_SYDSEW10_0.2-0.3_	SE212451.020	LB211657	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	26 Oct 2020
0407_SYDSEW10_0.6-0.7_	SE212451.021	LB211658	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	26 Oct 2020
0407_SYDSEW11_0.1-0.2_	SE212451.022	LB211658	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	26 Oct 2020
0407_SYDSEW11_1.8-1.9_	SE212451.023	LB211658	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	26 Oct 2020
0407_QC523_201016 TS	SE212451.024	LB211658	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	26 Oct 2020
0407_QC523_201016 TB	SE212451.025	LB211658	16 Oct 2020	16 Oct 2020	30 Oct 2020	20 Oct 2020	29 Nov 2020	26 Oct 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples — **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C2_PFTeDA) Isotopically Labelled Internal Recovery Standard		SE212451.001	%	0 - 130%	59
		SE212451.002	%	0 - 130%	34
		SE212451.003	%	0 - 130%	82
		SE212451.004	%	0 - 130%	69
		SE212451.005	%	0 - 130%	48
		SE212451.006	%	0 - 130%	96
		SE212451.007	%	0 - 130%	69
		SE212451.008	%	0 - 130%	37
		SE212451.009	%	0 - 130%	94
		SE212451.010	%	0 - 130%	67
		SE212451.011	%	0 - 130%	106
		SE212451.012	%	0 - 130%	57
	0407_QC193_201016	SE212451.013	%	0 - 130%	59
		SE212451.014	%	0 - 130%	63
		SE212451.015	%	0 - 130%	79
		SE212451.016	%	0 - 130%	44
		SE212451.017	%	0 - 130%	49
		SE212451.018	%	0 - 130%	47
		SE212451.019	%	0 - 130%	43
		SE212451.020	%	0 - 130%	85
		SE212451.021	%	0 - 130%	72
		SE212451.022	%	0 - 130%	69
		SE212451.023	%	0 - 130%	47
(13C2-4:2 FTS) Isotopically Labelled Internal Recovery Standard		SE212451.001	%	0 - 150%	140
		SE212451.002	%	0 - 150%	145
		SE212451.003	%	0 - 150%	139
		SE212451.004	%	0 - 150%	156 †
		SE212451.005	%	0 - 150%	158 †
		SE212451.006	%	0 - 150%	163 †
		SE212451.007	%	0 - 150%	162 †
		SE212451.008	%	0 - 150%	128
		SE212451.009	%	0 - 150%	153 †
		SE212451.010	%	0 - 150%	129
		SE212451.011	%	0 - 150%	143
		SE212451.012	%	0 - 150%	132
	0407_QC193_201016	SE212451.013	%	0 - 150%	131
		SE212451.014	%	0 - 150%	151 †
		SE212451.015	%	0 - 150%	164 †
		SE212451.016	%	0 - 150%	137
		SE212451.017	%	0 - 150%	125
		SE212451.018	%	0 - 150%	174 †
		SE212451.019	%	0 - 150%	138
		SE212451.020	%	0 - 150%	146
		SE212451.021	%	0 - 150%	135
		SE212451.022	%	0 - 150%	157 †
		SE212451.023	%	0 - 150%	134
(13C2-6:2 FTS) Isotopically Labelled Internal Recovery Standard		SE212451.001	%	0 - 150%	134
		SE212451.002	%	0 - 150%	126
		SE212451.003	%	0 - 150%	138
		SE212451.004	%	0 - 150%	134
		SE212451.005	%	0 - 150%	153 †
		SE212451.006	%	0 - 150%	172 †
		SE212451.007	%	0 - 150%	165 †
		SE212451.008	%	0 - 150%	135
		SE212451.009	%	0 - 150%	136
		SE212451.010	%	0 - 150%	146
		SE212451.011	%	0 - 150%	141
		SE212451.012	%	0 - 150%	127
	0407_QC193_201016	SE212451.013	%	0 - 150%	127
		SE212451.014	%	0 - 150%	141
		SE212451.015	%	0 - 150%	160 †

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples (continued) — **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C2-6:2 FTS) Isotopically Labelled Internal Recovery Standard		SE212451.016	%	0 - 150%	125
		SE212451.017	%	0 - 150%	118
		SE212451.018	%	0 - 150%	143
		SE212451.019	%	0 - 150%	127
		SE212451.020	%	0 - 150%	131
		SE212451.021	%	0 - 150%	124
		SE212451.022	%	0 - 150%	135
		SE212451.023	%	0 - 150%	129
(13C2-8:2 FTS) Isotopically Labelled Internal Recovery Standard		SE212451.001	%	0 - 150%	126
		SE212451.002	%	0 - 150%	106
		SE212451.003	%	0 - 150%	138
		SE212451.004	%	0 - 150%	142
		SE212451.005	%	0 - 150%	126
		SE212451.006	%	0 - 150%	156 †
		SE212451.007	%	0 - 150%	143
		SE212451.008	%	0 - 150%	129
		SE212451.009	%	0 - 150%	152 †
		SE212451.010	%	0 - 150%	123
		SE212451.011	%	0 - 150%	133
		SE212451.012	%	0 - 150%	123
	0407_QC193_201016	SE212451.013	%	0 - 150%	108
		SE212451.014	%	0 - 150%	136
		SE212451.015	%	0 - 150%	151 †
		SE212451.016	%	0 - 150%	100
		SE212451.017	%	0 - 150%	132
		SE212451.018	%	0 - 150%	139
		SE212451.019	%	0 - 150%	119
		SE212451.020	%	0 - 150%	116
		SE212451.021	%	0 - 150%	130
		SE212451.022	%	0 - 150%	147
		SE212451.023	%	0 - 150%	129
(13C2-PFDoA) Isotopically Labelled Internal Recovery Standard		SE212451.001	%	0 - 150%	101
		SE212451.002	%	0 - 150%	89
		SE212451.003	%	0 - 150%	115
		SE212451.004	%	0 - 150%	110
		SE212451.005	%	0 - 150%	90
		SE212451.006	%	0 - 150%	128
		SE212451.007	%	0 - 150%	111
		SE212451.008	%	0 - 150%	90
		SE212451.009	%	0 - 150%	122
		SE212451.010	%	0 - 150%	107
		SE212451.011	%	0 - 150%	103
		SE212451.012	%	0 - 150%	90
	0407_QC193_201016	SE212451.013	%	0 - 150%	98
		SE212451.014	%	0 - 150%	107
		SE212451.015	%	0 - 150%	105
		SE212451.016	%	0 - 150%	97
		SE212451.017	%	0 - 150%	91
		SE212451.018	%	0 - 150%	87
		SE212451.019	%	0 - 150%	95
		SE212451.020	%	0 - 150%	104
		SE212451.021	%	0 - 150%	108
		SE212451.022	%	0 - 150%	109
		SE212451.023	%	0 - 150%	99
(13C2-PFHxDA) Isotopically Labelled Internal Recovery Standard		SE212451.001	%	0 - 150%	12
		SE212451.002	%	0 - 150%	7
		SE212451.003	%	0 - 150%	38
		SE212451.004	%	0 - 150%	15
		SE212451.005	%	0 - 150%	10
		SE212451.006	%	0 - 150%	22
		SE212451.007	%	0 - 150%	20

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples (continued) **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C2-PFHxDA) Isotopically Labelled Internal Recovery Standard		SE212451.008	%	0 - 150%	4
		SE212451.009	%	0 - 150%	30
		SE212451.010	%	0 - 150%	13
		SE212451.011	%	0 - 150%	20
		SE212451.012	%	0 - 150%	8
	0407_QC193_201016	SE212451.013	%	0 - 150%	11
		SE212451.014	%	0 - 150%	13
		SE212451.015	%	0 - 150%	22
		SE212451.016	%	0 - 150%	5
		SE212451.017	%	0 - 150%	12
		SE212451.018	%	0 - 150%	10
		SE212451.019	%	0 - 150%	5
		SE212451.020	%	0 - 150%	20
		SE212451.021	%	0 - 150%	17
		SE212451.022	%	0 - 150%	21
		SE212451.023	%	0 - 150%	10
(13C3-PFBS) Isotopically Labelled Internal Recovery Standard		SE212451.001	%	0 - 150%	100
		SE212451.002	%	0 - 150%	96
		SE212451.003	%	0 - 150%	92
		SE212451.004	%	0 - 150%	98
		SE212451.005	%	0 - 150%	91
		SE212451.006	%	0 - 150%	95
		SE212451.007	%	0 - 150%	99
		SE212451.008	%	0 - 150%	94
		SE212451.009	%	0 - 150%	98
		SE212451.010	%	0 - 150%	95
		SE212451.011	%	0 - 150%	94
		SE212451.012	%	0 - 150%	95
	0407_QC193_201016	SE212451.013	%	0 - 150%	91
		SE212451.014	%	0 - 150%	92
		SE212451.015	%	0 - 150%	100
		SE212451.016	%	0 - 150%	97
		SE212451.017	%	0 - 150%	90
		SE212451.018	%	0 - 150%	96
		SE212451.019	%	0 - 150%	93
		SE212451.020	%	0 - 150%	93
		SE212451.021	%	0 - 150%	94
		SE212451.022	%	0 - 150%	94
		SE212451.023	%	0 - 150%	95
(13C3-PFHxS) Isotopically Labelled Internal Recovery Standard		SE212451.001	%	0 - 150%	103
		SE212451.002	%	0 - 150%	98
		SE212451.003	%	0 - 150%	99
		SE212451.004	%	0 - 150%	111
		SE212451.005	%	0 - 150%	93
		SE212451.006	%	0 - 150%	109
		SE212451.007	%	0 - 150%	104
		SE212451.008	%	0 - 150%	101
		SE212451.009	%	0 - 150%	101
		SE212451.010	%	0 - 150%	101
		SE212451.011	%	0 - 150%	102
		SE212451.012	%	0 - 150%	100
	0407_QC193_201016	SE212451.013	%	0 - 150%	96
		SE212451.014	%	0 - 150%	101
		SE212451.015	%	0 - 150%	97
		SE212451.016	%	0 - 150%	100
		SE212451.017	%	0 - 150%	97
		SE212451.018	%	0 - 150%	110
		SE212451.019	%	0 - 150%	110
		SE212451.020	%	0 - 150%	102
		SE212451.021	%	0 - 150%	103
		SE212451.022	%	0 - 150%	100

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples (continued) **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C3-PFHxS) Isotopically Labelled Internal Recovery Standard		SE212451.023	%	0 - 150%	108
(13C4_PFOA) Isotopically Labelled Internal Recovery Standard		SE212451.001	%	0 - 150%	98
		SE212451.002	%	0 - 150%	90
		SE212451.003	%	0 - 150%	99
		SE212451.004	%	0 - 150%	99
		SE212451.005	%	0 - 150%	107
		SE212451.006	%	0 - 150%	98
		SE212451.007	%	0 - 150%	94
		SE212451.008	%	0 - 150%	104
		SE212451.009	%	0 - 150%	104
		SE212451.010	%	0 - 150%	95
		SE212451.011	%	0 - 150%	102
		SE212451.012	%	0 - 150%	97
	0407_QC193_201016	SE212451.013	%	0 - 150%	100
		SE212451.014	%	0 - 150%	103
		SE212451.015	%	0 - 150%	98
		SE212451.016	%	0 - 150%	100
		SE212451.017	%	0 - 150%	99
		SE212451.018	%	0 - 150%	100
		SE212451.019	%	0 - 150%	107
		SE212451.020	%	0 - 150%	108
		SE212451.021	%	0 - 150%	99
		SE212451.022	%	0 - 150%	102
		SE212451.023	%	0 - 150%	102
(13C4-PFBA) Isotopically Labelled Internal Recovery Standard		SE212451.001	%	0 - 150%	101
		SE212451.002	%	0 - 150%	99
		SE212451.003	%	0 - 150%	100
		SE212451.004	%	0 - 150%	102
		SE212451.005	%	0 - 150%	103
		SE212451.006	%	0 - 150%	100
		SE212451.007	%	0 - 150%	102
		SE212451.008	%	0 - 150%	105
		SE212451.009	%	0 - 150%	101
		SE212451.010	%	0 - 150%	100
		SE212451.011	%	0 - 150%	105
		SE212451.012	%	0 - 150%	100
	0407_QC193_201016	SE212451.013	%	0 - 150%	100
		SE212451.014	%	0 - 150%	103
		SE212451.015	%	0 - 150%	100
		SE212451.016	%	0 - 150%	102
		SE212451.017	%	0 - 150%	102
		SE212451.018	%	0 - 150%	101
		SE212451.019	%	0 - 150%	102
		SE212451.020	%	0 - 150%	102
		SE212451.021	%	0 - 150%	102
		SE212451.022	%	0 - 150%	100
		SE212451.023	%	0 - 150%	101
(13C4-PFHpA) Isotopically Labelled Internal Recovery Standard		SE212451.001	%	0 - 150%	98
		SE212451.002	%	0 - 150%	95
		SE212451.003	%	0 - 150%	96
		SE212451.004	%	0 - 150%	100
		SE212451.005	%	0 - 150%	102
		SE212451.006	%	0 - 150%	95
		SE212451.007	%	0 - 150%	102
		SE212451.008	%	0 - 150%	100
		SE212451.009	%	0 - 150%	101
		SE212451.010	%	0 - 150%	91
		SE212451.011	%	0 - 150%	96
		SE212451.012	%	0 - 150%	101
	0407_QC193_201016	SE212451.013	%	0 - 150%	96
		SE212451.014	%	0 - 150%	100

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples (continued) **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C4-PFHpA) Isotopically Labelled Internal Recovery Standard		SE212451.015	%	0 - 150%	101
		SE212451.016	%	0 - 150%	99
		SE212451.017	%	0 - 150%	97
		SE212451.018	%	0 - 150%	107
		SE212451.019	%	0 - 150%	103
		SE212451.020	%	0 - 150%	97
		SE212451.021	%	0 - 150%	102
		SE212451.022	%	0 - 150%	103
		SE212451.023	%	0 - 150%	100
(13C5-PFHxA) Isotopically Labelled Internal Recovery Standard		SE212451.001	%	0 - 150%	97
		SE212451.002	%	0 - 150%	92
		SE212451.003	%	0 - 150%	91
		SE212451.004	%	0 - 150%	95
		SE212451.005	%	0 - 150%	100
		SE212451.006	%	0 - 150%	94
		SE212451.007	%	0 - 150%	97
		SE212451.008	%	0 - 150%	97
		SE212451.009	%	0 - 150%	100
		SE212451.010	%	0 - 150%	91
		SE212451.011	%	0 - 150%	96
		SE212451.012	%	0 - 150%	93
	0407_QC193_201016	SE212451.013	%	0 - 150%	99
		SE212451.014	%	0 - 150%	96
		SE212451.015	%	0 - 150%	98
		SE212451.016	%	0 - 150%	104
		SE212451.017	%	0 - 150%	97
		SE212451.018	%	0 - 150%	101
		SE212451.019	%	0 - 150%	100
		SE212451.020	%	0 - 150%	102
		SE212451.021	%	0 - 150%	95
		SE212451.022	%	0 - 150%	104
		SE212451.023	%	0 - 150%	94
(13C5-PFPeA) Isotopically Labelled Internal Recovery Standard		SE212451.001	%	0 - 150%	101
		SE212451.002	%	0 - 150%	102
		SE212451.003	%	0 - 150%	104
		SE212451.004	%	0 - 150%	104
		SE212451.005	%	0 - 150%	106
		SE212451.006	%	0 - 150%	108
		SE212451.007	%	0 - 150%	106
		SE212451.008	%	0 - 150%	105
		SE212451.009	%	0 - 150%	106
		SE212451.010	%	0 - 150%	104
		SE212451.011	%	0 - 150%	107
		SE212451.012	%	0 - 150%	103
	0407_QC193_201016	SE212451.013	%	0 - 150%	104
		SE212451.014	%	0 - 150%	104
		SE212451.015	%	0 - 150%	105
		SE212451.016	%	0 - 150%	102
		SE212451.017	%	0 - 150%	103
		SE212451.018	%	0 - 150%	106
		SE212451.019	%	0 - 150%	102
		SE212451.020	%	0 - 150%	106
		SE212451.021	%	0 - 150%	106
		SE212451.022	%	0 - 150%	104
		SE212451.023	%	0 - 150%	104
(13C6-PFDA) Isotopically Labelled Internal Recovery Standard		SE212451.001	%	0 - 150%	102
		SE212451.002	%	0 - 150%	109
		SE212451.003	%	0 - 150%	104
		SE212451.004	%	0 - 150%	119
		SE212451.005	%	0 - 150%	118
		SE212451.006	%	0 - 150%	107

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples (continued) **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C6-PFDA) Isotopically Labelled Internal Recovery Standard		SE212451.007	%	0 - 150%	115
		SE212451.008	%	0 - 150%	96
		SE212451.009	%	0 - 150%	114
		SE212451.010	%	0 - 150%	106
		SE212451.011	%	0 - 150%	98
		SE212451.012	%	0 - 150%	108
	0407_QC193_201016	SE212451.013	%	0 - 150%	105
		SE212451.014	%	0 - 150%	113
		SE212451.015	%	0 - 150%	94
		SE212451.016	%	0 - 150%	113
		SE212451.017	%	0 - 150%	102
		SE212451.018	%	0 - 150%	103
		SE212451.019	%	0 - 150%	101
		SE212451.020	%	0 - 150%	111
		SE212451.021	%	0 - 150%	123
		SE212451.022	%	0 - 150%	119
		SE212451.023	%	0 - 150%	99
(13C7-PFUdA) Isotopically Labelled Internal Recovery Standard		SE212451.001	%	0 - 150%	107
		SE212451.002	%	0 - 150%	104
		SE212451.003	%	0 - 150%	123
		SE212451.004	%	0 - 150%	106
		SE212451.005	%	0 - 150%	106
		SE212451.006	%	0 - 150%	118
		SE212451.007	%	0 - 150%	114
		SE212451.008	%	0 - 150%	96
		SE212451.009	%	0 - 150%	122
		SE212451.010	%	0 - 150%	106
		SE212451.011	%	0 - 150%	103
		SE212451.012	%	0 - 150%	89
	0407_QC193_201016	SE212451.013	%	0 - 150%	97
		SE212451.014	%	0 - 150%	100
		SE212451.015	%	0 - 150%	113
		SE212451.016	%	0 - 150%	104
		SE212451.017	%	0 - 150%	104
		SE212451.018	%	0 - 150%	88
		SE212451.019	%	0 - 150%	113
		SE212451.020	%	0 - 150%	107
		SE212451.021	%	0 - 150%	120
		SE212451.022	%	0 - 150%	130
		SE212451.023	%	0 - 150%	112
(13C8-PFOS) Isotopically Labelled Internal Recovery Standard		SE212451.001	%	0 - 150%	119
		SE212451.002	%	0 - 150%	117
		SE212451.003	%	0 - 150%	99
		SE212451.004	%	0 - 150%	100
		SE212451.005	%	0 - 150%	112
		SE212451.006	%	0 - 150%	114
		SE212451.007	%	0 - 150%	117
		SE212451.008	%	0 - 150%	107
		SE212451.009	%	0 - 150%	98
		SE212451.010	%	0 - 150%	105
		SE212451.011	%	0 - 150%	99
		SE212451.012	%	0 - 150%	113
	0407_QC193_201016	SE212451.013	%	0 - 150%	128
		SE212451.014	%	0 - 150%	97
		SE212451.015	%	0 - 150%	92
		SE212451.016	%	0 - 150%	97
		SE212451.017	%	0 - 150%	114
		SE212451.018	%	0 - 150%	107
		SE212451.019	%	0 - 150%	101
		SE212451.020	%	0 - 150%	94
		SE212451.021	%	0 - 150%	119

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples (continued) **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C8-PFOS) Isotopically Labelled Internal Recovery Standard		SE212451.022	%	0 - 150%	111
		SE212451.023	%	0 - 150%	93
(13C8-PFOSA) Isotopically Labelled Internal Recovery Standard		SE212451.001	%	0 - 150%	68
		SE212451.002	%	0 - 150%	83
		SE212451.003	%	0 - 150%	66
		SE212451.004	%	0 - 150%	65
		SE212451.005	%	0 - 150%	77
		SE212451.006	%	0 - 150%	72
		SE212451.007	%	0 - 150%	76
		SE212451.008	%	0 - 150%	76
		SE212451.009	%	0 - 150%	76
		SE212451.010	%	0 - 150%	71
		SE212451.011	%	0 - 150%	73
		SE212451.012	%	0 - 150%	77
	0407_QC193_201016	SE212451.013	%	0 - 150%	92
		SE212451.014	%	0 - 150%	68
		SE212451.015	%	0 - 150%	68
		SE212451.016	%	0 - 150%	73
		SE212451.017	%	0 - 150%	71
		SE212451.018	%	0 - 150%	69
		SE212451.019	%	0 - 150%	74
		SE212451.020	%	0 - 150%	68
		SE212451.021	%	0 - 150%	74
		SE212451.022	%	0 - 150%	73
		SE212451.023	%	0 - 150%	70
(13C9-PFNA) Isotopically Labelled Internal Recovery Standard		SE212451.001	%	0 - 150%	104
		SE212451.002	%	0 - 150%	102
		SE212451.003	%	0 - 150%	105
		SE212451.004	%	0 - 150%	94
		SE212451.005	%	0 - 150%	100
		SE212451.006	%	0 - 150%	96
		SE212451.007	%	0 - 150%	110
		SE212451.008	%	0 - 150%	95
		SE212451.009	%	0 - 150%	96
		SE212451.010	%	0 - 150%	100
		SE212451.011	%	0 - 150%	108
		SE212451.012	%	0 - 150%	114
	0407_QC193_201016	SE212451.013	%	0 - 150%	92
		SE212451.014	%	0 - 150%	101
		SE212451.015	%	0 - 150%	97
		SE212451.016	%	0 - 150%	100
		SE212451.017	%	0 - 150%	94
		SE212451.018	%	0 - 150%	101
		SE212451.019	%	0 - 150%	98
		SE212451.020	%	0 - 150%	108
		SE212451.021	%	0 - 150%	104
		SE212451.022	%	0 - 150%	110
		SE212451.023	%	0 - 150%	104
(D3-N-MeFOSA) Isotopically Labelled Internal Recovery Standard		SE212451.001	%	0 - 150%	62
		SE212451.002	%	0 - 150%	52
		SE212451.003	%	0 - 150%	61
		SE212451.004	%	0 - 150%	47
		SE212451.005	%	0 - 150%	49
		SE212451.006	%	0 - 150%	51
		SE212451.007	%	0 - 150%	60
		SE212451.008	%	0 - 150%	64
		SE212451.009	%	0 - 150%	58
		SE212451.010	%	0 - 150%	52
		SE212451.011	%	0 - 150%	51
		SE212451.012	%	0 - 150%	61
	0407_QC193_201016	SE212451.013	%	0 - 150%	70

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples (continued) **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(D3-N-MeFOSA) Isotopically Labelled Internal Recovery Standard		SE212451.014	%	0 - 150%	60
		SE212451.015	%	0 - 150%	46
		SE212451.016	%	0 - 150%	59
		SE212451.017	%	0 - 150%	60
		SE212451.018	%	0 - 150%	62
		SE212451.019	%	0 - 150%	59
		SE212451.020	%	0 - 150%	55
		SE212451.021	%	0 - 150%	58
		SE212451.022	%	0 - 150%	50
		SE212451.023	%	0 - 150%	48
(D3-N-MeFOSAA) Isotopically Labelled Internal Recovery Standard		SE212451.001	%	0 - 150%	103
		SE212451.002	%	0 - 150%	111
		SE212451.003	%	0 - 150%	88
		SE212451.004	%	0 - 150%	101
		SE212451.005	%	0 - 150%	109
		SE212451.006	%	0 - 150%	106
		SE212451.007	%	0 - 150%	100
		SE212451.008	%	0 - 150%	100
		SE212451.009	%	0 - 150%	106
		SE212451.010	%	0 - 150%	91
		SE212451.011	%	0 - 150%	91
		SE212451.012	%	0 - 150%	101
	0407_QC193_201016	SE212451.013	%	0 - 150%	124
		SE212451.014	%	0 - 150%	86
		SE212451.015	%	0 - 150%	95
		SE212451.016	%	0 - 150%	75
		SE212451.017	%	0 - 150%	103
		SE212451.018	%	0 - 150%	109
		SE212451.019	%	0 - 150%	79
		SE212451.020	%	0 - 150%	94
		SE212451.021	%	0 - 150%	107
		SE212451.022	%	0 - 150%	107
		SE212451.023	%	0 - 150%	90
(D5-N-EtFOSA) Isotopically Labelled Internal Recovery Standard		SE212451.001	%	0 - 150%	50
		SE212451.002	%	0 - 150%	44
		SE212451.003	%	0 - 150%	56
		SE212451.004	%	0 - 150%	44
		SE212451.005	%	0 - 150%	42
		SE212451.006	%	0 - 150%	46
		SE212451.007	%	0 - 150%	52
		SE212451.008	%	0 - 150%	55
		SE212451.009	%	0 - 150%	52
		SE212451.010	%	0 - 150%	47
		SE212451.011	%	0 - 150%	52
		SE212451.012	%	0 - 150%	60
	0407_QC193_201016	SE212451.013	%	0 - 150%	58
		SE212451.014	%	0 - 150%	49
		SE212451.015	%	0 - 150%	39
		SE212451.016	%	0 - 150%	45
		SE212451.017	%	0 - 150%	56
		SE212451.018	%	0 - 150%	51
		SE212451.019	%	0 - 150%	49
		SE212451.020	%	0 - 150%	53
		SE212451.021	%	0 - 150%	56
		SE212451.022	%	0 - 150%	56
		SE212451.023	%	0 - 150%	40
(D5-N-EtFOSAA) Isotopically Labelled Internal Recovery Standard		SE212451.001	%	0 - 150%	93
		SE212451.002	%	0 - 150%	82
		SE212451.003	%	0 - 150%	99
		SE212451.004	%	0 - 150%	89
		SE212451.005	%	0 - 150%	94

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples (continued) **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(D5-N-EtFOSAA) Isotopically Labelled Internal Recovery Standard		SE212451.006	%	0 - 150%	118
		SE212451.007	%	0 - 150%	85
		SE212451.008	%	0 - 150%	92
		SE212451.009	%	0 - 150%	105
		SE212451.010	%	0 - 150%	91
		SE212451.011	%	0 - 150%	97
		SE212451.012	%	0 - 150%	95
	0407_QC193_201016	SE212451.013	%	0 - 150%	106
		SE212451.014	%	0 - 150%	83
		SE212451.015	%	0 - 150%	89
		SE212451.016	%	0 - 150%	66
		SE212451.017	%	0 - 150%	87
		SE212451.018	%	0 - 150%	100
		SE212451.019	%	0 - 150%	85
		SE212451.020	%	0 - 150%	98
		SE212451.021	%	0 - 150%	116
		SE212451.022	%	0 - 150%	90
		SE212451.023	%	0 - 150%	77
(D7-N-MeFOSE) Isotopically Labelled Internal Recovery Standard		SE212451.001	%	0 - 150%	79
		SE212451.002	%	0 - 150%	80
		SE212451.003	%	0 - 150%	74
		SE212451.004	%	0 - 150%	70
		SE212451.005	%	0 - 150%	67
		SE212451.006	%	0 - 150%	76
		SE212451.007	%	0 - 150%	75
		SE212451.008	%	0 - 150%	75
		SE212451.009	%	0 - 150%	77
		SE212451.010	%	0 - 150%	74
		SE212451.011	%	0 - 150%	73
		SE212451.012	%	0 - 150%	79
	0407_QC193_201016	SE212451.013	%	0 - 150%	98
		SE212451.014	%	0 - 150%	70
		SE212451.015	%	0 - 150%	64
		SE212451.016	%	0 - 150%	71
		SE212451.017	%	0 - 150%	78
		SE212451.018	%	0 - 150%	74
		SE212451.019	%	0 - 150%	79
		SE212451.020	%	0 - 150%	78
		SE212451.021	%	0 - 150%	77
		SE212451.022	%	0 - 150%	80
		SE212451.023	%	0 - 150%	66
(D9-N-EtFOSE) Isotopically Labelled Internal Recovery Standard		SE212451.001	%	0 - 150%	79
		SE212451.002	%	0 - 150%	68
		SE212451.003	%	0 - 150%	78
		SE212451.004	%	0 - 150%	62
		SE212451.005	%	0 - 150%	67
		SE212451.006	%	0 - 150%	73
		SE212451.007	%	0 - 150%	78
		SE212451.008	%	0 - 150%	73
		SE212451.009	%	0 - 150%	82
		SE212451.010	%	0 - 150%	67
		SE212451.011	%	0 - 150%	82
		SE212451.012	%	0 - 150%	82
	0407_QC193_201016	SE212451.013	%	0 - 150%	86
		SE212451.014	%	0 - 150%	69
		SE212451.015	%	0 - 150%	77
		SE212451.016	%	0 - 150%	71
		SE212451.017	%	0 - 150%	78
		SE212451.018	%	0 - 150%	86
		SE212451.019	%	0 - 150%	67
		SE212451.020	%	0 - 150%	76

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples (continued)

Method: MA-1523

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(D9-N-EtFOSE) Isotopically Labelled Internal Recovery Standard		SE212451.021	%	0 - 150%	74
		SE212451.022	%	0 - 150%	78
		SE212451.023	%	0 - 150%	58

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)		SE212451.001	%	60 - 130%	64
		SE212451.002	%	60 - 130%	78
		SE212451.003	%	60 - 130%	82
		SE212451.004	%	60 - 130%	91
		SE212451.005	%	60 - 130%	75
		SE212451.006	%	60 - 130%	79
		SE212451.007	%	60 - 130%	77
		SE212451.008	%	60 - 130%	75
		SE212451.009	%	60 - 130%	89
		SE212451.010	%	60 - 130%	70
		SE212451.011	%	60 - 130%	91
		SE212451.012	%	60 - 130%	92
	0407_QC193_201016	SE212451.013	%	60 - 130%	91
		SE212451.014	%	60 - 130%	86
		SE212451.015	%	60 - 130%	79
		SE212451.016	%	60 - 130%	83
		SE212451.017	%	60 - 130%	86
		SE212451.018	%	60 - 130%	75
		SE212451.019	%	60 - 130%	87
		SE212451.020	%	60 - 130%	96
		SE212451.021	%	60 - 130%	82
		SE212451.022	%	60 - 130%	89
		SE212451.023	%	60 - 130%	71
	0407_QC523_201016 TS	SE212451.024	%	60 - 130%	84
	0407_QC523_201016 TB	SE212451.025	%	60 - 130%	71
d4-1,2-dichloroethane (Surrogate)		SE212451.001	%	60 - 130%	80
		SE212451.002	%	60 - 130%	78
		SE212451.003	%	60 - 130%	89
		SE212451.004	%	60 - 130%	93
		SE212451.005	%	60 - 130%	79
		SE212451.006	%	60 - 130%	76
		SE212451.007	%	60 - 130%	79
		SE212451.008	%	60 - 130%	78
		SE212451.009	%	60 - 130%	95
		SE212451.010	%	60 - 130%	86
		SE212451.011	%	60 - 130%	100
		SE212451.012	%	60 - 130%	93
	0407_QC193_201016	SE212451.013	%	60 - 130%	96
		SE212451.014	%	60 - 130%	82
		SE212451.015	%	60 - 130%	82
		SE212451.016	%	60 - 130%	91
		SE212451.017	%	60 - 130%	97
		SE212451.018	%	60 - 130%	83
		SE212451.019	%	60 - 130%	80
		SE212451.020	%	60 - 130%	96
		SE212451.021	%	60 - 130%	87
		SE212451.022	%	60 - 130%	81
		SE212451.023	%	60 - 130%	77
	0407_QC523_201016 TS	SE212451.024	%	60 - 130%	92
	0407_QC523_201016 TB	SE212451.025	%	60 - 130%	93
d8-toluene (Surrogate)		SE212451.001	%	60 - 130%	73
		SE212451.002	%	60 - 130%	73
		SE212451.003	%	60 - 130%	75
		SE212451.004	%	60 - 130%	77
		SE212451.005	%	60 - 130%	71

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d8-toluene (Surrogate)		SE212451.006	%	60 - 130%	70
		SE212451.007	%	60 - 130%	74
		SE212451.008	%	60 - 130%	72
		SE212451.009	%	60 - 130%	79
		SE212451.010	%	60 - 130%	92
		SE212451.011	%	60 - 130%	87
		SE212451.012	%	60 - 130%	85
	0407_QC193_201016	SE212451.013	%	60 - 130%	80
		SE212451.014	%	60 - 130%	76
		SE212451.015	%	60 - 130%	70
		SE212451.016	%	60 - 130%	80
		SE212451.017	%	60 - 130%	82
		SE212451.018	%	60 - 130%	72
		SE212451.019	%	60 - 130%	79
		SE212451.020	%	60 - 130%	83
		SE212451.021	%	60 - 130%	76
		SE212451.022	%	60 - 130%	78
		SE212451.023	%	60 - 130%	62
	0407_QC523_201016 TS	SE212451.024	%	60 - 130%	82
	0407_QC523_201016 TB	SE212451.025	%	60 - 130%	80

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_QC523_201016 TB	SE212451.025	%	60 - 130%	71
d4-1,2-dichloroethane (Surrogate)	0407_QC523_201016 TB	SE212451.025	%	60 - 130%	93
d8-toluene (Surrogate)	0407_QC523_201016 TB	SE212451.025	%	60 - 130%	80

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Ammonia Nitrogen (soluble) in Soil

Method: ME-(AU)-[ENV]AN291

Sample Number	Parameter	Units	LOR	Result
LB211901.001	Ammonia Nitrogen, NH_3 as N	mg/kg	0.2	<0.2

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result
LB211693.001	Mercury	mg/kg	0.05	<0.05
LB211834.001	Mercury	mg/kg	0.05	<0.05

Soluble Anions (1:5) in Soil by Ion Chromatography

Method: ME-(AU)-[ENV]AN245

Sample Number	Parameter	Units	LOR	Result
LB211903.001	Nitrate Nitrogen	mg/kg	0.025	<0.025
	Sulfate	mg/kg	5	<5.0

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB211690.001	Arsenic, As	mg/kg	1	<1
	Beryllium, Be	mg/kg	0.5	<0.5
	Cadmium, Cd	mg/kg	0.3	<0.3
	Cobalt, Co	mg/kg	0.5	<0.5
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Manganese, Mn	mg/kg	1	<1
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0
LB211831.001	Arsenic, As	mg/kg	1	<1
	Beryllium, Be	mg/kg	0.5	<0.5
	Cadmium, Cd	mg/kg	0.3	<0.3
	Cobalt, Co	mg/kg	0.5	<0.5
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Manganese, Mn	mg/kg	1	<1
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB211657.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB211657.001	Halogenated Aliphatics	Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic	Benzene	mg/kg	0.1	<0.1
	Hydrocarbons	Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10
		MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	100
		d8-toluene (Surrogate)	%	-	84
		Bromofluorobenzene (Surrogate)	%	-	90
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1
LB211658.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB211658.001	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10
		MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB211658.001	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	80
		d8-toluene (Surrogate)	%	-	73
		Bromofluorobenzene (Surrogate)	%	-	89
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB211658.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	80

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Ammonia Nitrogen (soluble) in Soil

Method: ME-(AU)-[ENV]AN291

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212451.010	LB211901.014	Ammonia Nitrogen, NH_3 as N	mg/kg	0.2	<0.2	0.3	118	34
SE212451.020	LB211901.028	Ammonia Nitrogen, NH_3 as N	mg/kg	0.2	1.7	1.7	42	2

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212451.010	LB211693.014	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE212451.019	LB211693.024	Mercury	mg/kg	0.05	0.05	0.05	122	1
SE212484.001	LB211834.009	Mercury	mg/kg	0.05	<0.05	<0.05	200	0

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212451.010	LB211677.011	% Moisture	%w/w	1	7.2	7.2	44	1
SE212451.020	LB211677.022	% Moisture	%w/w	1	3.9	3.7	57	5
SE212500.005	LB211678.011	% Moisture	%w/w	1	14.865424430	16.690442225	36	12
SE212500.012	LB211678.019	% Moisture	%w/w	1	17.560151962	19.367369589	35	10

Nitrite Nitrogen in Soil

Method: ME-(AU)-[ENV]AN277

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212451.010	LB211900.014	Nitrite, NO_2 as N in Soil*	mg/kg	0.05	<0.05	<0.05	188	0
SE212451.020	LB211900.028	Nitrite, NO_2 as N in Soil*	mg/kg	0.05	0.14	0.16	49	13
SE212451.023	LB211900.032	Nitrite, NO_2 as N in Soil*	mg/kg	0.05	0.06	<0.05	129	14

Soluble Anions (1:5) in Soil by Ion Chromatography

Method: ME-(AU)-[ENV]AN245

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212451.010	LB211903.014	Nitrate Nitrogen	mg/kg	0.025	0.71	0.77	37	8
		ortho Phosphate as P	mg/kg	0.25	<0.25	<0.25	200	0
		Sulfate	mg/kg	5	5.9	5.6	117	5
SE212451.020	LB211903.028	Nitrate Nitrogen	mg/kg	0.025	5.2	7.5	31	37 ②
		ortho Phosphate as P	mg/kg	0.25	0.29	0.30	115	4
		Sulfate	mg/kg	5	76	100	36	28
SE212451.023	LB211903.032	Nitrate Nitrogen	mg/kg	0.025	0.088	0.085	88	4
		ortho Phosphate as P	mg/kg	0.25	<0.25	<0.25	200	0
		Sulfate	mg/kg	5	<5.0	<5.0	159	0

TKN Kjeldahl Digestion by Discrete Analyser in Soil

Method: ME-(AU)-[ENV]AN292

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212451.010	LB211899.014	Total Kjeldahl Nitrogen	mg/kg	40	330	330	36	0
		Total Nitrogen (calc)	mg/kg	40	330	330	36	0
SE212451.020	LB211899.028	Total Kjeldahl Nitrogen	mg/kg	40	350	370	36	7
		Total Nitrogen (calc)	mg/kg	40	350	380	35	7
SE212451.023	LB211899.032	Total Kjeldahl Nitrogen	mg/kg	40	<40	42	81	15
		Total Nitrogen (calc)	mg/kg	40	<40	42	81	15

Total Phosphorus by Kjeldahl Digestion DA in Soil

Method: ME-(AU)-[ENV]AN279/AN293(Sydney only)

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212451.010	LB211899.014	Total Phosphorus (Kjeldahl Digestion)	mg/kg	40	<40	<40	75	2
SE212451.020	LB211899.028	Total Phosphorus (Kjeldahl Digestion)	mg/kg	40	46	43	60	6
SE212451.023	LB211899.032	Total Phosphorus (Kjeldahl Digestion)	mg/kg	40	<40	<40	200	0

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212451.010	LB211690.014	Arsenic, As	mg/kg	1	<1	<1	135	0
		Boron, B	mg/kg	5	<5	<5	200	0
		Beryllium, Be	mg/kg	0.5	<0.5	<0.5	200	0
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Cobalt, Co	mg/kg	0.5	<0.5	<0.5	200	0
		Chromium, Cr	mg/kg	0.5	2.0	2.0	55	2
		Copper, Cu	mg/kg	0.5	<0.5	<0.5	141	0
		Manganese, Mn	mg/kg	1	<1	<1	200	0
		Nickel, Ni	mg/kg	0.5	<0.5	<0.5	200	0
		Lead, Pb	mg/kg	1	2	2	85	11
		Zinc, Zn	mg/kg	2	3.2	3.6	89	11

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212451.019	LB211690.024	Arsenic, As	mg/kg	1	6	6	46	3
		Boron, B	mg/kg	5	7	7	99	3
		Beryllium, Be	mg/kg	0.5	<0.5	<0.5	200	0
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Cobalt, Co	mg/kg	0.5	1.0	1.0	80	3
		Chromium, Cr	mg/kg	0.5	17	17	33	0
		Copper, Cu	mg/kg	0.5	0.6	0.9	94	35
		Manganese, Mn	mg/kg	1	9	9	41	1
		Nickel, Ni	mg/kg	0.5	5.1	4.8	40	6
		Lead, Pb	mg/kg	1	16	17	36	2
		Zinc, Zn	mg/kg	2	11	11	48	6
SE212558.001	LB211831.014	Lead, Pb	mg/kg	1	200	210	30	3
SE212558.008	LB211831.022	Lead, Pb	mg/kg	1	8	8	43	2

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212451.010	LB211657.014	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212451.010	LB211657.014	Monocyclic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.6	9.0	50	4
			d8-toluene (Surrogate)	mg/kg	-	9.2	7.7	50	17
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.0	9.7	50	32
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE212451.020	LB211657.025	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212451.020	LB211657.025	Halogenated	1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
		Aliphatics	1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.6	9.2	50	4
			d8-toluene (Surrogate)	mg/kg	-	8.3	8.6	50	4
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.6	7.9	50	19
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE212500.002	LB211658.024	Monocyclic	Benzene	mg/kg	0.1	0	0	200	0
		Aromatic	Toluene	mg/kg	0.1	0	0	200	0
			Ethylbenzene	mg/kg	0.1	0	0	200	0
			m/p-xylene	mg/kg	0.2	0	0	200	0
			o-xylene	mg/kg	0.1	0	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212500.002	LB211658.024	Polycyclic	Naphthalene	mg/kg	0.1	0.094837018	80.087622766	8 140	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.435017345	88.493684040	8 50	1
			d8-toluene (Surrogate)	mg/kg	-	7.793035581	78.465462911	3 50	8
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.729182114	58.103665240	7 50	5
		Totals	Total Xylenes	mg/kg	0.3	0	0	200	0
			Total BTEX	mg/kg	0.6	0	0	200	0
SE212500.012	LB211658.023	Monocyclic	Benzene	mg/kg	0.1	0.014521800	00.010709495	0 200	0
		Aromatic	Toluene	mg/kg	0.1	0.127716457	80.065394019	5 134	24
			Ethylbenzene	mg/kg	0.1	0.013196904	60.019415312	3 200	0
			m/p-xylene	mg/kg	0.2	0.104531353	10.069313080	8 200	0
			o-xylene	mg/kg	0.1	0.103224887	70.036385246	5 173	3
		Polycyclic	Naphthalene	mg/kg	0.1	0.194345042	90.156602475	6 87	22
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.421470000	78.344599868	9 50	12
			d8-toluene (Surrogate)	mg/kg	-	9.425878095	68.840538321	6 50	6
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.330929698	19.786003478	0 50	5
		Totals	Total Xylenes	mg/kg	0.3	0.207756240	80.105698327	4 200	0
			Total BTEX	mg/kg	0.6	0.230941345	6 0	200	0

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212500.002	LB211658.024		TRH C6-C10	mg/kg	25	0	0	200	0
			TRH C6-C9	mg/kg	20	0	0	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.435017345	88.493684040	8 30	1
			d8-toluene (Surrogate)	mg/kg	-	7.793035581	78.465462911	3 30	8
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.729182114	58.103665240	7 30	5
		VPH F Bands	Benzene (F0)	mg/kg	0.1	0	0	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	0	0	200	0
SE212500.012	LB211658.023		TRH C6-C10	mg/kg	25	0	0	200	0
			TRH C6-C9	mg/kg	20	0	0	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.421470000	78.344599868	9 30	12
			d8-toluene (Surrogate)	mg/kg	-	9.425878095	68.840538321	6 30	6
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.330929698	19.786003478	0 30	5
		VPH F Bands	Benzene (F0)	mg/kg	0.1	0.014521800	00.010709495	0 200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	-0.230941345	6 0	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Ammonia Nitrogen (soluble) in Soil

Method: ME-(AU)-[ENV]AN291

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB211901.002	Ammonia Nitrogen, NH_3 as N	mg/kg	0.2	4.7	5	80 - 120	95

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB211693.002	Mercury	mg/kg	0.05	0.21	0.2	70 - 130	106
LB211834.002	Mercury	mg/kg	0.05	0.21	0.2	70 - 130	106

Soluble Anions (1:5) in Soil by Ion Chromatography

Method: ME-(AU)-[ENV]AN245

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB211903.002	Nitrate Nitrogen	mg/kg	0.025	9.6	10	70 - 130	96
	Sulfate	mg/kg	5	96	100	70 - 130	96

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB211690.002	Arsenic, As	mg/kg	1	310	318.22	80 - 120	96
	Boron, B	mg/kg	5	32	37.13	80 - 120	87
	Beryllium, Be	mg/kg	0.5	3.9	4.17	80 - 120	94
	Cadmium, Cd	mg/kg	0.3	5.0	5.41	80 - 120	93
	Cobalt, Co	mg/kg	0.5	20	20.71	80 - 120	97
	Chromium, Cr	mg/kg	0.5	36	38.31	80 - 120	94
	Copper, Cu	mg/kg	0.5	280	290	80 - 120	98
	Manganese, Mn	mg/kg	1	680	660	80 - 120	103
	Nickel, Ni	mg/kg	0.5	180	187	80 - 120	98
	Lead, Pb	mg/kg	1	90	89.9	80 - 120	100
	Zinc, Zn	mg/kg	2	260	273	80 - 120	97
LB211831.002	Arsenic, As	mg/kg	1	310	318.22	80 - 120	97
	Boron, B	mg/kg	5	34	37.13	80 - 120	91
	Beryllium, Be	mg/kg	0.5	3.9	4.17	80 - 120	94
	Cadmium, Cd	mg/kg	0.3	4.9	5.41	80 - 120	90
	Cobalt, Co	mg/kg	0.5	20	20.71	80 - 120	99
	Chromium, Cr	mg/kg	0.5	37	38.31	80 - 120	97
	Copper, Cu	mg/kg	0.5	280	290	80 - 120	98
	Manganese, Mn	mg/kg	1	680	660	80 - 120	104
	Nickel, Ni	mg/kg	0.5	180	187	80 - 120	97
	Lead, Pb	mg/kg	1	88	89.9	80 - 120	98
	Zinc, Zn	mg/kg	2	260	273	80 - 120	96

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB211657.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	5.5	5	60 - 140	110
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	6.3	5	60 - 140	126
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	6.4	5	60 - 140	127
	Halogenated	Chlorobenzene	mg/kg	0.1	6.2	5	60 - 140	124
	Monocyclic	Benzene	mg/kg	0.1	6.0	5	60 - 140	121
	Aromatic	Toluene	mg/kg	0.1	5.3	5	60 - 140	107
		Ethylbenzene	mg/kg	0.1	5.3	5	60 - 140	106
		m/p-xylene	mg/kg	0.2	11	10	60 - 140	106
		o-xylene	mg/kg	0.1	5.3	5	60 - 140	107
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.8	10	70 - 130	98
		d8-toluene (Surrogate)	mg/kg	-	8.5	10	70 - 130	85
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.4	10	70 - 130	84
	Trihalomethan	Chloroform	mg/kg	0.1	5.7	5	60 - 140	115
LB211658.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	5.6	5	60 - 140	113
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	5.8	5	60 - 140	116
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	5.8	5	60 - 140	116
	Halogenated	Chlorobenzene	mg/kg	0.1	6.0	5	60 - 140	120
	Monocyclic	Benzene	mg/kg	0.1	5.8	5	60 - 140	116
	Aromatic	Toluene	mg/kg	0.1	4.8	5	60 - 140	97
		Ethylbenzene	mg/kg	0.1	4.9	5	60 - 140	99

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB211658.002	Monocyclic	m/p-xylene	mg/kg	0.2	9.7	10	60 - 140	97
	Aromatic	o-xylene	mg/kg	0.1	4.9	5	60 - 140	99
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.6	10	70 - 130	96
		d8-toluene (Surrogate)	mg/kg	-	8.2	10	70 - 130	82
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.3	10	70 - 130	83
	Trihalomethan	Chloroform	mg/kg	0.1	5.3	5	60 - 140	106

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB211658.002		TRH C6-C10	mg/kg	25	84	92.5	60 - 140	91
		TRH C6-C9	mg/kg	20	75	80	60 - 140	94
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.6	10	70 - 130	96
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.3	10	70 - 130	83
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	54	62.5	60 - 140	86

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Ammonia Nitrogen (soluble) in Soil

Method: ME-(AU)-[ENV]AN291

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212451.021	LB211901.029	Ammonia Nitrogen, NH_3 as N	mg/kg	0.2	4.9	<0.2	5	100

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212451.001	LB211693.004	Mercury	mg/kg	0.05	0.21	<0.05	0.2	97

Soluble Anions (1:5) in Soil by Ion Chromatography

Method: ME-(AU)-[ENV]AN245

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212451.001	LB211903.004	Nitrate Nitrogen	mg/kg	0.025	10	0.28	10	101
		Sulfate	mg/kg	5	120	14	100	102
SE212451.021	LB211903.029	Nitrate Nitrogen	mg/kg	0.025	10	0.47	10	99
		Sulfate	mg/kg	5	110	<5.0	100	103

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212451.001	LB211690.004	Arsenic, As	mg/kg	1	47	<1	50	92
		Boron, B	mg/kg	5	47	<5	50	91
		Beryllium, Be	mg/kg	0.5	46	<0.5	50	92
		Cadmium, Cd	mg/kg	0.3	43	<0.3	50	85
		Cobalt, Co	mg/kg	0.5	49	<0.5	50	98
		Chromium, Cr	mg/kg	0.5	49	1.1	50	96
		Copper, Cu	mg/kg	0.5	48	0.7	50	95
		Manganese, Mn	mg/kg	1	50	2	50	97
		Nickel, Ni	mg/kg	0.5	48	0.6	50	94
		Lead, Pb	mg/kg	1	52	6	50	93
		Zinc, Zn	mg/kg	2	53	6.3	50	94
SE212662.001	LB211831.004	Nickel, Ni	mg/kg	0.5	46	0.9	50	91
		Lead, Pb	mg/kg	1	55	8	50	94

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212451.001	LB211657.004	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	-	-
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	-	-
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	-	-
			Bromomethane	mg/kg	1	<1	<1	-	-
			Chloroethane	mg/kg	1	<1	<1	-	-
			Trichlorofluoromethane	mg/kg	1	<1	<1	-	-
			Iodomethane	mg/kg	5	<5	<5	-	-
			1,1-dichloroethene	mg/kg	0.1	5.6	<0.1	5	111
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	-	-
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	-	-
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichloroethane	mg/kg	0.1	5.9	<0.1	5	117
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	-	-
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	-	-
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	5.8	<0.1	5	116
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212451.001	LB211657.004	Halogenated Aliphatics	Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	-	-
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	-	-
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	-	-
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	-	-
		Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	6.1	<0.1	5	121
			Bromobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	-	-
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Monocyclic Aromatic	Benzene	mg/kg	0.1	6.4	<0.1	5	129
			Toluene	mg/kg	0.1	5.4	<0.1	5	108
			Ethylbenzene	mg/kg	0.1	5.3	<0.1	5	105
			m/p-xylene	mg/kg	0.2	10	<0.2	10	103
			o-xylene	mg/kg	0.1	5.2	<0.1	5	104
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	-	-
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	-	-
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	-	-
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	-	-
		Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	-	-
			2-nitropropane	mg/kg	10	<10	<10	-	-
		Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10	<10	-	-
			MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	-	-
			Vinyl acetate	mg/kg	10	<10	<10	-	-
			MEK (2-butanone)	mg/kg	10	<10	<10	-	-
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	-	-
			2-hexanone (MBK)	mg/kg	5	<5	<5	-	-
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.2	8.0	10	82
			d8-toluene (Surrogate)	mg/kg	-	7.6	7.3	10	76
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.1	6.4	10	81
		Totals	Total Xylenes	mg/kg	0.3	16	<0.3	-	-
			Total BTEX	mg/kg	0.6	33	<0.6	-	-
			Total VOC*	mg/kg	24	71	<24	-	-
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	-	-
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	29	<1.8	-	-
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	29	<1.8	-	-
		Trihalomethanes	Chloroform	mg/kg	0.1	5.3	<0.1	5	107
			Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	-	-
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	-	-
			Bromoform	mg/kg	0.1	<0.1	<0.1	-	-
SE212451.021	LB211658.004	Monocyclic Aromatic	Benzene	mg/kg	0.1	4.9	<0.1	5	99
			Toluene	mg/kg	0.1	4.6	<0.1	5	92
			Ethylbenzene	mg/kg	0.1	4.9	<0.1	5	97
			m/p-xylene	mg/kg	0.2	9.2	<0.2	10	92
			o-xylene	mg/kg	0.1	4.7	<0.1	5	94
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.8	8.7	10	98

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212451.021	LB211658.004	Surrogates	d8-toluene (Surrogate)	mg/kg	-	8.3	7.6	10	83
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.6	8.2	10	86
		Totals	Total Xylenes	mg/kg	0.3	14	<0.3	-	-
			Total BTEX	mg/kg	0.6	28	<0.6	-	-

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
***	Indicates that both * and ** apply.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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source:Sydney.pdf page: 1 SRS Ref: SE212528_COC

E-MAILED
19/10/2020

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd
ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☒ **SYDNEY: 202 Submarine School, Sub Base Platypus, North Sydney, 2060**
- ✓ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2601
- ☐ MACKAY: 21 River Street, Mackay, QLD 4741
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4811
- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0821

CLIENT: **Defence Housing Australia**
PROJECT: **Randwick Barracks**
PROJECT NUMBER: **610.30041**
PROJECT MANAGER: [redacted]
PM CONTACT No: [redacted]

LABORATORY: **SGS**
LABORATORY ADDRESS: **Unit 16/33 Maddox St, Alexandria NSW 2015**
SAMPLER: [redacted]
SAMPLER CONTACT No: [redacted]
Email Reports and Invoices to: **LQRSYD@slrconsulting.com,** [redacted]

Turnaround Time (TAT)
✓ Standard TAT
☐ Non Standard or Urgent TAT
Required TAT: Standard

COC Number: 1 of 1

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Benzo(a)pyrene			TRH fraction C6-C10 and PFAS				HOLD	Additional Information (Comment on any gross contamination or specific requirements)
1	0407_TP210_BH01_0.2-0.3_201019	19-10-2020	Soil		X								
X	0407_TP210_BH01_0.5-0.6_201019	19-10-2020	Soil									X	
2	0407_TP210_BH01_0.8-0.9_201019	19-10-2020	Soil		X								
3	0407_QC194_201019	19-10-2020	Soil		X								
	0407_QC294_201019	19-10-2020	Soil										Please send to Eurofins for analysis of BaP
4	0407_TP210_BH02_0.05-0.1_201019	19-10-2020	Soil		X								
5	0407_TP210_BH02_0.4-0.5_201019	19-10-2020	Soil		X								
6	0407_TP210_BH03_0.2-0.3_201019	19-10-2020	Soil		X								
7	0407_TP210_BH03_0.5-0.6_201019	19-10-2020	Soil		X								
	0407_TP210_BH03_0.8-0.9_201019	19-10-2020	Soil									X	
8	0407_TP210_BH04_0.2-0.3_201019	19-10-2020	Soil		X								
9	0407_TP210_BH04_0.5-0.6_201019	19-10-2020	Soil		X								
	0407_TP210_BH04_0.8-0.9_201019	19-10-2020	Soil									X	
10	0407_QC195_201019	19-10-2020	Soil		X								
	0407_QC295_201019	19-10-2020	Soil										Please send to Eurofins for analysis of BaP
		19-10-2020	Soil										

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 19-10-2020	**Received by**	Sign [redacted]	Date / Time 19/10/20	Temperature Received:
Relinquished By	Sign	Date / Time	**Received by**	Sign [redacted]	Date / Time 4:35	6.4
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

SGS EHS Sydney COC
SE212528

SAMPLE RECEIPT ADVICE

SE212528

CLIENT DETAILS

Contact	LQRSYD
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	02 9427 8100
Facsimile	02 9427 8200
Email	lqrsyd@slrconsulting.com
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	10

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Mon 19/10/2020
Report Due	Mon 26/10/2020
SGS Reference	**SE212528**

SUBMISSION DETAILS

This is to confirm that 10 samples were received on Monday 19/10/2020. Results are expected to be ready by COB Monday 26/10/2020. Please quote SGS reference SE212528 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	10 Soil
Date documentation received	19/10/2020@6:02pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	6.4°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

3 samples have been placed on hold as no tests have been assigned for them by the client. These samples will not be processed.

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SAMPLE RECEIPT ADVICE

SE212528

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Moisture Content	PAH (Polynuclear Aromatic Hydrocarbons) in Soil
001	0407_TP210_BH01_0.2-0.3_201019	1	4
002	0407_TP210_BH01_0.8-0.9_201019	1	4
003	0407_QC194_201019	1	4
004	0407_TP210_BH02_0.05-0.1_201019	1	4
005	0407_TP210_BH02_0.4-0.5_201019	1	4
006	0407_TP210_BH03_0.2-0.3_201019	1	4
007	0407_TP210_BH03_0.5-0.6_201019	1	4
008	0407_TP210_BH04_0.2-0.3_201019	1	4
009	0407_TP210_BH04_0.5-0.6_201019	1	4
010	0407_QC195_201019	1	4

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	LQRSYD
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	02 9427 8100
Facsimile	02 9427 8200
Email	lqrsyd@slrconsulting.com
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	10

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE212528 R0**
Date Received	19/10/2020
Date Reported	26/10/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

SIGNATORIES

[redacted]

Organic Section Head

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 21/10/2020

PARAMETER	UOM	LOR	0407_TP210_BH01_(2-0.3_201019 SOIL - 19/10/2020 SE212528.001	0407_TP210_BH01_(8-0.9_201019 SOIL - 19/10/2020 SE212528.002	0407_QC194_20101 SOIL - 19/10/2020 SE212528.003	0407_TP210_BH02_(05-0.1_201019 SOIL - 19/10/2020 SE212528.004	0407_TP210_BH02_(4-0.5_201019 SOIL - 19/10/2020 SE212528.005
Benzo(a)pyrene	mg/kg	0.1	**0.8**	**0.1**	<0.1	**6.4**	**0.6**

PARAMETER	UOM	LOR	0407_TP210_BH03_(2-0.3_201019 SOIL - 19/10/2020 SE212528.006	0407_TP210_BH03_(5-0.6_201019 SOIL - 19/10/2020 SE212528.007	0407_TP210_BH04_(2-0.3_201019 SOIL - 19/10/2020 SE212528.008	0407_TP210_BH04_(5-0.6_201019 SOIL - 19/10/2020 SE212528.009	0407_QC195_20101 SOIL - 19/10/2020 SE212528.010
Benzo(a)pyrene	mg/kg	0.1	**2.4**	**0.2**	**2.7**	**2.2**	**2.6**

Moisture Content [AN002] Tested: 21/10/2020

PARAMETER	UOM	LOR	0407_TP210_BH01_(2-0.3_201019 SOIL - 19/10/2020 SE212528.001	0407_TP210_BH01_(8-0.9_201019 SOIL - 19/10/2020 SE212528.002	0407_QC194_20101 SOIL - 19/10/2020 SE212528.003	0407_TP210_BH02_(05-0.1_201019 SOIL - 19/10/2020 SE212528.004	0407_TP210_BH02_(4-0.5_201019 SOIL - 19/10/2020 SE212528.005
% Moisture	%w/w	1	6.5	2.8	4.9	11.4	5.7

PARAMETER	UOM	LOR	0407_TP210_BH03_(2-0.3_201019 SOIL - 19/10/2020 SE212528.006	0407_TP210_BH03_(5-0.6_201019 SOIL - 19/10/2020 SE212528.007	0407_TP210_BH04_(2-0.3_201019 SOIL - 19/10/2020 SE212528.008	0407_TP210_BH04_(5-0.6_201019 SOIL - 19/10/2020 SE212528.009	0407_QC195_20101 SOIL - 19/10/2020 SE212528.010
% Moisture	%w/w	1	8.6	34.6	5.4	7.3	6.8

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN420	Carcinogenic PAHs may be expressed as Benzo(a)pyrene equivalents by applying the BaP toxicity equivalence factor (NEPM 1999, June 2013, B7). These can be reported as the individual PAHs and as a sum of carcinogenic PAHs. The sum is reported three ways, the first assuming all <LOR results are zero, the second assuming all < LOR results are half the LOR and the third assuming all <LOR results are the LOR.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		
***	Indicates that both * and ** apply.				

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE212528 R0

CLIENT DETAILS

Contact	LQRSYD
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	02 9427 8100
Facsimile	02 9427 8200
Email	lqrsyd@slrconsulting.com
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	10

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE212528 R0**
Date Received	19 Oct 2020
Date Reported	26 Oct 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Duplicate	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	1 item

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	10 Soil
Date documentation received	19/10/2020@6:02pr	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	6.4°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE212528 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP210_BH01_0.2-0.3	SE212528.001	LB211771	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP210_BH01_0.8-0.9	SE212528.002	LB211771	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_QC194_201019	SE212528.003	LB211771	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP210_BH02_0.05-0.	SE212528.004	LB211771	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP210_BH02_0.4-0.5	SE212528.005	LB211771	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP210_BH03_0.2-0.3	SE212528.006	LB211771	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP210_BH03_0.5-0.6	SE212528.007	LB211771	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP210_BH04_0.2-0.3	SE212528.008	LB211771	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP210_BH04_0.5-0.6	SE212528.009	LB211771	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_QC195_201019	SE212528.010	LB211771	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP210_BH01_0.2-0.3	SE212528.001	LB211770	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_TP210_BH01_0.8-0.9	SE212528.002	LB211770	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_QC194_201019	SE212528.003	LB211770	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_TP210_BH02_0.05-0.	SE212528.004	LB211770	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_TP210_BH02_0.4-0.5	SE212528.005	LB211770	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_TP210_BH03_0.2-0.3	SE212528.006	LB211770	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_TP210_BH03_0.5-0.6	SE212528.007	LB211770	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_TP210_BH04_0.2-0.3	SE212528.008	LB211770	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_TP210_BH04_0.5-0.6	SE212528.009	LB211770	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_QC195_201019	SE212528.010	LB211770	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil — **Method: ME-(AU)-[ENV]AN420**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)		SE212528.001	%	70 - 130%	86
		SE212528.002	%	70 - 130%	89
	0407_QC194_201019	SE212528.003	%	70 - 130%	85
		SE212528.004	%	70 - 130%	90
		SE212528.005	%	70 - 130%	86
		SE212528.006	%	70 - 130%	85
		SE212528.007	%	70 - 130%	86
		SE212528.008	%	70 - 130%	95
		SE212528.009	%	70 - 130%	91
	0407_QC195_201019	SE212528.010	%	70 - 130%	89
d14-p-terphenyl (Surrogate)		SE212528.001	%	70 - 130%	85
		SE212528.002	%	70 - 130%	85
	0407_QC194_201019	SE212528.003	%	70 - 130%	92
		SE212528.004	%	70 - 130%	94
		SE212528.005	%	70 - 130%	92
		SE212528.006	%	70 - 130%	89
		SE212528.007	%	70 - 130%	85
		SE212528.008	%	70 - 130%	86
		SE212528.009	%	70 - 130%	89
	0407_QC195_201019	SE212528.010	%	70 - 130%	91
d5-nitrobenzene (Surrogate)		SE212528.001	%	70 - 130%	85
		SE212528.002	%	70 - 130%	86
	0407_QC194_201019	SE212528.003	%	70 - 130%	86
		SE212528.004	%	70 - 130%	85
		SE212528.005	%	70 - 130%	92
		SE212528.006	%	70 - 130%	90
		SE212528.007	%	70 - 130%	86
		SE212528.008	%	70 - 130%	85
		SE212528.009	%	70 - 130%	90
	0407_QC195_201019	SE212528.010	%	70 - 130%	88

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil — **Method: ME-(AU)-[ENV]AN420**

Sample Number		Parameter	Units	LOR	Result
LB211770.001		Benzo(a)pyrene	mg/kg	0.1	<0.1
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	95
		2-fluorobiphenyl (Surrogate)	%	-	94
		d14-p-terphenyl (Surrogate)	%	-	85

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212528.010	LB211771.011		% Moisture	%w/w	1	6.8	6.7	45	2
SE212556.010	LB211771.022		% Moisture	%w/w	1	5.49450549456	6.4957264957	47	17
SE212556.013	LB211771.026		% Moisture	%w/w	1	8.74914559128	8.6832740213	41	1

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212528.010	LB211770.014		Benzo(a)pyrene	mg/kg	0.1	2.6	2.8	34	7
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	30	1
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	2
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.4	30	7
SE212556.010	LB211770.028		Benzo(a)pyrene	mg/kg	0.1	0.0691700226	0.5783344336	61	141 ②
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4713129359	0.4413804971	30	7
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4300021840	0.4347169483	30	1
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4311729410	0.4635795675	30	7

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil — **Method: ME-(AU)-[ENV]AN420**

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB211770.002		Benzo(a)pyrene	mg/kg	0.1	4.3	4	60 - 140	107
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	88
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	90
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	85

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil — **Method: ME-(AU)-[ENV]AN420**

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212528.001	LB211770.004		Benzo(a)pyrene	mg/kg	0.1	4.6	0.8	4	96
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	-	86
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	88
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	88

MATRIX SPIKE DUPLICATES

SE212528 R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
***	Indicates that both * and ** apply.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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source: Sydney.pdf page: 1 SRS Ref: SE212532_COC

E-MAILED
19/10 @ 6.02

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd
ABN 29 001 584 612

PROJECT OFFICE (Tick one)

☐	BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000	☐	GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227	☐	NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305	✓	School, Sub Base Platypus, North Sydney, 2060	☐	MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
☐	CANBERRA: GPO Box 410, Canberra, ACT 2601	☐	MACKAY: 21 River Street, Mackay, QLD 4741	☐	PERTH: 503 Murray Street, Perth, WA 6001	☐	TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4811	☐	DARWIN: 21 Parap Rd, Dawin, NT 0821

CLIENT: **Defence Housing Australia**
PROJECT: **Randwick Barracks**
PROJECT NUMBER: **610.30041**
PROJECT MANAGER: [redacted]
PM CONTACT No [redacted]

LABORATORY: **SGS**
LABORATORY ADDRESS: **Unit 16/33 Maddox St, Alexandria NSW 2015**
SAMPLER [redacted]
SAMPLER CONTACT No: [redacted]
Email Reports and Invoices to: **LQRSYD@slrconsulting.com,** [redacted]

Turnaround Time (TAT): ✓ Standard TAT ☐ Non Standard or Urgent TAT
Required TAT: Standard

COC Number: 1 of 2

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: Lead	Benzo(a)pyrene	Copper	PAHs	PCBs			Hold	Additional Information (Comment on any gross contamination or specific requirements)
1	0407_TP186_BH01_0.0-0.1_20201019	19/10/2020	Soil			x							
2	0407_TP186_BH02_0.0-0.1_20201019	19/10/2020	Soil			x							
3	0407_TP186_BH03_0.0-0.1_20201019	19/10/2020	Soil			x							
4	0407_TP186_BH03_0.4-0.5_20201019	19/10/2020	Soil			x							
5	0407_TP186_BH04_0.4-0.5_20201019	19/10/2020	Soil			x							
6	0407_TP235_BH01_0.0-0.1_20201019	19/10/2020	Soil					x					
7	0407_TP235_BH02_0.0-0.1_20201019	19/10/2020	Soil					x					
8	0407_TP235_BH03_0.0-0.1_20201019	19/10/2020	Soil					x					
9	0407_TP235_BH04_0.0-0.1_20201019	19/10/2020	Soil					x					
10	0407_TP235_BH01_0.3-0.4_20201019	19/10/2020	Soil					x					
11	0407_TP235_BH02_0.3-0.4_20201019	19/10/2020	Soil					x					
12	0407_TP235_BH03_0.4-0.5_20201019	19/10/2020	Soil					x					
13	0407_TP235_BH04_0.4-0.5_20201019	19/10/2020	Soil					x					
14	QC314	19/10/2020	Water		x	x	x	x	x				

SGS EHS Sydney COC
SE212532
[redacted]

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time	19/10/2020 @ 1600	**Received by**	Sign [redacted]	Date / Time	1635
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	19/10
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	

Temperature Received: 6.4

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd
ABN 29 001 584 612

PROJECT OFFICE (Tick one)

☐	BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000	☐	GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227	☐	NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305	✓	School, Sub Base Platypus, North Sydney, 2060
☐	CANBERRA: GPO Box 410, Canberra, ACT 2601	☐	MACKAY: 21 River Street, Mackay, QLD 4741	☐	PERTH: 103 Murray Street, Perth, WA 6001	☐	TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4811
☐	MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122	☐	DARWIN: 21 Parap Rd, Darwin, NT 0821				

CLIENT: **Defence Housing Australia**
PROJECT: **Randwick Barracks**
PROJECT NUMBER: **610.30041**
PROJECT MANAGER [redacted]
PM CONTACT No [redacted]

LABORATORY: **SGS**
LABORATORY ADDRESS: **Unit 16/33 Maddox St, Alexandria NSW 2015**
SAMPLER: [redacted]
SAMPLER CONTACT No: [redacted]
Email Reports and Invoices to: **LQRSYD@slrconsulting.com,** [redacted]

Turnaround Time (TAT)
✓ Standard TAT
☐ Non Standard or Urgent TAT
Required TAT: Standard

COC Number: 2 of 2

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: Lead	Benzo(a)pyrene	Copper	PAHs	PCBs			Hold	Additional Information (Comment on any gross contamination or specific requirements)
15	0407_TP200_BH01_0.0-0.1_20201019	19/10/2020	Soil			×							
16	0407_TP200_BH02_0.0-0.1_20201019	19/10/2020	Soil			×							
17	0407_TP200_BH03_0.0-0.1_20201019	19/10/2020	Soil			×							
18	0407_TP200_BH04_0.0-0.1_20201019	19/10/2020	Soil			×							
19	0407_TP200_BH01_0.3-0.4_20201019	19/10/2020	Soil			×							
20	0407_TP200_BH02_0.4-0.5_20201019	19/10/2020	Soil			×							
21	0407_TP200_BH03_0.3-0.4_20201019	19/10/2020	Soil			×							
22	0407_TP200_BH04_0.4-0.5_20201019	19/10/2020	Soil			×							
23	0407_TP213_BH01_0.0-0.1_20201019	19/10/2020	Soil					×					
24	0407_TP213_BH02_0.0-0.1_20201019	19/10/2020	Soil					×					
25	0407_TP213_BH03_0.0-0.1_20201019	19/10/2020	Soil					×					
26	0407_TP213_BH04_0.0-0.1_20201019	19/10/2020	Soil					×					
27	0407_TP213_BH01_0.4-0.5_20201019	19/10/2020	Soil					×					
28	0407_TP213_BH02_0.4-0.5_20201019	19/10/2020	Soil					×					
29	0407_TP213_BH03_0.4-0.5_20201019	19/10/2020	Soil					×					
30	0407_TP213_BH04_0.4-0.5_20201019	19/10/2020	Soil					×					

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time	19/10/2020 @ 1500	**Received by**	Sign	Date / Time	19/10
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	

Temperature Received: P 4.3+

SAMPLE RECEIPT ADVICE

SE212532

CLIENT DETAILS

Contact	LQRSYD
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	02 9427 8100
Facsimile	02 9427 8200
Email	lqrsyd@slrconsulting.com
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	30

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Mon 19/10/2020
Report Due	Mon 26/10/2020
SGS Reference	**SE212532**

SUBMISSION DETAILS

This is to confirm that 30 samples were received on Monday 19/10/2020. Results are expected to be ready by COB Monday 26/10/2020. Please quote SGS reference SE212532 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	Client	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	29 Soil, 1 Water
Date documentation received	19/10/2020 @06:02pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	6.4°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

Extra sample 0407_TP186_BH04_0.0-0.1 received.

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SAMPLE RECEIPT ADVICE

SE212532

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Moisture Content	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Water	PCBs in Water	Trace Metals (Total) in Water by ICPMS
001	0407_TP186_BH01_0.0-0.1_20201019	1	4	-	-	-
002	0407_TP186_BH02_0.0-0.1_20201019	1	4	-	-	-
003	0407_TP186_BH03_0.0-0.1_20201019	1	4	-	-	-
004	0407_TP186_BH03_0.4-0.5_20201019	1	4	-	-	-
005	0407_TP186_BH04_0.4-0.5_20201019	1	4	-	-	-
006	0407_TP235_BH01_0.0-0.1_20201019	1	5	-	-	-
007	0407_TP235_BH02_0.0-0.1_20201019	1	5	-	-	-
008	0407_TP235_BH03_0.0-0.1_20201019	1	5	-	-	-
009	0407_TP235_BH04_0.0-0.1_20201019	1	5	-	-	-
010	0407_TP235_BH01_0.3-0.4_20201019	1	5	-	-	-
011	0407_TP235_BH02_0.3-0.4_20201019	1	5	-	-	-
012	0407_TP235_BH03_0.4-0.5_20201019	1	5	-	-	-
013	0407_TP235_BH04_0.4-0.5_20201019	1	5	-	-	-
014	QC314	-	-	22	11	2
015	0407_TP200_BH01_0.0-0.1_20201019	1	4	-	-	-
016	0407_TP200_BH02_0.0-0.1_20201019	1	4	-	-	-
017	0407_TP200_BH03_0.0-0.1_20201019	1	4	-	-	-
018	0407_TP200_BH04_0.0-0.1_20201019	1	4	-	-	-
019	0407_TP200_BH01_0.3-0.4_20201019	1	4	-	-	-
020	0407_TP200_BH02_0.4-0.5_20201019	1	4	-	-	-
021	0407_TP200_BH03_0.3-0.4_20201019	1	4	-	-	-
022	0407_TP200_BH04_0.4-0.5_20201019	1	4	-	-	-
023	0407_TP213_BH01_0.0-0.1_20201019	1	5	-	-	-
024	0407_TP213_BH02_0.0-0.1_20201019	1	5	-	-	-

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE212532

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Moisture Content	PAH (Polynuclear Aromatic Hydrocarbons) in Soil
025	0407_TP213_BH03_0.0-0.1_20201019	1	5
026	0407_TP213_BH04_0.0-0.1_20201019	1	5
027	0407_TP213_BH01_0.4-0.5_20201019	1	5
028	0407_TP213_BH02_0.4-0.5_20201019	1	5
029	0407_TP213_BH03_0.4-0.5_20201019	1	5
030	0407_TP213_BH04_0.4-0.5_20201019	1	5

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	LQRSYD
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	02 9427 8100
Facsimile	02 9427 8200
Email	lqrsyd@slrconsulting.com
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	30

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE212532 R0**
Date Received	19/10/2020
Date Reported	27/10/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

SIGNATORIES

[redacted]

Chemist | Metals/Inorganics Team Leader | Organic Section Head

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 21/10/2020

PARAMETER	UOM	LOR	0407_TP186_BH01_(0-0.1_20201019 SOIL - 19/10/2020 SE212532.001	0407_TP186_BH02_(0-0.1_20201019 SOIL - 19/10/2020 SE212532.002	0407_TP186_BH03_(0-0.1_20201019 SOIL - 19/10/2020 SE212532.003	0407_TP186_BH03_(4-0.5_20201019 SOIL - 19/10/2020 SE212532.004	0407_TP186_BH04_(4-0.5_20201019 SOIL - 19/10/2020 SE212532.005
Benzo(a)pyrene	mg/kg	0.1	3.4	4.6	3.6	1.0	0.3
Total PAH (NEPM/WHO 16)	mg/kg	0.8	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP235_BH01_(0-0.1_20201019 SOIL - 19/10/2020 SE212532.006	0407_TP235_BH02_(0-0.1_20201019 SOIL - 19/10/2020 SE212532.007	0407_TP235_BH03_(0-0.1_20201019 SOIL - 19/10/2020 SE212532.008	0407_TP235_BH04_(0-0.1_20201019 SOIL - 19/10/2020 SE212532.009	0407_TP235_BH01_(3-0.4_20201019 SOIL - 19/10/2020 SE212532.010
Benzo(a)pyrene	mg/kg	0.1	2.1	3.7	1.2	0.6	<0.1
Total PAH (NEPM/WHO 16)	mg/kg	0.8	19	37	11	6.2	<0.8

PARAMETER	UOM	LOR	0407_TP235_BH02_(3-0.4_20201019 SOIL - 19/10/2020 SE212532.011	0407_TP235_BH03_(4-0.5_20201019 SOIL - 19/10/2020 SE212532.012	0407_TP235_BH04_(4-0.5_20201019 SOIL - 19/10/2020 SE212532.013	0407_TP200_BH01_(0-0.1_20201019 SOIL - 19/10/2020 SE212532.015	0407_TP200_BH02_(0-0.1_20201019 SOIL - 19/10/2020 SE212532.016
Benzo(a)pyrene	mg/kg	0.1	<0.1	0.1	0.1	0.2	0.4
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8	<0.8	-	-

PARAMETER	UOM	LOR	0407_TP200_BH03_(0-0.1_20201019 SOIL - 19/10/2020 SE212532.017	0407_TP200_BH04_(0-0.1_20201019 SOIL - 19/10/2020 SE212532.018	0407_TP200_BH01_(3-0.4_20201019 SOIL - 19/10/2020 SE212532.019	0407_TP200_BH02_(4-0.5_20201019 SOIL - 19/10/2020 SE212532.020	0407_TP200_BH03_(3-0.4_20201019 SOIL - 19/10/2020 SE212532.021
Benzo(a)pyrene	mg/kg	0.1	0.3	0.5	0.3	1.4	<0.1
Total PAH (NEPM/WHO 16)	mg/kg	0.8	-	-	-	-	-

PARAMETER	UOM	LOR	0407_TP200_BH04_(4-0.5_20201019 SOIL - 19/10/2020 SE212532.022	0407_TP213_BH01_(0-0.1_20201019 SOIL - 19/10/2020 SE212532.023	0407_TP213_BH02_(0-0.1_20201019 SOIL - 19/10/2020 SE212532.024	0407_TP213_BH03_(0-0.1_20201019 SOIL - 19/10/2020 SE212532.025	0407_TP213_BH04_(0-0.1_20201019 SOIL - 19/10/2020 SE212532.026
Benzo(a)pyrene	mg/kg	0.1	1.2	5.7	13	40	12
Total PAH (NEPM/WHO 16)	mg/kg	0.8	-	74	170	440	170

PARAMETER	UOM	LOR	0407_TP213_BH01_(4-0.5_20201019 SOIL - 19/10/2020 SE212532.027	0407_TP213_BH02_(4-0.5_20201019 SOIL - 19/10/2020 SE212532.028	0407_TP213_BH03_(4-0.5_20201019 SOIL - 19/10/2020 SE212532.029	0407_TP213_BH04_(4-0.5_20201019 SOIL - 19/10/2020 SE212532.030
Benzo(a)pyrene	mg/kg	0.1	0.6	12	0.4	<0.1
Total PAH (NEPM/WHO 16)	mg/kg	0.8	6.8	180	4.6	<0.8

Moisture Content [AN002] Tested: 21/10/2020

PARAMETER	UOM	LOR	0407_TP186_BH01_(0-0.1_20201019 SOIL - 19/10/2020 SE212532.001	0407_TP186_BH02_(0-0.1_20201019 SOIL - 19/10/2020 SE212532.002	0407_TP186_BH03_(0-0.1_20201019 SOIL - 19/10/2020 SE212532.003	0407_TP186_BH03_(4-0.5_20201019 SOIL - 19/10/2020 SE212532.004	0407_TP186_BH04_(4-0.5_20201019 SOIL - 19/10/2020 SE212532.005
% Moisture	%w/w	1	8.5	5.1	6.7	6.7	9.0

PARAMETER	UOM	LOR	0407_TP235_BH01_(0-0.1_20201019 SOIL - 19/10/2020 SE212532.006	0407_TP235_BH02_(0-0.1_20201019 SOIL - 19/10/2020 SE212532.007	0407_TP235_BH03_(0-0.1_20201019 SOIL - 19/10/2020 SE212532.008	0407_TP235_BH04_(0-0.1_20201019 SOIL - 19/10/2020 SE212532.009	0407_TP235_BH01_(3-0.4_20201019 SOIL - 19/10/2020 SE212532.010
% Moisture	%w/w	1	27.2	14.8	46.2	38.7	11.2

PARAMETER	UOM	LOR	0407_TP235_BH02_(3-0.4_20201019 SOIL - 19/10/2020 SE212532.011	0407_TP235_BH03_(4-0.5_20201019 SOIL - 19/10/2020 SE212532.012	0407_TP235_BH04_(4-0.5_20201019 SOIL - 19/10/2020 SE212532.013	0407_TP200_BH01_(0-0.1_20201019 SOIL - 19/10/2020 SE212532.015	0407_TP200_BH02_(0-0.1_20201019 SOIL - 19/10/2020 SE212532.016
% Moisture	%w/w	1	19.2	14.0	14.3	15.5	17.1

PARAMETER	UOM	LOR	0407_TP200_BH03_(0-0.1_20201019 SOIL - 19/10/2020 SE212532.017	0407_TP200_BH04_(0-0.1_20201019 SOIL - 19/10/2020 SE212532.018	0407_TP200_BH01_(3-0.4_20201019 SOIL - 19/10/2020 SE212532.019	0407_TP200_BH02_(4-0.5_20201019 SOIL - 19/10/2020 SE212532.020	0407_TP200_BH03_(3-0.4_20201019 SOIL - 19/10/2020 SE212532.021
% Moisture	%w/w	1	25.8	20.4	13.2	18.9	6.2

PARAMETER	UOM	LOR	0407_TP200_BH04_(4-0.5_20201019 SOIL - 19/10/2020 SE212532.022	0407_TP213_BH01_(0-0.1_20201019 SOIL - 19/10/2020 SE212532.023	0407_TP213_BH02_(0-0.1_20201019 SOIL - 19/10/2020 SE212532.024	0407_TP213_BH03_(0-0.1_20201019 SOIL - 19/10/2020 SE212532.025	0407_TP213_BH04_(0-0.1_20201019 SOIL - 19/10/2020 SE212532.026
% Moisture	%w/w	1	18.4	17.3	27.0	8.7	12.6

PARAMETER	UOM	LOR	0407_TP213_BH01_(4-0.5_20201019 SOIL - 19/10/2020 SE212532.027	0407_TP213_BH02_(4-0.5_20201019 SOIL - 19/10/2020 SE212532.028	0407_TP213_BH03_(4-0.5_20201019 SOIL - 19/10/2020 SE212532.029	0407_TP213_BH04_(4-0.5_20201019 SOIL - 19/10/2020 SE212532.030
% Moisture	%w/w	1	7.0	9.8	6.3	6.9

PAH (Polynuclear Aromatic Hydrocarbons) in Water [AN420] Tested: 22/10/2020

PARAMETER	UOM	LOR	QC314 WATER - 19/10/2020 SE212532.014
Naphthalene	µg/L	0.1	<0.1
2-methylnaphthalene	µg/L	0.1	<0.1
1-methylnaphthalene	µg/L	0.1	<0.1
Acenaphthylene	µg/L	0.1	<0.1
Acenaphthene	µg/L	0.1	<0.1
Fluorene	µg/L	0.1	<0.1
Phenanthrene	µg/L	0.1	<0.1
Anthracene	µg/L	0.1	<0.1
Fluoranthene	µg/L	0.1	<0.1
Pyrene	µg/L	0.1	<0.1
Benzo(a)anthracene	µg/L	0.1	<0.1
Chrysene	µg/L	0.1	<0.1
Benzo(b&j)fluoranthene	µg/L	0.1	<0.1
Benzo(k)fluoranthene	µg/L	0.1	<0.1
Benzo(a)pyrene	µg/L	0.1	<0.1
Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1
Dibenzo(ah)anthracene	µg/L	0.1	<0.1
Benzo(ghi)perylene	µg/L	0.1	<0.1
Total PAH (18)	µg/L	1	<1

PCBs in Water [AN420] Tested: 22/10/2020

PARAMETER	UOM	LOR	QC314 WATER - 19/10/2020 SE212532.014
Arochlor 1016	µg/L	1	<1
Arochlor 1221	µg/L	1	<1
Arochlor 1232	µg/L	1	<1
Arochlor 1242	µg/L	1	<1
Arochlor 1248	µg/L	1	<1
Arochlor 1254	µg/L	1	<1
Arochlor 1260	µg/L	1	<1
Arochlor 1262	µg/L	1	<1
Arochlor 1268	µg/L	1	<1
Total Arochlors*	µg/L	5	<5

Trace Metals (Total) in Water by ICPMS [AN022/AN318] Tested: 22/10/2020

PARAMETER	UOM	LOR	QC314 WATER - 19/10/2020 SE212532.014
Total Copper	µg/L	1	<1
Total Lead	µg/L	1	<1

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN022/AN318	Following acid digestion of un filtered sample, determination of elements at trace level in waters by ICP-MS technique, referenced to USEPA 6020B and USEPA 200.8 (5.4).
AN022	The water sample is digested with Nitric Acid and made up to the original volume similar to APHA3030E.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN420	Carcinogenic PAHs may be expressed as Benzo(a)pyrene equivalents by applying the BaP toxicity equivalence factor (NEPM 1999, June 2013, B7). These can be reported as the individual PAHs and as a sum of carcinogenic PAHs. The sum is reported three ways, the first assuming all <LOR results are zero, the second assuming all < LOR results are half the LOR and the third assuming all <LOR results are the LOR.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
**	Indicative data, theoretical holding time exceeded.	NVL	Not validated.	LOR	Limit of Reporting.
***	Indicates that both * and ** apply.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE212532 R0

CLIENT DETAILS

Contact	LQRSYD
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	02 9427 8100
Facsimile	02 9427 8200
Email	lqrsyd@slrconsulting.com
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	30

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE212532 R0**
Date Received	19 Oct 2020
Date Reported	27 Oct 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met (within the SGS Alexandria Environmental laboratory).

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	Client	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	29 Soil, 1 Water
Date documentation received	19/10/2020 @06:02	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	6.4°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE212532 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP186_BH01_0.0-0.1	SE212532.001	LB211773	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP186_BH02_0.0-0.1	SE212532.002	LB211773	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP186_BH03_0.0-0.1	SE212532.003	LB211773	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP186_BH03_0.4-0.5	SE212532.004	LB211773	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP186_BH04_0.4-0.5	SE212532.005	LB211773	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP235_BH01_0.0-0.1	SE212532.006	LB211773	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP235_BH02_0.0-0.1	SE212532.007	LB211773	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP235_BH03_0.0-0.1	SE212532.008	LB211773	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP235_BH04_0.0-0.1	SE212532.009	LB211773	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP235_BH01_0.3-0.4	SE212532.010	LB211773	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP235_BH02_0.3-0.4	SE212532.011	LB211773	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP235_BH03_0.4-0.5	SE212532.012	LB211773	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP235_BH04_0.4-0.5	SE212532.013	LB211773	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP200_BH01_0.0-0.1	SE212532.015	LB211773	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP200_BH02_0.0-0.1	SE212532.016	LB211773	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP200_BH03_0.0-0.1	SE212532.017	LB211773	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP200_BH04_0.0-0.1	SE212532.018	LB211773	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP200_BH01_0.3-0.4	SE212532.019	LB211773	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP200_BH02_0.4-0.5	SE212532.020	LB211773	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP200_BH03_0.3-0.4	SE212532.021	LB211773	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP200_BH04_0.4-0.5	SE212532.022	LB211773	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP213_BH01_0.0-0.1	SE212532.023	LB211773	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP213_BH02_0.0-0.1	SE212532.024	LB211773	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP213_BH03_0.0-0.1	SE212532.025	LB211773	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP213_BH04_0.0-0.1	SE212532.026	LB211773	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP213_BH01_0.4-0.5	SE212532.027	LB211773	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP213_BH02_0.4-0.5	SE212532.028	LB211773	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP213_BH03_0.4-0.5	SE212532.029	LB211773	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP213_BH04_0.4-0.5	SE212532.030	LB211773	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP186_BH01_0.0-0.1	SE212532.001	LB211772	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_TP186_BH02_0.0-0.1	SE212532.002	LB211772	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_TP186_BH03_0.0-0.1	SE212532.003	LB211772	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_TP186_BH03_0.4-0.5	SE212532.004	LB211772	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_TP186_BH04_0.4-0.5	SE212532.005	LB211772	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_TP235_BH01_0.0-0.1	SE212532.006	LB211772	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_TP235_BH02_0.0-0.1	SE212532.007	LB211772	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_TP235_BH03_0.0-0.1	SE212532.008	LB211772	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_TP235_BH04_0.0-0.1	SE212532.009	LB211772	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_TP235_BH01_0.3-0.4	SE212532.010	LB211772	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_TP235_BH02_0.3-0.4	SE212532.011	LB211772	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_TP235_BH03_0.4-0.5	SE212532.012	LB211772	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_TP235_BH04_0.4-0.5	SE212532.013	LB211772	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_TP200_BH01_0.0-0.1	SE212532.015	LB211772	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_TP200_BH02_0.0-0.1	SE212532.016	LB211772	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_TP200_BH03_0.0-0.1	SE212532.017	LB211772	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_TP200_BH04_0.0-0.1	SE212532.018	LB211772	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_TP200_BH01_0.3-0.4	SE212532.019	LB211772	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_TP200_BH02_0.4-0.5	SE212532.020	LB211772	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_TP200_BH03_0.3-0.4	SE212532.021	LB211772	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_TP200_BH04_0.4-0.5	SE212532.022	LB211772	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_TP213_BH01_0.0-0.1	SE212532.023	LB211772	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_TP213_BH02_0.0-0.1	SE212532.024	LB211772	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_TP213_BH03_0.0-0.1	SE212532.025	LB211772	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_TP213_BH04_0.0-0.1	SE212532.026	LB211772	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_TP213_BH01_0.4-0.5	SE212532.027	LB211772	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_TP213_BH02_0.4-0.5	SE212532.028	LB211772	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_TP213_BH03_0.4-0.5	SE212532.029	LB211772	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020

HOLDING TIME SUMMARY

SE212532 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP213_BH04_0.4-0.5	SE212532.030	LB211772	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
QC314	SE212532.014	LB211792	19 Oct 2020	19 Oct 2020	26 Oct 2020	22 Oct 2020	01 Dec 2020	26 Oct 2020

PCBs in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
QC314	SE212532.014	LB211792	19 Oct 2020	19 Oct 2020	26 Oct 2020	22 Oct 2020	01 Dec 2020	26 Oct 2020

Trace Metals (Total) in Water by ICPMS

Method: ME-(AU)-[ENV]AN022/AN318

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
QC314	SE212532.014	LB211813	19 Oct 2020	19 Oct 2020	17 Apr 2021	22 Oct 2020	17 Apr 2021	23 Oct 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil — **Method: ME-(AU)-[ENV]AN420**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)		SE212532.001	%	70 - 130%	92
		SE212532.002	%	70 - 130%	98
		SE212532.003	%	70 - 130%	85
		SE212532.004	%	70 - 130%	84
		SE212532.005	%	70 - 130%	85
		SE212532.006	%	70 - 130%	93
		SE212532.007	%	70 - 130%	87
		SE212532.008	%	70 - 130%	97
		SE212532.009	%	70 - 130%	87
		SE212532.010	%	70 - 130%	87
		SE212532.011	%	70 - 130%	81
		SE212532.012	%	70 - 130%	88
		SE212532.013	%	70 - 130%	78
		SE212532.015	%	70 - 130%	86
		SE212532.016	%	70 - 130%	82
		SE212532.017	%	70 - 130%	86
		SE212532.018	%	70 - 130%	85
		SE212532.019	%	70 - 130%	92
		SE212532.020	%	70 - 130%	88
		SE212532.021	%	70 - 130%	80
		SE212532.022	%	70 - 130%	83
		SE212532.023	%	70 - 130%	87
		SE212532.024	%	70 - 130%	94
		SE212532.025	%	70 - 130%	88
		SE212532.026	%	70 - 130%	91
		SE212532.027	%	70 - 130%	85
		SE212532.028	%	70 - 130%	95
		SE212532.029	%	70 - 130%	90
		SE212532.030	%	70 - 130%	81
d14-p-terphenyl (Surrogate)		SE212532.001	%	70 - 130%	95
		SE212532.002	%	70 - 130%	92
		SE212532.003	%	70 - 130%	92
		SE212532.004	%	70 - 130%	94
		SE212532.005	%	70 - 130%	97
		SE212532.006	%	70 - 130%	95
		SE212532.007	%	70 - 130%	92
		SE212532.008	%	70 - 130%	104
		SE212532.009	%	70 - 130%	97
		SE212532.010	%	70 - 130%	95
		SE212532.011	%	70 - 130%	96
		SE212532.012	%	70 - 130%	99
		SE212532.013	%	70 - 130%	93
		SE212532.015	%	70 - 130%	99
		SE212532.016	%	70 - 130%	94
		SE212532.017	%	70 - 130%	96
		SE212532.018	%	70 - 130%	99
		SE212532.019	%	70 - 130%	110
		SE212532.020	%	70 - 130%	91
		SE212532.021	%	70 - 130%	96
		SE212532.022	%	70 - 130%	95
		SE212532.023	%	70 - 130%	89
		SE212532.024	%	70 - 130%	89
		SE212532.025	%	70 - 130%	83
		SE212532.026	%	70 - 130%	88
		SE212532.027	%	70 - 130%	100
		SE212532.028	%	70 - 130%	85
		SE212532.029	%	70 - 130%	100
		SE212532.030	%	70 - 130%	97
d5-nitrobenzene (Surrogate)		SE212532.001	%	70 - 130%	104
		SE212532.002	%	70 - 130%	100
		SE212532.003	%	70 - 130%	98

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d5-nitrobenzene (Surrogate)		SE212532.004	%	70 - 130%	104
		SE212532.005	%	70 - 130%	95
		SE212532.006	%	70 - 130%	101
		SE212532.007	%	70 - 130%	104
		SE212532.008	%	70 - 130%	105
		SE212532.009	%	70 - 130%	102
		SE212532.010	%	70 - 130%	98
		SE212532.011	%	70 - 130%	102
		SE212532.012	%	70 - 130%	100
		SE212532.013	%	70 - 130%	96
		SE212532.015	%	70 - 130%	96
		SE212532.016	%	70 - 130%	94
		SE212532.017	%	70 - 130%	102
		SE212532.018	%	70 - 130%	98
		SE212532.019	%	70 - 130%	111
		SE212532.020	%	70 - 130%	101
		SE212532.021	%	70 - 130%	101
		SE212532.022	%	70 - 130%	96
		SE212532.023	%	70 - 130%	91
		SE212532.024	%	70 - 130%	95
		SE212532.025	%	70 - 130%	95
		SE212532.026	%	70 - 130%	95
		SE212532.027	%	70 - 130%	99
		SE212532.028	%	70 - 130%	91
		SE212532.029	%	70 - 130%	100
		SE212532.030	%	70 - 130%	102

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	QC314	SE212532.014	%	40 - 130%	48
d14-p-terphenyl (Surrogate)	QC314	SE212532.014	%	40 - 130%	86
d5-nitrobenzene (Surrogate)	QC314	SE212532.014	%	40 - 130%	44

PCBs in Water

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (Surrogate)	QC314	SE212532.014	%	40 - 130%	76

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB211772.001		Benzo(a)pyrene	mg/kg	0.1	<0.1
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	94
		2-fluorobiphenyl (Surrogate)	%	-	87
		d14-p-terphenyl (Surrogate)	%	-	106

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB211792.001		Naphthalene	µg/L	0.1	<0.1
		2-methylnaphthalene	µg/L	0.1	<0.1
		1-methylnaphthalene	µg/L	0.1	<0.1
		Acenaphthylene	µg/L	0.1	<0.1
		Acenaphthene	µg/L	0.1	<0.1
		Fluorene	µg/L	0.1	<0.1
		Phenanthrene	µg/L	0.1	<0.1
		Anthracene	µg/L	0.1	<0.1
		Fluoranthene	µg/L	0.1	<0.1
		Pyrene	µg/L	0.1	<0.1
		Benzo(a)anthracene	µg/L	0.1	<0.1
		Chrysene	µg/L	0.1	<0.1
		Benzo(a)pyrene	µg/L	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1
		Dibenzo(ah)anthracene	µg/L	0.1	<0.1
		Benzo(ghi)perylene	µg/L	0.1	<0.1
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	62
		2-fluorobiphenyl (Surrogate)	%	-	70
		d14-p-terphenyl (Surrogate)	%	-	94

PCBs in Water

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB211792.001	Arochlor 1016	µg/L	1	<1
	Arochlor 1221	µg/L	1	<1
	Arochlor 1232	µg/L	1	<1
	Arochlor 1242	µg/L	1	<1
	Arochlor 1248	µg/L	1	<1
	Arochlor 1254	µg/L	1	<1
	Arochlor 1260	µg/L	1	<1
	Arochlor 1262	µg/L	1	<1
	Arochlor 1268	µg/L	1	<1

Trace Metals (Total) in Water by ICPMS

Method: ME-(AU)-[ENV]AN022/AN318

Sample Number	Parameter	Units	LOR	Result
LB211813.001	Total Copper	µg/L	1	<1
	Total Lead	µg/L	1	<1

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212532.010	LB211773.011	% Moisture	%w/w	1	11.2	11.5	39	3
SE212532.021	LB211773.022	% Moisture	%w/w	1	6.2	6.4	46	3
SE212532.030	LB211773.032	% Moisture	%w/w	1	6.9	6.2	45	10

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212532.010	LB211772.014		Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	30	5
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	0
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	4
SE212532.021	LB211772.028		Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	30	7
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	11
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.4	30	9
SE212532.030	LB211772.038		Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	165	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	30	6
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	3
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	0

Trace Metals (Total) in Water by ICPMS

Method: ME-(AU)-[ENV]AN022/AN318

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212597.003	LB211813.021	Total Copper	µg/L	1	4	4	38	4

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB211772.002		Benzo(a)pyrene	mg/kg	0.1	4.1	4	60 - 140	101
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	101
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	83
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	94

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB211792.002		Naphthalene	µg/L	0.1	32	40	60 - 140	79
		Acenaphthylene	µg/L	0.1	35	40	60 - 140	87
		Acenaphthene	µg/L	0.1	40	40	60 - 140	99
		Phenanthrene	µg/L	0.1	37	40	60 - 140	92
		Anthracene	µg/L	0.1	36	40	60 - 140	90
		Fluoranthene	µg/L	0.1	33	40	60 - 140	83
		Pyrene	µg/L	0.1	35	40	60 - 140	87
		Benzo(a)pyrene	µg/L	0.1	36	40	60 - 140	90
	Surrogates	d5-nitrobenzene (Surrogate)	µg/L	-	0.3	0.5	40 - 130	64
		2-fluorobiphenyl (Surrogate)	µg/L	-	0.3	0.5	40 - 130	68
		d14-p-terphenyl (Surrogate)	µg/L	-	0.4	0.5	40 - 130	74

PCBs in Water

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB211792.002	Arochlor 1260	µg/L	1	<1	0.4	60 - 140	113

Trace Metals (Total) in Water by ICPMS

Method: ME-(AU)-[ENV]AN022/AN318

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB211813.002	Total Copper	µg/L	1	22	20	80 - 120	112
	Total Lead	µg/L	1	19	20	80 - 120	97

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil — Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212532.001	LB211772.004		Benzo(a)pyrene	mg/kg	0.1	6.4	3.4	4	75
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	-	102
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	-	85
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	-	88

Trace Metals (Total) in Water by ICPMS — Method: ME-(AU)-[ENV]AN022/AN318

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212532.014	LB211813.004	Total Copper	µg/L	1	23	<1	20	113
		Total Lead	µg/L	1	21	<1	20	106

MATRIX SPIKE DUPLICATES

SE212532 R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
***	Indicates that both * and ** apply.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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source: Sydney.pdf page: 1 SRS Ref: SE212539_COC

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd
ABN 29 001 584 612

PROJECT OFFICE (Tick one)

☐	BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000	☐	GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227	☐	NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305	✓	School, Sub Base Platypus, North Sydney, 2060	☐	MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
☐	CANBERRA: GPO Box 410, Canberra, ACT 2601	☐	MACKAY: 21 River Street, Mackay, QLD 4741	☐	PERTH: 503 Murray Street, Perth, WA 6001	☐	TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4811	☐	DARWIN: 21 Parap Rd, Dawin, NT 0821

CLIENT: **Defence Housing Australia**
PROJECT: **Randwick Barracks**
PROJECT NUMBER: **610.30041**
PROJECT MANAGER: [redacted]
PM CONTACT No: [redacted]

LABORATORY: **SGS**
LABORATORY ADDRESS: **Unit 16/33 Maddox St, Alexandria NSW 2015**
SAMPLER: [redacted]
SAMPLER CONTACT No [redacted]
Email Reports and Invoices to: **LQRSYD@slrconsulting.com,** [redacted]

Turnaround Time (TAT)
✓ Standard TAT
☐ Non Standard or Urgent TAT
Required TAT: Standard

COC Number: 1 of 1

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Lead	Benzo(a)pyrene	Copper	PAHs	PCBs	TRH C6-10	PFAS	HOLD	Additional Information (Comment on any gross contamination or specific requirements)
1	0407_TP231_BH01_0.0-0.1_20201020	20/10/2020	Soil			x							
2	0407_TP231_BH02_0.0-0.1_20201020	20/10/2020	Soil			x							
3	0407_TP231_BH03_0.0-0.1_20201020	20/10/2020	Soil			x							
4	0407_TP231_BH04_0.0-0.1_20201020	20/10/2020	Soil			x							
5	0407_TP231_BH01_0.4-0.5_20201020	20/10/2020	Soil			x							
6	0407_TP231_BH02_0.4-0.5_20201020	20/10/2020	Soil			x							
7	0407_TP231_BH03_0.4-0.5_20201020	20/10/2020	Soil			x							
8	0407_TP231_BH04_0.4-0.5_20201020	20/10/2020	Soil			x							
9	QC315	20/10/2020	Water		x	x	x	x	x				
10	QC525 e TB	20/10/2020	~~Water~~ Soil							x	x		
11	~~Trip Spike~~ QC525-TS	20/10/20	Soil									x	

SGS EHS Sydney COC
SE212539

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time	19/10/2020 @ 1500	**Received by**	Sign	[redacted]	Date / Time	20/10
Relinquished By	Sign	Date / Time		**Received by**	Sign		Date / Time	
Relinquished By	Sign	Date / Time		**Received by**	Sign		Date / Time	

Temperature Received: @ 1.2°

SAMPLE RECEIPT ADVICE

SE212539

CLIENT DETAILS

Contact	LQRSYD
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	02 9427 8100
Facsimile	02 9427 8200
Email	lqrsyd@slrconsulting.com
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	11

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Tue 20/10/2020
Report Due	Tue 27/10/2020
SGS Reference	**SE212539**

SUBMISSION DETAILS

This is to confirm that 11 samples were received on Tuesday 20/10/2020. Results are expected to be ready by COB Tuesday 27/10/2020.
Please quote SGS reference SE212539 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	10 Soil, 1 Water
Date documentation received	20/10/2020	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	2.4°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

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SAMPLE RECEIPT ADVICE

SE212539

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Moisture Content	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Water	PCBs in Water	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
001	0407_TP231_BH01_0.0-0.1_20201020	1	4	-	-	-	-
002	0407_TP231_BH02_0.0-0.1_20201020	1	4	-	-	-	-
003	0407_TP231_BH03_0.0-0.1_20201020	1	4	-	-	-	-
004	0407_TP231_BH04_0.0-0.1_20201020	1	4	-	-	-	-
005	0407_TP231_BH01_0.4-0.5_20201020	1	4	-	-	-	-
006	0407_TP231_BH02_0.4-0.5_20201020	1	4	-	-	-	-
007	0407_TP231_BH03_0.4-0.5_20201020	1	4	-	-	-	-
008	0407_TP231_BH04_0.4-0.5_20201020	1	4	-	-	-	-
009	QC315	-	-	22	11	-	-
010	QC525-TB	1	-	-	-	-	7
011	QC525-TS	-	-	-	-	11	-

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE212539

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Trace Metals (Total) in Water by ICPMS
009	QC315	2

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	LQRSYD
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	02 9427 8100
Facsimile	02 9427 8200
Email	lqrsyd@slrconsulting.com
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	11

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE212539 R0**
Date Received	20/10/2020
Date Reported	27/10/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

SIGNATORIES

[redacted]

Chemist | Metals/Inorganics Team Leader | Organic Section Head

VOC's in Soil [AN433] Tested: 22/10/2020

PARAMETER	UOM	LOR	QC525-TS SOIL - 20/10/2020 SE212539.011
Benzene	mg/kg	0.1	[86%]
Toluene	mg/kg	0.1	[100%]
Ethylbenzene	mg/kg	0.1	[89%]
m/p-xylene	mg/kg	0.2	[89%]
o-xylene	mg/kg	0.1	[90%]
Naphthalene	mg/kg	0.1	-
Total Xylenes	mg/kg	0.3	-
Total BTEX	mg/kg	0.6	-

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 22/10/2020

PARAMETER	UOM	LOR	QC525-TB SOIL - 20/10/2020 SE212539.010
Benzene (F0)	mg/kg	0.1	<0.1
TRH C6-C9	mg/kg	20	<20
TRH C6-C10	mg/kg	25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 26/10/2020

PARAMETER	UOM	LOR	0407_TP231_BH01_(0-0.1_20201020 SOIL - 20/10/2020 SE212539.001	0407_TP231_BH02_(0-0.1_20201020 SOIL - 20/10/2020 SE212539.002	0407_TP231_BH03_(0-0.1_20201020 SOIL - 20/10/2020 SE212539.003	0407_TP231_BH04_(0-0.1_20201020 SOIL - 20/10/2020 SE212539.004	0407_TP231_BH01_(4-0.5_20201020 SOIL - 20/10/2020 SE212539.005
Benzo(a)pyrene	mg/kg	0.1	**1.0**	**0.5**	**0.7**	**2.0**	**0.3**

PARAMETER	UOM	LOR	0407_TP231_BH02_(4-0.5_20201020 SOIL - 20/10/2020 SE212539.006	0407_TP231_BH03_(4-0.5_20201020 SOIL - 20/10/2020 SE212539.007	0407_TP231_BH04_(4-0.5_20201020 SOIL - 20/10/2020 SE212539.008
Benzo(a)pyrene	mg/kg	0.1	**0.9**	**0.4**	<0.1

Moisture Content [AN002] Tested: 22/10/2020

PARAMETER	UOM	LOR	0407_TP231_BH01_(0-0.1_20201020 SOIL - 20/10/2020 SE212539.001	0407_TP231_BH02_(0-0.1_20201020 SOIL - 20/10/2020 SE212539.002	0407_TP231_BH03_(0-0.1_20201020 SOIL - 20/10/2020 SE212539.003	0407_TP231_BH04_(0-0.1_20201020 SOIL - 20/10/2020 SE212539.004	0407_TP231_BH01_(4-0.5_20201020 SOIL - 20/10/2020 SE212539.005
% Moisture	%w/w	1	**4.9**	**4.1**	**3.9**	**4.3**	**3.1**

PARAMETER	UOM	LOR	0407_TP231_BH02_(4-0.5_20201020 SOIL - 20/10/2020 SE212539.006	0407_TP231_BH03_(4-0.5_20201020 SOIL - 20/10/2020 SE212539.007	0407_TP231_BH04_(4-0.5_20201020 SOIL - 20/10/2020 SE212539.008	QC525-TB SOIL - 20/10/2020 SE212539.010
% Moisture	%w/w	1	**3.2**	**3.0**	**2.0**	<1.0

PAH (Polynuclear Aromatic Hydrocarbons) in Water [AN420] Tested: 21/10/2020

PARAMETER	UOM	LOR	QC315 WATER - 20/10/2020 SE212539.009
Naphthalene	µg/L	0.1	<0.1
2-methylnaphthalene	µg/L	0.1	<0.1
1-methylnaphthalene	µg/L	0.1	<0.1
Acenaphthylene	µg/L	0.1	<0.1
Acenaphthene	µg/L	0.1	<0.1
Fluorene	µg/L	0.1	<0.1
Phenanthrene	µg/L	0.1	<0.1
Anthracene	µg/L	0.1	<0.1
Fluoranthene	µg/L	0.1	<0.1
Pyrene	µg/L	0.1	<0.1
Benzo(a)anthracene	µg/L	0.1	<0.1
Chrysene	µg/L	0.1	<0.1
Benzo(b&j)fluoranthene	µg/L	0.1	<0.1
Benzo(k)fluoranthene	µg/L	0.1	<0.1
Benzo(a)pyrene	µg/L	0.1	<0.1
Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1
Dibenzo(ah)anthracene	µg/L	0.1	<0.1
Benzo(ghi)perylene	µg/L	0.1	<0.1
Total PAH (18)	µg/L	1	<1

PCBs in Water [AN420] Tested: 21/10/2020

PARAMETER	UOM	LOR	QC315 WATER - 20/10/2020 SE212539.009
Arochlor 1016	µg/L	1	<1
Arochlor 1221	µg/L	1	<1
Arochlor 1232	µg/L	1	<1
Arochlor 1242	µg/L	1	<1
Arochlor 1248	µg/L	1	<1
Arochlor 1254	µg/L	1	<1
Arochlor 1260	µg/L	1	<1
Arochlor 1262	µg/L	1	<1
Arochlor 1268	µg/L	1	<1
Total Arochlors*	µg/L	5	<5

Trace Metals (Total) in Water by ICPMS [AN022/AN318] Tested: 22/10/2020

PARAMETER	UOM	LOR	QC315 WATER - 20/10/2020 SE212539.009
Total Copper	µg/L	1	<1
Total Lead	µg/L	1	<1

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN022/AN318	Following acid digestion of un filtered sample, determination of elements at trace level in waters by ICP-MS technique, referenced to USEPA 6020B and USEPA 200.8 (5.4).
AN022	The water sample is digested with Nitric Acid and made up to the original volume similar to APHA3030E.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN420	Carcinogenic PAHs may be expressed as Benzo(a)pyrene equivalents by applying the BaP toxicity equivalence factor (NEPM 1999, June 2013, B7). These can be reported as the individual PAHs and as a sum of carcinogenic PAHs. The sum is reported three ways, the first assuming all <LOR results are zero, the second assuming all < LOR results are half the LOR and the third assuming all <LOR results are the LOR.
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
**	Indicative data, theoretical holding time exceeded.	NVL	Not validated.	LOR	Limit of Reporting.
***	Indicates that both * and ** apply.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE212539 R0

CLIENT DETAILS

Contact	LQRSYD
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	02 9427 8100
Facsimile	02 9427 8200
Email	lqrsyd@slrconsulting.com
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	11

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE212539 R0**
Date Received	20 Oct 2020
Date Reported	27 Oct 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Matrix Spike	Volatile Petroleum Hydrocarbons in Soil	1 item

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	10 Soil, 1 Water
Date documentation received	20/10/2020	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	2.4°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE212539 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP231_BH01_0.0-0.1	SE212539.001	LB212019	20 Oct 2020	20 Oct 2020	03 Nov 2020	26 Oct 2020	31 Oct 2020	27 Oct 2020
0407_TP231_BH02_0.0-0.1	SE212539.002	LB212019	20 Oct 2020	20 Oct 2020	03 Nov 2020	26 Oct 2020	31 Oct 2020	27 Oct 2020
0407_TP231_BH03_0.0-0.1	SE212539.003	LB212019	20 Oct 2020	20 Oct 2020	03 Nov 2020	26 Oct 2020	31 Oct 2020	27 Oct 2020
0407_TP231_BH04_0.0-0.1	SE212539.004	LB212019	20 Oct 2020	20 Oct 2020	03 Nov 2020	26 Oct 2020	31 Oct 2020	27 Oct 2020
0407_TP231_BH01_0.4-0.5	SE212539.005	LB212019	20 Oct 2020	20 Oct 2020	03 Nov 2020	26 Oct 2020	31 Oct 2020	27 Oct 2020
0407_TP231_BH02_0.4-0.5	SE212539.006	LB212019	20 Oct 2020	20 Oct 2020	03 Nov 2020	26 Oct 2020	31 Oct 2020	27 Oct 2020
0407_TP231_BH03_0.4-0.5	SE212539.007	LB212019	20 Oct 2020	20 Oct 2020	03 Nov 2020	26 Oct 2020	31 Oct 2020	27 Oct 2020
0407_TP231_BH04_0.4-0.5	SE212539.008	LB212019	20 Oct 2020	20 Oct 2020	03 Nov 2020	26 Oct 2020	31 Oct 2020	27 Oct 2020
QC525-TB	SE212539.010	LB211869	20 Oct 2020	20 Oct 2020	03 Nov 2020	22 Oct 2020	27 Oct 2020	27 Oct 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP231_BH01_0.0-0.1	SE212539.001	LB212015	20 Oct 2020	20 Oct 2020	03 Nov 2020	26 Oct 2020	05 Dec 2020	27 Oct 2020
0407_TP231_BH02_0.0-0.1	SE212539.002	LB212015	20 Oct 2020	20 Oct 2020	03 Nov 2020	26 Oct 2020	05 Dec 2020	27 Oct 2020
0407_TP231_BH03_0.0-0.1	SE212539.003	LB212015	20 Oct 2020	20 Oct 2020	03 Nov 2020	26 Oct 2020	05 Dec 2020	27 Oct 2020
0407_TP231_BH04_0.0-0.1	SE212539.004	LB212015	20 Oct 2020	20 Oct 2020	03 Nov 2020	26 Oct 2020	05 Dec 2020	27 Oct 2020
0407_TP231_BH01_0.4-0.5	SE212539.005	LB212015	20 Oct 2020	20 Oct 2020	03 Nov 2020	26 Oct 2020	05 Dec 2020	27 Oct 2020
0407_TP231_BH02_0.4-0.5	SE212539.006	LB212015	20 Oct 2020	20 Oct 2020	03 Nov 2020	26 Oct 2020	05 Dec 2020	27 Oct 2020
0407_TP231_BH03_0.4-0.5	SE212539.007	LB212015	20 Oct 2020	20 Oct 2020	03 Nov 2020	26 Oct 2020	05 Dec 2020	27 Oct 2020
0407_TP231_BH04_0.4-0.5	SE212539.008	LB212015	20 Oct 2020	20 Oct 2020	03 Nov 2020	26 Oct 2020	05 Dec 2020	27 Oct 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
QC315	SE212539.009	LB211702	20 Oct 2020	20 Oct 2020	27 Oct 2020	21 Oct 2020	30 Nov 2020	27 Oct 2020

PCBs in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
QC315	SE212539.009	LB211702	20 Oct 2020	20 Oct 2020	27 Oct 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020

Trace Metals (Total) in Water by ICPMS

Method: ME-(AU)-[ENV]AN022/AN318

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
QC315	SE212539.009	LB211813	20 Oct 2020	20 Oct 2020	18 Apr 2021	22 Oct 2020	18 Apr 2021	23 Oct 2020

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
QC525-TB	SE212539.010	LB211852	20 Oct 2020	20 Oct 2020	03 Nov 2020	22 Oct 2020	01 Dec 2020	27 Oct 2020
QC525-TS	SE212539.011	LB211852	20 Oct 2020	20 Oct 2020	03 Nov 2020	22 Oct 2020	01 Dec 2020	27 Oct 2020

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
QC525-TB	SE212539.010	LB211852	20 Oct 2020	20 Oct 2020	03 Nov 2020	22 Oct 2020	01 Dec 2020	27 Oct 2020
QC525-TS	SE212539.011	LB211852	20 Oct 2020	20 Oct 2020	03 Nov 2020	22 Oct 2020	01 Dec 2020	27 Oct 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)		SE212539.001	%	70 - 130%	82
		SE212539.002	%	70 - 130%	82
		SE212539.003	%	70 - 130%	88
		SE212539.004	%	70 - 130%	101
		SE212539.005	%	70 - 130%	80
		SE212539.006	%	70 - 130%	86
		SE212539.007	%	70 - 130%	90
		SE212539.008	%	70 - 130%	81
d14-p-terphenyl (Surrogate)		SE212539.001	%	70 - 130%	92
		SE212539.002	%	70 - 130%	99
		SE212539.003	%	70 - 130%	100
		SE212539.004	%	70 - 130%	97
		SE212539.005	%	70 - 130%	100
		SE212539.006	%	70 - 130%	106
		SE212539.007	%	70 - 130%	102
		SE212539.008	%	70 - 130%	94
d5-nitrobenzene (Surrogate)		SE212539.001	%	70 - 130%	100
		SE212539.002	%	70 - 130%	104
		SE212539.003	%	70 - 130%	102
		SE212539.004	%	70 - 130%	96
		SE212539.005	%	70 - 130%	98
		SE212539.006	%	70 - 130%	105
		SE212539.007	%	70 - 130%	99
		SE212539.008	%	70 - 130%	99

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	QC315	SE212539.009	%	40 - 130%	56
d14-p-terphenyl (Surrogate)	QC315	SE212539.009	%	40 - 130%	90
d5-nitrobenzene (Surrogate)	QC315	SE212539.009	%	40 - 130%	52

PCBs in Water

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (Surrogate)	QC315	SE212539.009	%	40 - 130%	80

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	QC525-TS	SE212539.011	%	60 - 130%	104
d4-1,2-dichloroethane (Surrogate)	QC525-TS	SE212539.011	%	60 - 130%	121
d8-toluene (Surrogate)	QC525-TS	SE212539.011	%	60 - 130%	115

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	QC525-TB	SE212539.010	%	60 - 130%	117
d4-1,2-dichloroethane (Surrogate)	QC525-TB	SE212539.010	%	60 - 130%	119
d8-toluene (Surrogate)	QC525-TB	SE212539.010	%	60 - 130%	120

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB212015.001		Benzo(a)pyrene	mg/kg	0.1	<0.1
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	95
		2-fluorobiphenyl (Surrogate)	%	-	84
		d14-p-terphenyl (Surrogate)	%	-	92

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB211702.001		Naphthalene	µg/L	0.1	<0.1
		2-methylnaphthalene	µg/L	0.1	<0.1
		1-methylnaphthalene	µg/L	0.1	<0.1
		Acenaphthylene	µg/L	0.1	<0.1
		Acenaphthene	µg/L	0.1	<0.1
		Fluorene	µg/L	0.1	<0.1
		Phenanthrene	µg/L	0.1	<0.1
		Anthracene	µg/L	0.1	<0.1
		Fluoranthene	µg/L	0.1	<0.1
		Pyrene	µg/L	0.1	<0.1
		Benzo(a)anthracene	µg/L	0.1	<0.1
		Chrysene	µg/L	0.1	<0.1
		Benzo(a)pyrene	µg/L	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1
		Dibenzo(ah)anthracene	µg/L	0.1	<0.1
		Benzo(ghi)perylene	µg/L	0.1	<0.1
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	66
		2-fluorobiphenyl (Surrogate)	%	-	72
		d14-p-terphenyl (Surrogate)	%	-	102

PCBs in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB211702.001		Arochlor 1016	µg/L	1	<1
		Arochlor 1221	µg/L	1	<1
		Arochlor 1232	µg/L	1	<1
		Arochlor 1242	µg/L	1	<1
		Arochlor 1248	µg/L	1	<1
		Arochlor 1254	µg/L	1	<1
		Arochlor 1260	µg/L	1	<1
		Arochlor 1262	µg/L	1	<1
		Arochlor 1268	µg/L	1	<1

Trace Metals (Total) in Water by ICPMS

Method: ME-(AU)-[ENV]AN022/AN318

Sample Number		Parameter	Units	LOR	Result
LB211813.001		Total Copper	µg/L	1	<1
		Total Lead	µg/L	1	<1

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB211852.001	Monocyclic Aromatic	Benzene	mg/kg	0.1	<0.1
	Hydrocarbons	Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	126
		d8-toluene (Surrogate)	%	-	126
		Bromofluorobenzene (Surrogate)	%	-	115

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB211852.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	126

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212539.008	LB212019.022	% Moisture	%w/w	1	2.0	1.8	83	8

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212539.008	LB212015.027		Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	152	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	30	5
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	3
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	12
SE212660.010	LB212015.014		Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	30	4
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.4	30	6
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	4

Trace Metals (Total) in Water by ICPMS

Method: ME-(AU)-[ENV]AN022/AN318

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212597.003	LB211813.021	Total Copper	µg/L	1	4	4	38	4

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212562.001	LB211852.031	Monocyclic	Benzene	mg/kg	0.1	<0.1	0	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	0.0029477659	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	0.0015715956	200	0
			m/p-xylene	mg/kg	0.2	<0.2	0.0043801189	200	0
			o-xylene	mg/kg	0.1	<0.1	0.0019403299	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.3	10.6570417704	50	3
			d8-toluene (Surrogate)	mg/kg	-	10.7	10.678568088(	50	0
			Bromofluorobenzene (Surrogate)	mg/kg	-	10.6	10.7527187994	50	2
SE212575.002	LB211852.030	Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	12.1	11.0	50	10
			d8-toluene (Surrogate)	mg/kg	-	11.5	11.1	50	4
			Bromofluorobenzene (Surrogate)	mg/kg	-	10.5	10.6	50	1

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212562.001	LB211852.031		TRH C6-C10	mg/kg	25	<25	0	200	0
			TRH C6-C9	mg/kg	20	<20	0	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.3	10.6570417704	30	3
			d8-toluene (Surrogate)	mg/kg	-	10.7	10.678568088(	30	0
			Bromofluorobenzene (Surrogate)	mg/kg	-	10.6	10.7527187994	30	2
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	0	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	0	200	0
SE212575.002	LB211852.030		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	12.1	11.0	30	10
			d8-toluene (Surrogate)	mg/kg	-	11.5	11.1	30	4
			Bromofluorobenzene (Surrogate)	mg/kg	-	10.5	10.6	30	1
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212015.002		Benzo(a)pyrene	mg/kg	0.1	4.5	4	60 - 140	113
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	100
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	86
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	90

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB211702.002		Naphthalene	µg/L	0.1	28	40	60 - 140	70
		Acenaphthylene	µg/L	0.1	31	40	60 - 140	77
		Acenaphthene	µg/L	0.1	35	40	60 - 140	87
		Phenanthrene	µg/L	0.1	34	40	60 - 140	85
		Anthracene	µg/L	0.1	33	40	60 - 140	82
		Fluoranthene	µg/L	0.1	36	40	60 - 140	91
		Pyrene	µg/L	0.1	35	40	60 - 140	89
		Benzo(a)pyrene	µg/L	0.1	34	40	60 - 140	84
	Surrogates	d5-nitrobenzene (Surrogate)	µg/L	-	0.3	0.5	40 - 130	64
		2-fluorobiphenyl (Surrogate)	µg/L	-	0.4	0.5	40 - 130	72
		d14-p-terphenyl (Surrogate)	µg/L	-	0.5	0.5	40 - 130	92

PCBs in Water

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB211702.002	Arochlor 1260	µg/L	1	<1	0.4	60 - 140	113

Trace Metals (Total) in Water by ICPMS

Method: ME-(AU)-[ENV]AN022/AN318

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB211813.002	Total Copper	µg/L	1	22	20	80 - 120	112
	Total Lead	µg/L	1	19	20	80 - 120	97

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB211852.002	Monocyclic	Benzene	mg/kg	0.1	4.2	5	60 - 140	83
	Aromatic	Toluene	mg/kg	0.1	5.5	5	60 - 140	109
		Ethylbenzene	mg/kg	0.1	5.4	5	60 - 140	108
		m/p-xylene	mg/kg	0.2	11	10	60 - 140	107
		o-xylene	mg/kg	0.1	5.4	5	60 - 140	109
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	12.0	10	70 - 130	120
		d8-toluene (Surrogate)	mg/kg	-	11.9	10	70 - 130	119
		Bromofluorobenzene (Surrogate)	mg/kg	-	10.9	10	70 - 130	109

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB211852.002		TRH C6-C10	mg/kg	25	80	92.5	60 - 140	87
		TRH C6-C9	mg/kg	20	69	80	60 - 140	86
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	12.0	10	70 - 130	120
		Bromofluorobenzene (Surrogate)	mg/kg	-	10.9	10	70 - 130	109
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	49	62.5	60 - 140	79

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212660.001	LB212015.004		Benzo(a)pyrene	mg/kg	0.1	4.5	<0.1	4	111
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	-	94
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	85
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	-	88

Trace Metals (Total) in Water by ICPMS

Method: ME-(AU)-[ENV]AN022/AN318

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212532.014	LB211813.004	Total Copper	µg/L	1	23	<1	20	113
		Total Lead	µg/L	1	21	<1	20	106

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212523.001	LB211852.004	Monocyclic	Benzene	mg/kg	0.1	4.1	<0.1	5	82
		Aromatic	Toluene	mg/kg	0.1	5.3	<0.1	5	107
			Ethylbenzene	mg/kg	0.1	5.2	<0.1	5	104
			m/p-xylene	mg/kg	0.2	10	<0.2	10	104
			o-xylene	mg/kg	0.1	5.4	0.1	5	105
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	11.8	11.0	10	118
			d8-toluene (Surrogate)	mg/kg	-	11.8	11.3	10	118
			Bromofluorobenzene (Surrogate)	mg/kg	-	11.1	10.6	10	111

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212523.001	LB211852.004		TRH C6-C10	mg/kg	25	120	<25	92.5	115
			TRH C6-C9	mg/kg	20	91	<20	80	104
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	11.8	11.0	10	118
			d8-toluene (Surrogate)	mg/kg	-	11.8	11.3	10	118
			Bromofluorobenzene (Surrogate)	mg/kg	-	11.1	10.6	-	111
		VPH F	Benzene (F0)	mg/kg	0.1	4.1	<0.1	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	93	<25	62.5	122 ④

MATRIX SPIKE DUPLICATES

SE212539 R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

QC Sample	Sample Number	Parameter	Units	LOR

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
***	Indicates that both * and ** apply.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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This test report shall not be reproduced, except in full.

source: Sydney.pdf page: 1 SDS Ref: SE212556_COC

E-MAILED
19/10 @ 6.02

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd
ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☒ SYDNEY: 202 Submarine School, Sub Base Platypus, North Sydney, 2060
- ✓ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2601
- ☐ MACKAY: 21 River Street, Mackay, QLD 4741
- ☐ PERTH: 503 Murray Street, Perth, WA 6001
- ☐ TOWNSVILLE: 514 Stuart Street, Townsville, QLD 4811
- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0821

CLIENT: **Defence Housing Australia**
PROJECT: **Randwick Barracks**
PROJECT NUMBER: **610.30041**
PROJECT MANAGER: [redacted]
PM CONTACT No [redacted]

LABORATORY: **SGS**
LABORATORY ADDRESS: **Unit 16/33 Maddox St, Alexandria NSW 2015**
SAMPLER [redacted]
SAMPLER CONTACT No: [redacted]
Email Reports and Invoices to: **LQRSYD@slrconsulting.com,** [redacted]

Turnaround Time (TAT)
✓ Standard TAT
☐ Non Standard or Urgent TAT
Required TAT: Standard

COC Number: 1 of 1

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Benzo(a)pyrene			TRH fraction C6-C10 and PFAS				HOLD	Additional Information (Comment on any gross contamination or specific requirements)
1	0407_TP211_BH01_0.05-0.1_201019	19-10-2020	Soil		X								
2	0407_TP211_BH02_0.05-0.1_201019	19-10-2020	Soil		X								
3	0407_TP211_BH03_0.1-0.2_201019	19-10-2020	Soil		X								
4	0407_TP221_BH01_0.2-0.3_201019	19-10-2020	Soil		X								
5	0407_TP221_BH01_0.5-0.6_201019	19-10-2020	Soil		X								
6	0407_TP221_BH02_0.2-0.3_201019	19-10-2020	Soil		X								
7	0407_TP221_BH02_0.5-0.6_201019	19-10-2020	Soil		X								
8	0407_TP221_BH03_0.2-0.3_201019	19-10-2020	Soil		X								
9	0407_TP221_BH03_0.5-0.6_201019	19-10-2020	Soil		X								
10	0407_QC196_201019	19-10-2020	Soil		X								
	0407_QC296_201019	19-10-2020	Soil										Please send to Eurofins for analysis of BaP
11	0407_TP221_BH04_0.2-0.3_201019	19-10-2020	Soil		X								
12	0407_TP221_BH04_0.5-0.6_201019	19-10-2020	Soil		X								
13	0407_QC197_201019	19-10-2020	Soil		X								
	0407_QC297_201019	19-10-2020	Soil										Please send to Eurofins for analysis of BaP

SGS EHS Sydney COC
SE212556

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 19-10-2020	**Received by**	Sign [redacted]	Date / Time 19/10 @	**Temperature Received:**	
Relinquished By	Sign	Date / Time	**Received by**	Sign [redacted]	Date / Time 6.35	6.4	
Relinquished By	Sign	Date / Time	**Received by**	Sign [redacted]	Date / Time		

SAMPLE RECEIPT ADVICE

SE212556

CLIENT DETAILS

Contact	LQRSYD
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	02 9427 8100
Facsimile	02 9427 8200
Email	lqrsyd@slrconsulting.com
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	13

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Mon 19/10/2020
Report Due	Mon 26/10/2020
SGS Reference	**SE212556**

SUBMISSION DETAILS

This is to confirm that 13 samples were received on Monday 19/10/2020. Results are expected to be ready by COB Monday 26/10/2020. Please quote SGS reference SE212556 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	13 Soil
Date documentation received	19/10/2020 @06:02pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	6.4°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

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SAMPLE RECEIPT ADVICE

SE212556

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Moisture Content	PAH (Polynuclear Aromatic Hydrocarbons) in Soil
001	0407_TP211_BH01_0.05-0.1_201019	1	4
002	0407_TP211_BH02_0.05-0.1_201019	1	4
003	0407_TP211_BH03_0.1-0.2_201019	1	4
004	0407_TP221_BH01_0.2-0.3_201019	1	4
005	0407_TP221_BH01_0.5-0.6_201019	1	4
006	0407_TP221_BH02_0.2-0.3_201019	1	4
007	0407_TP221_BH02_0.5-0.6_201019	1	4
008	0407_TP221_BH03_0.2-0.3_201019	1	4
009	0407_TP221_BH03_0.5-0.6_201019	1	4
010	0407_QC196_201019	1	4
011	0407_TP221_BH04_0.2-0.3_201019	1	4
012	0407_TP221_BH04_0.5-0.6_201019	1	4
013	0407_QC197_201019	1	4

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	LQRSYD
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	02 9427 8100
Facsimile	02 9427 8200
Email	lqrsyd@slrconsulting.com
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	13

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE212556 R0**
Date Received	19/10/2020
Date Reported	26/10/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

SIGNATORIES

[redacted]

Organic Section Head

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 21/10/2020

PARAMETER	UOM	LOR	0407_TP211_BH01_(05-0.1_201019 SOIL - 19/10/2020 SE212556.001	0407_TP211_BH02_(05-0.1_201019 SOIL - 19/10/2020 SE212556.002	0407_TP211_BH03_(1-0.2_201019 SOIL - 19/10/2020 SE212556.003	0407_TP221_BH01_(2-0.3_201019 SOIL - 19/10/2020 SE212556.004	0407_TP221_BH01_(5-0.6_201019 SOIL - 19/10/2020 SE212556.005
Benzo(a)pyrene	mg/kg	0.1	**2.7**	**0.5**	**3.7**	**0.1**	**3.7**

PARAMETER	UOM	LOR	0407_TP221_BH02_(2-0.3_201019 SOIL - 19/10/2020 SE212556.006	0407_TP221_BH02_(5-0.6_201019 SOIL - 19/10/2020 SE212556.007	0407_TP221_BH03_(2-0.3_201019 SOIL - 19/10/2020 SE212556.008	0407_TP221_BH03_(5-0.6_201019 SOIL - 19/10/2020 SE212556.009	0407_QC196_20101 SOIL - 19/10/2020 SE212556.010
Benzo(a)pyrene	mg/kg	0.1	**0.2**	**2.8**	**0.1**	<0.1	<0.1

PARAMETER	UOM	LOR	0407_TP221_BH04_(2-0.3_201019 SOIL - 19/10/2020 SE212556.011	0407_TP221_BH04_(5-0.6_201019 SOIL - 19/10/2020 SE212556.012	0407_QC197_20101 SOIL - 19/10/2020 SE212556.013
Benzo(a)pyrene	mg/kg	0.1	**1.3**	**0.2**	**0.2**

Moisture Content [AN002] Tested: 21/10/2020

PARAMETER	UOM	LOR	0407_TP211_BH01_(05-0.1_201019 SOIL - 19/10/2020 SE212556.001	0407_TP211_BH02_(05-0.1_201019 SOIL - 19/10/2020 SE212556.002	0407_TP211_BH03_(1-0.2_201019 SOIL - 19/10/2020 SE212556.003	0407_TP221_BH01_(2-0.3_201019 SOIL - 19/10/2020 SE212556.004	0407_TP221_BH01_(5-0.6_201019 SOIL - 19/10/2020 SE212556.005
% Moisture	%w/w	1	6.2	5.5	9.8	33.6	9.0

PARAMETER	UOM	LOR	0407_TP221_BH02_(2-0.3_201019 SOIL - 19/10/2020 SE212556.006	0407_TP221_BH02_(5-0.6_201019 SOIL - 19/10/2020 SE212556.007	0407_TP221_BH03_(2-0.3_201019 SOIL - 19/10/2020 SE212556.008	0407_TP221_BH03_(5-0.6_201019 SOIL - 19/10/2020 SE212556.009	0407_QC196_20101 SOIL - 19/10/2020 SE212556.010
% Moisture	%w/w	1	19.4	7.4	31.7	21.5	5.5

PARAMETER	UOM	LOR	0407_TP221_BH04_(2-0.3_201019 SOIL - 19/10/2020 SE212556.011	0407_TP221_BH04_(5-0.6_201019 SOIL - 19/10/2020 SE212556.012	0407_QC197_20101 SOIL - 19/10/2020 SE212556.013
% Moisture	%w/w	1	14.0	5.0	8.7

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN420	Carcinogenic PAHs may be expressed as Benzo(a)pyrene equivalents by applying the BaP toxicity equivalence factor (NEPM 1999, June 2013, B7). These can be reported as the individual PAHs and as a sum of carcinogenic PAHs. The sum is reported three ways, the first assuming all <LOR results are zero, the second assuming all < LOR results are half the LOR and the third assuming all <LOR results are the LOR.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		
***	Indicates that both * and ** apply.				

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE212556 R0

CLIENT DETAILS

Contact	LQRSYD
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	02 9427 8100
Facsimile	02 9427 8200
Email	lqrsyd@slrconsulting.com
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	13

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE212556 R0**
Date Received	19 Oct 2020
Date Reported	26 Oct 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Surrogate	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	4 items
Duplicate	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	1 item

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	13 Soil
Date documentation received	19/10/2020 @06:02	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	6.4°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE212556 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP211_BH01_0.05-0.	SE212556.001	LB211771	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP211_BH02_0.05-0.	SE212556.002	LB211771	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP211_BH03_0.1-0.2	SE212556.003	LB211771	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP221_BH01_0.2-0.3	SE212556.004	LB211771	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP221_BH01_0.5-0.6	SE212556.005	LB211771	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP221_BH02_0.2-0.3	SE212556.006	LB211771	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP221_BH02_0.5-0.6	SE212556.007	LB211771	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP221_BH03_0.2-0.3	SE212556.008	LB211771	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP221_BH03_0.5-0.6	SE212556.009	LB211771	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_QC196_201019	SE212556.010	LB211771	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP221_BH04_0.2-0.3	SE212556.011	LB211771	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP221_BH04_0.5-0.6	SE212556.012	LB211771	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_QC197_201019	SE212556.013	LB211771	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP211_BH01_0.05-0.	SE212556.001	LB211770	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_TP211_BH02_0.05-0.	SE212556.002	LB211770	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_TP211_BH03_0.1-0.2	SE212556.003	LB211770	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_TP221_BH01_0.2-0.3	SE212556.004	LB211770	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_TP221_BH01_0.5-0.6	SE212556.005	LB211770	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_TP221_BH02_0.2-0.3	SE212556.006	LB211770	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_TP221_BH02_0.5-0.6	SE212556.007	LB211770	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_TP221_BH03_0.2-0.3	SE212556.008	LB211770	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_TP221_BH03_0.5-0.6	SE212556.009	LB211770	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_QC196_201019	SE212556.010	LB211770	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_TP221_BH04_0.2-0.3	SE212556.011	LB211770	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_TP221_BH04_0.5-0.6	SE212556.012	LB211770	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_QC197_201019	SE212556.013	LB211770	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil — **Method: ME-(AU)-[ENV]AN420**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)		SE212556.001	%	70 - 130%	85
		SE212556.002	%	70 - 130%	91
		SE212556.003	%	70 - 130%	94
		SE212556.004	%	70 - 130%	90
		SE212556.005	%	70 - 130%	85
		SE212556.006	%	70 - 130%	85
		SE212556.007	%	70 - 130%	86
		SE212556.008	%	70 - 130%	87
		SE212556.009	%	70 - 130%	86
	0407_QC196_201019	SE212556.010	%	70 - 130%	86
		SE212556.011	%	70 - 130%	59 ④
		SE212556.012	%	70 - 130%	84
	0407_QC197_201019	SE212556.013	%	70 - 130%	106
d14-p-terphenyl (Surrogate)		SE212556.001	%	70 - 130%	91
		SE212556.002	%	70 - 130%	93
		SE212556.003	%	70 - 130%	90
		SE212556.004	%	70 - 130%	94
		SE212556.005	%	70 - 130%	84
		SE212556.006	%	70 - 130%	94
		SE212556.007	%	70 - 130%	87
		SE212556.008	%	70 - 130%	95
		SE212556.009	%	70 - 130%	93
	0407_QC196_201019	SE212556.010	%	70 - 130%	86
		SE212556.011	%	70 - 130%	56 ④
		SE212556.012	%	70 - 130%	85
	0407_QC197_201019	SE212556.013	%	70 - 130%	131 ①
d5-nitrobenzene (Surrogate)		SE212556.001	%	70 - 130%	91
		SE212556.002	%	70 - 130%	100
		SE212556.003	%	70 - 130%	90
		SE212556.004	%	70 - 130%	91
		SE212556.005	%	70 - 130%	92
		SE212556.006	%	70 - 130%	89
		SE212556.007	%	70 - 130%	97
		SE212556.008	%	70 - 130%	94
		SE212556.009	%	70 - 130%	93
	0407_QC196_201019	SE212556.010	%	70 - 130%	94
		SE212556.011	%	70 - 130%	61 ④
		SE212556.012	%	70 - 130%	95
	0407_QC197_201019	SE212556.013	%	70 - 130%	122

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil — **Method: ME-(AU)-[ENV]AN420**

Sample Number		Parameter	Units	LOR	Result
LB211770.001		Benzo(a)pyrene	mg/kg	0.1	<0.1
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	95
		2-fluorobiphenyl (Surrogate)	%	-	94
		d14-p-terphenyl (Surrogate)	%	-	85

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212528.010	LB211771.011	% Moisture	%w/w	1	6.8	6.7	45	2
SE212556.010	LB211771.022	% Moisture	%w/w	1	5.5	6.5	47	17
SE212556.013	LB211771.026	% Moisture	%w/w	1	8.7	8.7	41	1

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212528.010	LB211770.014		Benzo(a)pyrene	mg/kg	0.1	2.6	2.8	34	7
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	30	1
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	2
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.4	30	7
SE212556.010	LB211770.028		Benzo(a)pyrene	mg/kg	0.1	<0.1	0.6	61	141 ②
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.4	30	7
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	1
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	30	7

LABORATORY CONTROL SAMPLES

SE212556 R0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil — **Method: ME-(AU)-[ENV]AN420**

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB211770.002		Benzo(a)pyrene	mg/kg	0.1	4.3	4	60 - 140	107
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	88
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	90
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	85

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil — **Method: ME-(AU)-[ENV]AN420**

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212528.001	LB211770.004		Benzo(a)pyrene	mg/kg	0.1	4.6	0.8	4	96
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	-	86
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	88
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	88

MATRIX SPIKE DUPLICATES

SE212556 R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
***	Indicates that both * and ** apply.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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E-MAILED
19/10/20 6.02pm

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd
ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☒ SYDNEY: 202 Submarine School, Sub Base Platypus, North Sydney, 2060
- ✓ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2601
- ☐ MACKAY: 21 River Street, Mackay, QLD 4741
- ☐ PERTH: 503 Murray Street, Perth, WA 6001
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4811
- ☐ DARWIN: 21 Parap Pd, Dawin, NT 0821

CLIENT: **Defence Housing Australia**
PROJECT: **Randwick Barracks**
PROJECT NUMBER: **610.30041**
PROJECT MANAGER: [redacted]
PM CONTACT No [redacted]

LABORATORY: **SGS**
LABORATORY ADDRESS: **Unit 16/33 Maddox St, Alexandria NSW 2015**
SAMPLER: [redacted]
SAMPLER CONTACT No [redacted]
Email Reports and Invoices to: **LQRSYD@slrconsulting.com,** [redacted]

Turnaround Time (TAT)
✓ Standard TAT
☐ Non Standard or Urgent TAT
Required TAT: Standard

COC Number: 1 of 1

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Benzo(a)pyrene			TRH fraction C6-C10 and PFAS				HOLD	Additional Information (Comment on any gross contamination or specific requirements)
1	0407_TP222_BH01_0.2-0.3_201019	19-10-2020	Soil		X								
2	0407_TP222_BH01_0.5-0.6_201019	19-10-2020	Soil		X								
3	0407_QC198_201019	19-10-2020	Soil		X								
	0407_QC298_201019	19-10-2020	Soil										Please send to Eurofins for analysis of BaP
4	0407_TP222_BH02_0.2-0.3_201019	19-10-2020	Soil		X								
5	0407_TP222_BH02_0.5-0.6_201019	19-10-2020	Soil		X								
6	0407_QC200_201019	19-10-2020	Soil		X								
	0407_QC300_201019	19-10-2020	Soil										Please send to Eurofins for analysis of BaP
7	0407_TP222_BH03_0.2-0.3_201019	19-10-2020	Soil		X								
8	0407_TP222_BH03_0.5-0.6_201019	19-10-2020	Soil		X								
9	0407_TP222_BH04_0.2-0.3_201019	19-10-2020	Soil		X								
10	0407_TP222_BH04_0.5-0.6_201019	19-10-2020	Soil		X								
11	0407_QC199_201019	19-10-2020	Soil		X								
	0407_QC299_201019	19-10-2020	Soil										Please send to Eurofins for analysis of BaP

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler		Date / Time	Received by		Date / Time	Temperature Received:
[redacted]		19-10-2020		[redacted]	19/10/20	
Sign		Date / Time	Received by	Sign	Date / Time	4.35
Sign		Date / Time	Received by	Sign	Date / Time	6.4 °C

SGS EHS Sydney COC
SE212557

SAMPLE RECEIPT ADVICE

SE212557

CLIENT DETAILS

Contact	LQRSYD
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	02 9427 8100
Facsimile	02 9427 8200
Email	lqrsyd@slrconsulting.com
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	11

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Mon 19/10/2020
Report Due	Mon 26/10/2020
SGS Reference	**SE212557**

SUBMISSION DETAILS

This is to confirm that 11 samples were received on Monday 19/10/2020. Results are expected to be ready by COB Monday 26/10/2020. Please quote SGS reference SE212557 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	11 Soil
Date documentation received	19/10/2020 @06:02pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	6.4°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

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SAMPLE RECEIPT ADVICE

SE212557

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Moisture Content	PAH (Polynuclear Aromatic Hydrocarbons) in Soil
001	0407_TP222_BH01_0.2-0.3_201019	1	4
002	0407_TP222_BH01_0.5-0.6_201019	1	4
003	0407_QC198_201019	1	4
004	0407_TP222_BH02_0.2-0.3_201019	1	4
005	0407_TP222_BH02_0.5-0.6_201019	1	4
006	0407_QC200_201019	1	4
007	0407_TP222_BH03_0.2-0.3_201019	1	4
008	0407_TP222_BH03_0.5-0.6_201019	1	4
009	0407_TP222_BH04_0.2-0.3_201019	1	4
010	0407_TP222_BH04_0.5-0.6_201019	1	4
011	0407_QC199_201019	1	4

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	LQRSYD
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	02 9427 8100
Facsimile	02 9427 8200
Email	lqrsyd@slrconsulting.com
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	11

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE212557 R0**
Date Received	19/10/2020
Date Reported	26/10/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

SIGNATORIES

[redacted]
Organic Section Head

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 21/10/2020

PARAMETER	UOM	LOR	0407_TP222_BH01_(2-0.3_201019 SOIL - 19/10/2020 SE212557.001	0407_TP222_BH01_(5-0.6_201019 SOIL - 19/10/2020 SE212557.002	0407_QC198_20101 SOIL - 19/10/2020 SE212557.003	0407_TP222_BH02_(2-0.3_201019 SOIL - 19/10/2020 SE212557.004	0407_TP222_BH02_(5-0.6_201019 SOIL - 19/10/2020 SE212557.005
Benzo(a)pyrene	mg/kg	0.1	**4.3**	**61**	**49**	**2.2**	**2.8**

PARAMETER	UOM	LOR	0407_QC200_20101 SOIL - 19/10/2020 SE212557.006	0407_TP222_BH03_(2-0.3_201019 SOIL - 19/10/2020 SE212557.007	0407_TP222_BH03_(5-0.6_201019 SOIL - 19/10/2020 SE212557.008	0407_TP222_BH04_(2-0.3_201019 SOIL - 19/10/2020 SE212557.009	0407_TP222_BH04_(5-0.6_201019 SOIL - 19/10/2020 SE212557.010
Benzo(a)pyrene	mg/kg	0.1	**3.1**	**0.3**	**0.2**	**4.9**	**25**

PARAMETER	UOM	LOR	0407_QC199_20101 SOIL - 19/10/2020 SE212557.011
Benzo(a)pyrene	mg/kg	0.1	**40**

Moisture Content [AN002] Tested: 21/10/2020

PARAMETER	UOM	LOR	0407_TP222_BH01_(0-2-0.3_201019 SOIL - 19/10/2020 SE212557.001	0407_TP222_BH01_(0-5-0.6_201019 SOIL - 19/10/2020 SE212557.002	0407_QC198_20101 SOIL - 19/10/2020 SE212557.003	0407_TP222_BH02_(0-2-0.3_201019 SOIL - 19/10/2020 SE212557.004	0407_TP222_BH02_(0-5-0.6_201019 SOIL - 19/10/2020 SE212557.005
% Moisture	%w/w	1	9.2	8.4	11.4	10.0	8.2

PARAMETER	UOM	LOR	0407_QC200_20101 SOIL - 19/10/2020 SE212557.006	0407_TP222_BH03_(0-2-0.3_201019 SOIL - 19/10/2020 SE212557.007	0407_TP222_BH03_(0-5-0.6_201019 SOIL - 19/10/2020 SE212557.008	0407_TP222_BH04_(0-2-0.3_201019 SOIL - 19/10/2020 SE212557.009	0407_TP222_BH04_(0-5-0.6_201019 SOIL - 19/10/2020 SE212557.010
% Moisture	%w/w	1	9.2	8.5	5.4	8.4	7.4

PARAMETER	UOM	LOR	0407_QC199_20101 SOIL - 19/10/2020 SE212557.011
% Moisture	%w/w	1	7.5

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN420	Carcinogenic PAHs may be expressed as Benzo(a)pyrene equivalents by applying the BaP toxicity equivalence factor (NEPM 1999, June 2013, B7). These can be reported as the individual PAHs and as a sum of carcinogenic PAHs. The sum is reported three ways, the first assuming all <LOR results are zero, the second assuming all < LOR results are half the LOR and the third assuming all <LOR results are the LOR.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		
***	Indicates that both * and ** apply.				

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE212557 R0

CLIENT DETAILS

Contact	LQRSYD
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	02 9427 8100
Facsimile	02 9427 8200
Email	lqrsyd@slrconsulting.com
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	11

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE212557 R0**
Date Received	19 Oct 2020
Date Reported	26 Oct 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met (within the SGS Alexandria Environmental laboratory).

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	11 Soil
Date documentation received	19/10/2020 @06:02	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	6.4°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE212557 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP222_BH01_0.2-0.3	SE212557.001	LB211778	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP222_BH01_0.5-0.6	SE212557.002	LB211778	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_QC198_201019	SE212557.003	LB211778	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP222_BH02_0.2-0.3	SE212557.004	LB211778	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP222_BH02_0.5-0.6	SE212557.005	LB211778	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_QC200_201019	SE212557.006	LB211778	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP222_BH03_0.2-0.3	SE212557.007	LB211778	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP222_BH03_0.5-0.6	SE212557.008	LB211778	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP222_BH04_0.2-0.3	SE212557.009	LB211778	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP222_BH04_0.5-0.6	SE212557.010	LB211778	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_QC199_201019	SE212557.011	LB211778	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP222_BH01_0.2-0.3	SE212557.001	LB211777	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_TP222_BH01_0.5-0.6	SE212557.002	LB211777	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_QC198_201019	SE212557.003	LB211777	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_TP222_BH02_0.2-0.3	SE212557.004	LB211777	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_TP222_BH02_0.5-0.6	SE212557.005	LB211777	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_QC200_201019	SE212557.006	LB211777	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_TP222_BH03_0.2-0.3	SE212557.007	LB211777	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_TP222_BH03_0.5-0.6	SE212557.008	LB211777	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_TP222_BH04_0.2-0.3	SE212557.009	LB211777	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_TP222_BH04_0.5-0.6	SE212557.010	LB211777	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_QC199_201019	SE212557.011	LB211777	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil — **Method: ME-(AU)-[ENV]AN420**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)		SE212557.001	%	70 - 130%	87
		SE212557.002	%	70 - 130%	91
	0407_QC198_201019	SE212557.003	%	70 - 130%	93
		SE212557.004	%	70 - 130%	91
		SE212557.005	%	70 - 130%	93
	0407_QC200_201019	SE212557.006	%	70 - 130%	85
		SE212557.007	%	70 - 130%	86
		SE212557.008	%	70 - 130%	78
		SE212557.009	%	70 - 130%	88
		SE212557.010	%	70 - 130%	99
	0407_QC199_201019	SE212557.011	%	70 - 130%	103
d14-p-terphenyl (Surrogate)		SE212557.001	%	70 - 130%	85
		SE212557.002	%	70 - 130%	98
	0407_QC198_201019	SE212557.003	%	70 - 130%	91
		SE212557.004	%	70 - 130%	94
		SE212557.005	%	70 - 130%	90
	0407_QC200_201019	SE212557.006	%	70 - 130%	90
		SE212557.007	%	70 - 130%	100
		SE212557.008	%	70 - 130%	89
		SE212557.009	%	70 - 130%	91
		SE212557.010	%	70 - 130%	99
	0407_QC199_201019	SE212557.011	%	70 - 130%	107
d5-nitrobenzene (Surrogate)		SE212557.001	%	70 - 130%	89
		SE212557.002	%	70 - 130%	90
	0407_QC198_201019	SE212557.003	%	70 - 130%	102
		SE212557.004	%	70 - 130%	94
		SE212557.005	%	70 - 130%	94
	0407_QC200_201019	SE212557.006	%	70 - 130%	92
		SE212557.007	%	70 - 130%	99
		SE212557.008	%	70 - 130%	97
		SE212557.009	%	70 - 130%	98
		SE212557.010	%	70 - 130%	93
	0407_QC199_201019	SE212557.011	%	70 - 130%	93

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil — **Method: ME-(AU)-[ENV]AN420**

Sample Number		Parameter	Units	LOR	Result
LB211777.001		Benzo(a)pyrene	mg/kg	0.1	<0.1
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	82
		2-fluorobiphenyl (Surrogate)	%	-	84
		d14-p-terphenyl (Surrogate)	%	-	96

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212557.006	LB211778.011	% Moisture	%w/w	1	9.2	8.5	41	9
SE212557.011	LB211778.017	% Moisture	%w/w	1	7.5	6.8	44	10

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212557.006	LB211777.014		Benzo(a)pyrene	mg/kg	0.1	3.1	2.3	34	30
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	30	2
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	30	10
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.4	30	9

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil — **Method: ME-(AU)-[ENV]AN420**

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB211777.002		Benzo(a)pyrene	mg/kg	0.1	4.3	4	60 - 140	107
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	83
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	85
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	86

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil — **Method: ME-(AU)-[ENV]AN420**

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212584.001	LB211777.004		Benzo(a)pyrene	mg/kg	0.1	4.4	<0.1	4	107
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.4	-	87
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.4	-	86
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	-	91

MATRIX SPIKE DUPLICATES

SE212557 R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
***	Indicates that both * and ** apply.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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source: Sydney.pdf page: 5 SDS Ref: SE212558_COC

E-MAILED
19/10 @ 6.02

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd
ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☒ **SYDNEY: 202 Submarine School, Sub Base Platypus, North Sydney, 2060**
- ✓ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2601
- ☐ MACKAY: 21 River Street, Mackay, QLD 4741
- ☐ PERTH: 503 Murray Street, Perth, WA 6001
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4811
- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0821

CLIENT: **Defence Housing Australia**
PROJECT: **Randwick Barracks**
PROJECT NUMBER: **610.30041**
PROJECT MANAGER: [redacted]
PM CONTACT No: [redacted]

LABORATORY: **SGS**
LABORATORY ADDRESS: **Unit 16/33 Maddox St, Alexandria NSW 2015**
SAMPLER: [redacted]
SAMPLER CONTACT No: [redacted]
Email Reports and Invoices to: **LQRSYD@slrconsulting.com,** [redacted]

Turnaround Time (TAT)
✓ Standard TAT
☐ Non Standard or Urgent TAT
Required TAT: Standard

COC Number: 1 of 1

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Lead			TRH fraction C6-C10 and PFAS				HOLD	Additional Information (Comment on any gross contamination or specific requirements)
1	0407_TP269_BH01_0.0-0.1_201019	19-10-2020	Soil		X								
2	0407_TP269_BH01_0.4-0.5_201019	19-10-2020	Soil		X								
3	0407_TP269_BH02_0.0-0.1_201019	19-10-2020	Soil		X								
4	0407_TP269_BH02_0.4-0.5_201019	19-10-2020	Soil		X								
5	0407_TP269_BH03_0.0-0.1_201019	19-10-2020	Soil		X								
6	0407_TP269_BH03_0.4-0.5_201019	19-10-2020	Soil		X								
7	0407_TP269_BH04_0.0-0.1_201019	19-10-2020	Soil		X								
8	0407_TP269_BH04_0.4-0.5_201019	19-10-2020	Soil		X								
9	0407_QC524_201019 – TB	19-10-2020	Soil					X					
10	0407_QC534_201019_TS	–	–					?					

SGS EHS Sydney COC
SE212558

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 19-10-2020	**Received by**	Sign [redacted]	Date / Time 19/10	**Temperature Received:**
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time 4.34	6.4°C
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

SAMPLE RECEIPT ADVICE

SE212558

CLIENT DETAILS

Contact	LQRSYD
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	02 9427 8100
Facsimile	02 9427 8200
Email	lqrsyd@slrconsulting.com
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	10

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Mon 19/10/2020
Report Due	Mon 26/10/2020
SGS Reference	**SE212558**

SUBMISSION DETAILS

This is to confirm that 10 samples were received on Monday 19/10/2020. Results are expected to be ready by COB Monday 26/10/2020. Please quote SGS reference SE212558 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	10 Soil
Date documentation received	19/10/2020 @06:02pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	6.4°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

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SAMPLE RECEIPT ADVICE

SE212558

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Moisture Content	Total Recoverable Elements in Soil/Waste	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
001	0407_TP269_BH01_0.0-0.1_201019	1	1	-	-
002	0407_TP269_BH01_0.4-0.5_201019	1	1	-	-
003	0407_TP269_BH02_0.0-0.1_201019	1	1	-	-
004	0407_TP269_BH02_0.4-0.5_201019	1	1	-	-
005	0407_TP269_BH03_0.0-0.1_201019	1	1	-	-
006	0407_TP269_BH03_0.4-0.5_201019	1	1	-	-
007	0407_TP269_BH04_0.0-0.1_201019	1	1	-	-
008	0407_TP269_BH04_0.4-0.5_201019	1	1	-	-
009	0407_QC524_201019_TB	1	-	-	7
010	0407_QC534_201019_TS	-	-	11	-

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	LQRSYD
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	02 9427 8100
Facsimile	02 9427 8200
Email	lqrsyd@slrconsulting.com
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	10

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE212558 R0**
Date Received	19/10/2020
Date Reported	26/10/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

SIGNATORIES

[redacted]

Senior Organic Chemist/Metals Chemist

Organic Section Head

VOC's in Soil [AN433] Tested: 21/10/2020

PARAMETER	UOM	LOR	0407_QC534_201019_TS SOIL - 19/10/2020 SE212558.010
Benzene	mg/kg	0.1	[104%]
Toluene	mg/kg	0.1	[104%]
Ethylbenzene	mg/kg	0.1	[104%]
m/p-xylene	mg/kg	0.2	[103%]
o-xylene	mg/kg	0.1	[104%]
Naphthalene	mg/kg	0.1	-
Total Xylenes	mg/kg	0.3	-
Total BTEX	mg/kg	0.6	-

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 21/10/2020

PARAMETER	UOM	LOR	0407_QC524_201019_TB SOIL - 19/10/2020 SE212558.009
Benzene (F0)	mg/kg	0.1	<0.1
TRH C6-C9	mg/kg	20	<20
TRH C6-C10	mg/kg	25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 22/10/2020

PARAMETER	UOM	LOR	0407_TP269_BH01_(0-0.1_201019 SOIL - 19/10/2020 SE212558.001	0407_TP269_BH01_(4-0.5_201019 SOIL - 19/10/2020 SE212558.002	0407_TP269_BH02_(0-0.1_201019 SOIL - 19/10/2020 SE212558.003	0407_TP269_BH02_(4-0.5_201019 SOIL - 19/10/2020 SE212558.004	0407_TP269_BH03_(0-0.1_201019 SOIL - 19/10/2020 SE212558.005
Lead, Pb	mg/kg	1	200	8	21	4	17

PARAMETER	UOM	LOR	0407_TP269_BH03_(4-0.5_201019 SOIL - 19/10/2020 SE212558.006	0407_TP269_BH04_(0-0.1_201019 SOIL - 19/10/2020 SE212558.007	0407_TP269_BH04_(4-0.5_201019 SOIL - 19/10/2020 SE212558.008
Lead, Pb	mg/kg	1	5	26	8

Moisture Content [AN002] Tested: 21/10/2020

PARAMETER	UOM	LOR	0407_TP269_BH01_(0-0.1_201019 SOIL - 19/10/2020 SE212558.001	0407_TP269_BH01_(4-0.5_201019 SOIL - 19/10/2020 SE212558.002	0407_TP269_BH02_(0-0.1_201019 SOIL - 19/10/2020 SE212558.003	0407_TP269_BH02_(4-0.5_201019 SOIL - 19/10/2020 SE212558.004	0407_TP269_BH03_(0-0.1_201019 SOIL - 19/10/2020 SE212558.005
% Moisture	%w/w	1	**2.0**	**3.6**	**2.9**	**4.7**	**2.9**

PARAMETER	UOM	LOR	0407_TP269_BH03_(4-0.5_201019 SOIL - 19/10/2020 SE212558.006	0407_TP269_BH04_(0-0.1_201019 SOIL - 19/10/2020 SE212558.007	0407_TP269_BH04_(4-0.5_201019 SOIL - 19/10/2020 SE212558.008	0407_QC524_201015_TB SOIL - 19/10/2020 SE212558.009
% Moisture	%w/w	1	**18.1**	**2.4**	**3.0**	<1.0

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
**	Indicative data, theoretical holding time exceeded.	NVL	Not validated.	LOR	Limit of Reporting.
***	Indicates that both * and ** apply.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE212558 R0

CLIENT DETAILS

Contact	LQRSYD
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	02 9427 8100
Facsimile	02 9427 8200
Email	lqrsyd@slrconsulting.com
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	10

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE212558 R0**
Date Received	19 Oct 2020
Date Reported	26 Oct 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met (within the SGS Alexandria Environmental laboratory).

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	10 Soil
Date documentation received	19/10/2020 @06:02	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	6.4°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE212558 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP269_BH01_0.0-0.1	SE212558.001	LB211769	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP269_BH01_0.4-0.5	SE212558.002	LB211769	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP269_BH02_0.0-0.1	SE212558.003	LB211769	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP269_BH02_0.4-0.5	SE212558.004	LB211769	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP269_BH03_0.0-0.1	SE212558.005	LB211769	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP269_BH03_0.4-0.5	SE212558.006	LB211769	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP269_BH04_0.0-0.1	SE212558.007	LB211769	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_TP269_BH04_0.4-0.5	SE212558.008	LB211769	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020
0407_QC524_201019_TB	SE212558.009	LB211769	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	26 Oct 2020	26 Oct 2020

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP269_BH01_0.0-0.1	SE212558.001	LB211831	19 Oct 2020	19 Oct 2020	17 Apr 2021	22 Oct 2020	17 Apr 2021	26 Oct 2020
0407_TP269_BH01_0.4-0.5	SE212558.002	LB211831	19 Oct 2020	19 Oct 2020	17 Apr 2021	22 Oct 2020	17 Apr 2021	26 Oct 2020
0407_TP269_BH02_0.0-0.1	SE212558.003	LB211831	19 Oct 2020	19 Oct 2020	17 Apr 2021	22 Oct 2020	17 Apr 2021	26 Oct 2020
0407_TP269_BH02_0.4-0.5	SE212558.004	LB211831	19 Oct 2020	19 Oct 2020	17 Apr 2021	22 Oct 2020	17 Apr 2021	26 Oct 2020
0407_TP269_BH03_0.0-0.1	SE212558.005	LB211831	19 Oct 2020	19 Oct 2020	17 Apr 2021	22 Oct 2020	17 Apr 2021	26 Oct 2020
0407_TP269_BH03_0.4-0.5	SE212558.006	LB211831	19 Oct 2020	19 Oct 2020	17 Apr 2021	22 Oct 2020	17 Apr 2021	26 Oct 2020
0407_TP269_BH04_0.0-0.1	SE212558.007	LB211831	19 Oct 2020	19 Oct 2020	17 Apr 2021	22 Oct 2020	17 Apr 2021	26 Oct 2020
0407_TP269_BH04_0.4-0.5	SE212558.008	LB211831	19 Oct 2020	19 Oct 2020	17 Apr 2021	22 Oct 2020	17 Apr 2021	26 Oct 2020

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC524_201019_TB	SE212558.009	LB211766	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_QC534_201019_TS	SE212558.010	LB211766	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC524_201019_TB	SE212558.009	LB211766	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020
0407_QC534_201019_TS	SE212558.010	LB211766	19 Oct 2020	19 Oct 2020	02 Nov 2020	21 Oct 2020	30 Nov 2020	26 Oct 2020

SURROGATES

SE212558 R0

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil — Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_QC534_201019_TS	SE212558.010	%	60 - 130%	79
d4-1,2-dichloroethane (Surrogate)	0407_QC534_201019_TS	SE212558.010	%	60 - 130%	94
d8-toluene (Surrogate)	0407_QC534_201019_TS	SE212558.010	%	60 - 130%	103

Volatile Petroleum Hydrocarbons in Soil — Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_QC524_201019_TB	SE212558.009	%	60 - 130%	88
d4-1,2-dichloroethane (Surrogate)	0407_QC524_201019_TB	SE212558.009	%	60 - 130%	105
d8-toluene (Surrogate)	0407_QC524_201019_TB	SE212558.009	%	60 - 130%	110

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB211831.001	Lead, Pb	mg/kg	1	<1

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB211766.001	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	106
		d8-toluene (Surrogate)	%	-	111
		Bromofluorobenzene (Surrogate)	%	-	96

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB211766.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	106

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212558.003	LB211769.022	% Moisture	%w/w	1	2.9	3.3	62	12
SE212558.009	LB211769.029	% Moisture	%w/w	1	<1.0	<1.0	200	0
SE212583.003	LB211769.011	% Moisture	%w/w	1	11.214230471	11.051212938	39	1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212558.001	LB211831.014	Lead, Pb	mg/kg	1	200	210	30	3
SE212558.008	LB211831.022	Lead, Pb	mg/kg	1	8	8	43	2

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212583.003	LB211766.014	Monocyclic	Benzene	mg/kg	0.1	0	0	200	0
		Aromatic	Toluene	mg/kg	0.1	0.003993272	90.003933050	200	0
			Ethylbenzene	mg/kg	0.1	0.001899115	60.001762899	200	0
			m/p-xylene	mg/kg	0.2	0.003305276	50.003095083	200	0
			o-xylene	mg/kg	0.1	0.001155977	20.000987796	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.32312641	210.248642117	50	1
			d8-toluene (Surrogate)	mg/kg	-	11.16162272	390.865376030	50	3
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.79239923	928.658520848	50	2
SE212583.010	LB211766.025	Monocyclic	Benzene	mg/kg	0.1	0	0	200	0
		Aromatic	Toluene	mg/kg	0.1	0.003520574	30.003604479	200	0
			Ethylbenzene	mg/kg	0.1	0.001574959	60.001568271	200	0
			m/p-xylene	mg/kg	0.2	0.002773851	70.002667606	200	0
			o-xylene	mg/kg	0.1	0.000718170	30.000784739	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.15508042	780.674527975	50	5
			d8-toluene (Surrogate)	mg/kg	-	10.53137393	620.867626318	50	3
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.30897475	518.691776110	50	5

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212583.003	LB211766.014		TRH C6-C10	mg/kg	25	0	0	200	0
			TRH C6-C9	mg/kg	20	0	0	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.32312641	210.248642117	30	1
			d8-toluene (Surrogate)	mg/kg	-	11.16162272	390.865376030	30	3
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.79239923	928.658520848	30	2
		VPH F Bands	Benzene (F0)	mg/kg	0.1	0	0	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	0	0	200	0
SE212583.010	LB211766.025		TRH C6-C10	mg/kg	25	0	0	200	0
			TRH C6-C9	mg/kg	20	0	0	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.15508042	780.674527975	30	5
			d8-toluene (Surrogate)	mg/kg	-	10.53137393	620.867626318	30	3
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.30897475	518.691776110	30	5
		VPH F Bands	Benzene (F0)	mg/kg	0.1	0	0	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	0	0	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB211831.002	Lead, Pb	mg/kg	1	88	89.9	80 - 120	98

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB211766.002	Monocyclic Aromatic	Benzene	mg/kg	0.1	5.3	5	60 - 140	106
		Toluene	mg/kg	0.1	5.6	5	60 - 140	112
		Ethylbenzene	mg/kg	0.1	5.6	5	60 - 140	113
		m/p-xylene	mg/kg	0.2	11	10	60 - 140	111
		o-xylene	mg/kg	0.1	5.6	5	60 - 140	111
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.7	10	70 - 130	107
		d8-toluene (Surrogate)	mg/kg	-	11.3	10	70 - 130	113
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.5	10	70 - 130	95

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB211766.002		TRH C6-C10	mg/kg	25	85	92.5	60 - 140	92
		TRH C6-C9	mg/kg	20	70	80	60 - 140	87
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.7	10	70 - 130	107
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.5	10	70 - 130	95
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	52	62.5	60 - 140	82

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212662.001	LB211831.004	Lead, Pb	mg/kg	1	55	8	50	94

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212617.001	LB211766.004	Monocyclic	Benzene	mg/kg	0.1	5.2	0.03859707213	5	104
		Aromatic	Toluene	mg/kg	0.1	5.5	0.04637199259	5	110
			Ethylbenzene	mg/kg	0.1	5.6	0.02733297485	5	112
			m/p-xylene	mg/kg	0.2	11	0.04222718826	10	111
			o-xylene	mg/kg	0.1	5.6	0.02324697490	5	111
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	11.0	9.85229999519	10	110
			d8-toluene (Surrogate)	mg/kg	-	11.2	10.71693378491	10	112
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.3	8.75512669359	10	93

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212617.001	LB211766.004		TRH C6-C10	mg/kg	25	81	0.30099812802	92.5	88
			TRH C6-C9	mg/kg	20	67	0.03218733390	80	84
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	11.0	9.85229999519	10	110
			d8-toluene (Surrogate)	mg/kg	-	11.2	10.71693378491	10	112
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.3	8.75512669359	-	93
		VPH F	Benzene (F0)	mg/kg	0.1	5.2	0.03859707213	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	48	0.30099812802	62.5	77

MATRIX SPIKE DUPLICATES

SE212558 R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
***	Indicates that both * and ** apply.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

☐	BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000	☐	GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227	☐	NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305	☒	SYDNEY: 202 Submarine School, Sub Base Platypus, North Sydney, 2060	✓	MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
☐	CANBERRA: GPO Box 410, Canberra, ACT 2601	☐	MACKAY: 21 River Street, Mackay, QLD 4741	☐	PERTH: 503 Murray Street, Perth, WA 6001	☐	TOWNSVILLE: 514 Stuart Street, Townsville, QLD 4811	☐	DARWIN: 21 Parap Rd, Darwin, NT 0821

CLIENT: Defence Housing Australia

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGER: [redacted]

PM CONTACT No: [redacted]

LABORATORY: SGS

LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015

SAMPLER: [redacted]

SAMPLER CONTACT No: [redacted]

Email Reports and Invoices to: LQRSYD@slrconsulting.com, [redacted]

Turnaround Time (TAT)

✓ Standard TAT

☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number 1 of 1

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: Asbestos (presence/absence)	Basic (short) PFAS Suite	TRH/BTEXN, PAHs, PCBs, OCPs/OPPs	VOCs/SVOCs	CHs and VHHs	Suite C	TRH fraction C6-C10 and PFAS	HOLD	Additional Information (Comment on any gross contamination or specific requirements)
1	0407_WD_GW19_201021	21-10-2020	Soil		X	X	X	X	X				
2	0407_WD_GW21_201021	21-10-2020	Soil		X	X	X	X	X				
3	0407_SEP001_201021	21-10-2020	Water							X			
4	0407_QC52~~9~~6_201020 TB	21-10-2020	Soil								X		
5	0407_QC526_201020 TB												

SGS EHS Sydney COC

SE212646

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time	21-10-2020	Received by	Sign [redacted]	Date / Time	21/10/20
Relinquished By	Sign	Date / Time		Received by	Sign	Date / Time	@1:30
Relinquished By	Sign	Date / Time		Received by	Sign	Date / Time	

Temperature Received:

SAMPLE RECEIPT ADVICE

SE212646

CLIENT DETAILS

Contact	LQRSYD
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	02 9427 8100
Facsimile	02 9427 8200
Email	lqrsyd@slrconsulting.com
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	5

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Wed 21/10/2020
Report Due	Wed 28/10/2020
SGS Reference	**SE212646**

SUBMISSION DETAILS

This is to confirm that 5 samples were received on Wednesday 21/10/2020. Results are expected to be ready by COB Wednesday 28/10/2020. Please quote SGS reference SE212646 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice Bricks
Samples received in correct containers	Yes	Sample counts by matrix	4 Soil, 1 Water
Date documentation received	21/10/2020	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	6.2°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

PFAS subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420.

This document is issued by the Company under its General Conditions of Service accessible at www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

SAMPLE RECEIPT ADVICE

SE212646

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Full 8270 SVOC in Soil	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
001	0407_WD_GW19_201021	171	29	14	26	11	10	81	7
002	0407_WD_GW21_201021	171	29	14	26	11	10	81	7
004	0407_QC526_201020 TS	-	-	-	-	-	-	81	-
005	0407_QC526_201020 TB	-	-	-	-	-	-	11	-

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE212646

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Anions by Ion Chromatography in Water	Fibre Identification in soil	Moisture Content	Nitrite in Water	Per- and Polyfluoroalkyl Substances (PFAS) in	VOCs in Water
001	0407_WD_GW19_201021	-	1	1	-	55	-
002	0407_WD_GW21_201021	-	1	1	-	55	-
003	0407_SEP001_201021	2	-	-	1	-	78
005	0407_QC526_201020 TB	-	-	1	-	-	-

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE212646

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Ammonia Nitrogen by Discrete Analyser	Filterable Reactive Phosphorus (FRP)	Mercury (dissolved) in Water	Per- and Polyfluoroalkyl Substances (PFAS) in	Sulfide by Titration in Water	TKN Kjeldahl Digestion by Discrete Analyser	Total Phosphorus by Kjeldahl Digestion DA in	Trace Metals (Dissolved) in Water by ICPMS
003	0407_SEP001_201021	1	1	1	55	1	1	1	11

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	LQRSYD
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	02 9427 8100
Facsimile	02 9427 8200
Email	lqrsyd@slrconsulting.com
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	5

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE212646 R0**
Date Received	21/10/2020
Date Reported	28/10/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

PFAS subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420. Report Number ME317061

No respirable fibres detected in all soil samples using trace analysis technique.

A portion of the sample supplied has been sub-sampled for asbestos analysis in soil according to SGS In-house procedures due to large volume.
We therefore cannot guarantee that the sub-sample is representative of the entire sample supplied. SGS Environmental Services recommends supplying approximately 50-100g of sample in a separate container.

Asbestos analysed by Approved Identifier Yusuf Kuthpudin.

SIGNATORIES

[redacted]

Chemist | Metals/Inorganics Team Leader | Senior Chemist

[redacted]

Organic Section Head | Inorganic/Metals Chemist | Asbestos Analyst

VOC's in Soil [AN433] Tested: 26/10/2020

PARAMETER	UOM	LOR	0407_WD_GW19_20021 SOIL - 21/10/2020 SE212646.001	0407_WD_GW21_20021 SOIL - 21/10/2020 SE212646.002	0407_QC526_20102(TS SOIL - 21/10/2020 SE212646.004	0407_QC526_20102(TB SOIL - 21/10/2020 SE212646.005
Benzene	mg/kg	0.1	<0.1	<0.1	[87%]	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	[90%]	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	[92%]	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	[89%]	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	[89%]	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	-	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	-	<0.6
Naphthalene	mg/kg	0.1	<0.1	<0.1	-	<0.1
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1	-
Chloromethane	mg/kg	1	<1	<1	<1	-
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1	-
Bromomethane	mg/kg	1	<1	<1	<1	-
Chloroethane	mg/kg	1	<1	<1	<1	-
Trichlorofluoromethane	mg/kg	1	<1	<1	<1	-
Acetone (2-propanone)	mg/kg	10	<10	<10	<10	-
Iodomethane	mg/kg	5	<5	<5	<5	-
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	-
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1	-
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5	-
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1	-
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5	-
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	-
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1	-
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	-
Vinyl acetate	mg/kg	10	<10	<10	<10	-
MEK (2-butanone)	mg/kg	10	<10	<10	<10	-
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1	-
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	-
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1	-
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	-
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	-
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	-
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	-
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1	-
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	-
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	-
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1	-
2-nitropropane	mg/kg	10	<10	<10	<10	-
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1	-
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1	-
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	-
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1	-
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	-
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	-
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1	-
2-hexanone (MBK)	mg/kg	5	<5	<5	<5	-
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1	-
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1	-
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	-
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1	-
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	-
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1	-
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1	-
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	-
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1	-

VOC's in Soil [AN433] Tested: 26/10/2020 (continued)

PARAMETER	UOM	LOR	0407_WD_GW19_20021 SOIL - 21/10/2020 SE212646.001	0407_WD_GW21_20021 SOIL - 21/10/2020 SE212646.002	0407_QC526_20102(TS SOIL - 21/10/2020 SE212646.004	0407_QC526_20102(TB SOIL - 21/10/2020 SE212646.005
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1	-
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	-
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1	-
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1	-
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1	-
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1	-
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1	-
Total VOC*	mg/kg	24	<24	<24	<24	-
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0	-
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	-
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8	-

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 26/10/2020

PARAMETER	UOM	LOR	0407_WD_GW19_2021 SOIL - 21/10/2020 SE212646.001	0407_WD_GW21_2021 SOIL - 21/10/2020 SE212646.002
TRH C6-C9	mg/kg	20	<20	<20
Benzene (F0)	mg/kg	0.1	<0.1	<0.1
TRH C6-C10	mg/kg	25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 26/10/2020

PARAMETER	UOM	LOR	0407_WD_GW19_2021 SOIL - 21/10/2020 SE212646.001	0407_WD_GW21_2021 SOIL - 21/10/2020 SE212646.002
TRH C10-C14	mg/kg	20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 26/10/2020

PARAMETER	UOM	LOR	0407_WD_GW19_2021 SOIL - 21/10/2020 SE212646.001	0407_WD_GW21_2021 SOIL - 21/10/2020 SE212646.002
Naphthalene	mg/kg	0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	<0.8

OC Pesticides in Soil [AN420] Tested: 26/10/2020

PARAMETER	UOM	LOR	0407_WD_GW19_2021 SOIL - 21/10/2020 SE212646.001	0407_WD_GW21_2021 SOIL - 21/10/2020 SE212646.002
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1

OP Pesticides in Soil [AN420] Tested: 26/10/2020

PARAMETER	UOM	LOR	0407_WD_GW19_2021 SOIL - 21/10/2020 SE212646.001	0407_WD_GW21_2021 SOIL - 21/10/2020 SE212646.002
Dichlorvos	mg/kg	0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7

PCBs in Soil [AN420] Tested: 26/10/2020

PARAMETER	UOM	LOR	0407_WD_GW19_2021 SOIL - 21/10/2020 SE212646.001	0407_WD_GW21_2021 SOIL - 21/10/2020 SE212646.002
Arochlor 1016	mg/kg	0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1

Full 8270 SVOC in Soil [AN420] Tested: 26/10/2020

PARAMETER	UOM	LOR	0407_WD_GW19_2021 SOIL - 21/10/2020 SE212646.001	0407_WD_GW21_2021 SOIL - 21/10/2020 SE212646.002
Acenaphthene	mg/kg	0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1
Benzo(b&j&k)fluoranthene	mg/kg	0.2	<0.2	<0.2
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1
Chrysene	mg/kg	0.1	<0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	**0.1**	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	**0.1**	<0.1
Carcinogenic PAHs, BaP TEQ, <LOR=0	TEQ (mg/kg)	0.2	<0.2	<0.2
2-acetylaminofluorene	mg/kg	0.5	<0.5	<0.5
7,12-dimethyl-benz(a)anthracene	mg/kg	0.5	<0.5	<0.5
3-methylcholanthrene	mg/kg	0.5	<0.5	<0.5
Aldrin	mg/kg	0.1	<0.1	<0.1
Alpha-BHC	mg/kg	0.1	<0.1	<0.1
Beta-BHC	mg/kg	0.5	<0.5	<0.5
Delta-BHC	mg/kg	0.1	<0.1	<0.1
Gamma-BHC (Lindane)	mg/kg	0.1	<0.1	<0.1
p,p-DDD	mg/kg	0.1	<0.1	<0.1
p,p-DDE	mg/kg	0.1	<0.1	<0.1
p,p-DDT	mg/kg	0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2
Alpha-endosulfan	mg/kg	0.2	<0.2	<0.2
Beta-endosulfan	mg/kg	0.2	<0.2	<0.2
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1
Endrin	mg/kg	0.2	<0.2	<0.2
Heptachlor	mg/kg	0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1
Alpha-chlordane	mg/kg	0.1	<0.1	<0.1
Gamma-chlordane	mg/kg	0.1	<0.1	<0.1
Endrin ketone	mg/kg	0.1	<0.1	<0.1
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2
Bromophos ethyl	mg/kg	0.2	<0.2	<0.2
Carbophenothion	mg/kg	0.5	<0.5	<0.5
Chlorfenvinphos-cis	mg/kg	2	<2	<2
Chlorfenvinphos-trans	mg/kg	0.5	<0.5	<0.5
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2
Chlorpyrifos-methyl	mg/kg	0.5	<0.5	<0.5
Co-Ral (Coumaphos)	mg/kg	0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5
Dichlorvos	mg/kg	0.5	<0.5	<0.5
Demeton-S-methyl	mg/kg	0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5

Full 8270 SVOC in Soil [AN420] Tested: 26/10/2020 (continued)

PARAMETER	UOM	LOR	0407_WD_GW19_2021 SOIL - 21/10/2020 SE212646.001	0407_WD_GW21_2021 SOIL - 21/10/2020 SE212646.002
Disulfoton (Di-syston)	mg/kg	0.5	<0.5	<0.5
EPN*	mg/kg	0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2
Ethoprophos (ethoprop or prophos)	mg/kg	0.5	<0.5	<0.5
Famphur (Famophos)	mg/kg	0.5	<0.5	<0.5
Fenamiphos (Phenamiphos)	mg/kg	0.5	<0.5	<0.5
Fenchlorophos (Ronnel)	mg/kg	0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2
Fenthion	mg/kg	0.5	<0.5	<0.5
Malathion (Maldison)	mg/kg	0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5
Mevinphos-cis/trans	mg/kg	1	<1	<1
o,o,o-triethyl phosphorothioate	mg/kg	0.5	<0.5	<0.5
Parathion ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2
Parathion methyl	mg/kg	0.5	<0.5	<0.5
Phorate	mg/kg	0.5	<0.5	<0.5
Pirimiphos-ethyl	mg/kg	0.5	<0.5	<0.5
Pirimiphos-methyl	mg/kg	0.5	<0.5	<0.5
Profenofos	mg/kg	0.5	<0.5	<0.5
Prothiophos (Tokuthion)*	mg/kg	0.5	<0.5	<0.5
Sulfotepp	mg/kg	0.5	<0.5	<0.5
Tetrachlorvinphos (Stirophos)*	mg/kg	0.5	<0.5	<0.5
PCB Congener C28	mg/kg	0.1	<0.1	<0.1
PCB Congener C52	mg/kg	0.1	<0.1	<0.1
PCB Congener C101	mg/kg	0.1	<0.1	<0.1
PCB Congener C118	mg/kg	0.1	<0.1	<0.1
PCB Congener C138	mg/kg	0.1	<0.1	<0.1
PCB Congener C153	mg/kg	0.1	<0.1	<0.1
PCB Congener C180	mg/kg	0.1	<0.1	<0.1
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.5	<0.5	<0.5
1,3-dichlorobenzene	mg/kg	0.5	<0.5	<0.5
1,4-dichlorobenzene	mg/kg	0.5	<0.5	<0.5
Hexachlorobutadiene	mg/kg	0.5	<0.5	<0.5
Hexachlorocyclopentadiene	mg/kg	1	<1	<1
Hexachloroethane	mg/kg	0.5	<0.5	<0.5
Hexachloroproprene	mg/kg	0.5	<0.5	<0.5
Pentachlorobenzene	mg/kg	0.5	<0.5	<0.5
Pentachloroethane	mg/kg	0.5	<0.5	<0.5
1,2,3,5 and 1,2,4,5 -tetrachlorobenzene	mg/kg	1	<1	<1
1,2,3,4-tetrachlorobenzene	mg/kg	0.5	<0.5	<0.5
1/2-Chloronaphthalene	mg/kg	1	<1	<1
1,2,4-trichlorobenzene	mg/kg	0.5	<0.5	<0.5
Bis(2-ethylhexyl)phthalate	mg/kg	5	<5	<5
Bis(2-ethylhexyl)adipate	mg/kg	0.5	<0.5	<0.5
Butyl benzyl phthalate	mg/kg	0.5	<0.5	<0.5
Di-n-butyl phthalate	mg/kg	0.5	<0.5	<0.5
Diethyl phthalate	mg/kg	0.5	<0.5	<0.5
Dimethyl phthalate	mg/kg	0.5	<0.5	<0.5
Dioctyl phthalate	mg/kg	0.5	<0.5	<0.5
Carbofuran	mg/kg	0.5	<0.5	<0.5
Carbaryl	mg/kg	0.5	<0.5	<0.5
Trifluralin	mg/kg	0.5	<0.5	<0.5
N-nitroso-di-n-butylamine (NDBA)	mg/kg	0.5	<0.5	<0.5
N-nitroso-diethylamine (NDEA)	mg/kg	1	<1	<1
N-nitroso-di-n-propylamine (NDPA)	mg/kg	0.5	<0.5	<0.5

Full 8270 SVOC in Soil [AN420] Tested: 26/10/2020 (continued)

PARAMETER	UOM	LOR	0407_WD_GW19_2021 SOIL - 21/10/2020 SE212646.001	0407_WD_GW21_2021 SOIL - 21/10/2020 SE212646.002
N-nitroso-morpholine (NMOR)	mg/kg	0.5	<0.5	<0.5
N-nitroso-piperidine (NPIP)	mg/kg	0.5	<0.5	<0.5
N-nitroso-pyrrolidine (NPYR)	mg/kg	1	<1	<1
4-amino biphenyl	mg/kg	1	<1	<1
Acetophenone	mg/kg	0.5	<0.5	<0.5
1,3-dinitrobenzene	mg/kg	1	<1	<1
2,4-dinitrotoluene	mg/kg	0.5	<0.5	<0.5
2,6-dinitrotoluene	mg/kg	0.5	<0.5	<0.5
Isophorone	mg/kg	0.5	<0.5	<0.5
Nitrobenzene	mg/kg	0.5	<0.5	<0.5
p-(dimethylamino) azobenzene	mg/kg	1	<1	<1
Phenacetin	mg/kg	1	<1	<1
Pentachloronitrobenzene (quintozene)	mg/kg	0.5	<0.5	<0.5
Aniline	mg/kg	3	<3	<3
4-chloroaniline	mg/kg	1	<1	<1
2-nitroaniline	mg/kg	1	<1	<1
3-nitroaniline	mg/kg	1	<1	<1
4-nitroaniline	mg/kg	1	<1	<1
Diphenylamine	mg/kg	0.5	<0.5	<0.5
o-toluidine	mg/kg	1	<1	<1
5-nitro-o-toluidine	mg/kg	1	<1	<1
1-naphthylamine	mg/kg	1	<1	<1
2-naphthylamine	mg/kg	1	<1	<1
Bis(2-chloroethoxy) methane	mg/kg	0.5	<0.5	<0.5
Bis(2-chloroethyl) ether	mg/kg	0.5	<0.5	<0.5
Bis(2-chloroisopropyl) ether	mg/kg	0.5	<0.5	<0.5
4-chlorophenyl phenyl ether	mg/kg	0.5	<0.5	<0.5
4-bromophenyl phenyl ether	mg/kg	0.5	<0.5	<0.5
Methyl methanesulfonate	mg/kg	1	<1	<1
Ethyl methanesulfonate	mg/kg	1	<1	<1
Dibenzofuran	mg/kg	0.5	<0.5	<0.5
Benzyl alcohol	mg/kg	1	<1	<1
Safrole	mg/kg	0.5	<0.5	<0.5
Isosafrole Isomer 1	mg/kg	1	<1	<1
Isosafrole Isomer 2	mg/kg	1	<1	<1
1,4-naphthoquinone	mg/kg	0.5	<0.5	<0.5
Thionazin	mg/kg	1	<1	<1
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5
4-chloro-3-methylphenol	mg/kg	2	<2	<2
2-chlorophenol	mg/kg	0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5
Phenol	mg/kg	0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1
Carcinogenic PAHs, BaP TEQ, <LOR=LOR*	TEQ (mg/kg)	0.3	<0.3	<0.3
Carcinogenic PAHs, BaP TEQ, <LOR=LOR/2*	TEQ (mg/kg)	0.2	<0.2	<0.2
2,3,4,6-tetrachlorophenol	mg/kg	0.5	<0.5	<0.5
Total (Alpha+Beta+SO4) Endosulfan*	mg/kg	0.2	<0.2	<0.2

Moisture Content [AN002] Tested: 26/10/2020

PARAMETER	UOM	LOR	0407_WD_GW19_20021 SOIL - 21/10/2020 SE212646.001	0407_WD_GW21_20021 SOIL - 21/10/2020 SE212646.002	0407_QC526_201020TB SOIL - 21/10/2020 SE212646.005
% Moisture	%w/w	1	**1.3**	**12.6**	<1.0

Fibre Identification in soil [AN602] Tested: 27/10/2020

PARAMETER	UOM	LOR	0407_WD_GW19_2021 SOIL - 21/10/2020 SE212646.001	0407_WD_GW21_2021 SOIL - 21/10/2020 SE212646.002
Asbestos Detected	No unit	-	No	No

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples [MA-1523] Tested: 27/10/2020

PARAMETER	UOM	LOR	0407_WD_GW19_2021 SOIL - 21/10/2020 SE212646.001	0407_WD_GW21_2021 SOIL - 21/10/2020 SE212646.002
Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	<0.0016	<0.0016
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	<0.0016	<0.0016
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	<0.0016	<0.0016
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	<0.0016	<0.0016
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	<0.0008	<0.0008
Perfluorononanoic acid (PFNA)	mg/kg	0.0016	<0.0016	<0.0016
Perfluorodecanoic acid (PFDA)	mg/kg	0.0016	<0.0016	<0.0016
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0016	<0.0016	<0.0016
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0016	<0.0016	<0.0016
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0016	<0.0016	<0.0016
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0016	<0.0016	<0.0016
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0032	<0.0032	<0.0032
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	<0.0016	<0.0016
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	<0.0016	<0.0016
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	<0.0016	<0.0016
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	<0.0016	<0.0016
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	<0.0016	<0.0016
Sum PFOS and PFHXS	mg/kg	0.0016	<0.0016	<0.0016
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	<0.0016	<0.0016
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0016	<0.0016	<0.0016
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.0016	<0.0016	<0.0016
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.008	<0.008	<0.008
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.008	<0.008	<0.008
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.016	<0.016	<0.016
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.016	<0.016	<0.016
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.008	<0.008	<0.008
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.008	<0.008	<0.008

VOCs in Water [AN433] Tested: 26/10/2020

PARAMETER	UOM	LOR	0407_SEP001_20102 WATER - 21/10/2020 SE212646.003
Dichlorodifluoromethane (CFC-12)	µg/L	5	<5
Chloromethane	µg/L	5	<5
Vinyl chloride (Chloroethene)	µg/L	0.3	<0.3
Bromomethane	µg/L	10	<10
Chloroethane	µg/L	5	<5
Trichlorofluoromethane	µg/L	1	<1
Acetone (2-propanone)	µg/L	10	<10
Iodomethane	µg/L	5	<5
1,1-dichloroethene	µg/L	0.5	<0.5
Acrylonitrile	µg/L	0.5	<0.5
Dichloromethane (Methylene chloride)	µg/L	5	<5
Allyl chloride	µg/L	2	<2
Carbon disulfide	µg/L	2	<2
trans-1,2-dichloroethene	µg/L	0.5	<0.5
MtBE (Methyl-tert-butyl ether)	µg/L	2	<2
1,1-dichloroethane	µg/L	0.5	<0.5
Vinyl acetate	µg/L	10	<10
MEK (2-butanone)	µg/L	10	<10
cis-1,2-dichloroethene	µg/L	0.5	<0.5
Bromochloromethane	µg/L	0.5	<0.5
Chloroform (THM)	µg/L	0.5	<0.5
2,2-dichloropropane	µg/L	0.5	<0.5
1,2-dichloroethane	µg/L	0.5	<0.5
1,1,1-trichloroethane	µg/L	0.5	<0.5
1,1-dichloropropene	µg/L	0.5	<0.5
Carbon tetrachloride	µg/L	0.5	<0.5
Benzene	µg/L	0.5	<0.5
Dibromomethane	µg/L	0.5	<0.5
1,2-dichloropropane	µg/L	0.5	<0.5
Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	<0.5
2-nitropropane	µg/L	100	<100
Bromodichloromethane (THM)	µg/L	0.5	<0.5
MIBK (4-methyl-2-pentanone)	µg/L	5	<5
cis-1,3-dichloropropene	µg/L	0.5	<0.5
trans-1,3-dichloropropene	µg/L	0.5	<0.5
1,1,2-trichloroethane	µg/L	0.5	<0.5
Toluene	µg/L	0.5	<0.5
1,3-dichloropropane	µg/L	0.5	<0.5
Dibromochloromethane (THM)	µg/L	0.5	<0.5
2-hexanone (MBK)	µg/L	5	<5
1,2-dibromoethane (EDB)	µg/L	0.5	<0.5
Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	<0.5
1,1,1,2-tetrachloroethane	µg/L	0.5	<0.5
Chlorobenzene	µg/L	0.5	<0.5
Ethylbenzene	µg/L	0.5	<0.5
Bromoform (THM)	µg/L	0.5	<0.5
m/p-xylene	µg/L	1	<1
cis-1,4-dichloro-2-butene	µg/L	1	<1
Styrene (Vinyl benzene)	µg/L	0.5	<0.5
1,1,2,2-tetrachloroethane	µg/L	0.5	<0.5
o-xylene	µg/L	0.5	<0.5
Total Xylenes	µg/L	1.5	<1.5
1,2,3-trichloropropane	µg/L	0.5	<0.5
trans-1,4-dichloro-2-butene	µg/L	1	<1
Isopropylbenzene (Cumene)	µg/L	0.5	<0.5
Bromobenzene	µg/L	0.5	<0.5

VOCs in Water [AN433] Tested: 26/10/2020 (continued)

PARAMETER	UOM	LOR	0407_SEP001_20102 WATER - 21/10/2020 SE212646.003
n-propylbenzene	µg/L	0.5	<0.5
2-chlorotoluene	µg/L	0.5	<0.5
4-chlorotoluene	µg/L	0.5	<0.5
1,3,5-trimethylbenzene	µg/L	0.5	<0.5
tert-butylbenzene	µg/L	0.5	<0.5
1,2,4-trimethylbenzene	µg/L	0.5	<0.5
sec-butylbenzene	µg/L	0.5	<0.5
1,3-dichlorobenzene	µg/L	0.5	<0.5
1,4-dichlorobenzene	µg/L	0.3	<0.3
p-isopropyltoluene	µg/L	0.5	<0.5
1,2-dichlorobenzene	µg/L	0.5	<0.5
n-butylbenzene	µg/L	0.5	<0.5
1,2-dibromo-3-chloropropane	µg/L	0.5	<0.5
1,2,4-trichlorobenzene	µg/L	0.5	<0.5
Naphthalene	µg/L	0.5	<0.5
Hexachlorobutadiene	µg/L	0.5	<0.5
1,2,3-trichlorobenzene	µg/L	0.5	<0.5
Total BTEX	µg/L	3	<3
Total VOC	µg/L	10	<10

Anions by Ion Chromatography in Water [AN245] Tested: 23/10/2020

PARAMETER	UOM	LOR	0407_SEP001_20102 WATER - 21/10/2020 SE212646.003
Nitrate Nitrogen, NO3-N	mg/L	0.005	**1.1**
Sulfate, SO4	mg/L	1	**27**

Nitrite in Water [AN277] Tested: 23/10/2020

PARAMETER	UOM	LOR	0407_SEP001_20102 WATER - 21/10/2020 SE212646.003
Nitrite Nitrogen, NO2 as N	mg/L	0.005	**0.009**

TKN Kjeldahl Digestion by Discrete Analyser [AN292] Tested: 26/10/2020

PARAMETER	UOM	LOR	0407_SEP001_20102 WATER - 21/10/2020 SE212646.003
Total Kjeldahl Nitrogen	mg/L	0.05	**0.35**

Total Phosphorus by Kjeldahl Digestion DA in Water [AN279/AN293(Sydney only)] Tested: 26/10/2020

PARAMETER	UOM	LOR	0407_SEP001_20102 WATER - 21/10/2020 SE212646.003
Total Phosphorus (Kjeldahl Digestion) as P	mg/L	0.02	**0.13**

Filterable Reactive Phosphorus (FRP) [AN278] Tested: 23/10/2020

PARAMETER	UOM	LOR	0407_SEP001_20102 WATER - 21/10/2020 SE212646.003
Filterable Reactive Phosphorus as P	mg/L	0.005	**0.13**

Ammonia Nitrogen by Discrete Analyser (Aquakem) [AN291] Tested: 23/10/2020

PARAMETER	UOM	LOR	0407_SEP001_20102 WATER - 21/10/2020 SE212646.003
Ammonia Nitrogen, NH_3 as N	mg/L	0.005	**0.016**

Sulfide by Titration in Water [AN149] Tested: 26/10/2020

PARAMETER	UOM	LOR	0407_SEP001_20102 WATER - 21/10/2020 SE212646.003
Sulfide	mg/L	0.5	<0.5

Trace Metals (Dissolved) in Water by ICPMS [AN318] Tested: 26/10/2020

PARAMETER	UOM	LOR	0407_SEP001_20102 WATER - 21/10/2020 SE212646.003
Arsenic, As	µg/L	1	<1
Cadmium, Cd	µg/L	0.1	<0.1
Copper, Cu	µg/L	1	**1**
Chromium, Cr	µg/L	1	<1
Nickel, Ni	µg/L	1	<1
Lead, Pb	µg/L	1	<1
Zinc, Zn	µg/L	5	**39**
Beryllium, Be	µg/L	1	<1
Boron, B	µg/L	5	**16**
Cobalt, Co	µg/L	1	<1
Manganese, Mn	µg/L	1	<1

Mercury (dissolved) in Water [AN311(Perth)/AN312] Tested: 23/10/2020

PARAMETER	UOM	LOR	0407_SEP001_20102 WATER - 21/10/2020 SE212646.003
Mercury	mg/L	0.0001	<0.0001

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples [MA-1523] Tested: 27/10/2020

PARAMETER	UOM	LOR	0407_SEP001_20102 WATER - 21/10/2020 SE212646.003
Perfluorobutanoic acid (PFBA)	µg/L	0.002	**0.007**
Perfluoropentanoic acid (PFPeA)	µg/L	0.002	**0.004**
Perfluorohexanoic acid (PFHxA)	µg/L	0.002	**0.003**
Perfluoroheptanoic acid (PFHpA)	µg/L	0.002	<0.002
Perfluorooctanoic Acid (PFOA)	µg/L	0.002	**0.003**
Perfluorononanoic acid (PFNA)	µg/L	0.004	<0.004
Perfluorodecanoic acid (PFDA)	µg/L	0.004	<0.004
Perfluoroundecanoic acid (PFUnA)	µg/L	0.004	<0.004
Perfluorododecanoic acid (PFDoA)	µg/L	0.004	<0.004
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.004	<0.004
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.004	<0.004
Perfluorohexadecanoic acid (PFHxDA)	µg/L	0.008	<0.008
Perfluorobutane sulfonate (PFBS)	µg/L	0.004	<0.004
Perfluoropentane sulfonate (PFPeS)	µg/L	0.004	<0.004
Perfluorohexane sulfonate (PFHxS)	µg/L	0.002	<0.002
Perfluoroheptane sulfonate (PFHpS)	µg/L	0.002	<0.002
Perfluorooctane sulfonate (PFOS)	µg/L	0.002	**0.012**
Sum of PFHxS and PFOS	µg/L	0.002	**0.012**
Perfluorononane sulfonate (PFNS)	µg/L	0.002	<0.002
Perfluorodecane sulfonate (PFDS)	µg/L	0.002	<0.002
Perfluorododecane sulfonate (PFDoS)	µg/L	0.002	<0.002
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	µg/L	0.002	<0.002
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	µg/L	0.002	<0.002
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	µg/L	0.002	<0.002
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.008	<0.008
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	µg/L	0.01	<0.01
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	µg/L	0.01	<0.01
2-(N-Methylperfluorooctane sulfonamido)-ethanol	µg/L	0.01	<0.01
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	µg/L	0.01	<0.01
N-Methylperfluorooctanesulfonamidoacetic acid	µg/L	0.01	<0.01
N-Ethylperfluorooctanesulfonamidoacetic Acid	µg/L	0.01	<0.01

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN020	Unpreserved water sample is filtered through a 0.45µm membrane filter and acidified with nitric acid similar to APHA3030B.
AN149	sulfide by Iodometric Titration: sulfide is precipitated as zinc sulfide to overcome interferences with sulphite and thiosulfate. After filtration, sulfide is determined titrimetrically. Reference APHA 4500-S2-
AN245	Anions by Ion Chromatography: A water sample is injected into an eluent stream that passes through the ion chromatographic system where the anions of interest ie Br, Cl, NO2, NO3 and SO4 are separated on their relative affinities for the active sites on the column packing material. Changes to the conductivity and the UV-visible absorbance of the eluent enable identification and quantitation of the anions based on their retention time and peak height or area. APHA 4110 B
AN277/WC250.312	Nitrite ions, when reacted with a reagent containing sulphanilamide and N-(1-naphthyl)-ethylenediamine dihydrochloride produce a highly coloured azo dye that is measured photometrically at 540nm.
AN278	Filterable Reactive Phosphorus by DA (determined on filtered sample): Orthophosphate reacts with ammonium molybdate (Mo VI) and potassium antimonyl tartrate (Sb III) in acid medium to form an antimony-phosphomolybdate complex. This complex is subsequently reduced with ascorbic acid to form a blue colour and the absorbance is read at 880 nm. The sensitivity of the automated method is 10-20 times that of the macro method. Reference APHA 4500-P F
AN279/AN293(Sydney)	The sample is digested with Sulphuric acid, K2SO4 and CuSO4. All forms of phosphorus are converted into orthophosphate. The digest is cooled and placed on the discrete analyser for colorimetric analysis.
AN281	An unfiltered water or soil sample is first digested in a block digestor with sulfuric acid, K2SO4 and CuSO4. The ammonia produced following digestion is then measured colourimetrically using the Aquakem 250 Discrete Analyser. A portion of the digested sample is buffered to an alkaline pH, and interfering cations are complexed. The ammonia then reacts with salicylate and hypochlorite to give a blue colour whose absorbance is measured at 660nm and compared with calibration standards. This is proportional to the concentration of Total Kjeldahl Nitrogen in the original sample.
AN291	Ammonia in solution reacts with hypochlorite ions from Sodium Dichloroisocyanuate, and salicylate in the presence of Sodium Nitroprusside to form indophenol blue and measured at 670 nm by Discrete Analyser.
AN311(Perth)/AN312	Mercury by Cold Vapour AAS in Waters: Mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500.
AN318	Determination of elements at trace level in waters by ICP-MS technique,, referenced to USEPA 6020B and USEPA 200.8 (5.4).
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents .
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).

AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples, Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.
MA-1523	This method covers the analysis of per- and polyfluoroalkyl substances (PFAS) in aqueous, solid and biosolid samples and solvent extracts, determined as the total of linear and branched isomers. After spiking with isotopically labelled quantification surrogates and clean-up via SPE cartridges sample extracts are analysed by liquid chromatography/mass spectrometry (LC-MS/MS). PFAS concentrations are determined by isotope dilution quantification.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
**	Indicative data, theoretical holding time exceeded.	NVL	Not validated.	LOR	Limit of Reporting.
***	Indicates that both * and ** apply.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

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Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	2

LABORATORY DETAILS

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Laboratory	SGS Alexandria Environmental
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SGS Reference	**SE212646 R0**
Date Received	21 Oct 2020
Date Reported	28 Oct 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

PFAS subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420. Report Number ME317061

No respirable fibres detected in all soil samples using trace analysis technique.

A portion of the sample supplied has been sub-sampled for asbestos analysis in soil according to SGS In-house procedures due to large volume.
We therefore cannot guarantee that the sub-sample is representative of the entire sample supplied. SGS Environmental Services recommends supplying approximately 50-100g of sample in a separate container.

Asbestos analysed by Approved Identifier Yusuf Kuthpudin.

SIGNATORIES

[redacted]

Chemist | Senior Chemist | Organic Section Head

[redacted]

Asbestos Analyst

RESULTS

Fibre Identification in soil — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE212646.001	0407_WD_GW19_201021	Soil	311g Sand, Rocks, Concrete	21 Oct 2020	No Asbestos Found Organic Fibres Detected	
SE212646.002	0407_WD_GW21_201021	Soil	277g Sand, Soil, Rocks	21 Oct 2020	No Asbestos Found Organic Fibres Detected	

METHOD SUMMARY

SE212646 R0

METHOD	METHODOLOGY SUMMARY
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples , Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable ’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.

FOOTNOTES

Amosite	-	Brown Asbestos	NA	-	Not Analysed
Chrysotile	-	White Asbestos	LNR	-	Listed, Not Required
Crocidolite	-	Blue Asbestos	*	-	NATA accreditation does not cover the performance of this service .
Amphiboles	-	Amosite and/or Crocidolite	**	-	Indicative data, theoretical holding time exceeded.
			***	-	Indicates that both * and ** apply.

(In reference to soil samples only) This report does not comply with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment and Remediation and Management of Asbestos Contaminated sites in Western Australia - May 2009.

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.

Where reported: 'Asbestos Detected': Asbestos detected by polarised light microscopy, including dispersion staining.
Where reported: 'No Asbestos Found': No Asbestos Found by polarised light microscopy , including dispersion staining.
Where reported: 'UMF Detected': Mineral fibres of unknown type detected by polarised light microscopy, including dispersion staining. Confirmation by another independent analytical technique may be necessary.

Even after disintegration it can be very difficult, or impossible, to detect the presence of asbestos in some asbestos -containing bulk materials using polarised light microscopy. This is due to the low grade or small length or diameter of asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety .

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS		LABORATORY DETAILS	
Contact	[redacted]	Manager	[redacted]
Client	SGS EHS SYDNEY	Laboratory	SGS Melbourne EH&S
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Project	**610.30041 Randwick Barracks**	SGS Reference	**ME317061 R0**
Order Number	**SE212646**	Date Received	26 Oct 2020
Samples	5	Date Reported	27 Oct 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(14420).

SIGNATORIES

[redacted]

Australian Chemistry Manager

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name ME317061.001 Soil 21 Oct 2020 SE212646.001	ME317061.002 Soil 21 Oct 2020 SE212646.002	ME317061.003 Water 21 Oct 2020 SE212646.003	ME317061.004 Soil 21 Oct 2020 SE212646.004
Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples Method: MA-1523 Tested: 26/10/2020						
Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	<0.0016	<0.0016	-	-
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	<0.0016	<0.0016	-	-
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	<0.0016	<0.0016	-	-
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	<0.0016	<0.0016	-	-
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	<0.0008	<0.0008	-	-
Perfluorononanoic acid (PFNA)	mg/kg	0.0016	<0.0016	<0.0016	-	-
Perfluorodecanoic acid (PFDA)	mg/kg	0.0016	<0.0016	<0.0016	-	-
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0016	<0.0016	<0.0016	-	-
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0016	<0.0016	<0.0016	-	-
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0016	<0.0016	<0.0016	-	-
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0016	<0.0016	<0.0016	-	-
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0032	<0.0032	<0.0032	-	-
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	<0.0016	<0.0016	-	-
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	<0.0016	<0.0016	-	-
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	<0.0016	<0.0016	-	-
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	<0.0016	<0.0016	-	-
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	<0.0016	<0.0016	-	-
Sum PFOS and PFHXS	mg/kg	0.0016	<0.0016	<0.0016	-	-
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	<0.0016	<0.0016	-	-
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0016	<0.0016	<0.0016	-	-
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0016	<0.0016	<0.0016	-	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	-	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	-	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	-	-
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.0016	<0.0016	<0.0016	-	-
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.008	<0.008	<0.008	-	-
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.008	<0.008	<0.008	-	-
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.016	<0.016	<0.016	-	-
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.016	<0.016	<0.016	-	-
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.008	<0.008	<0.008	-	-
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.008	<0.008	<0.008	-	-
(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	**101**	**101**	-	-
(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	**103**	**100**	-	-
(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	**103**	**95**	-	-
(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	**100**	**97**	-	-
(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	**106**	**100**	-	-
(13C9-PFNA) Isotopically Labelled Internal Recovery	%	-	**100**	**111**	-	-
(13C6-PFDA) Isotopically Labelled Internal Recovery	%	-	**116**	**98**	-	-
(13C7-PFUdA) Isotopically Labelled Internal Recovery	%	-	**99**	**89**	-	-
(13C2-PFDoA) Isotopically Labelled Internal Recovery	%	-	**98**	**96**	-	-
(13C2_PFTeDA) Isotopically Labelled Internal Recovery	%	-	**75**	**55**	-	-
(13C2-PFHxDA) Isotopically Labelled Internal Recovery	%	-	**53**	**26**	-	-
(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	**95**	**97**	-	-
(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	**97**	**105**	-	-
(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	**117**	**98**	-	-
(13C2-4:2 FTS) Isotopically Labelled Internal Recovery	%	-	**100**	**106**	-	-
(13C2-6:2 FTS) Isotopically Labelled Internal Recovery	%	-	**110**	**109**	-	-
(13C2-8:2 FTS) Isotopically Labelled Internal Recovery	%	-	**120**	**111**	-	-
(13C8-PFOSA) Isotopically Labelled Internal Recovery	%	-	**115**	**77**	-	-
(D3-N-MeFOSA) Isotopically Labelled Internal Recovery	%	-	**83**	**60**	-	-
(D5-N-EtFOSA) Isotopically Labelled Internal Recovery	%	-	**75**	**56**	-	-
(D7-N-MeFOSE) Isotopically Labelled Internal Recovery	%	-	**92**	**75**	-	-
(D9-N-EtFOSE) Isotopically Labelled Internal Recovery	%	-	**85**	**81**	-	-
(D3-N-MeFOSAA) Isotopically Labelled Internal Recovery	%	-	**111**	**104**	-	-
(D5-N-EtFOSAA) Isotopically Labelled Internal Recovery	%	-	**95**	**104**	-	-

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples Method: MA-1523 Tested: 27/10/2020

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name ME317061.001 Soil 21 Oct 2020 SE212646.001	ME317061.002 Soil 21 Oct 2020 SE212646.002	ME317061.003 Water 21 Oct 2020 SE212646.003	ME317061.004 Soil 21 Oct 2020 SE212646.004
Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples Method: MA-1523 Tested: 27/10/2020 (continued)						
Perfluorobutanoic acid (PFBA)	µg/L	0.002	-	-	**0.007**	-
Perfluoropentanoic acid (PFPeA)	µg/L	0.002	-	-	**0.004**	-
Perfluorohexanoic acid (PFHxA)	µg/L	0.002	-	-	**0.003**	-
Perfluoroheptanoic acid (PFHpA)	µg/L	0.002	-	-	<0.002	-
Perfluorooctanoic Acid (PFOA)	µg/L	0.002	-	-	**0.003**	-
Perfluorononanoic acid (PFNA)	µg/L	0.004	-	-	<0.004	-
Perfluorodecanoic acid (PFDA)	µg/L	0.004	-	-	<0.004	-
Perfluoroundecanoic acid (PFUnA)	µg/L	0.004	-	-	<0.004	-
Perfluorododecanoic acid (PFDoA)	µg/L	0.004	-	-	<0.004	-
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.004	-	-	<0.004	-
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.004	-	-	<0.004	-
Perfluorohexadecanoic acid (PFHxDA)	µg/L	0.008	-	-	<0.008	-
Perfluorobutane sulfonate (PFBS)	µg/L	0.004	-	-	<0.004	-
Perfluoropentane sulfonate (PFPeS)	µg/L	0.004	-	-	<0.004	-
Perfluorohexane sulfonate (PFHxS)	µg/L	0.002	-	-	<0.002	-
Perfluoroheptane sulfonate (PFHpS)	µg/L	0.002	-	-	<0.002	-
Perfluorooctane sulfonate (PFOS)	µg/L	0.002	-	-	**0.012**	-
Sum of PFHxS and PFOS	µg/L	0.002	-	-	**0.012**	-
Perfluorononane sulfonate (PFNS)	µg/L	0.002	-	-	<0.002	-
Perfluorodecane sulfonate (PFDS)	µg/L	0.002	-	-	<0.002	-
Perfluorododecane sulfonate (PFDoS)	µg/L	0.002	-	-	<0.002	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	µg/L	0.002	-	-	<0.002	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	µg/L	0.002	-	-	<0.002	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	µg/L	0.002	-	-	<0.002	-
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.008	-	-	<0.008	-
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	µg/L	0.01	-	-	<0.01	-
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	µg/L	0.01	-	-	<0.01	-
2-(N-Methylperfluorooctane sulfonamido)-ethanol	µg/L	0.01	-	-	<0.01	-
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	µg/L	0.01	-	-	<0.01	-
N-Methylperfluorooctanesulfonamidoacetic acid	µg/L	0.01	-	-	<0.01	-
N-Ethylperfluorooctanesulfonamidoacetic Acid	µg/L	0.01	-	-	<0.01	-
(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	-	-	**100**	-
(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	-	-	**99**	-
(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	-	-	**101**	-
(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	-	-	**100**	-
(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	-	-	**103**	-
(13C9-PFNA) Isotopically Labelled Internal Recovery	%	-	-	-	**92**	-
(13C6-PFDA) Isotopically Labelled Internal Recovery	%	-	-	-	**97**	-
(13C7-PFUdA) Isotopically Labelled Internal Recovery	%	-	-	-	**100**	-
(13C2-PFDoA) Isotopically Labelled Internal Recovery	%	-	-	-	**108**	-
(13C2_PFTeDA) Isotopically Labelled Internal Recovery	%	-	-	-	**103**	-
(13C2-PFHxDA) Isotopically Labelled Internal Recovery	%	-	-	-	**150**	-
(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	-	-	**104**	-
(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	-	-	**105**	-
(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	-	-	**95**	-
(13C2-4:2 FTS) Isotopically Labelled Internal Recovery	%	-	-	-	**92**	-
(13C2-6:2 FTS) Isotopically Labelled Internal Recovery	%	-	-	-	**101**	-
(13C2-8:2 FTS) Isotopically Labelled Internal Recovery	%	-	-	-	**107**	-
(13C8-PFOSA) Isotopically Labelled Internal Recovery	%	-	-	-	**107**	-
(D3-N-MeFOSA) Isotopically Labelled Internal Recovery	%	-	-	-	**93**	-
(D5-N-EtFOSA) Isotopically Labelled Internal Recovery	%	-	-	-	**96**	-
(D7-N-MeFOSE) Isotopically Labelled Internal Recovery	%	-	-	-	**106**	-
(D9-N-EtFOSE) Isotopically Labelled Internal Recovery	%	-	-	-	**107**	-
(D3-N-MeFOSAA) Isotopically Labelled Internal Recovery	%	-	-	-	**121**	-
(D5-N-EtFOSAA) Isotopically Labelled Internal Recovery	%	-	-	-	**111**	-
Moisture Content Method: AN002 Tested: 26/10/2020						

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME317061.001 Soil 21 Oct 2020 SE212646.001	ME317061.002 Soil 21 Oct 2020 SE212646.002	ME317061.003 Water 21 Oct 2020 SE212646.003	ME317061.004 Soil 21 Oct 2020 SE212646.004
Moisture Content Method: AN002 Tested: 27/10/2020 (continued)							
% Moisture*	%w/w	1		**2.0**	**2.8**	-	-

Parameter	Units	LOR	Sample Number ME317061.005 Sample Matrix Soil Sample Date 21 Oct 2020 Sample Name SE212646.005
Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples	**Method: MA-1523**	**Tested: 27/10/2020**	
Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	-
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	-
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	-
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	-
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	-
Perfluorononanoic acid (PFNA)	mg/kg	0.0016	-
Perfluorodecanoic acid (PFDA)	mg/kg	0.0016	-
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0016	-
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0016	-
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0016	-
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0016	-
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0032	-
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	-
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	-
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	-
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	-
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	-
Sum PFOS and PFHXS	mg/kg	0.0016	-
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	-
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0016	-
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0016	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	-
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.0016	-
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.008	-
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.008	-
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.016	-
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.016	-
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.008	-
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.008	-
(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	-
(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	-
(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	-
(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	-
(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	-
(13C9-PFNA) Isotopically Labelled Internal Recovery	%	-	-
(13C6-PFDA) Isotopically Labelled Internal Recovery	%	-	-
(13C7-PFUdA) Isotopically Labelled Internal Recovery	%	-	-
(13C2-PFDoA) Isotopically Labelled Internal Recovery	%	-	-
(13C2_PFTeDA) Isotopically Labelled Internal Recovery	%	-	-
(13C2-PFHxDA) Isotopically Labelled Internal Recovery	%	-	-
(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	-
(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	-
(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	-
(13C2-4:2 FTS) Isotopically Labelled Internal Recovery	%	-	-
(13C2-6:2 FTS) Isotopically Labelled Internal Recovery	%	-	-
(13C2-8:2 FTS) Isotopically Labelled Internal Recovery	%	-	-
(13C8-PFOSA) Isotopically Labelled Internal Recovery	%	-	-
(D3-N-MeFOSA) Isotopically Labelled Internal Recovery	%	-	-
(D5-N-EtFOSA) Isotopically Labelled Internal Recovery	%	-	-
(D7-N-MeFOSE) Isotopically Labelled Internal Recovery	%	-	-
(D9-N-EtFOSE) Isotopically Labelled Internal Recovery	%	-	-
(D3-N-MeFOSAA) Isotopically Labelled Internal Recovery	%	-	-
(D5-N-EtFOSAA) Isotopically Labelled Internal Recovery	%	-	-

Parameter	Units	LOR	Sample Number: ME317061.005 Sample Matrix: Soil Sample Date: 21 Oct 2020 Sample Name: SE212646.005
Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples	**Method: MA-1523**	**Tested: 27/10/2020**	
Perfluorobutanoic acid (PFBA)	µg/L	0.002	-
Perfluoropentanoic acid (PFPeA)	µg/L	0.002	-
Perfluorohexanoic acid (PFHxA)	µg/L	0.002	-
Perfluoroheptanoic acid (PFHpA)	µg/L	0.002	-
Perfluorooctanoic Acid (PFOA)	µg/L	0.002	-
Perfluorononanoic acid (PFNA)	µg/L	0.004	-
Perfluorodecanoic acid (PFDA)	µg/L	0.004	-
Perfluoroundecanoic acid (PFUnA)	µg/L	0.004	-
Perfluorododecanoic acid (PFDoA)	µg/L	0.004	-
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.004	-
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.004	-
Perfluorohexadecanoic acid (PFHxDA)	µg/L	0.008	-
Perfluorobutane sulfonate (PFBS)	µg/L	0.004	-
Perfluoropentane sulfonate (PFPeS)	µg/L	0.004	-
Perfluorohexane sulfonate (PFHxS)	µg/L	0.002	-
Perfluoroheptane sulfonate (PFHpS)	µg/L	0.002	-
Perfluorooctane sulfonate (PFOS)	µg/L	0.002	-
Sum of PFHxS and PFOS	µg/L	0.002	-
Perfluorononane sulfonate (PFNS)	µg/L	0.002	-
Perfluorodecane sulfonate (PFDS)	µg/L	0.002	-
Perfluorododecane sulfonate (PFDoS)	µg/L	0.002	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	µg/L	0.002	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	µg/L	0.002	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	µg/L	0.002	-
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.008	-
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	µg/L	0.01	-
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	µg/L	0.01	-
2-(N-Methylperfluorooctane sulfonamido)-ethanol	µg/L	0.01	-
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	µg/L	0.01	-
N-Methylperfluorooctanesulfonamidoacetic acid	µg/L	0.01	-
N-Ethylperfluorooctanesulfonamidoacetic Acid	µg/L	0.01	-
(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	-
(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	-
(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	-
(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	-
(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	-
(13C9-PFNA) Isotopically Labelled Internal Recovery	%	-	-
(13C6-PFDA) Isotopically Labelled Internal Recovery	%	-	-
(13C7-PFUdA) Isotopically Labelled Internal Recovery	%	-	-
(13C2-PFDoA) Isotopically Labelled Internal Recovery	%	-	-
(13C2_PFTeDA) Isotopically Labelled Internal Recovery	%	-	-
(13C2-PFHxDA) Isotopically Labelled Internal Recovery	%	-	-
(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	-
(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	-
(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	-
(13C2-4:2 FTS) Isotopically Labelled Internal Recovery	%	-	-
(13C2-6:2 FTS) Isotopically Labelled Internal Recovery	%	-	-
(13C2-8:2 FTS) Isotopically Labelled Internal Recovery	%	-	-
(13C8-PFOSA) Isotopically Labelled Internal Recovery	%	-	-
(D3-N-MeFOSA) Isotopically Labelled Internal Recovery	%	-	-
(D5-N-EtFOSA) Isotopically Labelled Internal Recovery	%	-	-
(D7-N-MeFOSE) Isotopically Labelled Internal Recovery	%	-	-
(D9-N-EtFOSE) Isotopically Labelled Internal Recovery	%	-	-
(D3-N-MeFOSAA) Isotopically Labelled Internal Recovery	%	-	-
(D5-N-EtFOSAA) Isotopically Labelled Internal Recovery	%	-	-

Parameter	Units	LOR	Sample Number: ME317061.005 Sample Matrix: Soil Sample Date: 21 Oct 2020 Sample Name: SE212646.005
Moisture Content Method: AN002 Tested: 27/10/2020			
% Moisture*	%w/w	1	-

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Moisture Content Method: ME-(AU)-[ENV]AN002

Parameter	QC Reference	Units	LOR	DUP %RPD
% Moisture*	LB036372	%w/w	1	0%

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples Method: MA-1523

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Perfluorobutanoic acid (PFBA)	LB036371	µg/L	0.002	<0.002	8%	NA
Perfluoropentanoic acid (PFPeA)	LB036371	µg/L	0.002	<0.002	5%	NA
Perfluorohexanoic acid (PFHxA)	LB036371	µg/L	0.002	<0.002	13%	NA
Perfluoroheptanoic acid (PFHpA)	LB036371	µg/L	0.002	<0.002	0%	117%
Perfluorooctanoic Acid (PFOA)	LB036371	µg/L	0.002	<0.002	7%	124%
Perfluorononanoic acid (PFNA)	LB036371	µg/L	0.004	<0.004	0%	129%
Perfluorodecanoic acid (PFDA)	LB036371	µg/L	0.004	<0.004	0%	125%
Perfluoroundecanoic acid (PFUnA)	LB036371	µg/L	0.004	<0.004	0%	116%
Perfluorododecanoic acid (PFDoA)	LB036371	µg/L	0.004	<0.004	0%	131%
Perfluorotridecanoic acid (PFTrDA)	LB036371	µg/L	0.004	<0.004	0%	128%
Perfluorotetradecanoic acid (PFTeDA)	LB036371	µg/L	0.004	<0.004	0%	142%
Perfluorohexadecanoic acid (PFHxDA)	LB036371	µg/L	0.008	<0.008	0%	NA
Perfluorobutane sulfonate (PFBS)	LB036371	µg/L	0.004	<0.004	0%	NA
Perfluoropentane sulfonate (PFPeS)	LB036371	µg/L	0.004	<0.004	0%	NA
Perfluorohexane sulfonate (PFHxS)	LB036371	µg/L	0.002	<0.002	15%	NA
Perfluoroheptane sulfonate (PFHpS)	LB036371	µg/L	0.002	<0.002	0%	NA
Perfluorooctane sulfonate (PFOS)	LB036371	µg/L	0.002	<0.002	31%	116%
Sum of PFHxS and PFOS	LB036371	µg/L	0.002	<0.002	9%	NA
Perfluorononane sulfonate (PFNS)	LB036371	µg/L	0.002	<0.002	0%	NA
Perfluorodecane sulfonate (PFDS)	LB036371	µg/L	0.002	<0.002	0%	NA
Perfluorododecane sulfonate (PFDoS)	LB036371	µg/L	0.002	<0.002	0%	NA
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	LB036371	µg/L	0.002	<0.002	0%	NA
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	LB036371	µg/L	0.002	<0.002	0%	NA
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	LB036371	µg/L	0.002	<0.002	0%	NA
Perfluorooctane sulfonamide (PFOSA)	LB036371	µg/L	0.008	<0.008	0%	99%
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	LB036371	µg/L	0.01	<0.01	0%	NA
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	LB036371	µg/L	0.01	<0.01	0%	NA
2-(N-Methylperfluorooctane sulfonamido)-ethanol (N-MeFOSE)	LB036371	µg/L	0.01	<0.01	0%	NA
2-(N-Ethylperfluorooctane sulfonamido)-ethanol (N-EtFOSE)	LB036371	µg/L	0.01	<0.01	0%	NA
N-Methylperfluorooctanesulfonamidoacetic acid (N_MeFOSAA)	LB036371	µg/L	0.01	<0.01	0%	NA
N-Ethylperfluorooctanesulfonamidoacetic Acid (N-EtFOSAA)	LB036371	µg/L	0.01	<0.01	0%	NA
(13C4-PFBA) Isotopically Labelled Internal Recovery Standard	LB036371	%	-	100%	0%	99%
(13C5-PFPeA) Isotopically Labelled Internal Recovery Standard	LB036371	%	-	98%	1%	101%
(13C5-PFHxA) Isotopically Labelled Internal Recovery Standard	LB036371	%	-	121%	1%	102%
(13C4-PFHpA) Isotopically Labelled Internal Recovery Standard	LB036371	%	-	110%	1%	96%
(13C4_PFOA) Isotopically Labelled Internal Recovery Standard	LB036371	%	-	109%	1%	102%
(13C9-PFNA) Isotopically Labelled Internal Recovery Standard	LB036371	%	-	92%	9%	95%
(13C6-PFDA) Isotopically Labelled Internal Recovery Standard	LB036371	%	-	91%	1%	98%
(13C7-PFUdA) Isotopically Labelled Internal Recovery Standard	LB036371	%	-	80%	1%	104%
(13C2-PFDoA) Isotopically Labelled Internal Recovery Standard	LB036371	%	-	71%	12%	103%
(13C2_PFTeDA) Isotopically Labelled Internal Recovery Standard	LB036371	%	-	59%	34%	110%
(13C2-PFHxDA) Isotopically Labelled Internal Recovery Standard	LB036371	%	-	77%	54%	147%
(13C3-PFBS) Isotopically Labelled Internal Recovery Standard	LB036371	%	-	140%	5%	115%
(13C3-PFHxS) Isotopically Labelled Internal Recovery Standard	LB036371	%	-	104%	3%	111%
(13C8-PFOS) Isotopically Labelled Internal Recovery Standard	LB036371	%	-	111%	11%	108%
(13C2-4:2 FTS) Isotopically Labelled Internal Recovery Standard	LB036371	%	-	148%	9%	105%
(13C2-6:2 FTS) Isotopically Labelled Internal Recovery Standard	LB036371	%	-	138%	15%	101%
(13C2-8:2 FTS) Isotopically Labelled Internal Recovery Standard	LB036371	%	-	100%	9%	107%
(13C8-PFOSA) Isotopically Labelled Internal Recovery Standard	LB036371	%	-	132%	15%	99%
(D3-N-MeFOSA) Isotopically Labelled Internal Recovery Standard	LB036371	%	-	134%	4%	89%
(D5-N-EtFOSA) Isotopically Labelled Internal Recovery Standard	LB036371	%	-	147%	8%	95%

QC SUMMARY

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples Method: MA-1523 (continued)

				MB	DUP %RPD	LCS %Recovery
(D7-N-MeFOSE) Isotopically Labelled Internal Recovery Standard	LB036371	%	-	147%	6%	95%
(D9-N-EtFOSE) Isotopically Labelled Internal Recovery Standard	LB036371	%	-	137%	0%	100%
(D3-N-MeFOSAA) Isotopically Labelled Internal Recovery Standard	LB036371	%	-	142%	8%	97%
(D5-N-EtFOSAA) Isotopically Labelled Internal Recovery Standard	LB036371	%	-	143%	2%	111%

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples Method: MA-1523

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Perfluorobutanoic acid (PFBA)	LB036370	mg/kg	0.0016	<0.0016	0%	NA
Perfluoropentanoic acid (PFPeA)	LB036370	mg/kg	0.0016	<0.0016	0%	NA
Perfluorohexanoic acid (PFHxA)	LB036370	mg/kg	0.0016	<0.0016	0%	NA
Perfluoroheptanoic acid (PFHpA)	LB036370	mg/kg	0.0016	<0.0016	0%	110%
Perfluorooctanoic Acid (PFOA)	LB036370	mg/kg	0.0008	<0.0008	0%	127%
Perfluorononanoic acid (PFNA)	LB036370	mg/kg	0.0016	<0.0016	0%	126%
Perfluorodecanoic acid (PFDA)	LB036370	mg/kg	0.0016	<0.0016	0%	104%
Perfluoroundecanoic acid (PFUnA)	LB036370	mg/kg	0.0016	<0.0016	0%	109%
Perfluorododecanoic acid (PFDoA)	LB036370	mg/kg	0.0016	<0.0016	0%	125%
Perfluorotridecanoic acid (PFTrDA)	LB036370	mg/kg	0.0016	<0.0016	0%	
Perfluorotetradecanoic acid (PFTeDA)	LB036370	mg/kg	0.0016	<0.0016	0%	NA
Perfluorohexadecanoic acid (PFHxDA)	LB036370	mg/kg	0.0032	<0.0032	0%	NA
Perfluorobutane sulfonate (PFBS)	LB036370	mg/kg	0.0016	<0.0016	0%	NA
Perfluoropentane sulfonate (PFPeS)	LB036370	mg/kg	0.0016	<0.0016	0%	NA
Perfluorohexane sulfonate (PFHxS)	LB036370	mg/kg	0.0016	<0.0016	0%	NA
Perfluoroheptane sulfonate (PFHpS)	LB036370	mg/kg	0.0016	<0.0016	0%	NA
Perfluorooctane sulfonate (PFOS)	LB036370	mg/kg	0.0016	<0.0016	0%	123%
Sum PFOS and PFHXS	LB036370	mg/kg	0.0016	<0.0016	0%	NA
Perfluorononane sulfonate (PFNS)	LB036370	mg/kg	0.0016	<0.0016	0%	NA
Perfluorodecane sulfonate (PFDS)	LB036370	mg/kg	0.0016	<0.0016	0%	NA
Perfluorododecane sulfonate (PFDoS)	LB036370	mg/kg	0.0016	<0.0016	0%	NA
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	LB036370	mg/kg	0.0016	<0.0016	0%	NA
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	LB036370	mg/kg	0.0016	<0.0016	0%	NA
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	LB036370	mg/kg	0.0016	<0.0016	0%	NA
Perfluorooctane sulfonamide (PFOSA)	LB036370	mg/kg	0.0016	<0.0016	0%	118%
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	LB036370	mg/kg	0.008	<0.008	0%	NA
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	LB036370	mg/kg	0.008	<0.008	0%	NA
2-(N-Methylperfluorooctane sulfonamido)-ethanol (N-MeFOSE)	LB036370	mg/kg	0.016	<0.016	0%	NA
2-(N-Ethylperfluorooctane sulfonamido)-ethanol (N-EtFOSE)	LB036370	mg/kg	0.016	<0.016	0%	NA
N-Methylperfluorooctanesulfonamidoacetic acid (N_MeFOSAA)	LB036370	mg/kg	0.008	<0.008	0%	NA
N-Ethylperfluorooctanesulfonamidoacetic Acid (N-EtFOSAA)	LB036370	mg/kg	0.008	<0.008	0%	NA
(13C4-PFBA) Isotopically Labelled Internal Recovery Standard	LB036370	%	-	103%	2%	102%
(13C5-PFPeA) Isotopically Labelled Internal Recovery Standard	LB036370	%	-	104%	2%	105%
(13C5-PFHxA) Isotopically Labelled Internal Recovery Standard	LB036370	%	-	112%	1%	106%
(13C4-PFHpA) Isotopically Labelled Internal Recovery Standard	LB036370	%	-	105%	1%	101%
(13C4_PFOA) Isotopically Labelled Internal Recovery Standard	LB036370	%	-	104%	3%	96%
(13C9-PFNA) Isotopically Labelled Internal Recovery Standard	LB036370	%	-	97%	1%	101%
(13C6-PFDA) Isotopically Labelled Internal Recovery Standard	LB036370	%	-	105%	5%	113%
(13C7-PFUdA) Isotopically Labelled Internal Recovery Standard	LB036370	%	-	90%	7%	92%
(13C2-PFDoA) Isotopically Labelled Internal Recovery Standard	LB036370	%	-	83%	5%	90%
(13C2_PFTeDA) Isotopically Labelled Internal Recovery Standard	LB036370	%	-	47%	19%	56%
(13C2-PFHxDA) Isotopically Labelled Internal Recovery Standard	LB036370	%	-	41%	25%	47%
(13C3-PFBS) Isotopically Labelled Internal Recovery Standard	LB036370	%	-	117%	9%	107%
(13C3-PFHxS) Isotopically Labelled Internal Recovery Standard	LB036370	%	-	109%	6%	107%
(13C8-PFOS) Isotopically Labelled Internal Recovery Standard	LB036370	%	-	99%	12%	98%
(13C2-4:2 FTS) Isotopically Labelled Internal Recovery Standard	LB036370	%	-	123%	10%	93%
(13C2-6:2 FTS) Isotopically Labelled Internal Recovery Standard	LB036370	%	-	125%	7%	103%
(13C2-8:2 FTS) Isotopically Labelled Internal Recovery Standard	LB036370	%	-	86%	14%	92%
(13C8-PFOSA) Isotopically Labelled Internal Recovery Standard	LB036370	%	-	90%	26%	85%
(D3-N-MeFOSA) Isotopically Labelled Internal Recovery Standard	LB036370	%	-	68%	11%	65%
(D5-N-EtFOSA) Isotopically Labelled Internal Recovery Standard	LB036370	%	-	51%	9%	62%
(D7-N-MeFOSE) Isotopically Labelled Internal Recovery Standard	LB036370	%	-	86%	1%	93%
(D9-N-EtFOSE) Isotopically Labelled Internal Recovery Standard	LB036370	%	-	75%	2%	88%
(D3-N-MeFOSAA) Isotopically Labelled Internal Recovery Standard	LB036370	%	-	93%	3%	104%
(D5-N-EtFOSAA) Isotopically Labelled Internal Recovery Standard	LB036370	%	-	96%	6%	90%

METHOD SUMMARY

ME317061 R0

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
MA-1523	This method covers the analysis of per- and polyfluoroalkyl substances (PFAS) in aqueous, solid and biosolid samples and solvent extracts, determined as the total of linear and branched isomers. After spiking with isotopically labelled quantification surrogates and clean-up via SPE cartridges sample extracts are analysed by liquid chromatography/mass spectrometry (LC-MS/MS). PFAS concentrations are determined by isotope dilution quantification.

FOOTNOTES

IS	Insufficient sample for analysis.	LOR	Limit of Reporting
LNR	Sample listed, but not received.	↑↓	Raised or Lowered Limit of Reporting
*	NATA accreditation does not cover the performance of this service.	QFH	QC result is above the upper tolerance
		QFL	QC result is below the lower tolerance
**	Indicative data, theoretical holding time exceeded.	-	The sample was not analysed for this analyte
***	Indicates that both * and ** apply.	NVL	Not Validated

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calcuated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

This document is issued by the Company under its General Conditions of Service accessible at www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

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STATEMENT OF QA/QC PERFORMANCE

SE212646 R0

CLIENT DETAILS

Contact	LQRSYD
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	02 9427 8100
Facsimile	02 9427 8200
Email	lqrsyd@slrconsulting.com
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	5

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE212646 R0**
Date Received	21 Oct 2020
Date Reported	28 Oct 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met (within the SGS Alexandria Environmental laboratory).

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice Bricks
Samples received in correct containers	Yes	Sample counts by matrix	4 Soil, 1 Water
Date documentation received	21/10/2020	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	6.2°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE212646 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

Ammonia Nitrogen by Discrete Analyser (Aquakem)

Method: ME-(AU)-[ENV]AN291

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SEP001_201021	SE212646.003	LB211948	21 Oct 2020	21 Oct 2020	18 Nov 2020	23 Oct 2020	18 Nov 2020	23 Oct 2020

Anions by Ion Chromatography in Water

Method: ME-(AU)-[ENV]AN245

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SEP001_201021	SE212646.003	LB211889	21 Oct 2020	21 Oct 2020	18 Nov 2020	23 Oct 2020	18 Nov 2020	26 Oct 2020

Fibre Identification in soil

Method: ME-(AU)-[ENV]AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_WD_GW19_201021	SE212646.001	LB212113	21 Oct 2020	21 Oct 2020	21 Oct 2021	27 Oct 2020	21 Oct 2021	28 Oct 2020
0407_WD_GW21_201021	SE212646.002	LB212113	21 Oct 2020	21 Oct 2020	21 Oct 2021	27 Oct 2020	21 Oct 2021	28 Oct 2020

Filterable Reactive Phosphorus (FRP)

Method: ME-(AU)-[ENV]AN278

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SEP001_201021	SE212646.003	LB211948	21 Oct 2020	21 Oct 2020	18 Nov 2020	23 Oct 2020	18 Nov 2020	23 Oct 2020

Full 8270 SVOC in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_WD_GW19_201021	SE212646.001	LB212055	21 Oct 2020	21 Oct 2020	04 Nov 2020	26 Oct 2020	05 Dec 2020	28 Oct 2020
0407_WD_GW21_201021	SE212646.002	LB212055	21 Oct 2020	21 Oct 2020	04 Nov 2020	26 Oct 2020	05 Dec 2020	28 Oct 2020

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SEP001_201021	SE212646.003	LB211902	21 Oct 2020	21 Oct 2020	18 Nov 2020	23 Oct 2020	18 Nov 2020	23 Oct 2020

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_WD_GW19_201021	SE212646.001	LB212060	21 Oct 2020	21 Oct 2020	04 Nov 2020	26 Oct 2020	31 Oct 2020	28 Oct 2020
0407_WD_GW21_201021	SE212646.002	LB212060	21 Oct 2020	21 Oct 2020	04 Nov 2020	26 Oct 2020	31 Oct 2020	28 Oct 2020
0407_QC526_201020 TB	SE212646.005	LB212060	21 Oct 2020	21 Oct 2020	04 Nov 2020	26 Oct 2020	31 Oct 2020	28 Oct 2020

Nitrite in Water

Method: ME-(AU)-[ENV]AN277

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SEP001_201021	SE212646.003	LB211948	21 Oct 2020	21 Oct 2020	25 Oct 2020	23 Oct 2020	25 Oct 2020	23 Oct 2020

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_WD_GW19_201021	SE212646.001	LB212055	21 Oct 2020	21 Oct 2020	04 Nov 2020	26 Oct 2020	05 Dec 2020	28 Oct 2020
0407_WD_GW21_201021	SE212646.002	LB212055	21 Oct 2020	21 Oct 2020	04 Nov 2020	26 Oct 2020	05 Dec 2020	28 Oct 2020

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_WD_GW19_201021	SE212646.001	LB212055	21 Oct 2020	21 Oct 2020	04 Nov 2020	26 Oct 2020	05 Dec 2020	28 Oct 2020
0407_WD_GW21_201021	SE212646.002	LB212055	21 Oct 2020	21 Oct 2020	04 Nov 2020	26 Oct 2020	05 Dec 2020	28 Oct 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_WD_GW19_201021	SE212646.001	LB212055	21 Oct 2020	21 Oct 2020	04 Nov 2020	26 Oct 2020	05 Dec 2020	28 Oct 2020
0407_WD_GW21_201021	SE212646.002	LB212055	21 Oct 2020	21 Oct 2020	04 Nov 2020	26 Oct 2020	05 Dec 2020	28 Oct 2020

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_WD_GW19_201021	SE212646.001	LB212055	21 Oct 2020	21 Oct 2020	04 Nov 2020	26 Oct 2020	05 Dec 2020	28 Oct 2020
0407_WD_GW21_201021	SE212646.002	LB212055	21 Oct 2020	21 Oct 2020	04 Nov 2020	26 Oct 2020	05 Dec 2020	28 Oct 2020

Sulfide by Titration in Water

Method: ME-(AU)-[ENV]AN149

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SEP001_201021	SE212646.003	LB212038	21 Oct 2020	21 Oct 2020	28 Oct 2020	26 Oct 2020	28 Oct 2020	26 Oct 2020

TKN Kjeldahl Digestion by Discrete Analyser

Method: ME-(AU)-[ENV]AN292

Sample Name	Sample No.	QC Ref

HOLDING TIME SUMMARY

SE212646 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

TKN Kjeldahl Digestion by Discrete Analyser (continued)

Method: ME-(AU)-[ENV]AN292

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SEP001_201021	SE212646.003	LB212016	21 Oct 2020	21 Oct 2020	18 Nov 2020	26 Oct 2020	18 Nov 2020	27 Oct 2020

Total Phosphorus by Kjeldahl Digestion DA in Water

Method: ME-(AU)-[ENV]AN279/AN293(Sydney only)

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SEP001_201021	SE212646.003	LB212016	21 Oct 2020	21 Oct 2020	18 Nov 2020	26 Oct 2020	18 Nov 2020	27 Oct 2020

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SEP001_201021	SE212646.003	LB212021	21 Oct 2020	21 Oct 2020	19 Apr 2021	26 Oct 2020	19 Apr 2021	27 Oct 2020

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_WD_GW19_201021	SE212646.001	LB212055	21 Oct 2020	21 Oct 2020	04 Nov 2020	26 Oct 2020	05 Dec 2020	28 Oct 2020
0407_WD_GW21_201021	SE212646.002	LB212055	21 Oct 2020	21 Oct 2020	04 Nov 2020	26 Oct 2020	05 Dec 2020	28 Oct 2020

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_WD_GW19_201021	SE212646.001	LB212048	21 Oct 2020	21 Oct 2020	04 Nov 2020	26 Oct 2020	05 Dec 2020	28 Oct 2020
0407_WD_GW21_201021	SE212646.002	LB212048	21 Oct 2020	21 Oct 2020	04 Nov 2020	26 Oct 2020	05 Dec 2020	28 Oct 2020
0407_QC526_201020 TS	SE212646.004	LB212048	21 Oct 2020	21 Oct 2020	04 Nov 2020	26 Oct 2020	05 Dec 2020	28 Oct 2020
0407_QC526_201020 TB	SE212646.005	LB212048	21 Oct 2020	21 Oct 2020	04 Nov 2020	26 Oct 2020	05 Dec 2020	28 Oct 2020

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_SEP001_201021	SE212646.003	LB212054	21 Oct 2020	21 Oct 2020	28 Oct 2020	26 Oct 2020	05 Dec 2020	27 Oct 2020

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_WD_GW19_201021	SE212646.001	LB212048	21 Oct 2020	21 Oct 2020	04 Nov 2020	26 Oct 2020	05 Dec 2020	28 Oct 2020
0407_WD_GW21_201021	SE212646.002	LB212048	21 Oct 2020	21 Oct 2020	04 Nov 2020	26 Oct 2020	05 Dec 2020	28 Oct 2020
0407_QC526_201020 TS	SE212646.004	LB212048	21 Oct 2020	21 Oct 2020	04 Nov 2020	26 Oct 2020	05 Dec 2020	28 Oct 2020
0407_QC526_201020 TB	SE212646.005	LB212048	21 Oct 2020	21 Oct 2020	04 Nov 2020	26 Oct 2020	05 Dec 2020	28 Oct 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Full 8270 SVOC in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-tribromophenol (Surrogate)	0407_WD_GW19_201021	SE212646.001	%	70 - 130%	105
	0407_WD_GW21_201021	SE212646.002	%	70 - 130%	100
2-fluorobiphenyl (Surrogate)	0407_WD_GW19_201021	SE212646.001	%	70 - 130%	96
	0407_WD_GW21_201021	SE212646.002	%	70 - 130%	94
d14-p-terphenyl (Surrogate)	0407_WD_GW19_201021	SE212646.001	%	70 - 130%	108
	0407_WD_GW21_201021	SE212646.002	%	70 - 130%	104
d5-nitrobenzene (Surrogate)	0407_WD_GW19_201021	SE212646.001	%	70 - 130%	80
	0407_WD_GW21_201021	SE212646.002	%	70 - 130%	76
d5-phenol (Surrogate)	0407_WD_GW19_201021	SE212646.001	%	70 - 130%	92
	0407_WD_GW21_201021	SE212646.002	%	70 - 130%	89

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_WD_GW19_201021	SE212646.001	%	60 - 130%	105
	0407_WD_GW21_201021	SE212646.002	%	60 - 130%	104

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_WD_GW19_201021	SE212646.001	%	60 - 130%	98
	0407_WD_GW21_201021	SE212646.002	%	60 - 130%	90
d14-p-terphenyl (Surrogate)	0407_WD_GW19_201021	SE212646.001	%	60 - 130%	108
	0407_WD_GW21_201021	SE212646.002	%	60 - 130%	103

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_WD_GW19_201021	SE212646.001	%	70 - 130%	98
	0407_WD_GW21_201021	SE212646.002	%	70 - 130%	90
d14-p-terphenyl (Surrogate)	0407_WD_GW19_201021	SE212646.001	%	70 - 130%	108
	0407_WD_GW21_201021	SE212646.002	%	70 - 130%	103
d5-nitrobenzene (Surrogate)	0407_WD_GW19_201021	SE212646.001	%	70 - 130%	96
	0407_WD_GW21_201021	SE212646.002	%	70 - 130%	96

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_WD_GW19_201021	SE212646.001	%	60 - 130%	105
	0407_WD_GW21_201021	SE212646.002	%	60 - 130%	104

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples

Method: MA-1523

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C2_PFTeDA) Isotopically Labelled Internal Recovery Standard	0407_SEP001_201021	SE212646.003	%	10 - 150%	103
(13C2-4:2 FTS) Isotopically Labelled Internal Recovery Standard	0407_SEP001_201021	SE212646.003	%	10 - 150%	92
(13C2-6:2 FTS) Isotopically Labelled Internal Recovery Standard	0407_SEP001_201021	SE212646.003	%	10 - 150%	101
(13C2-8:2 FTS) Isotopically Labelled Internal Recovery Standard	0407_SEP001_201021	SE212646.003	%	10 - 150%	107
(13C2-PFDoA) Isotopically Labelled Internal Recovery Standard	0407_SEP001_201021	SE212646.003	%	10 - 150%	108
(13C2-PFHxDA) Isotopically Labelled Internal Recovery Standard	0407_SEP001_201021	SE212646.003	%	10 - 150%	150
(13C3-PFBS) Isotopically Labelled Internal Recovery Standard	0407_SEP001_201021	SE212646.003	%	10 - 150%	104
(13C3-PFHxS) Isotopically Labelled Internal Recovery Standard	0407_SEP001_201021	SE212646.003	%	10 - 150%	105
(13C4_PFOA) Isotopically Labelled Internal Recovery Standard	0407_SEP001_201021	SE212646.003	%	10 - 150%	103
(13C4-PFBA) Isotopically Labelled Internal Recovery Standard	0407_SEP001_201021	SE212646.003	%	10 - 150%	100
(13C4-PFHpA) Isotopically Labelled Internal Recovery Standard	0407_SEP001_201021	SE212646.003	%	10 - 150%	100
(13C5-PFHxA) Isotopically Labelled Internal Recovery Standard	0407_SEP001_201021	SE212646.003	%	10 - 150%	101
(13C5-PFPeA) Isotopically Labelled Internal Recovery Standard	0407_SEP001_201021	SE212646.003	%	10 - 150%	99
(13C6-PFDA) Isotopically Labelled Internal Recovery Standard	0407_SEP001_201021	SE212646.003	%	10 - 150%	97
(13C7-PFUdA) Isotopically Labelled Internal Recovery Standard	0407_SEP001_201021	SE212646.003	%	10 - 150%	100
(13C8-PFOS) Isotopically Labelled Internal Recovery Standard	0407_SEP001_201021	SE212646.003	%	10 - 150%	95
(13C8-PFOSA) Isotopically Labelled Internal Recovery Standard	0407_SEP001_201021	SE212646.003	%	10 - 150%	107
(13C9-PFNA) Isotopically Labelled Internal Recovery Standard	0407_SEP001_201021	SE212646.003	%	10 - 150%	92
(D3-N-MeFOSA) Isotopically Labelled Internal Recovery Standard	0407_SEP001_201021	SE212646.003	%	10 - 150%	93
(D3-N-MeFOSAA) Isotopically Labelled Internal Recovery Standard	0407_SEP001_201021	SE212646.003	%	10 - 150%	121
(D5-N-EtFOSA) Isotopically Labelled Internal Recovery Standard	0407_SEP001_201021	SE212646.003	%	10 - 150%	96
(D5-N-EtFOSAA) Isotopically Labelled Internal Recovery Standard	0407_SEP001_201021	SE212646.003	%	10 - 150%	111
(D7-N-MeFOSE) Isotopically Labelled Internal Recovery Standard	0407_SEP001_201021	SE212646.003	%	10 - 150%	106

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples (continued)

Method: MA-1523

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(D9-N-EtFOSE) Isotopically Labelled Internal Recovery Standard	0407_SEP001_201021	SE212646.003	%	10 - 150%	107

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples

Method: MA-1523

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C2_PFTeDA) Isotopically Labelled Internal Recovery Standard	0407_WD_GW19_201021	SE212646.001	%	0 - 130%	75
	0407_WD_GW21_201021	SE212646.002	%	0 - 130%	55
(13C2-4:2 FTS) Isotopically Labelled Internal Recovery Standard	0407_WD_GW19_201021	SE212646.001	%	0 - 150%	100
	0407_WD_GW21_201021	SE212646.002	%	0 - 150%	106
(13C2-6:2 FTS) Isotopically Labelled Internal Recovery Standard	0407_WD_GW19_201021	SE212646.001	%	0 - 150%	110
	0407_WD_GW21_201021	SE212646.002	%	0 - 150%	109
(13C2-8:2 FTS) Isotopically Labelled Internal Recovery Standard	0407_WD_GW19_201021	SE212646.001	%	0 - 150%	120
	0407_WD_GW21_201021	SE212646.002	%	0 - 150%	111
(13C2-PFDoA) Isotopically Labelled Internal Recovery Standard	0407_WD_GW19_201021	SE212646.001	%	0 - 150%	98
	0407_WD_GW21_201021	SE212646.002	%	0 - 150%	96
(13C2-PFHxDA) Isotopically Labelled Internal Recovery Standard	0407_WD_GW19_201021	SE212646.001	%	0 - 150%	53
	0407_WD_GW21_201021	SE212646.002	%	0 - 150%	26
(13C3-PFBS) Isotopically Labelled Internal Recovery Standard	0407_WD_GW19_201021	SE212646.001	%	0 - 150%	95
	0407_WD_GW21_201021	SE212646.002	%	0 - 150%	97
(13C3-PFHxS) Isotopically Labelled Internal Recovery Standard	0407_WD_GW19_201021	SE212646.001	%	0 - 150%	97
	0407_WD_GW21_201021	SE212646.002	%	0 - 150%	105
(13C4_PFOA) Isotopically Labelled Internal Recovery Standard	0407_WD_GW19_201021	SE212646.001	%	0 - 150%	106
	0407_WD_GW21_201021	SE212646.002	%	0 - 150%	100
(13C4-PFBA) Isotopically Labelled Internal Recovery Standard	0407_WD_GW19_201021	SE212646.001	%	0 - 150%	101
	0407_WD_GW21_201021	SE212646.002	%	0 - 150%	101
(13C4-PFHpA) Isotopically Labelled Internal Recovery Standard	0407_WD_GW19_201021	SE212646.001	%	0 - 150%	100
	0407_WD_GW21_201021	SE212646.002	%	0 - 150%	97
(13C5-PFHxA) Isotopically Labelled Internal Recovery Standard	0407_WD_GW19_201021	SE212646.001	%	0 - 150%	103
	0407_WD_GW21_201021	SE212646.002	%	0 - 150%	95
(13C5-PFPeA) Isotopically Labelled Internal Recovery Standard	0407_WD_GW19_201021	SE212646.001	%	0 - 150%	103
	0407_WD_GW21_201021	SE212646.002	%	0 - 150%	100
(13C6-PFDA) Isotopically Labelled Internal Recovery Standard	0407_WD_GW19_201021	SE212646.001	%	0 - 150%	116
	0407_WD_GW21_201021	SE212646.002	%	0 - 150%	98
(13C7-PFUdA) Isotopically Labelled Internal Recovery Standard	0407_WD_GW19_201021	SE212646.001	%	0 - 150%	99
	0407_WD_GW21_201021	SE212646.002	%	0 - 150%	89
(13C8-PFOS) Isotopically Labelled Internal Recovery Standard	0407_WD_GW19_201021	SE212646.001	%	0 - 150%	117
	0407_WD_GW21_201021	SE212646.002	%	0 - 150%	98
(13C8-PFOSA) Isotopically Labelled Internal Recovery Standard	0407_WD_GW19_201021	SE212646.001	%	0 - 150%	115
	0407_WD_GW21_201021	SE212646.002	%	0 - 150%	77
(13C9-PFNA) Isotopically Labelled Internal Recovery Standard	0407_WD_GW19_201021	SE212646.001	%	0 - 150%	100
	0407_WD_GW21_201021	SE212646.002	%	0 - 150%	111
(D3-N-MeFOSA) Isotopically Labelled Internal Recovery Standard	0407_WD_GW19_201021	SE212646.001	%	0 - 150%	83
	0407_WD_GW21_201021	SE212646.002	%	0 - 150%	60
(D3-N-MeFOSAA) Isotopically Labelled Internal Recovery Standard	0407_WD_GW19_201021	SE212646.001	%	0 - 150%	111
	0407_WD_GW21_201021	SE212646.002	%	0 - 150%	104
(D5-N-EtFOSA) Isotopically Labelled Internal Recovery Standard	0407_WD_GW19_201021	SE212646.001	%	0 - 150%	75
	0407_WD_GW21_201021	SE212646.002	%	0 - 150%	56
(D5-N-EtFOSAA) Isotopically Labelled Internal Recovery Standard	0407_WD_GW19_201021	SE212646.001	%	0 - 150%	95
	0407_WD_GW21_201021	SE212646.002	%	0 - 150%	104
(D7-N-MeFOSE) Isotopically Labelled Internal Recovery Standard	0407_WD_GW19_201021	SE212646.001	%	0 - 150%	92
	0407_WD_GW21_201021	SE212646.002	%	0 - 150%	75
(D9-N-EtFOSE) Isotopically Labelled Internal Recovery Standard	0407_WD_GW19_201021	SE212646.001	%	0 - 150%	85
	0407_WD_GW21_201021	SE212646.002	%	0 - 150%	81

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_WD_GW19_201021	SE212646.001	%	60 - 130%	97
	0407_WD_GW21_201021	SE212646.002	%	60 - 130%	76
	0407_QC526_201020 TS	SE212646.004	%	60 - 130%	77
	0407_QC526_201020 TB	SE212646.005	%	60 - 130%	96
d4-1,2-dichloroethane (Surrogate)	0407_WD_GW19_201021	SE212646.001	%	60 - 130%	91
	0407_WD_GW21_201021	SE212646.002	%	60 - 130%	72
	0407_QC526_201020 TS	SE212646.004	%	60 - 130%	83

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d4-1,2-dichloroethane (Surrogate)	0407_QC526_201020 TB	SE212646.005	%	60 - 130%	96
d8-toluene (Surrogate)	0407_WD_GW19_201021	SE212646.001	%	60 - 130%	93
	0407_WD_GW21_201021	SE212646.002	%	60 - 130%	71
	0407_QC526_201020 TS	SE212646.004	%	60 - 130%	78
	0407_QC526_201020 TB	SE212646.005	%	60 - 130%	91

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_SEP001_201021	SE212646.003	%	40 - 130%	105
d4-1,2-dichloroethane (Surrogate)	0407_SEP001_201021	SE212646.003	%	40 - 130%	102
d8-toluene (Surrogate)	0407_SEP001_201021	SE212646.003	%	40 - 130%	97

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_WD_GW19_201021	SE212646.001	%	60 - 130%	97
	0407_WD_GW21_201021	SE212646.002	%	60 - 130%	76
d4-1,2-dichloroethane (Surrogate)	0407_WD_GW19_201021	SE212646.001	%	60 - 130%	91
	0407_WD_GW21_201021	SE212646.002	%	60 - 130%	72
d8-toluene (Surrogate)	0407_WD_GW19_201021	SE212646.001	%	60 - 130%	93
	0407_WD_GW21_201021	SE212646.002	%	60 - 130%	71

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Ammonia Nitrogen by Discrete Analyser (Aquakem)

Method: ME-(AU)-[ENV]AN291

Sample Number	Parameter	Units	LOR	Result
LB211948.001	Ammonia Nitrogen, NH_3 as N	mg/L	0.005	<0.005

Anions by Ion Chromatography in Water

Method: ME-(AU)-[ENV]AN245

Sample Number	Parameter	Units	LOR	Result
LB211889.001	Nitrate Nitrogen, NO3-N	mg/L	0.005	<0.005
	Sulfate, SO4	mg/L	1	<1.0

Filterable Reactive Phosphorus (FRP)

Method: ME-(AU)-[ENV]AN278

Sample Number	Parameter	Units	LOR	Result
LB211948.001	Filterable Reactive Phosphorus as P	mg/L	0.005	<0.005

Full 8270 SVOC in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB212055.001	01-PAHs	Acenaphthene	mg/kg	0.1	<0.1
		Acenaphthylene	mg/kg	0.1	<0.1
		Anthracene	mg/kg	0.1	<0.1
		Benzo(a)anthracene	mg/kg	0.1	<0.1
		Benzo(b&j&k)fluoranthene	mg/kg	0.2	<0.2
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Benzo(a)pyrene	mg/kg	0.1	<0.1
		Chrysene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Fluoranthene	mg/kg	0.1	<0.1
		Fluorene	mg/kg	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		1-methylnaphthalene	mg/kg	0.1	<0.1
		2-methylnaphthalene	mg/kg	0.1	<0.1
		Naphthalene	mg/kg	0.1	<0.1
		Phenanthrene	mg/kg	0.1	<0.1
		Pyrene	mg/kg	0.1	<0.1
		2-acetylaminofluorene	mg/kg	0.5	<0.5
		7,12-dimethyl-benz(a)anthracene	mg/kg	0.5	<0.5
		3-methylcholanthrene	mg/kg	0.5	<0.5
	02-OCs	Aldrin	mg/kg	0.1	<0.1
		Alpha-BHC	mg/kg	0.1	<0.1
		Beta-BHC	mg/kg	0.5	<0.5
		Delta-BHC	mg/kg	0.1	<0.1
		Gamma-BHC (Lindane)	mg/kg	0.1	<0.1
		p,p-DDD	mg/kg	0.1	<0.1
		p,p-DDE	mg/kg	0.1	<0.1
		p,p-DDT	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Alpha-endosulfan	mg/kg	0.2	<0.2
		Beta-endosulfan	mg/kg	0.2	<0.2
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin	mg/kg	0.2	<0.2
		Heptachlor	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
		Alpha-chlordane	mg/kg	0.1	<0.1
		Gamma-chlordane	mg/kg	0.1	<0.1
		Endrin ketone	mg/kg	0.1	<0.1
	03-OPs	Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
		Bromophos ethyl	mg/kg	0.2	<0.2
		Carbophenothion	mg/kg	0.5	<0.5

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

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Full 8270 SVOC in Soil (continued) — **Method: ME-(AU)-[ENV]AN420**

Sample Number		Parameter	Units	LOR	Result
LB212055.001	03-OPs	Chlorfenvinphos-cis	mg/kg	2	<2
		Chlorfenvinphos-trans	mg/kg	0.5	<0.5
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Chlorpyrifos-methyl	mg/kg	0.5	<0.5
		Co-Ral (Coumaphos)	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Dichlorvos	mg/kg	0.5	<0.5
		Demeton-S-methyl	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Disulfoton (Di-syston)	mg/kg	0.5	<0.5
		EPN*	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Ethoprophos (ethoprop or prophos)	mg/kg	0.5	<0.5
		Famphur (Famophos)	mg/kg	0.5	<0.5
		Fenamiphos (Phenamiphos)	mg/kg	0.5	<0.5
		Fenchlorophos (Ronnel)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2
		Fenthion	mg/kg	0.5	<0.5
		Malathion (Maldison)	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Mevinphos-cis/trans	mg/kg	1	<1
		o,o,o-triethyl phosphorothioate	mg/kg	0.5	<0.5
		Parathion ethyl (Parathion)	mg/kg	0.2	<0.2
		Parathion methyl	mg/kg	0.5	<0.5
		Phorate	mg/kg	0.5	<0.5
		Pirimiphos-ethyl	mg/kg	0.5	<0.5
		Pirimiphos-methyl	mg/kg	0.5	<0.5
		Profenofos	mg/kg	0.5	<0.5
		Prothiophos (Tokuthion)*	mg/kg	0.5	<0.5
		Sulfotepp	mg/kg	0.5	<0.5
		Tetrachlorvinphos (Stirophos)*	mg/kg	0.5	<0.5
	04-PCB UPAC(7) Congeners	PCB Congener C28	mg/kg	0.1	<0.1
		PCB Congener C52	mg/kg	0.1	<0.1
		PCB Congener C101	mg/kg	0.1	<0.1
		PCB Congener C118	mg/kg	0.1	<0.1
		PCB Congener C138	mg/kg	0.1	<0.1
		PCB Congener C153	mg/kg	0.1	<0.1
		PCB Congener C180	mg/kg	0.1	<0.1
	05-SVCH (Cl Benzenes, Hydrocarbons & VOCs)	Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.5	<0.5
		1,3-dichlorobenzene	mg/kg	0.5	<0.5
		1,4-dichlorobenzene	mg/kg	0.5	<0.5
		Hexachlorobutadiene	mg/kg	0.5	<0.5
		Hexachlorocyclopentadiene	mg/kg	1	<1
		Hexachloroethane	mg/kg	0.5	<0.5
		Hexachloroproprene	mg/kg	0.5	<0.5
		Pentachlorobenzene	mg/kg	0.5	<0.5
		Pentachloroethane	mg/kg	0.5	<0.5
		1,2,3,5 and 1,2,4,5 -tetrachlorobenzene	mg/kg	1	<1
		1,2,3,4-tetrachlorobenzene	mg/kg	0.5	<0.5
		1/2-Chloronaphthalene	mg/kg	1	<1
		1,2,4-trichlorobenzene	mg/kg	0.5	<0.5
	06-Phthalates	Bis(2-ethylhexyl)phthalate	mg/kg	5	<5
		Bis(2-ethylhexyl)adipate	mg/kg	0.5	<0.5
		Butyl benzyl phthalate	mg/kg	0.5	<0.5
		Di-n-butyl phthalate	mg/kg	0.5	<0.5
		Diethyl phthalate	mg/kg	0.5	<0.5
		Dimethyl phthalate	mg/kg	0.5	<0.5
		Dioctyl phthalate	mg/kg	0.5	<0.5
	07-Carbamates	Carbofuran	mg/kg	0.5	<0.5
		Carbaryl	mg/kg	0.5	<0.5

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Full 8270 SVOC in Soil (continued) — **Method: ME-(AU)-[ENV]AN420**

Sample Number		Parameter	Units	LOR	Result
LB212055.001	08-Herbicides (normal)	Trifluralin	mg/kg	0.5	<0.5
	09-Nitrosamines	N-nitroso-di-n-butylamine (NDBA)	mg/kg	0.5	<0.5
		N-nitroso-diethylamine (NDEA)	mg/kg	1	<1
		N-nitroso-di-n-propylamine (NDPA)	mg/kg	0.5	<0.5
		N-nitroso-morpholine (NMOR)	mg/kg	0.5	<0.5
		N-nitroso-piperidine (NPIP)	mg/kg	0.5	<0.5
		N-nitroso-pyrrolidine (NPYR)	mg/kg	1	<1
		4-amino biphenyl	mg/kg	1	<1
	10-Nitroaromatics and Ketones	Acetophenone	mg/kg	0.5	<0.5
		1,3-dinitrobenzene	mg/kg	1	<1
		2,4-dinitrotoluene	mg/kg	0.5	<0.5
		2,6-dinitrotoluene	mg/kg	0.5	<0.5
		Isophorone	mg/kg	0.5	<0.5
		Nitrobenzene	mg/kg	0.5	<0.5
		p-(dimethylamino) azobenzene	mg/kg	1	<1
		Phenacetin	mg/kg	1	<1
		Pentachloronitrobenzene (quintozene)	mg/kg	0.5	<0.5
	11-Anilines and Amines	Aniline	mg/kg	3	<3
		4-chloroaniline	mg/kg	1	<1
		2-nitroaniline	mg/kg	1	<1
		3-nitroaniline	mg/kg	1	<1
		4-nitroaniline	mg/kg	1	<1
		Diphenylamine	mg/kg	0.5	<0.5
		o-toluidine	mg/kg	1	<1
		5-nitro-o-toluidine	mg/kg	1	<1
		1-naphthylamine	mg/kg	1	<1
		2-naphthylamine	mg/kg	1	<1
	12-Haloethers	Bis(2-chloroethoxy) methane	mg/kg	0.5	<0.5
		Bis(2-chloroethyl) ether	mg/kg	0.5	<0.5
		Bis(2-chloroisopropyl) ether	mg/kg	0.5	<0.5
		4-chlorophenyl phenyl ether	mg/kg	0.5	<0.5
		4-bromophenyl phenyl ether	mg/kg	0.5	<0.5
	13-Other SVOCs	Methyl methanesulfonate	mg/kg	1	<1
		Ethyl methanesulfonate	mg/kg	1	<1
		Dibenzofuran	mg/kg	0.5	<0.5
		Benzyl alcohol	mg/kg	1	<1
		Safrole	mg/kg	0.5	<0.5
		Isosafrole Isomer 1	mg/kg	1	<1
		Isosafrole Isomer 2	mg/kg	1	<1
		1,4-naphthoquinone	mg/kg	0.5	<0.5
		Thionazin	mg/kg	1	<1
	14-Speciated Routine Phenols	3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		4-chloro-3-methylphenol	mg/kg	2	<2
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2-nitrophenol	mg/kg	0.5	<0.5
		Phenol	mg/kg	0.5	<0.5
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5
		Pentachlorophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
	Surrogates	d5-phenol (Surrogate)	%	-	99
		d5-nitrobenzene (Surrogate)	%	-	102
		2-fluorobiphenyl (Surrogate)	%	-	104
		2,4,6-tribromophenol (Surrogate)	%	-	86
		d14-p-terphenyl (Surrogate)	%	-	105

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

Sample Number	Parameter	Units	LOR	Result
LB211902.001	Mercury	mg/L	0.0001	<0.0001

Nitrite in Water

Method: ME-(AU)-[ENV]AN277

Sample Number	Parameter	Units	LOR	Result
LB211948.001	Nitrite Nitrogen, NO2 as N	mg/L	0.005	<0.005

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB212055.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	110

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB212055.001		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	104
		d14-p-terphenyl (Surrogate)	%	-	105

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB212055.001	Naphthalene	mg/kg	0.1	<0.1
	2-methylnaphthalene	mg/kg	0.1	<0.1
	1-methylnaphthalene	mg/kg	0.1	<0.1
	Acenaphthylene	mg/kg	0.1	<0.1
	Acenaphthene	mg/kg	0.1	<0.1
	Fluorene	mg/kg	0.1	<0.1
	Phenanthrene	mg/kg	0.1	<0.1
	Anthracene	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB212055.001		Fluoranthene	mg/kg	0.1	<0.1
		Pyrene	mg/kg	0.1	<0.1
		Benzo(a)anthracene	mg/kg	0.1	<0.1
		Chrysene	mg/kg	0.1	<0.1
		Benzo(a)pyrene	mg/kg	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	102
		2-fluorobiphenyl (Surrogate)	%	-	104
		d14-p-terphenyl (Surrogate)	%	-	105

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB212055.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	110

Sulfide by Titration in Water

Method: ME-(AU)-[ENV]AN149

Sample Number	Parameter	Units	LOR	Result
LB212038.001	Sulfide	mg/L	0.5	<0.5

Total Phosphorus by Kjeldahl Digestion DA in Water

Method: ME-(AU)-[ENV]AN279/AN293(Sydney only)

Sample Number	Parameter	Units	LOR	Result
LB212016.001	Total Phosphorus (Kjeldahl Digestion) as P	mg/L	0.02	<0.02

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Sample Number	Parameter	Units	LOR	Result
LB212021.001	Arsenic, As	µg/L	1	<1
	Beryllium, Be	µg/L	1	<1
	Boron, B	µg/L	5	<5
	Cadmium, Cd	µg/L	0.1	<0.1
	Chromium, Cr	µg/L	1	<1
	Cobalt, Co	µg/L	1	<1
	Copper, Cu	µg/L	1	<1
	Lead, Pb	µg/L	1	<1
	Manganese, Mn	µg/L	1	<1
	Nickel, Ni	µg/L	1	<1
	Zinc, Zn	µg/L	5	<5

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB212055.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number	Parameter	Units	LOR

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB212048.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB212048.001	Oxygenated Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	91
		d8-toluene (Surrogate)	%	-	88
		Bromofluorobenzene (Surrogate)	%	-	88
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB212054.001	Fumigants	2,2-dichloropropane	µg/L	0.5	<0.5
		1,2-dichloropropane	µg/L	0.5	<0.5
		cis-1,3-dichloropropene	µg/L	0.5	<0.5
		trans-1,3-dichloropropene	µg/L	0.5	<0.5
		1,2-dibromoethane (EDB)	µg/L	0.5	<0.5
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	µg/L	5	<5
		Chloromethane	µg/L	5	<5
		Vinyl chloride (Chloroethene)	µg/L	0.3	<0.3
		Bromomethane	µg/L	10	<10
		Chloroethane	µg/L	5	<5
		Trichlorofluoromethane	µg/L	1	<1
		Iodomethane	µg/L	5	<5
		1,1-dichloroethene	µg/L	0.5	<0.5
		Dichloromethane (Methylene chloride)	µg/L	5	<5
		Allyl chloride	µg/L	2	<2
		trans-1,2-dichloroethene	µg/L	0.5	<0.5
		1,1-dichloroethane	µg/L	0.5	<0.5
		cis-1,2-dichloroethene	µg/L	0.5	<0.5
		Bromochloromethane	µg/L	0.5	<0.5
		1,2-dichloroethane	µg/L	0.5	<0.5
		1,1,1-trichloroethane	µg/L	0.5	<0.5
		1,1-dichloropropene	µg/L	0.5	<0.5
		Carbon tetrachloride	µg/L	0.5	<0.5
		Dibromomethane	µg/L	0.5	<0.5
		Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	<0.5
		1,1,2-trichloroethane	µg/L	0.5	<0.5
		1,3-dichloropropane	µg/L	0.5	<0.5
		Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	<0.5
		1,1,1,2-tetrachloroethane	µg/L	0.5	<0.5
		cis-1,4-dichloro-2-butene	µg/L	1	<1
		1,1,2,2-tetrachloroethane	µg/L	0.5	<0.5
		1,2,3-trichloropropane	µg/L	0.5	<0.5
		trans-1,4-dichloro-2-butene	µg/L	1	<1
		1,2-dibromo-3-chloropropane	µg/L	0.5	<0.5
		Hexachlorobutadiene	µg/L	0.5	<0.5
	Halogenated Aromatics	Chlorobenzene	µg/L	0.5	<0.5
		Bromobenzene	µg/L	0.5	<0.5
		2-chlorotoluene	µg/L	0.5	<0.5
		4-chlorotoluene	µg/L	0.5	<0.5
		1,3-dichlorobenzene	µg/L	0.5	<0.5
		1,4-dichlorobenzene	µg/L	0.3	<0.3

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOCs in Water (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB212054.001	Halogenated Aromatics	1,2-dichlorobenzene	µg/L	0.5	<0.5
		1,2,4-trichlorobenzene	µg/L	0.5	<0.5
		1,2,3-trichlorobenzene	µg/L	0.5	<0.5
	Monocyclic Aromatic Hydrocarbons	Benzene	µg/L	0.5	<0.5
		Toluene	µg/L	0.5	<0.5
		Ethylbenzene	µg/L	0.5	<0.5
		m/p-xylene	µg/L	1	<1
		Styrene (Vinyl benzene)	µg/L	0.5	<0.5
		o-xylene	µg/L	0.5	<0.5
		Isopropylbenzene (Cumene)	µg/L	0.5	<0.5
		n-propylbenzene	µg/L	0.5	<0.5
		1,3,5-trimethylbenzene	µg/L	0.5	<0.5
		tert-butylbenzene	µg/L	0.5	<0.5
		1,2,4-trimethylbenzene	µg/L	0.5	<0.5
		sec-butylbenzene	µg/L	0.5	<0.5
		p-isopropyltoluene	µg/L	0.5	<0.5
		n-butylbenzene	µg/L	0.5	<0.5
	Nitrogenous Compounds	Acrylonitrile	µg/L	0.5	<0.5
	Oxygenated Compounds	Acetone (2-propanone)	µg/L	10	<10
		MtBE (Methyl-tert-butyl ether)	µg/L	2	<1
		Vinyl acetate	µg/L	10	<10
		MEK (2-butanone)	µg/L	10	<10
		MIBK (4-methyl-2-pentanone)	µg/L	5	<5
		2-hexanone (MBK)	µg/L	5	<5
	Polycyclic VOCs	Naphthalene	µg/L	0.5	<0.5
	Sulphonated	Carbon disulfide	µg/L	2	<2
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	99
		d8-toluene (Surrogate)	%	-	96
		Bromofluorobenzene (Surrogate)	%	-	100
	Trihalomethanes	Chloroform (THM)	µg/L	0.5	<0.5
		Bromodichloromethane (THM)	µg/L	0.5	<0.5
		Dibromochloromethane (THM)	µg/L	0.5	<0.5
		Bromoform (THM)	µg/L	0.5	<0.5

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB212048.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	91

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Ammonia Nitrogen by Discrete Analyser (Aquakem)

Method: ME-(AU)-[ENV]AN291

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212646.003	LB211948.011	Ammonia Nitrogen, NH_3 as N	mg/L	0.005	0.016	0.0082	99	45

Anions by Ion Chromatography in Water

Method: ME-(AU)-[ENV]AN245

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212646.003	LB211889.015	Nitrate Nitrogen, NO3-N	mg/L	0.005	1.1	1.1	15	1
		Sulfate, SO4	mg/L	1	27	27	19	1

Filterable Reactive Phosphorus (FRP)

Method: ME-(AU)-[ENV]AN278

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212646.003	LB211948.011	Filterable Reactive Phosphorus as P	mg/L	0.005	0.13	0.1318	19	0

Full 8270 SVOC in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212646.002	LB212055.022	01-PAHs	Acenaphthene	mg/kg	0.1	<0.1	0	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	0	200	0
			Anthracene	mg/kg	0.1	<0.1	0	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	0	200	0
			Benzo(b&j&k)fluoranthene	mg/kg	0.2	<0.2	0	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	0	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	0	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	0	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	0	200	0
			Chrysene	mg/kg	0.1	<0.1	0	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	0	200	0
			Fluoranthene	mg/kg	0.1	<0.1	0	200	0
			Fluorene	mg/kg	0.1	<0.1	0	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	0	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	0	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	0	200	0
			Naphthalene	mg/kg	0.1	<0.1	0	200	0
			Phenanthrene	mg/kg	0.1	<0.1	0	200	0
			Pyrene	mg/kg	0.1	<0.1	0	200	0
			Carcinogenic PAHs, BaP TEQ, <LOR=0	mg/kg	0.2	<0.2	0	200	0
			2-acetylaminofluorene	mg/kg	0.5	<0.5	0.02	200	0
			7,12-dimethyl-benz(a)anthracene	mg/kg	0.5	<0.5	0	200	0
			3-methylcholanthrene	mg/kg	0.5	<0.5	0	200	0
			Carcinogenic PAHs, BaP TEQ, <LOR=LOR*	mg/kg	0.3	<0.3	0.242	134	0
			Carcinogenic PAHs, BaP TEQ, <LOR=LOR/2*	mg/kg	0.2	<0.2	0.121	175	0
		02-OCs	Aldrin	mg/kg	0.1	<0.1	0	200	0
			Alpha-BHC	mg/kg	0.1	<0.1	0	200	0
			Beta-BHC	mg/kg	0.5	<0.5	0	200	0
			Delta-BHC	mg/kg	0.1	<0.1	0	200	0
			Gamma-BHC (Lindane)	mg/kg	0.1	<0.1	0	200	0
			p,p-DDD	mg/kg	0.1	<0.1	0	200	0
			p,p-DDE	mg/kg	0.1	<0.1	0.03	200	0
			p,p-DDT	mg/kg	0.1	<0.1	0	200	0
			Dieldrin	mg/kg	0.2	<0.2	0.02	200	0
			Alpha-endosulfan	mg/kg	0.2	<0.2	0	200	0
			Beta-endosulfan	mg/kg	0.2	<0.2	0.01	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	0	200	0
			Endrin	mg/kg	0.2	<0.2	0	200	0
			Heptachlor	mg/kg	0.1	<0.1	0	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	0	200	0
			Isodrin	mg/kg	0.1	<0.1	0	200	0
			Methoxychlor	mg/kg	0.1	<0.1	0	200	0
			Mirex	mg/kg	0.1	<0.1	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Full 8270 SVOC in Soil (continued) — **Method: ME-(AU)-[ENV]AN420**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212646.002	LB212055.022	02-OCs	Alpha-chlordane	mg/kg	0.1	<0.1	0	200	0
			Gamma-chlordane	mg/kg	0.1	<0.1	0	200	0
			Endrin ketone	mg/kg	0.1	<0.1	0	200	0
			Total (Alpha+Beta+SO4) Endosulfan*	mg/kg	0.2	<0.2	0.01	200	0
		03-OPs	Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	0	200	0
			Bromophos ethyl	mg/kg	0.2	<0.2	0	200	0
			Carbophenothion	mg/kg	0.5	<0.5	0	200	0
			Chlorfenvinphos-cis	mg/kg	2	<2	0	200	0
			Chlorfenvinphos-trans	mg/kg	0.5	<0.5	0	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	0	200	0
			Chlorpyrifos-methyl	mg/kg	0.5	<0.5	0	200	0
			Co-Ral (Coumaphos)	mg/kg	0.5	<0.5	0	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	0.01	200	0
			Dichlorvos	mg/kg	0.5	<0.5	0	200	0
			Demeton-S-methyl	mg/kg	0.5	<0.5	0	200	0
			Dimethoate	mg/kg	0.5	<0.5	0.01	200	0
			Disulfoton (Di-syston)	mg/kg	0.5	<0.5	0	200	0
			EPN*	mg/kg	0.5	<0.5	0.01	200	0
			Ethion	mg/kg	0.2	<0.2	0	200	0
			Ethoprophos (ethoprop or prophos)	mg/kg	0.5	<0.5	0.01	200	0
			Famphur (Famophos)	mg/kg	0.5	<0.5	0	200	0
			Fenamiphos (Phenamiphos)	mg/kg	0.5	<0.5	0	200	0
			Fenchlorophos (Ronnel)	mg/kg	0.5	<0.5	0	200	0
			Fenitrothion	mg/kg	0.2	<0.2	0	200	0
			Fenthion	mg/kg	0.5	<0.5	0	200	0
			Malathion (Maldison)	mg/kg	0.2	<0.2	0	200	0
			Methidathion	mg/kg	0.5	<0.5	0	200	0
			Mevinphos-cis/trans	mg/kg	1	<1	0	200	0
			o,o,o-triethyl phosphorothioate	mg/kg	0.5	<0.5	0	200	0
			Parathion ethyl (Parathion)	mg/kg	0.2	<0.2	0	200	0
			Parathion methyl	mg/kg	0.5	<0.5	0	200	0
			Phorate	mg/kg	0.5	<0.5	0	200	0
			Pirimiphos-ethyl	mg/kg	0.5	<0.5	0.01	200	0
			Pirimiphos-methyl	mg/kg	0.5	<0.5	0	200	0
			Profenofos	mg/kg	0.5	<0.5	0	200	0
			Prothiophos (Tokuthion)*	mg/kg	0.5	<0.5	0.01	200	0
			Sulfotepp	mg/kg	0.5	<0.5	0	200	0
			Tetrachlorvinphos (Stirophos)*	mg/kg	0.5	<0.5	0	200	0
		04-PCB	PCB Congener C28	mg/kg	0.1	<0.1	0	200	0
		UPAC(7)	PCB Congener C52	mg/kg	0.1	<0.1	0	200	0
			PCB Congener C101	mg/kg	0.1	<0.1	0	200	0
			PCB Congener C118	mg/kg	0.1	<0.1	0	200	0
			PCB Congener C138	mg/kg	0.1	<0.1	0	200	0
			PCB Congener C153	mg/kg	0.1	<0.1	0	200	0
			PCB Congener C180	mg/kg	0.1	<0.1	0.01	200	0
		05-SVCH (Cl	Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	0	200	0
		Benzenes,	1,2-dichlorobenzene	mg/kg	0.5	<0.5	0	200	0
			1,3-dichlorobenzene	mg/kg	0.5	<0.5	0	200	0
			1,4-dichlorobenzene	mg/kg	0.5	<0.5	0	200	0
			Hexachlorobutadiene	mg/kg	0.5	<0.5	0	200	0
			Hexachlorocyclopentadiene	mg/kg	1	<1	0	200	0
			Hexachloroethane	mg/kg	0.5	<0.5	0	200	0
			Hexachloroproprene	mg/kg	0.5	<0.5	0	200	0
			Pentachlorobenzene	mg/kg	0.5	<0.5	0	200	0
			Pentachloroethane	mg/kg	0.5	<0.5	0	200	0
			1,2,3,5 and 1,2,4,5 -tetrachlorobenzene	mg/kg	1	<1	0	200	0
			1,2,3,4-tetrachlorobenzene	mg/kg	0.5	<0.5	0	200	0
			1/2-Chloronaphthalene	mg/kg	1	<1	0	200	0
			1,2,4-trichlorobenzene	mg/kg	0.5	<0.5	0	200	0
		06-Phthalates	Bis(2-ethylhexyl)phthalate	mg/kg	5	<5	0.01	200	0
			Bis(2-ethylhexyl)adipate	mg/kg	0.5	<0.5	0	200	0

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RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Full 8270 SVOC in Soil (continued) — **Method: ME-(AU)-[ENV]AN420**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212646.002	LB212055.022	06-Phthalates	Butyl benzyl phthalate	mg/kg	0.5	<0.5	0	200	0
			Di-n-butyl phthalate	mg/kg	0.5	<0.5	0	200	0
			Diethyl phthalate	mg/kg	0.5	<0.5	0.01	200	0
			Dimethyl phthalate	mg/kg	0.5	<0.5	0	200	0
			Dioctyl phthalate	mg/kg	0.5	<0.5	0	200	0
		07-Carbamates	Carbofuran	mg/kg	0.5	<0.5	0	200	0
			Carbaryl	mg/kg	0.5	<0.5	0	200	0
		08-Herbicides	Trifluralin	mg/kg	0.5	<0.5	0	200	0
		09-Nitrosamines	N-nitroso-di-n-butylamine (NDBA)	mg/kg	0.5	<0.5	0	200	0
			N-nitroso-diethylamine (NDEA)	mg/kg	1	<1	0	200	0
			N-nitroso-di-n-propylamine (NDPA)	mg/kg	0.5	<0.5	0	200	0
			N-nitroso-morpholine (NMOR)	mg/kg	0.5	<0.5	0	200	0
			N-nitroso-piperidine (NPIP)	mg/kg	0.5	<0.5	0.02	200	0
			N-nitroso-pyrrolidine (NPYR)	mg/kg	1	<1	0	200	0
			4-amino biphenyl	mg/kg	1	<1	0	200	0
		10-Nitroaromatics and	Acetophenone	mg/kg	0.5	<0.5	0	200	0
			1,3-dinitrobenzene	mg/kg	1	<1	0	200	0
			2,4-dinitrotoluene	mg/kg	0.5	<0.5	0	200	0
			2,6-dinitrotoluene	mg/kg	0.5	<0.5	0	200	0
			Isophorone	mg/kg	0.5	<0.5	0	200	0
			Nitrobenzene	mg/kg	0.5	<0.5	0	200	0
			p-(dimethylamino) azobenzene	mg/kg	1	<1	0.02	200	0
			Phenacetin	mg/kg	1	<1	0	200	0
			Pentachloronitrobenzene (quintozene)	mg/kg	0.5	<0.5	0	200	0
		11-Anilines and Amines	Aniline	mg/kg	3	<3	0	200	0
			4-chloroaniline	mg/kg	1	<1	0	200	0
			2-nitroaniline	mg/kg	1	<1	0.02	200	0
			3-nitroaniline	mg/kg	1	<1	0	200	0
			4-nitroaniline	mg/kg	1	<1	0.02	200	0
			Diphenylamine	mg/kg	0.5	<0.5	0	200	0
			o-toluidine	mg/kg	1	<1	0	200	0
			5-nitro-o-toluidine	mg/kg	1	<1	0	200	0
			1-naphthylamine	mg/kg	1	<1	0	200	0
			2-naphthylamine	mg/kg	1	<1	0	200	0
		12-Haloethers	Bis(2-chloroethoxy) methane	mg/kg	0.5	<0.5	0	200	0
			Bis(2-chloroethyl) ether	mg/kg	0.5	<0.5	0	200	0
			Bis(2-chloroisopropyl) ether	mg/kg	0.5	<0.5	0	200	0
			4-chlorophenyl phenyl ether	mg/kg	0.5	<0.5	0	200	0
			4-bromophenyl phenyl ether	mg/kg	0.5	<0.5	0	200	0
		13-Other SVOCs	Methyl methanesulfonate	mg/kg	1	<1	0	200	0
			Ethyl methanesulfonate	mg/kg	1	<1	0	200	0
			Dibenzofuran	mg/kg	0.5	<0.5	0	200	0
			Benzyl alcohol	mg/kg	1	<1	0	200	0
			Safrole	mg/kg	0.5	<0.5	0.01	200	0
			Isosafrole Isomer 1	mg/kg	1	<1	0	200	0
			Isosafrole Isomer 2	mg/kg	1	<1	0	200	0
			1,4-naphthoquinone	mg/kg	0.5	<0.5	0	200	0
			Thionazin	mg/kg	1	<1	0	200	0
		14-Speciated Routine	3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	0	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	0	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	0	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	0	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	0	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	0	200	0
			Phenol	mg/kg	0.5	<0.5	0	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	0	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	0	200	0
			4-nitrophenol	mg/kg	1	<1	0	200	0

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Full 8270 SVOC in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212646.002	LB212055.022	14-Speciated	2,3,4,6-tetrachlorophenol	mg/kg	0.5	<0.5	0	200	0
		Surrogates	d5-phenol (Surrogate)	mg/kg	-	1.8	1.77	30	0
			d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.38	30	0
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.47	30	0
			2,4,6-tribromophenol (Surrogate)	mg/kg	-	5.0	5.05	30	1
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.52	30	0

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212693.003	LB211902.006	Mercury	µg/L	0.0001	<0.0001	<0.0001	200	0

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212646.001	LB212060.011	% Moisture	%w/w	1	1.3	1.3	107	6
SE212710.002	LB212060.016	% Moisture	%w/w	1	16.5	16.9	36	3

Nitrite in Water

Method: ME-(AU)-[ENV]AN277

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212646.003	LB211948.011	Nitrite Nitrogen, NO2 as N	mg/L	0.005	0.009	0.0092	69	3

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212646.002	LB212055.023	Hexachlorobenzene (HCB)	mg/kg	0.1	NVL	NVL	NVL	NVL
		Alpha BHC	mg/kg	0.1	NVL	NVL	NVL	NVL
		Lindane	mg/kg	0.1	NVL	NVL	NVL	NVL
		Heptachlor	mg/kg	0.1	NVL	NVL	NVL	NVL
		Aldrin	mg/kg	0.1	NVL	NVL	NVL	NVL
		Beta BHC	mg/kg	0.1	NVL	NVL	NVL	NVL
		Delta BHC	mg/kg	0.1	NVL	NVL	NVL	NVL
		Alpha Endosulfan	mg/kg	0.2	NVL	NVL	NVL	NVL
		Dieldrin	mg/kg	0.2	NVL	NVL	NVL	NVL
		Endrin	mg/kg	0.2	NVL	NVL	NVL	NVL
		Beta Endosulfan	mg/kg	0.2	NVL	NVL	NVL	NVL
		Endrin Aldehyde	mg/kg	0.1	NVL	NVL	NVL	NVL
		Methoxychlor	mg/kg	0.1	NVL	NVL	NVL	NVL
		Endrin Ketone	mg/kg	0.1	NVL	NVL	NVL	NVL
		Isodrin	mg/kg	0.1	NVL	NVL	NVL	NVL
		Mirex	mg/kg	0.1	NVL	NVL	NVL	NVL
SE212710.001	LB212055.022	Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	0	200	0
		Alpha BHC	mg/kg	0.1	<0.1	0	200	0
		Lindane	mg/kg	0.1	<0.1	0	200	0
		Heptachlor	mg/kg	0.1	<0.1	0	200	0
		Aldrin	mg/kg	0.1	<0.1	0	200	0
		Beta BHC	mg/kg	0.1	<0.1	0	200	0
		Delta BHC	mg/kg	0.1	<0.1	0	200	0
		Heptachlor epoxide	mg/kg	0.1	<0.1	0	200	0
		o,p'-DDE	mg/kg	0.1	<0.1	0	200	0
		Alpha Endosulfan	mg/kg	0.2	<0.2	0	200	0
		Gamma Chlordane	mg/kg	0.1	<0.1	0	200	0
		Alpha Chlordane	mg/kg	0.1	<0.1	0	200	0
		trans-Nonachlor	mg/kg	0.1	<0.1	0	200	0
		p,p'-DDE	mg/kg	0.1	<0.1	0	200	0
		Dieldrin	mg/kg	0.2	<0.2	0	200	0
		Endrin	mg/kg	0.2	<0.2	0	200	0
		o,p'-DDD	mg/kg	0.1	<0.1	0	200	0
		o,p'-DDT	mg/kg	0.1	<0.1	0	200	0
		Beta Endosulfan	mg/kg	0.2	<0.2	0	200	0

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OC Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212710.001	LB212055.022		p,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	0	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	0	200	0
			Methoxychlor	mg/kg	0.1	<0.1	0	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	0	200	0
			Isodrin	mg/kg	0.1	<0.1	0	200	0
			Mirex	mg/kg	0.1	<0.1	0	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.16	0.158	30	1

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212646.001	LB212055.014		Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
			Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
			Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
			Malathion	mg/kg	0.2	<0.2	<0.2	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	6
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	10
SE212646.002	LB212055.022		Dichlorvos	mg/kg	0.5	NVL	NVL	NVL	NVL
			Dimethoate	mg/kg	0.5	NVL	NVL	NVL	NVL
			Diazinon (Dimpylate)	mg/kg	0.5	NVL	NVL	NVL	NVL
			Fenitrothion	mg/kg	0.2	NVL	NVL	NVL	NVL
			Malathion	mg/kg	0.2	NVL	NVL	NVL	NVL
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	NVL	NVL	NVL	NVL
			Parathion-ethyl (Parathion)	mg/kg	0.2	NVL	NVL	NVL	NVL
			Bromophos Ethyl	mg/kg	0.2	NVL	NVL	NVL	NVL
			Methidathion	mg/kg	0.5	NVL	NVL	NVL	NVL
			Ethion	mg/kg	0.2	NVL	NVL	NVL	NVL
			Azinphos-methyl (Guthion)	mg/kg	0.2	NVL	NVL	NVL	NVL
			Total OP Pesticides*	mg/kg	1.7	NVL	NVL	NVL	NVL
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	NVL	NVL	NVL	NVL
			d14-p-terphenyl (Surrogate)	mg/kg	-	NVL	NVL	NVL	NVL

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212646.001	LB212055.014	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
		Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
		Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
		Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Fluoranthene	mg/kg	0.1	<0.1	<0.1	166	0
		Pyrene	mg/kg	0.1	<0.1	<0.1	157	0
		Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	173	0
		Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	183	0
		Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
		Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212646.001	LB212055.014		Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	<0.3	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	<0.2	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	30	1
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	6
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	10
SE212646.002	LB212055.022		Naphthalene	mg/kg	0.1	NVL	NVL	NVL	NVL
			2-methylnaphthalene	mg/kg	0.1	NVL	NVL	NVL	NVL
			1-methylnaphthalene	mg/kg	0.1	NVL	NVL	NVL	NVL
			Acenaphthylene	mg/kg	0.1	NVL	NVL	NVL	NVL
			Acenaphthene	mg/kg	0.1	NVL	NVL	NVL	NVL
			Fluorene	mg/kg	0.1	NVL	NVL	NVL	NVL
			Phenanthrene	mg/kg	0.1	NVL	NVL	NVL	NVL
			Anthracene	mg/kg	0.1	NVL	NVL	NVL	NVL
			Fluoranthene	mg/kg	0.1	NVL	NVL	NVL	NVL
			Pyrene	mg/kg	0.1	NVL	NVL	NVL	NVL
			Benzo(a)anthracene	mg/kg	0.1	NVL	NVL	NVL	NVL
			Chrysene	mg/kg	0.1	NVL	NVL	NVL	NVL
			Benzo(b&j)fluoranthene	mg/kg	0.1	NVL	NVL	NVL	NVL
			Benzo(k)fluoranthene	mg/kg	0.1	NVL	NVL	NVL	NVL
			Benzo(a)pyrene	mg/kg	0.1	NVL	NVL	NVL	NVL
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	NVL	NVL	NVL	NVL
			Dibenzo(ah)anthracene	mg/kg	0.1	NVL	NVL	NVL	NVL
			Benzo(ghi)perylene	mg/kg	0.1	NVL	NVL	NVL	NVL
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	NVL	NVL	NVL	NVL
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	NVL	NVL	NVL	NVL
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	NVL	NVL	NVL	NVL
			Total PAH (18)	mg/kg	0.8	NVL	NVL	NVL	NVL
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.38	30	23
			2-fluorobiphenyl (Surrogate)	mg/kg	-	NVL	NVL	NVL	NVL
			d14-p-terphenyl (Surrogate)	mg/kg	-	NVL	NVL	NVL	NVL

TKN Kjeldahl Digestion by Discrete Analyser

Method: ME-(AU)-[ENV]AN292

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212654.005	LB212016.024	Total Kjeldahl Nitrogen	mg/L	0.05	617.96	632.1516	15	2
SE212720.001	LB212016.014	Total Kjeldahl Nitrogen	mg/L	0.05	13	13	15	4

Total Phosphorus by Kjeldahl Digestion DA in Water

Method: ME-(AU)-[ENV]AN279/AN293(Sydney only)

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212654.005	LB212016.024	Total Phosphorus (Kjeldahl Digestion) as P	mg/L	0.02	50.224	50.5296	15	1

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212696.001	LB212021.014	Arsenic, As	µg/L	1	4.406	4.467	38	1
		Cadmium, Cd	µg/L	0.1	0.003	0.004	200	0
		Chromium, Cr	µg/L	1	0.486	0.487	200	0
		Copper, Cu	µg/L	1	0.279	0.247	200	0
		Lead, Pb	µg/L	1	5.906	5.936	32	1
		Nickel, Ni	µg/L	1	1.85	1.856	69	0
		Zinc, Zn	µg/L	5	13.047	13.14	53	1

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212646.001	LB212055.014	TRH C10-C14	mg/kg	20	<20	<20	200	0
		TRH C15-C28	mg/kg	45	<45	<45	200	0
		TRH C29-C36	mg/kg	45	<45	<45	200	0
		TRH C37-C40	mg/kg	100	<100	<100	200	0
		TRH C10-C36 Total	mg/kg	110	<110	<110	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212646.001	LB212055.014		TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE212710.002	LB212055.022		TRH C10-C14	mg/kg	20	<20	0	200	0
			TRH C15-C28	mg/kg	45	<45	0	200	0
			TRH C29-C36	mg/kg	45	<45	0	200	0
			TRH C37-C40	mg/kg	100	<100	0	200	0
			TRH C10-C36 Total	mg/kg	110	<110	0	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	0	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	0	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	0	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	0	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	0	200	0

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212646.001	LB212048.014	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212646.001	LB212048.014	Halogenated	1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
			Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.1	9.3	50	2
			d8-toluene (Surrogate)	mg/kg	-	9.3	9.3	50	1
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.7	10.4	50	6
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0
SE212710.002	LB212048.020	Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.0	9.9	50	9
			d8-toluene (Surrogate)	mg/kg	-	7.6	9.4	50	20
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.1	10.3	50	13
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212644.002	LB212054.022	Monocyclic	Benzene	µg/L	0.5	<0.0005	0.0001	200	0
		Aromatic	Toluene	µg/L	0.5	<0.0005	0.0001	200	180
			Ethylbenzene	µg/L	0.5	<0.0005	0.0000	200	130
			m/p-xylene	µg/L	1	<0.001	0.000	200	153
			o-xylene	µg/L	0.5	<0.0005	0.0001	200	142
		Polycyclic	Naphthalene	µg/L	0.5	<0.0005	0.0002	200	184
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	0.0	0.0	30	9
			d8-toluene (Surrogate)	µg/L	-	0.0	0.0	30	5
			Bromofluorobenzene (Surrogate)	µg/L	-	0.0	0.0	30	2

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOCs in Water (continued) — **Method: ME-(AU)-[ENV]AN433**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212783.001	LB212054.023	Fumigants	2,2-dichloropropane	µg/L	0.5	<0.5	<0.5	200	0
			1,2-dichloropropane	µg/L	0.5	<0.5	<0.5	200	0
			cis-1,3-dichloropropene	µg/L	0.5	<0.5	<0.5	200	0
			trans-1,3-dichloropropene	µg/L	0.5	<0.5	<0.5	200	0
			1,2-dibromoethane (EDB)	µg/L	0.5	<0.5	<0.5	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	µg/L	5	<5	<5	200	0
		Aliphatics	Chloromethane	µg/L	5	<5	<5	200	0
			Vinyl chloride (Chloroethene)	µg/L	0.3	<0.3	<0.3	200	0
			Bromomethane	µg/L	10	<10	<10	200	0
			Chloroethane	µg/L	5	<5	<5	200	0
			Trichlorofluoromethane	µg/L	1	<1	<1	200	0
			Iodomethane	µg/L	5	<5	<5	200	0
			1,1-dichloroethene	µg/L	0.5	<0.5	<0.5	200	0
			Dichloromethane (Methylene chloride)	µg/L	5	<5	<5	200	0
			Allyl chloride	µg/L	2	<2	<2	200	0
			trans-1,2-dichloroethene	µg/L	0.5	<0.5	<0.5	200	0
			1,1-dichloroethane	µg/L	0.5	<0.5	<0.5	200	0
			cis-1,2-dichloroethene	µg/L	0.5	<0.5	<0.5	200	0
			Bromochloromethane	µg/L	0.5	<0.5	<0.5	200	0
			1,2-dichloroethane	µg/L	0.5	<0.5	<0.5	200	0
			1,1,1-trichloroethane	µg/L	0.5	<0.5	<0.5	200	0
			1,1-dichloropropene	µg/L	0.5	<0.5	<0.5	200	0
			Carbon tetrachloride	µg/L	0.5	<0.5	<0.5	200	0
			Dibromomethane	µg/L	0.5	<0.5	<0.5	200	0
			Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	<0.5	<0.5	200	0
			1,1,2-trichloroethane	µg/L	0.5	<0.5	<0.5	200	0
			1,3-dichloropropane	µg/L	0.5	<0.5	<0.5	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	<0.5	<0.5	200	0
			1,1,1,2-tetrachloroethane	µg/L	0.5	<0.5	<0.5	200	0
			cis-1,4-dichloro-2-butene	µg/L	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	µg/L	0.5	<0.5	<0.5	200	0
			1,2,3-trichloropropane	µg/L	0.5	<0.5	<0.5	200	0
			trans-1,4-dichloro-2-butene	µg/L	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	µg/L	0.5	<0.5	<0.5	200	0
			Hexachlorobutadiene	µg/L	0.5	<0.5	<0.5	200	0
		Halogenated	Chlorobenzene	µg/L	0.5	<0.5	<0.5	200	0
		Aromatics	Bromobenzene	µg/L	0.5	<0.5	<0.5	200	0
			2-chlorotoluene	µg/L	0.5	<0.5	<0.5	200	0
			4-chlorotoluene	µg/L	0.5	<0.5	<0.5	200	0
			1,3-dichlorobenzene	µg/L	0.5	<0.5	<0.5	200	0
			1,4-dichlorobenzene	µg/L	0.3	<0.3	<0.3	200	0
			1,2-dichlorobenzene	µg/L	0.5	<0.5	<0.5	200	0
			1,2,4-trichlorobenzene	µg/L	0.5	<0.5	<0.5	200	0
			1,2,3-trichlorobenzene	µg/L	0.5	<0.5	<0.5	200	0
		Monocyclic	Benzene	µg/L	0.5	0.9	0.9	87	1
		Aromatic	Toluene	µg/L	0.5	<0.5	<0.5	133	0
			Ethylbenzene	µg/L	0.5	0.7	0.6	110	7
			m/p-xylene	µg/L	1	2	2	85	5
			Styrene (Vinyl benzene)	µg/L	0.5	<0.5	<0.5	200	0
			o-xylene	µg/L	0.5	0.7	0.6	106	6
			Isopropylbenzene (Cumene)	µg/L	0.5	<0.5	<0.5	200	0
			n-propylbenzene	µg/L	0.5	<0.5	<0.5	200	0
			1,3,5-trimethylbenzene	µg/L	0.5	<0.5	<0.5	200	0
			tert-butylbenzene	µg/L	0.5	<0.5	<0.5	200	0
			1,2,4-trimethylbenzene	µg/L	0.5	<0.5	<0.5	200	0
			sec-butylbenzene	µg/L	0.5	<0.5	<0.5	200	0
			p-isopropyltoluene	µg/L	0.5	<0.5	<0.5	200	0
			n-butylbenzene	µg/L	0.5	<0.5	<0.5	200	0
		Nitrogenous	Acrylonitrile	µg/L	0.5	<0.5	<0.5	200	0
		Oxygenated	Acetone (2-propanone)	µg/L	10	16	15	95	11
		Compounds	MtBE (Methyl-tert-butyl ether)	µg/L	2	<2	<2	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOCs in Water (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212783.001	LB212054.023	Oxygenated	Vinyl acetate	µg/L	10	<10	<10	200	0
		Compounds	MEK (2-butanone)	µg/L	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	µg/L	5	<5	<5	200	0
			2-hexanone (MBK)	µg/L	5	<5	<5	200	0
		Polycyclic	Naphthalene	µg/L	0.5	<0.5	<0.5	164	0
		Sulphonated	Carbon disulfide	µg/L	2	<2	<2	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	10.1	10.1	30	0
			d8-toluene (Surrogate)	µg/L	-	9.7	9.6	30	1
			Bromofluorobenzene (Surrogate)	µg/L	-	10.4	10.5	30	2
		Trihalomethan	Chloroform (THM)	µg/L	0.5	<0.5	<0.5	200	0
		es	Bromodichloromethane (THM)	µg/L	0.5	<0.5	<0.5	200	0
			Dibromochloromethane (THM)	µg/L	0.5	<0.5	<0.5	200	0
			Bromoform (THM)	µg/L	0.5	<0.5	<0.5	200	0

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212646.001	LB212048.014		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.1	9.3	30	2
			d8-toluene (Surrogate)	mg/kg	-	9.3	9.3	30	1
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.7	10.4	30	6
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0
SE212710.002	LB212048.020		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.0	9.9	30	9
			d8-toluene (Surrogate)	mg/kg	-	7.6	9.4	30	20
			Bromofluorobenzene (Surrogate)	mg/kg	-	9.1	10.3	30	13
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Ammonia Nitrogen by Discrete Analyser (Aquakem)

Method: ME-(AU)-[ENV]AN291

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB211948.002	Ammonia Nitrogen, NH_3 as N	mg/L	0.005	2.6	2.5	80 - 120	106

Anions by Ion Chromatography in Water

Method: ME-(AU)-[ENV]AN245

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB211889.002	Nitrate Nitrogen, NO3-N	mg/L	0.005	1.9	2	80 - 120	96
	Sulfate, SO4	mg/L	1	19	20	80 - 120	95

Filterable Reactive Phosphorus (FRP)

Method: ME-(AU)-[ENV]AN278

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB211948.002	Filterable Reactive Phosphorus as P	mg/L	0.005	0.11	0.1	80 - 120	109

Full 8270 SVOC in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212055.002	01-PAHs	Acenaphthene	mg/kg	0.1	4.4	4	70 - 130	109
		Acenaphthylene	mg/kg	0.1	4.6	4	70 - 130	114
		Anthracene	mg/kg	0.1	4.7	4	70 - 130	118
		Benzo(a)pyrene	mg/kg	0.1	4.6	4	70 - 130	114
		Fluoranthene	mg/kg	0.1	4.6	4	70 - 130	114
		Naphthalene	mg/kg	0.1	4.4	4	70 - 130	111
		Phenanthrene	mg/kg	0.1	4.5	4	70 - 130	113
		Pyrene	mg/kg	0.1	4.7	4	70 - 130	119
	02-OCs	Aldrin	mg/kg	0.1	0.8	1	70 - 130	80
		Delta-BHC	mg/kg	0.1	0.9	1	70 - 130	91
		p,p-DDT	mg/kg	0.1	0.7	1	70 - 130	70
		Dieldrin	mg/kg	0.2	0.9	1	70 - 130	91
		Endrin	mg/kg	0.2	0.8	1	70 - 130	77
		Heptachlor	mg/kg	0.1	0.7	1	70 - 130	70
	03-OPs	Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.1	2	70 - 130	106
		Diazinon (Dimpylate)	mg/kg	0.5	2.1	2	70 - 130	106
		Dichlorvos	mg/kg	0.5	2.0	2	70 - 130	101
		Ethion	mg/kg	0.2	2.4	2	70 - 130	121
	05-SVCH (Cl Benzenes,	Hexachlorobenzene (HCB)	mg/kg	0.1	1.0	1	70 - 130	99
		Hexachlorobutadiene	mg/kg	0.5	1.1	1	70 - 130	105
		Hexachloroethane	mg/kg	0.5	1.0	1	70 - 130	102
		Pentachlorobenzene	mg/kg	0.5	1.0	1	70 - 130	96
		1,2,3,4-tetrachlorobenzene	mg/kg	0.5	1.0	1	70 - 130	100
	06-Phthalates	Bis(2-ethylhexyl)phthalate	mg/kg	5	<5	4	70 - 130	102
		Butyl benzyl phthalate	mg/kg	0.5	3.6	4	70 - 130	89
		Di-n-butyl phthalate	mg/kg	0.5	4.0	4	70 - 130	100
		Diethyl phthalate	mg/kg	0.5	4.0	4	70 - 130	100
		Dimethyl phthalate	mg/kg	0.5	3.8	4	70 - 130	94
		Dioctyl phthalate	mg/kg	0.5	4.0	4	70 - 130	101
	07-Carbamate	Carbofuran	mg/kg	0.5	0.8	1	70 - 130	75
	09-Nitrosamine	N-nitroso-di-n-propylamine (NDPA)	mg/kg	0.5	2.4	2	70 - 130	122
	10-Nitroaromat	Pentachloronitrobenzene (quintozene)	mg/kg	0.5	0.7	1	70 - 130	73
	14-Speciated Routine	2,4-dichlorophenol	mg/kg	0.5	1.0	1	70 - 130	100
		Phenol	mg/kg	0.5	1.0	1	70 - 130	101
		2,4,6-trichlorophenol	mg/kg	0.5	0.9	1	70 - 130	94
		Pentachlorophenol	mg/kg	0.5	0.8	1	70 - 130	78
	Surrogates	d5-phenol (Surrogate)	mg/kg	-	2.1	2	40 - 130	103
		d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	102
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	98
		2,4,6-tribromophenol (Surrogate)	mg/kg	-	4.9	5	40 - 130	98
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	102

Nitrite in Water

Method: ME-(AU)-[ENV]AN277

Sample Number	Parameter	Units	LOR

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Nitrite in Water (continued)

Method: ME-(AU)-[ENV]AN277

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB211948.002	Nitrite Nitrogen, NO2 as N	mg/L	0.005	0.10	0.1	80 - 120	100

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212055.002		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	124
		Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	111
		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	114
		Dieldrin	mg/kg	0.2	0.2	0.2	60 - 140	109
		Endrin	mg/kg	0.2	0.2	0.2	60 - 140	119
		p,p'-DDT	mg/kg	0.1	0.2	0.2	60 - 140	98
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.15	0.15	40 - 130	99

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212055.002		Dichlorvos	mg/kg	0.5	2.0	2	60 - 140	101
		Diazinon (Dimpylate)	mg/kg	0.5	2.1	2	60 - 140	106
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.1	2	60 - 140	106
		Ethion	mg/kg	0.2	2.4	2	60 - 140	121
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	98
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	93

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212055.002		Naphthalene	mg/kg	0.1	4.4	4	60 - 140	111
		Acenaphthylene	mg/kg	0.1	4.6	4	60 - 140	114
		Acenaphthene	mg/kg	0.1	4.4	4	60 - 140	109
		Phenanthrene	mg/kg	0.1	4.5	4	60 - 140	113
		Anthracene	mg/kg	0.1	4.7	4	60 - 140	118
		Fluoranthene	mg/kg	0.1	4.6	4	60 - 140	114
		Pyrene	mg/kg	0.1	4.7	4	60 - 140	119
		Benzo(a)pyrene	mg/kg	0.1	4.6	4	60 - 140	114
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	97
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	98
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	93

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212055.002	Arochlor 1260	mg/kg	0.2	0.6	0.4	60 - 140	140

Sulfide by Titration in Water

Method: ME-(AU)-[ENV]AN149

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212038.002	Sulfide	mg/L	0.5	96	100	70 - 130	96

Total Phosphorus by Kjeldahl Digestion DA in Water

Method: ME-(AU)-[ENV]AN279/AN293(Sydney only)

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212016.002	Total Phosphorus (Kjeldahl Digestion) as P	mg/L	0.02	0.91	1	80 - 120	91

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212021.002	Arsenic, As	µg/L	1	19	20	80 - 120	93
	Beryllium, Be	µg/L	1	20	20	80 - 120	100
	Boron, B	µg/L	5	21	20	80 - 120	106
	Cadmium, Cd	µg/L	0.1	21	20	80 - 120	107
	Chromium, Cr	µg/L	1	22	20	80 - 120	109
	Cobalt, Co	µg/L	1	22	20	80 - 120	110
	Copper, Cu	µg/L	1	22	20	80 - 120	111

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Trace Metals (Dissolved) in Water by ICPMS (continued)

Method: ME-(AU)-[ENV]AN318

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212021.002	Lead, Pb	µg/L	1	20	20	80 - 120	98
	Manganese, Mn	µg/L	1	22	20	80 - 120	108
	Nickel, Ni	µg/L	1	21	20	80 - 120	106
	Zinc, Zn	µg/L	5	22	20	80 - 120	109

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212055.002		TRH C10-C14	mg/kg	20	39	40	60 - 140	98
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	75
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	63
	TRH F Bands	TRH >C10-C16	mg/kg	25	35	40	60 - 140	88
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	70
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	65

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212048.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	4.5	5	60 - 140	90
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	5.1	5	60 - 140	102
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	4.9	5	60 - 140	99
	Halogenated	Chlorobenzene	mg/kg	0.1	5.4	5	60 - 140	107
	Monocyclic	Benzene	mg/kg	0.1	4.6	5	60 - 140	91
	Aromatic	Toluene	mg/kg	0.1	5.0	5	60 - 140	100
		Ethylbenzene	mg/kg	0.1	5.2	5	60 - 140	103
		m/p-xylene	mg/kg	0.2	10	10	60 - 140	101
		o-xylene	mg/kg	0.1	5.2	5	60 - 140	104
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.2	10	70 - 130	92
		d8-toluene (Surrogate)	mg/kg	-	8.6	10	70 - 130	86
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.5	10	70 - 130	95
	Trihalomethan	Chloroform	mg/kg	0.1	4.9	5	60 - 140	98

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212054.002	Halogenated	1,1-dichloroethene	µg/L	0.5	60	45.45	60 - 140	133
	Aliphatics	1,2-dichloroethane	µg/L	0.5	49	45.45	60 - 140	108
		Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	47	45.45	60 - 140	104
	Halogenated	Chlorobenzene	µg/L	0.5	48	45.45	60 - 140	105
	Monocyclic	Benzene	µg/L	0.5	46	45.45	60 - 140	102
	Aromatic	Toluene	µg/L	0.5	44	45.45	60 - 140	96
		Ethylbenzene	µg/L	0.5	49	45.45	60 - 140	107
		m/p-xylene	µg/L	1	96	90.9	60 - 140	105
		o-xylene	µg/L	0.5	46	45.45	60 - 140	102
	Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	10.4	10	60 - 140	104
		d8-toluene (Surrogate)	µg/L	-	10.0	10	70 - 130	100
		Bromofluorobenzene (Surrogate)	µg/L	-	10.2	10	70 - 130	102
	Trihalomethan	Chloroform (THM)	µg/L	0.5	52	45.45	60 - 140	115

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212048.002		TRH C6-C10	mg/kg	25	86	92.5	60 - 140	93
		TRH C6-C9	mg/kg	20	76	80	60 - 140	95
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.2	10	70 - 130	92
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.5	10	70 - 130	95
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	56	62.5	60 - 140	90

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Anions by Ion Chromatography in Water

Method: ME-(AU)-[ENV]AN245

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212608.001	LB211889.005	Nitrate Nitrogen, NO3-N	mg/L	0.005	1.9	0.005	2	94

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212646.003	LB211902.004	Mercury	mg/L	0.0001	0.0022	<0.0001	0.008	112

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE212736.002	LB212055.021		Naphthalene	mg/kg	0.1	<0.1	4	107
			2-methylnaphthalene	mg/kg	0.1	<0.1	-	-
			1-methylnaphthalene	mg/kg	0.1	<0.1	-	-
			Acenaphthylene	mg/kg	0.1	<0.1	4	110
			Acenaphthene	mg/kg	0.1	<0.1	4	111
			Fluorene	mg/kg	0.1	<0.1	-	-
			Phenanthrene	mg/kg	0.1	<0.1	4	110
			Anthracene	mg/kg	0.1	<0.1	4	115
			Fluoranthene	mg/kg	0.1	<0.1	4	106
			Pyrene	mg/kg	0.1	<0.1	4	116
			Benzo(a)anthracene	mg/kg	0.1	<0.1	-	-
			Chrysene	mg/kg	0.1	<0.1	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	-	-
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	-	-
			Benzo(a)pyrene	mg/kg	0.1	<0.1	4	117
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	-	-
			Total PAH (18)	mg/kg	0.8	<0.8	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	-	96
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	-	93
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	-	94

TKN Kjeldahl Digestion by Discrete Analyser

Method: ME-(AU)-[ENV]AN292

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212728.001	LB212016.025	Total Kjeldahl Nitrogen	mg/L	0.05	4.2	2.13605	2.5	84

Total Phosphorus by Kjeldahl Digestion DA in Water

Method: ME-(AU)-[ENV]AN279/AN293(Sydney only)

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212728.001	LB212016.025	Total Phosphorus (Kjeldahl Digestion) as P	mg/L	0.02	1.1	0.20879	1	90

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212592A.001	LB212021.004	Beryllium, Be	µg/L	1	20	<1	20	102
		Cobalt, Co	µg/L	1	22	<1	20	106
		Nickel, Ni	µg/L	1	24	3	20	102

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number	Parameter	Units	LOR	Original	Spike	Recovery%
SE212736.002	LB212055.021	TRH C10-C14	mg/kg	20	<20	40	90
		TRH C15-C28	mg/kg	45	<45	40	70
		TRH C29-C36	mg/kg	45	<45	40	60
		TRH C37-C40	mg/kg	100	<100	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE212736.002	LB212055.021		TRH C10-C36 Total	mg/kg	110	<110	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	-	-
		TRH F	TRH >C10-C16	mg/kg	25	<25	40	80
		Bands	TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	<90	40	68
			TRH >C34-C40 (F4)	mg/kg	120	<120	-	-

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE212662A.006	LB212048.021	Monocyclic	Benzene	mg/kg	0.1	<0.1	5	73
		Aromatic	Toluene	mg/kg	0.1	<0.1	5	85
			Ethylbenzene	mg/kg	0.1	<0.1	5	87
			m/p-xylene	mg/kg	0.2	<0.2	10	87
			o-xylene	mg/kg	0.1	<0.1	5	91
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.2	10	96
			d8-toluene (Surrogate)	mg/kg	-	7.5	10	91
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.8	10	85
		Totals	Total Xylenes	mg/kg	0.3	<0.3	-	-
			Total BTEX	mg/kg	0.6	<0.6	-	-

VOCs in Water

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212605.001	LB212054.024	Monocyclic	Benzene	µg/L	0.5	0.050	<0.5	45.45	110
		Aromatic	Toluene	µg/L	0.5	0.045	<0.5	45.45	99
			Ethylbenzene	µg/L	0.5	0.048	<0.5	45.45	105
			m/p-xylene	µg/L	1	0.093	<1	90.9	102
			o-xylene	µg/L	0.5	0.046	<0.5	45.45	101
		Polycyclic	Naphthalene	µg/L	0.5	0.044	<0.5	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	10.6	10	-	106
			d8-toluene (Surrogate)	µg/L	-	10.1	9.8	-	101
			Bromofluorobenzene (Surrogate)	µg/L	-	10.2	11	-	102

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE212662A.006	LB212048.021		TRH C6-C10	mg/kg	25	<25	92.5	69
			TRH C6-C9	mg/kg	20	<20	80	69
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.2	10	96
			d8-toluene (Surrogate)	mg/kg	-	7.5	10	91
			Bromofluorobenzene (Surrogate)	mg/kg	-	8.8	-	85
		VPH F	Benzene (F0)	mg/kg	0.1	<0.1	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	62.5	62

MATRIX SPIKE DUPLICATES

SE212646 R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
***	Indicates that both * and ** apply.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.
①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd
ABN 29 001 584 612

PROJECT OFFICE (Tick one):
- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ✓ SYDNEY: 202 Submarine School, Sub Base Platypus, North Sydney, 2060
- ☐ MELBOURNE: Suite 3, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2601
- ☐ MACKAY: 21 River Street, Mackay, QLD 4741
- ☐ PERTH: 503 Murray Street, Perth, WA 6001
- ☐ TOWNSVILLE: 114 Sturt Street, Townsville, QLD 4811
- ☐ DARWIN: 21 Parap Rd, Dawin, NT 0821

CLIENT: **Defence Housing Australia**
PROJECT: **Randwick Barracks**
PROJECT NUMBER: **610.30041**
PROJECT MANAGER: [redacted]
PM CONTACT No: [redacted]

LABORATORY: **SGS**
LABORATORY ADDRESS: **Unit 16/33 Maddox St, Alexandria NSW 2015**
SAMPLER: [redacted]
SAMPLER CONTACT No: [redacted]
Email Reports and Invoices to: **LQRSYD@slrconsulting.com** [redacted]

Turnaround Time (TAT)
✓ Standard TAT
☐ Non Standard or Urgent TAT
Required TAT: Standard

COC Number: 1 of 1

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	Suite B	Suite C	Suite G	VOCs	SVOCs	TRH C6-10	PAHs	TRH/BTEXN	PCBs	Phenols	OCP/OPP	PFAS	Metals 8	Additional Information (Comment on any gross contamination or specific requirements)
1	GW14	28-10-2020	Water			×		×	×										
2	GW15	28-10-2020	Water			×		×	×										
3	GW16	28-10-2020	Water			×											×		
4	GW17	28-10-2020	Water			×											×		
5	GW18	28-10-2020	Water		×		×												
6	QC525_TS	28-10-2020	Water								×						×		
7	QC525_TB	28-10-2020	Water								×						×		
8	QC316	28-10-2020	Water						×	×		×	×				×	×	

SGS EHS Sydney COC
SE212916

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 19/10/2020 @ 1500	**Received by**	Sig [redacted]	28/10/20	Date / Time EV 7-20	**Temperature Received:** 9°C
Relinquished By	Sign	Date / Time	**Received by**	Sign		Date / Time	
Relinquished By	Sign	Date / Time	**Received by**	Sign		Date / Time	

Saved: SLR_Approval.pdf page: 1 EOS Part: SE212916_COC

SAMPLE RECEIPT ADVICE

SE212916

CLIENT DETAILS

Contact	LQRSYD
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	02 9427 8100
Facsimile	02 9427 8200
Email	lqrsyd@slrconsulting.com
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	8

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Wed 28/10/2020
Report Due	Wed 4/11/2020
SGS Reference	**SE212916**

SUBMISSION DETAILS

This is to confirm that 8 samples were received on Wednesday 28/10/2020. Results are expected to be ready by COB Wednesday 4/11/2020.
Please quote SGS reference SE212916 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	8 Water
Date documentation received	28/10/2020	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	9°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

PFAS subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420.
Micros subcontracted to Symbio Laboratories, 2 Sirius Road, Lane Cove West NSW 2066, NATA Accreditation Number 2455.
For QC316, PFAS sample not supplied.

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SAMPLE RECEIPT ADVICE

SE212916

CLIENT DETAILS

Client SLR CONSULTING AUSTRALIA PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Full 8270 SVOC in Water	OC Pesticides in Water	OP Pesticides in Water	PAH (Polynuclear Aromatic Hydrocarbons) in Water	PCBs in Water	Speciated Phenols in Water	TRH (Total Recoverable Hydrocarbons) in Water	VOCs in Water	Volatile Petroleum Hydrocarbons in Water
001	GW14	-	-	-	-	11	-	9	78	7
002	GW15	-	-	-	-	11	-	9	78	7
003	GW16	-	-	-	-	11	-	9	11	7
004	GW17	-	-	-	-	11	-	9	11	7
005	GW18	-	28	13	22	11	18	9	11	7
006	QC525_TS	-	-	-	-	-	-	-	11	-
007	QC525_TB	-	-	-	-	-	-	-	-	7
008	QC316	168	-	-	22	-	-	9	78	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE212916

CLIENT DETAILS

Client SLR CONSULTING AUSTRALIA PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Ammonia Nitrogen by Discrete Analyser	Anions by Ion Chromatography in Water	Filterable Reactive Phosphorus (FRP)	Mercury (dissolved) in Water	Nitrite in Water	Sulfide by Titration in Water	TKN Kjeldahl Digestion by Discrete Analyser	Total Phosphorus by Kjeldahl Digestion DA in	Trace Metals (Dissolved) in Water by ICPMS
005	GW18	1	2	1	1	1	1	3	1	11
008	QC316	-	-	-	1	-	-	-	-	11

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
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Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE212916

CLIENT DETAILS

Client SLR CONSULTING AUSTRALIA PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Per- and Polyfluoroalkyl Substances (PFAS) in	Sample Subcontracted
001	GW14	55	-
002	GW15	55	-
003	GW16	55	-
004	GW17	55	-
005	GW18	55	1

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	LQRSYD
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	02 9427 8100
Facsimile	02 9427 8200
Email	lqrsyd@slrconsulting.com
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	8

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE212916 R0**
Date Received	28/10/2020
Date Reported	11/11/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

PFAS subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420. Report No: ME317177
Some PFAS surrogate recovery values are out of range due to sample matrix interference
Micros subcontracted to Symbio Laboratories, 2 Sirius Road, Lane Cove West NSW 2066, NATA Accreditation Number 2455.Report Number S962155
LL PAH/OC/OP/PCB and SVOC subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420.ME317271.

SIGNATORIES

[redacted]

Chemist | Metals/Inorganics Team Leader | Senior Chemist

[redacted]

Organic Section Head | Inorganic/Metals Chemist

VOCs in Water [AN433] Tested: 30/10/2020

PARAMETER	UOM	LOR	GW14 WATER - 28/10/2020 SE212916.001	GW15 WATER - 28/10/2020 SE212916.002	GW16 WATER - 28/10/2020 SE212916.003	GW17 WATER - 28/10/2020 SE212916.004	GW18 WATER - 28/10/2020 SE212916.005
Benzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Toluene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
m/p-xylene	µg/L	1	<1	<1	<1	<1	<1
o-xylene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Total Xylenes	µg/L	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
Total BTEX	µg/L	3	<3	<3	<3	<3	<3
Dichlorodifluoromethane (CFC-12)	µg/L	5	<5	<5	-	-	-
Chloromethane	µg/L	5	<5	<5	-	-	-
Vinyl chloride (Chloroethene)	µg/L	0.3	<0.3	<0.3	-	-	-
Bromomethane	µg/L	10	<10	<10	-	-	-
Chloroethane	µg/L	5	<5	<5	-	-	-
Trichlorofluoromethane	µg/L	1	<1	<1	-	-	-
Acetone (2-propanone)	µg/L	10	<10	<10	-	-	-
Iodomethane	µg/L	5	<5	<5	-	-	-
1,1-dichloroethene	µg/L	0.5	<0.5	<0.5	-	-	-
Acrylonitrile	µg/L	0.5	<0.5	<0.5	-	-	-
Dichloromethane (Methylene chloride)	µg/L	5	<5	<5	-	-	-
Allyl chloride	µg/L	2	<2	<2	-	-	-
Carbon disulfide	µg/L	2	<2	<2	-	-	-
trans-1,2-dichloroethene	µg/L	0.5	<0.5	<0.5	-	-	-
MtBE (Methyl-tert-butyl ether)	µg/L	2	<2	<2	-	-	-
1,1-dichloroethane	µg/L	0.5	<0.5	<0.5	-	-	-
Vinyl acetate	µg/L	10	<10	<10	-	-	-
MEK (2-butanone)	µg/L	10	<10	<10	-	-	-
cis-1,2-dichloroethene	µg/L	0.5	**6.9**	**6.4**	-	-	-
Bromochloromethane	µg/L	0.5	<0.5	<0.5	-	-	-
Chloroform (THM)	µg/L	0.5	<0.5	<0.5	-	-	-
2,2-dichloropropane	µg/L	0.5	<0.5	<0.5	-	-	-
1,2-dichloroethane	µg/L	0.5	<0.5	<0.5	-	-	-
1,1,1-trichloroethane	µg/L	0.5	<0.5	<0.5	-	-	-
1,1-dichloropropene	µg/L	0.5	<0.5	<0.5	-	-	-
Carbon tetrachloride	µg/L	0.5	<0.5	<0.5	-	-	-
Dibromomethane	µg/L	0.5	<0.5	<0.5	-	-	-
1,2-dichloropropane	µg/L	0.5	<0.5	<0.5	-	-	-
Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	**0.6**	**0.7**	-	-	-
2-nitropropane	µg/L	100	<100	<100	-	-	-
Bromodichloromethane (THM)	µg/L	0.5	<0.5	<0.5	-	-	-
MIBK (4-methyl-2-pentanone)	µg/L	5	<5	<5	-	-	-
cis-1,3-dichloropropene	µg/L	0.5	<0.5	<0.5	-	-	-
trans-1,3-dichloropropene	µg/L	0.5	<0.5	<0.5	-	-	-
1,1,2-trichloroethane	µg/L	0.5	<0.5	<0.5	-	-	-
1,3-dichloropropane	µg/L	0.5	<0.5	<0.5	-	-	-
Dibromochloromethane (THM)	µg/L	0.5	<0.5	<0.5	-	-	-
2-hexanone (MBK)	µg/L	5	<5	<5	-	-	-
1,2-dibromoethane (EDB)	µg/L	0.5	<0.5	<0.5	-	-	-
Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	<0.5	<0.5	-	-	-
1,1,1,2-tetrachloroethane	µg/L	0.5	<0.5	<0.5	-	-	-
Chlorobenzene	µg/L	0.5	<0.5	<0.5	-	-	-
Bromoform (THM)	µg/L	0.5	<0.5	<0.5	-	-	-
cis-1,4-dichloro-2-butene	µg/L	1	<1	<1	-	-	-
Styrene (Vinyl benzene)	µg/L	0.5	<0.5	<0.5	-	-	-
1,1,2,2-tetrachloroethane	µg/L	0.5	<0.5	<0.5	-	-	-
1,2,3-trichloropropane	µg/L	0.5	<0.5	<0.5	-	-	-
trans-1,4-dichloro-2-butene	µg/L	1	<1	<1	-	-	-

VOCs in Water [AN433] Tested: 30/10/2020 (continued)

PARAMETER	UOM	LOR	GW14 WATER - 28/10/2020 SE212916.001	GW15 WATER - 28/10/2020 SE212916.002	GW16 WATER - 28/10/2020 SE212916.003	GW17 WATER - 28/10/2020 SE212916.004	GW18 WATER - 28/10/2020 SE212916.005
Isopropylbenzene (Cumene)	µg/L	0.5	<0.5	<0.5	-	-	-
Bromobenzene	µg/L	0.5	<0.5	<0.5	-	-	-
n-propylbenzene	µg/L	0.5	<0.5	<0.5	-	-	-
2-chlorotoluene	µg/L	0.5	<0.5	<0.5	-	-	-
4-chlorotoluene	µg/L	0.5	<0.5	<0.5	-	-	-
1,3,5-trimethylbenzene	µg/L	0.5	<0.5	<0.5	-	-	-
tert-butylbenzene	µg/L	0.5	<0.5	<0.5	-	-	-
1,2,4-trimethylbenzene	µg/L	0.5	<0.5	<0.5	-	-	-
sec-butylbenzene	µg/L	0.5	<0.5	<0.5	-	-	-
1,3-dichlorobenzene	µg/L	0.5	<0.5	<0.5	-	-	-
1,4-dichlorobenzene	µg/L	0.3	<0.3	<0.3	-	-	-
p-isopropyltoluene	µg/L	0.5	<0.5	<0.5	-	-	-
1,2-dichlorobenzene	µg/L	0.5	<0.5	<0.5	-	-	-
n-butylbenzene	µg/L	0.5	<0.5	<0.5	-	-	-
1,2-dibromo-3-chloropropane	µg/L	0.5	<0.5	<0.5	-	-	-
1,2,4-trichlorobenzene	µg/L	0.5	<0.5	<0.5	-	-	-
Hexachlorobutadiene	µg/L	0.5	<0.5	<0.5	-	-	-
1,2,3-trichlorobenzene	µg/L	0.5	<0.5	<0.5	-	-	-
Total VOC	µg/L	10	<10	<10	-	-	-

VOCs in Water [AN433] Tested: 30/10/2020 (continued)

PARAMETER	UOM	LOR	QC525_TS WATER - 28/10/2020 SE212916.006	QC316 WATER - 28/10/2020 SE212916.008
Benzene	µg/L	0.5	[99%]	<0.5
Toluene	µg/L	0.5	[100%]	<0.5
Ethylbenzene	µg/L	0.5	[98%]	<0.5
m/p-xylene	µg/L	1	[101%]	<1
o-xylene	µg/L	0.5	[98%]	<0.5
Naphthalene	µg/L	0.5	[91%]	<0.5
Total Xylenes	µg/L	1.5	-	<1.5
Total BTEX	µg/L	3	-	<3
Dichlorodifluoromethane (CFC-12)	µg/L	5	-	<5
Chloromethane	µg/L	5	-	<5
Vinyl chloride (Chloroethene)	µg/L	0.3	-	<0.3
Bromomethane	µg/L	10	-	<10
Chloroethane	µg/L	5	-	<5
Trichlorofluoromethane	µg/L	1	-	<1
Acetone (2-propanone)	µg/L	10	-	<10
Iodomethane	µg/L	5	-	<5
1,1-dichloroethene	µg/L	0.5	-	<0.5
Acrylonitrile	µg/L	0.5	-	<0.5
Dichloromethane (Methylene chloride)	µg/L	5	-	<5
Allyl chloride	µg/L	2	-	<2
Carbon disulfide	µg/L	2	-	<2
trans-1,2-dichloroethene	µg/L	0.5	-	<0.5
MtBE (Methyl-tert-butyl ether)	µg/L	2	-	<2
1,1-dichloroethane	µg/L	0.5	-	<0.5
Vinyl acetate	µg/L	10	-	<10
MEK (2-butanone)	µg/L	10	-	<10
cis-1,2-dichloroethene	µg/L	0.5	-	<0.5
Bromochloromethane	µg/L	0.5	-	<0.5
Chloroform (THM)	µg/L	0.5	-	<0.5
2,2-dichloropropane	µg/L	0.5	-	<0.5
1,2-dichloroethane	µg/L	0.5	-	<0.5
1,1,1-trichloroethane	µg/L	0.5	-	<0.5
1,1-dichloropropene	µg/L	0.5	-	<0.5
Carbon tetrachloride	µg/L	0.5	-	<0.5
Dibromomethane	µg/L	0.5	-	<0.5
1,2-dichloropropane	µg/L	0.5	-	<0.5
Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	-	<0.5
2-nitropropane	µg/L	100	-	<100
Bromodichloromethane (THM)	µg/L	0.5	-	<0.5
MIBK (4-methyl-2-pentanone)	µg/L	5	-	<5
cis-1,3-dichloropropene	µg/L	0.5	-	<0.5
trans-1,3-dichloropropene	µg/L	0.5	-	<0.5
1,1,2-trichloroethane	µg/L	0.5	-	<0.5
1,3-dichloropropane	µg/L	0.5	-	<0.5
Dibromochloromethane (THM)	µg/L	0.5	-	<0.5
2-hexanone (MBK)	µg/L	5	-	<5
1,2-dibromoethane (EDB)	µg/L	0.5	-	<0.5
Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	-	<0.5
1,1,1,2-tetrachloroethane	µg/L	0.5	-	<0.5
Chlorobenzene	µg/L	0.5	-	<0.5
Bromoform (THM)	µg/L	0.5	-	<0.5
cis-1,4-dichloro-2-butene	µg/L	1	-	<1
Styrene (Vinyl benzene)	µg/L	0.5	-	<0.5
1,1,2,2-tetrachloroethane	µg/L	0.5	-	<0.5
1,2,3-trichloropropane	µg/L	0.5	-	<0.5
trans-1,4-dichloro-2-butene	µg/L	1	-	<1

VOCs in Water [AN433] Tested: 30/10/2020 (continued)

PARAMETER	UOM	LOR	QC525_TS WATER - 28/10/2020 SE212916.006	QC316 WATER - 28/10/2020 SE212916.008
Isopropylbenzene (Cumene)	µg/L	0.5	-	<0.5
Bromobenzene	µg/L	0.5	-	<0.5
n-propylbenzene	µg/L	0.5	-	<0.5
2-chlorotoluene	µg/L	0.5	-	<0.5
4-chlorotoluene	µg/L	0.5	-	<0.5
1,3,5-trimethylbenzene	µg/L	0.5	-	<0.5
tert-butylbenzene	µg/L	0.5	-	<0.5
1,2,4-trimethylbenzene	µg/L	0.5	-	<0.5
sec-butylbenzene	µg/L	0.5	-	<0.5
1,3-dichlorobenzene	µg/L	0.5	-	<0.5
1,4-dichlorobenzene	µg/L	0.3	-	<0.3
p-isopropyltoluene	µg/L	0.5	-	<0.5
1,2-dichlorobenzene	µg/L	0.5	-	<0.5
n-butylbenzene	µg/L	0.5	-	<0.5
1,2-dibromo-3-chloropropane	µg/L	0.5	-	<0.5
1,2,4-trichlorobenzene	µg/L	0.5	-	<0.5
Hexachlorobutadiene	µg/L	0.5	-	<0.5
1,2,3-trichlorobenzene	µg/L	0.5	-	<0.5
Total VOC	µg/L	10	-	<10

Volatile Petroleum Hydrocarbons in Water [AN433] Tested: 30/10/2020

PARAMETER	UOM	LOR	GW14 WATER - 28/10/2020 SE212916.001	GW15 WATER - 28/10/2020 SE212916.002	GW16 WATER - 28/10/2020 SE212916.003	GW17 WATER - 28/10/2020 SE212916.004	GW18 WATER - 28/10/2020 SE212916.005
Benzene (F0)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TRH C6-C9	µg/L	40	<40	<40	<40	<40	<40
TRH C6-C10	µg/L	50	<50	<50	<50	<50	<50
TRH C6-C10 minus BTEX (F1)	µg/L	50	<50	<50	<50	<50	<50

PARAMETER	UOM	LOR	QC525_TB WATER - 28/10/2020 SE212916.007	QC316 WATER - 28/10/2020 SE212916.008
Benzene (F0)	µg/L	0.5	<0.5	<0.5
TRH C6-C9	µg/L	40	<40	<40
TRH C6-C10	µg/L	50	<50	<50
TRH C6-C10 minus BTEX (F1)	µg/L	50	<50	<50

TRH (Total Recoverable Hydrocarbons) in Water [AN403] Tested: 4/11/2020

PARAMETER	UOM	LOR	GW14 WATER - 28/10/2020 SE212916.001	GW15 WATER - 28/10/2020 SE212916.002	GW16 WATER - 28/10/2020 SE212916.003	GW17 WATER - 28/10/2020 SE212916.004	GW18 WATER - 28/10/2020 SE212916.005
TRH C10-C14	µg/L	50	<50	<50	<50	<50	<50
TRH C15-C28	µg/L	200	<200	<200	<200	<200	<200
TRH C29-C36	µg/L	200	<200	<200	<200	<200	<200
TRH C37-C40	µg/L	200	<200	<200	<200	<200	<200
TRH >C10-C16	µg/L	60	<60	<60	<60	<60	<60
TRH >C10-C16 - Naphthalene (F2)	µg/L	60	<60	<60	<60	<60	<60
TRH >C16-C34 (F3)	µg/L	500	<500	<500	<500	<500	<500
TRH >C34-C40 (F4)	µg/L	500	<500	<500	<500	<500	<500
TRH C10-C40	µg/L	320	<320	<320	<320	<320	<320

PARAMETER	UOM	LOR	QC316 WATER - 28/10/2020 SE212916.008
TRH C10-C14	µg/L	50	<50
TRH C15-C28	µg/L	200	<200
TRH C29-C36	µg/L	200	<200
TRH C37-C40	µg/L	200	<200
TRH >C10-C16	µg/L	60	<60
TRH >C10-C16 - Naphthalene (F2)	µg/L	60	<60
TRH >C16-C34 (F3)	µg/L	500	<500
TRH >C34-C40 (F4)	µg/L	500	<500
TRH C10-C40	µg/L	320	<320

Speciated Phenols in Water [AN420] Tested: 4/11/2020

PARAMETER	UOM	LOR	GW18 WATER - 28/10/2020 SE212916.005
Phenol	µg/L	0.5	<0.5
2-methyl phenol (o-cresol)	µg/L	0.5	<0.5
3/4-methyl phenol (m/p-cresol)	µg/L	1	<1
Total Cresol	µg/L	1.5	<1.5
2-chlorophenol	µg/L	0.5	<0.5
2,4-dimethylphenol	µg/L	0.5	<0.5
2,6-dichlorophenol	µg/L	0.5	<0.5
2,4-dichlorophenol	µg/L	0.5	<0.5
2,4,6-trichlorophenol	µg/L	0.5	<0.5
2-nitrophenol	µg/L	0.5	<0.5
4-nitrophenol	µg/L	1	<1
2,4,5-trichlorophenol	µg/L	0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	µg/L	1	<1
Pentachlorophenol	µg/L	0.5	<0.5
2,4-dinitrophenol	µg/L	2	<2
4-chloro-3-methylphenol	µg/L	2	<2

Anions by Ion Chromatography in Water [AN245] Tested: 29/10/2020

PARAMETER	UOM	LOR	GW18 WATER - 28/10/2020 SE212916.005
Nitrate Nitrogen, NO3-N	mg/L	0.005	**3.9**
Sulfate, SO4	mg/L	1	**28**

Nitrite in Water [AN277] Tested: 29/10/2020

PARAMETER	UOM	LOR	GW18 WATER - 28/10/2020 SE212916.005
Nitrite Nitrogen, NO2 as N	mg/L	0.005	<0.005

TKN Kjeldahl Digestion by Discrete Analyser [AN292] Tested: 4/11/2020

PARAMETER	UOM	LOR	GW18 WATER - 28/10/2020 SE212916.005
Total Kjeldahl Nitrogen	mg/L	0.05	<0.05
Total Nitrogen (calc)	mg/L	0.05	**3.9**
Organic Nitrogen (calc)	mg/L	0.05	<0.05

Total Phosphorus by Kjeldahl Digestion DA in Water [AN279/AN293(Sydney only)] Tested: 4/11/2020

PARAMETER	UOM	LOR	GW18 WATER - 28/10/2020 SE212916.005
Total Phosphorus (Kjeldahl Digestion) as P	mg/L	0.02	<0.02

Filterable Reactive Phosphorus (FRP) [AN278] Tested: 29/10/2020

PARAMETER	UOM	LOR	GW18 WATER - 28/10/2020 SE212916.005
Filterable Reactive Phosphorus as P	mg/L	0.005	<0.005

Ammonia Nitrogen by Discrete Analyser (Aquakem) [AN291] Tested: 29/10/2020

PARAMETER	UOM	LOR	GW18 WATER - 28/10/2020 SE212916.005
Ammonia Nitrogen, NH_3 as N	mg/L	0.005	<0.005

Sulfide by Titration in Water [AN149] Tested: 4/11/2020

PARAMETER	UOM	LOR	GW18 WATER - 28/10/2020 SE212916.005
Sulfide	mg/L	0.5	<0.5

Trace Metals (Dissolved) in Water by ICPMS [AN318] Tested: 30/10/2020

PARAMETER	UOM	LOR	GW14 WATER - 28/10/2020 SE212916.001	GW15 WATER - 28/10/2020 SE212916.002	GW16 WATER - 28/10/2020 SE212916.003	GW17 WATER - 28/10/2020 SE212916.004
Arsenic, As	µg/L	1	<1	<1	<1	<1
Beryllium, Be	µg/L	1	<1	<1	<1	<1
Boron, B	µg/L	5	30	140	92	21
Cadmium, Cd	µg/L	0.1	<0.1	<0.1	<0.1	<0.1
Cobalt, Co	µg/L	1	1	1	1	2
Chromium, Cr	µg/L	1	6	2	2	1
Copper, Cu	µg/L	1	<1	2	17	7
Lead, Pb	µg/L	1	1	<1	3	9
Manganese, Mn	µg/L	1	30	12	4	15
Nickel, Ni	µg/L	1	1	<1	3	2
Zinc, Zn	µg/L	5	23	14	16	22

Mercury (dissolved) in Water [AN311(Perth)/AN312] Tested: 4/11/2020

PARAMETER	UOM	LOR	GW14 WATER - 28/10/2020 SE212916.001	GW15 WATER - 28/10/2020 SE212916.002	GW16 WATER - 28/10/2020 SE212916.003	GW17 WATER - 28/10/2020 SE212916.004
Mercury	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples [MA-1523] Tested: 4/11/2020

PARAMETER	UOM	LOR	GW14 WATER - 28/10/2020 SE212916.001	GW15 WATER - 28/10/2020 SE212916.002	GW16 WATER - 28/10/2020 SE212916.003	GW17 WATER - 28/10/2020 SE212916.004	GW18 WATER - 28/10/2020 SE212916.005
Perfluorobutanoic acid (PFBA)	µg/L	0.002	<0.002	**0.003**	<0.002	**0.003**	**0.020**
Perfluoropentanoic acid (PFPeA)	µg/L	0.002	<0.002	<0.002	**0.002**	**0.003**	**0.075**
Perfluorohexanoic acid (PFHxA)	µg/L	0.002	**0.005**	**0.004**	**0.007**	**0.007**	**0.099**
Perfluoroheptanoic acid (PFHpA)	µg/L	0.002	<0.002	<0.002	<0.002	<0.002	**0.035**
Perfluorooctanoic Acid (PFOA)	µg/L	0.002	**0.006**	<0.002	<0.002	**0.003**	**0.045**
Perfluorononanoic acid (PFNA)	µg/L	0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Perfluorodecanoic acid (PFDA)	µg/L	0.004	<0.004	<0.004	<0.004	<0.004	**0.012**
Perfluoroundecanoic acid (PFUnA)	µg/L	0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Perfluorododecanoic acid (PFDoA)	µg/L	0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Perfluorohexadecanoic acid (PFHxDA)	µg/L	0.008	<0.008	<0.008	<0.008	<0.008	<0.008
Perfluorobutane sulfonate (PFBS)	µg/L	0.004	<0.004	<0.004	**0.006**	**0.006**	**0.011**
Perfluoropentane sulfonate (PFPeS)	µg/L	0.004	<0.004	<0.004	<0.004	**0.005**	<0.004
Perfluorohexane sulfonate (PFHxS)	µg/L	0.002	**0.010**	**0.012**	**0.023**	**0.020**	**0.006**
Perfluoroheptane sulfonate (PFHpS)	µg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Perfluorooctane sulfonate (PFOS)	µg/L	0.002	**0.016**	**0.003**	<0.002	<0.002	**0.009**
Sum of PFHxS and PFOS	µg/L	0.002	**0.026**	**0.015**	**0.023**	**0.020**	**0.015**
Perfluorononane sulfonate (PFNS)	µg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Perfluorodecane sulfonate (PFDS)	µg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Perfluorododecane sulfonate (PFDoS)	µg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	µg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	µg/L	0.002	**0.012**	<0.002	<0.002	**0.012**	**0.009**
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	µg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.008	<0.008	<0.008	<0.008	<0.008	<0.008
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2-(N-Methylperfluorooctane sulfonamido)-ethanol	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
N-Methylperfluorooctanesulfonamidoacetic acid	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
N-Ethylperfluorooctanesulfonamidoacetic Acid	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

Sample Subcontracted [] Tested: 3/11/2020

PARAMETER	UOM	LOR	GW18 WATER - 28/10/2020 SE212916.005
Sample Subcontracted*	No unit	-	Subcontracted

Trace Metals (Total) in Water by ICPMS [AN022/AN318] Tested: 30/10/2020

PARAMETER	UOM	LOR	GW18 WATER - 28/10/2020 SE212916.005	QC316 WATER - 28/10/2020 SE212916.008
Total Arsenic	µg/L	1	<1	<1
Total Cadmium	µg/L	0.1	<0.1	<0.1
Total Chromium	µg/L	1	<1	<1
Total Copper	µg/L	1	<1	<1
Total Nickel	µg/L	1	<1	<1
Total Lead	µg/L	1	<1	<1
Total Zinc	µg/L	5	<5	<5
Total Beryllium	µg/L	1	<1	-
Total Boron	µg/L	5	**83**	-
Total Cobalt	µg/L	1	<1	-
Total Magnesium	µg/L	100	**4400**	-

Mercury (total) in Water [AN311(Perth) /AN312] Tested: 30/10/2020

PARAMETER	UOM	LOR	GW18 WATER - 28/10/2020 SE212916.005	QC316 WATER - 28/10/2020 SE212916.008
Total Mercury	mg/L	0.0001	<0.0001	<0.0001

SVOC Compounds in Waters by GC-QQQ, Low Level [USEPA8270D LL] Tested: 11/11/2020

PARAMETER	UOM	LOR	GW18 WATER - 28/10/2020 SE212916.005	QC316 WATER - 28/10/2020 SE212916.008
Acenaphthene	µg/L	0.01	<0.01	<0.01
Acenaphthylene	µg/L	0.01	<0.01	<0.01
Anthracene	µg/L	0.01	<0.01	<0.01
Benzo(a)anthracene	µg/L	0.01	<0.01	<0.01
Benzo (a) pyrene	µg/L	0.005	<0.005	<0.005
Benzo (b) fluoranthene	µg/L	0.01	<0.01	<0.01
Benzo (e) pyrene	µg/L	0.01	<0.01	<0.01
Benzo (ghi) perylene	µg/L	0.01	<0.01	<0.01
Benzo (k) fluoranthene	µg/L	0.01	<0.01	<0.01
Benzo (b+j+k) fluoranthene	µg/L	0.02	<0.02	<0.02
Chrysene	µg/L	0.01	<0.01	<0.01
Dibenz (ah) anthracene	µg/L	0.01	<0.01	<0.01
7,12-Dimethylbenz(a)anthracene	µg/L	0.01	<0.01	<0.01
Fluoranthene	µg/L	0.01	<0.01	<0.01
Fluorene	µg/L	0.01	<0.01	<0.01
Indeno (1,2,3-cd) pyrene	µg/L	0.01	<0.01	<0.01
Naphthalene	µg/L	0.1	<0.1	<0.1
Phenanthrene	µg/L	0.01	<0.01	<0.01
Pyrene	µg/L	0.01	<0.01	<0.01
2-Methylnaphthalene	µg/L	0.1	<0.1	<0.1
Total PAHs Vic EPA - assumes <LOR results = 0	µg/L	0.8	-	<0.8
Total PAHs Vic EPA - assumes <LOR results = 0.5LOR	µg/L	0.8	<0.8	<0.8
4,4-DDD	µg/L	0.1	<0.1	<0.1
4,4-DDE	µg/L	0.1	<0.1	<0.1
4,4-DDT	µg/L	0.1	<0.1	<0.1
Aldrin	µg/L	0.002	<0.002	<0.002
alpha-BHC	µg/L	0.1	<0.1	<0.1
alpha-Chlordane	µg/L	0.002	<0.002	<0.002
beta-BHC	µg/L	0.1	<0.1	<0.1
Chlordane	µg/L	0.005	<0.005	<0.005
delta-BHC	µg/L	0.1	<0.1	<0.1
Dieldrin	µg/L	0.002	<0.002	<0.002
Aldrin and Dieldrin	µg/L	0.1	<0.1	<0.1
Endosulfan 1	µg/L	0.005	<0.005	<0.005
Endosulfan 2	µg/L	0.005	<0.005	<0.005
Endosulfan Sulphate	µg/L	0.005	<0.005	<0.005
Total Endosulfan	µg/L	0.01	<0.01	<0.01
Endrin	µg/L	0.1	<0.1	<0.1
Endrin Aldehyde	µg/L	0.1	<0.1	<0.1
Endrin ketone	µg/L	0.1	<0.1	<0.1
gamma-BHC	µg/L	0.002	<0.002	<0.002
gamma-Chlordane	µg/L	0.002	<0.002	<0.002
Heptachlor	µg/L	0.002	<0.002	<0.002
Heptachlor Epoxide	µg/L	0.1	<0.1	<0.1
Hexachlorobenzene	µg/L	0.002	<0.002	<0.002
Isodrin	µg/L	0.1	<0.1	<0.1
Methoxychlor	µg/L	0.1	<0.1	<0.1
Mirex	µg/L	0.1	<0.1	<0.1
Chlorpyrifos	µg/L	0.009	<0.009	<0.009
Dimethoate	µg/L	0.1	<0.1	<0.1
Disulfoton	µg/L	0.1	<0.1	<0.1
Famphur	µg/L	0.1	<0.1	<0.1
Methyl parathion	µg/L	0.01	<0.01	<0.01
Phorate	µg/L	0.1	<0.1	<0.1
Stirofos	µg/L	0.1	<0.1	<0.1
Sulfotepp	µg/L	0.1	<0.1	<0.1

SVOC Compounds in Waters by GC-QQQ, Low Level [USEPA8270D LL] Tested: 11/11/2020 (continued)

PARAMETER	UOM	LOR	GW18 WATER - 28/10/2020 SE212916.005	QC316 WATER - 28/10/2020 SE212916.008
Thionazin	µg/L	0.1	<0.1	<0.1
2-Chlorophenol	µg/L	0.1	-	<0.1
1-Methylnaphthalene	µg/L	0.1	-	<0.1
2,4-Dimethylphenol	µg/L	0.01	-	<0.01
2,4-Dinitrophenol	µg/L	0.01	-	<0.01
2-Nitrophenol	µg/L	0.01	-	<0.01
4-nitrophenol	µg/L	0.01	-	<0.01
m&p Cresol	µg/L	0.01	-	<0.01
o-Cresol	µg/L	0.01	-	<0.01
2-Methyl 4,6-Dinitrophenol	µg/L	0.01	-	<0.01
2,3,4,6-Tetrachlorophenol	µg/L	0.01	-	<0.01
2,4-Dichlorophenol	µg/L	0.01	-	<0.01
2,4,5-Trichlorophenol	µg/L	0.01	-	<0.01
2,4,6-Tribromophenol*	µg/L	0.01	-	<0.01
2,4,6-Trichlorophenol	µg/L	0.01	-	<0.01
2,6-Dichlorophenol	µg/L	0.01	-	<0.01
3-Methylcholanthrene	µg/L	0.01	-	<0.01
4-Chloro-3-methylphenol	µg/L	0.1	-	<0.1
DDT+DDE+DDD	µg/L	0.2	-	<0.2
o,p-DDT	µg/L	0.002	-	<0.002
Total DDT	µg/L	0.1	-	<0.1
Acetophenone	µg/L	0.01	-	<0.01
Bis (2-Ethylhexyl) adipate	µg/L	0.01	-	<0.01
Bis (2-Ethylhexyl) phthalate	µg/L	0.01	-	<0.01
Coronene	µg/L	0.01	-	<0.01
Dibenz (aj) acridine	µg/L	0.01	-	<0.01
Dibenzo[a,e]pyrene	µg/L	0.01	-	<0.01
Dinoseb	µg/L	0.05	-	<0.05
Hexachlorophene	µg/L	0.05	-	<0.05
Pentachlorophenol	µg/L	0.1	-	<0.1
Phenol	µg/L	0.01	-	<0.0↓
Perylene	µg/L	0.01	-	<0.01
Total PAHs - assumes <LOR results = 0	µg/L	0.09	-	-
Total PAHs - assumes <LOR results = 0.5xLOR	µg/L	0.09	-	-

Combined SVOC Pesticides in Water, Low Level [EPA 8270D] Tested: 11/11/2020

PARAMETER	UOM	LOR	GW18 WATER - 28/10/2020 SE212916.005	QC316 WATER - 28/10/2020 SE212916.008
Azinphos-methyl	µg/L	0.05	<0.05	<0.05
Bromophos ethyl*	µg/L	0.05	<0.05	<0.05
Chlorfenvinphos*	µg/L	0.1	<0.1	<0.1
Diazinon*	µg/L	0.01	<0.01	<0.01
Dichlorvos	µg/L	0.01	<0.01	<0.01
Ethion	µg/L	0.01	<0.01	<0.01
Fenitrothion	µg/L	0.01	<0.01	<0.01
Fenisulfothion	µg/L	0.1	<0.1	<0.1
Fenthion	µg/L	0.1	<0.1	<0.1
Malathion	µg/L	0.01	<0.01	<0.01
Mevinphos-cis/trans	µg/L	0.1	<0.1	<0.1
Methidathion	µg/L	0.01	<0.01	<0.01
Parathion	µg/L	0.01	<0.01	<0.01
Acephate	µg/L	0.1	-	<0.1
Alachlor	µg/L	0.1	-	<0.1
Atraton	µg/L	0.1	-	<0.1
Atrazine	µg/L	0.01	-	<0.01
Bifenthrin	µg/L	0.1	-	<0.1
Bioresmethrin	µg/L	0.1	-	<0.1
Boscalid*	µg/L	0.1	-	<0.1
Bromacil	µg/L	0.1	-	<0.1
Bromoxynil*	µg/L	0.1	-	<0.1
Butachlor*	µg/L	0.1	-	<0.1
Butylate*	µg/L	0.1	-	<0.1
Captafol*	µg/L	0.1	-	<0.1
Captan*	µg/L	0.1	-	<0.1
Carbophenothion	µg/L	0.1	-	<0.1
Carboxin*	µg/L	0.1	-	<0.1
Chlopropham	µg/L	0.1	-	<0.1
Chlorfenvinphos-cis	µg/L	0.1	-	<0.1
Chlorfenvinphos-trans	µg/L	0.1	-	<0.1
Chlorothalonil*	µg/L	0.1	-	<0.1
Chlorpyrifos-methyl	µg/L	0.1	-	<0.1
Chlorsulfuron*	µg/L	0.1	-	<0.1
Ciodrin (Crotoxyphos)*	µg/L	0.1	-	<0.1
cis-permethrin	µg/L	0.1	-	<0.1
Co-Ral (Coumaphos)	µg/L	0.1	-	<0.1
Cyanazine	µg/L	0.1	-	<0.1
Cycloate*	µg/L	0.1	-	<0.1
Cyfluthrin*	µg/L	0.1	-	<0.1
Cypermethrin	µg/L	0.1	-	<0.1
Deltamethrin	µg/L	0.1	-	<0.1
Demeton-o	µg/L	0.1	-	<0.1
Demeton-s	µg/L	0.1	-	<0.1
Demeton-s-methyl	µg/L	0.1	-	<0.1
Diallate A*	µg/L	0.1	-	<0.1
Diallate B*	µg/L	0.1	-	<0.1
Dichlobenil*	µg/L	0.1	-	<0.1
Dichlofluanid*	µg/L	0.1	-	<0.1
Dichlone*	µg/L	0.1	-	<0.1
Diclofop-methyl*	µg/L	0.1	-	<0.1
Dicofol	µg/L	0.1	-	<0.1
Dicrotophos*	µg/L	0.1	-	<0.1
EPN	µg/L	0.1	-	<0.1
EPTC	µg/L	0.1	-	<0.1
Esfenvalerate	µg/L	0.1	-	<0.1

Combined SVOC Pesticides in Water, Low Level [EPA 8270D] Tested: 11/11/2020 (continued)

PARAMETER	UOM	LOR	GW18 WATER - 28/10/2020 SE212916.005	QC316 WATER - 28/10/2020 SE212916.008
Ethoprop	µg/L	0.1	-	<0.1
Fearimol	µg/L	0.1	-	<0.1
Fenamiphos (Phenamiphos)	µg/L	0.1	-	<0.1
Fenchlorophos (Ronnel)	µg/L	0.1	-	<0.1
Fenvalerate	µg/L	0.1	-	<0.1
Fluchloralin	µg/L	0.1	-	<0.1
Fludioxonil	µg/L	0.1	-	<0.1
Fluridone	µg/L	0.1	-	<0.1
Haloxyfop methyl	µg/L	0.1	-	<0.1
Hexazinone	µg/L	0.01	-	<0.01
Imidan (Phosmet)	µg/L	0.1	-	<0.1
Indoxacarb	µg/L	0.1	-	<0.1
Kepone	µg/L	0.1	-	<0.1
Leptophos	µg/L	0.1	-	<0.1
Mestranol	µg/L	0.1	-	<0.1
Metalaxyl	µg/L	0.1	-	<0.1
Methiocarb	µg/L	0.1	-	<0.1
Methyl paraoxan	µg/L	0.1	-	<0.1
Metolachlor	µg/L	0.1	-	<0.1
Metribuzin	µg/L	0.01	-	<0.01
MGK-264	µg/L	0.1	-	<0.1
Molinate	µg/L	0.01	-	<0.01
Monocrotophos	µg/L	0.1	-	<0.1
Napropamide*	µg/L	0.1	-	<0.1
Norflurazon*	µg/L	0.1	-	<0.1
Omethoate	µg/L	0.1	-	<0.1
Oxyfluorfen	µg/L	0.1	-	<0.1
Parathion-methyl	µg/L	0.01	-	<0.01
Pebulate	µg/L	0.1	-	<0.1
Pendimethalin	µg/L	0.1	-	<0.1
Permethrin	µg/L	0.1	-	<0.1
Phosalone (Zolone)	µg/L	0.1	-	<0.1
Phosphamidone	µg/L	0.1	-	<0.1
Piperonyl butoxide	µg/L	0.1	-	<0.1
Primiphos-ethyl	µg/L	0.1	-	<0.1
Primiphos-methyl	µg/L	0.1	-	<0.1
Profenofos	µg/L	0.1	-	<0.1
Prometon	µg/L	0.1	-	<0.1
Prometryn	µg/L	0.01	-	<0.01
Pronamide (Propyzamide)*	µg/L	0.1	-	<0.1
Propachlor	µg/L	0.1	-	<0.1
Propargite	µg/L	0.1	-	<0.1
Propazine	µg/L	0.01	-	<0.01
Prophos	µg/L	0.1	-	<0.1
Propiconazole (Isomer 1+Isomer 2)	µg/L	0.1	-	<0.1
Propiconazole Isomer 1	µg/L	0.1	-	<0.1
Propiconazole Isomer 2	µg/L	0.1	-	<0.1
Propylthiouracil	µg/L	0.1	-	<0.1
Propyzamide	µg/L	0.1	-	<0.1
Prothiofos	µg/L	0.1	-	<0.1
Simazine	µg/L	0.01	-	<0.01
Simetryn	µg/L	0.1	-	<0.1
Strychnine*	µg/L	0.1	-	<0.1
Sulprofos*	µg/L	0.1	-	<0.1
Tebuthiuron*	µg/L	0.1	-	<0.1
Temephos	µg/L	0.1	-	<0.1

Combined SVOC Pesticides in Water, Low Level [EPA 8270D] Tested: 11/11/2020 (continued)

PARAMETER	UOM	LOR	GW18 WATER - 28/10/2020 SE212916.005	QC316 WATER - 28/10/2020 SE212916.008
Terbacil*	µg/L	0.1	-	<0.1
Terbuthylazine	µg/L	0.1	-	<0.1
Terbutryn (Prebane)	µg/L	0.1	-	<0.1
Tetrachlorvinphos (Stirifos)	µg/L	0.1	-	<0.1
Thiabendazole	µg/L	0.1	-	<0.1
Thiamethoxam	µg/L	0.1	-	<0.1
Thiometon	µg/L	0.1	-	<0.1
Triadimefon	µg/L	0.1	-	<0.1
Triazophos	µg/L	0.1	-	<0.1
Trichlorfon	µg/L	0.1	-	<0.1
Trichlornate (Trichloronate)*	µg/L	0.1	-	<0.1
Tricyclazole*	µg/L	0.1	-	<0.1
Trifluralin	µg/L	0.1	-	<0.1
Vernolate*	µg/L	0.1	-	<0.1
Vinclozalin*	µg/L	0.1	-	<0.1
Zolone (phosalone, fosalone)	µg/L	0.1	-	<0.1
Ametryn	µg/L	0.1	-	<0.1
Azinphos-ethyl	µg/L	0.05	-	<0.05
Naftalfos	µg/L	0.1	-	<0.1
Naled (Dibrom)	µg/L	0.1	-	<0.1
Terbufos	µg/L	0.01	-	<0.01

SVOC Compounds in Waters by GC-QQQ [USEPA8270D] Tested: 11/11/2020

PARAMETER	UOM	LOR	GW14 WATER - 28/10/2020 SE212916.001	GW15 WATER - 28/10/2020 SE212916.002	GW16 WATER - 28/10/2020 SE212916.003	GW17 WATER - 28/10/2020 SE212916.004	GW18 WATER - 28/10/2020 SE212916.005
Arochlor 1016	µg/L	0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Arochlor 1221	µg/L	0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Arochlor 1232	µg/L	0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Arochlor 1242	µg/L	0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Arochlor 1248	µg/L	0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Arochlor 1254	µg/L	0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Arochlor 1260	µg/L	0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Arochlor 1262	µg/L	0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Arochlor 1268	µg/L	0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Total PCB*	µg/L	0.03	<0.03	<0.03	<0.03	<0.03	<0.03

PARAMETER	UOM	LOR	QC316 WATER - 28/10/2020 SE212916.008
Arochlor 1016	µg/L	0.03	<0.03
Arochlor 1221	µg/L	0.03	<0.03
Arochlor 1232	µg/L	0.03	<0.03
Arochlor 1242	µg/L	0.03	<0.03
Arochlor 1248	µg/L	0.03	<0.03
Arochlor 1254	µg/L	0.03	<0.03
Arochlor 1260	µg/L	0.03	<0.03
Arochlor 1262	µg/L	0.03	<0.03
Arochlor 1268	µg/L	0.03	<0.03
Total PCB*	µg/L	0.03	<0.03

Pesticides / Herbicides in waters by HPLC-MS MA-1569.WW.01 [MA1569] Tested: 11/11/2020

PARAMETER	UOM	LOR	QC316 WATER - 28/10/2020 SE212916.008
2,4,5-T*	µg/L	0.5	<0.5
2,4,5-TP*	µg/L	0.5	<0.5
2,4,6-T*	µg/L	0.5	<0.5
2,4-D [(2,4-Dichlorophenoxy) acetic acid]*	µg/L	0.5	<0.5
24-DB*	µg/L	0.5	<0.5
2,6-D [(2,6-Dichlorophenoxy) acetic acid]*	µg/L	0.5	<0.5
4-CPA*	µg/L	1	<1
Bromoxynil*	µg/L	1	<1
Clopyralid*	µg/L	0.5	<0.5
Dicamba*	µg/L	0.5	<0.5
Dichloroprop / Dichlorprop-P*	µg/L	0.5	<0.5
Dinoseb*	µg/L	0.5	<0.5
Fluroxypyr*	µg/L	0.5	<0.5
Ioxynil*	µg/L	1	<1
MCPA*	µg/L	0.5	<0.5
MCPB*	µg/L	1	<1
mecoprop*	µg/L	0.5	<0.5
Picloram*	µg/L	1	<1
Triclopyr*	µg/L	0.5	<0.5

METHOD	METHODOLOGY SUMMARY
AN020	Unpreserved water sample is filtered through a 0.45µm membrane filter and acidified with nitric acid similar to APHA3030B.
AN022/AN318	Following acid digestion of un filtered sample, determination of elements at trace level in waters by ICP-MS technique, referenced to USEPA 6020B and USEPA 200.8 (5.4).
AN022	The water sample is digested with Nitric Acid and made up to the original volume similar to APHA3030E.
AN149	sulfide by Iodometric Titration: sulfide is precipitated as zinc sulfide to overcome interferences with sulphite and thiosulfate. After filtration, sulfide is determined titrimetrically. Reference APHA 4500-S2-
AN245	Anions by Ion Chromatography: A water sample is injected into an eluent stream that passes through the ion chromatographic system where the anions of interest ie Br, Cl, NO2, NO3 and SO4 are separated on their relative affinities for the active sites on the column packing material. Changes to the conductivity and the UV-visible absorbance of the eluent enable identification and quantitation of the anions based on their retention time and peak height or area. APHA 4110 B
AN277/WC250.312	Nitrite ions, when reacted with a reagent containing sulphanilamide and N-(1-naphthyl)-ethylenediamine dihydrochloride produce a highly coloured azo dye that is measured photometrically at 540nm.
AN278	Filterable Reactive Phosphorus by DA (determined on filtered sample): Orthophosphate reacts with ammonium molybdate (Mo VI) and potassium antimonyl tartrate (Sb III) in acid medium to form an antimony-phosphomolybdate complex. This complex is subsequently reduced with ascorbic acid to form a blue colour and the absorbance is read at 880 nm. The sensitivity of the automated method is 10-20 times that of the macro method. Reference APHA 4500-P F
AN279/AN293(Sydney)	The sample is digested with Sulphuric acid, K2SO4 and CuSO4. All forms of phosphorus are converted into orthophosphate. The digest is cooled and placed on the discrete analyser for colorimetric analysis.
AN281	An unfiltered water or soil sample is first digested in a block digestor with sulfuric acid, K2SO4 and CuSO4. The ammonia produced following digestion is then measured colourimetrically using the Aquakem 250 Discrete Analyser. A portion of the digested sample is buffered to an alkaline pH, and interfering cations are complexed. The ammonia then reacts with salicylate and hypochlorite to give a blue colour whose absorbance is measured at 660nm and compared with calibration standards. This is proportional to the concentration of Total Kjeldahl Nitrogen in the original sample.
AN291	Ammonia in solution reacts with hypochlorite ions from Sodium Dichloroisocyanuate, and salicylate in the presence of Sodium Nitroprusside to form indophenol blue and measured at 670 nm by Discrete Analyser.
AN311(Perth) /AN312	Mercury by Cold Vapour AAS in Waters: Mercury ions taken from unfiltered sample are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500.
AN311(Perth)/AN312	Mercury by Cold Vapour AAS in Waters: Mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500.
AN318	Determination of elements at trace level in waters by ICP-MS technique,, referenced to USEPA 6020B and USEPA 200.8 (5.4).
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). Where F2 is corrected for Naphthalene, the VOC data for Naphthalene is used.
AN403	Additionally, the volatile C6-C9/C6-C10 fractions may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoveerable Hydrocarbons - Silica (TRH-Silica) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents.

AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.
EPA8270D LL	This method covers analytical procedures for the analysis of semi-volatile organic compounds (SVOC) including most neutral, acidic, and basic organic compounds based on the USEPA method 8270D. Samples are extracted into a solvent appropriate to the matrix and analysed using a gas chromatograph – triple quadrapole (GC–QQQ).
EPA8270D Pest LL	This method covers analytical procedures for the analysis of semi-volatile organic compounds (SVOC pesticides) including most neutral, acidic, and basic organic compounds based on the USEPA method 8270D. Samples are extracted into a solvent appropriate to the matrix and analysed using a gas chromatograph – triple quadrapole (GC–QQQ).
EPA8270D	This method covers analytical procedures for the analysis of semi-volatile organic compounds (SVOC) including most neutral, acidic, and basic organic compounds based on the USEPA method 8270D. Samples are extracted into a solvent appropriate to the matrix and analysed using a gas chromatograph – triple quadrapole (GC–QQQ).
MA-1523	This method covers the analysis of per- and polyfluoroalkyl substances (PFAS) in aqueous, solid and biosolid samples and solvent extracts, determined as the total of linear and branched isomers. After spiking with isotopically labelled quantification surrogates and clean-up via SPE cartridges sample extracts are analysed by liquid chromatography/mass spectrometry (LC-MS/MS). PFAS concentrations are determined by isotope dilution quantification.
MA1569	This method is intended for the analysis of a diverse range of pesticides and herbicides by Liquid Chromatography using a Tandem Mass Spectrometry detector (LC-MS/MS). Due to the diverse nature of the analytes covered in this method each analyte requires its own analytical acquisition method thus the sample is run multiple times according to the analyte list requested. Water samples are filtered and filtrates are directly injected onto LC-MS/MS using selective ion monitoring.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
**	Indicative data, theoretical holding time exceeded.	NVL	Not validated.	LOR	Limit of Reporting.
***	Indicates that both * and ** apply.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

This document is issued by the Company under its General Conditions of Service accessible at www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

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Symbio LABORATORIES

CERTIFICATE OF ANALYSIS

Certificate Number	S962155 [R00]	**Page**	1/2
Client	SGS Environmental Services - Sydney	**Registering Laboratory**	Sydney
Contact	[redacted]	**Contact**	Customer Service Team
Address	16/33 Maddox St Alexandria NSW 2015	**Address**	2 Sirius Rd, Lane Cove West, NSW 2066
		Email	admin@symbiolabs.com.au
Telephone	02 8594 0400	**Telephone**	1300 703 166
Order Number	---	**Date Samples Received**	29/10/2020
Project ID	SE212916 -Water	**Date Analysis Commenced**	29/10/2020
Sampler	Customer	**Issue Date**	02/11/2020
Client Job Reference	SE212916	**Receipt Temperature (°C)**	8
No. of Samples Registered	1 | Sampler: Customer	**Storage Temperature (°C)**	4.0
Priority	Normal	**Quote Number**	---

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ABN: 82 079 645 015

NATA

Accreditation No: 2455
Accredited for compliance with ISO/IEC 17025 - Testing

This report supersedes any previous revision with this reference. This document must not be reproduced, except in full. If samples were provided by the customer, results apply only to the samples 'as received' and responsibility for representative sampling rests with the customer. Water results are reported on an 'as is' basis. Soil and sediment results are reported on a 'dry weight' basis. For other matrices the basis of reporting will be confirmed in the 'Report Comments' section. Measurement Uncertainty is available upon request or via www.symbiolabs.com.au/login. If the laboratory was authorised to conduct testing on samples received outside of the specified conditions, all test results may be impacted. Details of samples received outside of the specified conditions are mentioned in the sample description section of this test report.

Definitions

| <: Less Than | >: Greater Than | RP: Result Pending | MPN: Most Probable Number | CFU: Colony Forming Units | ---: Not Received/Not Requested | NA: Not Applicable | ND: Not Detected | LOR: Limit of Reporting | [NT]: Not Tested |

| ~: Estimated | ^ Subcontracted Analysis | TBA: To Be Advised | ** Potential Holding Time Concern | * Test not covered by NATA scope of accreditation | # Result derived from a calculation and includes results equal to or greater than the LOR

Authorised By

Name	Position	Accreditation Category
[redacted]	Laboratory Manager – Microbiology	Environmental and Food Microbiology

Sample Information - *Client/Sampler Supplied*

Sample ID	S962155/1
Sample Description	SE212916.005 GW18
Sample Date/Time	2020-10-28 00:00
Sample Matrix	Water

Client	SGS Environmental Services - Sydney	**Project ID**	SE212916 -Water
Certificate Number	S962155 [R00]	**Sampler**	Customer
Page	2/2	**Order Number**	---

Analytical Results

Compound/Analyte	LOR	Units	SE212916.005 GW18
Client Sample Description			
Client Sampling date/time			28/10/2020 00:00
			S962155/1
			Results
Micro General			
M16.1W - AS 5013.10			
Salmonella spp*	ND	/100mL	ND
M8.5 - AS/NZS 4276.7			
Escherichia coli	1	CFU/100mL	<1
Thermotolerant Coliforms	1	CFU/100mL	<1

Analysis Location

All in-house analysis was completed by Symbio Laboratories - Sydney.

STATEMENT OF QA/QC PERFORMANCE

SE212916 R0

CLIENT DETAILS

Contact	LQRSYD
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	02 9427 8100
Facsimile	02 9427 8200
Email	lqrsyd@slrconsulting.com
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	8

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE212916 R0**
Date Received	28 Oct 2020
Date Reported	11 Nov 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Surrogate	Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples	3 items
	Speciated Phenols in Water	1 item
Duplicate	Trace Metals (Total) in Water by ICPMS	4 items
	VOCs in Water	1 item

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	8 Water
Date documentation received	28/10/2020	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	9°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE212916 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

Ammonia Nitrogen by Discrete Analyser (Aquakem)

Method: ME-(AU)-[ENV]AN291

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW18	SE212916.005	LB212360	28 Oct 2020	28 Oct 2020	25 Nov 2020	29 Oct 2020	25 Nov 2020	30 Oct 2020

Anions by Ion Chromatography in Water

Method: ME-(AU)-[ENV]AN245

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW18	SE212916.005	LB212280	28 Oct 2020	28 Oct 2020	25 Nov 2020	29 Oct 2020	25 Nov 2020	30 Oct 2020

Filterable Reactive Phosphorus (FRP)

Method: ME-(AU)-[ENV]AN278

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW18	SE212916.005	LB212360	28 Oct 2020	28 Oct 2020	25 Nov 2020	29 Oct 2020	25 Nov 2020	30 Oct 2020

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW14	SE212916.001	LB212673	28 Oct 2020	28 Oct 2020	25 Nov 2020	04 Nov 2020	25 Nov 2020	04 Nov 2020
GW15	SE212916.002	LB212673	28 Oct 2020	28 Oct 2020	25 Nov 2020	04 Nov 2020	25 Nov 2020	04 Nov 2020
GW16	SE212916.003	LB212673	28 Oct 2020	28 Oct 2020	25 Nov 2020	04 Nov 2020	25 Nov 2020	04 Nov 2020
GW17	SE212916.004	LB212673	28 Oct 2020	28 Oct 2020	25 Nov 2020	04 Nov 2020	25 Nov 2020	04 Nov 2020
GW18	SE212916.005	LB212673	28 Oct 2020	28 Oct 2020	25 Nov 2020	04 Nov 2020	25 Nov 2020	29 Oct 2020
QC525_TS	SE212916.006	LB212673	28 Oct 2020	28 Oct 2020	25 Nov 2020	04 Nov 2020	25 Nov 2020	29 Oct 2020
QC525_TB	SE212916.007	LB212673	28 Oct 2020	28 Oct 2020	25 Nov 2020	04 Nov 2020	25 Nov 2020	29 Oct 2020
QC316	SE212916.008	LB212673	28 Oct 2020	28 Oct 2020	25 Nov 2020	04 Nov 2020	25 Nov 2020	29 Oct 2020

Mercury (total) in Water

Method: ME-(AU)-[ENV]AN311(Perth) /AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW18	SE212916.005	LB212390	28 Oct 2020	28 Oct 2020	25 Nov 2020	30 Oct 2020	25 Nov 2020	30 Oct 2020
QC316	SE212916.008	LB212390	28 Oct 2020	28 Oct 2020	25 Nov 2020	30 Oct 2020	25 Nov 2020	30 Oct 2020

Nitrite in Water

Method: ME-(AU)-[ENV]AN277

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW18	SE212916.005	LB212360	28 Oct 2020	28 Oct 2020	01 Nov 2020	29 Oct 2020	01 Nov 2020	30 Oct 2020

Speciated Phenols in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW14	SE212916.001	LB212661	28 Oct 2020	28 Oct 2020	18 Nov 2020	04 Nov 2020	14 Dec 2020	04 Nov 2020
GW15	SE212916.002	LB212661	28 Oct 2020	28 Oct 2020	18 Nov 2020	04 Nov 2020	14 Dec 2020	04 Nov 2020
GW16	SE212916.003	LB212661	28 Oct 2020	28 Oct 2020	18 Nov 2020	04 Nov 2020	14 Dec 2020	04 Nov 2020
GW17	SE212916.004	LB212661	28 Oct 2020	28 Oct 2020	18 Nov 2020	04 Nov 2020	14 Dec 2020	04 Nov 2020
GW18	SE212916.005	LB212661	28 Oct 2020	28 Oct 2020	18 Nov 2020	04 Nov 2020	14 Dec 2020	04 Nov 2020
QC316	SE212916.008	LB212661	28 Oct 2020	28 Oct 2020	18 Nov 2020	04 Nov 2020	14 Dec 2020	04 Nov 2020

Sulfide by Titration in Water

Method: ME-(AU)-[ENV]AN149

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW18	SE212916.005	LB212687	28 Oct 2020	28 Oct 2020	04 Nov 2020	04 Nov 2020	04 Nov 2020	04 Nov 2020

TKN Kjeldahl Digestion by Discrete Analyser

Method: ME-(AU)-[ENV]AN292

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW18	SE212916.005	LB212684	28 Oct 2020	28 Oct 2020	25 Nov 2020	04 Nov 2020	25 Nov 2020	04 Nov 2020

Total Phosphorus by Kjeldahl Digestion DA in Water

Method: ME-(AU)-[ENV]AN279/AN293(Sydney only)

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW18	SE212916.005	LB212684	28 Oct 2020	28 Oct 2020	25 Nov 2020	04 Nov 2020	25 Nov 2020	04 Nov 2020

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW14	SE212916.001	LB212417	28 Oct 2020	28 Oct 2020	26 Apr 2021	30 Oct 2020	26 Apr 2021	02 Nov 2020
GW15	SE212916.002	LB212417	28 Oct 2020	28 Oct 2020	26 Apr 2021	30 Oct 2020	26 Apr 2021	02 Nov 2020
GW16	SE212916.003	LB212417	28 Oct 2020	28 Oct 2020	26 Apr 2021	30 Oct 2020	26 Apr 2021	02 Nov 2020
GW17	SE212916.004	LB212417	28 Oct 2020	28 Oct 2020	26 Apr 2021	30 Oct 2020	26 Apr 2021	02 Nov 2020

HOLDING TIME SUMMARY

SE212916 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

Trace Metals (Total) in Water by ICPMS

Method: ME-(AU)-[ENV]AN022/AN318

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW18	SE212916.005	LB212420	28 Oct 2020	28 Oct 2020	26 Apr 2021	30 Oct 2020	26 Apr 2021	02 Nov 2020
QC316	SE212916.008	LB212420	28 Oct 2020	28 Oct 2020	26 Apr 2021	30 Oct 2020	26 Apr 2021	02 Nov 2020

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW14	SE212916.001	LB212661	28 Oct 2020	28 Oct 2020	04 Nov 2020	04 Nov 2020	14 Dec 2020	04 Nov 2020
GW15	SE212916.002	LB212661	28 Oct 2020	28 Oct 2020	04 Nov 2020	04 Nov 2020	14 Dec 2020	04 Nov 2020
GW16	SE212916.003	LB212661	28 Oct 2020	28 Oct 2020	04 Nov 2020	04 Nov 2020	14 Dec 2020	04 Nov 2020
GW17	SE212916.004	LB212661	28 Oct 2020	28 Oct 2020	04 Nov 2020	04 Nov 2020	14 Dec 2020	04 Nov 2020
GW18	SE212916.005	LB212661	28 Oct 2020	28 Oct 2020	04 Nov 2020	04 Nov 2020	14 Dec 2020	04 Nov 2020
QC316	SE212916.008	LB212661	28 Oct 2020	28 Oct 2020	04 Nov 2020	04 Nov 2020	14 Dec 2020	04 Nov 2020

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW14	SE212916.001	LB212443	28 Oct 2020	28 Oct 2020	04 Nov 2020	30 Oct 2020	09 Dec 2020	02 Nov 2020
GW15	SE212916.002	LB212443	28 Oct 2020	28 Oct 2020	04 Nov 2020	30 Oct 2020	09 Dec 2020	02 Nov 2020
GW16	SE212916.003	LB212443	28 Oct 2020	28 Oct 2020	04 Nov 2020	30 Oct 2020	09 Dec 2020	02 Nov 2020
GW17	SE212916.004	LB212443	28 Oct 2020	28 Oct 2020	04 Nov 2020	30 Oct 2020	09 Dec 2020	02 Nov 2020
GW18	SE212916.005	LB212443	28 Oct 2020	28 Oct 2020	04 Nov 2020	30 Oct 2020	09 Dec 2020	02 Nov 2020
QC525_TS	SE212916.006	LB212443	28 Oct 2020	28 Oct 2020	04 Nov 2020	30 Oct 2020	09 Dec 2020	02 Nov 2020
QC525_TB	SE212916.007	LB212443	28 Oct 2020	28 Oct 2020	04 Nov 2020	30 Oct 2020	09 Dec 2020	03 Nov 2020
QC316	SE212916.008	LB212443	28 Oct 2020	28 Oct 2020	04 Nov 2020	30 Oct 2020	09 Dec 2020	02 Nov 2020

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW14	SE212916.001	LB212443	28 Oct 2020	28 Oct 2020	04 Nov 2020	30 Oct 2020	09 Dec 2020	02 Nov 2020
GW15	SE212916.002	LB212443	28 Oct 2020	28 Oct 2020	04 Nov 2020	30 Oct 2020	09 Dec 2020	02 Nov 2020
GW16	SE212916.003	LB212443	28 Oct 2020	28 Oct 2020	04 Nov 2020	30 Oct 2020	09 Dec 2020	02 Nov 2020
GW17	SE212916.004	LB212443	28 Oct 2020	28 Oct 2020	04 Nov 2020	30 Oct 2020	09 Dec 2020	02 Nov 2020
GW18	SE212916.005	LB212443	28 Oct 2020	28 Oct 2020	04 Nov 2020	30 Oct 2020	09 Dec 2020	02 Nov 2020
QC525_TS	SE212916.006	LB212443	28 Oct 2020	28 Oct 2020	04 Nov 2020	30 Oct 2020	09 Dec 2020	03 Nov 2020
QC525_TB	SE212916.007	LB212443	28 Oct 2020	28 Oct 2020	04 Nov 2020	30 Oct 2020	09 Dec 2020	02 Nov 2020
QC316	SE212916.008	LB212443	28 Oct 2020	28 Oct 2020	04 Nov 2020	30 Oct 2020	09 Dec 2020	02 Nov 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples — **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C2_PFTeDA) Isotopically Labelled Internal Recovery Standard	GW14	SE212916.001	%	10 - 150%	117
	GW15	SE212916.002	%	10 - 150%	114
	GW16	SE212916.003	%	10 - 150%	117
	GW17	SE212916.004	%	10 - 150%	118
	GW18	SE212916.005	%	10 - 150%	129
(13C2-4:2 FTS) Isotopically Labelled Internal Recovery Standard	GW14	SE212916.001	%	10 - 150%	34
	GW15	SE212916.002	%	10 - 150%	37
	GW16	SE212916.003	%	10 - 150%	37
	GW17	SE212916.004	%	10 - 150%	38
	GW18	SE212916.005	%	10 - 150%	33
(13C2-6:2 FTS) Isotopically Labelled Internal Recovery Standard	GW14	SE212916.001	%	10 - 150%	32
	GW15	SE212916.002	%	10 - 150%	40
	GW16	SE212916.003	%	10 - 150%	38
	GW17	SE212916.004	%	10 - 150%	30
	GW18	SE212916.005	%	10 - 150%	29
(13C2-8:2 FTS) Isotopically Labelled Internal Recovery Standard	GW14	SE212916.001	%	10 - 150%	46
	GW15	SE212916.002	%	10 - 150%	41
	GW16	SE212916.003	%	10 - 150%	41
	GW17	SE212916.004	%	10 - 150%	36
	GW18	SE212916.005	%	10 - 150%	34
(13C2-PFDoA) Isotopically Labelled Internal Recovery Standard	GW14	SE212916.001	%	10 - 150%	101
	GW15	SE212916.002	%	10 - 150%	111
	GW16	SE212916.003	%	10 - 150%	99
	GW17	SE212916.004	%	10 - 150%	106
	GW18	SE212916.005	%	10 - 150%	106
(13C2-PFHxDA) Isotopically Labelled Internal Recovery Standard	GW14	SE212916.001	%	10 - 150%	139
	GW15	SE212916.002	%	10 - 150%	148
	GW16	SE212916.003	%	10 - 150%	159 †
	GW17	SE212916.004	%	10 - 150%	154 †
	GW18	SE212916.005	%	10 - 150%	178 †
(13C3-PFBS) Isotopically Labelled Internal Recovery Standard	GW14	SE212916.001	%	10 - 150%	97
	GW15	SE212916.002	%	10 - 150%	100
	GW16	SE212916.003	%	10 - 150%	103
	GW17	SE212916.004	%	10 - 150%	100
	GW18	SE212916.005	%	10 - 150%	94
(13C3-PFHxS) Isotopically Labelled Internal Recovery Standard	GW14	SE212916.001	%	10 - 150%	100
	GW15	SE212916.002	%	10 - 150%	92
	GW16	SE212916.003	%	10 - 150%	101
	GW17	SE212916.004	%	10 - 150%	92
	GW18	SE212916.005	%	10 - 150%	95
(13C4_PFOA) Isotopically Labelled Internal Recovery Standard	GW14	SE212916.001	%	10 - 150%	105
	GW15	SE212916.002	%	10 - 150%	98
	GW16	SE212916.003	%	10 - 150%	112
	GW17	SE212916.004	%	10 - 150%	115
	GW18	SE212916.005	%	10 - 150%	98
(13C4-PFBA) Isotopically Labelled Internal Recovery Standard	GW14	SE212916.001	%	10 - 150%	101
	GW15	SE212916.002	%	10 - 150%	99
	GW16	SE212916.003	%	10 - 150%	97
	GW17	SE212916.004	%	10 - 150%	101
	GW18	SE212916.005	%	10 - 150%	100
(13C4-PFHpA) Isotopically Labelled Internal Recovery Standard	GW14	SE212916.001	%	10 - 150%	110
	GW15	SE212916.002	%	10 - 150%	110
	GW16	SE212916.003	%	10 - 150%	120
	GW17	SE212916.004	%	10 - 150%	119
	GW18	SE212916.005	%	10 - 150%	111
(13C5-PFHxA) Isotopically Labelled Internal Recovery Standard	GW14	SE212916.001	%	10 - 150%	107
	GW15	SE212916.002	%	10 - 150%	111
	GW16	SE212916.003	%	10 - 150%	116
	GW17	SE212916.004	%	10 - 150%	117
	GW18	SE212916.005	%	10 - 150%	103
(13C5-PFPeA) Isotopically Labelled Internal Recovery Standard	GW14	SE212916.001	%	10 - 150%	105

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples (continued) — **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C5-PFPeA) Isotopically Labelled Internal Recovery Standard	GW15	SE212916.002	%	10 - 150%	101
	GW16	SE212916.003	%	10 - 150%	100
	GW17	SE212916.004	%	10 - 150%	103
	GW18	SE212916.005	%	10 - 150%	103
(13C6-PFDA) Isotopically Labelled Internal Recovery Standard	GW14	SE212916.001	%	10 - 150%	96
	GW15	SE212916.002	%	10 - 150%	108
	GW16	SE212916.003	%	10 - 150%	97
	GW17	SE212916.004	%	10 - 150%	119
	GW18	SE212916.005	%	10 - 150%	92
(13C7-PFUdA) Isotopically Labelled Internal Recovery Standard	GW14	SE212916.001	%	10 - 150%	94
	GW15	SE212916.002	%	10 - 150%	100
	GW16	SE212916.003	%	10 - 150%	103
	GW17	SE212916.004	%	10 - 150%	104
	GW18	SE212916.005	%	10 - 150%	109
(13C8-PFOS) Isotopically Labelled Internal Recovery Standard	GW14	SE212916.001	%	10 - 150%	108
	GW15	SE212916.002	%	10 - 150%	98
	GW16	SE212916.003	%	10 - 150%	99
	GW17	SE212916.004	%	10 - 150%	116
	GW18	SE212916.005	%	10 - 150%	127
(13C8-PFOSA) Isotopically Labelled Internal Recovery Standard	GW14	SE212916.001	%	10 - 150%	92
	GW15	SE212916.002	%	10 - 150%	79
	GW16	SE212916.003	%	10 - 150%	98
	GW17	SE212916.004	%	10 - 150%	95
	GW18	SE212916.005	%	10 - 150%	112
(13C9-PFNA) Isotopically Labelled Internal Recovery Standard	GW14	SE212916.001	%	10 - 150%	99
	GW15	SE212916.002	%	10 - 150%	105
	GW16	SE212916.003	%	10 - 150%	87
	GW17	SE212916.004	%	10 - 150%	101
	GW18	SE212916.005	%	10 - 150%	101
(D3-N-MeFOSA) Isotopically Labelled Internal Recovery Standard	GW14	SE212916.001	%	10 - 150%	87
	GW15	SE212916.002	%	10 - 150%	81
	GW16	SE212916.003	%	10 - 150%	91
	GW17	SE212916.004	%	10 - 150%	97
	GW18	SE212916.005	%	10 - 150%	103
(D3-N-MeFOSAA) Isotopically Labelled Internal Recovery Standard	GW14	SE212916.001	%	10 - 150%	86
	GW15	SE212916.002	%	10 - 150%	84
	GW16	SE212916.003	%	10 - 150%	83
	GW17	SE212916.004	%	10 - 150%	96
	GW18	SE212916.005	%	10 - 150%	107
(D5-N-EtFOSA) Isotopically Labelled Internal Recovery Standard	GW14	SE212916.001	%	10 - 150%	81
	GW15	SE212916.002	%	10 - 150%	80
	GW16	SE212916.003	%	10 - 150%	93
	GW17	SE212916.004	%	10 - 150%	85
	GW18	SE212916.005	%	10 - 150%	86
(D5-N-EtFOSAA) Isotopically Labelled Internal Recovery Standard	GW14	SE212916.001	%	10 - 150%	112
	GW15	SE212916.002	%	10 - 150%	80
	GW16	SE212916.003	%	10 - 150%	109
	GW17	SE212916.004	%	10 - 150%	102
	GW18	SE212916.005	%	10 - 150%	102
(D7-N-MeFOSE) Isotopically Labelled Internal Recovery Standard	GW14	SE212916.001	%	10 - 150%	94
	GW15	SE212916.002	%	10 - 150%	73
	GW16	SE212916.003	%	10 - 150%	98
	GW17	SE212916.004	%	10 - 150%	99
	GW18	SE212916.005	%	10 - 150%	93
(D9-N-EtFOSE) Isotopically Labelled Internal Recovery Standard	GW14	SE212916.001	%	10 - 150%	101
	GW15	SE212916.002	%	10 - 150%	96
	GW16	SE212916.003	%	10 - 150%	101
	GW17	SE212916.004	%	10 - 150%	87
	GW18	SE212916.005	%	10 - 150%	107

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Water

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	GW18	SE212916.005	%	40 - 130%	128
d5-phenol (Surrogate)	GW18	SE212916.005	%	20 - 90%	105 †

SVOC Compounds in Waters by GC-QQQ

Method: USEPA8270D

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d14-p-terphenyl (Surrogate)	GW14	SE212916.001	%	40 - 130%	106
	GW15	SE212916.002	%	40 - 130%	116
	GW16	SE212916.003	%	40 - 130%	113
	GW17	SE212916.004	%	40 - 130%	99
	GW18	SE212916.005	%	40 - 130%	103
	QC316	SE212916.008	%	40 - 130%	113

SVOC Compounds in Waters by GC-QQQ, Low Level

Method: USEPA8270D LL

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d14-p-terphenyl (Surrogate)	GW18	SE212916.005	%	40 - 130%	103
	QC316	SE212916.008	%	40 - 130%	113

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	GW14	SE212916.001	%	40 - 130%	110
	GW15	SE212916.002	%	40 - 130%	98
	GW16	SE212916.003	%	40 - 130%	101
	GW17	SE212916.004	%	40 - 130%	106
	GW18	SE212916.005	%	40 - 130%	104
	QC525_TS	SE212916.006	%	40 - 130%	101
	QC316	SE212916.008	%	40 - 130%	111
d4-1,2-dichloroethane (Surrogate)	GW14	SE212916.001	%	40 - 130%	94
	GW15	SE212916.002	%	40 - 130%	99
	GW16	SE212916.003	%	40 - 130%	87
	GW17	SE212916.004	%	40 - 130%	95
	GW18	SE212916.005	%	40 - 130%	82
	QC525_TS	SE212916.006	%	40 - 130%	104
	QC316	SE212916.008	%	40 - 130%	106
d8-toluene (Surrogate)	GW14	SE212916.001	%	40 - 130%	99
	GW15	SE212916.002	%	40 - 130%	92
	GW16	SE212916.003	%	40 - 130%	97
	GW17	SE212916.004	%	40 - 130%	121
	GW18	SE212916.005	%	40 - 130%	99
	QC525_TS	SE212916.006	%	40 - 130%	98
	QC316	SE212916.008	%	40 - 130%	96

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	GW14	SE212916.001	%	40 - 130%	110
	GW15	SE212916.002	%	40 - 130%	98
	GW16	SE212916.003	%	40 - 130%	101
	GW17	SE212916.004	%	40 - 130%	106
	GW18	SE212916.005	%	40 - 130%	104
	QC525_TB	SE212916.007	%	40 - 130%	111
	QC316	SE212916.008	%	40 - 130%	111
d4-1,2-dichloroethane (Surrogate)	GW14	SE212916.001	%	60 - 130%	94
	GW15	SE212916.002	%	60 - 130%	99
	GW16	SE212916.003	%	60 - 130%	87
	GW17	SE212916.004	%	60 - 130%	95
	GW18	SE212916.005	%	60 - 130%	82
	QC525_TB	SE212916.007	%	60 - 130%	100
	QC316	SE212916.008	%	60 - 130%	106
d8-toluene (Surrogate)	GW14	SE212916.001	%	40 - 130%	99
	GW15	SE212916.002	%	40 - 130%	92
	GW16	SE212916.003	%	40 - 130%	97
	GW17	SE212916.004	%	40 - 130%	121
	GW18	SE212916.005	%	40 - 130%	99

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Water (continued) — **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d8-toluene (Surrogate)	QC525_TB	SE212916.007	%	40 - 130%	97
	QC316	SE212916.008	%	40 - 130%	96

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Ammonia Nitrogen by Discrete Analyser (Aquakem)

Method: ME-(AU)-[ENV]AN291

Sample Number	Parameter	Units	LOR	Result
LB212360.001	Ammonia Nitrogen, NH_3 as N	mg/L	0.005	<0.005

Anions by Ion Chromatography in Water

Method: ME-(AU)-[ENV]AN245

Sample Number	Parameter	Units	LOR	Result
LB212280.001	Nitrate Nitrogen, NO3-N	mg/L	0.005	<0.005
	Sulfate, SO4	mg/L	1	<1.0

Filterable Reactive Phosphorus (FRP)

Method: ME-(AU)-[ENV]AN278

Sample Number	Parameter	Units	LOR	Result
LB212360.001	Filterable Reactive Phosphorus as P	mg/L	0.005	<0.005

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

Sample Number	Parameter	Units	LOR	Result
LB212673.001	Mercury	mg/L	0.0001	<0.0001

Nitrite in Water

Method: ME-(AU)-[ENV]AN277

Sample Number	Parameter	Units	LOR	Result
LB212360.001	Nitrite Nitrogen, NO2 as N	mg/L	0.005	<0.005

Speciated Phenols in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB212661.001		Phenol	µg/L	0.5	<0.5
		2-methyl phenol (o-cresol)	µg/L	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	µg/L	1	<1
		2-chlorophenol	µg/L	0.5	<0.5
		2,4-dimethylphenol	µg/L	0.5	<0.5
		2,6-dichlorophenol	µg/L	0.5	<0.5
		2,4-dichlorophenol	µg/L	0.5	<0.5
		2,4,6-trichlorophenol	µg/L	0.5	<0.5
		2-nitrophenol	µg/L	0.5	<0.5
		4-nitrophenol	µg/L	1	<1
		2,4,5-trichlorophenol	µg/L	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	µg/L	1	<1
		Pentachlorophenol	µg/L	0.5	<0.5
		2,4-dinitrophenol	µg/L	2	<2
		4-chloro-3-methylphenol	µg/L	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	75
		d5-phenol (Surrogate)	%	-	97

Sulfide by Titration in Water

Method: ME-(AU)-[ENV]AN149

Sample Number	Parameter	Units	LOR	Result
LB212687.001	Sulfide	mg/L	0.5	<0.5

Total Phosphorus by Kjeldahl Digestion DA in Water

Method: ME-(AU)-[ENV]AN279/AN293(Sydney only)

Sample Number	Parameter	Units	LOR	Result
LB212684.001	Total Phosphorus (Kjeldahl Digestion) as P	mg/L	0.02	<0.02

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Sample Number	Parameter	Units	LOR	Result
LB212417.001	Arsenic, As	µg/L	1	<1
	Beryllium, Be	µg/L	1	<1
	Boron, B	µg/L	5	<5

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Trace Metals (Dissolved) in Water by ICPMS (continued)

Method: ME-(AU)-[ENV]AN318

Sample Number	Parameter	Units	LOR	Result
LB212417.001	Cadmium, Cd	µg/L	0.1	<0.1
	Chromium, Cr	µg/L	1	<1
	Cobalt, Co	µg/L	1	<1
	Copper, Cu	µg/L	1	<1
	Lead, Pb	µg/L	1	<1
	Manganese, Mn	µg/L	1	<1
	Nickel, Ni	µg/L	1	<1
	Zinc, Zn	µg/L	5	<5

Trace Metals (Total) in Water by ICPMS

Method: ME-(AU)-[ENV]AN022/AN318

Sample Number	Parameter	Units	LOR	Result
LB212420.001	Total Arsenic	µg/L	1	<1
	Total Beryllium	µg/L	1	<1
	Total Boron	µg/L	5	<5
	Total Cadmium	µg/L	0.1	<0.1
	Total Cobalt	µg/L	1	<1
	Total Copper	µg/L	1	<1
	Total Lead	µg/L	1	<1
	Total Magnesium	µg/L	100	<100
	Total Nickel	µg/L	1	<1
	Total Zinc	µg/L	5	<5

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB212661.001	TRH C10-C14	µg/L	50	<50
	TRH C15-C28	µg/L	200	<200
	TRH C29-C36	µg/L	200	<200
	TRH C37-C40	µg/L	200	<200

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB212443.001	Fumigants	2,2-dichloropropane	µg/L	0.5	<0.5
		1,2-dichloropropane	µg/L	0.5	<0.5
		cis-1,3-dichloropropene	µg/L	0.5	<0.5
		trans-1,3-dichloropropene	µg/L	0.5	<0.5
		1,2-dibromoethane (EDB)	µg/L	0.5	<0.5
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	µg/L	5	<5
		Chloromethane	µg/L	5	<5
		Vinyl chloride (Chloroethene)	µg/L	0.3	<0.3
		Bromomethane	µg/L	10	<10
		Chloroethane	µg/L	5	<5
		Trichlorofluoromethane	µg/L	1	<1
		Iodomethane	µg/L	5	<5
		1,1-dichloroethene	µg/L	0.5	<0.5
		Dichloromethane (Methylene chloride)	µg/L	5	<5
		Allyl chloride	µg/L	2	<2
		trans-1,2-dichloroethene	µg/L	0.5	<0.5
		1,1-dichloroethane	µg/L	0.5	<0.5
		cis-1,2-dichloroethene	µg/L	0.5	<0.5
		Bromochloromethane	µg/L	0.5	<0.5
		1,2-dichloroethane	µg/L	0.5	<0.5
		1,1,1-trichloroethane	µg/L	0.5	<0.5
		1,1-dichloropropene	µg/L	0.5	<0.5
		Carbon tetrachloride	µg/L	0.5	<0.5
		Dibromomethane	µg/L	0.5	<0.5
		Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	<0.5
		1,1,2-trichloroethane	µg/L	0.5	<0.5
		1,3-dichloropropane	µg/L	0.5	<0.5
		Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	<0.5
		1,1,1,2-tetrachloroethane	µg/L	0.5	<0.5
		cis-1,4-dichloro-2-butene	µg/L	1	<1
		1,1,2,2-tetrachloroethane	µg/L	0.5	<0.5

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOCs in Water (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB212443.001	Halogenated Aliphatics	1,2,3-trichloropropane	µg/L	0.5	<0.5
		trans-1,4-dichloro-2-butene	µg/L	1	<1
		1,2-dibromo-3-chloropropane	µg/L	0.5	<0.5
		Hexachlorobutadiene	µg/L	0.5	<0.5
	Halogenated Aromatics	Chlorobenzene	µg/L	0.5	<0.5
		Bromobenzene	µg/L	0.5	<0.5
		2-chlorotoluene	µg/L	0.5	<0.5
		4-chlorotoluene	µg/L	0.5	<0.5
		1,3-dichlorobenzene	µg/L	0.5	<0.5
		1,4-dichlorobenzene	µg/L	0.3	<0.3
		1,2-dichlorobenzene	µg/L	0.5	<0.5
		1,2,4-trichlorobenzene	µg/L	0.5	<0.5
		1,2,3-trichlorobenzene	µg/L	0.5	<0.5
	Monocyclic Aromatic Hydrocarbons	Benzene	µg/L	0.5	<0.5
		Toluene	µg/L	0.5	<0.5
		Ethylbenzene	µg/L	0.5	<0.5
		m/p-xylene	µg/L	1	<1
		o-xylene	µg/L	0.5	<0.5
		Styrene (Vinyl benzene)	µg/L	0.5	<0.5
		Isopropylbenzene (Cumene)	µg/L	0.5	<0.5
		n-propylbenzene	µg/L	0.5	<0.5
		1,3,5-trimethylbenzene	µg/L	0.5	<0.5
		tert-butylbenzene	µg/L	0.5	<0.5
		1,2,4-trimethylbenzene	µg/L	0.5	<0.5
		sec-butylbenzene	µg/L	0.5	<0.5
		p-isopropyltoluene	µg/L	0.5	<0.5
		n-butylbenzene	µg/L	0.5	<0.5
	Nitrogenous Compounds	Acrylonitrile	µg/L	0.5	<0.5
	Oxygenated Compounds	Acetone (2-propanone)	µg/L	10	<10
		MtBE (Methyl-tert-butyl ether)	µg/L	2	<1
		Vinyl acetate	µg/L	10	<10
		MEK (2-butanone)	µg/L	10	<10
		MIBK (4-methyl-2-pentanone)	µg/L	5	<5
		2-hexanone (MBK)	µg/L	5	<5
	Polycyclic VOCs	Naphthalene	µg/L	0.5	<0.5
	Sulphonated	Carbon disulfide	µg/L	2	<2
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	84
		d8-toluene (Surrogate)	%	-	100
		Bromofluorobenzene (Surrogate)	%	-	112
	Trihalomethanes	Chloroform (THM)	µg/L	0.5	<0.5
		Bromodichloromethane (THM)	µg/L	0.5	<0.5
		Dibromochloromethane (THM)	µg/L	0.5	<0.5
		Bromoform (THM)	µg/L	0.5	<0.5

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB212443.001		TRH C6-C9	µg/L	40	<40
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	84
		d8-toluene (Surrogate)	%	-	100
		Bromofluorobenzene (Surrogate)	%	-	112

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Ammonia Nitrogen by Discrete Analyser (Aquakem)

Method: ME-(AU)-[ENV]AN291

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212901.002	LB212360.020	Ammonia Nitrogen, NH_3 as N	mg/L	0.005	0.74	0.74	16	0
SE212914.004	LB212360.014	Ammonia Nitrogen, NH_3 as N	mg/L	0.005	290	270	15	7

Anions by Ion Chromatography in Water

Method: ME-(AU)-[ENV]AN245

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212822.002	LB212280.015	Nitrate Nitrogen, NO3-N	mg/L	0.005	0.22	0.22	17	1
		Sulfate, SO4	mg/L	1	13	13	23	0
SE212916.005	LB212280.023	Nitrate Nitrogen, NO3-N	mg/L	0.005	3.9	3.8	15	3
		Sulfate, SO4	mg/L	1	28	27	19	3

Filterable Reactive Phosphorus (FRP)

Method: ME-(AU)-[ENV]AN278

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212914.004	LB212360.014	Filterable Reactive Phosphorus as P	mg/L	0.005	<0.005	<0.005	172	0

Mercury (total) in Water

Method: ME-(AU)-[ENV]AN311(Perth) /AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212973.008	LB212390.011	Total Mercury	µg/L	0.0001	<0.0001	<0.0001	200	0

TKN Kjeldahl Digestion by Discrete Analyser

Method: ME-(AU)-[ENV]AN292

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE213048.010	LB212684.014	Total Kjeldahl Nitrogen	mg/L	0.05	2.2	2.2	17	1
SE213055.001	LB212684.027	Total Kjeldahl Nitrogen	mg/L	0.05	0.89	0.99	20	11

Total Phosphorus by Kjeldahl Digestion DA in Water

Method: ME-(AU)-[ENV]AN279/AN293(Sydney only)

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE213048.010	LB212684.014	Total Phosphorus (Kjeldahl Digestion) as P	mg/L	0.02	0.10	0.09	36	7
SE213055.001	LB212684.027	Total Phosphorus (Kjeldahl Digestion) as P	mg/L	0.02	0.09	0.11	35	24

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212967.001	LB212417.014	Arsenic, As	µg/L	1	15	14	22	1
		Cadmium, Cd	µg/L	0.1	<0.1	<0.1	200	0
		Chromium, Cr	µg/L	1	6	6	32	2
		Copper, Cu	µg/L	1	<1	<1	200	0
		Lead, Pb	µg/L	1	<1	<1	200	0
		Nickel, Ni	µg/L	1	13	13	23	2
		Zinc, Zn	µg/L	5	5	5	111	1
SE212969.002	LB212417.021	Arsenic, As	µg/L	1	<1	<1	124	0
		Cadmium, Cd	µg/L	0.1	<0.1	<0.1	200	0
		Chromium, Cr	µg/L	1	<1	<1	200	0
		Copper, Cu	µg/L	1	<1	<1	200	0
		Lead, Pb	µg/L	1	<1	<1	200	0
		Nickel, Ni	µg/L	1	9	9	26	1
		Zinc, Zn	µg/L	5	<5	<5	163	0

Trace Metals (Total) in Water by ICPMS

Method: ME-(AU)-[ENV]AN022/AN318

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212998.001	LB212420.014	Total Arsenic	µg/L	1	63	92	16	38 ②
		Total Cadmium	µg/L	0.1	17	20	16	16 ②
		Total Copper	µg/L	1	2100	3300	15	44 ②
		Total Lead	µg/L	1	330	380	15	13
		Total Nickel	µg/L	1	250	300	15	17 ②
		Total Zinc	µg/L	5	51000	56000	15	9

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Original	Duplicate	Parameter	Units	LOR

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOCs in Water (continued) — **Method: ME-(AU)-[ENV]AN433**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212916.001	LB212443.023	Fumigants	2,2-dichloropropane	µg/L	0.5	<0.5	0	200	0
			1,2-dichloropropane	µg/L	0.5	<0.5	0.0050636454	200	0
			cis-1,3-dichloropropene	µg/L	0.5	<0.5	0.0005909013	200	0
			trans-1,3-dichloropropene	µg/L	0.5	<0.5	0	200	0
			1,2-dibromoethane (EDB)	µg/L	0.5	<0.5	0	200	0
		Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	µg/L	5	<5	0.0163396282	200	0
			Chloromethane	µg/L	5	<5	0.1945730047	200	0
			Vinyl chloride (Chloroethene)	µg/L	0.3	<0.3	0.2878267444	200	0
			Bromomethane	µg/L	10	<10	0.0417470720	200	0
			Chloroethane	µg/L	5	<5	0.0141807293	200	0
			Trichlorofluoromethane	µg/L	1	<1	0.0020149147	200	0
			Iodomethane	µg/L	5	<5	0.0504205284	200	0
			1,1-dichloroethene	µg/L	0.5	<0.5	0.0254565491	200	0
			Dichloromethane (Methylene chloride)	µg/L	5	<5	0.1024987079	200	0
			Allyl chloride	µg/L	2	<2	0.0227217072	200	0
			trans-1,2-dichloroethene	µg/L	0.5	<0.5	0.1344033917	200	0
			1,1-dichloroethane	µg/L	0.5	<0.5	0.0228991074	200	0
			cis-1,2-dichloroethene	µg/L	0.5	6.9	5.5268229014	38	22
			Bromochloromethane	µg/L	0.5	<0.5	0.0022476284	200	0
			1,2-dichloroethane	µg/L	0.5	<0.5	0	200	0
			1,1,1-trichloroethane	µg/L	0.5	<0.5	0	200	0
			1,1-dichloropropene	µg/L	0.5	<0.5	0	200	0
			Carbon tetrachloride	µg/L	0.5	<0.5	0.0036136423	200	0
			Dibromomethane	µg/L	0.5	<0.5	0.0015138951	200	0
			Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	0.6	1.3034071228	81	67
			1,1,2-trichloroethane	µg/L	0.5	<0.5	0	200	0
			1,3-dichloropropane	µg/L	0.5	<0.5	0.2859951121	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	<0.5	1.5854448172	86	104 ⓡ
			1,1,1,2-tetrachloroethane	µg/L	0.5	<0.5	0	200	0
			cis-1,4-dichloro-2-butene	µg/L	1	<1	0.0191617750	200	0
			1,1,2,2-tetrachloroethane	µg/L	0.5	<0.5	0.0182382906	200	0
			1,2,3-trichloropropane	µg/L	0.5	<0.5	0	200	0
			trans-1,4-dichloro-2-butene	µg/L	1	<1	0	200	0
			1,2-dibromo-3-chloropropane	µg/L	0.5	<0.5	0	200	0
			Hexachlorobutadiene	µg/L	0.5	<0.5	0.0286504494	200	0
		Halogenated Aromatics	Chlorobenzene	µg/L	0.5	<0.5	0.0249075300	200	0
			Bromobenzene	µg/L	0.5	<0.5	0.0553096317	200	0
			2-chlorotoluene	µg/L	0.5	<0.5	0	200	0
			4-chlorotoluene	µg/L	0.5	<0.5	0	200	0
			1,3-dichlorobenzene	µg/L	0.5	<0.5	0	200	0
			1,4-dichlorobenzene	µg/L	0.3	<0.3	0.0337944655	200	0
			1,2-dichlorobenzene	µg/L	0.5	<0.5	0.0236166389	200	0
			1,2,4-trichlorobenzene	µg/L	0.5	<0.5	0.0169762706	200	0
			1,2,3-trichlorobenzene	µg/L	0.5	<0.5	0.0160090665	200	0
		Monocyclic Aromatic	Benzene	µg/L	0.5	<0.5	0	200	0
			Toluene	µg/L	0.5	<0.5	0.2265243559	200	0
			Ethylbenzene	µg/L	0.5	<0.5	0.0081149683	200	0
			m/p-xylene	µg/L	1	<1	0.0272860131	200	0
			o-xylene	µg/L	0.5	<0.5	0.0126043596	200	0
			Styrene (Vinyl benzene)	µg/L	0.5	<0.5	0.0073772229	200	0
			Isopropylbenzene (Cumene)	µg/L	0.5	<0.5	0.0231488746	200	0
			n-propylbenzene	µg/L	0.5	<0.5	0.0053896109	200	0
			1,3,5-trimethylbenzene	µg/L	0.5	<0.5	0.0063161816	200	0
			tert-butylbenzene	µg/L	0.5	<0.5	0.0014155792	200	0
			1,2,4-trimethylbenzene	µg/L	0.5	<0.5	0.0054750301	200	0
			sec-butylbenzene	µg/L	0.5	<0.5	0.0081526975	200	0
			p-isopropyltoluene	µg/L	0.5	<0.5	0.0182607085	200	0
			n-butylbenzene	µg/L	0.5	<0.5	0.0109205988	200	0
		Nitrogenous	Acrylonitrile	µg/L	0.5	<0.5	0.0055606765	200	0
		Oxygenated Compounds	Acetone (2-propanone)	µg/L	10	<10	0.7373499699	200	0
			MtBE (Methyl-tert-butyl ether)	µg/L	2	<2	0.0388425777	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOCs in Water (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212916.001	LB212443.023	Oxygenated Compounds	Vinyl acetate	µg/L	10	<10	0	200	0
			MEK (2-butanone)	µg/L	10	<10	0	200	0
			MIBK (4-methyl-2-pentanone)	µg/L	5	<5	0.0118260508	200	0
			2-hexanone (MBK)	µg/L	5	<5	0	200	0
		Polycyclic	Naphthalene	µg/L	0.5	<0.5	0.0727627941	200	0
		Sulphonated	Carbon disulfide	µg/L	2	<2	0.1030461325	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	0.0	9.7967768960	30	4
			d8-toluene (Surrogate)	µg/L	-	0.0	9.8166634706	30	1
			Bromofluorobenzene (Surrogate)	µg/L	-	0.0	10.159275193E	30	8
		Trihalomethanes	Chloroform (THM)	µg/L	0.5	<0.5	0.0618172583	200	0
			Bromodichloromethane (THM)	µg/L	0.5	<0.5	0.0190713840	200	0
			Dibromochloromethane (THM)	µg/L	0.5	<0.5	0	200	0
			Bromoform (THM)	µg/L	0.5	<0.5	0	200	0
SE212967.003	LB212443.022	Fumigants	2,2-dichloropropane	µg/L	0.5	<0.5	<0.5	200	0
			1,2-dichloropropane	µg/L	0.5	<0.5	<0.5	200	0
			cis-1,3-dichloropropene	µg/L	0.5	<0.5	<0.5	200	0
			trans-1,3-dichloropropene	µg/L	0.5	<0.5	<0.5	200	0
			1,2-dibromoethane (EDB)	µg/L	0.5	<0.5	<0.5	200	0
		Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	µg/L	5	<5	<5	200	0
			Chloromethane	µg/L	5	<5	<5	200	0
			Vinyl chloride (Chloroethene)	µg/L	0.3	<0.3	<0.3	200	0
			Bromomethane	µg/L	10	<10	<10	200	0
			Chloroethane	µg/L	5	<5	<5	200	0
			Trichlorofluoromethane	µg/L	1	<1	<1	200	0
			Iodomethane	µg/L	5	<5	<5	200	0
			1,1-dichloroethene	µg/L	0.5	<0.5	<0.5	200	0
			Dichloromethane (Methylene chloride)	µg/L	5	<5	<5	200	0
			Allyl chloride	µg/L	2	<2	<2	200	0
			trans-1,2-dichloroethene	µg/L	0.5	<0.5	<0.5	200	0
			1,1-dichloroethane	µg/L	0.5	<0.5	<0.5	200	0
			cis-1,2-dichloroethene	µg/L	0.5	<0.5	<0.5	200	0
			Bromochloromethane	µg/L	0.5	<0.5	<0.5	200	0
			1,2-dichloroethane	µg/L	0.5	<0.5	<0.5	200	0
			1,1,1-trichloroethane	µg/L	0.5	<0.5	<0.5	200	0
			1,1-dichloropropene	µg/L	0.5	<0.5	<0.5	200	0
			Carbon tetrachloride	µg/L	0.5	<0.5	<0.5	200	0
			Dibromomethane	µg/L	0.5	<0.5	<0.5	200	0
			Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	<0.5	<0.5	200	0
			1,1,2-trichloroethane	µg/L	0.5	<0.5	<0.5	200	0
			1,3-dichloropropane	µg/L	0.5	<0.5	<0.5	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	<0.5	0.5	200	5
			1,1,1,2-tetrachloroethane	µg/L	0.5	<0.5	<0.5	200	0
			cis-1,4-dichloro-2-butene	µg/L	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	µg/L	0.5	<0.5	<0.5	200	0
			1,2,3-trichloropropane	µg/L	0.5	<0.5	<0.5	200	0
			trans-1,4-dichloro-2-butene	µg/L	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	µg/L	0.5	<0.5	<0.5	200	0
			Hexachlorobutadiene	µg/L	0.5	<0.5	<0.5	200	0
		Halogenated Aromatics	Chlorobenzene	µg/L	0.5	<0.5	<0.5	200	0
			Bromobenzene	µg/L	0.5	<0.5	<0.5	200	0
			2-chlorotoluene	µg/L	0.5	<0.5	<0.5	200	0
			4-chlorotoluene	µg/L	0.5	<0.5	<0.5	200	0
			1,3-dichlorobenzene	µg/L	0.5	<0.5	<0.5	200	0
			1,4-dichlorobenzene	µg/L	0.3	<0.3	<0.3	200	0
			1,2-dichlorobenzene	µg/L	0.5	<0.5	<0.5	200	0
			1,2,4-trichlorobenzene	µg/L	0.5	<0.5	<0.5	200	0
			1,2,3-trichlorobenzene	µg/L	0.5	<0.5	<0.5	200	0
		Monocyclic Aromatic	Benzene	µg/L	0.5	<0.5	<0.5	200	0
			Toluene	µg/L	0.5	<0.5	<0.5	200	0
			Ethylbenzene	µg/L	0.5	<0.5	<0.5	200	0
			m/p-xylene	µg/L	1	<1	<1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOCs in Water (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212967.003	LB212443.022	Monocyclic	o-xylene	µg/L	0.5	<0.5	<0.5	200	0
		Aromatic	Styrene (Vinyl benzene)	µg/L	0.5	<0.5	<0.5	200	0
			Isopropylbenzene (Cumene)	µg/L	0.5	<0.5	<0.5	200	0
			n-propylbenzene	µg/L	0.5	<0.5	<0.5	200	0
			1,3,5-trimethylbenzene	µg/L	0.5	<0.5	<0.5	200	0
			tert-butylbenzene	µg/L	0.5	<0.5	<0.5	200	0
			1,2,4-trimethylbenzene	µg/L	0.5	<0.5	<0.5	200	0
			sec-butylbenzene	µg/L	0.5	<0.5	<0.5	200	0
			p-isopropyltoluene	µg/L	0.5	<0.5	<0.5	200	0
			n-butylbenzene	µg/L	0.5	<0.5	<0.5	200	0
		Nitrogenous	Acrylonitrile	µg/L	0.5	<0.5	<0.5	200	0
		Oxygenated	Acetone (2-propanone)	µg/L	10	<10	<10	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	µg/L	2	<2	<2	200	0
			Vinyl acetate	µg/L	10	<10	<10	200	0
			MEK (2-butanone)	µg/L	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	µg/L	5	<5	<5	200	0
			2-hexanone (MBK)	µg/L	5	<5	<5	200	0
		Polycyclic	Naphthalene	µg/L	0.5	<0.5	<0.5	200	0
		Sulphonated	Carbon disulfide	µg/L	2	<2	<2	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	8.9	9.8	30	10
			d8-toluene (Surrogate)	µg/L	-	9.5	9.8	30	3
			Bromofluorobenzene (Surrogate)	µg/L	-	10.0	10.2	30	2
		Trihalomethan	Chloroform (THM)	µg/L	0.5	<0.5	<0.5	200	0
		es	Bromodichloromethane (THM)	µg/L	0.5	<0.5	<0.5	200	0
			Dibromochloromethane (THM)	µg/L	0.5	<0.5	<0.5	200	0
			Bromoform (THM)	µg/L	0.5	<0.5	<0.5	200	0

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212916.001	LB212443.023		TRH C6-C10	µg/L	50	<50	0	200	0
			TRH C6-C9	µg/L	40	<40	0	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	0.0	9.7967768960	30	4
			d8-toluene (Surrogate)	µg/L	-	0.0	9.8166634706	30	1
			Bromofluorobenzene (Surrogate)	µg/L	-	0.0	10.159275193	30	8
		VPH F Bands	Benzene (F0)	µg/L	0.5	<0.5	0	200	0
			TRH C6-C10 minus BTEX (F1)	µg/L	50	<50	0	200	0
SE212967.003	LB212443.022		TRH C6-C10	µg/L	50	<50	<50	200	0
			TRH C6-C9	µg/L	40	<40	<40	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	8.9	9.8	30	10
			d8-toluene (Surrogate)	µg/L	-	9.5	9.8	30	3
			Bromofluorobenzene (Surrogate)	µg/L	-	10.0	10.2	30	2
		VPH F Bands	Benzene (F0)	µg/L	0.5	<0.5	0	200	0
			TRH C6-C10 minus BTEX (F1)	µg/L	50	<50	<50	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Ammonia Nitrogen by Discrete Analyser (Aquakem)

Method: ME-(AU)-[ENV]AN291

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212360.002	Ammonia Nitrogen, NH_3 as N	mg/L	0.005	2.5	2.5	80 - 120	99

Anions by Ion Chromatography in Water

Method: ME-(AU)-[ENV]AN245

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212280.002	Nitrate Nitrogen, NO3-N	mg/L	0.005	1.9	2	80 - 120	97
	Sulfate, SO4	mg/L	1	19	20	80 - 120	95

Filterable Reactive Phosphorus (FRP)

Method: ME-(AU)-[ENV]AN278

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212360.002	Filterable Reactive Phosphorus as P	mg/L	0.005	0.096	0.1	80 - 120	96

Nitrite in Water

Method: ME-(AU)-[ENV]AN277

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212360.002	Nitrite Nitrogen, NO2 as N	mg/L	0.005	0.093	0.1	80 - 120	93

Speciated Phenols in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212661.002		Phenol	µg/L	0.5	44	40	60 - 140	111
		2,4-dichlorophenol	µg/L	0.5	51	40	60 - 140	128
		2,4,6-trichlorophenol	µg/L	0.5	44	40	60 - 140	111
		Pentachlorophenol	µg/L	0.5	28	40	60 - 140	71
	Surrogates	2,4,6-Tribromophenol (Surrogate)	µg/L	-	4.2	5	40 - 130	84
		d5-phenol (Surrogate)	µg/L	-	2.4	2	40 - 130	118

Sulfide by Titration in Water

Method: ME-(AU)-[ENV]AN149

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212687.002	Sulfide	mg/L	0.5	95	100	70 - 130	95

Total Phosphorus by Kjeldahl Digestion DA in Water

Method: ME-(AU)-[ENV]AN279/AN293(Sydney only)

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212684.002	Total Phosphorus (Kjeldahl Digestion) as P	mg/L	0.02	0.91	1	80 - 120	91

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212417.002	Arsenic, As	µg/L	1	19	20	80 - 120	93
	Beryllium, Be	µg/L	1	20	20	80 - 120	99
	Boron, B	µg/L	5	20	20	80 - 120	101
	Cadmium, Cd	µg/L	0.1	21	20	80 - 120	105
	Chromium, Cr	µg/L	1	21	20	80 - 120	106
	Cobalt, Co	µg/L	1	21	20	80 - 120	106
	Copper, Cu	µg/L	1	22	20	80 - 120	108
	Lead, Pb	µg/L	1	19	20	80 - 120	96
	Manganese, Mn	µg/L	1	21	20	80 - 120	106
	Nickel, Ni	µg/L	1	21	20	80 - 120	104
	Zinc, Zn	µg/L	5	21	20	80 - 120	107

Trace Metals (Total) in Water by ICPMS

Method: ME-(AU)-[ENV]AN022/AN318

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212420.002	Total Arsenic	µg/L	1	18	20	80 - 120	91
	Total Beryllium	µg/L	1	20	20	80 - 120	98
	Total Boron	µg/L	5	20	20	80 - 120	102
	Total Cadmium	µg/L	0.1	21	20	80 - 120	104
	Total Chromium	µg/L	1	22	20	80 - 120	111
	Total Cobalt	µg/L	1	22	20	80 - 120	110

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Trace Metals (Total) in Water by ICPMS (continued)

Method: ME-(AU)-[ENV]AN022/AN318

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212420.002		Total Copper	µg/L	1	22	20	80 - 120	112
		Total Lead	µg/L	1	20	20	80 - 120	98
		Total Magnesium	µg/L	100	<100	20	80 - 120	111
		Total Nickel	µg/L	1	22	20	80 - 120	109
		Total Zinc	µg/L	5	21	20	80 - 120	104

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212661.002		TRH C10-C14	µg/L	50	1000	1200	60 - 140	87
		TRH C15-C28	µg/L	200	1200	1200	60 - 140	97
		TRH C29-C36	µg/L	200	950	1200	60 - 140	79
	TRH F Bands	TRH >C10-C16	µg/L	60	1100	1200	60 - 140	91
		TRH >C16-C34 (F3)	µg/L	500	1100	1200	60 - 140	94
		TRH >C34-C40 (F4)	µg/L	500	<500	600	60 - 140	74

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212443.002	Halogenated	1,1-dichloroethene	µg/L	0.5	47	45.45	60 - 140	103
	Aliphatics	1,2-dichloroethane	µg/L	0.5	56	45.45	60 - 140	122
		Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	45	45.45	60 - 140	99
	Halogenated	Chlorobenzene	µg/L	0.5	56	45.45	60 - 140	123
	Monocyclic	Benzene	µg/L	0.5	45	45.45	60 - 140	100
	Aromatic	Toluene	µg/L	0.5	47	45.45	60 - 140	103
		Ethylbenzene	µg/L	0.5	49	45.45	60 - 140	109
		m/p-xylene	µg/L	1	95	90.9	60 - 140	105
		o-xylene	µg/L	0.5	51	45.45	60 - 140	111
	Trihalomethan	Chloroform (THM)	µg/L	0.5	48	45.45	60 - 140	105

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212443.002		TRH C6-C10	µg/L	50	1100	946.63	60 - 140	112
		TRH C6-C9	µg/L	40	940	818.71	60 - 140	115
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	µg/L	50	770	639.67	60 - 140	120

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Ammonia Nitrogen by Discrete Analyser (Aquakem)

Method: ME-(AU)-[ENV]AN291

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212611.001	LB212360.004	Ammonia Nitrogen, NH_3 as N	mg/L	0.005	2.5	<0.01	2.5	100

Anions by Ion Chromatography in Water

Method: ME-(AU)-[ENV]AN245

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212857.001	LB212280.005	Nitrate Nitrogen, NO3-N	mg/L	0.005	2.0	0.090	2	97

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212916.001	LB212673.004	Mercury	mg/L	0.0001	0.0020	<0.0001	0.008	99

Mercury (total) in Water

Method: ME-(AU)-[ENV]AN311(Perth) /AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212916.005	LB212390.004	Total Mercury	mg/L	0.0001	0.0019	<0.0001	-	-

Nitrite in Water

Method: ME-(AU)-[ENV]AN277

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212611.001	LB212360.004	Nitrite Nitrogen, NO2 as N	mg/L	0.005	0.088	<0.005	0.1	87

TKN Kjeldahl Digestion by Discrete Analyser

Method: ME-(AU)-[ENV]AN292

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE213018.001	LB212684.028	Total Kjeldahl Nitrogen	mg/L	0.05	3.5	0.91	2.5	102

Total Phosphorus by Kjeldahl Digestion DA in Water

Method: ME-(AU)-[ENV]AN279/AN293(Sydney only)

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE213018.001	LB212684.028	Total Phosphorus (Kjeldahl Digestion) as P	mg/L	0.02	1.0	0.09	1	91

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212914.001	LB212417.004	Arsenic, As	µg/L	1	25	2	20	113
		Cadmium, Cd	µg/L	0.1	22	<0.1	20	110
		Chromium, Cr	µg/L	1	26	4	20	109
		Copper, Cu	µg/L	1	22	<1	20	107
		Lead, Pb	µg/L	1	19	<1	20	96
		Nickel, Ni	µg/L	1	29	9	20	101
		Zinc, Zn	µg/L	5	31	10	20	103

Trace Metals (Total) in Water by ICPMS

Method: ME-(AU)-[ENV]AN022/AN318

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212901.001	LB212420.004	Total Chromium	µg/L	1	22	<1	-	-
		Total Copper	µg/L	1	20	<1	20	98
		Total Lead	µg/L	1	20	<1	20	99
		Total Zinc	µg/L	5	20	<5	20	92

VOCs in Water

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212916.005	LB212443.024	Monocyclic Aromatic	Benzene	µg/L	0.5	52	<0.5	45.45	114
			Toluene	µg/L	0.5	54	<0.5	45.45	118
			Ethylbenzene	µg/L	0.5	54	<0.5	45.45	118
			m/p-xylene	µg/L	1	110	<1	90.9	118

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOCs in Water (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212916.005	LB212443.024	Monocyclic	o-xylene	µg/L	0.5	55	<0.5	45.45	120
		Polycyclic	Naphthalene	µg/L	0.5	53	<0.5	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/L	-	10.7	0.0	-	107
			d8-toluene (Surrogate)	mg/L	-	10.7	0.0	-	107
			Bromofluorobenzene (Surrogate)	mg/L	-	10.0	0.0	-	100

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212916.005	LB212443.024		TRH C6-C10	µg/L	50	950	<50	946.63	100
			TRH C6-C9	µg/L	40	840	<40	818.71	102
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/L	-	10.7	0.0	-	107
			d8-toluene (Surrogate)	mg/L	-	10.7	0.0	-	107
			Bromofluorobenzene (Surrogate)	mg/L	-	10.0	0.0	-	100
		VPH F	Benzene (F0)	µg/L	0.5		<0.5	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	µg/L	50	630	<50	639.67	97

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
***	Indicates that both * and ** apply.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.
①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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This test report shall not be reproduced, except in full.

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ NEWCASTLE: 10 Kings Road New Lambton, NSW 2305
- ☒ SYDNEY: 202 Submarine School, Sub Base Platypus, North Sydney, 2060
- ✓ MELBOURNE: Suite 2, 7 Dorrville Avenue, Hawthorn, VIC 3122
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2601
- ☐ MACKAY: 21 River Street, Mackay, QLD 4741
- ☐ PERTH: 503 Murray Street, Perth, WA 6001
- ☐ TOWNSVILLE: 514 Stuart Street, Townsville, QLD 4811
- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0821

CLIENT: Defence Housing Australia

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGER: [redacted]

PM CONTACT No: [redacted]

LABORATORY: SGS

LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015

SAMPLER: [redacted]

SAMPLER CONTACT No: [redacted]

Email Reports and Invoices to: LQRSYD@slrconsulting.com, [redacted]

Turnaround Time (TAT): ✓ Standard TAT; ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number: 1 of 1

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	Suite F	Suite E and H	Suite E, H, D and MTBEs	PFAS			HOLD	Additional Information (Comment on any gross contamination or specific requirements)
1	GW01	29-10-2020	Water		X				X				
2	GW02	29-10-2020	Water				X		X				
3	GW03	29-10-2020	Water		X				X				
4	GW04	29-10-2020	Water		X				X				
5	GW05	29-10-2020	Water			X			X				
6	GW06	29-10-2020	Water			X			X				
7	GW07	29-10-2020	Water					X	X				
8	GW09	29-10-2020	Water		X				X				
9	GW19	29-10-2020	Water		X				X				

SGS EHS Sydney COC

SE212970

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 29-10-2020	**Received by**	Sign [redacted]	Date / Time 29/10/20 @ 4:20	Temperature Received: 15°C
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

source: SE_Addressed.pdf page: 1 SDG Ref: SE212970_COC

SAMPLE RECEIPT ADVICE

SE212970

CLIENT DETAILS

Contact	LQRSYD
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	02 9427 8100
Facsimile	02 9427 8200
Email	lqrsyd@slrconsulting.com
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	9

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Thu 29/10/2020
Report Due	Fri 6/11/2020
SGS Reference	**SE212970**

SUBMISSION DETAILS

This is to confirm that 9 samples were received on Thursday 29/10/2020. Results are expected to be ready by COB Friday 6/11/2020. Please quote SGS reference SE212970 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	9 Water
Date documentation received	29/10/2020	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	15°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

PFAS and Explosives subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420.

This document is issued by the Company under its General Conditions of Service accessible at www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

SAMPLE RECEIPT ADVICE

SE212970

CLIENT DETAILS

Client SLR CONSULTING AUSTRALIA PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Water	OP Pesticides in Water	PAH (Polynuclear Aromatic Hydrocarbons) in Water	PCBs in Water	Speciated Phenols in Water	TRH (Total Recoverable Hydrocarbons) in Water	VOCs in Water	Volatile Petroleum Hydrocarbons in Water
001	GW01	28	13	22	11	18	9	78	7
002	GW02	-	-	22	-	-	-	-	-
003	GW03	28	13	22	11	18	9	78	7
004	GW04	28	13	22	11	18	9	78	7
005	GW05	-	-	-	11	-	9	78	7
006	GW06	-	-	-	11	-	9	78	7
007	GW07	-	-	22	-	18	9	78	7
008	GW09	28	13	22	11	18	9	78	7
009	GW19	28	13	22	11	18	9	78	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE212970

CLIENT DETAILS

Client SLR CONSULTING AUSTRALIA PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Explosives in Water	Mercury (dissolved) in Water	Per- and Polyfluoroalkyl Substances (PFAS) in	Trace Metals (Dissolved) in Water by ICPMS	Trace Metals (Total) in Water by ICPMS
001	GW01	-	1	55	7	-
002	GW02	16	-	55	-	11
003	GW03	-	1	55	7	-
004	GW04	-	1	55	7	-
005	GW05	-	1	55	7	-
006	GW06	-	1	55	7	-
007	GW07	16	-	55	1	11
008	GW09	-	1	55	7	-
009	GW19	-	1	55	7	-

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE212970

CLIENT DETAILS

Client SLR CONSULTING AUSTRALIA PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Mercury (total) in Water
002	GW02	1
007	GW07	1

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	LQRSYD
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	02 9427 8100
Facsimile	02 9427 8200
Email	lqrsyd@slrconsulting.com
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	9

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE212970 R0**
Date Received	29/10/2020
Date Reported	11/11/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

FAS and Explosives subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420. Report Number ME317193
MA-1523 Majority of surrogates are within acceptance criteria.
LL PAH/OC/OP/PCB subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420. PFAS and Explosives subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420. ME317193A.

SIGNATORIES

[redacted]

Chemist

Metals/Inorganics Team Leader

VOCs in Water [AN433] Tested: 4/11/2020

PARAMETER	UOM	LOR	GW01 WATER - 29/10/2020 SE212970.001	GW03 WATER - 29/10/2020 SE212970.003	GW04 WATER - 29/10/2020 SE212970.004	GW05 WATER - 29/10/2020 SE212970.005	GW06 WATER - 29/10/2020 SE212970.006
Benzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Toluene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
m/p-xylene	µg/L	1	<1	<1	<1	<1	<1
o-xylene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Total Xylenes	µg/L	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
Total BTEX	µg/L	3	<3	<3	<3	<3	<3
Dichlorodifluoromethane (CFC-12)	µg/L	5	<5	<5	<5	<5	<5
Chloromethane	µg/L	5	<5	<5	<5	<5	<5
Vinyl chloride (Chloroethene)	µg/L	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Bromomethane	µg/L	10	<10	<10	<10	<10	<10
Chloroethane	µg/L	5	<5	<5	<5	<5	<5
Trichlorofluoromethane	µg/L	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	µg/L	10	<10	<10	<10	<10	<10
Iodomethane	µg/L	5	<5	<5	<5	<5	<5
1,1-dichloroethene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Acrylonitrile	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dichloromethane (Methylene chloride)	µg/L	5	<5	<5	<5	<5	<5
Allyl chloride	µg/L	2	<2	<2	<2	<2	<2
Carbon disulfide	µg/L	2	<2	<2	<2	<2	<2
trans-1,2-dichloroethene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MtBE (Methyl-tert-butyl ether)	µg/L	2	<2	<2	<2	<2	<2
1,1-dichloroethane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Vinyl acetate	µg/L	10	<10	<10	<10	<10	<10
MEK (2-butanone)	µg/L	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromochloromethane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroform (THM)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,2-dichloropropane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-dichloroethane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-trichloroethane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1-dichloropropene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Carbon tetrachloride	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-dichloropropane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitropropane	µg/L	100	<100	<100	<100	<100	<100
Bromodichloromethane (THM)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MIBK (4-methyl-2-pentanone)	µg/L	5	<5	<5	<5	<5	<5
cis-1,3-dichloropropene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,3-dichloropropene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-trichloroethane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,3-dichloropropane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane (THM)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-hexanone (MBK)	µg/L	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1,2-tetrachloroethane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform (THM)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
cis-1,4-dichloro-2-butene	µg/L	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2,2-tetrachloroethane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2,3-trichloropropane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,4-dichloro-2-butene	µg/L	1	<1	<1	<1	<1	<1

VOCs in Water [AN433] Tested: 4/11/2020 (continued)

PARAMETER	UOM	LOR	GW01 WATER - 29/10/2020 SE212970.001	GW03 WATER - 29/10/2020 SE212970.003	GW04 WATER - 29/10/2020 SE212970.004	GW05 WATER - 29/10/2020 SE212970.005	GW06 WATER - 29/10/2020 SE212970.006
Isopropylbenzene (Cumene)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromobenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
n-propylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-chlorotoluene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-chlorotoluene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,3,5-trimethylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
tert-butylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2,4-trimethylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
sec-butylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,3-dichlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,4-dichlorobenzene	µg/L	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
p-isopropyltoluene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-dichlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
n-butylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-dibromo-3-chloropropane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2,4-trichlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Hexachlorobutadiene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2,3-trichlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Total VOC	µg/L	10	<10	<10	<10	<10	<10

VOCs in Water [AN433] Tested: 4/11/2020 (continued)

PARAMETER	UOM	LOR	GW07 WATER - 29/10/2020 SE212970.007	GW09 WATER - 29/10/2020 SE212970.008	GW19 WATER - 29/10/2020 SE212970.009
Benzene	µg/L	0.5	<0.5	<0.5	<0.5
Toluene	µg/L	0.5	<0.5	<0.5	<0.5
Ethylbenzene	µg/L	0.5	<0.5	<0.5	<0.5
m/p-xylene	µg/L	1	<1	<1	<1
o-xylene	µg/L	0.5	<0.5	<0.5	<0.5
Naphthalene	µg/L	0.5	<0.5	<0.5	<0.5
Total Xylenes	µg/L	1.5	<1.5	<1.5	<1.5
Total BTEX	µg/L	3	<3	<3	<3
Dichlorodifluoromethane (CFC-12)	µg/L	5	<5	<5	<5
Chloromethane	µg/L	5	<5	<5	<5
Vinyl chloride (Chloroethene)	µg/L	0.3	<0.3	<0.3	<0.3
Bromomethane	µg/L	10	<10	<10	<10
Chloroethane	µg/L	5	<5	<5	<5
Trichlorofluoromethane	µg/L	1	<1	<1	<1
Acetone (2-propanone)	µg/L	10	<10	<10	<10
Iodomethane	µg/L	5	<5	<5	<5
1,1-dichloroethene	µg/L	0.5	<0.5	<0.5	<0.5
Acrylonitrile	µg/L	0.5	<0.5	<0.5	<0.5
Dichloromethane (Methylene chloride)	µg/L	5	<5	<5	<5
Allyl chloride	µg/L	2	<2	<2	<2
Carbon disulfide	µg/L	2	<2	<2	<2
trans-1,2-dichloroethene	µg/L	0.5	<0.5	<0.5	<0.5
MtBE (Methyl-tert-butyl ether)	µg/L	2	<2	<2	<2
1,1-dichloroethane	µg/L	0.5	<0.5	<0.5	<0.5
Vinyl acetate	µg/L	10	<10	<10	<10
MEK (2-butanone)	µg/L	10	<10	<10	<10
cis-1,2-dichloroethene	µg/L	0.5	<0.5	<0.5	<0.5
Bromochloromethane	µg/L	0.5	<0.5	<0.5	<0.5
Chloroform (THM)	µg/L	0.5	<0.5	<0.5	<0.5
2,2-dichloropropane	µg/L	0.5	<0.5	<0.5	<0.5
1,2-dichloroethane	µg/L	0.5	<0.5	<0.5	<0.5
1,1,1-trichloroethane	µg/L	0.5	<0.5	<0.5	<0.5
1,1-dichloropropene	µg/L	0.5	<0.5	<0.5	<0.5
Carbon tetrachloride	µg/L	0.5	<0.5	<0.5	<0.5
Dibromomethane	µg/L	0.5	<0.5	<0.5	<0.5
1,2-dichloropropane	µg/L	0.5	<0.5	<0.5	<0.5
Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	<0.5	<0.5	<0.5
2-nitropropane	µg/L	100	<100	<100	<100
Bromodichloromethane (THM)	µg/L	0.5	<0.5	<0.5	<0.5
MIBK (4-methyl-2-pentanone)	µg/L	5	<5	<5	<5
cis-1,3-dichloropropene	µg/L	0.5	<0.5	<0.5	<0.5
trans-1,3-dichloropropene	µg/L	0.5	<0.5	<0.5	<0.5
1,1,2-trichloroethane	µg/L	0.5	<0.5	<0.5	<0.5
1,3-dichloropropane	µg/L	0.5	<0.5	<0.5	<0.5
Dibromochloromethane (THM)	µg/L	0.5	<0.5	<0.5	<0.5
2-hexanone (MBK)	µg/L	5	<5	<5	<5
1,2-dibromoethane (EDB)	µg/L	0.5	<0.5	<0.5	<0.5
Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	<0.5	<0.5	<0.5
1,1,1,2-tetrachloroethane	µg/L	0.5	<0.5	<0.5	<0.5
Chlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5
Bromoform (THM)	µg/L	0.5	<0.5	<0.5	<0.5
cis-1,4-dichloro-2-butene	µg/L	1	<1	<1	<1
Styrene (Vinyl benzene)	µg/L	0.5	<0.5	<0.5	<0.5
1,1,2,2-tetrachloroethane	µg/L	0.5	<0.5	<0.5	<0.5
1,2,3-trichloropropane	µg/L	0.5	<0.5	<0.5	<0.5
trans-1,4-dichloro-2-butene	µg/L	1	<1	<1	<1

VOCs in Water [AN433] Tested: 4/11/2020 (continued)

PARAMETER	UOM	LOR	GW07 WATER - 29/10/2020 SE212970.007	GW09 WATER - 29/10/2020 SE212970.008	GW19 WATER - 29/10/2020 SE212970.009
Isopropylbenzene (Cumene)	µg/L	0.5	<0.5	<0.5	<0.5
Bromobenzene	µg/L	0.5	<0.5	<0.5	<0.5
n-propylbenzene	µg/L	0.5	<0.5	<0.5	<0.5
2-chlorotoluene	µg/L	0.5	<0.5	<0.5	<0.5
4-chlorotoluene	µg/L	0.5	<0.5	<0.5	<0.5
1,3,5-trimethylbenzene	µg/L	0.5	<0.5	<0.5	<0.5
tert-butylbenzene	µg/L	0.5	<0.5	<0.5	<0.5
1,2,4-trimethylbenzene	µg/L	0.5	<0.5	<0.5	<0.5
sec-butylbenzene	µg/L	0.5	<0.5	<0.5	<0.5
1,3-dichlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5
1,4-dichlorobenzene	µg/L	0.3	<0.3	<0.3	<0.3
p-isopropyltoluene	µg/L	0.5	<0.5	<0.5	<0.5
1,2-dichlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5
n-butylbenzene	µg/L	0.5	<0.5	<0.5	<0.5
1,2-dibromo-3-chloropropane	µg/L	0.5	<0.5	<0.5	<0.5
1,2,4-trichlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5
Hexachlorobutadiene	µg/L	0.5	<0.5	<0.5	<0.5
1,2,3-trichlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5
Total VOC	µg/L	10	<10	<10	<10

Volatile Petroleum Hydrocarbons in Water [AN433] Tested: 4/11/2020

PARAMETER	UOM	LOR	GW01 WATER - 29/10/2020 SE212970.001	GW03 WATER - 29/10/2020 SE212970.003	GW04 WATER - 29/10/2020 SE212970.004	GW05 WATER - 29/10/2020 SE212970.005	GW06 WATER - 29/10/2020 SE212970.006
Benzene (F0)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TRH C6-C9	µg/L	40	<40	<40	<40	<40	<40
TRH C6-C10	µg/L	50	<50	<50	<50	<50	<50
TRH C6-C10 minus BTEX (F1)	µg/L	50	<50	<50	<50	<50	<50

PARAMETER	UOM	LOR	GW07 WATER - 29/10/2020 SE212970.007	GW09 WATER - 29/10/2020 SE212970.008	GW19 WATER - 29/10/2020 SE212970.009
Benzene (F0)	µg/L	0.5	<0.5	<0.5	<0.5
TRH C6-C9	µg/L	40	<40	<40	<40
TRH C6-C10	µg/L	50	<50	<50	<50
TRH C6-C10 minus BTEX (F1)	µg/L	50	<50	<50	<50

TRH (Total Recoverable Hydrocarbons) in Water [AN403] Tested: 4/11/2020

PARAMETER	UOM	LOR	GW01 WATER - 29/10/2020 SE212970.001	GW03 WATER - 29/10/2020 SE212970.003	GW04 WATER - 29/10/2020 SE212970.004	GW05 WATER - 29/10/2020 SE212970.005	GW06 WATER - 29/10/2020 SE212970.006
TRH C10-C14	µg/L	50	<50	<50	<50	<50	<50
TRH C15-C28	µg/L	200	<200	<200	<200	<200	<200
TRH C29-C36	µg/L	200	<200	<200	<200	<200	<200
TRH C37-C40	µg/L	200	<200	<200	<200	<200	<200
TRH >C10-C16	µg/L	60	<60	<60	<60	<60	<60
TRH >C10-C16 - Naphthalene (F2)	µg/L	60	<60	<60	<60	<60	<60
TRH >C16-C34 (F3)	µg/L	500	<500	<500	<500	<500	<500
TRH >C34-C40 (F4)	µg/L	500	<500	<500	<500	<500	<500
TRH C10-C40	µg/L	320	<320	<320	<320	<320	<320

PARAMETER	UOM	LOR	GW07 WATER - 29/10/2020 SE212970.007	GW09 WATER - 29/10/2020 SE212970.008	GW19 WATER - 29/10/2020 SE212970.009
TRH C10-C14	µg/L	50	<50	<50	<50
TRH C15-C28	µg/L	200	<200	<200	<200
TRH C29-C36	µg/L	200	<200	<200	<200
TRH C37-C40	µg/L	200	<200	<200	<200
TRH >C10-C16	µg/L	60	<60	<60	<60
TRH >C10-C16 - Naphthalene (F2)	µg/L	60	<60	<60	<60
TRH >C16-C34 (F3)	µg/L	500	<500	<500	<500
TRH >C34-C40 (F4)	µg/L	500	<500	<500	<500
TRH C10-C40	µg/L	320	<320	<320	<320

Speciated Phenols in Water [AN420] Tested: 4/11/2020

PARAMETER	UOM	LOR	GW01 WATER - 29/10/2020 SE212970.001	GW03 WATER - 29/10/2020 SE212970.003	GW04 WATER - 29/10/2020 SE212970.004	GW07 WATER - 29/10/2020 SE212970.007	GW09 WATER - 29/10/2020 SE212970.008
Phenol	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	µg/L	1	<1	<1	<1	<1	<1
Total Cresol	µg/L	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	µg/L	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	µg/L	1	<1	<1	<1	<1	<1
Pentachlorophenol	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	µg/L	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	µg/L	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	GW19 WATER - 29/10/2020 SE212970.009
Phenol	µg/L	0.5	<0.5
2-methyl phenol (o-cresol)	µg/L	0.5	<0.5
3/4-methyl phenol (m/p-cresol)	µg/L	1	<1
Total Cresol	µg/L	1.5	<1.5
2-chlorophenol	µg/L	0.5	<0.5
2,4-dimethylphenol	µg/L	0.5	<0.5
2,6-dichlorophenol	µg/L	0.5	<0.5
2,4-dichlorophenol	µg/L	0.5	<0.5
2,4,6-trichlorophenol	µg/L	0.5	<0.5
2-nitrophenol	µg/L	0.5	<0.5
4-nitrophenol	µg/L	1	<1
2,4,5-trichlorophenol	µg/L	0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	µg/L	1	<1
Pentachlorophenol	µg/L	0.5	<0.5
2,4-dinitrophenol	µg/L	2	<2
4-chloro-3-methylphenol	µg/L	2	<2

Trace Metals (Dissolved) in Water by ICPMS [AN318] Tested: 30/10/2020

PARAMETER	UOM	LOR	GW01 WATER - 29/10/2020 SE212970.001	GW03 WATER - 29/10/2020 SE212970.003	GW04 WATER - 29/10/2020 SE212970.004	GW05 WATER - 29/10/2020 SE212970.005	GW06 WATER - 29/10/2020 SE212970.006
Arsenic, As	µg/L	1	<1	<1	<1	<1	<1
Cadmium, Cd	µg/L	0.1	0.1	<0.1	<0.1	<0.1	<0.1
Chromium, Cr	µg/L	1	<1	<1	<1	<1	<1
Copper, Cu	µg/L	1	120	66	86	59	76
Lead, Pb	µg/L	1	5	2	3	2	2
Nickel, Ni	µg/L	1	11	7	9	5	8
Zinc, Zn	µg/L	5	130	74	83	90	60

PARAMETER	UOM	LOR	GW07 WATER - 29/10/2020 SE212970.007	GW09 WATER - 29/10/2020 SE212970.008	GW19 WATER - 29/10/2020 SE212970.009
Arsenic, As	µg/L	1	-	<1	<1
Cadmium, Cd	µg/L	0.1	-	0.1	0.2
Chromium, Cr	µg/L	1	-	<1	<1
Copper, Cu	µg/L	1	-	110	100
Lead, Pb	µg/L	1	4	5	5
Nickel, Ni	µg/L	1	-	10	11
Zinc, Zn	µg/L	5	-	110	110

Mercury (dissolved) in Water [AN311(Perth)/AN312] Tested: 30/10/2020

PARAMETER	UOM	LOR	GW01 WATER - 29/10/2020 SE212970.001	GW03 WATER - 29/10/2020 SE212970.003	GW04 WATER - 29/10/2020 SE212970.004	GW05 WATER - 29/10/2020 SE212970.005	GW06 WATER - 29/10/2020 SE212970.006
Mercury	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001

PARAMETER	UOM	LOR	GW09 WATER - 29/10/2020 SE212970.008	GW19 WATER - 29/10/2020 SE212970.009
Mercury	mg/L	0.0001	<0.0001	<0.0001

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples [MA-1523] Tested: 9/11/2020

PARAMETER	UOM	LOR	GW01 WATER - 29/10/2020 SE212970.001	GW02 WATER - 29/10/2020 SE212970.002	GW03 WATER - 29/10/2020 SE212970.003	GW04 WATER - 29/10/2020 SE212970.004	GW05 WATER - 29/10/2020 SE212970.005
Perfluorobutanoic acid (PFBA)	µg/L	0.002	**0.009**	<0.002	<0.002	<0.002	**0.007**
Perfluoropentanoic acid (PFPeA)	µg/L	0.002	**0.017**	<0.002	<0.002	<0.002	**0.011**
Perfluorohexanoic acid (PFHxA)	µg/L	0.002	**0.012**	<0.002	**0.003**	**0.010**	**0.027**
Perfluoroheptanoic acid (PFHpA)	µg/L	0.002	<0.002	<0.002	<0.002	<0.002	**0.012**
Perfluorooctanoic Acid (PFOA)	µg/L	0.002	**0.007**	<0.002	**0.013**	**0.013**	**0.023**
Perfluorononanoic acid (PFNA)	µg/L	0.004	**0.008**	<0.004	<0.004	<0.004	<0.004
Perfluorodecanoic acid (PFDA)	µg/L	0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Perfluoroundecanoic acid (PFUnA)	µg/L	0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Perfluorododecanoic acid (PFDoA)	µg/L	0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Perfluorohexadecanoic acid (PFHxDA)	µg/L	0.008	<0.008	<0.008	<0.008	<0.008	<0.008
Perfluorobutane sulfonate (PFBS)	µg/L	0.004	**0.063**	<0.004	**0.006**	**0.005**	**0.054**
Perfluoropentane sulfonate (PFPeS)	µg/L	0.004	**0.009**	<0.004	<0.004	**0.014**	**0.025**
Perfluorohexane sulfonate (PFHxS)	µg/L	0.002	**0.024**	**0.004**	**0.008**	**0.12**	**0.19**
Perfluoroheptane sulfonate (PFHpS)	µg/L	0.002	**0.003**	<0.002	<0.002	**0.003**	**0.016**
Perfluorooctane sulfonate (PFOS)	µg/L	0.002	**0.084**	**0.015**	**0.010**	**0.64**	**0.24**
Sum of PFHxS and PFOS	µg/L	0.002	**0.11**	**0.020**	**0.018**	**0.75**	**0.43**
Perfluorononane sulfonate (PFNS)	µg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Perfluorodecane sulfonate (PFDS)	µg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Perfluorododecane sulfonate (PFDoS)	µg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	µg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	µg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	µg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.008	<0.008	<0.008	<0.008	<0.008	<0.008
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2-(N-Methylperfluorooctane sulfonamido)-ethanol	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
N-Methylperfluorooctanesulfonamidoacetic acid	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
N-Ethylperfluorooctanesulfonamidoacetic Acid	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples [MA-1523] Tested: 9/11/2020 (continued)

PARAMETER	UOM	LOR	GW06 WATER - 29/10/2020 SE212970.006	GW07 WATER - 29/10/2020 SE212970.007	GW09 WATER - 29/10/2020 SE212970.008	GW19 WATER - 29/10/2020 SE212970.009
Perfluorobutanoic acid (PFBA)	µg/L	0.002	<0.002	<0.002	**0.008**	<0.002
Perfluoropentanoic acid (PFPeA)	µg/L	0.002	<0.002	<0.002	**0.020**	<0.002
Perfluorohexanoic acid (PFHxA)	µg/L	0.002	<0.002	<0.002	**0.019**	<0.002
Perfluoroheptanoic acid (PFHpA)	µg/L	0.002	<0.002	<0.002	**0.014**	<0.002
Perfluorooctanoic Acid (PFOA)	µg/L	0.002	<0.002	<0.002	**0.023**	<0.002
Perfluorononanoic acid (PFNA)	µg/L	0.004	<0.004	<0.004	<0.004	<0.004
Perfluorodecanoic acid (PFDA)	µg/L	0.004	<0.004	<0.004	<0.004	<0.004
Perfluoroundecanoic acid (PFUnA)	µg/L	0.004	<0.004	<0.004	<0.004	<0.004
Perfluorododecanoic acid (PFDoA)	µg/L	0.004	<0.004	<0.004	<0.004	<0.004
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.004	<0.004	<0.004	<0.004	<0.004
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.004	<0.004	<0.004	<0.004	<0.004
Perfluorohexadecanoic acid (PFHxDA)	µg/L	0.008	<0.008	<0.008	<0.008	<0.008
Perfluorobutane sulfonate (PFBS)	µg/L	0.004	**0.008**	<0.004	**0.014**	<0.004
Perfluoropentane sulfonate (PFPeS)	µg/L	0.004	<0.004	<0.004	**0.012**	<0.004
Perfluorohexane sulfonate (PFHxS)	µg/L	0.002	**0.025**	**0.003**	**0.062**	**0.018**
Perfluoroheptane sulfonate (PFHpS)	µg/L	0.002	<0.002	<0.002	**0.002**	<0.002
Perfluorooctane sulfonate (PFOS)	µg/L	0.002	**0.058**	**0.019**	**0.11**	**0.013**
Sum of PFHxS and PFOS	µg/L	0.002	**0.083**	**0.022**	**0.17**	**0.032**
Perfluorononane sulfonate (PFNS)	µg/L	0.002	<0.002	<0.002	<0.002	<0.002
Perfluorodecane sulfonate (PFDS)	µg/L	0.002	<0.002	<0.002	<0.002	<0.002
Perfluorododecane sulfonate (PFDoS)	µg/L	0.002	<0.002	<0.002	<0.002	<0.002
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	µg/L	0.002	<0.002	<0.002	<0.002	<0.002
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	µg/L	0.002	<0.002	<0.002	<0.002	<0.002
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	µg/L	0.002	<0.002	<0.002	<0.002	<0.002
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.008	<0.008	<0.008	<0.008	<0.008
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	µg/L	0.01	<0.01	<0.01	<0.01	<0.01
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	µg/L	0.01	<0.01	<0.01	<0.01	<0.01
2-(N-Methylperfluorooctane sulfonamido)-ethanol	µg/L	0.01	<0.01	<0.01	<0.01	<0.01
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	µg/L	0.01	<0.01	<0.01	<0.01	<0.01
N-Methylperfluorooctanesulfonamidoacetic acid	µg/L	0.01	<0.01	<0.01	<0.01	<0.01
N-Ethylperfluorooctanesulfonamidoacetic Acid	µg/L	0.01	<0.01	<0.01	<0.01	<0.01

Explosives in Water [MA-1129] Tested: 9/11/2020

PARAMETER	UOM	LOR	GW02 WATER - 29/10/2020 SE212970.002	GW07 WATER - 29/10/2020 SE212970.007
2-Amino-4,6-Dinitrotoluene	mg/L	0.001	<0.001	<0.001
4-Amino-2,6-Dinitrotoluene	mg/L	0.001	<0.001	<0.001
1,3-Dinitrobenzene	mg/L	0.001	<0.001	<0.001
1,4-Dinitrobenzene	mg/L	0.001	<0.001	<0.001
DNT (2,4 & 2,6 isomeric mixture)	mg/L	0.001	<0.001	<0.001
HMX	mg/L	0.001	<0.001	<0.001
2-Nitrotoluene	mg/L	0.001	<0.001	<0.001
3-Nitrotoluene	mg/L	0.001	<0.001	<0.001
4-Nitrotoluene	mg/L	0.001	<0.001	<0.001
Nitrobenzene	mg/L	0.001	<0.001	<0.001
Nitroglycerine	mg/L	0.001	<0.001	<0.001
PETN	mg/L	0.001	<0.001	<0.001
RDX	mg/L	0.001	<0.001	<0.001
Tetryl	mg/L	0.001	<0.001	<0.001
1,3,5-Trinitrobenzene	mg/L	0.001	<0.001	<0.001
2,4,6-TNT	mg/L	0.001	<0.001	<0.001

Trace Metals (Total) in Water by ICPMS [AN022/AN318] Tested: 30/10/2020

PARAMETER	UOM	LOR	GW02 WATER - 29/10/2020 SE212970.002	GW07 WATER - 29/10/2020 SE212970.007
Total Arsenic	µg/L	1	<1	<1
Total Cadmium	µg/L	0.1	<0.1	<0.1
Total Chromium	µg/L	1	**2**	**4**
Total Copper	µg/L	1	<1	**1**
Total Nickel	µg/L	1	<1	**1**
Total Lead	µg/L	1	<1	**1**
Total Zinc	µg/L	5	<5	<5
Total Beryllium	µg/L	1	<1	<1
Total Boron	µg/L	5	**22**	**12**
Total Cobalt	µg/L	1	<1	<1
Total Manganese	µg/L	1	**4**	**3**

Mercury (total) in Water [AN311(Perth) /AN312] Tested: 30/10/2020

PARAMETER	UOM	LOR	GW02 WATER - 29/10/2020 SE212970.002	GW07 WATER - 29/10/2020 SE212970.007
Total Mercury	mg/L	0.0001	<0.0001	<0.0001

SVOC Compounds in Waters by GC-QQQ, Low Level [USEPA8270D LL] Tested: 9/11/2020

PARAMETER	UOM	LOR	GW01 WATER - 29/10/2020 SE212970.001	GW02 WATER - 29/10/2020 SE212970.002	GW03 WATER - 29/10/2020 SE212970.003	GW04 WATER - 29/10/2020 SE212970.004	GW07 WATER - 29/10/2020 SE212970.007
Acenaphthene	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Acenaphthylene	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Anthracene	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo(a)anthracene	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo (a) pyrene	µg/L	0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Benzo (b) fluoranthene	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo (e) pyrene	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo (ghi) perylene	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo (k) fluoranthene	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo (b+j+k) fluoranthene	µg/L	0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chrysene	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Dibenz (ah) anthracene	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
7,12-Dimethylbenz(a)anthracene	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Fluoranthene	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Fluorene	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Indeno (1,2,3-cd) pyrene	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Naphthalene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Pyrene	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2-Methylnaphthalene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total PAHs Vic EPA - assumes <LOR results = 0	µg/L	0.8	-	-	-	-	-
Total PAHs Vic EPA - assumes <LOR results = 0.5LOR	µg/L	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
4,4-DDD	µg/L	0.1	<0.1	-	<0.1	<0.1	-
4,4-DDE	µg/L	0.1	<0.1	-	<0.1	<0.1	-
4,4-DDT	µg/L	0.1	<0.1	-	<0.1	<0.1	-
Aldrin	µg/L	0.002	<0.002	-	<0.002	<0.002	-
alpha-BHC	µg/L	0.1	<0.1	-	<0.1	<0.1	-
alpha-Chlordane	µg/L	0.002	<0.002	-	<0.002	<0.002	-
beta-BHC	µg/L	0.1	<0.1	-	<0.1	<0.1	-
Chlordane	µg/L	0.005	<0.005	-	<0.005	<0.005	-
delta-BHC	µg/L	0.1	<0.1	-	<0.1	<0.1	-
Dieldrin	µg/L	0.002	<0.002	-	<0.002	<0.002	-
Aldrin and Dieldrin	µg/L	0.1	<0.1	-	<0.1	<0.1	-
Endosulfan 1	µg/L	0.005	<0.005	-	<0.005	<0.005	-
Endosulfan 2	µg/L	0.005	<0.005	-	<0.005	<0.005	-
Endosulfan Sulphate	µg/L	0.005	<0.005	-	<0.005	<0.005	-
Total Endosulfan	µg/L	0.01	<0.01	-	<0.01	<0.01	-
Endrin	µg/L	0.1	<0.1	-	<0.1	<0.1	-
Endrin Aldehyde	µg/L	0.1	<0.1	-	<0.1	<0.1	-
Endrin ketone	µg/L	0.1	<0.1	-	<0.1	<0.1	-
gamma-BHC	µg/L	0.002	<0.002	-	<0.002	<0.002	-
gamma-Chlordane	µg/L	0.002	<0.002	-	<0.002	<0.002	-
Heptachlor	µg/L	0.002	<0.002	-	<0.002	<0.002	-
Heptachlor Epoxide	µg/L	0.1	<0.1	-	<0.1	<0.1	-
Hexachlorobenzene	µg/L	0.002	<0.002	-	<0.002	<0.002	-
Isodrin	µg/L	0.1	<0.1	-	<0.1	<0.1	-
Methoxychlor	µg/L	0.1	<0.1	-	<0.1	<0.1	-
Mirex	µg/L	0.1	<0.1	-	<0.1	<0.1	-
Chlorpyrifos	µg/L	0.009	<0.009	-	<0.009	<0.009	-
Dimethoate	µg/L	0.1	<0.1	-	<0.1	<0.1	-
Disulfoton	µg/L	0.1	<0.1	-	<0.1	<0.1	-
Famphur	µg/L	0.1	<0.1	-	<0.1	<0.1	-
Methyl parathion	µg/L	0.01	<0.01	-	<0.01	<0.01	-
Phorate	µg/L	0.1	<0.1	-	<0.1	<0.1	-
Stirofos	µg/L	0.1	<0.1	-	<0.1	<0.1	-
Sulfotepp	µg/L	0.1	<0.1	-	<0.1	<0.1	-

SVOC Compounds in Waters by GC-QQQ, Low Level [USEPA8270D LL] Tested: 9/11/2020 (continued)

PARAMETER	UOM	LOR	GW01 WATER - 29/10/2020 SE212970.001	GW02 WATER - 29/10/2020 SE212970.002	GW03 WATER - 29/10/2020 SE212970.003	GW04 WATER - 29/10/2020 SE212970.004	GW07 WATER - 29/10/2020 SE212970.007
Thionazin	µg/L	0.1	<0.1	-	<0.1	<0.1	-

SVOC Compounds in Waters by GC-QQQ, Low Level [USEPA8270D LL] Tested: 9/11/2020 (continued)

PARAMETER	UOM	LOR	GW09 WATER - 29/10/2020 SE212970.008	GW19 WATER - 29/10/2020 SE212970.009
Acenaphthene	µg/L	0.01	<0.01	<0.01
Acenaphthylene	µg/L	0.01	<0.01	<0.01
Anthracene	µg/L	0.01	<0.01	<0.01
Benzo(a)anthracene	µg/L	0.01	<0.01	<0.01
Benzo (a) pyrene	µg/L	0.005	<0.005	<0.005
Benzo (b) fluoranthene	µg/L	0.01	<0.01	<0.01
Benzo (e) pyrene	µg/L	0.01	<0.01	<0.01
Benzo (ghi) perylene	µg/L	0.01	<0.01	<0.01
Benzo (k) fluoranthene	µg/L	0.01	<0.01	<0.01
Benzo (b+j+k) fluoranthene	µg/L	0.02	<0.02	<0.02
Chrysene	µg/L	0.01	<0.01	<0.01
Dibenz (ah) anthracene	µg/L	0.01	<0.01	<0.01
7,12-Dimethylbenz(a)anthracene	µg/L	0.01	<0.01	<0.01
Fluoranthene	µg/L	0.01	<0.01	<0.01
Fluorene	µg/L	0.01	<0.01	<0.01
Indeno (1,2,3-cd) pyrene	µg/L	0.01	<0.01	<0.01
Naphthalene	µg/L	0.1	<0.1	<0.1
Phenanthrene	µg/L	0.01	<0.01	<0.01
Pyrene	µg/L	0.01	<0.01	<0.01
2-Methylnaphthalene	µg/L	0.1	<0.1	<0.1
Total PAHs Vic EPA - assumes <LOR results = 0	µg/L	0.8	-	-
Total PAHs Vic EPA - assumes <LOR results = 0.5LOR	µg/L	0.8	<0.8	<0.8
4,4-DDD	µg/L	0.1	<0.1	<0.1
4,4-DDE	µg/L	0.1	<0.1	<0.1
4,4-DDT	µg/L	0.1	<0.1	<0.1
Aldrin	µg/L	0.002	<0.002	<0.002
alpha-BHC	µg/L	0.1	<0.1	<0.1
alpha-Chlordane	µg/L	0.002	<0.002	<0.002
beta-BHC	µg/L	0.1	<0.1	<0.1
Chlordane	µg/L	0.005	<0.005	<0.005
delta-BHC	µg/L	0.1	<0.1	<0.1
Dieldrin	µg/L	0.002	<0.002	<0.002
Aldrin and Dieldrin	µg/L	0.1	<0.1	<0.1
Endosulfan 1	µg/L	0.005	<0.005	<0.005
Endosulfan 2	µg/L	0.005	<0.005	<0.005
Endosulfan Sulphate	µg/L	0.005	<0.005	<0.005
Total Endosulfan	µg/L	0.01	<0.01	<0.01
Endrin	µg/L	0.1	<0.1	<0.1
Endrin Aldehyde	µg/L	0.1	<0.1	<0.1
Endrin ketone	µg/L	0.1	<0.1	<0.1
gamma-BHC	µg/L	0.002	<0.002	<0.002
gamma-Chlordane	µg/L	0.002	<0.002	<0.002
Heptachlor	µg/L	0.002	<0.002	<0.002
Heptachlor Epoxide	µg/L	0.1	<0.1	<0.1
Hexachlorobenzene	µg/L	0.002	<0.002	<0.002
Isodrin	µg/L	0.1	<0.1	<0.1
Methoxychlor	µg/L	0.1	<0.1	<0.1
Mirex	µg/L	0.1	<0.1	<0.1
Chlorpyrifos	µg/L	0.009	<0.009	<0.009
Dimethoate	µg/L	0.1	<0.1	<0.1
Disulfoton	µg/L	0.1	<0.1	<0.1
Famphur	µg/L	0.1	<0.1	<0.1
Methyl parathion	µg/L	0.01	<0.01	<0.01
Phorate	µg/L	0.1	<0.1	<0.1
Stirofos	µg/L	0.1	<0.1	<0.1
Sulfotepp	µg/L	0.1	<0.1	<0.1

SVOC Compounds in Waters by GC-QQQ, Low Level [USEPA8270D LL] Tested: 9/11/2020 (continued)

PARAMETER	UOM	LOR	GW09 WATER - 29/10/2020 SE212970.008	GW19 WATER - 29/10/2020 SE212970.009
Thionazin	µg/L	0.1	<0.1	<0.1

Combined SVOC Pesticides in Water, Low Level [EPA 8270D] Tested: 9/11/2020

PARAMETER	UOM	LOR	GW01 WATER - 29/10/2020 SE212970.001	GW03 WATER - 29/10/2020 SE212970.003	GW04 WATER - 29/10/2020 SE212970.004	GW09 WATER - 29/10/2020 SE212970.008	GW19 WATER - 29/10/2020 SE212970.009
Azinphos-methyl	µg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos ethyl*	µg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos*	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Diazinon*	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Dichlorvos	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Ethion	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Fenitrothion	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Fenisulfothion	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fenthion	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Malathion	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Mevinphos-cis/trans	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methidathion	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Parathion	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

SVOC Compounds in Waters by GC-QQQ [USEPA8270D] Tested: 9/11/2020

PARAMETER	UOM	LOR	GW01 WATER - 29/10/2020 SE212970.001	GW03 WATER - 29/10/2020 SE212970.003	GW04 WATER - 29/10/2020 SE212970.004	GW05 WATER - 29/10/2020 SE212970.005	GW06 WATER - 29/10/2020 SE212970.006
Arochlor 1016	µg/L	0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Arochlor 1221	µg/L	0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Arochlor 1232	µg/L	0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Arochlor 1242	µg/L	0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Arochlor 1248	µg/L	0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Arochlor 1254	µg/L	0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Arochlor 1260	µg/L	0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Arochlor 1262	µg/L	0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Arochlor 1268	µg/L	0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Total PCB*	µg/L	0.03	<0.03	<0.03	<0.03	<0.03	<0.03

PARAMETER	UOM	LOR	GW09 WATER - 29/10/2020 SE212970.008	GW19 WATER - 29/10/2020 SE212970.009
Arochlor 1016	µg/L	0.03	<0.03	<0.03
Arochlor 1221	µg/L	0.03	<0.03	<0.03
Arochlor 1232	µg/L	0.03	<0.03	<0.03
Arochlor 1242	µg/L	0.03	<0.03	<0.03
Arochlor 1248	µg/L	0.03	<0.03	<0.03
Arochlor 1254	µg/L	0.03	<0.03	<0.03
Arochlor 1260	µg/L	0.03	<0.03	<0.03
Arochlor 1262	µg/L	0.03	<0.03	<0.03
Arochlor 1268	µg/L	0.03	<0.03	<0.03
Total PCB*	µg/L	0.03	<0.03	<0.03

METHOD	METHODOLOGY SUMMARY
AN020	Unpreserved water sample is filtered through a 0.45µm membrane filter and acidified with nitric acid similar to APHA3030B.
AN022/AN318	Following acid digestion of un filtered sample, determination of elements at trace level in waters by ICP-MS technique, referenced to USEPA 6020B and USEPA 200.8 (5.4).
AN022	The water sample is digested with Nitric Acid and made up to the original volume similar to APHA3030E.
AN311(Perth) /AN312	Mercury by Cold Vapour AAS in Waters: Mercury ions taken from unfiltered sample are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500.
AN311(Perth)/AN312	Mercury by Cold Vapour AAS in Waters: Mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500.
AN318	Determination of elements at trace level in waters by ICP-MS technique,, referenced to USEPA 6020B and USEPA 200.8 (5.4).
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). Where F2 is corrected for Naphthalene, the VOC data for Naphthalene is used.
AN403	Additionally, the volatile C6-C9/C6-C10 fractions may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoveerable Hydrocarbons - Silica (TRH-Silica) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents.
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.
EPA8270D LL	This method covers analytical procedures for the analysis of semi-volatile organic compounds (SVOC) including most neutral, acidic, and basic organic compounds based on the USEPA method 8270D. Samples are extracted into a solvent appropriate to the matrix and analysed using a gas chromatograph – triple quadrapole (GC–QQQ).
EPA8270D Pest LL	This method covers analytical procedures for the analysis of semi-volatile organic compounds (SVOC pesticides) including most neutral, acidic, and basic organic compounds based on the USEPA method 8270D. Samples are extracted into a solvent appropriate to the matrix and analysed using a gas chromatograph – triple quadrapole (GC–QQQ).
EPA8270D	This method covers analytical procedures for the analysis of semi-volatile organic compounds (SVOC) including most neutral, acidic, and basic organic compounds based on the USEPA method 8270D. Samples are extracted into a solvent appropriate to the matrix and analysed using a gas chromatograph – triple quadrapole (GC–QQQ).
MA1129	This method is intended for the trace analysis of explosive residues by high performance liquid chromatography using a diode array detector. This method is based on the USEPA 8330 method for Explosives. To achieve the low detection limit required of water samples, solid phase extraction (SPE) is used or alternatively liquid/liquid extraction can be used. For solid phase extraction, water sample is passed through a pre-washed SPE cartridge then eluted with acetonitrile. The eluate is then diluted with calcium chloride. The sample is then filtered through a 0.45µm Teflon filter disc, and 100µL is injected into a HPLC.
MA-1523	This method covers the analysis of per- and polyfluoroalkyl substances (PFAS) in aqueous, solid and biosolid samples and solvent extracts, determined as the total of linear and branched isomers. After spiking with isotopically labelled quantification surrogates and clean-up via SPE cartridges sample extracts are analysed by liquid chromatography/mass spectrometry (LC-MS/MS). PFAS concentrations are determined by isotope dilution quantification.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		
***	Indicates that both * and ** apply.				

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS		LABORATORY DETAILS	
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Project	**610.30041 Randwick Barracks**	SGS Reference	**ME317193 R0**
Order Number	**SE212970**	Date Received	02 Nov 2020
Samples	9	Date Reported	06 Nov 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(14420).

MA-1523 Majority of surrogates are within acceptance criteria.

SIGNATORIES

[redacted]

Australian Chemistry Manager Senior Chemist

Parameter	Units	LOR	Sample Number: ME317193.001 Sample Matrix: Water Sample Date: 29 Oct 2020 Sample Name: SE212970.001	ME317193.002 Water 29 Oct 2020 SE212970.002	ME317193.003 Water 29 Oct 2020 SE212970.003	ME317193.004 Water 29 Oct 2020 SE212970.004
Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples Method: MA-1523 Tested: 2/11/2020						
Perfluorobutanoic acid (PFBA)	µg/L	0.002	**0.009**	<0.002	<0.002	<0.002
Perfluoropentanoic acid (PFPeA)	µg/L	0.002	**0.017**	<0.002	<0.002	<0.002
Perfluorohexanoic acid (PFHxA)	µg/L	0.002	**0.012**	<0.002	**0.003**	**0.010**
Perfluoroheptanoic acid (PFHpA)	µg/L	0.002	<0.002	<0.002	<0.002	<0.002
Perfluorooctanoic Acid (PFOA)	µg/L	0.002	**0.007**	<0.002	**0.013**	**0.013**
Perfluorononanoic acid (PFNA)	µg/L	0.004	**0.008**	<0.004	<0.004	<0.004
Perfluorodecanoic acid (PFDA)	µg/L	0.004	<0.004	<0.004	<0.004	<0.004
Perfluoroundecanoic acid (PFUnA)	µg/L	0.004	<0.004	<0.004	<0.004	<0.004
Perfluorododecanoic acid (PFDoA)	µg/L	0.004	<0.004	<0.004	<0.004	<0.004
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.004	<0.004	<0.004	<0.004	<0.004
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.004	<0.004	<0.004	<0.004	<0.004
Perfluorohexadecanoic acid (PFHxDA)	µg/L	0.008	<0.008	<0.008	<0.008	<0.008
Perfluorobutane sulfonate (PFBS)	µg/L	0.004	**0.063**	<0.004	**0.006**	**0.005**
Perfluoropentane sulfonate (PFPeS)	µg/L	0.004	**0.009**	<0.004	<0.004	**0.014**
Perfluorohexane sulfonate (PFHxS)	µg/L	0.002	**0.024**	**0.004**	**0.008**	**0.12**
Perfluoroheptane sulfonate (PFHpS)	µg/L	0.002	**0.003**	<0.002	<0.002	**0.003**
Perfluorooctane sulfonate (PFOS)	µg/L	0.002	**0.084**	**0.015**	**0.010**	**0.64**
Sum of PFHxS and PFOS	µg/L	0.002	**0.11**	**0.020**	**0.018**	**0.75**
Perfluorononane sulfonate (PFNS)	µg/L	0.002	<0.002	<0.002	<0.002	<0.002
Perfluorodecane sulfonate (PFDS)	µg/L	0.002	<0.002	<0.002	<0.002	<0.002
Perfluorododecane sulfonate (PFDoS)	µg/L	0.002	<0.002	<0.002	<0.002	<0.002
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	µg/L	0.002	<0.002	<0.002	<0.002	<0.002
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	µg/L	0.002	<0.002	<0.002	<0.002	<0.002
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	µg/L	0.002	<0.002	<0.002	<0.002	<0.002
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.008	<0.008	<0.008	<0.008	<0.008
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	µg/L	0.01	<0.01	<0.01	<0.01	<0.01
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	µg/L	0.01	<0.01	<0.01	<0.01	<0.01
2-(N-Methylperfluorooctane sulfonamido)-ethanol	µg/L	0.01	<0.01	<0.01	<0.01	<0.01
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	µg/L	0.01	<0.01	<0.01	<0.01	<0.01
N-Methylperfluorooctanesulfonamidoacetic acid	µg/L	0.01	<0.01	<0.01	<0.01	<0.01
N-Ethylperfluorooctanesulfonamidoacetic Acid	µg/L	0.01	<0.01	<0.01	<0.01	<0.01
(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	**96**	**99**	**100**	**100**
(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	**102**	**100**	**102**	**101**
(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	**102**	**107**	**108**	**104**
(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	**103**	**108**	**107**	**106**
(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	**99**	**107**	**97**	**102**
(13C9-PFNA) Isotopically Labelled Internal Recovery	%	-	**98**	**111**	**103**	**104**
(13C6-PFDA) Isotopically Labelled Internal Recovery	%	-	**112**	**83**	**109**	**94**
(13C7-PFUdA) Isotopically Labelled Internal Recovery	%	-	**108**	**98**	**111**	**109**
(13C2-PFDoA) Isotopically Labelled Internal Recovery	%	-	**113**	**105**	**124**	**100**
(13C2_PFTeDA) Isotopically Labelled Internal Recovery	%	-	**114**	**119**	**126**	**122**
(13C2-PFHxDA) Isotopically Labelled Internal Recovery	%	-	**100**	**129**	**144**	**135**
(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	**103**	**102**	**119**	**100**
(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	**102**	**102**	**107**	**99**
(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	**90**	**83**	**90**	**87**
(13C2-4:2 FTS) Isotopically Labelled Internal Recovery	%	-	**38**	**37**	**45**	**35**
(13C2-6:2 FTS) Isotopically Labelled Internal Recovery	%	-	**38**	**41**	**45**	**35**
(13C2-8:2 FTS) Isotopically Labelled Internal Recovery	%	-	**31**	**30**	**53**	**30**
(13C8-PFOSA) Isotopically Labelled Internal Recovery	%	-	**76**	**84**	**91**	**73**
(D3-N-MeFOSA) Isotopically Labelled Internal Recovery	%	-	**75**	**68**	**87**	**72**
(D5-N-EtFOSA) Isotopically Labelled Internal Recovery	%	-	**56**	**72**	**77**	**77**
(D7-N-MeFOSE) Isotopically Labelled Internal Recovery	%	-	**59**	**69**	**76**	**77**
(D9-N-EtFOSE) Isotopically Labelled Internal Recovery	%	-	**81**	**78**	**85**	**79**
(D3-N-MeFOSAA) Isotopically Labelled Internal Recovery	%	-	**71**	**73**	**89**	**84**
(D5-N-EtFOSAA) Isotopically Labelled Internal Recovery	%	-	**82**	**82**	**84**	**95**
Explosives in Water Method: MA-1129 Tested: 6/11/2020						

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name ME317193.001 Water 29 Oct 2020 SE212970.001	ME317193.002 Water 29 Oct 2020 SE212970.002	ME317193.003 Water 29 Oct 2020 SE212970.003	ME317193.004 Water 29 Oct 2020 SE212970.004
Explosives in Water Method: MA-1129 Tested: 6/11/2020 (continued)						
2-Amino-4,6-Dinitrotoluene	mg/L	0.001	-	<0.001	-	-
4-Amino-2,6-Dinitrotoluene	mg/L	0.001	-	<0.001	-	-
1,3-Dinitrobenzene	mg/L	0.001	-	<0.001	-	-
1,4-Dinitrobenzene	mg/L	0.001	-	<0.001	-	-
DNT (2,4 & 2,6 isomeric mixture)	mg/L	0.001	-	<0.001	-	-
HMX	mg/L	0.001	-	<0.001	-	-
2-Nitrotoluene	mg/L	0.001	-	<0.001	-	-
3-Nitrotoluene	mg/L	0.001	-	<0.001	-	-
4-Nitrotoluene	mg/L	0.001	-	<0.001	-	-
Nitrobenzene	mg/L	0.001	-	<0.001	-	-
Nitroglycerine	mg/L	0.001	-	<0.001	-	-
PETN	mg/L	0.001	-	<0.001	-	-
RDX	mg/L	0.001	-	<0.001	-	-
Tetryl	mg/L	0.001	-	<0.001	-	-
1,3,5-Trinitrobenzene	mg/L	0.001	-	<0.001	-	-
2,4,6-TNT	mg/L	0.001	-	<0.001	-	-

Parameter	Units	LOR	Sample Number: ME317193.005 Sample Matrix: Water Sample Date: 29 Oct 2020 Sample Name: SE212970.005	ME317193.006 Water 29 Oct 2020 SE212970.006	ME317193.007 Water 29 Oct 2020 SE212970.007	ME317193.008 Water 29 Oct 2020 SE212970.008
Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples Method: MA-1523 Tested: 2/11/2020						
Perfluorobutanoic acid (PFBA)	µg/L	0.002	**0.007**	<0.002	<0.002	**0.008**
Perfluoropentanoic acid (PFPeA)	µg/L	0.002	**0.011**	<0.002	<0.002	**0.020**
Perfluorohexanoic acid (PFHxA)	µg/L	0.002	**0.027**	<0.002	<0.002	**0.019**
Perfluoroheptanoic acid (PFHpA)	µg/L	0.002	**0.012**	<0.002	<0.002	**0.014**
Perfluorooctanoic Acid (PFOA)	µg/L	0.002	**0.023**	<0.002	<0.002	**0.023**
Perfluorononanoic acid (PFNA)	µg/L	0.004	<0.004	<0.004	<0.004	<0.004
Perfluorodecanoic acid (PFDA)	µg/L	0.004	<0.004	<0.004	<0.004	<0.004
Perfluoroundecanoic acid (PFUnA)	µg/L	0.004	<0.004	<0.004	<0.004	<0.004
Perfluorododecanoic acid (PFDoA)	µg/L	0.004	<0.004	<0.004	<0.004	<0.004
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.004	<0.004	<0.004	<0.004	<0.004
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.004	<0.004	<0.004	<0.004	<0.004
Perfluorohexadecanoic acid (PFHxDA)	µg/L	0.008	<0.008	<0.008	<0.008	<0.008
Perfluorobutane sulfonate (PFBS)	µg/L	0.004	**0.054**	**0.008**	<0.004	**0.014**
Perfluoropentane sulfonate (PFPeS)	µg/L	0.004	**0.025**	<0.004	<0.004	**0.012**
Perfluorohexane sulfonate (PFHxS)	µg/L	0.002	**0.19**	**0.025**	**0.003**	**0.062**
Perfluoroheptane sulfonate (PFHpS)	µg/L	0.002	**0.016**	<0.002	<0.002	**0.002**
Perfluorooctane sulfonate (PFOS)	µg/L	0.002	**0.24**	**0.058**	**0.019**	**0.11**
Sum of PFHxS and PFOS	µg/L	0.002	**0.43**	**0.083**	**0.022**	**0.17**
Perfluorononane sulfonate (PFNS)	µg/L	0.002	<0.002	<0.002	<0.002	<0.002
Perfluorodecane sulfonate (PFDS)	µg/L	0.002	<0.002	<0.002	<0.002	<0.002
Perfluorododecane sulfonate (PFDoS)	µg/L	0.002	<0.002	<0.002	<0.002	<0.002
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	µg/L	0.002	<0.002	<0.002	<0.002	<0.002
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	µg/L	0.002	<0.002	<0.002	<0.002	<0.002
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	µg/L	0.002	<0.002	<0.002	<0.002	<0.002
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.008	<0.008	<0.008	<0.008	<0.008
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	µg/L	0.01	<0.01	<0.01	<0.01	<0.01
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	µg/L	0.01	<0.01	<0.01	<0.01	<0.01
2-(N-Methylperfluorooctane sulfonamido)-ethanol	µg/L	0.01	<0.01	<0.01	<0.01	<0.01
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	µg/L	0.01	<0.01	<0.01	<0.01	<0.01
N-Methylperfluorooctanesulfonamidoacetic acid	µg/L	0.01	<0.01	<0.01	<0.01	<0.01
N-Ethylperfluorooctanesulfonamidoacetic Acid	µg/L	0.01	<0.01	<0.01	<0.01	<0.01
(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	**97**	**96**	**99**	**96**
(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	**100**	**103**	**101**	**103**
(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	**116**	**114**	**111**	**111**
(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	**115**	**114**	**108**	**114**
(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	**106**	**104**	**102**	**109**
(13C9-PFNA) Isotopically Labelled Internal Recovery	%	-	**94**	**104**	**99**	**109**
(13C6-PFDA) Isotopically Labelled Internal Recovery	%	-	**99**	**113**	**97**	**110**
(13C7-PFUdA) Isotopically Labelled Internal Recovery	%	-	**95**	**111**	**104**	**102**
(13C2-PFDoA) Isotopically Labelled Internal Recovery	%	-	**110**	**111**	**105**	**116**
(13C2_PFTeDA) Isotopically Labelled Internal Recovery	%	-	**114**	**125**	**109**	**130**
(13C2-PFHxDA) Isotopically Labelled Internal Recovery	%	-	**136**	**136**	**137**	**145**
(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	**103**	**104**	**108**	**108**
(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	**98**	**100**	**101**	**117**
(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	**101**	**96**	**85**	**86**
(13C2-4:2 FTS) Isotopically Labelled Internal Recovery	%	-	**40**	**39**	**40**	**40**
(13C2-6:2 FTS) Isotopically Labelled Internal Recovery	%	-	**34**	**42**	**35**	**27**
(13C2-8:2 FTS) Isotopically Labelled Internal Recovery	%	-	**51**	**44**	**43**	**34**
(13C8-PFOSA) Isotopically Labelled Internal Recovery	%	-	**82**	**75**	**92**	**100**
(D3-N-MeFOSA) Isotopically Labelled Internal Recovery	%	-	**82**	**83**	**58**	**72**
(D5-N-EtFOSA) Isotopically Labelled Internal Recovery	%	-	**66**	**73**	**65**	**72**
(D7-N-MeFOSE) Isotopically Labelled Internal Recovery	%	-	**89**	**78**	**74**	**87**
(D9-N-EtFOSE) Isotopically Labelled Internal Recovery	%	-	**87**	**89**	**74**	**92**
(D3-N-MeFOSAA) Isotopically Labelled Internal Recovery	%	-	**82**	**76**	**79**	**84**
(D5-N-EtFOSAA) Isotopically Labelled Internal Recovery	%	-	**82**	**78**	**84**	**103**

Explosives in Water Method: MA-1129 Tested: 6/11/2020

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name ME317193.005 Water 29 Oct 2020 SE212970.005	ME317193.006 Water 29 Oct 2020 SE212970.006	ME317193.007 Water 29 Oct 2020 SE212970.007	ME317193.008 Water 29 Oct 2020 SE212970.008
Explosives in Water Method: MA-1129 Tested: 6/11/2020 (continued)						
2-Amino-4,6-Dinitrotoluene	mg/L	0.001	-	-	<0.001	-
4-Amino-2,6-Dinitrotoluene	mg/L	0.001	-	-	<0.001	-
1,3-Dinitrobenzene	mg/L	0.001	-	-	<0.001	-
1,4-Dinitrobenzene	mg/L	0.001	-	-	<0.001	-
DNT (2,4 & 2,6 isomeric mixture)	mg/L	0.001	-	-	<0.001	-
HMX	mg/L	0.001	-	-	<0.001	-
2-Nitrotoluene	mg/L	0.001	-	-	<0.001	-
3-Nitrotoluene	mg/L	0.001	-	-	<0.001	-
4-Nitrotoluene	mg/L	0.001	-	-	<0.001	-
Nitrobenzene	mg/L	0.001	-	-	<0.001	-
Nitroglycerine	mg/L	0.001	-	-	<0.001	-
PETN	mg/L	0.001	-	-	<0.001	-
RDX	mg/L	0.001	-	-	<0.001	-
Tetryl	mg/L	0.001	-	-	<0.001	-
1,3,5-Trinitrobenzene	mg/L	0.001	-	-	<0.001	-
2,4,6-TNT	mg/L	0.001	-	-	<0.001	-

Parameter	Units	LOR	Sample Number ME317193.009 Sample Matrix Water Sample Date 29 Oct 2020 Sample Name SE212970.009
Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples	**Method: MA-1523**	**Tested: 2/11/2020**	
Perfluorobutanoic acid (PFBA)	µg/L	0.002	<0.002
Perfluoropentanoic acid (PFPeA)	µg/L	0.002	<0.002
Perfluorohexanoic acid (PFHxA)	µg/L	0.002	<0.002
Perfluoroheptanoic acid (PFHpA)	µg/L	0.002	<0.002
Perfluorooctanoic Acid (PFOA)	µg/L	0.002	<0.002
Perfluorononanoic acid (PFNA)	µg/L	0.004	<0.004
Perfluorodecanoic acid (PFDA)	µg/L	0.004	<0.004
Perfluoroundecanoic acid (PFUnA)	µg/L	0.004	<0.004
Perfluorododecanoic acid (PFDoA)	µg/L	0.004	<0.004
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.004	<0.004
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.004	<0.004
Perfluorohexadecanoic acid (PFHxDA)	µg/L	0.008	<0.008
Perfluorobutane sulfonate (PFBS)	µg/L	0.004	<0.004
Perfluoropentane sulfonate (PFPeS)	µg/L	0.004	<0.004
Perfluorohexane sulfonate (PFHxS)	µg/L	0.002	**0.018**
Perfluoroheptane sulfonate (PFHpS)	µg/L	0.002	<0.002
Perfluorooctane sulfonate (PFOS)	µg/L	0.002	**0.013**
Sum of PFHxS and PFOS	µg/L	0.002	**0.032**
Perfluorononane sulfonate (PFNS)	µg/L	0.002	<0.002
Perfluorodecane sulfonate (PFDS)	µg/L	0.002	<0.002
Perfluorododecane sulfonate (PFDoS)	µg/L	0.002	<0.002
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	µg/L	0.002	<0.002
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	µg/L	0.002	<0.002
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	µg/L	0.002	<0.002
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.008	<0.008
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	µg/L	0.01	<0.01
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	µg/L	0.01	<0.01
2-(N-Methylperfluorooctane sulfonamido)-ethanol	µg/L	0.01	<0.01
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	µg/L	0.01	<0.01
N-Methylperfluorooctanesulfonamidoacetic acid	µg/L	0.01	<0.01
N-Ethylperfluorooctanesulfonamidoacetic Acid	µg/L	0.01	<0.01
(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	**104**
(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	**105**
(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	**120**
(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	**130**
(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	**110**
(13C9-PFNA) Isotopically Labelled Internal Recovery	%	-	**101**
(13C6-PFDA) Isotopically Labelled Internal Recovery	%	-	**135**
(13C7-PFUdA) Isotopically Labelled Internal Recovery	%	-	**117**
(13C2-PFDoA) Isotopically Labelled Internal Recovery	%	-	**106**
(13C2_PFTeDA) Isotopically Labelled Internal Recovery	%	-	**131**
(13C2-PFHxDA) Isotopically Labelled Internal Recovery	%	-	**145**
(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	**96**
(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	**93**
(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	**99**
(13C2-4:2 FTS) Isotopically Labelled Internal Recovery	%	-	**31**
(13C2-6:2 FTS) Isotopically Labelled Internal Recovery	%	-	**29**
(13C2-8:2 FTS) Isotopically Labelled Internal Recovery	%	-	**37**
(13C8-PFOSA) Isotopically Labelled Internal Recovery	%	-	**104**
(D3-N-MeFOSA) Isotopically Labelled Internal Recovery	%	-	**71**
(D5-N-EtFOSA) Isotopically Labelled Internal Recovery	%	-	**82**
(D7-N-MeFOSE) Isotopically Labelled Internal Recovery	%	-	**88**
(D9-N-EtFOSE) Isotopically Labelled Internal Recovery	%	-	**105**
(D3-N-MeFOSAA) Isotopically Labelled Internal Recovery	%	-	**98**
(D5-N-EtFOSAA) Isotopically Labelled Internal Recovery	%	-	**96**

Parameter	Units	LOR	Sample Number ME317193.009 Sample Matrix Water Sample Date 29 Oct 2020 Sample Name SE212970.009
Explosives in Water Method: MA-1129 Tested: 6/11/2020			
2-Amino-4,6-Dinitrotoluene	mg/L	0.001	-
4-Amino-2,6-Dinitrotoluene	mg/L	0.001	-
1,3-Dinitrobenzene	mg/L	0.001	-
1,4-Dinitrobenzene	mg/L	0.001	-
DNT (2,4 & 2,6 isomeric mixture)	mg/L	0.001	-
HMX	mg/L	0.001	-
2-Nitrotoluene	mg/L	0.001	-
3-Nitrotoluene	mg/L	0.001	-
4-Nitrotoluene	mg/L	0.001	-
Nitrobenzene	mg/L	0.001	-
Nitroglycerine	mg/L	0.001	-
PETN	mg/L	0.001	-
RDX	mg/L	0.001	-
Tetryl	mg/L	0.001	-
1,3,5-Trinitrobenzene	mg/L	0.001	-
2,4,6-TNT	mg/L	0.001	-

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage.* Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Explosives in Water Method: MA-1129

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
2-Amino-4,6-Dinitrotoluene	LB036628	mg/L	0.001	<0.001	
4-Amino-2,6-Dinitrotoluene	LB036628	mg/L	0.001	<0.001	NA
1,3-Dinitrobenzene	LB036628	mg/L	0.001	<0.001	NA
1,4-Dinitrobenzene	LB036628	mg/L	0.001	<0.001	NA
DNT (2,4 & 2,6 isomeric mixture)	LB036628	mg/L	0.001	<0.001	NA
HMX	LB036628	mg/L	0.001	<0.001	NA
2-Nitrotoluene	LB036628	mg/L	0.001	<0.001	NA
3-Nitrotoluene	LB036628	mg/L	0.001	<0.001	NA
4-Nitrotoluene	LB036628	mg/L	0.001	<0.001	
Nitrobenzene	LB036628	mg/L	0.001	<0.001	NA
Nitroglycerine	LB036628	mg/L	0.001	<0.001	
PETN	LB036628	mg/L	0.001	<0.001	
RDX	LB036628	mg/L	0.001	<0.001	NA
Tetryl	LB036628	mg/L	0.001	<0.001	NA
1,3,5-Trinitrobenzene	LB036628	mg/L	0.001	<0.001	NA
2,4,6-TNT	LB036628	mg/L	0.001	<0.001	NA

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples Method: MA-1523

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Perfluorobutanoic acid (PFBA)	LB036558	µg/L	0.002	<0.002	0%	NA
Perfluoropentanoic acid (PFPeA)	LB036558	µg/L	0.002	<0.002	0%	NA
Perfluorohexanoic acid (PFHxA)	LB036558	µg/L	0.002	<0.002	0%	NA
Perfluoroheptanoic acid (PFHpA)	LB036558	µg/L	0.002	<0.002	0%	83%
Perfluorooctanoic Acid (PFOA)	LB036558	µg/L	0.002	<0.002	0%	97%
Perfluorononanoic acid (PFNA)	LB036558	µg/L	0.004	<0.004	0%	99%
Perfluorodecanoic acid (PFDA)	LB036558	µg/L	0.004	<0.004	0%	109%
Perfluoroundecanoic acid (PFUnA)	LB036558	µg/L	0.004	<0.004	0%	73%
Perfluorododecanoic acid (PFDoA)	LB036558	µg/L	0.004	<0.004	0%	95%
Perfluorotridecanoic acid (PFTrDA)	LB036558	µg/L	0.004	<0.004	0%	126%
Perfluorotetradecanoic acid (PFTeDA)	LB036558	µg/L	0.004	<0.004	0%	92%
Perfluorohexadecanoic acid (PFHxDA)	LB036558	µg/L	0.008	<0.008	0%	NA
Perfluorobutane sulfonate (PFBS)	LB036558	µg/L	0.004	<0.004	0%	NA
Perfluoropentane sulfonate (PFPeS)	LB036558	µg/L	0.004	<0.004	0%	NA
Perfluorohexane sulfonate (PFHxS)	LB036558	µg/L	0.002	<0.002	0%	NA
Perfluoroheptane sulfonate (PFHpS)	LB036558	µg/L	0.002	<0.002	0%	NA
Perfluorooctane sulfonate (PFOS)	LB036558	µg/L	0.002	<0.002	0%	132%
Sum of PFHxS and PFOS	LB036558	µg/L	0.002	<0.002	0%	NA
Perfluorononane sulfonate (PFNS)	LB036558	µg/L	0.002	<0.002	0%	NA
Perfluorodecane sulfonate (PFDS)	LB036558	µg/L	0.002	<0.002	0%	NA
Perfluorododecane sulfonate (PFDoS)	LB036558	µg/L	0.002	<0.002	0%	NA
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	LB036558	µg/L	0.002	<0.002	0%	NA
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	LB036558	µg/L	0.002	<0.002	0%	NA
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	LB036558	µg/L	0.002	<0.002	0%	NA
Perfluorooctane sulfonamide (PFOSA)	LB036558	µg/L	0.008	<0.008	0%	51%
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	LB036558	µg/L	0.01	<0.01	0%	NA
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	LB036558	µg/L	0.01	<0.01	0%	NA
2-(N-Methylperfluorooctane sulfonamido)-ethanol (N-MeFOSE)	LB036558	µg/L	0.01	<0.01	0%	NA
2-(N-Ethylperfluorooctane sulfonamido)-ethanol (N-EtFOSE)	LB036558	µg/L	0.01	<0.01	0%	NA
N-Methylperfluorooctanesulfonamidoacetic acid (N_MeFOSAA)	LB036558	µg/L	0.01	<0.01	0%	NA
N-Ethylperfluorooctanesulfonamidoacetic Acid (N-EtFOSAA)	LB036558	µg/L	0.01	<0.01	0%	NA
(13C4-PFBA) Isotopically Labelled Internal Recovery Standard	LB036558	%	-	98%	0 - 3%	98%
(13C5-PFPeA) Isotopically Labelled Internal Recovery Standard	LB036558	%	-	99%	1%	103%
(13C5-PFHxA) Isotopically Labelled Internal Recovery Standard	LB036558	%	-	109%	2 - 5%	113%
(13C4-PFHpA) Isotopically Labelled Internal Recovery Standard	LB036558	%	-	106%	0 - 1%	113%
(13C4_PFOA) Isotopically Labelled Internal Recovery Standard	LB036558	%	-	103%	2%	103%

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage.* Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples Method: MA-1523 (continued)

				MB	DUP %RPD	LCS %Recovery
(13C9-PFNA) Isotopically Labelled Internal Recovery Standard	LB036558	%	-	95%	0 - 8%	91%
(13C6-PFDA) Isotopically Labelled Internal Recovery Standard	LB036558	%	-	116%	0 - 7%	91%
(13C7-PFUdA) Isotopically Labelled Internal Recovery Standard	LB036558	%	-	89%	6 - 12%	101%
(13C2-PFDoA) Isotopically Labelled Internal Recovery Standard	LB036558	%	-	76%	7 - 11%	103%
(13C2_PFTeDA) Isotopically Labelled Internal Recovery Standard	LB036558	%	-	51%	2 - 11%	111%
(13C2-PFHxDA) Isotopically Labelled Internal Recovery Standard	LB036558	%	-	20%	8 - 12%	119%
(13C3-PFBS) Isotopically Labelled Internal Recovery Standard	LB036558	%	-	115%	0 - 2%	105%
(13C3-PFHxS) Isotopically Labelled Internal Recovery Standard	LB036558	%	-	98%	1 - 2%	101%
(13C8-PFOS) Isotopically Labelled Internal Recovery Standard	LB036558	%	-	90%	0 - 20%	125%
(13C2-4:2 FTS) Isotopically Labelled Internal Recovery Standard	LB036558	%	-	42%	3%	38%
(13C2-6:2 FTS) Isotopically Labelled Internal Recovery Standard	LB036558	%	-	45%	23 - 29%	36%
(13C2-8:2 FTS) Isotopically Labelled Internal Recovery Standard	LB036558	%	-	38%	7 - 32%	33%
(13C8-PFOSA) Isotopically Labelled Internal Recovery Standard	LB036558	%	-	120%	4 - 25%	105%
(D3-N-MeFOSA) Isotopically Labelled Internal Recovery Standard	LB036558	%	-	104%	20 - 26%	105%
(D5-N-EtFOSA) Isotopically Labelled Internal Recovery Standard	LB036558	%	-	90%	4 - 20%	99%
(D7-N-MeFOSE) Isotopically Labelled Internal Recovery Standard	LB036558	%	-	102%	1 - 14%	92%
(D9-N-EtFOSE) Isotopically Labelled Internal Recovery Standard	LB036558	%	-	119%	10 - 11%	100%
(D3-N-MeFOSAA) Isotopically Labelled Internal Recovery Standard	LB036558	%	-	98%	19%	94%
(D5-N-EtFOSAA) Isotopically Labelled Internal Recovery Standard	LB036558	%	-	114%	10 - 30%	121%

METHOD	METHODOLOGY SUMMARY
MA1129	This method is intended for the trace analysis of explosive residues by high performance liquid chromatography using a diode array detector. This method is based on the USEPA 8330 method for Explosives. To achieve the low detection limit required of water samples , solid phase extraction (SPE) is used or alternatively liquid/liquid extraction can be used. For solid phase extraction, water sample is passed through a pre-washed SPE cartridge then eluted with acetonitrile. The eluate is then diluted with calcium chloride. The sample is then filtered through a 0.45µm Teflon filter disc, and 100µL is injected into a HPLC.
MA-1523	This method covers the analysis of per- and polyfluoroalkyl substances (PFAS) in aqueous, solid and biosolid samples and solvent extracts, determined as the total of linear and branched isomers. After spiking with isotopically labelled quantification surrogates and clean-up via SPE cartridges sample extracts are analysed by liquid chromatography/mass spectrometry (LC-MS/MS). PFAS concentrations are determined by isotope dilution quantification.

FOOTNOTES

IS	Insufficient sample for analysis.	LOR	Limit of Reporting
LNR	Sample listed, but not received.	↑↓	Raised or Lowered Limit of Reporting
*	NATA accreditation does not cover the performance of this service.	QFH	QC result is above the upper tolerance
		QFL	QC result is below the lower tolerance
**	Indicative data, theoretical holding time exceeded.	-	The sample was not analysed for this analyte
***	Indicates that both * and ** apply.	NVL	Not Validated

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calcuated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE212970 R0

CLIENT DETAILS

Contact	LQRSYD
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	02 9427 8100
Facsimile	02 9427 8200
Email	lqrsyd@slrconsulting.com
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	9

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE212970 R0**
Date Received	29 Oct 2020
Date Reported	11 Nov 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Duplicate	Trace Metals (Total) in Water by ICPMS	4 items
Matrix Spike	Volatile Petroleum Hydrocarbons in Water	1 item

SAMPLE SUMMARY

HOLDING TIME SUMMARY

SE212970 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW01	SE212970.001	LB212388	29 Oct 2020	29 Oct 2020	26 Nov 2020	30 Oct 2020	26 Nov 2020	30 Oct 2020
GW03	SE212970.003	LB212388	29 Oct 2020	29 Oct 2020	26 Nov 2020	30 Oct 2020	26 Nov 2020	30 Oct 2020
GW04	SE212970.004	LB212388	29 Oct 2020	29 Oct 2020	26 Nov 2020	30 Oct 2020	26 Nov 2020	30 Oct 2020
GW05	SE212970.005	LB212388	29 Oct 2020	29 Oct 2020	26 Nov 2020	30 Oct 2020	26 Nov 2020	30 Oct 2020
GW06	SE212970.006	LB212388	29 Oct 2020	29 Oct 2020	26 Nov 2020	30 Oct 2020	26 Nov 2020	30 Oct 2020
GW09	SE212970.008	LB212388	29 Oct 2020	29 Oct 2020	26 Nov 2020	30 Oct 2020	26 Nov 2020	30 Oct 2020
GW19	SE212970.009	LB212388	29 Oct 2020	29 Oct 2020	26 Nov 2020	30 Oct 2020	26 Nov 2020	30 Oct 2020

Mercury (total) in Water

Method: ME-(AU)-[ENV]AN311(Perth) /AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW02	SE212970.002	LB212390	29 Oct 2020	29 Oct 2020	26 Nov 2020	30 Oct 2020	26 Nov 2020	30 Oct 2020
GW07	SE212970.007	LB212390	29 Oct 2020	29 Oct 2020	26 Nov 2020	30 Oct 2020	26 Nov 2020	30 Oct 2020

Speciated Phenols in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW01	SE212970.001	LB212662	29 Oct 2020	29 Oct 2020	19 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020
GW02	SE212970.002	LB212662	29 Oct 2020	29 Oct 2020	19 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020
GW03	SE212970.003	LB212662	29 Oct 2020	29 Oct 2020	19 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020
GW04	SE212970.004	LB212662	29 Oct 2020	29 Oct 2020	19 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020
GW05	SE212970.005	LB212662	29 Oct 2020	29 Oct 2020	19 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020
GW06	SE212970.006	LB212662	29 Oct 2020	29 Oct 2020	19 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020
GW07	SE212970.007	LB212662	29 Oct 2020	29 Oct 2020	19 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020
GW09	SE212970.008	LB212662	29 Oct 2020	29 Oct 2020	19 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020
GW19	SE212970.009	LB212662	29 Oct 2020	29 Oct 2020	19 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW01	SE212970.001	LB212422	29 Oct 2020	29 Oct 2020	27 Apr 2021	30 Oct 2020	27 Apr 2021	02 Nov 2020
GW03	SE212970.003	LB212422	29 Oct 2020	29 Oct 2020	27 Apr 2021	30 Oct 2020	27 Apr 2021	02 Nov 2020
GW04	SE212970.004	LB212422	29 Oct 2020	29 Oct 2020	27 Apr 2021	30 Oct 2020	27 Apr 2021	02 Nov 2020
GW05	SE212970.005	LB212422	29 Oct 2020	29 Oct 2020	27 Apr 2021	30 Oct 2020	27 Apr 2021	02 Nov 2020
GW06	SE212970.006	LB212422	29 Oct 2020	29 Oct 2020	27 Apr 2021	30 Oct 2020	27 Apr 2021	02 Nov 2020
GW07	SE212970.007	LB212422	29 Oct 2020	29 Oct 2020	27 Apr 2021	30 Oct 2020	27 Apr 2021	03 Nov 2020
GW09	SE212970.008	LB212422	29 Oct 2020	29 Oct 2020	27 Apr 2021	30 Oct 2020	27 Apr 2021	02 Nov 2020
GW19	SE212970.009	LB212422	29 Oct 2020	29 Oct 2020	27 Apr 2021	30 Oct 2020	27 Apr 2021	02 Nov 2020

Trace Metals (Total) in Water by ICPMS

Method: ME-(AU)-[ENV]AN022/AN318

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW02	SE212970.002	LB212420	29 Oct 2020	29 Oct 2020	27 Apr 2021	30 Oct 2020	27 Apr 2021	02 Nov 2020
GW07	SE212970.007	LB212420	29 Oct 2020	29 Oct 2020	27 Apr 2021	30 Oct 2020	27 Apr 2021	02 Nov 2020

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW01	SE212970.001	LB212662	29 Oct 2020	29 Oct 2020	05 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020
GW02	SE212970.002	LB212662	29 Oct 2020	29 Oct 2020	05 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020
GW03	SE212970.003	LB212662	29 Oct 2020	29 Oct 2020	05 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020
GW04	SE212970.004	LB212662	29 Oct 2020	29 Oct 2020	05 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020
GW05	SE212970.005	LB212662	29 Oct 2020	29 Oct 2020	05 Nov 2020	04 Nov 2020	14 Dec 2020	05 Nov 2020
GW06	SE212970.006	LB212662	29 Oct 2020	29 Oct 2020	05 Nov 2020	04 Nov 2020	14 Dec 2020	05 Nov 2020
GW07	SE212970.007	LB212662	29 Oct 2020	29 Oct 2020	05 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020
GW09	SE212970.008	LB212662	29 Oct 2020	29 Oct 2020	05 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020
GW19	SE212970.009	LB212662	29 Oct 2020	29 Oct 2020	05 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW01	SE212970.001	LB212701	29 Oct 2020	29 Oct 2020	05 Nov 2020	04 Nov 2020	14 Dec 2020	05 Nov 2020
GW03	SE212970.003	LB212701	29 Oct 2020	29 Oct 2020	05 Nov 2020	04 Nov 2020	14 Dec 2020	05 Nov 2020
GW04	SE212970.004	LB212701	29 Oct 2020	29 Oct 2020	05 Nov 2020	04 Nov 2020	14 Dec 2020	05 Nov 2020
GW05	SE212970.005	LB212701	29 Oct 2020	29 Oct 2020	05 Nov 2020	04 Nov 2020	14 Dec 2020	05 Nov 2020
GW06	SE212970.006	LB212701	29 Oct 2020	29 Oct 2020	05 Nov 2020	04 Nov 2020	14 Dec 2020	05 Nov 2020
GW07	SE212970.007	LB212701	29 Oct 2020	29 Oct 2020	05 Nov 2020	04 Nov 2020	14 Dec 2020	05 Nov 2020
GW09	SE212970.008	LB212701	29 Oct 2020	29 Oct 2020	05 Nov 2020	04 Nov 2020	14 Dec 2020	05 Nov 2020
GW19	SE212970.009	LB212701	29 Oct 2020	29 Oct 2020	05 Nov 2020	04 Nov 2020	14 Dec 2020	05 Nov 2020

HOLDING TIME SUMMARY

SE212970 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW01	SE212970.001	LB212701	29 Oct 2020	29 Oct 2020	05 Nov 2020	04 Nov 2020	14 Dec 2020	05 Nov 2020
GW03	SE212970.003	LB212701	29 Oct 2020	29 Oct 2020	05 Nov 2020	04 Nov 2020	14 Dec 2020	05 Nov 2020
GW04	SE212970.004	LB212701	29 Oct 2020	29 Oct 2020	05 Nov 2020	04 Nov 2020	14 Dec 2020	05 Nov 2020
GW05	SE212970.005	LB212701	29 Oct 2020	29 Oct 2020	05 Nov 2020	04 Nov 2020	14 Dec 2020	05 Nov 2020
GW06	SE212970.006	LB212701	29 Oct 2020	29 Oct 2020	05 Nov 2020	04 Nov 2020	14 Dec 2020	05 Nov 2020
GW07	SE212970.007	LB212701	29 Oct 2020	29 Oct 2020	05 Nov 2020	04 Nov 2020	14 Dec 2020	05 Nov 2020
GW09	SE212970.008	LB212701	29 Oct 2020	29 Oct 2020	05 Nov 2020	04 Nov 2020	14 Dec 2020	05 Nov 2020
GW19	SE212970.009	LB212701	29 Oct 2020	29 Oct 2020	05 Nov 2020	04 Nov 2020	14 Dec 2020	05 Nov 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples — **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C2_PFTeDA) Isotopically Labelled Internal Recovery Standard	GW01	SE212970.001	%	10 - 150%	114
	GW02	SE212970.002	%	10 - 150%	119
	GW03	SE212970.003	%	10 - 150%	126
	GW04	SE212970.004	%	10 - 150%	122
	GW05	SE212970.005	%	10 - 150%	114
	GW06	SE212970.006	%	10 - 150%	125
	GW07	SE212970.007	%	10 - 150%	109
	GW09	SE212970.008	%	10 - 150%	130
	GW19	SE212970.009	%	10 - 150%	131
(13C2-4:2 FTS) Isotopically Labelled Internal Recovery Standard	GW01	SE212970.001	%	10 - 150%	38
	GW02	SE212970.002	%	10 - 150%	37
	GW03	SE212970.003	%	10 - 150%	45
	GW04	SE212970.004	%	10 - 150%	35
	GW05	SE212970.005	%	10 - 150%	40
	GW06	SE212970.006	%	10 - 150%	39
	GW07	SE212970.007	%	10 - 150%	40
	GW09	SE212970.008	%	10 - 150%	40
	GW19	SE212970.009	%	10 - 150%	31
(13C2-6:2 FTS) Isotopically Labelled Internal Recovery Standard	GW01	SE212970.001	%	10 - 150%	38
	GW02	SE212970.002	%	10 - 150%	41
	GW03	SE212970.003	%	10 - 150%	45
	GW04	SE212970.004	%	10 - 150%	35
	GW05	SE212970.005	%	10 - 150%	34
	GW06	SE212970.006	%	10 - 150%	42
	GW07	SE212970.007	%	10 - 150%	35
	GW09	SE212970.008	%	10 - 150%	27
	GW19	SE212970.009	%	10 - 150%	29
(13C2-8:2 FTS) Isotopically Labelled Internal Recovery Standard	GW01	SE212970.001	%	10 - 150%	31
	GW02	SE212970.002	%	10 - 150%	30
	GW03	SE212970.003	%	10 - 150%	53
	GW04	SE212970.004	%	10 - 150%	30
	GW05	SE212970.005	%	10 - 150%	51
	GW06	SE212970.006	%	10 - 150%	44
	GW07	SE212970.007	%	10 - 150%	43
	GW09	SE212970.008	%	10 - 150%	34
	GW19	SE212970.009	%	10 - 150%	37
(13C2-PFDoA) Isotopically Labelled Internal Recovery Standard	GW01	SE212970.001	%	10 - 150%	113
	GW02	SE212970.002	%	10 - 150%	105
	GW03	SE212970.003	%	10 - 150%	124
	GW04	SE212970.004	%	10 - 150%	100
	GW05	SE212970.005	%	10 - 150%	110
	GW06	SE212970.006	%	10 - 150%	111
	GW07	SE212970.007	%	10 - 150%	105
	GW09	SE212970.008	%	10 - 150%	116
	GW19	SE212970.009	%	10 - 150%	106
(13C2-PFHxDA) Isotopically Labelled Internal Recovery Standard	GW01	SE212970.001	%	10 - 150%	100
	GW02	SE212970.002	%	10 - 150%	129
	GW03	SE212970.003	%	10 - 150%	144
	GW04	SE212970.004	%	10 - 150%	135
	GW05	SE212970.005	%	10 - 150%	136
	GW06	SE212970.006	%	10 - 150%	136
	GW07	SE212970.007	%	10 - 150%	137
	GW09	SE212970.008	%	10 - 150%	145
	GW19	SE212970.009	%	10 - 150%	145
(13C3-PFBS) Isotopically Labelled Internal Recovery Standard	GW01	SE212970.001	%	10 - 150%	103
	GW02	SE212970.002	%	10 - 150%	102
	GW03	SE212970.003	%	10 - 150%	119
	GW04	SE212970.004	%	10 - 150%	100
	GW05	SE212970.005	%	10 - 150%	103
	GW06	SE212970.006	%	10 - 150%	104
	GW07	SE212970.007	%	10 - 150%	108

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples (continued) — **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C3-PFBS) Isotopically Labelled Internal Recovery Standard	GW09	SE212970.008	%	10 - 150%	108
	GW19	SE212970.009	%	10 - 150%	96
(13C3-PFHxS) Isotopically Labelled Internal Recovery Standard	GW01	SE212970.001	%	10 - 150%	102
	GW02	SE212970.002	%	10 - 150%	102
	GW03	SE212970.003	%	10 - 150%	107
	GW04	SE212970.004	%	10 - 150%	99
	GW05	SE212970.005	%	10 - 150%	98
	GW06	SE212970.006	%	10 - 150%	100
	GW07	SE212970.007	%	10 - 150%	101
	GW09	SE212970.008	%	10 - 150%	117
	GW19	SE212970.009	%	10 - 150%	93
(13C4_PFOA) Isotopically Labelled Internal Recovery Standard	GW01	SE212970.001	%	10 - 150%	99
	GW02	SE212970.002	%	10 - 150%	107
	GW03	SE212970.003	%	10 - 150%	97
	GW04	SE212970.004	%	10 - 150%	102
	GW05	SE212970.005	%	10 - 150%	106
	GW06	SE212970.006	%	10 - 150%	104
	GW07	SE212970.007	%	10 - 150%	102
	GW09	SE212970.008	%	10 - 150%	109
	GW19	SE212970.009	%	10 - 150%	110
(13C4-PFBA) Isotopically Labelled Internal Recovery Standard	GW01	SE212970.001	%	10 - 150%	96
	GW02	SE212970.002	%	10 - 150%	99
	GW03	SE212970.003	%	10 - 150%	100
	GW04	SE212970.004	%	10 - 150%	100
	GW05	SE212970.005	%	10 - 150%	97
	GW06	SE212970.006	%	10 - 150%	96
	GW07	SE212970.007	%	10 - 150%	99
	GW09	SE212970.008	%	10 - 150%	96
	GW19	SE212970.009	%	10 - 150%	104
(13C4-PFHpA) Isotopically Labelled Internal Recovery Standard	GW01	SE212970.001	%	10 - 150%	103
	GW02	SE212970.002	%	10 - 150%	108
	GW03	SE212970.003	%	10 - 150%	107
	GW04	SE212970.004	%	10 - 150%	106
	GW05	SE212970.005	%	10 - 150%	115
	GW06	SE212970.006	%	10 - 150%	114
	GW07	SE212970.007	%	10 - 150%	108
	GW09	SE212970.008	%	10 - 150%	114
	GW19	SE212970.009	%	10 - 150%	130
(13C5-PFHxA) Isotopically Labelled Internal Recovery Standard	GW01	SE212970.001	%	10 - 150%	102
	GW02	SE212970.002	%	10 - 150%	107
	GW03	SE212970.003	%	10 - 150%	108
	GW04	SE212970.004	%	10 - 150%	104
	GW05	SE212970.005	%	10 - 150%	116
	GW06	SE212970.006	%	10 - 150%	114
	GW07	SE212970.007	%	10 - 150%	111
	GW09	SE212970.008	%	10 - 150%	111
	GW19	SE212970.009	%	10 - 150%	120
(13C5-PFPeA) Isotopically Labelled Internal Recovery Standard	GW01	SE212970.001	%	10 - 150%	102
	GW02	SE212970.002	%	10 - 150%	100
	GW03	SE212970.003	%	10 - 150%	102
	GW04	SE212970.004	%	10 - 150%	101
	GW05	SE212970.005	%	10 - 150%	100
	GW06	SE212970.006	%	10 - 150%	103
	GW07	SE212970.007	%	10 - 150%	101
	GW09	SE212970.008	%	10 - 150%	103
	GW19	SE212970.009	%	10 - 150%	105
(13C6-PFDA) Isotopically Labelled Internal Recovery Standard	GW01	SE212970.001	%	10 - 150%	112
	GW02	SE212970.002	%	10 - 150%	83
	GW03	SE212970.003	%	10 - 150%	109
	GW04	SE212970.004	%	10 - 150%	94
	GW05	SE212970.005	%	10 - 150%	99

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples (continued) **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C6-PFDA) Isotopically Labelled Internal Recovery Standard	GW06	SE212970.006	%	10 - 150%	113
	GW07	SE212970.007	%	10 - 150%	97
	GW09	SE212970.008	%	10 - 150%	110
	GW19	SE212970.009	%	10 - 150%	135
(13C7-PFUdA) Isotopically Labelled Internal Recovery Standard	GW01	SE212970.001	%	10 - 150%	108
	GW02	SE212970.002	%	10 - 150%	98
	GW03	SE212970.003	%	10 - 150%	111
	GW04	SE212970.004	%	10 - 150%	109
	GW05	SE212970.005	%	10 - 150%	95
	GW06	SE212970.006	%	10 - 150%	111
	GW07	SE212970.007	%	10 - 150%	104
	GW09	SE212970.008	%	10 - 150%	102
	GW19	SE212970.009	%	10 - 150%	117
(13C8-PFOS) Isotopically Labelled Internal Recovery Standard	GW01	SE212970.001	%	10 - 150%	90
	GW02	SE212970.002	%	10 - 150%	83
	GW03	SE212970.003	%	10 - 150%	90
	GW04	SE212970.004	%	10 - 150%	87
	GW05	SE212970.005	%	10 - 150%	101
	GW06	SE212970.006	%	10 - 150%	96
	GW07	SE212970.007	%	10 - 150%	85
	GW09	SE212970.008	%	10 - 150%	86
	GW19	SE212970.009	%	10 - 150%	99
(13C8-PFOSA) Isotopically Labelled Internal Recovery Standard	GW01	SE212970.001	%	10 - 150%	76
	GW02	SE212970.002	%	10 - 150%	84
	GW03	SE212970.003	%	10 - 150%	91
	GW04	SE212970.004	%	10 - 150%	73
	GW05	SE212970.005	%	10 - 150%	82
	GW06	SE212970.006	%	10 - 150%	75
	GW07	SE212970.007	%	10 - 150%	92
	GW09	SE212970.008	%	10 - 150%	100
	GW19	SE212970.009	%	10 - 150%	104
(13C9-PFNA) Isotopically Labelled Internal Recovery Standard	GW01	SE212970.001	%	10 - 150%	98
	GW02	SE212970.002	%	10 - 150%	111
	GW03	SE212970.003	%	10 - 150%	103
	GW04	SE212970.004	%	10 - 150%	104
	GW05	SE212970.005	%	10 - 150%	94
	GW06	SE212970.006	%	10 - 150%	104
	GW07	SE212970.007	%	10 - 150%	99
	GW09	SE212970.008	%	10 - 150%	109
	GW19	SE212970.009	%	10 - 150%	101
(D3-N-MeFOSA) Isotopically Labelled Internal Recovery Standard	GW01	SE212970.001	%	10 - 150%	75
	GW02	SE212970.002	%	10 - 150%	68
	GW03	SE212970.003	%	10 - 150%	87
	GW04	SE212970.004	%	10 - 150%	72
	GW05	SE212970.005	%	10 - 150%	82
	GW06	SE212970.006	%	10 - 150%	83
	GW07	SE212970.007	%	10 - 150%	58
	GW09	SE212970.008	%	10 - 150%	72
	GW19	SE212970.009	%	10 - 150%	71
(D3-N-MeFOSAA) Isotopically Labelled Internal Recovery Standard	GW01	SE212970.001	%	10 - 150%	71
	GW02	SE212970.002	%	10 - 150%	73
	GW03	SE212970.003	%	10 - 150%	89
	GW04	SE212970.004	%	10 - 150%	84
	GW05	SE212970.005	%	10 - 150%	82
	GW06	SE212970.006	%	10 - 150%	76
	GW07	SE212970.007	%	10 - 150%	79
	GW09	SE212970.008	%	10 - 150%	84
	GW19	SE212970.009	%	10 - 150%	98
(D5-N-EtFOSA) Isotopically Labelled Internal Recovery Standard	GW01	SE212970.001	%	10 - 150%	56
	GW02	SE212970.002	%	10 - 150%	72
	GW03	SE212970.003	%	10 - 150%	77

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples (continued)

Method: MA-1523

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(D5-N-EtFOSA) Isotopically Labelled Internal Recovery Standard	GW04	SE212970.004	%	10 - 150%	77
	GW05	SE212970.005	%	10 - 150%	66
	GW06	SE212970.006	%	10 - 150%	73
	GW07	SE212970.007	%	10 - 150%	65
	GW09	SE212970.008	%	10 - 150%	72
	GW19	SE212970.009	%	10 - 150%	82
(D5-N-EtFOSAA) Isotopically Labelled Internal Recovery Standard	GW01	SE212970.001	%	10 - 150%	82
	GW02	SE212970.002	%	10 - 150%	82
	GW03	SE212970.003	%	10 - 150%	84
	GW04	SE212970.004	%	10 - 150%	95
	GW05	SE212970.005	%	10 - 150%	82
	GW06	SE212970.006	%	10 - 150%	78
	GW07	SE212970.007	%	10 - 150%	84
	GW09	SE212970.008	%	10 - 150%	103
	GW19	SE212970.009	%	10 - 150%	96
(D7-N-MeFOSE) Isotopically Labelled Internal Recovery Standard	GW01	SE212970.001	%	10 - 150%	59
	GW02	SE212970.002	%	10 - 150%	69
	GW03	SE212970.003	%	10 - 150%	76
	GW04	SE212970.004	%	10 - 150%	77
	GW05	SE212970.005	%	10 - 150%	89
	GW06	SE212970.006	%	10 - 150%	78
	GW07	SE212970.007	%	10 - 150%	74
	GW09	SE212970.008	%	10 - 150%	87
	GW19	SE212970.009	%	10 - 150%	88
(D9-N-EtFOSE) Isotopically Labelled Internal Recovery Standard	GW01	SE212970.001	%	10 - 150%	81
	GW02	SE212970.002	%	10 - 150%	78
	GW03	SE212970.003	%	10 - 150%	85
	GW04	SE212970.004	%	10 - 150%	79
	GW05	SE212970.005	%	10 - 150%	87
	GW06	SE212970.006	%	10 - 150%	89
	GW07	SE212970.007	%	10 - 150%	74
	GW09	SE212970.008	%	10 - 150%	92
	GW19	SE212970.009	%	10 - 150%	105

Speciated Phenols in Water

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	GW01	SE212970.001	%	40 - 130%	56
	GW03	SE212970.003	%	40 - 130%	44
	GW04	SE212970.004	%	40 - 130%	51
	GW07	SE212970.007	%	40 - 130%	62
	GW09	SE212970.008	%	40 - 130%	56
	GW19	SE212970.009	%	40 - 130%	49
d5-phenol (Surrogate)	GW01	SE212970.001	%	20 - 90%	53
	GW03	SE212970.003	%	20 - 90%	41
	GW04	SE212970.004	%	20 - 90%	48
	GW07	SE212970.007	%	20 - 90%	55
	GW09	SE212970.008	%	20 - 90%	50
	GW19	SE212970.009	%	20 - 90%	44

SVOC Compounds in Waters by GC-QQQ

Method: USEPA8270D

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d14-p-terphenyl (Surrogate)	GW01	SE212970.001	%	40 - 130%	113
	GW03	SE212970.003	%	40 - 130%	113
	GW04	SE212970.004	%	40 - 130%	101
	GW05	SE212970.005	%	40 - 130%	110
	GW06	SE212970.006	%	40 - 130%	114
	GW09	SE212970.008	%	40 - 130%	109
	GW19	SE212970.009	%	40 - 130%	114

SVOC Compounds in Waters by GC-QQQ, Low Level

Method: USEPA8270D LL

Parameter	Sample Name	Sample Number	Units

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

SVOC Compounds in Waters by GC-QQQ, Low Level (continued)

Method: USEPA8270D LL

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d14-p-terphenyl (Surrogate)	GW01	SE212970.001	%	40 - 130%	113
	GW02	SE212970.002	%	40 - 130%	108
	GW03	SE212970.003	%	40 - 130%	113
	GW04	SE212970.004	%	40 - 130%	101
	GW07	SE212970.007	%	40 - 130%	115
	GW09	SE212970.008	%	40 - 130%	109
	GW19	SE212970.009	%	40 - 130%	114

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	GW01	SE212970.001	%	40 - 130%	101
	GW03	SE212970.003	%	40 - 130%	106
	GW04	SE212970.004	%	40 - 130%	102
	GW05	SE212970.005	%	40 - 130%	103
	GW06	SE212970.006	%	40 - 130%	104
	GW07	SE212970.007	%	40 - 130%	102
	GW09	SE212970.008	%	40 - 130%	101
	GW19	SE212970.009	%	40 - 130%	105
d4-1,2-dichloroethane (Surrogate)	GW01	SE212970.001	%	40 - 130%	96
	GW03	SE212970.003	%	40 - 130%	97
	GW04	SE212970.004	%	40 - 130%	98
	GW05	SE212970.005	%	40 - 130%	97
	GW06	SE212970.006	%	40 - 130%	97
	GW07	SE212970.007	%	40 - 130%	97
	GW09	SE212970.008	%	40 - 130%	99
	GW19	SE212970.009	%	40 - 130%	97
d8-toluene (Surrogate)	GW01	SE212970.001	%	40 - 130%	97
	GW03	SE212970.003	%	40 - 130%	96
	GW04	SE212970.004	%	40 - 130%	96
	GW05	SE212970.005	%	40 - 130%	97
	GW06	SE212970.006	%	40 - 130%	97
	GW07	SE212970.007	%	40 - 130%	97
	GW09	SE212970.008	%	40 - 130%	96
	GW19	SE212970.009	%	40 - 130%	96

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	GW01	SE212970.001	%	40 - 130%	101
	GW03	SE212970.003	%	40 - 130%	106
	GW04	SE212970.004	%	40 - 130%	102
	GW05	SE212970.005	%	40 - 130%	103
	GW06	SE212970.006	%	40 - 130%	104
	GW07	SE212970.007	%	40 - 130%	102
	GW09	SE212970.008	%	40 - 130%	101
	GW19	SE212970.009	%	40 - 130%	105
d4-1,2-dichloroethane (Surrogate)	GW01	SE212970.001	%	60 - 130%	96
	GW03	SE212970.003	%	60 - 130%	97
	GW04	SE212970.004	%	60 - 130%	98
	GW05	SE212970.005	%	60 - 130%	97
	GW06	SE212970.006	%	60 - 130%	97
	GW07	SE212970.007	%	60 - 130%	97
	GW09	SE212970.008	%	60 - 130%	99
	GW19	SE212970.009	%	60 - 130%	97
d8-toluene (Surrogate)	GW01	SE212970.001	%	40 - 130%	97
	GW03	SE212970.003	%	40 - 130%	96
	GW04	SE212970.004	%	40 - 130%	96
	GW05	SE212970.005	%	40 - 130%	97
	GW06	SE212970.006	%	40 - 130%	97
	GW07	SE212970.007	%	40 - 130%	97
	GW09	SE212970.008	%	40 - 130%	96
	GW19	SE212970.009	%	40 - 130%	96

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

Sample Number	Parameter	Units	LOR	Result
LB212388.001	Mercury	mg/L	0.0001	<0.0001

Speciated Phenols in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB212662.001		Phenol	µg/L	0.5	<0.5
		2-methyl phenol (o-cresol)	µg/L	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	µg/L	1	<1
		2-chlorophenol	µg/L	0.5	<0.5
		2,4-dimethylphenol	µg/L	0.5	<0.5
		2,6-dichlorophenol	µg/L	0.5	<0.5
		2,4-dichlorophenol	µg/L	0.5	<0.5
		2,4,6-trichlorophenol	µg/L	0.5	<0.5
		2-nitrophenol	µg/L	0.5	<0.5
		4-nitrophenol	µg/L	1	<1
		2,4,5-trichlorophenol	µg/L	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	µg/L	1	<1
		Pentachlorophenol	µg/L	0.5	<0.5
		2,4-dinitrophenol	µg/L	2	<2
		4-chloro-3-methylphenol	µg/L	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	51
		d5-phenol (Surrogate)	%	-	47

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Sample Number	Parameter	Units	LOR	Result
LB212422.001	Arsenic, As	µg/L	1	<1
	Cadmium, Cd	µg/L	0.1	<0.1
	Chromium, Cr	µg/L	1	<1
	Copper, Cu	µg/L	1	<1
	Lead, Pb	µg/L	1	<1
	Nickel, Ni	µg/L	1	<1
	Zinc, Zn	µg/L	5	<5

Trace Metals (Total) in Water by ICPMS

Method: ME-(AU)-[ENV]AN022/AN318

Sample Number	Parameter	Units	LOR	Result
LB212420.001	Total Arsenic	µg/L	1	<1
	Total Beryllium	µg/L	1	<1
	Total Boron	µg/L	5	<5
	Total Cadmium	µg/L	0.1	<0.1
	Total Cobalt	µg/L	1	<1
	Total Copper	µg/L	1	<1
	Total Lead	µg/L	1	<1
	Total Manganese	µg/L	1	<1
	Total Nickel	µg/L	1	<1
	Total Zinc	µg/L	5	<5

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB212662.001	TRH C10-C14	µg/L	50	<50
	TRH C15-C28	µg/L	200	<200
	TRH C29-C36	µg/L	200	<200
	TRH C37-C40	µg/L	200	<200

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB212701.001	Fumigants	2,2-dichloropropane	µg/L	0.5	<0.5
		1,2-dichloropropane	µg/L	0.5	<0.5
		cis-1,3-dichloropropene	µg/L	0.5	<0.5
		trans-1,3-dichloropropene	µg/L	0.5	<0.5
		1,2-dibromoethane (EDB)	µg/L	0.5	<0.5
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	µg/L	5	<5
		Chloromethane	µg/L	5	<5

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOCs in Water (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB212701.001	Halogenated Aliphatics	Vinyl chloride (Chloroethene)	µg/L	0.3	<0.3
		Bromomethane	µg/L	10	<10
		Chloroethane	µg/L	5	<5
		Trichlorofluoromethane	µg/L	1	<1
		Iodomethane	µg/L	5	<5
		1,1-dichloroethene	µg/L	0.5	<0.5
		Dichloromethane (Methylene chloride)	µg/L	5	<5
		Allyl chloride	µg/L	2	<2
		trans-1,2-dichloroethene	µg/L	0.5	<0.5
		1,1-dichloroethane	µg/L	0.5	<0.5
		cis-1,2-dichloroethene	µg/L	0.5	<0.5
		Bromochloromethane	µg/L	0.5	<0.5
		1,2-dichloroethane	µg/L	0.5	<0.5
		1,1,1-trichloroethane	µg/L	0.5	<0.5
		1,1-dichloropropene	µg/L	0.5	<0.5
		Carbon tetrachloride	µg/L	0.5	<0.5
		Dibromomethane	µg/L	0.5	<0.5
		Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	<0.5
		1,1,2-trichloroethane	µg/L	0.5	<0.5
		1,3-dichloropropane	µg/L	0.5	<0.5
		Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	<0.5
		1,1,1,2-tetrachloroethane	µg/L	0.5	<0.5
		cis-1,4-dichloro-2-butene	µg/L	1	<1
		1,1,2,2-tetrachloroethane	µg/L	0.5	<0.5
		1,2,3-trichloropropane	µg/L	0.5	<0.5
		trans-1,4-dichloro-2-butene	µg/L	1	<1
		1,2-dibromo-3-chloropropane	µg/L	0.5	<0.5
		Hexachlorobutadiene	µg/L	0.5	<0.5
	Halogenated Aromatics	Chlorobenzene	µg/L	0.5	<0.5
		Bromobenzene	µg/L	0.5	<0.5
		2-chlorotoluene	µg/L	0.5	<0.5
		4-chlorotoluene	µg/L	0.5	<0.5
		1,3-dichlorobenzene	µg/L	0.5	<0.5
		1,4-dichlorobenzene	µg/L	0.3	<0.3
		1,2-dichlorobenzene	µg/L	0.5	<0.5
		1,2,4-trichlorobenzene	µg/L	0.5	<0.5
		1,2,3-trichlorobenzene	µg/L	0.5	<0.5
	Monocyclic Aromatic Hydrocarbons	Benzene	µg/L	0.5	<0.5
		Toluene	µg/L	0.5	<0.5
		Ethylbenzene	µg/L	0.5	<0.5
		m/p-xylene	µg/L	1	<1
		o-xylene	µg/L	0.5	<0.5
		Styrene (Vinyl benzene)	µg/L	0.5	<0.5
		Isopropylbenzene (Cumene)	µg/L	0.5	<0.5
		n-propylbenzene	µg/L	0.5	<0.5
		1,3,5-trimethylbenzene	µg/L	0.5	<0.5
		tert-butylbenzene	µg/L	0.5	<0.5
		1,2,4-trimethylbenzene	µg/L	0.5	<0.5
		sec-butylbenzene	µg/L	0.5	<0.5
		p-isopropyltoluene	µg/L	0.5	<0.5
		n-butylbenzene	µg/L	0.5	<0.5
	Nitrogenous Compounds	Acrylonitrile	µg/L	0.5	<0.5
	Oxygenated Compounds	Acetone (2-propanone)	µg/L	10	<10
		MtBE (Methyl-tert-butyl ether)	µg/L	2	<2
		Vinyl acetate	µg/L	10	<10
		MEK (2-butanone)	µg/L	10	<10
		MIBK (4-methyl-2-pentanone)	µg/L	5	<5
		2-hexanone (MBK)	µg/L	5	<5
	Polycyclic VOCs	Naphthalene	µg/L	0.5	<0.5
	Sulphonated	Carbon disulfide	µg/L	2	<2
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	95

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOCs in Water (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB212701.001	Surrogates	d8-toluene (Surrogate)	%	-	95
		Bromofluorobenzene (Surrogate)	%	-	98
	Trihalomethanes	Chloroform (THM)	µg/L	0.5	<0.5
		Bromodichloromethane (THM)	µg/L	0.5	<0.5
		Dibromochloromethane (THM)	µg/L	0.5	<0.5
		Bromoform (THM)	µg/L	0.5	<0.5

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB212701.001		TRH C6-C9	µg/L	40	<40
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	95
		d8-toluene (Surrogate)	%	-	95
		Bromofluorobenzene (Surrogate)	%	-	98

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212967.006	LB212388.014	Mercury	µg/L	0.0001	<0.0001	<0.0001	200	0

Mercury (total) in Water

Method: ME-(AU)-[ENV]AN311(Perth) /AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212973.008	LB212390.011	Total Mercury	µg/L	0.0001	<0.0001	<0.0001	200	0

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212973.004	LB212422.014	Arsenic, As	µg/L	1	<1	<1	200	0
		Cadmium, Cd	µg/L	0.1	<0.1	<0.1	180	0
		Chromium, Cr	µg/L	1	<1	<1	200	0
		Copper, Cu	µg/L	1	33	33	18	0
		Lead, Pb	µg/L	1	1	1	100	1
		Nickel, Ni	µg/L	1	3	3	54	0
		Zinc, Zn	µg/L	5	27	28	33	2
SE212973.010	LB212422.018	Arsenic, As	µg/L	1	<1	<1	200	0
		Cadmium, Cd	µg/L	0.1	<0.1	<0.1	200	0
		Chromium, Cr	µg/L	1	<1	<1	131	0
		Copper, Cu	µg/L	1	1	1	105	1
		Lead, Pb	µg/L	1	<1	<1	149	0
		Nickel, Ni	µg/L	1	<1	<1	200	0
		Zinc, Zn	µg/L	5	<5	<5	200	0

Trace Metals (Total) in Water by ICPMS

Method: ME-(AU)-[ENV]AN022/AN318

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212998.001	LB212420.014	Total Arsenic	µg/L	1	63	92	16	38 ②
		Total Cadmium	µg/L	0.1	17	20	16	16 ②
		Total Copper	µg/L	1	2100	3300	15	44 ②
		Total Lead	µg/L	1	330	380	15	13
		Total Nickel	µg/L	1	250	300	15	17 ②
		Total Zinc	µg/L	5	51000	56000	15	9

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212970.009	LB212701.024	Fumigants	2,2-dichloropropane	µg/L	0.5	<0.5	0	200	0
			1,2-dichloropropane	µg/L	0.5	<0.5	0	200	0
			cis-1,3-dichloropropene	µg/L	0.5	<0.5	0	200	0
			trans-1,3-dichloropropene	µg/L	0.5	<0.5	0	200	0
			1,2-dibromoethane (EDB)	µg/L	0.5	<0.5	0	200	0
		Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	µg/L	5	<5	0	200	0
			Chloromethane	µg/L	5	<5	0	200	0
			Vinyl chloride (Chloroethene)	µg/L	0.3	<0.3	0	200	0
			Bromomethane	µg/L	10	<10	0.100563579	200	0
			Chloroethane	µg/L	5	<5	0	200	0
			Trichlorofluoromethane	µg/L	1	<1	0.003290477	200	0
			Iodomethane	µg/L	5	<5	0.046142401	200	0
			1,1-dichloroethene	µg/L	0.5	<0.5	0.022829673	200	0
			Dichloromethane (Methylene chloride)	µg/L	5	<5	0.118712952	200	0
			Allyl chloride	µg/L	2	<2	0	200	0
			trans-1,2-dichloroethene	µg/L	0.5	<0.5	0	200	0
			1,1-dichloroethane	µg/L	0.5	<0.5	0	200	0
			cis-1,2-dichloroethene	µg/L	0.5	<0.5	0	200	0
			Bromochloromethane	µg/L	0.5	<0.5	0.002075402	200	0
			1,2-dichloroethane	µg/L	0.5	<0.5	0.029193959	200	0
			1,1,1-trichloroethane	µg/L	0.5	<0.5	0	200	0
			1,1-dichloropropene	µg/L	0.5	<0.5	0	200	0
			Carbon tetrachloride	µg/L	0.5	<0.5	0	200	0
			Dibromomethane	µg/L	0.5	<0.5	0.000723781	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOCs in Water (continued) — Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212970.009	LB212701.024	Halogenated	Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	<0.5	0.017677576	200	0
		Aliphatics	1,1,2-trichloroethane	µg/L	0.5	<0.5	0	200	0
			1,3-dichloropropane	µg/L	0.5	<0.5	0	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	<0.5	0.0017809	200	0
			1,1,1,2-tetrachloroethane	µg/L	0.5	<0.5	0	200	0
			cis-1,4-dichloro-2-butene	µg/L	1	<1	0	200	0
			1,1,2,2-tetrachloroethane	µg/L	0.5	<0.5	0	200	0
			1,2,3-trichloropropane	µg/L	0.5	<0.5	0	200	0
			trans-1,4-dichloro-2-butene	µg/L	1	<1	0	200	0
			1,2-dibromo-3-chloropropane	µg/L	0.5	<0.5	0	200	0
			Hexachlorobutadiene	µg/L	0.5	<0.5	0.00160172	200	0
		Halogenated	Chlorobenzene	µg/L	0.5	<0.5	0.040661103	200	0
		Aromatics	Bromobenzene	µg/L	0.5	<0.5	0	200	0
			2-chlorotoluene	µg/L	0.5	<0.5	0	200	0
			4-chlorotoluene	µg/L	0.5	<0.5	0	200	0
			1,3-dichlorobenzene	µg/L	0.5	<0.5	0	200	0
			1,4-dichlorobenzene	µg/L	0.3	<0.3	0.004848566	200	0
			1,2-dichlorobenzene	µg/L	0.5	<0.5	0.014314848	200	0
			1,2,4-trichlorobenzene	µg/L	0.5	<0.5	0	200	0
			1,2,3-trichlorobenzene	µg/L	0.5	<0.5	0	200	0
		Monocyclic	Benzene	µg/L	0.5	<0.5	0.033024211	200	0
		Aromatic	Toluene	µg/L	0.5	<0.5	0.052438723	200	0
			Ethylbenzene	µg/L	0.5	<0.5	0.037616669	200	0
			m/p-xylene	µg/L	1	<1	0.103440482	200	0
			o-xylene	µg/L	0.5	<0.5	0.051782432	200	0
			Styrene (Vinyl benzene)	µg/L	0.5	<0.5	0	200	0
			Isopropylbenzene (Cumene)	µg/L	0.5	<0.5	0.005164021	200	0
			n-propylbenzene	µg/L	0.5	<0.5	0.00075685	200	0
			1,3,5-trimethylbenzene	µg/L	0.5	<0.5	0.001722287	200	0
			tert-butylbenzene	µg/L	0.5	<0.5	0	200	0
			1,2,4-trimethylbenzene	µg/L	0.5	<0.5	0.004631419	200	0
			sec-butylbenzene	µg/L	0.5	<0.5	0	200	0
			p-isopropyltoluene	µg/L	0.5	<0.5	0.001922576	200	0
			n-butylbenzene	µg/L	0.5	<0.5	0	200	0
		Nitrogenous	Acrylonitrile	µg/L	0.5	<0.5	0	200	0
		Oxygenated	Acetone (2-propanone)	µg/L	10	<10	1.46075802	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	µg/L	2	<2	0.020903784	200	0
			Vinyl acetate	µg/L	10	<10	0	200	0
			MEK (2-butanone)	µg/L	10	<10	0	200	0
			MIBK (4-methyl-2-pentanone)	µg/L	5	<5	0	200	0
			2-hexanone (MBK)	µg/L	5	<5	0	200	0
		Polycyclic	Naphthalene	µg/L	0.5	<0.5	0.140269237	200	0
		Sulphonated	Carbon disulfide	µg/L	2	<2	0.009324996	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	0.0	9.416701966	30	3
			d8-toluene (Surrogate)	µg/L	-	0.0	9.425935108	30	2
			Bromofluorobenzene (Surrogate)	µg/L	-	0.0	10.32772421	30	1
		Trihalomethan	Chloroform (THM)	µg/L	0.5	<0.5	0.067217613	200	0
		es	Bromodichloromethane (THM)	µg/L	0.5	<0.5	0	200	0
			Dibromochloromethane (THM)	µg/L	0.5	<0.5	0	200	0
			Bromoform (THM)	µg/L	0.5	<0.5	0	200	0
SE212973.003	LB212701.025	Monocyclic	Benzene	µg/L	0.5	<0.5	0	200	0
		Aromatic	Toluene	µg/L	0.5	<0.5	0.021758313	200	0
			Ethylbenzene	µg/L	0.5	<0.5	0.016405749	200	0
			m/p-xylene	µg/L	1	<1	0.048094487	200	0
			o-xylene	µg/L	0.5	<0.5	0.020662308	200	0
		Polycyclic	Naphthalene	µg/L	0.5	<0.5	0.075777755	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	0.0	9.77935202	30	0
			d8-toluene (Surrogate)	µg/L	-	0.0	9.719570837	30	0
			Bromofluorobenzene (Surrogate)	µg/L	-	0.0	10.49788129	30	2

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Water — **Method: ME-(AU)-[ENV]AN433**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212970.009	LB212701.024		TRH C6-C10	µg/L	50	<50	4.282758966	200	0
			TRH C6-C9	µg/L	40	<40	0.419823525	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	0.0	9.416701966	30	3
			d8-toluene (Surrogate)	µg/L	-	0.0	9.425935108	30	2
			Bromofluorobenzene (Surrogate)	µg/L	-	0.0	10.32772421	30	1
		VPH F Bands	Benzene (F0)	µg/L	0.5	<0.5	0.033024211	200	0
			TRH C6-C10 minus BTEX (F1)	µg/L	50	<50	4.282758966	200	0
SE212973.003	LB212701.025		TRH C6-C10	µg/L	50	<50	1.486997958	200	0
			TRH C6-C9	µg/L	40	<40	0	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	0.0	9.77935202	30	0
			d8-toluene (Surrogate)	µg/L	-	0.0	9.719570837	30	0
			Bromofluorobenzene (Surrogate)	µg/L	-	0.0	10.49788129	30	2
		VPH F Bands	Benzene (F0)	µg/L	0.5	<0.5	0	200	0
			TRH C6-C10 minus BTEX (F1)	µg/L	50	<50	1.486997958	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Speciated Phenols in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212662.002		Phenol	µg/L	0.5	25	40	60 - 140	62
		2,4-dichlorophenol	µg/L	0.5	35	40	60 - 140	87
		2,4,6-trichlorophenol	µg/L	0.5	25	40	60 - 140	63
		Pentachlorophenol	µg/L	0.5	25	40	60 - 140	63
	Surrogates	2,4,6-Tribromophenol (Surrogate)	µg/L	-	2.3	5	40 - 130	46
		d5-phenol (Surrogate)	µg/L	-	1.0	2	40 - 130	48

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212422.002	Arsenic, As	µg/L	1	20	20	80 - 120	99
	Cadmium, Cd	µg/L	0.1	22	20	80 - 120	110
	Chromium, Cr	µg/L	1	22	20	80 - 120	112
	Copper, Cu	µg/L	1	23	20	80 - 120	114
	Lead, Pb	µg/L	1	20	20	80 - 120	100
	Nickel, Ni	µg/L	1	22	20	80 - 120	110
	Zinc, Zn	µg/L	5	23	20	80 - 120	113

Trace Metals (Total) in Water by ICPMS

Method: ME-(AU)-[ENV]AN022/AN318

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212420.002	Total Arsenic	µg/L	1	18	20	80 - 120	91
	Total Beryllium	µg/L	1	20	20	80 - 120	98
	Total Boron	µg/L	5	20	20	80 - 120	102
	Total Cadmium	µg/L	0.1	21	20	80 - 120	104
	Total Chromium	µg/L	1	22	20	80 - 120	111
	Total Cobalt	µg/L	1	22	20	80 - 120	110
	Total Copper	µg/L	1	22	20	80 - 120	112
	Total Lead	µg/L	1	20	20	80 - 120	98
	Total Manganese	µg/L	1	22	20	80 - 120	112
	Total Nickel	µg/L	1	22	20	80 - 120	109
	Total Zinc	µg/L	5	21	20	80 - 120	104

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212662.002		TRH C10-C14	µg/L	50	1000	1200	60 - 140	85
		TRH C15-C28	µg/L	200	1200	1200	60 - 140	97
		TRH C29-C36	µg/L	200	1200	1200	60 - 140	100
	TRH F Bands	TRH >C10-C16	µg/L	60	1100	1200	60 - 140	89
		TRH >C16-C34 (F3)	µg/L	500	1200	1200	60 - 140	103
		TRH >C34-C40 (F4)	µg/L	500	590	600	60 - 140	98

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212701.002	Halogenated	1,1-dichloroethene	µg/L	0.5	55	45.45	60 - 140	121
	Aliphatics	1,2-dichloroethane	µg/L	0.5	56	45.45	60 - 140	123
		Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	55	45.45	60 - 140	121
	Halogenated	Chlorobenzene	µg/L	0.5	52	45.45	60 - 140	115
	Monocyclic	Benzene	µg/L	0.5	48	45.45	60 - 140	105
	Aromatic	Toluene	µg/L	0.5	46	45.45	60 - 140	102
		Ethylbenzene	µg/L	0.5	49	45.45	60 - 140	107
		m/p-xylene	µg/L	1	96	90.9	60 - 140	105
		o-xylene	µg/L	0.5	49	45.45	60 - 140	107
	Trihalomethan	Chloroform (THM)	µg/L	0.5	59	45.45	60 - 140	131

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212701.002		TRH C6-C10	µg/L	50	780	946.63	60 - 140	82
		TRH C6-C9	µg/L	40	660	818.71	60 - 140	81
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	µg/L	50	490	639.67	60 - 140	77

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212914.001	LB212388.004	Mercury	mg/L	0.0001	0.0018	<0.0001	0.008	91

Mercury (total) in Water

Method: ME-(AU)-[ENV]AN311(Perth) /AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212916.005	LB212390.004	Total Mercury	mg/L	0.0001	0.0019	<0.0001	-	-

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212970.001	LB212422.004	Arsenic, As	µg/L	1	21	<1	20	105
		Cadmium, Cd	µg/L	0.1	22	0.1	20	110
		Chromium, Cr	µg/L	1	23	<1	20	111
		Copper, Cu	µg/L	1	140	120	20	112
		Lead, Pb	µg/L	1	24	5	20	93
		Nickel, Ni	µg/L	1	33	11	20	107
		Zinc, Zn	µg/L	5	150	130	20	126

Trace Metals (Total) in Water by ICPMS

Method: ME-(AU)-[ENV]AN022/AN318

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212901.001	LB212420.004	Total Chromium	µg/L	1	22	<1	-	-
		Total Copper	µg/L	1	20	<1	20	98
		Total Lead	µg/L	1	20	<1	20	99
		Total Zinc	µg/L	5	20	<5	20	92

VOCs in Water

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE212970.005	LB212701.026	Fumigants	2,2-dichloropropane	µg/L	0.5	<0.5	-	-
			1,2-dichloropropane	µg/L	0.5	<0.5	-	-
			cis-1,3-dichloropropene	µg/L	0.5	<0.5	-	-
			trans-1,3-dichloropropene	µg/L	0.5	<0.5	-	-
			1,2-dibromoethane (EDB)	µg/L	0.5	<0.5	-	-
		Halogenated	Dichlorodifluoromethane (CFC-12)	µg/L	5	<5	-	-
		Aliphatics	Chloromethane	µg/L	5	<5	-	-
			Vinyl chloride (Chloroethene)	µg/L	0.3	<0.3	-	-
			Bromomethane	µg/L	10	<10	-	-
			Chloroethane	µg/L	5	<5	-	-
			Trichlorofluoromethane	µg/L	1	<1	-	-
			Iodomethane	µg/L	5	<5	-	-
			1,1-dichloroethene	µg/L	0.5	<0.5	45.45	126
			Dichloromethane (Methylene chloride)	µg/L	5	<5	-	-
			Allyl chloride	µg/L	2	<2	-	-
			trans-1,2-dichloroethene	µg/L	0.5	<0.5	-	-
			1,1-dichloroethane	µg/L	0.5	<0.5	-	-
			cis-1,2-dichloroethene	µg/L	0.5	<0.5	-	-
			Bromochloromethane	µg/L	0.5	<0.5	-	-
			1,2-dichloroethane	µg/L	0.5	<0.5	45.45	129
			1,1,1-trichloroethane	µg/L	0.5	<0.5	-	-
			1,1-dichloropropene	µg/L	0.5	<0.5	-	-
			Carbon tetrachloride	µg/L	0.5	<0.5	-	-
			Dibromomethane	µg/L	0.5	<0.5	-	-
			Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	<0.5	45.45	127
			1,1,2-trichloroethane	µg/L	0.5	<0.5	-	-
			1,3-dichloropropane	µg/L	0.5	<0.5	-	-
			Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	<0.5	-	-
			1,1,1,2-tetrachloroethane	µg/L	0.5	<0.5	-	-
			cis-1,4-dichloro-2-butene	µg/L	1	<1	-	-
			1,1,2,2-tetrachloroethane	µg/L	0.5	<0.5	-	-
			1,2,3-trichloropropane	µg/L	0.5	<0.5	-	-
			trans-1,4-dichloro-2-butene	µg/L	1	<1	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOCs in Water (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE212970.005	LB212701.026	Halogenated	1,2-dibromo-3-chloropropane	µg/L	0.5	<0.5	-	-
		Aliphatics	Hexachlorobutadiene	µg/L	0.5	<0.5	-	-
		Halogenated	Chlorobenzene	µg/L	0.5	<0.5	45.45	119
		Aromatics	Bromobenzene	µg/L	0.5	<0.5	-	-
			2-chlorotoluene	µg/L	0.5	<0.5	-	-
			4-chlorotoluene	µg/L	0.5	<0.5	-	-
			1,3-dichlorobenzene	µg/L	0.5	<0.5	-	-
			1,4-dichlorobenzene	µg/L	0.3	<0.3	-	-
			1,2-dichlorobenzene	µg/L	0.5	<0.5	-	-
			1,2,4-trichlorobenzene	µg/L	0.5	<0.5	-	-
			1,2,3-trichlorobenzene	µg/L	0.5	<0.5	-	-
		Monocyclic	Benzene	µg/L	0.5	<0.5	45.45	118
		Aromatic	Toluene	µg/L	0.5	<0.5	45.45	117
			Ethylbenzene	µg/L	0.5	<0.5	45.45	115
			m/p-xylene	µg/L	1	<1	90.9	116
			o-xylene	µg/L	0.5	<0.5	45.45	118
			Styrene (Vinyl benzene)	µg/L	0.5	<0.5	-	-
			Isopropylbenzene (Cumene)	µg/L	0.5	<0.5	-	-
			n-propylbenzene	µg/L	0.5	<0.5	-	-
			1,3,5-trimethylbenzene	µg/L	0.5	<0.5	-	-
			tert-butylbenzene	µg/L	0.5	<0.5	-	-
			1,2,4-trimethylbenzene	µg/L	0.5	<0.5	-	-
			sec-butylbenzene	µg/L	0.5	<0.5	-	-
			p-isopropyltoluene	µg/L	0.5	<0.5	-	-
			n-butylbenzene	µg/L	0.5	<0.5	-	-
		Nitrogenous	Acrylonitrile	µg/L	0.5	<0.5	-	-
		Oxygenated	Acetone (2-propanone)	µg/L	10	<10	-	-
		Compounds	MtBE (Methyl-tert-butyl ether)	µg/L	2	<2	-	-
			Vinyl acetate	µg/L	10	<10	-	-
			MEK (2-butanone)	µg/L	10	<10	-	-
			MIBK (4-methyl-2-pentanone)	µg/L	5	<5	-	-
			2-hexanone (MBK)	µg/L	5	<5	-	-
		Polycyclic	Naphthalene	µg/L	0.5	<0.5	-	-
		Sulphonated	Carbon disulfide	µg/L	2	<2	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/L	-	0.0	-	104
			d8-toluene (Surrogate)	mg/L	-	0.0	-	104
			Bromofluorobenzene (Surrogate)	mg/L	-	0.0	-	101
		Trihalometha	Chloroform (THM)	µg/L	0.5	<0.5	45.45	137
		nes	Bromodichloromethane (THM)	µg/L	0.5	<0.5	-	-
			Dibromochloromethane (THM)	µg/L	0.5	<0.5	-	-
			Bromoform (THM)	µg/L	0.5	<0.5	-	-

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE212970.005	LB212701.026		TRH C6-C10	µg/L	50	<50	946.63	70
			TRH C6-C9	µg/L	40	<40	818.71	79
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/L	-	0.0	-	104
			d8-toluene (Surrogate)	mg/L	-	0.0	-	104
			Bromofluorobenzene (Surrogate)	mg/L	-	0.0	-	101
		VPH F	Benzene (F0)	µg/L	0.5	<0.5	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	µg/L	50	<50	639.67	54 ④

MATRIX SPIKE DUPLICATES

SE212970 R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
***	Indicates that both * and ** apply.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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PROJECT OFFICE (Tick one)

☐	BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000	☐	GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227	☐	NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305	✓	School, Sub Base Platypus, North Sydney, 2060	☐	MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
☐	CANBERRA: GPO Box 410, Canberra, ACT 2601	☐	MACKAY: 21 River Street, Mackay, QLD 4741	☐	PERTH: 503 Murray Street, Perth, WA 6001	☐	TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4811	☐	DARWIN: 21 Parap Rd, Dawin, NT 0821

CLIENT: Defence Housing Australia

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGER: [redacted]

PM CONTACT No: [redacted]

LABORATORY: SGS

LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015

SAMPLER [redacted]

SAMPLER CONTACT No: [redacted]

Email Reports and Invoices to: LQRSYD@slrconsulting.com, [redacted]

Turnaround Time (TAT)

✓ Standard TAT

☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number: 1 of 1

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	Suite B	Suite C	Suite G	VOCs	SVOCs	TRH C6-10	PAHs	TRH/BTEXN	PCBs	Phenols	OCP/OPP	PFAS	Metals 8	Additional Information (Comment on any gross contamination or specific requirements)
1	GW13a	29/10/2020	Water															x	
2	GW13b	29/10/2020	Water		x		x												
3	GW12	29/10/2020	Water		x												x		
4	GW11	29/10/2020	Water		x												x		
5	GW22	29/10/2020	Water		x												x		
6	QC526TS	29/10/2020	Water								x						x		
7	QC526_TB	29/10/2020	Water								x						x		
8	QC317	29/10/2020	Water						x	x		x	x				x	x	
9	GW23	29/10/2020	Water		x												x		
10	QC201	29/10/2020	Water		x												x		
	QC301	29/10/2020	Water																

SGS EHS Sydney COC

SE212973

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 29/10/2020 @ 1600	Received by	Sign [redacted]	Date / Time 29/10/20 @ 4:20pm	Temperature Received: 15°C
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

SAMPLE RECEIPT ADVICE

SE212973

CLIENT DETAILS

Contact	LQRSYD
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	02 9427 8100
Facsimile	02 9427 8200
Email	lqrsyd@slrconsulting.com
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	10

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Thu 29/10/2020
Report Due	Fri 6/11/2020
SGS Reference	**SE212973**

SUBMISSION DETAILS

This is to confirm that 10 samples were received on Thursday 29/10/2020. Results are expected to be ready by COB Friday 6/ 11/2020. Please quote SGS reference SE212973 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	10 Water
Date documentation received	29/10/2020	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	15°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

PFAS subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420.
Micros subcontracted to Symbio Laboratories, 2 Sirius Road, Lane Cove West NSW 2066, NATA Accreditation Number 2455.

This document is issued by the Company under its General Conditions of Service accessible at www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

SAMPLE RECEIPT ADVICE

SE212973

CLIENT DETAILS

Client SLR CONSULTING AUSTRALIA PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Full 8270 SVOC in Water	OC Pesticides in Water	OP Pesticides in Water	PAH (Polynuclear Aromatic Hydrocarbons) in Water	PCBs in Water	Speciated Phenols in Water	TRH (Total Recoverable Hydrocarbons) in Water	VOCs in Water	Volatile Petroleum Hydrocarbons in Water
002	GW13b	-	28	13	22	11	18	9	78	7
003	GW12	-	28	13	22	11	18	9	11	7
004	GW11	-	28	13	22	11	18	9	11	7
005	GW22	-	28	13	22	11	18	9	11	7
006	QC526_TS	-	-	-	-	-	-	-	11	-
007	QC526_TB	-	-	-	-	-	-	-	-	7
008	QC317	168	-	-	22	-	-	9	78	7
009	GW23	-	28	13	22	11	18	9	78	7
010	QC201	-	28	13	22	11	18	9	78	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE212973

CLIENT DETAILS

Client SLR CONSULTING AUSTRALIA PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Ammonia Nitrogen by Discrete Analyser	Anions by Ion Chromatography in Water	Filterable Reactive Phosphorus (FRP)	Mercury (dissolved) in Water	Nitrite in Water	Sulfide by Titration in Water	TKN Kjeldahl Digestion by Discrete Analyser	Total Phosphorus by Kjeldahl Digestion DA in	Trace Metals (Dissolved) in Water by ICPMS
002	GW13b	1	2	1	-	1	1	3	1	-
003	GW12	-	-	-	1	-	-	-	-	7
004	GW11	-	-	-	1	-	-	-	-	7
005	GW22	-	-	-	1	-	-	-	-	7
009	GW23	-	-	-	1	-	-	-	-	7
010	QC201	-	-	-	1	-	-	-	-	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
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Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE212973

CLIENT DETAILS

Client SLR CONSULTING AUSTRALIA PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Per- and Polyfluoroalkyl Substances (PFAS) in	Sample Subcontracted	Trace Metals (Total) in Water by ICPMS
001	GW13a	-	-	7
002	GW13b	55	1	11
003	GW12	55	-	-
004	GW11	55	-	-
005	GW22	55	-	-
008	QC317	55	-	7
009	GW23	55	-	-
010	QC201	55	-	-

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
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Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE212973

CLIENT DETAILS

Client SLR CONSULTING AUSTRALIA PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Mercury (total) in Water
001	GW13a	1
002	GW13b	1
008	QC317	1

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	LQRSYD
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	02 9427 8100
Facsimile	02 9427 8200
Email	lqrsyd@slrconsulting.com
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	10

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE212973 R0**
Date Received	29/10/2020
Date Reported	11/11/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

PFAS subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Number. 2562/14420. Report No: ME317194
Micros subcontracted to Symbio Laboratories, 2 Sirius Road, Lane Cove West NSW 2066, NATA Accreditation Number 2455. Report Number S962611

MA1523: Some surrogate recovery is outside of the acceptance criteria due to sample matrix interference.
LL PAH/OC/OP/PCB and SVOC subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420.ME317270.

SIGNATORIES

[redacted]

Chemist | Metals/Inorganics Team Leader | Organic Section Head

[redacted]

Inorganic/Metals Chemist

VOCs in Water [AN433] Tested: 4/11/2020

PARAMETER	UOM	LOR	GW13b WATER - 29/10/2020 SE212973.002	GW12 WATER - 29/10/2020 SE212973.003	GW11 WATER - 29/10/2020 SE212973.004	GW22 WATER - 29/10/2020 SE212973.005	QC526_TS WATER - 29/10/2020 SE212973.006
Benzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	[97%]
Toluene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	[98%]
Ethylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	[98%]
m/p-xylene	µg/L	1	<1	<1	<1	<1	[97%]
o-xylene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	[98%]
Naphthalene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	-
Total Xylenes	µg/L	1.5	<1.5	<1.5	<1.5	<1.5	-
Total BTEX	µg/L	3	<3	<3	<3	<3	-
Dichlorodifluoromethane (CFC-12)	µg/L	5	<5	-	-	-	-
Chloromethane	µg/L	5	<5	-	-	-	-
Vinyl chloride (Chloroethene)	µg/L	0.3	<0.3	-	-	-	-
Bromomethane	µg/L	10	<10	-	-	-	-
Chloroethane	µg/L	5	<5	-	-	-	-
Trichlorofluoromethane	µg/L	1	<1	-	-	-	-
Acetone (2-propanone)	µg/L	10	<10	-	-	-	-
Iodomethane	µg/L	5	<5	-	-	-	-
1,1-dichloroethene	µg/L	0.5	<0.5	-	-	-	-
Acrylonitrile	µg/L	0.5	<0.5	-	-	-	-
Dichloromethane (Methylene chloride)	µg/L	5	<5	-	-	-	-
Allyl chloride	µg/L	2	<2	-	-	-	-
Carbon disulfide	µg/L	2	<2	-	-	-	-
trans-1,2-dichloroethene	µg/L	0.5	<0.5	-	-	-	-
MtBE (Methyl-tert-butyl ether)	µg/L	2	<2	-	-	-	-
1,1-dichloroethane	µg/L	0.5	<0.5	-	-	-	-
Vinyl acetate	µg/L	10	<10	-	-	-	-
MEK (2-butanone)	µg/L	10	<10	-	-	-	-
cis-1,2-dichloroethene	µg/L	0.5	<0.5	-	-	-	-
Bromochloromethane	µg/L	0.5	<0.5	-	-	-	-
Chloroform (THM)	µg/L	0.5	<0.5	-	-	-	-
2,2-dichloropropane	µg/L	0.5	<0.5	-	-	-	-
1,2-dichloroethane	µg/L	0.5	<0.5	-	-	-	-
1,1,1-trichloroethane	µg/L	0.5	<0.5	-	-	-	-
1,1-dichloropropene	µg/L	0.5	<0.5	-	-	-	-
Carbon tetrachloride	µg/L	0.5	<0.5	-	-	-	-
Dibromomethane	µg/L	0.5	<0.5	-	-	-	-
1,2-dichloropropane	µg/L	0.5	<0.5	-	-	-	-
Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	<0.5	-	-	-	-
2-nitropropane	µg/L	100	<100	-	-	-	-
Bromodichloromethane (THM)	µg/L	0.5	<0.5	-	-	-	-
MIBK (4-methyl-2-pentanone)	µg/L	5	<5	-	-	-	-
cis-1,3-dichloropropene	µg/L	0.5	<0.5	-	-	-	-
trans-1,3-dichloropropene	µg/L	0.5	<0.5	-	-	-	-
1,1,2-trichloroethane	µg/L	0.5	<0.5	-	-	-	-
1,3-dichloropropane	µg/L	0.5	<0.5	-	-	-	-
Dibromochloromethane (THM)	µg/L	0.5	<0.5	-	-	-	-
2-hexanone (MBK)	µg/L	5	<5	-	-	-	-
1,2-dibromoethane (EDB)	µg/L	0.5	<0.5	-	-	-	-
Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	<0.5	-	-	-	-
1,1,1,2-tetrachloroethane	µg/L	0.5	<0.5	-	-	-	-
Chlorobenzene	µg/L	0.5	<0.5	-	-	-	-
Bromoform (THM)	µg/L	0.5	<0.5	-	-	-	-
cis-1,4-dichloro-2-butene	µg/L	1	<1	-	-	-	-
Styrene (Vinyl benzene)	µg/L	0.5	<0.5	-	-	-	-
1,1,2,2-tetrachloroethane	µg/L	0.5	<0.5	-	-	-	-
1,2,3-trichloropropane	µg/L	0.5	<0.5	-	-	-	-
trans-1,4-dichloro-2-butene	µg/L	1	<1	-	-	-	-

VOCs in Water [AN433] Tested: 4/11/2020 (continued)

PARAMETER	UOM	LOR	GW13b WATER - 29/10/2020 SE212973.002	GW12 WATER - 29/10/2020 SE212973.003	GW11 WATER - 29/10/2020 SE212973.004	GW22 WATER - 29/10/2020 SE212973.005	QC526_TS WATER - 29/10/2020 SE212973.006
Isopropylbenzene (Cumene)	µg/L	0.5	<0.5	-	-	-	-
Bromobenzene	µg/L	0.5	<0.5	-	-	-	-
n-propylbenzene	µg/L	0.5	<0.5	-	-	-	-
2-chlorotoluene	µg/L	0.5	<0.5	-	-	-	-
4-chlorotoluene	µg/L	0.5	<0.5	-	-	-	-
1,3,5-trimethylbenzene	µg/L	0.5	<0.5	-	-	-	-
tert-butylbenzene	µg/L	0.5	<0.5	-	-	-	-
1,2,4-trimethylbenzene	µg/L	0.5	<0.5	-	-	-	-
sec-butylbenzene	µg/L	0.5	<0.5	-	-	-	-
1,3-dichlorobenzene	µg/L	0.5	<0.5	-	-	-	-
1,4-dichlorobenzene	µg/L	0.3	<0.3	-	-	-	-
p-isopropyltoluene	µg/L	0.5	<0.5	-	-	-	-
1,2-dichlorobenzene	µg/L	0.5	<0.5	-	-	-	-
n-butylbenzene	µg/L	0.5	<0.5	-	-	-	-
1,2-dibromo-3-chloropropane	µg/L	0.5	<0.5	-	-	-	-
1,2,4-trichlorobenzene	µg/L	0.5	<0.5	-	-	-	-
Hexachlorobutadiene	µg/L	0.5	<0.5	-	-	-	-
1,2,3-trichlorobenzene	µg/L	0.5	<0.5	-	-	-	-
Total VOC	µg/L	10	<10	-	-	-	-

VOCs in Water [AN433] Tested: 4/11/2020 (continued)

PARAMETER	UOM	LOR	QC526_TB WATER - 29/10/2020 SE212973.007	QC317 WATER - 29/10/2020 SE212973.008	GW23 WATER - 29/10/2020 SE212973.009	QC201 WATER - 29/10/2020 SE212973.010
Benzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
Toluene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
m/p-xylene	µg/L	1	<1	<1	<1	<1
o-xylene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
Total Xylenes	µg/L	1.5	<1.5	<1.5	<1.5	<1.5
Total BTEX	µg/L	3	<3	<3	<3	<3
Dichlorodifluoromethane (CFC-12)	µg/L	5	-	<5	<5	<5
Chloromethane	µg/L	5	-	<5	<5	<5
Vinyl chloride (Chloroethene)	µg/L	0.3	-	<0.3	<0.3	<0.3
Bromomethane	µg/L	10	-	<10	<10	<10
Chloroethane	µg/L	5	-	<5	<5	<5
Trichlorofluoromethane	µg/L	1	-	<1	<1	<1
Acetone (2-propanone)	µg/L	10	-	<10	<10	<10
Iodomethane	µg/L	5	-	<5	<5	<5
1,1-dichloroethene	µg/L	0.5	-	<0.5	<0.5	<0.5
Acrylonitrile	µg/L	0.5	-	<0.5	<0.5	<0.5
Dichloromethane (Methylene chloride)	µg/L	5	-	<5	<5	<5
Allyl chloride	µg/L	2	-	<2	<2	<2
Carbon disulfide	µg/L	2	-	<2	<2	<2
trans-1,2-dichloroethene	µg/L	0.5	-	<0.5	<0.5	<0.5
MtBE (Methyl-tert-butyl ether)	µg/L	2	-	<2	<2	<2
1,1-dichloroethane	µg/L	0.5	-	<0.5	<0.5	<0.5
Vinyl acetate	µg/L	10	-	<10	<10	<10
MEK (2-butanone)	µg/L	10	-	<10	<10	<10
cis-1,2-dichloroethene	µg/L	0.5	-	<0.5	<0.5	<0.5
Bromochloromethane	µg/L	0.5	-	<0.5	<0.5	<0.5
Chloroform (THM)	µg/L	0.5	-	**5.5**	<0.5	<0.5
2,2-dichloropropane	µg/L	0.5	-	<0.5	<0.5	<0.5
1,2-dichloroethane	µg/L	0.5	-	<0.5	<0.5	<0.5
1,1,1-trichloroethane	µg/L	0.5	-	<0.5	<0.5	<0.5
1,1-dichloropropene	µg/L	0.5	-	<0.5	<0.5	<0.5
Carbon tetrachloride	µg/L	0.5	-	<0.5	<0.5	<0.5
Dibromomethane	µg/L	0.5	-	<0.5	<0.5	<0.5
1,2-dichloropropane	µg/L	0.5	-	<0.5	<0.5	<0.5
Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	-	<0.5	<0.5	<0.5
2-nitropropane	µg/L	100	-	<100	<100	<100
Bromodichloromethane (THM)	µg/L	0.5	-	**0.5**	<0.5	<0.5
MIBK (4-methyl-2-pentanone)	µg/L	5	-	<5	<5	<5
cis-1,3-dichloropropene	µg/L	0.5	-	<0.5	<0.5	<0.5
trans-1,3-dichloropropene	µg/L	0.5	-	<0.5	<0.5	<0.5
1,1,2-trichloroethane	µg/L	0.5	-	<0.5	<0.5	<0.5
1,3-dichloropropane	µg/L	0.5	-	<0.5	<0.5	<0.5
Dibromochloromethane (THM)	µg/L	0.5	-	<0.5	<0.5	<0.5
2-hexanone (MBK)	µg/L	5	-	<5	<5	<5
1,2-dibromoethane (EDB)	µg/L	0.5	-	<0.5	<0.5	<0.5
Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	-	<0.5	<0.5	**0.8**
1,1,1,2-tetrachloroethane	µg/L	0.5	-	<0.5	<0.5	<0.5
Chlorobenzene	µg/L	0.5	-	<0.5	<0.5	<0.5
Bromoform (THM)	µg/L	0.5	-	<0.5	<0.5	<0.5
cis-1,4-dichloro-2-butene	µg/L	1	-	<1	<1	<1
Styrene (Vinyl benzene)	µg/L	0.5	-	<0.5	<0.5	<0.5
1,1,2,2-tetrachloroethane	µg/L	0.5	-	<0.5	<0.5	<0.5
1,2,3-trichloropropane	µg/L	0.5	-	<0.5	<0.5	<0.5
trans-1,4-dichloro-2-butene	µg/L	1	-	<1	<1	<1

VOCs in Water [AN433] Tested: 4/11/2020 (continued)

PARAMETER	UOM	LOR	QC526_TB WATER - 29/10/2020 SE212973.007	QC317 WATER - 29/10/2020 SE212973.008	GW23 WATER - 29/10/2020 SE212973.009	QC201 WATER - 29/10/2020 SE212973.010
Isopropylbenzene (Cumene)	µg/L	0.5	-	<0.5	<0.5	<0.5
Bromobenzene	µg/L	0.5	-	<0.5	<0.5	<0.5
n-propylbenzene	µg/L	0.5	-	<0.5	<0.5	<0.5
2-chlorotoluene	µg/L	0.5	-	<0.5	<0.5	<0.5
4-chlorotoluene	µg/L	0.5	-	<0.5	<0.5	<0.5
1,3,5-trimethylbenzene	µg/L	0.5	-	<0.5	<0.5	<0.5
tert-butylbenzene	µg/L	0.5	-	<0.5	<0.5	<0.5
1,2,4-trimethylbenzene	µg/L	0.5	-	<0.5	<0.5	<0.5
sec-butylbenzene	µg/L	0.5	-	<0.5	<0.5	<0.5
1,3-dichlorobenzene	µg/L	0.5	-	<0.5	<0.5	<0.5
1,4-dichlorobenzene	µg/L	0.3	-	<0.3	<0.3	<0.3
p-isopropyltoluene	µg/L	0.5	-	<0.5	<0.5	<0.5
1,2-dichlorobenzene	µg/L	0.5	-	<0.5	<0.5	<0.5
n-butylbenzene	µg/L	0.5	-	<0.5	<0.5	<0.5
1,2-dibromo-3-chloropropane	µg/L	0.5	-	<0.5	<0.5	<0.5
1,2,4-trichlorobenzene	µg/L	0.5	-	<0.5	<0.5	<0.5
Hexachlorobutadiene	µg/L	0.5	-	<0.5	<0.5	<0.5
1,2,3-trichlorobenzene	µg/L	0.5	-	<0.5	<0.5	<0.5
Total VOC	µg/L	10	-	<10	<10	<10

Volatile Petroleum Hydrocarbons in Water [AN433] Tested: 4/11/2020

PARAMETER	UOM	LOR	GW13b WATER - 29/10/2020 SE212973.002	GW12 WATER - 29/10/2020 SE212973.003	GW11 WATER - 29/10/2020 SE212973.004	GW22 WATER - 29/10/2020 SE212973.005	QC526_TB WATER - 29/10/2020 SE212973.007
Benzene (F0)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TRH C6-C9	µg/L	40	<40	<40	<40	<40	<40
TRH C6-C10	µg/L	50	<50	<50	<50	<50	<50
TRH C6-C10 minus BTEX (F1)	µg/L	50	<50	<50	<50	<50	<50

PARAMETER	UOM	LOR	QC317 WATER - 29/10/2020 SE212973.008	GW23 WATER - 29/10/2020 SE212973.009	QC201 WATER - 29/10/2020 SE212973.010
Benzene (F0)	µg/L	0.5	<0.5	<0.5	<0.5
TRH C6-C9	µg/L	40	<40	<40	<40
TRH C6-C10	µg/L	50	<50	<50	<50
TRH C6-C10 minus BTEX (F1)	µg/L	50	<50	<50	<50

TRH (Total Recoverable Hydrocarbons) in Water [AN403] Tested: 4/11/2020

PARAMETER	UOM	LOR	GW13b WATER - 29/10/2020 SE212973.002	GW12 WATER - 29/10/2020 SE212973.003	GW11 WATER - 29/10/2020 SE212973.004	GW22 WATER - 29/10/2020 SE212973.005	QC317 WATER - 29/10/2020 SE212973.008
TRH C10-C14	µg/L	50	<50	<50	<50	<50	<50
TRH C15-C28	µg/L	200	<200	<200	<200	<200	<200
TRH C29-C36	µg/L	200	<200	<200	<200	<200	<200
TRH C37-C40	µg/L	200	<200	<200	<200	<200	<200
TRH >C10-C16	µg/L	60	<60	<60	<60	<60	<60
TRH >C10-C16 - Naphthalene (F2)	µg/L	60	<60	<60	<60	<60	<60
TRH >C16-C34 (F3)	µg/L	500	<500	<500	<500	<500	<500
TRH >C34-C40 (F4)	µg/L	500	<500	<500	<500	<500	<500
TRH C10-C40	µg/L	320	<320	<320	<320	<320	<320

PARAMETER	UOM	LOR	GW23 WATER - 29/10/2020 SE212973.009	QC201 WATER - 29/10/2020 SE212973.010
TRH C10-C14	µg/L	50	<50	<50
TRH C15-C28	µg/L	200	<200	<200
TRH C29-C36	µg/L	200	<200	<200
TRH C37-C40	µg/L	200	<200	<200
TRH >C10-C16	µg/L	60	<60	<60
TRH >C10-C16 - Naphthalene (F2)	µg/L	60	<60	<60
TRH >C16-C34 (F3)	µg/L	500	<500	<500
TRH >C34-C40 (F4)	µg/L	500	<500	<500
TRH C10-C40	µg/L	320	<320	<320

Speciated Phenols in Water [AN420] Tested: 4/11/2020

PARAMETER	UOM	LOR	GW13b WATER - 29/10/2020 SE212973.002	GW12 WATER - 29/10/2020 SE212973.003	GW11 WATER - 29/10/2020 SE212973.004	GW22 WATER - 29/10/2020 SE212973.005	GW23 WATER - 29/10/2020 SE212973.009
Phenol	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	µg/L	1	<1	<1	<1	<1	<1
Total Cresol	µg/L	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	µg/L	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	µg/L	1	<1	<1	<1	<1	<1
Pentachlorophenol	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	µg/L	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	µg/L	2	<2	<2	<2	<2	<2

PARAMETER	UOM	LOR	QC201 WATER - 29/10/2020 SE212973.010
Phenol	µg/L	0.5	<0.5
2-methyl phenol (o-cresol)	µg/L	0.5	<0.5
3/4-methyl phenol (m/p-cresol)	µg/L	1	<1
Total Cresol	µg/L	1.5	<1.5
2-chlorophenol	µg/L	0.5	<0.5
2,4-dimethylphenol	µg/L	0.5	<0.5
2,6-dichlorophenol	µg/L	0.5	<0.5
2,4-dichlorophenol	µg/L	0.5	<0.5
2,4,6-trichlorophenol	µg/L	0.5	<0.5
2-nitrophenol	µg/L	0.5	<0.5
4-nitrophenol	µg/L	1	<1
2,4,5-trichlorophenol	µg/L	0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	µg/L	1	<1
Pentachlorophenol	µg/L	0.5	<0.5
2,4-dinitrophenol	µg/L	2	<2
4-chloro-3-methylphenol	µg/L	2	<2

Anions by Ion Chromatography in Water [AN245] Tested: 5/11/2020

PARAMETER	UOM	LOR	GW13b WATER - 29/10/2020 SE212973.002
Nitrate Nitrogen, NO3-N	mg/L	0.005	<0.005
Sulfate, SO4	mg/L	1	**26**

Nitrite in Water [AN277] Tested: 30/10/2020

PARAMETER	UOM	LOR	GW13b WATER - 29/10/2020 SE212973.002
Nitrite Nitrogen, NO2 as N	mg/L	0.005	<0.005

TKN Kjeldahl Digestion by Discrete Analyser [AN292] Tested: 4/11/2020

PARAMETER	UOM	LOR	GW13b WATER - 29/10/2020 SE212973.002
Total Kjeldahl Nitrogen	mg/L	0.05	**0.28**
Total Nitrogen (calc)	mg/L	0.05	**0.28**
Organic Nitrogen (calc)	mg/L	0.05	**0.22**

Total Phosphorus by Kjeldahl Digestion DA in Water [AN279/AN293(Sydney only)] Tested: 4/11/2020

PARAMETER	UOM	LOR	GW13b WATER - 29/10/2020 SE212973.002
Total Phosphorus (Kjeldahl Digestion) as P	mg/L	0.02	**0.05**

Filterable Reactive Phosphorus (FRP) [AN278] Tested: 30/10/2020

PARAMETER	UOM	LOR	GW13b WATER - 29/10/2020 SE212973.002
Filterable Reactive Phosphorus as P	mg/L	0.005	<0.005

Ammonia Nitrogen by Discrete Analyser (Aquakem) [AN291] Tested: 30/10/2020

PARAMETER	UOM	LOR	GW13b WATER - 29/10/2020 SE212973.002
Ammonia Nitrogen, NH_3 as N	mg/L	0.005	**0.053**

Sulfide by Titration in Water [AN149] Tested: 4/11/2020

PARAMETER	UOM	LOR	GW13b WATER - 29/10/2020 SE212973.002
Sulfide	mg/L	0.5	<0.5

Trace Metals (Dissolved) in Water by ICPMS [AN318] Tested: 30/10/2020

PARAMETER	UOM	LOR	GW12 WATER - 29/10/2020 SE212973.003	GW11 WATER - 29/10/2020 SE212973.004	GW22 WATER - 29/10/2020 SE212973.005	GW23 WATER - 29/10/2020 SE212973.009	QC201 WATER - 29/10/2020 SE212973.010
Arsenic, As	µg/L	1	<1	<1	<1	<1	<1
Cadmium, Cd	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chromium, Cr	µg/L	1	<1	<1	<1	<1	<1
Copper, Cu	µg/L	1	2	33	7	32	1
Lead, Pb	µg/L	1	<1	1	1	2	<1
Nickel, Ni	µg/L	1	<1	3	2	3	<1
Zinc, Zn	µg/L	5	<5	27	12	36	<5

Mercury (dissolved) in Water [AN311(Perth)/AN312] Tested: 30/10/2020

PARAMETER	UOM	LOR	GW12 WATER - 29/10/2020 SE212973.003	GW11 WATER - 29/10/2020 SE212973.004	GW22 WATER - 29/10/2020 SE212973.005	GW23 WATER - 29/10/2020 SE212973.009	QC201 WATER - 29/10/2020 SE212973.010
Mercury	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples [MA-1523] Tested: 5/11/2020

PARAMETER	UOM	LOR	GW13b WATER - 29/10/2020 SE212973.002	GW12 WATER - 29/10/2020 SE212973.003	GW11 WATER - 29/10/2020 SE212973.004	GW22 WATER - 29/10/2020 SE212973.005	QC317 WATER - 29/10/2020 SE212973.008
Perfluorobutanoic acid (PFBA)	µg/L	0.002	<0.002	<0.002	**0.003**	**0.004**	<0.002
Perfluoropentanoic acid (PFPeA)	µg/L	0.002	<0.002	<0.002	**0.004**	**0.004**	<0.002
Perfluorohexanoic acid (PFHxA)	µg/L	0.002	<0.002	**0.003**	**0.009**	**0.012**	<0.002
Perfluoroheptanoic acid (PFHpA)	µg/L	0.002	<0.002	<0.002	**0.003**	**0.005**	<0.002
Perfluorooctanoic Acid (PFOA)	µg/L	0.002	<0.002	**0.014**	**0.014**	**0.027**	<0.002
Perfluorononanoic acid (PFNA)	µg/L	0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Perfluorodecanoic acid (PFDA)	µg/L	0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Perfluoroundecanoic acid (PFUnA)	µg/L	0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Perfluorododecanoic acid (PFDoA)	µg/L	0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Perfluorohexadecanoic acid (PFHxDA)	µg/L	0.008	<0.008	<0.008	<0.008	<0.008	<0.008
Perfluorobutane sulfonate (PFBS)	µg/L	0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Perfluoropentane sulfonate (PFPeS)	µg/L	0.004	<0.004	<0.004	<0.004	**0.004**	<0.004
Perfluorohexane sulfonate (PFHxS)	µg/L	0.002	**0.007**	**0.030**	**0.031**	**0.12**	<0.002
Perfluoroheptane sulfonate (PFHpS)	µg/L	0.002	<0.002	<0.002	**0.012**	**0.009**	<0.002
Perfluorooctane sulfonate (PFOS)	µg/L	0.002	<0.002	**0.021**	**0.18**	**0.056**	**0.002**
Sum of PFHxS and PFOS	µg/L	0.002	**0.007**	**0.051**	**0.21**	**0.18**	**0.002**
Perfluorononane sulfonate (PFNS)	µg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Perfluorodecane sulfonate (PFDS)	µg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Perfluorododecane sulfonate (PFDoS)	µg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	µg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	µg/L	0.002	**0.009**	**0.002**	<0.002	<0.002	<0.002
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	µg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.008	<0.008	<0.008	<0.008	<0.008	<0.008
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2-(N-Methylperfluorooctane sulfonamido)-ethanol	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
N-Methylperfluorooctanesulfonamidoacetic acid	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
N-Ethylperfluorooctanesulfonamidoacetic Acid	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples [MA-1523] Tested: 5/11/2020 (continued)

PARAMETER	UOM	LOR	GW23 WATER - 29/10/2020 SE212973.009	QC201 WATER - 29/10/2020 SE212973.010
Perfluorobutanoic acid (PFBA)	µg/L	0.002	<0.002	<0.002
Perfluoropentanoic acid (PFPeA)	µg/L	0.002	<0.002	<0.002
Perfluorohexanoic acid (PFHxA)	µg/L	0.002	<0.002	<0.002
Perfluoroheptanoic acid (PFHpA)	µg/L	0.002	<0.002	<0.002
Perfluorooctanoic Acid (PFOA)	µg/L	0.002	<0.002	**0.011**
Perfluorononanoic acid (PFNA)	µg/L	0.004	<0.004	<0.004
Perfluorodecanoic acid (PFDA)	µg/L	0.004	<0.004	<0.004
Perfluoroundecanoic acid (PFUnA)	µg/L	0.004	<0.004	<0.004
Perfluorododecanoic acid (PFDoA)	µg/L	0.004	<0.004	<0.004
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.004	<0.004	<0.004
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.004	<0.004	<0.004
Perfluorohexadecanoic acid (PFHxDA)	µg/L	0.008	<0.008	<0.008
Perfluorobutane sulfonate (PFBS)	µg/L	0.004	<0.004	<0.004
Perfluoropentane sulfonate (PFPeS)	µg/L	0.004	<0.004	<0.004
Perfluorohexane sulfonate (PFHxS)	µg/L	0.002	**0.027**	**0.019**
Perfluoroheptane sulfonate (PFHpS)	µg/L	0.002	<0.002	**0.005**
Perfluorooctane sulfonate (PFOS)	µg/L	0.002	<0.002	**0.022**
Sum of PFHxS and PFOS	µg/L	0.002	**0.027**	**0.041**
Perfluorononane sulfonate (PFNS)	µg/L	0.002	<0.002	<0.002
Perfluorodecane sulfonate (PFDS)	µg/L	0.002	<0.002	<0.002
Perfluorododecane sulfonate (PFDoS)	µg/L	0.002	<0.002	<0.002
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	µg/L	0.002	<0.002	<0.002
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	µg/L	0.002	<0.002	<0.002
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	µg/L	0.002	<0.002	<0.002
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.008	<0.008	<0.008
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	µg/L	0.01	<0.01	<0.01
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	µg/L	0.01	<0.01	<0.01
2-(N-Methylperfluorooctane sulfonamido)-ethanol	µg/L	0.01	<0.01	<0.01
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	µg/L	0.01	<0.01	<0.01
N-Methylperfluorooctanesulfonamidoacetic acid	µg/L	0.01	<0.01	<0.01
N-Ethylperfluorooctanesulfonamidoacetic Acid	µg/L	0.01	<0.01	<0.01

Sample Subcontracted [] Tested: 2/11/2020

PARAMETER	UOM	LOR	GW13b WATER - 29/10/2020 SE212973.002
Sample Subcontracted*	No unit	-	Symbio

Trace Metals (Total) in Water by ICPMS [AN022/AN318] Tested: 30/10/2020

PARAMETER	UOM	LOR	GW13a WATER - 29/10/2020 SE212973.001	GW13b WATER - 29/10/2020 SE212973.002	QC317 WATER - 29/10/2020 SE212973.008
Total Arsenic	µg/L	1	**2**	<1	<1
Total Cadmium	µg/L	0.1	<0.1	<0.1	<0.1
Total Chromium	µg/L	1	**6**	**2**	<1
Total Copper	µg/L	1	**2**	**2**	<1
Total Nickel	µg/L	1	**22**	<1	<1
Total Lead	µg/L	1	**2**	<1	<1
Total Zinc	µg/L	5	**13**	**37**	<5
Total Beryllium	µg/L	1	-	<1	-
Total Boron	µg/L	5	-	**8**	-
Total Cobalt	µg/L	1	-	**1**	-
Total Manganese	µg/L	1	-	**500**	-

Mercury (total) in Water [AN311(Perth) /AN312] Tested: 30/10/2020

PARAMETER	UOM	LOR	GW13a WATER - 29/10/2020 SE212973.001	GW13b WATER - 29/10/2020 SE212973.002	QC317 WATER - 29/10/2020 SE212973.008
Total Mercury	mg/L	0.0001	<0.0001	<0.0001	<0.0001

SVOC Compounds in Waters by GC-QQQ, Low Level [USEPA8270D LL] Tested: 5/11/2020

PARAMETER	UOM	LOR	GW13b WATER - 29/10/2020 SE212973.002	GW12 WATER - 29/10/2020 SE212973.003	GW11 WATER - 29/10/2020 SE212973.004	GW22 WATER - 29/10/2020 SE212973.005	QC317 WATER - 29/10/2020 SE212973.008
Acenaphthene	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Acenaphthylene	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Anthracene	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo(a)anthracene	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo (a) pyrene	µg/L	0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Benzo (b) fluoranthene	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo (e) pyrene	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo (ghi) perylene	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo (k) fluoranthene	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo (b+j+k) fluoranthene	µg/L	0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chrysene	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Dibenz (ah) anthracene	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
7,12-Dimethylbenz(a)anthracene	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Fluoranthene	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Fluorene	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Indeno (1,2,3-cd) pyrene	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Naphthalene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Pyrene	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2-Methylnaphthalene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total PAHs Vic EPA - assumes <LOR results = 0	µg/L	0.8	-	-	-	-	<0.8
Total PAHs Vic EPA - assumes <LOR results = 0.5LOR	µg/L	0.8	<0.8	<0.8	<0.8	<0.8	<0.8
4,4-DDD	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4,4-DDE	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4,4-DDT	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	µg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
alpha-BHC	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-Chlordane	µg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
beta-BHC	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlordane	µg/L	0.005	<0.005	<0.005	<0.005	<0.005	<0.005
delta-BHC	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	µg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Aldrin and Dieldrin	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan 1	µg/L	0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Endosulfan 2	µg/L	0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Endosulfan Sulphate	µg/L	0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total Endosulfan	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Endrin	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin ketone	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-BHC	µg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
gamma-Chlordane	µg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Heptachlor	µg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Heptachlor Epoxide	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobenzene	µg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Isodrin	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyrifos	µg/L	0.009	<0.009	<0.009	<0.009	<0.009	<0.009
Dimethoate	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Disulfoton	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Famphur	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methyl parathion	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Phorate	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Stirofos	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Sulfotepp	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1

SVOC Compounds in Waters by GC-QQQ, Low Level [USEPA8270D LL] Tested: 5/11/2020 (continued)

PARAMETER	UOM	LOR	GW13b WATER - 29/10/2020 SE212973.002	GW12 WATER - 29/10/2020 SE212973.003	GW11 WATER - 29/10/2020 SE212973.004	GW22 WATER - 29/10/2020 SE212973.005	QC317 WATER - 29/10/2020 SE212973.008
Thionazin	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-Chlorophenol	µg/L	0.1	-	-	-	-	<0.1
1-Methylnaphthalene	µg/L	0.1	-	-	-	-	<0.1
2,4-Dimethylphenol	µg/L	0.01	-	-	-	-	<0.01
2,4-Dinitrophenol	µg/L	0.01	-	-	-	-	<0.01
2-Nitrophenol	µg/L	0.01	-	-	-	-	<0.01
4-nitrophenol	µg/L	0.01	-	-	-	-	<0.01
m&p Cresol	µg/L	0.01	-	-	-	-	<0.01
o-Cresol	µg/L	0.01	-	-	-	-	<0.01
2-Methyl 4,6-Dinitrophenol	µg/L	0.01	-	-	-	-	<0.01
2,3,4,6-Tetrachlorophenol	µg/L	0.01	-	-	-	-	<0.01
2,4-Dichlorophenol	µg/L	0.01	-	-	-	-	<0.01
2,4,5-Trichlorophenol	µg/L	0.01	-	-	-	-	<0.01
2,4,6-Tribromophenol*	µg/L	0.01	-	-	-	-	<0.01
2,4,6-Trichlorophenol	µg/L	0.01	-	-	-	-	<0.01
2,6-Dichlorophenol	µg/L	0.01	-	-	-	-	<0.01
3-Methylcholanthrene	µg/L	0.01	-	-	-	-	<0.01
4-Chloro-3-methylphenol	µg/L	0.1	-	-	-	-	<0.1
DDT+DDE+DDD	µg/L	0.2	-	-	-	-	<0.2
o,p-DDT	µg/L	0.002	-	-	-	-	<0.002
Total DDT	µg/L	0.1	-	-	-	-	<0.1
Acetophenone	µg/L	0.01	-	-	-	-	<0.01
Bis (2-Ethylhexyl) adipate	µg/L	0.01	-	-	-	-	<0.01
Bis (2-Ethylhexyl) phthalate	µg/L	0.01	-	-	-	-	<0.01
Coronene	µg/L	0.01	-	-	-	-	<0.01
Dibenz (aj) acridine	µg/L	0.01	-	-	-	-	<0.01
Dibenzo[a,e]pyrene	µg/L	0.01	-	-	-	-	<0.01
Dinoseb	µg/L	0.05	-	-	-	-	<0.05
Hexachlorophene	µg/L	0.05	-	-	-	-	<0.05
Pentachlorophenol	µg/L	0.1	-	-	-	-	<0.1
Phenol	µg/L	0.01	-	-	-	-	<0.0↓
Perylene	µg/L	0.01	-	-	-	-	<0.01
Total PAHs - assumes <LOR results = 0	µg/L	0.09	-	-	-	-	-
Total PAHs - assumes <LOR results = 0.5xLOR	µg/L	0.09	-	-	-	-	-

SVOC Compounds in Waters by GC-QQQ, Low Level [USEPA8270D LL] Tested: 5/11/2020 (continued)

PARAMETER	UOM	LOR	GW23 WATER - 29/10/2020 SE212973.009	QC201 WATER - 29/10/2020 SE212973.010
Acenaphthene	µg/L	0.01	<0.01	<0.01
Acenaphthylene	µg/L	0.01	<0.01	<0.01
Anthracene	µg/L	0.01	<0.01	<0.01
Benzo(a)anthracene	µg/L	0.01	<0.01	<0.01
Benzo (a) pyrene	µg/L	0.005	<0.005	<0.005
Benzo (b) fluoranthene	µg/L	0.01	<0.01	<0.01
Benzo (e) pyrene	µg/L	0.01	<0.01	<0.01
Benzo (ghi) perylene	µg/L	0.01	<0.01	<0.01
Benzo (k) fluoranthene	µg/L	0.01	<0.01	<0.01
Benzo (b+j+k) fluoranthene	µg/L	0.02	<0.02	<0.02
Chrysene	µg/L	0.01	<0.01	<0.01
Dibenz (ah) anthracene	µg/L	0.01	<0.01	<0.01
7,12-Dimethylbenz(a)anthracene	µg/L	0.01	<0.01	<0.01
Fluoranthene	µg/L	0.01	<0.01	<0.01
Fluorene	µg/L	0.01	<0.01	<0.01
Indeno (1,2,3-cd) pyrene	µg/L	0.01	<0.01	<0.01
Naphthalene	µg/L	0.1	<0.1	<0.1
Phenanthrene	µg/L	0.01	<0.01	<0.01
Pyrene	µg/L	0.01	<0.01	<0.01
2-Methylnaphthalene	µg/L	0.1	<0.1	<0.1
Total PAHs Vic EPA - assumes <LOR results = 0	µg/L	0.8	-	-
Total PAHs Vic EPA - assumes <LOR results = 0.5LOR	µg/L	0.8	<0.8	<0.8
4,4-DDD	µg/L	0.1	<0.1	<0.1
4,4-DDE	µg/L	0.1	<0.1	<0.1
4,4-DDT	µg/L	0.1	<0.1	<0.1
Aldrin	µg/L	0.002	<0.002	<0.002
alpha-BHC	µg/L	0.1	<0.1	<0.1
alpha-Chlordane	µg/L	0.002	<0.002	<0.002
beta-BHC	µg/L	0.1	<0.1	<0.1
Chlordane	µg/L	0.005	<0.005	<0.005
delta-BHC	µg/L	0.1	<0.1	<0.1
Dieldrin	µg/L	0.002	<0.002	<0.002
Aldrin and Dieldrin	µg/L	0.1	<0.1	<0.1
Endosulfan 1	µg/L	0.005	<0.005	<0.005
Endosulfan 2	µg/L	0.005	<0.005	<0.005
Endosulfan Sulphate	µg/L	0.005	<0.005	<0.005
Total Endosulfan	µg/L	0.01	<0.01	<0.01
Endrin	µg/L	0.1	<0.1	<0.1
Endrin Aldehyde	µg/L	0.1	<0.1	<0.1
Endrin ketone	µg/L	0.1	<0.1	<0.1
gamma-BHC	µg/L	0.002	<0.002	<0.002
gamma-Chlordane	µg/L	0.002	<0.002	<0.002
Heptachlor	µg/L	0.002	<0.002	<0.002
Heptachlor Epoxide	µg/L	0.1	<0.1	<0.1
Hexachlorobenzene	µg/L	0.002	<0.002	<0.002
Isodrin	µg/L	0.1	<0.1	<0.1
Methoxychlor	µg/L	0.1	<0.1	<0.1
Mirex	µg/L	0.1	<0.1	<0.1
Chlorpyrifos	µg/L	0.009	<0.009	<0.009
Dimethoate	µg/L	0.1	<0.1	<0.1
Disulfoton	µg/L	0.1	<0.1	<0.1
Famphur	µg/L	0.1	<0.1	<0.1
Methyl parathion	µg/L	0.01	<0.01	<0.01
Phorate	µg/L	0.1	<0.1	<0.1
Stirofos	µg/L	0.1	<0.1	<0.1
Sulfotepp	µg/L	0.1	<0.1	<0.1

SVOC Compounds in Waters by GC-QQQ, Low Level [USEPA8270D LL] Tested: 5/11/2020 (continued)

PARAMETER	UOM	LOR	GW23 WATER - 29/10/2020 SE212973.009	QC201 WATER - 29/10/2020 SE212973.010
Thionazin	µg/L	0.1	<0.1	<0.1
2-Chlorophenol	µg/L	0.1	-	-
1-Methylnaphthalene	µg/L	0.1	-	-
2,4-Dimethylphenol	µg/L	0.01	-	-
2,4-Dinitrophenol	µg/L	0.01	-	-
2-Nitrophenol	µg/L	0.01	-	-
4-nitrophenol	µg/L	0.01	-	-
m&p Cresol	µg/L	0.01	-	-
o-Cresol	µg/L	0.01	-	-
2-Methyl 4,6-Dinitrophenol	µg/L	0.01	-	-
2,3,4,6-Tetrachlorophenol	µg/L	0.01	-	-
2,4-Dichlorophenol	µg/L	0.01	-	-
2,4,5-Trichlorophenol	µg/L	0.01	-	-
2,4,6-Tribromophenol*	µg/L	0.01	-	-
2,4,6-Trichlorophenol	µg/L	0.01	-	-
2,6-Dichlorophenol	µg/L	0.01	-	-
3-Methylcholanthrene	µg/L	0.01	-	-
4-Chloro-3-methylphenol	µg/L	0.1	-	-
DDT+DDE+DDD	µg/L	0.2	-	-
o,p-DDT	µg/L	0.002	-	-
Total DDT	µg/L	0.1	-	-
Acetophenone	µg/L	0.01	-	-
Bis (2-Ethylhexyl) adipate	µg/L	0.01	-	-
Bis (2-Ethylhexyl) phthalate	µg/L	0.01	-	-
Coronene	µg/L	0.01	-	-
Dibenz (aj) acridine	µg/L	0.01	-	-
Dibenzo[a,e]pyrene	µg/L	0.01	-	-
Dinoseb	µg/L	0.05	-	-
Hexachlorophene	µg/L	0.05	-	-
Pentachlorophenol	µg/L	0.1	-	-
Phenol	µg/L	0.01	-	-
Perylene	µg/L	0.01	-	-
Total PAHs - assumes <LOR results = 0	µg/L	0.09	-	-
Total PAHs - assumes <LOR results = 0.5xLOR	µg/L	0.09	-	-

Combined SVOC Pesticides in Water, Low Level [EPA 8270D] Tested: 11/11/2020

PARAMETER	UOM	LOR	GW13b WATER - 29/10/2020 SE212973.002	GW12 WATER - 29/10/2020 SE212973.003	GW11 WATER - 29/10/2020 SE212973.004	GW22 WATER - 29/10/2020 SE212973.005	QC317 WATER - 29/10/2020 SE212973.008
Azinphos-methyl	µg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos ethyl*	µg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos*	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Diazinon*	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Dichlorvos	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Ethion	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Fenitrothion	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Fenisulfothion	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fenthion	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Malathion	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Mevinphos-cis/trans	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methidathion	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Parathion	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Acephate	µg/L	0.1	-	-	-	-	<0.1
Alachlor	µg/L	0.1	-	-	-	-	<0.1
Atraton	µg/L	0.1	-	-	-	-	<0.1
Atrazine	µg/L	0.01	-	-	-	-	<0.01
Bifenthrin	µg/L	0.1	-	-	-	-	<0.1
Bioresmethrin	µg/L	0.1	-	-	-	-	<0.1
Boscalid*	µg/L	0.1	-	-	-	-	<0.1
Bromacil	µg/L	0.1	-	-	-	-	<0.1
Bromoxynil*	µg/L	0.1	-	-	-	-	<0.1
Butachlor*	µg/L	0.1	-	-	-	-	<0.1
Butylate*	µg/L	0.1	-	-	-	-	<0.1
Captafol*	µg/L	0.1	-	-	-	-	<0.1
Captan*	µg/L	0.1	-	-	-	-	<0.1
Carbophenothion	µg/L	0.1	-	-	-	-	<0.1
Carboxin*	µg/L	0.1	-	-	-	-	<0.1
Chlopropham	µg/L	0.1	-	-	-	-	<0.1
Chlorfenvinphos-cis	µg/L	0.1	-	-	-	-	<0.1
Chlorfenvinphos-trans	µg/L	0.1	-	-	-	-	<0.1
Chlorothalonil*	µg/L	0.1	-	-	-	-	<0.1
Chlorpyrifos-methyl	µg/L	0.1	-	-	-	-	<0.1
Chlorsulfuron*	µg/L	0.1	-	-	-	-	<0.1
Ciodrin (Crotoxyphos)*	µg/L	0.1	-	-	-	-	<0.1
cis-permethrin	µg/L	0.1	-	-	-	-	<0.1
Co-Ral (Coumaphos)	µg/L	0.1	-	-	-	-	<0.1
Cyanazine	µg/L	0.1	-	-	-	-	<0.1
Cycloate*	µg/L	0.1	-	-	-	-	<0.1
Cyfluthrin*	µg/L	0.1	-	-	-	-	<0.1
Cypermethrin	µg/L	0.1	-	-	-	-	<0.1
Deltamethrin	µg/L	0.1	-	-	-	-	<0.1
Demeton-o	µg/L	0.1	-	-	-	-	<0.1
Demeton-s	µg/L	0.1	-	-	-	-	<0.1
Demeton-s-methyl	µg/L	0.1	-	-	-	-	<0.1
Diallate A*	µg/L	0.1	-	-	-	-	<0.1
Diallate B*	µg/L	0.1	-	-	-	-	<0.1
Dichlobenil*	µg/L	0.1	-	-	-	-	<0.1
Dichlofluanid*	µg/L	0.1	-	-	-	-	<0.1
Dichlone*	µg/L	0.1	-	-	-	-	<0.1
Diclofop-methyl*	µg/L	0.1	-	-	-	-	<0.1
Dicofol	µg/L	0.1	-	-	-	-	<0.1
Dicrotophos*	µg/L	0.1	-	-	-	-	<0.1
EPN	µg/L	0.1	-	-	-	-	<0.1
EPTC	µg/L	0.1	-	-	-	-	<0.1
Esfenvalerate	µg/L	0.1	-	-	-	-	<0.1

Combined SVOC Pesticides in Water, Low Level [EPA 8270D] Tested: 11/11/2020 (continued)

PARAMETER	UOM	LOR	GW13b WATER - 29/10/2020 SE212973.002	GW12 WATER - 29/10/2020 SE212973.003	GW11 WATER - 29/10/2020 SE212973.004	GW22 WATER - 29/10/2020 SE212973.005	QC317 WATER - 29/10/2020 SE212973.008
Ethoprop	µg/L	0.1	-	-	-	-	<0.1
Fearimol	µg/L	0.1	-	-	-	-	<0.1
Fenamiphos (Phenamiphos)	µg/L	0.1	-	-	-	-	<0.1
Fenchlorophos (Ronnel)	µg/L	0.1	-	-	-	-	<0.1
Fenvalerate	µg/L	0.1	-	-	-	-	<0.1
Fluchloralin	µg/L	0.1	-	-	-	-	<0.1
Fludioxonil	µg/L	0.1	-	-	-	-	<0.1
Fluridone	µg/L	0.1	-	-	-	-	<0.1
Haloxyfop methyl	µg/L	0.1	-	-	-	-	<0.1
Hexazinone	µg/L	0.01	-	-	-	-	<0.01
Imidan (Phosmet)	µg/L	0.1	-	-	-	-	<0.1
Indoxacarb	µg/L	0.1	-	-	-	-	<0.1
Kepone	µg/L	0.1	-	-	-	-	<0.1
Leptophos	µg/L	0.1	-	-	-	-	<0.1
Mestranol	µg/L	0.1	-	-	-	-	<0.1
Metalaxyl	µg/L	0.1	-	-	-	-	<0.1
Methiocarb	µg/L	0.1	-	-	-	-	<0.1
Methyl paraoxan	µg/L	0.1	-	-	-	-	<0.1
Metolachlor	µg/L	0.1	-	-	-	-	<0.1
Metribuzin	µg/L	0.01	-	-	-	-	<0.01
MGK-264	µg/L	0.1	-	-	-	-	<0.1
Molinate	µg/L	0.01	-	-	-	-	<0.01
Monocrotophos	µg/L	0.1	-	-	-	-	<0.1
Napropamide*	µg/L	0.1	-	-	-	-	<0.1
Norflurazon*	µg/L	0.1	-	-	-	-	<0.1
Omethoate	µg/L	0.1	-	-	-	-	<0.1
Oxyfluorfen	µg/L	0.1	-	-	-	-	<0.1
Parathion-methyl	µg/L	0.01	-	-	-	-	<0.01
Pebulate	µg/L	0.1	-	-	-	-	<0.1
Pendimethalin	µg/L	0.1	-	-	-	-	<0.1
Permethrin	µg/L	0.1	-	-	-	-	<0.1
Phosalone (Zolone)	µg/L	0.1	-	-	-	-	<0.1
Phosphamidone	µg/L	0.1	-	-	-	-	<0.1
Piperonyl butoxide	µg/L	0.1	-	-	-	-	<0.1
Primiphos-ethyl	µg/L	0.1	-	-	-	-	<0.1
Primiphos-methyl	µg/L	0.1	-	-	-	-	<0.1
Profenofos	µg/L	0.1	-	-	-	-	<0.1
Prometon	µg/L	0.1	-	-	-	-	<0.1
Prometryn	µg/L	0.01	-	-	-	-	<0.01
Pronamide (Propyzamide)*	µg/L	0.1	-	-	-	-	<0.1
Propachlor	µg/L	0.1	-	-	-	-	<0.1
Propargite	µg/L	0.1	-	-	-	-	<0.1
Propazine	µg/L	0.01	-	-	-	-	<0.01
Prophos	µg/L	0.1	-	-	-	-	<0.1
Propiconazole (Isomer 1+Isomer 2)	µg/L	0.1	-	-	-	-	<0.1
Propiconazole Isomer 1	µg/L	0.1	-	-	-	-	<0.1
Propiconazole Isomer 2	µg/L	0.1	-	-	-	-	<0.1
Propylthiouracil	µg/L	0.1	-	-	-	-	<0.1
Propyzamide	µg/L	0.1	-	-	-	-	<0.1
Prothiofos	µg/L	0.1	-	-	-	-	<0.1
Simazine	µg/L	0.01	-	-	-	-	<0.01
Simetryn	µg/L	0.1	-	-	-	-	<0.1
Strychnine*	µg/L	0.1	-	-	-	-	<0.1
Sulprofos*	µg/L	0.1	-	-	-	-	<0.1
Tebuthiuron*	µg/L	0.1	-	-	-	-	<0.1
Temephos	µg/L	0.1	-	-	-	-	<0.1

Combined SVOC Pesticides in Water, Low Level [EPA 8270D] Tested: 11/11/2020 (continued)

PARAMETER	UOM	LOR	GW13b WATER - 29/10/2020 SE212973.002	GW12 WATER - 29/10/2020 SE212973.003	GW11 WATER - 29/10/2020 SE212973.004	GW22 WATER - 29/10/2020 SE212973.005	QC317 WATER - 29/10/2020 SE212973.008
Terbacil*	µg/L	0.1	-	-	-	-	<0.1
Terbuthylazine	µg/L	0.1	-	-	-	-	<0.1
Terbutryn (Prebane)	µg/L	0.1	-	-	-	-	<0.1
Tetrachlorvinphos (Stirifos)	µg/L	0.1	-	-	-	-	<0.1
Thiabendazole	µg/L	0.1	-	-	-	-	<0.1
Thiamethoxam	µg/L	0.1	-	-	-	-	<0.1
Thiometon	µg/L	0.1	-	-	-	-	<0.1
Triadimefon	µg/L	0.1	-	-	-	-	<0.1
Triazophos	µg/L	0.1	-	-	-	-	<0.1
Trichlorfon	µg/L	0.1	-	-	-	-	<0.1
Trichlornate (Trichloronate)*	µg/L	0.1	-	-	-	-	<0.1
Tricyclazole*	µg/L	0.1	-	-	-	-	<0.1
Trifluralin	µg/L	0.1	-	-	-	-	<0.1
Vernolate*	µg/L	0.1	-	-	-	-	<0.1
Vinclozalin*	µg/L	0.1	-	-	-	-	<0.1
Zolone (phosalone, fosalone)	µg/L	0.1	-	-	-	-	<0.1
Ametryn	µg/L	0.1	-	-	-	-	<0.1
Azinphos-ethyl	µg/L	0.05	-	-	-	-	<0.05
Naftalfos	µg/L	0.1	-	-	-	-	<0.1
Naled (Dibrom)	µg/L	0.1	-	-	-	-	<0.1
Terbufos	µg/L	0.01	-	-	-	-	<0.01

Combined SVOC Pesticides in Water, Low Level [EPA 8270D] Tested: 11/11/2020 (continued)

PARAMETER	UOM	LOR	GW23 WATER - 29/10/2020 SE212973.009	QC201 WATER - 29/10/2020 SE212973.010
Azinphos-methyl	µg/L	0.05	<0.05	<0.05
Bromophos ethyl*	µg/L	0.05	<0.05	<0.05
Chlorfenvinphos*	µg/L	0.1	<0.1	<0.1
Diazinon*	µg/L	0.01	<0.01	<0.01
Dichlorvos	µg/L	0.01	<0.01	<0.01
Ethion	µg/L	0.01	<0.01	<0.01
Fenitrothion	µg/L	0.01	<0.01	<0.01
Fenisulfothion	µg/L	0.1	<0.1	<0.1
Fenthion	µg/L	0.1	<0.1	<0.1
Malathion	µg/L	0.01	<0.01	<0.01
Mevinphos-cis/trans	µg/L	0.1	<0.1	<0.1
Methidathion	µg/L	0.01	<0.01	<0.01
Parathion	µg/L	0.01	<0.01	<0.01
Acephate	µg/L	0.1	-	-
Alachlor	µg/L	0.1	-	-
Atraton	µg/L	0.1	-	-
Atrazine	µg/L	0.01	-	-
Bifenthrin	µg/L	0.1	-	-
Bioresmethrin	µg/L	0.1	-	-
Boscalid*	µg/L	0.1	-	-
Bromacil	µg/L	0.1	-	-
Bromoxynil*	µg/L	0.1	-	-
Butachlor*	µg/L	0.1	-	-
Butylate*	µg/L	0.1	-	-
Captafol*	µg/L	0.1	-	-
Captan*	µg/L	0.1	-	-
Carbophenothion	µg/L	0.1	-	-
Carboxin*	µg/L	0.1	-	-
Chlopropham	µg/L	0.1	-	-
Chlorfenvinphos-cis	µg/L	0.1	-	-
Chlorfenvinphos-trans	µg/L	0.1	-	-
Chlorothalonil*	µg/L	0.1	-	-
Chlorpyrifos-methyl	µg/L	0.1	-	-
Chlorsulfuron*	µg/L	0.1	-	-
Ciodrin (Crotoxyphos)*	µg/L	0.1	-	-
cis-permethrin	µg/L	0.1	-	-
Co-Ral (Coumaphos)	µg/L	0.1	-	-
Cyanazine	µg/L	0.1	-	-
Cycloate*	µg/L	0.1	-	-
Cyfluthrin*	µg/L	0.1	-	-
Cypermethrin	µg/L	0.1	-	-
Deltamethrin	µg/L	0.1	-	-
Demeton-o	µg/L	0.1	-	-
Demeton-s	µg/L	0.1	-	-
Demeton-s-methyl	µg/L	0.1	-	-
Diallate A*	µg/L	0.1	-	-
Diallate B*	µg/L	0.1	-	-
Dichlobenil*	µg/L	0.1	-	-
Dichlofluanid*	µg/L	0.1	-	-
Dichlone*	µg/L	0.1	-	-
Diclofop-methyl*	µg/L	0.1	-	-
Dicofol	µg/L	0.1	-	-
Dicrotophos*	µg/L	0.1	-	-
EPN	µg/L	0.1	-	-
EPTC	µg/L	0.1	-	-
Esfenvalerate	µg/L	0.1	-	-

Combined SVOC Pesticides in Water, Low Level [EPA 8270D] Tested: 11/11/2020 (continued)

PARAMETER	UOM	LOR	GW23 WATER - 29/10/2020 SE212973.009	QC201 WATER - 29/10/2020 SE212973.010
Ethoprop	µg/L	0.1	-	-
Fearimol	µg/L	0.1	-	-
Fenamiphos (Phenamiphos)	µg/L	0.1	-	-
Fenchlorophos (Ronnel)	µg/L	0.1	-	-
Fenvalerate	µg/L	0.1	-	-
Fluchloralin	µg/L	0.1	-	-
Fludioxonil	µg/L	0.1	-	-
Fluridone	µg/L	0.1	-	-
Haloxyfop methyl	µg/L	0.1	-	-
Hexazinone	µg/L	0.01	-	-
Imidan (Phosmet)	µg/L	0.1	-	-
Indoxacarb	µg/L	0.1	-	-
Kepone	µg/L	0.1	-	-
Leptophos	µg/L	0.1	-	-
Mestranol	µg/L	0.1	-	-
Metalaxyl	µg/L	0.1	-	-
Methiocarb	µg/L	0.1	-	-
Methyl paraoxan	µg/L	0.1	-	-
Metolachlor	µg/L	0.1	-	-
Metribuzin	µg/L	0.01	-	-
MGK-264	µg/L	0.1	-	-
Molinate	µg/L	0.01	-	-
Monocrotophos	µg/L	0.1	-	-
Napropamide*	µg/L	0.1	-	-
Norflurazon*	µg/L	0.1	-	-
Omethoate	µg/L	0.1	-	-
Oxyfluorfen	µg/L	0.1	-	-
Parathion-methyl	µg/L	0.01	-	-
Pebulate	µg/L	0.1	-	-
Pendimethalin	µg/L	0.1	-	-
Permethrin	µg/L	0.1	-	-
Phosalone (Zolone)	µg/L	0.1	-	-
Phosphamidone	µg/L	0.1	-	-
Piperonyl butoxide	µg/L	0.1	-	-
Primiphos-ethyl	µg/L	0.1	-	-
Primiphos-methyl	µg/L	0.1	-	-
Profenofos	µg/L	0.1	-	-
Prometon	µg/L	0.1	-	-
Prometryn	µg/L	0.01	-	-
Pronamide (Propyzamide)*	µg/L	0.1	-	-
Propachlor	µg/L	0.1	-	-
Propargite	µg/L	0.1	-	-
Propazine	µg/L	0.01	-	-
Prophos	µg/L	0.1	-	-
Propiconazole (Isomer 1+Isomer 2)	µg/L	0.1	-	-
Propiconazole Isomer 1	µg/L	0.1	-	-
Propiconazole Isomer 2	µg/L	0.1	-	-
Propylthiouracil	µg/L	0.1	-	-
Propyzamide	µg/L	0.1	-	-
Prothiofos	µg/L	0.1	-	-
Simazine	µg/L	0.01	-	-
Simetryn	µg/L	0.1	-	-
Strychnine*	µg/L	0.1	-	-
Sulprofos*	µg/L	0.1	-	-
Tebuthiuron*	µg/L	0.1	-	-
Temephos	µg/L	0.1	-	-

Combined SVOC Pesticides in Water, Low Level [EPA 8270D] Tested: 11/11/2020 (continued)

PARAMETER	UOM	LOR	GW23 WATER - 29/10/2020 SE212973.009	QC201 WATER - 29/10/2020 SE212973.010
Terbacil*	µg/L	0.1	-	-
Terbuthylazine	µg/L	0.1	-	-
Terbutryn (Prebane)	µg/L	0.1	-	-
Tetrachlorvinphos (Stirifos)	µg/L	0.1	-	-
Thiabendazole	µg/L	0.1	-	-
Thiamethoxam	µg/L	0.1	-	-
Thiometon	µg/L	0.1	-	-
Triadimefon	µg/L	0.1	-	-
Triazophos	µg/L	0.1	-	-
Trichlorfon	µg/L	0.1	-	-
Trichlornate (Trichloronate)*	µg/L	0.1	-	-
Tricyclazole*	µg/L	0.1	-	-
Trifluralin	µg/L	0.1	-	-
Vernolate*	µg/L	0.1	-	-
Vinclozalin*	µg/L	0.1	-	-
Zolone (phosalone, fosalone)	µg/L	0.1	-	-
Ametryn	µg/L	0.1	-	-
Azinphos-ethyl	µg/L	0.05	-	-
Naftalfos	µg/L	0.1	-	-
Naled (Dibrom)	µg/L	0.1	-	-
Terbufos	µg/L	0.01	-	-

SVOC Compounds in Waters by GC-QQQ [USEPA8270D] Tested: 11/11/2020

PARAMETER	UOM	LOR	GW13b WATER - 29/10/2020 SE212973.002	GW12 WATER - 29/10/2020 SE212973.003	GW11 WATER - 29/10/2020 SE212973.004	GW22 WATER - 29/10/2020 SE212973.005	QC317 WATER - 29/10/2020 SE212973.008
Arochlor 1016	µg/L	0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Arochlor 1221	µg/L	0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Arochlor 1232	µg/L	0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Arochlor 1242	µg/L	0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Arochlor 1248	µg/L	0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Arochlor 1254	µg/L	0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Arochlor 1260	µg/L	0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Arochlor 1262	µg/L	0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Arochlor 1268	µg/L	0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Total PCB*	µg/L	0.03	<0.03	<0.03	<0.03	<0.03	<0.03

PARAMETER	UOM	LOR	GW23 WATER - 29/10/2020 SE212973.009	QC201 WATER - 29/10/2020 SE212973.010
Arochlor 1016	µg/L	0.03	<0.03	<0.03
Arochlor 1221	µg/L	0.03	<0.03	<0.03
Arochlor 1232	µg/L	0.03	<0.03	<0.03
Arochlor 1242	µg/L	0.03	<0.03	<0.03
Arochlor 1248	µg/L	0.03	<0.03	<0.03
Arochlor 1254	µg/L	0.03	<0.03	<0.03
Arochlor 1260	µg/L	0.03	<0.03	<0.03
Arochlor 1262	µg/L	0.03	<0.03	<0.03
Arochlor 1268	µg/L	0.03	<0.03	<0.03
Total PCB*	µg/L	0.03	<0.03	<0.03

Pesticides / Herbicides in waters by HPLC-MS MA-1569.WW.01 [MA1569] Tested: 11/11/2020

PARAMETER	UOM	LOR	QC317 WATER - 29/10/2020 SE212973.008
2,4,5-T*	µg/L	0.5	<0.5
2,4,5-TP*	µg/L	0.5	<0.5
2,4,6-T*	µg/L	0.5	<0.5
2,4-D [(2,4-Dichlorophenoxy) acetic acid]*	µg/L	0.5	<0.5
24-DB*	µg/L	0.5	<0.5
2,6-D [(2,6-Dichlorophenoxy) acetic acid]*	µg/L	0.5	<0.5
4-CPA*	µg/L	1	<1
Bromoxynil*	µg/L	1	<1
Clopyralid*	µg/L	0.5	<0.5
Dicamba*	µg/L	0.5	<0.5
Dichloroprop / Dichlorprop-P*	µg/L	0.5	<0.5
Dinoseb*	µg/L	0.5	<0.5
Fluroxypyr*	µg/L	0.5	<0.5
Ioxynil*	µg/L	1	<1
MCPA*	µg/L	0.5	<0.5
MCPB*	µg/L	1	<1
mecoprop*	µg/L	0.5	<0.5
Picloram*	µg/L	1	<1
Triclopyr*	µg/L	0.5	<0.5

METHOD	METHODOLOGY SUMMARY
AN020	Unpreserved water sample is filtered through a 0.45µm membrane filter and acidified with nitric acid similar to APHA3030B.
AN022/AN318	Following acid digestion of un filtered sample, determination of elements at trace level in waters by ICP-MS technique, referenced to USEPA 6020B and USEPA 200.8 (5.4).
AN022	The water sample is digested with Nitric Acid and made up to the original volume similar to APHA3030E.
AN149	sulfide by Iodometric Titration: sulfide is precipitated as zinc sulfide to overcome interferences with sulphite and thiosulfate. After filtration, sulfide is determined titrimetrically. Reference APHA 4500-S2-
AN245	Anions by Ion Chromatography: A water sample is injected into an eluent stream that passes through the ion chromatographic system where the anions of interest ie Br, Cl, NO2, NO3 and SO4 are separated on their relative affinities for the active sites on the column packing material. Changes to the conductivity and the UV-visible absorbance of the eluent enable identification and quantitation of the anions based on their retention time and peak height or area. APHA 4110 B
AN277/WC250.312	Nitrite ions, when reacted with a reagent containing sulphanilamide and N-(1-naphthyl)-ethylenediamine dihydrochloride produce a highly coloured azo dye that is measured photometrically at 540nm.
AN278	Filterable Reactive Phosphorus by DA (determined on filtered sample): Orthophosphate reacts with ammonium molybdate (Mo VI) and potassium antimonyl tartrate (Sb III) in acid medium to form an antimony-phosphomolybdate complex. This complex is subsequently reduced with ascorbic acid to form a blue colour and the absorbance is read at 880 nm. The sensitivity of the automated method is 10-20 times that of the macro method. Reference APHA 4500-P F
AN279/AN293(Sydney)	The sample is digested with Sulphuric acid, K2SO4 and CuSO4. All forms of phosphorus are converted into orthophosphate. The digest is cooled and placed on the discrete analyser for colorimetric analysis.
AN281	An unfiltered water or soil sample is first digested in a block digestor with sulfuric acid, K2SO4 and CuSO4. The ammonia produced following digestion is then measured colourimetrically using the Aquakem 250 Discrete Analyser. A portion of the digested sample is buffered to an alkaline pH, and interfering cations are complexed. The ammonia then reacts with salicylate and hypochlorite to give a blue colour whose absorbance is measured at 660nm and compared with calibration standards. This is proportional to the concentration of Total Kjeldahl Nitrogen in the original sample.
AN291	Ammonia in solution reacts with hypochlorite ions from Sodium Dichloroisocyanuate, and salicylate in the presence of Sodium Nitroprusside to form indophenol blue and measured at 670 nm by Discrete Analyser.
AN311(Perth) /AN312	Mercury by Cold Vapour AAS in Waters: Mercury ions taken from unfiltered sample are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500.
AN311(Perth)/AN312	Mercury by Cold Vapour AAS in Waters: Mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500.
AN318	Determination of elements at trace level in waters by ICP-MS technique,, referenced to USEPA 6020B and USEPA 200.8 (5.4).
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). Where F2 is corrected for Naphthalene, the VOC data for Naphthalene is used.
AN403	Additionally, the volatile C6-C9/C6-C10 fractions may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoveerable Hydrocarbons - Silica (TRH-Silica) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents.

AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.
EPA8270D LL	This method covers analytical procedures for the analysis of semi-volatile organic compounds (SVOC) including most neutral, acidic, and basic organic compounds based on the USEPA method 8270D. Samples are extracted into a solvent appropriate to the matrix and analysed using a gas chromatograph – triple quadrapole (GC–QQQ).
EPA8270D Pest LL	This method covers analytical procedures for the analysis of semi-volatile organic compounds (SVOC pesticides) including most neutral, acidic, and basic organic compounds based on the USEPA method 8270D. Samples are extracted into a solvent appropriate to the matrix and analysed using a gas chromatograph – triple quadrapole (GC–QQQ).
EPA8270D	This method covers analytical procedures for the analysis of semi-volatile organic compounds (SVOC) including most neutral, acidic, and basic organic compounds based on the USEPA method 8270D. Samples are extracted into a solvent appropriate to the matrix and analysed using a gas chromatograph – triple quadrapole (GC–QQQ).
MA-1523	This method covers the analysis of per- and polyfluoroalkyl substances (PFAS) in aqueous, solid and biosolid samples and solvent extracts, determined as the total of linear and branched isomers. After spiking with isotopically labelled quantification surrogates and clean-up via SPE cartridges sample extracts are analysed by liquid chromatography/mass spectrometry (LC-MS/MS). PFAS concentrations are determined by isotope dilution quantification.
MA1569	This method is intended for the analysis of a diverse range of pesticides and herbicides by Liquid Chromatography using a Tandem Mass Spectrometry detector (LC-MS/MS). Due to the diverse nature of the analytes covered in this method each analyte requires its own analytical acquisition method thus the sample is run multiple times according to the analyte list requested. Water samples are filtered and filtrates are directly injected onto LC-MS/MS using selective ion monitoring.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
**	Indicative data, theoretical holding time exceeded.	NVL	Not validated.	LOR	Limit of Reporting.
***	Indicates that both * and ** apply.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT

Accreditation No. 2562

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Project	**610.30041 Randwick Barracks**	SGS Reference	**ME317270 R0**
Order Number	**SE212973**	Date Received	05 Nov 2020
Samples	10	Date Reported	10 Nov 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(14420).

SIGNATORIES

[redacted]

Australian Chemistry Manager Senior Chemist

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME317270.001 Water 29 Oct 2020 SE212973.001	ME317270.002 Water 29 Oct 2020 SE212973.002	ME317270.003 Water 29 Oct 2020 SE212973.003	ME317270.004 Water 29 Oct 2020 SE212973.004
SVOC Compounds in Waters by GC-QQQ Method: USEPA8270D Tested: 9/11/2020							
Arochlor 1016	µg/L	0.03		-	<0.03	<0.03	<0.03
Arochlor 1221	µg/L	0.03		-	<0.03	<0.03	<0.03
Arochlor 1232	µg/L	0.03		-	<0.03	<0.03	<0.03
Arochlor 1242	µg/L	0.03		-	<0.03	<0.03	<0.03
Arochlor 1248	µg/L	0.03		-	<0.03	<0.03	<0.03
Arochlor 1254	µg/L	0.03		-	<0.03	<0.03	<0.03
Arochlor 1260	µg/L	0.03		-	<0.03	<0.03	<0.03
Arochlor 1262	µg/L	0.03		-	<0.03	<0.03	<0.03
Arochlor 1268	µg/L	0.03		-	<0.03	<0.03	<0.03
Total PCB*	µg/L	0.03		-	<0.03	<0.03	<0.03
d14-p-terphenyl (Surrogate)	%	0.001		-	**105**	**107**	**104**
d5-nitrobenzene (Surrogate)	%	0.001		-	-	-	-
d6-phenol (Surrogate)	%	0.001		-	-	-	-
2-fluorobiphenyl (Surrogate)	%	0.001		-	-	-	-
2,4,6-tribromophenol (Surrogate)	%	0.001		-	-	-	-
2-fluorophenol (Surrogate)	%	0.001		-	-	-	-
SVOC Compounds in Waters by GC-QQQ, Low Level Method: USEPA8270D LL Tested: 9/11/2020							
2-Chlorophenol	µg/L	0.1		-	-	-	-
1-Methylnaphthalene	µg/L	0.1		-	-	-	-
2,4-Dimethylphenol	µg/L	0.1		-	-	-	-
2,4-Dinitrophenol	µg/L	0.1		-	-	-	-
2-Methylnaphthalene	µg/L	0.1		-	<0.1	<0.1	<0.1
2-Nitrophenol	µg/L	0.1		-	-	-	-
4-nitrophenol	µg/L	0.1		-	-	-	-
m&p Cresol	µg/L	0.1		-	-	-	-
o-Cresol	µg/L	0.1		-	-	-	-
2-Methyl 4,6-Dinitrophenol	µg/L	0.1		-	-	-	-
2,3,4,6-Tetrachlorophenol	µg/L	0.1		-	-	-	-
2,4-Dichlorophenol	µg/L	0.1		-	-	-	-
2,4,5-Trichlorophenol	µg/L	0.1		-	-	-	-
2,4,6-Tribromophenol*	µg/L	0.1		-	-	-	-
2,4,6-Trichlorophenol	µg/L	0.1		-	-	-	-
2,6-Dichlorophenol	µg/L	0.1		-	-	-	-
3-Methylcholanthrene	µg/L	0.01		-	-	-	-
4-Chloro-3-methylphenol	µg/L	0.1		-	-	-	-
4,4-DDD	µg/L	0.1		-	<0.1	<0.1	<0.1
4,4-DDE	µg/L	0.1		-	<0.1	<0.1	<0.1
4,4-DDT	µg/L	0.1		-	<0.1	<0.1	<0.1
DDT+DDE+DDD	µg/L	0.2		-	-	-	-
o,p-DDT	µg/L	0.01		-	-	-	-
Total DDT	µg/L	0.1		-	-	-	-
7,12-Dimethylbenz(a)anthracene	µg/L	0.01		-	<0.01	<0.01	<0.01
Acenaphthene	µg/L	0.01		-	<0.01	<0.01	<0.01
Acenaphthylene	µg/L	0.01		-	<0.01	<0.01	<0.01
Acetophenone	µg/L	0.01		-	-	-	-
Aldrin	µg/L	0.01		-	<0.01	<0.01	<0.01
Aldrin and Dieldrin	µg/L	0.1		-	<0.1	<0.1	<0.1
alpha-BHC	µg/L	0.1		-	<0.1	<0.1	<0.1
alpha-Chlordane	µg/L	0.01		-	<0.01	<0.01	<0.01
Anthracene	µg/L	0.01		-	<0.01	<0.01	<0.01
Benzo(a)anthracene	µg/L	0.01		-	<0.01	<0.01	<0.01
Benzo (a) pyrene	µg/L	0.01		-	<0.01	<0.01	<0.01
Benzo (b) fluoranthene	µg/L	0.01		-	<0.01	<0.01	<0.01
Benzo (e) pyrene	µg/L	0.01		-	<0.01	<0.01	<0.01
Benzo (ghi) perylene	µg/L	0.01		-	<0.01	<0.01	<0.01
Benzo (k) fluoranthene	µg/L	0.01		-	<0.01	<0.01	<0.01
Benzo (b+j+k) fluoranthene	µg/L	0.02		-	<0.02	<0.02	<0.02

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME317270.001 Water 29 Oct 2020 SE212973.001	ME317270.002 Water 29 Oct 2020 SE212973.002	ME317270.003 Water 29 Oct 2020 SE212973.003	ME317270.004 Water 29 Oct 2020 SE212973.004
SVOC Compounds in Waters by GC-QQQ, Low Level Method: USEPA8270D LL Tested: 6/11/2020 (continued)							
beta-BHC	µg/L	0.1	-	<0.1	<0.1	<0.1
Bis (2-Ethylhexyl) adipate	µg/L	0.01	-	-	-	-
Bis (2-Ethylhexyl) phthalate	µg/L	0.01	-	-	-	-
Chlordane	µg/L	0.01	-	<0.01	<0.01	<0.01
Chlorpyrifos	µg/L	0.01	-	<0.01	<0.01	<0.01
Chrysene	µg/L	0.01	-	<0.01	<0.01	<0.01
Coronene	µg/L	0.01	-	-	-	-
delta-BHC	µg/L	0.1	-	<0.1	<0.1	<0.1
Dibenz (ah) anthracene	µg/L	0.01	-	<0.01	<0.01	<0.01
Dibenz (aj) acridine	µg/L	0.01	-	-	-	-
Dibenzo[a,e]pyrene	µg/L	0.01	-	-	-	-
Dieldrin	µg/L	0.01	-	<0.01	<0.01	<0.01
Dimethoate	µg/L	0.1	-	<0.1	<0.1	<0.1
Dinoseb	µg/L	0.05	-	-	-	-
Disulfoton	µg/L	0.1	-	<0.1	<0.1	<0.1
Endosulfan 1	µg/L	0.01	-	<0.01	<0.01	<0.01
Endosulfan 2	µg/L	0.01	-	<0.01	<0.01	<0.01
Endosulfan Sulphate	µg/L	0.01	-	<0.01	<0.01	<0.01
Total Endosulfan	µg/L	0.01	-	<0.01	<0.01	<0.01
Endrin	µg/L	0.1	-	<0.1	<0.1	<0.1
Endrin Aldehyde	µg/L	0.1	-	<0.1	<0.1	<0.1
Endrin ketone	µg/L	0.1	-	<0.1	<0.1	<0.1
Famphur	µg/L	0.1	-	<0.1	<0.1	<0.1
Fluoranthene	µg/L	0.01	-	<0.01	<0.01	<0.01
Fluorene	µg/L	0.01	-	<0.01	<0.01	<0.01
gamma-BHC	µg/L	0.01	-	<0.01	<0.01	<0.01
gamma-Chlordane	µg/L	0.01	-	<0.01	<0.01	<0.01
Heptachlor	µg/L	0.01	-	<0.01	<0.01	<0.01
Heptachlor Epoxide	µg/L	0.1	-	<0.1	<0.1	<0.1
Hexachlorobenzene	µg/L	0.01	-	<0.01	<0.01	<0.01
Hexachlorophene	µg/L	0.05	-	-	-	-
Indeno (1,2,3-cd) pyrene	µg/L	0.01	-	<0.01	<0.01	<0.01
Isodrin	µg/L	0.1	-	<0.1	<0.1	<0.1
Methoxychlor	µg/L	0.1	-	<0.1	<0.1	<0.1
Methyl parathion	µg/L	0.01	-	<0.01	<0.01	<0.01
Mirex	µg/L	0.1	-	<0.1	<0.1	<0.1
Naphthalene	µg/L	0.1	-	<0.1	<0.1	<0.1
Pentachlorophenol	µg/L	0.1	-	-	-	-
Phenol	µg/L	0.01	-	-	-	-
Perylene	µg/L	0.01	-	-	-	-
Phenanthrene	µg/L	0.01	-	<0.01	<0.01	<0.01
Phorate	µg/L	0.1	-	<0.1	<0.1	<0.1
Pyrene	µg/L	0.01	-	<0.01	<0.01	<0.01
Stirofos	µg/L	0.1	-	<0.1	<0.1	<0.1
Sulfotepp	µg/L	0.1	-	<0.1	<0.1	<0.1
Thionazin	µg/L	0.1	-	<0.1	<0.1	<0.1
Total PAHs - assumes <LOR results = 0	µg/L	0.09	-	-	-	-
Total PAHs - assumes <LOR results = 0.5xLOR	µg/L	0.09	-	-	-	-
Total PAHs Vic EPA - assumes <LOR results = 0	µg/L	0.8	-	<0.8	<0.8	<0.8
Total PAHs Vic EPA - assumes <LOR results = 0.5LOR	µg/L	0.8	-	<0.8	<0.8	<0.8
d14-p-terphenyl (Surrogate)	%	0.0001	-	**105**	**107**	**104**
Combined SVOC Pesticides in Water, Low Level Method: EPA 8270D Tested: 9/11/2020							
Tebuthiuron*	µg/L	0.1	-	-	-	-
Temephos	µg/L	0.1	-	-	-	-
Terbacil*	µg/L	0.1	-	-	-	-
Terbutryn (Prebane)	µg/L	0.1	-	-	-	-
Tetrachlorvinphos (Stirifos)	µg/L	0.1	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name ME317270.001 Water 29 Oct 2020 SE212973.001	ME317270.002 Water 29 Oct 2020 SE212973.002	ME317270.003 Water 29 Oct 2020 SE212973.003	ME317270.004 Water 29 Oct 2020 SE212973.004
Combined SVOC Pesticides in Water, Low Level Method: EPA 8270D Tested: 6/11/2020 (continued)						
Thiabendazole	µg/L	0.1	-	-	-	-
Thiamethoxam	µg/L	0.1	-	-	-	-
Thiometon	µg/L	0.1	-	-	-	-
Triadimefon	µg/L	0.1	-	-	-	-
Triazophos	µg/L	0.1	-	-	-	-
Trichlorfon	µg/L	0.1	-	-	-	-
Trichlornate (Trichloronate)*	µg/L	0.1	-	-	-	-
Tricyclazole*	µg/L	0.1	-	-	-	-
Vernolate*	µg/L	0.1	-	-	-	-
Acephate	µg/L	0.1	-	-	-	-
Alachlor	µg/L	0.1	-	-	-	-
Atraton	µg/L	0.1	-	-	-	-
Azinphos-methyl	µg/L	0.05	-	<0.05	<0.05	<0.05
Bioresmethrin	µg/L	0.1	-	-	-	-
Boscalid*	µg/L	0.1	-	-	-	-
Bromophos ethyl*	µg/L	0.05	-	<0.05	<0.05	<0.05
Butachlor*	µg/L	0.1	-	-	-	-
Butylate*	µg/L	0.1	-	-	-	-
Captafol*	µg/L	0.1	-	-	-	-
Captan*	µg/L	0.1	-	-	-	-
Carboxin*	µg/L	0.1	-	-	-	-
Chlorfenvinphos*	µg/L	0.1	-	<0.1	<0.1	<0.1
Chloropham	µg/L	0.1	-	-	-	-
Chlorsulfuron*	µg/L	0.1	-	-	-	-
Ciodrin (Crotoxyphos)*	µg/L	0.1	-	-	-	-
cis-permethrin	µg/L	0.1	-	-	-	-
Cycloate*	µg/L	0.1	-	-	-	-
Cyfluthrin*	µg/L	0.1	-	-	-	-
Demeton-o	µg/L	0.1	-	-	-	-
Demeton-s	µg/L	0.1	-	-	-	-
Demeton-s-methyl	µg/L	0.1	-	-	-	-
Diallate A*	µg/L	0.1	-	-	-	-
Diallate B*	µg/L	0.1	-	-	-	-
Diazinon*	µg/L	0.01	-	<0.01	<0.01	<0.01
Dichlobenil*	µg/L	0.1	-	-	-	-
Dichlofluanid*	µg/L	0.1	-	-	-	-
Dichlone*	µg/L	0.1	-	-	-	-
Dichlorvos	µg/L	0.01	-	<0.01	<0.01	<0.01
Diclofop-methyl*	µg/L	0.1	-	-	-	-
Dicofol	µg/L	0.1	-	-	-	-
Dicrotophos*	µg/L	0.1	-	-	-	-
EPN	µg/L	0.1	-	-	-	-
EPTC	µg/L	0.1	-	-	-	-
Esfenvalerate	µg/L	0.1	-	-	-	-
Ethion	µg/L	0.01	-	<0.01	<0.01	<0.01
Ethoprop	µg/L	0.1	-	-	-	-
Fenamiphos (Phenamiphos)	µg/L	0.1	-	-	-	-
Fearimol	µg/L	0.1	-	-	-	-
Fenitrothion	µg/L	0.01	-	<0.01	<0.01	<0.01
Fenisulfothion	µg/L	0.1	-	<0.1	<0.1	<0.1
Fenthion	µg/L	0.1	-	<0.1	<0.1	<0.1
Fenvalerate	µg/L	0.1	-	-	-	-
Fluchloralin	µg/L	0.1	-	-	-	-
Fludioxonil	µg/L	0.1	-	-	-	-
Fluridone	µg/L	0.1	-	-	-	-
Haloxyfop methyl	µg/L	0.1	-	-	-	-
Hexazinone	µg/L	0.01	-	-	-	-
Imidan (Phosmet)	µg/L	0.1	-	-	-	-
Indoxacarb	µg/L	0.1	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME317270.001 Water 29 Oct 2020 SE212973.001	ME317270.002 Water 29 Oct 2020 SE212973.002	ME317270.003 Water 29 Oct 2020 SE212973.003	ME317270.004 Water 29 Oct 2020 SE212973.004
Combined SVOC Pesticides in Water, Low Level	**Method: EPA 8270D**	**Tested: 6/11/2020**	**(continued)**				
Kepone	µg/L	0.1		-	-	-	-
Leptophos	µg/L	0.1		-	-	-	-
Malathion	µg/L	0.01		-	<0.01	<0.01	<0.01
Mestranol	µg/L	0.1		-	-	-	-
Metalaxyl	µg/L	0.1		-	-	-	-
Methidathion	µg/L	0.01		-	<0.01	<0.01	<0.01
Methiocarb	µg/L	0.1		-	-	-	-
Methyl paraoxan	µg/L	0.1		-	-	-	-
Metolachlor	µg/L	0.1		-	-	-	-
Mevinphos-cis/trans	µg/L	0.1		-	<0.1	<0.1	<0.1
MGK-264	µg/L	0.1		-	-	-	-
Monocrotophos	µg/L	0.1		-	-	-	-
Naftalfos	µg/L	0.1		-	-	-	-
Naled (Dibrom)	µg/L	0.1		-	-	-	-
Napropamide*	µg/L	0.1		-	-	-	-
Norflurazon*	µg/L	0.1		-	-	-	-
Omethoate	µg/L	0.1		-	-	-	-
Oxyfluorfen	µg/L	0.1		-	-	-	-
Parathion	µg/L	0.01		-	<0.01	<0.01	<0.01
Pebulate	µg/L	0.1		-	-	-	-
Pendimethalin	µg/L	0.1		-	-	-	-
Permethrin	µg/L	0.1		-	-	-	-
Phosalone (Zolone)	µg/L	0.1		-	-	-	-
Phosphamidone	µg/L	0.1		-	-	-	-
Piperonyl butoxide	µg/L	0.1		-	-	-	-
Profenofos	µg/L	0.1		-	-	-	-
Prometon	µg/L	0.1		-	-	-	-
Propachlor	µg/L	0.1		-	-	-	-
Propargite	µg/L	0.1		-	-	-	-
Propiconazole Isomer 2	µg/L	0.1		-	-	-	-
Propylthiouracil	µg/L	0.1		-	-	-	-
Propyzamide	µg/L	0.1		-	-	-	-
Prothiofos	µg/L	0.1		-	-	-	-
Simetryn	µg/L	0.1		-	-	-	-
Strychnine*	µg/L	0.1		-	-	-	-
Sulprofos*	µg/L	0.1		-	-	-	-
OPs							
Terbufos	µg/L	0.01		-	-	-	-
Carbophenothion	µg/L	0.1		-	-	-	-
Chlorfenvinphos-cis	µg/L	0.1		-	-	-	-
Chlorfenvinphos-trans	µg/L	0.1		-	-	-	-
Chlorpyrifos-methyl	µg/L	0.1		-	-	-	-
Co-Ral (Coumaphos)	µg/L	0.1		-	-	-	-
Fenchlorophos (Ronnel)	µg/L	0.1		-	-	-	-
Parathion-methyl	µg/L	0.01		-	-	-	-
Primiphos-ethyl	µg/L	0.1		-	-	-	-
Primiphos-methyl	µg/L	0.1		-	-	-	-
Herbicides (normal)							
Trifluralin	µg/L	0.1		-	-	-	-
Biocides ADWG							
Pronamide (Propyzamide)*	µg/L	0.1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name ME317270.001 Water 29 Oct 2020 SE212973.001	ME317270.002 Water 29 Oct 2020 SE212973.002	ME317270.003 Water 29 Oct 2020 SE212973.003	ME317270.004 Water 29 Oct 2020 SE212973.004
Combined SVOC Pesticides in Water, Low Level **Method: EPA 8270D** **Tested: 9/11/2020** **(continued)**						
Herbicides (other)						
Molinate	µg/L	0.01	-	-	-	-
Herbicides (Phenoxy Acid Herbicides)						
Bromoxynil*	µg/L	0.1	-	-	-	-
Herbicides (Triazine Herbicides)						
Terbuthylazine	µg/L	0.1	-	-	-	-
Ametryn	µg/L	0.1	-	-	-	-
Atrazine	µg/L	0.01	-	-	-	-
Cyanazine	µg/L	0.1	-	-	-	-
Metribuzin	µg/L	0.01	-	-	-	-
Prometryn	µg/L	0.01	-	-	-	-
Propazine	µg/L	0.01	-	-	-	-
Simazine	µg/L	0.01	-	-	-	-
OCs						
Vinclozalin*	µg/L	0.1	-	-	-	-
Chlorothalonil*	µg/L	0.1	-	-	-	-
OPs						
Zolone (phosalone, fosalone)	µg/L	0.1	-	-	-	-
Azinphos-ethyl	µg/L	0.05	-	-	-	-
Prophos	µg/L	0.1	-	-	-	-
Other SVOCs						
Bromacil	µg/L	0.1	-	-	-	-
Propiconazole (Isomer 1+Isomer 2)	µg/L	0.1	-	-	-	-
Propiconazole Isomer 1	µg/L	0.1	-	-	-	-
Surrogates						
d14-p-terphenyl (Surrogate)	%	-	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name ME317270.001 Water 29 Oct 2020 SE212973.001	ME317270.002 Water 29 Oct 2020 SE212973.002	ME317270.003 Water 29 Oct 2020 SE212973.003	ME317270.004 Water 29 Oct 2020 SE212973.004
Combined SVOC Pesticides in Water, Low Level Method: EPA 8270D Tested: 9/11/2020 (continued)						
Synthetic Pyrethroids						
Bifenthrin	µg/L	0.1	-	-	-	-
Cypermethrin	µg/L	0.1	-	-	-	-
Deltamethrin	µg/L	0.1	-	-	-	-
Pesticides / Herbicides in waters by HPLC-MS MA-1569.WW.01 Method: MA1569 Tested: 9/11/2020						
Bromoxynil*	µg/L	1	-	-	-	-
Clopyralid*	µg/L	0.5	-	-	-	-
4-CPA*	µg/L	1	-	-	-	-
2,4-D [(2,4-Dichlorophenoxy) acetic acid]*	µg/L	0.5	-	-	-	-
2,6-D [(2,6-Dichlorophenoxy) acetic acid]*	µg/L	0.5	-	-	-	-
24-DB*	µg/L	0.5	-	-	-	-
Dicamba*	µg/L	0.5	-	-	-	-
Dichloroprop / Dichlorprop-P*	µg/L	0.5	-	-	-	-
Dinoseb*	µg/L	0.5	-	-	-	-
Fluroxypyr*	µg/L	0.5	-	-	-	-
Ioxynil*	µg/L	1	-	-	-	-
MCPA*	µg/L	0.5	-	-	-	-
MCPB*	µg/L	1	-	-	-	-
mecoprop*	µg/L	0.5	-	-	-	-
Picloram*	µg/L	1	-	-	-	-
2,4,5-T*	µg/L	0.5	-	-	-	-
2,4,5-TP*	µg/L	0.5	-	-	-	-
2,4,6-T*	µg/L	0.5	-	-	-	-
Triclopyr*	µg/L	0.5	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name ME317270.005 Water 29 Oct 2020 SE212973.005	ME317270.006 Water 29 Oct 2020 SE212973.006	ME317270.007 Water 29 Oct 2020 SE212973.007	ME317270.008 Water 29 Oct 2020 SE212973.008
SVOC Compounds in Waters by GC-QQQ Method: USEPA8270D Tested: 6/11/2020						
Arochlor 1016	µg/L	0.03	<0.03	-	-	<0.03
Arochlor 1221	µg/L	0.03	<0.03	-	-	<0.03
Arochlor 1232	µg/L	0.03	<0.03	-	-	<0.03
Arochlor 1242	µg/L	0.03	<0.03	-	-	<0.03
Arochlor 1248	µg/L	0.03	<0.03	-	-	<0.03
Arochlor 1254	µg/L	0.03	<0.03	-	-	<0.03
Arochlor 1260	µg/L	0.03	<0.03	-	-	<0.03
Arochlor 1262	µg/L	0.03	<0.03	-	-	<0.03
Arochlor 1268	µg/L	0.03	<0.03	-	-	<0.03
Total PCB*	µg/L	0.03	<0.03	-	-	<0.03
d14-p-terphenyl (Surrogate)	%	0.001	**104**	-	-	**103**
d5-nitrobenzene (Surrogate)	%	0.001	-	-	-	-
d6-phenol (Surrogate)	%	0.001	-	-	-	-
2-fluorobiphenyl (Surrogate)	%	0.001	-	-	-	-
2,4,6-tribromophenol (Surrogate)	%	0.001	-	-	-	-
2-fluorophenol (Surrogate)	%	0.001	-	-	-	-
SVOC Compounds in Waters by GC-QQQ, Low Level Method: USEPA8270D LL Tested: 6/11/2020						
2-Chlorophenol	µg/L	0.1	-	-	-	<0.1
1-Methylnaphthalene	µg/L	0.1	-	-	-	<0.1
2,4-Dimethylphenol	µg/L	0.1	-	-	-	<0.1
2,4-Dinitrophenol	µg/L	0.1	-	-	-	<0.1
2-Methylnaphthalene	µg/L	0.1	<0.1	-	-	<0.1
2-Nitrophenol	µg/L	0.1	-	-	-	<0.1
4-nitrophenol	µg/L	0.1	-	-	-	<0.1
m&p Cresol	µg/L	0.1	-	-	-	<0.1
o-Cresol	µg/L	0.1	-	-	-	<0.1
2-Methyl 4,6-Dinitrophenol	µg/L	0.1	-	-	-	<0.1
2,3,4,6-Tetrachlorophenol	µg/L	0.1	-	-	-	<0.1
2,4-Dichlorophenol	µg/L	0.1	-	-	-	<0.1
2,4,5-Trichlorophenol	µg/L	0.1	-	-	-	<0.1
2,4,6-Tribromophenol*	µg/L	0.1	-	-	-	<0.1
2,4,6-Trichlorophenol	µg/L	0.1	-	-	-	<0.1
2,6-Dichlorophenol	µg/L	0.1	-	-	-	<0.1
3-Methylcholanthrene	µg/L	0.01	-	-	-	<0.01
4-Chloro-3-methylphenol	µg/L	0.1	-	-	-	<0.1
4,4-DDD	µg/L	0.1	<0.1	-	-	<0.1
4,4-DDE	µg/L	0.1	<0.1	-	-	<0.1
4,4-DDT	µg/L	0.1	<0.1	-	-	<0.1
DDT+DDE+DDD	µg/L	0.2	-	-	-	<0.2
o,p-DDT	µg/L	0.01	-	-	-	<0.01
Total DDT	µg/L	0.1	-	-	-	<0.1
7,12-Dimethylbenz(a)anthracene	µg/L	0.01	<0.01	-	-	<0.01
Acenaphthene	µg/L	0.01	<0.01	-	-	<0.01
Acenaphthylene	µg/L	0.01	<0.01	-	-	<0.01
Acetophenone	µg/L	0.01	-	-	-	<0.01
Aldrin	µg/L	0.01	<0.01	-	-	<0.01
Aldrin and Dieldrin	µg/L	0.1	<0.1	-	-	<0.1
alpha-BHC	µg/L	0.1	<0.1	-	-	<0.1
alpha-Chlordane	µg/L	0.01	<0.01	-	-	<0.01
Anthracene	µg/L	0.01	<0.01	-	-	<0.01
Benzo(a)anthracene	µg/L	0.01	<0.01	-	-	<0.01
Benzo (a) pyrene	µg/L	0.01	<0.01	-	-	<0.01
Benzo (b) fluoranthene	µg/L	0.01	<0.01	-	-	<0.01
Benzo (e) pyrene	µg/L	0.01	<0.01	-	-	<0.01
Benzo (ghi) perylene	µg/L	0.01	<0.01	-	-	<0.01
Benzo (k) fluoranthene	µg/L	0.01	<0.01	-	-	<0.01
Benzo (b+j+k) fluoranthene	µg/L	0.02	<0.02	-	-	<0.02

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name ME317270.005 Water 29 Oct 2020 SE212973.005	ME317270.006 Water 29 Oct 2020 SE212973.006	ME317270.007 Water 29 Oct 2020 SE212973.007	ME317270.008 Water 29 Oct 2020 SE212973.008
SVOC Compounds in Waters by GC-QQQ, Low Level Method: USEPA8270D LL Tested: 6/11/2020 (continued)						
beta-BHC	µg/L	0.1	<0.1	-	-	<0.1
Bis (2-Ethylhexyl) adipate	µg/L	0.01	-	-	-	<0.01
Bis (2-Ethylhexyl) phthalate	µg/L	0.01	-	-	-	<0.01
Chlordane	µg/L	0.01	<0.01	-	-	<0.01
Chlorpyrifos	µg/L	0.01	<0.01	-	-	<0.01
Chrysene	µg/L	0.01	<0.01	-	-	<0.01
Coronene	µg/L	0.01	-	-	-	<0.01
delta-BHC	µg/L	0.1	<0.1	-	-	<0.1
Dibenz (ah) anthracene	µg/L	0.01	<0.01	-	-	<0.01
Dibenz (aj) acridine	µg/L	0.01	-	-	-	<0.01
Dibenzo[a,e]pyrene	µg/L	0.01	-	-	-	<0.01
Dieldrin	µg/L	0.01	<0.01	-	-	<0.01
Dimethoate	µg/L	0.1	<0.1	-	-	<0.1
Dinoseb	µg/L	0.05	-	-	-	<0.05
Disulfoton	µg/L	0.1	<0.1	-	-	<0.1
Endosulfan 1	µg/L	0.01	<0.01	-	-	<0.01
Endosulfan 2	µg/L	0.01	<0.01	-	-	<0.01
Endosulfan Sulphate	µg/L	0.01	<0.01	-	-	<0.01
Total Endosulfan	µg/L	0.01	<0.01	-	-	<0.01
Endrin	µg/L	0.1	<0.1	-	-	<0.1
Endrin Aldehyde	µg/L	0.1	<0.1	-	-	<0.1
Endrin ketone	µg/L	0.1	<0.1	-	-	<0.1
Famphur	µg/L	0.1	<0.1	-	-	<0.1
Fluoranthene	µg/L	0.01	<0.01	-	-	<0.01
Fluorene	µg/L	0.01	<0.01	-	-	<0.01
gamma-BHC	µg/L	0.01	<0.01	-	-	<0.01
gamma-Chlordane	µg/L	0.01	<0.01	-	-	<0.01
Heptachlor	µg/L	0.01	<0.01	-	-	<0.01
Heptachlor Epoxide	µg/L	0.1	<0.1	-	-	<0.1
Hexachlorobenzene	µg/L	0.01	<0.01	-	-	<0.01
Hexachlorophene	µg/L	0.05	-	-	-	<0.05
Indeno (1,2,3-cd) pyrene	µg/L	0.01	<0.01	-	-	<0.01
Isodrin	µg/L	0.1	<0.1	-	-	<0.1
Methoxychlor	µg/L	0.1	<0.1	-	-	<0.1
Methyl parathion	µg/L	0.01	<0.01	-	-	<0.01
Mirex	µg/L	0.1	<0.1	-	-	<0.1
Naphthalene	µg/L	0.1	<0.1	-	-	<0.1
Pentachlorophenol	µg/L	0.1	-	-	-	<0.1
Phenol	µg/L	0.01	-	-	-	<0.01
Perylene	µg/L	0.01	-	-	-	<0.01
Phenanthrene	µg/L	0.01	<0.01	-	-	<0.01
Phorate	µg/L	0.1	<0.1	-	-	<0.1
Pyrene	µg/L	0.01	<0.01	-	-	<0.01
Stirofos	µg/L	0.1	<0.1	-	-	<0.1
Sulfotepp	µg/L	0.1	<0.1	-	-	<0.1
Thionazin	µg/L	0.1	<0.1	-	-	<0.1
Total PAHs - assumes <LOR results = 0	µg/L	0.09	-	-	-	-
Total PAHs - assumes <LOR results = 0.5xLOR	µg/L	0.09	-	-	-	-
Total PAHs Vic EPA - assumes <LOR results = 0	µg/L	0.8	<0.8	-	-	<0.8
Total PAHs Vic EPA - assumes <LOR results = 0.5LOR	µg/L	0.8	<0.8	-	-	<0.8
d14-p-terphenyl (Surrogate)	%	0.0001	**104**	-	-	**103**
Combined SVOC Pesticides in Water, Low Level Method: EPA 8270D Tested: 6/11/2020						
Tebuthiuron*	µg/L	0.1	-	-	-	<0.1
Temephos	µg/L	0.1	-	-	-	<0.1
Terbacil*	µg/L	0.1	-	-	-	<0.1
Terbutryn (Prebane)	µg/L	0.1	-	-	-	<0.1
Tetrachlorvinphos (Stirifos)	µg/L	0.1	-	-	-	<0.1

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name ME317270.005 Water 29 Oct 2020 SE212973.005	ME317270.006 Water 29 Oct 2020 SE212973.006	ME317270.007 Water 29 Oct 2020 SE212973.007	ME317270.008 Water 29 Oct 2020 SE212973.008
Combined SVOC Pesticides in Water, Low Level	**Method: EPA 8270D**	**Tested: 6/11/2020**	**(continued)**			
Thiabendazole	µg/L	0.1	-	-	-	<0.1
Thiamethoxam	µg/L	0.1	-	-	-	<0.1
Thiometon	µg/L	0.1	-	-	-	<0.1
Triadimefon	µg/L	0.1	-	-	-	<0.1
Triazophos	µg/L	0.1	-	-	-	<0.1
Trichlorfon	µg/L	0.1	-	-	-	<0.1
Trichlornate (Trichloronate)*	µg/L	0.1	-	-	-	<0.1
Tricyclazole*	µg/L	0.1	-	-	-	<0.1
Vernolate*	µg/L	0.1	-	-	-	<0.1
Acephate	µg/L	0.1	-	-	-	<0.1
Alachlor	µg/L	0.1	-	-	-	<0.1
Atraton	µg/L	0.1	-	-	-	<0.1
Azinphos-methyl	µg/L	0.05	<0.05	-	-	<0.05
Bioresmethrin	µg/L	0.1	-	-	-	<0.1
Boscalid*	µg/L	0.1	-	-	-	<0.1
Bromophos ethyl*	µg/L	0.05	<0.05	-	-	<0.05
Butachlor*	µg/L	0.1	-	-	-	<0.1
Butylate*	µg/L	0.1	-	-	-	<0.1
Captafol*	µg/L	0.1	-	-	-	<0.1
Captan*	µg/L	0.1	-	-	-	<0.1
Carboxin*	µg/L	0.1	-	-	-	<0.1
Chlorfenvinphos*	µg/L	0.1	<0.1	-	-	<0.1
Chloropham	µg/L	0.1	-	-	-	<0.1
Chlorsulfuron*	µg/L	0.1	-	-	-	<0.1
Ciodrin (Crotoxyphos)*	µg/L	0.1	-	-	-	<0.1
cis-permethrin	µg/L	0.1	-	-	-	<0.1
Cycloate*	µg/L	0.1	-	-	-	<0.1
Cyfluthrin*	µg/L	0.1	-	-	-	<0.1
Demeton-o	µg/L	0.1	-	-	-	<0.1
Demeton-s	µg/L	0.1	-	-	-	<0.1
Demeton-s-methyl	µg/L	0.1	-	-	-	<0.1
Diallate A*	µg/L	0.1	-	-	-	<0.1
Diallate B*	µg/L	0.1	-	-	-	<0.1
Diazinon*	µg/L	0.01	<0.01	-	-	<0.01
Dichlobenil*	µg/L	0.1	-	-	-	<0.1
Dichlofluanid*	µg/L	0.1	-	-	-	<0.1
Dichlone*	µg/L	0.1	-	-	-	<0.1
Dichlorvos	µg/L	0.01	<0.01	-	-	<0.01
Diclofop-methyl*	µg/L	0.1	-	-	-	<0.1
Dicofol	µg/L	0.1	-	-	-	<0.1
Dicrotophos*	µg/L	0.1	-	-	-	<0.1
EPN	µg/L	0.1	-	-	-	<0.1
EPTC	µg/L	0.1	-	-	-	<0.1
Esfenvalerate	µg/L	0.1	-	-	-	<0.1
Ethion	µg/L	0.01	<0.01	-	-	<0.01
Ethoprop	µg/L	0.1	-	-	-	<0.1
Fenamiphos (Phenamiphos)	µg/L	0.1	-	-	-	<0.1
Fearimol	µg/L	0.1	-	-	-	<0.1
Fenitrothion	µg/L	0.01	<0.01	-	-	<0.01
Fenisulfothion	µg/L	0.1	<0.1	-	-	<0.1
Fenthion	µg/L	0.1	<0.1	-	-	<0.1
Fenvalerate	µg/L	0.1	-	-	-	<0.1
Fluchloralin	µg/L	0.1	-	-	-	<0.1
Fludioxonil	µg/L	0.1	-	-	-	<0.1
Fluridone	µg/L	0.1	-	-	-	<0.1
Haloxyfop methyl	µg/L	0.1	-	-	-	<0.1
Hexazinone	µg/L	0.01	-	-	-	<0.01
Imidan (Phosmet)	µg/L	0.1	-	-	-	<0.1
Indoxacarb	µg/L	0.1	-	-	-	<0.1

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME317270.005 Water 29 Oct 2020 SE212973.005	ME317270.006 Water 29 Oct 2020 SE212973.006	ME317270.007 Water 29 Oct 2020 SE212973.007	ME317270.008 Water 29 Oct 2020 SE212973.008
Combined SVOC Pesticides in Water, Low Level	**Method: EPA 8270D**	**Tested: 6/11/2020**	**(continued)**				
Kepone	µg/L	0.1		-	-	-	<0.1
Leptophos	µg/L	0.1		-	-	-	<0.1
Malathion	µg/L	0.01		<0.01	-	-	<0.01
Mestranol	µg/L	0.1		-	-	-	<0.1
Metalaxyl	µg/L	0.1		-	-	-	<0.1
Methidathion	µg/L	0.01		<0.01	-	-	<0.01
Methiocarb	µg/L	0.1		-	-	-	<0.1
Methyl paraoxan	µg/L	0.1		-	-	-	<0.1
Metolachlor	µg/L	0.1		-	-	-	<0.1
Mevinphos-cis/trans	µg/L	0.1		<0.1	-	-	<0.1
MGK-264	µg/L	0.1		-	-	-	<0.1
Monocrotophos	µg/L	0.1		-	-	-	<0.1
Naftalfos	µg/L	0.1		-	-	-	<0.1
Naled (Dibrom)	µg/L	0.1		-	-	-	<0.1
Napropamide*	µg/L	0.1		-	-	-	<0.1
Norflurazon*	µg/L	0.1		-	-	-	<0.1
Omethoate	µg/L	0.1		-	-	-	<0.1
Oxyfluorfen	µg/L	0.1		-	-	-	<0.1
Parathion	µg/L	0.01		<0.01	-	-	<0.01
Pebulate	µg/L	0.1		-	-	-	<0.1
Pendimethalin	µg/L	0.1		-	-	-	<0.1
Permethrin	µg/L	0.1		-	-	-	<0.1
Phosalone (Zolone)	µg/L	0.1		-	-	-	<0.1
Phosphamidone	µg/L	0.1		-	-	-	<0.1
Piperonyl butoxide	µg/L	0.1		-	-	-	<0.1
Profenofos	µg/L	0.1		-	-	-	<0.1
Prometon	µg/L	0.1		-	-	-	<0.1
Propachlor	µg/L	0.1		-	-	-	<0.1
Propargite	µg/L	0.1		-	-	-	<0.1
Propiconazole Isomer 2	µg/L	0.1		-	-	-	<0.1
Propylthiouracil	µg/L	0.1		-	-	-	<0.1
Propyzamide	µg/L	0.1		-	-	-	<0.1
Prothiofos	µg/L	0.1		-	-	-	<0.1
Simetryn	µg/L	0.1		-	-	-	<0.1
Strychnine*	µg/L	0.1		-	-	-	<0.1
Sulprofos*	µg/L	0.1		-	-	-	<0.1
OPs							
Terbufos	µg/L	0.01		-	-	-	<0.01
Carbophenothion	µg/L	0.1		-	-	-	<0.1
Chlorfenvinphos-cis	µg/L	0.1		-	-	-	<0.1
Chlorfenvinphos-trans	µg/L	0.1		-	-	-	<0.1
Chlorpyrifos-methyl	µg/L	0.1		-	-	-	<0.1
Co-Ral (Coumaphos)	µg/L	0.1		-	-	-	<0.1
Fenchlorophos (Ronnel)	µg/L	0.1		-	-	-	<0.1
Parathion-methyl	µg/L	0.01		-	-	-	<0.01
Primiphos-ethyl	µg/L	0.1		-	-	-	<0.1
Primiphos-methyl	µg/L	0.1		-	-	-	<0.1
Herbicides (normal)							
Trifluralin	µg/L	0.1		-	-	-	<0.1
Biocides ADWG							
Pronamide (Propyzamide)*	µg/L	0.1		-	-	-	<0.1

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name ME317270.005 Water 29 Oct 2020 SE212973.005	ME317270.006 Water 29 Oct 2020 SE212973.006	ME317270.007 Water 29 Oct 2020 SE212973.007	ME317270.008 Water 29 Oct 2020 SE212973.008
Combined SVOC Pesticides in Water, Low Level Method: EPA 8270D Tested: 6/11/2020 (continued)						
Herbicides (other)						
Molinate	µg/L	0.01	-	-	-	<0.01
Herbicides (Phenoxy Acid Herbicides)						
Bromoxynil*	µg/L	0.1	-	-	-	<0.1
Herbicides (Triazine Herbicides)						
Terbuthylazine	µg/L	0.1	-	-	-	<0.1
Ametryn	µg/L	0.1	-	-	-	<0.1
Atrazine	µg/L	0.01	-	-	-	<0.01
Cyanazine	µg/L	0.1	-	-	-	<0.1
Metribuzin	µg/L	0.01	-	-	-	<0.01
Prometryn	µg/L	0.01	-	-	-	<0.01
Propazine	µg/L	0.01	-	-	-	<0.01
Simazine	µg/L	0.01	-	-	-	<0.01
OCs						
Vinclozalin*	µg/L	0.1	-	-	-	<0.1
Chlorothalonil*	µg/L	0.1	-	-	-	<0.1
OPs						
Zolone (phosalone, fosalone)	µg/L	0.1	-	-	-	<0.1
Azinphos-ethyl	µg/L	0.05	-	-	-	<0.05
Prophos	µg/L	0.1	-	-	-	<0.1
Other SVOCs						
Bromacil	µg/L	0.1	-	-	-	<0.1
Propiconazole (Isomer 1+Isomer 2)	µg/L	0.1	-	-	-	<0.1
Propiconazole Isomer 1	µg/L	0.1	-	-	-	<0.1
Surrogates						
d14-p-terphenyl (Surrogate)	%	-	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name ME317270.005 Water 29 Oct 2020 SE212973.005	ME317270.006 Water 29 Oct 2020 SE212973.006	ME317270.007 Water 29 Oct 2020 SE212973.007	ME317270.008 Water 29 Oct 2020 SE212973.008
Combined SVOC Pesticides in Water, Low Level Method: EPA 8270D Tested: 6/11/2020 (continued)						
Synthetic Pyrethroids						
Bifenthrin	µg/L	0.1	-	-	-	<0.1
Cypermethrin	µg/L	0.1	-	-	-	<0.1
Deltamethrin	µg/L	0.1	-	-	-	<0.1
Pesticides / Herbicides in waters by HPLC-MS MA-1569.WW.01 Method: MA1569 Tested: 9/11/2020						
Bromoxynil*	µg/L	1	-	-	-	<1
Clopyralid*	µg/L	0.5	-	-	-	<0.5
4-CPA*	µg/L	1	-	-	-	<1
2,4-D [(2,4-Dichlorophenoxy) acetic acid]*	µg/L	0.5	-	-	-	<0.5
2,6-D [(2,6-Dichlorophenoxy) acetic acid]*	µg/L	0.5	-	-	-	<0.5
24-DB*	µg/L	0.5	-	-	-	<0.5
Dicamba*	µg/L	0.5	-	-	-	<0.5
Dichloroprop / Dichlorprop-P*	µg/L	0.5	-	-	-	<0.5
Dinoseb*	µg/L	0.5	-	-	-	<0.5
Fluroxypyr*	µg/L	0.5	-	-	-	<0.5
Ioxynil*	µg/L	1	-	-	-	<1
MCPA*	µg/L	0.5	-	-	-	<0.5
MCPB*	µg/L	1	-	-	-	<1
mecoprop*	µg/L	0.5	-	-	-	<0.5
Picloram*	µg/L	1	-	-	-	<1
2,4,5-T*	µg/L	0.5	-	-	-	<0.5
2,4,5-TP*	µg/L	0.5	-	-	-	<0.5
2,4,6-T*	µg/L	0.5	-	-	-	<0.5
Triclopyr*	µg/L	0.5	-	-	-	<0.5

Parameter	Units	LOR	Sample Number: ME317270.009 Sample Matrix: Water Sample Date: 29 Oct 2020 Sample Name: SE212973.009	Sample Number: ME317270.010 Sample Matrix: Water Sample Date: 29 Oct 2020 Sample Name: SE212973.010
SVOC Compounds in Waters by GC-QQQ Method: USEPA8270D Tested: 6/11/2020				
Arochlor 1016	µg/L	0.03	<0.03	<0.03
Arochlor 1221	µg/L	0.03	<0.03	<0.03
Arochlor 1232	µg/L	0.03	<0.03	<0.03
Arochlor 1242	µg/L	0.03	<0.03	<0.03
Arochlor 1248	µg/L	0.03	<0.03	<0.03
Arochlor 1254	µg/L	0.03	<0.03	<0.03
Arochlor 1260	µg/L	0.03	<0.03	<0.03
Arochlor 1262	µg/L	0.03	<0.03	<0.03
Arochlor 1268	µg/L	0.03	<0.03	<0.03
Total PCB*	µg/L	0.03	<0.03	<0.03
d14-p-terphenyl (Surrogate)	%	0.001	**98**	**103**
d5-nitrobenzene (Surrogate)	%	0.001	-	-
d6-phenol (Surrogate)	%	0.001	-	-
2-fluorobiphenyl (Surrogate)	%	0.001	-	-
2,4,6-tribromophenol (Surrogate)	%	0.001	-	-
2-fluorophenol (Surrogate)	%	0.001	-	-
SVOC Compounds in Waters by GC-QQQ, Low Level Method: USEPA8270D LL Tested: 6/11/2020				
2-Chlorophenol	µg/L	0.1	-	-
1-Methylnaphthalene	µg/L	0.1	-	-
2,4-Dimethylphenol	µg/L	0.1	-	-
2,4-Dinitrophenol	µg/L	0.1	-	-
2-Methylnaphthalene	µg/L	0.1	<0.1	<0.1
2-Nitrophenol	µg/L	0.1	-	-
4-nitrophenol	µg/L	0.1	-	-
m&p Cresol	µg/L	0.1	-	-
o-Cresol	µg/L	0.1	-	-
2-Methyl 4,6-Dinitrophenol	µg/L	0.1	-	-
2,3,4,6-Tetrachlorophenol	µg/L	0.1	-	-
2,4-Dichlorophenol	µg/L	0.1	-	-
2,4,5-Trichlorophenol	µg/L	0.1	-	-
2,4,6-Tribromophenol*	µg/L	0.1	-	-
2,4,6-Trichlorophenol	µg/L	0.1	-	-
2,6-Dichlorophenol	µg/L	0.1	-	-
3-Methylcholanthrene	µg/L	0.01	-	-
4-Chloro-3-methylphenol	µg/L	0.1	-	-
4,4-DDD	µg/L	0.1	<0.1	<0.1
4,4-DDE	µg/L	0.1	<0.1	<0.1
4,4-DDT	µg/L	0.1	<0.1	<0.1
DDT+DDE+DDD	µg/L	0.2	-	-
o,p-DDT	µg/L	0.01	-	-
Total DDT	µg/L	0.1	-	-
7,12-Dimethylbenz(a)anthracene	µg/L	0.01	<0.01	<0.01
Acenaphthene	µg/L	0.01	<0.01	<0.01
Acenaphthylene	µg/L	0.01	<0.01	<0.01
Acetophenone	µg/L	0.01	-	-
Aldrin	µg/L	0.01	<0.01	<0.01
Aldrin and Dieldrin	µg/L	0.1	<0.1	<0.1
alpha-BHC	µg/L	0.1	<0.1	<0.1
alpha-Chlordane	µg/L	0.01	<0.01	<0.01
Anthracene	µg/L	0.01	<0.01	<0.01
Benzo(a)anthracene	µg/L	0.01	<0.01	<0.01
Benzo (a) pyrene	µg/L	0.01	<0.01	<0.01
Benzo (b) fluoranthene	µg/L	0.01	<0.01	<0.01
Benzo (e) pyrene	µg/L	0.01	<0.01	<0.01
Benzo (ghi) perylene	µg/L	0.01	<0.01	<0.01
Benzo (k) fluoranthene	µg/L	0.01	<0.01	<0.01
Benzo (b+j+k) fluoranthene	µg/L	0.02	<0.02	<0.02

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name ME317270.009 Water 29 Oct 2020 SE212973.009	ME317270.010 Water 29 Oct 2020 SE212973.010
SVOC Compounds in Waters by GC-QQQ, Low Level	**Method: USEPA8270D LL**	**Tested: 6/11/2020**	**(continued)**	
beta-BHC	µg/L	0.1	<0.1	<0.1
Bis (2-Ethylhexyl) adipate	µg/L	0.01	-	-
Bis (2-Ethylhexyl) phthalate	µg/L	0.01	-	-
Chlordane	µg/L	0.01	<0.01	<0.01
Chlorpyrifos	µg/L	0.01	<0.01	<0.01
Chrysene	µg/L	0.01	<0.01	<0.01
Coronene	µg/L	0.01	-	-
delta-BHC	µg/L	0.1	<0.1	<0.1
Dibenz (ah) anthracene	µg/L	0.01	<0.01	<0.01
Dibenz (aj) acridine	µg/L	0.01	-	-
Dibenzo[a,e]pyrene	µg/L	0.01	-	-
Dieldrin	µg/L	0.01	<0.01	<0.01
Dimethoate	µg/L	0.1	<0.1	<0.1
Dinoseb	µg/L	0.05	-	-
Disulfoton	µg/L	0.1	<0.1	<0.1
Endosulfan 1	µg/L	0.01	<0.01	<0.01
Endosulfan 2	µg/L	0.01	<0.01	<0.01
Endosulfan Sulphate	µg/L	0.01	<0.01	<0.01
Total Endosulfan	µg/L	0.01	<0.01	<0.01
Endrin	µg/L	0.1	<0.1	<0.1
Endrin Aldehyde	µg/L	0.1	<0.1	<0.1
Endrin ketone	µg/L	0.1	<0.1	<0.1
Famphur	µg/L	0.1	<0.1	<0.1
Fluoranthene	µg/L	0.01	<0.01	<0.01
Fluorene	µg/L	0.01	<0.01	<0.01
gamma-BHC	µg/L	0.01	<0.01	<0.01
gamma-Chlordane	µg/L	0.01	<0.01	<0.01
Heptachlor	µg/L	0.01	<0.01	<0.01
Heptachlor Epoxide	µg/L	0.1	<0.1	<0.1
Hexachlorobenzene	µg/L	0.01	<0.01	<0.01
Hexachlorophene	µg/L	0.05	-	-
Indeno (1,2,3-cd) pyrene	µg/L	0.01	<0.01	<0.01
Isodrin	µg/L	0.1	<0.1	<0.1
Methoxychlor	µg/L	0.1	<0.1	<0.1
Methyl parathion	µg/L	0.01	<0.01	<0.01
Mirex	µg/L	0.1	<0.1	<0.1
Naphthalene	µg/L	0.1	<0.1	<0.1
Pentachlorophenol	µg/L	0.1	-	-
Phenol	µg/L	0.01	-	-
Perylene	µg/L	0.01	-	-
Phenanthrene	µg/L	0.01	<0.01	<0.01
Phorate	µg/L	0.1	<0.1	<0.1
Pyrene	µg/L	0.01	<0.01	<0.01
Stirofos	µg/L	0.1	<0.1	<0.1
Sulfotepp	µg/L	0.1	<0.1	<0.1
Thionazin	µg/L	0.1	<0.1	<0.1
Total PAHs - assumes <LOR results = 0	µg/L	0.09	-	-
Total PAHs - assumes <LOR results = 0.5xLOR	µg/L	0.09	-	-
Total PAHs Vic EPA - assumes <LOR results = 0	µg/L	0.8	<0.8	<0.8
Total PAHs Vic EPA - assumes <LOR results = 0.5LOR	µg/L	0.8	<0.8	<0.8
d14-p-terphenyl (Surrogate)	%	0.0001	**98**	**103**

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name ME317270.009 Water 29 Oct 2020 SE212973.009	ME317270.010 Water 29 Oct 2020 SE212973.010
Combined SVOC Pesticides in Water, Low Level	**Method: EPA 8270D**	**Tested: 6/11/2020**		
Tebuthiuron*	µg/L	0.1	-	-
Temephos	µg/L	0.1	-	-
Terbacil*	µg/L	0.1	-	-
Terbutryn (Prebane)	µg/L	0.1	-	-
Tetrachlorvinphos (Stirifos)	µg/L	0.1	-	-
Thiabendazole	µg/L	0.1	-	-
Thiamethoxam	µg/L	0.1	-	-
Thiometon	µg/L	0.1	-	-
Triadimefon	µg/L	0.1	-	-
Triazophos	µg/L	0.1	-	-
Trichlorfon	µg/L	0.1	-	-
Trichlornate (Trichloronate)*	µg/L	0.1	-	-
Tricyclazole*	µg/L	0.1	-	-
Vernolate*	µg/L	0.1	-	-
Acephate	µg/L	0.1	-	-
Alachlor	µg/L	0.1	-	-
Atraton	µg/L	0.1	-	-
Azinphos-methyl	µg/L	0.05	<0.05	<0.05
Bioresmethrin	µg/L	0.1	-	-
Boscalid*	µg/L	0.1	-	-
Bromophos ethyl*	µg/L	0.05	<0.05	<0.05
Butachlor*	µg/L	0.1	-	-
Butylate*	µg/L	0.1	-	-
Captafol*	µg/L	0.1	-	-
Captan*	µg/L	0.1	-	-
Carboxin*	µg/L	0.1	-	-
Chlorfenvinphos*	µg/L	0.1	<0.1	<0.1
Chlopropham	µg/L	0.1	-	-
Chlorsulfuron*	µg/L	0.1	-	-
Ciodrin (Crotoxyphos)*	µg/L	0.1	-	-
cis-permethrin	µg/L	0.1	-	-
Cycloate*	µg/L	0.1	-	-
Cyfluthrin*	µg/L	0.1	-	-
Demeton-o	µg/L	0.1	-	-
Demeton-s	µg/L	0.1	-	-
Demeton-s-methyl	µg/L	0.1	-	-
Diallate A*	µg/L	0.1	-	-
Diallate B*	µg/L	0.1	-	-
Diazinon*	µg/L	0.01	<0.01	<0.01
Dichlobenil*	µg/L	0.1	-	-
Dichlofluanid*	µg/L	0.1	-	-
Dichlone*	µg/L	0.1	-	-
Dichlorvos	µg/L	0.01	<0.01	<0.01
Diclofop-methyl*	µg/L	0.1	-	-
Dicofol	µg/L	0.1	-	-
Dicrotophos*	µg/L	0.1	-	-
EPN	µg/L	0.1	-	-
EPTC	µg/L	0.1	-	-
Esfenvalerate	µg/L	0.1	-	-
Ethion	µg/L	0.01	<0.01	<0.01
Ethoprop	µg/L	0.1	-	-
Fenamiphos (Phenamiphos)	µg/L	0.1	-	-
Fearimol	µg/L	0.1	-	-
Fenitrothion	µg/L	0.01	<0.01	<0.01
Fenisulfothion	µg/L	0.1	<0.1	<0.1
Fenthion	µg/L	0.1	<0.1	<0.1
Fenvalerate	µg/L	0.1	-	-
Fluchloralin	µg/L	0.1	-	-
Fludioxonil	µg/L	0.1	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name ME317270.009 Water 29 Oct 2020 SE212973.009	ME317270.010 Water 29 Oct 2020 SE212973.010
Combined SVOC Pesticides in Water, Low Level	**Method: EPA 8270D**	**Tested: 6/11/2020**	**(continued)**	
Fluridone	µg/L	0.1	-	-
Haloxyfop methyl	µg/L	0.1	-	-
Hexazinone	µg/L	0.01	-	-
Imidan (Phosmet)	µg/L	0.1	-	-
Indoxacarb	µg/L	0.1	-	-
Kepone	µg/L	0.1	-	-
Leptophos	µg/L	0.1	-	-
Malathion	µg/L	0.01	<0.01	<0.01
Mestranol	µg/L	0.1	-	-
Metalaxyl	µg/L	0.1	-	-
Methidathion	µg/L	0.01	<0.01	<0.01
Methiocarb	µg/L	0.1	-	-
Methyl paraoxan	µg/L	0.1	-	-
Metolachlor	µg/L	0.1	-	-
Mevinphos-cis/trans	µg/L	0.1	<0.1	<0.1
MGK-264	µg/L	0.1	-	-
Monocrotophos	µg/L	0.1	-	-
Naftalfos	µg/L	0.1	-	-
Naled (Dibrom)	µg/L	0.1	-	-
Napropamide*	µg/L	0.1	-	-
Norflurazon*	µg/L	0.1	-	-
Omethoate	µg/L	0.1	-	-
Oxyfluorfen	µg/L	0.1	-	-
Parathion	µg/L	0.01	<0.01	<0.01
Pebulate	µg/L	0.1	-	-
Pendimethalin	µg/L	0.1	-	-
Permethrin	µg/L	0.1	-	-
Phosalone (Zolone)	µg/L	0.1	-	-
Phosphamidone	µg/L	0.1	-	-
Piperonyl butoxide	µg/L	0.1	-	-
Profenofos	µg/L	0.1	-	-
Prometon	µg/L	0.1	-	-
Propachlor	µg/L	0.1	-	-
Propargite	µg/L	0.1	-	-
Propiconazole Isomer 2	µg/L	0.1	-	-
Propylthiouracil	µg/L	0.1	-	-
Propyzamide	µg/L	0.1	-	-
Prothiofos	µg/L	0.1	-	-
Simetryn	µg/L	0.1	-	-
Strychnine*	µg/L	0.1	-	-
Sulprofos*	µg/L	0.1	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name ME317270.009 Water 29 Oct 2020 SE212973.009	ME317270.010 Water 29 Oct 2020 SE212973.010
Combined SVOC Pesticides in Water, Low Level **Method: EPA 8270D** **Tested: 6/11/2020** **(continued)**				
OPs				
Terbufos	µg/L	0.01	-	-
Carbophenothion	µg/L	0.1	-	-
Chlorfenvinphos-cis	µg/L	0.1	-	-
Chlorfenvinphos-trans	µg/L	0.1	-	-
Chlorpyrifos-methyl	µg/L	0.1	-	-
Co-Ral (Coumaphos)	µg/L	0.1	-	-
Fenchlorophos (Ronnel)	µg/L	0.1	-	-
Parathion-methyl	µg/L	0.01	-	-
Primiphos-ethyl	µg/L	0.1	-	-
Primiphos-methyl	µg/L	0.1	-	-
Herbicides (normal)				
Trifluralin	µg/L	0.1	-	-
Biocides ADWG				
Pronamide (Propyzamide)*	µg/L	0.1	-	-
Herbicides (other)				
Molinate	µg/L	0.01	-	-
Herbicides (Phenoxy Acid Herbicides)				
Bromoxynil*	µg/L	0.1	-	-
Herbicides (Triazine Herbicides)				
Terbuthylazine	µg/L	0.1	-	-
Ametryn	µg/L	0.1	-	-
Atrazine	µg/L	0.01	-	-
Cyanazine	µg/L	0.1	-	-
Metribuzin	µg/L	0.01	-	-
Prometryn	µg/L	0.01	-	-
Propazine	µg/L	0.01	-	-
Simazine	µg/L	0.01	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME317270.009 Water 29 Oct 2020 SE212973.009	ME317270.010 Water 29 Oct 2020 SE212973.010
Combined SVOC Pesticides in Water, Low Level Method: EPA 8270D Tested: 6/11/2020 (continued)					
OCs					
Vinclozalin*	µg/L	0.1		-	-
Chlorothalonil*	µg/L	0.1		-	-
OPs					
Zolone (phosalone, fosalone)	µg/L	0.1		-	-
Azinphos-ethyl	µg/L	0.05		-	-
Prophos	µg/L	0.1		-	-
Other SVOCs					
Bromacil	µg/L	0.1		-	-
Propiconazole (Isomer 1+Isomer 2)	µg/L	0.1		-	-
Propiconazole Isomer 1	µg/L	0.1		-	-
Surrogates					
d14-p-terphenyl (Surrogate)	%	-		-	-
Synthetic Pyrethroids					
Bifenthrin	µg/L	0.1		-	-
Cypermethrin	µg/L	0.1		-	-
Deltamethrin	µg/L	0.1		-	-
Pesticides / Herbicides in waters by HPLC-MS MA-1569.WW.01 Method: MA1569 Tested: 9/11/2020					
Bromoxynil*	µg/L	1		-	-
Clopyralid*	µg/L	0.5		-	-
4-CPA*	µg/L	1		-	-
2,4-D [(2,4-Dichlorophenoxy) acetic acid]*	µg/L	0.5		-	-
2,6-D [(2,6-Dichlorophenoxy) acetic acid]*	µg/L	0.5		-	-
24-DB*	µg/L	0.5		-	-
Dicamba*	µg/L	0.5		-	-
Dichloroprop / Dichlorprop-P*	µg/L	0.5		-	-
Dinoseb*	µg/L	0.5		-	-
Fluroxypyr*	µg/L	0.5		-	-
Ioxynil*	µg/L	1		-	-
MCPA*	µg/L	0.5		-	-
MCPB*	µg/L	1		-	-
mecoprop*	µg/L	0.5		-	-
Picloram*	µg/L	1		-	-
2,4,5-T*	µg/L	0.5		-	-
2,4,5-TP*	µg/L	0.5		-	-
2,4,6-T*	µg/L	0.5		-	-
Triclopyr*	µg/L	0.5		-	-

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage.* Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Combined SVOC Pesticides in Water, Low Level **Method: EPA 8270D**

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Tebuthiuron*	LB036694	µg/L	0.1	<0.1	NA
Temephos	LB036694	µg/L	0.1	<0.1	NA
Terbacil*	LB036694	µg/L	0.1	<0.1	NA
Terbutryn (Prebane)	LB036694	µg/L	0.1	<0.1	NA
Tetrachlorvinphos (Stirifos)	LB036694	µg/L	0.1	<0.1	NA
Thiabendazole	LB036694	µg/L	0.1	<0.1	NA
Thiamethoxam	LB036694	µg/L	0.1	<0.1	NA
Thiometon	LB036694	µg/L	0.1	<0.1	NA
Triadimefon	LB036694	µg/L	0.1	<0.1	NA
Triazophos	LB036694	µg/L	0.1	<0.1	NA
Trichlorfon	LB036694	µg/L	0.1	<0.1	NA
Trichlornate (Trichloronate)*	LB036694	µg/L	0.1	<0.1	NA
Tricyclazole*	LB036694	µg/L	0.1	<0.1	NA
Vernolate*	LB036694	µg/L	0.1	<0.1	NA
Acephate	LB036694	µg/L	0.1	<0.1	NA
Alachlor	LB036694	µg/L	0.1	<0.1	NA
Atraton	LB036694	µg/L	0.1	<0.1	NA
Azinphos-methyl	LB036694	µg/L	0.05	<0.05	NA
Bioresmethrin	LB036694	µg/L	0.1	<0.1	NA
Boscalid*	LB036694	µg/L	0.1	<0.1	NA
Bromophos ethyl*	LB036694	µg/L	0.05	<0.05	NA
Butachlor*	LB036694	µg/L	0.1	<0.1	NA
Butylate*	LB036694	µg/L	0.1	<0.1	NA
Captafol*	LB036694	µg/L	0.1	<0.1	NA
Captan*	LB036694	µg/L	0.1	<0.1	NA
Carboxin*	LB036694	µg/L	0.1	<0.1	NA
Chlorfenvinphos*	LB036694	µg/L	0.1	<0.1	NA
Chlopropham	LB036694	µg/L	0.1	<0.1	NA
Chlorsulfuron*	LB036694	µg/L	0.1	<0.1	NA
Ciodrin (Crotoxyphos)*	LB036694	µg/L	0.1	<0.1	NA
cis-permethrin	LB036694	µg/L	0.1	<0.1	NA
Cycloate*	LB036694	µg/L	0.1	<0.1	NA
Cyfluthrin*	LB036694	µg/L	0.1	<0.1	NA
Demeton-o	LB036694	µg/L	0.1	<0.1	NA
Demeton-s	LB036694	µg/L	0.1	<0.1	NA
Demeton-s-methyl	LB036694	µg/L	0.1	<0.1	NA
Diallate A*	LB036694	µg/L	0.1	<0.1	NA
Diallate B*	LB036694	µg/L	0.1	<0.1	NA
Diazinon*	LB036694	µg/L	0.01	<0.01	NA
Dichlobenil*	LB036694	µg/L	0.1	<0.1	NA
Dichlofluanid*	LB036694	µg/L	0.1	<0.1	NA
Dichlone*	LB036694	µg/L	0.1	<0.1	NA
Dichlorvos	LB036694	µg/L	0.01	<0.01	104%
Diclofop-methyl*	LB036694	µg/L	0.1	<0.1	NA
Dicofol	LB036694	µg/L	0.1	<0.1	NA
Dicrotophos*	LB036694	µg/L	0.1	<0.1	NA
EPN	LB036694	µg/L	0.1	<0.1	NA
EPTC	LB036694	µg/L	0.1	<0.1	NA
Esfenvalerate	LB036694	µg/L	0.1	<0.1	NA
Ethion	LB036694	µg/L	0.01	<0.01	NA
Ethoprop	LB036694	µg/L	0.1	<0.1	NA
Fenamiphos (Phenamiphos)	LB036694	µg/L	0.1	<0.1	NA
Fearimol	LB036694	µg/L	0.1	<0.1	NA
Fenitrothion	LB036694	µg/L	0.01	<0.01	NA
Fenisulfothion	LB036694	µg/L	0.1	<0.1	NA
Fenthion	LB036694	µg/L	0.1	<0.1	NA

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage.* Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Combined SVOC Pesticides in Water, Low Level **Method: EPA 8270D (continued)**

				MB	LCS %Recovery
Fenvalerate	LB036694	µg/L	0.1	<0.1	NA
Fluchloralin	LB036694	µg/L	0.1	<0.1	NA
Fludioxonil	LB036694	µg/L	0.1	<0.1	NA
Fluridone	LB036694	µg/L	0.1	<0.1	NA
Haloxyfop methyl	LB036694	µg/L	0.1	<0.1	NA
Hexazinone	LB036694	µg/L	0.01	<0.01	NA
Imidan (Phosmet)	LB036694	µg/L	0.1	<0.1	NA
Indoxacarb	LB036694	µg/L	0.1	<0.1	NA
Kepone	LB036694	µg/L	0.1	<0.1	NA
Leptophos	LB036694	µg/L	0.1	<0.1	NA
Malathion	LB036694	µg/L	0.01	<0.01	NA
Mestranol	LB036694	µg/L	0.1	<0.1	NA
Metalaxyl	LB036694	µg/L	0.1	<0.1	NA
Methidathion	LB036694	µg/L	0.01	<0.01	NA
Methiocarb	LB036694	µg/L	0.1	<0.1	NA
Methyl paraoxan	LB036694	µg/L	0.1	<0.1	NA
Metolachlor	LB036694	µg/L	0.1	<0.1	NA
Mevinphos-cis/trans	LB036694	µg/L	0.1	<0.1	NA
MGK-264	LB036694	µg/L	0.1	<0.1	NA
Monocrotophos	LB036694	µg/L	0.1	<0.1	NA
Naftalfos	LB036694	µg/L	0.1	<0.1	NA
Naled (Dibrom)	LB036694	µg/L	0.1	<0.1	NA
Napropamide*	LB036694	µg/L	0.1	<0.1	NA
Norflurazon*	LB036694	µg/L	0.1	<0.1	NA
Omethoate	LB036694	µg/L	0.1	<0.1	NA
Oxyfluorfen	LB036694	µg/L	0.1	<0.1	NA
Parathion	LB036694	µg/L	0.01	<0.01	NA
Pebulate	LB036694	µg/L	0.1	<0.1	NA
Pendimethalin	LB036694	µg/L	0.1	<0.1	NA
Permethrin	LB036694	µg/L	0.1	<0.1	NA
Phosalone (Zolone)	LB036694	µg/L	0.1	<0.1	NA
Phosphamidone	LB036694	µg/L	0.1	<0.1	NA
Piperonyl butoxide	LB036694	µg/L	0.1	<0.1	NA
Profenofos	LB036694	µg/L	0.1	<0.1	NA
Prometon	LB036694	µg/L	0.1	<0.1	NA
Propachlor	LB036694	µg/L	0.1	<0.1	NA
Propargite	LB036694	µg/L	0.1	<0.1	NA
Propiconazole Isomer 2	LB036694	µg/L	0.1	<0.1	NA
Propylthiouracil	LB036694	µg/L	0.1	<0.1	NA
Propyzamide	LB036694	µg/L	0.1	<0.1	NA
Prothiofos	LB036694	µg/L	0.1	<0.1	NA
Simetryn	LB036694	µg/L	0.1	<0.1	NA
Strychnine*	LB036694	µg/L	0.1	<0.1	NA
Sulprofos*	LB036694	µg/L	0.1	<0.1	NA

OPs

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Terbufos	LB036694	µg/L	0.01	<0.01	NA
Carbophenothion	LB036694	µg/L	0.1	<0.1	NA
Chlorfenvinphos-cis	LB036694	µg/L	0.1	<0.1	NA
Chlorfenvinphos-trans	LB036694	µg/L	0.1	<0.1	NA
Chlorpyrifos-methyl	LB036694	µg/L	0.1	<0.1	NA
Co-Ral (Coumaphos)	LB036694	µg/L	0.1	<0.1	NA
Fenchlorophos (Ronnel)	LB036694	µg/L	0.1	<0.1	NA
Parathion-methyl	LB036694	µg/L	0.01	<0.01	NA
Primiphos-ethyl	LB036694	µg/L	0.1	<0.1	NA

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage.* Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Combined SVOC Pesticides in Water, Low Level **Method: EPA 8270D (continued)**

				MB	LCS %Recovery
Primiphos-methyl	LB036694	µg/L	0.1	<0.1	NA

Herbicides (normal)

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Trifluralin	LB036694	µg/L	0.1	<0.1	NA

Biocides ADWG

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Pronamide (Propyzamide)*	LB036694	µg/L	0.1	<0.1	NA

Herbicides (other)

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Molinate	LB036694	µg/L	0.01	<0.01	NA

Herbicides (Phenoxy Acid Herbicides)

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Bromoxynil*	LB036694	µg/L	0.1	<0.1	NA

Herbicides (Triazine Herbicides)

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Terbuthylazine	LB036694	µg/L	0.1	<0.1	NA
Ametryn	LB036694	µg/L	0.1	<0.1	NA
Atrazine	LB036694	µg/L	0.01	<0.01	NA
Cyanazine	LB036694	µg/L	0.1	<0.1	NA
Metribuzin	LB036694	µg/L	0.01	<0.01	NA
Prometryn	LB036694	µg/L	0.01	<0.01	NA
Propazine	LB036694	µg/L	0.01	<0.01	NA
Simazine	LB036694	µg/L	0.01	<0.01	NA

OCs

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Vinclozalin*	LB036694	µg/L	0.1	<0.1	NA
Chlorothalonil*	LB036694	µg/L	0.1	<0.1	NA

OPs

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Zolone (phosalone, fosalone)	LB036694	µg/L	0.1	<0.1	NA
Azinphos-ethyl	LB036694	µg/L	0.05	<0.05	NA
Prophos	LB036694	µg/L	0.1	<0.1	NA

Other SVOCs

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Bromacil	LB036694	µg/L	0.1	<0.1	NA
Propiconazole (Isomer 1+Isomer 2)	LB036694	µg/L	0.1	<0.1	NA
Propiconazole Isomer 1	LB036694	µg/L	0.1	<0.1	NA

Synthetic Pyrethroids

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Bifenthrin	LB036694	µg/L	0.1	<0.1	NA
Cypermethrin	LB036694	µg/L	0.1	<0.1	NA
Deltamethrin	LB036694	µg/L	0.1	<0.1	NA

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage.* Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Pesticides / Herbicides in waters by HPLC-MS MA-1569.WW.01 Method: MA1569

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery	MSD %RPD
Bromoxynil*	LB036671	µg/L	1	<1	0%	NA		
Clopyralid*	LB036671	µg/L	0.5	<0.5	0%	NA		
4-CPA*	LB036671	µg/L	1	<1	0%	NA		
2,4-D [(2,4-Dichlorophenoxy) acetic acid]*	LB036671	µg/L	0.5	<0.5	0%	93%	102%	2%
2,6-D [(2,6-Dichlorophenoxy) acetic acid]*	LB036671	µg/L	0.5	<0.5	0%	NA		
24-DB*	LB036671	µg/L	0.5	<0.5	0%	NA		
Dicamba*	LB036671	µg/L	0.5	<0.5	0%	112%	116%	11%
Dichloroprop / Dichlorprop-P*	LB036671	µg/L	0.5	<0.5	0%	NA		
Dinoseb*	LB036671	µg/L	0.5	<0.5	0%	NA		
Fluroxypyr*	LB036671	µg/L	0.5	<0.5	0%	NA		
Ioxynil*	LB036671	µg/L	1	<1	0%	NA		
MCPA*	LB036671	µg/L	0.5	<0.5	0%	107%	117%	
MCPB*	LB036671	µg/L	1	<1	0%	NA		
mecoprop*	LB036671	µg/L	0.5	<0.5	0%	NA		
Picloram*	LB036671	µg/L	1	<1	0%	NA	NA	NA
2,4,5-T*	LB036671	µg/L	0.5	<0.5	0%	NA		
2,4,5-TP*	LB036671	µg/L	0.5	<0.5	0%	NA		
2,4,6-T*	LB036671	µg/L	0.5	<0.5	0%	NA		
Triclopyr*	LB036671	µg/L	0.5	<0.5	0%	NA	NA	NA

SVOC Compounds in Waters by GC-QQQ Method: USEPA8270D

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Arochlor 1016	LB036688	µg/L	0.03	<0.03	NA
Arochlor 1221	LB036688	µg/L	0.03	<0.03	NA
Arochlor 1232	LB036688	µg/L	0.03	<0.03	NA
Arochlor 1242	LB036688	µg/L	0.03	<0.03	NA
Arochlor 1248	LB036688	µg/L	0.03	<0.03	NA
Arochlor 1254	LB036688	µg/L	0.03	<0.03	NA
Arochlor 1260	LB036688	µg/L	0.03	<0.03	NA
Arochlor 1262	LB036688	µg/L	0.03	<0.03	NA
Arochlor 1268	LB036688	µg/L	0.03	<0.03	NA
Total PCB*	LB036688	µg/L	0.03	<0.03	NA
d14-p-terphenyl (Surrogate)	LB036688	%	0.001	124%	110%

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage.* Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

SVOC Compounds in Waters by GC-QQQ, Low Level **Method: USEPA8270D LL**

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
2-Chlorophenol	LB036688	µg/L	0.1	<0.1	125%
1-Methylnaphthalene	LB036688	µg/L	0.1	<0.1	NA
2,4-Dimethylphenol	LB036688	µg/L	0.1	<0.1	NA
2,4-Dinitrophenol	LB036688	µg/L	0.1	<0.1	NA
2-Methylnaphthalene	LB036688	µg/L	0.1	<0.1	NA
2-Nitrophenol	LB036688	µg/L	0.1	<0.1	NA
4-nitrophenol	LB036688	µg/L	0.1	<0.1	NA
m&p Cresol	LB036688	µg/L	0.1	<0.1	NA
o-Cresol	LB036688	µg/L	0.1	<0.1	NA
2-Methyl 4,6-Dinitrophenol	LB036688	µg/L	0.1	<0.1	NA
2,3,4,6-Tetrachlorophenol	LB036688	µg/L	0.1	<0.1	NA
2,4-Dichlorophenol	LB036688	µg/L	0.1	<0.1	NA
2,4,5-Trichlorophenol	LB036688	µg/L	0.1	<0.1	NA
2,4,6-Tribromophenol*	LB036688	µg/L	0.1	<0.1	NA
2,4,6-Trichlorophenol	LB036688	µg/L	0.1	<0.1	NA
2,6-Dichlorophenol	LB036688	µg/L	0.1	<0.1	NA
3-Methylcholanthrene	LB036688	µg/L	0.01	<0.01	NA
4-Chloro-3-methylphenol	LB036688	µg/L	0.1	<0.1	103%
4,4-DDD	LB036688	µg/L	0.1	<0.1	NA
4,4-DDE	LB036688	µg/L	0.1	<0.1	NA
4,4-DDT	LB036688	µg/L	0.1	<0.1	104%
DDT+DDE+DDD	LB036688	µg/L	0.2	<0.2	NA
o,p-DDT	LB036688	µg/L	0.01	<0.01	NA
Total DDT	LB036688	µg/L	0.1	<0.1	NA
7,12-Dimethylbenz(a)anthracene	LB036688	µg/L	0.01	<0.01	NA
Acenaphthene	LB036688	µg/L	0.01	<0.01	116%
Acenaphthylene	LB036688	µg/L	0.01	<0.01	NA
Acetophenone	LB036688	µg/L	0.01	<0.01	NA
Aldrin	LB036688	µg/L	0.01	<0.01	113%
Aldrin and Dieldrin	LB036688	µg/L	0.1	<0.1	NA
alpha-BHC	LB036688	µg/L	0.1	<0.1	NA
alpha-Chlordane	LB036688	µg/L	0.01	<0.01	NA
Anthracene	LB036688	µg/L	0.01	<0.01	NA
Benzo(a)anthracene	LB036688	µg/L	0.01	<0.01	NA
Benzo (a) pyrene	LB036688	µg/L	0.01	<0.01	NA
Benzo (b) fluoranthene	LB036688	µg/L	0.01	<0.01	NA
Benzo (e) pyrene	LB036688	µg/L	0.01	<0.01	NA
Benzo (ghi) perylene	LB036688	µg/L	0.01	<0.01	NA
Benzo (k) fluoranthene	LB036688	µg/L	0.01	<0.01	NA
Benzo (b+j+k) fluoranthene	LB036688	µg/L	0.02	<0.02	NA
beta-BHC	LB036688	µg/L	0.1	<0.1	NA
Bis (2-Ethylhexyl) adipate	LB036688	µg/L	0.01	<0.01	NA
Bis (2-Ethylhexyl) phthalate	LB036688	µg/L	0.01	<0.01	NA
Chlordane	LB036688	µg/L	0.01	<0.01	NA
Chlorpyrifos	LB036688	µg/L	0.01	<0.01	
Chrysene	LB036688	µg/L	0.01	<0.01	NA
Coronene	LB036688	µg/L	0.01	<0.01	NA
delta-BHC	LB036688	µg/L	0.1	<0.1	NA
Dibenz (ah) anthracene	LB036688	µg/L	0.01	<0.01	NA
Dibenz (aj) acridine	LB036688	µg/L	0.01	<0.01	NA
Dibenzo[a,e]pyrene	LB036688	µg/L	0.01	<0.01	NA
Dieldrin	LB036688	µg/L	0.01	<0.01	109%
Dimethoate	LB036688	µg/L	0.1	<0.1	NA
Dinoseb	LB036688	µg/L	0.05	<0.05	NA
Disulfoton	LB036688	µg/L	0.1	<0.1	NA
Endosulfan 1	LB036688	µg/L	0.01	<0.01	NA

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage.* Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

SVOC Compounds in Waters by GC-QQQ, Low Level **Method: USEPA8270D LL (continued)**

				MB	LCS %Recovery
Endosulfan 2	LB036688	µg/L	0.01	<0.01	NA
Endosulfan Sulphate	LB036688	µg/L	0.01	<0.01	NA
Total Endosulfan	LB036688	µg/L	0.01	<0.01	NA
Endrin	LB036688	µg/L	0.1	<0.1	105%
Endrin Aldehyde	LB036688	µg/L	0.1	<0.1	NA
Endrin ketone	LB036688	µg/L	0.1	<0.1	NA
Famphur	LB036688	µg/L	0.1	<0.1	NA
Fluoranthene	LB036688	µg/L	0.01	<0.01	NA
Fluorene	LB036688	µg/L	0.01	<0.01	NA
gamma-BHC	LB036688	µg/L	0.01	<0.01	99%
gamma-Chlordane	LB036688	µg/L	0.01	<0.01	NA
Heptachlor	LB036688	µg/L	0.01	<0.01	109%
Heptachlor Epoxide	LB036688	µg/L	0.1	<0.1	NA
Hexachlorobenzene	LB036688	µg/L	0.01	<0.01	NA
Hexachlorophene	LB036688	µg/L	0.05	<0.05	NA
Indeno (1,2,3-cd) pyrene	LB036688	µg/L	0.01	<0.01	NA
Isodrin	LB036688	µg/L	0.1	<0.1	NA
Methoxychlor	LB036688	µg/L	0.1	<0.1	NA
Methyl parathion	LB036688	µg/L	0.01	<0.01	NA
Mirex	LB036688	µg/L	0.1	<0.1	NA
Naphthalene	LB036688	µg/L	0.1	<0.1	NA
Pentachlorophenol	LB036688	µg/L	0.1	<0.1	NA
Phenol	LB036688	µg/L	0.01	<0.0	NA
Perylene	LB036688	µg/L	0.01	<0.01	NA
Phenanthrene	LB036688	µg/L	0.01	<0.01	NA
Phorate	LB036688	µg/L	0.1	<0.1	NA
Pyrene	LB036688	µg/L	0.01	<0.01	123%
Stirofos	LB036688	µg/L	0.1	<0.1	NA
Sulfotepp	LB036688	µg/L	0.1	<0.1	NA
Thionazin	LB036688	µg/L	0.1	<0.1	NA
Total PAHs Vic EPA - assumes <LOR results = 0	LB036688	µg/L	0.8	<0.8	NA
Total PAHs Vic EPA - assumes <LOR results = 0.5LOR	LB036688	µg/L	0.8	<0.8	NA
d14-p-terphenyl (Surrogate)	LB036688	%	0.0001	124%	110%

METHOD	METHODOLOGY SUMMARY
EPA8270D	This method covers analytical procedures for the analysis of semi-volatile organic compounds (SVOC) including most neutral, acidic, and basic organic compounds based on the USEPA method 8270D. Samples are extracted into a solvent appropriate to the matrix and analysed using a gas chromatograph – triple quadrapole (GC–QQQ).
EPA8270D LL	This method covers analytical procedures for the analysis of semi-volatile organic compounds (SVOC) including most neutral, acidic, and basic organic compounds based on the USEPA method 8270D. Samples are extracted into a solvent appropriate to the matrix and analysed using a gas chromatograph – triple quadrapole (GC–QQQ).
EPA8270D Pest LL	This method covers analytical procedures for the analysis of semi-volatile organic compounds (SVOC pesticides) including most neutral, acidic, and basic organic compounds based on the USEPA method 8270D. Samples are extracted into a solvent appropriate to the matrix and analysed using a gas chromatograph – triple quadrapole (GC–QQQ).
MA1569	This method is intended for the analysis of a diverse range of pesticides and herbicides by Liquid Chromatography using a Tandem Mass Spectrometry detector (LC-MS/MS). Due to the diverse nature of the analytes covered in this method each analyte requires its own analytical acquisition method thus the sample is run multiple times according to the analyte list requested. Water samples are filtered and filtrates are directly injected onto LC -MS/MS using selective ion monitoring.

FOOTNOTES

IS	Insufficient sample for analysis.	LOR	Limit of Reporting
LNR	Sample listed, but not received.	↑↓	Raised or Lowered Limit of Reporting
*	NATA accreditation does not cover the performance of this service.	QFH	QC result is above the upper tolerance
		QFL	QC result is below the lower tolerance
**	Indicative data, theoretical holding time exceeded.	-	The sample was not analysed for this analyte
***	Indicates that both * and ** apply.	NVL	Not Validated

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calcuated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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Symbio LABORATORIES

CERTIFICATE OF ANALYSIS

Certificate Number	S962611 [R00]	**Page**	1/2
Client	SGS Environmental Services - Sydney	**Registering Laboratory**	Sydney
Contact	[redacted]	**Contact**	Customer Service Team
Address	16/33 Maddox St Alexandria NSW 2015	**Address**	2 Sirius Rd, Lane Cove West, NSW 2066
		Email	admin@symbiolabs.com.au
Telephone	02 8594 0400	**Telephone**	1300 703 166
Order Number	---	**Date Samples Received**	30/10/2020
Project ID	SE212973 Water	**Date Analysis Commenced**	30/10/2020
Sampler	Customer	**Issue Date**	02/11/2020
Client Job Reference	SE212973	**Receipt Temperature (°C)**	10.0
No. of Samples Registered	1 | Sampler: Customer	**Storage Temperature (°C)**	4.0
Priority	Normal	**Quote Number**	---

Symbio LABORATORIES Proudly AUSTRALIAN

ABN: 82 079 645 015

NATA

Accreditation No: 2455
Accredited for compliance with ISO/IEC 17025 - Testing

This report supersedes any previous revision with this reference. This document must not be reproduced, except in full. If samples were provided by the customer, results apply only to the samples 'as received' and responsibility for representative sampling rests with the customer. Water results are reported on an 'as is' basis. Soil and sediment results are reported on a 'dry weight' basis. For other matrices the basis of reporting will be confirmed in the 'Report Comments' section. Measurement Uncertainty is available upon request or via www.symbiolabs.com.au/login. If the laboratory was authorised to conduct testing on samples received outside of the specified conditions, all test results may be impacted. Details of samples received outside of the specified conditions are mentioned in the sample description section of this test report.

Definitions

| <: Less Than | >: Greater Than | RP: Result Pending | MPN: Most Probable Number | CFU: Colony Forming Units | ---: Not Received/Not Requested | NA: Not Applicable | ND: Not Detected | LOR: Limit of Reporting | [NT]: Not Tested |

| ~: Estimated | ^ Subcontracted Analysis | TBA: To Be Advised | ** Potential Holding Time Concern | * Test not covered by NATA scope of accreditation | # Result derived from a calculation and includes results equal to or greater than the LOR

Authorised By

Name	Position	Accreditation Category
[redacted]	Laboratory Manager – Microbiology	Environmental and Food Microbiology

Sample Information - *Client/Sampler Supplied*

Sample ID	S962611/1
Sample Description	SE212973.002 GW13b
Sample Matrix	Water

Client	SGS Environmental Services - Sydney	**Project ID**	SE212973 Water
Certificate Number	S962611 [R00]	**Sampler**	Customer
Page	2/2	**Order Number**	---

Analytical Results

		Client Sample Description	SE212973.002 GW13b
		Client Sampling date/time	---
Compound/Analyte	**LOR**	**Units**	**S962611/1**
			Results
Micro General			
M16.1W - AS 5013.10			
Salmonella spp*	ND	/100mL	ND
M8.5 - AS/NZS 4276.7			
Escherichia coli	1	CFU/100mL	<1
Thermotolerant Coliforms	1	CFU/100mL	<1

Analysis Location

All in-house analysis was completed by Symbio Laboratories - Sydney.

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SGS EHS SYDNEY
Address	Unit 16, 33 Maddox Street Alexandria NSW 2015
Telephone	02 8594 0400
Facsimile	02 8594 0499
Email	au.environmental.sydney@sgs.com
Project	**610.30041 Randwick Barracks**
Order Number	**SE212973**
Samples	10

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Melbourne EH&S
Address	10/585 Blackburn Road Notting Hill Victoria 3168
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SGS Reference	**ME317194 R0**
Date Received	02 Nov 2020
Date Reported	05 Nov 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(14420).

MA1523: Some surrogate recovery is outside of the acceptance criteria due to sample matrix interference.

SIGNATORIES

[redacted]

Senior Chemist

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME317194.001 Water 29 Oct 2020 SE212973.001	ME317194.002 Water 29 Oct 2020 SE212973.002	ME317194.003 Water 29 Oct 2020 SE212973.003	ME317194.004 Water 29 Oct 2020 SE212973.004
Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples	**Method: MA-1523**	**Tested: 5/11/2020**					
Perfluorobutanoic acid (PFBA)	µg/L	0.002		-	<0.002	<0.002	**0.003**
Perfluoropentanoic acid (PFPeA)	µg/L	0.002		-	<0.002	<0.002	**0.004**
Perfluorohexanoic acid (PFHxA)	µg/L	0.002		-	<0.002	**0.003**	**0.009**
Perfluoroheptanoic acid (PFHpA)	µg/L	0.002		-	<0.002	<0.002	**0.003**
Perfluorooctanoic Acid (PFOA)	µg/L	0.002		-	<0.002	**0.014**	**0.014**
Perfluorononanoic acid (PFNA)	µg/L	0.004		-	<0.004	<0.004	<0.004
Perfluorodecanoic acid (PFDA)	µg/L	0.004		-	<0.004	<0.004	<0.004
Perfluoroundecanoic acid (PFUnA)	µg/L	0.004		-	<0.004	<0.004	<0.004
Perfluorododecanoic acid (PFDoA)	µg/L	0.004		-	<0.004	<0.004	<0.004
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.004		-	<0.004	<0.004	<0.004
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.004		-	<0.004	<0.004	<0.004
Perfluorohexadecanoic acid (PFHxDA)	µg/L	0.008		-	<0.008	<0.008	<0.008
Perfluorobutane sulfonate (PFBS)	µg/L	0.004		-	<0.004	<0.004	<0.004
Perfluoropentane sulfonate (PFPeS)	µg/L	0.004		-	<0.004	<0.004	<0.004
Perfluorohexane sulfonate (PFHxS)	µg/L	0.002		-	**0.007**	**0.030**	**0.031**
Perfluoroheptane sulfonate (PFHpS)	µg/L	0.002		-	<0.002	<0.002	**0.012**
Perfluorooctane sulfonate (PFOS)	µg/L	0.002		-	<0.002	**0.021**	**0.18**
Sum of PFHxS and PFOS	µg/L	0.002		-	**0.007**	**0.051**	**0.21**
Perfluorononane sulfonate (PFNS)	µg/L	0.002		-	<0.002	<0.002	<0.002
Perfluorodecane sulfonate (PFDS)	µg/L	0.002		-	<0.002	<0.002	<0.002
Perfluorododecane sulfonate (PFDoS)	µg/L	0.002		-	<0.002	<0.002	<0.002
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	µg/L	0.002		-	<0.002	<0.002	<0.002
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	µg/L	0.002		-	**0.009**	**0.002**	<0.002
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	µg/L	0.002		-	<0.002	<0.002	<0.002
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.008		-	<0.008	<0.008	<0.008
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	µg/L	0.01		-	<0.01	<0.01	<0.01
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	µg/L	0.01		-	<0.01	<0.01	<0.01
2-(N-Methylperfluorooctane sulfonamido)-ethanol	µg/L	0.01		-	<0.01	<0.01	<0.01
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	µg/L	0.01		-	<0.01	<0.01	<0.01
N-Methylperfluorooctanesulfonamidoacetic acid	µg/L	0.01		-	<0.01	<0.01	<0.01
N-Ethylperfluorooctanesulfonamidoacetic Acid	µg/L	0.01		-	<0.01	<0.01	<0.01
(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-		-	**99**	**100**	**101**
(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-		-	**104**	**103**	**101**
(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-		-	**96**	**105**	**107**
(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-		-	**103**	**110**	**107**
(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-		-	**92**	**98**	**100**
(13C9-PFNA) Isotopically Labelled Internal Recovery	%	-		-	**99**	**88**	**90**
(13C6-PFDA) Isotopically Labelled Internal Recovery	%	-		-	**87**	**99**	**89**
(13C7-PFUdA) Isotopically Labelled Internal Recovery	%	-		-	**95**	**101**	**94**
(13C2-PFDoA) Isotopically Labelled Internal Recovery	%	-		-	**87**	**97**	**88**
(13C2_PFTeDA) Isotopically Labelled Internal Recovery	%	-		-	**96**	**79**	**77**
(13C2-PFHxDA) Isotopically Labelled Internal Recovery	%	-		-	**88**	**56**	**57**
(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-		-	**117**	**110**	**108**
(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-		-	**114**	**104**	**113**
(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-		-	**97**	**99**	**93**
(13C2-4:2 FTS) Isotopically Labelled Internal Recovery	%	-		-	**40**	**42**	**41**
(13C2-6:2 FTS) Isotopically Labelled Internal Recovery	%	-		-	**42**	**36**	**36**
(13C2-8:2 FTS) Isotopically Labelled Internal Recovery	%	-		-	**49**	**53**	**53**
(13C8-PFOSA) Isotopically Labelled Internal Recovery	%	-		-	**91**	**75**	**87**
(D3-N-MeFOSA) Isotopically Labelled Internal Recovery	%	-		-	**84**	**60**	**72**
(D5-N-EtFOSA) Isotopically Labelled Internal Recovery	%	-		-	**70**	**62**	**65**
(D7-N-MeFOSE) Isotopically Labelled Internal Recovery	%	-		-	**80**	**74**	**85**
(D9-N-EtFOSE) Isotopically Labelled Internal Recovery	%	-		-	**83**	**75**	**75**
(D3-N-MeFOSAA) Isotopically Labelled Internal Recovery	%	-		-	**87**	**79**	**79**
(D5-N-EtFOSAA) Isotopically Labelled Internal Recovery	%	-		-	**91**	**85**	**92**

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name ME317194.005 Water 29 Oct 2020 SE212973.005	ME317194.006 Water 29 Oct 2020 SE212973.006	ME317194.007 Water 29 Oct 2020 SE212973.007	ME317194.008 Water 29 Oct 2020 SE212973.008
Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples	**Method: MA-1523**	**Tested: 2/11/2020**				
Perfluorobutanoic acid (PFBA)	µg/L	0.002	**0.004**	-	-	<0.002
Perfluoropentanoic acid (PFPeA)	µg/L	0.002	**0.004**	-	-	<0.002
Perfluorohexanoic acid (PFHxA)	µg/L	0.002	**0.012**	-	-	<0.002
Perfluoroheptanoic acid (PFHpA)	µg/L	0.002	**0.005**	-	-	<0.002
Perfluorooctanoic Acid (PFOA)	µg/L	0.002	**0.027**	-	-	<0.002
Perfluorononanoic acid (PFNA)	µg/L	0.004	<0.004	-	-	<0.004
Perfluorodecanoic acid (PFDA)	µg/L	0.004	<0.004	-	-	<0.004
Perfluoroundecanoic acid (PFUnA)	µg/L	0.004	<0.004	-	-	<0.004
Perfluorododecanoic acid (PFDoA)	µg/L	0.004	<0.004	-	-	<0.004
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.004	<0.004	-	-	<0.004
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.004	<0.004	-	-	<0.004
Perfluorohexadecanoic acid (PFHxDA)	µg/L	0.008	<0.008	-	-	<0.008
Perfluorobutane sulfonate (PFBS)	µg/L	0.004	<0.004	-	-	<0.004
Perfluoropentane sulfonate (PFPeS)	µg/L	0.004	**0.004**	-	-	<0.004
Perfluorohexane sulfonate (PFHxS)	µg/L	0.002	**0.12**	-	-	<0.002
Perfluoroheptane sulfonate (PFHpS)	µg/L	0.002	**0.009**	-	-	<0.002
Perfluorooctane sulfonate (PFOS)	µg/L	0.002	**0.056**	-	-	**0.002**
Sum of PFHxS and PFOS	µg/L	0.002	**0.18**	-	-	**0.002**
Perfluorononane sulfonate (PFNS)	µg/L	0.002	<0.002	-	-	<0.002
Perfluorodecane sulfonate (PFDS)	µg/L	0.002	<0.002	-	-	<0.002
Perfluorododecane sulfonate (PFDoS)	µg/L	0.002	<0.002	-	-	<0.002
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	µg/L	0.002	<0.002	-	-	<0.002
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	µg/L	0.002	<0.002	-	-	<0.002
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	µg/L	0.002	<0.002	-	-	<0.002
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.008	<0.008	-	-	<0.008
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	µg/L	0.01	<0.01	-	-	<0.01
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	µg/L	0.01	<0.01	-	-	<0.01
2-(N-Methylperfluorooctane sulfonamido)-ethanol	µg/L	0.01	<0.01	-	-	<0.01
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	µg/L	0.01	<0.01	-	-	<0.01
N-Methylperfluorooctanesulfonamidoacetic acid	µg/L	0.01	<0.01	-	-	<0.01
N-Ethylperfluorooctanesulfonamidoacetic Acid	µg/L	0.01	<0.01	-	-	<0.01
(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	**100**	-	-	**101**
(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	**103**	-	-	**104**
(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	**103**	-	-	**106**
(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	**107**	-	-	**111**
(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	**107**	-	-	**91**
(13C9-PFNA) Isotopically Labelled Internal Recovery	%	-	**108**	-	-	**111**
(13C6-PFDA) Isotopically Labelled Internal Recovery	%	-	**84**	-	-	**109**
(13C7-PFUdA) Isotopically Labelled Internal Recovery	%	-	**91**	-	-	**98**
(13C2-PFDoA) Isotopically Labelled Internal Recovery	%	-	**98**	-	-	**95**
(13C2_PFTeDA) Isotopically Labelled Internal Recovery	%	-	**92**	-	-	**89**
(13C2-PFHxDA) Isotopically Labelled Internal Recovery	%	-	**93**	-	-	**58**
(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	**98**	-	-	**99**
(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	**96**	-	-	**95**
(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	**95**	-	-	**96**
(13C2-4:2 FTS) Isotopically Labelled Internal Recovery	%	-	**39**	-	-	**36**
(13C2-6:2 FTS) Isotopically Labelled Internal Recovery	%	-	**33**	-	-	**35**
(13C2-8:2 FTS) Isotopically Labelled Internal Recovery	%	-	**39**	-	-	**35**
(13C8-PFOSA) Isotopically Labelled Internal Recovery	%	-	**88**	-	-	**90**
(D3-N-MeFOSA) Isotopically Labelled Internal Recovery	%	-	**79**	-	-	**48**
(D5-N-EtFOSA) Isotopically Labelled Internal Recovery	%	-	**64**	-	-	**73**
(D7-N-MeFOSE) Isotopically Labelled Internal Recovery	%	-	**74**	-	-	**82**
(D9-N-EtFOSE) Isotopically Labelled Internal Recovery	%	-	**80**	-	-	**83**
(D3-N-MeFOSAA) Isotopically Labelled Internal Recovery	%	-	**87**	-	-	**82**
(D5-N-EtFOSAA) Isotopically Labelled Internal Recovery	%	-	**106**	-	-	**94**

Parameter	Units	LOR	Sample Number: ME317194.009 Sample Matrix: Water Sample Date: 29 Oct 2020 Sample Name: SE212973.009	Sample Number: ME317194.010 Sample Matrix: Water Sample Date: 29 Oct 2020 Sample Name: SE212973.010
Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples	**Method: MA-1523**	**Tested: 2/11/2020**		
Perfluorobutanoic acid (PFBA)	µg/L	0.002	<0.002	<0.002
Perfluoropentanoic acid (PFPeA)	µg/L	0.002	<0.002	<0.002
Perfluorohexanoic acid (PFHxA)	µg/L	0.002	<0.002	<0.002
Perfluoroheptanoic acid (PFHpA)	µg/L	0.002	<0.002	<0.002
Perfluorooctanoic Acid (PFOA)	µg/L	0.002	<0.002	**0.011**
Perfluorononanoic acid (PFNA)	µg/L	0.004	<0.004	<0.004
Perfluorodecanoic acid (PFDA)	µg/L	0.004	<0.004	<0.004
Perfluoroundecanoic acid (PFUnA)	µg/L	0.004	<0.004	<0.004
Perfluorododecanoic acid (PFDoA)	µg/L	0.004	<0.004	<0.004
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.004	<0.004	<0.004
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.004	<0.004	<0.004
Perfluorohexadecanoic acid (PFHxDA)	µg/L	0.008	<0.008	<0.008
Perfluorobutane sulfonate (PFBS)	µg/L	0.004	<0.004	<0.004
Perfluoropentane sulfonate (PFPeS)	µg/L	0.004	<0.004	<0.004
Perfluorohexane sulfonate (PFHxS)	µg/L	0.002	**0.027**	**0.019**
Perfluoroheptane sulfonate (PFHpS)	µg/L	0.002	<0.002	**0.005**
Perfluorooctane sulfonate (PFOS)	µg/L	0.002	<0.002	**0.022**
Sum of PFHxS and PFOS	µg/L	0.002	**0.027**	**0.041**
Perfluorononane sulfonate (PFNS)	µg/L	0.002	<0.002	<0.002
Perfluorodecane sulfonate (PFDS)	µg/L	0.002	<0.002	<0.002
Perfluorododecane sulfonate (PFDoS)	µg/L	0.002	<0.002	<0.002
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	µg/L	0.002	<0.002	<0.002
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	µg/L	0.002	<0.002	<0.002
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	µg/L	0.002	<0.002	<0.002
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.008	<0.008	<0.008
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	µg/L	0.01	<0.01	<0.01
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	µg/L	0.01	<0.01	<0.01
2-(N-Methylperfluorooctane sulfonamido)-ethanol	µg/L	0.01	<0.01	<0.01
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	µg/L	0.01	<0.01	<0.01
N-Methylperfluorooctanesulfonamidoacetic acid	µg/L	0.01	<0.01	<0.01
N-Ethylperfluorooctanesulfonamidoacetic Acid	µg/L	0.01	<0.01	<0.01
(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	**99**	**101**
(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	**101**	**104**
(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	**111**	**104**
(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	**112**	**116**
(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	**109**	**97**
(13C9-PFNA) Isotopically Labelled Internal Recovery	%	-	**100**	**97**
(13C6-PFDA) Isotopically Labelled Internal Recovery	%	-	**87**	**88**
(13C7-PFUdA) Isotopically Labelled Internal Recovery	%	-	**106**	**109**
(13C2-PFDoA) Isotopically Labelled Internal Recovery	%	-	**103**	**95**
(13C2_PFTeDA) Isotopically Labelled Internal Recovery	%	-	**98**	**79**
(13C2-PFHxDA) Isotopically Labelled Internal Recovery	%	-	**83**	**61**
(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	**106**	**95**
(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	**97**	**93**
(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	**94**	**99**
(13C2-4:2 FTS) Isotopically Labelled Internal Recovery	%	-	**37**	**37**
(13C2-6:2 FTS) Isotopically Labelled Internal Recovery	%	-	**38**	**37**
(13C2-8:2 FTS) Isotopically Labelled Internal Recovery	%	-	**36**	**34**
(13C8-PFOSA) Isotopically Labelled Internal Recovery	%	-	**73**	**86**
(D3-N-MeFOSA) Isotopically Labelled Internal Recovery	%	-	**80**	**68**
(D5-N-EtFOSA) Isotopically Labelled Internal Recovery	%	-	**68**	**50**
(D7-N-MeFOSE) Isotopically Labelled Internal Recovery	%	-	**82**	**71**
(D9-N-EtFOSE) Isotopically Labelled Internal Recovery	%	-	**84**	**58**
(D3-N-MeFOSAA) Isotopically Labelled Internal Recovery	%	-	**99**	**89**
(D5-N-EtFOSAA) Isotopically Labelled Internal Recovery	%	-	**85**	**92**

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples Method: MA-1523

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Perfluorobutanoic acid (PFBA)	LB036559	µg/L	0.002	<0.002	10%	NA
Perfluoropentanoic acid (PFPeA)	LB036559	µg/L	0.002	<0.002	36%	NA
Perfluorohexanoic acid (PFHxA)	LB036559	µg/L	0.002	<0.002	8%	NA
Perfluoroheptanoic acid (PFHpA)	LB036559	µg/L	0.002	<0.002	18%	63%
Perfluorooctanoic Acid (PFOA)	LB036559	µg/L	0.002	<0.002	24%	79%
Perfluorononanoic acid (PFNA)	LB036559	µg/L	0.004	<0.004	0%	101%
Perfluorodecanoic acid (PFDA)	LB036559	µg/L	0.004	<0.004	0%	79%
Perfluoroundecanoic acid (PFUnA)	LB036559	µg/L	0.004	<0.004	0%	82%
Perfluorododecanoic acid (PFDoA)	LB036559	µg/L	0.004	<0.004	0%	107%
Perfluorotridecanoic acid (PFTrDA)	LB036559	µg/L	0.004	<0.004	0%	104%
Perfluorotetradecanoic acid (PFTeDA)	LB036559	µg/L	0.004	<0.004	0%	89%
Perfluorohexadecanoic acid (PFHxDA)	LB036559	µg/L	0.008	<0.008	0%	NA
Perfluorobutane sulfonate (PFBS)	LB036559	µg/L	0.004	<0.004	0%	NA
Perfluoropentane sulfonate (PFPeS)	LB036559	µg/L	0.004	<0.004	0%	NA
Perfluorohexane sulfonate (PFHxS)	LB036559	µg/L	0.002	<0.002	13%	NA
Perfluoroheptane sulfonate (PFHpS)	LB036559	µg/L	0.002	<0.002	11%	NA
Perfluorooctane sulfonate (PFOS)	LB036559	µg/L	0.002	<0.002	10%	77%
Sum of PFHxS and PFOS	LB036559	µg/L	0.002	<0.002	11%	NA
Perfluorononane sulfonate (PFNS)	LB036559	µg/L	0.002	<0.002	0%	NA
Perfluorodecane sulfonate (PFDS)	LB036559	µg/L	0.002	<0.002	0%	NA
Perfluorododecane sulfonate (PFDoS)	LB036559	µg/L	0.002	<0.002	0%	NA
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	LB036559	µg/L	0.002	<0.002	0%	NA
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	LB036559	µg/L	0.002	<0.002	3%	NA
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	LB036559	µg/L	0.002	<0.002	0%	NA
Perfluorooctane sulfonamide (PFOSA)	LB036559	µg/L	0.008	<0.008	0%	62%
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	LB036559	µg/L	0.01	<0.01	0%	NA
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	LB036559	µg/L	0.01	<0.01	0%	NA
2-(N-Methylperfluorooctane sulfonamido)-ethanol (N-MeFOSE)	LB036559	µg/L	0.01	<0.01	0%	NA
2-(N-Ethylperfluorooctane sulfonamido)-ethanol (N-EtFOSE)	LB036559	µg/L	0.01	<0.01	0%	NA
N-Methylperfluorooctanesulfonamidoacetic acid (N_MeFOSAA)	LB036559	µg/L	0.01	<0.01	0%	NA
N-Ethylperfluorooctanesulfonamidoacetic Acid (N-EtFOSAA)	LB036559	µg/L	0.01	<0.01	0%	NA
(13C4-PFBA) Isotopically Labelled Internal Recovery Standard	LB036559	%	-	97%	0%	101%
(13C5-PFPeA) Isotopically Labelled Internal Recovery Standard	LB036559	%	-	102%	1%	103%
(13C5-PFHxA) Isotopically Labelled Internal Recovery Standard	LB036559	%	-	109%	8%	116%
(13C4-PFHpA) Isotopically Labelled Internal Recovery Standard	LB036559	%	-	110%	2%	116%
(13C4_PFOA) Isotopically Labelled Internal Recovery Standard	LB036559	%	-	94%	7%	110%
(13C9-PFNA) Isotopically Labelled Internal Recovery Standard	LB036559	%	-	104%	0%	94%
(13C6-PFDA) Isotopically Labelled Internal Recovery Standard	LB036559	%	-	122%	5%	108%
(13C7-PFUdA) Isotopically Labelled Internal Recovery Standard	LB036559	%	-	97%	6%	99%
(13C2-PFDoA) Isotopically Labelled Internal Recovery Standard	LB036559	%	-	83%	5%	103%
(13C2_PFTeDA) Isotopically Labelled Internal Recovery Standard	LB036559	%	-	62%	7%	74%
(13C2-PFHxDA) Isotopically Labelled Internal Recovery Standard	LB036559	%	-	34%	36%	31%
(13C3-PFBS) Isotopically Labelled Internal Recovery Standard	LB036559	%	-	116%	6%	106%
(13C3-PFHxS) Isotopically Labelled Internal Recovery Standard	LB036559	%	-	107%	2%	102%
(13C8-PFOS) Isotopically Labelled Internal Recovery Standard	LB036559	%	-	106%	27%	102%
(13C2-4:2 FTS) Isotopically Labelled Internal Recovery Standard	LB036559	%	-	39%	2%	39%
(13C2-6:2 FTS) Isotopically Labelled Internal Recovery Standard	LB036559	%	-	43%	20%	43%
(13C2-8:2 FTS) Isotopically Labelled Internal Recovery Standard	LB036559	%	-	32%	18%	48%
(13C8-PFOSA) Isotopically Labelled Internal Recovery Standard	LB036559	%	-	108%	19%	87%
(D3-N-MeFOSA) Isotopically Labelled Internal Recovery Standard	LB036559	%	-	81%	55%	63%
(D5-N-EtFOSA) Isotopically Labelled Internal Recovery Standard	LB036559	%	-	66%	49%	51%
(D7-N-MeFOSE) Isotopically Labelled Internal Recovery Standard	LB036559	%	-	92%	35%	76%
(D9-N-EtFOSE) Isotopically Labelled Internal Recovery Standard	LB036559	%	-	101%	26%	79%
(D3-N-MeFOSAA) Isotopically Labelled Internal Recovery Standard	LB036559	%	-	79%	31%	83%
(D5-N-EtFOSAA) Isotopically Labelled Internal Recovery Standard	LB036559	%	-	85%	5%	98%

METHOD	METHODOLOGY SUMMARY
MA-1523	This method covers the analysis of per- and polyfluoroalkyl substances (PFAS) in aqueous, solid and biosolid samples and solvent extracts, determined as the total of linear and branched isomers. After spiking with isotopically labelled quantification surrogates and clean-up via SPE cartridges sample extracts are analysed by liquid chromatography/mass spectrometry (LC-MS/MS). PFAS concentrations are determined by isotope dilution quantification.

FOOTNOTES

IS	Insufficient sample for analysis.	LOR	Limit of Reporting
LNR	Sample listed, but not received.	↑↓	Raised or Lowered Limit of Reporting
*	NATA accreditation does not cover the performance of this service.	QFH	QC result is above the upper tolerance
		QFL	QC result is below the lower tolerance
**	Indicative data, theoretical holding time exceeded.	-	The sample was not analysed for this analyte
***	Indicates that both * and ** apply.	NVL	Not Validated

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calcuated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE212973 R0

CLIENT DETAILS

Contact	LQRSYD
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	02 9427 8100
Facsimile	02 9427 8200
Email	lqrsyd@slrconsulting.com
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	10

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE212973 R0**
Date Received	29 Oct 2020
Date Reported	11 Nov 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Duplicate	Trace Metals (Total) in Water by ICPMS	4 items
Matrix Spike	Volatile Petroleum Hydrocarbons in Water	1 item

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	10 Water
Date documentation received	29/10/2020	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	15°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE212973 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

Ammonia Nitrogen by Discrete Analyser (Aquakem)

Method: ME-(AU)-[ENV]AN291

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW13b	SE212973.002	LB212444	29 Oct 2020	29 Oct 2020	26 Nov 2020	30 Oct 2020	26 Nov 2020	30 Oct 2020

Anions by Ion Chromatography in Water

Method: ME-(AU)-[ENV]AN245

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW13b	SE212973.002	LB212741	29 Oct 2020	29 Oct 2020	26 Nov 2020	05 Nov 2020	26 Nov 2020	06 Nov 2020

Filterable Reactive Phosphorus (FRP)

Method: ME-(AU)-[ENV]AN278

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW13b	SE212973.002	LB212444	29 Oct 2020	29 Oct 2020	26 Nov 2020	30 Oct 2020	26 Nov 2020	30 Oct 2020

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW12	SE212973.003	LB212389	29 Oct 2020	29 Oct 2020	26 Nov 2020	30 Oct 2020	26 Nov 2020	30 Oct 2020
GW11	SE212973.004	LB212389	29 Oct 2020	29 Oct 2020	26 Nov 2020	30 Oct 2020	26 Nov 2020	30 Oct 2020
GW22	SE212973.005	LB212389	29 Oct 2020	29 Oct 2020	26 Nov 2020	30 Oct 2020	26 Nov 2020	30 Oct 2020
GW23	SE212973.009	LB212389	29 Oct 2020	29 Oct 2020	26 Nov 2020	30 Oct 2020	26 Nov 2020	30 Oct 2020
QC201	SE212973.010	LB212389	29 Oct 2020	29 Oct 2020	26 Nov 2020	30 Oct 2020	26 Nov 2020	30 Oct 2020

Mercury (total) in Water

Method: ME-(AU)-[ENV]AN311(Perth) /AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW13a	SE212973.001	LB212390	29 Oct 2020	29 Oct 2020	26 Nov 2020	30 Oct 2020	26 Nov 2020	30 Oct 2020
GW13b	SE212973.002	LB212390	29 Oct 2020	29 Oct 2020	26 Nov 2020	30 Oct 2020	26 Nov 2020	30 Oct 2020
QC317	SE212973.008	LB212390	29 Oct 2020	29 Oct 2020	26 Nov 2020	30 Oct 2020	26 Nov 2020	30 Oct 2020

Nitrite in Water

Method: ME-(AU)-[ENV]AN277

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW13b	SE212973.002	LB212444	29 Oct 2020	29 Oct 2020	02 Nov 2020	30 Oct 2020	02 Nov 2020	30 Oct 2020

Speciated Phenols in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW13b	SE212973.002	LB212661	29 Oct 2020	29 Oct 2020	19 Nov 2020	04 Nov 2020	14 Dec 2020	05 Nov 2020
GW12	SE212973.003	LB212661	29 Oct 2020	29 Oct 2020	19 Nov 2020	04 Nov 2020	14 Dec 2020	05 Nov 2020
GW11	SE212973.004	LB212661	29 Oct 2020	29 Oct 2020	19 Nov 2020	04 Nov 2020	14 Dec 2020	05 Nov 2020
GW22	SE212973.005	LB212661	29 Oct 2020	29 Oct 2020	19 Nov 2020	04 Nov 2020	14 Dec 2020	05 Nov 2020
QC317	SE212973.008	LB212661	29 Oct 2020	29 Oct 2020	19 Nov 2020	04 Nov 2020	14 Dec 2020	05 Nov 2020
GW23	SE212973.009	LB212661	29 Oct 2020	29 Oct 2020	19 Nov 2020	04 Nov 2020	14 Dec 2020	05 Nov 2020
QC201	SE212973.010	LB212661	29 Oct 2020	29 Oct 2020	19 Nov 2020	04 Nov 2020	14 Dec 2020	05 Nov 2020

Sulfide by Titration in Water

Method: ME-(AU)-[ENV]AN149

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW13b	SE212973.002	LB212687	29 Oct 2020	29 Oct 2020	05 Nov 2020	04 Nov 2020	05 Nov 2020	04 Nov 2020

TKN Kjeldahl Digestion by Discrete Analyser

Method: ME-(AU)-[ENV]AN292

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW13b	SE212973.002	LB212684	29 Oct 2020	29 Oct 2020	26 Nov 2020	04 Nov 2020	26 Nov 2020	06 Nov 2020

Total Phosphorus by Kjeldahl Digestion DA in Water

Method: ME-(AU)-[ENV]AN279/AN293(Sydney only)

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW13b	SE212973.002	LB212684	29 Oct 2020	29 Oct 2020	26 Nov 2020	04 Nov 2020	26 Nov 2020	04 Nov 2020

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW12	SE212973.003	LB212422	29 Oct 2020	29 Oct 2020	27 Apr 2021	30 Oct 2020	27 Apr 2021	02 Nov 2020
GW11	SE212973.004	LB212422	29 Oct 2020	29 Oct 2020	27 Apr 2021	30 Oct 2020	27 Apr 2021	02 Nov 2020
GW22	SE212973.005	LB212422	29 Oct 2020	29 Oct 2020	27 Apr 2021	30 Oct 2020	27 Apr 2021	02 Nov 2020
GW23	SE212973.009	LB212422	29 Oct 2020	29 Oct 2020	27 Apr 2021	30 Oct 2020	27 Apr 2021	02 Nov 2020
QC201	SE212973.010	LB212422	29 Oct 2020	29 Oct 2020	27 Apr 2021	30 Oct 2020	27 Apr 2021	02 Nov 2020

HOLDING TIME SUMMARY

SE212973 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

Trace Metals (Total) in Water by ICPMS

Method: ME-(AU)-[ENV]AN022/AN318

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW13a	SE212973.001	LB212420	29 Oct 2020	29 Oct 2020	27 Apr 2021	30 Oct 2020	27 Apr 2021	02 Nov 2020
GW13b	SE212973.002	LB212420	29 Oct 2020	29 Oct 2020	27 Apr 2021	30 Oct 2020	27 Apr 2021	02 Nov 2020
QC317	SE212973.008	LB212420	29 Oct 2020	29 Oct 2020	27 Apr 2021	30 Oct 2020	27 Apr 2021	02 Nov 2020

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW13b	SE212973.002	LB212661	29 Oct 2020	29 Oct 2020	05 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020
GW12	SE212973.003	LB212661	29 Oct 2020	29 Oct 2020	05 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020
GW11	SE212973.004	LB212661	29 Oct 2020	29 Oct 2020	05 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020
GW22	SE212973.005	LB212661	29 Oct 2020	29 Oct 2020	05 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020
QC317	SE212973.008	LB212661	29 Oct 2020	29 Oct 2020	05 Nov 2020	04 Nov 2020	14 Dec 2020	05 Nov 2020
GW23	SE212973.009	LB212661	29 Oct 2020	29 Oct 2020	05 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020
QC201	SE212973.010	LB212661	29 Oct 2020	29 Oct 2020	05 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW13b	SE212973.002	LB212701	29 Oct 2020	29 Oct 2020	05 Nov 2020	04 Nov 2020	14 Dec 2020	05 Nov 2020
GW12	SE212973.003	LB212701	29 Oct 2020	29 Oct 2020	05 Nov 2020	04 Nov 2020	14 Dec 2020	05 Nov 2020
GW11	SE212973.004	LB212701	29 Oct 2020	29 Oct 2020	05 Nov 2020	04 Nov 2020	14 Dec 2020	05 Nov 2020
GW22	SE212973.005	LB212701	29 Oct 2020	29 Oct 2020	05 Nov 2020	04 Nov 2020	14 Dec 2020	05 Nov 2020
QC526_TS	SE212973.006	LB212701	29 Oct 2020	29 Oct 2020	05 Nov 2020	04 Nov 2020	14 Dec 2020	05 Nov 2020
QC526_TB	SE212973.007	LB212701	29 Oct 2020	29 Oct 2020	05 Nov 2020	04 Nov 2020	14 Dec 2020	05 Nov 2020
QC317	SE212973.008	LB212701	29 Oct 2020	29 Oct 2020	05 Nov 2020	04 Nov 2020	14 Dec 2020	05 Nov 2020
GW23	SE212973.009	LB212701	29 Oct 2020	29 Oct 2020	05 Nov 2020	04 Nov 2020	14 Dec 2020	05 Nov 2020
QC201	SE212973.010	LB212701	29 Oct 2020	29 Oct 2020	05 Nov 2020	04 Nov 2020	14 Dec 2020	05 Nov 2020

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW13b	SE212973.002	LB212701	29 Oct 2020	29 Oct 2020	05 Nov 2020	04 Nov 2020	14 Dec 2020	05 Nov 2020
GW12	SE212973.003	LB212701	29 Oct 2020	29 Oct 2020	05 Nov 2020	04 Nov 2020	14 Dec 2020	05 Nov 2020
GW11	SE212973.004	LB212701	29 Oct 2020	29 Oct 2020	05 Nov 2020	04 Nov 2020	14 Dec 2020	05 Nov 2020
GW22	SE212973.005	LB212701	29 Oct 2020	29 Oct 2020	05 Nov 2020	04 Nov 2020	14 Dec 2020	05 Nov 2020
QC526_TS	SE212973.006	LB212701	29 Oct 2020	29 Oct 2020	05 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020
QC526_TB	SE212973.007	LB212701	29 Oct 2020	29 Oct 2020	05 Nov 2020	04 Nov 2020	14 Dec 2020	05 Nov 2020
QC317	SE212973.008	LB212701	29 Oct 2020	29 Oct 2020	05 Nov 2020	04 Nov 2020	14 Dec 2020	05 Nov 2020
GW23	SE212973.009	LB212701	29 Oct 2020	29 Oct 2020	05 Nov 2020	04 Nov 2020	14 Dec 2020	05 Nov 2020
QC201	SE212973.010	LB212701	29 Oct 2020	29 Oct 2020	05 Nov 2020	04 Nov 2020	14 Dec 2020	05 Nov 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples — **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C2_PFTeDA) Isotopically Labelled Internal Recovery Standard	GW13b	SE212973.002	%	10 - 150%	96
	GW12	SE212973.003	%	10 - 150%	79
	GW11	SE212973.004	%	10 - 150%	77
	GW22	SE212973.005	%	10 - 150%	92
	QC317	SE212973.008	%	10 - 150%	89
	GW23	SE212973.009	%	10 - 150%	98
	QC201	SE212973.010	%	10 - 150%	79
(13C2-4:2 FTS) Isotopically Labelled Internal Recovery Standard	GW13b	SE212973.002	%	10 - 150%	40
	GW12	SE212973.003	%	10 - 150%	42
	GW11	SE212973.004	%	10 - 150%	41
	GW22	SE212973.005	%	10 - 150%	39
	QC317	SE212973.008	%	10 - 150%	36
	GW23	SE212973.009	%	10 - 150%	37
	QC201	SE212973.010	%	10 - 150%	37
(13C2-6:2 FTS) Isotopically Labelled Internal Recovery Standard	GW13b	SE212973.002	%	10 - 150%	42
	GW12	SE212973.003	%	10 - 150%	36
	GW11	SE212973.004	%	10 - 150%	36
	GW22	SE212973.005	%	10 - 150%	33
	QC317	SE212973.008	%	10 - 150%	35
	GW23	SE212973.009	%	10 - 150%	38
	QC201	SE212973.010	%	10 - 150%	37
(13C2-8:2 FTS) Isotopically Labelled Internal Recovery Standard	GW13b	SE212973.002	%	10 - 150%	49
	GW12	SE212973.003	%	10 - 150%	53
	GW11	SE212973.004	%	10 - 150%	53
	GW22	SE212973.005	%	10 - 150%	39
	QC317	SE212973.008	%	10 - 150%	35
	GW23	SE212973.009	%	10 - 150%	36
	QC201	SE212973.010	%	10 - 150%	34
(13C2-PFDoA) Isotopically Labelled Internal Recovery Standard	GW13b	SE212973.002	%	10 - 150%	87
	GW12	SE212973.003	%	10 - 150%	97
	GW11	SE212973.004	%	10 - 150%	88
	GW22	SE212973.005	%	10 - 150%	98
	QC317	SE212973.008	%	10 - 150%	95
	GW23	SE212973.009	%	10 - 150%	103
	QC201	SE212973.010	%	10 - 150%	95
(13C2-PFHxDA) Isotopically Labelled Internal Recovery Standard	GW13b	SE212973.002	%	10 - 150%	88
	GW12	SE212973.003	%	10 - 150%	56
	GW11	SE212973.004	%	10 - 150%	57
	GW22	SE212973.005	%	10 - 150%	93
	QC317	SE212973.008	%	10 - 150%	58
	GW23	SE212973.009	%	10 - 150%	83
	QC201	SE212973.010	%	10 - 150%	61
(13C3-PFBS) Isotopically Labelled Internal Recovery Standard	GW13b	SE212973.002	%	10 - 150%	117
	GW12	SE212973.003	%	10 - 150%	110
	GW11	SE212973.004	%	10 - 150%	108
	GW22	SE212973.005	%	10 - 150%	98
	QC317	SE212973.008	%	10 - 150%	99
	GW23	SE212973.009	%	10 - 150%	106
	QC201	SE212973.010	%	10 - 150%	95
(13C3-PFHxS) Isotopically Labelled Internal Recovery Standard	GW13b	SE212973.002	%	10 - 150%	114
	GW12	SE212973.003	%	10 - 150%	104
	GW11	SE212973.004	%	10 - 150%	113
	GW22	SE212973.005	%	10 - 150%	96
	QC317	SE212973.008	%	10 - 150%	95
	GW23	SE212973.009	%	10 - 150%	97
	QC201	SE212973.010	%	10 - 150%	93
(13C4_PFOA) Isotopically Labelled Internal Recovery Standard	GW13b	SE212973.002	%	10 - 150%	92
	GW12	SE212973.003	%	10 - 150%	98
	GW11	SE212973.004	%	10 - 150%	100
	GW22	SE212973.005	%	10 - 150%	107
	QC317	SE212973.008	%	10 - 150%	91

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples (continued) **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C4_PFOA) Isotopically Labelled Internal Recovery Standard	GW23	SE212973.009	%	10 - 150%	109
	QC201	SE212973.010	%	10 - 150%	97
(13C4-PFBA) Isotopically Labelled Internal Recovery Standard	GW13b	SE212973.002	%	10 - 150%	99
	GW12	SE212973.003	%	10 - 150%	100
	GW11	SE212973.004	%	10 - 150%	101
	GW22	SE212973.005	%	10 - 150%	100
	QC317	SE212973.008	%	10 - 150%	101
	GW23	SE212973.009	%	10 - 150%	99
	QC201	SE212973.010	%	10 - 150%	101
(13C4-PFHpA) Isotopically Labelled Internal Recovery Standard	GW13b	SE212973.002	%	10 - 150%	103
	GW12	SE212973.003	%	10 - 150%	110
	GW11	SE212973.004	%	10 - 150%	107
	GW22	SE212973.005	%	10 - 150%	107
	QC317	SE212973.008	%	10 - 150%	111
	GW23	SE212973.009	%	10 - 150%	112
	QC201	SE212973.010	%	10 - 150%	116
(13C5-PFHxA) Isotopically Labelled Internal Recovery Standard	GW13b	SE212973.002	%	10 - 150%	96
	GW12	SE212973.003	%	10 - 150%	105
	GW11	SE212973.004	%	10 - 150%	107
	GW22	SE212973.005	%	10 - 150%	103
	QC317	SE212973.008	%	10 - 150%	106
	GW23	SE212973.009	%	10 - 150%	111
	QC201	SE212973.010	%	10 - 150%	104
(13C5-PFPeA) Isotopically Labelled Internal Recovery Standard	GW13b	SE212973.002	%	10 - 150%	104
	GW12	SE212973.003	%	10 - 150%	103
	GW11	SE212973.004	%	10 - 150%	101
	GW22	SE212973.005	%	10 - 150%	103
	QC317	SE212973.008	%	10 - 150%	104
	GW23	SE212973.009	%	10 - 150%	101
	QC201	SE212973.010	%	10 - 150%	104
(13C6-PFDA) Isotopically Labelled Internal Recovery Standard	GW13b	SE212973.002	%	10 - 150%	87
	GW12	SE212973.003	%	10 - 150%	99
	GW11	SE212973.004	%	10 - 150%	89
	GW22	SE212973.005	%	10 - 150%	84
	QC317	SE212973.008	%	10 - 150%	109
	GW23	SE212973.009	%	10 - 150%	87
	QC201	SE212973.010	%	10 - 150%	88
(13C7-PFUdA) Isotopically Labelled Internal Recovery Standard	GW13b	SE212973.002	%	10 - 150%	95
	GW12	SE212973.003	%	10 - 150%	101
	GW11	SE212973.004	%	10 - 150%	94
	GW22	SE212973.005	%	10 - 150%	91
	QC317	SE212973.008	%	10 - 150%	98
	GW23	SE212973.009	%	10 - 150%	106
	QC201	SE212973.010	%	10 - 150%	109
(13C8-PFOS) Isotopically Labelled Internal Recovery Standard	GW13b	SE212973.002	%	10 - 150%	97
	GW12	SE212973.003	%	10 - 150%	99
	GW11	SE212973.004	%	10 - 150%	93
	GW22	SE212973.005	%	10 - 150%	95
	QC317	SE212973.008	%	10 - 150%	96
	GW23	SE212973.009	%	10 - 150%	94
	QC201	SE212973.010	%	10 - 150%	99
(13C8-PFOSA) Isotopically Labelled Internal Recovery Standard	GW13b	SE212973.002	%	10 - 150%	91
	GW12	SE212973.003	%	10 - 150%	75
	GW11	SE212973.004	%	10 - 150%	87
	GW22	SE212973.005	%	10 - 150%	88
	QC317	SE212973.008	%	10 - 150%	90
	GW23	SE212973.009	%	10 - 150%	73
	QC201	SE212973.010	%	10 - 150%	86
(13C9-PFNA) Isotopically Labelled Internal Recovery Standard	GW13b	SE212973.002	%	10 - 150%	99
	GW12	SE212973.003	%	10 - 150%	88
	GW11	SE212973.004	%	10 - 150%	90

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples (continued)

Method: MA-1523

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C9-PFNA) Isotopically Labelled Internal Recovery Standard	GW22	SE212973.005	%	10 - 150%	108
	QC317	SE212973.008	%	10 - 150%	111
	GW23	SE212973.009	%	10 - 150%	100
	QC201	SE212973.010	%	10 - 150%	97
(D3-N-MeFOSA) Isotopically Labelled Internal Recovery Standard	GW13b	SE212973.002	%	10 - 150%	84
	GW12	SE212973.003	%	10 - 150%	60
	GW11	SE212973.004	%	10 - 150%	72
	GW22	SE212973.005	%	10 - 150%	79
	QC317	SE212973.008	%	10 - 150%	48
	GW23	SE212973.009	%	10 - 150%	80
	QC201	SE212973.010	%	10 - 150%	68
(D3-N-MeFOSAA) Isotopically Labelled Internal Recovery Standard	GW13b	SE212973.002	%	10 - 150%	87
	GW12	SE212973.003	%	10 - 150%	79
	GW11	SE212973.004	%	10 - 150%	79
	GW22	SE212973.005	%	10 - 150%	87
	QC317	SE212973.008	%	10 - 150%	82
	GW23	SE212973.009	%	10 - 150%	99
	QC201	SE212973.010	%	10 - 150%	89
(D5-N-EtFOSA) Isotopically Labelled Internal Recovery Standard	GW13b	SE212973.002	%	10 - 150%	70
	GW12	SE212973.003	%	10 - 150%	62
	GW11	SE212973.004	%	10 - 150%	65
	GW22	SE212973.005	%	10 - 150%	64
	QC317	SE212973.008	%	10 - 150%	73
	GW23	SE212973.009	%	10 - 150%	68
	QC201	SE212973.010	%	10 - 150%	50
(D5-N-EtFOSAA) Isotopically Labelled Internal Recovery Standard	GW13b	SE212973.002	%	10 - 150%	91
	GW12	SE212973.003	%	10 - 150%	85
	GW11	SE212973.004	%	10 - 150%	92
	GW22	SE212973.005	%	10 - 150%	106
	QC317	SE212973.008	%	10 - 150%	94
	GW23	SE212973.009	%	10 - 150%	85
	QC201	SE212973.010	%	10 - 150%	92
(D7-N-MeFOSE) Isotopically Labelled Internal Recovery Standard	GW13b	SE212973.002	%	10 - 150%	80
	GW12	SE212973.003	%	10 - 150%	74
	GW11	SE212973.004	%	10 - 150%	85
	GW22	SE212973.005	%	10 - 150%	74
	QC317	SE212973.008	%	10 - 150%	82
	GW23	SE212973.009	%	10 - 150%	82
	QC201	SE212973.010	%	10 - 150%	71
(D9-N-EtFOSE) Isotopically Labelled Internal Recovery Standard	GW13b	SE212973.002	%	10 - 150%	83
	GW12	SE212973.003	%	10 - 150%	75
	GW11	SE212973.004	%	10 - 150%	75
	GW22	SE212973.005	%	10 - 150%	80
	QC317	SE212973.008	%	10 - 150%	83
	GW23	SE212973.009	%	10 - 150%	84
	QC201	SE212973.010	%	10 - 150%	58

Speciated Phenols in Water

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	GW13b	SE212973.002	%	40 - 130%	53
	GW12	SE212973.003	%	40 - 130%	56
	GW11	SE212973.004	%	40 - 130%	52
	GW22	SE212973.005	%	40 - 130%	58
	GW23	SE212973.009	%	40 - 130%	46
	QC201	SE212973.010	%	40 - 130%	50
d5-phenol (Surrogate)	GW13b	SE212973.002	%	20 - 90%	47
	GW12	SE212973.003	%	20 - 90%	48
	GW11	SE212973.004	%	20 - 90%	52
	GW22	SE212973.005	%	20 - 90%	54
	GW23	SE212973.009	%	20 - 90%	41
	QC201	SE212973.010	%	20 - 90%	44

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

SVOC Compounds in Waters by GC-QQQ

Method: USEPA8270D

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d14-p-terphenyl (Surrogate)	GW13b	SE212973.002	%	40 - 130%	105
	GW12	SE212973.003	%	40 - 130%	107
	GW11	SE212973.004	%	40 - 130%	104
	GW22	SE212973.005	%	40 - 130%	104
	QC317	SE212973.008	%	40 - 130%	103
	GW23	SE212973.009	%	40 - 130%	98
	QC201	SE212973.010	%	40 - 130%	103

SVOC Compounds in Waters by GC-QQQ, Low Level

Method: USEPA8270D LL

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d14-p-terphenyl (Surrogate)	GW13b	SE212973.002	%	40 - 130%	105
	GW12	SE212973.003	%	40 - 130%	107
	GW11	SE212973.004	%	40 - 130%	104
	GW22	SE212973.005	%	40 - 130%	104
	QC317	SE212973.008	%	40 - 130%	103
	GW23	SE212973.009	%	40 - 130%	98
	QC201	SE212973.010	%	40 - 130%	103

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	GW13b	SE212973.002	%	40 - 130%	104
	GW12	SE212973.003	%	40 - 130%	107
	GW11	SE212973.004	%	40 - 130%	105
	GW22	SE212973.005	%	40 - 130%	105
	QC526_TS	SE212973.006	%	40 - 130%	98
	QC526_TB	SE212973.007	%	40 - 130%	105
	QC317	SE212973.008	%	40 - 130%	101
	GW23	SE212973.009	%	40 - 130%	105
	QC201	SE212973.010	%	40 - 130%	105
d4-1,2-dichloroethane (Surrogate)	GW13b	SE212973.002	%	40 - 130%	98
	GW12	SE212973.003	%	40 - 130%	98
	GW11	SE212973.004	%	40 - 130%	98
	GW22	SE212973.005	%	40 - 130%	99
	QC526_TS	SE212973.006	%	40 - 130%	106
	QC526_TB	SE212973.007	%	40 - 130%	96
	QC317	SE212973.008	%	40 - 130%	97
	GW23	SE212973.009	%	40 - 130%	98
	QC201	SE212973.010	%	40 - 130%	100
d8-toluene (Surrogate)	GW13b	SE212973.002	%	40 - 130%	97
	GW12	SE212973.003	%	40 - 130%	97
	GW11	SE212973.004	%	40 - 130%	97
	GW22	SE212973.005	%	40 - 130%	97
	QC526_TS	SE212973.006	%	40 - 130%	101
	QC526_TB	SE212973.007	%	40 - 130%	96
	QC317	SE212973.008	%	40 - 130%	97
	GW23	SE212973.009	%	40 - 130%	97
	QC201	SE212973.010	%	40 - 130%	96

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	GW13b	SE212973.002	%	40 - 130%	104
	GW12	SE212973.003	%	40 - 130%	107
	GW11	SE212973.004	%	40 - 130%	105
	GW22	SE212973.005	%	40 - 130%	105
	QC526_TB	SE212973.007	%	40 - 130%	105
	QC317	SE212973.008	%	40 - 130%	101
	GW23	SE212973.009	%	40 - 130%	105
	QC201	SE212973.010	%	40 - 130%	105
d4-1,2-dichloroethane (Surrogate)	GW13b	SE212973.002	%	60 - 130%	98
	GW12	SE212973.003	%	60 - 130%	98
	GW11	SE212973.004	%	60 - 130%	98
	GW22	SE212973.005	%	60 - 130%	99

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Volatile Petroleum Hydrocarbons in Water (continued) **Method: ME-(AU)-[ENV]AN433**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d4-1,2-dichloroethane (Surrogate)	QC526_TB	SE212973.007	%	60 - 130%	96
	QC317	SE212973.008	%	60 - 130%	97
	GW23	SE212973.009	%	60 - 130%	98
	QC201	SE212973.010	%	60 - 130%	100
d8-toluene (Surrogate)	GW13b	SE212973.002	%	40 - 130%	97
	GW12	SE212973.003	%	40 - 130%	97
	GW11	SE212973.004	%	40 - 130%	97
	GW22	SE212973.005	%	40 - 130%	97
	QC526_TB	SE212973.007	%	40 - 130%	96
	QC317	SE212973.008	%	40 - 130%	97
	GW23	SE212973.009	%	40 - 130%	97
	QC201	SE212973.010	%	40 - 130%	96

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Ammonia Nitrogen by Discrete Analyser (Aquakem)

Method: ME-(AU)-[ENV]AN291

Sample Number	Parameter	Units	LOR	Result
LB212444.001	Ammonia Nitrogen, NH_3 as N	mg/L	0.005	<0.005

Anions by Ion Chromatography in Water

Method: ME-(AU)-[ENV]AN245

Sample Number	Parameter	Units	LOR	Result
LB212741.001	Nitrate Nitrogen, NO3-N	mg/L	0.005	<0.005
	Sulfate, SO4	mg/L	1	<1.0

Filterable Reactive Phosphorus (FRP)

Method: ME-(AU)-[ENV]AN278

Sample Number	Parameter	Units	LOR	Result
LB212444.001	Filterable Reactive Phosphorus as P	mg/L	0.005	<0.005

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

Sample Number	Parameter	Units	LOR	Result
LB212389.001	Mercury	mg/L	0.0001	<0.0001

Nitrite in Water

Method: ME-(AU)-[ENV]AN277

Sample Number	Parameter	Units	LOR	Result
LB212444.001	Nitrite Nitrogen, NO2 as N	mg/L	0.005	<0.005

Speciated Phenols in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB212661.001		Phenol	µg/L	0.5	<0.5
		2-methyl phenol (o-cresol)	µg/L	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	µg/L	1	<1
		2-chlorophenol	µg/L	0.5	<0.5
		2,4-dimethylphenol	µg/L	0.5	<0.5
		2,6-dichlorophenol	µg/L	0.5	<0.5
		2,4-dichlorophenol	µg/L	0.5	<0.5
		2,4,6-trichlorophenol	µg/L	0.5	<0.5
		2-nitrophenol	µg/L	0.5	<0.5
		4-nitrophenol	µg/L	1	<1
		2,4,5-trichlorophenol	µg/L	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	µg/L	1	<1
		Pentachlorophenol	µg/L	0.5	<0.5
		2,4-dinitrophenol	µg/L	2	<2
		4-chloro-3-methylphenol	µg/L	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	75
		d5-phenol (Surrogate)	%	-	97

Sulfide by Titration in Water

Method: ME-(AU)-[ENV]AN149

Sample Number	Parameter	Units	LOR	Result
LB212687.001	Sulfide	mg/L	0.5	<0.5

Total Phosphorus by Kjeldahl Digestion DA in Water

Method: ME-(AU)-[ENV]AN279/AN293(Sydney only)

Sample Number	Parameter	Units	LOR	Result
LB212684.001	Total Phosphorus (Kjeldahl Digestion) as P	mg/L	0.02	<0.02

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Sample Number	Parameter	Units	LOR	Result
LB212422.001	Arsenic, As	µg/L	1	<1
	Cadmium, Cd	µg/L	0.1	<0.1
	Chromium, Cr	µg/L	1	<1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Trace Metals (Dissolved) in Water by ICPMS (continued)

Method: ME-(AU)-[ENV]AN318

Sample Number	Parameter	Units	LOR	Result
LB212422.001	Copper, Cu	µg/L	1	<1
	Lead, Pb	µg/L	1	<1
	Nickel, Ni	µg/L	1	<1
	Zinc, Zn	µg/L	5	<5

Trace Metals (Total) in Water by ICPMS

Method: ME-(AU)-[ENV]AN022/AN318

Sample Number	Parameter	Units	LOR	Result
LB212420.001	Total Arsenic	µg/L	1	<1
	Total Beryllium	µg/L	1	<1
	Total Boron	µg/L	5	<5
	Total Cadmium	µg/L	0.1	<0.1
	Total Cobalt	µg/L	1	<1
	Total Copper	µg/L	1	<1
	Total Lead	µg/L	1	<1
	Total Manganese	µg/L	1	<1
	Total Nickel	µg/L	1	<1
	Total Zinc	µg/L	5	<5

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB212661.001	TRH C10-C14	µg/L	50	<50
	TRH C15-C28	µg/L	200	<200
	TRH C29-C36	µg/L	200	<200
	TRH C37-C40	µg/L	200	<200

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB212701.001	Fumigants	2,2-dichloropropane	µg/L	0.5	<0.5
		1,2-dichloropropane	µg/L	0.5	<0.5
		cis-1,3-dichloropropene	µg/L	0.5	<0.5
		trans-1,3-dichloropropene	µg/L	0.5	<0.5
		1,2-dibromoethane (EDB)	µg/L	0.5	<0.5
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	µg/L	5	<5
		Chloromethane	µg/L	5	<5
		Vinyl chloride (Chloroethene)	µg/L	0.3	<0.3
		Bromomethane	µg/L	10	<10
		Chloroethane	µg/L	5	<5
		Trichlorofluoromethane	µg/L	1	<1
		Iodomethane	µg/L	5	<5
		1,1-dichloroethene	µg/L	0.5	<0.5
		Dichloromethane (Methylene chloride)	µg/L	5	<5
		Allyl chloride	µg/L	2	<2
		trans-1,2-dichloroethene	µg/L	0.5	<0.5
		1,1-dichloroethane	µg/L	0.5	<0.5
		cis-1,2-dichloroethene	µg/L	0.5	<0.5
		Bromochloromethane	µg/L	0.5	<0.5
		1,2-dichloroethane	µg/L	0.5	<0.5
		1,1,1-trichloroethane	µg/L	0.5	<0.5
		1,1-dichloropropene	µg/L	0.5	<0.5
		Carbon tetrachloride	µg/L	0.5	<0.5
		Dibromomethane	µg/L	0.5	<0.5
		Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	<0.5
		1,1,2-trichloroethane	µg/L	0.5	<0.5
		1,3-dichloropropane	µg/L	0.5	<0.5
		Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	<0.5
		1,1,1,2-tetrachloroethane	µg/L	0.5	<0.5
		cis-1,4-dichloro-2-butene	µg/L	1	<1
		1,1,2,2-tetrachloroethane	µg/L	0.5	<0.5
		1,2,3-trichloropropane	µg/L	0.5	<0.5
		trans-1,4-dichloro-2-butene	µg/L	1	<1
		1,2-dibromo-3-chloropropane	µg/L	0.5	<0.5
		Hexachlorobutadiene	µg/L	0.5	<0.5

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VOCs in Water (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB212701.001	Halogenated Aromatics	Chlorobenzene	µg/L	0.5	<0.5
		Bromobenzene	µg/L	0.5	<0.5
		2-chlorotoluene	µg/L	0.5	<0.5
		4-chlorotoluene	µg/L	0.5	<0.5
		1,3-dichlorobenzene	µg/L	0.5	<0.5
		1,4-dichlorobenzene	µg/L	0.3	<0.3
		1,2-dichlorobenzene	µg/L	0.5	<0.5
		1,2,4-trichlorobenzene	µg/L	0.5	<0.5
		1,2,3-trichlorobenzene	µg/L	0.5	<0.5
	Monocyclic Aromatic Hydrocarbons	Benzene	µg/L	0.5	<0.5
		Toluene	µg/L	0.5	<0.5
		Ethylbenzene	µg/L	0.5	<0.5
		m/p-xylene	µg/L	1	<1
		o-xylene	µg/L	0.5	<0.5
		Styrene (Vinyl benzene)	µg/L	0.5	<0.5
		Isopropylbenzene (Cumene)	µg/L	0.5	<0.5
		n-propylbenzene	µg/L	0.5	<0.5
		1,3,5-trimethylbenzene	µg/L	0.5	<0.5
		tert-butylbenzene	µg/L	0.5	<0.5
		1,2,4-trimethylbenzene	µg/L	0.5	<0.5
		sec-butylbenzene	µg/L	0.5	<0.5
		p-isopropyltoluene	µg/L	0.5	<0.5
		n-butylbenzene	µg/L	0.5	<0.5
	Nitrogenous Compounds	Acrylonitrile	µg/L	0.5	<0.5
	Oxygenated Compounds	Acetone (2-propanone)	µg/L	10	<10
		MtBE (Methyl-tert-butyl ether)	µg/L	2	<2
		Vinyl acetate	µg/L	10	<10
		MEK (2-butanone)	µg/L	10	<10
		MIBK (4-methyl-2-pentanone)	µg/L	5	<5
		2-hexanone (MBK)	µg/L	5	<5
	Polycyclic VOCs	Naphthalene	µg/L	0.5	<0.5
	Sulphonated	Carbon disulfide	µg/L	2	<2
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	95
		d8-toluene (Surrogate)	%	-	95
		Bromofluorobenzene (Surrogate)	%	-	98
	Trihalomethanes	Chloroform (THM)	µg/L	0.5	<0.5
		Bromodichloromethane (THM)	µg/L	0.5	<0.5
		Dibromochloromethane (THM)	µg/L	0.5	<0.5
		Bromoform (THM)	µg/L	0.5	<0.5

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB212701.001		TRH C6-C9	µg/L	40	<40
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	95
		d8-toluene (Surrogate)	%	-	95
		Bromofluorobenzene (Surrogate)	%	-	98

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Ammonia Nitrogen by Discrete Analyser (Aquakem)

Method: ME-(AU)-[ENV]AN291

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212940.004	LB212444.014	Ammonia Nitrogen, NH_3 as N	mg/L	0.005	0.21	0.21	20	2
SE212973.002	LB212444.021	Ammonia Nitrogen, NH_3 as N	mg/L	0.005	0.053	0.053	34	0

Anions by Ion Chromatography in Water

Method: ME-(AU)-[ENV]AN245

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE213070.001	LB212741.015	Sulfate, SO4	mg/L	1	110	110	16	0

Filterable Reactive Phosphorus (FRP)

Method: ME-(AU)-[ENV]AN278

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212973.002	LB212444.021	Filterable Reactive Phosphorus as P	mg/L	0.005	<0.005	<0.005	200	0

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212973.010	LB212389.010	Mercury	µg/L	0.0001	<0.0001	<0.0001	200	0

Mercury (total) in Water

Method: ME-(AU)-[ENV]AN311(Perth) /AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212973.008	LB212390.011	Total Mercury	µg/L	0.0001	<0.0001	<0.0001	200	0

Nitrite in Water

Method: ME-(AU)-[ENV]AN277

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212973.002	LB212444.021	Nitrite Nitrogen, NO2 as N	mg/L	0.005	<0.005	<0.005	200	0

TKN Kjeldahl Digestion by Discrete Analyser

Method: ME-(AU)-[ENV]AN292

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE213048.010	LB212684.014	Total Kjeldahl Nitrogen	mg/L	0.05	2.2	2.2	17	1
SE213055.001	LB212684.027	Total Kjeldahl Nitrogen	mg/L	0.05	0.89	0.99	20	11

Total Phosphorus by Kjeldahl Digestion DA in Water

Method: ME-(AU)-[ENV]AN279/AN293(Sydney only)

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE213048.010	LB212684.014	Total Phosphorus (Kjeldahl Digestion) as P	mg/L	0.02	0.10	0.09	36	7
SE213055.001	LB212684.027	Total Phosphorus (Kjeldahl Digestion) as P	mg/L	0.02	0.09	0.11	35	24

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212973.004	LB212422.014	Arsenic, As	µg/L	1	<1	<1	200	0
		Cadmium, Cd	µg/L	0.1	<0.1	<0.1	180	0
		Chromium, Cr	µg/L	1	<1	<1	200	0
		Copper, Cu	µg/L	1	33	33	18	0
		Lead, Pb	µg/L	1	1	1	100	1
		Nickel, Ni	µg/L	1	3	3	54	0
		Zinc, Zn	µg/L	5	27	28	33	2
SE212973.010	LB212422.018	Arsenic, As	µg/L	1	<1	<1	200	0
		Cadmium, Cd	µg/L	0.1	<0.1	<0.1	200	0
		Chromium, Cr	µg/L	1	<1	<1	131	0
		Copper, Cu	µg/L	1	1	1	105	1
		Lead, Pb	µg/L	1	<1	<1	149	0
		Nickel, Ni	µg/L	1	<1	<1	200	0
		Zinc, Zn	µg/L	5	<5	<5	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Trace Metals (Total) in Water by ICPMS

Method: ME-(AU)-[ENV]AN022/AN318

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212998.001	LB212420.014	Total Arsenic	µg/L	1	63	92	16	38 ②
		Total Cadmium	µg/L	0.1	17	20	16	16 ②
		Total Copper	µg/L	1	2100	3300	15	44 ②
		Total Lead	µg/L	1	330	380	15	13
		Total Nickel	µg/L	1	250	300	15	17 ②
		Total Zinc	µg/L	5	51000	56000	15	9

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212970.009	LB212701.024	Fumigants	2,2-dichloropropane	µg/L	0.5	0	0	200	0
			1,2-dichloropropane	µg/L	0.5	0	0	200	0
			cis-1,3-dichloropropene	µg/L	0.5	0	0	200	0
			trans-1,3-dichloropropene	µg/L	0.5	0	0	200	0
			1,2-dibromoethane (EDB)	µg/L	0.5	0	0	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	µg/L	5	0	0	200	0
		Aliphatics	Chloromethane	µg/L	5	0	0	200	0
			Vinyl chloride (Chloroethene)	µg/L	0.3	0	0	200	0
			Bromomethane	µg/L	10	0.096083775	0.100563579	200	0
			Chloroethane	µg/L	5	0	0	200	0
			Trichlorofluoromethane	µg/L	1	0.002719894	0.003290477	200	0
			Iodomethane	µg/L	5	0.047789155	0.046142401	200	0
			1,1-dichloroethene	µg/L	0.5	0.005079384	0.022829673	200	0
			Dichloromethane (Methylene chloride)	µg/L	5	0.108473429	0.118712952	200	0
			Allyl chloride	µg/L	2	0	0	200	0
			trans-1,2-dichloroethene	µg/L	0.5	0	0	200	0
			1,1-dichloroethane	µg/L	0.5	0	0	200	0
			cis-1,2-dichloroethene	µg/L	0.5	0.000667376	0	200	0
			Bromochloromethane	µg/L	0.5	0	0.002075402	200	0
			1,2-dichloroethane	µg/L	0.5	0.016768717	0.029193959	200	0
			1,1,1-trichloroethane	µg/L	0.5	0	0	200	0
			1,1-dichloropropene	µg/L	0.5	0	0	200	0
			Carbon tetrachloride	µg/L	0.5	0	0	200	0
			Dibromomethane	µg/L	0.5	0	0.000723781	200	0
			Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	0.006150465	0.017677576	200	0
			1,1,2-trichloroethane	µg/L	0.5	0	0	200	0
			1,3-dichloropropane	µg/L	0.5	0	0	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	0.001671311	0.0017809	200	0
			1,1,1,2-tetrachloroethane	µg/L	0.5	0	0	200	0
			cis-1,4-dichloro-2-butene	µg/L	1	0.005585451	0	200	0
			1,1,2,2-tetrachloroethane	µg/L	0.5	0	0	200	0
			1,2,3-trichloropropane	µg/L	0.5	0	0	200	0
			trans-1,4-dichloro-2-butene	µg/L	1	0	0	200	0
			1,2-dibromo-3-chloropropane	µg/L	0.5	0	0	200	0
			Hexachlorobutadiene	µg/L	0.5	0.002612018	0.00160172	200	0
		Halogenated	Chlorobenzene	µg/L	0.5	0.013338243	0.040661103	200	0
		Aromatics	Bromobenzene	µg/L	0.5	0	0	200	0
			2-chlorotoluene	µg/L	0.5	0	0	200	0
			4-chlorotoluene	µg/L	0.5	0	0	200	0
			1,3-dichlorobenzene	µg/L	0.5	0	0	200	0
			1,4-dichlorobenzene	µg/L	0.3	0	0.004848566	200	0
			1,2-dichlorobenzene	µg/L	0.5	0.01211683	0.014314848	200	0
			1,2,4-trichlorobenzene	µg/L	0.5	0	0	200	0
			1,2,3-trichlorobenzene	µg/L	0.5	0	0	200	0
		Monocyclic	Benzene	µg/L	0.5	0	0.033024211	200	0
		Aromatic	Toluene	µg/L	0.5	0.039803471	0.052438723	200	0
			Ethylbenzene	µg/L	0.5	0.004644757	0.037616669	200	0
			m/p-xylene	µg/L	1	0.015830712	0.103440482	200	0
			o-xylene	µg/L	0.5	0.005042982	0.051782432	200	0
			Styrene (Vinyl benzene)	µg/L	0.5	0	0	200	0
			Isopropylbenzene (Cumene)	µg/L	0.5	0.005195002	0.005164021	200	0
			n-propylbenzene	µg/L	0.5	0.001271956	0.00075685	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOCs in Water (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212970.009	LB212701.024	Monocyclic	1,3,5-trimethylbenzene	µg/L	0.5	0.001776536	0.001722287	200	0
		Aromatic	tert-butylbenzene	µg/L	0.5	0	0	200	0
			1,2,4-trimethylbenzene	µg/L	0.5	0.004385043	0.004631419	200	0
			sec-butylbenzene	µg/L	0.5	0	0	200	0
			p-isopropyltoluene	µg/L	0.5	0	0.001922576	200	0
			n-butylbenzene	µg/L	0.5	0	0	200	0
		Nitrogenous	Acrylonitrile	µg/L	0.5	0	0	200	0
		Oxygenated	Acetone (2-propanone)	µg/L	10	1.017779901	1.46075802	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	µg/L	2	0.018068342	0.020903784	200	0
			Vinyl acetate	µg/L	10	0	0	200	0
			MEK (2-butanone)	µg/L	10	0	0	200	0
			MIBK (4-methyl-2-pentanone)	µg/L	5	0	0	200	0
			2-hexanone (MBK)	µg/L	5	0	0	200	0
		Polycyclic	Naphthalene	µg/L	0.5	0.012488076	0.140269237	200	0
		Sulphonated	Carbon disulfide	µg/L	2	0.005593113	0.009324996	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	9.703735088	9.416701966	30	3
			d8-toluene (Surrogate)	µg/L	-	9.644759814	9.425935108	30	2
			Bromofluorobenzene (Surrogate)	µg/L	-	10.48087595	10.32772421	30	1
		Trihalomethan	Chloroform (THM)	µg/L	0.5	0.058900973	0.067217613	200	0
		es	Bromodichloromethane (THM)	µg/L	0.5	0	0	200	0
			Dibromochloromethane (THM)	µg/L	0.5	0.001321546	0	200	0
			Bromoform (THM)	µg/L	0.5	0	0	200	0
SE212973.003	LB212701.025	Monocyclic	Benzene	µg/L	0.5	<0.5	0	200	0
		Aromatic	Toluene	µg/L	0.5	<0.5	0.021758313	200	0
			Ethylbenzene	µg/L	0.5	<0.5	0.016405749	200	0
			m/p-xylene	µg/L	1	<1	0.048094487	200	0
			o-xylene	µg/L	0.5	<0.5	0.020662308	200	0
		Polycyclic	Naphthalene	µg/L	0.5	<0.5	0.075777755	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	0.0	9.77935202	30	0
			d8-toluene (Surrogate)	µg/L	-	0.0	9.719570837	30	0
			Bromofluorobenzene (Surrogate)	µg/L	-	0.0	10.49788129	30	2

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE212970.009	LB212701.024		TRH C6-C10	µg/L	50	0.945392944	4.282758966	200	0
			TRH C6-C9	µg/L	40	0	0.419823525	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	9.703735088	9.416701966	30	3
			d8-toluene (Surrogate)	µg/L	-	9.644759814	9.425935108	30	2
			Bromofluorobenzene (Surrogate)	µg/L	-	10.48087595	10.32772421	30	1
		VPH F Bands	Benzene (F0)	µg/L	0.5	0	0.033024211	200	0
			TRH C6-C10 minus BTEX (F1)	µg/L	50	0.945392944	4.282758966	200	0
SE212973.003	LB212701.025		TRH C6-C10	µg/L	50	<50	1.486997958	200	0
			TRH C6-C9	µg/L	40	<40	0	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	0.0	9.77935202	30	0
			d8-toluene (Surrogate)	µg/L	-	0.0	9.719570837	30	0
			Bromofluorobenzene (Surrogate)	µg/L	-	0.0	10.49788129	30	2
		VPH F Bands	Benzene (F0)	µg/L	0.5	<0.5	0	200	0
			TRH C6-C10 minus BTEX (F1)	µg/L	50	<50	1.486997958	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Ammonia Nitrogen by Discrete Analyser (Aquakem)

Method: ME-(AU)-[ENV]AN291

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212444.002	Ammonia Nitrogen, NH_3 as N	mg/L	0.005	2.5	2.5	80 - 120	99

Anions by Ion Chromatography in Water

Method: ME-(AU)-[ENV]AN245

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212741.002	Nitrate Nitrogen, NO3-N	mg/L	0.005	1.9	2	80 - 120	96
	Sulfate, SO4	mg/L	1	19	20	80 - 120	96

Filterable Reactive Phosphorus (FRP)

Method: ME-(AU)-[ENV]AN278

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212444.002	Filterable Reactive Phosphorus as P	mg/L	0.005	0.11	0.1	80 - 120	111

Nitrite in Water

Method: ME-(AU)-[ENV]AN277

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212444.002	Nitrite Nitrogen, NO2 as N	mg/L	0.005	0.099	0.1	80 - 120	99

Speciated Phenols in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212661.002		Phenol	µg/L	0.5	44	40	60 - 140	111
		2,4-dichlorophenol	µg/L	0.5	51	40	60 - 140	128
		2,4,6-trichlorophenol	µg/L	0.5	44	40	60 - 140	111
		Pentachlorophenol	µg/L	0.5	28	40	60 - 140	71
	Surrogates	2,4,6-Tribromophenol (Surrogate)	µg/L	-	4.2	5	40 - 130	84
		d5-phenol (Surrogate)	µg/L	-	2.4	2	40 - 130	118

Sulfide by Titration in Water

Method: ME-(AU)-[ENV]AN149

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212687.002	Sulfide	mg/L	0.5	95	100	70 - 130	95

Total Phosphorus by Kjeldahl Digestion DA in Water

Method: ME-(AU)-[ENV]AN279/AN293(Sydney only)

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212684.002	Total Phosphorus (Kjeldahl Digestion) as P	mg/L	0.02	0.91	1	80 - 120	91

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212422.002	Arsenic, As	µg/L	1	20	20	80 - 120	99
	Cadmium, Cd	µg/L	0.1	22	20	80 - 120	110
	Chromium, Cr	µg/L	1	22	20	80 - 120	112
	Copper, Cu	µg/L	1	23	20	80 - 120	114
	Lead, Pb	µg/L	1	20	20	80 - 120	100
	Nickel, Ni	µg/L	1	22	20	80 - 120	110
	Zinc, Zn	µg/L	5	23	20	80 - 120	113

Trace Metals (Total) in Water by ICPMS

Method: ME-(AU)-[ENV]AN022/AN318

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212420.002	Total Arsenic	µg/L	1	18	20	80 - 120	91
	Total Beryllium	µg/L	1	20	20	80 - 120	98
	Total Boron	µg/L	5	20	20	80 - 120	102
	Total Cadmium	µg/L	0.1	21	20	80 - 120	104
	Total Chromium	µg/L	1	22	20	80 - 120	111
	Total Cobalt	µg/L	1	22	20	80 - 120	110
	Total Copper	µg/L	1	22	20	80 - 120	112
	Total Lead	µg/L	1	20	20	80 - 120	98
	Total Manganese	µg/L	1	22	20	80 - 120	112
	Total Nickel	µg/L	1	22	20	80 - 120	109

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Trace Metals (Total) in Water by ICPMS (continued)

Method: ME-(AU)-[ENV]AN022/AN318

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212420.002		Total Zinc	µg/L	5	21	20	80 - 120	104

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212661.002		TRH C10-C14	µg/L	50	1000	1200	60 - 140	87
		TRH C15-C28	µg/L	200	1200	1200	60 - 140	97
		TRH C29-C36	µg/L	200	950	1200	60 - 140	79
	TRH F Bands	TRH >C10-C16	µg/L	60	1100	1200	60 - 140	91
		TRH >C16-C34 (F3)	µg/L	500	1100	1200	60 - 140	94
		TRH >C34-C40 (F4)	µg/L	500	<500	600	60 - 140	74

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212701.002	Halogenated	1,1-dichloroethene	µg/L	0.5	55	45.45	60 - 140	121
	Aliphatics	1,2-dichloroethane	µg/L	0.5	56	45.45	60 - 140	123
		Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	55	45.45	60 - 140	121
	Halogenated	Chlorobenzene	µg/L	0.5	52	45.45	60 - 140	115
	Monocyclic	Benzene	µg/L	0.5	48	45.45	60 - 140	105
	Aromatic	Toluene	µg/L	0.5	46	45.45	60 - 140	102
		Ethylbenzene	µg/L	0.5	49	45.45	60 - 140	107
		m/p-xylene	µg/L	1	96	90.9	60 - 140	105
		o-xylene	µg/L	0.5	49	45.45	60 - 140	107
	Trihalomethan	Chloroform (THM)	µg/L	0.5	59	45.45	60 - 140	131

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212701.002		TRH C6-C10	µg/L	50	780	946.63	60 - 140	82
		TRH C6-C9	µg/L	40	660	818.71	60 - 140	81
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	µg/L	50	490	639.67	60 - 140	77

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Ammonia Nitrogen by Discrete Analyser (Aquakem)

Method: ME-(AU)-[ENV]AN291

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212962.001	LB212444.022	Ammonia Nitrogen, NH_3 as N	mg/L	0.005	2.5	0.01	2.5	98

Anions by Ion Chromatography in Water

Method: ME-(AU)-[ENV]AN245

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE213055.001	LB212741.025	Nitrate Nitrogen, NO3-N	mg/L	0.005	1.9	<0.005	2	97

Filterable Reactive Phosphorus (FRP)

Method: ME-(AU)-[ENV]AN278

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212941.001	LB212444.022	Filterable Reactive Phosphorus as P	mg/L	0.005	0.12	0.009	0.1	114

Mercury (total) in Water

Method: ME-(AU)-[ENV]AN311(Perth) /AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212916.005	LB212390.004	Total Mercury	mg/L	0.0001	0.0019	<0.0001	-	-

Nitrite in Water

Method: ME-(AU)-[ENV]AN277

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212941.001	LB212444.022	Nitrite Nitrogen, NO2 as N	mg/L	0.005	0.093	<0.005	0.1	92

TKN Kjeldahl Digestion by Discrete Analyser

Method: ME-(AU)-[ENV]AN292

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE213018.001	LB212684.028	Total Kjeldahl Nitrogen	mg/L	0.05	3.5	0.91	2.5	102

Total Phosphorus by Kjeldahl Digestion DA in Water

Method: ME-(AU)-[ENV]AN279/AN293(Sydney only)

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE213018.001	LB212684.028	Total Phosphorus (Kjeldahl Digestion) as P	mg/L	0.02	1.0	0.09	1	91

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212970.001	LB212422.004	Arsenic, As	µg/L	1	21	0.07	20	105
		Cadmium, Cd	µg/L	0.1	22	0.107	20	110
		Chromium, Cr	µg/L	1	23	0.443	20	111
		Copper, Cu	µg/L	1	140	120.291	20	112
		Lead, Pb	µg/L	1	24	5.274	20	93
		Nickel, Ni	µg/L	1	33	11.104	20	107
		Zinc, Zn	µg/L	5	150	128.063	20	126

Trace Metals (Total) in Water by ICPMS

Method: ME-(AU)-[ENV]AN022/AN318

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE212901.001	LB212420.004	Total Chromium	µg/L	1	22	<1	-	-
		Total Copper	µg/L	1	20	<1	20	98
		Total Lead	µg/L	1	20	<1	20	99
		Total Zinc	µg/L	5	20	<5	20	92

VOCs in Water

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE212970.005	LB212701.026	Fumigants	2,2-dichloropropane	µg/L	0.5	0	-	-
			1,2-dichloropropane	µg/L	0.5	0	-	-
			cis-1,3-dichloropropene	µg/L	0.5	0	-	-
			trans-1,3-dichloropropene	µg/L	0.5	0	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOCs in Water (continued) — Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE212970.005	LB212701.026	Fumigants	1,2-dibromoethane (EDB)	µg/L	0.5	0	-	-
		Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	µg/L	5	0	-	-
			Chloromethane	µg/L	5	0	-	-
			Vinyl chloride (Chloroethene)	µg/L	0.3	0	-	-
			Bromomethane	µg/L	10	0.08861744	-	-
			Chloroethane	µg/L	5	0	-	-
			Trichlorofluoromethane	µg/L	1	0.001317945	-	-
			Iodomethane	µg/L	5	0.051898025	-	-
			1,1-dichloroethene	µg/L	0.5	0.00327266	45.45	126
			Dichloromethane (Methylene chloride)	µg/L	5	0.104371379	-	-
			Allyl chloride	µg/L	2	0	-	-
			trans-1,2-dichloroethene	µg/L	0.5	0	-	-
			1,1-dichloroethane	µg/L	0.5	0	-	-
			cis-1,2-dichloroethene	µg/L	0.5	0	-	-
			Bromochloromethane	µg/L	0.5	0.000681939	-	-
			1,2-dichloroethane	µg/L	0.5	0.018629097	45.45	129
			1,1,1-trichloroethane	µg/L	0.5	0	-	-
			1,1-dichloropropene	µg/L	0.5	0	-	-
			Carbon tetrachloride	µg/L	0.5	0	-	-
			Dibromomethane	µg/L	0.5	0	-	-
			Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	0.009440622	45.45	127
			1,1,2-trichloroethane	µg/L	0.5	0	-	-
			1,3-dichloropropane	µg/L	0.5	0	-	-
			Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	0.003080554	-	-
			1,1,1,2-tetrachloroethane	µg/L	0.5	0	-	-
			cis-1,4-dichloro-2-butene	µg/L	1	0	-	-
			1,1,2,2-tetrachloroethane	µg/L	0.5	0	-	-
			1,2,3-trichloropropane	µg/L	0.5	0	-	-
			trans-1,4-dichloro-2-butene	µg/L	1	0	-	-
			1,2-dibromo-3-chloropropane	µg/L	0.5	0	-	-
			Hexachlorobutadiene	µg/L	0.5	0.002447423	-	-
		Halogenated Aromatics	Chlorobenzene	µg/L	0.5	0.012479663	45.45	119
			Bromobenzene	µg/L	0.5	0	-	-
			2-chlorotoluene	µg/L	0.5	0	-	-
			4-chlorotoluene	µg/L	0.5	0	-	-
			1,3-dichlorobenzene	µg/L	0.5	0	-	-
			1,4-dichlorobenzene	µg/L	0.3	0	-	-
			1,2-dichlorobenzene	µg/L	0.5	0.012475617	-	-
			1,2,4-trichlorobenzene	µg/L	0.5	0	-	-
			1,2,3-trichlorobenzene	µg/L	0.5	0	-	-
		Monocyclic Aromatic	Benzene	µg/L	0.5	0	45.45	118
			Toluene	µg/L	0.5	0.020284249	45.45	117
			Ethylbenzene	µg/L	0.5	0.004998554	45.45	115
			m/p-xylene	µg/L	1	0.01596832	90.9	116
			o-xylene	µg/L	0.5	0.005802486	45.45	118
			Styrene (Vinyl benzene)	µg/L	0.5	0	-	-
			Isopropylbenzene (Cumene)	µg/L	0.5	0.005045604	-	-
			n-propylbenzene	µg/L	0.5	0	-	-
			1,3,5-trimethylbenzene	µg/L	0.5	0	-	-
			tert-butylbenzene	µg/L	0.5	0.000549487	-	-
			1,2,4-trimethylbenzene	µg/L	0.5	0.003308538	-	-
			sec-butylbenzene	µg/L	0.5	0	-	-
			p-isopropyltoluene	µg/L	0.5	0	-	-
			n-butylbenzene	µg/L	0.5	0.000963968	-	-
		Nitrogenous	Acrylonitrile	µg/L	0.5	0	-	-
		Oxygenated Compounds	Acetone (2-propanone)	µg/L	10	0.941369014	-	-
			MtBE (Methyl-tert-butyl ether)	µg/L	2	0.017155068	-	-
			Vinyl acetate	µg/L	10	0	-	-
			MEK (2-butanone)	µg/L	10	0	-	-
			MIBK (4-methyl-2-pentanone)	µg/L	5	0	-	-
			2-hexanone (MBK)	µg/L	5	0	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOCs in Water (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE212970.005	LB212701.026	Polycyclic	Naphthalene	µg/L	0.5	0.012484174	-	-
		Sulphonated	Carbon disulfide	µg/L	2	0.010360045	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/L	-	9.697480488	-	104
			d8-toluene (Surrogate)	mg/L	-	9.68109438	-	104
			Bromofluorobenzene (Surrogate)	mg/L	-	10.30654214	-	101
		Trihalometha	Chloroform (THM)	µg/L	0.5	0.053681301	45.45	137
		nes	Bromodichloromethane (THM)	µg/L	0.5	0.00216308	-	-
			Dibromochloromethane (THM)	µg/L	0.5	0	-	-
			Bromoform (THM)	µg/L	0.5	0	-	-

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE212970.005	LB212701.026		TRH C6-C10	µg/L	50	0.224592895	946.63	70
			TRH C6-C9	µg/L	40	0	818.71	79
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/L	-	9.697480488	-	104
			d8-toluene (Surrogate)	mg/L	-	9.68109438	-	104
			Bromofluorobenzene (Surrogate)	mg/L	-	10.30654214	-	101
		VPH F	Benzene (F0)	µg/L	0.5	0	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	µg/L	50	0.224592895	639.67	54 ④

MATRIX SPIKE DUPLICATES

SE212973 R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
***	Indicates that both * and ** apply.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.
①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one): ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000 ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227 ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305 ✓ SYDNEY: 202 Submarine School, Sub Base Platypus, North Sydney, 2060 ☐ MELBOURNE: Suite 2 2 Domville Avenue Hawthorn, VIC 3122 ☐ CANBERRA: GPO Box 410, Canberra, ACT 2601 ☐ MACKAY: 23 River Street, Mackay, QLD 4740 ☐ PERTH: 503 Murray Street, Perth, WA 6001 ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810 ☐ DARWIN: 21 Parap Rd, Darwin, NT 0821

CLIENT: Defence Housing Australia

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGER: [redacted]

PM CONTACT No: [redacted]

LABORATORY: SGS

LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015

SAMPLER: [redacted]

SAMPLER CONTACT No: [redacted]

Email Reports and Invoices to: LQRSYD@slrconsulting.com [redacted]

Turnaround Time (TAT): ✓ Standard TAT ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number: 1 of 1

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc.)	Containers and Preservatives	Suite A	Suite B	Suite C	Suite G	VOCs	SVOCs	TRH C6-10	PAHs	TRH/BTEXN	OCP/OPP	PFAS	Metals 8	Additional Information (Comment on any gross contamination or specific requirements)
1	GW08	30-10-2020	Water			x		x						☐			
2	GW10	30-10-2020	Water			x		x						x			
3	GW20	30-10-2020	Water		x										x		
4	GW21	30-10-2020	Water		x										x		
5	QC527TS	30-10-2020	Water								x				x		
6	QC527_TB	30-10-2020	Water								x				x		
7	QC318	30-10-2020	Water						x	x		x	x		x	x	

I attest that the proper field sampling procedures were used during the collection of these samples

Relinquished By Sampler	[redacted]	Date / Time 30/10/2020 @ 1400	Received by	Sign [redacted]	Date / Time 30/10/20	Temperature Received:
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time 2:10 pm	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

SGS EHS Sydney COC

SE213014



source:SE_Addressed.pdf page:1 SGS Ref:SE213014_COC

SAMPLE RECEIPT ADVICE

SE213014

CLIENT DETAILS

Contact	LQRSYD
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	02 9427 8100
Facsimile	02 9427 8200
Email	lqrsyd@slrconsulting.com
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	7

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Fri 30/10/2020
Report Due	Fri 6/11/2020
SGS Reference	**SE213014**

SUBMISSION DETAILS

This is to confirm that 7 samples were received on Friday 30/10/2020. Results are expected to be ready by COB Friday 6/ 11/2020. Please quote SGS reference SE213014 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	7 Water
Date documentation received	30/10/2020	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	13°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

PFAS subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420. Report No: ME317192

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SAMPLE RECEIPT ADVICE

SE213014

CLIENT DETAILS

Client SLR CONSULTING AUSTRALIA PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Mercury (dissolved) in Water	Per- and Polyfluoroalkyl Substances (PFAS) in	Speciated Phenols in Water	Trace Metals (Dissolved) in Water by ICPMS	TRH (Total Recoverable Hydrocarbons) in Water	VOCs in Water	Volatile Petroleum Hydrocarbons in Water
001	GW08	1	55	-	7	9	78	7
002	GW10	1	55	-	7	9	78	7
003	GW20	1	55	18	7	9	78	7
004	GW21	1	55	18	7	9	78	7
005	QCC527TS	-	-	-	-	-	11	-
006	QC527_TB	-	-	-	-	-	-	7
007	QC318	-	55	-	-	9	78	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE213014

CLIENT DETAILS

Client SLR CONSULTING AUSTRALIA PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Mercury (total) in Water	Trace Metals (Total) in Water by ICPMS
007	QC318	1	11

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	LQRSYD
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	02 9427 8100
Facsimile	02 9427 8200
Email	lqrsyd@slrconsulting.com
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	7

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE213014 R0**
Date Received	30/10/2020
Date Reported	11/11/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

PFAS subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420. Report No: ME317269
MA-1523 Majority of surrogates are within acceptance criteria.

SIGNATORIES

[redacted]

Chemist | Metals/Inorganics Team Leader | Senior Chemist

VOCs in Water [AN433] Tested: 5/11/2020

PARAMETER	UOM	LOR	GW08 WATER - 30/10/2020 SE213014.001	GW10 WATER - 30/10/2020 SE213014.002	GW20 WATER - 30/10/2020 SE213014.003	GW21 WATER - 30/10/2020 SE213014.004	QCC527TS WATER - 30/10/2020 SE213014.005
Benzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	[104%]
Toluene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	[104%]
Ethylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	[101%]
m/p-xylene	µg/L	1	<1	<1	<1	<1	[101%]
o-xylene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	[102%]
Naphthalene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	-
Total Xylenes	µg/L	1.5	<1.5	<1.5	<1.5	<1.5	-
Total BTEX	µg/L	3	<3	<3	<3	<3	-
Dichlorodifluoromethane (CFC-12)	µg/L	5	<5	<5	<5	<5	-
Chloromethane	µg/L	5	<5	<5	<5	<5	-
Vinyl chloride (Chloroethene)	µg/L	0.3	<0.3	<0.3	<0.3	<0.3	-
Bromomethane	µg/L	10	<10	<10	<10	<10	-
Chloroethane	µg/L	5	<5	<5	<5	<5	-
Trichlorofluoromethane	µg/L	1	<1	<1	<1	<1	-
Acetone (2-propanone)	µg/L	10	<10	<10	<10	<10	-
Iodomethane	µg/L	5	<5	<5	<5	<5	-
1,1-dichloroethene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	-
Acrylonitrile	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	-
Dichloromethane (Methylene chloride)	µg/L	5	<5	<5	<5	<5	-
Allyl chloride	µg/L	2	<2	<2	<2	<2	-
Carbon disulfide	µg/L	2	<2	<2	<2	<2	-
trans-1,2-dichloroethene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	-
MtBE (Methyl-tert-butyl ether)	µg/L	2	<2	<2	<2	<2	-
1,1-dichloroethane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	-
Vinyl acetate	µg/L	10	<10	<10	<10	<10	-
MEK (2-butanone)	µg/L	10	<10	<10	<10	<10	-
cis-1,2-dichloroethene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	-
Bromochloromethane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	-
Chloroform (THM)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	-
2,2-dichloropropane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	-
1,2-dichloroethane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	-
1,1,1-trichloroethane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	-
1,1-dichloropropene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	-
Carbon tetrachloride	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	-
Dibromomethane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	-
1,2-dichloropropane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	-
Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	-
2-nitropropane	µg/L	100	<100	<100	<100	<100	-
Bromodichloromethane (THM)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	-
MIBK (4-methyl-2-pentanone)	µg/L	5	<5	<5	<5	<5	-
cis-1,3-dichloropropene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	-
trans-1,3-dichloropropene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	-
1,1,2-trichloroethane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	-
1,3-dichloropropane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	-
Dibromochloromethane (THM)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	-
2-hexanone (MBK)	µg/L	5	<5	<5	<5	<5	-
1,2-dibromoethane (EDB)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	-
Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	-
1,1,1,2-tetrachloroethane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	-
Chlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	-
Bromoform (THM)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	-
cis-1,4-dichloro-2-butene	µg/L	1	<1	<1	<1	<1	-
Styrene (Vinyl benzene)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	-
1,1,2,2-tetrachloroethane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	-
1,2,3-trichloropropane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	-
trans-1,4-dichloro-2-butene	µg/L	1	<1	<1	<1	<1	-

VOCs in Water [AN433] Tested: 5/11/2020 (continued)

PARAMETER	UOM	LOR	GW08 WATER - 30/10/2020 SE213014.001	GW10 WATER - 30/10/2020 SE213014.002	GW20 WATER - 30/10/2020 SE213014.003	GW21 WATER - 30/10/2020 SE213014.004	QCC527TS WATER - 30/10/2020 SE213014.005
Isopropylbenzene (Cumene)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	-
Bromobenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	-
n-propylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	-
2-chlorotoluene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	-
4-chlorotoluene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	-
1,3,5-trimethylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	-
tert-butylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	-
1,2,4-trimethylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	-
sec-butylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	-
1,3-dichlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	-
1,4-dichlorobenzene	µg/L	0.3	<0.3	<0.3	<0.3	<0.3	-
p-isopropyltoluene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	-
1,2-dichlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	-
n-butylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	-
1,2-dibromo-3-chloropropane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	-
1,2,4-trichlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	-
Hexachlorobutadiene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	-
1,2,3-trichlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	-
Total VOC	µg/L	10	<10	<10	<10	<10	-

VOCs in Water [AN433] Tested: 5/11/2020 (continued)

PARAMETER	UOM	LOR	QC527_TB WATER - 30/10/2020 SE213014.006	QC318 WATER - 30/10/2020 SE213014.007
Benzene	µg/L	0.5	<0.5	<0.5
Toluene	µg/L	0.5	<0.5	<0.5
Ethylbenzene	µg/L	0.5	<0.5	<0.5
m/p-xylene	µg/L	1	<1	<1
o-xylene	µg/L	0.5	<0.5	<0.5
Naphthalene	µg/L	0.5	<0.5	<0.5
Total Xylenes	µg/L	1.5	<1.5	<1.5
Total BTEX	µg/L	3	<3	<3
Dichlorodifluoromethane (CFC-12)	µg/L	5	-	<5
Chloromethane	µg/L	5	-	<5
Vinyl chloride (Chloroethene)	µg/L	0.3	-	<0.3
Bromomethane	µg/L	10	-	<10
Chloroethane	µg/L	5	-	<5
Trichlorofluoromethane	µg/L	1	-	<1
Acetone (2-propanone)	µg/L	10	-	<10
Iodomethane	µg/L	5	-	<5
1,1-dichloroethene	µg/L	0.5	-	<0.5
Acrylonitrile	µg/L	0.5	-	<0.5
Dichloromethane (Methylene chloride)	µg/L	5	-	<5
Allyl chloride	µg/L	2	-	<2
Carbon disulfide	µg/L	2	-	<2
trans-1,2-dichloroethene	µg/L	0.5	-	<0.5
MtBE (Methyl-tert-butyl ether)	µg/L	2	-	<2
1,1-dichloroethane	µg/L	0.5	-	<0.5
Vinyl acetate	µg/L	10	-	<10
MEK (2-butanone)	µg/L	10	-	<10
cis-1,2-dichloroethene	µg/L	0.5	-	<0.5
Bromochloromethane	µg/L	0.5	-	<0.5
Chloroform (THM)	µg/L	0.5	-	**11**
2,2-dichloropropane	µg/L	0.5	-	<0.5
1,2-dichloroethane	µg/L	0.5	-	<0.5
1,1,1-trichloroethane	µg/L	0.5	-	<0.5
1,1-dichloropropene	µg/L	0.5	-	<0.5
Carbon tetrachloride	µg/L	0.5	-	<0.5
Dibromomethane	µg/L	0.5	-	<0.5
1,2-dichloropropane	µg/L	0.5	-	<0.5
Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	-	<0.5
2-nitropropane	µg/L	100	-	<100
Bromodichloromethane (THM)	µg/L	0.5	-	<0.5
MIBK (4-methyl-2-pentanone)	µg/L	5	-	<5
cis-1,3-dichloropropene	µg/L	0.5	-	<0.5
trans-1,3-dichloropropene	µg/L	0.5	-	<0.5
1,1,2-trichloroethane	µg/L	0.5	-	<0.5
1,3-dichloropropane	µg/L	0.5	-	<0.5
Dibromochloromethane (THM)	µg/L	0.5	-	<0.5
2-hexanone (MBK)	µg/L	5	-	<5
1,2-dibromoethane (EDB)	µg/L	0.5	-	<0.5
Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	-	<0.5
1,1,1,2-tetrachloroethane	µg/L	0.5	-	<0.5
Chlorobenzene	µg/L	0.5	-	<0.5
Bromoform (THM)	µg/L	0.5	-	<0.5
cis-1,4-dichloro-2-butene	µg/L	1	-	<1
Styrene (Vinyl benzene)	µg/L	0.5	-	<0.5
1,1,2,2-tetrachloroethane	µg/L	0.5	-	<0.5
1,2,3-trichloropropane	µg/L	0.5	-	<0.5
trans-1,4-dichloro-2-butene	µg/L	1	-	<1

VOCs in Water [AN433] Tested: 5/11/2020 (continued)

PARAMETER	UOM	LOR	QC527_TB WATER - 30/10/2020 SE213014.006	QC318 WATER - 30/10/2020 SE213014.007
Isopropylbenzene (Cumene)	µg/L	0.5	-	<0.5
Bromobenzene	µg/L	0.5	-	<0.5
n-propylbenzene	µg/L	0.5	-	<0.5
2-chlorotoluene	µg/L	0.5	-	<0.5
4-chlorotoluene	µg/L	0.5	-	<0.5
1,3,5-trimethylbenzene	µg/L	0.5	-	<0.5
tert-butylbenzene	µg/L	0.5	-	<0.5
1,2,4-trimethylbenzene	µg/L	0.5	-	<0.5
sec-butylbenzene	µg/L	0.5	-	<0.5
1,3-dichlorobenzene	µg/L	0.5	-	<0.5
1,4-dichlorobenzene	µg/L	0.3	-	<0.3
p-isopropyltoluene	µg/L	0.5	-	<0.5
1,2-dichlorobenzene	µg/L	0.5	-	<0.5
n-butylbenzene	µg/L	0.5	-	<0.5
1,2-dibromo-3-chloropropane	µg/L	0.5	-	<0.5
1,2,4-trichlorobenzene	µg/L	0.5	-	<0.5
Hexachlorobutadiene	µg/L	0.5	-	<0.5
1,2,3-trichlorobenzene	µg/L	0.5	-	<0.5
Total VOC	µg/L	10	-	11

Volatile Petroleum Hydrocarbons in Water [AN433] Tested: 5/11/2020

PARAMETER	UOM	LOR	GW08 WATER - 30/10/2020 SE213014.001	GW10 WATER - 30/10/2020 SE213014.002	GW20 WATER - 30/10/2020 SE213014.003	GW21 WATER - 30/10/2020 SE213014.004	QC527_TB WATER - 30/10/2020 SE213014.006
Benzene (F0)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TRH C6-C9	µg/L	40	<40	<40	<40	<40	<40
TRH C6-C10	µg/L	50	<50	<50	<50	<50	<50
TRH C6-C10 minus BTEX (F1)	µg/L	50	<50	<50	<50	<50	<50

PARAMETER	UOM	LOR	QC318 WATER - 30/10/2020 SE213014.007
Benzene (F0)	µg/L	0.5	<0.5
TRH C6-C9	µg/L	40	<40
TRH C6-C10	µg/L	50	<50
TRH C6-C10 minus BTEX (F1)	µg/L	50	<50

TRH (Total Recoverable Hydrocarbons) in Water [AN403] Tested: 4/11/2020

PARAMETER	UOM	LOR	GW08 WATER - 30/10/2020 SE213014.001	GW10 WATER - 30/10/2020 SE213014.002	GW20 WATER - 30/10/2020 SE213014.003	GW21 WATER - 30/10/2020 SE213014.004	QC318 WATER - 30/10/2020 SE213014.007
TRH C10-C14	µg/L	50	<50	<50	<50	<50	<50
TRH C15-C28	µg/L	200	<200	**640**	<200	<200	<200
TRH C29-C36	µg/L	200	<200	**850**	<200	<200	<200
TRH C37-C40	µg/L	200	<200	<200	<200	<200	<200
TRH >C10-C16	µg/L	60	<60	<60	<60	<60	<60
TRH >C10-C16 - Naphthalene (F2)	µg/L	60	<60	<60	<60	<60	<60
TRH >C16-C34 (F3)	µg/L	500	<500	**1300**	<500	<500	<500
TRH >C34-C40 (F4)	µg/L	500	<500	<500	<500	<500	<500
TRH C10-C40	µg/L	320	<320	**1500**	<320	<320	<320

Speciated Phenols in Water [AN420] Tested: 4/11/2020

PARAMETER	UOM	LOR	GW20 WATER - 30/10/2020 SE213014.003	GW21 WATER - 30/10/2020 SE213014.004
Phenol	µg/L	0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	µg/L	0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	µg/L	1	<1	<1
Total Cresol	µg/L	1.5	<1.5	<1.5
2-chlorophenol	µg/L	0.5	<0.5	<0.5
2,4-dimethylphenol	µg/L	0.5	<0.5	<0.5
2,6-dichlorophenol	µg/L	0.5	<0.5	<0.5
2,4-dichlorophenol	µg/L	0.5	<0.5	<0.5
2,4,6-trichlorophenol	µg/L	0.5	<0.5	<0.5
2-nitrophenol	µg/L	0.5	<0.5	<0.5
4-nitrophenol	µg/L	1	<1	<1
2,4,5-trichlorophenol	µg/L	0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	µg/L	1	<1	<1
Pentachlorophenol	µg/L	0.5	<0.5	<0.5
2,4-dinitrophenol	µg/L	2	<2	<2
4-chloro-3-methylphenol	µg/L	2	<2	<2

Trace Metals (Dissolved) in Water by ICPMS [AN318] Tested: 3/11/2020

PARAMETER	UOM	LOR	GW08 WATER - 30/10/2020 SE213014.001	GW10 WATER - 30/10/2020 SE213014.002	GW20 WATER - 30/10/2020 SE213014.003	GW21 WATER - 30/10/2020 SE213014.004
Arsenic, As	µg/L	1	<1	<1	<1	<1
Cadmium, Cd	µg/L	0.1	<0.1	<0.1	<0.1	<0.1
Chromium, Cr	µg/L	1	<1	<1	1	<1
Copper, Cu	µg/L	1	16	11	27	14
Lead, Pb	µg/L	1	<1	<1	4	<1
Nickel, Ni	µg/L	1	1	<1	2	1
Zinc, Zn	µg/L	5	13	8	25	14

Mercury (dissolved) in Water [AN311(Perth)/AN312] Tested: 4/11/2020

PARAMETER	UOM	LOR	GW08 WATER - 30/10/2020 SE213014.001	GW10 WATER - 30/10/2020 SE213014.002	GW20 WATER - 30/10/2020 SE213014.003	GW21 WATER - 30/10/2020 SE213014.004
Mercury	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples [MA-1523] Tested: 4/11/2020

PARAMETER	UOM	LOR	GW08 WATER - 30/10/2020 SE213014.001	GW10 WATER - 30/10/2020 SE213014.002	GW20 WATER - 30/10/2020 SE213014.003	GW21 WATER - 30/10/2020 SE213014.004	QC318 WATER - 30/10/2020 SE213014.007
Perfluorobutanoic acid (PFBA)	µg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Perfluoropentanoic acid (PFPeA)	µg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Perfluorohexanoic acid (PFHxA)	µg/L	0.002	<0.002	<0.002	<0.002	**0.003**	<0.002
Perfluoroheptanoic acid (PFHpA)	µg/L	0.002	<0.002	<0.002	<0.002	**0.002**	<0.002
Perfluorooctanoic Acid (PFOA)	µg/L	0.002	**0.003**	**0.004**	**0.003**	**0.018**	<0.002
Perfluorononanoic acid (PFNA)	µg/L	0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Perfluorodecanoic acid (PFDA)	µg/L	0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Perfluoroundecanoic acid (PFUnA)	µg/L	0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Perfluorododecanoic acid (PFDoA)	µg/L	0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Perfluorohexadecanoic acid (PFHxDA)	µg/L	0.008	<0.008	<0.008	<0.008	<0.008	<0.008
Perfluorobutane sulfonate (PFBS)	µg/L	0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Perfluoropentane sulfonate (PFPeS)	µg/L	0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Perfluorohexane sulfonate (PFHxS)	µg/L	0.002	<0.002	**0.002**	**0.010**	**0.005**	<0.002
Perfluoroheptane sulfonate (PFHpS)	µg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Perfluorooctane sulfonate (PFOS)	µg/L	0.002	**0.004**	**0.002**	**0.063**	**0.022**	<0.002
Sum of PFHxS and PFOS	µg/L	0.002	**0.004**	**0.004**	**0.072**	**0.027**	<0.002
Perfluorononane sulfonate (PFNS)	µg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Perfluorodecane sulfonate (PFDS)	µg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Perfluorododecane sulfonate (PFDoS)	µg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	µg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	µg/L	0.002	**0.010**	<0.002	<0.002	<0.002	<0.002
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	µg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.008	<0.008	<0.008	<0.008	<0.008	<0.008
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2-(N-Methylperfluorooctane sulfonamido)-ethanol	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
N-Methylperfluorooctanesulfonamidoacetic acid	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
N-Ethylperfluorooctanesulfonamidoacetic Acid	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01

Trace Metals (Total) in Water by ICPMS [AN022/AN318] Tested: 4/11/2020

PARAMETER	UOM	LOR	QC318 WATER - 30/10/2020 SE213014.007
Total Arsenic	µg/L	1	<1
Total Cadmium	µg/L	0.1	<0.1
Total Chromium	µg/L	1	<1
Total Copper	µg/L	1	<1
Total Nickel	µg/L	1	<1
Total Lead	µg/L	1	<1
Total Zinc	µg/L	5	<5
Total Beryllium	µg/L	1	<1
Total Boron	µg/L	5	**16**
Total Cobalt	µg/L	1	<1
Total Manganese	µg/L	1	<1

Mercury (total) in Water [AN311(Perth) /AN312] Tested: 4/11/2020

PARAMETER	UOM	LOR	QC318 WATER - 30/10/2020 SE213014.007
Total Mercury	mg/L	0.0001	<0.0001

SVOC Compounds in Waters by GC-QQQ, Low Level [USEPA8270D LL] Tested: 11/11/2020

PARAMETER	UOM	LOR	GW08 WATER - 30/10/2020 SE213014.001	GW10 WATER - 30/10/2020 SE213014.002	GW20 WATER - 30/10/2020 SE213014.003	GW21 WATER - 30/10/2020 SE213014.004	QC318 WATER - 30/10/2020 SE213014.007
Acenaphthene	µg/L	0.01	-	-	<0.01	<0.01	<0.01
Acenaphthylene	µg/L	0.01	-	-	<0.01	<0.01	<0.01
Anthracene	µg/L	0.01	-	-	<0.01	<0.01	<0.01
Benzo(a)anthracene	µg/L	0.01	-	-	<0.01	<0.01	<0.01
Benzo (a) pyrene	µg/L	0.005	-	-	<0.005	<0.005	<0.005
Benzo (b) fluoranthene	µg/L	0.01	-	-	<0.01	<0.01	<0.01
Benzo (e) pyrene	µg/L	0.01	-	-	<0.01	<0.01	<0.01
Benzo (ghi) perylene	µg/L	0.01	-	-	<0.01	<0.01	<0.01
Benzo (k) fluoranthene	µg/L	0.01	-	-	<0.01	<0.01	<0.01
Benzo (b+j+k) fluoranthene	µg/L	0.02	-	-	<0.02	<0.02	<0.02
Chrysene	µg/L	0.01	-	-	<0.01	<0.01	<0.01
Dibenz (ah) anthracene	µg/L	0.01	-	-	<0.01	<0.01	<0.01
7,12-Dimethylbenz(a)anthracene	µg/L	0.01	-	-	<0.01	<0.01	<0.01
Fluoranthene	µg/L	0.01	-	-	<0.01	<0.01	<0.01
Fluorene	µg/L	0.01	-	-	<0.01	<0.01	<0.01
Indeno (1,2,3-cd) pyrene	µg/L	0.01	-	-	<0.01	<0.01	<0.01
Naphthalene	µg/L	0.1	-	-	<0.1	<0.1	<0.1
Phenanthrene	µg/L	0.01	-	-	<0.01	<0.01	<0.01
Pyrene	µg/L	0.01	-	-	<0.01	<0.01	<0.01
2-Methylnaphthalene	µg/L	0.1	-	-	<0.1	<0.1	<0.1
Total PAHs Vic EPA - assumes <LOR results = 0	µg/L	0.8	-	-	-	-	<0.8
Total PAHs Vic EPA - assumes <LOR results = 0.5LOR	µg/L	0.8	-	-	<0.8	<0.8	<0.8
4,4-DDD	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4,4-DDE	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4,4-DDT	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	µg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
alpha-BHC	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
alpha-Chlordane	µg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
beta-BHC	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlordane	µg/L	0.005	<0.005	<0.005	<0.005	<0.005	<0.005
delta-BHC	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	µg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Aldrin and Dieldrin	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan 1	µg/L	0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Endosulfan 2	µg/L	0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Endosulfan Sulphate	µg/L	0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Total Endosulfan	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Endrin	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Endrin ketone	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
gamma-BHC	µg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
gamma-Chlordane	µg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Heptachlor	µg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Heptachlor Epoxide	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobenzene	µg/L	0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Isodrin	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Mirex	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chlorpyrifos	µg/L	0.009	<0.009	<0.009	<0.009	<0.009	<0.009
Dimethoate	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Disulfoton	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Famphur	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methyl parathion	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Phorate	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Stirofos	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Sulfotepp	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1

SVOC Compounds in Waters by GC-QQQ, Low Level [USEPA8270D LL] Tested: 11/11/2020 (continued)

PARAMETER	UOM	LOR	GW08 WATER - 30/10/2020 SE213014.001	GW10 WATER - 30/10/2020 SE213014.002	GW20 WATER - 30/10/2020 SE213014.003	GW21 WATER - 30/10/2020 SE213014.004	QC318 WATER - 30/10/2020 SE213014.007
Thionazin	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-Chlorophenol	µg/L	0.1	-	-	-	-	<0.1
1-Methylnaphthalene	µg/L	0.1	-	-	-	-	<0.1
2,4-Dimethylphenol	µg/L	0.01	-	-	-	-	<0.01
2,4-Dinitrophenol	µg/L	0.01	-	-	-	-	<0.01
2-Nitrophenol	µg/L	0.01	-	-	-	-	<0.01
4-nitrophenol	µg/L	0.01	-	-	-	-	<0.01
m&p Cresol	µg/L	0.01	-	-	-	-	<0.01
o-Cresol	µg/L	0.01	-	-	-	-	<0.01
2-Methyl 4,6-Dinitrophenol	µg/L	0.01	-	-	-	-	<0.01
2,3,4,6-Tetrachlorophenol	µg/L	0.01	-	-	-	-	<0.01
2,4-Dichlorophenol	µg/L	0.01	-	-	-	-	<0.01
2,4,5-Trichlorophenol	µg/L	0.01	-	-	-	-	<0.01
2,4,6-Tribromophenol*	µg/L	0.01	-	-	-	-	<0.01
2,4,6-Trichlorophenol	µg/L	0.01	-	-	-	-	<0.01
2,6-Dichlorophenol	µg/L	0.01	-	-	-	-	<0.01
3-Methylcholanthrene	µg/L	0.01	-	-	-	-	<0.01
4-Chloro-3-methylphenol	µg/L	0.1	-	-	-	-	<0.1
DDT+DDE+DDD	µg/L	0.2	-	-	-	-	<0.2
o,p-DDT	µg/L	0.002	-	-	-	-	<0.002
Total DDT	µg/L	0.1	-	-	-	-	<0.1
Acetophenone	µg/L	0.01	-	-	-	-	<0.01
Bis (2-Ethylhexyl) adipate	µg/L	0.01	-	-	-	-	<0.01
Bis (2-Ethylhexyl) phthalate	µg/L	0.01	-	-	-	-	<0.01
Coronene	µg/L	0.01	-	-	-	-	<0.01
Dibenz (aj) acridine	µg/L	0.01	-	-	-	-	<0.01
Dibenzo[a,e]pyrene	µg/L	0.01	-	-	-	-	<0.01
Dinoseb	µg/L	0.05	-	-	-	-	<0.05
Hexachlorophene	µg/L	0.05	-	-	-	-	<0.05
Pentachlorophenol	µg/L	0.1	-	-	-	-	<0.1
Phenol	µg/L	0.01	-	-	-	-	<0.0↓
Perylene	µg/L	0.01	-	-	-	-	<0.01
Total PAHs - assumes <LOR results = 0	µg/L	0.09	-	-	-	-	-
Total PAHs - assumes <LOR results = 0.5xLOR	µg/L	0.09	-	-	-	-	-

Combined SVOC Pesticides in Water, Low Level [EPA 8270D] Tested: 11/11/2020

PARAMETER	UOM	LOR	GW08 WATER - 30/10/2020 SE213014.001	GW10 WATER - 30/10/2020 SE213014.002	GW20 WATER - 30/10/2020 SE213014.003	GW21 WATER - 30/10/2020 SE213014.004	QC318 WATER - 30/10/2020 SE213014.007
Azinphos-methyl	µg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Bromophos ethyl*	µg/L	0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Chlorfenvinphos*	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Diazinon*	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Dichlorvos	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Ethion	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Fenitrothion	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Fenisulfothion	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fenthion	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Malathion	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Mevinphos-cis/trans	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Methidathion	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Parathion	µg/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Acephate	µg/L	0.1	-	-	-	-	<0.1
Alachlor	µg/L	0.1	-	-	-	-	<0.1
Atraton	µg/L	0.1	-	-	-	-	<0.1
Atrazine	µg/L	0.01	-	-	-	-	<0.01
Bifenthrin	µg/L	0.1	-	-	-	-	<0.1
Bioresmethrin	µg/L	0.1	-	-	-	-	<0.1
Boscalid*	µg/L	0.1	-	-	-	-	<0.1
Bromacil	µg/L	0.1	-	-	-	-	<0.1
Bromoxynil*	µg/L	0.1	-	-	-	-	<0.1
Butachlor*	µg/L	0.1	-	-	-	-	<0.1
Butylate*	µg/L	0.1	-	-	-	-	<0.1
Captafol*	µg/L	0.1	-	-	-	-	<0.1
Captan*	µg/L	0.1	-	-	-	-	<0.1
Carbophenothion	µg/L	0.1	-	-	-	-	<0.1
Carboxin*	µg/L	0.1	-	-	-	-	<0.1
Chlopropham	µg/L	0.1	-	-	-	-	<0.1
Chlorfenvinphos-cis	µg/L	0.1	-	-	-	-	<0.1
Chlorfenvinphos-trans	µg/L	0.1	-	-	-	-	<0.1
Chlorothalonil*	µg/L	0.1	-	-	-	-	<0.1
Chlorpyrifos-methyl	µg/L	0.1	-	-	-	-	<0.1
Chlorsulfuron*	µg/L	0.1	-	-	-	-	<0.1
Ciodrin (Crotoxyphos)*	µg/L	0.1	-	-	-	-	<0.1
cis-permethrin	µg/L	0.1	-	-	-	-	<0.1
Co-Ral (Coumaphos)	µg/L	0.1	-	-	-	-	<0.1
Cyanazine	µg/L	0.1	-	-	-	-	<0.1
Cycloate*	µg/L	0.1	-	-	-	-	<0.1
Cyfluthrin*	µg/L	0.1	-	-	-	-	<0.1
Cypermethrin	µg/L	0.1	-	-	-	-	<0.1
Deltamethrin	µg/L	0.1	-	-	-	-	<0.1
Demeton-o	µg/L	0.1	-	-	-	-	<0.1
Demeton-s	µg/L	0.1	-	-	-	-	<0.1
Demeton-s-methyl	µg/L	0.1	-	-	-	-	<0.1
Diallate A*	µg/L	0.1	-	-	-	-	<0.1
Diallate B*	µg/L	0.1	-	-	-	-	<0.1
Dichlobenil*	µg/L	0.1	-	-	-	-	<0.1
Dichlofluanid*	µg/L	0.1	-	-	-	-	<0.1
Dichlone*	µg/L	0.1	-	-	-	-	<0.1
Diclofop-methyl*	µg/L	0.1	-	-	-	-	<0.1
Dicofol	µg/L	0.1	-	-	-	-	<0.1
Dicrotophos*	µg/L	0.1	-	-	-	-	<0.1
EPN	µg/L	0.1	-	-	-	-	<0.1
EPTC	µg/L	0.1	-	-	-	-	<0.1
Esfenvalerate	µg/L	0.1	-	-	-	-	<0.1

Combined SVOC Pesticides in Water, Low Level [EPA 8270D] Tested: 11/11/2020 (continued)

PARAMETER	UOM	LOR	GW08 WATER - 30/10/2020 SE213014.001	GW10 WATER - 30/10/2020 SE213014.002	GW20 WATER - 30/10/2020 SE213014.003	GW21 WATER - 30/10/2020 SE213014.004	QC318 WATER - 30/10/2020 SE213014.007
Ethoprop	µg/L	0.1	-	-	-	-	<0.1
Fearimol	µg/L	0.1	-	-	-	-	<0.1
Fenamiphos (Phenamiphos)	µg/L	0.1	-	-	-	-	<0.1
Fenchlorophos (Ronnel)	µg/L	0.1	-	-	-	-	<0.1
Fenvalerate	µg/L	0.1	-	-	-	-	<0.1
Fluchloralin	µg/L	0.1	-	-	-	-	<0.1
Fludioxonil	µg/L	0.1	-	-	-	-	<0.1
Fluridone	µg/L	0.1	-	-	-	-	<0.1
Haloxyfop methyl	µg/L	0.1	-	-	-	-	<0.1
Hexazinone	µg/L	0.01	-	-	-	-	<0.01
Imidan (Phosmet)	µg/L	0.1	-	-	-	-	<0.1
Indoxacarb	µg/L	0.1	-	-	-	-	<0.1
Kepone	µg/L	0.1	-	-	-	-	<0.1
Leptophos	µg/L	0.1	-	-	-	-	<0.1
Mestranol	µg/L	0.1	-	-	-	-	<0.1
Metalaxyl	µg/L	0.1	-	-	-	-	<0.1
Methiocarb	µg/L	0.1	-	-	-	-	<0.1
Methyl paraoxan	µg/L	0.1	-	-	-	-	<0.1
Metolachlor	µg/L	0.1	-	-	-	-	<0.1
Metribuzin	µg/L	0.01	-	-	-	-	<0.01
MGK-264	µg/L	0.1	-	-	-	-	<0.1
Molinate	µg/L	0.01	-	-	-	-	<0.01
Monocrotophos	µg/L	0.1	-	-	-	-	<0.1
Napropamide*	µg/L	0.1	-	-	-	-	<0.1
Norflurazon*	µg/L	0.1	-	-	-	-	<0.1
Omethoate	µg/L	0.1	-	-	-	-	<0.1
Oxyfluorfen	µg/L	0.1	-	-	-	-	<0.1
Parathion-methyl	µg/L	0.01	-	-	-	-	<0.01
Pebulate	µg/L	0.1	-	-	-	-	<0.1
Pendimethalin	µg/L	0.1	-	-	-	-	<0.1
Permethrin	µg/L	0.1	-	-	-	-	<0.1
Phosalone (Zolone)	µg/L	0.1	-	-	-	-	<0.1
Phosphamidone	µg/L	0.1	-	-	-	-	<0.1
Piperonyl butoxide	µg/L	0.1	-	-	-	-	<0.1
Primiphos-ethyl	µg/L	0.1	-	-	-	-	<0.1
Primiphos-methyl	µg/L	0.1	-	-	-	-	<0.1
Profenofos	µg/L	0.1	-	-	-	-	<0.1
Prometon	µg/L	0.1	-	-	-	-	<0.1
Prometryn	µg/L	0.01	-	-	-	-	<0.01
Pronamide (Propyzamide)*	µg/L	0.1	-	-	-	-	<0.1
Propachlor	µg/L	0.1	-	-	-	-	<0.1
Propargite	µg/L	0.1	-	-	-	-	<0.1
Propazine	µg/L	0.01	-	-	-	-	<0.01
Prophos	µg/L	0.1	-	-	-	-	<0.1
Propiconazole (Isomer 1+Isomer 2)	µg/L	0.1	-	-	-	-	<0.1
Propiconazole Isomer 1	µg/L	0.1	-	-	-	-	<0.1
Propiconazole Isomer 2	µg/L	0.1	-	-	-	-	<0.1
Propylthiouracil	µg/L	0.1	-	-	-	-	<0.1
Propyzamide	µg/L	0.1	-	-	-	-	<0.1
Prothiofos	µg/L	0.1	-	-	-	-	<0.1
Simazine	µg/L	0.01	-	-	-	-	<0.01
Simetryn	µg/L	0.1	-	-	-	-	<0.1
Strychnine*	µg/L	0.1	-	-	-	-	<0.1
Sulprofos*	µg/L	0.1	-	-	-	-	<0.1
Tebuthiuron*	µg/L	0.1	-	-	-	-	<0.1
Temephos	µg/L	0.1	-	-	-	-	<0.1

Combined SVOC Pesticides in Water, Low Level [EPA 8270D] Tested: 11/11/2020 (continued)

PARAMETER	UOM	LOR	GW08 WATER - 30/10/2020 SE213014.001	GW10 WATER - 30/10/2020 SE213014.002	GW20 WATER - 30/10/2020 SE213014.003	GW21 WATER - 30/10/2020 SE213014.004	QC318 WATER - 30/10/2020 SE213014.007
Terbacil*	µg/L	0.1	-	-	-	-	<0.1
Terbuthylazine	µg/L	0.1	-	-	-	-	<0.1
Terbutryn (Prebane)	µg/L	0.1	-	-	-	-	<0.1
Tetrachlorvinphos (Stirifos)	µg/L	0.1	-	-	-	-	<0.1
Thiabendazole	µg/L	0.1	-	-	-	-	<0.1
Thiamethoxam	µg/L	0.1	-	-	-	-	<0.1
Thiometon	µg/L	0.1	-	-	-	-	<0.1
Triadimefon	µg/L	0.1	-	-	-	-	<0.1
Triazophos	µg/L	0.1	-	-	-	-	<0.1
Trichlorfon	µg/L	0.1	-	-	-	-	<0.1
Trichlornate (Trichloronate)*	µg/L	0.1	-	-	-	-	<0.1
Tricyclazole*	µg/L	0.1	-	-	-	-	<0.1
Trifluralin	µg/L	0.1	-	-	-	-	<0.1
Vernolate*	µg/L	0.1	-	-	-	-	<0.1
Vinclozalin*	µg/L	0.1	-	-	-	-	<0.1
Zolone (phosalone, fosalone)	µg/L	0.1	-	-	-	-	<0.1
Ametryn	µg/L	0.1	-	-	-	-	<0.1
Azinphos-ethyl	µg/L	0.05	-	-	-	-	<0.05
Naftalfos	µg/L	0.1	-	-	-	-	<0.1
Naled (Dibrom)	µg/L	0.1	-	-	-	-	<0.1
Terbufos	µg/L	0.01	-	-	-	-	<0.01

SVOC Compounds in Waters by GC-QQQ [USEPA8270D] Tested: 11/11/2020

PARAMETER	UOM	LOR	GW08 WATER - 30/10/2020 SE213014.001	GW10 WATER - 30/10/2020 SE213014.002	GW20 WATER - 30/10/2020 SE213014.003	GW21 WATER - 30/10/2020 SE213014.004	QC318 WATER - 30/10/2020 SE213014.007
Arochlor 1016	µg/L	0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Arochlor 1221	µg/L	0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Arochlor 1232	µg/L	0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Arochlor 1242	µg/L	0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Arochlor 1248	µg/L	0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Arochlor 1254	µg/L	0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Arochlor 1260	µg/L	0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Arochlor 1262	µg/L	0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Arochlor 1268	µg/L	0.03	<0.03	<0.03	<0.03	<0.03	<0.03
Total PCB*	µg/L	0.03	<0.03	<0.03	<0.03	<0.03	<0.03

Pesticides / Herbicides in waters by HPLC-MS MA-1569.WW.01 [MA1569] Tested: 11/11/2020

PARAMETER	UOM	LOR	QC318 WATER - 30/10/2020 SE213014.007
2,4,5-T*	µg/L	0.5	<0.5
2,4,5-TP*	µg/L	0.5	<0.5
2,4,6-T*	µg/L	0.5	<0.5
2,4-D [(2,4-Dichlorophenoxy) acetic acid]*	µg/L	0.5	<0.5
24-DB*	µg/L	0.5	<0.5
2,6-D [(2,6-Dichlorophenoxy) acetic acid]*	µg/L	0.5	<0.5
4-CPA*	µg/L	1	<1
Bromoxynil*	µg/L	1	<1
Clopyralid*	µg/L	0.5	<0.5
Dicamba*	µg/L	0.5	<0.5
Dichloroprop / Dichlorprop-P*	µg/L	0.5	<0.5
Dinoseb*	µg/L	0.5	<0.5
Fluroxypyr*	µg/L	0.5	<0.5
Ioxynil*	µg/L	1	<1
MCPA*	µg/L	0.5	<0.5
MCPB*	µg/L	1	<1
mecoprop*	µg/L	0.5	<0.5
Picloram*	µg/L	1	<1
Triclopyr*	µg/L	0.5	<0.5

METHOD	METHODOLOGY SUMMARY
AN020	Unpreserved water sample is filtered through a 0.45µm membrane filter and acidified with nitric acid similar to APHA3030B.
AN022/AN318	Following acid digestion of un filtered sample, determination of elements at trace level in waters by ICP-MS technique, referenced to USEPA 6020B and USEPA 200.8 (5.4).
AN022	The water sample is digested with Nitric Acid and made up to the original volume similar to APHA3030E.
AN311(Perth) /AN312	Mercury by Cold Vapour AAS in Waters: Mercury ions taken from unfiltered sample are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500.
AN311(Perth)/AN312	Mercury by Cold Vapour AAS in Waters: Mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500.
AN318	Determination of elements at trace level in waters by ICP-MS technique,, referenced to USEPA 6020B and USEPA 200.8 (5.4).
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). Where F2 is corrected for Naphthalene, the VOC data for Naphthalene is used.
AN403	Additionally, the volatile C6-C9/C6-C10 fractions may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoveerable Hydrocarbons - Silica (TRH-Silica) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents.
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.
EPA8270D LL	This method covers analytical procedures for the analysis of semi-volatile organic compounds (SVOC) including most neutral, acidic, and basic organic compounds based on the USEPA method 8270D. Samples are extracted into a solvent appropriate to the matrix and analysed using a gas chromatograph – triple quadrapole (GC–QQQ).
EPA8270D Pest LL	This method covers analytical procedures for the analysis of semi-volatile organic compounds (SVOC pesticides) including most neutral, acidic, and basic organic compounds based on the USEPA method 8270D. Samples are extracted into a solvent appropriate to the matrix and analysed using a gas chromatograph – triple quadrapole (GC–QQQ).
EPA8270D	This method covers analytical procedures for the analysis of semi-volatile organic compounds (SVOC) including most neutral, acidic, and basic organic compounds based on the USEPA method 8270D. Samples are extracted into a solvent appropriate to the matrix and analysed using a gas chromatograph – triple quadrapole (GC–QQQ).
MA-1523	This method covers the analysis of per- and polyfluoroalkyl substances (PFAS) in aqueous, solid and biosolid samples and solvent extracts, determined as the total of linear and branched isomers. After spiking with isotopically labelled quantification surrogates and clean-up via SPE cartridges sample extracts are analysed by liquid chromatography/mass spectrometry (LC-MS/MS). PFAS concentrations are determined by isotope dilution quantification.

MA1569	This method is intended for the analysis of a diverse range of pesticides and herbicides by Liquid Chromatography using a Tandem Mass Spectrometry detector (LC-MS/MS). Due to the diverse nature of the analytes covered in this method each analyte requires its own analytical acquisition method thus the sample is run multiple times according to the analyte list requested. Water samples are filtered and filtrates are directly injected onto LC-MS/MS using selective ion monitoring.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
**	Indicative data, theoretical holding time exceeded.	NVL	Not validated.	LOR	Limit of Reporting.
***	Indicates that both * and ** apply.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-qb/environment-health-and-safety.

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ANALYTICAL REPORT

Accreditation No. 2562

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Project	**610.30041 Randwick Barracks**	SGS Reference	**ME317192 R0**
Order Number	**SE213014**	Date Received	02 Nov 2020
Samples	7	Date Reported	04 Nov 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(14420).

MA-1523 Majority of surrogates are within acceptance criteria.

SIGNATORIES

[redacted]

Australian Chemistry Manager

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME317192.001 Water 30 Oct 2020 SE213014.001	ME317192.002 Water 30 Oct 2020 SE213014.002	ME317192.003 Water 30 Oct 2020 SE213014.003	ME317192.004 Water 30 Oct 2020 SE213014.004
Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples	**Method: MA-1523**	**Tested: 2/11/2020**					
Perfluorobutanoic acid (PFBA)	µg/L	0.002		<0.002	<0.002	<0.002	<0.002
Perfluoropentanoic acid (PFPeA)	µg/L	0.002		<0.002	<0.002	<0.002	<0.002
Perfluorohexanoic acid (PFHxA)	µg/L	0.002		<0.002	<0.002	<0.002	**0.003**
Perfluoroheptanoic acid (PFHpA)	µg/L	0.002		<0.002	<0.002	<0.002	**0.002**
Perfluorooctanoic Acid (PFOA)	µg/L	0.002		**0.003**	**0.004**	**0.003**	**0.018**
Perfluorononanoic acid (PFNA)	µg/L	0.004		<0.004	<0.004	<0.004	<0.004
Perfluorodecanoic acid (PFDA)	µg/L	0.004		<0.004	<0.004	<0.004	<0.004
Perfluoroundecanoic acid (PFUnA)	µg/L	0.004		<0.004	<0.004	<0.004	<0.004
Perfluorododecanoic acid (PFDoA)	µg/L	0.004		<0.004	<0.004	<0.004	<0.004
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.004		<0.004	<0.004	<0.004	<0.004
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.004		<0.004	<0.004	<0.004	<0.004
Perfluorohexadecanoic acid (PFHxDA)	µg/L	0.008		<0.008	<0.008	<0.008	<0.008
Perfluorobutane sulfonate (PFBS)	µg/L	0.004		<0.004	<0.004	<0.004	<0.004
Perfluoropentane sulfonate (PFPeS)	µg/L	0.004		<0.004	<0.004	<0.004	<0.004
Perfluorohexane sulfonate (PFHxS)	µg/L	0.002		<0.002	**0.002**	**0.010**	**0.005**
Perfluoroheptane sulfonate (PFHpS)	µg/L	0.002		<0.002	<0.002	<0.002	<0.002
Perfluorooctane sulfonate (PFOS)	µg/L	0.002		**0.004**	**0.002**	**0.063**	**0.022**
Sum of PFHxS and PFOS	µg/L	0.002		**0.004**	**0.004**	**0.072**	**0.027**
Perfluorononane sulfonate (PFNS)	µg/L	0.002		<0.002	<0.002	<0.002	<0.002
Perfluorodecane sulfonate (PFDS)	µg/L	0.002		<0.002	<0.002	<0.002	<0.002
Perfluorododecane sulfonate (PFDoS)	µg/L	0.002		<0.002	<0.002	<0.002	<0.002
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	µg/L	0.002		<0.002	<0.002	<0.002	<0.002
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	µg/L	0.002		**0.010**	<0.002	<0.002	<0.002
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	µg/L	0.002		<0.002	<0.002	<0.002	<0.002
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.008		<0.008	<0.008	<0.008	<0.008
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	µg/L	0.01		<0.01	<0.01	<0.01	<0.01
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	µg/L	0.01		<0.01	<0.01	<0.01	<0.01
2-(N-Methylperfluorooctane sulfonamido)-ethanol	µg/L	0.01		<0.01	<0.01	<0.01	<0.01
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	µg/L	0.01		<0.01	<0.01	<0.01	<0.01
N-Methylperfluorooctanesulfonamidoacetic acid	µg/L	0.01		<0.01	<0.01	<0.01	<0.01
N-Ethylperfluorooctanesulfonamidoacetic Acid	µg/L	0.01		<0.01	<0.01	<0.01	<0.01
(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-		**98**	**99**	**102**	**100**
(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-		**99**	**100**	**104**	**102**
(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-		**111**	**103**	**115**	**109**
(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-		**113**	**100**	**119**	**116**
(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-		**104**	**100**	**104**	**110**
(13C9-PFNA) Isotopically Labelled Internal Recovery	%	-		**92**	**97**	**100**	**105**
(13C6-PFDA) Isotopically Labelled Internal Recovery	%	-		**86**	**88**	**83**	**113**
(13C7-PFUdA) Isotopically Labelled Internal Recovery	%	-		**92**	**97**	**102**	**110**
(13C2-PFDoA) Isotopically Labelled Internal Recovery	%	-		**95**	**107**	**98**	**115**
(13C2_PFTeDA) Isotopically Labelled Internal Recovery	%	-		**103**	**112**	**98**	**126**
(13C2-PFHxDA) Isotopically Labelled Internal Recovery	%	-		**103**	**113**	**88**	**145**
(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-		**110**	**109**	**88**	**99**
(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-		**105**	**111**	**83**	**109**
(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-		**110**	**110**	**76**	**104**
(13C2-4:2 FTS) Isotopically Labelled Internal Recovery	%	-		**39**	**37**	**30**	**36**
(13C2-6:2 FTS) Isotopically Labelled Internal Recovery	%	-		**35**	**38**	**31**	**37**
(13C2-8:2 FTS) Isotopically Labelled Internal Recovery	%	-		**47**	**43**	**38**	**39**
(13C8-PFOSA) Isotopically Labelled Internal Recovery	%	-		**111**	**88**	**81**	**88**
(D3-N-MeFOSA) Isotopically Labelled Internal Recovery	%	-		**105**	**104**	**81**	**88**
(D5-N-EtFOSA) Isotopically Labelled Internal Recovery	%	-		**97**	**76**	**55**	**69**
(D7-N-MeFOSE) Isotopically Labelled Internal Recovery	%	-		**102**	**107**	**75**	**86**
(D9-N-EtFOSE) Isotopically Labelled Internal Recovery	%	-		**107**	**102**	**82**	**94**
(D3-N-MeFOSAA) Isotopically Labelled Internal Recovery	%	-		**93**	**97**	**82**	**79**
(D5-N-EtFOSAA) Isotopically Labelled Internal Recovery	%	-		**130**	**103**	**97**	**95**

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME317192.005 Water 30 Oct 2020 SE213014.005	ME317192.006 Water 30 Oct 2020 SE213014.006	ME317192.007 Water 30 Oct 2020 SE213014.007
Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples	**Method: MA-1523**	**Tested: 4/11/2020**				
Perfluorobutanoic acid (PFBA)	µg/L	0.002		-	-	<0.002
Perfluoropentanoic acid (PFPeA)	µg/L	0.002		-	-	<0.002
Perfluorohexanoic acid (PFHxA)	µg/L	0.002		-	-	<0.002
Perfluoroheptanoic acid (PFHpA)	µg/L	0.002		-	-	<0.002
Perfluorooctanoic Acid (PFOA)	µg/L	0.002		-	-	<0.002
Perfluorononanoic acid (PFNA)	µg/L	0.004		-	-	<0.004
Perfluorodecanoic acid (PFDA)	µg/L	0.004		-	-	<0.004
Perfluoroundecanoic acid (PFUnA)	µg/L	0.004		-	-	<0.004
Perfluorododecanoic acid (PFDoA)	µg/L	0.004		-	-	<0.004
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.004		-	-	<0.004
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.004		-	-	<0.004
Perfluorohexadecanoic acid (PFHxDA)	µg/L	0.008		-	-	<0.008
Perfluorobutane sulfonate (PFBS)	µg/L	0.004		-	-	<0.004
Perfluoropentane sulfonate (PFPeS)	µg/L	0.004		-	-	<0.004
Perfluorohexane sulfonate (PFHxS)	µg/L	0.002		-	-	<0.002
Perfluoroheptane sulfonate (PFHpS)	µg/L	0.002		-	-	<0.002
Perfluorooctane sulfonate (PFOS)	µg/L	0.002		-	-	<0.002
Sum of PFHxS and PFOS	µg/L	0.002		-	-	<0.002
Perfluorononane sulfonate (PFNS)	µg/L	0.002		-	-	<0.002
Perfluorodecane sulfonate (PFDS)	µg/L	0.002		-	-	<0.002
Perfluorododecane sulfonate (PFDoS)	µg/L	0.002		-	-	<0.002
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	µg/L	0.002		-	-	<0.002
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	µg/L	0.002		-	-	<0.002
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	µg/L	0.002		-	-	<0.002
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.008		-	-	<0.008
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	µg/L	0.01		-	-	<0.01
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	µg/L	0.01		-	-	<0.01
2-(N-Methylperfluorooctane sulfonamido)-ethanol	µg/L	0.01		-	-	<0.01
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	µg/L	0.01		-	-	<0.01
N-Methylperfluorooctanesulfonamidoacetic acid	µg/L	0.01		-	-	<0.01
N-Ethylperfluorooctanesulfonamidoacetic Acid	µg/L	0.01		-	-	<0.01
(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-		-	-	**98**
(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-		-	-	**99**
(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-		-	-	**107**
(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-		-	-	**110**
(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-		-	-	**102**
(13C9-PFNA) Isotopically Labelled Internal Recovery	%	-		-	-	**96**
(13C6-PFDA) Isotopically Labelled Internal Recovery	%	-		-	-	**99**
(13C7-PFUdA) Isotopically Labelled Internal Recovery	%	-		-	-	**95**
(13C2-PFDoA) Isotopically Labelled Internal Recovery	%	-		-	-	**91**
(13C2_PFTeDA) Isotopically Labelled Internal Recovery	%	-		-	-	**80**
(13C2-PFHxDA) Isotopically Labelled Internal Recovery	%	-		-	-	**59**
(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-		-	-	**99**
(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-		-	-	**99**
(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-		-	-	**83**
(13C2-4:2 FTS) Isotopically Labelled Internal Recovery	%	-		-	-	**37**
(13C2-6:2 FTS) Isotopically Labelled Internal Recovery	%	-		-	-	**35**
(13C2-8:2 FTS) Isotopically Labelled Internal Recovery	%	-		-	-	**35**
(13C8-PFOSA) Isotopically Labelled Internal Recovery	%	-		-	-	**82**
(D3-N-MeFOSA) Isotopically Labelled Internal Recovery	%	-		-	-	**55**
(D5-N-EtFOSA) Isotopically Labelled Internal Recovery	%	-		-	-	**65**
(D7-N-MeFOSE) Isotopically Labelled Internal Recovery	%	-		-	-	**73**
(D9-N-EtFOSE) Isotopically Labelled Internal Recovery	%	-		-	-	**84**
(D3-N-MeFOSAA) Isotopically Labelled Internal Recovery	%	-		-	-	**81**
(D5-N-EtFOSAA) Isotopically Labelled Internal Recovery	%	-		-	-	**78**

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples Method: MA-1523

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Perfluorobutanoic acid (PFBA)	LB036558	µg/L	0.002	<0.002	0%	NA
Perfluoropentanoic acid (PFPeA)	LB036558	µg/L	0.002	<0.002	0%	NA
Perfluorohexanoic acid (PFHxA)	LB036558	µg/L	0.002	<0.002	0%	NA
Perfluoroheptanoic acid (PFHpA)	LB036558	µg/L	0.002	<0.002	0%	83%
Perfluorooctanoic Acid (PFOA)	LB036558	µg/L	0.002	<0.002	0%	97%
Perfluorononanoic acid (PFNA)	LB036558	µg/L	0.004	<0.004	0%	99%
Perfluorodecanoic acid (PFDA)	LB036558	µg/L	0.004	<0.004	0%	109%
Perfluoroundecanoic acid (PFUnA)	LB036558	µg/L	0.004	<0.004	0%	73%
Perfluorododecanoic acid (PFDoA)	LB036558	µg/L	0.004	<0.004	0%	95%
Perfluorotridecanoic acid (PFTrDA)	LB036558	µg/L	0.004	<0.004	0%	126%
Perfluorotetradecanoic acid (PFTeDA)	LB036558	µg/L	0.004	<0.004	0%	92%
Perfluorohexadecanoic acid (PFHxDA)	LB036558	µg/L	0.008	<0.008	0%	NA
Perfluorobutane sulfonate (PFBS)	LB036558	µg/L	0.004	<0.004	0%	NA
Perfluoropentane sulfonate (PFPeS)	LB036558	µg/L	0.004	<0.004	0%	NA
Perfluorohexane sulfonate (PFHxS)	LB036558	µg/L	0.002	<0.002	0%	NA
Perfluoroheptane sulfonate (PFHpS)	LB036558	µg/L	0.002	<0.002	0%	NA
Perfluorooctane sulfonate (PFOS)	LB036558	µg/L	0.002	<0.002	0%	132%
Sum of PFHxS and PFOS	LB036558	µg/L	0.002	<0.002	0%	NA
Perfluorononane sulfonate (PFNS)	LB036558	µg/L	0.002	<0.002	0%	NA
Perfluorodecane sulfonate (PFDS)	LB036558	µg/L	0.002	<0.002	0%	NA
Perfluorododecane sulfonate (PFDoS)	LB036558	µg/L	0.002	<0.002	0%	NA
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	LB036558	µg/L	0.002	<0.002	0%	NA
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	LB036558	µg/L	0.002	<0.002	0%	NA
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	LB036558	µg/L	0.002	<0.002	0%	NA
Perfluorooctane sulfonamide (PFOSA)	LB036558	µg/L	0.008	<0.008	0%	51%
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	LB036558	µg/L	0.01	<0.01	0%	NA
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	LB036558	µg/L	0.01	<0.01	0%	NA
2-(N-Methylperfluorooctane sulfonamido)-ethanol (N-MeFOSE)	LB036558	µg/L	0.01	<0.01	0%	NA
2-(N-Ethylperfluorooctane sulfonamido)-ethanol (N-EtFOSE)	LB036558	µg/L	0.01	<0.01	0%	NA
N-Methylperfluorooctanesulfonamidoacetic acid (N_MeFOSAA)	LB036558	µg/L	0.01	<0.01	0%	NA
N-Ethylperfluorooctanesulfonamidoacetic Acid (N-EtFOSAA)	LB036558	µg/L	0.01	<0.01	0%	NA
(13C4-PFBA) Isotopically Labelled Internal Recovery Standard	LB036558	%	-	98%	0 - 3%	98%
(13C5-PFPeA) Isotopically Labelled Internal Recovery Standard	LB036558	%	-	99%	1%	103%
(13C5-PFHxA) Isotopically Labelled Internal Recovery Standard	LB036558	%	-	109%	2 - 5%	113%
(13C4-PFHpA) Isotopically Labelled Internal Recovery Standard	LB036558	%	-	106%	0 - 1%	113%
(13C4_PFOA) Isotopically Labelled Internal Recovery Standard	LB036558	%	-	103%	2%	103%
(13C9-PFNA) Isotopically Labelled Internal Recovery Standard	LB036558	%	-	95%	0 - 8%	91%
(13C6-PFDA) Isotopically Labelled Internal Recovery Standard	LB036558	%	-	116%	0 - 7%	91%
(13C7-PFUdA) Isotopically Labelled Internal Recovery Standard	LB036558	%	-	89%	6 - 12%	101%
(13C2-PFDoA) Isotopically Labelled Internal Recovery Standard	LB036558	%	-	76%	7 - 11%	103%
(13C2_PFTeDA) Isotopically Labelled Internal Recovery Standard	LB036558	%	-	51%	2 - 11%	111%
(13C2-PFHxDA) Isotopically Labelled Internal Recovery Standard	LB036558	%	-	20%	8 - 12%	119%
(13C3-PFBS) Isotopically Labelled Internal Recovery Standard	LB036558	%	-	115%	0 - 2%	105%
(13C3-PFHxS) Isotopically Labelled Internal Recovery Standard	LB036558	%	-	98%	1 - 2%	101%
(13C8-PFOS) Isotopically Labelled Internal Recovery Standard	LB036558	%	-	90%	0 - 20%	125%
(13C2-4:2 FTS) Isotopically Labelled Internal Recovery Standard	LB036558	%	-	42%	3%	38%
(13C2-6:2 FTS) Isotopically Labelled Internal Recovery Standard	LB036558	%	-	45%	23 - 29%	36%
(13C2-8:2 FTS) Isotopically Labelled Internal Recovery Standard	LB036558	%	-	38%	7 - 32%	33%
(13C8-PFOSA) Isotopically Labelled Internal Recovery Standard	LB036558	%	-	120%	4 - 25%	105%
(D3-N-MeFOSA) Isotopically Labelled Internal Recovery Standard	LB036558	%	-	104%	20 - 26%	105%
(D5-N-EtFOSA) Isotopically Labelled Internal Recovery Standard	LB036558	%	-	90%	4 - 20%	99%
(D7-N-MeFOSE) Isotopically Labelled Internal Recovery Standard	LB036558	%	-	102%	1 - 14%	92%
(D9-N-EtFOSE) Isotopically Labelled Internal Recovery Standard	LB036558	%	-	119%	10 - 11%	100%
(D3-N-MeFOSAA) Isotopically Labelled Internal Recovery Standard	LB036558	%	-	98%	19%	94%
(D5-N-EtFOSAA) Isotopically Labelled Internal Recovery Standard	LB036558	%	-	114%	10 - 30%	121%

METHOD	METHODOLOGY SUMMARY
MA-1523	This method covers the analysis of per- and polyfluoroalkyl substances (PFAS) in aqueous, solid and biosolid samples and solvent extracts, determined as the total of linear and branched isomers. After spiking with isotopically labelled quantification surrogates and clean-up via SPE cartridges sample extracts are analysed by liquid chromatography/mass spectrometry (LC-MS/MS). PFAS concentrations are determined by isotope dilution quantification.

FOOTNOTES

IS	Insufficient sample for analysis.	LOR	Limit of Reporting
LNR	Sample listed, but not received.	↑↓	Raised or Lowered Limit of Reporting
*	NATA accreditation does not cover the performance of this service.	QFH	QC result is above the upper tolerance
		QFL	QC result is below the lower tolerance
**	Indicative data, theoretical holding time exceeded.	-	The sample was not analysed for this analyte
***	Indicates that both * and ** apply.	NVL	Not Validated

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calcuated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS		LABORATORY DETAILS	
Contact	[redacted]	Manager	[redacted]
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Facsimile	02 8594 0499	Facsimile	+61395743399
Email	au.environmental.sydney@sgs.com	Email	Au.SampleReceipt.Melbourne@sgs.com
Project	**610.30041 Randwick Barracks**	SGS Reference	**ME317269 R0**
Order Number	**SE213014**	Date Received	05 Nov 2020
Samples	7	Date Reported	10 Nov 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(14420).

SIGNATORIES

[redacted]

Australian Chemistry Manager Senior Chemist

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name ME317269.001 Water 30 Oct 2020 SE213014.001	ME317269.002 Water 30 Oct 2020 SE213014.002	ME317269.003 Water 30 Oct 2020 SE213014.003	ME317269.004 Water 30 Oct 2020 SE213014.004
SVOC Compounds in Waters by GC-QQQ Method: USEPA8270D Tested: 6/11/2020						
Arochlor 1016	µg/L	0.03	<0.03	<0.03	<0.03	<0.03
Arochlor 1221	µg/L	0.03	<0.03	<0.03	<0.03	<0.03
Arochlor 1232	µg/L	0.03	<0.03	<0.03	<0.03	<0.03
Arochlor 1242	µg/L	0.03	<0.03	<0.03	<0.03	<0.03
Arochlor 1248	µg/L	0.03	<0.03	<0.03	<0.03	<0.03
Arochlor 1254	µg/L	0.03	<0.03	<0.03	<0.03	<0.03
Arochlor 1260	µg/L	0.03	<0.03	<0.03	<0.03	<0.03
Arochlor 1262	µg/L	0.03	<0.03	<0.03	<0.03	<0.03
Arochlor 1268	µg/L	0.03	<0.03	<0.03	<0.03	<0.03
Total PCB*	µg/L	0.03	<0.03	<0.03	<0.03	<0.03
d14-p-terphenyl (Surrogate)	%	0.001	**115**	**108**	**104**	**101**
d5-nitrobenzene (Surrogate)	%	0.001	-	-	-	-
d6-phenol (Surrogate)	%	0.001	-	-	-	-
2-fluorobiphenyl (Surrogate)	%	0.001	-	-	-	-
2,4,6-tribromophenol (Surrogate)	%	0.001	-	-	-	-
2-fluorophenol (Surrogate)	%	0.001	-	-	-	-
SVOC Compounds in Waters by GC-QQQ, Low Level Method: USEPA8270D LL Tested: 6/11/2020						
2-Chlorophenol	µg/L	0.1	-	-	-	-
1-Methylnaphthalene	µg/L	0.1	-	-	-	-
2,4-Dimethylphenol	µg/L	0.1	-	-	-	-
2,4-Dinitrophenol	µg/L	0.1	-	-	-	-
2-Methylnaphthalene	µg/L	0.1	-	-	<0.1	<0.1
2-Nitrophenol	µg/L	0.1	-	-	-	-
4-nitrophenol	µg/L	0.1	-	-	-	-
m&p Cresol	µg/L	0.1	-	-	-	-
o-Cresol	µg/L	0.1	-	-	-	-
2-Methyl 4,6-Dinitrophenol	µg/L	0.1	-	-	-	-
2,3,4,6-Tetrachlorophenol	µg/L	0.1	-	-	-	-
2,4-Dichlorophenol	µg/L	0.1	-	-	-	-
2,4,5-Trichlorophenol	µg/L	0.1	-	-	-	-
2,4,6-Tribromophenol*	µg/L	0.1	-	-	-	-
2,4,6-Trichlorophenol	µg/L	0.1	-	-	-	-
2,6-Dichlorophenol	µg/L	0.1	-	-	-	-
3-Methylcholanthrene	µg/L	0.01	-	-	-	-
4-Chloro-3-methylphenol	µg/L	0.1	-	-	-	-
4,4-DDD	µg/L	0.1	<0.1	<0.1	<0.1	<0.1
4,4-DDE	µg/L	0.1	<0.1	<0.1	<0.1	<0.1
4,4-DDT	µg/L	0.1	<0.1	<0.1	<0.1	<0.1
DDT+DDE+DDD	µg/L	0.2	-	-	-	-
o,p-DDT	µg/L	0.01	-	-	-	-
Total DDT	µg/L	0.1	-	-	-	-
7,12-Dimethylbenz(a)anthracene	µg/L	0.01	-	-	<0.01	<0.01
Acenaphthene	µg/L	0.01	-	-	<0.01	<0.01
Acenaphthylene	µg/L	0.01	-	-	<0.01	<0.01
Acetophenone	µg/L	0.01	-	-	-	-
Aldrin	µg/L	0.01	<0.01	<0.01	<0.01	<0.01
Aldrin and Dieldrin	µg/L	0.1	<0.1	<0.1	<0.1	<0.1
alpha-BHC	µg/L	0.1	<0.1	<0.1	<0.1	<0.1
alpha-Chlordane	µg/L	0.01	<0.01	<0.01	<0.01	<0.01
Anthracene	µg/L	0.01	-	-	<0.01	<0.01
Benzo(a)anthracene	µg/L	0.01	-	-	<0.01	<0.01
Benzo (a) pyrene	µg/L	0.01	-	-	<0.01	<0.01
Benzo (b) fluoranthene	µg/L	0.01	-	-	<0.01	<0.01
Benzo (e) pyrene	µg/L	0.01	-	-	<0.01	<0.01
Benzo (ghi) perylene	µg/L	0.01	-	-	<0.01	<0.01
Benzo (k) fluoranthene	µg/L	0.01	-	-	<0.01	<0.01
Benzo (b+j+k) fluoranthene	µg/L	0.02	-	-	<0.02	<0.02

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name ME317269.001 Water 30 Oct 2020 SE213014.001	ME317269.002 Water 30 Oct 2020 SE213014.002	ME317269.003 Water 30 Oct 2020 SE213014.003	ME317269.004 Water 30 Oct 2020 SE213014.004
SVOC Compounds in Waters by GC-QQQ, Low Level Method: USEPA8270D LL Tested: 6/11/2020 (continued)						
beta-BHC	µg/L	0.1	<0.1	<0.1	<0.1	<0.1
Bis (2-Ethylhexyl) adipate	µg/L	0.01	-	-	-	-
Bis (2-Ethylhexyl) phthalate	µg/L	0.01	-	-	-	-
Chlordane	µg/L	0.01	<0.01	<0.01	<0.01	<0.01
Chlorpyrifos	µg/L	0.01	<0.01	<0.01	<0.01	<0.01
Chrysene	µg/L	0.01	-	-	<0.01	<0.01
Coronene	µg/L	0.01	-	-	-	-
delta-BHC	µg/L	0.1	<0.1	<0.1	<0.1	<0.1
Dibenz (ah) anthracene	µg/L	0.01	-	-	<0.01	<0.01
Dibenz (aj) acridine	µg/L	0.01	-	-	-	-
Dibenzo[a,e]pyrene	µg/L	0.01	-	-	-	-
Dieldrin	µg/L	0.01	<0.01	<0.01	<0.01	<0.01
Dimethoate	µg/L	0.1	<0.1	<0.1	<0.1	<0.1
Dinoseb	µg/L	0.05	-	-	-	-
Disulfoton	µg/L	0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan 1	µg/L	0.01	<0.01	<0.01	<0.01	<0.01
Endosulfan 2	µg/L	0.01	<0.01	<0.01	<0.01	<0.01
Endosulfan Sulphate	µg/L	0.01	<0.01	<0.01	<0.01	<0.01
Total Endosulfan	µg/L	0.01	<0.01	<0.01	<0.01	<0.01
Endrin	µg/L	0.1	<0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	µg/L	0.1	<0.1	<0.1	<0.1	<0.1
Endrin ketone	µg/L	0.1	<0.1	<0.1	<0.1	<0.1
Famphur	µg/L	0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	µg/L	0.01	-	-	<0.01	<0.01
Fluorene	µg/L	0.01	-	-	<0.01	<0.01
gamma-BHC	µg/L	0.01	<0.01	<0.01	<0.01	<0.01
gamma-Chlordane	µg/L	0.01	<0.01	<0.01	<0.01	<0.01
Heptachlor	µg/L	0.01	<0.01	<0.01	<0.01	<0.01
Heptachlor Epoxide	µg/L	0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobenzene	µg/L	0.01	<0.01	<0.01	<0.01	<0.01
Hexachlorophene	µg/L	0.05	-	-	-	-
Indeno (1,2,3-cd) pyrene	µg/L	0.01	-	-	<0.01	<0.01
Isodrin	µg/L	0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	µg/L	0.1	<0.1	<0.1	<0.1	<0.1
Methyl parathion	µg/L	0.01	<0.01	<0.01	<0.01	<0.01
Mirex	µg/L	0.1	<0.1	<0.1	<0.1	<0.1
Naphthalene	µg/L	0.1	-	-	<0.1	<0.1
Pentachlorophenol	µg/L	0.1	-	-	-	-
Phenol	µg/L	0.1	-	-	-	-
Perylene	µg/L	0.01	-	-	-	-
Phenanthrene	µg/L	0.01	-	-	<0.01	<0.01
Phorate	µg/L	0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	µg/L	0.01	-	-	<0.01	<0.01
Stirofos	µg/L	0.1	<0.1	<0.1	<0.1	<0.1
Sulfotepp	µg/L	0.1	<0.1	<0.1	<0.1	<0.1
Thionazin	µg/L	0.1	<0.1	<0.1	<0.1	<0.1
Total PAHs - assumes <LOR results = 0	µg/L	0.09	-	-	-	-
Total PAHs - assumes <LOR results = 0.5xLOR	µg/L	0.09	-	-	-	-
Total PAHs Vic EPA - assumes <LOR results = 0	µg/L	0.8	-	-	<0.8	<0.8
Total PAHs Vic EPA - assumes <LOR results = 0.5LOR	µg/L	0.8	-	-	<0.8	<0.8
d14-p-terphenyl (Surrogate)	%	0.0001	-	-	**104**	**101**
Combined SVOC Pesticides in Water, Low Level Method: EPA 8270D Tested: 6/11/2020						
Tebuthiuron*	µg/L	0.1	-	-	-	-
Temephos	µg/L	0.1	-	-	-	-
Terbacil*	µg/L	0.1	-	-	-	-
Terbutryn (Prebane)	µg/L	0.1	-	-	-	-
Tetrachlorvinphos (Stirifos)	µg/L	0.1	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name ME317269.001 Water 30 Oct 2020 SE213014.001	ME317269.002 Water 30 Oct 2020 SE213014.002	ME317269.003 Water 30 Oct 2020 SE213014.003	ME317269.004 Water 30 Oct 2020 SE213014.004
Combined SVOC Pesticides in Water, Low Level	**Method: EPA 8270D**	**Tested: 6/11/2020**	**(continued)**			
Thiabendazole	µg/L	0.1	-	-	-	-
Thiamethoxam	µg/L	0.1	-	-	-	-
Thiometon	µg/L	0.1	-	-	-	-
Triadimefon	µg/L	0.1	-	-	-	-
Triazophos	µg/L	0.1	-	-	-	-
Trichlorfon	µg/L	0.1	-	-	-	-
Trichlornate (Trichloronate)*	µg/L	0.1	-	-	-	-
Tricyclazole*	µg/L	0.1	-	-	-	-
Vernolate*	µg/L	0.1	-	-	-	-
Acephate	µg/L	0.1	-	-	-	-
Alachlor	µg/L	0.1	-	-	-	-
Atraton	µg/L	0.1	-	-	-	-
Azinphos-methyl	µg/L	0.05	<0.05	<0.05	<0.05	<0.05
Bioresmethrin	µg/L	0.1	-	-	-	-
Boscalid*	µg/L	0.1	-	-	-	-
Bromophos ethyl*	µg/L	0.05	<0.05	<0.05	<0.05	<0.05
Butachlor*	µg/L	0.1	-	-	-	-
Butylate*	µg/L	0.1	-	-	-	-
Captafol*	µg/L	0.1	-	-	-	-
Captan*	µg/L	0.1	-	-	-	-
Carboxin*	µg/L	0.1	-	-	-	-
Chlorfenvinphos*	µg/L	0.1	<0.1	<0.1	<0.1	<0.1
Chloropham	µg/L	0.1	-	-	-	-
Chlorsulfuron*	µg/L	0.1	-	-	-	-
Ciodrin (Crotoxyphos)*	µg/L	0.1	-	-	-	-
cis-permethrin	µg/L	0.1	-	-	-	-
Cycloate*	µg/L	0.1	-	-	-	-
Cyfluthrin*	µg/L	0.1	-	-	-	-
Demeton-o	µg/L	0.1	-	-	-	-
Demeton-s	µg/L	0.1	-	-	-	-
Demeton-s-methyl	µg/L	0.1	-	-	-	-
Diallate A*	µg/L	0.1	-	-	-	-
Diallate B*	µg/L	0.1	-	-	-	-
Diazinon*	µg/L	0.01	<0.01	<0.01	<0.01	<0.01
Dichlobenil*	µg/L	0.1	-	-	-	-
Dichlofluanid*	µg/L	0.1	-	-	-	-
Dichlone*	µg/L	0.1	-	-	-	-
Dichlorvos	µg/L	0.01	<0.01	<0.01	<0.01	<0.01
Diclofop-methyl*	µg/L	0.1	-	-	-	-
Dicofol	µg/L	0.1	-	-	-	-
Dicrotophos*	µg/L	0.1	-	-	-	-
EPN	µg/L	0.1	-	-	-	-
EPTC	µg/L	0.1	-	-	-	-
Esfenvalerate	µg/L	0.1	-	-	-	-
Ethion	µg/L	0.01	<0.01	<0.01	<0.01	<0.01
Ethoprop	µg/L	0.1	-	-	-	-
Fenamiphos (Phenamiphos)	µg/L	0.1	-	-	-	-
Fearimol	µg/L	0.1	-	-	-	-
Fenitrothion	µg/L	0.01	<0.01	<0.01	<0.01	<0.01
Fenisulfothion	µg/L	0.1	<0.1	<0.1	<0.1	<0.1
Fenthion	µg/L	0.1	<0.1	<0.1	<0.1	<0.1
Fenvalerate	µg/L	0.1	-	-	-	-
Fluchloralin	µg/L	0.1	-	-	-	-
Fludioxonil	µg/L	0.1	-	-	-	-
Fluridone	µg/L	0.1	-	-	-	-
Haloxyfop methyl	µg/L	0.1	-	-	-	-
Hexazinone	µg/L	0.01	-	-	-	-
Imidan (Phosmet)	µg/L	0.1	-	-	-	-
Indoxacarb	µg/L	0.1	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME317269.001 Water 30 Oct 2020 SE213014.001	ME317269.002 Water 30 Oct 2020 SE213014.002	ME317269.003 Water 30 Oct 2020 SE213014.003	ME317269.004 Water 30 Oct 2020 SE213014.004
Combined SVOC Pesticides in Water, Low Level	**Method: EPA 8270D**	**Tested: 6/11/2020**	**(continued)**				
Kepone	µg/L	0.1		-	-	-	-
Leptophos	µg/L	0.1		-	-	-	-
Malathion	µg/L	0.01		<0.01	<0.01	<0.01	<0.01
Mestranol	µg/L	0.1		-	-	-	-
Metalaxyl	µg/L	0.1		-	-	-	-
Methidathion	µg/L	0.01		<0.01	<0.01	<0.01	<0.01
Methiocarb	µg/L	0.1		-	-	-	-
Methyl paraoxan	µg/L	0.1		-	-	-	-
Metolachlor	µg/L	0.1		-	-	-	-
Mevinphos-cis/trans	µg/L	0.1		<0.1	<0.1	<0.1	<0.1
MGK-264	µg/L	0.1		-	-	-	-
Monocrotophos	µg/L	0.1		-	-	-	-
Naftalfos	µg/L	0.1		-	-	-	-
Naled (Dibrom)	µg/L	0.1		-	-	-	-
Napropamide*	µg/L	0.1		-	-	-	-
Norflurazon*	µg/L	0.1		-	-	-	-
Omethoate	µg/L	0.1		-	-	-	-
Oxyfluorfen	µg/L	0.1		-	-	-	-
Parathion	µg/L	0.01		<0.01	<0.01	<0.01	<0.01
Pebulate	µg/L	0.1		-	-	-	-
Pendimethalin	µg/L	0.1		-	-	-	-
Permethrin	µg/L	0.1		-	-	-	-
Phosalone (Zolone)	µg/L	0.1		-	-	-	-
Phosphamidone	µg/L	0.1		-	-	-	-
Piperonyl butoxide	µg/L	0.1		-	-	-	-
Profenofos	µg/L	0.1		-	-	-	-
Prometon	µg/L	0.1		-	-	-	-
Propachlor	µg/L	0.1		-	-	-	-
Propargite	µg/L	0.1		-	-	-	-
Propiconazole Isomer 2	µg/L	0.1		-	-	-	-
Propylthiouracil	µg/L	0.1		-	-	-	-
Propyzamide	µg/L	0.1		-	-	-	-
Prothiofos	µg/L	0.1		-	-	-	-
Simetryn	µg/L	0.1		-	-	-	-
Strychnine*	µg/L	0.1		-	-	-	-
Sulprofos*	µg/L	0.1		-	-	-	-
OPs							
Terbufos	µg/L	0.01		-	-	-	-
Carbophenothion	µg/L	0.1		-	-	-	-
Chlorfenvinphos-cis	µg/L	0.1		-	-	-	-
Chlorfenvinphos-trans	µg/L	0.1		-	-	-	-
Chlorpyrifos-methyl	µg/L	0.1		-	-	-	-
Co-Ral (Coumaphos)	µg/L	0.1		-	-	-	-
Fenchlorophos (Ronnel)	µg/L	0.1		-	-	-	-
Parathion-methyl	µg/L	0.01		-	-	-	-
Primiphos-ethyl	µg/L	0.1		-	-	-	-
Primiphos-methyl	µg/L	0.1		-	-	-	-
Herbicides (normal)							
Trifluralin	µg/L	0.1		-	-	-	-
Biocides ADWG							
Pronamide (Propyzamide)*	µg/L	0.1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name ME317269.001 Water 30 Oct 2020 SE213014.001	ME317269.002 Water 30 Oct 2020 SE213014.002	ME317269.003 Water 30 Oct 2020 SE213014.003	ME317269.004 Water 30 Oct 2020 SE213014.004
Combined SVOC Pesticides in Water, Low Level **Method: EPA 8270D** **Tested: 6/11/2020** **(continued)**						
Herbicides (other)						
Molinate	µg/L	0.01	-	-	-	-
Herbicides (Phenoxy Acid Herbicides)						
Bromoxynil*	µg/L	0.1	-	-	-	-
Herbicides (Triazine Herbicides)						
Terbuthylazine	µg/L	0.1	-	-	-	-
Ametryn	µg/L	0.1	-	-	-	-
Atrazine	µg/L	0.01	-	-	-	-
Cyanazine	µg/L	0.1	-	-	-	-
Metribuzin	µg/L	0.01	-	-	-	-
Prometryn	µg/L	0.01	-	-	-	-
Propazine	µg/L	0.01	-	-	-	-
Simazine	µg/L	0.01	-	-	-	-
OCs						
Vinclozalin*	µg/L	0.1	-	-	-	-
Chlorothalonil*	µg/L	0.1	-	-	-	-
OPs						
Zolone (phosalone, fosalone)	µg/L	0.1	-	-	-	-
Azinphos-ethyl	µg/L	0.05	-	-	-	-
Prophos	µg/L	0.1	-	-	-	-
Other SVOCs						
Bromacil	µg/L	0.1	-	-	-	-
Propiconazole (Isomer 1+Isomer 2)	µg/L	0.1	-	-	-	-
Propiconazole Isomer 1	µg/L	0.1	-	-	-	-
Surrogates						
d14-p-terphenyl (Surrogate)	%	-	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME317269.001 Water 30 Oct 2020 SE213014.001	ME317269.002 Water 30 Oct 2020 SE213014.002	ME317269.003 Water 30 Oct 2020 SE213014.003	ME317269.004 Water 30 Oct 2020 SE213014.004
Combined SVOC Pesticides in Water, Low Level Method: EPA 8270D Tested: 6/11/2020 (continued)							
Synthetic Pyrethroids							
Bifenthrin	µg/L	0.1		-	-	-	-
Cypermethrin	µg/L	0.1		-	-	-	-
Deltamethrin	µg/L	0.1		-	-	-	-
Pesticides / Herbicides in waters by HPLC-MS MA-1569.WW.01 Method: MA1569 Tested: 9/11/2020							
Bromoxynil*	µg/L	1		-	-	-	-
Clopyralid*	µg/L	0.5		-	-	-	-
4-CPA*	µg/L	1		-	-	-	-
2,4-D [(2,4-Dichlorophenoxy) acetic acid]*	µg/L	0.5		-	-	-	-
2,6-D [(2,6-Dichlorophenoxy) acetic acid]*	µg/L	0.5		-	-	-	-
24-DB*	µg/L	0.5		-	-	-	-
Dicamba*	µg/L	0.5		-	-	-	-
Dichloroprop / Dichlorprop-P*	µg/L	0.5		-	-	-	-
Dinoseb*	µg/L	0.5		-	-	-	-
Fluroxypyr*	µg/L	0.5		-	-	-	-
Ioxynil*	µg/L	1		-	-	-	-
MCPA*	µg/L	0.5		-	-	-	-
MCPB*	µg/L	1		-	-	-	-
mecoprop*	µg/L	0.5		-	-	-	-
Picloram*	µg/L	1		-	-	-	-
2,4,5-T*	µg/L	0.5		-	-	-	-
2,4,5-TP*	µg/L	0.5		-	-	-	-
2,4,6-T*	µg/L	0.5		-	-	-	-
Triclopyr*	µg/L	0.5		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME317269.005 Water 30 Oct 2020 SE213014.005	ME317269.006 Water 30 Oct 2020 SE213014.006	ME317269.007 Water 30 Oct 2020 SE213014.007
SVOC Compounds in Waters by GC-QQQ Method: USEPA8270D Tested: 9/11/2020						
Arochlor 1016	µg/L	0.03		-	-	<0.03
Arochlor 1221	µg/L	0.03		-	-	<0.03
Arochlor 1232	µg/L	0.03		-	-	<0.03
Arochlor 1242	µg/L	0.03		-	-	<0.03
Arochlor 1248	µg/L	0.03		-	-	<0.03
Arochlor 1254	µg/L	0.03		-	-	<0.03
Arochlor 1260	µg/L	0.03		-	-	<0.03
Arochlor 1262	µg/L	0.03		-	-	<0.03
Arochlor 1268	µg/L	0.03		-	-	<0.03
Total PCB*	µg/L	0.03		-	-	<0.03
d14-p-terphenyl (Surrogate)	%	0.001		-	-	109
d5-nitrobenzene (Surrogate)	%	0.001		-	-	-
d6-phenol (Surrogate)	%	0.001		-	-	-
2-fluorobiphenyl (Surrogate)	%	0.001		-	-	-
2,4,6-tribromophenol (Surrogate)	%	0.001		-	-	-
2-fluorophenol (Surrogate)	%	0.001		-	-	-
SVOC Compounds in Waters by GC-QQQ, Low Level Method: USEPA8270D LL Tested: 9/11/2020						
2-Chlorophenol	µg/L	0.1		-	-	<0.1
1-Methylnaphthalene	µg/L	0.1		-	-	<0.1
2,4-Dimethylphenol	µg/L	0.1		-	-	<0.1
2,4-Dinitrophenol	µg/L	0.1		-	-	<0.1
2-Methylnaphthalene	µg/L	0.1		-	-	<0.1
2-Nitrophenol	µg/L	0.1		-	-	<0.1
4-nitrophenol	µg/L	0.1		-	-	<0.1
m&p Cresol	µg/L	0.1		-	-	<0.1
o-Cresol	µg/L	0.1		-	-	<0.1
2-Methyl 4,6-Dinitrophenol	µg/L	0.1		-	-	<0.1
2,3,4,6-Tetrachlorophenol	µg/L	0.1		-	-	<0.1
2,4-Dichlorophenol	µg/L	0.1		-	-	<0.1
2,4,5-Trichlorophenol	µg/L	0.1		-	-	<0.1
2,4,6-Tribromophenol*	µg/L	0.1		-	-	<0.1
2,4,6-Trichlorophenol	µg/L	0.1		-	-	<0.1
2,6-Dichlorophenol	µg/L	0.1		-	-	<0.1
3-Methylcholanthrene	µg/L	0.01		-	-	<0.01
4-Chloro-3-methylphenol	µg/L	0.1		-	-	<0.1
4,4-DDD	µg/L	0.1		-	-	<0.1
4,4-DDE	µg/L	0.1		-	-	<0.1
4,4-DDT	µg/L	0.1		-	-	<0.1
DDT+DDE+DDD	µg/L	0.2		-	-	<0.2
o,p-DDT	µg/L	0.01		-	-	<0.01
Total DDT	µg/L	0.1		-	-	<0.1
7,12-Dimethylbenz(a)anthracene	µg/L	0.01		-	-	<0.01
Acenaphthene	µg/L	0.01		-	-	<0.01
Acenaphthylene	µg/L	0.01		-	-	<0.01
Acetophenone	µg/L	0.01		-	-	<0.01
Aldrin	µg/L	0.01		-	-	<0.01
Aldrin and Dieldrin	µg/L	0.1		-	-	<0.1
alpha-BHC	µg/L	0.1		-	-	<0.1
alpha-Chlordane	µg/L	0.01		-	-	<0.01
Anthracene	µg/L	0.01		-	-	<0.01
Benzo(a)anthracene	µg/L	0.01		-	-	<0.01
Benzo (a) pyrene	µg/L	0.01		-	-	<0.01
Benzo (b) fluoranthene	µg/L	0.01		-	-	<0.01
Benzo (e) pyrene	µg/L	0.01		-	-	<0.01
Benzo (ghi) perylene	µg/L	0.01		-	-	<0.01
Benzo (k) fluoranthene	µg/L	0.01		-	-	<0.01
Benzo (b+j+k) fluoranthene	µg/L	0.02		-	-	<0.02

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME317269.005 Water 30 Oct 2020 SE213014.005	ME317269.006 Water 30 Oct 2020 SE213014.006	ME317269.007 Water 30 Oct 2020 SE213014.007
SVOC Compounds in Waters by GC-QQQ, Low Level Method: USEPA8270D LL Tested: 6/11/2020 (continued)						
beta-BHC	µg/L	0.1		-	-	<0.1
Bis (2-Ethylhexyl) adipate	µg/L	0.01		-	-	<0.01
Bis (2-Ethylhexyl) phthalate	µg/L	0.01		-	-	<0.01
Chlordane	µg/L	0.01		-	-	<0.01
Chlorpyrifos	µg/L	0.01		-	-	<0.01
Chrysene	µg/L	0.01		-	-	<0.01
Coronene	µg/L	0.01		-	-	<0.01
delta-BHC	µg/L	0.1		-	-	<0.1
Dibenz (ah) anthracene	µg/L	0.01		-	-	<0.01
Dibenz (aj) acridine	µg/L	0.01		-	-	<0.01
Dibenzo[a,e]pyrene	µg/L	0.01		-	-	<0.01
Dieldrin	µg/L	0.01		-	-	<0.01
Dimethoate	µg/L	0.1		-	-	<0.1
Dinoseb	µg/L	0.05		-	-	<0.05
Disulfoton	µg/L	0.1		-	-	<0.1
Endosulfan 1	µg/L	0.01		-	-	<0.01
Endosulfan 2	µg/L	0.01		-	-	<0.01
Endosulfan Sulphate	µg/L	0.01		-	-	<0.01
Total Endosulfan	µg/L	0.01		-	-	<0.01
Endrin	µg/L	0.1		-	-	<0.1
Endrin Aldehyde	µg/L	0.1		-	-	<0.1
Endrin ketone	µg/L	0.1		-	-	<0.1
Famphur	µg/L	0.1		-	-	<0.1
Fluoranthene	µg/L	0.01		-	-	<0.01
Fluorene	µg/L	0.01		-	-	<0.01
gamma-BHC	µg/L	0.01		-	-	<0.01
gamma-Chlordane	µg/L	0.01		-	-	<0.01
Heptachlor	µg/L	0.01		-	-	<0.01
Heptachlor Epoxide	µg/L	0.1		-	-	<0.1
Hexachlorobenzene	µg/L	0.01		-	-	<0.01
Hexachlorophene	µg/L	0.05		-	-	<0.05
Indeno (1,2,3-cd) pyrene	µg/L	0.01		-	-	<0.01
Isodrin	µg/L	0.1		-	-	<0.1
Methoxychlor	µg/L	0.1		-	-	<0.1
Methyl parathion	µg/L	0.01		-	-	<0.01
Mirex	µg/L	0.1		-	-	<0.1
Naphthalene	µg/L	0.1		-	-	<0.1
Pentachlorophenol	µg/L	0.1		-	-	<0.1
Phenol	µg/L	0.1		-	-	<0.1
Perylene	µg/L	0.01		-	-	<0.01
Phenanthrene	µg/L	0.01		-	-	<0.01
Phorate	µg/L	0.1		-	-	<0.1
Pyrene	µg/L	0.01		-	-	<0.01
Stirofos	µg/L	0.1		-	-	<0.1
Sulfotepp	µg/L	0.1		-	-	<0.1
Thionazin	µg/L	0.1		-	-	<0.1
Total PAHs - assumes <LOR results = 0	µg/L	0.09		-	-	-
Total PAHs - assumes <LOR results = 0.5xLOR	µg/L	0.09		-	-	-
Total PAHs Vic EPA - assumes <LOR results = 0	µg/L	0.8		-	-	<0.8
Total PAHs Vic EPA - assumes <LOR results = 0.5LOR	µg/L	0.8		-	-	<0.8
d14-p-terphenyl (Surrogate)	%	0.0001		-	-	**109**
Combined SVOC Pesticides in Water, Low Level Method: EPA 8270D Tested: 9/11/2020						
Tebuthiuron*	µg/L	0.1		-	-	<0.1
Temephos	µg/L	0.1		-	-	<0.1
Terbacil*	µg/L	0.1		-	-	<0.1
Terbutryn (Prebane)	µg/L	0.1		-	-	<0.1
Tetrachlorvinphos (Stirifos)	µg/L	0.1		-	-	<0.1

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name ME317269.005 Water 30 Oct 2020 SE213014.005	ME317269.006 Water 30 Oct 2020 SE213014.006	ME317269.007 Water 30 Oct 2020 SE213014.007
Combined SVOC Pesticides in Water, Low Level	**Method: EPA 8270D**	**Tested: 6/11/2020**	**(continued)**		
Thiabendazole	µg/L	0.1	-	-	<0.1
Thiamethoxam	µg/L	0.1	-	-	<0.1
Thiometon	µg/L	0.1	-	-	<0.1
Triadimefon	µg/L	0.1	-	-	<0.1
Triazophos	µg/L	0.1	-	-	<0.1
Trichlorfon	µg/L	0.1	-	-	<0.1
Trichlornate (Trichloronate)*	µg/L	0.1	-	-	<0.1
Tricyclazole*	µg/L	0.1	-	-	<0.1
Vernolate*	µg/L	0.1	-	-	<0.1
Acephate	µg/L	0.1	-	-	<0.1
Alachlor	µg/L	0.1	-	-	<0.1
Atraton	µg/L	0.1	-	-	<0.1
Azinphos-methyl	µg/L	0.05	-	-	<0.05
Bioresmethrin	µg/L	0.1	-	-	<0.1
Boscalid*	µg/L	0.1	-	-	<0.1
Bromophos ethyl*	µg/L	0.05	-	-	<0.05
Butachlor*	µg/L	0.1	-	-	<0.1
Butylate*	µg/L	0.1	-	-	<0.1
Captafol*	µg/L	0.1	-	-	<0.1
Captan*	µg/L	0.1	-	-	<0.1
Carboxin*	µg/L	0.1	-	-	<0.1
Chlorfenvinphos*	µg/L	0.1	-	-	<0.1
Chloropham	µg/L	0.1	-	-	<0.1
Chlorsulfuron*	µg/L	0.1	-	-	<0.1
Ciodrin (Crotoxyphos)*	µg/L	0.1	-	-	<0.1
cis-permethrin	µg/L	0.1	-	-	<0.1
Cycloate*	µg/L	0.1	-	-	<0.1
Cyfluthrin*	µg/L	0.1	-	-	<0.1
Demeton-o	µg/L	0.1	-	-	<0.1
Demeton-s	µg/L	0.1	-	-	<0.1
Demeton-s-methyl	µg/L	0.1	-	-	<0.1
Diallate A*	µg/L	0.1	-	-	<0.1
Diallate B*	µg/L	0.1	-	-	<0.1
Diazinon*	µg/L	0.01	-	-	<0.01
Dichlobenil*	µg/L	0.1	-	-	<0.1
Dichlofluanid*	µg/L	0.1	-	-	<0.1
Dichlone*	µg/L	0.1	-	-	<0.1
Dichlorvos	µg/L	0.01	-	-	<0.01
Diclofop-methyl*	µg/L	0.1	-	-	<0.1
Dicofol	µg/L	0.1	-	-	<0.1
Dicrotophos*	µg/L	0.1	-	-	<0.1
EPN	µg/L	0.1	-	-	<0.1
EPTC	µg/L	0.1	-	-	<0.1
Esfenvalerate	µg/L	0.1	-	-	<0.1
Ethion	µg/L	0.01	-	-	<0.01
Ethoprop	µg/L	0.1	-	-	<0.1
Fenamiphos (Phenamiphos)	µg/L	0.1	-	-	<0.1
Fearimol	µg/L	0.1	-	-	<0.1
Fenitrothion	µg/L	0.01	-	-	<0.01
Fenisulfothion	µg/L	0.1	-	-	<0.1
Fenthion	µg/L	0.1	-	-	<0.1
Fenvalerate	µg/L	0.1	-	-	<0.1
Fluchloralin	µg/L	0.1	-	-	<0.1
Fludioxonil	µg/L	0.1	-	-	<0.1
Fluridone	µg/L	0.1	-	-	<0.1
Haloxyfop methyl	µg/L	0.1	-	-	<0.1
Hexazinone	µg/L	0.01	-	-	<0.01
Imidan (Phosmet)	µg/L	0.1	-	-	<0.1
Indoxacarb	µg/L	0.1	-	-	<0.1

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME317269.005 Water 30 Oct 2020 SE213014.005	ME317269.006 Water 30 Oct 2020 SE213014.006	ME317269.007 Water 30 Oct 2020 SE213014.007
Combined SVOC Pesticides in Water, Low Level	**Method: EPA 8270D**	**Tested: 6/11/2020**	**(continued)**			
Kepone	µg/L	0.1		-	-	<0.1
Leptophos	µg/L	0.1		-	-	<0.1
Malathion	µg/L	0.01		-	-	<0.01
Mestranol	µg/L	0.1		-	-	<0.1
Metalaxyl	µg/L	0.1		-	-	<0.1
Methidathion	µg/L	0.01		-	-	<0.01
Methiocarb	µg/L	0.1		-	-	<0.1
Methyl paraoxan	µg/L	0.1		-	-	<0.1
Metolachlor	µg/L	0.1		-	-	<0.1
Mevinphos-cis/trans	µg/L	0.1		-	-	<0.1
MGK-264	µg/L	0.1		-	-	<0.1
Monocrotophos	µg/L	0.1		-	-	<0.1
Naftalfos	µg/L	0.1		-	-	<0.1
Naled (Dibrom)	µg/L	0.1		-	-	<0.1
Napropamide*	µg/L	0.1		-	-	<0.1
Norflurazon*	µg/L	0.1		-	-	<0.1
Omethoate	µg/L	0.1		-	-	<0.1
Oxyfluorfen	µg/L	0.1		-	-	<0.1
Parathion	µg/L	0.01		-	-	<0.01
Pebulate	µg/L	0.1		-	-	<0.1
Pendimethalin	µg/L	0.1		-	-	<0.1
Permethrin	µg/L	0.1		-	-	<0.1
Phosalone (Zolone)	µg/L	0.1		-	-	<0.1
Phosphamidone	µg/L	0.1		-	-	<0.1
Piperonyl butoxide	µg/L	0.1		-	-	<0.1
Profenofos	µg/L	0.1		-	-	<0.1
Prometon	µg/L	0.1		-	-	<0.1
Propachlor	µg/L	0.1		-	-	<0.1
Propargite	µg/L	0.1		-	-	<0.1
Propiconazole Isomer 2	µg/L	0.1		-	-	<0.1
Propylthiouracil	µg/L	0.1		-	-	<0.1
Propyzamide	µg/L	0.1		-	-	<0.1
Prothiofos	µg/L	0.1		-	-	<0.1
Simetryn	µg/L	0.1		-	-	<0.1
Strychnine*	µg/L	0.1		-	-	<0.1
Sulprofos*	µg/L	0.1		-	-	<0.1

OPs

Terbufos	µg/L	0.01		-	-	<0.01
Carbophenothion	µg/L	0.1		-	-	<0.1
Chlorfenvinphos-cis	µg/L	0.1		-	-	<0.1
Chlorfenvinphos-trans	µg/L	0.1		-	-	<0.1
Chlorpyrifos-methyl	µg/L	0.1		-	-	<0.1
Co-Ral (Coumaphos)	µg/L	0.1		-	-	<0.1
Fenchlorophos (Ronnel)	µg/L	0.1		-	-	<0.1
Parathion-methyl	µg/L	0.01		-	-	<0.01
Primiphos-ethyl	µg/L	0.1		-	-	<0.1
Primiphos-methyl	µg/L	0.1		-	-	<0.1

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name ME317269.005 Water 30 Oct 2020 SE213014.005	ME317269.006 Water 30 Oct 2020 SE213014.006	ME317269.007 Water 30 Oct 2020 SE213014.007
Combined SVOC Pesticides in Water, Low Level **Method: EPA 8270D** **Tested: 9/11/2020** **(continued)**					
Herbicides (normal)					
Trifluralin	µg/L	0.1	-	-	<0.1
Biocides ADWG					
Pronamide (Propyzamide)*	µg/L	0.1	-	-	<0.1
Herbicides (other)					
Molinate	µg/L	0.01	-	-	<0.01
Herbicides (Phenoxy Acid Herbicides)					
Bromoxynil*	µg/L	0.1	-	-	<0.1
Herbicides (Triazine Herbicides)					
Terbuthylazine	µg/L	0.1	-	-	<0.1
Ametryn	µg/L	0.1	-	-	<0.1
Atrazine	µg/L	0.01	-	-	<0.01
Cyanazine	µg/L	0.1	-	-	<0.1
Metribuzin	µg/L	0.01	-	-	<0.01
Prometryn	µg/L	0.01	-	-	<0.01
Propazine	µg/L	0.01	-	-	<0.01
Simazine	µg/L	0.01	-	-	<0.01
OCs					
Vinclozalin*	µg/L	0.1	-	-	<0.1
Chlorothalonil*	µg/L	0.1	-	-	<0.1
OPs					
Zolone (phosalone, fosalone)	µg/L	0.1	-	-	<0.1
Azinphos-ethyl	µg/L	0.05	-	-	<0.05
Prophos	µg/L	0.1	-	-	<0.1

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME317269.005 Water 30 Oct 2020 SE213014.005	ME317269.006 Water 30 Oct 2020 SE213014.006	ME317269.007 Water 30 Oct 2020 SE213014.007
Combined SVOC Pesticides in Water, Low Level Method: EPA 8270D Tested: 9/11/2020 (continued)						
Other SVOCs						
Bromacil	µg/L	0.1		-	-	<0.1
Propiconazole (Isomer 1+Isomer 2)	µg/L	0.1		-	-	<0.1
Propiconazole Isomer 1	µg/L	0.1		-	-	<0.1
Surrogates						
d14-p-terphenyl (Surrogate)	%	-		-	-	-
Synthetic Pyrethroids						
Bifenthrin	µg/L	0.1		-	-	<0.1
Cypermethrin	µg/L	0.1		-	-	<0.1
Deltamethrin	µg/L	0.1		-	-	<0.1
Pesticides / Herbicides in waters by HPLC-MS MA-1569.WW.01 Method: MA1569 Tested: 9/11/2020						
Bromoxynil*	µg/L	1		-	-	<1
Clopyralid*	µg/L	0.5		-	-	<0.5
4-CPA*	µg/L	1		-	-	<1
2,4-D [(2,4-Dichlorophenoxy) acetic acid]*	µg/L	0.5		-	-	<0.5
2,6-D [(2,6-Dichlorophenoxy) acetic acid]*	µg/L	0.5		-	-	<0.5
24-DB*	µg/L	0.5		-	-	<0.5
Dicamba*	µg/L	0.5		-	-	<0.5
Dichloroprop / Dichlorprop-P*	µg/L	0.5		-	-	<0.5
Dinoseb*	µg/L	0.5		-	-	<0.5
Fluroxypyr*	µg/L	0.5		-	-	<0.5
Ioxynil*	µg/L	1		-	-	<1
MCPA*	µg/L	0.5		-	-	<0.5
MCPB*	µg/L	1		-	-	<1
mecoprop*	µg/L	0.5		-	-	<0.5
Picloram*	µg/L	1		-	-	<1
2,4,5-T*	µg/L	0.5		-	-	<0.5
2,4,5-TP*	µg/L	0.5		-	-	<0.5
2,4,6-T*	µg/L	0.5		-	-	<0.5
Triclopyr*	µg/L	0.5		-	-	<0.5

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage.* Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Combined SVOC Pesticides in Water, Low Level **Method: EPA 8270D**

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Tebuthiuron*	LB036694	µg/L	0.1	<0.1	NA
Temephos	LB036694	µg/L	0.1	<0.1	NA
Terbacil*	LB036694	µg/L	0.1	<0.1	NA
Terbutryn (Prebane)	LB036694	µg/L	0.1	<0.1	NA
Tetrachlorvinphos (Stirifos)	LB036694	µg/L	0.1	<0.1	NA
Thiabendazole	LB036694	µg/L	0.1	<0.1	NA
Thiamethoxam	LB036694	µg/L	0.1	<0.1	NA
Thiometon	LB036694	µg/L	0.1	<0.1	NA
Triadimefon	LB036694	µg/L	0.1	<0.1	NA
Triazophos	LB036694	µg/L	0.1	<0.1	NA
Trichlorfon	LB036694	µg/L	0.1	<0.1	NA
Trichlornate (Trichloronate)*	LB036694	µg/L	0.1	<0.1	NA
Tricyclazole*	LB036694	µg/L	0.1	<0.1	NA
Vernolate*	LB036694	µg/L	0.1	<0.1	NA
Acephate	LB036694	µg/L	0.1	<0.1	NA
Alachlor	LB036694	µg/L	0.1	<0.1	NA
Atraton	LB036694	µg/L	0.1	<0.1	NA
Azinphos-methyl	LB036694	µg/L	0.05	<0.05	NA
Bioresmethrin	LB036694	µg/L	0.1	<0.1	NA
Boscalid*	LB036694	µg/L	0.1	<0.1	NA
Bromophos ethyl*	LB036694	µg/L	0.05	<0.05	NA
Butachlor*	LB036694	µg/L	0.1	<0.1	NA
Butylate*	LB036694	µg/L	0.1	<0.1	NA
Captafol*	LB036694	µg/L	0.1	<0.1	NA
Captan*	LB036694	µg/L	0.1	<0.1	NA
Carboxin*	LB036694	µg/L	0.1	<0.1	NA
Chlorfenvinphos*	LB036694	µg/L	0.1	<0.1	NA
Chlopropham	LB036694	µg/L	0.1	<0.1	NA
Chlorsulfuron*	LB036694	µg/L	0.1	<0.1	NA
Ciodrin (Crotoxyphos)*	LB036694	µg/L	0.1	<0.1	NA
cis-permethrin	LB036694	µg/L	0.1	<0.1	NA
Cycloate*	LB036694	µg/L	0.1	<0.1	NA
Cyfluthrin*	LB036694	µg/L	0.1	<0.1	NA
Demeton-o	LB036694	µg/L	0.1	<0.1	NA
Demeton-s	LB036694	µg/L	0.1	<0.1	NA
Demeton-s-methyl	LB036694	µg/L	0.1	<0.1	NA
Diallate A*	LB036694	µg/L	0.1	<0.1	NA
Diallate B*	LB036694	µg/L	0.1	<0.1	NA
Diazinon*	LB036694	µg/L	0.01	<0.01	NA
Dichlobenil*	LB036694	µg/L	0.1	<0.1	NA
Dichlofluanid*	LB036694	µg/L	0.1	<0.1	NA
Dichlone*	LB036694	µg/L	0.1	<0.1	NA
Dichlorvos	LB036694	µg/L	0.01	<0.01	104%
Diclofop-methyl*	LB036694	µg/L	0.1	<0.1	NA
Dicofol	LB036694	µg/L	0.1	<0.1	NA
Dicrotophos*	LB036694	µg/L	0.1	<0.1	NA
EPN	LB036694	µg/L	0.1	<0.1	NA
EPTC	LB036694	µg/L	0.1	<0.1	NA
Esfenvalerate	LB036694	µg/L	0.1	<0.1	NA
Ethion	LB036694	µg/L	0.01	<0.01	NA
Ethoprop	LB036694	µg/L	0.1	<0.1	NA
Fenamiphos (Phenamiphos)	LB036694	µg/L	0.1	<0.1	NA
Fearimol	LB036694	µg/L	0.1	<0.1	NA
Fenitrothion	LB036694	µg/L	0.01	<0.01	NA
Fenisulfothion	LB036694	µg/L	0.1	<0.1	NA
Fenthion	LB036694	µg/L	0.1	<0.1	NA

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage.* Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Combined SVOC Pesticides in Water, Low Level **Method: EPA 8270D (continued)**

				MB	LCS %Recovery
Fenvalerate	LB036694	µg/L	0.1	<0.1	NA
Fluchloralin	LB036694	µg/L	0.1	<0.1	NA
Fludioxonil	LB036694	µg/L	0.1	<0.1	NA
Fluridone	LB036694	µg/L	0.1	<0.1	NA
Haloxyfop methyl	LB036694	µg/L	0.1	<0.1	NA
Hexazinone	LB036694	µg/L	0.01	<0.01	NA
Imidan (Phosmet)	LB036694	µg/L	0.1	<0.1	NA
Indoxacarb	LB036694	µg/L	0.1	<0.1	NA
Kepone	LB036694	µg/L	0.1	<0.1	NA
Leptophos	LB036694	µg/L	0.1	<0.1	NA
Malathion	LB036694	µg/L	0.01	<0.01	NA
Mestranol	LB036694	µg/L	0.1	<0.1	NA
Metalaxyl	LB036694	µg/L	0.1	<0.1	NA
Methidathion	LB036694	µg/L	0.01	<0.01	NA
Methiocarb	LB036694	µg/L	0.1	<0.1	NA
Methyl paraoxan	LB036694	µg/L	0.1	<0.1	NA
Metolachlor	LB036694	µg/L	0.1	<0.1	NA
Mevinphos-cis/trans	LB036694	µg/L	0.1	<0.1	NA
MGK-264	LB036694	µg/L	0.1	<0.1	NA
Monocrotophos	LB036694	µg/L	0.1	<0.1	NA
Naftalfos	LB036694	µg/L	0.1	<0.1	NA
Naled (Dibrom)	LB036694	µg/L	0.1	<0.1	NA
Napropamide*	LB036694	µg/L	0.1	<0.1	NA
Norflurazon*	LB036694	µg/L	0.1	<0.1	NA
Omethoate	LB036694	µg/L	0.1	<0.1	NA
Oxyfluorfen	LB036694	µg/L	0.1	<0.1	NA
Parathion	LB036694	µg/L	0.01	<0.01	NA
Pebulate	LB036694	µg/L	0.1	<0.1	NA
Pendimethalin	LB036694	µg/L	0.1	<0.1	NA
Permethrin	LB036694	µg/L	0.1	<0.1	NA
Phosalone (Zolone)	LB036694	µg/L	0.1	<0.1	NA
Phosphamidone	LB036694	µg/L	0.1	<0.1	NA
Piperonyl butoxide	LB036694	µg/L	0.1	<0.1	NA
Profenofos	LB036694	µg/L	0.1	<0.1	NA
Prometon	LB036694	µg/L	0.1	<0.1	NA
Propachlor	LB036694	µg/L	0.1	<0.1	NA
Propargite	LB036694	µg/L	0.1	<0.1	NA
Propiconazole Isomer 2	LB036694	µg/L	0.1	<0.1	NA
Propylthiouracil	LB036694	µg/L	0.1	<0.1	NA
Propyzamide	LB036694	µg/L	0.1	<0.1	NA
Prothiofos	LB036694	µg/L	0.1	<0.1	NA
Simetryn	LB036694	µg/L	0.1	<0.1	NA
Strychnine*	LB036694	µg/L	0.1	<0.1	NA
Sulprofos*	LB036694	µg/L	0.1	<0.1	NA

OPs

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Terbufos	LB036694	µg/L	0.01	<0.01	NA
Carbophenothion	LB036694	µg/L	0.1	<0.1	NA
Chlorfenvinphos-cis	LB036694	µg/L	0.1	<0.1	NA
Chlorfenvinphos-trans	LB036694	µg/L	0.1	<0.1	NA
Chlorpyrifos-methyl	LB036694	µg/L	0.1	<0.1	NA
Co-Ral (Coumaphos)	LB036694	µg/L	0.1	<0.1	NA
Fenchlorophos (Ronnel)	LB036694	µg/L	0.1	<0.1	NA
Parathion-methyl	LB036694	µg/L	0.01	<0.01	NA
Primiphos-ethyl	LB036694	µg/L	0.1	<0.1	NA

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage.* Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Combined SVOC Pesticides in Water, Low Level **Method: EPA 8270D (continued)**

				MB	LCS %Recovery
Primiphos-methyl	LB036694	µg/L	0.1	<0.1	NA

Herbicides (normal)

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Trifluralin	LB036694	µg/L	0.1	<0.1	NA

Biocides ADWG

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Pronamide (Propyzamide)*	LB036694	µg/L	0.1	<0.1	NA

Herbicides (other)

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Molinate	LB036694	µg/L	0.01	<0.01	NA

Herbicides (Phenoxy Acid Herbicides)

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Bromoxynil*	LB036694	µg/L	0.1	<0.1	NA

Herbicides (Triazine Herbicides)

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Terbuthylazine	LB036694	µg/L	0.1	<0.1	NA
Ametryn	LB036694	µg/L	0.1	<0.1	NA
Atrazine	LB036694	µg/L	0.01	<0.01	NA
Cyanazine	LB036694	µg/L	0.1	<0.1	NA
Metribuzin	LB036694	µg/L	0.01	<0.01	NA
Prometryn	LB036694	µg/L	0.01	<0.01	NA
Propazine	LB036694	µg/L	0.01	<0.01	NA
Simazine	LB036694	µg/L	0.01	<0.01	NA

OCs

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Vinclozalin*	LB036694	µg/L	0.1	<0.1	NA
Chlorothalonil*	LB036694	µg/L	0.1	<0.1	NA

OPs

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Zolone (phosalone, fosalone)	LB036694	µg/L	0.1	<0.1	NA
Azinphos-ethyl	LB036694	µg/L	0.05	<0.05	NA
Prophos	LB036694	µg/L	0.1	<0.1	NA

Other SVOCs

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Bromacil	LB036694	µg/L	0.1	<0.1	NA
Propiconazole (Isomer 1+Isomer 2)	LB036694	µg/L	0.1	<0.1	NA
Propiconazole Isomer 1	LB036694	µg/L	0.1	<0.1	NA

Synthetic Pyrethroids

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Bifenthrin	LB036694	µg/L	0.1	<0.1	NA
Cypermethrin	LB036694	µg/L	0.1	<0.1	NA
Deltamethrin	LB036694	µg/L	0.1	<0.1	NA

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage.* Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Pesticides / Herbicides in waters by HPLC-MS MA-1569.WW.01 Method: MA1569

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery	MS %Recovery	MSD %RPD
Bromoxynil*	LB036671	µg/L	1	<1	0%	NA		
Clopyralid*	LB036671	µg/L	0.5	<0.5	0%	NA		
4-CPA*	LB036671	µg/L	1	<1	0%	NA		
2,4-D [(2,4-Dichlorophenoxy) acetic acid]*	LB036671	µg/L	0.5	<0.5	0%	93%	102%	2%
2,6-D [(2,6-Dichlorophenoxy) acetic acid]*	LB036671	µg/L	0.5	<0.5	0%	NA		
24-DB*	LB036671	µg/L	0.5	<0.5	0%	NA		
Dicamba*	LB036671	µg/L	0.5	<0.5	0%	112%	116%	11%
Dichloroprop / Dichlorprop-P*	LB036671	µg/L	0.5	<0.5	0%	NA		
Dinoseb*	LB036671	µg/L	0.5	<0.5	0%	NA		
Fluroxypyr*	LB036671	µg/L	0.5	<0.5	0%	NA		
Ioxynil*	LB036671	µg/L	1	<1	0%	NA		
MCPA*	LB036671	µg/L	0.5	<0.5	0%	107%	117%	
MCPB*	LB036671	µg/L	1	<1	0%	NA		
mecoprop*	LB036671	µg/L	0.5	<0.5	0%	NA		
Picloram*	LB036671	µg/L	1	<1	0%	NA	NA	NA
2,4,5-T*	LB036671	µg/L	0.5	<0.5	0%	NA		
2,4,5-TP*	LB036671	µg/L	0.5	<0.5	0%	NA		
2,4,6-T*	LB036671	µg/L	0.5	<0.5	0%	NA		
Triclopyr*	LB036671	µg/L	0.5	<0.5	0%	NA	NA	NA

SVOC Compounds in Waters by GC-QQQ Method: USEPA8270D

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Arochlor 1016	LB036688	µg/L	0.03	<0.03	NA
Arochlor 1221	LB036688	µg/L	0.03	<0.03	NA
Arochlor 1232	LB036688	µg/L	0.03	<0.03	NA
Arochlor 1242	LB036688	µg/L	0.03	<0.03	NA
Arochlor 1248	LB036688	µg/L	0.03	<0.03	NA
Arochlor 1254	LB036688	µg/L	0.03	<0.03	NA
Arochlor 1260	LB036688	µg/L	0.03	<0.03	NA
Arochlor 1262	LB036688	µg/L	0.03	<0.03	NA
Arochlor 1268	LB036688	µg/L	0.03	<0.03	NA
Total PCB*	LB036688	µg/L	0.03	<0.03	NA
d14-p-terphenyl (Surrogate)	LB036688	%	0.001	124%	110%

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage.* Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

SVOC Compounds in Waters by GC-QQQ, Low Level **Method: USEPA8270D LL**

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
2-Chlorophenol	LB036688	µg/L	0.1	<0.1	125%
1-Methylnaphthalene	LB036688	µg/L	0.1	<0.1	NA
2,4-Dimethylphenol	LB036688	µg/L	0.1	<0.1	NA
2,4-Dinitrophenol	LB036688	µg/L	0.1	<0.1	NA
2-Methylnaphthalene	LB036688	µg/L	0.1	<0.1	NA
2-Nitrophenol	LB036688	µg/L	0.1	<0.1	NA
4-nitrophenol	LB036688	µg/L	0.1	<0.1	NA
m&p Cresol	LB036688	µg/L	0.1	<0.1	NA
o-Cresol	LB036688	µg/L	0.1	<0.1	NA
2-Methyl 4,6-Dinitrophenol	LB036688	µg/L	0.1	<0.1	NA
2,3,4,6-Tetrachlorophenol	LB036688	µg/L	0.1	<0.1	NA
2,4-Dichlorophenol	LB036688	µg/L	0.1	<0.1	NA
2,4,5-Trichlorophenol	LB036688	µg/L	0.1	<0.1	NA
2,4,6-Tribromophenol*	LB036688	µg/L	0.1	<0.1	NA
2,4,6-Trichlorophenol	LB036688	µg/L	0.1	<0.1	NA
2,6-Dichlorophenol	LB036688	µg/L	0.1	<0.1	NA
3-Methylcholanthrene	LB036688	µg/L	0.01	<0.01	NA
4-Chloro-3-methylphenol	LB036688	µg/L	0.1	<0.1	103%
4,4-DDD	LB036688	µg/L	0.1	<0.1	NA
4,4-DDE	LB036688	µg/L	0.1	<0.1	NA
4,4-DDT	LB036688	µg/L	0.1	<0.1	104%
DDT+DDE+DDD	LB036688	µg/L	0.2	<0.2	NA
o,p-DDT	LB036688	µg/L	0.01	<0.01	NA
Total DDT	LB036688	µg/L	0.1	<0.1	NA
7,12-Dimethylbenz(a)anthracene	LB036688	µg/L	0.01	<0.01	NA
Acenaphthene	LB036688	µg/L	0.01	<0.01	116%
Acenaphthylene	LB036688	µg/L	0.01	<0.01	NA
Acetophenone	LB036688	µg/L	0.01	<0.01	NA
Aldrin	LB036688	µg/L	0.01	<0.01	113%
Aldrin and Dieldrin	LB036688	µg/L	0.1	<0.1	NA
alpha-BHC	LB036688	µg/L	0.1	<0.1	NA
alpha-Chlordane	LB036688	µg/L	0.01	<0.01	NA
Anthracene	LB036688	µg/L	0.01	<0.01	NA
Benzo(a)anthracene	LB036688	µg/L	0.01	<0.01	NA
Benzo (a) pyrene	LB036688	µg/L	0.01	<0.01	NA
Benzo (b) fluoranthene	LB036688	µg/L	0.01	<0.01	NA
Benzo (e) pyrene	LB036688	µg/L	0.01	<0.01	NA
Benzo (ghi) perylene	LB036688	µg/L	0.01	<0.01	NA
Benzo (k) fluoranthene	LB036688	µg/L	0.01	<0.01	NA
Benzo (b+j+k) fluoranthene	LB036688	µg/L	0.02	<0.02	NA
beta-BHC	LB036688	µg/L	0.1	<0.1	NA
Bis (2-Ethylhexyl) adipate	LB036688	µg/L	0.01	<0.01	NA
Bis (2-Ethylhexyl) phthalate	LB036688	µg/L	0.01	<0.01	NA
Chlordane	LB036688	µg/L	0.01	<0.01	NA
Chlorpyrifos	LB036688	µg/L	0.01	<0.01	
Chrysene	LB036688	µg/L	0.01	<0.01	NA
Coronene	LB036688	µg/L	0.01	<0.01	NA
delta-BHC	LB036688	µg/L	0.1	<0.1	NA
Dibenz (ah) anthracene	LB036688	µg/L	0.01	<0.01	NA
Dibenz (aj) acridine	LB036688	µg/L	0.01	<0.01	NA
Dibenzo[a,e]pyrene	LB036688	µg/L	0.01	<0.01	NA
Dieldrin	LB036688	µg/L	0.01	<0.01	109%
Dimethoate	LB036688	µg/L	0.1	<0.1	NA
Dinoseb	LB036688	µg/L	0.05	<0.05	NA
Disulfoton	LB036688	µg/L	0.1	<0.1	NA
Endosulfan 1	LB036688	µg/L	0.01	<0.01	NA

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage.* Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

SVOC Compounds in Waters by GC-QQQ, Low Level **Method: USEPA8270D LL (continued)**

				MB	LCS %Recovery
Endosulfan 2	LB036688	µg/L	0.01	<0.01	NA
Endosulfan Sulphate	LB036688	µg/L	0.01	<0.01	NA
Total Endosulfan	LB036688	µg/L	0.01	<0.01	NA
Endrin	LB036688	µg/L	0.1	<0.1	105%
Endrin Aldehyde	LB036688	µg/L	0.1	<0.1	NA
Endrin ketone	LB036688	µg/L	0.1	<0.1	NA
Famphur	LB036688	µg/L	0.1	<0.1	NA
Fluoranthene	LB036688	µg/L	0.01	<0.01	NA
Fluorene	LB036688	µg/L	0.01	<0.01	NA
gamma-BHC	LB036688	µg/L	0.01	<0.01	99%
gamma-Chlordane	LB036688	µg/L	0.01	<0.01	NA
Heptachlor	LB036688	µg/L	0.01	<0.01	109%
Heptachlor Epoxide	LB036688	µg/L	0.1	<0.1	NA
Hexachlorobenzene	LB036688	µg/L	0.01	<0.01	NA
Hexachlorophene	LB036688	µg/L	0.05	<0.05	NA
Indeno (1,2,3-cd) pyrene	LB036688	µg/L	0.01	<0.01	NA
Isodrin	LB036688	µg/L	0.1	<0.1	NA
Methoxychlor	LB036688	µg/L	0.1	<0.1	NA
Methyl parathion	LB036688	µg/L	0.01	<0.01	NA
Mirex	LB036688	µg/L	0.1	<0.1	NA
Naphthalene	LB036688	µg/L	0.1	<0.1	NA
Pentachlorophenol	LB036688	µg/L	0.1	<0.1	NA
Phenol	LB036688	µg/L	0.1	<0.1	NA
Perylene	LB036688	µg/L	0.01	<0.01	NA
Phenanthrene	LB036688	µg/L	0.01	<0.01	NA
Phorate	LB036688	µg/L	0.1	<0.1	NA
Pyrene	LB036688	µg/L	0.01	<0.01	123%
Stirofos	LB036688	µg/L	0.1	<0.1	NA
Sulfotepp	LB036688	µg/L	0.1	<0.1	NA
Thionazin	LB036688	µg/L	0.1	<0.1	NA
Total PAHs Vic EPA - assumes <LOR results = 0	LB036688	µg/L	0.8	<0.8	NA
Total PAHs Vic EPA - assumes <LOR results = 0.5LOR	LB036688	µg/L	0.8	<0.8	NA
d14-p-terphenyl (Surrogate)	LB036688	%	0.0001	124%	110%

METHOD	METHODOLOGY SUMMARY
EPA8270D	This method covers analytical procedures for the analysis of semi-volatile organic compounds (SVOC) including most neutral, acidic, and basic organic compounds based on the USEPA method 8270D. Samples are extracted into a solvent appropriate to the matrix and analysed using a gas chromatograph – triple quadrapole (GC–QQQ).
EPA8270D LL	This method covers analytical procedures for the analysis of semi-volatile organic compounds (SVOC) including most neutral, acidic, and basic organic compounds based on the USEPA method 8270D. Samples are extracted into a solvent appropriate to the matrix and analysed using a gas chromatograph – triple quadrapole (GC–QQQ).
EPA8270D Pest LL	This method covers analytical procedures for the analysis of semi-volatile organic compounds (SVOC pesticides) including most neutral, acidic, and basic organic compounds based on the USEPA method 8270D. Samples are extracted into a solvent appropriate to the matrix and analysed using a gas chromatograph – triple quadrapole (GC–QQQ).
MA1569	This method is intended for the analysis of a diverse range of pesticides and herbicides by Liquid Chromatography using a Tandem Mass Spectrometry detector (LC-MS/MS). Due to the diverse nature of the analytes covered in this method each analyte requires its own analytical acquisition method thus the sample is run multiple times according to the analyte list requested. Water samples are filtered and filtrates are directly injected onto LC -MS/MS using selective ion monitoring.

FOOTNOTES

IS	Insufficient sample for analysis.	LOR	Limit of Reporting
LNR	Sample listed, but not received.	↑↓	Raised or Lowered Limit of Reporting
*	NATA accreditation does not cover the performance of this service.	QFH	QC result is above the upper tolerance
		QFL	QC result is below the lower tolerance
**	Indicative data, theoretical holding time exceeded.	-	The sample was not analysed for this analyte
***	Indicates that both * and ** apply.	NVL	Not Validated

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calcuated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE213014 R0

CLIENT DETAILS

Contact	LQRSYD
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	02 9427 8100
Facsimile	02 9427 8200
Email	lqrsyd@slrconsulting.com
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	7

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE213014 R0**
Date Received	30 Oct 2020
Date Reported	11 Nov 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Duplicate	VOCs in Water	1 item

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	7 Water
Date documentation received	30/10/2020	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	13°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE213014 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

Mercury (dissolved) in Water — Method: ME-(AU)-[ENV]AN311(Perth)/AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW08	SE213014.001	LB212663	30 Oct 2020	30 Oct 2020	27 Nov 2020	04 Nov 2020	27 Nov 2020	04 Nov 2020
GW10	SE213014.002	LB212663	30 Oct 2020	30 Oct 2020	27 Nov 2020	04 Nov 2020	27 Nov 2020	04 Nov 2020
GW20	SE213014.003	LB212663	30 Oct 2020	30 Oct 2020	27 Nov 2020	04 Nov 2020	27 Nov 2020	04 Nov 2020
GW21	SE213014.004	LB212663	30 Oct 2020	30 Oct 2020	27 Nov 2020	04 Nov 2020	27 Nov 2020	04 Nov 2020

Mercury (total) in Water — Method: ME-(AU)-[ENV]AN311(Perth) /AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
QC318	SE213014.007	LB212664	30 Oct 2020	30 Oct 2020	27 Nov 2020	04 Nov 2020	27 Nov 2020	04 Nov 2020

Speciated Phenols in Water — Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW08	SE213014.001	LB212662	30 Oct 2020	30 Oct 2020	20 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020
GW10	SE213014.002	LB212662	30 Oct 2020	30 Oct 2020	20 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020
GW20	SE213014.003	LB212662	30 Oct 2020	30 Oct 2020	20 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020
GW21	SE213014.004	LB212662	30 Oct 2020	30 Oct 2020	20 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020
QC318	SE213014.007	LB212662	30 Oct 2020	30 Oct 2020	20 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020

Trace Metals (Dissolved) in Water by ICPMS — Method: ME-(AU)-[ENV]AN318

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW08	SE213014.001	LB212648	30 Oct 2020	30 Oct 2020	28 Apr 2021	03 Nov 2020	28 Apr 2021	04 Nov 2020
GW10	SE213014.002	LB212648	30 Oct 2020	30 Oct 2020	28 Apr 2021	03 Nov 2020	28 Apr 2021	04 Nov 2020
GW20	SE213014.003	LB212648	30 Oct 2020	30 Oct 2020	28 Apr 2021	03 Nov 2020	28 Apr 2021	04 Nov 2020
GW21	SE213014.004	LB212648	30 Oct 2020	30 Oct 2020	28 Apr 2021	03 Nov 2020	28 Apr 2021	04 Nov 2020

Trace Metals (Total) in Water by ICPMS — Method: ME-(AU)-[ENV]AN022/AN318

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
QC318	SE213014.007	LB212731	30 Oct 2020	30 Oct 2020	28 Apr 2021	04 Nov 2020	28 Apr 2021	06 Nov 2020

TRH (Total Recoverable Hydrocarbons) in Water — Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW08	SE213014.001	LB212662	30 Oct 2020	30 Oct 2020	06 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020
GW10	SE213014.002	LB212662	30 Oct 2020	30 Oct 2020	06 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020
GW20	SE213014.003	LB212662	30 Oct 2020	30 Oct 2020	06 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020
GW21	SE213014.004	LB212662	30 Oct 2020	30 Oct 2020	06 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020
QC318	SE213014.007	LB212662	30 Oct 2020	30 Oct 2020	06 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020

VOCs in Water — Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW08	SE213014.001	LB212763	30 Oct 2020	30 Oct 2020	06 Nov 2020	05 Nov 2020	15 Dec 2020	06 Nov 2020
GW10	SE213014.002	LB212763	30 Oct 2020	30 Oct 2020	06 Nov 2020	05 Nov 2020	15 Dec 2020	06 Nov 2020
GW20	SE213014.003	LB212763	30 Oct 2020	30 Oct 2020	06 Nov 2020	05 Nov 2020	15 Dec 2020	06 Nov 2020
GW21	SE213014.004	LB212763	30 Oct 2020	30 Oct 2020	06 Nov 2020	05 Nov 2020	15 Dec 2020	06 Nov 2020
QCC527TS	SE213014.005	LB212763	30 Oct 2020	30 Oct 2020	06 Nov 2020	05 Nov 2020	15 Dec 2020	06 Nov 2020
QC527_TB	SE213014.006	LB212763	30 Oct 2020	30 Oct 2020	06 Nov 2020	05 Nov 2020	15 Dec 2020	06 Nov 2020
QC318	SE213014.007	LB212763	30 Oct 2020	30 Oct 2020	06 Nov 2020	05 Nov 2020	15 Dec 2020	06 Nov 2020

Volatile Petroleum Hydrocarbons in Water — Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW08	SE213014.001	LB212763	30 Oct 2020	30 Oct 2020	06 Nov 2020	05 Nov 2020	15 Dec 2020	06 Nov 2020
GW10	SE213014.002	LB212763	30 Oct 2020	30 Oct 2020	06 Nov 2020	05 Nov 2020	15 Dec 2020	06 Nov 2020
GW20	SE213014.003	LB212763	30 Oct 2020	30 Oct 2020	06 Nov 2020	05 Nov 2020	15 Dec 2020	06 Nov 2020
GW21	SE213014.004	LB212763	30 Oct 2020	30 Oct 2020	06 Nov 2020	05 Nov 2020	15 Dec 2020	06 Nov 2020
QCC527TS	SE213014.005	LB212763	30 Oct 2020	30 Oct 2020	06 Nov 2020	05 Nov 2020	15 Dec 2020	06 Nov 2020
QC527_TB	SE213014.006	LB212763	30 Oct 2020	30 Oct 2020	06 Nov 2020	05 Nov 2020	15 Dec 2020	06 Nov 2020
QC318	SE213014.007	LB212763	30 Oct 2020	30 Oct 2020	06 Nov 2020	05 Nov 2020	15 Dec 2020	06 Nov 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples — **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C2_PFTeDA) Isotopically Labelled Internal Recovery Standard	GW08	SE213014.001	%	10 - 150%	103
	GW10	SE213014.002	%	10 - 150%	112
	GW20	SE213014.003	%	10 - 150%	98
	GW21	SE213014.004	%	10 - 150%	126
	QC318	SE213014.007	%	10 - 150%	80
(13C2-4:2 FTS) Isotopically Labelled Internal Recovery Standard	GW08	SE213014.001	%	10 - 150%	39
	GW10	SE213014.002	%	10 - 150%	37
	GW20	SE213014.003	%	10 - 150%	30
	GW21	SE213014.004	%	10 - 150%	36
	QC318	SE213014.007	%	10 - 150%	37
(13C2-6:2 FTS) Isotopically Labelled Internal Recovery Standard	GW08	SE213014.001	%	10 - 150%	35
	GW10	SE213014.002	%	10 - 150%	38
	GW20	SE213014.003	%	10 - 150%	31
	GW21	SE213014.004	%	10 - 150%	37
	QC318	SE213014.007	%	10 - 150%	35
(13C2-8:2 FTS) Isotopically Labelled Internal Recovery Standard	GW08	SE213014.001	%	10 - 150%	47
	GW10	SE213014.002	%	10 - 150%	43
	GW20	SE213014.003	%	10 - 150%	38
	GW21	SE213014.004	%	10 - 150%	39
	QC318	SE213014.007	%	10 - 150%	35
(13C2-PFDoA) Isotopically Labelled Internal Recovery Standard	GW08	SE213014.001	%	10 - 150%	95
	GW10	SE213014.002	%	10 - 150%	107
	GW20	SE213014.003	%	10 - 150%	98
	GW21	SE213014.004	%	10 - 150%	115
	QC318	SE213014.007	%	10 - 150%	91
(13C2-PFHxDA) Isotopically Labelled Internal Recovery Standard	GW08	SE213014.001	%	10 - 150%	103
	GW10	SE213014.002	%	10 - 150%	113
	GW20	SE213014.003	%	10 - 150%	88
	GW21	SE213014.004	%	10 - 150%	145
	QC318	SE213014.007	%	10 - 150%	59
(13C3-PFBS) Isotopically Labelled Internal Recovery Standard	GW08	SE213014.001	%	10 - 150%	110
	GW10	SE213014.002	%	10 - 150%	109
	GW20	SE213014.003	%	10 - 150%	88
	GW21	SE213014.004	%	10 - 150%	99
	QC318	SE213014.007	%	10 - 150%	99
(13C3-PFHxS) Isotopically Labelled Internal Recovery Standard	GW08	SE213014.001	%	10 - 150%	105
	GW10	SE213014.002	%	10 - 150%	111
	GW20	SE213014.003	%	10 - 150%	83
	GW21	SE213014.004	%	10 - 150%	109
	QC318	SE213014.007	%	10 - 150%	99
(13C4_PFOA) Isotopically Labelled Internal Recovery Standard	GW08	SE213014.001	%	10 - 150%	104
	GW10	SE213014.002	%	10 - 150%	100
	GW20	SE213014.003	%	10 - 150%	104
	GW21	SE213014.004	%	10 - 150%	110
	QC318	SE213014.007	%	10 - 150%	102
(13C4-PFBA) Isotopically Labelled Internal Recovery Standard	GW08	SE213014.001	%	10 - 150%	98
	GW10	SE213014.002	%	10 - 150%	99
	GW20	SE213014.003	%	10 - 150%	102
	GW21	SE213014.004	%	10 - 150%	100
	QC318	SE213014.007	%	10 - 150%	98
(13C4-PFHpA) Isotopically Labelled Internal Recovery Standard	GW08	SE213014.001	%	10 - 150%	113
	GW10	SE213014.002	%	10 - 150%	100
	GW20	SE213014.003	%	10 - 150%	119
	GW21	SE213014.004	%	10 - 150%	116
	QC318	SE213014.007	%	10 - 150%	110
(13C5-PFHxA) Isotopically Labelled Internal Recovery Standard	GW08	SE213014.001	%	10 - 150%	111
	GW10	SE213014.002	%	10 - 150%	103
	GW20	SE213014.003	%	10 - 150%	115
	GW21	SE213014.004	%	10 - 150%	109
	QC318	SE213014.007	%	10 - 150%	107
(13C5-PFPeA) Isotopically Labelled Internal Recovery Standard	GW08	SE213014.001	%	10 - 150%	99

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples (continued) — **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C5-PFPeA) Isotopically Labelled Internal Recovery Standard	GW10	SE213014.002	%	10 - 150%	100
	GW20	SE213014.003	%	10 - 150%	104
	GW21	SE213014.004	%	10 - 150%	102
	QC318	SE213014.007	%	10 - 150%	99
(13C6-PFDA) Isotopically Labelled Internal Recovery Standard	GW08	SE213014.001	%	10 - 150%	86
	GW10	SE213014.002	%	10 - 150%	88
	GW20	SE213014.003	%	10 - 150%	83
	GW21	SE213014.004	%	10 - 150%	113
	QC318	SE213014.007	%	10 - 150%	99
(13C7-PFUdA) Isotopically Labelled Internal Recovery Standard	GW08	SE213014.001	%	10 - 150%	92
	GW10	SE213014.002	%	10 - 150%	97
	GW20	SE213014.003	%	10 - 150%	102
	GW21	SE213014.004	%	10 - 150%	110
	QC318	SE213014.007	%	10 - 150%	95
(13C8-PFOS) Isotopically Labelled Internal Recovery Standard	GW08	SE213014.001	%	10 - 150%	110
	GW10	SE213014.002	%	10 - 150%	110
	GW20	SE213014.003	%	10 - 150%	76
	GW21	SE213014.004	%	10 - 150%	104
	QC318	SE213014.007	%	10 - 150%	83
(13C8-PFOSA) Isotopically Labelled Internal Recovery Standard	GW08	SE213014.001	%	10 - 150%	111
	GW10	SE213014.002	%	10 - 150%	88
	GW20	SE213014.003	%	10 - 150%	81
	GW21	SE213014.004	%	10 - 150%	88
	QC318	SE213014.007	%	10 - 150%	82
(13C9-PFNA) Isotopically Labelled Internal Recovery Standard	GW08	SE213014.001	%	10 - 150%	92
	GW10	SE213014.002	%	10 - 150%	97
	GW20	SE213014.003	%	10 - 150%	100
	GW21	SE213014.004	%	10 - 150%	105
	QC318	SE213014.007	%	10 - 150%	96
(D3-N-MeFOSA) Isotopically Labelled Internal Recovery Standard	GW08	SE213014.001	%	10 - 150%	105
	GW10	SE213014.002	%	10 - 150%	104
	GW20	SE213014.003	%	10 - 150%	81
	GW21	SE213014.004	%	10 - 150%	88
	QC318	SE213014.007	%	10 - 150%	55
(D3-N-MeFOSAA) Isotopically Labelled Internal Recovery Standard	GW08	SE213014.001	%	10 - 150%	93
	GW10	SE213014.002	%	10 - 150%	97
	GW20	SE213014.003	%	10 - 150%	82
	GW21	SE213014.004	%	10 - 150%	79
	QC318	SE213014.007	%	10 - 150%	81
(D5-N-EtFOSA) Isotopically Labelled Internal Recovery Standard	GW08	SE213014.001	%	10 - 150%	97
	GW10	SE213014.002	%	10 - 150%	76
	GW20	SE213014.003	%	10 - 150%	55
	GW21	SE213014.004	%	10 - 150%	69
	QC318	SE213014.007	%	10 - 150%	65
(D5-N-EtFOSAA) Isotopically Labelled Internal Recovery Standard	GW08	SE213014.001	%	10 - 150%	130
	GW10	SE213014.002	%	10 - 150%	103
	GW20	SE213014.003	%	10 - 150%	97
	GW21	SE213014.004	%	10 - 150%	95
	QC318	SE213014.007	%	10 - 150%	78
(D7-N-MeFOSE) Isotopically Labelled Internal Recovery Standard	GW08	SE213014.001	%	10 - 150%	102
	GW10	SE213014.002	%	10 - 150%	107
	GW20	SE213014.003	%	10 - 150%	75
	GW21	SE213014.004	%	10 - 150%	86
	QC318	SE213014.007	%	10 - 150%	73
(D9-N-EtFOSE) Isotopically Labelled Internal Recovery Standard	GW08	SE213014.001	%	10 - 150%	107
	GW10	SE213014.002	%	10 - 150%	102
	GW20	SE213014.003	%	10 - 150%	82
	GW21	SE213014.004	%	10 - 150%	94
	QC318	SE213014.007	%	10 - 150%	84

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Water

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	GW20	SE213014.003	%	40 - 130%	57
	GW21	SE213014.004	%	40 - 130%	54
d5-phenol (Surrogate)	GW20	SE213014.003	%	20 - 90%	53
	GW21	SE213014.004	%	20 - 90%	50

SVOC Compounds in Waters by GC-QQQ

Method: USEPA8270D

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d14-p-terphenyl (Surrogate)	GW08	SE213014.001	%	40 - 130%	115
	GW10	SE213014.002	%	40 - 130%	108
	GW20	SE213014.003	%	40 - 130%	104
	GW21	SE213014.004	%	40 - 130%	101
	QC318	SE213014.007	%	40 - 130%	109

SVOC Compounds in Waters by GC-QQQ, Low Level

Method: USEPA8270D LL

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d14-p-terphenyl (Surrogate)	GW20	SE213014.003	%	40 - 130%	104
	GW21	SE213014.004	%	40 - 130%	101
	QC318	SE213014.007	%	40 - 130%	109

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	GW08	SE213014.001	%	40 - 130%	103
	GW10	SE213014.002	%	40 - 130%	101
	GW20	SE213014.003	%	40 - 130%	106
	GW21	SE213014.004	%	40 - 130%	102
	QCC527TS	SE213014.005	%	40 - 130%	101
	QC527_TB	SE213014.006	%	40 - 130%	103
	QC318	SE213014.007	%	40 - 130%	107
d4-1,2-dichloroethane (Surrogate)	GW08	SE213014.001	%	40 - 130%	97
	GW10	SE213014.002	%	40 - 130%	96
	GW20	SE213014.003	%	40 - 130%	97
	GW21	SE213014.004	%	40 - 130%	97
	QCC527TS	SE213014.005	%	40 - 130%	102
	QC527_TB	SE213014.006	%	40 - 130%	96
	QC318	SE213014.007	%	40 - 130%	96
d8-toluene (Surrogate)	GW08	SE213014.001	%	40 - 130%	96
	GW10	SE213014.002	%	40 - 130%	97
	GW20	SE213014.003	%	40 - 130%	96
	GW21	SE213014.004	%	40 - 130%	96
	QCC527TS	SE213014.005	%	40 - 130%	102
	QC527_TB	SE213014.006	%	40 - 130%	97
	QC318	SE213014.007	%	40 - 130%	97

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	GW08	SE213014.001	%	40 - 130%	103
	GW10	SE213014.002	%	40 - 130%	101
	GW20	SE213014.003	%	40 - 130%	106
	GW21	SE213014.004	%	40 - 130%	102
	QC527_TB	SE213014.006	%	40 - 130%	103
	QC318	SE213014.007	%	40 - 130%	107
d4-1,2-dichloroethane (Surrogate)	GW08	SE213014.001	%	60 - 130%	97
	GW10	SE213014.002	%	60 - 130%	96
	GW20	SE213014.003	%	60 - 130%	97
	GW21	SE213014.004	%	60 - 130%	97
	QC527_TB	SE213014.006	%	60 - 130%	96
	QC318	SE213014.007	%	60 - 130%	96
d8-toluene (Surrogate)	GW08	SE213014.001	%	40 - 130%	96
	GW10	SE213014.002	%	40 - 130%	97
	GW20	SE213014.003	%	40 - 130%	96
	GW21	SE213014.004	%	40 - 130%	96
	QC527_TB	SE213014.006	%	40 - 130%	97
	QC318	SE213014.007	%	40 - 130%	97

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

Sample Number	Parameter	Units	LOR	Result
LB212663.001	Mercury	mg/L	0.0001	<0.0001

Speciated Phenols in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB212662.001		Phenol	µg/L	0.5	<0.5
		2-methyl phenol (o-cresol)	µg/L	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	µg/L	1	<1
		2-chlorophenol	µg/L	0.5	<0.5
		2,4-dimethylphenol	µg/L	0.5	<0.5
		2,6-dichlorophenol	µg/L	0.5	<0.5
		2,4-dichlorophenol	µg/L	0.5	<0.5
		2,4,6-trichlorophenol	µg/L	0.5	<0.5
		2-nitrophenol	µg/L	0.5	<0.5
		4-nitrophenol	µg/L	1	<1
		2,4,5-trichlorophenol	µg/L	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	µg/L	1	<1
		Pentachlorophenol	µg/L	0.5	<0.5
		2,4-dinitrophenol	µg/L	2	<2
		4-chloro-3-methylphenol	µg/L	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	51
		d5-phenol (Surrogate)	%	-	47

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Sample Number	Parameter	Units	LOR	Result
LB212648.001	Arsenic, As	µg/L	1	<1
	Cadmium, Cd	µg/L	0.1	<0.1
	Chromium, Cr	µg/L	1	<1
	Copper, Cu	µg/L	1	<1
	Lead, Pb	µg/L	1	<1
	Nickel, Ni	µg/L	1	<1
	Zinc, Zn	µg/L	5	<5

Trace Metals (Total) in Water by ICPMS

Method: ME-(AU)-[ENV]AN022/AN318

Sample Number	Parameter	Units	LOR	Result
LB212731.001	Total Arsenic	µg/L	1	<1
	Total Beryllium	µg/L	1	<1
	Total Boron	µg/L	5	<5
	Total Cadmium	µg/L	0.1	<0.1
	Total Cobalt	µg/L	1	<1
	Total Copper	µg/L	1	<1
	Total Lead	µg/L	1	<1
	Total Manganese	µg/L	1	<1
	Total Nickel	µg/L	1	<1
	Total Zinc	µg/L	5	<5

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB212662.001	TRH C10-C14	µg/L	50	<50
	TRH C15-C28	µg/L	200	<200
	TRH C29-C36	µg/L	200	<200
	TRH C37-C40	µg/L	200	<200

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB212763.001	Fumigants	2,2-dichloropropane	µg/L	0.5	<0.5
		1,2-dichloropropane	µg/L	0.5	<0.5
		cis-1,3-dichloropropene	µg/L	0.5	<0.5
		trans-1,3-dichloropropene	µg/L	0.5	<0.5
		1,2-dibromoethane (EDB)	µg/L	0.5	<0.5
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	µg/L	5	<5
		Chloromethane	µg/L	5	<5

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOCs in Water (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB212763.001	Halogenated Aliphatics	Vinyl chloride (Chloroethene)	µg/L	0.3	<0.3
		Bromomethane	µg/L	10	<10
		Chloroethane	µg/L	5	<5
		Trichlorofluoromethane	µg/L	1	<1
		Iodomethane	µg/L	5	<5
		1,1-dichloroethene	µg/L	0.5	<0.5
		Dichloromethane (Methylene chloride)	µg/L	5	<5
		Allyl chloride	µg/L	2	<2
		trans-1,2-dichloroethene	µg/L	0.5	<0.5
		1,1-dichloroethane	µg/L	0.5	<0.5
		cis-1,2-dichloroethene	µg/L	0.5	<0.5
		Bromochloromethane	µg/L	0.5	<0.5
		1,2-dichloroethane	µg/L	0.5	<0.5
		1,1,1-trichloroethane	µg/L	0.5	<0.5
		1,1-dichloropropene	µg/L	0.5	<0.5
		Carbon tetrachloride	µg/L	0.5	<0.5
		Dibromomethane	µg/L	0.5	<0.5
		Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	<0.5
		1,1,2-trichloroethane	µg/L	0.5	<0.5
		1,3-dichloropropane	µg/L	0.5	<0.5
		Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	<0.5
		1,1,1,2-tetrachloroethane	µg/L	0.5	<0.5
		cis-1,4-dichloro-2-butene	µg/L	1	<1
		1,1,2,2-tetrachloroethane	µg/L	0.5	<0.5
		1,2,3-trichloropropane	µg/L	0.5	<0.5
		trans-1,4-dichloro-2-butene	µg/L	1	<1
		1,2-dibromo-3-chloropropane	µg/L	0.5	<0.5
		Hexachlorobutadiene	µg/L	0.5	<0.5
	Halogenated Aromatics	Chlorobenzene	µg/L	0.5	<0.5
		Bromobenzene	µg/L	0.5	<0.5
		2-chlorotoluene	µg/L	0.5	<0.5
		4-chlorotoluene	µg/L	0.5	<0.5
		1,3-dichlorobenzene	µg/L	0.5	<0.5
		1,4-dichlorobenzene	µg/L	0.3	<0.3
		1,2-dichlorobenzene	µg/L	0.5	<0.5
		1,2,4-trichlorobenzene	µg/L	0.5	<0.5
		1,2,3-trichlorobenzene	µg/L	0.5	<0.5
	Monocyclic Aromatic Hydrocarbons	Benzene	µg/L	0.5	<0.5
		Toluene	µg/L	0.5	<0.5
		Ethylbenzene	µg/L	0.5	<0.5
		m/p-xylene	µg/L	1	<1
		o-xylene	µg/L	0.5	<0.5
		Styrene (Vinyl benzene)	µg/L	0.5	<0.5
		Isopropylbenzene (Cumene)	µg/L	0.5	<0.5
		n-propylbenzene	µg/L	0.5	<0.5
		1,3,5-trimethylbenzene	µg/L	0.5	<0.5
		tert-butylbenzene	µg/L	0.5	<0.5
		1,2,4-trimethylbenzene	µg/L	0.5	<0.5
		sec-butylbenzene	µg/L	0.5	<0.5
		p-isopropyltoluene	µg/L	0.5	<0.5
		n-butylbenzene	µg/L	0.5	<0.5
	Nitrogenous Compounds	Acrylonitrile	µg/L	0.5	<0.5
	Oxygenated Compounds	Acetone (2-propanone)	µg/L	10	<10
		MtBE (Methyl-tert-butyl ether)	µg/L	2	<1
		Vinyl acetate	µg/L	10	<10
		MEK (2-butanone)	µg/L	10	<10
		MIBK (4-methyl-2-pentanone)	µg/L	5	<5
		2-hexanone (MBK)	µg/L	5	<5
	Polycyclic VOCs	Naphthalene	µg/L	0.5	<0.5
	Sulphonated	Carbon disulfide	µg/L	2	<2
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	95

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOCs in Water (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB212763.001	Surrogates	d8-toluene (Surrogate)	%	-	95
		Bromofluorobenzene (Surrogate)	%	-	103
	Trihalomethanes	Chloroform (THM)	µg/L	0.5	<0.5
		Bromodichloromethane (THM)	µg/L	0.5	<0.5
		Dibromochloromethane (THM)	µg/L	0.5	<0.5
		Bromoform (THM)	µg/L	0.5	<0.5

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB212763.001		TRH C6-C9	µg/L	40	<40
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	95
		d8-toluene (Surrogate)	%	-	95
		Bromofluorobenzene (Surrogate)	%	-	103

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE213110.009	LB212663.013	Mercury	µg/L	0.0001	<0.0001	0.0000	200	193

Mercury (total) in Water

Method: ME-(AU)-[ENV]AN311(Perth) /AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE213014.007	LB212664.004	Total Mercury	µg/L	0.0001	<0.0001	0.0000	200	198

Trace Metals (Total) in Water by ICPMS

Method: ME-(AU)-[ENV]AN022/AN318

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE213139.002	LB212731.011	Total Arsenic	µg/L	1	1	1	114	2
		Total Boron	µg/L	5	13	12	57	8
		Total Manganese	µg/L	1	42	44	17	4

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE213073.002	LB212763.020	Monocyclic Aromatic	Benzene	µg/L	0.5	<0.0005	0.0000	200	193
			Toluene	µg/L	0.5	<0.0005	0.0001	200	0
			Ethylbenzene	µg/L	0.5	0.0011	0.0011	76	1
			m/p-xylene	µg/L	1	<0.001	0.001	172	199 ③
			o-xylene	µg/L	0.5	<0.0005	0.0001	200	198
		Polycyclic	Naphthalene	µg/L	0.5	<0.0005	0.0003	200	198
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	0.0	0.0	30	0
			d8-toluene (Surrogate)	µg/L	-	0.0	0.0	30	1
			Bromofluorobenzene (Surrogate)	µg/L	-	0.0	0.0	30	1
SE213128.005	LB212763.021	Monocyclic Aromatic	Benzene	µg/L	0.5	<0.5	<0.5	200	0
			Toluene	µg/L	0.5	<0.5	<0.5	200	0
			Ethylbenzene	µg/L	0.5	<0.5	<0.5	200	0
			m/p-xylene	µg/L	1	<1	<1	200	0
			o-xylene	µg/L	0.5	<0.5	<0.5	200	0
		Polycyclic	Naphthalene	µg/L	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	9.5	9.4	30	1
			d8-toluene (Surrogate)	µg/L	-	9.8	9.8	30	1
			Bromofluorobenzene (Surrogate)	µg/L	-	10.7	10.5	30	2

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE213073.002	LB212763.020		TRH C6-C10	µg/L	50	0.82	0.85	36	5
			TRH C6-C9	µg/L	40	0.81	0.84	35	3
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	0.0	0.0	30	0
			d8-toluene (Surrogate)	µg/L	-	0.0	0.0	30	1
			Bromofluorobenzene (Surrogate)	µg/L	-	0.0	0.0	30	1
		VPH F Bands	Benzene (F0)	µg/L	0.5	0.029212008	0.0280526285	200	193
			TRH C6-C10 minus BTEX (F1)	µg/L	50	0.81	0.85	36	5
SE213128.005	LB212763.021		TRH C6-C10	µg/L	50	110	100	77	8
			TRH C6-C9	µg/L	40	100	94	71	6
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	9.5	9.4	30	1
			d8-toluene (Surrogate)	µg/L	-	9.8	9.8	30	1
			Bromofluorobenzene (Surrogate)	µg/L	-	10.7	10.5	30	2
		VPH F Bands	Benzene (F0)	µg/L	0.5	<0.5	0	200	0
			TRH C6-C10 minus BTEX (F1)	µg/L	50	110	100	77	8

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Speciated Phenols in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212662.002		Phenol	µg/L	0.5	25	40	60 - 140	62
		2,4-dichlorophenol	µg/L	0.5	35	40	60 - 140	87
		2,4,6-trichlorophenol	µg/L	0.5	25	40	60 - 140	63
		Pentachlorophenol	µg/L	0.5	25	40	60 - 140	63
	Surrogates	2,4,6-Tribromophenol (Surrogate)	µg/L	-	2.3	5	40 - 130	46
		d5-phenol (Surrogate)	µg/L	-	1.0	2	40 - 130	48

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212648.002	Arsenic, As	µg/L	1	19	20	80 - 120	96
	Cadmium, Cd	µg/L	0.1	22	20	80 - 120	112
	Chromium, Cr	µg/L	1	22	20	80 - 120	112
	Copper, Cu	µg/L	1	23	20	80 - 120	113
	Lead, Pb	µg/L	1	20	20	80 - 120	99
	Nickel, Ni	µg/L	1	22	20	80 - 120	109
	Zinc, Zn	µg/L	5	23	20	80 - 120	117

Trace Metals (Total) in Water by ICPMS

Method: ME-(AU)-[ENV]AN022/AN318

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212731.002	Total Arsenic	µg/L	1	18	20	80 - 120	91
	Total Beryllium	µg/L	1	20	20	80 - 120	102
	Total Boron	µg/L	5	22	20	80 - 120	108
	Total Cadmium	µg/L	0.1	21	20	80 - 120	106
	Total Chromium	µg/L	1	22	20	80 - 120	109
	Total Cobalt	µg/L	1	22	20	80 - 120	108
	Total Copper	µg/L	1	22	20	80 - 120	109
	Total Lead	µg/L	1	20	20	80 - 120	99
	Total Manganese	µg/L	1	22	20	80 - 120	108
	Total Nickel	µg/L	1	21	20	80 - 120	105
	Total Zinc	µg/L	5	20	20	80 - 120	100

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212662.002		TRH C10-C14	µg/L	50	1000	1200	60 - 140	85
		TRH C15-C28	µg/L	200	1200	1200	60 - 140	97
		TRH C29-C36	µg/L	200	1200	1200	60 - 140	100
	TRH F Bands	TRH >C10-C16	µg/L	60	1100	1200	60 - 140	89
		TRH >C16-C34 (F3)	µg/L	500	1200	1200	60 - 140	103
		TRH >C34-C40 (F4)	µg/L	500	590	600	60 - 140	98

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212763.002	Halogenated	1,1-dichloroethene	µg/L	0.5	52	45.45	60 - 140	115
	Aliphatics	1,2-dichloroethane	µg/L	0.5	52	45.45	60 - 140	115
		Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	53	45.45	60 - 140	117
	Halogenated	Chlorobenzene	µg/L	0.5	50	45.45	60 - 140	110
	Monocyclic	Benzene	µg/L	0.5	48	45.45	60 - 140	105
	Aromatic	Toluene	µg/L	0.5	48	45.45	60 - 140	105
		Ethylbenzene	µg/L	0.5	46	45.45	60 - 140	102
		m/p-xylene	µg/L	1	93	90.9	60 - 140	103
		o-xylene	µg/L	0.5	48	45.45	60 - 140	105
	Trihalomethan	Chloroform (THM)	µg/L	0.5	57	45.45	60 - 140	126

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212763.002		TRH C6-C10	µg/L	50	880	946.63	60 - 140	93
		TRH C6-C9	µg/L	40	750	818.71	60 - 140	92
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	µg/L	50	600	639.67	60 - 140	94

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE213014.001	LB212663.004	Mercury	mg/L	0.0001	0.0020	<0.0001	0.008	97

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE213014.001	LB212648.004	Arsenic, As	µg/L	1	20	<1	20	101
		Cadmium, Cd	µg/L	0.1	23	<0.1	20	113
		Chromium, Cr	µg/L	1	23	<1	20	112
		Copper, Cu	µg/L	1	38	16	20	112
		Lead, Pb	µg/L	1	20	<1	20	98
		Nickel, Ni	µg/L	1	23	1	20	109
		Zinc, Zn	µg/L	5	36	13	20	117

Trace Metals (Total) in Water by ICPMS

Method: ME-(AU)-[ENV]AN022/AN318

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE213014.007	LB212731.004	Total Arsenic	µg/L	1	20	<1	20	102
		Total Beryllium	µg/L	1	22	<1	20	111
		Total Boron	µg/L	5	35	16	20	97
		Total Cadmium	µg/L	0.1	23	<0.1	20	117
		Total Chromium	µg/L	1	23	<1	-	-
		Total Cobalt	µg/L	1	23	<1	20	116
		Total Copper	µg/L	1	24	<1	20	118
		Total Lead	µg/L	1	22	<1	20	110
		Total Manganese	µg/L	1	23	<1	20	115
		Total Nickel	µg/L	1	23	<1	20	114
		Total Zinc	µg/L	5	25	<5	20	111

VOCs in Water

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE213014.003	LB212763.022	Fumigants	2,2-dichloropropane	µg/L	0.5		<0.5	-	-
			1,2-dichloropropane	µg/L	0.5		<0.5	-	-
			cis-1,3-dichloropropene	µg/L	0.5		<0.5	-	-
			trans-1,3-dichloropropene	µg/L	0.5		<0.5	-	-
			1,2-dibromoethane (EDB)	µg/L	0.5		<0.5	-	-
		Halogenated	Dichlorodifluoromethane (CFC-12)	µg/L	5		<5	-	-
		Aliphatics	Chloromethane	µg/L	5		<5	-	-
			Vinyl chloride (Chloroethene)	µg/L	0.3		<0.3	-	-
			Bromomethane	µg/L	10		<10	-	-
			Chloroethane	µg/L	5		<5	-	-
			Trichlorofluoromethane	µg/L	1		<1	-	-
			Iodomethane	µg/L	5		<5	-	-
			1,1-dichloroethene	µg/L	0.5		<0.5	45.45	104
			Dichloromethane (Methylene chloride)	µg/L	5		<5	-	-
			Allyl chloride	µg/L	2		<2	-	-
			trans-1,2-dichloroethene	µg/L	0.5		<0.5	-	-
			1,1-dichloroethane	µg/L	0.5		<0.5	-	-
			cis-1,2-dichloroethene	µg/L	0.5		<0.5	-	-
			Bromochloromethane	µg/L	0.5		<0.5	-	-
			1,2-dichloroethane	µg/L	0.5		<0.5	45.45	108
			1,1,1-trichloroethane	µg/L	0.5		<0.5	-	-
			1,1-dichloropropene	µg/L	0.5		<0.5	-	-
			Carbon tetrachloride	µg/L	0.5		<0.5	-	-
			Dibromomethane	µg/L	0.5		<0.5	-	-
			Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5		<0.5	45.45	108
			1,1,2-trichloroethane	µg/L	0.5		<0.5	-	-
			1,3-dichloropropane	µg/L	0.5		<0.5	-	-
			Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5		<0.5	-	-
			1,1,1,2-tetrachloroethane	µg/L	0.5		<0.5	-	-
			cis-1,4-dichloro-2-butene	µg/L	1		<1	-	-
			1,1,2,2-tetrachloroethane	µg/L	0.5		<0.5	-	-
			1,2,3-trichloropropane	µg/L	0.5		<0.5	-	-

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOCs in Water (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE213014.003	LB212763.022	Halogenated Aliphatics	trans-1,4-dichloro-2-butene	µg/L	1		<1	-	-
			1,2-dibromo-3-chloropropane	µg/L	0.5		<0.5	-	-
			Hexachlorobutadiene	µg/L	0.5		<0.5	-	-
		Halogenated Aromatics	Chlorobenzene	µg/L	0.5		<0.5	45.45	101
			Bromobenzene	µg/L	0.5		<0.5	-	-
			2-chlorotoluene	µg/L	0.5		<0.5	-	-
			4-chlorotoluene	µg/L	0.5		<0.5	-	-
			1,3-dichlorobenzene	µg/L	0.5		<0.5	-	-
			1,4-dichlorobenzene	µg/L	0.3		<0.3	-	-
			1,2-dichlorobenzene	µg/L	0.5		<0.5	-	-
			1,2,4-trichlorobenzene	µg/L	0.5		<0.5	-	-
			1,2,3-trichlorobenzene	µg/L	0.5		<0.5	-	-
		Monocyclic Aromatic	Benzene	µg/L	0.5	48	<0.5	45.45	105
			Toluene	µg/L	0.5	48	<0.5	45.45	106
			Ethylbenzene	µg/L	0.5	45	<0.5	45.45	99
			m/p-xylene	µg/L	1	92	<1	90.9	101
			o-xylene	µg/L	0.5	47	<0.5	45.45	104
			Styrene (Vinyl benzene)	µg/L	0.5		<0.5	-	-
			Isopropylbenzene (Cumene)	µg/L	0.5		<0.5	-	-
			n-propylbenzene	µg/L	0.5		<0.5	-	-
			1,3,5-trimethylbenzene	µg/L	0.5		<0.5	-	-
			tert-butylbenzene	µg/L	0.5		<0.5	-	-
			1,2,4-trimethylbenzene	µg/L	0.5		<0.5	-	-
			sec-butylbenzene	µg/L	0.5		<0.5	-	-
			p-isopropyltoluene	µg/L	0.5		<0.5	-	-
			n-butylbenzene	µg/L	0.5		<0.5	-	-
		Nitrogenous	Acrylonitrile	µg/L	0.5		<0.5	-	-
		Oxygenated Compounds	Acetone (2-propanone)	µg/L	10		<10	-	-
			MtBE (Methyl-tert-butyl ether)	µg/L	2		<2	-	-
			Vinyl acetate	µg/L	10		<10	-	-
			MEK (2-butanone)	µg/L	10		<10	-	-
			MIBK (4-methyl-2-pentanone)	µg/L	5		<5	-	-
			2-hexanone (MBK)	µg/L	5		<5	-	-
		Polycyclic	Naphthalene	µg/L	0.5	<0.5	<0.5	-	-
		Sulphonated	Carbon disulfide	µg/L	2		<2	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/L	-	10.1	0.0	-	101
			d8-toluene (Surrogate)	mg/L	-	10.5	0.0	-	105
			Bromofluorobenzene (Surrogate)	mg/L	-	10.2	0.0	-	102
		Trihalomethanes	Chloroform (THM)	µg/L	0.5		<0.5	45.45	120
			Bromodichloromethane (THM)	µg/L	0.5		<0.5	-	-
			Dibromochloromethane (THM)	µg/L	0.5		<0.5	-	-
			Bromoform (THM)	µg/L	0.5		<0.5	-	-

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE213014.003	LB212763.022		TRH C6-C10	µg/L	50	760	<50	946.63	80
			TRH C6-C9	µg/L	40	760	<40	818.71	92
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/L	-	10.1	0.0	-	101
			d8-toluene (Surrogate)	mg/L	-	10.5	0.0	-	105
			Bromofluorobenzene (Surrogate)	mg/L	-	10.2	0.0	-	102
		VPH F Bands	Benzene (F0)	µg/L	0.5		<0.5	-	-
			TRH C6-C10 minus BTEX (F1)	µg/L	50	480	<50	639.67	75

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
***	Indicates that both * and ** apply.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.
①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

☐	BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000	☐	GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227	☐	NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305	☒	SYDNEY: 202 Submarine School, Sub Base Platypus, North Sydney, 2060	✓	MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
☐	CANBERRA: GPO Box 410, Canberra, ACT 2601	☐	MACKAY: 21 River Street, Mackay, QLD 4741	☐	PERTH: 503 Murray Street, Perth, WA 6001	☐	TOWNSVILLE: 514 Stuart Street, Townsville, QLD 4811	☐	DARWIN: 21 Parap Rd, Dawin, NT 0821

CLIENT: Defence Housing Australia

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGER [redacted]

PM CONTACT No: [redacted]

LABORATORY: SGS

LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015

SAMPLER [redacted]

SAMPLER CONTACT No [redacted]

Email Reports and Invoices to: LQRSYD@slrconsulting.com, [redacted]

Turnaround Time (TAT)

COC Number 1 of 1

✓ Standard TAT

☐ Non Standard or Urgent TAT

Required TAT: Standard

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: Suite A (including asbestos)	Suite C	MTBEs	PBDEs	CEC / pH / Organic Matter / % Clay			HOLD	Additional Information (Comment on any gross contamination or specific requirements)
1	0407_LP_BAC_0.0-0.1_201103	03-11-2020	Soil		X	X	X	X	X				
2	0407_LP_BAC_0.4-0.5_201103	03-11-2020	Soil		X	X	X	X	X				
3	0407_LP_BAC_0.8-0.9_201103	03-11-2020	Soil		X	X	X	X	X				
~~4~~	0407_LP_BAC_WATER_201103	03-11-2020	Groundwater		X	X	X	X					
~~5~~	0407_SEW002_GRAB_201103	03-11-2020	Water			X							

SGS EHS Sydney COC

SE213111

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time	03-11-2020	Received by	Sign [redacted]	Date / Time	3/11/20
Relinquished By	Sign	Date / Time		Received by	Sign	Date / Time	@ 3:50
Relinquished By	Sign	Date / Time		Received by	Sign	Date / Time	

Temperature Received: 15°C

SAMPLE RECEIPT ADVICE

SE213111

CLIENT DETAILS

Contact	LQRSYD
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	02 9427 8100
Facsimile	02 9427 8200
Email	lqrsyd@slrconsulting.com
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	3

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Tue 3/11/2020
Report Due	Tue 10/11/2020
SGS Reference	**SE213111**

SUBMISSION DETAILS

This is to confirm that 3 samples were received on Tuesday 3/11/2020. Results are expected to be ready by COB Tuesday 10/11/2020. Please quote SGS reference SE213111 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	3 Soil
Date documentation received	3/11/2020	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	15°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

PFAS and PBDEs subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420.
Micros subcontracted to Symbio Laboratories, 2 Sirius Road, Lane Cove West NSW 2066, NATA Accreditation Number 2455.
%Clay subcontracted to SGS Cairns, 2/58 Comport St, Portsmith QLD 4870, NATA Accreditation Number: 2562, Site Number: 3146.
SGS does not have the capability to do Sulfide in soil samples.
Water samples reported in SE213112.

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SAMPLE RECEIPT ADVICE

SE213111

CLIENT DETAILS

Client SLR CONSULTING AUSTRALIA PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	Speciated Phenols in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
001	0407_LP_BAC_0.0-0.1_201103	29	14	26	11	18	10	81	7
002	0407_LP_BAC_0.4-0.5_201103	29	14	26	11	18	10	81	7
003	0407_LP_BAC_0.8-0.9_201103	29	14	26	11	18	10	81	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE213111

CLIENT DETAILS

Client SLR CONSULTING AUSTRALIA PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Ammonia Nitrogen (soluble) in Soil	Exchangeable Cations and Cation Exchange Capacity	Mercury in Soil	Nitrite Nitrogen in Soil	pH in soil (1:5)	Soluble Anions (1:5) in Soil by Ion Chromatography	TKN Kjeldahl Digestion by Discrete Analyser in Soil	Total Phosphorus by Kjeldahl Digestion DA in	Total Recoverable Elements in Soil/Waste
001	0407_LP_BAC_0.0-0.1_201103	1	13	1	1	1	3	1	1	11
002	0407_LP_BAC_0.4-0.5_201103	1	13	1	1	1	3	1	1	11
003	0407_LP_BAC_0.8-0.9_201103	1	13	1	1	1	3	1	1	11

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
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SAMPLE RECEIPT ADVICE

SE213111

CLIENT DETAILS

Client SLR CONSULTING AUSTRALIA PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Additional SVOC in Soil	Fibre Identification in soil	Gravimetric Determination of Asbestos in Soil	Moisture Content	Particle sizing of soils <75µm by hydrometer	Particle sizing of soils by sieving	Per- and Polyfluoroalkyl Substances (PFAS) in	Sample Subcontracted
001	0407_LP_BAC_0.0-0.1_201103	14	2	9	1	1	2	55	1
002	0407_LP_BAC_0.4-0.5_201103	14	2	9	1	1	2	55	1
003	0407_LP_BAC_0.8-0.9_201103	14	2	9	1	1	2	55	1

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	LQRSYD
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	02 9427 8100
Facsimile	02 9427 8200
Email	lqrsyd@slrconsulting.com
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	3

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE213111 R0**
Date Received	3/11/2020
Date Reported	12/11/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

%Clay subcontracted to SGS Cairns, 2/58 Comport St, Portsmith QLD 4870, NATA Accreditation Number: 2562, Site Number: 3146. Report No: CE149180

Micros subcontracted to Symbio Laboratories, 2 Sirius Road, Lane Cove West NSW 2066, NATA Accreditation Number 2455. Report Number S963964

SGS does not have the capability to do Sulfide in soil samples.
Water samples reported in SE213112.

No respirable fibres detected in all soil samples using trace analysis technique.

Sample #2: Asbestos found in approx 4x3x2mm cement sheet fragments in >2mm portion.

Asbestos analysed by Approved Identifier Yusuf Kuthpudin.
PFAS and PBDEs subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420. Report Number ME317277
MA1523: Some surrogate recovery is outside of the acceptance criteria due to sample matrix interference.

SIGNATORIES

[redacted]

Chemist | Senior Organic Chemist/Metals Chemist | Metals/Inorganics Team Leader

[redacted]

Asbestos Analyst

VOC's in Soil [AN433] Tested: 4/11/2020

PARAMETER	UOM	LOR	0407_LP_BAC_0.0-01_201103 SOIL - 3/11/2020 SE213111.001	0407_LP_BAC_0.4-05_201103 SOIL - 3/11/2020 SE213111.002	0407_LP_BAC_0.8-09_201103 SOIL - 3/11/2020 SE213111.003
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1

VOC's in Soil [AN433] Tested: 4/11/2020 (continued)

PARAMETER	UOM	LOR	0407_LP_BAC_0.0-01_201103 SOIL - 3/11/2020 SE213111.001	0407_LP_BAC_0.4-05_201103 SOIL - 3/11/2020 SE213111.002	0407_LP_BAC_0.8-09_201103 SOIL - 3/11/2020 SE213111.003
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
Total VOC*	mg/kg	24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 4/11/2020

PARAMETER	UOM	LOR	0407_LP_BAC_0.0-01_201103 SOIL - 3/11/2020 SE213111.001	0407_LP_BAC_0.4-05_201103 SOIL - 3/11/2020 SE213111.002	0407_LP_BAC_0.8-09_201103 SOIL - 3/11/2020 SE213111.003
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 4/11/2020

PARAMETER	UOM	LOR	0407_LP_BAC_0.0-01_201103 SOIL - 3/11/2020 SE213111.001	0407_LP_BAC_0.4-05_201103 SOIL - 3/11/2020 SE213111.002	0407_LP_BAC_0.8-09_201103 SOIL - 3/11/2020 SE213111.003
TRH C10-C14	mg/kg	20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	60	<45
TRH C29-C36	mg/kg	45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210

Speciated Phenols in Soil [AN420] Tested: 4/11/2020

PARAMETER	UOM	LOR	0407_LP_BAC_0.0-01_201103 SOIL - 3/11/2020 SE213111.001	0407_LP_BAC_0.4-05_201103 SOIL - 3/11/2020 SE213111.002	0407_LP_BAC_0.8-09_201103 SOIL - 3/11/2020 SE213111.003
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 4/11/2020

PARAMETER	UOM	LOR	0407_LP_BAC_0.0-01_201103 SOIL - 3/11/2020 SE213111.001	0407_LP_BAC_0.4-05_201103 SOIL - 3/11/2020 SE213111.002	0407_LP_BAC_0.8-09_201103 SOIL - 3/11/2020 SE213111.003
Naphthalene	mg/kg	0.1	<0.1	**0.2**	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	**0.4**	**0.1**
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	**0.1**	<0.1
Phenanthrene	mg/kg	0.1	**0.3**	**1.8**	**0.5**
Anthracene	mg/kg	0.1	<0.1	**0.5**	**0.1**
Fluoranthene	mg/kg	0.1	**0.5**	**4.2**	**1.3**
Pyrene	mg/kg	0.1	**0.4**	**4.0**	**1.1**
Benzo(a)anthracene	mg/kg	0.1	**0.2**	**1.7**	**0.5**
Chrysene	mg/kg	0.1	**0.2**	**1.9**	**0.6**
Benzo(b&j)fluoranthene	mg/kg	0.1	**0.1**	**1.8**	**0.5**
Benzo(k)fluoranthene	mg/kg	0.1	**0.1**	**1.2**	**0.3**
Benzo(a)pyrene	mg/kg	0.1	**0.2**	**2.1**	**0.5**
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	**1.0**	**0.3**
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	**0.1**	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	**1.0**	**0.3**
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	**0.2**	**2.8**	**0.7**
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	**0.3**	**2.8**	**0.8**
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	**0.3**	**2.8**	**0.8**
Total PAH (18)	mg/kg	0.8	**2.0**	**22**	**6.4**
Total PAH (NEPM/WHO 16)	mg/kg	0.8	**2.0**	**22**	**6.4**

OP Pesticides in Soil [AN420] Tested: 4/11/2020

PARAMETER	UOM	LOR	0407_LP_BAC_0.0-01_201103 SOIL - 3/11/2020 SE213111.001	0407_LP_BAC_0.4-05_201103 SOIL - 3/11/2020 SE213111.002	0407_LP_BAC_0.8-09_201103 SOIL - 3/11/2020 SE213111.003
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7

OC Pesticides in Soil [AN420] Tested: 4/11/2020

PARAMETER	UOM	LOR	0407_LP_BAC_0.0-01_201103 SOIL - 3/11/2020 SE213111.001	0407_LP_BAC_0.4-05_201103 SOIL - 3/11/2020 SE213111.002	0407_LP_BAC_0.8-09_201103 SOIL - 3/11/2020 SE213111.003
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1

PCBs in Soil [AN420] Tested: 4/11/2020

PARAMETER	UOM	LOR	0407_LP_BAC_0.0-01_201103 SOIL - 3/11/2020 SE213111.001	0407_LP_BAC_0.4-05_201103 SOIL - 3/11/2020 SE213111.002	0407_LP_BAC_0.8-09_201103 SOIL - 3/11/2020 SE213111.003
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1

TKN Kjeldahl Digestion by Discrete Analyser in Soil [AN292] Tested: 5/11/2020

PARAMETER	UOM	LOR	0407_LP_BAC_0.0-01_201103 SOIL - 3/11/2020 SE213111.001	0407_LP_BAC_0.4-05_201103 SOIL - 3/11/2020 SE213111.002	0407_LP_BAC_0.8-09_201103 SOIL - 3/11/2020 SE213111.003
Total Kjeldahl Nitrogen	mg/kg	40	**730**	**350**	**390**

Soluble Anions (1:5) in Soil by Ion Chromatography [AN245] Tested: 5/11/2020

PARAMETER	UOM	LOR	0407_LP_BAC_0.0-01_201103 SOIL - 3/11/2020 SE213111.001	0407_LP_BAC_0.4-05_201103 SOIL - 3/11/2020 SE213111.002	0407_LP_BAC_0.8-09_201103 SOIL - 3/11/2020 SE213111.003
Nitrate Nitrogen	mg/kg	0.025	**3.5**	**2.2**	**2.4**
Sulfate	mg/kg	5	<5.0	<5.0	**7.5**
ortho Phosphate as P	mg/kg	0.25	**2.8**	**1.7**	**1.0**

Nitrite Nitrogen in Soil [AN277] Tested: 5/11/2020

PARAMETER	UOM	LOR	0407_LP_BAC_0.0-01_201103 SOIL - 3/11/2020 SE213111.001	0407_LP_BAC_0.4-05_201103 SOIL - 3/11/2020 SE213111.002	0407_LP_BAC_0.8-09_201103 SOIL - 3/11/2020 SE213111.003
Nitrite, NO_2 as N in Soil*	mg/kg	0.05	<0.05	<0.05	<0.05

Ammonia Nitrogen (soluble) in Soil [AN291] Tested: 5/11/2020

PARAMETER	UOM	LOR	0407_LP_BAC_0.0-01_201103 SOIL - 3/11/2020 SE213111.001	0407_LP_BAC_0.4-05_201103 SOIL - 3/11/2020 SE213111.002	0407_LP_BAC_0.8-09_201103 SOIL - 3/11/2020 SE213111.003
Ammonia Nitrogen, NH_3 as N	mg/kg	0.15	**0.54**	**0.53**	**2.0**

Total Phosphorus by Kjeldahl Digestion DA in Soil [AN279/AN293(Sydney only)] Tested: 5/11/2020

PARAMETER	UOM	LOR	0407_LP_BAC_0.0-01_201103 SOIL - 3/11/2020 SE213111.001	0407_LP_BAC_0.4-05_201103 SOIL - 3/11/2020 SE213111.002	0407_LP_BAC_0.8-09_201103 SOIL - 3/11/2020 SE213111.003
Total Phosphorus (Kjeldahl Digestion)	mg/kg	40	190	180	200

pH in soil (1:5) [AN101] Tested: 5/11/2020

PARAMETER	UOM	LOR	0407_LP_BAC_0.0-01_201103 SOIL - 3/11/2020 SE213111.001	0407_LP_BAC_0.4-05_201103 SOIL - 3/11/2020 SE213111.002	0407_LP_BAC_0.8-09_201103 SOIL - 3/11/2020 SE213111.003
pH	pH Units	0.1	**6.9**	**7.4**	**7.6**

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR) [AN122] Tested: 6/11/2020

PARAMETER	UOM	LOR	0407_LP_BAC_0.0-01_201103 SOIL - 3/11/2020 SE213111.001	0407_LP_BAC_0.4-05_201103 SOIL - 3/11/2020 SE213111.002	0407_LP_BAC_0.8-09_201103 SOIL - 3/11/2020 SE213111.003
Exchangeable Sodium, Na	mg/kg	2	15	10	16
Exchangeable Sodium, Na	meq/100g	0.01	0.07	0.04	0.07
Exchangeable Sodium Percentage*	%	0.1	1.3	1.2	1.0
Exchangeable Potassium, K	mg/kg	2	56	30	53
Exchangeable Potassium, K	meq/100g	0.01	0.14	0.08	0.13
Exchangeable Potassium Percentage*	%	0.1	2.8	2.2	1.9
Exchangeable Calcium, Ca	mg/kg	2	880	630	1300
Exchangeable Calcium, Ca	meq/100g	0.01	4.4	3.1	6.5
Exchangeable Calcium Percentage*	%	0.1	84.2	88.7	93.0
Exchangeable Magnesium, Mg	mg/kg	2	75	34	35
Exchangeable Magnesium, Mg	meq/100g	0.02	0.62	0.28	0.28
Exchangeable Magnesium Percentage*	%	0.1	11.8	7.9	4.1
Cation Exchange Capacity	meq/100g	0.02	5.2	3.5	7.0

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 4/11/2020

PARAMETER	UOM	LOR	0407_LP_BAC_0.0-01_201103 SOIL - 3/11/2020 SE213111.001	0407_LP_BAC_0.4-05_201103 SOIL - 3/11/2020 SE213111.002	0407_LP_BAC_0.8-09_201103 SOIL - 3/11/2020 SE213111.003
Arsenic, As	mg/kg	1	2	2	4
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	3.4	6.0	6.4
Copper, Cu	mg/kg	0.5	24	13	19
Lead, Pb	mg/kg	1	34	83	72
Nickel, Ni	mg/kg	0.5	3.0	41	68
Zinc, Zn	mg/kg	2	52	92	90
Beryllium, Be	mg/kg	0.5	<0.5	<0.5	<0.5
Boron, B	mg/kg	5	<5	8	39
Cobalt, Co	mg/kg	0.5	0.6	0.7	3.7
Manganese, Mn	mg/kg	1	24	40	44

Mercury in Soil [AN312] Tested: 4/11/2020

PARAMETER	UOM	LOR	0407_LP_BAC_0.0-01_201103 SOIL - 3/11/2020 SE213111.001	0407_LP_BAC_0.4-05_201103 SOIL - 3/11/2020 SE213111.002	0407_LP_BAC_0.8-09_201103 SOIL - 3/11/2020 SE213111.003
Mercury	mg/kg	0.05	**0.10**	**0.12**	**0.08**

Moisture Content [AN002] Tested: 4/11/2020

PARAMETER	UOM	LOR	0407_LP_BAC_0.0-01_201103 SOIL - 3/11/2020 SE213111.001	0407_LP_BAC_0.4-05_201103 SOIL - 3/11/2020 SE213111.002	0407_LP_BAC_0.8-09_201103 SOIL - 3/11/2020 SE213111.003
% Moisture	%w/w	1	**6.6**	**6.4**	**6.3**

Fibre Identification in soil [AN602] Tested: 6/11/2020

PARAMETER	UOM	LOR	0407_LP_BAC_0.0-01_201103 SOIL - 3/11/2020 SE213111.001	0407_LP_BAC_0.4-05_201103 SOIL - 3/11/2020 SE213111.002	0407_LP_BAC_0.8-09_201103 SOIL - 3/11/2020 SE213111.003
Asbestos Detected	No unit	-	No	Yes	No
Estimated Fibres*	%w/w	0.01	<0.01	<0.01	<0.01

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 6/11/2020

PARAMETER	UOM	LOR	0407_LP_BAC_0.0-01_201103 SOIL - 3/11/2020 SE213111.001	0407_LP_BAC_0.4-05_201103 SOIL - 3/11/2020 SE213111.002	0407_LP_BAC_0.8-09_201103 SOIL - 3/11/2020 SE213111.003
Total Sample Weight*	g	1	**395**	**606**	**570**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	**0.00600**	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples [MA-1523] Tested: 11/11/2020

PARAMETER	UOM	LOR	0407_LP_BAC_0.0-01_201103 SOIL - 3/11/2020 SE213111.001	0407_LP_BAC_0.4-05_201103 SOIL - 3/11/2020 SE213111.002	0407_LP_BAC_0.8-09_201103 SOIL - 3/11/2020 SE213111.003
Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	<0.0008	<0.0008	<0.0008
Perfluorononanoic acid (PFNA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluorodecanoic acid (PFDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0032	<0.0032	<0.0032	<0.0032
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Sum PFOS and PFHXS	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.008	<0.008	<0.008	<0.008
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.008	<0.008	<0.008	<0.008
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.016	<0.016	<0.016	<0.016
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.016	<0.016	<0.016	<0.016
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.008	<0.008	<0.008	<0.008
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.008	<0.008	<0.008	<0.008

Additional SVOC in Soil [USEPA 8270D] Tested: 11/11/2020

PARAMETER	UOM	LOR	0407_LP_BAC_0.0-01_201103 SOIL - 3/11/2020 SE213111.001	0407_LP_BAC_0.4-05_201103 SOIL - 3/11/2020 SE213111.002	0407_LP_BAC_0.8-09_201103 SOIL - 3/11/2020 SE213111.003
2,2,3,4,4,5,6-Heptabromodiphenyl ether*	mg/kg	0.5	<0.5	<0.5	<0.5
2,2,3,4,4,5-Hexabromodiphenyl ether*	mg/kg	0.5	<0.5	<0.5	<0.5
2,2,3,4,4-Pentabromodiphenyl ether*	mg/kg	0.5	<0.5	<0.5	<0.5
2,2,4,4,5,5-Hexabromodiphenyl ether*	mg/kg	0.5	<0.5	<0.5	<0.5
2,2,4,4,5,6-Hexabromodiphenyl ether*	mg/kg	0.5	<0.5	<0.5	<0.5
2,2,4,4,5-Pentabromodiphenyl ether*	mg/kg	0.5	<0.5	<0.5	<0.5
2,2,4,4,6-Pentabromodiphenyl ether*	mg/kg	0.5	<0.5	<0.5	<0.5
2,2,4,4-Tetrabromodiphenyl ether*	mg/kg	0.5	<0.5	<0.5	<0.5
2,2,4-Tribromodiphenyl ether*	mg/kg	0.5	<0.5	<0.5	<0.5
2,3,3,4,4,5,6-Heptabromodiphenyl ether*	mg/kg	0.5	<0.5	<0.5	<0.5
2,3,4,4-Tetrabromodiphenyl ether*	mg/kg	0.5	<0.5	<0.5	<0.5
2,3,4,6-Tetrabromodiphenyl ether*	mg/kg	0.5	<0.5	<0.5	<0.5
2,4,4-Tribromodiphenyl ether*	mg/kg	0.5	<0.5	<0.5	<0.5
Decabromodiphenyl ether*	mg/kg	0.5	<0.5	<0.5	<0.5

Particle sizing of soils by sieving [AN005] Tested: 12/11/2020

PARAMETER	UOM	LOR	0407_LP_BAC_0.0-01_201103 SOIL - 3/11/2020 SE213111.001	0407_LP_BAC_0.4-05_201103 SOIL - 3/11/2020 SE213111.002	0407_LP_BAC_0.8-09_201103 SOIL - 3/11/2020 SE213111.003
Passing 75µm*	%w/w	1	6	6	7
Retained 75µm*	%w/w	1	94	94	93

Particle sizing of soils <75µm by hydrometer [AN005] Tested: 12/11/2020

PARAMETER	UOM	LOR	0407_LP_BAC_0.0-01_201103 SOIL - 3/11/2020 SE213111.001	0407_LP_BAC_0.4-05_201103 SOIL - 3/11/2020 SE213111.002	0407_LP_BAC_0.8-09_201103 SOIL - 3/11/2020 SE213111.003
Clay (<0.002mm)*	%w/w	0.1	**4.0**	**4.0**	**4.0**

Sample Subcontracted [] Tested: 9/11/2020

PARAMETER	UOM	LOR	0407_LP_BAC_0.0-01_201103 SOIL - 3/11/2020 SE213111.001	0407_LP_BAC_0.4-05_201103 SOIL - 3/11/2020 SE213111.002	0407_LP_BAC_0.8-09_201103 SOIL - 3/11/2020 SE213111.003
Sample Subcontracted*	No unit	-	Subcontracted	Subcontracted	Subcontracted

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN005	The particle size distribution of a soil is determined by wet sieving, using a maximum of 900 mL of deionised water to sieve all fractions down to 75 µm. Referenced to AS1289.3.6.1 and AS1141.11.
AN005	Following wet sieving of the sample,(particles smaller than 75 µm) a dispersing solution is added and a hydrometer is used to measure sedimentation. Soil density is determined and the percentage of each size fraction calculated. Referenced to AS1289.3.6.3.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
AN101	pH in Soil Sludge Sediment and Water: pH is measured electrometrically using a combination electrode and is calibrated against 3 buffers purchased commercially. For soils, sediments and sludges, an extract with water (or 0.01M CaCl2) is made at a ratio of 1:5 and the pH determined and reported on the extract. Reference APHA 4500-H+.
AN122	Exchangeable Cations, CEC and ESP: Soil sample is extracted in 1M Ammonium Acetate at pH=7 (or 1M Ammonium Chloride at pH=7) with cations (Na, K, Ca & Mg) then determined by ICP OES/ICP MS and reported as Exchangeable Cations. For saline soils, these results can be corrected for water soluble cations and reported as Exchangeable cations in meq/100g or soil can be pre-treated (aqueous ethanol/aqueous glycerol) prior to extraction. Cation Exchange Capacity (CEC) is the sum of the exchangeable cations in meq/100g.
AN122	The Exchangeable Sodium Percentage (ESP) is calculated as the exchangeable sodium divided by the CEC (all in meq/100g) times 100. ESP can be used to categorise the sodicity of the soil as below: ESP < 6% non-sodic ESP 6-15% sodic ESP >15% strongly sodic Method is referenced to Rayment and Lyons, 2011, sections 15D3 and 15N1.-
AN245	Anions by Ion Chromatography: A water sample is injected into an eluent stream that passes through the ion chromatographic system where the anions of interest ie Br, Cl, NO2, NO3 and SO4 are separated on their relative affinities for the active sites on the column packing material. Changes to the conductivity and the UV-visible absorbance of the eluent enable identification and quantitation of the anions based on their retention time and peak height or area. APHA 4110 B
AN277	Nitrite on the extract is determined as an intense red-pink azo dye at 540 nm following diazotisation with sulphanilamide and subsequent coupling with N-(1-naphthyl) ethylenediamine dihydrochloride. The original nitrite is determined. Reference APHA 4500-NO2- B.
AN291	From the soil extract, ammonia reacts with hypochlorite ions from Sodium Dichloroisocyanuate, and salicylate in the presence of Sodium Nitroprusside to form indophenol blue and measured at 670nm.
AN292	The sample is heated in the presence of Sulphuric acid, K2SO4 and CuSO4 for two and half hours using a temperature controlled digestion block. Amino Nitrogen of many organic materials is converted to ammonium ion. Free ammonia also is converted to ammonium. The digest is cooled and placed on the Aquakem 250 discrete analyser for Ammonia determination.
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid, mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents .

AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples, Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.
AN605	This technique gravimetrically determines the mass of Bonded Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight. Any fibrous asbestos (FA) found in this fraction will be added to the 2-7mm fraction and its mass recorded there.
AN605	This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free/respirable fibres which are only observed by standard trace analysis as per AN602.
AN605	Bonded asbestos containing material (Bonded ACM) comprises asbestos-containing-material which is sound in condition. Fibrous asbestos (FA) comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material. Asbestos fines (AF) includes free fibres, small fibre bundles and also small fragments of bonded ACM that passes through a 7mm sieve - which implies that the bonded ACM fragments have a substantial degree of damage which increases the potential for fibre release.
AN-605	Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009 and NEPM 1999 (2013) schedule B1 section 4..
MA-1523	This method covers the analysis of per- and polyfluoroalkyl substances (PFAS) in aqueous, solid and biosolid samples and solvent extracts, determined as the total of linear and branched isomers. After spiking with isotopically labelled quantification surrogates and clean-up via SPE cartridges sample extracts are analysed by liquid chromatography/mass spectrometry (LC-MS/MS). PFAS concentrations are determined by isotope dilution quantification.
USEPA8270D_ADD	This method covers analytical procedures for the analysis of additional semi-volatile organic compounds (SVOC) including most neutral, acidic, and basic organic compounds based on the USEPA method 8270D. Samples are extracted into a solvent appropriate to the matrix and analysed using a gas chromatograph – mass spectrometer (GC–MS).

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		
***	Indicates that both * and ** apply.				

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

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Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	3

LABORATORY DETAILS

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SGS Reference	**SE213111 R0**
Date Received	03 Nov 2020
Date Reported	12 Nov 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

%Clay subcontracted to SGS Cairns, 2/58 Comport St, Portsmith QLD 4870, NATA Accreditation Number: 2562, Site Number: 3146. Report No: CE149180

Micros subcontracted to Symbio Laboratories, 2 Sirius Road, Lane Cove West NSW 2066, NATA Accreditation Number 2455. Report Number S963964

SGS does not have the capability to do Sulfide in soil samples.
Water samples reported in SE213112.

No respirable fibres detected in all soil samples using trace analysis technique.

Sample #2: Asbestos found in approx 4x3x2mm cement sheet fragments in >2mm portion.

Asbestos analysed by Approved Identifier Yusuf Kuthpudin.
PFAS and PBDEs subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420. Report Number ME317277
MA1523: Some surrogate recovery is outside of the acceptance criteria due to sample matrix interference.

SIGNATORIES

[redacted]

Chemist | Senior Organic Chemist/Metals Chemis | Asbestos Analyst

RESULTS

Fibre Identification in soil — Method AN602

Laboratory Reference	Client Reference	Matrix	Sample Description	Date Sampled	Fibre Identification	Est.%w/w*
SE213111.001	0407_LP_BAC_0.0-0.1_201103	Soil	395g Sand, Soil, Rocks	03 Nov 2020	No Asbestos Found Organic Fibres Detected	<0.01
SE213111.002	0407_LP_BAC_0.4-0.5_201103	Soil	606g Sand, Soil, Rocks	03 Nov 2020	Amosite & Chrysotile Asbestos Found Synthetic Mineral Fibres Detected Organic Fibres Detected	<0.01
SE213111.003	0407_LP_BAC_0.8-0.9_201103	Soil	570g Sand, Soil, Rocks	03 Nov 2020	No Asbestos Found Organic Fibres Detected	<0.01

Gravimetric Determination of Asbestos in Soil [AN605] Tested: 6/11/2020

PARAMETER	UOM	LOR	0407_LP_BAC_0.0-01_201103 SOIL - 3/11/2020 SE213111.001	0407_LP_BAC_0.4-05_201103 SOIL - 3/11/2020 SE213111.002	0407_LP_BAC_0.8-09_201103 SOIL - 3/11/2020 SE213111.003
Total Sample Weight*	g	1	**395**	**606**	**570**
Bonded ACM in >7mm Sample*	g	0.001	<0.001	<0.001	<0.001
AF/FA in >2mm to <7mm Sample*	g	0.00001	<0.00001	**0.00600**	<0.00001
AF/FA in <2mm Sample*	g	0.00001	<0.00001	<0.00001	<0.00001
Asbestos in soil (>7mm ACM)*	%w/w	0.01	<0.01	<0.01	<0.01
Asbestos in soil (>2mm to <7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001
Asbestos in soil (<2mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001
Asbestos in soil (<7mm AF/FA)*	%w/w	0.001	<0.001	<0.001	<0.001
Fibre Type*	No unit	-	-	-	-

METHOD SUMMARY

METHOD	METHODOLOGY SUMMARY
AN602	Qualitative identification of chrysotile, amosite and crocidolite in bulk samples by polarised light microscopy (PLM) in conjunction with dispersion staining (DS). AS4964 provides the basis for this document. Unequivocal identification of the asbestos minerals present is made by obtaining sufficient diagnostic `clues`, which provide a reasonable degree of certainty, dispersion staining is a mandatory `clue` for positive identification. If sufficient `clues` are absent, then positive identification of asbestos is not possible. This procedure requires removal of suspect fibres/bundles from the sample which cannot be returned.
AN602	Fibres/material that cannot be unequivocably identified as one of the three asbestos forms, will be reported as unknown mineral fibres (umf) The fibres detected may or may not be asbestos fibres.
AN602	AS4964.2004 Method for the Qualitative Identification of Asbestos in Bulk Samples , Section 8.4, Trace Analysis Criteria, Note 4 states:"Depending upon sample condition and fibre type, the detection limit of this technique has been found to lie generally in the range of 1 in 1,000 to 1 in 10,000 parts by weight, equivalent to 1 to 0.1 g/kg."
AN602	The sample can be reported “no asbestos found at the reporting limit of 0.1 g/kg” (<0.01%w/w) where AN602 section 4.5 of this method has been followed, and if- (a) no trace asbestos fibres have been detected (i.e. no ‘respirable ’ fibres): (b) the estimated weight of non-respirable asbestos fibre bundles and/or the estimated weight of asbestos in asbestos-containing materials are found to be less than 0.1g/kg: and (c) these non-respirable asbestos fibre bundles and/or the asbestos containing materials are only visible under stereo-microscope viewing conditions.
AN605	This technique gravimetrically determines the mass of Bonded Asbestos Containing Material retained on a 7mm Sieve and assumes that 15% of this ACM is asbestos. This calculated asbestos weight is then calculated as a percentage of the total sample weight. Any fibrous asbestos (FA) found in this fraction will be added to the 2-7mm fraction and its mass recorded there.
AN605	This technique also gravimetrically determines the mass of Fibrous Asbestos (FA) and Asbestos Fines (AF) Containing Material retained on and passing a 2mm sieve post 7mm sieving. Assumes that FA and AF are 100% asbestos containing. This calculated asbestos weight is then calculated as a percentage of the total sample weight. This does not include free/respirable fibres which are only observed by standard trace analysis as per AN602.
AN605	Bonded asbestos containing material (Bonded ACM) comprises asbestos-containing-material which is sound in condition. Fibrous asbestos (FA) comprises friable asbestos material and includes severely weathered cement sheet, insulation products and woven asbestos material. Asbestos fines (AF) includes free fibres, small fibre bundles and also small fragments of bonded ACM that passes through a 7mm sieve - which implies that the bonded ACM fragments have a substantial degree of damage which increases the potential for fibre release.
AN-605	Insofar as is technically feasible, this report is consistent with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment Remediation and Management of Asbestos - Contaminated Sites in Western Australia - May 2009 and NEPM 1999 (2013) schedule B1 section 4..

FOOTNOTES

Amosite	-	Brown Asbestos	NA	-	Not Analysed
Chrysotile	-	White Asbestos	LNR	-	Listed, Not Required
Crocidolite	-	Blue Asbestos	*	-	NATA accreditation does not cover the performance of this service.
Amphiboles	-	Amosite and/or Crocidolite	**	-	Indicative data, theoretical holding time exceeded.
			***	-	Indicates that both * and ** apply.

(In reference to soil samples only) This report does not comply with the analytical reporting recommendations in the Western Australian Department of Health Guidelines for the Assessment and Remediation and Management of Asbestos Contaminated sites in Western Australia - May 2009.

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.

Where reported: 'Asbestos Detected': Asbestos detected by polarised light microscopy, including dispersion staining.
Where reported: 'No Asbestos Found': No Asbestos Found by polarised light microscopy, including dispersion staining.
Where reported: 'UMF Detected': Mineral fibres of unknown type detected by polarised light microscopy, including dispersion staining. Confirmation by another independent analytical technique may be necessary.

Even after disintegration it can be very difficult, or impossible, to detect the presence of asbestos in some asbestos-containing bulk materials using polarised light microscopy. This is due to the low grade or small length or diameter of asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS		LABORATORY DETAILS	
Contact	Admin	Manager	[redacted]
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Facsimile	0285940499	Facsimile	+61 07 4035 5122
Email	au.environmental.sydney@sgs.com	Email	AU.Environmental.Cairns@sgs.com
Project	**610.30041 Randwick Barracks**	SGS Reference	**CE149180 R0**
Order Number	**SE213111**	Date Received	05 Nov 2020
Samples	3	Date Reported	12 Nov 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(3146/19038)

SIGNATORIES

[redacted]

Operations Manager Manager Northern QLD

Parameter	Units	LOR	Sample Number: CE149180.001 Sample Matrix: Soil Sample Date: 03 Nov 2020 Sample Name: SE213111.001	CE149180.002 Soil 03 Nov 2020 SE213111.002	CE149180.003 Soil 03 Nov 2020 SE213111.003
Moisture Content Method: AN002 Tested: 6/11/2020					
% Moisture	%w/w	1	**5.5**	**6.6**	**5.3**
Particle sizing of soils by sieving Method: AN005 Tested: 12/11/2020					
Passing 75µm	%w/w	1	**6**	**6**	**7**
Retained 75µm	%w/w	1	**94**	**94**	**93**
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 12/11/2020					
Clay (<0.002mm)	%w/w	0.1	**4.0**	**4.0**	**4.0**

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage.* Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

No QC samples were reported for this job.

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN005	The particle size distribution of a soil is determined by wet sieving, using a maximum of 900 mL of deionised water to sieve all fractions down to 75 µm. Referenced to AS1289.3.6.1 and AS1141.11.
AN005	Following wet sieving of the sample,(particles smaller than 75 µm) a dispersing solution is added and a hydrometer is used to measure sedimentation. Soil density is determined and the percentage of each size fraction calculated. Referenced to AS1289.3.6.3.

FOOTNOTES

IS	Insufficient sample for analysis.	LOR	Limit of Reporting
LNR	Sample listed, but not received.	↑↓	Raised or Lowered Limit of Reporting
*	NATA accreditation does not cover the performance of this service.	QFH	QC result is above the upper tolerance
		QFL	QC result is below the lower tolerance
**	Indicative data, theoretical holding time exceeded.	-	The sample was not analysed for this analyte
***	Indicates that both * and ** apply.	NVL	Not Validated

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calcuated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS		LABORATORY DETAILS	
Contact	[redacted]	Manager	[redacted]
Client	SGS EHS SYDNEY	Laboratory	SGS Melbourne EH&S
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Project	**610.30041 Randwick Barracks**	SGS Reference	**ME317277 R0**
Order Number	**SE213111**	Date Received	05 Nov 2020
Samples	3	Date Reported	10 Nov 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(14420).

MA1523: Some surrogate recovery is outside of the acceptance criteria due to sample matrix interference.

SIGNATORIES

[redacted]

Australian Chemistry Manager Senior Chemist

Parameter	Units	LOR	Sample Number: ME317277.001 Sample Matrix: Soil Sample Date: 03 Nov 2020 Sample Name: SE213111.001	ME317277.002 Soil 03 Nov 2020 SE213111.002	ME317277.003 Soil 03 Nov 2020 SE213111.003
Additional SVOC in Soil Method: USEPA 8270D Tested: 9/11/2020					
2,2,3,4,4,5,6-Heptabromodiphenyl ether*	mg/kg	0.5	<0.5	<0.5	<0.5
2,2,3,4,4,5-Hexabromodiphenyl ether*	mg/kg	0.5	<0.5	<0.5	<0.5
2,2,3,4,4-Pentabromodiphenyl ether*	mg/kg	0.5	<0.5	<0.5	<0.5
2,2,4,4,5,5-Hexabromodiphenyl ether*	mg/kg	0.5	<0.5	<0.5	<0.5
2,2,4,4,5,6-Hexabromodiphenyl ether*	mg/kg	0.5	<0.5	<0.5	<0.5
2,2,4,4,5-Pentabromodiphenyl ether*	mg/kg	0.5	<0.5	<0.5	<0.5
2,2,4,4,6-Pentabromodiphenyl ether*	mg/kg	0.5	<0.5	<0.5	<0.5
2,2,4,4-Tetrabromodiphenyl ether*	mg/kg	0.5	<0.5	<0.5	<0.5
2,2,4-Tribromodiphenyl ether*	mg/kg	0.5	<0.5	<0.5	<0.5
2,3,3,4,4,5,6-Heptabromodiphenyl ether*	mg/kg	0.5	<0.5	<0.5	<0.5
2,3,4,4-Tetrabromodiphenyl ether*	mg/kg	0.5	<0.5	<0.5	<0.5
2,3,4,6-Tetrabromodiphenyl ether*	mg/kg	0.5	<0.5	<0.5	<0.5
2,4,4-Tribromodiphenyl ether*	mg/kg	0.5	<0.5	<0.5	<0.5
Decabromodiphenyl ether*	mg/kg	0.5	<0.5	<0.5	<0.5
Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples Method: MA-1523 Tested: 9/11/2020					
Perfluorobutanoic acid (PFBA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0008	<0.0008	<0.0008	<0.0008
Perfluorononanoic acid (PFNA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluorodecanoic acid (PFDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0032	<0.0032	<0.0032	<0.0032
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Sum PFOS and PFHXS	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluorononane sulfonate (PFNS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.0016	<0.0016	<0.0016	<0.0016
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.008	<0.008	<0.008	<0.008
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.008	<0.008	<0.008	<0.008
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.016	<0.016	<0.016	<0.016
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.016	<0.016	<0.016	<0.016
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.008	<0.008	<0.008	<0.008
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.008	<0.008	<0.008	<0.008
(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	**111**	**113**	**116**
(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	**149**	**145**	**146**
(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	**105**	**104**	**101**
(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	**117**	**114**	**102**
(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	**113**	**117**	**105**
(13C9-PFNA) Isotopically Labelled Internal Recovery	%	-	**115**	**130**	**101**
(13C6-PFDA) Isotopically Labelled Internal Recovery	%	-	**105**	**86**	**97**
(13C7-PFUdA) Isotopically Labelled Internal Recovery	%	-	**106**	**91**	**93**
(13C2-PFDoA) Isotopically Labelled Internal Recovery	%	-	**119**	**105**	**114**
(13C2_PFTeDA) Isotopically Labelled Internal Recovery	%	-	**109**	**105**	**104**
(13C2-PFHxDA) Isotopically Labelled Internal Recovery	%	-	**50**	**30**	**32**

Parameter	Units	LOR	Sample Number ME317277.001 Sample Matrix Soil Sample Date 03 Nov 2020 Sample Name SE213111.001	ME317277.002 Soil 03 Nov 2020 SE213111.002	ME317277.003 Soil 03 Nov 2020 SE213111.003
Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples Method: MA-1523 Tested: 9/11/2020 (continued)					
(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	144	133	138
(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	117	120	128
(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	102	102	88
(13C2-4:2 FTS) Isotopically Labelled Internal Recovery	%	-	101	95	103
(13C2-6:2 FTS) Isotopically Labelled Internal Recovery	%	-	123	99	102
(13C2-8:2 FTS) Isotopically Labelled Internal Recovery	%	-	128	106	122
(13C8-PFOSA) Isotopically Labelled Internal Recovery	%	-	118	109	111
(D3-N-MeFOSA) Isotopically Labelled Internal Recovery	%	-	81	96	81
(D5-N-EtFOSA) Isotopically Labelled Internal Recovery	%	-	64	63	62
(D7-N-MeFOSE) Isotopically Labelled Internal Recovery	%	-	74	71	74
(D9-N-EtFOSE) Isotopically Labelled Internal Recovery	%	-	108	115	87
(D3-N-MeFOSAA) Isotopically Labelled Internal Recovery	%	-	89	104	87
(D5-N-EtFOSAA) Isotopically Labelled Internal Recovery	%	-	89	85	90
Moisture Content Method: AN002 Tested: 9/11/2020					
% Moisture*	%w/w	1	7.0	6.3	6.6

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Additional SVOC in Soil Method: USEPA 8270D

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
2,2,3,4,4,5,6-Heptabromodiphenyl ether*	LB036730	mg/kg	0.5	<0.5	0%	NA
2,2,3,4,4,5-Hexabromodiphenyl ether*	LB036730	mg/kg	0.5	<0.5	0%	NA
2,2,3,4,4-Pentabromodiphenyl ether*	LB036730	mg/kg	0.5	<0.5	0%	NA
2,2,4,4,5,5-Hexabromodiphenyl ether*	LB036730	mg/kg	0.5	<0.5	0%	NA
2,2,4,4,5,6-Hexabromodiphenyl ether*	LB036730	mg/kg	0.5	<0.5	0%	NA
2,2,4,4,5-Pentabromodiphenyl ether*	LB036730	mg/kg	0.5	<0.5	0%	NA
2,2,4,4,6-Pentabromodiphenyl ether*	LB036730	mg/kg	0.5	<0.5	0%	NA
2,2,4,4-Tetrabromodiphenyl ether*	LB036730	mg/kg	0.5	<0.5	0%	NA
2,2,4-Tribromodiphenyl ether*	LB036730	mg/kg	0.5	<0.5	0%	NA
2,3,3,4,4,5,6-Heptabromodiphenyl ether*	LB036730	mg/kg	0.5	<0.5	0%	NA
2,3,4,4-Tetrabromodiphenyl ether*	LB036730	mg/kg	0.5	<0.5	0%	NA
2,3,4,6-Tetrabromodiphenyl ether*	LB036730	mg/kg	0.5	<0.5	0%	NA
2,4,4-Tribromodiphenyl ether*	LB036730	mg/kg	0.5	<0.5	0%	NA
Decabromodiphenyl ether*	LB036730	mg/kg	0.5	<0.5	0%	NA

Moisture Content Method: ME-(AU)-[ENV]AN002

Parameter	QC Reference	Units	LOR	DUP %RPD
% Moisture*	LB036708	%w/w	1	3%

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples Method: MA-1523

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Perfluorobutanoic acid (PFBA)	LB036707	mg/kg	0.0016	<0.0016	0%	NA
Perfluoropentanoic acid (PFPeA)	LB036707	mg/kg	0.0016	<0.0016	0%	NA
Perfluorohexanoic acid (PFHxA)	LB036707	mg/kg	0.0016	<0.0016	0%	NA
Perfluoroheptanoic acid (PFHpA)	LB036707	mg/kg	0.0016	<0.0016	0%	80%
Perfluorooctanoic Acid (PFOA)	LB036707	mg/kg	0.0008	<0.0008	0%	125%
Perfluorononanoic acid (PFNA)	LB036707	mg/kg	0.0016	<0.0016	0%	116%
Perfluorodecanoic acid (PFDA)	LB036707	mg/kg	0.0016	<0.0016	0%	148%
Perfluoroundecanoic acid (PFUnA)	LB036707	mg/kg	0.0016	<0.0016	0%	81%
Perfluorododecanoic acid (PFDoA)	LB036707	mg/kg	0.0016	<0.0016	0%	117%
Perfluorotridecanoic acid (PFTrDA)	LB036707	mg/kg	0.0016	<0.0016	0%	85%
Perfluorotetradecanoic acid (PFTeDA)	LB036707	mg/kg	0.0016	<0.0016	0%	NA
Perfluorohexadecanoic acid (PFHxDA)	LB036707	mg/kg	0.0032	<0.0032	0%	NA
Perfluorobutane sulfonate (PFBS)	LB036707	mg/kg	0.0016	<0.0016	0%	NA
Perfluoropentane sulfonate (PFPeS)	LB036707	mg/kg	0.0016	<0.0016	0%	NA
Perfluorohexane sulfonate (PFHxS)	LB036707	mg/kg	0.0016	<0.0016	0%	NA
Perfluoroheptane sulfonate (PFHpS)	LB036707	mg/kg	0.0016	<0.0016	0%	NA
Perfluorooctane sulfonate (PFOS)	LB036707	mg/kg	0.0016	<0.0016	0%	138%
Sum PFOS and PFHXS	LB036707	mg/kg	0.0016	<0.0016	0%	NA
Perfluorononane sulfonate (PFNS)	LB036707	mg/kg	0.0016	<0.0016	0%	NA
Perfluorodecane sulfonate (PFDS)	LB036707	mg/kg	0.0016	<0.0016	0%	NA
Perfluorododecane sulfonate (PFDoS)	LB036707	mg/kg	0.0016	<0.0016	0%	NA
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	LB036707	mg/kg	0.0016	<0.0016	0%	NA
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	LB036707	mg/kg	0.0016	<0.0016	0%	NA
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	LB036707	mg/kg	0.0016	<0.0016	0%	NA
Perfluorooctane sulfonamide (PFOSA)	LB036707	mg/kg	0.0016	<0.0016	0%	63%
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	LB036707	mg/kg	0.008	<0.008	0%	NA
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	LB036707	mg/kg	0.008	<0.008	0%	NA
2-(N-Methylperfluorooctane sulfonamido)-ethanol (N-MeFOSE)	LB036707	mg/kg	0.016	<0.016	0%	NA
2-(N-Ethylperfluorooctane sulfonamido)-ethanol (N-EtFOSE)	LB036707	mg/kg	0.016	<0.016	0%	NA
N-Methylperfluorooctanesulfonamidoacetic acid (N_MeFOSAA)	LB036707	mg/kg	0.008	<0.008	0%	NA
N-Ethylperfluorooctanesulfonamidoacetic Acid (N-EtFOSAA)	LB036707	mg/kg	0.008	<0.008	0%	NA
(13C4-PFBA) Isotopically Labelled Internal Recovery Standard	LB036707	%	-	109%	0%	113%
(13C5-PFPeA) Isotopically Labelled Internal Recovery Standard	LB036707	%	-	142%	6%	143%

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage.* Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples Method: MA-1523 (continued)

				MB	DUP %RPD	LCS %Recovery
(13C5-PFHxA) Isotopically Labelled Internal Recovery Standard	LB036707	%	-	101%	10%	99%
(13C4-PFHpA) Isotopically Labelled Internal Recovery Standard	LB036707	%	-	107%	3%	109%
(13C4_PFOA) Isotopically Labelled Internal Recovery Standard	LB036707	%	-	110%	11%	109%
(13C9-PFNA) Isotopically Labelled Internal Recovery Standard	LB036707	%	-	110%	8%	114%
(13C6-PFDA) Isotopically Labelled Internal Recovery Standard	LB036707	%	-	93%	11%	85%
(13C7-PFUdA) Isotopically Labelled Internal Recovery Standard	LB036707	%	-	87%	25%	93%
(13C2-PFDoA) Isotopically Labelled Internal Recovery Standard	LB036707	%	-	69%	20%	86%
(13C2_PFTeDA) Isotopically Labelled Internal Recovery Standard	LB036707	%	-	53%	21%	68%
(13C2-PFHxDA) Isotopically Labelled Internal Recovery Standard	LB036707	%	-	27%	29%	21%
(13C3-PFBS) Isotopically Labelled Internal Recovery Standard	LB036707	%	-	145%	14%	123%
(13C3-PFHxS) Isotopically Labelled Internal Recovery Standard	LB036707	%	-	121%	5%	111%
(13C8-PFOS) Isotopically Labelled Internal Recovery Standard	LB036707	%	-	104%	50%	90%
(13C2-4:2 FTS) Isotopically Labelled Internal Recovery Standard	LB036707	%	-	100%	5%	88%
(13C2-6:2 FTS) Isotopically Labelled Internal Recovery Standard	LB036707	%	-	103%	15%	93%
(13C2-8:2 FTS) Isotopically Labelled Internal Recovery Standard	LB036707	%	-	100%	1%	95%
(13C8-PFOSA) Isotopically Labelled Internal Recovery Standard	LB036707	%	-	116%	76%	86%
(D3-N-MeFOSA) Isotopically Labelled Internal Recovery Standard	LB036707	%	-	80%	121%	60%
(D5-N-EtFOSA) Isotopically Labelled Internal Recovery Standard	LB036707	%	-	59%	76%	49%
(D7-N-MeFOSE) Isotopically Labelled Internal Recovery Standard	LB036707	%	-	83%	70%	69%
(D9-N-EtFOSE) Isotopically Labelled Internal Recovery Standard	LB036707	%	-	102%	89%	96%
(D3-N-MeFOSAA) Isotopically Labelled Internal Recovery Standard	LB036707	%	-	95%	73%	79%
(D5-N-EtFOSAA) Isotopically Labelled Internal Recovery Standard	LB036707	%	-	90%	68%	88%

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
MA-1523	This method covers the analysis of per- and polyfluoroalkyl substances (PFAS) in aqueous, solid and biosolid samples and solvent extracts, determined as the total of linear and branched isomers. After spiking with isotopically labelled quantification surrogates and clean-up via SPE cartridges sample extracts are analysed by liquid chromatography/mass spectrometry (LC-MS/MS). PFAS concentrations are determined by isotope dilution quantification.
USEPA8270D_ADD	This method covers analytical procedures for the analysis of additional semi-volatile organic compounds (SVOC) including most neutral, acidic, and basic organic compounds based on the USEPA method 8270D. Samples are extracted into a solvent appropriate to the matrix and analysed using a gas chromatograph – mass spectrometer (GC–MS).

FOOTNOTES

IS	Insufficient sample for analysis.	LOR	Limit of Reporting
LNR	Sample listed, but not received.	↑↓	Raised or Lowered Limit of Reporting
*	NATA accreditation does not cover the performance of this service.	QFH	QC result is above the upper tolerance
		QFL	QC result is below the lower tolerance
**	Indicative data, theoretical holding time exceeded.	-	The sample was not analysed for this analyte
***	Indicates that both * and ** apply.	NVL	Not Validated

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calcuated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE213111 R0

CLIENT DETAILS

Contact	LQRSYD
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	02 9427 8100
Facsimile	02 9427 8200
Email	lqrsyd@slrconsulting.com
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	3

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE213111 R0**
Date Received	03 Nov 2020
Date Reported	12 Nov 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Surrogate	VOC's in Soil	1 item
	Volatile Petroleum Hydrocarbons in Soil	1 item
Duplicate	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	1 item
Matrix Spike	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	3 items

SAMPLE SUMMARY

HOLDING TIME SUMMARY

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SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Ammonia Nitrogen (soluble) in Soil

Method: ME-(AU)-[ENV]AN291

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_LP_BAC_0.0-0.1_201	SE213111.001	LB212779	03 Nov 2020	03 Nov 2020	01 Dec 2020	05 Nov 2020	01 Dec 2020	06 Nov 2020
0407_LP_BAC_0.4-0.5_201	SE213111.002	LB212779	03 Nov 2020	03 Nov 2020	01 Dec 2020	05 Nov 2020	01 Dec 2020	06 Nov 2020
0407_LP_BAC_0.8-0.9_201	SE213111.003	LB212779	03 Nov 2020	03 Nov 2020	01 Dec 2020	05 Nov 2020	01 Dec 2020	06 Nov 2020

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)

Method: ME-(AU)-[ENV]AN122

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_LP_BAC_0.0-0.1_201	SE213111.001	LB212834	03 Nov 2020	03 Nov 2020	01 Dec 2020	06 Nov 2020	01 Dec 2020	09 Nov 2020
0407_LP_BAC_0.4-0.5_201	SE213111.002	LB212834	03 Nov 2020	03 Nov 2020	01 Dec 2020	06 Nov 2020	01 Dec 2020	09 Nov 2020
0407_LP_BAC_0.8-0.9_201	SE213111.003	LB212834	03 Nov 2020	03 Nov 2020	01 Dec 2020	06 Nov 2020	01 Dec 2020	09 Nov 2020

Fibre Identification in soil

Method: ME-(AU)-[ENV]AN602

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_LP_BAC_0.0-0.1_201	SE213111.001	LB212905	03 Nov 2020	03 Nov 2020	03 Nov 2021	06 Nov 2020	03 Nov 2021	10 Nov 2020
0407_LP_BAC_0.4-0.5_201	SE213111.002	LB212905	03 Nov 2020	03 Nov 2020	03 Nov 2021	06 Nov 2020	03 Nov 2021	10 Nov 2020
0407_LP_BAC_0.8-0.9_201	SE213111.003	LB212905	03 Nov 2020	03 Nov 2020	03 Nov 2021	06 Nov 2020	03 Nov 2021	10 Nov 2020

Gravimetric Determination of Asbestos in Soil

Method: ME-(AU)-[ENV]AN605

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_LP_BAC_0.0-0.1_201	SE213111.001	LB212905	03 Nov 2020	03 Nov 2020	02 May 2021	06 Nov 2020	02 May 2021	10 Nov 2020
0407_LP_BAC_0.4-0.5_201	SE213111.002	LB212905	03 Nov 2020	03 Nov 2020	02 May 2021	06 Nov 2020	02 May 2021	10 Nov 2020
0407_LP_BAC_0.8-0.9_201	SE213111.003	LB212905	03 Nov 2020	03 Nov 2020	02 May 2021	06 Nov 2020	02 May 2021	10 Nov 2020

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_LP_BAC_0.0-0.1_201	SE213111.001	LB212726	03 Nov 2020	03 Nov 2020	01 Dec 2020	04 Nov 2020	01 Dec 2020	06 Nov 2020
0407_LP_BAC_0.4-0.5_201	SE213111.002	LB212726	03 Nov 2020	03 Nov 2020	01 Dec 2020	04 Nov 2020	01 Dec 2020	06 Nov 2020
0407_LP_BAC_0.8-0.9_201	SE213111.003	LB212726	03 Nov 2020	03 Nov 2020	01 Dec 2020	04 Nov 2020	01 Dec 2020	06 Nov 2020

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_LP_BAC_0.0-0.1_201	SE213111.001	LB212717	03 Nov 2020	03 Nov 2020	17 Nov 2020	04 Nov 2020	09 Nov 2020	06 Nov 2020
0407_LP_BAC_0.4-0.5_201	SE213111.002	LB212717	03 Nov 2020	03 Nov 2020	17 Nov 2020	04 Nov 2020	09 Nov 2020	06 Nov 2020
0407_LP_BAC_0.8-0.9_201	SE213111.003	LB212717	03 Nov 2020	03 Nov 2020	17 Nov 2020	04 Nov 2020	09 Nov 2020	06 Nov 2020

Nitrite Nitrogen in Soil

Method: ME-(AU)-[ENV]AN277

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_LP_BAC_0.0-0.1_201	SE213111.001	LB212778	03 Nov 2020	03 Nov 2020	10 Nov 2020	05 Nov 2020	07 Nov 2020	06 Nov 2020
0407_LP_BAC_0.4-0.5_201	SE213111.002	LB212778	03 Nov 2020	03 Nov 2020	10 Nov 2020	05 Nov 2020	07 Nov 2020	06 Nov 2020
0407_LP_BAC_0.8-0.9_201	SE213111.003	LB212778	03 Nov 2020	03 Nov 2020	10 Nov 2020	05 Nov 2020	07 Nov 2020	06 Nov 2020

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_LP_BAC_0.0-0.1_201	SE213111.001	LB212713	03 Nov 2020	03 Nov 2020	17 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020
0407_LP_BAC_0.4-0.5_201	SE213111.002	LB212713	03 Nov 2020	03 Nov 2020	17 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020
0407_LP_BAC_0.8-0.9_201	SE213111.003	LB212713	03 Nov 2020	03 Nov 2020	17 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_LP_BAC_0.0-0.1_201	SE213111.001	LB212713	03 Nov 2020	03 Nov 2020	17 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020
0407_LP_BAC_0.4-0.5_201	SE213111.002	LB212713	03 Nov 2020	03 Nov 2020	17 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020
0407_LP_BAC_0.8-0.9_201	SE213111.003	LB212713	03 Nov 2020	03 Nov 2020	17 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_LP_BAC_0.0-0.1_201	SE213111.001	LB212713	03 Nov 2020	03 Nov 2020	17 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020
0407_LP_BAC_0.4-0.5_201	SE213111.002	LB212713	03 Nov 2020	03 Nov 2020	17 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020
0407_LP_BAC_0.8-0.9_201	SE213111.003	LB212713	03 Nov 2020	03 Nov 2020	17 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_LP_BAC_0.0-0.1_201	SE213111.001	LB212713	03 Nov 2020	03 Nov 2020	17 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020
0407_LP_BAC_0.4-0.5_201	SE213111.002	LB212713	03 Nov 2020	03 Nov 2020	17 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020
0407_LP_BAC_0.8-0.9_201	SE213111.003	LB212713	03 Nov 2020	03 Nov 2020	17 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020

HOLDING TIME SUMMARY

SE213111 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_LP_BAC_0.0-0.1_201	SE213111.001	LB212786	03 Nov 2020	03 Nov 2020	10 Nov 2020	05 Nov 2020	06 Nov 2020	05 Nov 2020
0407_LP_BAC_0.4-0.5_201	SE213111.002	LB212786	03 Nov 2020	03 Nov 2020	10 Nov 2020	05 Nov 2020	06 Nov 2020	05 Nov 2020
0407_LP_BAC_0.8-0.9_201	SE213111.003	LB212786	03 Nov 2020	03 Nov 2020	10 Nov 2020	05 Nov 2020	06 Nov 2020	05 Nov 2020

Soluble Anions (1:5) in Soil by Ion Chromatography

Method: ME-(AU)-[ENV]AN245

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_LP_BAC_0.0-0.1_201	SE213111.001	LB212784	03 Nov 2020	03 Nov 2020	10 Nov 2020	05 Nov 2020	03 Dec 2020	06 Nov 2020
0407_LP_BAC_0.4-0.5_201	SE213111.002	LB212784	03 Nov 2020	03 Nov 2020	10 Nov 2020	05 Nov 2020	03 Dec 2020	06 Nov 2020
0407_LP_BAC_0.8-0.9_201	SE213111.003	LB212784	03 Nov 2020	03 Nov 2020	10 Nov 2020	05 Nov 2020	03 Dec 2020	06 Nov 2020

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_LP_BAC_0.0-0.1_201	SE213111.001	LB212713	03 Nov 2020	03 Nov 2020	17 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020
0407_LP_BAC_0.4-0.5_201	SE213111.002	LB212713	03 Nov 2020	03 Nov 2020	17 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020
0407_LP_BAC_0.8-0.9_201	SE213111.003	LB212713	03 Nov 2020	03 Nov 2020	17 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020

TKN Kjeldahl Digestion by Discrete Analyser in Soil

Method: ME-(AU)-[ENV]AN292

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_LP_BAC_0.0-0.1_201	SE213111.001	LB212777	03 Nov 2020	03 Nov 2020	10 Nov 2020	05 Nov 2020	12 Nov 2020	06 Nov 2020
0407_LP_BAC_0.4-0.5_201	SE213111.002	LB212777	03 Nov 2020	03 Nov 2020	10 Nov 2020	05 Nov 2020	12 Nov 2020	06 Nov 2020
0407_LP_BAC_0.8-0.9_201	SE213111.003	LB212777	03 Nov 2020	03 Nov 2020	10 Nov 2020	05 Nov 2020	12 Nov 2020	06 Nov 2020

Total Phosphorus by Kjeldahl Digestion DA in Soil

Method: ME-(AU)-[ENV]AN279/AN293(Sydney only)

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_LP_BAC_0.0-0.1_201	SE213111.001	LB212777	03 Nov 2020	03 Nov 2020	01 Dec 2020	05 Nov 2020	01 Dec 2020	06 Nov 2020
0407_LP_BAC_0.4-0.5_201	SE213111.002	LB212777	03 Nov 2020	03 Nov 2020	01 Dec 2020	05 Nov 2020	01 Dec 2020	06 Nov 2020
0407_LP_BAC_0.8-0.9_201	SE213111.003	LB212777	03 Nov 2020	03 Nov 2020	01 Dec 2020	05 Nov 2020	01 Dec 2020	06 Nov 2020

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_LP_BAC_0.0-0.1_201	SE213111.001	LB212723	03 Nov 2020	03 Nov 2020	02 May 2021	04 Nov 2020	02 May 2021	09 Nov 2020
0407_LP_BAC_0.4-0.5_201	SE213111.002	LB212723	03 Nov 2020	03 Nov 2020	02 May 2021	04 Nov 2020	02 May 2021	09 Nov 2020
0407_LP_BAC_0.8-0.9_201	SE213111.003	LB212723	03 Nov 2020	03 Nov 2020	02 May 2021	04 Nov 2020	02 May 2021	09 Nov 2020

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_LP_BAC_0.0-0.1_201	SE213111.001	LB212713	03 Nov 2020	03 Nov 2020	17 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020
0407_LP_BAC_0.4-0.5_201	SE213111.002	LB212713	03 Nov 2020	03 Nov 2020	17 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020
0407_LP_BAC_0.8-0.9_201	SE213111.003	LB212713	03 Nov 2020	03 Nov 2020	17 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_LP_BAC_0.0-0.1_201	SE213111.001	LB212710	03 Nov 2020	03 Nov 2020	17 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020
0407_LP_BAC_0.4-0.5_201	SE213111.002	LB212710	03 Nov 2020	03 Nov 2020	17 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020
0407_LP_BAC_0.8-0.9_201	SE213111.003	LB212710	03 Nov 2020	03 Nov 2020	17 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_LP_BAC_0.0-0.1_201	SE213111.001	LB212710	03 Nov 2020	03 Nov 2020	17 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020
0407_LP_BAC_0.4-0.5_201	SE213111.002	LB212710	03 Nov 2020	03 Nov 2020	17 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020
0407_LP_BAC_0.8-0.9_201	SE213111.003	LB212710	03 Nov 2020	03 Nov 2020	17 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_LP_BAC_0.0-0.1_201103	SE213111.001	%	60 - 130%	85
	0407_LP_BAC_0.4-0.5_201103	SE213111.002	%	60 - 130%	85
	0407_LP_BAC_0.8-0.9_201103	SE213111.003	%	60 - 130%	87

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_LP_BAC_0.0-0.1_201103	SE213111.001	%	60 - 130%	104
	0407_LP_BAC_0.4-0.5_201103	SE213111.002	%	60 - 130%	103
	0407_LP_BAC_0.8-0.9_201103	SE213111.003	%	60 - 130%	105
d14-p-terphenyl (Surrogate)	0407_LP_BAC_0.0-0.1_201103	SE213111.001	%	60 - 130%	101
	0407_LP_BAC_0.4-0.5_201103	SE213111.002	%	60 - 130%	101
	0407_LP_BAC_0.8-0.9_201103	SE213111.003	%	60 - 130%	104

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_LP_BAC_0.0-0.1_201103	SE213111.001	%	70 - 130%	104
	0407_LP_BAC_0.4-0.5_201103	SE213111.002	%	70 - 130%	103
	0407_LP_BAC_0.8-0.9_201103	SE213111.003	%	70 - 130%	105
d14-p-terphenyl (Surrogate)	0407_LP_BAC_0.0-0.1_201103	SE213111.001	%	70 - 130%	101
	0407_LP_BAC_0.4-0.5_201103	SE213111.002	%	70 - 130%	101
	0407_LP_BAC_0.8-0.9_201103	SE213111.003	%	70 - 130%	104
d5-nitrobenzene (Surrogate)	0407_LP_BAC_0.0-0.1_201103	SE213111.001	%	70 - 130%	103
	0407_LP_BAC_0.4-0.5_201103	SE213111.002	%	70 - 130%	104
	0407_LP_BAC_0.8-0.9_201103	SE213111.003	%	70 - 130%	109

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_LP_BAC_0.0-0.1_201103	SE213111.001	%	60 - 130%	85
	0407_LP_BAC_0.4-0.5_201103	SE213111.002	%	60 - 130%	85
	0407_LP_BAC_0.8-0.9_201103	SE213111.003	%	60 - 130%	87

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples

Method: MA-1523

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C2_PFTeDA) Isotopically Labelled Internal Recovery Standard	0407_LP_BAC_0.0-0.1_201103	SE213111.001	%	0 - 130%	109
	0407_LP_BAC_0.4-0.5_201103	SE213111.002	%	0 - 130%	105
	0407_LP_BAC_0.8-0.9_201103	SE213111.003	%	0 - 130%	104
(13C2-4:2 FTS) Isotopically Labelled Internal Recovery Standard	0407_LP_BAC_0.0-0.1_201103	SE213111.001	%	0 - 150%	101
	0407_LP_BAC_0.4-0.5_201103	SE213111.002	%	0 - 150%	95
	0407_LP_BAC_0.8-0.9_201103	SE213111.003	%	0 - 150%	103
(13C2-6:2 FTS) Isotopically Labelled Internal Recovery Standard	0407_LP_BAC_0.0-0.1_201103	SE213111.001	%	0 - 150%	123
	0407_LP_BAC_0.4-0.5_201103	SE213111.002	%	0 - 150%	99
	0407_LP_BAC_0.8-0.9_201103	SE213111.003	%	0 - 150%	102
(13C2-8:2 FTS) Isotopically Labelled Internal Recovery Standard	0407_LP_BAC_0.0-0.1_201103	SE213111.001	%	0 - 150%	128
	0407_LP_BAC_0.4-0.5_201103	SE213111.002	%	0 - 150%	106
	0407_LP_BAC_0.8-0.9_201103	SE213111.003	%	0 - 150%	122
(13C2-PFDoA) Isotopically Labelled Internal Recovery Standard	0407_LP_BAC_0.0-0.1_201103	SE213111.001	%	0 - 150%	119
	0407_LP_BAC_0.4-0.5_201103	SE213111.002	%	0 - 150%	105
	0407_LP_BAC_0.8-0.9_201103	SE213111.003	%	0 - 150%	114
(13C2-PFHxDA) Isotopically Labelled Internal Recovery Standard	0407_LP_BAC_0.0-0.1_201103	SE213111.001	%	0 - 150%	50
	0407_LP_BAC_0.4-0.5_201103	SE213111.002	%	0 - 150%	30
	0407_LP_BAC_0.8-0.9_201103	SE213111.003	%	0 - 150%	32
(13C3-PFBS) Isotopically Labelled Internal Recovery Standard	0407_LP_BAC_0.0-0.1_201103	SE213111.001	%	0 - 150%	144
	0407_LP_BAC_0.4-0.5_201103	SE213111.002	%	0 - 150%	133
	0407_LP_BAC_0.8-0.9_201103	SE213111.003	%	0 - 150%	138
(13C3-PFHxS) Isotopically Labelled Internal Recovery Standard	0407_LP_BAC_0.0-0.1_201103	SE213111.001	%	0 - 150%	117
	0407_LP_BAC_0.4-0.5_201103	SE213111.002	%	0 - 150%	120
	0407_LP_BAC_0.8-0.9_201103	SE213111.003	%	0 - 150%	128
(13C4_PFOA) Isotopically Labelled Internal Recovery Standard	0407_LP_BAC_0.0-0.1_201103	SE213111.001	%	0 - 150%	113
	0407_LP_BAC_0.4-0.5_201103	SE213111.002	%	0 - 150%	117
	0407_LP_BAC_0.8-0.9_201103	SE213111.003	%	0 - 150%	105
(13C4-PFBA) Isotopically Labelled Internal Recovery Standard	0407_LP_BAC_0.0-0.1_201103	SE213111.001	%	0 - 150%	111
	0407_LP_BAC_0.4-0.5_201103	SE213111.002	%	0 - 150%	113
	0407_LP_BAC_0.8-0.9_201103	SE213111.003	%	0 - 150%	116

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples (continued)

Method: MA-1523

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C4-PFHpA) Isotopically Labelled Internal Recovery Standard	0407_LP_BAC_0.0-0.1_201103	SE213111.001	%	0 - 150%	117
	0407_LP_BAC_0.4-0.5_201103	SE213111.002	%	0 - 150%	114
	0407_LP_BAC_0.8-0.9_201103	SE213111.003	%	0 - 150%	102
(13C5-PFHxA) Isotopically Labelled Internal Recovery Standard	0407_LP_BAC_0.0-0.1_201103	SE213111.001	%	0 - 150%	105
	0407_LP_BAC_0.4-0.5_201103	SE213111.002	%	0 - 150%	104
	0407_LP_BAC_0.8-0.9_201103	SE213111.003	%	0 - 150%	101
(13C5-PFPeA) Isotopically Labelled Internal Recovery Standard	0407_LP_BAC_0.0-0.1_201103	SE213111.001	%	0 - 150%	149
	0407_LP_BAC_0.4-0.5_201103	SE213111.002	%	0 - 150%	145
	0407_LP_BAC_0.8-0.9_201103	SE213111.003	%	0 - 150%	146
(13C6-PFDA) Isotopically Labelled Internal Recovery Standard	0407_LP_BAC_0.0-0.1_201103	SE213111.001	%	0 - 150%	105
	0407_LP_BAC_0.4-0.5_201103	SE213111.002	%	0 - 150%	86
	0407_LP_BAC_0.8-0.9_201103	SE213111.003	%	0 - 150%	97
(13C7-PFUdA) Isotopically Labelled Internal Recovery Standard	0407_LP_BAC_0.0-0.1_201103	SE213111.001	%	0 - 150%	106
	0407_LP_BAC_0.4-0.5_201103	SE213111.002	%	0 - 150%	91
	0407_LP_BAC_0.8-0.9_201103	SE213111.003	%	0 - 150%	93
(13C8-PFOS) Isotopically Labelled Internal Recovery Standard	0407_LP_BAC_0.0-0.1_201103	SE213111.001	%	0 - 150%	102
	0407_LP_BAC_0.4-0.5_201103	SE213111.002	%	0 - 150%	102
	0407_LP_BAC_0.8-0.9_201103	SE213111.003	%	0 - 150%	88
(13C8-PFOSA) Isotopically Labelled Internal Recovery Standard	0407_LP_BAC_0.0-0.1_201103	SE213111.001	%	0 - 150%	118
	0407_LP_BAC_0.4-0.5_201103	SE213111.002	%	0 - 150%	109
	0407_LP_BAC_0.8-0.9_201103	SE213111.003	%	0 - 150%	111
(13C9-PFNA) Isotopically Labelled Internal Recovery Standard	0407_LP_BAC_0.0-0.1_201103	SE213111.001	%	0 - 150%	115
	0407_LP_BAC_0.4-0.5_201103	SE213111.002	%	0 - 150%	130
	0407_LP_BAC_0.8-0.9_201103	SE213111.003	%	0 - 150%	101
(D3-N-MeFOSA) Isotopically Labelled Internal Recovery Standard	0407_LP_BAC_0.0-0.1_201103	SE213111.001	%	0 - 150%	81
	0407_LP_BAC_0.4-0.5_201103	SE213111.002	%	0 - 150%	96
	0407_LP_BAC_0.8-0.9_201103	SE213111.003	%	0 - 150%	81
(D3-N-MeFOSAA) Isotopically Labelled Internal Recovery Standard	0407_LP_BAC_0.0-0.1_201103	SE213111.001	%	0 - 150%	89
	0407_LP_BAC_0.4-0.5_201103	SE213111.002	%	0 - 150%	104
	0407_LP_BAC_0.8-0.9_201103	SE213111.003	%	0 - 150%	87
(D5-N-EtFOSA) Isotopically Labelled Internal Recovery Standard	0407_LP_BAC_0.0-0.1_201103	SE213111.001	%	0 - 150%	64
	0407_LP_BAC_0.4-0.5_201103	SE213111.002	%	0 - 150%	63
	0407_LP_BAC_0.8-0.9_201103	SE213111.003	%	0 - 150%	62
(D5-N-EtFOSAA) Isotopically Labelled Internal Recovery Standard	0407_LP_BAC_0.0-0.1_201103	SE213111.001	%	0 - 150%	89
	0407_LP_BAC_0.4-0.5_201103	SE213111.002	%	0 - 150%	85
	0407_LP_BAC_0.8-0.9_201103	SE213111.003	%	0 - 150%	90
(D7-N-MeFOSE) Isotopically Labelled Internal Recovery Standard	0407_LP_BAC_0.0-0.1_201103	SE213111.001	%	0 - 150%	74
	0407_LP_BAC_0.4-0.5_201103	SE213111.002	%	0 - 150%	71
	0407_LP_BAC_0.8-0.9_201103	SE213111.003	%	0 - 150%	74
(D9-N-EtFOSE) Isotopically Labelled Internal Recovery Standard	0407_LP_BAC_0.0-0.1_201103	SE213111.001	%	0 - 150%	108
	0407_LP_BAC_0.4-0.5_201103	SE213111.002	%	0 - 150%	115
	0407_LP_BAC_0.8-0.9_201103	SE213111.003	%	0 - 150%	87

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	0407_LP_BAC_0.0-0.1_201103	SE213111.001	%	70 - 130%	74
	0407_LP_BAC_0.4-0.5_201103	SE213111.002	%	70 - 130%	74
	0407_LP_BAC_0.8-0.9_201103	SE213111.003	%	70 - 130%	73
d5-phenol (Surrogate)	0407_LP_BAC_0.0-0.1_201103	SE213111.001	%	50 - 130%	95
	0407_LP_BAC_0.4-0.5_201103	SE213111.002	%	50 - 130%	96
	0407_LP_BAC_0.8-0.9_201103	SE213111.003	%	50 - 130%	100

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_LP_BAC_0.0-0.1_201103	SE213111.001	%	60 - 130%	101
	0407_LP_BAC_0.4-0.5_201103	SE213111.002	%	60 - 130%	109
	0407_LP_BAC_0.8-0.9_201103	SE213111.003	%	60 - 130%	99
d4-1,2-dichloroethane (Surrogate)	0407_LP_BAC_0.0-0.1_201103	SE213111.001	%	60 - 130%	101
	0407_LP_BAC_0.4-0.5_201103	SE213111.002	%	60 - 130%	98
	0407_LP_BAC_0.8-0.9_201103	SE213111.003	%	60 - 130%	116
d8-toluene (Surrogate)	0407_LP_BAC_0.0-0.1_201103	SE213111.001	%	60 - 130%	132 ①
	0407_LP_BAC_0.4-0.5_201103	SE213111.002	%	60 - 130%	92

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued) — Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d8-toluene (Surrogate)	0407_LP_BAC_0.8-0.9_201103	SE213111.003	%	60 - 130%	102

Volatile Petroleum Hydrocarbons in Soil — Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_LP_BAC_0.0-0.1_201103	SE213111.001	%	60 - 130%	101
	0407_LP_BAC_0.4-0.5_201103	SE213111.002	%	60 - 130%	109
	0407_LP_BAC_0.8-0.9_201103	SE213111.003	%	60 - 130%	99
d4-1,2-dichloroethane (Surrogate)	0407_LP_BAC_0.0-0.1_201103	SE213111.001	%	60 - 130%	101
	0407_LP_BAC_0.4-0.5_201103	SE213111.002	%	60 - 130%	98
	0407_LP_BAC_0.8-0.9_201103	SE213111.003	%	60 - 130%	116
d8-toluene (Surrogate)	0407_LP_BAC_0.0-0.1_201103	SE213111.001	%	60 - 130%	132 ⓘ
	0407_LP_BAC_0.4-0.5_201103	SE213111.002	%	60 - 130%	92
	0407_LP_BAC_0.8-0.9_201103	SE213111.003	%	60 - 130%	102

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Ammonia Nitrogen (soluble) in Soil

Method: ME-(AU)-[ENV]AN291

Sample Number	Parameter	Units	LOR	Result
LB212779.001	Ammonia Nitrogen, NH_3 as N	mg/kg	0.15	<0.15

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)

Method: ME-(AU)-[ENV]AN122

Sample Number	Parameter	Units	LOR	Result
LB212834.001	Exchangeable Sodium, Na	mg/kg	2	0
	Exchangeable Potassium, K	mg/kg	2	0
	Exchangeable Calcium, Ca	mg/kg	2	0
	Exchangeable Magnesium, Mg	mg/kg	2	0

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result
LB212726.001	Mercury	mg/kg	0.05	<0.05

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB212713.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	78

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB212713.001		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	122
		d14-p-terphenyl (Surrogate)	%	-	108

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB212713.001		Naphthalene	mg/kg	0.1	<0.1
		2-methylnaphthalene	mg/kg	0.1	<0.1
		1-methylnaphthalene	mg/kg	0.1	<0.1
		Acenaphthylene	mg/kg	0.1	<0.1
		Acenaphthene	mg/kg	0.1	<0.1
		Fluorene	mg/kg	0.1	<0.1
		Phenanthrene	mg/kg	0.1	<0.1
		Anthracene	mg/kg	0.1	<0.1
		Fluoranthene	mg/kg	0.1	<0.1
		Pyrene	mg/kg	0.1	<0.1
		Benzo(a)anthracene	mg/kg	0.1	<0.1
		Chrysene	mg/kg	0.1	<0.1
		Benzo(a)pyrene	mg/kg	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	116
		2-fluorobiphenyl (Surrogate)	%	-	122
		d14-p-terphenyl (Surrogate)	%	-	108

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB212713.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	78

Soluble Anions (1:5) in Soil by Ion Chromatography

Method: ME-(AU)-[ENV]AN245

Sample Number	Parameter	Units	LOR	Result
LB212784.001	Nitrate Nitrogen	mg/kg	0.025	<0.025
	Sulfate	mg/kg	5	<5.0

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB212713.001		Phenol	mg/kg	0.5	<0.5
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5
		2-nitrophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
		Pentachlorophenol	mg/kg	0.5	<0.5
		2,4-dinitrophenol	mg/kg	2	<2
		4-chloro-3-methylphenol	mg/kg	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	73
		d5-phenol (Surrogate)	%	-	100

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB212723.001	Arsenic, As	mg/kg	1	<1
	Beryllium, Be	mg/kg	0.5	<0.5
	Cadmium, Cd	mg/kg	0.3	<0.3
	Cobalt, Co	mg/kg	0.5	<0.5
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Manganese, Mn	mg/kg	1	<1
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB212713.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB212710.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB212710.001	Halogenated Aromatics	1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic	Benzene	mg/kg	0.1	<0.1
	Hydrocarbons	Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10
		MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	99
		d8-toluene (Surrogate)	%	-	86
		Bromofluorobenzene (Surrogate)	%	-	96
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB212710.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	99

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Ammonia Nitrogen (soluble) in Soil

Method: ME-(AU)-[ENV]AN291

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE213111.003	LB212779.007	Ammonia Nitrogen, NH_3 as N	mg/kg	0.15	2.0	1.6	41	20

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE213105.004	LB212726.014	Mercury	mg/kg	0.05	2.0	1.7	33	20
SE213137.003	LB212726.024	Mercury	mg/kg	0.05	<0.05	<0.05	200	0

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE213111.003	LB212717.022	% Moisture	%w/w	1	6.3	5.7	47	9
SE213146.005	LB212717.011	% Moisture	%w/w	1	10.9	10.7	39	2

Nitrite Nitrogen in Soil

Method: ME-(AU)-[ENV]AN277

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE213111.003	LB212778.007	Nitrite, NO_2 as N in Soil*	mg/kg	0.05	<0.05	<0.05	182	0

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE213111.002	LB212713.028		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	0	200	0
			Alpha BHC	mg/kg	0.1	<0.1	0	200	0
			Lindane	mg/kg	0.1	<0.1	0	200	0
			Heptachlor	mg/kg	0.1	<0.1	0	200	0
			Aldrin	mg/kg	0.1	<0.1	0	200	0
			Beta BHC	mg/kg	0.1	<0.1	0	200	0
			Delta BHC	mg/kg	0.1	<0.1	0	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	0	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	0	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	0	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	0	200	0
			Dieldrin	mg/kg	0.2	<0.2	0	200	0
			Endrin	mg/kg	0.2	<0.2	0	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	0	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	0	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	0	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	0	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	0	200	0
			Methoxychlor	mg/kg	0.1	<0.1	0	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	0	200	0
			Isodrin	mg/kg	0.1	<0.1	0	200	0
			Mirex	mg/kg	0.1	<0.1	0	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.13	0.131	30	3

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE213111.003	LB212713.027	Dichlorvos	mg/kg	0.5	<0.5	<0.5	200	0
		Dimethoate	mg/kg	0.5	<0.5	<0.5	200	0
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	200	0
		Fenitrothion	mg/kg	0.2	<0.2	<0.2	200	0
		Malathion	mg/kg	0.2	<0.2	<0.2	200	0
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OP Pesticides in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE213111.003	LB212713.027		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	200	0
			Methidathion	mg/kg	0.5	<0.5	<0.5	200	0
			Ethion	mg/kg	0.2	<0.2	<0.2	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	0
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	2

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE213111.003	LB212713.027		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	0.1	0.1	122	13
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	0.5	0.5	49	3
			Anthracene	mg/kg	0.1	0.1	0.1	118	10
			Fluoranthene	mg/kg	0.1	1.3	1.3	38	1
			Pyrene	mg/kg	0.1	1.1	1.1	39	1
			Benzo(a)anthracene	mg/kg	0.1	0.5	0.5	50	0
			Chrysene	mg/kg	0.1	0.6	0.5	47	9
			Benzo(b&j)fluoranthene	mg/kg	0.1	0.5	0.5	49	1
			Benzo(k)fluoranthene	mg/kg	0.1	0.3	0.3	61	7
			Benzo(a)pyrene	mg/kg	0.1	0.5	0.6	48	2
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	0.3	0.3	62	1
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	0.3	0.3	62	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	0.7	0.7	37	1
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	0.8	0.8	46	1
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	0.8	0.8	36	1
			Total PAH (18)	mg/kg	0.8	6.4	6.3	43	2
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	30	1
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	0
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	2
SE213146.005	LB212713.014		Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthylene	mg/kg	0.1	<0.1	<0.1	200	0
			Acenaphthene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluorene	mg/kg	0.1	<0.1	<0.1	200	0
			Phenanthrene	mg/kg	0.1	<0.1	<0.1	200	0
			Anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Chrysene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(a)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	200	0
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	200	0
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=0	mg/kg	0.2	<0.2	<0.2	200	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	mg/kg	0.3	<0.3	<0.3	134	0
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	mg/kg	0.2	<0.2	<0.2	175	0
			Total PAH (18)	mg/kg	0.8	<0.8	<0.8	200	0
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.6	30	3
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	1
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	30	2

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE213111.002	LB212713.028		Arochlor 1016	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1221	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1232	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1242	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1248	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1254	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1260	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1262	mg/kg	0.2	<0.2	0	200	0
			Arochlor 1268	mg/kg	0.2	<0.2	0	200	0
			Total PCBs (Arochlors)	mg/kg	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0	0.131	30	3

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE213111.003	LB212786.011	pH	pH Units	0.1	7.6	7.7	31	3

Soluble Anions (1:5) in Soil by Ion Chromatography

Method: ME-(AU)-[ENV]AN245

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE213111.003	LB212784.011	Nitrate Nitrogen	mg/kg	0.025	2.4	2.0	32	16
		Sulfate	mg/kg	5	7.5	7.8	95	5
		ortho Phosphate as P	mg/kg	0.25	1.0	1.1	53	4

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE213111.003	LB212713.027		Phenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	200	0
			Total Cresol	mg/kg	1.5	<1.5	<1.5	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	<0.5	200	0
			4-nitrophenol	mg/kg	1	<1	<1	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	200	0
			2,4-dinitrophenol	mg/kg	2	<2	<2	200	0
			4-chloro-3-methylphenol	mg/kg	2	<2	<2	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.6	3.7	30	2
			d5-phenol (Surrogate)	mg/kg	-	2.0	2.0	30	2

TKN Kjeldahl Digestion by Discrete Analyser in Soil

Method: ME-(AU)-[ENV]AN292

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE213111.003	LB212777.007	Total Kjeldahl Nitrogen	mg/kg	40	390	360	35	9

Total Phosphorus by Kjeldahl Digestion DA in Soil

Method: ME-(AU)-[ENV]AN279/AN293(Sydney only)

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE213111.003	LB212777.007	Total Phosphorus (Kjeldahl Digestion)	mg/kg	40	200	170	26	16

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE213105.004	LB212723.014	Arsenic, As	mg/kg	1	4	3	61	33
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	4.8	3.2	42	40

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE213105.004	LB212723.014	Copper, Cu	mg/kg	0.5	5.4	7.9	38	37
		Nickel, Ni	mg/kg	0.5	2.9	2.3	49	25
		Lead, Pb	mg/kg	1	81	55	31	38 ②
		Zinc, Zn	mg/kg	2	52	56	34	8
SE213137.003	LB212723.024	Arsenic, As	mg/kg	1	4	3	60	28
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	12	16	34	31
		Copper, Cu	mg/kg	0.5	39	51	31	29
		Nickel, Ni	mg/kg	0.5	60	63	31	4
		Lead, Pb	mg/kg	1	13	16	37	18
		Zinc, Zn	mg/kg	2	77	110	32	32

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE213111.003	LB212713.027		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0
SE213146.005	LB212713.014		TRH C10-C14	mg/kg	20	<20	<20	200	0
			TRH C15-C28	mg/kg	45	<45	<45	200	0
			TRH C29-C36	mg/kg	45	<45	<45	200	0
			TRH C37-C40	mg/kg	100	<100	<100	200	0
			TRH C10-C36 Total	mg/kg	110	<110	<110	200	0
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	<25	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	200	0
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	200	0
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	200	0

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE213111.002	LB212710.026	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	0	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	0	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	0	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	0	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	0	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	0	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	0	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	0	200	0
			Bromomethane	mg/kg	1	<1	0	200	0
			Chloroethane	mg/kg	1	<1	0	200	0
			Trichlorofluoromethane	mg/kg	1	<1	0	200	0
			Iodomethane	mg/kg	5	<5	0.01	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	0	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	0.03	200	0
			Allyl chloride	mg/kg	0.1	<0.1	0	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	0	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	0	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	0	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	0	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	0	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	0	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	0	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	0	200	0
			Dibromomethane	mg/kg	0.1	<0.1	0	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued) — **Method: ME-(AU)-[ENV]AN433**

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE213111.002	LB212710.026	Halogenated	1,1,2-trichloroethane	mg/kg	0.1	<0.1	0	200	0
		Aliphatics	1,3-dichloropropane	mg/kg	0.1	<0.1	0	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	0	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	0	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	0	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	0	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	0	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	0	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	0	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	0	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	0	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	0	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	0	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	0	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	0	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	0	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	0	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	0	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	0	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	0	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	0	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	0	200	0
			m/p-xylene	mg/kg	0.2	<0.2	0	200	0
			o-xylene	mg/kg	0.1	<0.1	0	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	0	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	0	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	0	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	0	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	0	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	0	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	0	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	0	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	0	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	0	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	0	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	0.34	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	0	200	0
			Vinyl acetate	mg/kg	10	<10	0	200	0
			MEK (2-butanone)	mg/kg	10	<10	0	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	0	200	0
			2-hexanone (MBK)	mg/kg	5	<5	0	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	0.07	165	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	0	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.8	10.5737847526	50	7
			d8-toluene (Surrogate)	mg/kg	-	9.2	9.1420477151	50	1
			Bromofluorobenzene (Surrogate)	mg/kg	-	10.9	9.5638461019	50	13
		Totals	Total Xylenes	mg/kg	0.3	<0.3	0	200	0
			Total BTEX	mg/kg	0.6	<0.6	0	200	0
			Total VOC*	mg/kg	24	<24	0.45	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	0.03	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	0.03	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	0	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	0	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	0	200	0
			Bromoform	mg/kg	0.1	<0.1	0	200	0
SE213146.005	LB212710.014	Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE213146.005	LB212710.014	Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.5	8.2	50	15
			d8-toluene (Surrogate)	mg/kg	-	9.1	9.0	50	1
			Bromofluorobenzene (Surrogate)	mg/kg	-	10.6	9.7	50	8
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE213111.002	LB212710.026		TRH C6-C10	mg/kg	25	<25	2.4521406278	200	0
			TRH C6-C9	mg/kg	20	<20	2.3700332977	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.8	10.573784752(	30	7
			d8-toluene (Surrogate)	mg/kg	-	9.2	9.1420477151	30	1
			Bromofluorobenzene (Surrogate)	mg/kg	-	10.9	9.5638461019	30	13
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	0	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	2.4521406278	200	0
SE213146.005	LB212710.014		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.5	8.2	30	15
			d8-toluene (Surrogate)	mg/kg	-	9.1	9.0	30	1
			Bromofluorobenzene (Surrogate)	mg/kg	-	10.6	9.7	30	8
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Ammonia Nitrogen (soluble) in Soil

Method: ME-(AU)-[ENV]AN291

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212779.002	Ammonia Nitrogen, NH_3 as N	mg/kg	0.15	5.1	5	80 - 120	103

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)

Method: ME-(AU)-[ENV]AN122

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212834.002	Exchangeable Sodium, Na	meq/100g	0.01	0.16	0.194	80 - 120	81
	Exchangeable Potassium, K	meq/100g	0.01	0.58	0.63	80 - 120	92
	Exchangeable Calcium, Ca	meq/100g	0.01	6.5	6.3	80 - 120	103
	Exchangeable Magnesium, Mg	meq/100g	0.02	1.1	1.11	80 - 120	96

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212726.002	Mercury	mg/kg	0.05	0.21	0.2	70 - 130	107

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212713.002		Heptachlor	mg/kg	0.1	0.1	0.2	60 - 140	74
		Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	76
		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	75
		Dieldrin	mg/kg	0.2	<0.2	0.2	60 - 140	77
		Endrin	mg/kg	0.2	<0.2	0.2	60 - 140	79
		p,p'-DDT	mg/kg	0.1	0.1	0.2	60 - 140	74
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.12	0.15	40 - 130	78

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212713.002		Dichlorvos	mg/kg	0.5	2.2	2	60 - 140	108
		Diazinon (Dimpylate)	mg/kg	0.5	2.1	2	60 - 140	105
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.5	2	60 - 140	127
		Ethion	mg/kg	0.2	2.3	2	60 - 140	113
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	103
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	97

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212713.002		Naphthalene	mg/kg	0.1	4.5	4	60 - 140	113
		Acenaphthylene	mg/kg	0.1	4.6	4	60 - 140	116
		Acenaphthene	mg/kg	0.1	4.5	4	60 - 140	112
		Phenanthrene	mg/kg	0.1	4.4	4	60 - 140	110
		Anthracene	mg/kg	0.1	4.3	4	60 - 140	106
		Fluoranthene	mg/kg	0.1	5.2	4	60 - 140	129
		Pyrene	mg/kg	0.1	4.2	4	60 - 140	106
		Benzo(a)pyrene	mg/kg	0.1	4.3	4	60 - 140	107
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	107
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	103
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	97

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212713.002	Arochlor 1260	mg/kg	0.2	0.5	0.4	60 - 140	120

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212786.003	pH	pH Units	0.1	7.4	7.415	98 - 102	99

Soluble Anions (1:5) in Soil by Ion Chromatography

Method: ME-(AU)-[ENV]AN245

Sample Number	Parameter	Units	LOR

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Soluble Anions (1:5) in Soil by Ion Chromatography (continued)

Method: ME-(AU)-[ENV]AN245

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212784.002		Nitrate Nitrogen	mg/kg	0.025	9.6	10	70 - 130	96
		Sulfate	mg/kg	5	96	100	70 - 130	96

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212713.002		Phenol	mg/kg	0.5	0.9	1	70 - 130	92
		2,4-dichlorophenol	mg/kg	0.5	0.8	1	70 - 130	80
		2,4,6-trichlorophenol	mg/kg	0.5	0.9	1	70 - 130	90
		Pentachlorophenol	mg/kg	0.5	0.7	1	70 - 130	74
	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.6	5	40 - 130	72
		d5-phenol (Surrogate)	mg/kg	-	2.0	2	40 - 130	98

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212723.002		Arsenic, As	mg/kg	1	330	318.22	80 - 120	103
		Boron, B	mg/kg	5	41	37.13	80 - 120	111
		Beryllium, Be	mg/kg	0.5	4.0	4.17	80 - 120	97
		Cadmium, Cd	mg/kg	0.3	5.4	5.41	80 - 120	101
		Cobalt, Co	mg/kg	0.5	21	20.71	80 - 120	102
		Chromium, Cr	mg/kg	0.5	40	38.31	80 - 120	105
		Copper, Cu	mg/kg	0.5	300	290	80 - 120	103
		Manganese, Mn	mg/kg	1	700	660	80 - 120	107
		Nickel, Ni	mg/kg	0.5	190	187	80 - 120	102
		Lead, Pb	mg/kg	1	93	89.9	80 - 120	104
		Zinc, Zn	mg/kg	2	280	273	80 - 120	102

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212713.002		TRH C10-C14	mg/kg	20	43	40	60 - 140	108
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	100
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	90
	TRH F Bands	TRH >C10-C16	mg/kg	25	44	40	60 - 140	110
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	95
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	90

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212710.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	4.2	5	60 - 140	84
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	6.0	5	60 - 140	120
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	5.0	5	60 - 140	100
	Halogenated	Chlorobenzene	mg/kg	0.1	6.0	5	60 - 140	120
	Monocyclic	Benzene	mg/kg	0.1	5.2	5	60 - 140	105
	Aromatic	Toluene	mg/kg	0.1	4.6	5	60 - 140	91
		Ethylbenzene	mg/kg	0.1	4.6	5	60 - 140	92
		m/p-xylene	mg/kg	0.2	9.1	10	60 - 140	91
		o-xylene	mg/kg	0.1	4.6	5	60 - 140	92
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	11.6	10	70 - 130	116
		d8-toluene (Surrogate)	mg/kg	-	9.8	10	70 - 130	98
		Bromofluorobenzene (Surrogate)	mg/kg	-	10.1	10	70 - 130	101
	Trihalomethan	Chloroform	mg/kg	0.1	5.5	5	60 - 140	110

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212710.002		TRH C6-C10	mg/kg	25	83	92.5	60 - 140	90
		TRH C6-C9	mg/kg	20	73	80	60 - 140	92
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	11.6	10	70 - 130	116
		Bromofluorobenzene (Surrogate)	mg/kg	-	10.1	10	70 - 130	101
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	55	62.5	60 - 140	88

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE213083.018	LB212726.004	Mercury	mg/kg	0.05	0.22	<0.05	0.2	93

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE213158.001	LB212713.004		Naphthalene	mg/kg	0.1	4.4	<0.1	4	110
			2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
			1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	-	-
			Acenaphthylene	mg/kg	0.1	4.5	<0.1	4	114
			Acenaphthene	mg/kg	0.1	4.3	<0.1	4	108
			Fluorene	mg/kg	0.1	<0.1	<0.1	-	-
			Phenanthrene	mg/kg	0.1	4.4	<0.1	4	109
			Anthracene	mg/kg	0.1	4.2	<0.1	4	105
			Fluoranthene	mg/kg	0.1	4.9	<0.1	4	122
			Pyrene	mg/kg	0.1	4.3	<0.1	4	107
			Benzo(a)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Chrysene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(k)fluoranthene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(a)pyrene	mg/kg	0.1	4.0	<0.1	4	101
			Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	<0.1	-	-
			Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	-	-
			Benzo(ghi)perylene	mg/kg	0.1	<0.1	<0.1	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	4.0	<0.2	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	4.2	<0.3	-	-
			Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	4.1	<0.2	-	-
			Total PAH (18)	mg/kg	0.8	35	<0.8	-	-
		Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.5	0.6	-	107
			2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	-	102
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	-	98

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE213083.018	LB212723.004	Arsenic, As	mg/kg	1	50	6	50	89
		Boron, B	mg/kg	5	54	28	50	53 ④
		Beryllium, Be	mg/kg	0.5	45	<0.5	50	89
		Cadmium, Cd	mg/kg	0.3	40	0.4	50	79
		Cobalt, Co	mg/kg	0.5	47	1.5	50	92
		Chromium, Cr	mg/kg	0.5	54	11	50	86
		Copper, Cu	mg/kg	0.5	69	22	50	93
		Manganese, Mn	mg/kg	1	370	370	50	16 ④
		Nickel, Ni	mg/kg	0.5	49	3.6	50	90
		Lead, Pb	mg/kg	1	74	40	50	70 ④
		Zinc, Zn	mg/kg	2	89	40	50	98

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE213158.001	LB212713.004		TRH C10-C14	mg/kg	20	33	<20	40	83
			TRH C15-C28	mg/kg	45	<45	<45	40	80
			TRH C29-C36	mg/kg	45	<45	<45	40	80
			TRH C37-C40	mg/kg	100	<100	<100	-	-
			TRH C10-C36 Total	mg/kg	110	<110	<110	-	-
			TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	-	-
		TRH F Bands	TRH >C10-C16	mg/kg	25	34	<25	40	85
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	30	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	<90	<90	40	80
			TRH >C34-C40 (F4)	mg/kg	120	<120	<120	-	-

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number	Parameter	Units	LOR

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE213158.001	LB212710.004	Monocyclic	Benzene	mg/kg	0.1	4.6	<0.1	5	92
		Aromatic	Toluene	mg/kg	0.1	4.7	<0.1	5	93
			Ethylbenzene	mg/kg	0.1	4.7	<0.1	5	94
			m/p-xylene	mg/kg	0.2	9.5	<0.2	10	95
			o-xylene	mg/kg	0.1	5.0	<0.1	5	99
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.3	10.4	10	103
			d8-toluene (Surrogate)	mg/kg	-	9.7	10.7	10	97
			Bromofluorobenzene (Surrogate)	mg/kg	-	10.0	9.4	10	100
		Totals	Total Xylenes	mg/kg	0.3	14	<0.3	-	-
			Total BTEX	mg/kg	0.6	28	<0.6	-	-

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE213158.001	LB212710.004		TRH C6-C10	mg/kg	25	90	<25	92.5	97
			TRH C6-C9	mg/kg	20	79	<20	80	98
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	10.3	10.4	10	103
			d8-toluene (Surrogate)	mg/kg	-	9.7	10.7	10	97
			Bromofluorobenzene (Surrogate)	mg/kg	-	10.0	9.4	-	100
		VPH F	Benzene (F0)	mg/kg	0.1	4.6	<0.1	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	62	<25	62.5	97

MATRIX SPIKE DUPLICATES

SE213111 R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
***	Indicates that both * and ** apply.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000	☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227	☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305	☒ SYDNEY: 202 Submarine School, Sub Base Platypus, North Sydney, 2060	✓ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122			
☐ CANBERRA: GPO Box 410, Canberra, ACT 2601	☐ MACKAY: 21 River Street, Mackay, QLD 4741	☐ PERTH: 503 Murray Street, Perth, WA 6001	☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4811	☐ DARWIN: 21 Parap Rd, Darwin, NT 0821			

CLIENT: Defence Housing Australia

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGER [redacted]

PM CONTACT No [redacted]

LABORATORY: SGS

LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015

SAMPLER: [redacted]

SAMPLER CONTACT No [redacted]

Email Reports and Invoices to: LQRSYD@slrconsulting.com, [redacted]

Turnaround Time (TAT): ✓ Standard TAT; ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number: 1 of 1

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: Suite A (including asbestos)	Suite C	MTBEs	PBDEs	CEC / pH / Organic Matter / % Clay			HOLD	Additional Information (Comment on any gross contamination or specific requirements)
1	0407_LP_BAC_0.0-0.1_201103	03-11-2020	Soil		X	X	X	X	X				
2	0407_LP_BAC_0.4-0.5_201103	03-11-2020	Soil		X	X	X	X	X				
3	0407_LP_BAC_0.8-0.9_201103	03-11-2020	Soil		X	X	X	X	X				
4	0407_LP_BAC_WATER_201103	03-11-2020	Groundwater		X	X	X	X					
5	0407_SEW002_GRAB_201103	03-11-2020	Water			X							

SGS EHS Sydney COC

SE213112

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 03-11-2020	Received by	Sign [redacted]	Date / Time 3/11/20	Temperature Received:
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time @ 3:50	15°C
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

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Last Printed 03-11-2020 4:37 PM

SLR Consulting Australia Pty Ltd

source: SE_Addressee.pdf page: 3 SDG Ref: SE213112_COC

SAMPLE RECEIPT ADVICE

SE213112

CLIENT DETAILS

Contact	LQRSYD
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	02 9427 8100
Facsimile	02 9427 8200
Email	lqrsyd@slrconsulting.com
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	2

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Tue 3/11/2020
Report Due	Wed 11/11/2020
SGS Reference	**SE213112**

SUBMISSION DETAILS

This is to confirm that 2 samples were received on Tuesday 3/11/2020. Results are expected to be ready by COB Wednesday 11/11/2020.
Please quote SGS reference SE213112 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	2 Water
Date documentation received	3/11/2020	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	15°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

PFAS and MTBEs subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420.
Micros subcontracted to Symbio Laboratories, 2 Sirius Road, Lane Cove West NSW 2066, NATA Accreditation Number 2455. Report Number S963962
LL PAH/OC/OP/PCB subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420.

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SAMPLE RECEIPT ADVICE

SE213112

CLIENT DETAILS

Client SLR CONSULTING AUSTRALIA PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Anions by Ion Chromatography in Water	Nitrite in Water	Speciated Phenols in Water	TKN Kjeldahl Digestion by Discrete Analyser	Total Phosphorus by Kjeldahl Digestion DA in	TRH (Total Recoverable Hydrocarbons) in Water	VOCs in Water	Volatile Petroleum Hydrocarbons in Water
001	0407_LP_BAC_WATER_201103	2	1	18	3	1	9	78	7
002	0407_SEW002_GRAB_201103	2	1	-	3	1	-	78	-

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE213112

CLIENT DETAILS

Client SLR CONSULTING AUSTRALIA PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Additional SVOC in Water 8270D.WW.ADD.00	Ammonia Nitrogen by Discrete Analyser	Filterable Reactive Phosphorus (FRP)	Mercury (dissolved) in Water	Per- and Polyfluoroalkyl Substances (PFAS) in	Sulfide by Titration in Water	Trace Metals (Dissolved) in Water by ICPMS
001	0407_LP_BAC_WATER_201103	14	1	1	1	55	1	11
002	0407_SEW002_GRAB_201103	-	1	1	1	55	1	11

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
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Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE213112

CLIENT DETAILS

Client SLR CONSULTING AUSTRALIA PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Combined SVOC Pesticides in Water, Low	Sample Subcontracted	SVOC Compounds in Waters by GC-QQQ	SVOC Compounds in Waters by GC-QQQ, Low
001	0407_LP_BAC_WATER_201103	14	1	16	58
002	0407_SEW002_GRAB_201103	-	1	-	-

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	LQRSYD
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	02 9427 8100
Facsimile	02 9427 8200
Email	lqrsyd@slrconsulting.com
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	2

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE213112 R0**
Date Received	3/11/2020
Date Reported	11/11/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

VPH/VOC - The Limit of Reporting (LOR) has been raised due to interferences from the sample matrix.
PFAS - ME317276- and PBDE subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420. Report Number ME317279
MA-1523 Majority of surrogates are within acceptance criteria.
Micros subcontracted to Symbio Laboratories, 2 Sirius Road, Lane Cove West NSW 2066, NATA Accreditation Number 2455. Report Number S963962

SIGNATORIES

[redacted]

Chemist | Metals/Inorganics Team Leader | Inorganic/Metals Chemist

VOCs in Water [AN433] Tested: 5/11/2020

PARAMETER	UOM	LOR	0407_LP_BAC_WATER_201103 WATER - 3/11/2020 SE213112.001	0407_SEW002_GRAB_201103 WATER - 3/11/2020 SE213112.002
Benzene	µg/L	0.5	<2.5↑	<0.5
Toluene	µg/L	0.5	<2.5↑	**11**
Ethylbenzene	µg/L	0.5	<2.5↑	<0.5
m/p-xylene	µg/L	1	<5↑	<1
o-xylene	µg/L	0.5	<2.5↑	<0.5
Naphthalene	µg/L	0.5	<2.5↑	<0.5
Total Xylenes	µg/L	1.5	<7.5↑	<1.5
Total BTEX	µg/L	3	<15↑	**11**
Dichlorodifluoromethane (CFC-12)	µg/L	5	<25↑	<5
Chloromethane	µg/L	5	<25↑	<5
Vinyl chloride (Chloroethene)	µg/L	0.3	<1.5↑	<0.3
Bromomethane	µg/L	10	<50↑	<10
Chloroethane	µg/L	5	<25↑	<5
Trichlorofluoromethane	µg/L	1	<5↑	<1
Acetone (2-propanone)	µg/L	10	<50↑	**31**
Iodomethane	µg/L	5	<25↑	<5
1,1-dichloroethene	µg/L	0.5	<2.5↑	<0.5
Acrylonitrile	µg/L	0.5	<2.5↑	<0.5
Dichloromethane (Methylene chloride)	µg/L	5	<25↑	<5
Allyl chloride	µg/L	2	<10↑	<2
Carbon disulfide	µg/L	2	<10↑	<2
trans-1,2-dichloroethene	µg/L	0.5	<2.5↑	<0.5
MtBE (Methyl-tert-butyl ether)	µg/L	2	<10↑	<2
1,1-dichloroethane	µg/L	0.5	<2.5↑	<0.5
Vinyl acetate	µg/L	10	<50↑	<10
MEK (2-butanone)	µg/L	10	<50↑	<10
cis-1,2-dichloroethene	µg/L	0.5	<2.5↑	<0.5
Bromochloromethane	µg/L	0.5	<2.5↑	<0.5
Chloroform (THM)	µg/L	0.5	<2.5↑	**13**
2,2-dichloropropane	µg/L	0.5	<2.5↑	<0.5
1,2-dichloroethane	µg/L	0.5	<2.5↑	<0.5
1,1,1-trichloroethane	µg/L	0.5	<2.5↑	<0.5
1,1-dichloropropene	µg/L	0.5	<2.5↑	<0.5
Carbon tetrachloride	µg/L	0.5	<2.5↑	<0.5
Dibromomethane	µg/L	0.5	<2.5↑	<0.5
1,2-dichloropropane	µg/L	0.5	<2.5↑	<0.5
Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	<2.5↑	<0.5
2-nitropropane	µg/L	100	<500↑	<100
Bromodichloromethane (THM)	µg/L	0.5	<2.5↑	**0.7**
MIBK (4-methyl-2-pentanone)	µg/L	5	<25↑	<5
cis-1,3-dichloropropene	µg/L	0.5	<2.5↑	<0.5
trans-1,3-dichloropropene	µg/L	0.5	<2.5↑	<0.5
1,1,2-trichloroethane	µg/L	0.5	<2.5↑	<0.5
1,3-dichloropropane	µg/L	0.5	<2.5↑	<0.5
Dibromochloromethane (THM)	µg/L	0.5	<2.5↑	<0.5
2-hexanone (MBK)	µg/L	5	<25↑	<5
1,2-dibromoethane (EDB)	µg/L	0.5	<2.5↑	<0.5
Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	<2.5↑	<0.5
1,1,1,2-tetrachloroethane	µg/L	0.5	<2.5↑	<0.5
Chlorobenzene	µg/L	0.5	<2.5↑	<0.5
Bromoform (THM)	µg/L	0.5	<2.5↑	<0.5
cis-1,4-dichloro-2-butene	µg/L	1	<5↑	<1
Styrene (Vinyl benzene)	µg/L	0.5	<2.5↑	<0.5
1,1,2,2-tetrachloroethane	µg/L	0.5	<2.5↑	<0.5
1,2,3-trichloropropane	µg/L	0.5	<2.5↑	<0.5
trans-1,4-dichloro-2-butene	µg/L	1	<5↑	<1

VOCs in Water [AN433] Tested: 5/11/2020 (continued)

PARAMETER	UOM	LOR	0407_LP_BAC_WATER_201103 WATER - 3/11/2020 SE213112.001	0407_SEW002_GRAB_201103 WATER - 3/11/2020 SE213112.002
Isopropylbenzene (Cumene)	µg/L	0.5	<2.5↑	<0.5
Bromobenzene	µg/L	0.5	<2.5↑	<0.5
n-propylbenzene	µg/L	0.5	<2.5↑	<0.5
2-chlorotoluene	µg/L	0.5	<2.5↑	<0.5
4-chlorotoluene	µg/L	0.5	<2.5↑	<0.5
1,3,5-trimethylbenzene	µg/L	0.5	<2.5↑	<0.5
tert-butylbenzene	µg/L	0.5	<2.5↑	<0.5
1,2,4-trimethylbenzene	µg/L	0.5	<2.5↑	<0.5
sec-butylbenzene	µg/L	0.5	<2.5↑	<0.5
1,3-dichlorobenzene	µg/L	0.5	<2.5↑	<0.5
1,4-dichlorobenzene	µg/L	0.3	<1.5↑	<0.3
p-isopropyltoluene	µg/L	0.5	<2.5↑	<0.5
1,2-dichlorobenzene	µg/L	0.5	<2.5↑	<0.5
n-butylbenzene	µg/L	0.5	<2.5↑	<0.5
1,2-dibromo-3-chloropropane	µg/L	0.5	<2.5↑	<0.5
1,2,4-trichlorobenzene	µg/L	0.5	<2.5↑	<0.5
Hexachlorobutadiene	µg/L	0.5	<2.5↑	<0.5
1,2,3-trichlorobenzene	µg/L	0.5	<2.5↑	<0.5
Total VOC	µg/L	10	<50↑	**59**

Volatile Petroleum Hydrocarbons in Water [AN433] Tested: 5/11/2020

PARAMETER	UOM	LOR	0407_LP_BAC_WATER_201103 WATER - 3/11/2020 SE213112.001
Benzene (F0)	µg/L	0.5	<2.5↑
TRH C6-C9	µg/L	40	<200↑
TRH C6-C10	µg/L	50	<250↑
TRH C6-C10 minus BTEX (F1)	µg/L	50	<250↑

TRH (Total Recoverable Hydrocarbons) in Water [AN403] Tested: 4/11/2020

PARAMETER	UOM	LOR	0407_LP_BAC_WATER_201103 WATER - 3/11/2020 SE213112.001
TRH C10-C14	µg/L	50	<50
TRH C15-C28	µg/L	200	<200
TRH C29-C36	µg/L	200	<200
TRH C37-C40	µg/L	200	<200
TRH >C10-C16	µg/L	60	<60
TRH >C10-C16 - Naphthalene (F2)	µg/L	60	<60
TRH >C16-C34 (F3)	µg/L	500	<500
TRH >C34-C40 (F4)	µg/L	500	<500
TRH C10-C40	µg/L	320	<320

Speciated Phenols in Water [AN420] Tested: 4/11/2020

PARAMETER	UOM	LOR	0407_LP_BAC_WATER_201103 WATER - 3/11/2020 SE213112.001
Phenol	µg/L	0.5	<0.5
2-methyl phenol (o-cresol)	µg/L	0.5	<0.5
3/4-methyl phenol (m/p-cresol)	µg/L	1	<1
Total Cresol	µg/L	1.5	<1.5
2-chlorophenol	µg/L	0.5	<0.5
2,4-dimethylphenol	µg/L	0.5	<0.5
2,6-dichlorophenol	µg/L	0.5	<0.5
2,4-dichlorophenol	µg/L	0.5	<0.5
2,4,6-trichlorophenol	µg/L	0.5	<0.5
2-nitrophenol	µg/L	0.5	<0.5
4-nitrophenol	µg/L	1	<1
2,4,5-trichlorophenol	µg/L	0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	µg/L	1	<1
Pentachlorophenol	µg/L	0.5	<0.5
2,4-dinitrophenol	µg/L	2	<2
4-chloro-3-methylphenol	µg/L	2	<2

Anions by Ion Chromatography in Water [AN245] Tested: 5/11/2020

PARAMETER	UOM	LOR	0407_LP_BAC_WATER_201103 WATER - 3/11/2020 SE213112.001	0407_SEW002_GRAB_201103 WATER - 3/11/2020 SE213112.002
Nitrate Nitrogen, NO3-N	mg/L	0.005	**2.5**	<0.005
Sulfate, SO4	mg/L	1	**21**	**28**

Nitrite in Water [AN277] Tested: 4/11/2020

PARAMETER	UOM	LOR	0407_LP_BAC_WATER_201103 WATER - 3/11/2020 SE213112.001	0407_SEW002_GRAB_201103 WATER - 3/11/2020 SE213112.002
Nitrite Nitrogen, NO2 as N	mg/L	0.005	<0.005	**0.006**

TKN Kjeldahl Digestion by Discrete Analyser [AN292] Tested: 5/11/2020

PARAMETER	UOM	LOR	0407_LP_BAC_WATR_201103 WATER - 3/11/2020 SE213112.001	0407_SEW002_GRAI_201103 WATER - 3/11/2020 SE213112.002
Total Kjeldahl Nitrogen	mg/L	0.05	<0.05	**78**
Total Nitrogen (calc)	mg/L	0.05	**2.5**	**78**
Organic Nitrogen (calc)	mg/L	0.05	<0.05	**19**

Total Phosphorus by Kjeldahl Digestion DA in Water [AN279/AN293(Sydney only)] Tested: 5/11/2020

PARAMETER	UOM	LOR	0407_LP_BAC_WATR_201103 WATER - 3/11/2020 SE213112.001	0407_SEW002_GRAB_201103 WATER - 3/11/2020 SE213112.002
Total Phosphorus (Kjeldahl Digestion) as P	mg/L	0.02	<0.02	11

Filterable Reactive Phosphorus (FRP) [AN278] Tested: 4/11/2020

PARAMETER	UOM	LOR	0407_LP_BAC_WATR_201103 WATER - 3/11/2020 SE213112.001	0407_SEW002_GRAI_201103 WATER - 3/11/2020 SE213112.002
Filterable Reactive Phosphorus as P	mg/L	0.005	<0.005	**6.6**

Ammonia Nitrogen by Discrete Analyser (Aquakem) [AN291] Tested: 4/11/2020

PARAMETER	UOM	LOR	0407_LP_BAC_WATER_201103 WATER - 3/11/2020 SE213112.001	0407_SEW002_GRAB_201103 WATER - 3/11/2020 SE213112.002
Ammonia Nitrogen, NH_3 as N	mg/L	0.005	<0.005	**60**

Sulfide by Titration in Water [AN149] Tested: 9/11/2020

PARAMETER	UOM	LOR	0407_LP_BAC_WATR_201103 WATER - 3/11/2020 SE213112.001	0407_SEW002_GRAI_201103 WATER - 3/11/2020 SE213112.002
Sulfide	mg/L	0.5	<0.5	**1.1**

Trace Metals (Dissolved) in Water by ICPMS [AN318] Tested: 4/11/2020

PARAMETER	UOM	LOR	0407_LP_BAC_WATER_201103 WATER - 3/11/2020 SE213112.001	0407_SEW002_GRAB_201103 WATER - 3/11/2020 SE213112.002
Arsenic, As	µg/L	1	<1	<1
Beryllium, Be	µg/L	1	<1	<1
Boron, B	µg/L	5	25	180
Cadmium, Cd	µg/L	0.1	<0.1	<0.1
Cobalt, Co	µg/L	1	<1	<1
Chromium, Cr	µg/L	1	<1	<1
Copper, Cu	µg/L	1	11	51
Lead, Pb	µg/L	1	<1	1
Manganese, Mn	µg/L	1	4	21
Nickel, Ni	µg/L	1	<1	3
Zinc, Zn	µg/L	5	9	150

Mercury (dissolved) in Water [AN311(Perth)/AN312] Tested: 5/11/2020

PARAMETER	UOM	LOR	0407_LP_BAC_WATR_201103 WATER - 3/11/2020 SE213112.001	0407_SEW002_GRAI_201103 WATER - 3/11/2020 SE213112.002
Mercury	mg/L	0.0001	<0.0001	<0.0001

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples [MA-1523] Tested: 11/11/2020

PARAMETER	UOM	LOR	0407_LP_BAC_WATER_201103 WATER - 3/11/2020 SE213112.001	0407_SEW002_GRAB_201103 WATER - 3/11/2020 SE213112.002
Perfluorobutanoic acid (PFBA)	µg/L	0.002	**0.009**	<0.020↑
Perfluoropentanoic acid (PFPeA)	µg/L	0.002	**0.036**	<0.020↑
Perfluorohexanoic acid (PFHxA)	µg/L	0.002	**0.052**	<0.020↑
Perfluoroheptanoic acid (PFHpA)	µg/L	0.002	**0.015**	<0.020↑
Perfluorooctanoic Acid (PFOA)	µg/L	0.002	**0.031**	<0.020↑
Perfluorononanoic acid (PFNA)	µg/L	0.004	<0.004	<0.040↑
Perfluorodecanoic acid (PFDA)	µg/L	0.004	<0.004	<0.040↑
Perfluoroundecanoic acid (PFUnA)	µg/L	0.004	<0.004	<0.040↑
Perfluorododecanoic acid (PFDoA)	µg/L	0.004	<0.004	<0.040↑
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.004	<0.004	<0.040↑
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.004	<0.004	<0.040↑
Perfluorohexadecanoic acid (PFHxDA)	µg/L	0.008	<0.008	<0.080↑
Perfluorobutane sulfonate (PFBS)	µg/L	0.004	**0.007**	<0.040↑
Perfluoropentane sulfonate (PFPeS)	µg/L	0.004	<0.004	<0.040↑
Perfluorohexane sulfonate (PFHxS)	µg/L	0.002	**0.010**	<0.020↑
Perfluoroheptane sulfonate (PFHpS)	µg/L	0.002	<0.002	<0.020↑
Perfluorooctane sulfonate (PFOS)	µg/L	0.002	**0.005**	<0.020↑
Sum of PFHxS and PFOS	µg/L	0.002	**0.015**	<0.020↑
Perfluorononane sulfonate (PFNS)	µg/L	0.002	<0.002	<0.020↑
Perfluorodecane sulfonate (PFDS)	µg/L	0.002	<0.002	<0.020↑
Perfluorododecane sulfonate (PFDoS)	µg/L	0.002	<0.002	<0.020↑
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	µg/L	0.002	<0.002	<0.020↑
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	µg/L	0.002	<0.002	<0.020↑
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	µg/L	0.002	<0.002	<0.020↑
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.008	<0.008	<0.080↑
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	µg/L	0.01	<0.01	<0.10↑
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	µg/L	0.01	<0.01	<0.10↑
2-(N-Methylperfluorooctane sulfonamido)-ethanol	µg/L	0.01	<0.01	<0.10↑
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	µg/L	0.01	<0.01	<0.10↑
N-Methylperfluorooctanesulfonamidoacetic acid	µg/L	0.01	<0.01	<0.10↑
N-Ethylperfluorooctanesulfonamidoacetic Acid	µg/L	0.01	<0.01	<0.10↑

Additional SVOC in Water 8270D.WW.ADD.00 [EPA8270C_ADD] Tested: 11/11/2020

PARAMETER	UOM	LOR	0407_LP_BAC_WATER_201103 WATER - 3/11/2020 SE213112.001
2,2,4-Tribromodiphenyl ether*	µg/L	0.1	<0.1
2,2,4,4-Tetrabromodiphenyl ether*	µg/L	0.1	<0.1
2,3,4,4-Tetrabromodiphenyl ether*	µg/L	0.1	<0.1
2,3,4,6-Tetrabromodiphenyl ether*	µg/L	0.1	<0.1
2,2,4,4,6-Pentabromodiphenyl ether*	µg/L	0.1	<0.1
2,2,4,4,5-Pentabromodiphenyl ether*	µg/L	0.1	<0.1
2,2,4,4,5,6-Hexabromodiphenyl ether*	µg/L	0.1	<0.1
2,2,4,4,5,5-Hexabromodiphenyl ether*	µg/L	0.1	<0.1
2,2,3,4,4-Pentabromodiphenyl ether*	µg/L	0.1	<0.1
2,2,3,4,4,5-Hexabromodiphenyl ether*	µg/L	0.1	<0.1
2,2,3,4,4,5,6-Heptabromodiphenyl ether*	µg/L	0.1	<0.1
2,4,4-Tribromodiphenyl ether*	µg/L	0.1	<0.1
2,3,3,4,4,5,6-Heptabromodiphenyl ether*	µg/L	0.1	<0.1
Decabromodiphenyl ether*	µg/L	0.1	<0.1

Sample Subcontracted [] Tested: 9/11/2020

PARAMETER	UOM	LOR	0407_LP_BAC_WATER_201103 WATER - 3/11/2020 SE213112.001	0407_SEW002_GRAB_201103 WATER - 3/11/2020 SE213112.002
Sample Subcontracted*	No unit	-	Subcontracted	Subcontracted

SVOC Compounds in Waters by GC-QQQ, Low Level [USEPA8270D LL] Tested: 4/11/2020

PARAMETER	UOM	LOR	0407_LP_BAC_WATER_201103 WATER - 3/11/2020 SE213112.001
4,4-DDD	µg/L	0.1	<0.1
4,4-DDE	µg/L	0.1	<0.1
4,4-DDT	µg/L	0.1	<0.1
Aldrin	µg/L	0.002	<0.002
alpha-BHC	µg/L	0.1	<0.1
alpha-Chlordane	µg/L	0.002	<0.002
beta-BHC	µg/L	0.1	<0.1
Chlordane	µg/L	0.005	<0.005
delta-BHC	µg/L	0.1	<0.1
Dieldrin	µg/L	0.002	<0.002
Aldrin and Dieldrin	µg/L	0.1	<0.1
Endosulfan 1	µg/L	0.005	<0.005
Endosulfan 2	µg/L	0.005	<0.005
Endosulfan Sulphate	µg/L	0.005	<0.005
Total Endosulfan	µg/L	0.01	<0.01
Endrin	µg/L	0.1	<0.1
Endrin Aldehyde	µg/L	0.1	<0.1
Endrin ketone	µg/L	0.1	<0.1
gamma-BHC	µg/L	0.002	<0.002
gamma-Chlordane	µg/L	0.002	<0.002
Heptachlor	µg/L	0.002	<0.002
Heptachlor Epoxide	µg/L	0.1	<0.1
Hexachlorobenzene	µg/L	0.002	<0.002
Isodrin	µg/L	0.1	<0.1
Methoxychlor	µg/L	0.1	<0.1
Mirex	µg/L	0.1	<0.1
Acenaphthene	µg/L	0.01	<0.01
Acenaphthylene	µg/L	0.01	<0.01
Anthracene	µg/L	0.01	<0.01
Benzo(a)anthracene	µg/L	0.01	<0.01
Benzo (a) pyrene	µg/L	0.005	<0.005
Benzo (b) fluoranthene	µg/L	0.01	<0.01
Benzo (e) pyrene	µg/L	0.01	<0.01
Benzo (ghi) perylene	µg/L	0.01	<0.01
Benzo (k) fluoranthene	µg/L	0.01	<0.01
Benzo (b+j+k) fluoranthene	µg/L	0.02	<0.02
Chrysene	µg/L	0.01	<0.01
Dibenz (ah) anthracene	µg/L	0.01	<0.01
7,12-Dimethylbenz(a)anthracene	µg/L	0.01	<0.01
Fluoranthene	µg/L	0.01	<0.01
Fluorene	µg/L	0.01	<0.01
Indeno (1,2,3-cd) pyrene	µg/L	0.01	<0.01
Naphthalene	µg/L	0.1	<0.1
Phenanthrene	µg/L	0.01	<0.01
Pyrene	µg/L	0.01	<0.01
2-Methylnaphthalene	µg/L	0.1	<0.1
Total PAHs Vic EPA - assumes <LOR results = 0	µg/L	0.8	-
Total PAHs Vic EPA - assumes <LOR results = 0.5LOR	µg/L	0.8	<0.8
Chlorpyrifos	µg/L	0.009	<0.009
Dimethoate	µg/L	0.1	<0.1
Disulfoton	µg/L	0.1	<0.1
Famphur	µg/L	0.1	<0.1
Methyl parathion	µg/L	0.01	<0.01
Phorate	µg/L	0.1	<0.1
Stirofos	µg/L	0.1	<0.1
Sulfotepp	µg/L	0.1	<0.1

SVOC Compounds in Waters by GC-QQQ, Low Level [USEPA8270D LL] Tested: 4/11/2020 (continued)

PARAMETER	UOM	LOR	0407_LP_BAC_WATER_201103 WATER - 3/11/2020 SE213112.001
Thionazin	µg/L	0.1	<0.1

Combined SVOC Pesticides in Water, Low Level [EPA 8270D] Tested: 11/11/2020

PARAMETER	UOM	LOR	0407_LP_BAC_WATER_201103 WATER - 3/11/2020 SE213112.001
Azinphos-methyl	µg/L	0.05	<0.05
Bromophos ethyl*	µg/L	0.05	<0.05
Chlorfenvinphos*	µg/L	0.1	<0.1
Diazinon*	µg/L	0.01	<0.01
Dichlorvos	µg/L	0.01	<0.01
Ethion	µg/L	0.01	<0.01
Fenitrothion	µg/L	0.01	<0.01
Fenisulfothion	µg/L	0.1	<0.1
Fenthion	µg/L	0.1	<0.1
Malathion	µg/L	0.01	<0.01
Mevinphos-cis/trans	µg/L	0.1	<0.1
Methidathion	µg/L	0.01	<0.01
Parathion	µg/L	0.01	<0.01

SVOC Compounds in Waters by GC-QQQ [USEPA8270D] Tested: 11/11/2020

PARAMETER	UOM	LOR	0407_LP_BAC_WATER_201103 WATER - 3/11/2020 SE213112.001
Arochlor 1016	µg/L	0.03	<0.03
Arochlor 1221	µg/L	0.03	<0.03
Arochlor 1232	µg/L	0.03	<0.03
Arochlor 1242	µg/L	0.03	<0.03
Arochlor 1248	µg/L	0.03	<0.03
Arochlor 1254	µg/L	0.03	<0.03
Arochlor 1260	µg/L	0.03	<0.03
Arochlor 1262	µg/L	0.03	<0.03
Arochlor 1268	µg/L	0.03	<0.03
Total PCB*	µg/L	0.03	<0.03

METHOD	METHODOLOGY SUMMARY
AN020	Unpreserved water sample is filtered through a 0.45µm membrane filter and acidified with nitric acid similar to APHA3030B.
AN149	sulfide by Iodometric Titration: sulfide is precipitated as zinc sulfide to overcome interferences with sulphite and thiosulfate. After filtration, sulfide is determined titrimetrically. Reference APHA 4500-S2-
AN245	Anions by Ion Chromatography: A water sample is injected into an eluent stream that passes through the ion chromatographic system where the anions of interest ie Br, Cl, NO2, NO3 and SO4 are separated on their relative affinities for the active sites on the column packing material. Changes to the conductivity and the UV-visible absorbance of the eluent enable identification and quantitation of the anions based on their retention time and peak height or area. APHA 4110 B
AN277/WC250.312	Nitrite ions, when reacted with a reagent containing sulphanilamide and N-(1-naphthyl)-ethylenediamine dihydrochloride produce a highly coloured azo dye that is measured photometrically at 540nm.
AN278	Filterable Reactive Phosphorus by DA (determined on filtered sample): Orthophosphate reacts with ammonium molybdate (Mo VI) and potassium antimonyl tartrate (Sb III) in acid medium to form an antimony-phosphomolybdate complex. This complex is subsequently reduced with ascorbic acid to form a blue colour and the absorbance is read at 880 nm. The sensitivity of the automated method is 10-20 times that of the macro method. Reference APHA 4500-P F
AN279/AN293(Sydney)	The sample is digested with Sulphuric acid, K2SO4 and CuSO4. All forms of phosphorus are converted into orthophosphate. The digest is cooled and placed on the discrete analyser for colorimetric analysis.
AN281	An unfiltered water or soil sample is first digested in a block digestor with sulfuric acid, K2SO4 and CuSO4. The ammonia produced following digestion is then measured colourimetrically using the Aquakem 250 Discrete Analyser. A portion of the digested sample is buffered to an alkaline pH, and interfering cations are complexed. The ammonia then reacts with salicylate and hypochlorite to give a blue colour whose absorbance is measured at 660nm and compared with calibration standards. This is proportional to the concentration of Total Kjeldahl Nitrogen in the original sample.
AN291	Ammonia in solution reacts with hypochlorite ions from Sodium Dichloroisocyanuate, and salicylate in the presence of Sodium Nitroprusside to form indophenol blue and measured at 670 nm by Discrete Analyser.
AN311(Perth)/AN312	Mercury by Cold Vapour AAS in Waters: Mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500.
AN318	Determination of elements at trace level in waters by ICP-MS technique,, referenced to USEPA 6020B and USEPA 200.8 (5.4).
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). Where F2 is corrected for Naphthalene, the VOC data for Naphthalene is used.
AN403	Additionally, the volatile C6-C9/C6-C10 fractions may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoveerable Hydrocarbons - Silica (TRH-Silica) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents.
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.
EPA8270D LL	This method covers analytical procedures for the analysis of semi-volatile organic compounds (SVOC) including most neutral, acidic, and basic organic compounds based on the USEPA method 8270D. Samples are extracted into a solvent appropriate to the matrix and analysed using a gas chromatograph – triple quadrapole (GC–QQQ).

EPA8270D Pest LL	This method covers analytical procedures for the analysis of semi-volatile organic compounds (SVOC pesticides) including most neutral, acidic, and basic organic compounds based on the USEPA method 8270D. Samples are extracted into a solvent appropriate to the matrix and analysed using a gas chromatograph – triple quadrapole (GC–QQQ).
EPA8270D	This method covers analytical procedures for the analysis of semi-volatile organic compounds (SVOC) including most neutral, acidic, and basic organic compounds based on the USEPA method 8270D. Samples are extracted into a solvent appropriate to the matrix and analysed using a gas chromatograph – triple quadrapole (GC–QQQ).
MA-1523	This method covers the analysis of per- and polyfluoroalkyl substances (PFAS) in aqueous, solid and biosolid samples and solvent extracts, determined as the total of linear and branched isomers. After spiking with isotopically labelled quantification surrogates and clean-up via SPE cartridges sample extracts are analysed by liquid chromatography/mass spectrometry (LC-MS/MS). PFAS concentrations are determined by isotope dilution quantification.
USEPA8270D.WW.ADD.00	This method covers analytical procedures for the analysis of additional semi-volatile organic compounds (SVOC) including most neutral, acidic, and basic organic compounds based on the USEPA method 8270D. Samples are extracted into a solvent appropriate to the matrix and analysed using a gas chromatograph – mass spectrometer (GC–MS).

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		
***	Indicates that both * and ** apply.				

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT

Accreditation No. 2562

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Project	**610.30041 Randwick Barracks**
Order Number	**SE213112**
Samples	2

LABORATORY DETAILS

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SGS Reference	**ME317276 R0**
Date Received	09 Nov 2020
Date Reported	11 Nov 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(14420).

MA-1523 Majority of surrogates are within acceptance criteria.

SIGNATORIES

[redacted]

Australian Chemistry Manager

Parameter	Units	LOR	Sample Number ME317276.001 Sample Matrix Water Sample Date 03 Nov 2020 Sample Name SE213112.001	ME317276.002 Water 03 Nov 2020 SE213112.002
Additional SVOC in Water 8270D.WW.ADD.00 Method: EPA8270C_ADD Tested: 9/11/2020				
Decabromodiphenyl ether*	µg/L	0.1	<0.1	-
2,2,3,4,4,5,6-Heptabromodiphenyl ether*	µg/L	0.1	<0.1	-
2,3,3,4,4,5,6-Heptabromodiphenyl ether*	µg/L	0.1	<0.1	-
2,2,3,4,4,5-Hexabromodiphenyl ether*	µg/L	0.1	<0.1	-
2,2,4,4,5,5-Hexabromodiphenyl ether*	µg/L	0.1	<0.1	-
2,2,4,4,5,6-Hexabromodiphenyl ether*	µg/L	0.1	<0.1	-
2,2,3,4,4-Pentabromodiphenyl ether*	µg/L	0.1	<0.1	-
2,2,4,4,5-Pentabromodiphenyl ether*	µg/L	0.1	<0.1	-
2,2,4,4,6-Pentabromodiphenyl ether*	µg/L	0.1	<0.1	-
2,2,4,4-Tetrabromodiphenyl ether*	µg/L	0.1	<0.1	-
2,3,4,4-Tetrabromodiphenyl ether*	µg/L	0.1	<0.1	-
2,3,4,6-Tetrabromodiphenyl ether*	µg/L	0.1	<0.1	-
2,2,4-Tribromodiphenyl ether*	µg/L	0.1	<0.1	-
2,4,4-Tribromodiphenyl ether*	µg/L	0.1	<0.1	-
SVOC Compounds in Waters by GC-QQQ Method: USEPA8270D Tested: 9/11/2020				
Arochlor 1016	µg/L	0.03	<0.03	-
Arochlor 1221	µg/L	0.03	<0.03	-
Arochlor 1232	µg/L	0.03	<0.03	-
Arochlor 1242	µg/L	0.03	<0.03	-
Arochlor 1248	µg/L	0.03	<0.03	-
Arochlor 1254	µg/L	0.03	<0.03	-
Arochlor 1260	µg/L	0.03	<0.03	-
Arochlor 1262	µg/L	0.03	<0.03	-
Arochlor 1268	µg/L	0.03	<0.03	-
Total PCB*	µg/L	0.03	<0.03	-
d14-p-terphenyl (Surrogate)	%	0.001	**109**	-
d5-nitrobenzene (Surrogate)	%	0.001	-	-
d6-phenol (Surrogate)	%	0.001	-	-
2-fluorobiphenyl (Surrogate)	%	0.001	-	-
2,4,6-tribromophenol (Surrogate)	%	0.001	-	-
2-fluorophenol (Surrogate)	%	0.001	-	-
SVOC Compounds in Waters by GC-QQQ, Low Level Method: USEPA8270D LL Tested: 9/11/2020				
2-Methylnaphthalene	µg/L	0.1	<0.1	-
4,4-DDD	µg/L	0.1	<0.1	-
4,4-DDE	µg/L	0.1	<0.1	-
4,4-DDT	µg/L	0.1	<0.1	-
7,12-Dimethylbenz(a)anthracene	µg/L	0.01	<0.01	-
Acenaphthene	µg/L	0.01	<0.01	-
Acenaphthylene	µg/L	0.01	<0.01	-
Aldrin	µg/L	0.01	<0.010	-
Aldrin and Dieldrin	µg/L	0.1	<0.1	-
alpha-BHC	µg/L	0.1	<0.1	-
alpha-Chlordane	µg/L	0.01	<0.010	-
Anthracene	µg/L	0.01	<0.01	-
Benzo(a)anthracene	µg/L	0.01	<0.01	-
Benzo (a) pyrene	µg/L	0.01	<0.010	-
Benzo (b) fluoranthene	µg/L	0.01	<0.01	-
Benzo (e) pyrene	µg/L	0.01	<0.01	-
Benzo (ghi) perylene	µg/L	0.01	<0.01	-
Benzo (k) fluoranthene	µg/L	0.01	<0.01	-
Benzo (b+j+k) fluoranthene	µg/L	0.01	<0.01	-
beta-BHC	µg/L	0.1	<0.1	-
Chlordane	µg/L	0.01	<0.010	-
Chlorpyrifos	µg/L	0.01	<0.010	-
Chrysene	µg/L	0.01	<0.01	-
delta-BHC	µg/L	0.1	<0.1	-

Parameter	Units	LOR	Sample Number: ME317276.001 Sample Matrix: Water Sample Date: 03 Nov 2020 Sample Name: SE213112.001	Sample Number: ME317276.002 Sample Matrix: Water Sample Date: 03 Nov 2020 Sample Name: SE213112.002
SVOC Compounds in Waters by GC-QQQ, Low Level Method: USEPA8270D LL Tested: 11/11/2020 (continued)				
Dibenz (ah) anthracene	µg/L	0.01	<0.01	-
Dieldrin	µg/L	0.01	<0.010	-
Dimethoate	µg/L	0.1	<0.1	-
Disulfoton	µg/L	0.1	<0.1	-
Endosulfan 1	µg/L	0.01	<0.010	-
Endosulfan 2	µg/L	0.01	<0.010	-
Endosulfan Sulphate	µg/L	0.01	<0.010	-
Total Endosulfan	µg/L	0.01	<0.01	-
Endrin	µg/L	0.1	<0.1	-
Endrin Aldehyde	µg/L	0.1	<0.1	-
Endrin ketone	µg/L	0.1	<0.1	-
Famphur	µg/L	0.1	<0.1	-
Fluoranthene	µg/L	0.01	<0.01	-
Fluorene	µg/L	0.01	<0.01	-
gamma-BHC	µg/L	0.01	<0.010	-
gamma-Chlordane	µg/L	0.01	<0.010	-
Heptachlor	µg/L	0.01	<0.010	-
Heptachlor Epoxide	µg/L	0.1	<0.1	-
Hexachlorobenzene	µg/L	0.01	<0.010	-
Indeno (1,2,3-cd) pyrene	µg/L	0.01	<0.01	-
Isodrin	µg/L	0.1	<0.1	-
Methoxychlor	µg/L	0.1	<0.1	-
Methyl parathion	µg/L	0.01	<0.01	-
Mirex	µg/L	0.1	<0.1	-
Naphthalene	µg/L	0.1	<0.1	-
Phenanthrene	µg/L	0.01	<0.01	-
Phorate	µg/L	0.1	<0.1	-
Pyrene	µg/L	0.01	<0.01	-
Stirofos	µg/L	0.1	<0.1	-
Sulfotepp	µg/L	0.1	<0.1	-
Thionazin	µg/L	0.1	<0.1	-
Total PAHs Vic EPA - assumes <LOR results = 0	µg/L	0.8	-	-
Total PAHs Vic EPA - assumes <LOR results = 0.5LOR	µg/L	0.8	<0.8	-
d14-p-terphenyl (Surrogate)	%	0.0001	**109**	-
Combined SVOC Pesticides in Water, Low Level Method: EPA 8270D Tested: 9/11/2020				
Azinphos-methyl	µg/L	0.05	<0.05	-
Bromophos ethyl*	µg/L	0.05	<0.05	-
Chlorfenvinphos*	µg/L	0.1	<0.1	-
Diazinon*	µg/L	0.01	<0.01	-
Dichlorvos	µg/L	0.01	<0.01	-
Ethion	µg/L	0.01	<0.01	-
Fenitrothion	µg/L	0.01	<0.01	-
Fenisulfothion	µg/L	0.1	<0.1	-
Fenthion	µg/L	0.1	<0.1	-
Malathion	µg/L	0.01	<0.01	-
Methidathion	µg/L	0.01	<0.01	-
Mevinphos-cis/trans	µg/L	0.1	<0.1	-
Parathion	µg/L	0.01	<0.01	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name ME317276.001 Water 03 Nov 2020 SE213112.001	ME317276.002 Water 03 Nov 2020 SE213112.002
Combined SVOC Pesticides in Water, Low Level Method: EPA 8270D Tested: 9/11/2020 (continued)				
Surrogates				
d14-p-terphenyl (Surrogate)	%	-	-	-
Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples Method: MA-1523 Tested: 9/11/2020				
Perfluorobutanoic acid (PFBA)	µg/L	0.002	**0.009**	<0.020↑
Perfluoropentanoic acid (PFPeA)	µg/L	0.002	**0.036**	<0.020↑
Perfluorohexanoic acid (PFHxA)	µg/L	0.002	**0.052**	<0.020↑
Perfluoroheptanoic acid (PFHpA)	µg/L	0.002	**0.015**	<0.020↑
Perfluorooctanoic Acid (PFOA)	µg/L	0.002	**0.031**	<0.020↑
Perfluorononanoic acid (PFNA)	µg/L	0.004	<0.004	<0.040↑
Perfluorodecanoic acid (PFDA)	µg/L	0.004	<0.004	<0.040↑
Perfluoroundecanoic acid (PFUnA)	µg/L	0.004	<0.004	<0.040↑
Perfluorododecanoic acid (PFDoA)	µg/L	0.004	<0.004	<0.040↑
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.004	<0.004	<0.040↑
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.004	<0.004	<0.040↑
Perfluorohexadecanoic acid (PFHxDA)	µg/L	0.008	<0.008	<0.080↑
Perfluorobutane sulfonate (PFBS)	µg/L	0.004	**0.007**	<0.040↑
Perfluoropentane sulfonate (PFPeS)	µg/L	0.004	<0.004	<0.040↑
Perfluorohexane sulfonate (PFHxS)	µg/L	0.002	**0.010**	<0.020↑
Perfluoroheptane sulfonate (PFHpS)	µg/L	0.002	<0.002	<0.020↑
Perfluorooctane sulfonate (PFOS)	µg/L	0.002	**0.005**	<0.020↑
Sum of PFHxS and PFOS	µg/L	0.002	**0.015**	<0.020↑
Perfluorononane sulfonate (PFNS)	µg/L	0.002	<0.002	<0.020↑
Perfluorodecane sulfonate (PFDS)	µg/L	0.002	<0.002	<0.020↑
Perfluorododecane sulfonate (PFDoS)	µg/L	0.002	<0.002	<0.020↑
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	µg/L	0.002	<0.002	<0.020↑
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	µg/L	0.002	<0.002	<0.020↑
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	µg/L	0.002	<0.002	<0.020↑
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.008	<0.008	<0.080↑
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	µg/L	0.01	<0.01	<0.10↑
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	µg/L	0.01	<0.01	<0.10↑
2-(N-Methylperfluorooctane sulfonamido)-ethanol	µg/L	0.01	<0.01	<0.10↑
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	µg/L	0.01	<0.01	<0.10↑
N-Methylperfluorooctanesulfonamidoacetic acid	µg/L	0.01	<0.01	<0.10↑
N-Ethylperfluorooctanesulfonamidoacetic Acid	µg/L	0.01	<0.01	<0.10↑
(13C4-PFBA) Isotopically Labelled Internal Recovery	%	-	**98**	**99**
(13C5-PFPeA) Isotopically Labelled Internal Recovery	%	-	**101**	**98**
(13C5-PFHxA) Isotopically Labelled Internal Recovery	%	-	**103**	**106**
(13C4-PFHpA) Isotopically Labelled Internal Recovery	%	-	**107**	**103**
(13C4_PFOA) Isotopically Labelled Internal Recovery	%	-	**102**	**102**
(13C9-PFNA) Isotopically Labelled Internal Recovery	%	-	**104**	**104**
(13C6-PFDA) Isotopically Labelled Internal Recovery	%	-	**100**	**87**
(13C7-PFUdA) Isotopically Labelled Internal Recovery	%	-	**96**	**111**
(13C2-PFDoA) Isotopically Labelled Internal Recovery	%	-	**92**	**110**
(13C2_PFTeDA) Isotopically Labelled Internal Recovery	%	-	**75**	**91**
(13C2-PFHxDA) Isotopically Labelled Internal Recovery	%	-	**40**	**50**
(13C3-PFBS) Isotopically Labelled Internal Recovery	%	-	**97**	**103**
(13C3-PFHxS) Isotopically Labelled Internal Recovery	%	-	**96**	**109**
(13C8-PFOS) Isotopically Labelled Internal Recovery	%	-	**107**	**98**
(13C2-4:2 FTS) Isotopically Labelled Internal Recovery	%	-	**84**	**105**
(13C2-6:2 FTS) Isotopically Labelled Internal Recovery	%	-	**86**	**103**
(13C2-8:2 FTS) Isotopically Labelled Internal Recovery	%	-	**78**	**116**
(13C8-PFOSA) Isotopically Labelled Internal Recovery	%	-	**114**	**76**
(D3-N-MeFOSA) Isotopically Labelled Internal Recovery	%	-	**80**	**63**
(D5-N-EtFOSA) Isotopically Labelled Internal Recovery	%	-	**76**	**64**
(D7-N-MeFOSE) Isotopically Labelled Internal Recovery	%	-	**95**	**69**
(D9-N-EtFOSE) Isotopically Labelled Internal Recovery	%	-	**110**	**76**
(D3-N-MeFOSAA) Isotopically Labelled Internal Recovery	%	-	**104**	**83**

Parameter	Units	LOR	Sample Number: ME317276.001 Sample Matrix: Water Sample Date: 03 Nov 2020 Sample Name: SE213112.001	Sample Number: ME317276.002 Sample Matrix: Water Sample Date: 03 Nov 2020 Sample Name: SE213112.002
Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples Method: MA-1523 Tested: 9/11/2020 (continued)				
(D5-N-EtFOSAA) Isotopically Labelled Internal Recovery	%	-	**104**	**81**

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage.* Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Additional SVOC in Water 8270D.WW.ADD.00 Method: EPA8270C_ADD

Parameter	QC Reference	Units	LOR	MB
Decabromodiphenyl ether*	LB036746	µg/L	0.1	<0.1
2,2,3,4,4,5,6-Heptabromodiphenyl ether*	LB036746	µg/L	0.1	<0.1
2,3,3,4,4,5,6-Heptabromodiphenyl ether*	LB036746	µg/L	0.1	<0.1
2,2,3,4,4,5-Hexabromodiphenyl ether*	LB036746	µg/L	0.1	<0.1
2,2,4,4,5,5-Hexabromodiphenyl ether*	LB036746	µg/L	0.1	<0.1
2,2,4,4,5,6-Hexabromodiphenyl ether*	LB036746	µg/L	0.1	<0.1
2,2,3,4,4-Pentabromodiphenyl ether*	LB036746	µg/L	0.1	<0.1
2,2,4,4,5-Pentabromodiphenyl ether*	LB036746	µg/L	0.1	<0.1
2,2,4,4,6-Pentabromodiphenyl ether*	LB036746	µg/L	0.1	<0.1
2,2,4,4-Tetrabromodiphenyl ether*	LB036746	µg/L	0.1	<0.1
2,3,4,4-Tetrabromodiphenyl ether*	LB036746	µg/L	0.1	<0.1
2,3,4,6-Tetrabromodiphenyl ether*	LB036746	µg/L	0.1	<0.1
2,2,4-Tribromodiphenyl ether*	LB036746	µg/L	0.1	<0.1
2,4,4-Tribromodiphenyl ether*	LB036746	µg/L	0.1	<0.1

Combined SVOC Pesticides in Water, Low Level Method: EPA 8270D

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Azinphos-methyl	LB036736	µg/L	0.05	<0.05	NA
Bromophos ethyl*	LB036736	µg/L	0.05	<0.05	NA
Chlorfenvinphos*	LB036736	µg/L	0.1	<0.1	NA
Diazinon*	LB036736	µg/L	0.01	<0.01	NA
Dichlorvos	LB036736	µg/L	0.01	<0.01	111%
Ethion	LB036736	µg/L	0.01	<0.01	NA
Fenitrothion	LB036736	µg/L	0.01	<0.01	NA
Fenisulfothion	LB036736	µg/L	0.1	<0.1	NA
Fenthion	LB036736	µg/L	0.1	<0.1	NA
Malathion	LB036736	µg/L	0.01	<0.01	NA
Methidathion	LB036736	µg/L	0.01	<0.01	NA
Mevinphos-cis/trans	LB036736	µg/L	0.1	<0.1	NA
Parathion	LB036736	µg/L	0.01	<0.01	NA

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage.* Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples Method: MA-1523

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Perfluorobutanoic acid (PFBA)	LB036743	µg/L	0.002	<0.002	1%	NA
Perfluoropentanoic acid (PFPeA)	LB036743	µg/L	0.002	<0.002	3%	NA
Perfluorohexanoic acid (PFHxA)	LB036743	µg/L	0.002	<0.002	2%	NA
Perfluoroheptanoic acid (PFHpA)	LB036743	µg/L	0.002	<0.002	5%	94%
Perfluorooctanoic Acid (PFOA)	LB036743	µg/L	0.002	<0.002	11%	95%
Perfluorononanoic acid (PFNA)	LB036743	µg/L	0.004	<0.004	0%	109%
Perfluorodecanoic acid (PFDA)	LB036743	µg/L	0.004	<0.004	0%	136%
Perfluoroundecanoic acid (PFUnA)	LB036743	µg/L	0.004	<0.004	0%	143%
Perfluorododecanoic acid (PFDoA)	LB036743	µg/L	0.004	<0.004	0%	147%
Perfluorotridecanoic acid (PFTrDA)	LB036743	µg/L	0.004	<0.004	0%	
Perfluorotetradecanoic acid (PFTeDA)	LB036743	µg/L	0.004	<0.004	0%	
Perfluorohexadecanoic acid (PFHxDA)	LB036743	µg/L	0.008	<0.008	0%	NA
Perfluorobutane sulfonate (PFBS)	LB036743	µg/L	0.004	<0.004	6%	NA
Perfluoropentane sulfonate (PFPeS)	LB036743	µg/L	0.004	<0.004	0%	NA
Perfluorohexane sulfonate (PFHxS)	LB036743	µg/L	0.002	<0.002	35%	NA
Perfluoroheptane sulfonate (PFHpS)	LB036743	µg/L	0.002	<0.002	0%	NA
Perfluorooctane sulfonate (PFOS)	LB036743	µg/L	0.002	<0.002	15%	136%
Sum of PFHxS and PFOS	LB036743	µg/L	0.002	<0.002	15%	NA
Perfluorononane sulfonate (PFNS)	LB036743	µg/L	0.002	<0.002	0%	NA
Perfluorodecane sulfonate (PFDS)	LB036743	µg/L	0.002	<0.002	0%	NA
Perfluorododecane sulfonate (PFDoS)	LB036743	µg/L	0.002	<0.002	0%	NA
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	LB036743	µg/L	0.002	<0.002	0%	NA
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	LB036743	µg/L	0.002	<0.002	0%	NA
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	LB036743	µg/L	0.002	<0.002	0%	NA
Perfluorooctane sulfonamide (PFOSA)	LB036743	µg/L	0.008	<0.008	0%	76%
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	LB036743	µg/L	0.01	<0.01	0%	NA
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	LB036743	µg/L	0.01	<0.01	0%	NA
2-(N-Methylperfluorooctane sulfonamido)-ethanol (N-MeFOSE)	LB036743	µg/L	0.01	<0.01	0%	NA
2-(N-Ethylperfluorooctane sulfonamido)-ethanol (N-EtFOSE)	LB036743	µg/L	0.01	<0.01	0%	NA
N-Methylperfluorooctanesulfonamidoacetic acid (N_MeFOSAA)	LB036743	µg/L	0.01	<0.01	0%	NA
N-Ethylperfluorooctanesulfonamidoacetic Acid (N-EtFOSAA)	LB036743	µg/L	0.01	<0.01	0%	NA
(13C4-PFBA) Isotopically Labelled Internal Recovery Standard	LB036743	%	-	100%	3%	102%
(13C5-PFPeA) Isotopically Labelled Internal Recovery Standard	LB036743	%	-	94%	2%	103%
(13C5-PFHxA) Isotopically Labelled Internal Recovery Standard	LB036743	%	-	114%	4%	103%
(13C4-PFHpA) Isotopically Labelled Internal Recovery Standard	LB036743	%	-	104%	4%	101%
(13C4_PFOA) Isotopically Labelled Internal Recovery Standard	LB036743	%	-	102%	5%	100%
(13C9-PFNA) Isotopically Labelled Internal Recovery Standard	LB036743	%	-	93%	2%	98%
(13C6-PFDA) Isotopically Labelled Internal Recovery Standard	LB036743	%	-	120%	1%	95%
(13C7-PFUdA) Isotopically Labelled Internal Recovery Standard	LB036743	%	-	100%	4%	94%
(13C2-PFDoA) Isotopically Labelled Internal Recovery Standard	LB036743	%	-	89%	11%	84%
(13C2_PFTeDA) Isotopically Labelled Internal Recovery Standard	LB036743	%	-	71%	1%	76%
(13C2-PFHxDA) Isotopically Labelled Internal Recovery Standard	LB036743	%	-	70%	5%	71%
(13C3-PFBS) Isotopically Labelled Internal Recovery Standard	LB036743	%	-	125%	18%	113%
(13C3-PFHxS) Isotopically Labelled Internal Recovery Standard	LB036743	%	-	108%	17%	104%
(13C8-PFOS) Isotopically Labelled Internal Recovery Standard	LB036743	%	-	96%	20%	101%
(13C2-4:2 FTS) Isotopically Labelled Internal Recovery Standard	LB036743	%	-	99%	14%	107%
(13C2-6:2 FTS) Isotopically Labelled Internal Recovery Standard	LB036743	%	-	81%	6%	114%
(13C2-8:2 FTS) Isotopically Labelled Internal Recovery Standard	LB036743	%	-	85%	12%	114%
(13C8-PFOSA) Isotopically Labelled Internal Recovery Standard	LB036743	%	-	90%	21%	115%
(D3-N-MeFOSA) Isotopically Labelled Internal Recovery Standard	LB036743	%	-	75%	40%	96%
(D5-N-EtFOSA) Isotopically Labelled Internal Recovery Standard	LB036743	%	-	94%	66%	101%
(D7-N-MeFOSE) Isotopically Labelled Internal Recovery Standard	LB036743	%	-	85%	8%	110%
(D9-N-EtFOSE) Isotopically Labelled Internal Recovery Standard	LB036743	%	-	96%	16%	124%
(D3-N-MeFOSAA) Isotopically Labelled Internal Recovery Standard	LB036743	%	-	100%	21%	120%
(D5-N-EtFOSAA) Isotopically Labelled Internal Recovery Standard	LB036743	%	-	96%	19%	108%

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage.* Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

SVOC Compounds in Waters by GC-QQQ Method: USEPA8270D

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Arochlor 1016	LB036736	µg/L	0.03	<0.03	NA
Arochlor 1221	LB036736	µg/L	0.03	<0.03	NA
Arochlor 1232	LB036736	µg/L	0.03	<0.03	NA
Arochlor 1242	LB036736	µg/L	0.03	<0.03	NA
Arochlor 1248	LB036736	µg/L	0.03	<0.03	NA
Arochlor 1254	LB036736	µg/L	0.03	<0.03	NA
Arochlor 1260	LB036736	µg/L	0.03	<0.03	NA
Arochlor 1262	LB036736	µg/L	0.03	<0.03	NA
Arochlor 1268	LB036736	µg/L	0.03	<0.03	NA
Total PCB*	LB036736	µg/L	0.03	<0.03	NA
d14-p-terphenyl (Surrogate)	LB036736	%	0.001	114%	134%

SVOC Compounds in Waters by GC-QQQ, Low Level Method: USEPA8270D LL

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
2-Methylnaphthalene	LB036736	µg/L	0.1	<0.1	NA
4,4-DDD	LB036736	µg/L	0.1	<0.1	NA
4,4-DDE	LB036736	µg/L	0.1	<0.1	NA
4,4-DDT	LB036736	µg/L	0.1	<0.1	93%
7,12-Dimethylbenz(a)anthracene	LB036736	µg/L	0.01	<0.01	NA
Acenaphthene	LB036736	µg/L	0.01	<0.01	93%
Acenaphthylene	LB036736	µg/L	0.01	<0.01	NA
Aldrin	LB036736	µg/L	0.01	<0.010	66%
Aldrin and Dieldrin	LB036736	µg/L	0.1	<0.1	NA
alpha-BHC	LB036736	µg/L	0.1	<0.1	NA
alpha-Chlordane	LB036736	µg/L	0.01	<0.010	NA
Anthracene	LB036736	µg/L	0.01	<0.01	NA
Benzo(a)anthracene	LB036736	µg/L	0.01	<0.01	NA
Benzo (a) pyrene	LB036736	µg/L	0.01	<0.010	NA
Benzo (b) fluoranthene	LB036736	µg/L	0.01	<0.01	NA
Benzo (e) pyrene	LB036736	µg/L	0.01	<0.01	NA
Benzo (ghi) perylene	LB036736	µg/L	0.01	<0.01	NA
Benzo (k) fluoranthene	LB036736	µg/L	0.01	<0.01	NA
Benzo (b+j+k) fluoranthene	LB036736	µg/L	0.01	<0.01	NA
beta-BHC	LB036736	µg/L	0.1	<0.1	NA
Chlordane	LB036736	µg/L	0.01	<0.010	NA
Chlorpyrifos	LB036736	µg/L	0.01	<0.010	132%
Chrysene	LB036736	µg/L	0.01	<0.01	NA
delta-BHC	LB036736	µg/L	0.1	<0.1	NA
Dibenz (ah) anthracene	LB036736	µg/L	0.01	<0.01	NA
Dieldrin	LB036736	µg/L	0.01	<0.010	99%
Dimethoate	LB036736	µg/L	0.1	<0.1	NA
Disulfoton	LB036736	µg/L	0.1	<0.1	NA
Endosulfan 1	LB036736	µg/L	0.01	<0.010	NA
Endosulfan 2	LB036736	µg/L	0.01	<0.010	NA
Endosulfan Sulphate	LB036736	µg/L	0.01	<0.010	NA
Total Endosulfan	LB036736	µg/L	0.01	<0.01	NA
Endrin	LB036736	µg/L	0.1	<0.1	107%
Endrin Aldehyde	LB036736	µg/L	0.1	<0.1	NA
Endrin ketone	LB036736	µg/L	0.1	<0.1	NA
Famphur	LB036736	µg/L	0.1	<0.1	NA
Fluoranthene	LB036736	µg/L	0.01	<0.01	NA
Fluorene	LB036736	µg/L	0.01	<0.01	NA
gamma-BHC	LB036736	µg/L	0.01	<0.010	83%
gamma-Chlordane	LB036736	µg/L	0.01	<0.010	NA
Heptachlor	LB036736	µg/L	0.01	<0.010	73%

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage.* Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

SVOC Compounds in Waters by GC-QQQ, Low Level **Method: USEPA8270D LL (continued)**

				MB	LCS %Recovery
Heptachlor Epoxide	LB036736	µg/L	0.1	<0.1	NA
Hexachlorobenzene	LB036736	µg/L	0.01	<0.010	NA
Indeno (1,2,3-cd) pyrene	LB036736	µg/L	0.01	<0.01	NA
Isodrin	LB036736	µg/L	0.1	<0.1	NA
Methoxychlor	LB036736	µg/L	0.1	<0.1	NA
Methyl parathion	LB036736	µg/L	0.01	<0.01	NA
Mirex	LB036736	µg/L	0.1	<0.1	NA
Naphthalene	LB036736	µg/L	0.1	<0.1	NA
Phenanthrene	LB036736	µg/L	0.01	<0.01	NA
Phorate	LB036736	µg/L	0.1	<0.1	NA
Pyrene	LB036736	µg/L	0.01	<0.01	100%
Stirofos	LB036736	µg/L	0.1	<0.1	NA
Sulfotepp	LB036736	µg/L	0.1	<0.1	NA
Thionazin	LB036736	µg/L	0.1	<0.1	NA
Total PAHs Vic EPA - assumes <LOR results = 0.5LOR	LB036736	µg/L	0.8	<0.8	NA
d14-p-terphenyl (Surrogate)	LB036736	%	0.0001	114%	134%

METHOD	METHODOLOGY SUMMARY
EPA8270D	This method covers analytical procedures for the analysis of semi-volatile organic compounds (SVOC) including most neutral, acidic, and basic organic compounds based on the USEPA method 8270D. Samples are extracted into a solvent appropriate to the matrix and analysed using a gas chromatograph – triple quadrapole (GC–QQQ).
EPA8270D LL	This method covers analytical procedures for the analysis of semi-volatile organic compounds (SVOC) including most neutral, acidic, and basic organic compounds based on the USEPA method 8270D. Samples are extracted into a solvent appropriate to the matrix and analysed using a gas chromatograph – triple quadrapole (GC–QQQ).
EPA8270D Pest LL	This method covers analytical procedures for the analysis of semi-volatile organic compounds (SVOC pesticides) including most neutral, acidic, and basic organic compounds based on the USEPA method 8270D. Samples are extracted into a solvent appropriate to the matrix and analysed using a gas chromatograph – triple quadrapole (GC–QQQ).
MA-1523	This method covers the analysis of per- and polyfluoroalkyl substances (PFAS) in aqueous, solid and biosolid samples and solvent extracts, determined as the total of linear and branched isomers. After spiking with isotopically labelled quantification surrogates and clean-up via SPE cartridges sample extracts are analysed by liquid chromatography/mass spectrometry (LC-MS/MS). PFAS concentrations are determined by isotope dilution quantification.
USEPA8270D.WW.ADD.00	This method covers analytical procedures for the analysis of additional semi-volatile organic compounds (SVOC) including most neutral, acidic, and basic organic compounds based on the USEPA method 8270D. Samples are extracted into a solvent appropriate to the matrix and analysed using a gas chromatograph – mass spectrometer (GC–MS).

FOOTNOTES

IS	Insufficient sample for analysis.	LOR	Limit of Reporting
LNR	Sample listed, but not received.	↑↓	Raised or Lowered Limit of Reporting
*	NATA accreditation does not cover the performance of this service.	QFH	QC result is above the upper tolerance
		QFL	QC result is below the lower tolerance
**	Indicative data, theoretical holding time exceeded.	-	The sample was not analysed for this analyte
***	Indicates that both * and ** apply.	NVL	Not Validated

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calcuated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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Symbio LABORATORIES

CERTIFICATE OF ANALYSIS

Certificate Number	S963962 [R00]	**Page**	1/2
Client	SGS Environmental Services - Sydney	**Registering Laboratory**	Sydney
Contact	[redacted]	**Contact**	Customer Service Team
Address	16/33 Maddox St Alexandria NSW 2015	**Address**	2 Sirius Rd, Lane Cove West, NSW 2066
		Email	admin@symbiolabs.com.au
Telephone	02 8594 0400	**Telephone**	1300 703 166
Order Number	---	**Date Samples Received**	04/11/2020
Project ID	SE213112 Water	**Date Analysis Commenced**	04/11/2020
Sampler	Customer	**Issue Date**	08/11/2020
Client Job Reference	SE213112	**Receipt Temperature (°C)**	8.0
No. of Samples Registered	2 | Sampler: Customer	**Storage Temperature (°C)**	4.0
Priority	Normal	**Quote Number**	---

Symbio LABORATORIES
Proudly AUSTRALIAN
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NATA
Accreditation No: 2455
Accredited for compliance with ISO/IEC 17025 - Testing

This report supersedes any previous revision with this reference. This document must not be reproduced, except in full. If samples were provided by the customer, results apply only to the samples 'as received' and responsibility for representative sampling rests with the customer. Water results are reported on an 'as is' basis. Soil and sediment results are reported on a 'dry weight' basis. For other matrices the basis of reporting will be confirmed in the 'Report Comments' section. Measurement Uncertainty is available upon request or via www.symbiolabs.com.au/login. If the laboratory was authorised to conduct testing on samples received outside of the specified conditions, all test results may be impacted. Details of samples received outside of the specified conditions are mentioned in the sample description section of this test report.

Definitions

| <: Less Than | >: Greater Than | RP: Result Pending | MPN: Most Probable Number | CFU: Colony Forming Units | ---: Not Received/Not Requested | NA: Not Applicable | ND: Not Detected | LOR: Limit of Reporting | [NT]: Not Tested |

| ~: Estimated | ^ Subcontracted Analysis | TBA: To Be Advised | ** Potential Holding Time Concern | * Test not covered by NATA scope of accreditation | # Result derived from a calculation and includes results equal to or greater than the LOR

Authorised By

Name	Position	Accreditation Category
[redacted]	Laboratory Manager – Microbiology	Environmental and Food Microbiology

Sample Information - *Client/Sampler Supplied*

Sample ID	S963962/1	S963962/2
Sample Description	SE213112.001 0407_LP_BAC_WATER_201103	SE213112.002 0407_LP_SEW002_GRAB_201103
Sample Date/Time	2020-11-03 00:00	2020-11-03 00:00
Sample Matrix	Water	Water

Client	SGS Environmental Services - Sydney	**Project ID**	SE213112 Water
Certificate Number	S963962 [R00]	**Sampler**	Customer
Page	2/2	**Order Number**	---

Analytical Results

		Client Sample Description	**SE213112.001 0407_LP_BAC_WATER_201103**	**SE213112.002 0407_LP_SEW002_GRAB_201103**
		Client Sampling date/time	**03/11/2020 00:00**	**03/11/2020 00:00**
Compound/Analyte	**LOR**	**Units**	**S963962/1**	**S963962/2**
			Results	**Results**
Micro General				
M16.1W - AS 5013.10				
Salmonella spp*	ND	/100mL	ND	ND
M8.5 - AS/NZS 4276.7				
Escherichia coli	1	CFU/100mL	<1	<1
Thermotolerant Coliforms	1	CFU/100mL	<1	<1

Analysis Location

All in-house analysis was completed by Symbio Laboratories - Sydney.

STATEMENT OF QA/QC PERFORMANCE

SE213112 R0

CLIENT DETAILS

Contact	LQRSYD
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	02 9427 8100
Facsimile	02 9427 8200
Email	lqrsyd@slrconsulting.com
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	2

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE213112 R0**
Date Received	03 Nov 2020
Date Reported	11 Nov 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Matrix Spike	Trace Metals (Dissolved) in Water by ICPMS	1 item
	Volatile Petroleum Hydrocarbons in Water	1 item

SAMPLE SUMMARY

HOLDING TIME SUMMARY

SE213112 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Ammonia Nitrogen by Discrete Analyser (Aquakem)

Method: ME-(AU)-[ENV]AN291

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_LP_BAC_WATER_20	SE213112.001	LB212707	03 Nov 2020	03 Nov 2020	01 Dec 2020	04 Nov 2020	01 Dec 2020	04 Nov 2020
0407_SEW002_GRAB_201	SE213112.002	LB212707	03 Nov 2020	03 Nov 2020	01 Dec 2020	04 Nov 2020	01 Dec 2020	04 Nov 2020

Anions by Ion Chromatography in Water

Method: ME-(AU)-[ENV]AN245

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_LP_BAC_WATER_20	SE213112.001	LB212741	03 Nov 2020	03 Nov 2020	01 Dec 2020	05 Nov 2020	01 Dec 2020	06 Nov 2020
0407_SEW002_GRAB_201	SE213112.002	LB212741	03 Nov 2020	03 Nov 2020	01 Dec 2020	05 Nov 2020	01 Dec 2020	06 Nov 2020

Filterable Reactive Phosphorus (FRP)

Method: ME-(AU)-[ENV]AN278

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_LP_BAC_WATER_20	SE213112.001	LB212707	03 Nov 2020	03 Nov 2020	01 Dec 2020	04 Nov 2020	01 Dec 2020	04 Nov 2020
0407_SEW002_GRAB_201	SE213112.002	LB212707	03 Nov 2020	03 Nov 2020	01 Dec 2020	04 Nov 2020	01 Dec 2020	05 Nov 2020

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_LP_BAC_WATER_20	SE213112.001	LB212750	03 Nov 2020	03 Nov 2020	01 Dec 2020	05 Nov 2020	01 Dec 2020	06 Nov 2020
0407_SEW002_GRAB_201	SE213112.002	LB212750	03 Nov 2020	03 Nov 2020	01 Dec 2020	05 Nov 2020	01 Dec 2020	06 Nov 2020

Nitrite in Water

Method: ME-(AU)-[ENV]AN277

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_LP_BAC_WATER_20	SE213112.001	LB212707	03 Nov 2020	03 Nov 2020	07 Nov 2020	04 Nov 2020	07 Nov 2020	04 Nov 2020
0407_SEW002_GRAB_201	SE213112.002	LB212707	03 Nov 2020	03 Nov 2020	07 Nov 2020	04 Nov 2020	07 Nov 2020	04 Nov 2020

Speciated Phenols in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_LP_BAC_WATER_20	SE213112.001	LB212709	03 Nov 2020	03 Nov 2020	24 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020

Sulfide by Titration in Water

Method: ME-(AU)-[ENV]AN149

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_LP_BAC_WATER_20	SE213112.001	LB212955	03 Nov 2020	03 Nov 2020	10 Nov 2020	09 Nov 2020	10 Nov 2020	09 Nov 2020
0407_SEW002_GRAB_201	SE213112.002	LB212955	03 Nov 2020	03 Nov 2020	10 Nov 2020	09 Nov 2020	10 Nov 2020	09 Nov 2020

TKN Kjeldahl Digestion by Discrete Analyser

Method: ME-(AU)-[ENV]AN292

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_LP_BAC_WATER_20	SE213112.001	LB212800	03 Nov 2020	03 Nov 2020	01 Dec 2020	05 Nov 2020	01 Dec 2020	06 Nov 2020
0407_SEW002_GRAB_201	SE213112.002	LB212800	03 Nov 2020	03 Nov 2020	01 Dec 2020	05 Nov 2020	01 Dec 2020	06 Nov 2020

Total Phosphorus by Kjeldahl Digestion DA in Water

Method: ME-(AU)-[ENV]AN279/AN293(Sydney only)

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_LP_BAC_WATER_20	SE213112.001	LB212800	03 Nov 2020	03 Nov 2020	01 Dec 2020	05 Nov 2020	01 Dec 2020	06 Nov 2020
0407_SEW002_GRAB_201	SE213112.002	LB212800	03 Nov 2020	03 Nov 2020	01 Dec 2020	05 Nov 2020	01 Dec 2020	06 Nov 2020

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_LP_BAC_WATER_20	SE213112.001	LB212732	03 Nov 2020	03 Nov 2020	02 May 2021	04 Nov 2020	02 May 2021	06 Nov 2020
0407_SEW002_GRAB_201	SE213112.002	LB212732	03 Nov 2020	03 Nov 2020	02 May 2021	04 Nov 2020	02 May 2021	06 Nov 2020

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_LP_BAC_WATER_20	SE213112.001	LB212709	03 Nov 2020	03 Nov 2020	10 Nov 2020	04 Nov 2020	14 Dec 2020	06 Nov 2020

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_LP_BAC_WATER_20	SE213112.001	LB212811	03 Nov 2020	03 Nov 2020	10 Nov 2020	05 Nov 2020	15 Dec 2020	06 Nov 2020
0407_SEW002_GRAB_201	SE213112.002	LB212811	03 Nov 2020	03 Nov 2020	10 Nov 2020	05 Nov 2020	15 Dec 2020	06 Nov 2020

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_LP_BAC_WATER_20	SE213112.001	LB212811	03 Nov 2020	03 Nov 2020	10 Nov 2020	05 Nov 2020	15 Dec 2020	06 Nov 2020
0407_SEW002_GRAB_201	SE213112.002	LB212811	03 Nov 2020	03 Nov 2020	10 Nov 2020	05 Nov 2020	15 Dec 2020	06 Nov 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples

Method: MA-1523

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C2_PFTeDA) Isotopically Labelled Internal Recovery Standard		SE213112.001	%	10 - 150%	75
	0407_SEW002_GRAB_201103	SE213112.002	%	10 - 150%	91
(13C2-4:2 FTS) Isotopically Labelled Internal Recovery Standard		SE213112.001	%	10 - 150%	84
	0407_SEW002_GRAB_201103	SE213112.002	%	10 - 150%	105
(13C2-6:2 FTS) Isotopically Labelled Internal Recovery Standard		SE213112.001	%	10 - 150%	86
	0407_SEW002_GRAB_201103	SE213112.002	%	10 - 150%	103
(13C2-8:2 FTS) Isotopically Labelled Internal Recovery Standard		SE213112.001	%	10 - 150%	78
	0407_SEW002_GRAB_201103	SE213112.002	%	10 - 150%	116
(13C2-PFDoA) Isotopically Labelled Internal Recovery Standard		SE213112.001	%	10 - 150%	92
	0407_SEW002_GRAB_201103	SE213112.002	%	10 - 150%	110
(13C2-PFHxDA) Isotopically Labelled Internal Recovery Standard		SE213112.001	%	10 - 150%	40
	0407_SEW002_GRAB_201103	SE213112.002	%	10 - 150%	50
(13C3-PFBS) Isotopically Labelled Internal Recovery Standard		SE213112.001	%	10 - 150%	97
	0407_SEW002_GRAB_201103	SE213112.002	%	10 - 150%	103
(13C3-PFHxS) Isotopically Labelled Internal Recovery Standard		SE213112.001	%	10 - 150%	96
	0407_SEW002_GRAB_201103	SE213112.002	%	10 - 150%	109
(13C4_PFOA) Isotopically Labelled Internal Recovery Standard		SE213112.001	%	10 - 150%	102
	0407_SEW002_GRAB_201103	SE213112.002	%	10 - 150%	102
(13C4-PFBA) Isotopically Labelled Internal Recovery Standard		SE213112.001	%	10 - 150%	98
	0407_SEW002_GRAB_201103	SE213112.002	%	10 - 150%	99
(13C4-PFHpA) Isotopically Labelled Internal Recovery Standard		SE213112.001	%	10 - 150%	107
	0407_SEW002_GRAB_201103	SE213112.002	%	10 - 150%	103
(13C5-PFHxA) Isotopically Labelled Internal Recovery Standard		SE213112.001	%	10 - 150%	103
	0407_SEW002_GRAB_201103	SE213112.002	%	10 - 150%	106
(13C5-PFPeA) Isotopically Labelled Internal Recovery Standard		SE213112.001	%	10 - 150%	101
	0407_SEW002_GRAB_201103	SE213112.002	%	10 - 150%	98
(13C6-PFDA) Isotopically Labelled Internal Recovery Standard		SE213112.001	%	10 - 150%	100
	0407_SEW002_GRAB_201103	SE213112.002	%	10 - 150%	87
(13C7-PFUdA) Isotopically Labelled Internal Recovery Standard		SE213112.001	%	10 - 150%	96
	0407_SEW002_GRAB_201103	SE213112.002	%	10 - 150%	111
(13C8-PFOS) Isotopically Labelled Internal Recovery Standard		SE213112.001	%	10 - 150%	107
	0407_SEW002_GRAB_201103	SE213112.002	%	10 - 150%	98
(13C8-PFOSA) Isotopically Labelled Internal Recovery Standard		SE213112.001	%	10 - 150%	114
	0407_SEW002_GRAB_201103	SE213112.002	%	10 - 150%	76
(13C9-PFNA) Isotopically Labelled Internal Recovery Standard		SE213112.001	%	10 - 150%	104
	0407_SEW002_GRAB_201103	SE213112.002	%	10 - 150%	104
(D3-N-MeFOSA) Isotopically Labelled Internal Recovery Standard		SE213112.001	%	10 - 150%	80
	0407_SEW002_GRAB_201103	SE213112.002	%	10 - 150%	63
(D3-N-MeFOSAA) Isotopically Labelled Internal Recovery Standard		SE213112.001	%	10 - 150%	104
	0407_SEW002_GRAB_201103	SE213112.002	%	10 - 150%	83
(D5-N-EtFOSA) Isotopically Labelled Internal Recovery Standard		SE213112.001	%	10 - 150%	76
	0407_SEW002_GRAB_201103	SE213112.002	%	10 - 150%	64
(D5-N-EtFOSAA) Isotopically Labelled Internal Recovery Standard		SE213112.001	%	10 - 150%	104
	0407_SEW002_GRAB_201103	SE213112.002	%	10 - 150%	81
(D7-N-MeFOSE) Isotopically Labelled Internal Recovery Standard		SE213112.001	%	10 - 150%	95
	0407_SEW002_GRAB_201103	SE213112.002	%	10 - 150%	69
(D9-N-EtFOSE) Isotopically Labelled Internal Recovery Standard		SE213112.001	%	10 - 150%	110
	0407_SEW002_GRAB_201103	SE213112.002	%	10 - 150%	76

Speciated Phenols in Water

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)		SE213112.001	%	40 - 130%	48
d5-phenol (Surrogate)		SE213112.001	%	20 - 90%	49

SVOC Compounds in Waters by GC-QQQ

Method: USEPA8270D

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d14-p-terphenyl (Surrogate)		SE213112.001	%	40 - 130%	109

SVOC Compounds in Waters by GC-QQQ, Low Level

Method: USEPA8270D LL

Parameter	Sample Name	Sample Number	Units

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

SVOC Compounds in Waters by GC-QQQ, Low Level (continued)

Method: USEPA8270D LL

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
d14-p-terphenyl (Surrogate)		SE213112.001	%	40 - 130%	109

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)		SE213112.001	%	40 - 130%	106
	0407_SEW002_GRAB_201103	SE213112.002	%	40 - 130%	105
d4-1,2-dichloroethane (Surrogate)		SE213112.001	%	40 - 130%	98
	0407_SEW002_GRAB_201103	SE213112.002	%	40 - 130%	95
d8-toluene (Surrogate)		SE213112.001	%	40 - 130%	96
	0407_SEW002_GRAB_201103	SE213112.002	%	40 - 130%	96

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)		SE213112.001	%	40 - 130%	106
d4-1,2-dichloroethane (Surrogate)		SE213112.001	%	60 - 130%	98
d8-toluene (Surrogate)		SE213112.001	%	40 - 130%	96

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Ammonia Nitrogen by Discrete Analyser (Aquakem)

Method: ME-(AU)-[ENV]AN291

Sample Number	Parameter	Units	LOR	Result
LB212707.001	Ammonia Nitrogen, NH_3 as N	mg/L	0.005	<0.005

Anions by Ion Chromatography in Water

Method: ME-(AU)-[ENV]AN245

Sample Number	Parameter	Units	LOR	Result
LB212741.001	Nitrate Nitrogen, NO3-N	mg/L	0.005	<0.005
	Sulfate, SO4	mg/L	1	<1.0

Filterable Reactive Phosphorus (FRP)

Method: ME-(AU)-[ENV]AN278

Sample Number	Parameter	Units	LOR	Result
LB212707.001	Filterable Reactive Phosphorus as P	mg/L	0.005	<0.005

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

Sample Number	Parameter	Units	LOR	Result
LB212750.001	Mercury	mg/L	0.0001	<0.0001

Nitrite in Water

Method: ME-(AU)-[ENV]AN277

Sample Number	Parameter	Units	LOR	Result
LB212707.001	Nitrite Nitrogen, NO2 as N	mg/L	0.005	<0.005

Speciated Phenols in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB212709.001		Phenol	µg/L	0.5	<0.5
		2-methyl phenol (o-cresol)	µg/L	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	µg/L	1	<1
		2-chlorophenol	µg/L	0.5	<0.5
		2,4-dimethylphenol	µg/L	0.5	<0.5
		2,6-dichlorophenol	µg/L	0.5	<0.5
		2,4-dichlorophenol	µg/L	0.5	<0.5
		2,4,6-trichlorophenol	µg/L	0.5	<0.5
		2-nitrophenol	µg/L	0.5	<0.5
		4-nitrophenol	µg/L	1	<1
		2,4,5-trichlorophenol	µg/L	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	µg/L	1	<1
		Pentachlorophenol	µg/L	0.5	<0.5
		2,4-dinitrophenol	µg/L	2	<2
		4-chloro-3-methylphenol	µg/L	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	75
		d5-phenol (Surrogate)	%	-	97

Sulfide by Titration in Water

Method: ME-(AU)-[ENV]AN149

Sample Number	Parameter	Units	LOR	Result
LB212955.001	Sulfide	mg/L	0.5	<0.5

Total Phosphorus by Kjeldahl Digestion DA in Water

Method: ME-(AU)-[ENV]AN279/AN293(Sydney only)

Sample Number	Parameter	Units	LOR	Result
LB212800.001	Total Phosphorus (Kjeldahl Digestion) as P	mg/L	0.02	<0.02

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Sample Number	Parameter	Units	LOR	Result
LB212732.001	Arsenic, As	µg/L	1	<1
	Beryllium, Be	µg/L	1	<1
	Boron, B	µg/L	5	<5

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Trace Metals (Dissolved) in Water by ICPMS (continued)

Method: ME-(AU)-[ENV]AN318

Sample Number	Parameter	Units	LOR	Result
LB212732.001	Cadmium, Cd	µg/L	0.1	<0.1
	Chromium, Cr	µg/L	1	<1
	Cobalt, Co	µg/L	1	<1
	Copper, Cu	µg/L	1	<1
	Lead, Pb	µg/L	1	<1
	Manganese, Mn	µg/L	1	<1
	Nickel, Ni	µg/L	1	<1
	Zinc, Zn	µg/L	5	<5

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB212709.001	TRH C10-C14	µg/L	50	<50
	TRH C15-C28	µg/L	200	<200
	TRH C29-C36	µg/L	200	<200
	TRH C37-C40	µg/L	200	<200

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB212811.001	Fumigants	2,2-dichloropropane	µg/L	0.5	<0.5
		1,2-dichloropropane	µg/L	0.5	<0.5
		cis-1,3-dichloropropene	µg/L	0.5	<0.5
		trans-1,3-dichloropropene	µg/L	0.5	<0.5
		1,2-dibromoethane (EDB)	µg/L	0.5	<0.5
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	µg/L	5	<5
		Chloromethane	µg/L	5	<5
		Vinyl chloride (Chloroethene)	µg/L	0.3	<0.3
		Bromomethane	µg/L	10	<10
		Chloroethane	µg/L	5	<5
		Trichlorofluoromethane	µg/L	1	<1
		Iodomethane	µg/L	5	<5
		1,1-dichloroethene	µg/L	0.5	<0.5
		Dichloromethane (Methylene chloride)	µg/L	5	<5
		Allyl chloride	µg/L	2	<2
		trans-1,2-dichloroethene	µg/L	0.5	<0.5
		1,1-dichloroethane	µg/L	0.5	<0.5
		cis-1,2-dichloroethene	µg/L	0.5	<0.5
		Bromochloromethane	µg/L	0.5	<0.5
		1,2-dichloroethane	µg/L	0.5	<0.5
		1,1,1-trichloroethane	µg/L	0.5	<0.5
		1,1-dichloropropene	µg/L	0.5	<0.5
		Carbon tetrachloride	µg/L	0.5	<0.5
		Dibromomethane	µg/L	0.5	<0.5
		Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	<0.5
		1,1,2-trichloroethane	µg/L	0.5	<0.5
		1,3-dichloropropane	µg/L	0.5	<0.5
		Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	<0.5
		1,1,1,2-tetrachloroethane	µg/L	0.5	<0.5
		cis-1,4-dichloro-2-butene	µg/L	1	<1
		1,1,2,2-tetrachloroethane	µg/L	0.5	<0.5
		1,2,3-trichloropropane	µg/L	0.5	<0.5
		trans-1,4-dichloro-2-butene	µg/L	1	<1
		1,2-dibromo-3-chloropropane	µg/L	0.5	<0.5
		Hexachlorobutadiene	µg/L	0.5	<0.5
	Halogenated Aromatics	Chlorobenzene	µg/L	0.5	<0.5
		Bromobenzene	µg/L	0.5	<0.5
		2-chlorotoluene	µg/L	0.5	<0.5
		4-chlorotoluene	µg/L	0.5	<0.5
		1,3-dichlorobenzene	µg/L	0.5	<0.5
		1,4-dichlorobenzene	µg/L	0.3	<0.3
		1,2-dichlorobenzene	µg/L	0.5	<0.5
		1,2,4-trichlorobenzene	µg/L	0.5	<0.5
		1,2,3-trichlorobenzene	µg/L	0.5	<0.5

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOCs in Water (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB212811.001	Monocyclic Aromatic Hydrocarbons	Benzene	µg/L	0.5	<0.5
		Toluene	µg/L	0.5	<0.5
		Ethylbenzene	µg/L	0.5	<0.5
		m/p-xylene	µg/L	1	<1
		o-xylene	µg/L	0.5	<0.5
		Styrene (Vinyl benzene)	µg/L	0.5	<0.5
		Isopropylbenzene (Cumene)	µg/L	0.5	<0.5
		n-propylbenzene	µg/L	0.5	<0.5
		1,3,5-trimethylbenzene	µg/L	0.5	<0.5
		tert-butylbenzene	µg/L	0.5	<0.5
		1,2,4-trimethylbenzene	µg/L	0.5	<0.5
		sec-butylbenzene	µg/L	0.5	<0.5
		p-isopropyltoluene	µg/L	0.5	<0.5
		n-butylbenzene	µg/L	0.5	<0.5
	Nitrogenous Compounds	Acrylonitrile	µg/L	0.5	<0.5
	Oxygenated Compounds	Acetone (2-propanone)	µg/L	10	<10
		MtBE (Methyl-tert-butyl ether)	µg/L	2	<1
		Vinyl acetate	µg/L	10	<10
		MEK (2-butanone)	µg/L	10	<10
		MIBK (4-methyl-2-pentanone)	µg/L	5	<5
		2-hexanone (MBK)	µg/L	5	<5
	Polycyclic VOCs	Naphthalene	µg/L	0.5	<0.5
	Sulphonated	Carbon disulfide	µg/L	2	<2
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	95
		d8-toluene (Surrogate)	%	-	95
		Bromofluorobenzene (Surrogate)	%	-	102
	Trihalomethanes	Chloroform (THM)	µg/L	0.5	<0.5
		Bromodichloromethane (THM)	µg/L	0.5	<0.5
		Dibromochloromethane (THM)	µg/L	0.5	<0.5
		Bromoform (THM)	µg/L	0.5	<0.5

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB212811.001		TRH C6-C9	µg/L	40	<40
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	95
		d8-toluene (Surrogate)	%	-	95
		Bromofluorobenzene (Surrogate)	%	-	102

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Ammonia Nitrogen by Discrete Analyser (Aquakem)

Method: ME-(AU)-[ENV]AN291

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE213112.001	LB212707.011	Ammonia Nitrogen, NH_3 as N	mg/L	0.005	<0.005	0.0039	200	0

Anions by Ion Chromatography in Water

Method: ME-(AU)-[ENV]AN245

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE213070.001	LB212741.015	Sulfate, SO4	mg/L	1	110	110	16	0

Filterable Reactive Phosphorus (FRP)

Method: ME-(AU)-[ENV]AN278

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE213112.001	LB212707.011	Filterable Reactive Phosphorus as P	mg/L	0.005	<0.005	0.0028	167	0

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE213152.003	LB212750.012	Mercury	µg/L	0.0001	<0.0001	<0.0001	200	0

Nitrite in Water

Method: ME-(AU)-[ENV]AN277

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE213112.001	LB212707.011	Nitrite Nitrogen, NO2 as N	mg/L	0.005	<0.005	-0.0003	200	0

TKN Kjeldahl Digestion by Discrete Analyser

Method: ME-(AU)-[ENV]AN292

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE213188.001	LB212800.024	Total Kjeldahl Nitrogen	mg/L	0.05	77.52652	78.95384	15	2

Total Phosphorus by Kjeldahl Digestion DA in Water

Method: ME-(AU)-[ENV]AN279/AN293(Sydney only)

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE213182.002	LB212800.025	Total Phosphorus (Kjeldahl Digestion) as P	mg/L	0.02	0.14703	0.1519	28	3
SE213188.001	LB212800.024	Total Phosphorus (Kjeldahl Digestion) as P	mg/L	0.02	19.94228	19.72756	15	1

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE213152.003	LB212732.014	Arsenic, As	µg/L	1	<1	<1	200	0
		Cadmium, Cd	µg/L	0.1	<0.1	<0.1	200	0
		Chromium, Cr	µg/L	1	<1	<1	200	0
		Copper, Cu	µg/L	1	59	58	17	2
		Lead, Pb	µg/L	1	<1	<1	200	0
		Nickel, Ni	µg/L	1	1	1	86	4
		Zinc, Zn	µg/L	5	6	6	105	1

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE213108.001	LB212709.024		TRH C10-C14	µg/L	50	<50	0	200	0
			TRH C15-C28	µg/L	200	<200	0	200	0
			TRH C29-C36	µg/L	200	<200	0	200	0
			TRH C37-C40	µg/L	200	<200	0	200	0
			TRH C10-C40	µg/L	320	<650	0	200	0
		TRH F Bands	TRH >C10-C16	µg/L	60	<60	0	200	0
			TRH >C16-C34 (F3)	µg/L	500	<500	0	200	0
			TRH >C34-C40 (F4)	µg/L	500	<500	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE213151.017	LB212811.025	Monocyclic	Benzene	µg/L	0.5	<0.5	0.1431871691	200	0
		Aromatic	Toluene	µg/L	0.5	41	40.1395047632	31	2
			Ethylbenzene	µg/L	0.5	<0.5	0.1445067028	200	0
			m/p-xylene	µg/L	1	<1	0.5247314612	200	0
			o-xylene	µg/L	0.5	<0.5	0.2018769860	200	0
		Polycyclic	Naphthalene	µg/L	0.5	<0.5	0.1959356378	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	9.7	9.7748791803	30	1
			d8-toluene (Surrogate)	µg/L	-	9.5	9.6443423308	30	1
			Bromofluorobenzene (Surrogate)	µg/L	-	10.5	10.8588607855	30	3
SE213152.003	LB212811.026	Monocyclic	Benzene	µg/L	0.5	<0.5	0.0298282407	200	0
		Aromatic	Toluene	µg/L	0.5	<0.5	0.2202249670	200	0
			Ethylbenzene	µg/L	0.5	<0.5	0.0532571692	200	0
			m/p-xylene	µg/L	1	<1	0.1627048339	200	0
			o-xylene	µg/L	0.5	<0.5	0.0996240622	200	0
		Polycyclic	Naphthalene	µg/L	0.5	<0.5	0.0812652980	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	9.3	9.4105771209	30	1
			d8-toluene (Surrogate)	µg/L	-	9.9	9.8291310457	30	0
			Bromofluorobenzene (Surrogate)	µg/L	-	10.8	10.5884667959	30	2

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE213151.017	LB212811.027		TRH C6-C10	µg/L	50	170	37.0479015444	63	19
			TRH C6-C9	µg/L	40	160	34.706138668	57	17
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	9.7	9.7748791803	30	1
			d8-toluene (Surrogate)	µg/L	-	9.5	9.6443423308	30	1
			Bromofluorobenzene (Surrogate)	µg/L	-	10.5	10.8588607855	30	3
		VPH F Bands	Benzene (F0)	µg/L	0.5	<0.5	0.1431871691	200	0
			TRH C6-C10 minus BTEX (F1)	µg/L	50	120	96.9083967811	75	25
SE213152.003	LB212811.028		TRH C6-C10	µg/L	50	190	192.4104	56	0
			TRH C6-C9	µg/L	40	190	187.3056	51	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	9.3	9.4105771209	30	1
			d8-toluene (Surrogate)	µg/L	-	9.9	9.8291310457	30	0
			Bromofluorobenzene (Surrogate)	µg/L	-	10.8	10.5884667959	30	2
		VPH F Bands	Benzene (F0)	µg/L	0.5	<0.5	0.0298282407	200	0
			TRH C6-C10 minus BTEX (F1)	µg/L	50	190	192.4104	56	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Ammonia Nitrogen by Discrete Analyser (Aquakem)

Method: ME-(AU)-[ENV]AN291

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212707.002	Ammonia Nitrogen, NH_3 as N	mg/L	0.005	2.5	2.5	80 - 120	100

Anions by Ion Chromatography in Water

Method: ME-(AU)-[ENV]AN245

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212741.002	Nitrate Nitrogen, NO3-N	mg/L	0.005	1.9	2	80 - 120	96
	Sulfate, SO4	mg/L	1	19	20	80 - 120	96

Filterable Reactive Phosphorus (FRP)

Method: ME-(AU)-[ENV]AN278

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212707.002	Filterable Reactive Phosphorus as P	mg/L	0.005	0.11	0.1	80 - 120	110

Nitrite in Water

Method: ME-(AU)-[ENV]AN277

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212707.002	Nitrite Nitrogen, NO2 as N	mg/L	0.005	0.11	0.1	80 - 120	112

Speciated Phenols in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212709.002		Phenol	µg/L	0.5	44	40	60 - 140	111
		2,4-dichlorophenol	µg/L	0.5	51	40	60 - 140	128
		2,4,6-trichlorophenol	µg/L	0.5	44	40	60 - 140	111
		Pentachlorophenol	µg/L	0.5	28	40	60 - 140	71
	Surrogates	2,4,6-Tribromophenol (Surrogate)	µg/L	-	4.2	5	40 - 130	84
		d5-phenol (Surrogate)	µg/L	-	2.4	2	40 - 130	118

Sulfide by Titration in Water

Method: ME-(AU)-[ENV]AN149

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212955.002	Sulfide	mg/L	0.5	88	100	70 - 130	88

Total Phosphorus by Kjeldahl Digestion DA in Water

Method: ME-(AU)-[ENV]AN279/AN293(Sydney only)

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212800.002	Total Phosphorus (Kjeldahl Digestion) as P	mg/L	0.02	0.93	1	80 - 120	93

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212732.002	Arsenic, As	µg/L	1	19	20	80 - 120	94
	Beryllium, Be	µg/L	1	20	20	80 - 120	99
	Boron, B	µg/L	5	21	20	80 - 120	105
	Cadmium, Cd	µg/L	0.1	21	20	80 - 120	107
	Chromium, Cr	µg/L	1	21	20	80 - 120	106
	Cobalt, Co	µg/L	1	21	20	80 - 120	106
	Copper, Cu	µg/L	1	22	20	80 - 120	108
	Lead, Pb	µg/L	1	20	20	80 - 120	98
	Manganese, Mn	µg/L	1	21	20	80 - 120	105
	Nickel, Ni	µg/L	1	21	20	80 - 120	105
	Zinc, Zn	µg/L	5	21	20	80 - 120	107

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212709.002		TRH C10-C14	µg/L	50	1000	1200	60 - 140	86
		TRH C15-C28	µg/L	200	1100	1200	60 - 140	95
		TRH C29-C36	µg/L	200	910	1200	60 - 140	76
	TRH F Bands	TRH >C10-C16	µg/L	60	1100	1200	60 - 140	89
		TRH >C16-C34 (F3)	µg/L	500	1100	1200	60 - 140	94
		TRH >C34-C40 (F4)	µg/L	500	<500	600	60 - 140	68

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212811.002	Halogenated	1,1-dichloroethene	µg/L	0.5	50	45.45	60 - 140	110
	Aliphatics	1,2-dichloroethane	µg/L	0.5	51	45.45	60 - 140	112
		Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	52	45.45	60 - 140	113
	Halogenated	Chlorobenzene	µg/L	0.5	48	45.45	60 - 140	106
	Monocyclic	Benzene	µg/L	0.5	46	45.45	60 - 140	100
	Aromatic	Toluene	µg/L	0.5	46	45.45	60 - 140	101
		Ethylbenzene	µg/L	0.5	46	45.45	60 - 140	101
		m/p-xylene	µg/L	1	92	90.9	60 - 140	102
		o-xylene	µg/L	0.5	47	45.45	60 - 140	103
	Trihalomethan	Chloroform (THM)	µg/L	0.5	56	45.45	60 - 140	123

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB212811.002		TRH C6-C10	µg/L	50	890	946.63	60 - 140	94
		TRH C6-C9	µg/L	40	760	818.71	60 - 140	92
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	µg/L	50	610	639.67	60 - 140	96

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	LQRSYD
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
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Email	lqrsyd@slrconsulting.com
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	20

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
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Email	au.environmental.sydney@sgs.com
SGS Reference	**SE213457 R0**
Date Received	11/11/2020
Date Reported	18/11/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

SIGNATORIES

[redacted]

Senior Organic Chemist/Metals Chemist | Metals/Inorganics Team Leader | Senior Chemist

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 12/11/2020

PARAMETER	UOM	LOR	0407_WD_GW01_20111 SOIL - 11/11/2020 SE213457.001	0407_WD_GW02_20111 SOIL - 11/11/2020 SE213457.002	0407_WD_GW03_20111 SOIL - 11/11/2020 SE213457.003	0407_WD_GW04_20111 SOIL - 11/11/2020 SE213457.004	0407_WD_GW05_20111 SOIL - 11/11/2020 SE213457.005
Arsenic, As	mg/kg	1	<1	<1	<1	<1	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	1.8	1.7	1.2	2.0	2.2
Copper, Cu	mg/kg	0.5	<0.5	3.3	<0.5	<0.5	3.5
Lead, Pb	mg/kg	1	<1	6	1	<1	2
Nickel, Ni	mg/kg	0.5	0.6	0.9	0.7	0.9	1.1
Zinc, Zn	mg/kg	2	<2	12	2	<2	9

PARAMETER	UOM	LOR	0407_WD_GW06_20111 SOIL - 11/11/2020 SE213457.006	0407_WD_GW07_20111 SOIL - 11/11/2020 SE213457.007	0407_WD_GW08_20111 SOIL - 11/11/2020 SE213457.008	0407_WD_GW09_20111 SOIL - 11/11/2020 SE213457.009	0407_WD_GW10_20111 SOIL - 11/11/2020 SE213457.010
Arsenic, As	mg/kg	1	<1	<1	<1	<1	<1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	1.6	2.2	1.5	1.8	1.7
Copper, Cu	mg/kg	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Lead, Pb	mg/kg	1	1	<1	2	<1	<1
Nickel, Ni	mg/kg	0.5	0.6	0.9	1.2	0.7	0.6
Zinc, Zn	mg/kg	2	<2	<2	3	<2	<2

PARAMETER	UOM	LOR	0407_WD_GW11_20111 SOIL - 11/11/2020 SE213457.011	0407_WD_GW12_20111 SOIL - 11/11/2020 SE213457.012	0407_WD_GW13a_21111 SOIL - 11/11/2020 SE213457.013	0407_WD_GW18_20111 SOIL - 11/11/2020 SE213457.019	0407_WD_GW19_20111 SOIL - 11/11/2020 SE213457.020
Arsenic, As	mg/kg	1	<1	<1	1	<1	1
Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Chromium, Cr	mg/kg	0.5	2.5	1.2	2.5	1.6	2.9
Copper, Cu	mg/kg	0.5	<0.5	<0.5	1.4	1.6	3.6
Lead, Pb	mg/kg	1	<1	1	12	11	7
Nickel, Ni	mg/kg	0.5	0.5	0.5	4.3	0.8	2.8
Zinc, Zn	mg/kg	2	<2	<2	62	6	10

Mercury in Soil [AN312] Tested: 12/11/2020

PARAMETER	UOM	LOR	0407_WD_GW01_20111 SOIL - 11/11/2020 SE213457.001	0407_WD_GW02_20111 SOIL - 11/11/2020 SE213457.002	0407_WD_GW03_20111 SOIL - 11/11/2020 SE213457.003	0407_WD_GW04_20111 SOIL - 11/11/2020 SE213457.004	0407_WD_GW05_20111 SOIL - 11/11/2020 SE213457.005
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_WD_GW06_20111 SOIL - 11/11/2020 SE213457.006	0407_WD_GW07_20111 SOIL - 11/11/2020 SE213457.007	0407_WD_GW08_20111 SOIL - 11/11/2020 SE213457.008	0407_WD_GW09_20111 SOIL - 11/11/2020 SE213457.009	0407_WD_GW10_20111 SOIL - 11/11/2020 SE213457.010
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

PARAMETER	UOM	LOR	0407_WD_GW11_20111 SOIL - 11/11/2020 SE213457.011	0407_WD_GW12_20111 SOIL - 11/11/2020 SE213457.012	0407_WD_GW13a_21111 SOIL - 11/11/2020 SE213457.013	0407_WD_GW18_20111 SOIL - 11/11/2020 SE213457.019	0407_WD_GW19_20111 SOIL - 11/11/2020 SE213457.020
Mercury	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05	<0.05

Moisture Content [AN002] Tested: 12/11/2020

PARAMETER	UOM	LOR	0407_WD_GW01_20111 SOIL - 11/11/2020 SE213457.001	0407_WD_GW02_20111 SOIL - 11/11/2020 SE213457.002	0407_WD_GW03_20111 SOIL - 11/11/2020 SE213457.003	0407_WD_GW04_20111 SOIL - 11/11/2020 SE213457.004	0407_WD_GW05_20111 SOIL - 11/11/2020 SE213457.005
% Moisture	%w/w	1	2.7	2.3	4.3	4.5	3.4

PARAMETER	UOM	LOR	0407_WD_GW06_20111 SOIL - 11/11/2020 SE213457.006	0407_WD_GW07_20111 SOIL - 11/11/2020 SE213457.007	0407_WD_GW08_20111 SOIL - 11/11/2020 SE213457.008	0407_WD_GW09_20111 SOIL - 11/11/2020 SE213457.009	0407_WD_GW10_20111 SOIL - 11/11/2020 SE213457.010
% Moisture	%w/w	1	5.3	2.9	4.5	2.7	1.0

PARAMETER	UOM	LOR	0407_WD_GW11_20111 SOIL - 11/11/2020 SE213457.011	0407_WD_GW12_20111 SOIL - 11/11/2020 SE213457.012	0407_WD_GW13a_21111 SOIL - 11/11/2020 SE213457.013	0407_WD_GW18_20111 SOIL - 11/11/2020 SE213457.019	0407_WD_GW19_20111 SOIL - 11/11/2020 SE213457.020
% Moisture	%w/w	1	3.8	4.3	6.7	5.8	4.4

Trace Metals (Dissolved) in Water by ICPMS [AN318] Tested: 13/11/2020

PARAMETER	UOM	LOR	0407_WD_GW14_20111 WATER - 11/11/2020 SE213457.015
Arsenic, As	µg/L	1	**1**
Cadmium, Cd	µg/L	0.1	<0.1
Copper, Cu	µg/L	1	**5**
Chromium, Cr	µg/L	1	**5**
Nickel, Ni	µg/L	1	<1
Lead, Pb	µg/L	1	<1
Zinc, Zn	µg/L	5	**13**

Mercury (dissolved) in Water [AN311(Perth)/AN312] Tested: 12/11/2020

PARAMETER	UOM	LOR	0407_WD_GW14_20111 WATER - 11/11/2020 SE213457.015
Mercury	mg/L	0.0001	<0.0001

Trace Metals (Total) in Water by ICPMS [AN022/AN318] Tested: 13/11/2020

PARAMETER	UOM	LOR	0407_WD_GW13b_2 1111 WATER - 11/11/2020 SE213457.014	0407_WD_GW15_20 111 WATER - 11/11/2020 SE213457.016	0407_WD_GW16_20 111 WATER - 11/11/2020 SE213457.017	0407_WD_GW17_20 111 WATER - 11/11/2020 SE213457.018
Total Arsenic	µg/L	1	**3**	**1**	<1	<1
Total Cadmium	µg/L	0.1	<0.1	<0.1	<0.1	<0.1
Total Chromium	µg/L	1	**7**	**8**	**2**	<1
Total Copper	µg/L	1	**4**	**42**	**26**	**9**
Total Nickel	µg/L	1	**6**	**8**	**3**	**4**
Total Lead	µg/L	1	**3**	**4**	**3**	**6**
Total Zinc	µg/L	5	**39**	**110**	**510**	**69**

Mercury (total) in Water [AN311(Perth) /AN312] Tested: 12/11/2020

PARAMETER	UOM	LOR	0407_WD_GW13b_2 1111 WATER - 11/11/2020 SE213457.014	0407_WD_GW15_20 111 WATER - 11/11/2020 SE213457.016	0407_WD_GW16_20 111 WATER - 11/11/2020 SE213457.017	0407_WD_GW17_20 111 WATER - 11/11/2020 SE213457.018
Total Mercury	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN020	Unpreserved water sample is filtered through a 0.45µm membrane filter and acidified with nitric acid similar to APHA3030B.
AN022/AN318	Following acid digestion of un filtered sample, determination of elements at trace level in waters by ICP-MS technique, referenced to USEPA 6020B and USEPA 200.8 (5.4).
AN022	The water sample is digested with Nitric Acid and made up to the original volume similar to APHA3030E.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
AN311(Perth) /AN312	Mercury by Cold Vapour AAS in Waters: Mercury ions taken from unfiltered sample are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500.
AN311(Perth)/AN312	Mercury by Cold Vapour AAS in Waters: Mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500.
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid , mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser . Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN318	Determination of elements at trace level in waters by ICP-MS technique,, referenced to USEPA 6020B and USEPA 200.8 (5.4).

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
**	Indicative data, theoretical holding time exceeded.	NVL	Not validated.	LOR	Limit of Reporting.
***	Indicates that both * and ** apply.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

This document is issued by the Company under its General Conditions of Service accessible at www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

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Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Anions by Ion Chromatography in Water

Method: ME-(AU)-[ENV]AN245

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE213055.001	LB212741.025	Nitrate Nitrogen, NO3-N	mg/L	0.005	1.9	<0.005	2	97

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE213112.001	LB212750.004	Mercury	mg/L	0.0001	0.0020	<0.0001	0.008	100

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE213112.001	LB212732.004	Arsenic, As	µg/L	1	21	<1	20	107
		Beryllium, Be	µg/L	1	21	<1	20	104
		Boron, B	µg/L	5	46	25	20	106
		Cadmium, Cd	µg/L	0.1	22	<0.1	20	112
		Chromium, Cr	µg/L	1	21	<1	20	105
		Cobalt, Co	µg/L	1	21	<1	20	104
		Copper, Cu	µg/L	1	31	11	20	104
		Lead, Pb	µg/L	1	20	<1	20	97
		Manganese, Mn	µg/L	1	32	4	20	140 ④
		Nickel, Ni	µg/L	1	21	<1	20	101
		Zinc, Zn	µg/L	5	33	9	20	121

VOCs in Water

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE213169.001	LB212811.024	Monocyclic	Benzene	µg/L	0.5	<0.5	45.45	100
		Aromatic	Toluene	µg/L	0.5	<0.5	45.45	101
			Ethylbenzene	µg/L	0.5	<0.5	45.45	99
			m/p-xylene	µg/L	1	<1	90.9	100
			o-xylene	µg/L	0.5	<0.5	45.45	101
		Polycyclic	Naphthalene	µg/L	0.5	<0.5	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/L	-	9.6	-	104
			d8-toluene (Surrogate)	mg/L	-	9.7	-	105
			Bromofluorobenzene (Surrogate)	mg/L	-	10	-	102

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE213169.001	LB212811.026		TRH C6-C10	µg/L	50	1.3	<50	946.63	135
			TRH C6-C9	µg/L	40	1.1	<40	818.71	131
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/L	-	0.0	9.6	-	104
			d8-toluene (Surrogate)	mg/L	-	0.0	9.7	-	105
			Bromofluorobenzene (Surrogate)	mg/L	-	0.0	10	-	102
		VPH F	Benzene (F0)	µg/L	0.5		<0.5	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	µg/L	50	1.0	<50	639.67	158 ④

MATRIX SPIKE DUPLICATES

SE213112 R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
***	Indicates that both * and ** apply.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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source Sydney.pdf page 1 SGS Ref SE213457_COC

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☒ SYDNEY: 202 Submarine School, Sub Base Platypus, North Sydney, 2060
- ✓ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2601
- ☐ MACKAY: 21 River Street, Mackay, QLD 4741
- ☐ PERTH: 503 Murray Street, Perth, WA 6021
- ☐ TOWNSVILLE: 514 Stuart Street, Townsville, QLD 4811
- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0821

CLIENT: Defence Housing Australia

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGER: [redacted]

PM CONTACT [redacted]

LABORATORY: SGS

LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015

SAMPLER [redacted]

SAMPLER CONTACT No: [redacted]

Email Reports and Invoices to: LQRSYD@slrconsulting.com, [redacted]

Turnaround Time (TAT)

✓ Standard TAT

☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number 1 of 1

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Metals 8 (Ar, Cd, Cr, Cu, Hg, Pb, Ni, Zn)							HOLD	Additional Information (Comment on any gross contamination or specific requirements)
1	0407_WD_GW01_201111	11-11-2020	Soil		X								
2	0407_WD_GW02_201111	11-11-2020	Soil		X								
3	0407_WD_GW03_201111	11-11-2020	Soil		X								
4	0407_WD_GW04_201111	11-11-2020	Soil		X								
5	0407_WD_GW05_201111	11-11-2020	Soil		X								
6	0407_WD_GW06_201111	11-11-2020	Soil		X								
7	0407_WD_GW07_201111	11-11-2020	Soil		X								
8	0407_WD_GW08_201111	11-11-2020	Soil		X								
9	0407_WD_GW09_201111	11-11-2020	Soil		X								
10	0407_WD_GW10_201111	11-11-2020	Soil		X								
11	0407_WD_GW11_201111	11-11-2020	Soil		X								
12	0407_WD_GW12_201111	11-11-2020	Soil		X								
13	0407_WD_GW13a_201111	11-11-2020	Soil		X								
14	0407_WD_GW13b_201111	11-11-2020	Water		X								
15	0407_WD_GW14_201111	11-11-2020	Water		X								Field filtered
16	0407_WD_GW15_201111	11-11-2020	Water		X								

SGS EHS Sydney COC

SE213457

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 11-11-2020	Received by	Sign [redacted]	Date / Time 3.3pm	Temperature Received: 11°C
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time 11/11/20	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd
ABN 29 001 584 612

PROJECT OFFICE (Tick one)

☐	BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000	☐	GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227	☐	NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305	☒	SYDNEY: 202 Submarine School, Sub Base Platypus, North Sydney, 2060
✓	MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122	☐	CANBERRA: GPO Box 410, Canberra ACT 2601	☐	MACKAY: 21 River Street, Mackay, QLD 4741	☐	PERTH: 503 Murray Street, Perth, WA 6001
☐	TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4811	☐	DARWIN: 23 Paran Rd, Darwin, NT 0821				

CLIENT: **Defence Housing Australia**
PROJECT: **Randwick Barracks**
PROJECT NUMBER: **610.30041**
PROJECT MANAGER: [redacted]
PM CONTACT No: [redacted]

LABORATORY: **SGS**
LABORATORY ADDRESS: **Unit 16/33 Maddox St, Alexandria NSW 2015**
SAMPLER: [redacted]
SAMPLER CONTACT No: [redacted]
Email Reports and Invoices to: **LQRSYD@slrconsulting.com,** [redacted]

Turnaround Time (TAT)
✓ Standard TAT
☐ Non Standard or Urgent TAT
Required TAT: Standard

COC Number: 1 of 1

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Metals 8 (Ar, Cd, Cr, Cu, Hg, Pb, Ni, Zn)							HOLD	Additional Information (Comment on any gross contamination or specific requirements)
17	0407_WD_GW16_201111	11-11-2020	Water		X								
18	0407_WD_GW17_201111	11-11-2020	Water		X								
19	0407_WD_GW18_201111	11-11-2020	Soil		X								
20	0407_WD_GW19_201111	11-11-2020	Soil		X								

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time	11-11-2020	Received by	Sign	Date / Time
Relinquished By	Sign	Date / Time		Received by	Sign	Date / Time
Relinquished By	Sign	Date / Time		Received by	Sign	Date / Time

Temperature Received:

SAMPLE RECEIPT ADVICE

SE213457

CLIENT DETAILS

Contact	LQRSYD
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	02 9427 8100
Facsimile	02 9427 8200
Email	lqrsyd@slrconsulting.com
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	20

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Wed 11/11/2020
Report Due	Wed 18/11/2020
SGS Reference	**SE213457**

SUBMISSION DETAILS

This is to confirm that 20 samples were received on Wednesday 11/11/2020. Results are expected to be ready by COB Wednesday 18/11/2020. Please quote SGS reference SE213457 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	15 Soil, 5 Water
Date documentation received	11/11/2020	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	11C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

1 extra sample 0407_W01_201111 received.

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SAMPLE RECEIPT ADVICE

SE213457

CLIENT DETAILS

Client SLR CONSULTING AUSTRALIA PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Mercury (dissolved) in Water	Mercury in Soil	Moisture Content	Total Recoverable Elements in Soil/Waste	Trace Metals (Dissolved) in Water by ICPMS	Trace Metals (Total) in Water by ICPMS
001	0407_WD_GW01_201111	-	1	1	7	-	-
002	0407_WD_GW02_201111	-	1	1	7	-	-
003	0407_WD_GW03_201111	-	1	1	7	-	-
004	0407_WD_GW04_201111	-	1	1	7	-	-
005	0407_WD_GW05_201111	-	1	1	7	-	-
006	0407_WD_GW06_201111	-	1	1	7	-	-
007	0407_WD_GW07_201111	-	1	1	7	-	-
008	0407_WD_GW08_201111	-	1	1	7	-	-
009	0407_WD_GW09_201111	-	1	1	7	-	-
010	0407_WD_GW10_201111	-	1	1	7	-	-
011	0407_WD_GW11_201111	-	1	1	7	-	-
012	0407_WD_GW12_201111	-	1	1	7	-	-
013	0407_WD_GW13a_201111	-	1	1	7	-	-
014	0407_WD_GW13b_201111	-	-	-	-	-	7
015	0407_WD_GW14_201111	1	-	-	-	7	-
016	0407_WD_GW15_201111	-	-	-	-	-	7
017	0407_WD_GW16_201111	-	-	-	-	-	7
018	0407_WD_GW17_201111	-	-	-	-	-	7
019	0407_WD_GW18_201111	-	1	1	7	-	-
020	0407_WD_GW19_201111	-	1	1	7	-	-

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE213457

CLIENT DETAILS

Client SLR CONSULTING AUSTRALIA PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Mercury (total) in Water
014	0407_WD_GW13b_201111	1
016	0407_WD_GW15_201111	1
017	0407_WD_GW16_201111	1
018	0407_WD_GW17_201111	1

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

STATEMENT OF QA/QC PERFORMANCE

SE213457 R0

CLIENT DETAILS

Contact	LQRSYD
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	02 9427 8100
Facsimile	02 9427 8200
Email	lqrsyd@slrconsulting.com
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	20

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE213457 R0**
Date Received	11 Nov 2020
Date Reported	18 Nov 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met (within the SGS Alexandria Environmental laboratory).

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	15 Soil, 5 Water
Date documentation received	11/11/2020	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	11C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE213457 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_WD_GW14_201111	SE213457.015	LB213235	11 Nov 2020	11 Nov 2020	09 Dec 2020	12 Nov 2020	09 Dec 2020	16 Nov 2020

Mercury (total) in Water

Method: ME-(AU)-[ENV]AN311(Perth) /AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_WD_GW13b_201111	SE213457.014	LB213227	11 Nov 2020	11 Nov 2020	09 Dec 2020	12 Nov 2020	09 Dec 2020	16 Nov 2020
0407_WD_GW15_201111	SE213457.016	LB213227	11 Nov 2020	11 Nov 2020	09 Dec 2020	12 Nov 2020	09 Dec 2020	16 Nov 2020
0407_WD_GW16_201111	SE213457.017	LB213227	11 Nov 2020	11 Nov 2020	09 Dec 2020	12 Nov 2020	09 Dec 2020	16 Nov 2020
0407_WD_GW17_201111	SE213457.018	LB213227	11 Nov 2020	11 Nov 2020	09 Dec 2020	12 Nov 2020	09 Dec 2020	16 Nov 2020

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_WD_GW01_201111	SE213457.001	LB213239	11 Nov 2020	11 Nov 2020	09 Dec 2020	12 Nov 2020	09 Dec 2020	16 Nov 2020
0407_WD_GW02_201111	SE213457.002	LB213239	11 Nov 2020	11 Nov 2020	09 Dec 2020	12 Nov 2020	09 Dec 2020	16 Nov 2020
0407_WD_GW03_201111	SE213457.003	LB213239	11 Nov 2020	11 Nov 2020	09 Dec 2020	12 Nov 2020	09 Dec 2020	16 Nov 2020
0407_WD_GW04_201111	SE213457.004	LB213239	11 Nov 2020	11 Nov 2020	09 Dec 2020	12 Nov 2020	09 Dec 2020	16 Nov 2020
0407_WD_GW05_201111	SE213457.005	LB213239	11 Nov 2020	11 Nov 2020	09 Dec 2020	12 Nov 2020	09 Dec 2020	16 Nov 2020
0407_WD_GW06_201111	SE213457.006	LB213239	11 Nov 2020	11 Nov 2020	09 Dec 2020	12 Nov 2020	09 Dec 2020	16 Nov 2020
0407_WD_GW07_201111	SE213457.007	LB213239	11 Nov 2020	11 Nov 2020	09 Dec 2020	12 Nov 2020	09 Dec 2020	16 Nov 2020
0407_WD_GW08_201111	SE213457.008	LB213239	11 Nov 2020	11 Nov 2020	09 Dec 2020	12 Nov 2020	09 Dec 2020	16 Nov 2020
0407_WD_GW09_201111	SE213457.009	LB213239	11 Nov 2020	11 Nov 2020	09 Dec 2020	12 Nov 2020	09 Dec 2020	16 Nov 2020
0407_WD_GW10_201111	SE213457.010	LB213239	11 Nov 2020	11 Nov 2020	09 Dec 2020	12 Nov 2020	09 Dec 2020	16 Nov 2020
0407_WD_GW11_201111	SE213457.011	LB213239	11 Nov 2020	11 Nov 2020	09 Dec 2020	12 Nov 2020	09 Dec 2020	16 Nov 2020
0407_WD_GW12_201111	SE213457.012	LB213239	11 Nov 2020	11 Nov 2020	09 Dec 2020	12 Nov 2020	09 Dec 2020	16 Nov 2020
0407_WD_GW13a_201111	SE213457.013	LB213239	11 Nov 2020	11 Nov 2020	09 Dec 2020	12 Nov 2020	09 Dec 2020	16 Nov 2020
0407_WD_GW18_201111	SE213457.019	LB213239	11 Nov 2020	11 Nov 2020	09 Dec 2020	12 Nov 2020	09 Dec 2020	16 Nov 2020
0407_WD_GW19_201111	SE213457.020	LB213239	11 Nov 2020	11 Nov 2020	09 Dec 2020	12 Nov 2020	09 Dec 2020	16 Nov 2020

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_WD_GW01_201111	SE213457.001	LB213240	11 Nov 2020	11 Nov 2020	25 Nov 2020	12 Nov 2020	17 Nov 2020	16 Nov 2020
0407_WD_GW02_201111	SE213457.002	LB213240	11 Nov 2020	11 Nov 2020	25 Nov 2020	12 Nov 2020	17 Nov 2020	16 Nov 2020
0407_WD_GW03_201111	SE213457.003	LB213240	11 Nov 2020	11 Nov 2020	25 Nov 2020	12 Nov 2020	17 Nov 2020	16 Nov 2020
0407_WD_GW04_201111	SE213457.004	LB213240	11 Nov 2020	11 Nov 2020	25 Nov 2020	12 Nov 2020	17 Nov 2020	16 Nov 2020
0407_WD_GW05_201111	SE213457.005	LB213240	11 Nov 2020	11 Nov 2020	25 Nov 2020	12 Nov 2020	17 Nov 2020	16 Nov 2020
0407_WD_GW06_201111	SE213457.006	LB213240	11 Nov 2020	11 Nov 2020	25 Nov 2020	12 Nov 2020	17 Nov 2020	16 Nov 2020
0407_WD_GW07_201111	SE213457.007	LB213240	11 Nov 2020	11 Nov 2020	25 Nov 2020	12 Nov 2020	17 Nov 2020	16 Nov 2020
0407_WD_GW08_201111	SE213457.008	LB213240	11 Nov 2020	11 Nov 2020	25 Nov 2020	12 Nov 2020	17 Nov 2020	16 Nov 2020
0407_WD_GW09_201111	SE213457.009	LB213240	11 Nov 2020	11 Nov 2020	25 Nov 2020	12 Nov 2020	17 Nov 2020	16 Nov 2020
0407_WD_GW10_201111	SE213457.010	LB213240	11 Nov 2020	11 Nov 2020	25 Nov 2020	12 Nov 2020	17 Nov 2020	16 Nov 2020
0407_WD_GW11_201111	SE213457.011	LB213240	11 Nov 2020	11 Nov 2020	25 Nov 2020	12 Nov 2020	17 Nov 2020	16 Nov 2020
0407_WD_GW12_201111	SE213457.012	LB213240	11 Nov 2020	11 Nov 2020	25 Nov 2020	12 Nov 2020	17 Nov 2020	16 Nov 2020
0407_WD_GW13a_201111	SE213457.013	LB213240	11 Nov 2020	11 Nov 2020	25 Nov 2020	12 Nov 2020	17 Nov 2020	16 Nov 2020
0407_WD_GW18_201111	SE213457.019	LB213240	11 Nov 2020	11 Nov 2020	25 Nov 2020	12 Nov 2020	17 Nov 2020	16 Nov 2020
0407_WD_GW19_201111	SE213457.020	LB213240	11 Nov 2020	11 Nov 2020	25 Nov 2020	12 Nov 2020	17 Nov 2020	16 Nov 2020

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_WD_GW01_201111	SE213457.001	LB213237	11 Nov 2020	11 Nov 2020	10 May 2021	12 Nov 2020	10 May 2021	16 Nov 2020
0407_WD_GW02_201111	SE213457.002	LB213237	11 Nov 2020	11 Nov 2020	10 May 2021	12 Nov 2020	10 May 2021	16 Nov 2020
0407_WD_GW03_201111	SE213457.003	LB213237	11 Nov 2020	11 Nov 2020	10 May 2021	12 Nov 2020	10 May 2021	16 Nov 2020
0407_WD_GW04_201111	SE213457.004	LB213237	11 Nov 2020	11 Nov 2020	10 May 2021	12 Nov 2020	10 May 2021	16 Nov 2020
0407_WD_GW05_201111	SE213457.005	LB213237	11 Nov 2020	11 Nov 2020	10 May 2021	12 Nov 2020	10 May 2021	16 Nov 2020
0407_WD_GW06_201111	SE213457.006	LB213237	11 Nov 2020	11 Nov 2020	10 May 2021	12 Nov 2020	10 May 2021	16 Nov 2020
0407_WD_GW07_201111	SE213457.007	LB213237	11 Nov 2020	11 Nov 2020	10 May 2021	12 Nov 2020	10 May 2021	16 Nov 2020
0407_WD_GW08_201111	SE213457.008	LB213237	11 Nov 2020	11 Nov 2020	10 May 2021	12 Nov 2020	10 May 2021	16 Nov 2020
0407_WD_GW09_201111	SE213457.009	LB213237	11 Nov 2020	11 Nov 2020	10 May 2021	12 Nov 2020	10 May 2021	16 Nov 2020
0407_WD_GW10_201111	SE213457.010	LB213237	11 Nov 2020	11 Nov 2020	10 May 2021	12 Nov 2020	10 May 2021	16 Nov 2020
0407_WD_GW11_201111	SE213457.011	LB213237	11 Nov 2020	11 Nov 2020	10 May 2021	12 Nov 2020	10 May 2021	16 Nov 2020
0407_WD_GW12_201111	SE213457.012	LB213237	11 Nov 2020	11 Nov 2020	10 May 2021	12 Nov 2020	10 May 2021	16 Nov 2020
0407_WD_GW13a_201111	SE213457.013	LB213237	11 Nov 2020	11 Nov 2020	10 May 2021	12 Nov 2020	10 May 2021	16 Nov 2020
0407_WD_GW18_201111	SE213457.019	LB213237	11 Nov 2020	11 Nov 2020	10 May 2021	12 Nov 2020	10 May 2021	16 Nov 2020

HOLDING TIME SUMMARY

SE213457 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES (continued)

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_WD_GW19_201111	SE213457.020	LB213237	11 Nov 2020	11 Nov 2020	10 May 2021	12 Nov 2020	10 May 2021	16 Nov 2020

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_WD_GW14_201111	SE213457.015	LB213347	11 Nov 2020	11 Nov 2020	10 May 2021	13 Nov 2020	10 May 2021	16 Nov 2020

Trace Metals (Total) in Water by ICPMS

Method: ME-(AU)-[ENV]AN022/AN318

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_WD_GW13b_201111	SE213457.014	LB213348	11 Nov 2020	11 Nov 2020	10 May 2021	13 Nov 2020	10 May 2021	16 Nov 2020
0407_WD_GW15_201111	SE213457.016	LB213348	11 Nov 2020	11 Nov 2020	10 May 2021	13 Nov 2020	10 May 2021	16 Nov 2020
0407_WD_GW16_201111	SE213457.017	LB213348	11 Nov 2020	11 Nov 2020	10 May 2021	13 Nov 2020	10 May 2021	16 Nov 2020
0407_WD_GW17_201111	SE213457.018	LB213348	11 Nov 2020	11 Nov 2020	10 May 2021	13 Nov 2020	10 May 2021	16 Nov 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No surrogates were required for this job.

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

Sample Number	Parameter	Units	LOR	Result
LB213235.001	Mercury	mg/L	0.0001	<0.0001

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result
LB213239.001	Mercury	mg/kg	0.05	<0.05

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB213237.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Sample Number	Parameter	Units	LOR	Result
LB213347.001	Arsenic, As	µg/L	1	<1
	Cadmium, Cd	µg/L	0.1	<0.1
	Chromium, Cr	µg/L	1	<1
	Copper, Cu	µg/L	1	<1
	Lead, Pb	µg/L	1	<1
	Nickel, Ni	µg/L	1	<1
	Zinc, Zn	µg/L	5	<5

Trace Metals (Total) in Water by ICPMS

Method: ME-(AU)-[ENV]AN022/AN318

Sample Number	Parameter	Units	LOR	Result
LB213348.001	Total Arsenic	µg/L	1	<1
	Total Cadmium	µg/L	0.1	<0.1
	Total Copper	µg/L	1	<1
	Total Lead	µg/L	1	<1
	Total Nickel	µg/L	1	<1
	Total Zinc	µg/L	5	<5

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE213457.015	LB213235.012	Mercury	µg/L	0.0001	<0.0001	<0.0001	200	198

Mercury (total) in Water

Method: ME-(AU)-[ENV]AN311(Perth) /AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE213457.018	LB213227.008	Total Mercury	µg/L	0.0001	<0.0001	0.0001	104	95

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE213457.006	LB213239.014	Mercury	mg/kg	0.05	<0.05	<0.05	200	0
SE213457.020	LB213239.024	Mercury	mg/kg	0.05	<0.05	<0.05	200	0

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE213457.010	LB213240.011	% Moisture	%w/w	1	1.0	<1.0	141	4
SE213457.020	LB213240.017	% Moisture	%w/w	1	4.4	4.6	52	3

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE213457.006	LB213237.014	Arsenic, As	mg/kg	1	<1	<1	200	0
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	1.6	1.6	62	1
		Copper, Cu	mg/kg	0.5	<0.5	<0.5	200	0
		Nickel, Ni	mg/kg	0.5	0.6	0.7	107	12
		Lead, Pb	mg/kg	1	1	<1	138	1
		Zinc, Zn	mg/kg	2	<2	<2	200	0
SE213457.020	LB213237.024	Arsenic, As	mg/kg	1	1	1	110	12
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	2.9	3.0	47	1
		Copper, Cu	mg/kg	0.5	3.6	3.0	45	18
		Nickel, Ni	mg/kg	0.5	2.8	2.2	50	26
		Lead, Pb	mg/kg	1	7	7	44	9
		Zinc, Zn	mg/kg	2	10	10	50	9

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE213457.015	LB213347.014	Arsenic, As	µg/L	1	1	1	83	0
		Cadmium, Cd	µg/L	0.1	<0.1	<0.1	200	0
		Chromium, Cr	µg/L	1	5	5	36	1
		Copper, Cu	µg/L	1	5	5	34	1
		Lead, Pb	µg/L	1	<1	<1	200	0
		Nickel, Ni	µg/L	1	<1	<1	124	0
		Zinc, Zn	µg/L	5	13	13	54	1
SE213508.001	LB213347.017	Arsenic, As	µg/L	1	0.527	0.514	200	0
		Cadmium, Cd	µg/L	0.1	0.003	0.003	200	0
		Chromium, Cr	µg/L	1	0.345	0.338	200	0
		Copper, Cu	µg/L	1	0.357	0.347	200	0
		Lead, Pb	µg/L	1	0.11	0.117	200	0
		Nickel, Ni	µg/L	1	0.224	0.229	200	0
		Zinc, Zn	µg/L	5	1.277	1.373	200	0

Trace Metals (Total) in Water by ICPMS

Method: ME-(AU)-[ENV]AN022/AN318

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE213482.006	LB213348.014	Total Arsenic	µg/L	1	310	300	15	4
SE213527.002	LB213348.023	Total Arsenic	µg/L	1	1	1	90	0
		Total Cadmium	µg/L	0.1	<0.1	<0.1	200	0
		Total Chromium	µg/L	1	<1	<1	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Trace Metals (Total) in Water by ICPMS (continued) — **Method: ME-(AU)-[ENV]AN022/AN318**

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE213527.002	LB213348.023	Total Copper	µg/L	1	2	2	74	2
		Total Lead	µg/L	1	<1	<1	200	0
		Total Nickel	µg/L	1	1	1	83	3
		Total Zinc	µg/L	5	<5	<5	153	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB213239.002	Mercury	mg/kg	0.05	0.22	0.2	70 - 130	109

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB213237.002	Arsenic, As	mg/kg	1	330	318.22	80 - 120	102
	Cadmium, Cd	mg/kg	0.3	4.6	5.41	80 - 120	85
	Chromium, Cr	mg/kg	0.5	39	38.31	80 - 120	102
	Copper, Cu	mg/kg	0.5	300	290	80 - 120	103
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	103
	Lead, Pb	mg/kg	1	95	89.9	80 - 120	105
	Zinc, Zn	mg/kg	2	270	273	80 - 120	101

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB213347.002	Arsenic, As	µg/L	1	18	20	80 - 120	91
	Cadmium, Cd	µg/L	0.1	20	20	80 - 120	102
	Chromium, Cr	µg/L	1	21	20	80 - 120	106
	Copper, Cu	µg/L	1	22	20	80 - 120	108
	Lead, Pb	µg/L	1	19	20	80 - 120	95
	Nickel, Ni	µg/L	1	21	20	80 - 120	104
	Zinc, Zn	µg/L	5	22	20	80 - 120	109

Trace Metals (Total) in Water by ICPMS

Method: ME-(AU)-[ENV]AN022/AN318

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB213348.002	Total Arsenic	µg/L	1	17	20	80 - 120	83
	Total Cadmium	µg/L	0.1	20	20	80 - 120	98
	Total Chromium	µg/L	1	21	20	80 - 120	104
	Total Copper	µg/L	1	21	20	80 - 120	106
	Total Lead	µg/L	1	19	20	80 - 120	93
	Total Nickel	µg/L	1	20	20	80 - 120	101
	Total Zinc	µg/L	5	19	20	80 - 120	97

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE213347.007	LB213239.004	Mercury	mg/kg	0.05	0.20	<0.05	0.2	97

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE213347.007	LB213237.004	Arsenic, As	mg/kg	1	45	2	50	86
		Cadmium, Cd	mg/kg	0.3	41	<0.3	50	82
		Chromium, Cr	mg/kg	0.5	49	4.1	50	90
		Copper, Cu	mg/kg	0.5	48	1.6	50	93
		Nickel, Ni	mg/kg	0.5	48	2.1	50	93
		Lead, Pb	mg/kg	1	54	10	50	88
		Zinc, Zn	mg/kg	2	54	13	50	82

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE213445.001	LB213347.004	Copper, Cu	µg/L	1	22	2.766	20	96
		Zinc, Zn	µg/L	5	110	87.969	20	106

Trace Metals (Total) in Water by ICPMS

Method: ME-(AU)-[ENV]AN022/AN318

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE213457.014	LB213348.004	Total Arsenic	µg/L	1	21	3	20	91
		Total Cadmium	µg/L	0.1	21	<0.1	20	105
		Total Chromium	µg/L	1	28	7	-	-
		Total Copper	µg/L	1	25	4	20	106
		Total Lead	µg/L	1	22	3	20	97
		Total Nickel	µg/L	1	26	6	20	101
		Total Zinc	µg/L	5	63	39	20	122

MATRIX SPIKE DUPLICATES

SE213457 R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
***	Indicates that both * and ** apply.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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CHAIN OF CUSTODY & ANALYSIS REQUEST

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To: Eurofins Mgt
Unit F3, Building F
16 Mars Road Lane Cove West NSW 2066
Phone: 02 9900 8421
Facsimile:

Purchase Order No:
Results: **13/7/20**
Comment:
Initiating: [redacted]au.samplereceipt.sydney@sgs.com)
Send Results: AU.Environmental.Sydney@sgs.com

Our Report No: SE208000A Sample ID	Client Reference	Date sampled	Soil	PRESERVATIVE	CONTAINER TYPE	Explosives (See attachment)	Please report date extracted and date analysed
SE208000A.001	0407_TP014_0.1_200623	23/6/20	X			X	
SE208000A.002	0407_TP014_0.5_200623	23/6/20	X			X	
SE208000A.033	0407_TP041_0.1_200623	23/6/20	X			X	
SE208000A.034	0407_TP041_1.0_200623	23/6/20	X			X	

SGS Alexandria Environmental
SE208000A SUBCON
Received: 03 – Jul – 2020

Relinquished By: Emily Yin	Date/Time: 8/7/2020	Received By:	Date/Time
Samples Intact: Yes / No	Temperature: Ambient / Chilled	Sample Cooler Sealed: Yes / No	Laboratory Quotation No:
Comments:		**Courier Service:**	**Consignment No:**

Explosives list

1,3-Dinitrobenzene
1,3,5-Trinitrobenzene
1,4-Dinitrobenzene
2-Amino-4,6-Dinitrotoluene
2-Nitrotoluene
3-Nitrotoluene
4-Amino-2,6-Dinitrotoluene
4-Nitrotoluene
Dinitro toluene
HMX
Nitrobenzene
Nitro-glycerine
PETN
RDX
o-Dinitrobenzene (Surrogate)
Tetryl
2,4,6-TNT

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Project Name: SE208000A

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Report #: 730587
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Received: Jul 8, 2020 4:31 PM
Due: Jul 13, 2020
Priority: 3 Day
Contact Name: Results Environmental

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Nitroglycerine (NG)	Moisture Set	Explosives
Melbourne Laboratory - NATA Site # 1254 & 14271						X	X	X
Sydney Laboratory - NATA Site # 18217								
Brisbane Laboratory - NATA Site # 20794								
Perth Laboratory - NATA Site # 23736								
External Laboratory								
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**			
1	SE20800A.001 0407_TP014_ 0.1_260623	Jun 23, 2020		Soil	S20-Jl14676	X	X	X
2	SE20800A.002 0407_TP014_ 0.5_260623	Jun 23, 2020		Soil	S20-Jl14677	X	X	X
3	SE20800A.033 0407_TP041_ 0.1_260623	Jun 23, 2020		Soil	S20-Jl14678	X	X	X
4	SE20800A.034 0407_TP041_ 1.0_260623	Jun 23, 2020		Soil	S20-Jl14679	X	X	X
Test Counts						4	4	4

SGS Environmental Services NSW
PO: 50385415
Unit 16/33 Maddox St
Alexandria NSW 2015

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: **Results Environmental**

Report **730587-S**
Project name SE208000A
Received Date Jul 08, 2020

Client Sample ID			**SE20800A.001 0407_TP014_0.1_260623**	**SE20800A.002 0407_TP014_0.5_260623**	**SE20800A.033 0407_TP041_0.1_260623**	**SE20800A.034 0407_TP041_1.0_260623**
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-JI14676**	**S20-JI14677**	**S20-JI14678**	**S20-JI14679**
Date Sampled			**Jun 23, 2020**	**Jun 23, 2020**	**Jun 23, 2020**	**Jun 23, 2020**
Test/Reference	LOR	Unit				
Nitroglycerine (NG)	5	mg/kg	< 5	< 5	< 5	< 5
% Moisture	1	%	9.6	14	5.9	3.9
Explosives						
Octahydro-1.3.5.7-tetranitro-1.3.5.7-tetrazocine (HMX)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pentaerythritol tetranitrate (PETN)	1	mg/kg	< 1	< 1	< 1	< 1
1-Chloro-2-nitrobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1-Chloro-3-nitrobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1-Chloro-4-nitrobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dinitrobenzene (1.3-DNB)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3.5-Trinitrobenzene (1.3.5-TNB)	1	mg/kg	< 1	< 1	< 1	< 1
2-Amino-4.6 dinitrotoluene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Nitrotoluene (2-NT)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4- & 2.6-Dinitrotoluene	1	mg/kg	< 1	< 1	< 1	< 1
3-Nitrotoluene (3-NT)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Amino-2.6-dinitrotoluene (4-Am-DNT)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Nitrotoluene (4-NT)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Hexahydro-1.3.5-trinitro-1.3.5-triazine (RDX)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Methyl-2.4.6-trinitrophenylnitramine (Tetryl)	1	mg/kg	< 1	< 1	< 1	< 1
Nitrobenzene (NB)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TNT	1	mg/kg	< 1	< 1	< 1	< 1

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Nitroglycerine (NG)	Melbourne	Jul 10, 2020	14 Days
- Method: USEPA Method 8332			
Explosives	Melbourne	Jul 10, 2020	14 Days
- Method: LTM-ORG-2230 Determination of Explosive by HPLC			
% Moisture	Melbourne	Jul 08, 2020	14 Days
- Method: LTM-GEN-7080 Moisture			

eurofins | Environment Testing

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Australia

Melbourne
6 Monterey Road
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Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

Sydney
Unit F3, Building F
16 Mars Road
Lane Cove West NSW 2066
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

Brisbane
1/21 Smallwood Place
Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Perth
2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261
Site # 23736

New Zealand

Auckland
35 O'Rorke Road
Penrose, Auckland 1061
Phone : +64 9 526 45 51
IANZ # 1327

Christchurch
43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

Company Name: SGS Environmental Services NSW
Address: PO: 50385415
Unit 16/33 Maddox St
Alexandria NSW 2015

Project Name: SE208000A

Order No.:
Report #: 730587
Phone: 02 8594 0400
Fax: 02 8594 0499

Received: Jul 8, 2020 4:31 PM
Due: Jul 13, 2020
Priority: 3 Day
Contact Name: Results Environmental

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Nitroglycerine (NG)	Moisture Set	Explosives
Melbourne Laboratory - NATA Site # 1254 & 14271						X	X	X
Sydney Laboratory - NATA Site # 18217								
Brisbane Laboratory - NATA Site # 20794								
Perth Laboratory - NATA Site # 23736								
External Laboratory								
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**			
1	SE20800A.001 0407_TP014_ 0.1_260623	Jun 23, 2020		Soil	S20-Jl14676	X	X	X
2	SE20800A.002 0407_TP014_ 0.5_260623	Jun 23, 2020		Soil	S20-Jl14677	X	X	X
3	SE20800A.033 0407_TP041_ 0.1_260623	Jun 23, 2020		Soil	S20-Jl14678	X	X	X
4	SE20800A.034 0407_TP041_ 1.0_260623	Jun 23, 2020		Soil	S20-Jl14679	X	X	X
Test Counts						4	4	4

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

****NOTE:** pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram
mg/L: milligrams per litre
ug/L: micrograms per litre
ppm: Parts per million
ppb: Parts per billion
%: Percentage
org/100mL: Organisms per 100 millilitres
NTU: Nephelometric Turbidity Units
MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version 5.3
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling.Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	M20-Jl14555	NCP	%	21	22	5.0	30%	Pass	
Duplicate									
Explosives				Result 1	Result 2	RPD			
Octahydro-1.3.5.7-tetranitro-1.3.5.7-tetrazocine (HMX)	M20-Jl14523	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pentaerythritol tetranitrate (PETN)	M20-Jl14523	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
1-Chloro-2-nitrobenzene	M20-Jl14523	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1-Chloro-3-nitrobenzene	M20-Jl14523	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1-Chloro-4-nitrobenzene	M20-Jl14523	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dinitrobenzene (1.3-DNB)	M20-Jl14523	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3.5-Trinitrobenzene (1.3.5-TNB)	M20-Jl14523	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2-Amino-4.6 dinitrotoluene	M20-Jl14523	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Nitrotoluene (2-NT)	M20-Jl14523	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4- & 2.6-Dinitrotoluene	M20-Jl14523	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
3-Nitrotoluene (3-NT)	M20-Jl14523	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Amino-2.6-dinitrotoluene (4-Am-DNT)	M20-Jl14523	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Nitrotoluene (4-NT)	M20-Jl14523	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Hexahydro-1.3.5-trinitro-1.3.5-triazine (RDX)	M20-Jl14523	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Methyl-2.4.6-trinitrophenylnitramine (Tetryl)	M20-Jl14523	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Nitrobenzene (NB)	M20-Jl14523	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TNT	M20-Jl14523	NCP	mg/kg	< 1	< 1	<1	30%	Pass	

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Authorised By

[redacted]

Analytical Services Manager
Senior Analyst-Organic (VIC)

[redacted]

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

Eurofins shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.

Please can I request the following additional analysis.

Suite E & H for samples:

- BH014 – 0.1 and 0.5 (lab report 208000)
- TP043 – 0.5 and 1.0 (lab report 728723)
- TP052 – 0.5 (lab report 207695)

SGS EHS Alexandria Laboratory

SE208000B COC

Received: 03–Jul–2020

Suite B, G & OC/OP

- TP027 – 0.5 (lab report 207591)
- TP045 – 0.5 (lab report 207657)
- TP054 – 0.5 (lab report 207657)

Suite D

- TP024 – 0.5 (lab report 208000)

PFAS (28) analysis for the 0.1m sample for the following:

- TP043 - lab report 728723
- TP220 – lab report 207831
- TP001 – lab report 207695
- TP083 – lab report 207824

Also I have gone through the lab reports and can't seem to find the lab report containing the following samples:

- BH010
- TP060
- TP061
- TP062
- BH041
- BH041
- BH042
- TP036 SE207591 – 25, 26
- BH040
- BH037
- TP144 SE207912 – 46, 47
- TP141 SE208142 – 5 16
- TP054
- TP015 SE208000 – 5 16.

Can you please confirm that there are no additional lab reports that might have slipped through the cracks.

Also can we ensure that samples are held onto for 60 days as we may need more additional analysis shortly.

Thanks for your help [redacted] have a good weekend.

Cheers,

[redacted]

SAMPLE RECEIPT ADVICE

SE208000B

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks - Additional**
Order Number	(Not specified)
Samples	39

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Fri 3/7/2020
Report Due	Mon 20/7/2020
SGS Reference	**SE208000B**

SUBMISSION DETAILS

This is to confirm that 39 samples were received on Friday 3/7/2020. Results are expected to be ready by COB Monday 20/7/2020. Please quote SGS reference SE208000B when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	3 Soil
Date documentation received	3/7/2020@4:22pm	Type of documentation received	Email
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	5.4°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

Explosives reported in SE208000A.

This document is issued by the Company under its General Conditions of Service accessible at www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

SAMPLE RECEIPT ADVICE

SE208000B

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks - Additional

SUMMARY OF ANALYSIS

No.	Sample ID	Total Recoverable Elements in Soil/Waste
001	0407_TP014_0.1_200623	4
002	0407_TP014_0.5_200623	4

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE208000B

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks - Additional

SUMMARY OF ANALYSIS

No.	Sample ID	Moisture Content	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	Speciated Phenols in Soil	Total Recoverable Elements in Soil/Waste	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
039	0407_TP024_0.5_200623	1	24	16	1	8	9	13

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks - Additional**
Order Number	(Not specified)
Samples	39

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208000B R0**
Date Received	3/7/2020
Date Reported	20/7/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

SIGNATORIES

[redacted]

Chemist | Senior Organic Chemist/Metals Chemist | Organic Section Head

VOC's in Soil [AN433] Tested: 17/7/2020

PARAMETER	UOM	LOR	0407_TP024_0.5_20(623 SOIL - 23/6/2020 SE208000B.039
Benzene	mg/kg	0.1	<0.1
Toluene	mg/kg	0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2
o-xylene	mg/kg	0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 17/7/2020

PARAMETER	UOM	LOR	0407_TP024_0.5_20(623 SOIL - 23/6/2020 SE208000B.039
Benzene (F0)	mg/kg	0.1	<0.1
DIPE (Di isopropyl Ether)	mg/kg	0.5	-
ETBE (Ethyl Tertiary tert Butyl Ether)	mg/kg	0.5	-
MtBE(Methyl-tert-butyl ether)	mg/kg	0.1	-
TAME (Tertiary tert Amyl Methyl Ether)	mg/kg	0.5	-
TBA (Tertiary tert Butyl Alcohol)	mg/kg	0.5	-
TRH C6-C9	mg/kg	20	**52**
Styrene*	mg/kg	0.1	-
TRH C6-C10	mg/kg	25	**59**
TRH C6-C10 minus BTEX (F1)	mg/kg	25	-

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 17/7/2020

PARAMETER	UOM	LOR	0407_TP024_0.5_20(623 SOIL - 23/6/2020 SE208000B.039
TRH C7-C9	mg/kg	20	<20
TRH C10-C14	mg/kg	20	<20
TRH C15-C28	mg/kg	45	<45
TRH C29-C36	mg/kg	45	<45
TRH >C10-C16	mg/kg	25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 17/7/2020

PARAMETER	UOM	LOR	0407_TP024_0.5_20(623 SOIL - 23/6/2020 SE208000B.039
Naphthalene	mg/kg	0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1
Fluorene	mg/kg	0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1
Anthracene	mg/kg	0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1
Pyrene	mg/kg	0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1
Chrysene	mg/kg	0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2

Speciated Phenols in Soil [AN420] Tested: 17/7/2020

PARAMETER	UOM	LOR	0407_TP024_0.5_20(623 SOIL - 23/6/2020 SE208000B.039
Phenol	mg/kg	0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
Total Cresol	mg/kg	1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5
4-nitrophenol	mg/kg	1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5
Pentachlorophenol	mg/kg	0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2
2,3,4,6-tetrachlorophenol	mg/kg	0.5	<0.5

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 17/7/2020

PARAMETER	UOM	LOR	0407_TP014_0.1_20(623 SOIL - 23/6/2020 SE208000B.001	0407_TP014_0.5_20(623 SOIL - 23/6/2020 SE208000B.002	0407_TP024_0.5_20(623 SOIL - 23/6/2020 SE208000B.039
Lead, Pb	mg/kg	1	-	-	**2**
Beryllium, Be	mg/kg	0.5	<0.5	<0.5	-
Boron, B	mg/kg	5	<5	<5	-
Cobalt, Co	mg/kg	0.5	<0.5	<0.5	-
Manganese, Mn	mg/kg	1	**6**	**3**	-

Moisture Content [AN002] Tested: 17/7/2020

PARAMETER	UOM	LOR	0407_TP024_0.5_20(623 SOIL - 23/6/2020 SE208000B.039
% Moisture	%w/w	1	**23.4**

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents .
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN420	Carcinogenic PAHs may be expressed as Benzo(a)pyrene equivalents by applying the BaP toxicity equivalence factor (NEPM 1999, June 2013, B7). These can be reported as the individual PAHs and as a sum of carcinogenic PAHs. The sum is reported three ways, the first assuming all <LOR results are zero, the second assuming all < LOR results are half the LOR and the third assuming all <LOR results are the LOR.
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE208000B R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks - Additional**
Order Number	(Not specified)
Samples	39

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208000B R0**
Date Received	03 Jul 2020
Date Reported	20 Jul 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Extraction Date	Moisture Content	1 item
	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	1 item
	Speciated Phenols in Soil	1 item
	TRH (Total Recoverable Hydrocarbons) in Soil	1 item
	VOC's in Soil	1 item
	Volatile Petroleum Hydrocarbons in Soil	1 item

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	3 Soil
Date documentation received	3/7/2020@4:22pm	Type of documentation received	Email
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	5.4°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE208000B R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP024_0.5_200623	SE208000B.039	LB204552	23 Jun 2020	03 Jul 2020	07 Jul 2020	17 Jul 2020†	22 Jul 2020	20 Jul 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP024_0.5_200623	SE208000B.039	LB204559	23 Jun 2020	03 Jul 2020	07 Jul 2020	17 Jul 2020†	26 Aug 2020	20 Jul 2020

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP024_0.5_200623	SE208000B.039	LB204559	23 Jun 2020	03 Jul 2020	07 Jul 2020	17 Jul 2020†	26 Aug 2020	20 Jul 2020

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP014_0.1_200623	SE208000B.001	LB204566	23 Jun 2020	03 Jul 2020	20 Dec 2020	17 Jul 2020	20 Dec 2020	20 Jul 2020
0407_TP014_0.5_200623	SE208000B.002	LB204566	23 Jun 2020	03 Jul 2020	20 Dec 2020	17 Jul 2020	20 Dec 2020	20 Jul 2020
0407_TP024_0.5_200623	SE208000B.039	LB204566	23 Jun 2020	03 Jul 2020	20 Dec 2020	17 Jul 2020	20 Dec 2020	20 Jul 2020

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP024_0.5_200623	SE208000B.039	LB204559	23 Jun 2020	03 Jul 2020	07 Jul 2020	17 Jul 2020†	26 Aug 2020	20 Jul 2020

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP024_0.5_200623	SE208000B.039	LB204545	23 Jun 2020	03 Jul 2020	07 Jul 2020	17 Jul 2020†	26 Aug 2020	20 Jul 2020

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP024_0.5_200623	SE208000B.039	LB204545	23 Jun 2020	03 Jul 2020	07 Jul 2020	17 Jul 2020†	26 Aug 2020	20 Jul 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP024_0.5_200623	SE208000B.039	%	70 - 130%	94
d14-p-terphenyl (Surrogate)	0407_TP024_0.5_200623	SE208000B.039	%	70 - 130%	89
d5-nitrobenzene (Surrogate)	0407_TP024_0.5_200623	SE208000B.039	%	70 - 130%	87

Speciated Phenols in Soil — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	0407_TP024_0.5_200623	SE208000B.039	%	70 - 130%	73

VOC's in Soil — Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP024_0.5_200623	SE208000B.039	%	60 - 130%	64
d4-1,2-dichloroethane (Surrogate)	0407_TP024_0.5_200623	SE208000B.039	%	60 - 130%	76
d8-toluene (Surrogate)	0407_TP024_0.5_200623	SE208000B.039	%	60 - 130%	73

Volatile Petroleum Hydrocarbons in Soil — Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP024_0.5_200623	SE208000B.039	%	60 - 130%	64
d4-1,2-dichloroethane (Surrogate)	0407_TP024_0.5_200623	SE208000B.039	%	60 - 130%	76
d8-toluene (Surrogate)	0407_TP024_0.5_200623	SE208000B.039	%	60 - 130%	73

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB204559.001		Naphthalene	mg/kg	0.1	<0.1
		2-methylnaphthalene	mg/kg	0.1	<0.1
		1-methylnaphthalene	mg/kg	0.1	<0.1
		Acenaphthylene	mg/kg	0.1	<0.1
		Acenaphthene	mg/kg	0.1	<0.1
		Fluorene	mg/kg	0.1	<0.1
		Phenanthrene	mg/kg	0.1	<0.1
		Anthracene	mg/kg	0.1	<0.1
		Fluoranthene	mg/kg	0.1	<0.1
		Pyrene	mg/kg	0.1	<0.1
		Benzo(a)anthracene	mg/kg	0.1	<0.1
		Chrysene	mg/kg	0.1	<0.1
		Benzo(a)pyrene	mg/kg	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	89
		2-fluorobiphenyl (Surrogate)	%	-	92
		d14-p-terphenyl (Surrogate)	%	-	89

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB204559.001		Phenol	mg/kg	0.5	<0.5
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5
		2-nitrophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		Pentachlorophenol	mg/kg	0.5	<0.5
		2,4-dinitrophenol	mg/kg	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	83

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB204566.001	Beryllium, Be	mg/kg	0.5	<0.5
	Cobalt, Co	mg/kg	0.5	<0.5
	Manganese, Mn	mg/kg	1	<1
	Lead, Pb	mg/kg	1	<1

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB204559.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB204545.001	Monocyclic Aromatic	Benzene	mg/kg	0.1	<0.1
	Hydrocarbons	Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		o-xylene	mg/kg	0.1	<0.1
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	84
		d8-toluene (Surrogate)	%	-	107
		Bromofluorobenzene (Surrogate)	%	-	76

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Volatile Petroleum Hydrocarbons in Soil — **Method: ME-(AU)-[ENV]AN433**

Sample Number		Parameter	Units	LOR	Result
LB204545.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	84

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208783.006	LB204552.011	% Moisture	%w/w	1	9.017496635	29.2436974789	41	2

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208000B.039	LB204559.015		Phenol	mg/kg	0.5	<0.5	0	200	0
			2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	0	200	0
			3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	0	200	0
			Total Cresol	mg/kg	1.5	<1.5	0	200	0
			2-chlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dimethylphenol	mg/kg	0.5	<0.5	0	200	0
			2,6-dichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4,6-trichlorophenol	mg/kg	0.5	<0.5	0	200	0
			2-nitrophenol	mg/kg	0.5	<0.5	0	200	0
			4-nitrophenol	mg/kg	1	<1	0	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	<0.5	0	200	0
			Pentachlorophenol	mg/kg	0.5	<0.5	0	200	0
			2,4-dinitrophenol	mg/kg	2	<2	0	200	0
			2,3,4,6-tetrachlorophenol	mg/kg	0.5	<0.5	0	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.6	3.73	30	2

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208578.006	LB204566.014	Lead, Pb	mg/kg	1	<1	<1	149	0

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208783.006	LB204559.014		TRH C10-C14	mg/kg	20	0	0	200	0
			TRH C15-C28	mg/kg	45	0	0	200	0
			TRH C29-C36	mg/kg	45	0	0	200	0
		TRH F Bands	TRH >C10-C16	mg/kg	25	0	0	200	0
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	0	0	200	0
			TRH >C16-C34 (F3)	mg/kg	90	0	0	200	0
			TRH >C34-C40 (F4)	mg/kg	120	0	0	200	0

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208783.006	LB204545.014	Monocyclic	Benzene	mg/kg	0.1	0	0	200	0
		Aromatic	Toluene	mg/kg	0.1	0.004275734	1 0.0040381782	200	0
			Ethylbenzene	mg/kg	0.1	0.001072087	30.0010144285	200	0
			m/p-xylene	mg/kg	0.2	0.002542769	00.0025411598	200	0
			o-xylene	mg/kg	0.1	0.001190512	20.0010051617	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	0.0030875888	0	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.347037036	38.8200503928	50	6
			d8-toluene (Surrogate)	mg/kg	-	8.181830597	78.7207394922	50	6
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.034931214	67.4211182373	50	5

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208783.006	LB204545.014		TRH C6-C10	mg/kg	25	0	0	200	0
			TRH C6-C9	mg/kg	20	0	0	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.347037036	38.8200503928	30	6
			d8-toluene (Surrogate)	mg/kg	-	8.181830597	78.7207394922	30	6
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.034931214	67.4211182373	30	5
		VPH F Bands	Benzene (F0)	mg/kg	0.1	0	0	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204559.002		Naphthalene	mg/kg	0.1	4.1	4	60 - 140	101
		Acenaphthylene	mg/kg	0.1	4.1	4	60 - 140	102
		Acenaphthene	mg/kg	0.1	4.1	4	60 - 140	103
		Phenanthrene	mg/kg	0.1	4.1	4	60 - 140	102
		Anthracene	mg/kg	0.1	3.9	4	60 - 140	99
		Fluoranthene	mg/kg	0.1	4.0	4	60 - 140	99
		Pyrene	mg/kg	0.1	4.1	4	60 - 140	103
		Benzo(a)pyrene	mg/kg	0.1	4.3	4	60 - 140	108
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	81
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	86
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	80

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204559.002		Phenol	mg/kg	0.5	0.8	1	70 - 130	78
		2,4-dichlorophenol	mg/kg	0.5	0.9	1	70 - 130	85
		2,4,6-trichlorophenol	mg/kg	0.5	1.0	1	70 - 130	104
		Pentachlorophenol	mg/kg	0.5	0.9	1	70 - 130	88
	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.9	5	40 - 130	79

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204566.002		Boron, B	mg/kg	5	42	37.13	80 - 120	113
		Beryllium, Be	mg/kg	0.5	4.4	4.17	80 - 120	106
		Cobalt, Co	mg/kg	0.5	22	20.71	80 - 120	109
		Manganese, Mn	mg/kg	1	710	660	80 - 120	107
		Lead, Pb	mg/kg	1	93	89.9	80 - 120	103

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204559.002		TRH C10-C14	mg/kg	20	32	40	60 - 140	80
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	75
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	78
	TRH F Bands	TRH >C10-C16	mg/kg	25	32	40	60 - 140	80
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	78
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	75

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204545.002	Monocyclic	Benzene	mg/kg	0.1	4.6	5	60 - 140	92
	Aromatic	Toluene	mg/kg	0.1	4.6	5	60 - 140	91
		Ethylbenzene	mg/kg	0.1	4.8	5	60 - 140	97
		m/p-xylene	mg/kg	0.2	9.7	10	60 - 140	97
		o-xylene	mg/kg	0.1	4.8	5	60 - 140	97
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.5	10	70 - 130	85
		d8-toluene (Surrogate)	mg/kg	-	8.5	10	70 - 130	85
		Bromofluorobenzene (Surrogate)	mg/kg	-	7.7	10	70 - 130	77

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB204545.002		TRH C6-C10	mg/kg	25	70	92.5	60 - 140	76
		TRH C6-C9	mg/kg	20	61	80	60 - 140	76
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.5	10	70 - 130	85
		Bromofluorobenzene (Surrogate)	mg/kg	-	7.7	10	70 - 130	77

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208799.001	LB204566.004	Lead, Pb	mg/kg	1	60	15	50	88

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

QC Sample	Sample Number		Parameter	Units	LOR	Original	Spike	Recovery%
SE208000B.03	LB204559.015		TRH C7-C9	mg/kg	20	<20	-	-
9			TRH C10-C14	mg/kg	20	<20	40	83
			TRH C15-C28	mg/kg	45	<45	40	78
			TRH C29-C36	mg/kg	45	<45	40	78
		TRH F Bands	TRH >C10-C16	mg/kg	25	<25	40	85
			TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	-	-
			TRH >C16-C34 (F3)	mg/kg	90	<90	40	75
			TRH >C34-C40 (F4)	mg/kg	120	<120	-	-

MATRIX SPIKE DUPLICATES

SE208000B R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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This test report shall not be reproduced, except in full.

Please can I request the following additional analysis.

Suite E & H for samples:

- BH014 – 0.1 and 0.5 (lab report 208000)
- TP043 – 0.5 and 1.0 (lab report 728723)
- TP052 – 0.5 (lab report 207695)

Suite B, G & OC/OP

- TP027 – 0.5 (lab report 207591)
- TP045 – 0.5 (lab report 207657)
- TP054 – 0.5 (lab report 207657)

Suite D

- TP024 – 0.5 (lab report 208000)

SGS EHS Alexandria Laboratory
SE207824A COC
Received: 03 – Jul – 2020

PFAS (28) analysis for the 0.1m sample for the following:

- TP043 - lab report 728723
- TP220 – lab report 207831
- TP001 – lab report 207695
- TP083 – lab report 207824

Also I have gone through the lab reports and can't seem to find the lab report containing the following samples:

- BH010
- TP060
- TP061
- TP062
- BH041
- BH041
- BH042
- TP036
- BH040
- BH037
- TP144
- TP141
- TP054
- TP015

Can you please confirm that there are no additional lab reports that might have slipped through the cracks.

Also can we ensure that samples are held onto for 60 days as we may need more additional analysis shortly.

Thanks for your help [redacted] have a good weekend.

Cheers,

[redacted]

SAMPLE RECEIPT ADVICE

SE207824A

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks-Additional**
Order Number	**000674--000676**
Samples	20

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Fri 3/7/2020
Report Due	Thu 23/7/2020
SGS Reference	**SE207824A**

SUBMISSION DETAILS

This is to confirm that 20 samples were received on Friday 3/7/2020. Results are expected to be ready by COB Thursday 23/7/2020. Please quote SGS reference SE207824A when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	1 Soil
Date documentation received	3/7/2020@4:22pm	Type of documentation received	Email
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	1.3°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

PFAS subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420. Report Number ME315385A

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SAMPLE RECEIPT ADVICE

SE207824A

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks-Additional

SUMMARY OF ANALYSIS

No.	Sample ID	Moisture Content	Per- and Polyfluoroalkyl Substances (PFAS) in
020	0407_TP083__0.1_200622	1	55

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No.

CLIENT DETAILS		LABORATORY DETAILS	
Contact	[redacted]	Manager	[redacted]
Client	SGS EHS SYDNEY	Laboratory	SGS Melbourne EH&S
Address	Unit 16, 33 Maddox Street Alexandria NSW 2015	Address	10/585 Blackburn Road Notting Hill Victoria 3168
Telephone	02 8594 0400	Telephone	+61395743200
Facsimile	02 8594 0499	Facsimile	+61395743399
Email	au.environmental.sydney@sgs.com	Email	Au.SampleReceipt.Melbourne@sgs.com
Project	**610.30041 Randwick Barracks-Additional**	SGS Reference	**ME315385A R0**
Order Number	**SE207824A**	Date Received	21 Jul 2020
Samples	20	Date Reported	23 Jul 2020

COMMENTS

An undefined accreditation identifier was encountered whilst generating this report. Please contact SGS.

MA-1523 Majority of surrogates are within acceptance criteria.

SIGNATORIES

[redacted]

Australian Chemistry Manager

Parameter	Units	LOR	Sample Number: ME315385A.001 Sample Matrix: Soil Sample Date: 22 Jun 2020 Sample Name: SE207824A.001	ME315385A.002 Soil 22 Jun 2020 SE207824A.002	ME315385A.003 Soil 22 Jun 2020 SE207824A.003	ME315385A.004 Soil 22 Jun 2020 SE207824A.004
Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level	**Method: MA-1523**	**Tested: 23/7/2020**				
Perfluorobutanoic acid (PFBA)	mg/kg	0.0001	-	-	-	-
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0005	-	-	-	-
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0001	-	-	-	-
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0001	-	-	-	-
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0001	-	-	-	-
Perfluorononanoic acid (PFNA)	mg/kg	0.0001	-	-	-	-
Perfluorodecanoic acid (PFDA)	mg/kg	0.0001	-	-	-	-
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0001	-	-	-	-
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0001	-	-	-	-
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0001	-	-	-	-
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0001	-	-	-	-
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0001	-	-	-	-
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0001	-	-	-	-
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0001	-	-	-	-
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0001	-	-	-	-
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0001	-	-	-	-
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0001	-	-	-	-
Sum PFOS and PFHXS	mg/kg	0.0001	-	-	-	-
Perfluorononane sulfonate (PFNS)	mg/kg	0.0001	-	-	-	-
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0001	-	-	-	-
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0001	-	-	-	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.001	-	-	-	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.001	-	-	-	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.001	-	-	-	-
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.001	-	-	-	-
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.001	-	-	-	-
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.001	-	-	-	-
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002	-	-	-	-
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002	-	-	-	-
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.001	-	-	-	-
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.001	-	-	-	-
(13C4-PFBA) Surrogate	%	-	-	-	-	-
(13C5_PFPeA) Surrogate	%	-	-	-	-	-
(13C5-PFHxA) Surrogate	%	-	-	-	-	-
(13C4-PFHpA) Surrogate	%	-	-	-	-	-
(13C4-PFOA) Surrogate	%	-	-	-	-	-
(13C9-PFNA) Surrogate	%	-	-	-	-	-
(13C6-PFDA) Surrogate	%	-	-	-	-	-
(13C7-PFUdA) Surrogate	%	-	-	-	-	-
(13C2-PFDoA) Surrogate	%	-	-	-	-	-
(13C2-PFTeDA) Surrogate	%	-	-	-	-	-
(13C2-PFHxDA) Surrogate	%	-	-	-	-	-
(13C3-PFBS) Surrogate	%	-	-	-	-	-
(13C3-PFHxS) Surrogate	%	-	-	-	-	-
(13C8-PFOS) Surrogate	%	-	-	-	-	-
(13C2-4:2FTS) Surrogate	%	-	-	-	-	-
(13C2-6:2FTS) Surrogate	%	-	-	-	-	-
(13C2-8:2FTS) Surrogate	%	-	-	-	-	-
(13C8-PFOSA) Surrogate	%	-	-	-	-	-
(D3-N-MeFOSA) Surrogate	%	-	-	-	-	-
(D5-N-EtFOSA) Surrogate	%	-	-	-	-	-
(D7-N-MeFOSE) Surrogate	%	-	-	-	-	-
(D9-N-EtFOSE) Surrogate	%	-	-	-	-	-
(D3-N-MeFOSAA) Surrogate	%	-	-	-	-	-
(D5-N-EtFOSAA) Surrogate	%	-	-	-	-	-

Moisture Content **Method: AN002** **Tested: 23/7/2020**

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name ME315385A.001 Soil 22 Jun 2020 SE207824A.001	ME315385A.002 Soil 22 Jun 2020 SE207824A.002	ME315385A.003 Soil 22 Jun 2020 SE207824A.003	ME315385A.004 Soil 22 Jun 2020 SE207824A.004
Moisture Content Method: AN002 Tested: 23/7/2020 (continued)						
% Moisture*	%w/w	1	-	-	-	-

Parameter	Units	LOR	Sample Number: ME315385A.005 Sample Matrix: Soil Sample Date: 22 Jun 2020 Sample Name: SE207824A.005	ME315385A.006 Soil 22 Jun 2020 SE207824A.006	ME315385A.007 Soil 22 Jun 2020 SE207824A.007	ME315385A.008 Soil 22 Jun 2020 SE207824A.008
Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level	**Method: MA-1523**	**Tested: 23/7/2020**				
Perfluorobutanoic acid (PFBA)	mg/kg	0.0001	-	-	-	-
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0005	-	-	-	-
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0001	-	-	-	-
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0001	-	-	-	-
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0001	-	-	-	-
Perfluorononanoic acid (PFNA)	mg/kg	0.0001	-	-	-	-
Perfluorodecanoic acid (PFDA)	mg/kg	0.0001	-	-	-	-
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0001	-	-	-	-
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0001	-	-	-	-
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0001	-	-	-	-
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0001	-	-	-	-
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0001	-	-	-	-
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0001	-	-	-	-
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0001	-	-	-	-
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0001	-	-	-	-
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0001	-	-	-	-
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0001	-	-	-	-
Sum PFOS and PFHXS	mg/kg	0.0001	-	-	-	-
Perfluorononane sulfonate (PFNS)	mg/kg	0.0001	-	-	-	-
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0001	-	-	-	-
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0001	-	-	-	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.001	-	-	-	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.001	-	-	-	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.001	-	-	-	-
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.001	-	-	-	-
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.001	-	-	-	-
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.001	-	-	-	-
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002	-	-	-	-
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002	-	-	-	-
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.001	-	-	-	-
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.001	-	-	-	-
(13C4-PFBA) Surrogate	%	-	-	-	-	-
(13C5_PFPeA) Surrogate	%	-	-	-	-	-
(13C5-PFHxA) Surrogate	%	-	-	-	-	-
(13C4-PFHpA) Surrogate	%	-	-	-	-	-
(13C4-PFOA) Surrogate	%	-	-	-	-	-
(13C9-PFNA) Surrogate	%	-	-	-	-	-
(13C6-PFDA) Surrogate	%	-	-	-	-	-
(13C7-PFUdA) Surrogate	%	-	-	-	-	-
(13C2-PFDoA) Surrogate	%	-	-	-	-	-
(13C2-PFTeDA) Surrogate	%	-	-	-	-	-
(13C2-PFHxDA) Surrogate	%	-	-	-	-	-
(13C3-PFBS) Surrogate	%	-	-	-	-	-
(13C3-PFHxS) Surrogate	%	-	-	-	-	-
(13C8-PFOS) Surrogate	%	-	-	-	-	-
(13C2-4:2FTS) Surrogate	%	-	-	-	-	-
(13C2-6:2FTS) Surrogate	%	-	-	-	-	-
(13C2-8:2FTS) Surrogate	%	-	-	-	-	-
(13C8-PFOSA) Surrogate	%	-	-	-	-	-
(D3-N-MeFOSA) Surrogate	%	-	-	-	-	-
(D5-N-EtFOSA) Surrogate	%	-	-	-	-	-
(D7-N-MeFOSE) Surrogate	%	-	-	-	-	-
(D9-N-EtFOSE) Surrogate	%	-	-	-	-	-
(D3-N-MeFOSAA) Surrogate	%	-	-	-	-	-
(D5-N-EtFOSAA) Surrogate	%	-	-	-	-	-

Moisture Content **Method: AN002** **Tested: 23/7/2020**

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name ME315385A.005 Soil 22 Jun 2020 SE207824A.005	ME315385A.006 Soil 22 Jun 2020 SE207824A.006	ME315385A.007 Soil 22 Jun 2020 SE207824A.007	ME315385A.008 Soil 22 Jun 2020 SE207824A.008
Moisture Content Method: AN002 Tested: 23/7/2020 (continued)						
% Moisture*	%w/w	1	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315385A.009 Soil 22 Jun 2020 SE207824A.009	ME315385A.010 Soil 22 Jun 2020 SE207824A.010	ME315385A.011 Soil 22 Jun 2020 SE207824A.011	ME315385A.012 Soil 22 Jun 2020 SE207824A.012
Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level	**Method: MA-1523**	**Tested: 23/7/2020**					
Perfluorobutanoic acid (PFBA)	mg/kg	0.0001		-	-	-	-
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0005		-	-	-	-
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0001		-	-	-	-
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0001		-	-	-	-
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0001		-	-	-	-
Perfluorononanoic acid (PFNA)	mg/kg	0.0001		-	-	-	-
Perfluorodecanoic acid (PFDA)	mg/kg	0.0001		-	-	-	-
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0001		-	-	-	-
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0001		-	-	-	-
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0001		-	-	-	-
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0001		-	-	-	-
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0001		-	-	-	-
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0001		-	-	-	-
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0001		-	-	-	-
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0001		-	-	-	-
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0001		-	-	-	-
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0001		-	-	-	-
Sum PFOS and PFHXS	mg/kg	0.0001		-	-	-	-
Perfluorononane sulfonate (PFNS)	mg/kg	0.0001		-	-	-	-
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0001		-	-	-	-
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0001		-	-	-	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.001		-	-	-	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.001		-	-	-	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.001		-	-	-	-
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.001		-	-	-	-
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.001		-	-	-	-
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.001		-	-	-	-
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002		-	-	-	-
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002		-	-	-	-
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.001		-	-	-	-
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.001		-	-	-	-
(13C4-PFBA) Surrogate	%	-		-	-	-	-
(13C5_PFPeA) Surrogate	%	-		-	-	-	-
(13C5-PFHxA) Surrogate	%	-		-	-	-	-
(13C4-PFHpA) Surrogate	%	-		-	-	-	-
(13C4-PFOA) Surrogate	%	-		-	-	-	-
(13C9-PFNA) Surrogate	%	-		-	-	-	-
(13C6-PFDA) Surrogate	%	-		-	-	-	-
(13C7-PFUdA) Surrogate	%	-		-	-	-	-
(13C2-PFDoA) Surrogate	%	-		-	-	-	-
(13C2-PFTeDA) Surrogate	%	-		-	-	-	-
(13C2-PFHxDA) Surrogate	%	-		-	-	-	-
(13C3-PFBS) Surrogate	%	-		-	-	-	-
(13C3-PFHxS) Surrogate	%	-		-	-	-	-
(13C8-PFOS) Surrogate	%	-		-	-	-	-
(13C2-4:2FTS) Surrogate	%	-		-	-	-	-
(13C2-6:2FTS) Surrogate	%	-		-	-	-	-
(13C2-8:2FTS) Surrogate	%	-		-	-	-	-
(13C8-PFOSA) Surrogate	%	-		-	-	-	-
(D3-N-MeFOSA) Surrogate	%	-		-	-	-	-
(D5-N-EtFOSA) Surrogate	%	-		-	-	-	-
(D7-N-MeFOSE) Surrogate	%	-		-	-	-	-
(D9-N-EtFOSE) Surrogate	%	-		-	-	-	-
(D3-N-MeFOSAA) Surrogate	%	-		-	-	-	-
(D5-N-EtFOSAA) Surrogate	%	-		-	-	-	-

Moisture Content **Method: AN002** **Tested: 23/7/2020**

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name ME315385A.009 Soil 22 Jun 2020 SE207824A.009	ME315385A.010 Soil 22 Jun 2020 SE207824A.010	ME315385A.011 Soil 22 Jun 2020 SE207824A.011	ME315385A.012 Soil 22 Jun 2020 SE207824A.012
Moisture Content Method: AN002 Tested: 23/7/2020 (continued)						
% Moisture*	%w/w	1	-	-	-	-

Parameter	Units	LOR	Sample Number: ME315385A.013 Sample Matrix: Soil Sample Date: 22 Jun 2020 Sample Name: SE207824A.013	ME315385A.014 Soil 22 Jun 2020 SE207824A.014	ME315385A.015 Soil 22 Jun 2020 SE207824A.015	ME315385A.016 Material 22 Jun 2020 SE207824A.016
Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level	**Method: MA-1523**	**Tested: 23/7/2020**				
Perfluorobutanoic acid (PFBA)	mg/kg	0.0001	-	-	-	-
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0005	-	-	-	-
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0001	-	-	-	-
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0001	-	-	-	-
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0001	-	-	-	-
Perfluorononanoic acid (PFNA)	mg/kg	0.0001	-	-	-	-
Perfluorodecanoic acid (PFDA)	mg/kg	0.0001	-	-	-	-
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0001	-	-	-	-
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0001	-	-	-	-
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0001	-	-	-	-
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0001	-	-	-	-
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0001	-	-	-	-
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0001	-	-	-	-
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0001	-	-	-	-
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0001	-	-	-	-
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0001	-	-	-	-
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0001	-	-	-	-
Sum PFOS and PFHXS	mg/kg	0.0001	-	-	-	-
Perfluorononane sulfonate (PFNS)	mg/kg	0.0001	-	-	-	-
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0001	-	-	-	-
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0001	-	-	-	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.001	-	-	-	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.001	-	-	-	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.001	-	-	-	-
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.001	-	-	-	-
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.001	-	-	-	-
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.001	-	-	-	-
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002	-	-	-	-
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002	-	-	-	-
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.001	-	-	-	-
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.001	-	-	-	-
(13C4-PFBA) Surrogate	%	-	-	-	-	-
(13C5_PFPeA) Surrogate	%	-	-	-	-	-
(13C5-PFHxA) Surrogate	%	-	-	-	-	-
(13C4-PFHpA) Surrogate	%	-	-	-	-	-
(13C4-PFOA) Surrogate	%	-	-	-	-	-
(13C9-PFNA) Surrogate	%	-	-	-	-	-
(13C6-PFDA) Surrogate	%	-	-	-	-	-
(13C7-PFUdA) Surrogate	%	-	-	-	-	-
(13C2-PFDoA) Surrogate	%	-	-	-	-	-
(13C2-PFTeDA) Surrogate	%	-	-	-	-	-
(13C2-PFHxDA) Surrogate	%	-	-	-	-	-
(13C3-PFBS) Surrogate	%	-	-	-	-	-
(13C3-PFHxS) Surrogate	%	-	-	-	-	-
(13C8-PFOS) Surrogate	%	-	-	-	-	-
(13C2-4:2FTS) Surrogate	%	-	-	-	-	-
(13C2-6:2FTS) Surrogate	%	-	-	-	-	-
(13C2-8:2FTS) Surrogate	%	-	-	-	-	-
(13C8-PFOSA) Surrogate	%	-	-	-	-	-
(D3-N-MeFOSA) Surrogate	%	-	-	-	-	-
(D5-N-EtFOSA) Surrogate	%	-	-	-	-	-
(D7-N-MeFOSE) Surrogate	%	-	-	-	-	-
(D9-N-EtFOSE) Surrogate	%	-	-	-	-	-
(D3-N-MeFOSAA) Surrogate	%	-	-	-	-	-
(D5-N-EtFOSAA) Surrogate	%	-	-	-	-	-

Moisture Content **Method: AN002** **Tested: 23/7/2020**

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name ME315385A.013 Soil 22 Jun 2020 SE207824A.013	ME315385A.014 Soil 22 Jun 2020 SE207824A.014	ME315385A.015 Soil 22 Jun 2020 SE207824A.015	ME315385A.016 Material 22 Jun 2020 SE207824A.016
Moisture Content Method: AN002 Tested: 23/7/2020 (continued)						
% Moisture*	%w/w	1	-	-	-	-

Parameter	Units	LOR	Sample Number: ME315385A.017 Sample Matrix: Material Sample Date: 22 Jun 2020 Sample Name: SE207824A.017	ME315385A.018 Material 22 Jun 2020 SE207824A.018	ME315385A.019 Material 22 Jun 2020 SE207824A.019	ME315385A.020 Soil 22 Jun 2020 SE207824A.020
Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level	**Method: MA-1523**	**Tested: 23/7/2020**				
Perfluorobutanoic acid (PFBA)	mg/kg	0.0001	-	-	-	<0.0001
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0005	-	-	-	<0.0005
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0001	-	-	-	<0.0001
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0001	-	-	-	<0.0001
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0001	-	-	-	<0.0001
Perfluorononanoic acid (PFNA)	mg/kg	0.0001	-	-	-	<0.0001
Perfluorodecanoic acid (PFDA)	mg/kg	0.0001	-	-	-	<0.0001
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0001	-	-	-	<0.0001
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0001	-	-	-	<0.0001
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0001	-	-	-	<0.0001
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0001	-	-	-	<0.0001
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0001	-	-	-	<0.0001
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0001	-	-	-	<0.0001
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0001	-	-	-	<0.0001
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0001	-	-	-	<0.0001
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0001	-	-	-	<0.0001
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0001	-	-	-	<0.0001
Sum PFOS and PFHXS	mg/kg	0.0001	-	-	-	<0.0001
Perfluorononane sulfonate (PFNS)	mg/kg	0.0001	-	-	-	<0.0001
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0001	-	-	-	<0.0001
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0001	-	-	-	<0.0001
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.001	-	-	-	<0.001
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.001	-	-	-	<0.001
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.001	-	-	-	<0.001
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.001	-	-	-	<0.001
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.001	-	-	-	<0.001
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.001	-	-	-	<0.001
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002	-	-	-	<0.002
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002	-	-	-	<0.002
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.001	-	-	-	<0.001
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.001	-	-	-	<0.001
(13C4-PFBA) Surrogate	%	-	-	-	-	**100**
(13C5_PFPeA) Surrogate	%	-	-	-	-	**93**
(13C5-PFHxA) Surrogate	%	-	-	-	-	**119**
(13C4-PFHpA) Surrogate	%	-	-	-	-	**104**
(13C4-PFOA) Surrogate	%	-	-	-	-	**107**
(13C9-PFNA) Surrogate	%	-	-	-	-	**105**
(13C6-PFDA) Surrogate	%	-	-	-	-	**95**
(13C7-PFUdA) Surrogate	%	-	-	-	-	**105**
(13C2-PFDoA) Surrogate	%	-	-	-	-	**98**
(13C2-PFTeDA) Surrogate	%	-	-	-	-	**86**
(13C2-PFHxDA) Surrogate	%	-	-	-	-	**63**
(13C3-PFBS) Surrogate	%	-	-	-	-	**103**
(13C3-PFHxS) Surrogate	%	-	-	-	-	**94**
(13C8-PFOS) Surrogate	%	-	-	-	-	**90**
(13C2-4:2FTS) Surrogate	%	-	-	-	-	**234**
(13C2-6:2FTS) Surrogate	%	-	-	-	-	**213**
(13C2-8:2FTS) Surrogate	%	-	-	-	-	**191**
(13C8-PFOSA) Surrogate	%	-	-	-	-	**65**
(D3-N-MeFOSA) Surrogate	%	-	-	-	-	**40**
(D5-N-EtFOSA) Surrogate	%	-	-	-	-	**40**
(D7-N-MeFOSE) Surrogate	%	-	-	-	-	**47**
(D9-N-EtFOSE) Surrogate	%	-	-	-	-	**38**
(D3-N-MeFOSAA) Surrogate	%	-	-	-	-	**116**
(D5-N-EtFOSAA) Surrogate	%	-	-	-	-	**118**

Moisture Content **Method: AN002** **Tested: 23/7/2020**

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name ME315385A.017 Material 22 Jun 2020 SE207824A.017	ME315385A.018 Material 22 Jun 2020 SE207824A.018	ME315385A.019 Material 22 Jun 2020 SE207824A.019	ME315385A.020 Soil 22 Jun 2020 SE207824A.020
Moisture Content Method: AN002 Tested: 22/7/2020 (continued)						
% Moisture*	%w/w	1	-	-	-	**9.1**

QC SUMMARY

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Moisture Content Method: ME-(AU)-[ENV]AN002

Parameter	QC Reference	Units	LOR	DUP %RPD
% Moisture*	LB034373	%w/w	1	6%

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level Method: MA-1523

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Perfluorobutanoic acid (PFBA)	LB034372	mg/kg	0.0001	<0.0001	0%	NA
Perfluoropentanoic acid (PFPeA)	LB034372	mg/kg	0.0005	<0.0005	0%	NA
Perfluorohexanoic acid (PFHxA)	LB034372	mg/kg	0.0001	<0.0001	0%	NA
Perfluoroheptanoic acid (PFHpA)	LB034372	mg/kg	0.0001	<0.0001	0%	88%
Perfluorooctanoic Acid (PFOA)	LB034372	mg/kg	0.0001	<0.0001	0%	90%
Perfluorononanoic acid (PFNA)	LB034372	mg/kg	0.0001	<0.0001	0%	104%
Perfluorodecanoic acid (PFDA)	LB034372	mg/kg	0.0001	<0.0001	0%	85%
Perfluoroundecanoic acid (PFUnA)	LB034372	mg/kg	0.0001	<0.0001	0%	89%
Perfluorododecanoic acid (PFDoA)	LB034372	mg/kg	0.0001	<0.0001	0%	105%
Perfluorotridecanoic acid (PFTrDA)	LB034372	mg/kg	0.0001	<0.0001	0%	121%
Perfluorotetradecanoic acid (PFTeDA)	LB034372	mg/kg	0.0001	<0.0001	0%	71%
Perfluorohexadecanoic acid (PFHxDA)	LB034372	mg/kg	0.0001	<0.0001	0%	NA
Perfluorobutane sulfonate (PFBS)	LB034372	mg/kg	0.0001	<0.0001	0%	NA
Perfluoropentane sulfonate (PFPeS)	LB034372	mg/kg	0.0001	<0.0001	0%	NA
Perfluorohexane sulfonate (PFHxS)	LB034372	mg/kg	0.0001	<0.0001	0%	NA
Perfluoroheptane sulfonate (PFHpS)	LB034372	mg/kg	0.0001	<0.0001	0%	NA
Perfluorooctane sulfonate (PFOS)	LB034372	mg/kg	0.0001	<0.0001	0%	83%
Sum PFOS and PFHXS	LB034372	mg/kg	0.0001	<0.0001	0%	NA
Perfluorononane sulfonate (PFNS)	LB034372	mg/kg	0.0001	<0.0001	0%	NA
Perfluorodecane sulfonate (PFDS)	LB034372	mg/kg	0.0001	<0.0001	0%	NA
Perfluorododecane sulfonate (PFDoS)	LB034372	mg/kg	0.0001	<0.0001	0%	NA
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	LB034372	mg/kg	0.001	<0.001	0%	NA
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	LB034372	mg/kg	0.001	<0.001	0%	NA
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	LB034372	mg/kg	0.001	<0.001	0%	NA
Perfluorooctane sulfonamide (PFOSA)	LB034372	mg/kg	0.001	<0.001	0%	62%
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	LB034372	mg/kg	0.001	<0.001	0%	NA
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	LB034372	mg/kg	0.001	<0.001	0%	NA
2-(N-Methylperfluorooctane sulfonamido)-ethanol (N-MeFOSE)	LB034372	mg/kg	0.002	<0.002	0%	NA
2-(N-Ethylperfluorooctane sulfonamido)-ethanol (N-EtFOSE)	LB034372	mg/kg	0.002	<0.002	0%	NA
N-Methylperfluorooctanesulfonamidoacetic acid (N_MeFOSAA)	LB034372	mg/kg	0.001	<0.001	0%	NA
N-Ethylperfluorooctanesulfonamidoacetic Acid (N-EtFOSAA)	LB034372	mg/kg	0.001	<0.001	0%	NA
(13C4-PFBA) Surrogate	LB034372	%	-	100%	1%	102%
(13C5_PFPeA) Surrogate	LB034372	%	-	93%	4%	98%
(13C5-PFHxA) Surrogate	LB034372	%	-	138%	0%	111%
(13C4-PFHpA) Surrogate	LB034372	%	-	114%	5%	105%
(13C4-PFOA) Surrogate	LB034372	%	-	109%	0%	110%
(13C9-PFNA) Surrogate	LB034372	%	-	109%	5%	109%
(13C6-PFDA) Surrogate	LB034372	%	-	106%	20%	118%
(13C7-PFUdA) Surrogate	LB034372	%	-	77%	3%	102%
(13C2-PFDoA) Surrogate	LB034372	%	-	51%	12%	98%
(13C2-PFTeDA) Surrogate	LB034372	%	-	12%	9%	69%
(13C2-PFHxDA) Surrogate	LB034372	%	-	1%	28%	21%
(13C3-PFBS) Surrogate	LB034372	%	-	122%	4%	102%
(13C3-PFHxS) Surrogate	LB034372	%	-	97%	6%	95%
(13C8-PFOS) Surrogate	LB034372	%	-	91%	13%	95%
(13C2-4:2FTS) Surrogate	LB034372	%	-	292%	10%	255%
(13C2-6:2FTS) Surrogate	LB034372	%	-	256%	11%	241%
(13C2-8:2FTS) Surrogate	LB034372	%	-	165%	26%	182%
(13C8-PFOSA) Surrogate	LB034372	%	-	53%	11%	55%
(D3-N-MeFOSA) Surrogate	LB034372	%	-	33%	23%	26%
(D5-N-EtFOSA) Surrogate	LB034372	%	-	23%	15%	16%

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level Method: MA-1523 (continued)

				MB	DUP %RPD	LCS %Recovery
(D7-N-MeFOSE) Surrogate	LB034372	%	-	35%	4%	37%
(D9-N-EtFOSE) Surrogate	LB034372	%	-	24%	14%	33%
(D3-N-MeFOSAA) Surrogate	LB034372	%	-	120%	11%	97%
(D5-N-EtFOSAA) Surrogate	LB034372	%	-	97%	5%	109%

METHOD SUMMARY

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
MA-1523	This method covers the analysis of per- and polyfluoroalkyl substances (PFAS) in aqueous, solid and biosolid samples and solvent extracts, determined as the total of linear and branched isomers. After spiking with isotopically labelled quantification surrogates and clean-up via SPE cartridges sample extracts are analysed by liquid chromatography/mass spectrometry (LC-MS/MS). PFAS concentrations are determined by isotope dilution quantification.

FOOTNOTES

IS	Insufficient sample for analysis.	LOR	Limit of Reporting
LNR	Sample listed, but not received.	↑↓	Raised or Lowered Limit of Reporting
*	NATA accreditation does not cover the performance of this service.	QFH	QC result is above the upper tolerance
		QFL	QC result is below the lower tolerance
**	Indicative data, theoretical holding time exceeded.	-	The sample was not analysed for this analyte
		NVL	Not Validated

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calcuated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety .

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STATEMENT OF QA/QC PERFORMANCE

SE207824A R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks-Additional**
Order Number	**000674--000676**
Samples	20

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207824A R0**
Date Received	03 Jul 2020
Date Reported	23 Jul 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Surrogate	Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level	3 items

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	1 Soil
Date documentation received	3/7/2020@4:22pm	Type of documentation received	Email
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	1.3°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE207824A R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

No holding time data is available for this job.

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C2-4:2FTS) Surrogate	0407_TP083__0.1_200622	SE207824A.020	%	10 - 150%	234 †
(13C2-6:2FTS) Surrogate	0407_TP083__0.1_200622	SE207824A.020	%	10 - 150%	213 †
(13C2-8:2FTS) Surrogate	0407_TP083__0.1_200622	SE207824A.020	%	10 - 150%	191 †
(13C2-PFDoA) Surrogate	0407_TP083__0.1_200622	SE207824A.020	%	10 - 150%	98
(13C2-PFHxDA) Surrogate	0407_TP083__0.1_200622	SE207824A.020	%	10 - 150%	63
(13C2-PFTeDA) Surrogate	0407_TP083__0.1_200622	SE207824A.020	%	10 - 130%	86
(13C3-PFBS) Surrogate	0407_TP083__0.1_200622	SE207824A.020	%	10 - 150%	103
(13C3-PFHxS) Surrogate	0407_TP083__0.1_200622	SE207824A.020	%	10 - 150%	94
(13C4-PFBA) Surrogate	0407_TP083__0.1_200622	SE207824A.020	%	10 - 150%	100
(13C4-PFHpA) Surrogate	0407_TP083__0.1_200622	SE207824A.020	%	10 - 150%	104
(13C4-PFOA) Surrogate	0407_TP083__0.1_200622	SE207824A.020	%	10 - 150%	107
(13C5_PFPeA) Surrogate	0407_TP083__0.1_200622	SE207824A.020	%	10 - 150%	93
(13C5-PFHxA) Surrogate	0407_TP083__0.1_200622	SE207824A.020	%	10 - 150%	119
(13C6-PFDA) Surrogate	0407_TP083__0.1_200622	SE207824A.020	%	10 - 150%	95
(13C7-PFUdA) Surrogate	0407_TP083__0.1_200622	SE207824A.020	%	10 - 150%	105
(13C8-PFOS) Surrogate	0407_TP083__0.1_200622	SE207824A.020	%	10 - 150%	90
(13C8-PFOSA) Surrogate	0407_TP083__0.1_200622	SE207824A.020	%	10 - 150%	65
(13C9-PFNA) Surrogate	0407_TP083__0.1_200622	SE207824A.020	%	10 - 150%	105
(D3-N-MeFOSA) Surrogate	0407_TP083__0.1_200622	SE207824A.020	%	10 - 150%	40
(D3-N-MeFOSAA) Surrogate	0407_TP083__0.1_200622	SE207824A.020	%	10 - 150%	116
(D5-N-EtFOSA) Surrogate	0407_TP083__0.1_200622	SE207824A.020	%	10 - 150%	40
(D5-N-EtFOSAA) Surrogate	0407_TP083__0.1_200622	SE207824A.020	%	10 - 150%	118
(D7-N-MeFOSE) Surrogate	0407_TP083__0.1_200622	SE207824A.020	%	10 - 150%	47
(D9-N-EtFOSE) Surrogate	0407_TP083__0.1_200622	SE207824A.020	%	10 - 150%	38

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

No method blanks were required for this job.

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No duplicates were required for this job.

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

No laboratory control standards were required for this job.

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spikes were required for this job.

MATRIX SPIKE DUPLICATES

SE207824A R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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Please can I request the following additional analysis.

Suite E & H for samples:

- BH014 – 0.1 and 0.5 (lab report 208000)
- TP043 – 0.5 and 1.0 (lab report 728723)
- TP052 – 0.5 (lab report 207695)

Suite B, G & OC/OP

- TP027 – 0.5 (lab report 207591)
- TP045 – 0.5 (lab report 207657)
- TP054 – 0.5 (lab report 207657)

SGS EHS Alexandria Laboratory

SE207591A COC

Received: 03–Jul–2020

Suite D

- TP024 – 0.5 (lab report 208000)

PFAS (28) analysis for the 0.1m sample for the following:

- TP043 - lab report 728723
- TP220 – lab report 207831
- TP001 – lab report 207695
- TP083 – lab report 207824

Also I have gone through the lab reports and can't seem to find the lab report containing the following samples:

- BH010
- TP060
- TP061
- TP062
- BH041
- BH041
- BH042
- TP036
- BH040
- BH037
- TP144
- TP141
- TP054
- TP015

Can you please confirm that there are no additional lab reports that might have slipped through the cracks.

Also can we ensure that samples are held onto for 60 days as we may need more additional analysis shortly.

Thanks for your help [redacted] have a good weekend.

Cheers,

[redacted]

SAMPLE RECEIPT ADVICE

SE207591A

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks-Additional**
Order Number	**000661--000663**
Samples	28

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Fri 3/7/2020
Report Due	Thu 23/7/2020
SGS Reference	**SE207591A**

SUBMISSION DETAILS

This is to confirm that 28 samples were received on Friday 3/7/2020. Results are expected to be ready by COB Thursday 23/7/2020. Please quote SGS reference SE207591A when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	1 Soil
Date documentation received	3/7/2020@4:22pm	Type of documentation received	Email
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	11°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

PFAS subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420, Report No: ME315769

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SAMPLE RECEIPT ADVICE

SE207591A

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks-Additional

SUMMARY OF ANALYSIS

No.	Sample ID	Moisture Content	Per- and Polyfluoroalkyl Substances (PFAS) in
022	0407_TP27_0.5_200616	1	55

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS		LABORATORY DETAILS	
Contact	[redacted]	Manager	[redacted]
Client	SGS EHS SYDNEY	Laboratory	SGS Melbourne EH&S
Address	Unit 16, 33 Maddox Street Alexandria NSW 2015	Address	10/585 Blackburn Road Notting Hill Victoria 3168
Telephone	02 8594 0400	Telephone	+61395743200
Facsimile	02 8594 0499	Facsimile	+61395743399
Email	au.environmental.sydney@sgs.com	Email	Au.SampleReceipt.Melbourne@sgs.com
Project	**610.30041 Randwick Barracks-Additional**	SGS Reference	**ME315769 R0**
Order Number	**SE207591A**	Date Received	21 Jul 2020
Samples	28	Date Reported	23 Jul 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(14420).

MA-1523 Majority of surrogates are within acceptance criteria.

SIGNATORIES

[redacted]

Australian Chemistry Manager

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315769.001 Soil 15 Jun 2020 SE207591A.001	ME315769.002 Soil 15 Jun 2020 SE207591A.002	ME315769.003 Soil 15 Jun 2020 SE207591A.003	ME315769.004 Soil 15 Jun 2020 SE207591A.004
Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level	**Method: MA-1523**	**Tested: 23/7/2020**					
Perfluorobutanoic acid (PFBA)	mg/kg	0.0001		-	-	-	-
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0005		-	-	-	-
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0001		-	-	-	-
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0001		-	-	-	-
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0001		-	-	-	-
Perfluorononanoic acid (PFNA)	mg/kg	0.0001		-	-	-	-
Perfluorodecanoic acid (PFDA)	mg/kg	0.0001		-	-	-	-
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0001		-	-	-	-
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0001		-	-	-	-
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0001		-	-	-	-
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0001		-	-	-	-
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0001		-	-	-	-
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0001		-	-	-	-
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0001		-	-	-	-
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0001		-	-	-	-
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0001		-	-	-	-
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0001		-	-	-	-
Sum PFOS and PFHXS	mg/kg	0.0001		-	-	-	-
Perfluorononane sulfonate (PFNS)	mg/kg	0.0001		-	-	-	-
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0001		-	-	-	-
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0001		-	-	-	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.001		-	-	-	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.001		-	-	-	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.001		-	-	-	-
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.001		-	-	-	-
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.001		-	-	-	-
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.001		-	-	-	-
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002		-	-	-	-
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002		-	-	-	-
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.001		-	-	-	-
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.001		-	-	-	-
(13C4-PFBA) Surrogate	%	-		-	-	-	-
(13C5_PFPeA) Surrogate	%	-		-	-	-	-
(13C5-PFHxA) Surrogate	%	-		-	-	-	-
(13C4-PFHpA) Surrogate	%	-		-	-	-	-
(13C4-PFOA) Surrogate	%	-		-	-	-	-
(13C9-PFNA) Surrogate	%	-		-	-	-	-
(13C6-PFDA) Surrogate	%	-		-	-	-	-
(13C7-PFUdA) Surrogate	%	-		-	-	-	-
(13C2-PFDoA) Surrogate	%	-		-	-	-	-
(13C2-PFTeDA) Surrogate	%	-		-	-	-	-
(13C2-PFHxDA) Surrogate	%	-		-	-	-	-
(13C3-PFBS) Surrogate	%	-		-	-	-	-
(13C3-PFHxS) Surrogate	%	-		-	-	-	-
(13C8-PFOS) Surrogate	%	-		-	-	-	-
(13C2-4:2FTS) Surrogate	%	-		-	-	-	-
(13C2-6:2FTS) Surrogate	%	-		-	-	-	-
(13C2-8:2FTS) Surrogate	%	-		-	-	-	-
(13C8-PFOSA) Surrogate	%	-		-	-	-	-
(D3-N-MeFOSA) Surrogate	%	-		-	-	-	-
(D5-N-EtFOSA) Surrogate	%	-		-	-	-	-
(D7-N-MeFOSE) Surrogate	%	-		-	-	-	-
(D9-N-EtFOSE) Surrogate	%	-		-	-	-	-
(D3-N-MeFOSAA) Surrogate	%	-		-	-	-	-
(D5-N-EtFOSAA) Surrogate	%	-		-	-	-	-

Moisture Content **Method: AN002** **Tested: 23/7/2020**

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name ME315769.001 Soil 15 Jun 2020 SE207591A.001	ME315769.002 Soil 15 Jun 2020 SE207591A.002	ME315769.003 Soil 15 Jun 2020 SE207591A.003	ME315769.004 Soil 15 Jun 2020 SE207591A.004
Moisture Content Method: AN002 Tested: 23/7/2020 (continued)						
% Moisture*	%w/w	1	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315769.005 Soil 15 Jun 2020 SE207591A.005	ME315769.006 Soil 15 Jun 2020 SE207591A.006	ME315769.007 Soil 15 Jun 2020 SE207591A.007	ME315769.008 Soil 15 Jun 2020 SE207591A.008
Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level	**Method: MA-1523**	**Tested: 23/7/2020**					
Perfluorobutanoic acid (PFBA)	mg/kg	0.0001		-	-	-	-
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0005		-	-	-	-
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0001		-	-	-	-
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0001		-	-	-	-
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0001		-	-	-	-
Perfluorononanoic acid (PFNA)	mg/kg	0.0001		-	-	-	-
Perfluorodecanoic acid (PFDA)	mg/kg	0.0001		-	-	-	-
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0001		-	-	-	-
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0001		-	-	-	-
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0001		-	-	-	-
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0001		-	-	-	-
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0001		-	-	-	-
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0001		-	-	-	-
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0001		-	-	-	-
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0001		-	-	-	-
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0001		-	-	-	-
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0001		-	-	-	-
Sum PFOS and PFHXS	mg/kg	0.0001		-	-	-	-
Perfluorononane sulfonate (PFNS)	mg/kg	0.0001		-	-	-	-
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0001		-	-	-	-
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0001		-	-	-	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.001		-	-	-	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.001		-	-	-	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.001		-	-	-	-
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.001		-	-	-	-
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.001		-	-	-	-
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.001		-	-	-	-
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002		-	-	-	-
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002		-	-	-	-
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.001		-	-	-	-
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.001		-	-	-	-
(13C4-PFBA) Surrogate	%	-		-	-	-	-
(13C5_PFPeA) Surrogate	%	-		-	-	-	-
(13C5-PFHxA) Surrogate	%	-		-	-	-	-
(13C4-PFHpA) Surrogate	%	-		-	-	-	-
(13C4-PFOA) Surrogate	%	-		-	-	-	-
(13C9-PFNA) Surrogate	%	-		-	-	-	-
(13C6-PFDA) Surrogate	%	-		-	-	-	-
(13C7-PFUdA) Surrogate	%	-		-	-	-	-
(13C2-PFDoA) Surrogate	%	-		-	-	-	-
(13C2-PFTeDA) Surrogate	%	-		-	-	-	-
(13C2-PFHxDA) Surrogate	%	-		-	-	-	-
(13C3-PFBS) Surrogate	%	-		-	-	-	-
(13C3-PFHxS) Surrogate	%	-		-	-	-	-
(13C8-PFOS) Surrogate	%	-		-	-	-	-
(13C2-4:2FTS) Surrogate	%	-		-	-	-	-
(13C2-6:2FTS) Surrogate	%	-		-	-	-	-
(13C2-8:2FTS) Surrogate	%	-		-	-	-	-
(13C8-PFOSA) Surrogate	%	-		-	-	-	-
(D3-N-MeFOSA) Surrogate	%	-		-	-	-	-
(D5-N-EtFOSA) Surrogate	%	-		-	-	-	-
(D7-N-MeFOSE) Surrogate	%	-		-	-	-	-
(D9-N-EtFOSE) Surrogate	%	-		-	-	-	-
(D3-N-MeFOSAA) Surrogate	%	-		-	-	-	-
(D5-N-EtFOSAA) Surrogate	%	-		-	-	-	-

Moisture Content **Method: AN002** **Tested: 23/7/2020**

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name ME315769.005 Soil 15 Jun 2020 SE207591A.005	ME315769.006 Soil 15 Jun 2020 SE207591A.006	ME315769.007 Soil 15 Jun 2020 SE207591A.007	ME315769.008 Soil 15 Jun 2020 SE207591A.008
Moisture Content Method: AN002 Tested: 23/7/2020 (continued)						
% Moisture*	%w/w	1	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315769.009 Soil 15 Jun 2020 SE207591A.009	ME315769.010 Soil 16 Jun 2020 SE207591A.010	ME315769.011 Soil 16 Jun 2020 SE207591A.011	ME315769.012 Soil 16 Jun 2020 SE207591A.012
Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level	**Method: MA-1523**	**Tested: 23/7/2020**					
Perfluorobutanoic acid (PFBA)	mg/kg	0.0001		-	-	-	-
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0005		-	-	-	-
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0001		-	-	-	-
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0001		-	-	-	-
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0001		-	-	-	-
Perfluorononanoic acid (PFNA)	mg/kg	0.0001		-	-	-	-
Perfluorodecanoic acid (PFDA)	mg/kg	0.0001		-	-	-	-
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0001		-	-	-	-
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0001		-	-	-	-
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0001		-	-	-	-
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0001		-	-	-	-
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0001		-	-	-	-
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0001		-	-	-	-
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0001		-	-	-	-
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0001		-	-	-	-
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0001		-	-	-	-
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0001		-	-	-	-
Sum PFOS and PFHXS	mg/kg	0.0001		-	-	-	-
Perfluorononane sulfonate (PFNS)	mg/kg	0.0001		-	-	-	-
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0001		-	-	-	-
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0001		-	-	-	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.001		-	-	-	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.001		-	-	-	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.001		-	-	-	-
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.001		-	-	-	-
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.001		-	-	-	-
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.001		-	-	-	-
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002		-	-	-	-
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002		-	-	-	-
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.001		-	-	-	-
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.001		-	-	-	-
(13C4-PFBA) Surrogate	%	-		-	-	-	-
(13C5_PFPeA) Surrogate	%	-		-	-	-	-
(13C5-PFHxA) Surrogate	%	-		-	-	-	-
(13C4-PFHpA) Surrogate	%	-		-	-	-	-
(13C4-PFOA) Surrogate	%	-		-	-	-	-
(13C9-PFNA) Surrogate	%	-		-	-	-	-
(13C6-PFDA) Surrogate	%	-		-	-	-	-
(13C7-PFUdA) Surrogate	%	-		-	-	-	-
(13C2-PFDoA) Surrogate	%	-		-	-	-	-
(13C2-PFTeDA) Surrogate	%	-		-	-	-	-
(13C2-PFHxDA) Surrogate	%	-		-	-	-	-
(13C3-PFBS) Surrogate	%	-		-	-	-	-
(13C3-PFHxS) Surrogate	%	-		-	-	-	-
(13C8-PFOS) Surrogate	%	-		-	-	-	-
(13C2-4:2FTS) Surrogate	%	-		-	-	-	-
(13C2-6:2FTS) Surrogate	%	-		-	-	-	-
(13C2-8:2FTS) Surrogate	%	-		-	-	-	-
(13C8-PFOSA) Surrogate	%	-		-	-	-	-
(D3-N-MeFOSA) Surrogate	%	-		-	-	-	-
(D5-N-EtFOSA) Surrogate	%	-		-	-	-	-
(D7-N-MeFOSE) Surrogate	%	-		-	-	-	-
(D9-N-EtFOSE) Surrogate	%	-		-	-	-	-
(D3-N-MeFOSAA) Surrogate	%	-		-	-	-	-
(D5-N-EtFOSAA) Surrogate	%	-		-	-	-	-

Moisture Content **Method: AN002** **Tested: 23/7/2020**

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name ME315769.009 Soil 15 Jun 2020 SE207591A.009	ME315769.010 Soil 16 Jun 2020 SE207591A.010	ME315769.011 Soil 16 Jun 2020 SE207591A.011	ME315769.012 Soil 16 Jun 2020 SE207591A.012
Moisture Content Method: AN002 Tested: 23/7/2020 (continued)						
% Moisture*	%w/w	1	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315769.013 Soil 16 Jun 2020 SE207591A.013	ME315769.014 Soil 16 Jun 2020 SE207591A.014	ME315769.015 Soil 16 Jun 2020 SE207591A.015	ME315769.016 Soil 16 Jun 2020 SE207591A.016
Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level	**Method: MA-1523**	**Tested: 23/7/2020**					
Perfluorobutanoic acid (PFBA)	mg/kg	0.0001		-	-	-	-
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0005		-	-	-	-
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0001		-	-	-	-
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0001		-	-	-	-
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0001		-	-	-	-
Perfluorononanoic acid (PFNA)	mg/kg	0.0001		-	-	-	-
Perfluorodecanoic acid (PFDA)	mg/kg	0.0001		-	-	-	-
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0001		-	-	-	-
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0001		-	-	-	-
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0001		-	-	-	-
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0001		-	-	-	-
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0001		-	-	-	-
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0001		-	-	-	-
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0001		-	-	-	-
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0001		-	-	-	-
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0001		-	-	-	-
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0001		-	-	-	-
Sum PFOS and PFHXS	mg/kg	0.0001		-	-	-	-
Perfluorononane sulfonate (PFNS)	mg/kg	0.0001		-	-	-	-
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0001		-	-	-	-
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0001		-	-	-	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.001		-	-	-	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.001		-	-	-	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.001		-	-	-	-
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.001		-	-	-	-
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.001		-	-	-	-
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.001		-	-	-	-
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002		-	-	-	-
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002		-	-	-	-
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.001		-	-	-	-
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.001		-	-	-	-
(13C4-PFBA) Surrogate	%	-		-	-	-	-
(13C5_PFPeA) Surrogate	%	-		-	-	-	-
(13C5-PFHxA) Surrogate	%	-		-	-	-	-
(13C4-PFHpA) Surrogate	%	-		-	-	-	-
(13C4-PFOA) Surrogate	%	-		-	-	-	-
(13C9-PFNA) Surrogate	%	-		-	-	-	-
(13C6-PFDA) Surrogate	%	-		-	-	-	-
(13C7-PFUdA) Surrogate	%	-		-	-	-	-
(13C2-PFDoA) Surrogate	%	-		-	-	-	-
(13C2-PFTeDA) Surrogate	%	-		-	-	-	-
(13C2-PFHxDA) Surrogate	%	-		-	-	-	-
(13C3-PFBS) Surrogate	%	-		-	-	-	-
(13C3-PFHxS) Surrogate	%	-		-	-	-	-
(13C8-PFOS) Surrogate	%	-		-	-	-	-
(13C2-4:2FTS) Surrogate	%	-		-	-	-	-
(13C2-6:2FTS) Surrogate	%	-		-	-	-	-
(13C2-8:2FTS) Surrogate	%	-		-	-	-	-
(13C8-PFOSA) Surrogate	%	-		-	-	-	-
(D3-N-MeFOSA) Surrogate	%	-		-	-	-	-
(D5-N-EtFOSA) Surrogate	%	-		-	-	-	-
(D7-N-MeFOSE) Surrogate	%	-		-	-	-	-
(D9-N-EtFOSE) Surrogate	%	-		-	-	-	-
(D3-N-MeFOSAA) Surrogate	%	-		-	-	-	-
(D5-N-EtFOSAA) Surrogate	%	-		-	-	-	-

Moisture Content **Method: AN002** **Tested: 23/7/2020**

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name ME315769.013 Soil 16 Jun 2020 SE207591A.013	ME315769.014 Soil 16 Jun 2020 SE207591A.014	ME315769.015 Soil 16 Jun 2020 SE207591A.015	ME315769.016 Soil 16 Jun 2020 SE207591A.016
Moisture Content Method: AN002 Tested: 23/7/2020 (continued)						
% Moisture*	%w/w	1	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315769.017 Soil 16 Jun 2020 SE207591A.017	ME315769.018 Soil 16 Jun 2020 SE207591A.018	ME315769.019 Soil 16 Jun 2020 SE207591A.019	ME315769.020 Soil 16 Jun 2020 SE207591A.020
Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level	**Method: MA-1523**	**Tested: 23/7/2020**					
Perfluorobutanoic acid (PFBA)	mg/kg	0.0001		-	-	-	-
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0005		-	-	-	-
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0001		-	-	-	-
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0001		-	-	-	-
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0001		-	-	-	-
Perfluorononanoic acid (PFNA)	mg/kg	0.0001		-	-	-	-
Perfluorodecanoic acid (PFDA)	mg/kg	0.0001		-	-	-	-
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0001		-	-	-	-
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0001		-	-	-	-
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0001		-	-	-	-
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0001		-	-	-	-
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0001		-	-	-	-
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0001		-	-	-	-
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0001		-	-	-	-
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0001		-	-	-	-
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0001		-	-	-	-
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0001		-	-	-	-
Sum PFOS and PFHXS	mg/kg	0.0001		-	-	-	-
Perfluorononane sulfonate (PFNS)	mg/kg	0.0001		-	-	-	-
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0001		-	-	-	-
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0001		-	-	-	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.001		-	-	-	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.001		-	-	-	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.001		-	-	-	-
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.001		-	-	-	-
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.001		-	-	-	-
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.001		-	-	-	-
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002		-	-	-	-
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002		-	-	-	-
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.001		-	-	-	-
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.001		-	-	-	-
(13C4-PFBA) Surrogate	%	-		-	-	-	-
(13C5_PFPeA) Surrogate	%	-		-	-	-	-
(13C5-PFHxA) Surrogate	%	-		-	-	-	-
(13C4-PFHpA) Surrogate	%	-		-	-	-	-
(13C4-PFOA) Surrogate	%	-		-	-	-	-
(13C9-PFNA) Surrogate	%	-		-	-	-	-
(13C6-PFDA) Surrogate	%	-		-	-	-	-
(13C7-PFUdA) Surrogate	%	-		-	-	-	-
(13C2-PFDoA) Surrogate	%	-		-	-	-	-
(13C2-PFTeDA) Surrogate	%	-		-	-	-	-
(13C2-PFHxDA) Surrogate	%	-		-	-	-	-
(13C3-PFBS) Surrogate	%	-		-	-	-	-
(13C3-PFHxS) Surrogate	%	-		-	-	-	-
(13C8-PFOS) Surrogate	%	-		-	-	-	-
(13C2-4:2FTS) Surrogate	%	-		-	-	-	-
(13C2-6:2FTS) Surrogate	%	-		-	-	-	-
(13C2-8:2FTS) Surrogate	%	-		-	-	-	-
(13C8-PFOSA) Surrogate	%	-		-	-	-	-
(D3-N-MeFOSA) Surrogate	%	-		-	-	-	-
(D5-N-EtFOSA) Surrogate	%	-		-	-	-	-
(D7-N-MeFOSE) Surrogate	%	-		-	-	-	-
(D9-N-EtFOSE) Surrogate	%	-		-	-	-	-
(D3-N-MeFOSAA) Surrogate	%	-		-	-	-	-
(D5-N-EtFOSAA) Surrogate	%	-		-	-	-	-

Moisture Content **Method: AN002** **Tested: 23/7/2020**

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315769.017 Soil 16 Jun 2020 SE207591A.017	ME315769.018 Soil 16 Jun 2020 SE207591A.018	ME315769.019 Soil 16 Jun 2020 SE207591A.019	ME315769.020 Soil 16 Jun 2020 SE207591A.020
Moisture Content Method: AN002 Tested: 23/7/2020 (continued)							
% Moisture*	%w/w	1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315769.021 Soil 16 Jun 2020 SE207591A.021	ME315769.022 Soil 16 Jun 2020 SE207591A.022	ME315769.023 Soil 16 Jun 2020 SE207591A.023	ME315769.024 Soil 16 Jun 2020 SE207591A.024
Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level	**Method: MA-1523**	**Tested: 23/7/2020**					
Perfluorobutanoic acid (PFBA)	mg/kg	0.0001		-	<0.0001	-	-
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0005		-	<0.0005	-	-
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0001		-	<0.0001	-	-
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0001		-	<0.0001	-	-
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0001		-	<0.0001	-	-
Perfluorononanoic acid (PFNA)	mg/kg	0.0001		-	<0.0001	-	-
Perfluorodecanoic acid (PFDA)	mg/kg	0.0001		-	<0.0001	-	-
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0001		-	<0.0001	-	-
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0001		-	<0.0001	-	-
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0001		-	<0.0001	-	-
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0001		-	<0.0001	-	-
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0001		-	<0.0001	-	-
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0001		-	<0.0001	-	-
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0001		-	<0.0001	-	-
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0001		-	<0.0001	-	-
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0001		-	<0.0001	-	-
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0001		-	<0.0001	-	-
Sum PFOS and PFHXS	mg/kg	0.0001		-	<0.0001	-	-
Perfluorononane sulfonate (PFNS)	mg/kg	0.0001		-	<0.0001	-	-
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0001		-	<0.0001	-	-
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0001		-	<0.0001	-	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.001		-	<0.001	-	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.001		-	<0.001	-	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.001		-	<0.001	-	-
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.001		-	<0.001	-	-
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.001		-	<0.001	-	-
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.001		-	<0.001	-	-
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002		-	<0.002	-	-
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002		-	<0.002	-	-
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.001		-	<0.001	-	-
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.001		-	<0.001	-	-
(13C4-PFBA) Surrogate	%	-		-	**100**	-	-
(13C5_PFPeA) Surrogate	%	-		-	**96**	-	-
(13C5-PFHxA) Surrogate	%	-		-	**115**	-	-
(13C4-PFHpA) Surrogate	%	-		-	**100**	-	-
(13C4-PFOA) Surrogate	%	-		-	**116**	-	-
(13C9-PFNA) Surrogate	%	-		-	**102**	-	-
(13C6-PFDA) Surrogate	%	-		-	**108**	-	-
(13C7-PFUdA) Surrogate	%	-		-	**98**	-	-
(13C2-PFDoA) Surrogate	%	-		-	**87**	-	-
(13C2-PFTeDA) Surrogate	%	-		-	**66**	-	-
(13C2-PFHxDA) Surrogate	%	-		-	**39**	-	-
(13C3-PFBS) Surrogate	%	-		-	**103**	-	-
(13C3-PFHxS) Surrogate	%	-		-	**96**	-	-
(13C8-PFOS) Surrogate	%	-		-	**113**	-	-
(13C2-4:2FTS) Surrogate	%	-		-	**250**	-	-
(13C2-6:2FTS) Surrogate	%	-		-	**241**	-	-
(13C2-8:2FTS) Surrogate	%	-		-	**200**	-	-
(13C8-PFOSA) Surrogate	%	-		-	**60**	-	-
(D3-N-MeFOSA) Surrogate	%	-		-	**49**	-	-
(D5-N-EtFOSA) Surrogate	%	-		-	**36**	-	-
(D7-N-MeFOSE) Surrogate	%	-		-	**41**	-	-
(D9-N-EtFOSE) Surrogate	%	-		-	**36**	-	-
(D3-N-MeFOSAA) Surrogate	%	-		-	**115**	-	-
(D5-N-EtFOSAA) Surrogate	%	-		-	**103**	-	-

Moisture Content **Method: AN002** **Tested: 23/7/2020**

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name ME315769.021 Soil 16 Jun 2020 SE207591A.021	ME315769.022 Soil 16 Jun 2020 SE207591A.022	ME315769.023 Soil 16 Jun 2020 SE207591A.023	ME315769.024 Soil 16 Jun 2020 SE207591A.024
Moisture Content Method: AN002 Tested: 23/7/2020 (continued)						
% Moisture*	%w/w	1	-	**3.4**	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315769.025 Soil 16 Jun 2020 SE207591A.025	ME315769.026 Soil 16 Jun 2020 SE207591A.026	ME315769.027 Material 16 Jun 2020 SE207591A.027	ME315769.028 Material 16 Jun 2020 SE207591A.028
Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level	**Method: MA-1523**	**Tested: 23/7/2020**					
Perfluorobutanoic acid (PFBA)	mg/kg	0.0001		-	-	-	-
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0005		-	-	-	-
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0001		-	-	-	-
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0001		-	-	-	-
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0001		-	-	-	-
Perfluorononanoic acid (PFNA)	mg/kg	0.0001		-	-	-	-
Perfluorodecanoic acid (PFDA)	mg/kg	0.0001		-	-	-	-
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0001		-	-	-	-
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0001		-	-	-	-
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0001		-	-	-	-
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0001		-	-	-	-
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0001		-	-	-	-
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0001		-	-	-	-
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0001		-	-	-	-
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0001		-	-	-	-
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0001		-	-	-	-
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0001		-	-	-	-
Sum PFOS and PFHXS	mg/kg	0.0001		-	-	-	-
Perfluorononane sulfonate (PFNS)	mg/kg	0.0001		-	-	-	-
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0001		-	-	-	-
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0001		-	-	-	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.001		-	-	-	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.001		-	-	-	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.001		-	-	-	-
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.001		-	-	-	-
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.001		-	-	-	-
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.001		-	-	-	-
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002		-	-	-	-
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002		-	-	-	-
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.001		-	-	-	-
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.001		-	-	-	-
(13C4-PFBA) Surrogate	%	-		-	-	-	-
(13C5_PFPeA) Surrogate	%	-		-	-	-	-
(13C5-PFHxA) Surrogate	%	-		-	-	-	-
(13C4-PFHpA) Surrogate	%	-		-	-	-	-
(13C4-PFOA) Surrogate	%	-		-	-	-	-
(13C9-PFNA) Surrogate	%	-		-	-	-	-
(13C6-PFDA) Surrogate	%	-		-	-	-	-
(13C7-PFUdA) Surrogate	%	-		-	-	-	-
(13C2-PFDoA) Surrogate	%	-		-	-	-	-
(13C2-PFTeDA) Surrogate	%	-		-	-	-	-
(13C2-PFHxDA) Surrogate	%	-		-	-	-	-
(13C3-PFBS) Surrogate	%	-		-	-	-	-
(13C3-PFHxS) Surrogate	%	-		-	-	-	-
(13C8-PFOS) Surrogate	%	-		-	-	-	-
(13C2-4:2FTS) Surrogate	%	-		-	-	-	-
(13C2-6:2FTS) Surrogate	%	-		-	-	-	-
(13C2-8:2FTS) Surrogate	%	-		-	-	-	-
(13C8-PFOSA) Surrogate	%	-		-	-	-	-
(D3-N-MeFOSA) Surrogate	%	-		-	-	-	-
(D5-N-EtFOSA) Surrogate	%	-		-	-	-	-
(D7-N-MeFOSE) Surrogate	%	-		-	-	-	-
(D9-N-EtFOSE) Surrogate	%	-		-	-	-	-
(D3-N-MeFOSAA) Surrogate	%	-		-	-	-	-
(D5-N-EtFOSAA) Surrogate	%	-		-	-	-	-

Moisture Content **Method: AN002** **Tested: 23/7/2020**

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name ME315769.025 Soil 16 Jun 2020 SE207591A.025	ME315769.026 Soil 16 Jun 2020 SE207591A.026	ME315769.027 Material 16 Jun 2020 SE207591A.027	ME315769.028 Material 16 Jun 2020 SE207591A.028
Moisture Content Method: AN002 Tested: 23/7/2020 (continued)						
% Moisture*	%w/w	1	-	-	-	-

QC SUMMARY

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Moisture Content Method: ME-(AU)-[ENV]AN002

Parameter	QC Reference	Units	LOR	DUP %RPD
% Moisture*	LB034373	%w/w	1	6%

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level Method: MA-1523

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Perfluorobutanoic acid (PFBA)	LB034372	mg/kg	0.0001	<0.0001	0%	NA
Perfluoropentanoic acid (PFPeA)	LB034372	mg/kg	0.0005	<0.0005	0%	NA
Perfluorohexanoic acid (PFHxA)	LB034372	mg/kg	0.0001	<0.0001	0%	NA
Perfluoroheptanoic acid (PFHpA)	LB034372	mg/kg	0.0001	<0.0001	0%	88%
Perfluorooctanoic Acid (PFOA)	LB034372	mg/kg	0.0001	<0.0001	0%	90%
Perfluorononanoic acid (PFNA)	LB034372	mg/kg	0.0001	<0.0001	0%	104%
Perfluorodecanoic acid (PFDA)	LB034372	mg/kg	0.0001	<0.0001	0%	85%
Perfluoroundecanoic acid (PFUnA)	LB034372	mg/kg	0.0001	<0.0001	0%	89%
Perfluorododecanoic acid (PFDoA)	LB034372	mg/kg	0.0001	<0.0001	0%	105%
Perfluorotridecanoic acid (PFTrDA)	LB034372	mg/kg	0.0001	<0.0001	0%	121%
Perfluorotetradecanoic acid (PFTeDA)	LB034372	mg/kg	0.0001	<0.0001	0%	71%
Perfluorohexadecanoic acid (PFHxDA)	LB034372	mg/kg	0.0001	<0.0001	0%	NA
Perfluorobutane sulfonate (PFBS)	LB034372	mg/kg	0.0001	<0.0001	0%	NA
Perfluoropentane sulfonate (PFPeS)	LB034372	mg/kg	0.0001	<0.0001	0%	NA
Perfluorohexane sulfonate (PFHxS)	LB034372	mg/kg	0.0001	<0.0001	0%	NA
Perfluoroheptane sulfonate (PFHpS)	LB034372	mg/kg	0.0001	<0.0001	0%	NA
Perfluorooctane sulfonate (PFOS)	LB034372	mg/kg	0.0001	<0.0001	0%	83%
Sum PFOS and PFHXS	LB034372	mg/kg	0.0001	<0.0001	0%	NA
Perfluorononane sulfonate (PFNS)	LB034372	mg/kg	0.0001	<0.0001	0%	NA
Perfluorodecane sulfonate (PFDS)	LB034372	mg/kg	0.0001	<0.0001	0%	NA
Perfluorododecane sulfonate (PFDoS)	LB034372	mg/kg	0.0001	<0.0001	0%	NA
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	LB034372	mg/kg	0.001	<0.001	0%	NA
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	LB034372	mg/kg	0.001	<0.001	0%	NA
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	LB034372	mg/kg	0.001	<0.001	0%	NA
Perfluorooctane sulfonamide (PFOSA)	LB034372	mg/kg	0.001	<0.001	0%	62%
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	LB034372	mg/kg	0.001	<0.001	0%	NA
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	LB034372	mg/kg	0.001	<0.001	0%	NA
2-(N-Methylperfluorooctane sulfonamido)-ethanol (N-MeFOSE)	LB034372	mg/kg	0.002	<0.002	0%	NA
2-(N-Ethylperfluorooctane sulfonamido)-ethanol (N-EtFOSE)	LB034372	mg/kg	0.002	<0.002	0%	NA
N-Methylperfluorooctanesulfonamidoacetic acid (N_MeFOSAA)	LB034372	mg/kg	0.001	<0.001	0%	NA
N-Ethylperfluorooctanesulfonamidoacetic Acid (N-EtFOSAA)	LB034372	mg/kg	0.001	<0.001	0%	NA
(13C4-PFBA) Surrogate	LB034372	%	-	100%	1%	102%
(13C5_PFPeA) Surrogate	LB034372	%	-	93%	4%	98%
(13C5-PFHxA) Surrogate	LB034372	%	-	138%	0%	111%
(13C4-PFHpA) Surrogate	LB034372	%	-	114%	5%	105%
(13C4-PFOA) Surrogate	LB034372	%	-	109%	0%	110%
(13C9-PFNA) Surrogate	LB034372	%	-	109%	5%	109%
(13C6-PFDA) Surrogate	LB034372	%	-	106%	20%	118%
(13C7-PFUdA) Surrogate	LB034372	%	-	77%	3%	102%
(13C2-PFDoA) Surrogate	LB034372	%	-	51%	12%	98%
(13C2-PFTeDA) Surrogate	LB034372	%	-	12%	9%	69%
(13C2-PFHxDA) Surrogate	LB034372	%	-	1%	28%	21%
(13C3-PFBS) Surrogate	LB034372	%	-	122%	4%	102%
(13C3-PFHxS) Surrogate	LB034372	%	-	97%	6%	95%
(13C8-PFOS) Surrogate	LB034372	%	-	91%	13%	95%
(13C2-4:2FTS) Surrogate	LB034372	%	-	292%	10%	255%
(13C2-6:2FTS) Surrogate	LB034372	%	-	256%	11%	241%
(13C2-8:2FTS) Surrogate	LB034372	%	-	165%	26%	182%
(13C8-PFOSA) Surrogate	LB034372	%	-	53%	11%	55%
(D3-N-MeFOSA) Surrogate	LB034372	%	-	33%	23%	26%
(D5-N-EtFOSA) Surrogate	LB034372	%	-	23%	15%	16%

QC SUMMARY

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level Method: MA-1523 (continued)

				MB	DUP %RPD	LCS %Recovery
(D7-N-MeFOSE) Surrogate	LB034372	%	-	35%	4%	37%
(D9-N-EtFOSE) Surrogate	LB034372	%	-	24%	14%	33%
(D3-N-MeFOSAA) Surrogate	LB034372	%	-	120%	11%	97%
(D5-N-EtFOSAA) Surrogate	LB034372	%	-	97%	5%	109%

METHOD SUMMARY

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
MA-1523	This method covers the analysis of per- and polyfluoroalkyl substances (PFAS) in aqueous, solid and biosolid samples and solvent extracts, determined as the total of linear and branched isomers. After spiking with isotopically labelled quantification surrogates and clean-up via SPE cartridges sample extracts are analysed by liquid chromatography/mass spectrometry (LC-MS/MS). PFAS concentrations are determined by isotope dilution quantification.

FOOTNOTES

IS	Insufficient sample for analysis.	LOR	Limit of Reporting
LNR	Sample listed, but not received.	↑↓	Raised or Lowered Limit of Reporting
*	NATA accreditation does not cover the performance of this service.	QFH	QC result is above the upper tolerance
		QFL	QC result is below the lower tolerance
**	Indicative data, theoretical holding time exceeded.	-	The sample was not analysed for this analyte
		NVL	Not Validated

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calcuated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety .

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STATEMENT OF QA/QC PERFORMANCE

SE207591A R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks-Additional**
Order Number	**000661--000663**
Samples	28

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207591A R0**
Date Received	03 Jul 2020
Date Reported	23 Jul 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Surrogate	Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level	3 items

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	1 Soil
Date documentation received	3/7/2020@4:22pm	Type of documentation received	Email
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	11°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE207591A R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

No holding time data is available for this job.

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C2-4:2FTS) Surrogate	0407_TP27_0.5_200616	SE207591A.022	%	10 - 150%	250 †
(13C2-6:2FTS) Surrogate	0407_TP27_0.5_200616	SE207591A.022	%	10 - 150%	241 †
(13C2-8:2FTS) Surrogate	0407_TP27_0.5_200616	SE207591A.022	%	10 - 150%	200 †
(13C2-PFDoA) Surrogate	0407_TP27_0.5_200616	SE207591A.022	%	10 - 150%	87
(13C2-PFHxDA) Surrogate	0407_TP27_0.5_200616	SE207591A.022	%	10 - 150%	39
(13C2-PFTeDA) Surrogate	0407_TP27_0.5_200616	SE207591A.022	%	10 - 130%	66
(13C3-PFBS) Surrogate	0407_TP27_0.5_200616	SE207591A.022	%	10 - 150%	103
(13C3-PFHxS) Surrogate	0407_TP27_0.5_200616	SE207591A.022	%	10 - 150%	96
(13C4-PFBA) Surrogate	0407_TP27_0.5_200616	SE207591A.022	%	10 - 150%	100
(13C4-PFHpA) Surrogate	0407_TP27_0.5_200616	SE207591A.022	%	10 - 150%	100
(13C4-PFOA) Surrogate	0407_TP27_0.5_200616	SE207591A.022	%	10 - 150%	116
(13C5_PFPeA) Surrogate	0407_TP27_0.5_200616	SE207591A.022	%	10 - 150%	96
(13C5-PFHxA) Surrogate	0407_TP27_0.5_200616	SE207591A.022	%	10 - 150%	115
(13C6-PFDA) Surrogate	0407_TP27_0.5_200616	SE207591A.022	%	10 - 150%	108
(13C7-PFUdA) Surrogate	0407_TP27_0.5_200616	SE207591A.022	%	10 - 150%	98
(13C8-PFOS) Surrogate	0407_TP27_0.5_200616	SE207591A.022	%	10 - 150%	113
(13C8-PFOSA) Surrogate	0407_TP27_0.5_200616	SE207591A.022	%	10 - 150%	60
(13C9-PFNA) Surrogate	0407_TP27_0.5_200616	SE207591A.022	%	10 - 150%	102
(D3-N-MeFOSA) Surrogate	0407_TP27_0.5_200616	SE207591A.022	%	10 - 150%	49
(D3-N-MeFOSAA) Surrogate	0407_TP27_0.5_200616	SE207591A.022	%	10 - 150%	115
(D5-N-EtFOSA) Surrogate	0407_TP27_0.5_200616	SE207591A.022	%	10 - 150%	36
(D5-N-EtFOSAA) Surrogate	0407_TP27_0.5_200616	SE207591A.022	%	10 - 150%	103
(D7-N-MeFOSE) Surrogate	0407_TP27_0.5_200616	SE207591A.022	%	10 - 150%	41
(D9-N-EtFOSE) Surrogate	0407_TP27_0.5_200616	SE207591A.022	%	10 - 150%	36

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

No method blanks were required for this job.

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No duplicates were required for this job.

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

No laboratory control standards were required for this job.

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spikes were required for this job.

MATRIX SPIKE DUPLICATES

SE207591A R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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This test report shall not be reproduced, except in full.

Please can I request the following additional analysis.

Suite E & H for samples:

- BH014 – 0.1 and 0.5 (lab report 208000)
- TP043 – 0.5 and 1.0 (lab report 728723)
- TP052 – 0.5 (lab report 207695)

Suite B, G & OC/OP

- TP027 – 0.5 (lab report 207591)
- TP045 – 0.5 (lab report 207657)
- TP054 – 0.5 (lab report 207657)

SGS EHS Alexandria Laboratory

SE207657A COC
Received: 03 – Jul – 2020

Suite D

- TP024 – 0.5 (lab report 208000)

PFAS (28) analysis for the 0.1m sample for the following:

- TP043 - lab report 728723
- TP220 – lab report 207831
- TP001 – lab report 207695
- TP083 – lab report 207824

Also I have gone through the lab reports and can't seem to find the lab report containing the following samples:

- BH010
- TP060
- TP061
- TP062
- BH041
- BH041
- BH042
- TP036
- BH040
- BH037
- TP144
- TP141
- TP054
- TP015

Can you please confirm that there are no additional lab reports that might have slipped through the cracks.

Also can we ensure that samples are held onto for 60 days as we may need more additional analysis shortly.

Thanks for your help [redacted] have a good weekend.

Cheers,

[redacted]

SAMPLE RECEIPT ADVICE

SE207657A

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barrack-Additional**
Order Number	**000664--000666**
Samples	21

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Fri 3/7/2020
Report Due	Thu 23/7/2020
SGS Reference	**SE207657A**

SUBMISSION DETAILS

This is to confirm that 21 samples were received on Friday 3/7/2020. Results are expected to be ready by COB Thursday 23/7/2020. Please quote SGS reference SE207657A when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	2 Soil
Date documentation received	3/7/2020@4:22pm	Type of documentation received	Email
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	10.3°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

PFAS subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420. Report No: PFAS subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420, Report No: ME315770

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SAMPLE RECEIPT ADVICE

SE207657A

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barrack-Additional

SUMMARY OF ANALYSIS

No.	Sample ID	Moisture Content	Per- and Polyfluoroalkyl Substances (PFAS) in
004	0407_TP45_0.5_200617	1	55
006	0407_TP54_0.5_200617	1	55

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barrack-Additional**
Order Number	**000664--000666**
Samples	21

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207657A R0**
Date Received	3/7/2020
Date Reported	23/7/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

PFAS subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420. Report No: PFAS subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420, Report No: ME315770

MA-1523 Majority of surrogates are within acceptance criteria.

SIGNATORIES

Moisture Content [AN002] Tested: 23/7/2020

PARAMETER	UOM	LOR	0407_TP45_0.5_2006 17 SOIL - 17/6/2020 SE207657A.004	0407_TP54_0.5_2006 17 SOIL - 17/6/2020 SE207657A.006
% Moisture	%w/w	1	**4.6**	**7.9**

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level [MA-1523] Tested: 23/7/2020

PARAMETER	UOM	LOR	0407_TP45_0.5_20017 SOIL - 17/6/2020 SE207657A.004	0407_TP54_0.5_20017 SOIL - 17/6/2020 SE207657A.006
Perfluorobutanoic acid (PFBA)	mg/kg	0.0001	<0.0001	<0.0001
Perfluoropentanoic acid (PFPeA)	mg/kg	0.0005	<0.0005	<0.0005
Perfluorohexanoic acid (PFHxA)	mg/kg	0.0001	<0.0001	<0.0001
Perfluoroheptanoic acid (PFHpA)	mg/kg	0.0001	<0.0001	<0.0001
Perfluorooctanoic Acid (PFOA)	mg/kg	0.0001	**0.0004**	<0.0001
Perfluorononanoic acid (PFNA)	mg/kg	0.0001	<0.0001	<0.0001
Perfluorodecanoic acid (PFDA)	mg/kg	0.0001	<0.0001	<0.0001
Perfluoroundecanoic acid (PFUnA)	mg/kg	0.0001	<0.0001	<0.0001
Perfluorododecanoic acid (PFDoA)	mg/kg	0.0001	<0.0001	<0.0001
Perfluorotridecanoic acid (PFTrDA)	mg/kg	0.0001	<0.0001	<0.0001
Perfluorotetradecanoic acid (PFTeDA)	mg/kg	0.0001	<0.0001	<0.0001
Perfluorohexadecanoic acid (PFHxDA)	mg/kg	0.0001	<0.0001	<0.0001
Perfluorobutane sulfonate (PFBS)	mg/kg	0.0001	<0.0001	<0.0001
Perfluoropentane sulfonate (PFPeS)	mg/kg	0.0001	<0.0001	<0.0001
Perfluorohexane sulfonate (PFHxS)	mg/kg	0.0001	<0.0001	<0.0001
Perfluoroheptane sulfonate (PFHpS)	mg/kg	0.0001	<0.0001	<0.0001
Perfluorooctane sulfonate (PFOS)	mg/kg	0.0001	**0.0004**	<0.0001
Sum PFOS and PFHXS	mg/kg	0.0001	**0.0004**	<0.0001
Perfluorononane sulfonate (PFNS)	mg/kg	0.0001	<0.0001	<0.0001
Perfluorodecane sulfonate (PFDS)	mg/kg	0.0001	<0.0001	<0.0001
Perfluorododecane sulfonate (PFDoS)	mg/kg	0.0001	<0.0001	<0.0001
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	mg/kg	0.001	<0.001	<0.001
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	mg/kg	0.001	<0.001	<0.001
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	mg/kg	0.001	<0.001	<0.001
Perfluorooctane sulfonamide (PFOSA)	mg/kg	0.001	<0.001	<0.001
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	mg/kg	0.001	<0.001	<0.001
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	mg/kg	0.001	<0.001	<0.001
2-(N-Methylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002	<0.002	<0.002
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	mg/kg	0.002	<0.002	<0.002
N-Methylperfluorooctanesulfonamidoacetic acid	mg/kg	0.001	<0.001	<0.001
N-Ethylperfluorooctanesulfonamidoacetic Acid	mg/kg	0.001	<0.001	<0.001

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
MA-1523	This method covers the analysis of per- and polyfluoroalkyl substances (PFAS) in aqueous, solid and biosolid samples and solvent extracts, determined as the total of linear and branched isomers. After spiking with isotopically labelled quantification surrogates and clean-up via SPE cartridges sample extracts are analysed by liquid chromatography/mass spectrometry (LC-MS/MS). PFAS concentrations are determined by isotope dilution quantification.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE207657A R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barrack-Additional**
Order Number	**000664--000666**
Samples	21

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207657A R0**
Date Received	03 Jul 2020
Date Reported	23 Jul 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Surrogate	Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level	7 items

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	2 Soil
Date documentation received	3/7/2020@4:22pm	Type of documentation received	Email
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	10.3°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE207657A R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

No holding time data is available for this job.

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Solid Samples- Low level **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C2-4:2FTS) Surrogate	0407_TP45_0.5_200617	SE207657A.004	%	10 - 150%	268 †
	0407_TP54_0.5_200617	SE207657A.006	%	10 - 150%	248 †
(13C2-6:2FTS) Surrogate	0407_TP45_0.5_200617	SE207657A.004	%	10 - 150%	260 †
	0407_TP54_0.5_200617	SE207657A.006	%	10 - 150%	251 †
(13C2-8:2FTS) Surrogate	0407_TP45_0.5_200617	SE207657A.004	%	10 - 150%	229 †
	0407_TP54_0.5_200617	SE207657A.006	%	10 - 150%	214 †
(13C2-PFDoA) Surrogate	0407_TP45_0.5_200617	SE207657A.004	%	10 - 150%	105
	0407_TP54_0.5_200617	SE207657A.006	%	10 - 150%	114
(13C2-PFHxDA) Surrogate	0407_TP45_0.5_200617	SE207657A.004	%	10 - 150%	41
	0407_TP54_0.5_200617	SE207657A.006	%	10 - 150%	165 †
(13C2-PFTeDA) Surrogate	0407_TP45_0.5_200617	SE207657A.004	%	10 - 130%	72
	0407_TP54_0.5_200617	SE207657A.006	%	10 - 130%	124
(13C3-PFBS) Surrogate	0407_TP45_0.5_200617	SE207657A.004	%	10 - 150%	102
	0407_TP54_0.5_200617	SE207657A.006	%	10 - 150%	102
(13C3-PFHxS) Surrogate	0407_TP45_0.5_200617	SE207657A.004	%	10 - 150%	104
	0407_TP54_0.5_200617	SE207657A.006	%	10 - 150%	99
(13C4-PFBA) Surrogate	0407_TP45_0.5_200617	SE207657A.004	%	10 - 150%	102
	0407_TP54_0.5_200617	SE207657A.006	%	10 - 150%	100
(13C4-PFHpA) Surrogate	0407_TP45_0.5_200617	SE207657A.004	%	10 - 150%	103
	0407_TP54_0.5_200617	SE207657A.006	%	10 - 150%	96
(13C4-PFOA) Surrogate	0407_TP45_0.5_200617	SE207657A.004	%	10 - 150%	115
	0407_TP54_0.5_200617	SE207657A.006	%	10 - 150%	106
(13C5_PFPeA) Surrogate	0407_TP45_0.5_200617	SE207657A.004	%	10 - 150%	97
	0407_TP54_0.5_200617	SE207657A.006	%	10 - 150%	94
(13C5-PFHxA) Surrogate	0407_TP45_0.5_200617	SE207657A.004	%	10 - 150%	119
	0407_TP54_0.5_200617	SE207657A.006	%	10 - 150%	106
(13C6-PFDA) Surrogate	0407_TP45_0.5_200617	SE207657A.004	%	10 - 150%	131
	0407_TP54_0.5_200617	SE207657A.006	%	10 - 150%	124
(13C7-PFUdA) Surrogate	0407_TP45_0.5_200617	SE207657A.004	%	10 - 150%	101
	0407_TP54_0.5_200617	SE207657A.006	%	10 - 150%	105
(13C8-PFOS) Surrogate	0407_TP45_0.5_200617	SE207657A.004	%	10 - 150%	100
	0407_TP54_0.5_200617	SE207657A.006	%	10 - 150%	100
(13C8-PFOSA) Surrogate	0407_TP45_0.5_200617	SE207657A.004	%	10 - 150%	50
	0407_TP54_0.5_200617	SE207657A.006	%	10 - 150%	50
(13C9-PFNA) Surrogate	0407_TP45_0.5_200617	SE207657A.004	%	10 - 150%	107
	0407_TP54_0.5_200617	SE207657A.006	%	10 - 150%	109
(D3-N-MeFOSA) Surrogate	0407_TP45_0.5_200617	SE207657A.004	%	10 - 150%	36
	0407_TP54_0.5_200617	SE207657A.006	%	10 - 150%	44
(D3-N-MeFOSAA) Surrogate	0407_TP45_0.5_200617	SE207657A.004	%	10 - 150%	118
	0407_TP54_0.5_200617	SE207657A.006	%	10 - 150%	108
(D5-N-EtFOSA) Surrogate	0407_TP45_0.5_200617	SE207657A.004	%	10 - 150%	29
	0407_TP54_0.5_200617	SE207657A.006	%	10 - 150%	50
(D5-N-EtFOSAA) Surrogate	0407_TP45_0.5_200617	SE207657A.004	%	10 - 150%	108
	0407_TP54_0.5_200617	SE207657A.006	%	10 - 150%	129
(D7-N-MeFOSE) Surrogate	0407_TP45_0.5_200617	SE207657A.004	%	10 - 150%	40
	0407_TP54_0.5_200617	SE207657A.006	%	10 - 150%	45
(D9-N-EtFOSE) Surrogate	0407_TP45_0.5_200617	SE207657A.004	%	10 - 150%	35
	0407_TP54_0.5_200617	SE207657A.006	%	10 - 150%	44

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

No method blanks were required for this job.

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No duplicates were required for this job.

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

No laboratory control standards were required for this job.

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spikes were required for this job.

MATRIX SPIKE DUPLICATES

SE207657A R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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This test report shall not be reproduced, except in full.

Good morning

Please book these additional jobs in.

Please be very carefully as there are lots of jobs

Regards,

[redacted]
Environment, Health & Safety
Client Manager
Phone: +61 (0)2 8594 0400
[redacted]
(Please note my new working hours of Mon-Fri 6:00am-2:00pm)



Covid-19 update: SGS Australia is open, with our Business Service Continuity Plans being put in place to ensure your project can be delivered as normal, please click here to see further details on our Business & Services Continuity Plans.

From: [redacted]@slrconsulting.com>
Sent: Tuesday, 21 July 2020 5:03 PM
To: [redacted]@sgs.com>
Cc: [redacted]@slrconsulting.com>; [redacted]@slrconsulting.com>
Subject: [EXTERNAL] 610.30041 DHA Randwick - Additional Analysis

*** WARNING: this message is from an EXTERNAL SENDER. Please be cautious, particularly with links and attachments. ***

Hi [redacted]

Can we please schedule the following analyses:

pH, clay content, TOC & CEC:

Report number	Sample ID
SE207695	TP002_0.1_200615
SE207695	TP002_1.5_200615
SE207695	TP005_0.1_200616
SE207695	TP005_1.5_200616
SE207695	TP049_0.1_200617
SE207695	TP049_1.0_200617
SE208047	TP092_0.1_200624
SE208047	TP092_1.0_200624
SE207831	TP220_0.1_200618
SE207831	TP220_1.0_200618
SE207831	TP221_0.1_200619
SE207831	TP221_1.0_200619
SE207998	TP230_0.1_200622
SE207998	TP230_1.8_200622
SE207591	TP018_0.1_200615
SE207591	TP018_1.0_200615
SE208047	TP092_0.1_200624
SE208047	TP092_1.0_200624
SE207911	TP095_0.1_200623
SE207911	TP095_1.0_200623
SE207731	TP073_0.1_200619
SE207731	TP073_1.0_200619
SE208659	TP133_0.1_200701
SE208659	TP133_1.0_200701
SE208142	TP151_0.1_200629
SE208142	TP151_1.0_200629
SE208137	TP183_0.1_200625
SE208137	TP183_0.5_200625

Additional analysis:

Report number	Sample ID	Parameter
SE208081	0407_TP241_1.0_200625	Pb & Zn
SE207731	0407_TP73_0.5_200619	Cr

ASLP Leach:

Report number	Sample ID	Parameter
SE208046	0407_TP237_0.5_200624	8 metals
SE208081	0407_TP241_0.5_200625	8 metals
SE208133	0407_TP111_0.1_200626	8 metals
SE208142	0407_TP256_0.1_200629	8 metals
SE207831	0407_TP222_0.1_200619	8 metals
SE207731	0407_TP73_0.1_200619	8 metals
SE207850	0407_TP162_0.1_200617	PAHs include B(a)P

SE207831	0407_TP197_0.1_200619	PAHs include B(a)P
SE207831	0407_TP197_0.5_200619	PAHs include B(a)P
SE207831	0407_TP200_0.5_200618	PAHs include B(a)P
SE207831	0407_TP200_1.0_200618	Total and leachable PAHs including B(a)P
SE207831	0407_TP209_0.5_200619	PAHs include B(a)P
SE207831	0407_TP221_0.5_200619	PAHs include B(a)P
SE207831	0407_TP221_1.0_200619	Total and leachable PAHs including B(a)P
SE207824	0407_TP231_0.1_200622	PAHs include B(a)P
SE208161	0407_BH41_0.0_200625	PFOS, PFOA, PfHxS
SE208046	0407_QC160_200624	PFOS, PFOA, PfHxS
SE207824	0407_QC130_200622	PFOS, PFOA, PfHxS

Let me know if you have any questions.

Many thanks,

[redacted]

SLR

[redacted]

Associate - Land Quality & Remediation

Please note in response to the COVID-19 Pandemic and physical distancing recommendations from the Australian Government, SLR is encouraging staff to work remotely and implement flexible working hours if necessary.
If you have received this email outside of regular office hours, it is not expected that you will respond until your own working hours commence.

+61 7 3117 5227

[redacted]

[redacted]@slrconsulting.com

SLR Consulting Australia Pty Ltd
Level 2, 15 Astor Terrace, Brisbane, QLD, Australia, 4000

WINNERS: RoSPA Gold Award, 2017

WINNERS : International Business Excellence Award, 2016

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SAMPLE RECEIPT ADVICE

SE207850A

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	36

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Tue 21/7/2020
Report Due	Wed 29/7/2020
SGS Reference	**SE207850A**

SUBMISSION DETAILS

This is to confirm that 36 samples were received on Tuesday 21/7/2020. Results are expected to be ready by COB Wednesday 29/7/2020.
Please quote SGS reference SE207850A when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	1 Soil
Date documentation received	21/7/2020@5:03pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	1.4°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

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SAMPLE RECEIPT ADVICE

SE207850A

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	ASLP (Australian Standard Leaching Procedure) DI	PAH (Polynuclear Aromatic Hydrocarbons) in ASLP DI
016	0407_TP162_0.1_200617	1	22

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	36

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207850A R0**
Date Received	21/7/2020
Date Reported	29/7/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

SIGNATORIES

[redacted]

Organic Section Head

ASLP (Australian Standard Leaching Procedure) DI Water [AN007/AS4439.3] Tested: 23/7/2020

PARAMETER	UOM	LOR	0407_TP162_0.1_20(617 SOIL - 17/6/2020 SE207850A.016
pH of solids leachate	pH Units	-	**7.1**

PAH (Polynuclear Aromatic Hydrocarbons) in ASLP DI Extract [AN420] Tested: 27/7/2020

PARAMETER	UOM	LOR	0407_TP162_0.1_20(617 SOIL - 17/6/2020 SE207850A.016
Naphthalene	µg/L	0.1	<0.1
2-methylnaphthalene	µg/L	0.1	<0.1
1-methylnaphthalene	µg/L	0.1	<0.1
Acenaphthylene	µg/L	0.1	<0.1
Acenaphthene	µg/L	0.1	<0.1
Fluorene	µg/L	0.1	<0.1
Phenanthrene	µg/L	0.1	<0.1
Anthracene	µg/L	0.1	<0.1
Fluoranthene	µg/L	0.1	<0.1
Pyrene	µg/L	0.1	<0.1
Benzo(a)anthracene	µg/L	0.1	<0.1
Chrysene	µg/L	0.1	<0.1
Benzo(b&j)fluoranthene	µg/L	0.1	<0.1
Benzo(k)fluoranthene	µg/L	0.1	<0.1
Benzo(a)pyrene	µg/L	0.1	<0.1
Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1
Dibenzo(ah)anthracene	µg/L	0.1	<0.1
Benzo(ghi)perylene	µg/L	0.1	<0.1
Total PAH (18)*	µg/L	1	<1

METHOD	METHODOLOGY SUMMARY
AN007/AS4439.3	Contaminants of interest in a waste material are leached out of the waste with a selected leaching solution under controlled conditions. The ratio of sample to extraction fluid is 100 g to 2 L (1 to 20 by mass). The concentration of each contaminant of interest is determined in the leachate by appropriate methods after separation from the sample by filtering. Based on AS4439.3.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE207850A R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	36

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207850A R0**
Date Received	21 Jul 2020
Date Reported	29 Jul 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Extraction Date	ASLP (Australian Standard Leaching Procedure) DI Water	1 item
	PAH (Polynuclear Aromatic Hydrocarbons) in ASLP DI Extract	1 item
Analysis Date	ASLP (Australian Standard Leaching Procedure) DI Water	1 item

SAMPLE SUMMARY

HOLDING TIME SUMMARY

SE207850A R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

ASLP (Australian Standard Leaching Procedure) DI Water

Method: ME-(AU)-[ENV]AN007/AS4439.3

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP162_0.1_200617	SE207850A.016	LB205010	17 Jun 2020	21 Jul 2020	01 Jul 2020	23 Jul 2020†	01 Jul 2020	29 Jul 2020†

PAH (Polynuclear Aromatic Hydrocarbons) in ASLP DI Extract

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP162_0.1_200617	SE207850A.016	LB205233	17 Jun 2020	21 Jul 2020	08 Jul 2020	27 Jul 2020†	05 Sep 2020	29 Jul 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in ASLP DI Extract — **Method: ME-(AU)-[ENV]AN420**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP162_0.1_200617	SE207850A.016	%	40 - 130%	66
d14-p-terphenyl (Surrogate)	0407_TP162_0.1_200617	SE207850A.016	%	40 - 130%	90
d5-nitrobenzene (Surrogate)	0407_TP162_0.1_200617	SE207850A.016	%	40 - 130%	58

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in ASLP DI Extract — **Method: ME-(AU)-[ENV]AN420**

Sample Number		Parameter	Units	LOR	Result
LB205233.001		Naphthalene	µg/L	0.1	<0.1
		2-methylnaphthalene	µg/L	0.1	<0.1
		1-methylnaphthalene	µg/L	0.1	<0.1
		Acenaphthylene	µg/L	0.1	<0.1
		Acenaphthene	µg/L	0.1	<0.1
		Fluorene	µg/L	0.1	<0.1
		Phenanthrene	µg/L	0.1	<0.1
		Anthracene	µg/L	0.1	<0.1
		Fluoranthene	µg/L	0.1	<0.1
		Pyrene	µg/L	0.1	<0.1
		Benzo(a)anthracene	µg/L	0.1	<0.1
		Chrysene	µg/L	0.1	<0.1
		Benzo(a)pyrene	µg/L	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1
		Dibenzo(ah)anthracene	µg/L	0.1	<0.1
		Benzo(ghi)perylene	µg/L	0.1	<0.1
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	70
		2-fluorobiphenyl (Surrogate)	%	-	74
		d14-p-terphenyl (Surrogate)	%	-	110

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Original	Duplicate	Parameter	Units	LOR

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in ASLP DI Extract — **Method: ME-(AU)-[ENV]AN420**

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205233.002		Naphthalene	µg/L	0.1	31	40	60 - 140	76
		Acenaphthylene	µg/L	0.1	36	40	60 - 140	90
		Acenaphthene	µg/L	0.1	32	40	60 - 140	80
		Phenanthrene	µg/L	0.1	38	40	60 - 140	95
		Anthracene	µg/L	0.1	31	40	60 - 140	77
		Fluoranthene	µg/L	0.1	36	40	60 - 140	90
		Pyrene	µg/L	0.1	36	40	60 - 140	89
		Benzo(a)pyrene	µg/L	0.1	40	40	60 - 140	101
	Surrogates	d5-nitrobenzene (Surrogate)	µg/L	-	0.4	0.5	40 - 130	86
		2-fluorobiphenyl (Surrogate)	µg/L	-	0.4	0.5	40 - 130	84
		d14-p-terphenyl (Surrogate)	µg/L	-	0.5	0.5	40 - 130	94

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

QC Sample	Sample Number	Parameter	Units	LOR

MATRIX SPIKE DUPLICATES

SE207850A R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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This test report shall not be reproduced, except in full.

Good morning

Please book these additional jobs in.

Please be very carefully as there are lots of jobs

Regards,

[redacted]
Environment, Health & Safety
Client Manager
Phone: +61 (0)2 8594 0400
Direct: +61 (0)2 8594 0449
Mobile: +61 (0)4 0797 2867
(Please note my new working hours of Mon-Fri 6:00am-2:00pm)



Covid-19 update: SGS Australia is open, with our Business Service Continuity Plans being put in place to ensure your project can be delivered as normal, please click here to see further details on our Business & Services Continuity Plans.

From: [redacted]@slrconsulting.com>
Sent: Tuesday, 21 July 2020 5:03 PM
To: [redacted]@sgs.com>
Cc: [redacted]@slrconsulting.com>
Subject: [EXTERNAL] 610.30041 DHA Randwick - Additional Analysis

*** WARNING: this message is from an EXTERNAL SENDER. Please be cautious, particularly with links and attachments. ***

Hi [redacted]

Can we please schedule the following analyses:

pH, clay content, TOC & CEC:

Report number	Sample ID
SE207695	TP002_0.1_200615
SE207695	TP002_1.5_200615
SE207695	TP005_0.1_200616
SE207695	TP005_1.5_200616
SE207695	TP049_0.1_200617
SE207695	TP049_1.0_200617
SE208047	TP092_0.1_200624
SE208047	TP092_1.0_200624
SE207831	TP220_0.1_200618
SE207831	TP220_1.0_200618
SE207831	TP221_0.1_200619
SE207831	TP221_1.0_200619
SE207998	TP230_0.1_200622
SE207998	TP230_1.8_200622
SE207591	TP018_0.1_200615
SE207591	TP018_1.0_200615
SE208047	TP092_0.1_200624
SE208047	TP092_1.0_200624
SE207911	TP095_0.1_200623
SE207911	TP095_1.0_200623
SE207731	TP073_0.1_200619
SE207731	TP073_1.0_200619
SE208659	TP133_0.1_200701
SE208659	TP133_1.0_200701
SE208142	TP151_0.1_200629
SE208142	TP151_1.0_200629
SE208137	TP183_0.1_200625
SE208137	TP183_0.5_200625

Additional analysis:

Report number	Sample ID	Parameter
SE208081	0407_TP241_1.0_200625	Pb & Zn
SE207731	0407_TP73_0.5_200619	Cr

ASLP Leach:

Report number	Sample ID	Parameter
SE208046	0407_TP237_0.5_200624	8 metals
SE208081	0407_TP241_0.5_200625	8 metals
SE208133	0407_TP111_0.1_200626	8 metals
SE208142	0407_TP256_0.1_200629	8 metals
SE207831	0407_TP222_0.1_200619	8 metals
SE207731	0407_TP73_0.1_200619	8 metals
SE207850	0407_TP162_0.1_200617	PAHs include B(a)P

SE207831	0407_TP197_0.1_200619	PAHs include B(a)P
SE207831	0407_TP197_0.5_200619	PAHs include B(a)P
SE207831	0407_TP200_0.5_200618	PAHs include B(a)P
SE207831	0407_TP200_1.0_200618	Total and leachable PAHs including B(a)P
SE207831	0407_TP209_0.5_200619	PAHs include B(a)P
SE207831	0407_TP221_0.5_200619	PAHs include B(a)P
SE207831	0407_TP221_1.0_200619	Total and leachable PAHs including B(a)P
SE207824	0407_TP231_0.1_200622	PAHs include B(a)P
SE208161	0407_BH41_0.0_200625	PFOS, PFOA, PfHxS
SE208046	0407_QC160_200624	PFOS, PFOA, PfHxS
SE207824	0407_QC130_200622	PFOS, PFOA, PfHxS

Let me know if you have any questions.

Many thanks,

[redacted]

SLR

[redacted]

Associate - Land Quality & Remediation

Please note in response to the COVID-19 Pandemic and physical distancing recommendations from the Australian Government, SLR is encouraging staff to work remotely and implement flexible working hours if necessary.
If you have received this email outside of regular office hours, it is not expected that you will respond until your own working hours commence.

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o [redacted]
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e [redacted]@slrconsulting.com

SLR Consulting Australia Pty Ltd
Level 2, 15 Astor Terrace, Brisbane, QLD, Australia, 4000

WINNERS: RoSPA Gold Award, 2017

WINNERS : International Business Excellence Award, 2016

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SAMPLE RECEIPT ADVICE

SE208081A

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000683--000685**
Samples	20

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Tue 21/7/2020
Report Due	Wed 29/7/2020
SGS Reference	**SE208081A**

SUBMISSION DETAILS

This is to confirm that 20 samples were received on Tuesday 21/7/2020. Results are expected to be ready by COB Wednesday 29/7/2020.
Please quote SGS reference SE208081A when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	1 Soil
Date documentation received	21/7/2020@5:03pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	4.7°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

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SAMPLE RECEIPT ADVICE

SE208081A

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Moisture Content	Total Recoverable Elements in Soil/Waste
020	0407_TP241_1.0_200625	1	2

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	20

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208081A R0**
Date Received	21/7/2020
Date Reported	29/7/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

SIGNATORIES

[redacted]

Senior Organic Chemist/Metals Chemist

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 28/7/2020

PARAMETER	UOM	LOR	0407_TP241_1.0_20(625 SOIL - 25/6/2020 SE208081A.020
Lead, Pb	mg/kg	1	<1
Zinc, Zn	mg/kg	2	**2**

Moisture Content [AN002] Tested: 24/7/2020

PARAMETER	UOM	LOR	0407_TP241_1.0_20(625 SOIL - 25/6/2020 SE208081A.020
% Moisture	%w/w	1	**22.0**

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE208081A R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	20

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208081A R0**
Date Received	21 Jul 2020
Date Reported	29 Jul 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Extraction Date	Moisture Content	1 item
Matrix Spike	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	1 item

SAMPLE SUMMARY

HOLDING TIME SUMMARY

SE208081A R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP241_1.0_200625	SE208081A.020	LB205094	25 Jun 2020	21 Jul 2020	09 Jul 2020	24 Jul 2020†	29 Jul 2020	29 Jul 2020

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP241_1.0_200625	SE208081A.020	LB205416	25 Jun 2020	21 Jul 2020	22 Dec 2020	28 Jul 2020	22 Dec 2020	29 Jul 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No surrogates were required for this job.

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES — **Method: ME-(AU)-[ENV]AN040/AN320**

Sample Number	Parameter	Units	LOR	Result
LB205416.001	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Moisture Content — Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207831B.008	LB205094.011	% Moisture	%w/w	1	4.00508582324	4.0345821325	55	1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES — Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208081A.020	LB205416.014	Lead, Pb	mg/kg	1	<1	<1	200	0
		Zinc, Zn	mg/kg	2	2	2	119	1

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES — **Method: ME-(AU)-[ENV]AN040/AN320**

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205416.002	Lead, Pb	mg/kg	1	100	89.9	80 - 120	113
	Zinc, Zn	mg/kg	2	300	273	80 - 120	108

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES — **Method: ME-(AU)-[ENV]AN040/AN320**

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE209043.001	LB205416.004	Lead, Pb	mg/kg	1	120	120	50	-13 ④

MATRIX SPIKE DUPLICATES

SE208081A R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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This test report shall not be reproduced, except in full.

Good morning

Please book these additional jobs in.

Please be very carefully as there are lots of jobs

Regards,

[redacted]
Environment, Health & Safety
Client Manager
Phone: +61 (0)2 8594 0400
Direct: +61 (0)2 8594 0449
Mobile: +61 (0)4 0797 2867
(Please note my new working hours of Mon-Fri 6:00am-2:00pm)



Covid-19 update: SGS Australia is open, with our Business Service Continuity Plans being put in place to ensure your project can be delivered as normal, please click here to see further details on our Business & Services Continuity Plans.

From: [redacted]@slrconsulting.com>
Sent: Tuesday, 21 July 2020 5:03 PM
To: [redacted]@sgs.com>
Cc: [redacted]@slrconsulting.com>
Subject: [EXTERNAL] 610.30041 DHA Randwick - Additional Analysis

*** WARNING: this message is from an EXTERNAL SENDER. Please be cautious, particularly with links and attachments. ***

Hi [redacted]

Can we please schedule the following analyses:

pH, clay content, TOC & CEC:

Report number	Sample ID
SE207695	TP002_0.1_200615
SE207695	TP002_1.5_200615
SE207695	TP005_0.1_200616
SE207695	TP005_1.5_200616
SE207695	TP049_0.1_200617
SE207695	TP049_1.0_200617
SE208047	TP092_0.1_200624
SE208047	TP092_1.0_200624
SE207831	TP220_0.1_200618
SE207831	TP220_1.0_200618
SE207831	TP221_0.1_200619
SE207831	TP221_1.0_200619
SE207998	TP230_0.1_200622
SE207998	TP230_1.8_200622
SE207591	TP018_0.1_200615
SE207591	TP018_1.0_200615
SE208047	TP092_0.1_200624
SE208047	TP092_1.0_200624
SE207911	TP095_0.1_200623
SE207911	TP095_1.0_200623
SE207731	TP073_0.1_200619
SE207731	TP073_1.0_200619
SE208659	TP133_0.1_200701
SE208659	TP133_1.0_200701
SE208142	TP151_0.1_200629
SE208142	TP151_1.0_200629
SE208137	TP183_0.1_200625
SE208137	TP183_0.5_200625

Additional analysis:

Report number	Sample ID	Parameter
SE208081	0407_TP241_1.0_200625	Pb & Zn
SE207731	0407_TP73_0.5_200619	Cr

ASLP Leach:

Report number	Sample ID	Parameter
SE208046	0407_TP237_0.5_200624	8 metals
SE208081	0407_TP241_0.5_200625	8 metals
SE208133	0407_TP111_0.1_200626	8 metals
SE208142	0407_TP256_0.1_200629	8 metals
SE207831	0407_TP222_0.1_200619	8 metals
SE207731	0407_TP73_0.1_200619	8 metals
SE207850	0407_TP162_0.1_200617	PAHs include B(a)P

SE207831	0407_TP197_0.1_200619	PAHs include B(a)P
SE207831	0407_TP197_0.5_200619	PAHs include B(a)P
SE207831	0407_TP200_0.5_200618	PAHs include B(a)P
SE207831	0407_TP200_1.0_200618	Total and leachable PAHs including B(a)P
SE207831	0407_TP209_0.5_200619	PAHs include B(a)P
SE207831	0407_TP221_0.5_200619	PAHs include B(a)P
SE207831	0407_TP221_1.0_200619	Total and leachable PAHs including B(a)P
SE207824	0407_TP231_0.1_200622	PAHs include B(a)P
SE208161	0407_BH41_0.0_200625	PFOS, PFOA, PfHxS
SE208046	0407_QC160_200624	PFOS, PFOA, PfHxS
SE207824	0407_QC130_200622	PFOS, PFOA, PfHxS

Let me know if you have any questions.

Many thanks,

[redacted]

SLR

[redacted]
Associate - Land Quality & Remediation

Please note in response to the COVID-19 Pandemic and physical distancing recommendations from the Australian Government, SLR is encouraging staff to work remotely and implement flexible working hours if necessary.
If you have received this email outside of regular office hours, it is not expected that you will respond until your own working hours commence.

d +61 7 3117 5227
o [redacted]
m
e [redacted]@slrconsulting.com

SLR Consulting Australia Pty Ltd
Level 2, 15 Astor Terrace, Brisbane, QLD, Australia, 4000

WINNERS: RoSPA Gold Award, 2017
WINNERS : International Business Excellence Award, 2016

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SAMPLE RECEIPT ADVICE

SE207824C

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000674--000676**
Samples	19

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Tue 21/7/2020
Report Due	Wed 29/7/2020
SGS Reference	**SE207824C**

SUBMISSION DETAILS

This is to confirm that 19 samples were received on Tuesday 21/7/2020. Results are expected to be ready by COB Wednesday 29/7/2020.
Please quote SGS reference SE207824C when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	1 Soil
Date documentation received	21/7/2020@5:03pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	1.3°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

PFOS/PFOA subcontracted to SGS Antwerp Belgium Institute of Applied Chromatography Haven 407, BELAC Accreditation Number: N.005-TEST. Results may be delayed.

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SAMPLE RECEIPT ADVICE

SE207824C

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Field pH for Acid Sulphate Soil	Perfluoronated Surfactants in ASLP DI Water Extract
015	0407_QC130_200622	4	55

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	19

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207824C R0**
Date Received	21/7/2020
Date Reported	30/7/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

PFOS/PFOA subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420. Report No ME315385C

MA1523: Some PFAS surrogate recovery is outside of the acceptance criteria due to sample matrix interference

SIGNATORIES

Perfluoronated Surfactants in ASLP DI Water Extract [MA_1523] Tested: 30/7/2020

PARAMETER	UOM	LOR	0407_QC130_20062: SOIL - 22/6/2020 SE207824C.015
Perfluorobutanoic acid (PFBA)	µg/L	0.002	<0.002
Perfluoropentanoic acid (PFPeA)	µg/L	0.002	<0.002
Perfluorohexanoic acid (PFHxA)	µg/L	0.002	<0.002
Perfluoroheptanoic acid (PFHpA)	µg/L	0.002	<0.002
Perfluorooctanoic Acid (PFOA)	µg/L	0.001	**0.001**
Perfluorononanoic acid (PFNA)	µg/L	0.004	<0.004
Perfluorodecanoic acid (PFDA)	µg/L	0.004	<0.004
Perfluoroundecanoic acid (PFUnA)	µg/L	0.004	<0.004
Perfluorododecanoic acid (PFDoA)	µg/L	0.004	<0.004
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.004	<0.004
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.004	<0.004
Perfluorohexadecanoic acid (PFHxDA)	µg/L	0.008	<0.008
Perfluorobutane sulfonate (PFBS)	µg/L	0.004	<0.004
Perfluoropentane sulfonate (PFPeS)	µg/L	0.004	<0.004
Perfluorohexane sulfonate (PFHxS)	µg/L	0.002	<0.002
Perfluoroheptane sulfonate (PFHpS)	µg/L	0.002	<0.002
Perfluorooctane sulfonate (PFOS)	µg/L	0.002	<0.002
Sum of PFHxS and PFOS	µg/L	0.002	<0.002
Perfluorononane sulfonate (PFNS)	µg/L	0.002	<0.002
Perfluorodecane sulfonate (PFDS)	µg/L	0.002	<0.002
Perfluorododecane sulfonate (PFDoS)	µg/L	0.002	<0.002
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	µg/L	0.002	<0.002
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	µg/L	0.002	<0.002
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	µg/L	0.002	<0.002
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.008	<0.008
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	µg/L	0.01	<0.01
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	µg/L	0.01	<0.01
2-(N-Methylperfluorooctane sulfonamido)-ethanol	µg/L	0.01	<0.01
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	µg/L	0.01	<0.01
N-Methylperfluorooctanesulfonamidoacetic acid	µg/L	0.01	<0.01
N-Ethylperfluorooctanesulfonamidoacetic Acid	µg/L	0.01	<0.01

METHOD	METHODOLOGY SUMMARY
MA1523	This method covers the analysis of per- and polyfluoroalkyl substances (PFAS) from a ASLP extract. Determined as the total of linear and branched isomers. After spiking with isotopically labelled quantification surrogates and clean-up via SPE cartridges sample extracts are analysed by liquid chromatography /mass spectrometry (LC-MS/MS). PFAS concentrations are determined by isotope dilution quantification .

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety .

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS		LABORATORY DETAILS	
Contact	[redacted]	Manager	[redacted]
Client	SGS EHS SYDNEY	Laboratory	SGS Melbourne EH&S
Address	Unit 16, 33 Maddox Street Alexandria NSW 2015	Address	10/585 Blackburn Road Notting Hill Victoria 3168
Telephone	02 8594 0400	Telephone	+61395743200
Facsimile	02 8594 0499	Facsimile	+61395743399
Email	au.environmental.sydney@sgs.com	Email	Au.SampleReceipt.Melbourne@sgs.com
Project	**610.30041 Randwick Barracks**	SGS Reference	**ME315385C R0**
Order Number	**SE207824C**	Date Received	28 Jul 2020
Samples	19	Date Reported	30 Jul 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(14420).

MA1523: Some PFAS surrogate recovery is outside of the acceptance criteria due to sample matrix interference .

SIGNATORIES

[redacted]

Australian Chemistry Manager

Parameter	Units	LOR	Sample Number: ME315385C.001 Sample Matrix: Soil Sample Date: 22 Jun 2020 Sample Name: SE207824C.001	ME315385C.002 Soil 22 Jun 2020 SE207824C.002	ME315385C.003 Soil 22 Jun 2020 SE207824C.003	ME315385C.004 Soil 22 Jun 2020 SE207824C.004
Perfluoronated Surfactants in ASLP DI Water Extract	**Method: MA_1523**	**Tested: 30/7/2020**				
Perfluorobutanoic acid (PFBA)	µg/L	0.002	-	-	-	-
Perfluoropentanoic acid (PFPeA)	µg/L	0.002	-	-	-	-
Perfluorohexanoic acid (PFHxA)	µg/L	0.002	-	-	-	-
Perfluoroheptanoic acid (PFHpA)	µg/L	0.002	-	-	-	-
Perfluorooctanoic Acid (PFOA)	µg/L	0.001	-	-	-	-
Perfluorononanoic acid (PFNA)	µg/L	0.004	-	-	-	-
Perfluorodecanoic acid (PFDA)	µg/L	0.004	-	-	-	-
Perfluoroundecanoic acid (PFUnA)	µg/L	0.004	-	-	-	-
Perfluorododecanoic acid (PFDoA)	µg/L	0.004	-	-	-	-
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.004	-	-	-	-
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.004	-	-	-	-
Perfluorohexadecanoic acid (PFHxDA)	µg/L	0.008	-	-	-	-
Perfluorobutane sulfonate (PFBS)	µg/L	0.004	-	-	-	-
Perfluoropentane sulfonate (PFPeS)	µg/L	0.004	-	-	-	-
Perfluorohexane sulfonate (PFHxS)	µg/L	0.002	-	-	-	-
Perfluoroheptane sulfonate (PFHpS)	µg/L	0.002	-	-	-	-
Perfluorooctane sulfonate (PFOS)	µg/L	0.002	-	-	-	-
Sum of PFHxS and PFOS	µg/L	0.002	-	-	-	-
Perfluorononane sulfonate (PFNS)	µg/L	0.002	-	-	-	-
Perfluorodecane sulfonate (PFDS)	µg/L	0.002	-	-	-	-
Perfluorododecane sulfonate (PFDoS)	µg/L	0.002	-	-	-	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	µg/L	0.002	-	-	-	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	µg/L	0.002	-	-	-	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	µg/L	0.002	-	-	-	-
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.008	-	-	-	-
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	µg/L	0.01	-	-	-	-
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	µg/L	0.01	-	-	-	-
2-(N-Methylperfluorooctane sulfonamido)-ethanol	µg/L	0.01	-	-	-	-
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	µg/L	0.01	-	-	-	-
N-Methylperfluorooctanesulfonamidoacetic acid	µg/L	0.01	-	-	-	-
N-Ethylperfluorooctanesulfonamidoacetic Acid	µg/L	0.01	-	-	-	-
(13C4-PFBA) Surrogate	%	-	-	-	-	-
(13C5-PFPeA) Surrogate	%	-	-	-	-	-
(13C5-PFHxA) Surrogate	%	-	-	-	-	-
(13C4-PFHpA) Surrogate	%	-	-	-	-	-
(13C4_PFOA) Surrogate	%	-	-	-	-	-
(13C9-PFNA) Surrogate	%	-	-	-	-	-
(13C6-PFDA) Surrogate	%	-	-	-	-	-
(13C7-PFUdA) Surrogate	%	-	-	-	-	-
(13C2-PFDoA) Surrogate	%	-	-	-	-	-
(13C2_PFTeDA) Surrogate	%	-	-	-	-	-
(13C2-PFHxDA) Surrogate	%	-	-	-	-	-
(13C3-PFBS) Surrogate	%	-	-	-	-	-
(13C3-PFHxS) Surrogate	%	-	-	-	-	-
(13C8-PFOS) Surrogate	%	-	-	-	-	-
(13C2-4:2 FTS) Surrogate	%	-	-	-	-	-
(13C2-6:2 FTS) Surrogate	%	-	-	-	-	-
(13C2-8:2 FTS) Surrogate	%	-	-	-	-	-
(13C8-PFOSA) Surrogate	%	-	-	-	-	-
(D3-N-MeFOSA) Surrogate	%	-	-	-	-	-
(D5-N-EtFOSA) Surrogate	%	-	-	-	-	-
(D7-N-MeFOSE) Surrogate	%	-	-	-	-	-
(D9-N-EtFOSE) Surrogate	%	-	-	-	-	-
(D3-N-MeFOSAA) Surrogate	%	-	-	-	-	-
(D5-N-EtFOSAA) Surrogate	%	-	-	-	-	-
ASLP AS 4439.3 Acid Leaching Report Information	**Method: AS4439.3**	**Tested: 29/7/2020**				

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315385C.001 Soil 22 Jun 2020 SE207824C.001	ME315385C.002 Soil 22 Jun 2020 SE207824C.002	ME315385C.003 Soil 22 Jun 2020 SE207824C.003	ME315385C.004 Soil 22 Jun 2020 SE207824C.004
ASLP AS 4439.3 Acid Leaching Report Information	**Method: AS4439.3**	**Tested: 29/7/2020**	**(continued)**				
Storage Temperature*	°C	-		-	-	-	-
Leaching Date*	No unit	-		-	-	-	-
Test Weight (g)*	g	-		-	-	-	-
Leach Fluid pH*	pH Units	-		-	-	-	-
Leaching Fluid Added (g)*	g	-		-	-	-	-
Leaching Fluid Collected (g)*	g	-		-	-	-	-
Solids Leachate pH*	pH Units	-		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315385C.005 Soil 22 Jun 2020 SE207824C.005	ME315385C.006 Soil 22 Jun 2020 SE207824C.006	ME315385C.007 Soil 22 Jun 2020 SE207824C.007	ME315385C.008 Soil 22 Jun 2020 SE207824C.008
Perfluoronated Surfactants in ASLP DI Water Extract	**Method: MA_1523**	**Tested: 30/7/2020**					
Perfluorobutanoic acid (PFBA)	µg/L	0.002		-	-	-	-
Perfluoropentanoic acid (PFPeA)	µg/L	0.002		-	-	-	-
Perfluorohexanoic acid (PFHxA)	µg/L	0.002		-	-	-	-
Perfluoroheptanoic acid (PFHpA)	µg/L	0.002		-	-	-	-
Perfluorooctanoic Acid (PFOA)	µg/L	0.001		-	-	-	-
Perfluorononanoic acid (PFNA)	µg/L	0.004		-	-	-	-
Perfluorodecanoic acid (PFDA)	µg/L	0.004		-	-	-	-
Perfluoroundecanoic acid (PFUnA)	µg/L	0.004		-	-	-	-
Perfluorododecanoic acid (PFDoA)	µg/L	0.004		-	-	-	-
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.004		-	-	-	-
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.004		-	-	-	-
Perfluorohexadecanoic acid (PFHxDA)	µg/L	0.008		-	-	-	-
Perfluorobutane sulfonate (PFBS)	µg/L	0.004		-	-	-	-
Perfluoropentane sulfonate (PFPeS)	µg/L	0.004		-	-	-	-
Perfluorohexane sulfonate (PFHxS)	µg/L	0.002		-	-	-	-
Perfluoroheptane sulfonate (PFHpS)	µg/L	0.002		-	-	-	-
Perfluorooctane sulfonate (PFOS)	µg/L	0.002		-	-	-	-
Sum of PFHxS and PFOS	µg/L	0.002		-	-	-	-
Perfluorononane sulfonate (PFNS)	µg/L	0.002		-	-	-	-
Perfluorodecane sulfonate (PFDS)	µg/L	0.002		-	-	-	-
Perfluorododecane sulfonate (PFDoS)	µg/L	0.002		-	-	-	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	µg/L	0.002		-	-	-	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	µg/L	0.002		-	-	-	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	µg/L	0.002		-	-	-	-
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.008		-	-	-	-
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	µg/L	0.01		-	-	-	-
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	µg/L	0.01		-	-	-	-
2-(N-Methylperfluorooctane sulfonamido)-ethanol	µg/L	0.01		-	-	-	-
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	µg/L	0.01		-	-	-	-
N-Methylperfluorooctanesulfonamidoacetic acid	µg/L	0.01		-	-	-	-
N-Ethylperfluorooctanesulfonamidoacetic Acid	µg/L	0.01		-	-	-	-
(13C4-PFBA) Surrogate	%	-		-	-	-	-
(13C5-PFPeA) Surrogate	%	-		-	-	-	-
(13C5-PFHxA) Surrogate	%	-		-	-	-	-
(13C4-PFHpA) Surrogate	%	-		-	-	-	-
(13C4_PFOA) Surrogate	%	-		-	-	-	-
(13C9-PFNA) Surrogate	%	-		-	-	-	-
(13C6-PFDA) Surrogate	%	-		-	-	-	-
(13C7-PFUdA) Surrogate	%	-		-	-	-	-
(13C2-PFDoA) Surrogate	%	-		-	-	-	-
(13C2_PFTeDA) Surrogate	%	-		-	-	-	-
(13C2-PFHxDA) Surrogate	%	-		-	-	-	-
(13C3-PFBS) Surrogate	%	-		-	-	-	-
(13C3-PFHxS) Surrogate	%	-		-	-	-	-
(13C8-PFOS) Surrogate	%	-		-	-	-	-
(13C2-4:2 FTS) Surrogate	%	-		-	-	-	-
(13C2-6:2 FTS) Surrogate	%	-		-	-	-	-
(13C2-8:2 FTS) Surrogate	%	-		-	-	-	-
(13C8-PFOSA) Surrogate	%	-		-	-	-	-
(D3-N-MeFOSA) Surrogate	%	-		-	-	-	-
(D5-N-EtFOSA) Surrogate	%	-		-	-	-	-
(D7-N-MeFOSE) Surrogate	%	-		-	-	-	-
(D9-N-EtFOSE) Surrogate	%	-		-	-	-	-
(D3-N-MeFOSAA) Surrogate	%	-		-	-	-	-
(D5-N-EtFOSAA) Surrogate	%	-		-	-	-	-

ASLP AS 4439.3 Acid Leaching Report Information **Method: AS4439.3** **Tested: 29/7/2020**

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315385C.005 Soil 22 Jun 2020 SE207824C.005	ME315385C.006 Soil 22 Jun 2020 SE207824C.006	ME315385C.007 Soil 22 Jun 2020 SE207824C.007	ME315385C.008 Soil 22 Jun 2020 SE207824C.008
ASLP AS 4439.3 Acid Leaching Report Information	**Method: AS4439.3**	**Tested: 29/7/2020**	**(continued)**				
Storage Temperature*	°C	-		-	-	-	-
Leaching Date*	No unit	-		-	-	-	-
Test Weight (g)*	g	-		-	-	-	-
Leach Fluid pH*	pH Units	-		-	-	-	-
Leaching Fluid Added (g)*	g	-		-	-	-	-
Leaching Fluid Collected (g)*	g	-		-	-	-	-
Solids Leachate pH*	pH Units	-		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315385C.009 Soil 22 Jun 2020 SE207824C.009	ME315385C.010 Soil 22 Jun 2020 SE207824C.010	ME315385C.011 Soil 22 Jun 2020 SE207824C.011	ME315385C.012 Soil 22 Jun 2020 SE207824C.012
Perfluoronated Surfactants in ASLP DI Water Extract	**Method: MA_1523**	**Tested: 30/7/2020**					
Perfluorobutanoic acid (PFBA)	µg/L	0.002		-	-	-	-
Perfluoropentanoic acid (PFPeA)	µg/L	0.002		-	-	-	-
Perfluorohexanoic acid (PFHxA)	µg/L	0.002		-	-	-	-
Perfluoroheptanoic acid (PFHpA)	µg/L	0.002		-	-	-	-
Perfluorooctanoic Acid (PFOA)	µg/L	0.001		-	-	-	-
Perfluorononanoic acid (PFNA)	µg/L	0.004		-	-	-	-
Perfluorodecanoic acid (PFDA)	µg/L	0.004		-	-	-	-
Perfluoroundecanoic acid (PFUnA)	µg/L	0.004		-	-	-	-
Perfluorododecanoic acid (PFDoA)	µg/L	0.004		-	-	-	-
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.004		-	-	-	-
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.004		-	-	-	-
Perfluorohexadecanoic acid (PFHxDA)	µg/L	0.008		-	-	-	-
Perfluorobutane sulfonate (PFBS)	µg/L	0.004		-	-	-	-
Perfluoropentane sulfonate (PFPeS)	µg/L	0.004		-	-	-	-
Perfluorohexane sulfonate (PFHxS)	µg/L	0.002		-	-	-	-
Perfluoroheptane sulfonate (PFHpS)	µg/L	0.002		-	-	-	-
Perfluorooctane sulfonate (PFOS)	µg/L	0.002		-	-	-	-
Sum of PFHxS and PFOS	µg/L	0.002		-	-	-	-
Perfluorononane sulfonate (PFNS)	µg/L	0.002		-	-	-	-
Perfluorodecane sulfonate (PFDS)	µg/L	0.002		-	-	-	-
Perfluorododecane sulfonate (PFDoS)	µg/L	0.002		-	-	-	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	µg/L	0.002		-	-	-	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	µg/L	0.002		-	-	-	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	µg/L	0.002		-	-	-	-
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.008		-	-	-	-
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	µg/L	0.01		-	-	-	-
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	µg/L	0.01		-	-	-	-
2-(N-Methylperfluorooctane sulfonamido)-ethanol	µg/L	0.01		-	-	-	-
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	µg/L	0.01		-	-	-	-
N-Methylperfluorooctanesulfonamidoacetic acid	µg/L	0.01		-	-	-	-
N-Ethylperfluorooctanesulfonamidoacetic Acid	µg/L	0.01		-	-	-	-
(13C4-PFBA) Surrogate	%	-		-	-	-	-
(13C5-PFPeA) Surrogate	%	-		-	-	-	-
(13C5-PFHxA) Surrogate	%	-		-	-	-	-
(13C4-PFHpA) Surrogate	%	-		-	-	-	-
(13C4_PFOA) Surrogate	%	-		-	-	-	-
(13C9-PFNA) Surrogate	%	-		-	-	-	-
(13C6-PFDA) Surrogate	%	-		-	-	-	-
(13C7-PFUdA) Surrogate	%	-		-	-	-	-
(13C2-PFDoA) Surrogate	%	-		-	-	-	-
(13C2_PFTeDA) Surrogate	%	-		-	-	-	-
(13C2-PFHxDA) Surrogate	%	-		-	-	-	-
(13C3-PFBS) Surrogate	%	-		-	-	-	-
(13C3-PFHxS) Surrogate	%	-		-	-	-	-
(13C8-PFOS) Surrogate	%	-		-	-	-	-
(13C2-4:2 FTS) Surrogate	%	-		-	-	-	-
(13C2-6:2 FTS) Surrogate	%	-		-	-	-	-
(13C2-8:2 FTS) Surrogate	%	-		-	-	-	-
(13C8-PFOSA) Surrogate	%	-		-	-	-	-
(D3-N-MeFOSA) Surrogate	%	-		-	-	-	-
(D5-N-EtFOSA) Surrogate	%	-		-	-	-	-
(D7-N-MeFOSE) Surrogate	%	-		-	-	-	-
(D9-N-EtFOSE) Surrogate	%	-		-	-	-	-
(D3-N-MeFOSAA) Surrogate	%	-		-	-	-	-
(D5-N-EtFOSAA) Surrogate	%	-		-	-	-	-

ASLP AS 4439.3 Acid Leaching Report Information **Method: AS4439.3** **Tested: 29/7/2020**

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315385C.009 Soil 22 Jun 2020 SE207824C.009	ME315385C.010 Soil 22 Jun 2020 SE207824C.010	ME315385C.011 Soil 22 Jun 2020 SE207824C.011	ME315385C.012 Soil 22 Jun 2020 SE207824C.012
ASLP AS 4439.3 Acid Leaching Report Information	**Method: AS4439.3**	**Tested: 29/7/2020**	**(continued)**				
Storage Temperature*	°C	-		-	-	-	-
Leaching Date*	No unit	-		-	-	-	-
Test Weight (g)*	g	-		-	-	-	-
Leach Fluid pH*	pH Units	-		-	-	-	-
Leaching Fluid Added (g)*	g	-		-	-	-	-
Leaching Fluid Collected (g)*	g	-		-	-	-	-
Solids Leachate pH*	pH Units	-		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315385C.013 Soil 22 Jun 2020 SE207824C.013	ME315385C.014 Soil 22 Jun 2020 SE207824C.014	ME315385C.015 Soil 22 Jun 2020 SE207824C.015	ME315385C.016 Material 22 Jun 2020 SE207824C.016
Perfluoronated Surfactants in ASLP DI Water Extract	**Method: MA_1523**	**Tested: 30/7/2020**					
Perfluorobutanoic acid (PFBA)	µg/L	0.002		-	-	<0.002	-
Perfluoropentanoic acid (PFPeA)	µg/L	0.002		-	-	<0.002	-
Perfluorohexanoic acid (PFHxA)	µg/L	0.002		-	-	<0.002	-
Perfluoroheptanoic acid (PFHpA)	µg/L	0.002		-	-	<0.002	-
Perfluorooctanoic Acid (PFOA)	µg/L	0.001		-	-	**0.001**	-
Perfluorononanoic acid (PFNA)	µg/L	0.004		-	-	<0.004	-
Perfluorodecanoic acid (PFDA)	µg/L	0.004		-	-	<0.004	-
Perfluoroundecanoic acid (PFUnA)	µg/L	0.004		-	-	<0.004	-
Perfluorododecanoic acid (PFDoA)	µg/L	0.004		-	-	<0.004	-
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.004		-	-	<0.004	-
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.004		-	-	<0.004	-
Perfluorohexadecanoic acid (PFHxDA)	µg/L	0.008		-	-	<0.008	-
Perfluorobutane sulfonate (PFBS)	µg/L	0.004		-	-	<0.004	-
Perfluoropentane sulfonate (PFPeS)	µg/L	0.004		-	-	<0.004	-
Perfluorohexane sulfonate (PFHxS)	µg/L	0.002		-	-	<0.002	-
Perfluoroheptane sulfonate (PFHpS)	µg/L	0.002		-	-	<0.002	-
Perfluorooctane sulfonate (PFOS)	µg/L	0.002		-	-	<0.002	-
Sum of PFHxS and PFOS	µg/L	0.002		-	-	<0.002	-
Perfluorononane sulfonate (PFNS)	µg/L	0.002		-	-	<0.002	-
Perfluorodecane sulfonate (PFDS)	µg/L	0.002		-	-	<0.002	-
Perfluorododecane sulfonate (PFDoS)	µg/L	0.002		-	-	<0.002	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	µg/L	0.002		-	-	<0.002	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	µg/L	0.002		-	-	<0.002	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	µg/L	0.002		-	-	<0.002	-
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.008		-	-	<0.008	-
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	µg/L	0.01		-	-	<0.01	-
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	µg/L	0.01		-	-	<0.01	-
2-(N-Methylperfluorooctane sulfonamido)-ethanol	µg/L	0.01		-	-	<0.01	-
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	µg/L	0.01		-	-	<0.01	-
N-Methylperfluorooctanesulfonamidoacetic acid	µg/L	0.01		-	-	<0.01	-
N-Ethylperfluorooctanesulfonamidoacetic Acid	µg/L	0.01		-	-	<0.01	-
(13C4-PFBA) Surrogate	%	-		-	-	**102**	-
(13C5-PFPeA) Surrogate	%	-		-	-	**107**	-
(13C5-PFHxA) Surrogate	%	-		-	-	**86**	-
(13C4-PFHpA) Surrogate	%	-		-	-	**104**	-
(13C4_PFOA) Surrogate	%	-		-	-	**110**	-
(13C9-PFNA) Surrogate	%	-		-	-	**92**	-
(13C6-PFDA) Surrogate	%	-		-	-	**96**	-
(13C7-PFUdA) Surrogate	%	-		-	-	**85**	-
(13C2-PFDoA) Surrogate	%	-		-	-	**95**	-
(13C2_PFTeDA) Surrogate	%	-		-	-	**131**	-
(13C2-PFHxDA) Surrogate	%	-		-	-	**278**	-
(13C3-PFBS) Surrogate	%	-		-	-	**103**	-
(13C3-PFHxS) Surrogate	%	-		-	-	**106**	-
(13C8-PFOS) Surrogate	%	-		-	-	**103**	-
(13C2-4:2 FTS) Surrogate	%	-		-	-	**132**	-
(13C2-6:2 FTS) Surrogate	%	-		-	-	**206**	-
(13C2-8:2 FTS) Surrogate	%	-		-	-	**168**	-
(13C8-PFOSA) Surrogate	%	-		-	-	**84**	-
(D3-N-MeFOSA) Surrogate	%	-		-	-	**62**	-
(D5-N-EtFOSA) Surrogate	%	-		-	-	**79**	-
(D7-N-MeFOSE) Surrogate	%	-		-	-	**89**	-
(D9-N-EtFOSE) Surrogate	%	-		-	-	**117**	-
(D3-N-MeFOSAA) Surrogate	%	-		-	-	**112**	-
(D5-N-EtFOSAA) Surrogate	%	-		-	-	**118**	-
ASLP AS 4439.3 Acid Leaching Report Information	**Method: AS4439.3**	**Tested: 29/7/2020**					

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315385C.013 Soil 22 Jun 2020 SE207824C.013	ME315385C.014 Soil 22 Jun 2020 SE207824C.014	ME315385C.015 Soil 22 Jun 2020 SE207824C.015	ME315385C.016 Material 22 Jun 2020 SE207824C.016
ASLP AS 4439.3 Acid Leaching Report Information	**Method: AS4439.3**	**Tested: 29/7/2020**	**(continued)**				
Storage Temperature*	°C	-	-	-	-	**4.0**	-
Leaching Date*	No unit	-	-	-	-	2020-07-28	-
Test Weight (g)*	g	-	-	-	-	**1.0**	-
Leach Fluid pH*	pH Units	-	-	-	-	**7.0**	-
Leaching Fluid Added (g)*	g	-	-	-	-	**20.0**	-
Leaching Fluid Collected (g)*	g	-	-	-	-	**20.0**	-
Solids Leachate pH*	pH Units	-	-	-	-	**6.2**	-

Parameter	Units	LOR	Sample Number: ME315385C.017 Sample Matrix: Material Sample Date: 22 Jun 2020 Sample Name: SE207824C.017	ME315385C.018 Material 22 Jun 2020 SE207824C.018	ME315385C.019 Material 22 Jun 2020 SE207824C.019
Perfluoronated Surfactants in ASLP DI Water Extract	**Method: MA_1523**	**Tested: 30/7/2020**			
Perfluorobutanoic acid (PFBA)	µg/L	0.002	-	-	-
Perfluoropentanoic acid (PFPeA)	µg/L	0.002	-	-	-
Perfluorohexanoic acid (PFHxA)	µg/L	0.002	-	-	-
Perfluoroheptanoic acid (PFHpA)	µg/L	0.002	-	-	-
Perfluorooctanoic Acid (PFOA)	µg/L	0.001	-	-	-
Perfluorononanoic acid (PFNA)	µg/L	0.004	-	-	-
Perfluorodecanoic acid (PFDA)	µg/L	0.004	-	-	-
Perfluoroundecanoic acid (PFUnA)	µg/L	0.004	-	-	-
Perfluorododecanoic acid (PFDoA)	µg/L	0.004	-	-	-
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.004	-	-	-
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.004	-	-	-
Perfluorohexadecanoic acid (PFHxDA)	µg/L	0.008	-	-	-
Perfluorobutane sulfonate (PFBS)	µg/L	0.004	-	-	-
Perfluoropentane sulfonate (PFPeS)	µg/L	0.004	-	-	-
Perfluorohexane sulfonate (PFHxS)	µg/L	0.002	-	-	-
Perfluoroheptane sulfonate (PFHpS)	µg/L	0.002	-	-	-
Perfluorooctane sulfonate (PFOS)	µg/L	0.002	-	-	-
Sum of PFHxS and PFOS	µg/L	0.002	-	-	-
Perfluorononane sulfonate (PFNS)	µg/L	0.002	-	-	-
Perfluorodecane sulfonate (PFDS)	µg/L	0.002	-	-	-
Perfluorododecane sulfonate (PFDoS)	µg/L	0.002	-	-	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	µg/L	0.002	-	-	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	µg/L	0.002	-	-	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	µg/L	0.002	-	-	-
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.008	-	-	-
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	µg/L	0.01	-	-	-
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	µg/L	0.01	-	-	-
2-(N-Methylperfluorooctane sulfonamido)-ethanol	µg/L	0.01	-	-	-
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	µg/L	0.01	-	-	-
N-Methylperfluorooctanesulfonamidoacetic acid	µg/L	0.01	-	-	-
N-Ethylperfluorooctanesulfonamidoacetic Acid	µg/L	0.01	-	-	-
(13C4-PFBA) Surrogate	%	-	-	-	-
(13C5-PFPeA) Surrogate	%	-	-	-	-
(13C5-PFHxA) Surrogate	%	-	-	-	-
(13C4-PFHpA) Surrogate	%	-	-	-	-
(13C4_PFOA) Surrogate	%	-	-	-	-
(13C9-PFNA) Surrogate	%	-	-	-	-
(13C6-PFDA) Surrogate	%	-	-	-	-
(13C7-PFUdA) Surrogate	%	-	-	-	-
(13C2-PFDoA) Surrogate	%	-	-	-	-
(13C2_PFTeDA) Surrogate	%	-	-	-	-
(13C2-PFHxDA) Surrogate	%	-	-	-	-
(13C3-PFBS) Surrogate	%	-	-	-	-
(13C3-PFHxS) Surrogate	%	-	-	-	-
(13C8-PFOS) Surrogate	%	-	-	-	-
(13C2-4:2 FTS) Surrogate	%	-	-	-	-
(13C2-6:2 FTS) Surrogate	%	-	-	-	-
(13C2-8:2 FTS) Surrogate	%	-	-	-	-
(13C8-PFOSA) Surrogate	%	-	-	-	-
(D3-N-MeFOSA) Surrogate	%	-	-	-	-
(D5-N-EtFOSA) Surrogate	%	-	-	-	-
(D7-N-MeFOSE) Surrogate	%	-	-	-	-
(D9-N-EtFOSE) Surrogate	%	-	-	-	-
(D3-N-MeFOSAA) Surrogate	%	-	-	-	-
(D5-N-EtFOSAA) Surrogate	%	-	-	-	-
ASLP AS 4439.3 Acid Leaching Report Information	**Method: AS4439.3**	**Tested: 29/7/2020**			

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315385C.017 Material 22 Jun 2020 SE207824C.017	ME315385C.018 Material 22 Jun 2020 SE207824C.018	ME315385C.019 Material 22 Jun 2020 SE207824C.019
ASLP AS 4439.3 Acid Leaching Report Information	**Method: AS4439.3**	**Tested: 29/7/2020**	**(continued)**			
Storage Temperature*	°C	-		-	-	-
Leaching Date*	No unit	-		-	-	-
Test Weight (g)*	g	-		-	-	-
Leach Fluid pH*	pH Units	-		-	-	-
Leaching Fluid Added (g)*	g	-		-	-	-
Leaching Fluid Collected (g)*	g	-		-	-	-
Solids Leachate pH*	pH Units	-		-	-	-

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Perfluoronated Surfactants in ASLP DI Water Extract **Method: MA_1523**

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Perfluorobutanoic acid (PFBA)	LB034554	µg/L	0.002	<0.002	0%	NA
Perfluoropentanoic acid (PFPeA)	LB034554	µg/L	0.002	<0.002	0%	NA
Perfluorohexanoic acid (PFHxA)	LB034554	µg/L	0.002	<0.002	0%	NA
Perfluoroheptanoic acid (PFHpA)	LB034554	µg/L	0.002	<0.002	0%	63%
Perfluorooctanoic Acid (PFOA)	LB034554	µg/L	0.001	<0.001	1%	78%
Perfluorononanoic acid (PFNA)	LB034554	µg/L	0.004	<0.004	0%	96%
Perfluorodecanoic acid (PFDA)	LB034554	µg/L	0.004	<0.004	0%	86%
Perfluoroundecanoic acid (PFUnA)	LB034554	µg/L	0.004	<0.004	0%	76%
Perfluorododecanoic acid (PFDoA)	LB034554	µg/L	0.004	<0.004	0%	83%
Perfluorotridecanoic acid (PFTrDA)	LB034554	µg/L	0.004	<0.004	0%	106%
Perfluorotetradecanoic acid (PFTeDA)	LB034554	µg/L	0.004	<0.004	0%	100%
Perfluorohexadecanoic acid (PFHxDA)	LB034554	µg/L	0.008	<0.008	0%	NA
Perfluorobutane sulfonate (PFBS)	LB034554	µg/L	0.004	<0.004	0%	NA
Perfluoropentane sulfonate (PFPeS)	LB034554	µg/L	0.004	<0.004	0%	NA
Perfluorohexane sulfonate (PFHxS)	LB034554	µg/L	0.002	<0.002	0%	NA
Perfluoroheptane sulfonate (PFHpS)	LB034554	µg/L	0.002	<0.002	0%	NA
Perfluorooctane sulfonate (PFOS)	LB034554	µg/L	0.002	<0.002	0%	90%
Sum of PFHxS and PFOS	LB034554	µg/L	0.002	<0.002	0%	NA
Perfluorononane sulfonate (PFNS)	LB034554	µg/L	0.002	<0.002	0%	NA
Perfluorodecane sulfonate (PFDS)	LB034554	µg/L	0.002	<0.002	0%	NA
Perfluorododecane sulfonate (PFDoS)	LB034554	µg/L	0.002	<0.002	0%	NA
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	LB034554	µg/L	0.002	<0.002	0%	NA
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	LB034554	µg/L	0.002	<0.002	0%	NA
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	LB034554	µg/L	0.002	<0.002	0%	NA
Perfluorooctane sulfonamide (PFOSA)	LB034554	µg/L	0.008	<0.008	0%	42%
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	LB034554	µg/L	0.01	<0.01	0%	NA
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	LB034554	µg/L	0.01	<0.01	0%	NA
2-(N-Methylperfluorooctane sulfonamido)-ethanol (N-MeFOSE)	LB034554	µg/L	0.01	<0.01	0%	NA
2-(N-Ethylperfluorooctane sulfonamido)-ethanol (N-EtFOSE)	LB034554	µg/L	0.01	<0.01	0%	NA
N-Methylperfluorooctanesulfonamidoacetic acid (N_MeFOSAA)	LB034554	µg/L	0.01	<0.01	0%	NA
N-Ethylperfluorooctanesulfonamidoacetic Acid (N-EtFOSAA)	LB034554	µg/L	0.01	<0.01	0%	NA
(13C4-PFBA) Surrogate	LB034554	%	-	101%	1%	100%
(13C5-PFPeA) Surrogate	LB034554	%	-	109%	1%	102%
(13C5-PFHxA) Surrogate	LB034554	%	-	99%	8%	87%
(13C4-PFHpA) Surrogate	LB034554	%	-	109%	4%	106%
(13C4_PFOA) Surrogate	LB034554	%	-	102%	1%	88%
(13C9-PFNA) Surrogate	LB034554	%	-	111%	11%	111%
(13C6-PFDA) Surrogate	LB034554	%	-	101%	1%	95%
(13C7-PFUdA) Surrogate	LB034554	%	-	89%	8%	90%
(13C2-PFDoA) Surrogate	LB034554	%	-	86%	2%	92%
(13C2_PFTeDA) Surrogate	LB034554	%	-	61%	20%	89%
(13C2-PFHxDA) Surrogate	LB034554	%	-	43%	47%	123%
(13C3-PFBS) Surrogate	LB034554	%	-	108%	2%	121%
(13C3-PFHxS) Surrogate	LB034554	%	-	102%	3%	109%
(13C8-PFOS) Surrogate	LB034554	%	-	100%	2%	108%
(13C2-4:2 FTS) Surrogate	LB034554	%	-	117%	13%	134%
(13C2-6:2 FTS) Surrogate	LB034554	%	-	171%	12%	177%
(13C2-8:2 FTS) Surrogate	LB034554	%	-	111%	18%	111%
(13C8-PFOSA) Surrogate	LB034554	%	-	74%	0%	75%
(D3-N-MeFOSA) Surrogate	LB034554	%	-	63%	17%	54%
(D5-N-EtFOSA) Surrogate	LB034554	%	-	54%	1%	47%
(D7-N-MeFOSE) Surrogate	LB034554	%	-	61%	22%	59%
(D9-N-EtFOSE) Surrogate	LB034554	%	-	55%	36%	48%
(D3-N-MeFOSAA) Surrogate	LB034554	%	-	79%	10%	69%
(D5-N-EtFOSAA) Surrogate	LB034554	%	-	76%	7%	96%

METHOD SUMMARY

METHOD	METHODOLOGY SUMMARY
MA1523	This method covers the analysis of per- and polyfluoroalkyl substances (PFAS) from a ASLP extract. Determined as the total of linear and branched isomers. After spiking with isotopically labelled quantification surrogates and clean-up via SPE cartridges sample extracts are analysed by liquid chromatography/mass spectrometry (LC-MS/MS). PFAS concentrations are determined by isotope dilution quantification .

FOOTNOTES

IS	Insufficient sample for analysis.	LOR	Limit of Reporting
LNR	Sample listed, but not received.	↑↓	Raised or Lowered Limit of Reporting
*	NATA accreditation does not cover the performance of this service.	QFH	QC result is above the upper tolerance
		QFL	QC result is below the lower tolerance
**	Indicative data, theoretical holding time exceeded.	-	The sample was not analysed for this analyte
		NVL	Not Validated

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calcuated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety .

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STATEMENT OF QA/QC PERFORMANCE

SE207824C R0

CLIENT DETAILS

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Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
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Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	19

LABORATORY DETAILS

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Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207824C R0**
Date Received	21 Jul 2020
Date Reported	30 Jul 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Surrogate	Perfluoronated Surfactants in ASLP DI Water Extract	3 items

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	1 Soil
Date documentation received	21/7/2020@5:03pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	1.3°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE207824C R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

No holding time data is available for this job.

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Perfluoronated Surfactants in ASLP DI Water Extract — **Method: MA_1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C2_PFTeDA) Surrogate	0407_QC130_200622	SE207824C.015	%	0 - 150%	131
(13C2-4:2 FTS) Surrogate	0407_QC130_200622	SE207824C.015	%	0 - 150%	132
(13C2-6:2 FTS) Surrogate	0407_QC130_200622	SE207824C.015	%	0 - 150%	206 †
(13C2-8:2 FTS) Surrogate	0407_QC130_200622	SE207824C.015	%	0 - 150%	168 †
(13C2-PFDoA) Surrogate	0407_QC130_200622	SE207824C.015	%	0 - 150%	95
(13C2-PFHxDA) Surrogate	0407_QC130_200622	SE207824C.015	%	0 - 150%	278 †
(13C3-PFBS) Surrogate	0407_QC130_200622	SE207824C.015	%	0 - 150%	103
(13C3-PFHxS) Surrogate	0407_QC130_200622	SE207824C.015	%	0 - 150%	106
(13C4_PFOA) Surrogate	0407_QC130_200622	SE207824C.015	%	0 - 150%	110
(13C4-PFBA) Surrogate	0407_QC130_200622	SE207824C.015	%	0 - 150%	102
(13C4-PFHpA) Surrogate	0407_QC130_200622	SE207824C.015	%	0 - 150%	104
(13C5-PFHxA) Surrogate	0407_QC130_200622	SE207824C.015	%	0 - 150%	86
(13C5-PFPeA) Surrogate	0407_QC130_200622	SE207824C.015	%	0 - 150%	107
(13C6-PFDA) Surrogate	0407_QC130_200622	SE207824C.015	%	0 - 150%	96
(13C7-PFUdA) Surrogate	0407_QC130_200622	SE207824C.015	%	0 - 150%	85
(13C8-PFOS) Surrogate	0407_QC130_200622	SE207824C.015	%	0 - 150%	103
(13C8-PFOSA) Surrogate	0407_QC130_200622	SE207824C.015	%	0 - 150%	84
(13C9-PFNA) Surrogate	0407_QC130_200622	SE207824C.015	%	0 - 150%	92
(D3-N-MeFOSA) Surrogate	0407_QC130_200622	SE207824C.015	%	0 - 150%	62
(D3-N-MeFOSAA) Surrogate	0407_QC130_200622	SE207824C.015	%	0 - 150%	112
(D5-N-EtFOSA) Surrogate	0407_QC130_200622	SE207824C.015	%	0 - 150%	79
(D5-N-EtFOSAA) Surrogate	0407_QC130_200622	SE207824C.015	%	0 - 150%	118
(D7-N-MeFOSE) Surrogate	0407_QC130_200622	SE207824C.015	%	0 - 150%	89
(D9-N-EtFOSE) Surrogate	0407_QC130_200622	SE207824C.015	%	0 - 150%	117

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

No method blanks were required for this job.

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No duplicates were required for this job.

LABORATORY CONTROL SAMPLES

SE207824C R0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

No laboratory control standards were required for this job.

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spikes were required for this job.

MATRIX SPIKE DUPLICATES

SE207824C R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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Good morning

Please book these additional jobs in.

Please be very carefully as there are lots of jobs

Regards,

[redacted]
Environment, Health & Safety
Client Manager
Phone: +61 (0)2 8594 0400
Direct:
Mobile: [redacted]
(Please note my new working hours of Mon-Fri 6:00am-2:00pm)



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From: [redacted]@slrconsulting.com>
Sent: Tuesday, 21 July 2020 5:03 PM
To: [redacted]@sgs.com>
Cc: [redacted]@slrconsulting.com>
Subject: [EXTERNAL] 610.30041 DHA Randwick - Additional Analysis

*** WARNING: this message is from an EXTERNAL SENDER. Please be cautious, particularly with links and attachments. ***

Hi [redacted]

Can we please schedule the following analyses:

pH, clay content, TOC & CEC:

Report number	Sample ID
SE207695	TP002_0.1_200615
SE207695	TP002_1.5_200615
SE207695	TP005_0.1_200616
SE207695	TP005_1.5_200616
SE207695	TP049_0.1_200617
SE207695	TP049_1.0_200617
SE208047	TP092_0.1_200624
SE208047	TP092_1.0_200624
SE207831	TP220_0.1_200618
SE207831	TP220_1.0_200618
SE207831	TP221_0.1_200619
SE207831	TP221_1.0_200619
SE207998	TP230_0.1_200622
SE207998	TP230_1.8_200622
SE207591	TP018_0.1_200615
SE207591	TP018_1.0_200615
SE208047	TP092_0.1_200624
SE208047	TP092_1.0_200624
SE207911	TP095_0.1_200623
SE207911	TP095_1.0_200623
SE207731	TP073_0.1_200619
SE207731	TP073_1.0_200619
SE208659	TP133_0.1_200701
SE208659	TP133_1.0_200701
SE208142	TP151_0.1_200629
SE208142	TP151_1.0_200629
SE208137	TP183_0.1_200625
SE208137	TP183_0.5_200625

Additional analysis:

Report number	Sample ID	Parameter
SE208081	0407_TP241_1.0_200625	Pb & Zn
SE207731	0407_TP73_0.5_200619	Cr

ASLP Leach:

Report number	Sample ID	Parameter
SE208046	0407_TP237_0.5_200624	8 metals
SE208081	0407_TP241_0.5_200625	8 metals
SE208133	0407_TP111_0.1_200626	8 metals
SE208142	0407_TP256_0.1_200629	8 metals
SE207831	0407_TP222_0.1_200619	8 metals
SE207731	0407_TP73_0.1_200619	8 metals
SE207850	0407_TP162_0.1_200617	PAHs include B(a)P

SE207831	0407_TP197_0.1_200619	PAHs include B(a)P
SE207831	0407_TP197_0.5_200619	PAHs include B(a)P
SE207831	0407_TP200_0.5_200618	PAHs include B(a)P
SE207831	0407_TP200_1.0_200618	Total and leachable PAHs including B(a)P
SE207831	0407_TP209_0.5_200619	PAHs include B(a)P
SE207831	0407_TP221_0.5_200619	PAHs include B(a)P
SE207831	0407_TP221_1.0_200619	Total and leachable PAHs including B(a)P
SE207824	0407_TP231_0.1_200622	PAHs include B(a)P
SE208161	0407_BH41_0.0_200625	PFOS, PFOA, PfHxS
SE208046	0407_QC160_200624	PFOS, PFOA, PfHxS
SE207824	0407_QC130_200622	PFOS, PFOA, PfHxS

Let me know if you have any questions.

Many thanks,

[redacted]

SLR

[redacted]
Associate - Land Quality & Remediation

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WINNERS: RoSPA Gold Award, 2017
WINNERS : International Business Excellence Award, 2016

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SAMPLE RECEIPT ADVICE

SE208046B

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000680--000682**
Samples	16

LABORATORY DETAILS

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Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Tue 21/7/2020
Report Due	Wed 29/7/2020
SGS Reference	**SE208046B**

SUBMISSION DETAILS

This is to confirm that 16 samples were received on Tuesday 21/7/2020. Results are expected to be ready by COB Wednesday 29/7/2020. Please quote SGS reference SE208046B when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	1 Soil
Date documentation received	21/7/2020@5:03pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	5.3°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

PFOS/PFOA subcontracted to SGS Antwerp Belgium Institute of Applied Chromatography Haven 407, BELAC Accreditation Number: N.005-TEST. Results may be delayed.

This document is issued by the Company under its General Conditions of Service accessible at www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

SAMPLE RECEIPT ADVICE

SE208046B

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Field pH for Acid Sulphate Soil	Perfluoronated Surfactants in ASLP DI Water Extract
016	0407_QC160_200624	4	55

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS		LABORATORY DETAILS	
Contact	[redacted]	Manager	[redacted]
Client	SGS EHS SYDNEY	Laboratory	SGS Melbourne EH&S
Address	Unit 16, 33 Maddox Street Alexandria NSW 2015	Address	10/585 Blackburn Road Notting Hill Victoria 3168
Telephone	02 8594 0400	Telephone	+61395743200
Facsimile	02 8594 0499	Facsimile	+61395743399
Email	au.environmental.sydney@sgs.com	Email	Au.SampleReceipt.Melbourne@sgs.com
Project	**610.30041 Randwick Barracks**	SGS Reference	**ME315500B R0**
Order Number	**SE208046B**	Date Received	27 Jul 2020
Samples	16	Date Reported	30 Jul 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(14420).

MA1523: Some PFAS surrogate recovery is outside of the acceptance criteria due to sample matrix interference .

SIGNATORIES

[redacted]

Australian Chemistry Manager

Parameter	Units	LOR	Sample Number: ME315500B.001 Sample Matrix: Soil Sample Date: 24 Jun 2020 Sample Name: SE208046B.001	ME315500B.002 Soil 24 Jun 2020 SE208046B.002	ME315500B.003 Soil 24 Jun 2020 SE208046B.003	ME315500B.004 Soil 24 Jun 2020 SE208046B.004
Perfluoronated Surfactants in ASLP DI Water Extract	**Method: MA_1523**	**Tested: 30/7/2020**				
Perfluorobutanoic acid (PFBA)	µg/L	0.002	-	-	-	-
Perfluoropentanoic acid (PFPeA)	µg/L	0.002	-	-	-	-
Perfluorohexanoic acid (PFHxA)	µg/L	0.002	-	-	-	-
Perfluoroheptanoic acid (PFHpA)	µg/L	0.002	-	-	-	-
Perfluorooctanoic Acid (PFOA)	µg/L	0.001	-	-	-	-
Perfluorononanoic acid (PFNA)	µg/L	0.004	-	-	-	-
Perfluorodecanoic acid (PFDA)	µg/L	0.004	-	-	-	-
Perfluoroundecanoic acid (PFUnA)	µg/L	0.004	-	-	-	-
Perfluorododecanoic acid (PFDoA)	µg/L	0.004	-	-	-	-
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.004	-	-	-	-
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.004	-	-	-	-
Perfluorohexadecanoic acid (PFHxDA)	µg/L	0.008	-	-	-	-
Perfluorobutane sulfonate (PFBS)	µg/L	0.004	-	-	-	-
Perfluoropentane sulfonate (PFPeS)	µg/L	0.004	-	-	-	-
Perfluorohexane sulfonate (PFHxS)	µg/L	0.002	-	-	-	-
Perfluoroheptane sulfonate (PFHpS)	µg/L	0.002	-	-	-	-
Perfluorooctane sulfonate (PFOS)	µg/L	0.002	-	-	-	-
Sum of PFHxS and PFOS	µg/L	0.002	-	-	-	-
Perfluorononane sulfonate (PFNS)	µg/L	0.002	-	-	-	-
Perfluorodecane sulfonate (PFDS)	µg/L	0.002	-	-	-	-
Perfluorododecane sulfonate (PFDoS)	µg/L	0.002	-	-	-	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	µg/L	0.002	-	-	-	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	µg/L	0.002	-	-	-	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	µg/L	0.002	-	-	-	-
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.008	-	-	-	-
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	µg/L	0.01	-	-	-	-
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	µg/L	0.01	-	-	-	-
2-(N-Methylperfluorooctane sulfonamido)-ethanol	µg/L	0.01	-	-	-	-
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	µg/L	0.01	-	-	-	-
N-Methylperfluorooctanesulfonamidoacetic acid	µg/L	0.01	-	-	-	-
N-Ethylperfluorooctanesulfonamidoacetic Acid	µg/L	0.01	-	-	-	-
(13C4-PFBA) Surrogate	%	-	-	-	-	-
(13C5-PFPeA) Surrogate	%	-	-	-	-	-
(13C5-PFHxA) Surrogate	%	-	-	-	-	-
(13C4-PFHpA) Surrogate	%	-	-	-	-	-
(13C4_PFOA) Surrogate	%	-	-	-	-	-
(13C9-PFNA) Surrogate	%	-	-	-	-	-
(13C6-PFDA) Surrogate	%	-	-	-	-	-
(13C7-PFUdA) Surrogate	%	-	-	-	-	-
(13C2-PFDoA) Surrogate	%	-	-	-	-	-
(13C2_PFTeDA) Surrogate	%	-	-	-	-	-
(13C2-PFHxDA) Surrogate	%	-	-	-	-	-
(13C3-PFBS) Surrogate	%	-	-	-	-	-
(13C3-PFHxS) Surrogate	%	-	-	-	-	-
(13C8-PFOS) Surrogate	%	-	-	-	-	-
(13C2-4:2 FTS) Surrogate	%	-	-	-	-	-
(13C2-6:2 FTS) Surrogate	%	-	-	-	-	-
(13C2-8:2 FTS) Surrogate	%	-	-	-	-	-
(13C8-PFOSA) Surrogate	%	-	-	-	-	-
(D3-N-MeFOSA) Surrogate	%	-	-	-	-	-
(D5-N-EtFOSA) Surrogate	%	-	-	-	-	-
(D7-N-MeFOSE) Surrogate	%	-	-	-	-	-
(D9-N-EtFOSE) Surrogate	%	-	-	-	-	-
(D3-N-MeFOSAA) Surrogate	%	-	-	-	-	-
(D5-N-EtFOSAA) Surrogate	%	-	-	-	-	-
ASLP AS 4439.3 Acid Leaching Report Information	**Method: AS4439.3**	**Tested: 29/7/2020**				

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315500B.001 Soil 24 Jun 2020 SE208046B.001	ME315500B.002 Soil 24 Jun 2020 SE208046B.002	ME315500B.003 Soil 24 Jun 2020 SE208046B.003	ME315500B.004 Soil 24 Jun 2020 SE208046B.004
ASLP AS 4439.3 Acid Leaching Report Information	**Method: AS4439.3**	**Tested: 29/7/2020**	**(continued)**				
Storage Temperature*	°C	-		-	-	-	-
Leaching Date*	No unit	-		-	-	-	-
Test Weight (g)*	g	-		-	-	-	-
Leach Fluid pH*	pH Units	-		-	-	-	-
Leaching Fluid Added (g)*	g	-		-	-	-	-
Leaching Fluid Collected (g)*	g	-		-	-	-	-
Solids Leachate pH*	pH Units	-		-	-	-	-

Parameter	Units	LOR	Sample Number: ME315500B.005 Sample Matrix: Material Sample Date: 24 Jun 2020 Sample Name: SE208046B.005	ME315500B.006 Soil 24 Jun 2020 SE208046B.006	ME315500B.007 Soil 24 Jun 2020 SE208046B.007	ME315500B.008 Soil 24 Jun 2020 SE208046B.008
Perfluoronated Surfactants in ASLP DI Water Extract	**Method: MA_1523**	**Tested: 30/7/2020**				
Perfluorobutanoic acid (PFBA)	µg/L	0.002	-	-	-	-
Perfluoropentanoic acid (PFPeA)	µg/L	0.002	-	-	-	-
Perfluorohexanoic acid (PFHxA)	µg/L	0.002	-	-	-	-
Perfluoroheptanoic acid (PFHpA)	µg/L	0.002	-	-	-	-
Perfluorooctanoic Acid (PFOA)	µg/L	0.001	-	-	-	-
Perfluorononanoic acid (PFNA)	µg/L	0.004	-	-	-	-
Perfluorodecanoic acid (PFDA)	µg/L	0.004	-	-	-	-
Perfluoroundecanoic acid (PFUnA)	µg/L	0.004	-	-	-	-
Perfluorododecanoic acid (PFDoA)	µg/L	0.004	-	-	-	-
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.004	-	-	-	-
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.004	-	-	-	-
Perfluorohexadecanoic acid (PFHxDA)	µg/L	0.008	-	-	-	-
Perfluorobutane sulfonate (PFBS)	µg/L	0.004	-	-	-	-
Perfluoropentane sulfonate (PFPeS)	µg/L	0.004	-	-	-	-
Perfluorohexane sulfonate (PFHxS)	µg/L	0.002	-	-	-	-
Perfluoroheptane sulfonate (PFHpS)	µg/L	0.002	-	-	-	-
Perfluorooctane sulfonate (PFOS)	µg/L	0.002	-	-	-	-
Sum of PFHxS and PFOS	µg/L	0.002	-	-	-	-
Perfluorononane sulfonate (PFNS)	µg/L	0.002	-	-	-	-
Perfluorodecane sulfonate (PFDS)	µg/L	0.002	-	-	-	-
Perfluorododecane sulfonate (PFDoS)	µg/L	0.002	-	-	-	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	µg/L	0.002	-	-	-	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	µg/L	0.002	-	-	-	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	µg/L	0.002	-	-	-	-
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.008	-	-	-	-
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	µg/L	0.01	-	-	-	-
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	µg/L	0.01	-	-	-	-
2-(N-Methylperfluorooctane sulfonamido)-ethanol	µg/L	0.01	-	-	-	-
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	µg/L	0.01	-	-	-	-
N-Methylperfluorooctanesulfonamidoacetic acid	µg/L	0.01	-	-	-	-
N-Ethylperfluorooctanesulfonamidoacetic Acid	µg/L	0.01	-	-	-	-
(13C4-PFBA) Surrogate	%	-	-	-	-	-
(13C5-PFPeA) Surrogate	%	-	-	-	-	-
(13C5-PFHxA) Surrogate	%	-	-	-	-	-
(13C4-PFHpA) Surrogate	%	-	-	-	-	-
(13C4_PFOA) Surrogate	%	-	-	-	-	-
(13C9-PFNA) Surrogate	%	-	-	-	-	-
(13C6-PFDA) Surrogate	%	-	-	-	-	-
(13C7-PFUdA) Surrogate	%	-	-	-	-	-
(13C2-PFDoA) Surrogate	%	-	-	-	-	-
(13C2_PFTeDA) Surrogate	%	-	-	-	-	-
(13C2-PFHxDA) Surrogate	%	-	-	-	-	-
(13C3-PFBS) Surrogate	%	-	-	-	-	-
(13C3-PFHxS) Surrogate	%	-	-	-	-	-
(13C8-PFOS) Surrogate	%	-	-	-	-	-
(13C2-4:2 FTS) Surrogate	%	-	-	-	-	-
(13C2-6:2 FTS) Surrogate	%	-	-	-	-	-
(13C2-8:2 FTS) Surrogate	%	-	-	-	-	-
(13C8-PFOSA) Surrogate	%	-	-	-	-	-
(D3-N-MeFOSA) Surrogate	%	-	-	-	-	-
(D5-N-EtFOSA) Surrogate	%	-	-	-	-	-
(D7-N-MeFOSE) Surrogate	%	-	-	-	-	-
(D9-N-EtFOSE) Surrogate	%	-	-	-	-	-
(D3-N-MeFOSAA) Surrogate	%	-	-	-	-	-
(D5-N-EtFOSAA) Surrogate	%	-	-	-	-	-
ASLP AS 4439.3 Acid Leaching Report Information	**Method: AS4439.3**	**Tested: 29/7/2020**				

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315500B.005 Material 24 Jun 2020 SE208046B.005	ME315500B.006 Soil 24 Jun 2020 SE208046B.006	ME315500B.007 Soil 24 Jun 2020 SE208046B.007	ME315500B.008 Soil 24 Jun 2020 SE208046B.008
ASLP AS 4439.3 Acid Leaching Report Information	**Method: AS4439.3**	**Tested: 29/7/2020**	**(continued)**				
Storage Temperature*	°C	-		-	-	-	-
Leaching Date*	No unit	-		-	-	-	-
Test Weight (g)*	g	-		-	-	-	-
Leach Fluid pH*	pH Units	-		-	-	-	-
Leaching Fluid Added (g)*	g	-		-	-	-	-
Leaching Fluid Collected (g)*	g	-		-	-	-	-
Solids Leachate pH*	pH Units	-		-	-	-	-

Parameter	Units	LOR	Sample Number: ME315500B.009 Sample Matrix: Soil Sample Date: 24 Jun 2020 Sample Name: SE208046B.009	ME315500B.010 Soil 24 Jun 2020 SE208046B.010	ME315500B.011 Soil 24 Jun 2020 SE208046B.011	ME315500B.012 Material 24 Jun 2020 SE208046B.012
Perfluoronated Surfactants in ASLP DI Water Extract	**Method: MA_1523**	**Tested: 30/7/2020**				
Perfluorobutanoic acid (PFBA)	µg/L	0.002	-	-	-	-
Perfluoropentanoic acid (PFPeA)	µg/L	0.002	-	-	-	-
Perfluorohexanoic acid (PFHxA)	µg/L	0.002	-	-	-	-
Perfluoroheptanoic acid (PFHpA)	µg/L	0.002	-	-	-	-
Perfluorooctanoic Acid (PFOA)	µg/L	0.001	-	-	-	-
Perfluorononanoic acid (PFNA)	µg/L	0.004	-	-	-	-
Perfluorodecanoic acid (PFDA)	µg/L	0.004	-	-	-	-
Perfluoroundecanoic acid (PFUnA)	µg/L	0.004	-	-	-	-
Perfluorododecanoic acid (PFDoA)	µg/L	0.004	-	-	-	-
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.004	-	-	-	-
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.004	-	-	-	-
Perfluorohexadecanoic acid (PFHxDA)	µg/L	0.008	-	-	-	-
Perfluorobutane sulfonate (PFBS)	µg/L	0.004	-	-	-	-
Perfluoropentane sulfonate (PFPeS)	µg/L	0.004	-	-	-	-
Perfluorohexane sulfonate (PFHxS)	µg/L	0.002	-	-	-	-
Perfluoroheptane sulfonate (PFHpS)	µg/L	0.002	-	-	-	-
Perfluorooctane sulfonate (PFOS)	µg/L	0.002	-	-	-	-
Sum of PFHxS and PFOS	µg/L	0.002	-	-	-	-
Perfluorononane sulfonate (PFNS)	µg/L	0.002	-	-	-	-
Perfluorodecane sulfonate (PFDS)	µg/L	0.002	-	-	-	-
Perfluorododecane sulfonate (PFDoS)	µg/L	0.002	-	-	-	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	µg/L	0.002	-	-	-	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	µg/L	0.002	-	-	-	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	µg/L	0.002	-	-	-	-
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.008	-	-	-	-
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	µg/L	0.01	-	-	-	-
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	µg/L	0.01	-	-	-	-
2-(N-Methylperfluorooctane sulfonamido)-ethanol	µg/L	0.01	-	-	-	-
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	µg/L	0.01	-	-	-	-
N-Methylperfluorooctanesulfonamidoacetic acid	µg/L	0.01	-	-	-	-
N-Ethylperfluorooctanesulfonamidoacetic Acid	µg/L	0.01	-	-	-	-
(13C4-PFBA) Surrogate	%	-	-	-	-	-
(13C5-PFPeA) Surrogate	%	-	-	-	-	-
(13C5-PFHxA) Surrogate	%	-	-	-	-	-
(13C4-PFHpA) Surrogate	%	-	-	-	-	-
(13C4_PFOA) Surrogate	%	-	-	-	-	-
(13C9-PFNA) Surrogate	%	-	-	-	-	-
(13C6-PFDA) Surrogate	%	-	-	-	-	-
(13C7-PFUdA) Surrogate	%	-	-	-	-	-
(13C2-PFDoA) Surrogate	%	-	-	-	-	-
(13C2_PFTeDA) Surrogate	%	-	-	-	-	-
(13C2-PFHxDA) Surrogate	%	-	-	-	-	-
(13C3-PFBS) Surrogate	%	-	-	-	-	-
(13C3-PFHxS) Surrogate	%	-	-	-	-	-
(13C8-PFOS) Surrogate	%	-	-	-	-	-
(13C2-4:2 FTS) Surrogate	%	-	-	-	-	-
(13C2-6:2 FTS) Surrogate	%	-	-	-	-	-
(13C2-8:2 FTS) Surrogate	%	-	-	-	-	-
(13C8-PFOSA) Surrogate	%	-	-	-	-	-
(D3-N-MeFOSA) Surrogate	%	-	-	-	-	-
(D5-N-EtFOSA) Surrogate	%	-	-	-	-	-
(D7-N-MeFOSE) Surrogate	%	-	-	-	-	-
(D9-N-EtFOSE) Surrogate	%	-	-	-	-	-
(D3-N-MeFOSAA) Surrogate	%	-	-	-	-	-
(D5-N-EtFOSAA) Surrogate	%	-	-	-	-	-
ASLP AS 4439.3 Acid Leaching Report Information	**Method: AS4439.3**	**Tested: 29/7/2020**				

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315500B.009 Soil 24 Jun 2020 SE208046B.009	ME315500B.010 Soil 24 Jun 2020 SE208046B.010	ME315500B.011 Soil 24 Jun 2020 SE208046B.011	ME315500B.012 Material 24 Jun 2020 SE208046B.012
ASLP AS 4439.3 Acid Leaching Report Information	**Method: AS4439.3**	**Tested: 29/7/2020**	**(continued)**				
Storage Temperature*	°C	-		-	-	-	-
Leaching Date*	No unit	-		-	-	-	-
Test Weight (g)*	g	-		-	-	-	-
Leach Fluid pH*	pH Units	-		-	-	-	-
Leaching Fluid Added (g)*	g	-		-	-	-	-
Leaching Fluid Collected (g)*	g	-		-	-	-	-
Solids Leachate pH*	pH Units	-		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315500B.013 Soil 24 Jun 2020 SE208046B.013	ME315500B.014 Soil 24 Jun 2020 SE208046B.014	ME315500B.015 Soil 24 Jun 2020 SE208046B.015	ME315500B.016 Soil 24 Jun 2020 SE208046B.016
Perfluoronated Surfactants in ASLP DI Water Extract	**Method: MA_1523**	**Tested: 30/7/2020**					
Perfluorobutanoic acid (PFBA)	µg/L	0.002		-	-	-	**0.004**
Perfluoropentanoic acid (PFPeA)	µg/L	0.002		-	-	-	**0.011**
Perfluorohexanoic acid (PFHxA)	µg/L	0.002		-	-	-	**0.010**
Perfluoroheptanoic acid (PFHpA)	µg/L	0.002		-	-	-	**0.004**
Perfluorooctanoic Acid (PFOA)	µg/L	0.001		-	-	-	**0.011**
Perfluorononanoic acid (PFNA)	µg/L	0.004		-	-	-	<0.004
Perfluorodecanoic acid (PFDA)	µg/L	0.004		-	-	-	<0.004
Perfluoroundecanoic acid (PFUnA)	µg/L	0.004		-	-	-	<0.004
Perfluorododecanoic acid (PFDoA)	µg/L	0.004		-	-	-	<0.004
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.004		-	-	-	<0.004
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.004		-	-	-	<0.004
Perfluorohexadecanoic acid (PFHxDA)	µg/L	0.008		-	-	-	<0.008
Perfluorobutane sulfonate (PFBS)	µg/L	0.004		-	-	-	<0.004
Perfluoropentane sulfonate (PFPeS)	µg/L	0.004		-	-	-	<0.004
Perfluorohexane sulfonate (PFHxS)	µg/L	0.002		-	-	-	**0.008**
Perfluoroheptane sulfonate (PFHpS)	µg/L	0.002		-	-	-	<0.002
Perfluorooctane sulfonate (PFOS)	µg/L	0.002		-	-	-	**0.088**
Sum of PFHxS and PFOS	µg/L	0.002		-	-	-	**0.097**
Perfluorononane sulfonate (PFNS)	µg/L	0.002		-	-	-	<0.002
Perfluorodecane sulfonate (PFDS)	µg/L	0.002		-	-	-	<0.002
Perfluorododecane sulfonate (PFDoS)	µg/L	0.002		-	-	-	<0.002
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	µg/L	0.002		-	-	-	<0.002
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	µg/L	0.002		-	-	-	**0.007**
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	µg/L	0.002		-	-	-	<0.002
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.008		-	-	-	<0.008
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	µg/L	0.01		-	-	-	<0.01
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	µg/L	0.01		-	-	-	<0.01
2-(N-Methylperfluorooctane sulfonamido)-ethanol	µg/L	0.01		-	-	-	<0.01
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	µg/L	0.01		-	-	-	<0.01
N-Methylperfluorooctanesulfonamidoacetic acid	µg/L	0.01		-	-	-	<0.01
N-Ethylperfluorooctanesulfonamidoacetic Acid	µg/L	0.01		-	-	-	<0.01
(13C4-PFBA) Surrogate	%	-		-	-	-	**101**
(13C5-PFPeA) Surrogate	%	-		-	-	-	**120**
(13C5-PFHxA) Surrogate	%	-		-	-	-	**96**
(13C4-PFHpA) Surrogate	%	-		-	-	-	**105**
(13C4_PFOA) Surrogate	%	-		-	-	-	**99**
(13C9-PFNA) Surrogate	%	-		-	-	-	**101**
(13C6-PFDA) Surrogate	%	-		-	-	-	**114**
(13C7-PFUdA) Surrogate	%	-		-	-	-	**96**
(13C2-PFDoA) Surrogate	%	-		-	-	-	**86**
(13C2_PFTeDA) Surrogate	%	-		-	-	-	**70**
(13C2-PFHxDA) Surrogate	%	-		-	-	-	**66**
(13C3-PFBS) Surrogate	%	-		-	-	-	**113**
(13C3-PFHxS) Surrogate	%	-		-	-	-	**96**
(13C8-PFOS) Surrogate	%	-		-	-	-	**97**
(13C2-4:2 FTS) Surrogate	%	-		-	-	-	**131**
(13C2-6:2 FTS) Surrogate	%	-		-	-	-	**153**
(13C2-8:2 FTS) Surrogate	%	-		-	-	-	**96**
(13C8-PFOSA) Surrogate	%	-		-	-	-	**70**
(D3-N-MeFOSA) Surrogate	%	-		-	-	-	**59**
(D5-N-EtFOSA) Surrogate	%	-		-	-	-	**62**
(D7-N-MeFOSE) Surrogate	%	-		-	-	-	**47**
(D9-N-EtFOSE) Surrogate	%	-		-	-	-	**63**
(D3-N-MeFOSAA) Surrogate	%	-		-	-	-	**70**
(D5-N-EtFOSAA) Surrogate	%	-		-	-	-	**73**
ASLP AS 4439.3 Acid Leaching Report Information	**Method: AS4439.3**	**Tested: 29/7/2020**					

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315500B.013 Soil 24 Jun 2020 SE208046B.013	ME315500B.014 Soil 24 Jun 2020 SE208046B.014	ME315500B.015 Soil 24 Jun 2020 SE208046B.015	ME315500B.016 Soil 24 Jun 2020 SE208046B.016
ASLP AS 4439.3 Acid Leaching Report Information	**Method: AS4439.3**	**Tested: 29/7/2020**	**(continued)**				
Storage Temperature*	°C	-		-	-	-	**4.0**
Leaching Date*	No unit	-		-	-	-	2020-07-28
Test Weight (g)*	g	-		-	-	-	**1.0**
Leach Fluid pH*	pH Units	-		-	-	-	**7.0**
Leaching Fluid Added (g)*	g	-		-	-	-	**20.0**
Leaching Fluid Collected (g)*	g	-		-	-	-	**20.0**
Solids Leachate pH*	pH Units	-		-	-	-	**8.8**

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Perfluoronated Surfactants in ASLP DI Water Extract **Method: MA_1523**

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Perfluorobutanoic acid (PFBA)	LB034554	µg/L	0.002	<0.002	0%	NA
Perfluoropentanoic acid (PFPeA)	LB034554	µg/L	0.002	<0.002	0%	NA
Perfluorohexanoic acid (PFHxA)	LB034554	µg/L	0.002	<0.002	0%	NA
Perfluoroheptanoic acid (PFHpA)	LB034554	µg/L	0.002	<0.002	0%	63%
Perfluorooctanoic Acid (PFOA)	LB034554	µg/L	0.001	<0.001	1%	78%
Perfluorononanoic acid (PFNA)	LB034554	µg/L	0.004	<0.004	0%	96%
Perfluorodecanoic acid (PFDA)	LB034554	µg/L	0.004	<0.004	0%	86%
Perfluoroundecanoic acid (PFUnA)	LB034554	µg/L	0.004	<0.004	0%	76%
Perfluorododecanoic acid (PFDoA)	LB034554	µg/L	0.004	<0.004	0%	83%
Perfluorotridecanoic acid (PFTrDA)	LB034554	µg/L	0.004	<0.004	0%	106%
Perfluorotetradecanoic acid (PFTeDA)	LB034554	µg/L	0.004	<0.004	0%	100%
Perfluorohexadecanoic acid (PFHxDA)	LB034554	µg/L	0.008	<0.008	0%	NA
Perfluorobutane sulfonate (PFBS)	LB034554	µg/L	0.004	<0.004	0%	NA
Perfluoropentane sulfonate (PFPeS)	LB034554	µg/L	0.004	<0.004	0%	NA
Perfluorohexane sulfonate (PFHxS)	LB034554	µg/L	0.002	<0.002	0%	NA
Perfluoroheptane sulfonate (PFHpS)	LB034554	µg/L	0.002	<0.002	0%	NA
Perfluorooctane sulfonate (PFOS)	LB034554	µg/L	0.002	<0.002	0%	90%
Sum of PFHxS and PFOS	LB034554	µg/L	0.002	<0.002	0%	NA
Perfluorononane sulfonate (PFNS)	LB034554	µg/L	0.002	<0.002	0%	NA
Perfluorodecane sulfonate (PFDS)	LB034554	µg/L	0.002	<0.002	0%	NA
Perfluorododecane sulfonate (PFDoS)	LB034554	µg/L	0.002	<0.002	0%	NA
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	LB034554	µg/L	0.002	<0.002	0%	NA
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	LB034554	µg/L	0.002	<0.002	0%	NA
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	LB034554	µg/L	0.002	<0.002	0%	NA
Perfluorooctane sulfonamide (PFOSA)	LB034554	µg/L	0.008	<0.008	0%	42%
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	LB034554	µg/L	0.01	<0.01	0%	NA
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	LB034554	µg/L	0.01	<0.01	0%	NA
2-(N-Methylperfluorooctane sulfonamido)-ethanol (N-MeFOSE)	LB034554	µg/L	0.01	<0.01	0%	NA
2-(N-Ethylperfluorooctane sulfonamido)-ethanol (N-EtFOSE)	LB034554	µg/L	0.01	<0.01	0%	NA
N-Methylperfluorooctanesulfonamidoacetic acid (N_MeFOSAA)	LB034554	µg/L	0.01	<0.01	0%	NA
N-Ethylperfluorooctanesulfonamidoacetic Acid (N-EtFOSAA)	LB034554	µg/L	0.01	<0.01	0%	NA
(13C4-PFBA) Surrogate	LB034554	%	-	101%	1%	100%
(13C5-PFPeA) Surrogate	LB034554	%	-	109%	1%	102%
(13C5-PFHxA) Surrogate	LB034554	%	-	99%	8%	87%
(13C4-PFHpA) Surrogate	LB034554	%	-	109%	4%	106%
(13C4_PFOA) Surrogate	LB034554	%	-	102%	1%	88%
(13C9-PFNA) Surrogate	LB034554	%	-	111%	11%	111%
(13C6-PFDA) Surrogate	LB034554	%	-	101%	1%	95%
(13C7-PFUdA) Surrogate	LB034554	%	-	89%	8%	90%
(13C2-PFDoA) Surrogate	LB034554	%	-	86%	2%	92%
(13C2_PFTeDA) Surrogate	LB034554	%	-	61%	20%	89%
(13C2-PFHxDA) Surrogate	LB034554	%	-	43%	47%	123%
(13C3-PFBS) Surrogate	LB034554	%	-	108%	2%	121%
(13C3-PFHxS) Surrogate	LB034554	%	-	102%	3%	109%
(13C8-PFOS) Surrogate	LB034554	%	-	100%	2%	108%
(13C2-4:2 FTS) Surrogate	LB034554	%	-	117%	13%	134%
(13C2-6:2 FTS) Surrogate	LB034554	%	-	171%	12%	177%
(13C2-8:2 FTS) Surrogate	LB034554	%	-	111%	18%	111%
(13C8-PFOSA) Surrogate	LB034554	%	-	74%	0%	75%
(D3-N-MeFOSA) Surrogate	LB034554	%	-	63%	17%	54%
(D5-N-EtFOSA) Surrogate	LB034554	%	-	54%	1%	47%
(D7-N-MeFOSE) Surrogate	LB034554	%	-	61%	22%	59%
(D9-N-EtFOSE) Surrogate	LB034554	%	-	55%	36%	48%
(D3-N-MeFOSAA) Surrogate	LB034554	%	-	79%	10%	69%
(D5-N-EtFOSAA) Surrogate	LB034554	%	-	76%	7%	96%

METHOD SUMMARY

METHOD	METHODOLOGY SUMMARY
MA1523	This method covers the analysis of per- and polyfluoroalkyl substances (PFAS) from a ASLP extract. Determined as the total of linear and branched isomers. After spiking with isotopically labelled quantification surrogates and clean-up via SPE cartridges sample extracts are analysed by liquid chromatography/mass spectrometry (LC-MS/MS). PFAS concentrations are determined by isotope dilution quantification .

FOOTNOTES

IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.

LOR	Limit of Reporting
↑↓	Raised or Lowered Limit of Reporting
QFH	QC result is above the upper tolerance
QFL	QC result is below the lower tolerance
-	The sample was not analysed for this analyte
NVL	Not Validated

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calcuated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety .

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	16

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
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Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208046B R0**
Date Received	21/7/2020
Date Reported	30/7/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

PFOS/PFOA subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420. Report No; ME315500B

Some PFAS surrogate recovery values are out of acceptance range due to matrix interference .

SIGNATORIES

Perfluoronated Surfactants in ASLP DI Water Extract [MA_1523] Tested: 30/7/2020

PARAMETER	UOM	LOR	0407_QC160_20062 SOIL - 24/6/2020 SE208046B.016
Perfluorobutanoic acid (PFBA)	µg/L	0.002	**0.004**
Perfluoropentanoic acid (PFPeA)	µg/L	0.002	**0.011**
Perfluorohexanoic acid (PFHxA)	µg/L	0.002	**0.010**
Perfluoroheptanoic acid (PFHpA)	µg/L	0.002	**0.004**
Perfluorooctanoic Acid (PFOA)	µg/L	0.001	**0.011**
Perfluorononanoic acid (PFNA)	µg/L	0.004	<0.004
Perfluorodecanoic acid (PFDA)	µg/L	0.004	<0.004
Perfluoroundecanoic acid (PFUnA)	µg/L	0.004	<0.004
Perfluorododecanoic acid (PFDoA)	µg/L	0.004	<0.004
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.004	<0.004
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.004	<0.004
Perfluorohexadecanoic acid (PFHxDA)	µg/L	0.008	<0.008
Perfluorobutane sulfonate (PFBS)	µg/L	0.004	<0.004
Perfluoropentane sulfonate (PFPeS)	µg/L	0.004	<0.004
Perfluorohexane sulfonate (PFHxS)	µg/L	0.002	**0.008**
Perfluoroheptane sulfonate (PFHpS)	µg/L	0.002	<0.002
Perfluorooctane sulfonate (PFOS)	µg/L	0.002	**0.088**
Sum of PFHxS and PFOS	µg/L	0.002	**0.097**
Perfluorononane sulfonate (PFNS)	µg/L	0.002	<0.002
Perfluorodecane sulfonate (PFDS)	µg/L	0.002	<0.002
Perfluorododecane sulfonate (PFDoS)	µg/L	0.002	<0.002
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	µg/L	0.002	<0.002
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	µg/L	0.002	**0.007**
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	µg/L	0.002	<0.002
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.008	<0.008
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	µg/L	0.01	<0.01
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	µg/L	0.01	<0.01
2-(N-Methylperfluorooctane sulfonamido)-ethanol	µg/L	0.01	<0.01
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	µg/L	0.01	<0.01
N-Methylperfluorooctanesulfonamidoacetic acid	µg/L	0.01	<0.01
N-Ethylperfluorooctanesulfonamidoacetic Acid	µg/L	0.01	<0.01

METHOD	METHODOLOGY SUMMARY
MA1523	This method covers the analysis of per- and polyfluoroalkyl substances (PFAS) from a ASLP extract. Determined as the total of linear and branched isomers. After spiking with isotopically labelled quantification surrogates and clean-up via SPE cartridges sample extracts are analysed by liquid chromatography /mass spectrometry (LC-MS/MS). PFAS concentrations are determined by isotope dilution quantification .

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety .

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STATEMENT OF QA/QC PERFORMANCE

SE208046B R0

CLIENT DETAILS

Contact	[redacted]
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Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
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Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	16

LABORATORY DETAILS

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Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208046B R0**
Date Received	21 Jul 2020
Date Reported	30 Jul 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Surrogate	Perfluoronated Surfactants in ASLP DI Water Extract	1 item

SAMPLE SUMMARY

HOLDING TIME SUMMARY

SE208046B R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

No holding time data is available for this job.

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Perfluoronated Surfactants in ASLP DI Water Extract — **Method: MA_1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C2_PFTeDA) Surrogate	0407_QC160_200624	SE208046B.016	%	0 - 150%	70
(13C2-4:2 FTS) Surrogate	0407_QC160_200624	SE208046B.016	%	0 - 150%	131
(13C2-6:2 FTS) Surrogate	0407_QC160_200624	SE208046B.016	%	0 - 150%	153 †
(13C2-8:2 FTS) Surrogate	0407_QC160_200624	SE208046B.016	%	0 - 150%	96
(13C2-PFDoA) Surrogate	0407_QC160_200624	SE208046B.016	%	0 - 150%	86
(13C2-PFHxDA) Surrogate	0407_QC160_200624	SE208046B.016	%	0 - 150%	66
(13C3-PFBS) Surrogate	0407_QC160_200624	SE208046B.016	%	0 - 150%	113
(13C3-PFHxS) Surrogate	0407_QC160_200624	SE208046B.016	%	0 - 150%	96
(13C4_PFOA) Surrogate	0407_QC160_200624	SE208046B.016	%	0 - 150%	99
(13C4-PFBA) Surrogate	0407_QC160_200624	SE208046B.016	%	0 - 150%	101
(13C4-PFHpA) Surrogate	0407_QC160_200624	SE208046B.016	%	0 - 150%	105
(13C5-PFHxA) Surrogate	0407_QC160_200624	SE208046B.016	%	0 - 150%	96
(13C5-PFPeA) Surrogate	0407_QC160_200624	SE208046B.016	%	0 - 150%	120
(13C6-PFDA) Surrogate	0407_QC160_200624	SE208046B.016	%	0 - 150%	114
(13C7-PFUdA) Surrogate	0407_QC160_200624	SE208046B.016	%	0 - 150%	96
(13C8-PFOS) Surrogate	0407_QC160_200624	SE208046B.016	%	0 - 150%	97
(13C8-PFOSA) Surrogate	0407_QC160_200624	SE208046B.016	%	0 - 150%	70
(13C9-PFNA) Surrogate	0407_QC160_200624	SE208046B.016	%	0 - 150%	101
(D3-N-MeFOSA) Surrogate	0407_QC160_200624	SE208046B.016	%	0 - 150%	59
(D3-N-MeFOSAA) Surrogate	0407_QC160_200624	SE208046B.016	%	0 - 150%	70
(D5-N-EtFOSA) Surrogate	0407_QC160_200624	SE208046B.016	%	0 - 150%	62
(D5-N-EtFOSAA) Surrogate	0407_QC160_200624	SE208046B.016	%	0 - 150%	73
(D7-N-MeFOSE) Surrogate	0407_QC160_200624	SE208046B.016	%	0 - 150%	47
(D9-N-EtFOSE) Surrogate	0407_QC160_200624	SE208046B.016	%	0 - 150%	63

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

No method blanks were required for this job.

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No duplicates were required for this job.

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

No laboratory control standards were required for this job.

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spikes were required for this job.

MATRIX SPIKE DUPLICATES

SE208046B R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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This test report shall not be reproduced, except in full.

Good morning

Please book these additional jobs in.

Please be very carefully as there are lots of jobs

Regards,

[redacted]
Environment, Health & Safety
Client Manager
Phone: +61 (0)2 8594 0400
Direct:
Mobile: [redacted]
(Please note my new working hours of Mon-Fri 6:00am-2:00pm)



Covid-19 update: SGS Australia is open, with our Business Service Continuity Plans being put in place to ensure your project can be delivered as normal, please click here to see further details on our Business & Services Continuity Plans.

From: [redacted]@slrconsulting.com>
Sent: Tuesday, 21 July 2020 5:03 PM
To: [redacted]@sgs.com>
Cc: [redacted]@slrconsulting.com>
Subject: [EXTERNAL] 610.30041 DHA Randwick - Additional Analysis

*** WARNING: this message is from an EXTERNAL SENDER. Please be cautious, particularly with links and attachments. ***

Hi [redacted]

Can we please schedule the following analyses:

pH, clay content, TOC & CEC:

Report number	Sample ID
SE207695	TP002_0.1_200615
SE207695	TP002_1.5_200615
SE207695	TP005_0.1_200616
SE207695	TP005_1.5_200616
SE207695	TP049_0.1_200617
SE207695	TP049_1.0_200617
SE208047	TP092_0.1_200624
SE208047	TP092_1.0_200624
SE207831	TP220_0.1_200618
SE207831	TP220_1.0_200618
SE207831	TP221_0.1_200619
SE207831	TP221_1.0_200619
SE207998	TP230_0.1_200622
SE207998	TP230_1.8_200622
SE207591	TP018_0.1_200615
SE207591	TP018_1.0_200615
SE208047	TP092_0.1_200624
SE208047	TP092_1.0_200624
SE207911	TP095_0.1_200623
SE207911	TP095_1.0_200623
SE207731	TP073_0.1_200619
SE207731	TP073_1.0_200619
SE208659	TP133_0.1_200701
SE208659	TP133_1.0_200701
SE208142	TP151_0.1_200629
SE208142	TP151_1.0_200629
SE208137	TP183_0.1_200625
SE208137	TP183_0.5_200625

Additional analysis:

Report number	Sample ID	Parameter
SE208081	0407_TP241_1.0_200625	Pb & Zn
SE207731	0407_TP73_0.5_200619	Cr

ASLP Leach:

Report number	Sample ID	Parameter
SE208046	0407_TP237_0.5_200624	8 metals
SE208081	0407_TP241_0.5_200625	8 metals
SE208133	0407_TP111_0.1_200626	8 metals
SE208142	0407_TP256_0.1_200629	8 metals
SE207831	0407_TP222_0.1_200619	8 metals
SE207731	0407_TP73_0.1_200619	8 metals
SE207850	0407_TP162_0.1_200617	PAHs include B(a)P

SE207831	0407_TP197_0.1_200619	PAHs include B(a)P
SE207831	0407_TP197_0.5_200619	PAHs include B(a)P
SE207831	0407_TP200_0.5_200618	PAHs include B(a)P
SE207831	0407_TP200_1.0_200618	Total and leachable PAHs including B(a)P
SE207831	0407_TP209_0.5_200619	PAHs include B(a)P
SE207831	0407_TP221_0.5_200619	PAHs include B(a)P
SE207831	0407_TP221_1.0_200619	Total and leachable PAHs including B(a)P
SE207824	0407_TP231_0.1_200622	PAHs include B(a)P
SE208161	0407_BH41_0.0_200625	PFOS, PFOA, PfHxS
SE208046	0407_QC160_200624	PFOS, PFOA, PfHxS
SE207824	0407_QC130_200622	PFOS, PFOA, PfHxS

Let me know if you have any questions.

Many thanks,

[redacted]

SLR

[redacted]

Associate - Land Quality & Remediation

Please note in response to the COVID-19 Pandemic and physical distancing recommendations from the Australian Government, SLR is encouraging staff to work remotely and implement flexible working hours if necessary.
If you have received this email outside of regular office hours, it is not expected that you will respond until your own working hours commence.

d +61 7 3117 5227
o [redacted]
m
e [redacted]@slrconsulting.com

SLR Consulting Australia Pty Ltd
Level 2, 15 Astor Terrace, Brisbane, QLD, Australia, 4000

WINNERS: RoSPA Gold Award, 2017
WINNERS : International Business Excellence Award, 2016

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SAMPLE RECEIPT ADVICE

SE208161A

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	18

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Tue 21/7/2020
Report Due	Wed 29/7/2020
SGS Reference	**SE208161A**

SUBMISSION DETAILS

This is to confirm that 18 samples were received on Tuesday 21/7/2020. Results are expected to be ready by COB Wednesday 29/7/2020.
Please quote SGS reference SE208161A when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	1 Soil
Date documentation received	21/7/2020@5:03pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	3.5°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

PFOS/PFOA subcontracted to SGS Antwerp Belgium Institute of Applied Chromatography Haven 407, BELAC Accreditation Number: N.005-TEST. Results may be delayed.

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SAMPLE RECEIPT ADVICE

SE208161A

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Field pH for Acid Sulphate Soil	Perfluoronated Surfactants in ASLP DI Water Extract
006	0407_BH41_0.0_200625	4	55

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS		LABORATORY DETAILS	
Contact	[redacted]	Manager	[redacted]
Client	SGS EHS SYDNEY	Laboratory	SGS Melbourne EH&S
Address	Unit 16, 33 Maddox Street Alexandria NSW 2015	Address	10/585 Blackburn Road Notting Hill Victoria 3168
Telephone	02 8594 0400	Telephone	+61395743200
Facsimile	02 8594 0499	Facsimile	+61395743399
Email	au.environmental.sydney@sgs.com	Email	Au.SampleReceipt.Melbourne@sgs.com
Project	**610.30041 Randwick Barracks**	SGS Reference	**ME315557A R0**
Order Number	**SE208161A**	Date Received	27 Jul 2020
Samples	18	Date Reported	30 Jul 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(14420).

MA1523: Some PFAS surrogate recovery is outside of the acceptance criteria due to sample matrix interference .

SIGNATORIES

[redacted]

Australian Chemistry Manager

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315557A.001 Water 22 Jun 2020 SE208161A.001	ME315557A.002 Water 23 Jun 2020 SE208161A.002	ME315557A.003 Water 23 Jun 2020 SE208161A.003	ME315557A.004 Water 24 Jun 2020 SE208161A.004
Perfluoronated Surfactants in ASLP DI Water Extract	**Method: MA_1523**	**Tested: 30/7/2020**					
Perfluorobutanoic acid (PFBA)	µg/L	0.002		-	-	-	-
Perfluoropentanoic acid (PFPeA)	µg/L	0.002		-	-	-	-
Perfluorohexanoic acid (PFHxA)	µg/L	0.002		-	-	-	-
Perfluoroheptanoic acid (PFHpA)	µg/L	0.002		-	-	-	-
Perfluorooctanoic Acid (PFOA)	µg/L	0.001		-	-	-	-
Perfluorononanoic acid (PFNA)	µg/L	0.004		-	-	-	-
Perfluorodecanoic acid (PFDA)	µg/L	0.004		-	-	-	-
Perfluoroundecanoic acid (PFUnA)	µg/L	0.004		-	-	-	-
Perfluorododecanoic acid (PFDoA)	µg/L	0.004		-	-	-	-
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.004		-	-	-	-
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.004		-	-	-	-
Perfluorohexadecanoic acid (PFHxDA)	µg/L	0.008		-	-	-	-
Perfluorobutane sulfonate (PFBS)	µg/L	0.004		-	-	-	-
Perfluoropentane sulfonate (PFPeS)	µg/L	0.004		-	-	-	-
Perfluorohexane sulfonate (PFHxS)	µg/L	0.002		-	-	-	-
Perfluoroheptane sulfonate (PFHpS)	µg/L	0.002		-	-	-	-
Perfluorooctane sulfonate (PFOS)	µg/L	0.002		-	-	-	-
Sum of PFHxS and PFOS	µg/L	0.002		-	-	-	-
Perfluorononane sulfonate (PFNS)	µg/L	0.002		-	-	-	-
Perfluorodecane sulfonate (PFDS)	µg/L	0.002		-	-	-	-
Perfluorododecane sulfonate (PFDoS)	µg/L	0.002		-	-	-	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	µg/L	0.002		-	-	-	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	µg/L	0.002		-	-	-	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	µg/L	0.002		-	-	-	-
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.008		-	-	-	-
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	µg/L	0.01		-	-	-	-
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	µg/L	0.01		-	-	-	-
2-(N-Methylperfluorooctane sulfonamido)-ethanol	µg/L	0.01		-	-	-	-
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	µg/L	0.01		-	-	-	-
N-Methylperfluorooctanesulfonamidoacetic acid	µg/L	0.01		-	-	-	-
N-Ethylperfluorooctanesulfonamidoacetic Acid	µg/L	0.01		-	-	-	-
(13C4-PFBA) Surrogate	%	-		-	-	-	-
(13C5-PFPeA) Surrogate	%	-		-	-	-	-
(13C5-PFHxA) Surrogate	%	-		-	-	-	-
(13C4-PFHpA) Surrogate	%	-		-	-	-	-
(13C4_PFOA) Surrogate	%	-		-	-	-	-
(13C9-PFNA) Surrogate	%	-		-	-	-	-
(13C6-PFDA) Surrogate	%	-		-	-	-	-
(13C7-PFUdA) Surrogate	%	-		-	-	-	-
(13C2-PFDoA) Surrogate	%	-		-	-	-	-
(13C2_PFTeDA) Surrogate	%	-		-	-	-	-
(13C2-PFHxDA) Surrogate	%	-		-	-	-	-
(13C3-PFBS) Surrogate	%	-		-	-	-	-
(13C3-PFHxS) Surrogate	%	-		-	-	-	-
(13C8-PFOS) Surrogate	%	-		-	-	-	-
(13C2-4:2 FTS) Surrogate	%	-		-	-	-	-
(13C2-6:2 FTS) Surrogate	%	-		-	-	-	-
(13C2-8:2 FTS) Surrogate	%	-		-	-	-	-
(13C8-PFOSA) Surrogate	%	-		-	-	-	-
(D3-N-MeFOSA) Surrogate	%	-		-	-	-	-
(D5-N-EtFOSA) Surrogate	%	-		-	-	-	-
(D7-N-MeFOSE) Surrogate	%	-		-	-	-	-
(D9-N-EtFOSE) Surrogate	%	-		-	-	-	-
(D3-N-MeFOSAA) Surrogate	%	-		-	-	-	-
(D5-N-EtFOSAA) Surrogate	%	-		-	-	-	-

ASLP AS 4439.3 Acid Leaching Report Information **Method: AS4439.3** **Tested: 29/7/2020**

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315557A.001 Water 22 Jun 2020 SE208161A.001	ME315557A.002 Water 23 Jun 2020 SE208161A.002	ME315557A.003 Water 23 Jun 2020 SE208161A.003	ME315557A.004 Water 24 Jun 2020 SE208161A.004
ASLP AS 4439.3 Acid Leaching Report Information	**Method: AS4439.3**	**Tested: 29/7/2020**	**(continued)**				
Storage Temperature*	°C	-		-	-	-	-
Leaching Date*	No unit	-		-	-	-	-
Test Weight (g)*	g	-		-	-	-	-
Leach Fluid pH*	pH Units	-		-	-	-	-
Leaching Fluid Added (g)*	g	-		-	-	-	-
Leaching Fluid Collected (g)*	g	-		-	-	-	-
Solids Leachate pH*	pH Units	-		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315557A.005 Water 24 Jun 2020 SE208161A.005	ME315557A.006 Soil 25 Jun 2020 SE208161A.006	ME315557A.007 Soil 25 Jun 2020 SE208161A.007	ME315557A.008 Soil 25 Jun 2020 SE208161A.008
Perfluoronated Surfactants in ASLP DI Water Extract	**Method: MA_1523**	**Tested: 30/7/2020**					
Perfluorobutanoic acid (PFBA)	µg/L	0.002		-	<0.002	-	-
Perfluoropentanoic acid (PFPeA)	µg/L	0.002		-	<0.002	-	-
Perfluorohexanoic acid (PFHxA)	µg/L	0.002		-	<0.002	-	-
Perfluoroheptanoic acid (PFHpA)	µg/L	0.002		-	<0.002	-	-
Perfluorooctanoic Acid (PFOA)	µg/L	0.001		-	<0.001	-	-
Perfluorononanoic acid (PFNA)	µg/L	0.004		-	<0.004	-	-
Perfluorodecanoic acid (PFDA)	µg/L	0.004		-	<0.004	-	-
Perfluoroundecanoic acid (PFUnA)	µg/L	0.004		-	<0.004	-	-
Perfluorododecanoic acid (PFDoA)	µg/L	0.004		-	<0.004	-	-
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.004		-	<0.004	-	-
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.004		-	<0.004	-	-
Perfluorohexadecanoic acid (PFHxDA)	µg/L	0.008		-	<0.008	-	-
Perfluorobutane sulfonate (PFBS)	µg/L	0.004		-	<0.004	-	-
Perfluoropentane sulfonate (PFPeS)	µg/L	0.004		-	<0.004	-	-
Perfluorohexane sulfonate (PFHxS)	µg/L	0.002		-	<0.002	-	-
Perfluoroheptane sulfonate (PFHpS)	µg/L	0.002		-	<0.002	-	-
Perfluorooctane sulfonate (PFOS)	µg/L	0.002		-	**0.005**	-	-
Sum of PFHxS and PFOS	µg/L	0.002		-	**0.005**	-	-
Perfluorononane sulfonate (PFNS)	µg/L	0.002		-	<0.002	-	-
Perfluorodecane sulfonate (PFDS)	µg/L	0.002		-	<0.002	-	-
Perfluorododecane sulfonate (PFDoS)	µg/L	0.002		-	<0.002	-	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	µg/L	0.002		-	<0.002	-	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	µg/L	0.002		-	**0.006**	-	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	µg/L	0.002		-	<0.002	-	-
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.008		-	<0.008	-	-
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	µg/L	0.01		-	<0.01	-	-
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	µg/L	0.01		-	<0.01	-	-
2-(N-Methylperfluorooctane sulfonamido)-ethanol	µg/L	0.01		-	<0.01	-	-
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	µg/L	0.01		-	<0.01	-	-
N-Methylperfluorooctanesulfonamidoacetic acid	µg/L	0.01		-	<0.01	-	-
N-Ethylperfluorooctanesulfonamidoacetic Acid	µg/L	0.01		-	<0.01	-	-
(13C4-PFBA) Surrogate	%	-		-	**98**	-	-
(13C5-PFPeA) Surrogate	%	-		-	**110**	-	-
(13C5-PFHxA) Surrogate	%	-		-	**101**	-	-
(13C4-PFHpA) Surrogate	%	-		-	**109**	-	-
(13C4_PFOA) Surrogate	%	-		-	**106**	-	-
(13C9-PFNA) Surrogate	%	-		-	**102**	-	-
(13C6-PFDA) Surrogate	%	-		-	**89**	-	-
(13C7-PFUdA) Surrogate	%	-		-	**82**	-	-
(13C2-PFDoA) Surrogate	%	-		-	**83**	-	-
(13C2_PFTeDA) Surrogate	%	-		-	**82**	-	-
(13C2-PFHxDA) Surrogate	%	-		-	**92**	-	-
(13C3-PFBS) Surrogate	%	-		-	**122**	-	-
(13C3-PFHxS) Surrogate	%	-		-	**110**	-	-
(13C8-PFOS) Surrogate	%	-		-	**102**	-	-
(13C2-4:2 FTS) Surrogate	%	-		-	**139**	-	-
(13C2-6:2 FTS) Surrogate	%	-		-	**181**	-	-
(13C2-8:2 FTS) Surrogate	%	-		-	**118**	-	-
(13C8-PFOSA) Surrogate	%	-		-	**82**	-	-
(D3-N-MeFOSA) Surrogate	%	-		-	**68**	-	-
(D5-N-EtFOSA) Surrogate	%	-		-	**81**	-	-
(D7-N-MeFOSE) Surrogate	%	-		-	**73**	-	-
(D9-N-EtFOSE) Surrogate	%	-		-	**57**	-	-
(D3-N-MeFOSAA) Surrogate	%	-		-	**86**	-	-
(D5-N-EtFOSAA) Surrogate	%	-		-	**113**	-	-
ASLP AS 4439.3 Acid Leaching Report Information	**Method: AS4439.3**	**Tested: 29/7/2020**					

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315557A.005 Water 24 Jun 2020 SE208161A.005	ME315557A.006 Soil 25 Jun 2020 SE208161A.006	ME315557A.007 Soil 25 Jun 2020 SE208161A.007	ME315557A.008 Soil 25 Jun 2020 SE208161A.008
ASLP AS 4439.3 Acid Leaching Report Information	**Method: AS4439.3**	**Tested: 29/7/2020**	**(continued)**				
Storage Temperature*	°C	-		-	**4.0**	-	-
Leaching Date*	No unit	-		-	2020-07-28	-	-
Test Weight (g)*	g	-		-	**1.0**	-	-
Leach Fluid pH*	pH Units	-		-	**7.0**	-	-
Leaching Fluid Added (g)*	g	-		-	**20.0**	-	-
Leaching Fluid Collected (g)*	g	-		-	**20.0**	-	-
Solids Leachate pH*	pH Units	-		-	**7.9**	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315557A.009 Soil 25 Jun 2020 SE208161A.009	ME315557A.010 Water 25 Jun 2020 SE208161A.010	ME315557A.011 Water 25 Jun 2020 SE208161A.011	ME315557A.012 Soil 26 Jun 2020 SE208161A.012
Perfluoronated Surfactants in ASLP DI Water Extract	**Method: MA_1523**	**Tested: 30/7/2020**					
Perfluorobutanoic acid (PFBA)	µg/L	0.002		-	-	-	-
Perfluoropentanoic acid (PFPeA)	µg/L	0.002		-	-	-	-
Perfluorohexanoic acid (PFHxA)	µg/L	0.002		-	-	-	-
Perfluoroheptanoic acid (PFHpA)	µg/L	0.002		-	-	-	-
Perfluorooctanoic Acid (PFOA)	µg/L	0.001		-	-	-	-
Perfluorononanoic acid (PFNA)	µg/L	0.004		-	-	-	-
Perfluorodecanoic acid (PFDA)	µg/L	0.004		-	-	-	-
Perfluoroundecanoic acid (PFUnA)	µg/L	0.004		-	-	-	-
Perfluorododecanoic acid (PFDoA)	µg/L	0.004		-	-	-	-
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.004		-	-	-	-
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.004		-	-	-	-
Perfluorohexadecanoic acid (PFHxDA)	µg/L	0.008		-	-	-	-
Perfluorobutane sulfonate (PFBS)	µg/L	0.004		-	-	-	-
Perfluoropentane sulfonate (PFPeS)	µg/L	0.004		-	-	-	-
Perfluorohexane sulfonate (PFHxS)	µg/L	0.002		-	-	-	-
Perfluoroheptane sulfonate (PFHpS)	µg/L	0.002		-	-	-	-
Perfluorooctane sulfonate (PFOS)	µg/L	0.002		-	-	-	-
Sum of PFHxS and PFOS	µg/L	0.002		-	-	-	-
Perfluorononane sulfonate (PFNS)	µg/L	0.002		-	-	-	-
Perfluorodecane sulfonate (PFDS)	µg/L	0.002		-	-	-	-
Perfluorododecane sulfonate (PFDoS)	µg/L	0.002		-	-	-	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	µg/L	0.002		-	-	-	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	µg/L	0.002		-	-	-	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	µg/L	0.002		-	-	-	-
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.008		-	-	-	-
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	µg/L	0.01		-	-	-	-
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	µg/L	0.01		-	-	-	-
2-(N-Methylperfluorooctane sulfonamido)-ethanol	µg/L	0.01		-	-	-	-
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	µg/L	0.01		-	-	-	-
N-Methylperfluorooctanesulfonamidoacetic acid	µg/L	0.01		-	-	-	-
N-Ethylperfluorooctanesulfonamidoacetic Acid	µg/L	0.01		-	-	-	-
(13C4-PFBA) Surrogate	%	-		-	-	-	-
(13C5-PFPeA) Surrogate	%	-		-	-	-	-
(13C5-PFHxA) Surrogate	%	-		-	-	-	-
(13C4-PFHpA) Surrogate	%	-		-	-	-	-
(13C4_PFOA) Surrogate	%	-		-	-	-	-
(13C9-PFNA) Surrogate	%	-		-	-	-	-
(13C6-PFDA) Surrogate	%	-		-	-	-	-
(13C7-PFUdA) Surrogate	%	-		-	-	-	-
(13C2-PFDoA) Surrogate	%	-		-	-	-	-
(13C2_PFTeDA) Surrogate	%	-		-	-	-	-
(13C2-PFHxDA) Surrogate	%	-		-	-	-	-
(13C3-PFBS) Surrogate	%	-		-	-	-	-
(13C3-PFHxS) Surrogate	%	-		-	-	-	-
(13C8-PFOS) Surrogate	%	-		-	-	-	-
(13C2-4:2 FTS) Surrogate	%	-		-	-	-	-
(13C2-6:2 FTS) Surrogate	%	-		-	-	-	-
(13C2-8:2 FTS) Surrogate	%	-		-	-	-	-
(13C8-PFOSA) Surrogate	%	-		-	-	-	-
(D3-N-MeFOSA) Surrogate	%	-		-	-	-	-
(D5-N-EtFOSA) Surrogate	%	-		-	-	-	-
(D7-N-MeFOSE) Surrogate	%	-		-	-	-	-
(D9-N-EtFOSE) Surrogate	%	-		-	-	-	-
(D3-N-MeFOSAA) Surrogate	%	-		-	-	-	-
(D5-N-EtFOSAA) Surrogate	%	-		-	-	-	-

ASLP AS 4439.3 Acid Leaching Report Information **Method: AS4439.3** **Tested: 29/7/2020**

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315557A.009 Soil 25 Jun 2020 SE208161A.009	ME315557A.010 Water 25 Jun 2020 SE208161A.010	ME315557A.011 Water 25 Jun 2020 SE208161A.011	ME315557A.012 Soil 26 Jun 2020 SE208161A.012
ASLP AS 4439.3 Acid Leaching Report Information	**Method: AS4439.3**	**Tested: 29/7/2020**	**(continued)**				
Storage Temperature*	°C	-		-	-	-	-
Leaching Date*	No unit	-		-	-	-	-
Test Weight (g)*	g	-		-	-	-	-
Leach Fluid pH*	pH Units	-		-	-	-	-
Leaching Fluid Added (g)*	g	-		-	-	-	-
Leaching Fluid Collected (g)*	g	-		-	-	-	-
Solids Leachate pH*	pH Units	-		-	-	-	-

Parameter	Units	LOR	Sample Number: ME315557A.013 Sample Matrix: Soil Sample Date: 26 Jun 2020 Sample Name: SE208161A.013	ME315557A.014 Soil 26 Jun 2020 SE208161A.014	ME315557A.015 Soil 26 Jun 2020 SE208161A.015	ME315557A.016 Soil 26 Jun 2020 SE208161A.016
Perfluoronated Surfactants in ASLP DI Water Extract	**Method: MA_1523**	**Tested: 30/7/2020**				
Perfluorobutanoic acid (PFBA)	µg/L	0.002	-	-	-	-
Perfluoropentanoic acid (PFPeA)	µg/L	0.002	-	-	-	-
Perfluorohexanoic acid (PFHxA)	µg/L	0.002	-	-	-	-
Perfluoroheptanoic acid (PFHpA)	µg/L	0.002	-	-	-	-
Perfluorooctanoic Acid (PFOA)	µg/L	0.001	-	-	-	-
Perfluorononanoic acid (PFNA)	µg/L	0.004	-	-	-	-
Perfluorodecanoic acid (PFDA)	µg/L	0.004	-	-	-	-
Perfluoroundecanoic acid (PFUnA)	µg/L	0.004	-	-	-	-
Perfluorododecanoic acid (PFDoA)	µg/L	0.004	-	-	-	-
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.004	-	-	-	-
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.004	-	-	-	-
Perfluorohexadecanoic acid (PFHxDA)	µg/L	0.008	-	-	-	-
Perfluorobutane sulfonate (PFBS)	µg/L	0.004	-	-	-	-
Perfluoropentane sulfonate (PFPeS)	µg/L	0.004	-	-	-	-
Perfluorohexane sulfonate (PFHxS)	µg/L	0.002	-	-	-	-
Perfluoroheptane sulfonate (PFHpS)	µg/L	0.002	-	-	-	-
Perfluorooctane sulfonate (PFOS)	µg/L	0.002	-	-	-	-
Sum of PFHxS and PFOS	µg/L	0.002	-	-	-	-
Perfluorononane sulfonate (PFNS)	µg/L	0.002	-	-	-	-
Perfluorodecane sulfonate (PFDS)	µg/L	0.002	-	-	-	-
Perfluorododecane sulfonate (PFDoS)	µg/L	0.002	-	-	-	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	µg/L	0.002	-	-	-	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	µg/L	0.002	-	-	-	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	µg/L	0.002	-	-	-	-
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.008	-	-	-	-
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	µg/L	0.01	-	-	-	-
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	µg/L	0.01	-	-	-	-
2-(N-Methylperfluorooctane sulfonamido)-ethanol	µg/L	0.01	-	-	-	-
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	µg/L	0.01	-	-	-	-
N-Methylperfluorooctanesulfonamidoacetic acid	µg/L	0.01	-	-	-	-
N-Ethylperfluorooctanesulfonamidoacetic Acid	µg/L	0.01	-	-	-	-
(13C4-PFBA) Surrogate	%	-	-	-	-	-
(13C5-PFPeA) Surrogate	%	-	-	-	-	-
(13C5-PFHxA) Surrogate	%	-	-	-	-	-
(13C4-PFHpA) Surrogate	%	-	-	-	-	-
(13C4_PFOA) Surrogate	%	-	-	-	-	-
(13C9-PFNA) Surrogate	%	-	-	-	-	-
(13C6-PFDA) Surrogate	%	-	-	-	-	-
(13C7-PFUdA) Surrogate	%	-	-	-	-	-
(13C2-PFDoA) Surrogate	%	-	-	-	-	-
(13C2_PFTeDA) Surrogate	%	-	-	-	-	-
(13C2-PFHxDA) Surrogate	%	-	-	-	-	-
(13C3-PFBS) Surrogate	%	-	-	-	-	-
(13C3-PFHxS) Surrogate	%	-	-	-	-	-
(13C8-PFOS) Surrogate	%	-	-	-	-	-
(13C2-4:2 FTS) Surrogate	%	-	-	-	-	-
(13C2-6:2 FTS) Surrogate	%	-	-	-	-	-
(13C2-8:2 FTS) Surrogate	%	-	-	-	-	-
(13C8-PFOSA) Surrogate	%	-	-	-	-	-
(D3-N-MeFOSA) Surrogate	%	-	-	-	-	-
(D5-N-EtFOSA) Surrogate	%	-	-	-	-	-
(D7-N-MeFOSE) Surrogate	%	-	-	-	-	-
(D9-N-EtFOSE) Surrogate	%	-	-	-	-	-
(D3-N-MeFOSAA) Surrogate	%	-	-	-	-	-
(D5-N-EtFOSAA) Surrogate	%	-	-	-	-	-
ASLP AS 4439.3 Acid Leaching Report Information	**Method: AS4439.3**	**Tested: 29/7/2020**				

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315557A.013 Soil 26 Jun 2020 SE208161A.013	ME315557A.014 Soil 26 Jun 2020 SE208161A.014	ME315557A.015 Soil 26 Jun 2020 SE208161A.015	ME315557A.016 Soil 26 Jun 2020 SE208161A.016
ASLP AS 4439.3 Acid Leaching Report Information	**Method: AS4439.3**	**Tested: 29/7/2020**	**(continued)**				
Storage Temperature*	°C	-		-	-	-	-
Leaching Date*	No unit	-		-	-	-	-
Test Weight (g)*	g	-		-	-	-	-
Leach Fluid pH*	pH Units	-		-	-	-	-
Leaching Fluid Added (g)*	g	-		-	-	-	-
Leaching Fluid Collected (g)*	g	-		-	-	-	-
Solids Leachate pH*	pH Units	-		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315557A.017 Soil 26 Jun 2020 SE208161A.017	ME315557A.018 Water 26 Jun 2020 SE208161A.018
Perfluoronated Surfactants in ASLP DI Water Extract	**Method: MA_1523**	**Tested: 30/7/2020**			
Perfluorobutanoic acid (PFBA)	µg/L	0.002		-	-
Perfluoropentanoic acid (PFPeA)	µg/L	0.002		-	-
Perfluorohexanoic acid (PFHxA)	µg/L	0.002		-	-
Perfluoroheptanoic acid (PFHpA)	µg/L	0.002		-	-
Perfluorooctanoic Acid (PFOA)	µg/L	0.001		-	-
Perfluorononanoic acid (PFNA)	µg/L	0.004		-	-
Perfluorodecanoic acid (PFDA)	µg/L	0.004		-	-
Perfluoroundecanoic acid (PFUnA)	µg/L	0.004		-	-
Perfluorododecanoic acid (PFDoA)	µg/L	0.004		-	-
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.004		-	-
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.004		-	-
Perfluorohexadecanoic acid (PFHxDA)	µg/L	0.008		-	-
Perfluorobutane sulfonate (PFBS)	µg/L	0.004		-	-
Perfluoropentane sulfonate (PFPeS)	µg/L	0.004		-	-
Perfluorohexane sulfonate (PFHxS)	µg/L	0.002		-	-
Perfluoroheptane sulfonate (PFHpS)	µg/L	0.002		-	-
Perfluorooctane sulfonate (PFOS)	µg/L	0.002		-	-
Sum of PFHxS and PFOS	µg/L	0.002		-	-
Perfluorononane sulfonate (PFNS)	µg/L	0.002		-	-
Perfluorodecane sulfonate (PFDS)	µg/L	0.002		-	-
Perfluorododecane sulfonate (PFDoS)	µg/L	0.002		-	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	µg/L	0.002		-	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	µg/L	0.002		-	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	µg/L	0.002		-	-
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.008		-	-
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	µg/L	0.01		-	-
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	µg/L	0.01		-	-
2-(N-Methylperfluorooctane sulfonamido)-ethanol	µg/L	0.01		-	-
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	µg/L	0.01		-	-
N-Methylperfluorooctanesulfonamidoacetic acid	µg/L	0.01		-	-
N-Ethylperfluorooctanesulfonamidoacetic Acid	µg/L	0.01		-	-
(13C4-PFBA) Surrogate	%	-		-	-
(13C5-PFPeA) Surrogate	%	-		-	-
(13C5-PFHxA) Surrogate	%	-		-	-
(13C4-PFHpA) Surrogate	%	-		-	-
(13C4_PFOA) Surrogate	%	-		-	-
(13C9-PFNA) Surrogate	%	-		-	-
(13C6-PFDA) Surrogate	%	-		-	-
(13C7-PFUdA) Surrogate	%	-		-	-
(13C2-PFDoA) Surrogate	%	-		-	-
(13C2_PFTeDA) Surrogate	%	-		-	-
(13C2-PFHxDA) Surrogate	%	-		-	-
(13C3-PFBS) Surrogate	%	-		-	-
(13C3-PFHxS) Surrogate	%	-		-	-
(13C8-PFOS) Surrogate	%	-		-	-
(13C2-4:2 FTS) Surrogate	%	-		-	-
(13C2-6:2 FTS) Surrogate	%	-		-	-
(13C2-8:2 FTS) Surrogate	%	-		-	-
(13C8-PFOSA) Surrogate	%	-		-	-
(D3-N-MeFOSA) Surrogate	%	-		-	-
(D5-N-EtFOSA) Surrogate	%	-		-	-
(D7-N-MeFOSE) Surrogate	%	-		-	-
(D9-N-EtFOSE) Surrogate	%	-		-	-
(D3-N-MeFOSAA) Surrogate	%	-		-	-
(D5-N-EtFOSAA) Surrogate	%	-		-	-

ASLP AS 4439.3 Acid Leaching Report Information **Method: AS4439.3** **Tested: 29/7/2020**

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315557A.017 Soil 26 Jun 2020 SE208161A.017	ME315557A.018 Water 26 Jun 2020 SE208161A.018
ASLP AS 4439.3 Acid Leaching Report Information	**Method: AS4439.3**	**Tested: 29/7/2020**	**(continued)**		
Storage Temperature*	°C	-		-	-
Leaching Date*	No unit	-		-	-
Test Weight (g)*	g	-		-	-
Leach Fluid pH*	pH Units	-		-	-
Leaching Fluid Added (g)*	g	-		-	-
Leaching Fluid Collected (g)*	g	-		-	-
Solids Leachate pH*	pH Units	-		-	-

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Perfluoronated Surfactants in ASLP DI Water Extract **Method: MA_1523**

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Perfluorobutanoic acid (PFBA)	LB034554	µg/L	0.002	<0.002	0%	NA
Perfluoropentanoic acid (PFPeA)	LB034554	µg/L	0.002	<0.002	0%	NA
Perfluorohexanoic acid (PFHxA)	LB034554	µg/L	0.002	<0.002	0%	NA
Perfluoroheptanoic acid (PFHpA)	LB034554	µg/L	0.002	<0.002	0%	63%
Perfluorooctanoic Acid (PFOA)	LB034554	µg/L	0.001	<0.001	1%	78%
Perfluorononanoic acid (PFNA)	LB034554	µg/L	0.004	<0.004	0%	96%
Perfluorodecanoic acid (PFDA)	LB034554	µg/L	0.004	<0.004	0%	86%
Perfluoroundecanoic acid (PFUnA)	LB034554	µg/L	0.004	<0.004	0%	76%
Perfluorododecanoic acid (PFDoA)	LB034554	µg/L	0.004	<0.004	0%	83%
Perfluorotridecanoic acid (PFTrDA)	LB034554	µg/L	0.004	<0.004	0%	106%
Perfluorotetradecanoic acid (PFTeDA)	LB034554	µg/L	0.004	<0.004	0%	100%
Perfluorohexadecanoic acid (PFHxDA)	LB034554	µg/L	0.008	<0.008	0%	NA
Perfluorobutane sulfonate (PFBS)	LB034554	µg/L	0.004	<0.004	0%	NA
Perfluoropentane sulfonate (PFPeS)	LB034554	µg/L	0.004	<0.004	0%	NA
Perfluorohexane sulfonate (PFHxS)	LB034554	µg/L	0.002	<0.002	0%	NA
Perfluoroheptane sulfonate (PFHpS)	LB034554	µg/L	0.002	<0.002	0%	NA
Perfluorooctane sulfonate (PFOS)	LB034554	µg/L	0.002	<0.002	0%	90%
Sum of PFHxS and PFOS	LB034554	µg/L	0.002	<0.002	0%	NA
Perfluorononane sulfonate (PFNS)	LB034554	µg/L	0.002	<0.002	0%	NA
Perfluorodecane sulfonate (PFDS)	LB034554	µg/L	0.002	<0.002	0%	NA
Perfluorododecane sulfonate (PFDoS)	LB034554	µg/L	0.002	<0.002	0%	NA
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	LB034554	µg/L	0.002	<0.002	0%	NA
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	LB034554	µg/L	0.002	<0.002	0%	NA
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	LB034554	µg/L	0.002	<0.002	0%	NA
Perfluorooctane sulfonamide (PFOSA)	LB034554	µg/L	0.008	<0.008	0%	42%
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	LB034554	µg/L	0.01	<0.01	0%	NA
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	LB034554	µg/L	0.01	<0.01	0%	NA
2-(N-Methylperfluorooctane sulfonamido)-ethanol (N-MeFOSE)	LB034554	µg/L	0.01	<0.01	0%	NA
2-(N-Ethylperfluorooctane sulfonamido)-ethanol (N-EtFOSE)	LB034554	µg/L	0.01	<0.01	0%	NA
N-Methylperfluorooctanesulfonamidoacetic acid (N_MeFOSAA)	LB034554	µg/L	0.01	<0.01	0%	NA
N-Ethylperfluorooctanesulfonamidoacetic Acid (N-EtFOSAA)	LB034554	µg/L	0.01	<0.01	0%	NA
(13C4-PFBA) Surrogate	LB034554	%	-	101%	1%	100%
(13C5-PFPeA) Surrogate	LB034554	%	-	109%	1%	102%
(13C5-PFHxA) Surrogate	LB034554	%	-	99%	8%	87%
(13C4-PFHpA) Surrogate	LB034554	%	-	109%	4%	106%
(13C4_PFOA) Surrogate	LB034554	%	-	102%	1%	88%
(13C9-PFNA) Surrogate	LB034554	%	-	111%	11%	111%
(13C6-PFDA) Surrogate	LB034554	%	-	101%	1%	95%
(13C7-PFUdA) Surrogate	LB034554	%	-	89%	8%	90%
(13C2-PFDoA) Surrogate	LB034554	%	-	86%	2%	92%
(13C2_PFTeDA) Surrogate	LB034554	%	-	61%	20%	89%
(13C2-PFHxDA) Surrogate	LB034554	%	-	43%	47%	123%
(13C3-PFBS) Surrogate	LB034554	%	-	108%	2%	121%
(13C3-PFHxS) Surrogate	LB034554	%	-	102%	3%	109%
(13C8-PFOS) Surrogate	LB034554	%	-	100%	2%	108%
(13C2-4:2 FTS) Surrogate	LB034554	%	-	117%	13%	134%
(13C2-6:2 FTS) Surrogate	LB034554	%	-	171%	12%	177%
(13C2-8:2 FTS) Surrogate	LB034554	%	-	111%	18%	111%
(13C8-PFOSA) Surrogate	LB034554	%	-	74%	0%	75%
(D3-N-MeFOSA) Surrogate	LB034554	%	-	63%	17%	54%
(D5-N-EtFOSA) Surrogate	LB034554	%	-	54%	1%	47%
(D7-N-MeFOSE) Surrogate	LB034554	%	-	61%	22%	59%
(D9-N-EtFOSE) Surrogate	LB034554	%	-	55%	36%	48%
(D3-N-MeFOSAA) Surrogate	LB034554	%	-	79%	10%	69%
(D5-N-EtFOSAA) Surrogate	LB034554	%	-	76%	7%	96%

METHOD SUMMARY

METHOD	METHODOLOGY SUMMARY
MA1523	This method covers the analysis of per- and polyfluoroalkyl substances (PFAS) from a ASLP extract. Determined as the total of linear and branched isomers. After spiking with isotopically labelled quantification surrogates and clean-up via SPE cartridges sample extracts are analysed by liquid chromatography/mass spectrometry (LC-MS/MS). PFAS concentrations are determined by isotope dilution quantification .

FOOTNOTES

IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.

LOR	Limit of Reporting
↑↓	Raised or Lowered Limit of Reporting
QFH	QC result is above the upper tolerance
QFL	QC result is below the lower tolerance
-	The sample was not analysed for this analyte
NVL	Not Validated

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calcuated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety .

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS		LABORATORY DETAILS	
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Project	**610.30041 Randwick Barracks**	SGS Reference	**ME315557A R0**
Order Number	**SE208161A**	Date Received	27 Jul 2020
Samples	18	Date Reported	30 Jul 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(14420).

MA1523: Some PFAS surrogate recovery is outside of the acceptance criteria due to sample matrix interference .

SIGNATORIES

[redacted]

Australian Chemistry Manager

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315557A.001 Water 22 Jun 2020 SE208161A.001	ME315557A.002 Water 23 Jun 2020 SE208161A.002	ME315557A.003 Water 23 Jun 2020 SE208161A.003	ME315557A.004 Water 24 Jun 2020 SE208161A.004
Perfluoronated Surfactants in ASLP DI Water Extract	**Method: MA_1523**	**Tested: 30/7/2020**					
Perfluorobutanoic acid (PFBA)	µg/L	0.002		-	-	-	-
Perfluoropentanoic acid (PFPeA)	µg/L	0.002		-	-	-	-
Perfluorohexanoic acid (PFHxA)	µg/L	0.002		-	-	-	-
Perfluoroheptanoic acid (PFHpA)	µg/L	0.002		-	-	-	-
Perfluorooctanoic Acid (PFOA)	µg/L	0.001		-	-	-	-
Perfluorononanoic acid (PFNA)	µg/L	0.004		-	-	-	-
Perfluorodecanoic acid (PFDA)	µg/L	0.004		-	-	-	-
Perfluoroundecanoic acid (PFUnA)	µg/L	0.004		-	-	-	-
Perfluorododecanoic acid (PFDoA)	µg/L	0.004		-	-	-	-
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.004		-	-	-	-
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.004		-	-	-	-
Perfluorohexadecanoic acid (PFHxDA)	µg/L	0.008		-	-	-	-
Perfluorobutane sulfonate (PFBS)	µg/L	0.004		-	-	-	-
Perfluoropentane sulfonate (PFPeS)	µg/L	0.004		-	-	-	-
Perfluorohexane sulfonate (PFHxS)	µg/L	0.002		-	-	-	-
Perfluoroheptane sulfonate (PFHpS)	µg/L	0.002		-	-	-	-
Perfluorooctane sulfonate (PFOS)	µg/L	0.002		-	-	-	-
Sum of PFHxS and PFOS	µg/L	0.002		-	-	-	-
Perfluorononane sulfonate (PFNS)	µg/L	0.002		-	-	-	-
Perfluorodecane sulfonate (PFDS)	µg/L	0.002		-	-	-	-
Perfluorododecane sulfonate (PFDoS)	µg/L	0.002		-	-	-	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	µg/L	0.002		-	-	-	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	µg/L	0.002		-	-	-	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	µg/L	0.002		-	-	-	-
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.008		-	-	-	-
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	µg/L	0.01		-	-	-	-
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	µg/L	0.01		-	-	-	-
2-(N-Methylperfluorooctane sulfonamido)-ethanol	µg/L	0.01		-	-	-	-
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	µg/L	0.01		-	-	-	-
N-Methylperfluorooctanesulfonamidoacetic acid	µg/L	0.01		-	-	-	-
N-Ethylperfluorooctanesulfonamidoacetic Acid	µg/L	0.01		-	-	-	-
(13C4-PFBA) Surrogate	%	-		-	-	-	-
(13C5-PFPeA) Surrogate	%	-		-	-	-	-
(13C5-PFHxA) Surrogate	%	-		-	-	-	-
(13C4-PFHpA) Surrogate	%	-		-	-	-	-
(13C4_PFOA) Surrogate	%	-		-	-	-	-
(13C9-PFNA) Surrogate	%	-		-	-	-	-
(13C6-PFDA) Surrogate	%	-		-	-	-	-
(13C7-PFUdA) Surrogate	%	-		-	-	-	-
(13C2-PFDoA) Surrogate	%	-		-	-	-	-
(13C2_PFTeDA) Surrogate	%	-		-	-	-	-
(13C2-PFHxDA) Surrogate	%	-		-	-	-	-
(13C3-PFBS) Surrogate	%	-		-	-	-	-
(13C3-PFHxS) Surrogate	%	-		-	-	-	-
(13C8-PFOS) Surrogate	%	-		-	-	-	-
(13C2-4:2 FTS) Surrogate	%	-		-	-	-	-
(13C2-6:2 FTS) Surrogate	%	-		-	-	-	-
(13C2-8:2 FTS) Surrogate	%	-		-	-	-	-
(13C8-PFOSA) Surrogate	%	-		-	-	-	-
(D3-N-MeFOSA) Surrogate	%	-		-	-	-	-
(D5-N-EtFOSA) Surrogate	%	-		-	-	-	-
(D7-N-MeFOSE) Surrogate	%	-		-	-	-	-
(D9-N-EtFOSE) Surrogate	%	-		-	-	-	-
(D3-N-MeFOSAA) Surrogate	%	-		-	-	-	-
(D5-N-EtFOSAA) Surrogate	%	-		-	-	-	-

ASLP AS 4439.3 Acid Leaching Report Information **Method: AS4439.3** **Tested: 29/7/2020**

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315557A.001 Water 22 Jun 2020 SE208161A.001	ME315557A.002 Water 23 Jun 2020 SE208161A.002	ME315557A.003 Water 23 Jun 2020 SE208161A.003	ME315557A.004 Water 24 Jun 2020 SE208161A.004
ASLP AS 4439.3 Acid Leaching Report Information	**Method: AS4439.3**	**Tested: 29/7/2020**	**(continued)**				
Storage Temperature*	°C	-		-	-	-	-
Leaching Date*	No unit	-		-	-	-	-
Test Weight (g)*	g	-		-	-	-	-
Leach Fluid pH*	pH Units	-		-	-	-	-
Leaching Fluid Added (g)*	g	-		-	-	-	-
Leaching Fluid Collected (g)*	g	-		-	-	-	-
Solids Leachate pH*	pH Units	-		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315557A.005 Water 24 Jun 2020 SE208161A.005	ME315557A.006 Soil 25 Jun 2020 SE208161A.006	ME315557A.007 Soil 25 Jun 2020 SE208161A.007	ME315557A.008 Soil 25 Jun 2020 SE208161A.008
Perfluoronated Surfactants in ASLP DI Water Extract	**Method: MA_1523**	**Tested: 30/7/2020**					
Perfluorobutanoic acid (PFBA)	µg/L	0.002		-	<0.002	-	-
Perfluoropentanoic acid (PFPeA)	µg/L	0.002		-	<0.002	-	-
Perfluorohexanoic acid (PFHxA)	µg/L	0.002		-	<0.002	-	-
Perfluoroheptanoic acid (PFHpA)	µg/L	0.002		-	<0.002	-	-
Perfluorooctanoic Acid (PFOA)	µg/L	0.001		-	<0.001	-	-
Perfluorononanoic acid (PFNA)	µg/L	0.004		-	<0.004	-	-
Perfluorodecanoic acid (PFDA)	µg/L	0.004		-	<0.004	-	-
Perfluoroundecanoic acid (PFUnA)	µg/L	0.004		-	<0.004	-	-
Perfluorododecanoic acid (PFDoA)	µg/L	0.004		-	<0.004	-	-
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.004		-	<0.004	-	-
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.004		-	<0.004	-	-
Perfluorohexadecanoic acid (PFHxDA)	µg/L	0.008		-	<0.008	-	-
Perfluorobutane sulfonate (PFBS)	µg/L	0.004		-	<0.004	-	-
Perfluoropentane sulfonate (PFPeS)	µg/L	0.004		-	<0.004	-	-
Perfluorohexane sulfonate (PFHxS)	µg/L	0.002		-	<0.002	-	-
Perfluoroheptane sulfonate (PFHpS)	µg/L	0.002		-	<0.002	-	-
Perfluorooctane sulfonate (PFOS)	µg/L	0.002		-	**0.005**	-	-
Sum of PFHxS and PFOS	µg/L	0.002		-	**0.005**	-	-
Perfluorononane sulfonate (PFNS)	µg/L	0.002		-	<0.002	-	-
Perfluorodecane sulfonate (PFDS)	µg/L	0.002		-	<0.002	-	-
Perfluorododecane sulfonate (PFDoS)	µg/L	0.002		-	<0.002	-	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	µg/L	0.002		-	<0.002	-	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	µg/L	0.002		-	**0.006**	-	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	µg/L	0.002		-	<0.002	-	-
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.008		-	<0.008	-	-
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	µg/L	0.01		-	<0.01	-	-
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	µg/L	0.01		-	<0.01	-	-
2-(N-Methylperfluorooctane sulfonamido)-ethanol	µg/L	0.01		-	<0.01	-	-
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	µg/L	0.01		-	<0.01	-	-
N-Methylperfluorooctanesulfonamidoacetic acid	µg/L	0.01		-	<0.01	-	-
N-Ethylperfluorooctanesulfonamidoacetic Acid	µg/L	0.01		-	<0.01	-	-
(13C4-PFBA) Surrogate	%	-		-	**98**	-	-
(13C5-PFPeA) Surrogate	%	-		-	**110**	-	-
(13C5-PFHxA) Surrogate	%	-		-	**101**	-	-
(13C4-PFHpA) Surrogate	%	-		-	**109**	-	-
(13C4_PFOA) Surrogate	%	-		-	**106**	-	-
(13C9-PFNA) Surrogate	%	-		-	**102**	-	-
(13C6-PFDA) Surrogate	%	-		-	**89**	-	-
(13C7-PFUdA) Surrogate	%	-		-	**82**	-	-
(13C2-PFDoA) Surrogate	%	-		-	**83**	-	-
(13C2_PFTeDA) Surrogate	%	-		-	**82**	-	-
(13C2-PFHxDA) Surrogate	%	-		-	**92**	-	-
(13C3-PFBS) Surrogate	%	-		-	**122**	-	-
(13C3-PFHxS) Surrogate	%	-		-	**110**	-	-
(13C8-PFOS) Surrogate	%	-		-	**102**	-	-
(13C2-4:2 FTS) Surrogate	%	-		-	**139**	-	-
(13C2-6:2 FTS) Surrogate	%	-		-	**181**	-	-
(13C2-8:2 FTS) Surrogate	%	-		-	**118**	-	-
(13C8-PFOSA) Surrogate	%	-		-	**82**	-	-
(D3-N-MeFOSA) Surrogate	%	-		-	**68**	-	-
(D5-N-EtFOSA) Surrogate	%	-		-	**81**	-	-
(D7-N-MeFOSE) Surrogate	%	-		-	**73**	-	-
(D9-N-EtFOSE) Surrogate	%	-		-	**57**	-	-
(D3-N-MeFOSAA) Surrogate	%	-		-	**86**	-	-
(D5-N-EtFOSAA) Surrogate	%	-		-	**113**	-	-
ASLP AS 4439.3 Acid Leaching Report Information	**Method: AS4439.3**	**Tested: 29/7/2020**					

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315557A.005 Water 24 Jun 2020 SE208161A.005	ME315557A.006 Soil 25 Jun 2020 SE208161A.006	ME315557A.007 Soil 25 Jun 2020 SE208161A.007	ME315557A.008 Soil 25 Jun 2020 SE208161A.008
ASLP AS 4439.3 Acid Leaching Report Information	**Method: AS4439.3**	**Tested: 29/7/2020**	**(continued)**				
Storage Temperature*	°C	-		-	**4.0**	-	-
Leaching Date*	No unit	-		-	2020-07-28	-	-
Test Weight (g)*	g	-		-	**1.0**	-	-
Leach Fluid pH*	pH Units	-		-	**7.0**	-	-
Leaching Fluid Added (g)*	g	-		-	**20.0**	-	-
Leaching Fluid Collected (g)*	g	-		-	**20.0**	-	-
Solids Leachate pH*	pH Units	-		-	**7.9**	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315557A.009 Soil 25 Jun 2020 SE208161A.009	ME315557A.010 Water 25 Jun 2020 SE208161A.010	ME315557A.011 Water 25 Jun 2020 SE208161A.011	ME315557A.012 Soil 26 Jun 2020 SE208161A.012
Perfluoronated Surfactants in ASLP DI Water Extract	**Method: MA_1523**	**Tested: 30/7/2020**					
Perfluorobutanoic acid (PFBA)	µg/L	0.002		-	-	-	-
Perfluoropentanoic acid (PFPeA)	µg/L	0.002		-	-	-	-
Perfluorohexanoic acid (PFHxA)	µg/L	0.002		-	-	-	-
Perfluoroheptanoic acid (PFHpA)	µg/L	0.002		-	-	-	-
Perfluorooctanoic Acid (PFOA)	µg/L	0.001		-	-	-	-
Perfluorononanoic acid (PFNA)	µg/L	0.004		-	-	-	-
Perfluorodecanoic acid (PFDA)	µg/L	0.004		-	-	-	-
Perfluoroundecanoic acid (PFUnA)	µg/L	0.004		-	-	-	-
Perfluorododecanoic acid (PFDoA)	µg/L	0.004		-	-	-	-
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.004		-	-	-	-
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.004		-	-	-	-
Perfluorohexadecanoic acid (PFHxDA)	µg/L	0.008		-	-	-	-
Perfluorobutane sulfonate (PFBS)	µg/L	0.004		-	-	-	-
Perfluoropentane sulfonate (PFPeS)	µg/L	0.004		-	-	-	-
Perfluorohexane sulfonate (PFHxS)	µg/L	0.002		-	-	-	-
Perfluoroheptane sulfonate (PFHpS)	µg/L	0.002		-	-	-	-
Perfluorooctane sulfonate (PFOS)	µg/L	0.002		-	-	-	-
Sum of PFHxS and PFOS	µg/L	0.002		-	-	-	-
Perfluorononane sulfonate (PFNS)	µg/L	0.002		-	-	-	-
Perfluorodecane sulfonate (PFDS)	µg/L	0.002		-	-	-	-
Perfluorododecane sulfonate (PFDoS)	µg/L	0.002		-	-	-	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	µg/L	0.002		-	-	-	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	µg/L	0.002		-	-	-	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	µg/L	0.002		-	-	-	-
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.008		-	-	-	-
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	µg/L	0.01		-	-	-	-
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	µg/L	0.01		-	-	-	-
2-(N-Methylperfluorooctane sulfonamido)-ethanol	µg/L	0.01		-	-	-	-
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	µg/L	0.01		-	-	-	-
N-Methylperfluorooctanesulfonamidoacetic acid	µg/L	0.01		-	-	-	-
N-Ethylperfluorooctanesulfonamidoacetic Acid	µg/L	0.01		-	-	-	-
(13C4-PFBA) Surrogate	%	-		-	-	-	-
(13C5-PFPeA) Surrogate	%	-		-	-	-	-
(13C5-PFHxA) Surrogate	%	-		-	-	-	-
(13C4-PFHpA) Surrogate	%	-		-	-	-	-
(13C4_PFOA) Surrogate	%	-		-	-	-	-
(13C9-PFNA) Surrogate	%	-		-	-	-	-
(13C6-PFDA) Surrogate	%	-		-	-	-	-
(13C7-PFUdA) Surrogate	%	-		-	-	-	-
(13C2-PFDoA) Surrogate	%	-		-	-	-	-
(13C2_PFTeDA) Surrogate	%	-		-	-	-	-
(13C2-PFHxDA) Surrogate	%	-		-	-	-	-
(13C3-PFBS) Surrogate	%	-		-	-	-	-
(13C3-PFHxS) Surrogate	%	-		-	-	-	-
(13C8-PFOS) Surrogate	%	-		-	-	-	-
(13C2-4:2 FTS) Surrogate	%	-		-	-	-	-
(13C2-6:2 FTS) Surrogate	%	-		-	-	-	-
(13C2-8:2 FTS) Surrogate	%	-		-	-	-	-
(13C8-PFOSA) Surrogate	%	-		-	-	-	-
(D3-N-MeFOSA) Surrogate	%	-		-	-	-	-
(D5-N-EtFOSA) Surrogate	%	-		-	-	-	-
(D7-N-MeFOSE) Surrogate	%	-		-	-	-	-
(D9-N-EtFOSE) Surrogate	%	-		-	-	-	-
(D3-N-MeFOSAA) Surrogate	%	-		-	-	-	-
(D5-N-EtFOSAA) Surrogate	%	-		-	-	-	-

ASLP AS 4439.3 Acid Leaching Report Information **Method: AS4439.3** **Tested: 29/7/2020**

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315557A.009 Soil 25 Jun 2020 SE208161A.009	ME315557A.010 Water 25 Jun 2020 SE208161A.010	ME315557A.011 Water 25 Jun 2020 SE208161A.011	ME315557A.012 Soil 26 Jun 2020 SE208161A.012
ASLP AS 4439.3 Acid Leaching Report Information	**Method: AS4439.3**	**Tested: 29/7/2020**	**(continued)**				
Storage Temperature*	°C	-		-	-	-	-
Leaching Date*	No unit	-		-	-	-	-
Test Weight (g)*	g	-		-	-	-	-
Leach Fluid pH*	pH Units	-		-	-	-	-
Leaching Fluid Added (g)*	g	-		-	-	-	-
Leaching Fluid Collected (g)*	g	-		-	-	-	-
Solids Leachate pH*	pH Units	-		-	-	-	-

Parameter	Units	LOR	Sample Number: ME315557A.013 Sample Matrix: Soil Sample Date: 26 Jun 2020 Sample Name: SE208161A.013	ME315557A.014 Soil 26 Jun 2020 SE208161A.014	ME315557A.015 Soil 26 Jun 2020 SE208161A.015	ME315557A.016 Soil 26 Jun 2020 SE208161A.016
Perfluoronated Surfactants in ASLP DI Water Extract	**Method: MA_1523**	**Tested: 30/7/2020**				
Perfluorobutanoic acid (PFBA)	µg/L	0.002	-	-	-	-
Perfluoropentanoic acid (PFPeA)	µg/L	0.002	-	-	-	-
Perfluorohexanoic acid (PFHxA)	µg/L	0.002	-	-	-	-
Perfluoroheptanoic acid (PFHpA)	µg/L	0.002	-	-	-	-
Perfluorooctanoic Acid (PFOA)	µg/L	0.001	-	-	-	-
Perfluorononanoic acid (PFNA)	µg/L	0.004	-	-	-	-
Perfluorodecanoic acid (PFDA)	µg/L	0.004	-	-	-	-
Perfluoroundecanoic acid (PFUnA)	µg/L	0.004	-	-	-	-
Perfluorododecanoic acid (PFDoA)	µg/L	0.004	-	-	-	-
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.004	-	-	-	-
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.004	-	-	-	-
Perfluorohexadecanoic acid (PFHxDA)	µg/L	0.008	-	-	-	-
Perfluorobutane sulfonate (PFBS)	µg/L	0.004	-	-	-	-
Perfluoropentane sulfonate (PFPeS)	µg/L	0.004	-	-	-	-
Perfluorohexane sulfonate (PFHxS)	µg/L	0.002	-	-	-	-
Perfluoroheptane sulfonate (PFHpS)	µg/L	0.002	-	-	-	-
Perfluorooctane sulfonate (PFOS)	µg/L	0.002	-	-	-	-
Sum of PFHxS and PFOS	µg/L	0.002	-	-	-	-
Perfluorononane sulfonate (PFNS)	µg/L	0.002	-	-	-	-
Perfluorodecane sulfonate (PFDS)	µg/L	0.002	-	-	-	-
Perfluorododecane sulfonate (PFDoS)	µg/L	0.002	-	-	-	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	µg/L	0.002	-	-	-	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	µg/L	0.002	-	-	-	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	µg/L	0.002	-	-	-	-
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.008	-	-	-	-
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	µg/L	0.01	-	-	-	-
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	µg/L	0.01	-	-	-	-
2-(N-Methylperfluorooctane sulfonamido)-ethanol	µg/L	0.01	-	-	-	-
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	µg/L	0.01	-	-	-	-
N-Methylperfluorooctanesulfonamidoacetic acid	µg/L	0.01	-	-	-	-
N-Ethylperfluorooctanesulfonamidoacetic Acid	µg/L	0.01	-	-	-	-
(13C4-PFBA) Surrogate	%	-	-	-	-	-
(13C5-PFPeA) Surrogate	%	-	-	-	-	-
(13C5-PFHxA) Surrogate	%	-	-	-	-	-
(13C4-PFHpA) Surrogate	%	-	-	-	-	-
(13C4_PFOA) Surrogate	%	-	-	-	-	-
(13C9-PFNA) Surrogate	%	-	-	-	-	-
(13C6-PFDA) Surrogate	%	-	-	-	-	-
(13C7-PFUdA) Surrogate	%	-	-	-	-	-
(13C2-PFDoA) Surrogate	%	-	-	-	-	-
(13C2_PFTeDA) Surrogate	%	-	-	-	-	-
(13C2-PFHxDA) Surrogate	%	-	-	-	-	-
(13C3-PFBS) Surrogate	%	-	-	-	-	-
(13C3-PFHxS) Surrogate	%	-	-	-	-	-
(13C8-PFOS) Surrogate	%	-	-	-	-	-
(13C2-4:2 FTS) Surrogate	%	-	-	-	-	-
(13C2-6:2 FTS) Surrogate	%	-	-	-	-	-
(13C2-8:2 FTS) Surrogate	%	-	-	-	-	-
(13C8-PFOSA) Surrogate	%	-	-	-	-	-
(D3-N-MeFOSA) Surrogate	%	-	-	-	-	-
(D5-N-EtFOSA) Surrogate	%	-	-	-	-	-
(D7-N-MeFOSE) Surrogate	%	-	-	-	-	-
(D9-N-EtFOSE) Surrogate	%	-	-	-	-	-
(D3-N-MeFOSAA) Surrogate	%	-	-	-	-	-
(D5-N-EtFOSAA) Surrogate	%	-	-	-	-	-
ASLP AS 4439.3 Acid Leaching Report Information	**Method: AS4439.3**	**Tested: 29/7/2020**				

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315557A.013 Soil 26 Jun 2020 SE208161A.013	ME315557A.014 Soil 26 Jun 2020 SE208161A.014	ME315557A.015 Soil 26 Jun 2020 SE208161A.015	ME315557A.016 Soil 26 Jun 2020 SE208161A.016
ASLP AS 4439.3 Acid Leaching Report Information	**Method: AS4439.3**	**Tested: 29/7/2020**	**(continued)**				
Storage Temperature*	°C	-		-	-	-	-
Leaching Date*	No unit	-		-	-	-	-
Test Weight (g)*	g	-		-	-	-	-
Leach Fluid pH*	pH Units	-		-	-	-	-
Leaching Fluid Added (g)*	g	-		-	-	-	-
Leaching Fluid Collected (g)*	g	-		-	-	-	-
Solids Leachate pH*	pH Units	-		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315557A.017 Soil 26 Jun 2020 SE208161A.017	ME315557A.018 Water 26 Jun 2020 SE208161A.018
Perfluoronated Surfactants in ASLP DI Water Extract	**Method: MA_1523**	**Tested: 30/7/2020**			
Perfluorobutanoic acid (PFBA)	µg/L	0.002		-	-
Perfluoropentanoic acid (PFPeA)	µg/L	0.002		-	-
Perfluorohexanoic acid (PFHxA)	µg/L	0.002		-	-
Perfluoroheptanoic acid (PFHpA)	µg/L	0.002		-	-
Perfluorooctanoic Acid (PFOA)	µg/L	0.001		-	-
Perfluorononanoic acid (PFNA)	µg/L	0.004		-	-
Perfluorodecanoic acid (PFDA)	µg/L	0.004		-	-
Perfluoroundecanoic acid (PFUnA)	µg/L	0.004		-	-
Perfluorododecanoic acid (PFDoA)	µg/L	0.004		-	-
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.004		-	-
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.004		-	-
Perfluorohexadecanoic acid (PFHxDA)	µg/L	0.008		-	-
Perfluorobutane sulfonate (PFBS)	µg/L	0.004		-	-
Perfluoropentane sulfonate (PFPeS)	µg/L	0.004		-	-
Perfluorohexane sulfonate (PFHxS)	µg/L	0.002		-	-
Perfluoroheptane sulfonate (PFHpS)	µg/L	0.002		-	-
Perfluorooctane sulfonate (PFOS)	µg/L	0.002		-	-
Sum of PFHxS and PFOS	µg/L	0.002		-	-
Perfluorononane sulfonate (PFNS)	µg/L	0.002		-	-
Perfluorodecane sulfonate (PFDS)	µg/L	0.002		-	-
Perfluorododecane sulfonate (PFDoS)	µg/L	0.002		-	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	µg/L	0.002		-	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	µg/L	0.002		-	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	µg/L	0.002		-	-
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.008		-	-
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	µg/L	0.01		-	-
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	µg/L	0.01		-	-
2-(N-Methylperfluorooctane sulfonamido)-ethanol	µg/L	0.01		-	-
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	µg/L	0.01		-	-
N-Methylperfluorooctanesulfonamidoacetic acid	µg/L	0.01		-	-
N-Ethylperfluorooctanesulfonamidoacetic Acid	µg/L	0.01		-	-
(13C4-PFBA) Surrogate	%	-		-	-
(13C5-PFPeA) Surrogate	%	-		-	-
(13C5-PFHxA) Surrogate	%	-		-	-
(13C4-PFHpA) Surrogate	%	-		-	-
(13C4_PFOA) Surrogate	%	-		-	-
(13C9-PFNA) Surrogate	%	-		-	-
(13C6-PFDA) Surrogate	%	-		-	-
(13C7-PFUdA) Surrogate	%	-		-	-
(13C2-PFDoA) Surrogate	%	-		-	-
(13C2_PFTeDA) Surrogate	%	-		-	-
(13C2-PFHxDA) Surrogate	%	-		-	-
(13C3-PFBS) Surrogate	%	-		-	-
(13C3-PFHxS) Surrogate	%	-		-	-
(13C8-PFOS) Surrogate	%	-		-	-
(13C2-4:2 FTS) Surrogate	%	-		-	-
(13C2-6:2 FTS) Surrogate	%	-		-	-
(13C2-8:2 FTS) Surrogate	%	-		-	-
(13C8-PFOSA) Surrogate	%	-		-	-
(D3-N-MeFOSA) Surrogate	%	-		-	-
(D5-N-EtFOSA) Surrogate	%	-		-	-
(D7-N-MeFOSE) Surrogate	%	-		-	-
(D9-N-EtFOSE) Surrogate	%	-		-	-
(D3-N-MeFOSAA) Surrogate	%	-		-	-
(D5-N-EtFOSAA) Surrogate	%	-		-	-

ASLP AS 4439.3 Acid Leaching Report Information **Method: AS4439.3** **Tested: 29/7/2020**

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315557A.017 Soil 26 Jun 2020 SE208161A.017	ME315557A.018 Water 26 Jun 2020 SE208161A.018
ASLP AS 4439.3 Acid Leaching Report Information	**Method: AS4439.3**	**Tested: 29/7/2020**	**(continued)**		
Storage Temperature*	°C	-		-	-
Leaching Date*	No unit	-		-	-
Test Weight (g)*	g	-		-	-
Leach Fluid pH*	pH Units	-		-	-
Leaching Fluid Added (g)*	g	-		-	-
Leaching Fluid Collected (g)*	g	-		-	-
Solids Leachate pH*	pH Units	-		-	-

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Perfluoronated Surfactants in ASLP DI Water Extract **Method: MA_1523**

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Perfluorobutanoic acid (PFBA)	LB034554	µg/L	0.002	<0.002	0%	NA
Perfluoropentanoic acid (PFPeA)	LB034554	µg/L	0.002	<0.002	0%	NA
Perfluorohexanoic acid (PFHxA)	LB034554	µg/L	0.002	<0.002	0%	NA
Perfluoroheptanoic acid (PFHpA)	LB034554	µg/L	0.002	<0.002	0%	63%
Perfluorooctanoic Acid (PFOA)	LB034554	µg/L	0.001	<0.001	1%	78%
Perfluorononanoic acid (PFNA)	LB034554	µg/L	0.004	<0.004	0%	96%
Perfluorodecanoic acid (PFDA)	LB034554	µg/L	0.004	<0.004	0%	86%
Perfluoroundecanoic acid (PFUnA)	LB034554	µg/L	0.004	<0.004	0%	76%
Perfluorododecanoic acid (PFDoA)	LB034554	µg/L	0.004	<0.004	0%	83%
Perfluorotridecanoic acid (PFTrDA)	LB034554	µg/L	0.004	<0.004	0%	106%
Perfluorotetradecanoic acid (PFTeDA)	LB034554	µg/L	0.004	<0.004	0%	100%
Perfluorohexadecanoic acid (PFHxDA)	LB034554	µg/L	0.008	<0.008	0%	NA
Perfluorobutane sulfonate (PFBS)	LB034554	µg/L	0.004	<0.004	0%	NA
Perfluoropentane sulfonate (PFPeS)	LB034554	µg/L	0.004	<0.004	0%	NA
Perfluorohexane sulfonate (PFHxS)	LB034554	µg/L	0.002	<0.002	0%	NA
Perfluoroheptane sulfonate (PFHpS)	LB034554	µg/L	0.002	<0.002	0%	NA
Perfluorooctane sulfonate (PFOS)	LB034554	µg/L	0.002	<0.002	0%	90%
Sum of PFHxS and PFOS	LB034554	µg/L	0.002	<0.002	0%	NA
Perfluorononane sulfonate (PFNS)	LB034554	µg/L	0.002	<0.002	0%	NA
Perfluorodecane sulfonate (PFDS)	LB034554	µg/L	0.002	<0.002	0%	NA
Perfluorododecane sulfonate (PFDoS)	LB034554	µg/L	0.002	<0.002	0%	NA
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	LB034554	µg/L	0.002	<0.002	0%	NA
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	LB034554	µg/L	0.002	<0.002	0%	NA
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	LB034554	µg/L	0.002	<0.002	0%	NA
Perfluorooctane sulfonamide (PFOSA)	LB034554	µg/L	0.008	<0.008	0%	42%
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	LB034554	µg/L	0.01	<0.01	0%	NA
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	LB034554	µg/L	0.01	<0.01	0%	NA
2-(N-Methylperfluorooctane sulfonamido)-ethanol (N-MeFOSE)	LB034554	µg/L	0.01	<0.01	0%	NA
2-(N-Ethylperfluorooctane sulfonamido)-ethanol (N-EtFOSE)	LB034554	µg/L	0.01	<0.01	0%	NA
N-Methylperfluorooctanesulfonamidoacetic acid (N_MeFOSAA)	LB034554	µg/L	0.01	<0.01	0%	NA
N-Ethylperfluorooctanesulfonamidoacetic Acid (N-EtFOSAA)	LB034554	µg/L	0.01	<0.01	0%	NA
(13C4-PFBA) Surrogate	LB034554	%	-	101%	1%	100%
(13C5-PFPeA) Surrogate	LB034554	%	-	109%	1%	102%
(13C5-PFHxA) Surrogate	LB034554	%	-	99%	8%	87%
(13C4-PFHpA) Surrogate	LB034554	%	-	109%	4%	106%
(13C4_PFOA) Surrogate	LB034554	%	-	102%	1%	88%
(13C9-PFNA) Surrogate	LB034554	%	-	111%	11%	111%
(13C6-PFDA) Surrogate	LB034554	%	-	101%	1%	95%
(13C7-PFUdA) Surrogate	LB034554	%	-	89%	8%	90%
(13C2-PFDoA) Surrogate	LB034554	%	-	86%	2%	92%
(13C2_PFTeDA) Surrogate	LB034554	%	-	61%	20%	89%
(13C2-PFHxDA) Surrogate	LB034554	%	-	43%	47%	123%
(13C3-PFBS) Surrogate	LB034554	%	-	108%	2%	121%
(13C3-PFHxS) Surrogate	LB034554	%	-	102%	3%	109%
(13C8-PFOS) Surrogate	LB034554	%	-	100%	2%	108%
(13C2-4:2 FTS) Surrogate	LB034554	%	-	117%	13%	134%
(13C2-6:2 FTS) Surrogate	LB034554	%	-	171%	12%	177%
(13C2-8:2 FTS) Surrogate	LB034554	%	-	111%	18%	111%
(13C8-PFOSA) Surrogate	LB034554	%	-	74%	0%	75%
(D3-N-MeFOSA) Surrogate	LB034554	%	-	63%	17%	54%
(D5-N-EtFOSA) Surrogate	LB034554	%	-	54%	1%	47%
(D7-N-MeFOSE) Surrogate	LB034554	%	-	61%	22%	59%
(D9-N-EtFOSE) Surrogate	LB034554	%	-	55%	36%	48%
(D3-N-MeFOSAA) Surrogate	LB034554	%	-	79%	10%	69%
(D5-N-EtFOSAA) Surrogate	LB034554	%	-	76%	7%	96%

METHOD SUMMARY

METHOD	METHODOLOGY SUMMARY
MA1523	This method covers the analysis of per- and polyfluoroalkyl substances (PFAS) from a ASLP extract. Determined as the total of linear and branched isomers. After spiking with isotopically labelled quantification surrogates and clean-up via SPE cartridges sample extracts are analysed by liquid chromatography/mass spectrometry (LC-MS/MS). PFAS concentrations are determined by isotope dilution quantification .

FOOTNOTES

IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.

LOR	Limit of Reporting
↑↓	Raised or Lowered Limit of Reporting
QFH	QC result is above the upper tolerance
QFL	QC result is below the lower tolerance
-	The sample was not analysed for this analyte
NVL	Not Validated

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calcuated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety .

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STATEMENT OF QA/QC PERFORMANCE

SE208161A R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	18

LABORATORY DETAILS

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Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208161A R0**
Date Received	21 Jul 2020
Date Reported	30 Jul 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Surrogate	Perfluoronated Surfactants in ASLP DI Water Extract	1 item

SAMPLE SUMMARY

HOLDING TIME SUMMARY

SE208161A R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

No holding time data is available for this job.

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Perfluoronated Surfactants in ASLP DI Water Extract — **Method: MA_1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C2_PFTeDA) Surrogate	0407_BH41_0.0_200625	SE208161A.006	%	0 - 150%	82
(13C2-4:2 FTS) Surrogate	0407_BH41_0.0_200625	SE208161A.006	%	0 - 150%	139
(13C2-6:2 FTS) Surrogate	0407_BH41_0.0_200625	SE208161A.006	%	0 - 150%	181 †
(13C2-8:2 FTS) Surrogate	0407_BH41_0.0_200625	SE208161A.006	%	0 - 150%	118
(13C2-PFDoA) Surrogate	0407_BH41_0.0_200625	SE208161A.006	%	0 - 150%	83
(13C2-PFHxDA) Surrogate	0407_BH41_0.0_200625	SE208161A.006	%	0 - 150%	92
(13C3-PFBS) Surrogate	0407_BH41_0.0_200625	SE208161A.006	%	0 - 150%	122
(13C3-PFHxS) Surrogate	0407_BH41_0.0_200625	SE208161A.006	%	0 - 150%	110
(13C4_PFOA) Surrogate	0407_BH41_0.0_200625	SE208161A.006	%	0 - 150%	106
(13C4-PFBA) Surrogate	0407_BH41_0.0_200625	SE208161A.006	%	0 - 150%	98
(13C4-PFHpA) Surrogate	0407_BH41_0.0_200625	SE208161A.006	%	0 - 150%	109
(13C5-PFHxA) Surrogate	0407_BH41_0.0_200625	SE208161A.006	%	0 - 150%	101
(13C5-PFPeA) Surrogate	0407_BH41_0.0_200625	SE208161A.006	%	0 - 150%	110
(13C6-PFDA) Surrogate	0407_BH41_0.0_200625	SE208161A.006	%	0 - 150%	89
(13C7-PFUdA) Surrogate	0407_BH41_0.0_200625	SE208161A.006	%	0 - 150%	82
(13C8-PFOS) Surrogate	0407_BH41_0.0_200625	SE208161A.006	%	0 - 150%	102
(13C8-PFOSA) Surrogate	0407_BH41_0.0_200625	SE208161A.006	%	0 - 150%	82
(13C9-PFNA) Surrogate	0407_BH41_0.0_200625	SE208161A.006	%	0 - 150%	102
(D3-N-MeFOSA) Surrogate	0407_BH41_0.0_200625	SE208161A.006	%	0 - 150%	68
(D3-N-MeFOSAA) Surrogate	0407_BH41_0.0_200625	SE208161A.006	%	0 - 150%	86
(D5-N-EtFOSA) Surrogate	0407_BH41_0.0_200625	SE208161A.006	%	0 - 150%	81
(D5-N-EtFOSAA) Surrogate	0407_BH41_0.0_200625	SE208161A.006	%	0 - 150%	113
(D7-N-MeFOSE) Surrogate	0407_BH41_0.0_200625	SE208161A.006	%	0 - 150%	73
(D9-N-EtFOSE) Surrogate	0407_BH41_0.0_200625	SE208161A.006	%	0 - 150%	57

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

No method blanks were required for this job.

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No duplicates were required for this job.

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

No laboratory control standards were required for this job.

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spikes were required for this job.

MATRIX SPIKE DUPLICATES

SE208161A R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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Good morning

Please book these additional jobs in.

Please be very carefully as there are lots of jobs

Regards,

[redacted]
Environment, Health & Safety
Client Manager
Phone: +61 (0)2 8594 0400
Direct:
Mobile: [redacted]
(Please note my new working hours of Mon-Fri 6:00am-2:00pm)



Covid-19 update: SGS Australia is open, with our Business Service Continuity Plans being put in place to ensure your project can be delivered as normal, please click here to see further details on our Business & Services Continuity Plans.

From: [redacted]@slrconsulting.com>
Sent: Tuesday, 21 July 2020 5:03 PM
To: [redacted]@sgs.com>
Cc: [redacted]@slrconsulting.com>
Subject: [EXTERNAL] 610.30041 DHA Randwick - Additional Analysis

*** WARNING: this message is from an EXTERNAL SENDER. Please be cautious, particularly with links and attachments. ***

Hi [redacted]

Can we please schedule the following analyses:

pH, clay content, TOC & CEC:

Report number	Sample ID
SE207695	TP002_0.1_200615
SE207695	TP002_1.5_200615
SE207695	TP005_0.1_200616
SE207695	TP005_1.5_200616
SE207695	TP049_0.1_200617
SE207695	TP049_1.0_200617
SE208047	TP092_0.1_200624
SE208047	TP092_1.0_200624
SE207831	TP220_0.1_200618
SE207831	TP220_1.0_200618
SE207831	TP221_0.1_200619
SE207831	TP221_1.0_200619
SE207998	TP230_0.1_200622
SE207998	TP230_1.8_200622
SE207591	TP018_0.1_200615
SE207591	TP018_1.0_200615
SE208047	TP092_0.1_200624
SE208047	TP092_1.0_200624
SE207911	TP095_0.1_200623
SE207911	TP095_1.0_200623
SE207731	TP073_0.1_200619
SE207731	TP073_1.0_200619
SE208659	TP133_0.1_200701
SE208659	TP133_1.0_200701
SE208142	TP151_0.1_200629
SE208142	TP151_1.0_200629
SE208137	TP183_0.1_200625
SE208137	TP183_0.5_200625

Additional analysis:

Report number	Sample ID	Parameter
SE208081	0407_TP241_1.0_200625	Pb & Zn
SE207731	0407_TP73_0.5_200619	Cr

ASLP Leach:

Report number	Sample ID	Parameter
SE208046	0407_TP237_0.5_200624	8 metals
SE208081	0407_TP241_0.5_200625	8 metals
SE208133	0407_TP111_0.1_200626	8 metals
SE208142	0407_TP256_0.1_200629	8 metals
SE207831	0407_TP222_0.1_200619	8 metals
SE207731	0407_TP73_0.1_200619	8 metals
SE207850	0407_TP162_0.1_200617	PAHs include B(a)P

SE207831	0407_TP197_0.1_200619	PAHs include B(a)P
SE207831	0407_TP197_0.5_200619	PAHs include B(a)P
SE207831	0407_TP200_0.5_200618	PAHs include B(a)P
SE207831	0407_TP200_1.0_200618	Total and leachable PAHs including B(a)P
SE207831	0407_TP209_0.5_200619	PAHs include B(a)P
SE207831	0407_TP221_0.5_200619	PAHs include B(a)P
SE207831	0407_TP221_1.0_200619	Total and leachable PAHs including B(a)P
SE207824	0407_TP231_0.1_200622	PAHs include B(a)P
SE208161	0407_BH41_0.0_200625	PFOS, PFOA, PfHxS
SE208046	0407_QC160_200624	PFOS, PFOA, PfHxS
SE207824	0407_QC130_200622	PFOS, PFOA, PfHxS

Let me know if you have any questions.

Many thanks,

[redacted]

SLR

[redacted]

Associate - Land Quality & Remediation

Please note in response to the COVID-19 Pandemic and physical distancing recommendations from the Australian Government, SLR is encouraging staff to work remotely and implement flexible working hours if necessary.
If you have received this email outside of regular office hours, it is not expected that you will respond until your own working hours commence.

d +61 7 3117 5227
o [redacted]
m
e [redacted]@slrconsulting.com

SLR Consulting Australia Pty Ltd
Level 2, 15 Astor Terrace, Brisbane, QLD, Australia, 4000

WINNERS: RoSPA Gold Award, 2017

WINNERS : International Business Excellence Award, 2016

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SAMPLE RECEIPT ADVICE

SE208133A

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000686-000689**
Samples	22

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Tue 21/7/2020
Report Due	Wed 29/7/2020
SGS Reference	**SE208133A**

SUBMISSION DETAILS

This is to confirm that 22 samples were received on Tuesday 21/7/2020. Results are expected to be ready by COB Wednesday 29/7/2020.
Please quote SGS reference SE208133A when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	1 Soil
Date documentation received	21/7/2020@5:03pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	3.7°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

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SAMPLE RECEIPT ADVICE

SE208133A

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	ASLP (Australian Standard Leaching Procedure) DI	Mercury in ASLP DI Water Extract	Metals in ASLP DI Extract by ICPOES
003	0407_TP111_0.1_200626	1	1	7

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	22

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208133A R0**
Date Received	21/7/2020
Date Reported	29/7/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

SIGNATORIES

[redacted]

Senior Organic Chemist/Metals Chemist

Metals/Inorganics Team Leader

ASLP (Australian Standard Leaching Procedure) DI Water [AN007/AS4439.3] Tested: 23/7/2020

PARAMETER	UOM	LOR	0407_TP111_0.1_20026 SOIL - 26/6/2020 SE208133A.003
pH of solids leachate	pH Units	-	**8.1**

Metals in ASLP DI Extract by ICPOES [AN320] Tested: 29/7/2020

PARAMETER	UOM	LOR	0407_TP111_0.1_20026 SOIL - 26/6/2020 SE208133A.003
Arsenic, As	mg/L	0.02	<0.02
Cadmium, Cd	mg/L	0.001	<0.001
Chromium, Cr	mg/L	0.005	**0.008**
Copper, Cu	mg/L	0.005	**0.017**
Lead, Pb	mg/L	0.02	**0.05**
Nickel, Ni	mg/L	0.005	<0.005
Zinc, Zn	mg/L	0.01	**0.12**

Mercury in ASLP DI Water Extract [AN311(Perth) /AN312] Tested: 29/7/2020

PARAMETER	UOM	LOR	0407_TP111_0.1_20026 SOIL - 26/6/2020 SE208133A.003
Mercury	mg/L	0.0001	<0.0001

METHOD	METHODOLOGY SUMMARY
AN007/AS4439.3	Contaminants of interest in a waste material are leached out of the waste with a selected leaching solution under controlled conditions. The ratio of sample to extraction fluid is 100 g to 2 L (1 to 20 by mass). The concentration of each contaminant of interest is determined in the leachate by appropriate methods after separation from the sample by filtering. Based on AS4439.3.
AN020	Unpreserved water sample is filtered through a 0.45µm membrane filter and acidified with nitric acid similar to APHA3030B.
AN311(Perth) /AN312	Mercury by Cold Vapour AAS in Waters: Mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500.
AN320	Metals by ICP-OES: Samples are preserved with 10% nitric acid for a wide range of metals and some non-metals. This solution is measured by Inductively Coupled Plasma. Solutions are aspirated into an argon plasma at 8000-10000K and emit characteristic energy or light as a result of electron transitions through unique energy levels. The emitted light is focused onto a diffraction grating where it is separated into components .
AN320	Photomultipliers or CCDs are used to measure the light intensity at specific wavelengths. This intensity is directly proportional to concentration. Corrections are required to compensate for spectral overlap between elements . Reference APHA 3120 B.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety .

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STATEMENT OF QA/QC PERFORMANCE

SE208133A R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	22

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208133A R0**
Date Received	21 Jul 2020
Date Reported	29 Jul 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Extraction Date	ASLP (Australian Standard Leaching Procedure) DI Water	1 item
Analysis Date	ASLP (Australian Standard Leaching Procedure) DI Water	1 item

SAMPLE SUMMARY

HOLDING TIME SUMMARY

SE208133A R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

ASLP (Australian Standard Leaching Procedure) DI Water

Method: ME-(AU)-[ENV]AN007/AS4439.3

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP111_0.1_200626	SE208133A.003	LB205010	26 Jun 2020	21 Jul 2020	10 Jul 2020	23 Jul 2020†	10 Jul 2020	29 Jul 2020†

Mercury in ASLP DI Water Extract

Method: ME-(AU)-[ENV]AN311(Perth) /AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP111_0.1_200626	SE208133A.003	LB205432	26 Jun 2020	21 Jul 2020	31 Jul 2020	29 Jul 2020	31 Jul 2020	29 Jul 2020

Metals in ASLP DI Extract by ICPOES

Method: ME-(AU)-[ENV]AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP111_0.1_200626	SE208133A.003	LB205430	26 Jun 2020	21 Jul 2020	23 Dec 2020	29 Jul 2020	25 Jan 2021	29 Jul 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No surrogates were required for this job.

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Metals in ASLP DI Extract by ICPOES — **Method: ME-(AU)-[ENV]AN320**

Sample Number	Parameter	Units	LOR	Result
LB205430.001	Arsenic, As	mg/L	0.02	<0.02
	Cadmium, Cd	mg/L	0.001	<0.001
	Chromium, Cr	mg/L	0.005	<0.005
	Copper, Cu	mg/L	0.005	<0.005
	Lead, Pb	mg/L	0.02	<0.02
	Nickel, Ni	mg/L	0.005	<0.005
	Zinc, Zn	mg/L	0.01	<0.01

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No duplicates were required for this job.

LABORATORY CONTROL SAMPLES

SE208133A R0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Sample Number	Parameter	Units	LOR

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spikes were required for this job.

MATRIX SPIKE DUPLICATES

SE208133A R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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Good morning

Please book these additional jobs in.

Please be very carefully as there are lots of jobs

Regards,

[redacted]
Environment, Health & Safety
Client Manager
Phone: +61 (0)2 8594 0400
Direct:
Mobile: [redacted]
(Please note my new working hours of Mon-Fri 6:00am-2:00pm)



Covid-19 update: SGS Australia is open, with our Business Service Continuity Plans being put in place to ensure your project can be delivered as normal, please click here to see further details on our Business & Services Continuity Plans.

From: [redacted]@slrconsulting.com>
Sent: Tuesday, 21 July 2020 5:03 PM
To: [redacted]@sgs.com>
Cc: [redacted]@slrconsulting.com>
Subject: [EXTERNAL] 610.30041 DHA Randwick - Additional Analysis

*** WARNING: this message is from an EXTERNAL SENDER. Please be cautious, particularly with links and attachments. ***

Hi [redacted]

Can we please schedule the following analyses:

pH, clay content, TOC & CEC:

Report number	Sample ID
SE207695	TP002_0.1_200615
SE207695	TP002_1.5_200615
SE207695	TP005_0.1_200616
SE207695	TP005_1.5_200616
SE207695	TP049_0.1_200617
SE207695	TP049_1.0_200617
SE208047	TP092_0.1_200624
SE208047	TP092_1.0_200624
SE207831	TP220_0.1_200618
SE207831	TP220_1.0_200618
SE207831	TP221_0.1_200619
SE207831	TP221_1.0_200619
SE207998	TP230_0.1_200622
SE207998	TP230_1.8_200622
SE207591	TP018_0.1_200615
SE207591	TP018_1.0_200615
SE208047	TP092_0.1_200624
SE208047	TP092_1.0_200624
SE207911	TP095_0.1_200623
SE207911	TP095_1.0_200623
SE207731	TP073_0.1_200619
SE207731	TP073_1.0_200619
SE208659	TP133_0.1_200701
SE208659	TP133_1.0_200701
SE208142	TP151_0.1_200629
SE208142	TP151_1.0_200629
SE208137	TP183_0.1_200625
SE208137	TP183_0.5_200625

Additional analysis:

Report number	Sample ID	Parameter
SE208081	0407_TP241_1.0_200625	Pb & Zn
SE207731	0407_TP73_0.5_200619	Cr

ASLP Leach:

Report number	Sample ID	Parameter
SE208046	0407_TP237_0.5_200624	8 metals
SE208081	0407_TP241_0.5_200625	8 metals
SE208133	0407_TP111_0.1_200626	8 metals
SE208142	0407_TP256_0.1_200629	8 metals
SE207831	0407_TP222_0.1_200619	8 metals
SE207731	0407_TP73_0.1_200619	8 metals
SE207850	0407_TP162_0.1_200617	PAHs include B(a)P

SE207831	0407_TP197_0.1_200619	PAHs include B(a)P
SE207831	0407_TP197_0.5_200619	PAHs include B(a)P
SE207831	0407_TP200_0.5_200618	PAHs include B(a)P
SE207831	0407_TP200_1.0_200618	Total and leachable PAHs including B(a)P
SE207831	0407_TP209_0.5_200619	PAHs include B(a)P
SE207831	0407_TP221_0.5_200619	PAHs include B(a)P
SE207831	0407_TP221_1.0_200619	Total and leachable PAHs including B(a)P
SE207824	0407_TP231_0.1_200622	PAHs include B(a)P
SE208161	0407_BH41_0.0_200625	PFOS, PFOA, PfHxS
SE208046	0407_QC160_200624	PFOS, PFOA, PfHxS
SE207824	0407_QC130_200622	PFOS, PFOA, PfHxS

Let me know if you have any questions.

Many thanks,

[redacted]

SLR

[redacted]

Associate - Land Quality & Remediation

Please note in response to the COVID-19 Pandemic and physical distancing recommendations from the Australian Government, SLR is encouraging staff to work remotely and implement flexible working hours if necessary.
If you have received this email outside of regular office hours, it is not expected that you will respond until your own working hours commence.

d +61 7 3117 5227
o [redacted]
m
e [redacted]@slrconsulting.com

SLR Consulting Australia Pty Ltd
Level 2, 15 Astor Terrace, Brisbane, QLD, Australia, 4000

WINNERS: RoSPA Gold Award, 2017

WINNERS : International Business Excellence Award, 2016

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SAMPLE RECEIPT ADVICE

SE208081B

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000683--000685**
Samples	19

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Tue 21/7/2020
Report Due	Wed 29/7/2020
SGS Reference	**SE208081B**

SUBMISSION DETAILS

This is to confirm that 19 samples were received on Tuesday 21/7/2020. Results are expected to be ready by COB Wednesday 29/7/2020.
Please quote SGS reference SE208081B when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	1 Soil
Date documentation received	21/7/2020@5:03pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	4.7°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

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SAMPLE RECEIPT ADVICE

SE208081B

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	ASLP (Australian Standard Leaching Procedure) DI	Mercury in ASLP DI Water Extract	Metals in ASLP DI Extract by ICPOES
016	0407_TP241_0.5_200625	1	1	7

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	19

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208081B R0**
Date Received	21/7/2020
Date Reported	29/7/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

SIGNATORIES

[redacted]

Senior Organic Chemist/Metals Chemist

Metals/Inorganics Team Leader

ASLP (Australian Standard Leaching Procedure) DI Water [AN007/AS4439.3] Tested: 23/7/2020

PARAMETER	UOM	LOR	0407_TP241_0.5_20(625 SOIL - 25/6/2020 SE208081B.016
pH of solids leachate	pH Units	-	**6.5**

Metals in ASLP DI Extract by ICPOES [AN320] Tested: 29/7/2020

PARAMETER	UOM	LOR	0407_TP241_0.5_20(625 SOIL - 25/6/2020 SE208081B.016
Arsenic, As	mg/L	0.02	<0.02
Cadmium, Cd	mg/L	0.001	<0.001
Chromium, Cr	mg/L	0.005	<0.005
Copper, Cu	mg/L	0.005	<0.005
Lead, Pb	mg/L	0.02	**0.05**
Nickel, Ni	mg/L	0.005	<0.005
Zinc, Zn	mg/L	0.01	**0.07**

Mercury in ASLP DI Water Extract [AN311(Perth) /AN312] Tested: 29/7/2020

PARAMETER	UOM	LOR	0407_TP241_0.5_20(625 SOIL - 25/6/2020 SE208081B.016
Mercury	mg/L	0.0001	<0.0001

METHOD	METHODOLOGY SUMMARY
AN007/AS4439.3	Contaminants of interest in a waste material are leached out of the waste with a selected leaching solution under controlled conditions. The ratio of sample to extraction fluid is 100 g to 2 L (1 to 20 by mass). The concentration of each contaminant of interest is determined in the leachate by appropriate methods after separation from the sample by filtering. Based on AS4439.3.
AN020	Unpreserved water sample is filtered through a 0.45µm membrane filter and acidified with nitric acid similar to APHA3030B.
AN311(Perth) /AN312	Mercury by Cold Vapour AAS in Waters: Mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500.
AN320	Metals by ICP-OES: Samples are preserved with 10% nitric acid for a wide range of metals and some non-metals. This solution is measured by Inductively Coupled Plasma. Solutions are aspirated into an argon plasma at 8000-10000K and emit characteristic energy or light as a result of electron transitions through unique energy levels. The emitted light is focused onto a diffraction grating where it is separated into components .
AN320	Photomultipliers or CCDs are used to measure the light intensity at specific wavelengths. This intensity is directly proportional to concentration. Corrections are required to compensate for spectral overlap between elements . Reference APHA 3120 B.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety .

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STATEMENT OF QA/QC PERFORMANCE

SE208081B R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	19

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208081B R0**
Date Received	21 Jul 2020
Date Reported	29 Jul 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Extraction Date	ASLP (Australian Standard Leaching Procedure) DI Water	1 item
Analysis Date	ASLP (Australian Standard Leaching Procedure) DI Water	1 item

SAMPLE SUMMARY

HOLDING TIME SUMMARY

SE208081B R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

ASLP (Australian Standard Leaching Procedure) DI Water

Method: ME-(AU)-[ENV]AN007/AS4439.3

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP241_0.5_200625	SE208081B.016	LB205010	25 Jun 2020	21 Jul 2020	09 Jul 2020	23 Jul 2020†	09 Jul 2020	29 Jul 2020†

Mercury in ASLP DI Water Extract

Method: ME-(AU)-[ENV]AN311(Perth) /AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP241_0.5_200625	SE208081B.016	LB205432	25 Jun 2020	21 Jul 2020	30 Jul 2020	29 Jul 2020	30 Jul 2020	29 Jul 2020

Metals in ASLP DI Extract by ICPOES

Method: ME-(AU)-[ENV]AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP241_0.5_200625	SE208081B.016	LB205430	25 Jun 2020	21 Jul 2020	22 Dec 2020	29 Jul 2020	25 Jan 2021	29 Jul 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No surrogates were required for this job.

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Metals in ASLP DI Extract by ICPOES — **Method: ME-(AU)-[ENV]AN320**

Sample Number	Parameter	Units	LOR	Result
LB205430.001	Arsenic, As	mg/L	0.02	<0.02
	Cadmium, Cd	mg/L	0.001	<0.001
	Chromium, Cr	mg/L	0.005	<0.005
	Copper, Cu	mg/L	0.005	<0.005
	Lead, Pb	mg/L	0.02	<0.02
	Nickel, Ni	mg/L	0.005	<0.005
	Zinc, Zn	mg/L	0.01	<0.01

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No duplicates were required for this job.

LABORATORY CONTROL SAMPLES

SE208081B R0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Sample Number	Parameter	Units	LOR

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spikes were required for this job.

MATRIX SPIKE DUPLICATES

SE208081B R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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Good morning

Please book these additional jobs in.

Please be very carefully as there are lots of jobs

Regards,

[redacted]
Environment, Health & Safety
Client Manager
Phone: +61 (0)2 8594 0400
Direct:
Mobile: [redacted]
(Please note my new working hours of Mon-Fri 6:00am-2:00pm)



Covid-19 update: SGS Australia is open, with our Business Service Continuity Plans being put in place to ensure your project can be delivered as normal, please click here to see further details on our Business & Services Continuity Plans.

From: [redacted]@slrconsulting.com>
Sent: Tuesday, 21 July 2020 5:03 PM
To: [redacted]@sgs.com>
Cc: [redacted]@slrconsulting.com>
Subject: [EXTERNAL] 610.30041 DHA Randwick - Additional Analysis

*** WARNING: this message is from an EXTERNAL SENDER. Please be cautious, particularly with links and attachments. ***

Hi [redacted]

Can we please schedule the following analyses:

pH, clay content, TOC & CEC:

Report number	Sample ID
SE207695	TP002_0.1_200615
SE207695	TP002_1.5_200615
SE207695	TP005_0.1_200616
SE207695	TP005_1.5_200616
SE207695	TP049_0.1_200617
SE207695	TP049_1.0_200617
SE208047	TP092_0.1_200624
SE208047	TP092_1.0_200624
SE207831	TP220_0.1_200618
SE207831	TP220_1.0_200618
SE207831	TP221_0.1_200619
SE207831	TP221_1.0_200619
SE207998	TP230_0.1_200622
SE207998	TP230_1.8_200622
SE207591	TP018_0.1_200615
SE207591	TP018_1.0_200615
SE208047	TP092_0.1_200624
SE208047	TP092_1.0_200624
SE207911	TP095_0.1_200623
SE207911	TP095_1.0_200623
SE207731	TP073_0.1_200619
SE207731	TP073_1.0_200619
SE208659	TP133_0.1_200701
SE208659	TP133_1.0_200701
SE208142	TP151_0.1_200629
SE208142	TP151_1.0_200629
SE208137	TP183_0.1_200625
SE208137	TP183_0.5_200625

Additional analysis:

Report number	Sample ID	Parameter
SE208081	0407_TP241_1.0_200625	Pb & Zn
SE207731	0407_TP73_0.5_200619	Cr

ASLP Leach:

Report number	Sample ID	Parameter
SE208046	0407_TP237_0.5_200624	8 metals
SE208081	0407_TP241_0.5_200625	8 metals
SE208133	0407_TP111_0.1_200626	8 metals
SE208142	0407_TP256_0.1_200629	8 metals
SE207831	0407_TP222_0.1_200619	8 metals
SE207731	0407_TP73_0.1_200619	8 metals
SE207850	0407_TP162_0.1_200617	PAHs include B(a)P

SE207831	0407_TP197_0.1_200619	PAHs include B(a)P
SE207831	0407_TP197_0.5_200619	PAHs include B(a)P
SE207831	0407_TP200_0.5_200618	PAHs include B(a)P
SE207831	0407_TP200_1.0_200618	Total and leachable PAHs including B(a)P
SE207831	0407_TP209_0.5_200619	PAHs include B(a)P
SE207831	0407_TP221_0.5_200619	PAHs include B(a)P
SE207831	0407_TP221_1.0_200619	Total and leachable PAHs including B(a)P
SE207824	0407_TP231_0.1_200622	PAHs include B(a)P
SE208161	0407_BH41_0.0_200625	PFOS, PFOA, PfHxS
SE208046	0407_QC160_200624	PFOS, PFOA, PfHxS
SE207824	0407_QC130_200622	PFOS, PFOA, PfHxS

Let me know if you have any questions.

Many thanks,

[redacted]

SLR

[redacted]

Associate - Land Quality & Remediation

Please note in response to the COVID-19 Pandemic and physical distancing recommendations from the Australian Government, SLR is encouraging staff to work remotely and implement flexible working hours if necessary.
If you have received this email outside of regular office hours, it is not expected that you will respond until your own working hours commence.

d +61 7 3117 5227
o [redacted]
m
e [redacted]@slrconsulting.com

SLR Consulting Australia Pty Ltd
Level 2, 15 Astor Terrace, Brisbane, QLD, Australia, 4000

WINNERS: RoSPA Gold Award, 2017

WINNERS : International Business Excellence Award, 2016

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SAMPLE RECEIPT ADVICE

SE207831C

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	45

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Tue 21/7/2020
Report Due	Wed 29/7/2020
SGS Reference	**SE207831C**

SUBMISSION DETAILS

This is to confirm that 45 samples were received on Tuesday 21/7/2020. Results are expected to be ready by COB Wednesday 29/7/2020.
Please quote SGS reference SE207831C when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	1 Soil
Date documentation received	21/7/2020@5:03pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	8°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

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SAMPLE RECEIPT ADVICE

SE207831C

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	ASLP (Australian Standard Leaching Procedure) DI	Mercury in ASLP DI Water Extract	Metals in ASLP DI Extract by ICPOES
023	0407_TP222_0.1_200619	1	1	7

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	45

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207831C R0**
Date Received	21/7/2020
Date Reported	29/7/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

SIGNATORIES

[redacted]

Senior Organic Chemist/Metals Chemist

Metals/Inorganics Team Leader

ASLP (Australian Standard Leaching Procedure) DI Water [AN007/AS4439.3] Tested: 23/7/2020

PARAMETER	UOM	LOR	0407_TP222_0.1_20(619 SOIL - 18/6/2020 SE207831C.023
pH of solids leachate	pH Units	-	**7.6**

Metals in ASLP DI Extract by ICPOES [AN320] Tested: 29/7/2020

PARAMETER	UOM	LOR	0407_TP222_0.1_20(619 SOIL - 18/6/2020 SE207831C.023
Arsenic, As	mg/L	0.02	<0.02
Cadmium, Cd	mg/L	0.001	<0.001
Chromium, Cr	mg/L	0.005	<0.005
Copper, Cu	mg/L	0.005	<0.005
Lead, Pb	mg/L	0.02	<0.02
Nickel, Ni	mg/L	0.005	<0.005
Zinc, Zn	mg/L	0.01	**0.03**

Mercury in ASLP DI Water Extract [AN311(Perth) /AN312] Tested: 29/7/2020

PARAMETER	UOM	LOR	0407_TP222_0.1_20(619 SOIL - 18/6/2020 SE207831C.023
Mercury	mg/L	0.0001	<0.0001

METHOD	METHODOLOGY SUMMARY
AN007/AS4439.3	Contaminants of interest in a waste material are leached out of the waste with a selected leaching solution under controlled conditions. The ratio of sample to extraction fluid is 100 g to 2 L (1 to 20 by mass). The concentration of each contaminant of interest is determined in the leachate by appropriate methods after separation from the sample by filtering. Based on AS4439.3.
AN020	Unpreserved water sample is filtered through a 0.45µm membrane filter and acidified with nitric acid similar to APHA3030B.
AN311(Perth) /AN312	Mercury by Cold Vapour AAS in Waters: Mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500.
AN320	Metals by ICP-OES: Samples are preserved with 10% nitric acid for a wide range of metals and some non-metals. This solution is measured by Inductively Coupled Plasma. Solutions are aspirated into an argon plasma at 8000-10000K and emit characteristic energy or light as a result of electron transitions through unique energy levels. The emitted light is focused onto a diffraction grating where it is separated into components .
AN320	Photomultipliers or CCDs are used to measure the light intensity at specific wavelengths. This intensity is directly proportional to concentration. Corrections are required to compensate for spectral overlap between elements . Reference APHA 3120 B.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety .

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STATEMENT OF QA/QC PERFORMANCE

SE207831C R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	45

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207831C R0**
Date Received	21 Jul 2020
Date Reported	29 Jul 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Extraction Date	ASLP (Australian Standard Leaching Procedure) DI Water	1 item
	Mercury in ASLP DI Water Extract	1 item
Analysis Date	ASLP (Australian Standard Leaching Procedure) DI Water	1 item
	Mercury in ASLP DI Water Extract	1 item

SAMPLE SUMMARY

HOLDING TIME SUMMARY

SE207831C R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

ASLP (Australian Standard Leaching Procedure) DI Water

Method: ME-(AU)-[ENV]AN007/AS4439.3

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP222_0.1_200619	SE207831C.023	LB205010	18 Jun 2020	21 Jul 2020	02 Jul 2020	23 Jul 2020†	02 Jul 2020	29 Jul 2020†

Mercury in ASLP DI Water Extract

Method: ME-(AU)-[ENV]AN311(Perth) /AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP222_0.1_200619	SE207831C.023	LB205432	18 Jun 2020	21 Jul 2020	23 Jul 2020	29 Jul 2020†	23 Jul 2020	29 Jul 2020†

Metals in ASLP DI Extract by ICPOES

Method: ME-(AU)-[ENV]AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP222_0.1_200619	SE207831C.023	LB205430	18 Jun 2020	21 Jul 2020	15 Dec 2020	29 Jul 2020	25 Jan 2021	29 Jul 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No surrogates were required for this job.

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Metals in ASLP DI Extract by ICPOES — **Method: ME-(AU)-[ENV]AN320**

Sample Number	Parameter	Units	LOR	Result
LB205430.001	Arsenic, As	mg/L	0.02	<0.02
	Cadmium, Cd	mg/L	0.001	<0.001
	Chromium, Cr	mg/L	0.005	<0.005
	Copper, Cu	mg/L	0.005	<0.005
	Lead, Pb	mg/L	0.02	<0.02
	Nickel, Ni	mg/L	0.005	<0.005
	Zinc, Zn	mg/L	0.01	<0.01

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No duplicates were required for this job.

LABORATORY CONTROL SAMPLES

SE207831C R0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Sample Number	Parameter	Units	LOR

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spikes were required for this job.

MATRIX SPIKE DUPLICATES

SE207831C R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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Good morning

Please book these additional jobs in.

Please be very carefully as there are lots of jobs

Regards,

[redacted]
Environment, Health & Safety
Client Manager
Phone: +61 (0)2 8594 0400
Direct:
Mobile: [redacted]
(Please note my new working hours of Mon-Fri 6:00am-2:00pm)



Covid-19 update: SGS Australia is open, with our Business Service Continuity Plans being put in place to ensure your project can be delivered as normal, please click here to see further details on our Business & Services Continuity Plans.

From: [redacted]@slrconsulting.com>
Sent: Tuesday, 21 July 2020 5:03 PM
To: [redacted]@sgs.com>
Cc: [redacted]@slrconsulting.com>
Subject: [EXTERNAL] 610.30041 DHA Randwick - Additional Analysis

*** WARNING: this message is from an EXTERNAL SENDER. Please be cautious, particularly with links and attachments. ***

Hi [redacted]

Can we please schedule the following analyses:

pH, clay content, TOC & CEC:

Report number	Sample ID
SE207695	TP002_0.1_200615
SE207695	TP002_1.5_200615
SE207695	TP005_0.1_200616
SE207695	TP005_1.5_200616
SE207695	TP049_0.1_200617
SE207695	TP049_1.0_200617
SE208047	TP092_0.1_200624
SE208047	TP092_1.0_200624
SE207831	TP220_0.1_200618
SE207831	TP220_1.0_200618
SE207831	TP221_0.1_200619
SE207831	TP221_1.0_200619
SE207998	TP230_0.1_200622
SE207998	TP230_1.8_200622
SE207591	TP018_0.1_200615
SE207591	TP018_1.0_200615
SE208047	TP092_0.1_200624
SE208047	TP092_1.0_200624
SE207911	TP095_0.1_200623
SE207911	TP095_1.0_200623
SE207731	TP073_0.1_200619
SE207731	TP073_1.0_200619
SE208659	TP133_0.1_200701
SE208659	TP133_1.0_200701
SE208142	TP151_0.1_200629
SE208142	TP151_1.0_200629
SE208137	TP183_0.1_200625
SE208137	TP183_0.5_200625

Additional analysis:

Report number	Sample ID	Parameter
SE208081	0407_TP241_1.0_200625	Pb & Zn
SE207731	0407_TP73_0.5_200619	Cr

ASLP Leach:

Report number	Sample ID	Parameter
SE208046	0407_TP237_0.5_200624	8 metals
SE208081	0407_TP241_0.5_200625	8 metals
SE208133	0407_TP111_0.1_200626	8 metals
SE208142	0407_TP256_0.1_200629	8 metals
SE207831	0407_TP222_0.1_200619	8 metals
SE207731	0407_TP73_0.1_200619	8 metals
SE207850	0407_TP162_0.1_200617	PAHs include B(a)P

SE207831	0407_TP197_0.1_200619	PAHs include B(a)P
SE207831	0407_TP197_0.5_200619	PAHs include B(a)P
SE207831	0407_TP200_0.5_200618	PAHs include B(a)P
SE207831	0407_TP200_1.0_200618	Total and leachable PAHs including B(a)P
SE207831	0407_TP209_0.5_200619	PAHs include B(a)P
SE207831	0407_TP221_0.5_200619	PAHs include B(a)P
SE207831	0407_TP221_1.0_200619	Total and leachable PAHs including B(a)P
SE207824	0407_TP231_0.1_200622	PAHs include B(a)P
SE208161	0407_BH41_0.0_200625	PFOS, PFOA, PfHxS
SE208046	0407_QC160_200624	PFOS, PFOA, PfHxS
SE207824	0407_QC130_200622	PFOS, PFOA, PfHxS

Let me know if you have any questions.

Many thanks,

[redacted]

SLR

[redacted]

Associate - Land Quality & Remediation

Please note in response to the COVID-19 Pandemic and physical distancing recommendations from the Australian Government, SLR is encouraging staff to work remotely and implement flexible working hours if necessary.
If you have received this email outside of regular office hours, it is not expected that you will respond until your own working hours commence.

d +61 7 3117 5227
o [redacted]
m
e [redacted]@slrconsulting.com

SLR Consulting Australia Pty Ltd
Level 2, 15 Astor Terrace, Brisbane, QLD, Australia, 4000

WINNERS: RoSPA Gold Award, 2017

WINNERS : International Business Excellence Award, 2016

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SAMPLE RECEIPT ADVICE

SE208046A

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000680--000682**
Samples	16

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Tue 21/7/2020
Report Due	Wed 29/7/2020
SGS Reference	**SE208046A**

SUBMISSION DETAILS

This is to confirm that 16 samples were received on Tuesday 21/7/2020. Results are expected to be ready by COB Wednesday 29/7/2020.
Please quote SGS reference SE208046A when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	1 Soil
Date documentation received	21/7/2020@5:03pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	5.3°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

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SAMPLE RECEIPT ADVICE

SE208046A

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	ASLP (Australian Standard Leaching Procedure) DI	Mercury in ASLP DI Water Extract	Metals in ASLP DI Extract by ICPOES
002	0407_TP237_0.5_200624	1	1	7

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	16

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208046A R0**
Date Received	21/7/2020
Date Reported	29/7/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

SIGNATORIES

[redacted]

Senior Organic Chemist/Metals Chemist

Metals/Inorganics Team Leader

ASLP (Australian Standard Leaching Procedure) DI Water [AN007/AS4439.3] Tested: 23/7/2020

PARAMETER	UOM	LOR	0407_TP237_0.5_20(624 SOIL - 24/6/2020 SE208046A.002
pH of solids leachate	pH Units	-	**6.5**

Metals in ASLP DI Extract by ICPOES [AN320] Tested: 29/7/2020

PARAMETER	UOM	LOR	0407_TP237_0.5_20(624 SOIL - 24/6/2020 SE208046A.002
Arsenic, As	mg/L	0.02	<0.02
Cadmium, Cd	mg/L	0.001	<0.001
Chromium, Cr	mg/L	0.005	<0.005
Copper, Cu	mg/L	0.005	<0.005
Lead, Pb	mg/L	0.02	**0.02**
Nickel, Ni	mg/L	0.005	<0.005
Zinc, Zn	mg/L	0.01	**0.03**

Mercury in ASLP DI Water Extract [AN311(Perth) /AN312] Tested: 29/7/2020

PARAMETER	UOM	LOR	0407_TP237_0.5_20(624 SOIL - 24/6/2020 SE208046A.002
Mercury	mg/L	0.0001	<0.0001

METHOD	METHODOLOGY SUMMARY
AN007/AS4439.3	Contaminants of interest in a waste material are leached out of the waste with a selected leaching solution under controlled conditions. The ratio of sample to extraction fluid is 100 g to 2 L (1 to 20 by mass). The concentration of each contaminant of interest is determined in the leachate by appropriate methods after separation from the sample by filtering. Based on AS4439.3.
AN020	Unpreserved water sample is filtered through a 0.45µm membrane filter and acidified with nitric acid similar to APHA3030B.
AN311(Perth) /AN312	Mercury by Cold Vapour AAS in Waters: Mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500.
AN320	Metals by ICP-OES: Samples are preserved with 10% nitric acid for a wide range of metals and some non-metals. This solution is measured by Inductively Coupled Plasma. Solutions are aspirated into an argon plasma at 8000-10000K and emit characteristic energy or light as a result of electron transitions through unique energy levels. The emitted light is focused onto a diffraction grating where it is separated into components .
AN320	Photomultipliers or CCDs are used to measure the light intensity at specific wavelengths. This intensity is directly proportional to concentration. Corrections are required to compensate for spectral overlap between elements . Reference APHA 3120 B.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety .

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STATEMENT OF QA/QC PERFORMANCE

SE208046A R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	16

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208046A R0**
Date Received	21 Jul 2020
Date Reported	29 Jul 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Extraction Date	ASLP (Australian Standard Leaching Procedure) DI Water	1 item
Analysis Date	ASLP (Australian Standard Leaching Procedure) DI Water	1 item

SAMPLE SUMMARY

HOLDING TIME SUMMARY

SE208046A R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

ASLP (Australian Standard Leaching Procedure) DI Water

Method: ME-(AU)-[ENV]AN007/AS4439.3

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP237_0.5_200624	SE208046A.002	LB205010	24 Jun 2020	21 Jul 2020	08 Jul 2020	23 Jul 2020†	08 Jul 2020	29 Jul 2020†

Mercury in ASLP DI Water Extract

Method: ME-(AU)-[ENV]AN311(Perth) /AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP237_0.5_200624	SE208046A.002	LB205432	24 Jun 2020	21 Jul 2020	29 Jul 2020	29 Jul 2020	29 Jul 2020	29 Jul 2020

Metals in ASLP DI Extract by ICPOES

Method: ME-(AU)-[ENV]AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP237_0.5_200624	SE208046A.002	LB205430	24 Jun 2020	21 Jul 2020	21 Dec 2020	29 Jul 2020	25 Jan 2021	29 Jul 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No surrogates were required for this job.

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Metals in ASLP DI Extract by ICPOES — **Method: ME-(AU)-[ENV]AN320**

Sample Number	Parameter	Units	LOR	Result
LB205430.001	Arsenic, As	mg/L	0.02	<0.02
	Cadmium, Cd	mg/L	0.001	<0.001
	Chromium, Cr	mg/L	0.005	<0.005
	Copper, Cu	mg/L	0.005	<0.005
	Lead, Pb	mg/L	0.02	<0.02
	Nickel, Ni	mg/L	0.005	<0.005
	Zinc, Zn	mg/L	0.01	<0.01

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No duplicates were required for this job.

LABORATORY CONTROL SAMPLES

SE208046A R0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Sample Number	Parameter	Units	LOR

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spikes were required for this job.

MATRIX SPIKE DUPLICATES

SE208046A R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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Good morning

Please book these additional jobs in.

Please be very carefully as there are lots of jobs

Regards,

[redacted]
Environment, Health & Safety
Client Manager
Phone: +61 (0)2 8594 0400
Direct:
Mobile: [redacted]
(Please note my new working hours of Mon-Fri 6:00am-2:00pm)



Covid-19 update: SGS Australia is open, with our Business Service Continuity Plans being put in place to ensure your project can be delivered as normal, please click here to see further details on our Business & Services Continuity Plans.

From: [redacted]@slrconsulting.com>
Sent: Tuesday, 21 July 2020 5:03 PM
To: [redacted]
Cc: [redacted]@slrconsulting.com>
Subject: [EXTERNAL] 610.30041 DHA Randwick - Additional Analysis

*** WARNING: this message is from an EXTERNAL SENDER. Please be cautious, particularly with links and attachments. ***

Hi [redacted]

Can we please schedule the following analyses:

pH, clay content, TOC & CEC:

Report number	Sample ID
SE207695	TP002_0.1_200615
SE207695	TP002_1.5_200615
SE207695	TP005_0.1_200616
SE207695	TP005_1.5_200616
SE207695	TP049_0.1_200617
SE207695	TP049_1.0_200617
SE208047	TP092_0.1_200624
SE208047	TP092_1.0_200624
SE207831	TP220_0.1_200618
SE207831	TP220_1.0_200618
SE207831	TP221_0.1_200619
SE207831	TP221_1.0_200619
SE207998	TP230_0.1_200622
SE207998	TP230_1.8_200622
SE207591	TP018_0.1_200615
SE207591	TP018_1.0_200615
SE208047	TP092_0.1_200624
SE208047	TP092_1.0_200624
SE207911	TP095_0.1_200623
SE207911	TP095_1.0_200623
SE207731	TP073_0.1_200619
SE207731	TP073_1.0_200619
SE208659	TP133_0.1_200701
SE208659	TP133_1.0_200701
SE208142	TP151_0.1_200629
SE208142	TP151_1.0_200629
SE208137	TP183_0.1_200625
SE208137	TP183_0.5_200625

Additional analysis:

Report number	Sample ID	Parameter
SE208081	0407_TP241_1.0_200625	Pb & Zn
SE207731	0407_TP73_0.5_200619	Cr

ASLP Leach:

Report number	Sample ID	Parameter
SE208046	0407_TP237_0.5_200624	8 metals
SE208081	0407_TP241_0.5_200625	8 metals
SE208133	0407_TP111_0.1_200626	8 metals
SE208142	0407_TP256_0.1_200629	8 metals
SE207831	0407_TP222_0.1_200619	8 metals
SE207731	0407_TP73_0.1_200619	8 metals
SE207850	0407_TP162_0.1_200617	PAHs include B(a)P

SE207831	0407_TP197_0.1_200619	PAHs include B(a)P
SE207831	0407_TP197_0.5_200619	PAHs include B(a)P
SE207831	0407_TP200_0.5_200618	PAHs include B(a)P
SE207831	0407_TP200_1.0_200618	Total and leachable PAHs including B(a)P
SE207831	0407_TP209_0.5_200619	PAHs include B(a)P
SE207831	0407_TP221_0.5_200619	PAHs include B(a)P
SE207831	0407_TP221_1.0_200619	Total and leachable PAHs including B(a)P
SE207824	0407_TP231_0.1_200622	PAHs include B(a)P
SE208161	0407_BH41_0.0_200625	PFOS, PFOA, PfHxS
SE208046	0407_QC160_200624	PFOS, PFOA, PfHxS
SE207824	0407_QC130_200622	PFOS, PFOA, PfHxS

Let me know if you have any questions.

Many thanks,

[redacted]

SLR

[redacted]

Associate - Land Quality & Remediation

Please note in response to the COVID-19 Pandemic and physical distancing recommendations from the Australian Government, SLR is encouraging staff to work remotely and implement flexible working hours if necessary.
If you have received this email outside of regular office hours, it is not expected that you will respond until your own working hours commence.

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WINNERS: RoSPA Gold Award, 2017

WINNERS : International Business Excellence Award, 2016

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SAMPLE RECEIPT ADVICE

SE208142B

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000690-000692**
Samples	16

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Tue 21/7/2020
Report Due	Wed 29/7/2020
SGS Reference	**SE208142B**

SUBMISSION DETAILS

This is to confirm that 16 samples were received on Tuesday 21/7/2020. Results are expected to be ready by COB Wednesday 29/7/2020.
Please quote SGS reference SE208142B when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	1 Soil
Date documentation received	21/7/2020@5:03pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	3.5°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

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SAMPLE RECEIPT ADVICE

SE208142B

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	ASLP (Australian Standard Leaching Procedure) DI	Mercury in ASLP DI Water Extract	Metals in ASLP DI Extract by ICPOES
003	0407_TP256_0.1_200629	1	1	7

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	16

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208142B R0**
Date Received	21/7/2020
Date Reported	29/7/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

SIGNATORIES

[redacted]

Senior Organic Chemist/Metals Chemist

Metals/Inorganics Team Leader

ASLP (Australian Standard Leaching Procedure) DI Water [AN007/AS4439.3] Tested: 23/7/2020

PARAMETER	UOM	LOR	0407_TP256_0.1_20(629 SOIL - 29/6/2020 SE208142B.003
pH of solids leachate	pH Units	-	**7.7**

Metals in ASLP DI Extract by ICPOES [AN320] Tested: 29/7/2020

PARAMETER	UOM	LOR	0407_TP256_0.1_20(629 SOIL - 29/6/2020 SE208142B.003
Arsenic, As	mg/L	0.02	<0.02
Cadmium, Cd	mg/L	0.001	<0.001
Chromium, Cr	mg/L	0.005	<0.005
Copper, Cu	mg/L	0.005	<0.005
Lead, Pb	mg/L	0.02	<0.02
Nickel, Ni	mg/L	0.005	<0.005
Zinc, Zn	mg/L	0.01	<0.01

Mercury in ASLP DI Water Extract [AN311(Perth) /AN312] Tested: 29/7/2020

PARAMETER	UOM	LOR	0407_TP256_0.1_20(629 SOIL - 29/6/2020 SE208142B.003
Mercury	mg/L	0.0001	<0.0001

METHOD	METHODOLOGY SUMMARY
AN007/AS4439.3	Contaminants of interest in a waste material are leached out of the waste with a selected leaching solution under controlled conditions. The ratio of sample to extraction fluid is 100 g to 2 L (1 to 20 by mass). The concentration of each contaminant of interest is determined in the leachate by appropriate methods after separation from the sample by filtering. Based on AS4439.3.
AN020	Unpreserved water sample is filtered through a 0.45µm membrane filter and acidified with nitric acid similar to APHA3030B.
AN311(Perth) /AN312	Mercury by Cold Vapour AAS in Waters: Mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500.
AN320	Metals by ICP-OES: Samples are preserved with 10% nitric acid for a wide range of metals and some non-metals. This solution is measured by Inductively Coupled Plasma. Solutions are aspirated into an argon plasma at 8000-10000K and emit characteristic energy or light as a result of electron transitions through unique energy levels. The emitted light is focused onto a diffraction grating where it is separated into components .
AN320	Photomultipliers or CCDs are used to measure the light intensity at specific wavelengths. This intensity is directly proportional to concentration. Corrections are required to compensate for spectral overlap between elements . Reference APHA 3120 B.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety .

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STATEMENT OF QA/QC PERFORMANCE

SE208142B R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	16

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Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208142B R0**
Date Received	21 Jul 2020
Date Reported	29 Jul 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Extraction Date	ASLP (Australian Standard Leaching Procedure) DI Water	1 item
Analysis Date	ASLP (Australian Standard Leaching Procedure) DI Water	1 item

SAMPLE SUMMARY

HOLDING TIME SUMMARY

SE208142B R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

ASLP (Australian Standard Leaching Procedure) DI Water

Method: ME-(AU)-[ENV]AN007/AS4439.3

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP256_0.1_200629	SE208142B.003	LB205010	29 Jun 2020	21 Jul 2020	13 Jul 2020	23 Jul 2020†	13 Jul 2020	29 Jul 2020†

Mercury in ASLP DI Water Extract

Method: ME-(AU)-[ENV]AN311(Perth) /AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP256_0.1_200629	SE208142B.003	LB205432	29 Jun 2020	21 Jul 2020	03 Aug 2020	29 Jul 2020	03 Aug 2020	29 Jul 2020

Metals in ASLP DI Extract by ICPOES

Method: ME-(AU)-[ENV]AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP256_0.1_200629	SE208142B.003	LB205430	29 Jun 2020	21 Jul 2020	26 Dec 2020	29 Jul 2020	25 Jan 2021	29 Jul 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No surrogates were required for this job.

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Metals in ASLP DI Extract by ICPOES — **Method: ME-(AU)-[ENV]AN320**

Sample Number	Parameter	Units	LOR	Result
LB205430.001	Arsenic, As	mg/L	0.02	<0.02
	Cadmium, Cd	mg/L	0.001	<0.001
	Chromium, Cr	mg/L	0.005	<0.005
	Copper, Cu	mg/L	0.005	<0.005
	Lead, Pb	mg/L	0.02	<0.02
	Nickel, Ni	mg/L	0.005	<0.005
	Zinc, Zn	mg/L	0.01	<0.01

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No duplicates were required for this job.

LABORATORY CONTROL SAMPLES

SE208142B R0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Sample Number	Parameter	Units	LOR

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spikes were required for this job.

MATRIX SPIKE DUPLICATES

SE208142B R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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SAMPLE RECEIPT ADVICE

SE207824B

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000674--000676**
Samples	19

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Tue 21/7/2020
Report Due	Wed 29/7/2020
SGS Reference	**SE207824B**

SUBMISSION DETAILS

This is to confirm that 19 samples were received on Tuesday 21/7/2020. Results are expected to be ready by COB Wednesday 29/7/2020.
Please quote SGS reference SE207824B when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	1 Soil
Date documentation received	21/7/2020@5:03pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	1.3°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

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SAMPLE RECEIPT ADVICE

SE207824B

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	ASLP (Australian Standard Leaching Procedure) DI	PAH (Polynuclear Aromatic Hydrocarbons) in ASLP DI
005	0407_TP231_0.1_200622	1	22

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

Good morning

Please book these additional jobs in.

Please be very carefully as there are lots of jobs

Regards,

[redacted]
Environment, Health & Safety
Client Manager
Phone: +61 (0)2 8594 0400
Direct:
Mobile: [redacted]
(Please note my new working hours of Mon-Fri 6:00am-2:00pm)



Covid-19 update: SGS Australia is open, with our Business Service Continuity Plans being put in place to ensure your project can be delivered as normal, please click here to see further details on our Business & Services Continuity Plans.

From: [redacted]@slrconsulting.com>
Sent: Tuesday, 21 July 2020 5:03 PM
To: [redacted]@sgs.com>
Cc: [redacted]@slrconsulting.com>
Subject: [EXTERNAL] 610.30041 DHA Randwick - Additional Analysis

*** WARNING: this message is from an EXTERNAL SENDER. Please be cautious, particularly with links and attachments. ***

Hi [redacted]

Can we please schedule the following analyses:

pH, clay content, TOC & CEC:

Report number	Sample ID
SE207695	TP002_0.1_200615
SE207695	TP002_1.5_200615
SE207695	TP005_0.1_200616
SE207695	TP005_1.5_200616
SE207695	TP049_0.1_200617
SE207695	TP049_1.0_200617
SE208047	TP092_0.1_200624
SE208047	TP092_1.0_200624
SE207831	TP220_0.1_200618
SE207831	TP220_1.0_200618
SE207831	TP221_0.1_200619
SE207831	TP221_1.0_200619
SE207998	TP230_0.1_200622
SE207998	TP230_1.8_200622
SE207591	TP018_0.1_200615
SE207591	TP018_1.0_200615
SE208047	TP092_0.1_200624
SE208047	TP092_1.0_200624
SE207911	TP095_0.1_200623
SE207911	TP095_1.0_200623
SE207731	TP073_0.1_200619
SE207731	TP073_1.0_200619
SE208659	TP133_0.1_200701
SE208659	TP133_1.0_200701
SE208142	TP151_0.1_200629
SE208142	TP151_1.0_200629
SE208137	TP183_0.1_200625
SE208137	TP183_0.5_200625

Additional analysis:

Report number	Sample ID	Parameter
SE208081	0407_TP241_1.0_200625	Pb & Zn
SE207731	0407_TP73_0.5_200619	Cr

ASLP Leach:

Report number	Sample ID	Parameter
SE208046	0407_TP237_0.5_200624	8 metals
SE208081	0407_TP241_0.5_200625	8 metals
SE208133	0407_TP111_0.1_200626	8 metals
SE208142	0407_TP256_0.1_200629	8 metals
SE207831	0407_TP222_0.1_200619	8 metals
SE207731	0407_TP73_0.1_200619	8 metals
SE207850	0407_TP162_0.1_200617	PAHs include B(a)P

SE207831	0407_TP197_0.1_200619	PAHs include B(a)P
SE207831	0407_TP197_0.5_200619	PAHs include B(a)P
SE207831	0407_TP200_0.5_200618	PAHs include B(a)P
SE207831	0407_TP200_1.0_200618	Total and leachable PAHs including B(a)P
SE207831	0407_TP209_0.5_200619	PAHs include B(a)P
SE207831	0407_TP221_0.5_200619	PAHs include B(a)P
SE207831	0407_TP221_1.0_200619	Total and leachable PAHs including B(a)P
SE207824	0407_TP231_0.1_200622	PAHs include B(a)P
SE208161	0407_BH41_0.0_200625	PFOS, PFOA, PfHxS
SE208046	0407_QC160_200624	PFOS, PFOA, PfHxS
SE207824	0407_QC130_200622	PFOS, PFOA, PfHxS

Let me know if you have any questions.

Many thanks,

[redacted]

SLR

[redacted]

Associate - Land Quality & Remediation

Please note in response to the COVID-19 Pandemic and physical distancing recommendations from the Australian Government, SLR is encouraging staff to work remotely and implement flexible working hours if necessary.
If you have received this email outside of regular office hours, it is not expected that you will respond until your own working hours commence.

d +61 7 3117 5227
o [redacted]
m
e [redacted]@slrconsulting.com

SLR Consulting Australia Pty Ltd
Level 2, 15 Astor Terrace, Brisbane, QLD, Australia, 4000

WINNERS: RoSPA Gold Award, 2017
WINNERS : International Business Excellence Award, 2016

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
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Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	19

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
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Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207824B R0**
Date Received	21/7/2020
Date Reported	29/7/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

SIGNATORIES

[redacted]

Organic Section Head

ASLP (Australian Standard Leaching Procedure) DI Water [AN007/AS4439.3] Tested: 23/7/2020

PARAMETER	UOM	LOR	0407_TP231_0.1_20(622 SOIL - 22/6/2020 SE207824B.005
pH of solids leachate	pH Units	-	**7.7**

PAH (Polynuclear Aromatic Hydrocarbons) in ASLP DI Extract [AN420] Tested: 27/7/2020

PARAMETER	UOM	LOR	0407_TP231_0.1_20(622 SOIL - 22/6/2020 SE207824B.005
Naphthalene	µg/L	0.1	<0.1
2-methylnaphthalene	µg/L	0.1	<0.1
1-methylnaphthalene	µg/L	0.1	<0.1
Acenaphthylene	µg/L	0.1	<0.1
Acenaphthene	µg/L	0.1	<0.1
Fluorene	µg/L	0.1	<0.1
Phenanthrene	µg/L	0.1	<0.1
Anthracene	µg/L	0.1	<0.1
Fluoranthene	µg/L	0.1	<0.1
Pyrene	µg/L	0.1	<0.1
Benzo(a)anthracene	µg/L	0.1	<0.1
Chrysene	µg/L	0.1	<0.1
Benzo(b&j)fluoranthene	µg/L	0.1	<0.1
Benzo(k)fluoranthene	µg/L	0.1	<0.1
Benzo(a)pyrene	µg/L	0.1	<0.1
Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1
Dibenzo(ah)anthracene	µg/L	0.1	<0.1
Benzo(ghi)perylene	µg/L	0.1	<0.1
Total PAH (18)*	µg/L	1	<1

METHOD	METHODOLOGY SUMMARY
AN007/AS4439.3	Contaminants of interest in a waste material are leached out of the waste with a selected leaching solution under controlled conditions. The ratio of sample to extraction fluid is 100 g to 2 L (1 to 20 by mass). The concentration of each contaminant of interest is determined in the leachate by appropriate methods after separation from the sample by filtering. Based on AS4439.3.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE207824B R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	19

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207824B R0**
Date Received	21 Jul 2020
Date Reported	29 Jul 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Extraction Date	ASLP (Australian Standard Leaching Procedure) DI Water	1 item
	PAH (Polynuclear Aromatic Hydrocarbons) in ASLP DI Extract	1 item
Analysis Date	ASLP (Australian Standard Leaching Procedure) DI Water	1 item

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	1 Soil
Date documentation received	21/7/2020@5:03pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	1.3°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE207824B R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

ASLP (Australian Standard Leaching Procedure) DI Water

Method: ME-(AU)-[ENV]AN007/AS4439.3

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP231_0.1_200622	SE207824B.005	LB205010	22 Jun 2020	21 Jul 2020	06 Jul 2020	23 Jul 2020†	06 Jul 2020	29 Jul 2020†

PAH (Polynuclear Aromatic Hydrocarbons) in ASLP DI Extract

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP231_0.1_200622	SE207824B.005	LB205233	22 Jun 2020	21 Jul 2020	13 Jul 2020	27 Jul 2020†	05 Sep 2020	29 Jul 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in ASLP DI Extract — **Method: ME-(AU)-[ENV]AN420**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP231_0.1_200622	SE207824B.005	%	40 - 130%	72
d14-p-terphenyl (Surrogate)	0407_TP231_0.1_200622	SE207824B.005	%	40 - 130%	102
d5-nitrobenzene (Surrogate)	0407_TP231_0.1_200622	SE207824B.005	%	40 - 130%	62

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in ASLP DI Extract — **Method: ME-(AU)-[ENV]AN420**

Sample Number		Parameter	Units	LOR	Result
LB205233.001		Naphthalene	µg/L	0.1	<0.1
		2-methylnaphthalene	µg/L	0.1	<0.1
		1-methylnaphthalene	µg/L	0.1	<0.1
		Acenaphthylene	µg/L	0.1	<0.1
		Acenaphthene	µg/L	0.1	<0.1
		Fluorene	µg/L	0.1	<0.1
		Phenanthrene	µg/L	0.1	<0.1
		Anthracene	µg/L	0.1	<0.1
		Fluoranthene	µg/L	0.1	<0.1
		Pyrene	µg/L	0.1	<0.1
		Benzo(a)anthracene	µg/L	0.1	<0.1
		Chrysene	µg/L	0.1	<0.1
		Benzo(a)pyrene	µg/L	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1
		Dibenzo(ah)anthracene	µg/L	0.1	<0.1
		Benzo(ghi)perylene	µg/L	0.1	<0.1
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	70
		2-fluorobiphenyl (Surrogate)	%	-	74
		d14-p-terphenyl (Surrogate)	%	-	110

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Original	Duplicate	Parameter	Units	LOR

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in ASLP DI Extract — **Method: ME-(AU)-[ENV]AN420**

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205233.002		Naphthalene	µg/L	0.1	31	40	60 - 140	76
		Acenaphthylene	µg/L	0.1	36	40	60 - 140	90
		Acenaphthene	µg/L	0.1	32	40	60 - 140	80
		Phenanthrene	µg/L	0.1	38	40	60 - 140	95
		Anthracene	µg/L	0.1	31	40	60 - 140	77
		Fluoranthene	µg/L	0.1	36	40	60 - 140	90
		Pyrene	µg/L	0.1	36	40	60 - 140	89
		Benzo(a)pyrene	µg/L	0.1	40	40	60 - 140	101
	Surrogates	d5-nitrobenzene (Surrogate)	µg/L	-	0.4	0.5	40 - 130	86
		2-fluorobiphenyl (Surrogate)	µg/L	-	0.4	0.5	40 - 130	84
		d14-p-terphenyl (Surrogate)	µg/L	-	0.5	0.5	40 - 130	94

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

QC Sample	Sample Number	Parameter	Units	LOR

MATRIX SPIKE DUPLICATES

SE207824B R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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Good morning

Please book these additional jobs in.

Please be very carefully as there are lots of jobs

Regards,

[redacted]
Environment, Health & Safety
Client Manager
Phone: +61 (0)2 8594 0400
Direct:
Mobile: [redacted]
(Please note my new working hours of Mon-Fri 6:00am-2:00pm)



Covid-19 update: SGS Australia is open, with our Business Service Continuity Plans being put in place to ensure your project can be delivered as normal, please click here to see further details on our Business & Services Continuity Plans.

From: [redacted]@slrconsulting.com>
Sent: Tuesday, 21 July 2020 5:03 PM
To: [redacted]@sgs.com>
Cc: [redacted]@slrconsulting.com>
Subject: [EXTERNAL] 610.30041 DHA Randwick - Additional Analysis

*** WARNING: this message is from an EXTERNAL SENDER. Please be cautious, particularly with links and attachments. ***

Hi [redacted]

Can we please schedule the following analyses:

pH, clay content, TOC & CEC:

Report number	Sample ID
SE207695	TP002_0.1_200615
SE207695	TP002_1.5_200615
SE207695	TP005_0.1_200616
SE207695	TP005_1.5_200616
SE207695	TP049_0.1_200617
SE207695	TP049_1.0_200617
SE208047	TP092_0.1_200624
SE208047	TP092_1.0_200624
SE207831	TP220_0.1_200618
SE207831	TP220_1.0_200618
SE207831	TP221_0.1_200619
SE207831	TP221_1.0_200619
SE207998	TP230_0.1_200622
SE207998	TP230_1.8_200622
SE207591	TP018_0.1_200615
SE207591	TP018_1.0_200615
SE208047	TP092_0.1_200624
SE208047	TP092_1.0_200624
SE207911	TP095_0.1_200623
SE207911	TP095_1.0_200623
SE207731	TP073_0.1_200619
SE207731	TP073_1.0_200619
SE208659	TP133_0.1_200701
SE208659	TP133_1.0_200701
SE208142	TP151_0.1_200629
SE208142	TP151_1.0_200629
SE208137	TP183_0.1_200625
SE208137	TP183_0.5_200625

Additional analysis:

Report number	Sample ID	Parameter
SE208081	0407_TP241_1.0_200625	Pb & Zn
SE207731	0407_TP73_0.5_200619	Cr

ASLP Leach:

Report number	Sample ID	Parameter
SE208046	0407_TP237_0.5_200624	8 metals
SE208081	0407_TP241_0.5_200625	8 metals
SE208133	0407_TP111_0.1_200626	8 metals
SE208142	0407_TP256_0.1_200629	8 metals
SE207831	0407_TP222_0.1_200619	8 metals
SE207731	0407_TP73_0.1_200619	8 metals
SE207850	0407_TP162_0.1_200617	PAHs include B(a)P

SE207831	0407_TP197_0.1_200619	PAHs include B(a)P
SE207831	0407_TP197_0.5_200619	PAHs include B(a)P
SE207831	0407_TP200_0.5_200618	PAHs include B(a)P
SE207831	0407_TP200_1.0_200618	Total and leachable PAHs including B(a)P
SE207831	0407_TP209_0.5_200619	PAHs include B(a)P
SE207831	0407_TP221_0.5_200619	PAHs include B(a)P
SE207831	0407_TP221_1.0_200619	Total and leachable PAHs including B(a)P
SE207824	0407_TP231_0.1_200622	PAHs include B(a)P
SE208161	0407_BH41_0.0_200625	PFOS, PFOA, PfHxS
SE208046	0407_QC160_200624	PFOS, PFOA, PfHxS
SE207824	0407_QC130_200622	PFOS, PFOA, PfHxS

Let me know if you have any questions.

Many thanks,

[redacted]

SLR

[redacted]

Associate - Land Quality & Remediation

Please note in response to the COVID-19 Pandemic and physical distancing recommendations from the Australian Government, SLR is encouraging staff to work remotely and implement flexible working hours if necessary.
If you have received this email outside of regular office hours, it is not expected that you will respond until your own working hours commence.

d +61 7 3117 5227
o [redacted]
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e [redacted]@slrconsulting.com

SLR Consulting Australia Pty Ltd
Level 2, 15 Astor Terrace, Brisbane, QLD, Australia, 4000

WINNERS: RoSPA Gold Award, 2017

WINNERS : International Business Excellence Award, 2016

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SAMPLE RECEIPT ADVICE

SE207731B

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000671--000673**
Samples	18

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Tue 21/7/2020
Report Due	Wed 29/7/2020
SGS Reference	**SE207731B**

SUBMISSION DETAILS

This is to confirm that 18 samples were received on Tuesday 21/7/2020. Results are expected to be ready by COB Wednesday 29/7/2020.
Please quote SGS reference SE207731B when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	1 Soil
Date documentation received	21/7/2020@5:03pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	10°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

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SAMPLE RECEIPT ADVICE

SE207731B

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Moisture Content	Total Recoverable Elements in Soil/Waste
018	0407_TP73_0.5_200619	1	1

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	18

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207731B R0**
Date Received	21/7/2020
Date Reported	29/7/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

SIGNATORIES

[redacted]

Senior Organic Chemist/Metals Chemist

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 24/7/2020

PARAMETER	UOM	LOR	0407_TP73_0.5_20019 SOIL - 19/6/2020 SE207731B.018
Chromium, Cr	mg/kg	0.5	**2.8**

Moisture Content [AN002] Tested: 24/7/2020

PARAMETER	UOM	LOR	0407_TP73_0.5_2006 19 SOIL - 19/6/2020 SE207731B.018
% Moisture	%w/w	1	**6.6**

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE207731B R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	18

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207731B R0**
Date Received	21 Jul 2020
Date Reported	29 Jul 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Extraction Date	Moisture Content	1 item
Duplicate	Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES	1 item

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	1 Soil
Date documentation received	21/7/2020@5:03pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	10°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE207731B R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP73_0.5_200619	SE207731B.018	LB205094	19 Jun 2020	21 Jul 2020	03 Jul 2020	24 Jul 2020†	29 Jul 2020	29 Jul 2020

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP73_0.5_200619	SE207731B.018	LB205130	19 Jun 2020	21 Jul 2020	16 Dec 2020	24 Jul 2020	16 Dec 2020	29 Jul 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No surrogates were required for this job.

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES — **Method: ME-(AU)-[ENV]AN040/AN320**

Sample Number	Parameter	Units	LOR	Result
LB205130.001	Chromium, Cr	mg/kg	0.5	<0.5

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207831B.008	LB205094.011	% Moisture	%w/w	1	4.00508582324	4.0345821325	55	1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207731B.018	LB205130.024	Chromium, Cr	mg/kg	0.5	2.8	2.9	48	4
SE209037.003	LB205130.014	Chromium, Cr	mg/kg	0.5	13.628284626	26.8801551413	32	65 ②

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES — **Method: ME-(AU)-[ENV]AN040/AN320**

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205130.002	Chromium, Cr	mg/kg	0.5	38	38.31	80 - 120	100

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES — **Method: ME-(AU)-[ENV]AN040/AN320**

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208983.001	LB205130.004	Chromium, Cr	mg/kg	0.5	50	0.29485887096	50	100

MATRIX SPIKE DUPLICATES

SE207731B R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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source (Untitled).pdf page 1 SGS Ref: SE207831D_COC

SGS EHS Alexandria Laboratory

SE207831D COC
Received: 21–Jul–2020

SE207831	0407_TP197_0.1_200619	PAHs include B(a)P	38
SE207831	0407_TP197_0.5_200619	PAHs include B(a)P	39
SE207831	0407_TP200_0.5_200618	PAHs include B(a)P	18
SE207831	0407_TP200_1.0_200618	Total and leachable PAHs including B(a)P	46
SE207831	0407_TP209_0.5_200619	PAHs include B(a)P	29
SE207831	0407_TP221_0.5_200619	PAHs include B(a)P	27
SE207831	0407_TP221_1.0_200619	Total and leachable PAHs including B(a)P	47
SE207824	0407_TP231_0.1_200622	PAHs include B(a)P	
SE208161	0407_BH41_0.0_200625	PFOS, PFOA, PfHxS	6
SE208046	0407_QC160_200624	PFOS, PFOA, PfHxS	16
SE207824	0407_QC130_200622	PFOS, PFOA, PfHxS	15

Let me know if you have any questions.

Many thanks,

[redacted]

SLR

[redacted]

Associate - Land Quality & Remediation

Please note in response to the COVID-19 Pandemic and physical distancing recommendations from the Australian Government, SLR is encouraging staff to work remotely and implement flexible working hours if necessary.
If you have received this email outside of regular office hours, it is not expected that you will respond until your own working hours commence.

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WINNERS: RoSPA Gold Award, 2017

WINNERS: International Business Excellence Award, 2016

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SAMPLE RECEIPT ADVICE

SE207831D

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	47

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Tue 21/7/2020
Report Due	Wed 29/7/2020
SGS Reference	**SE207831D**

SUBMISSION DETAILS

This is to confirm that 47 samples were received on Tuesday 21/7/2020. Results are expected to be ready by COB Wednesday 29/7/2020.
Please quote SGS reference SE207831D when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	9 Soil
Date documentation received	21/7/2020@5:03pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	8°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

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SAMPLE RECEIPT ADVICE

SE207831D

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	ASLP (Australian Standard Leaching Procedure) DI	PAH (Polynuclear Aromatic Hydrocarbons) in ASLP DI
018	0407_TP200_0.5_200618	1	22

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE207831D

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	ASLP (Australian Standard Leaching Procedure) DI	Moisture Content	PAH (Polynuclear Aromatic Hydrocarbons) in ASLP DI	PAH (Polynuclear Aromatic Hydrocarbons) in Soil
027	0407_TP221_0.5_200619	1	-	22	-
029	0407_TP209_0.5_200619	1	-	22	-
038	0407_TP197_0.1_200619	1	-	22	-
039	0407_TP197_0.5_200619	1	-	22	-
046	0407_TP200_1.0_200618	1	1	22	26
047	0407_TP221_1.0_200619	1	1	22	26

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	47

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207831D R0**
Date Received	21/7/2020
Date Reported	29/7/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

SIGNATORIES

[redacted]

Organic Section Head

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 28/7/2020

PARAMETER	UOM	LOR	0407_TP200_1.0_20(618 SOIL - 19/6/2020 SE207831D.046	0407_TP221_1.0_20(619 SOIL - 19/6/2020 SE207831D.047
Naphthalene	mg/kg	0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	**0.5**
Pyrene	mg/kg	0.1	<0.1	**0.6**
Benzo(a)anthracene	mg/kg	0.1	<0.1	**0.3**
Chrysene	mg/kg	0.1	<0.1	**0.4**
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	**0.6**
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	**0.2**
Benzo(a)pyrene	mg/kg	0.1	<0.1	**0.5**
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	**0.3**
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	**0.3**
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	**0.6**
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	**0.7**
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	**0.7**
Total PAH (18)	mg/kg	0.8	<0.8	**3.7**
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	**3.7**

Moisture Content [AN002] Tested: 28/7/2020

PARAMETER	UOM	LOR	0407_TP200_1.0_20(618 SOIL - 19/6/2020 SE207831D.046	0407_TP221_1.0_20(619 SOIL - 19/6/2020 SE207831D.047
% Moisture	%w/w	1	**20.7**	**12.9**

ASLP (Australian Standard Leaching Procedure) DI Water [AN007/AS4439.3] Tested: 23/7/2020

PARAMETER	UOM	LOR	0407_TP200_0.5_20(618 SOIL - 18/6/2020 SE207831D.018	0407_TP221_0.5_20(619 SOIL - 19/6/2020 SE207831D.027	0407_TP209_0.5_20(619 SOIL - 19/6/2020 SE207831D.029	0407_TP197_0.1_20(619 SOIL - 19/6/2020 SE207831D.038	0407_TP197_0.5_20(619 SOIL - 19/6/2020 SE207831D.039
pH of solids leachate	pH Units	-	**7.6**	**7.0**	**8.6**	**7.0**	**8.6**

PARAMETER	UOM	LOR	0407_TP200_1.0_20(618 SOIL - 19/6/2020 SE207831D.046	0407_TP221_1.0_20(619 SOIL - 19/6/2020 SE207831D.047
pH of solids leachate	pH Units	-	**5.8**	**6.1**

PAH (Polynuclear Aromatic Hydrocarbons) in ASLP DI Extract [AN420] Tested: 27/7/2020

PARAMETER	UOM	LOR	0407_TP200_0.5_20(618 SOIL - 18/6/2020 SE207831D.018	0407_TP221_0.5_20(619 SOIL - 19/6/2020 SE207831D.027	0407_TP209_0.5_20(619 SOIL - 19/6/2020 SE207831D.029	0407_TP197_0.1_20(619 SOIL - 19/6/2020 SE207831D.038	0407_TP197_0.5_20(619 SOIL - 19/6/2020 SE207831D.039
Naphthalene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total PAH (18)*	µg/L	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	0407_TP200_1.0_20(618 SOIL - 19/6/2020 SE207831D.046	0407_TP221_1.0_20(619 SOIL - 19/6/2020 SE207831D.047
Naphthalene	µg/L	0.1	<0.1	<0.1
2-methylnaphthalene	µg/L	0.1	<0.1	<0.1
1-methylnaphthalene	µg/L	0.1	<0.1	<0.1
Acenaphthylene	µg/L	0.1	<0.1	<0.1
Acenaphthene	µg/L	0.1	<0.1	<0.1
Fluorene	µg/L	0.1	<0.1	<0.1
Phenanthrene	µg/L	0.1	<0.1	<0.1
Anthracene	µg/L	0.1	<0.1	<0.1
Fluoranthene	µg/L	0.1	<0.1	<0.1
Pyrene	µg/L	0.1	<0.1	<0.1
Benzo(a)anthracene	µg/L	0.1	<0.1	<0.1
Chrysene	µg/L	0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	µg/L	0.1	<0.1	<0.1
Benzo(k)fluoranthene	µg/L	0.1	<0.1	<0.1
Benzo(a)pyrene	µg/L	0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1	<0.1
Dibenzo(ah)anthracene	µg/L	0.1	<0.1	<0.1
Benzo(ghi)perylene	µg/L	0.1	<0.1	<0.1
Total PAH (18)*	µg/L	1	<1	<1

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN007/AS4439.3	Contaminants of interest in a waste material are leached out of the waste with a selected leaching solution under controlled conditions. The ratio of sample to extraction fluid is 100 g to 2 L (1 to 20 by mass). The concentration of each contaminant of interest is determined in the leachate by appropriate methods after separation from the sample by filtering. Based on AS4439.3.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN420	Carcinogenic PAHs may be expressed as Benzo(a)pyrene equivalents by applying the BaP toxicity equivalence factor (NEPM 1999, June 2013, B7). These can be reported as the individual PAHs and as a sum of carcinogenic PAHs. The sum is reported three ways, the first assuming all <LOR results are zero, the second assuming all < LOR results are half the LOR and the third assuming all <LOR results are the LOR.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE207831D R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	47

LABORATORY DETAILS

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Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207831D R0**
Date Received	21 Jul 2020
Date Reported	29 Jul 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Extraction Date	ASLP (Australian Standard Leaching Procedure) DI Water	7 items
	Moisture Content	2 items
	PAH (Polynuclear Aromatic Hydrocarbons) in ASLP DI Extract	7 items
	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	2 items
Analysis Date	ASLP (Australian Standard Leaching Procedure) DI Water	7 items
Surrogate	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	2 items

SAMPLE SUMMARY

HOLDING TIME SUMMARY

SE207831D R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

ASLP (Australian Standard Leaching Procedure) DI Water

Method: ME-(AU)-[ENV]AN007/AS4439.3

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP200_0.5_200618	SE207831D.018	LB205010	18 Jun 2020	21 Jul 2020	02 Jul 2020	23 Jul 2020†	02 Jul 2020	29 Jul 2020†
0407_TP221_0.5_200619	SE207831D.027	LB205010	19 Jun 2020	21 Jul 2020	03 Jul 2020	23 Jul 2020†	03 Jul 2020	29 Jul 2020†
0407_TP209_0.5_200619	SE207831D.029	LB205010	19 Jun 2020	21 Jul 2020	03 Jul 2020	23 Jul 2020†	03 Jul 2020	29 Jul 2020†
0407_TP197_0.1_200619	SE207831D.038	LB205010	19 Jun 2020	21 Jul 2020	03 Jul 2020	23 Jul 2020†	03 Jul 2020	29 Jul 2020†
0407_TP197_0.5_200619	SE207831D.039	LB205010	19 Jun 2020	21 Jul 2020	03 Jul 2020	23 Jul 2020†	03 Jul 2020	29 Jul 2020†
0407_TP200_1.0_200618	SE207831D.046	LB205423	19 Jun 2020	21 Jul 2020	03 Jul 2020	28 Jul 2020†	03 Jul 2020	29 Jul 2020†
0407_TP221_1.0_200619	SE207831D.047	LB205423	19 Jun 2020	21 Jul 2020	03 Jul 2020	28 Jul 2020†	03 Jul 2020	29 Jul 2020†

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP200_1.0_200618	SE207831D.046	LB205422	19 Jun 2020	21 Jul 2020	03 Jul 2020	28 Jul 2020†	02 Aug 2020	29 Jul 2020
0407_TP221_1.0_200619	SE207831D.047	LB205422	19 Jun 2020	21 Jul 2020	03 Jul 2020	28 Jul 2020†	02 Aug 2020	29 Jul 2020

PAH (Polynuclear Aromatic Hydrocarbons) in ASLP DI Extract

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP200_0.5_200618	SE207831D.018	LB205233	18 Jun 2020	21 Jul 2020	09 Jul 2020	27 Jul 2020†	05 Sep 2020	29 Jul 2020
0407_TP221_0.5_200619	SE207831D.027	LB205233	19 Jun 2020	21 Jul 2020	10 Jul 2020	27 Jul 2020†	05 Sep 2020	29 Jul 2020
0407_TP209_0.5_200619	SE207831D.029	LB205233	19 Jun 2020	21 Jul 2020	10 Jul 2020	27 Jul 2020†	05 Sep 2020	29 Jul 2020
0407_TP197_0.1_200619	SE207831D.038	LB205233	19 Jun 2020	21 Jul 2020	10 Jul 2020	27 Jul 2020†	05 Sep 2020	29 Jul 2020
0407_TP197_0.5_200619	SE207831D.039	LB205233	19 Jun 2020	21 Jul 2020	10 Jul 2020	27 Jul 2020†	05 Sep 2020	29 Jul 2020
0407_TP200_1.0_200618	SE207831D.046	LB205439	19 Jun 2020	21 Jul 2020	10 Jul 2020	29 Jul 2020†	07 Sep 2020	29 Jul 2020
0407_TP221_1.0_200619	SE207831D.047	LB205439	19 Jun 2020	21 Jul 2020	10 Jul 2020	29 Jul 2020†	07 Sep 2020	29 Jul 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP200_1.0_200618	SE207831D.046	LB205421	19 Jun 2020	21 Jul 2020	03 Jul 2020	28 Jul 2020†	06 Sep 2020	29 Jul 2020
0407_TP221_1.0_200619	SE207831D.047	LB205421	19 Jun 2020	21 Jul 2020	03 Jul 2020	28 Jul 2020†	06 Sep 2020	29 Jul 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

PAH (Polynuclear Aromatic Hydrocarbons) in ASLP DI Extract — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP200_0.5_200618	SE207831D.018	%	40 - 130%	68
	0407_TP221_0.5_200619	SE207831D.027	%	40 - 130%	60
	0407_TP209_0.5_200619	SE207831D.029	%	40 - 130%	72
	0407_TP197_0.1_200619	SE207831D.038	%	40 - 130%	70
	0407_TP197_0.5_200619	SE207831D.039	%	40 - 130%	66
	0407_TP200_1.0_200618	SE207831D.046	%	40 - 130%	68
	0407_TP221_1.0_200619	SE207831D.047	%	40 - 130%	66
d14-p-terphenyl (Surrogate)	0407_TP200_0.5_200618	SE207831D.018	%	40 - 130%	90
	0407_TP221_0.5_200619	SE207831D.027	%	40 - 130%	86
	0407_TP209_0.5_200619	SE207831D.029	%	40 - 130%	96
	0407_TP197_0.1_200619	SE207831D.038	%	40 - 130%	92
	0407_TP197_0.5_200619	SE207831D.039	%	40 - 130%	76
	0407_TP200_1.0_200618	SE207831D.046	%	40 - 130%	90
	0407_TP221_1.0_200619	SE207831D.047	%	40 - 130%	86
d5-nitrobenzene (Surrogate)	0407_TP200_0.5_200618	SE207831D.018	%	40 - 130%	62
	0407_TP221_0.5_200619	SE207831D.027	%	40 - 130%	48
	0407_TP209_0.5_200619	SE207831D.029	%	40 - 130%	62
	0407_TP197_0.1_200619	SE207831D.038	%	40 - 130%	60
	0407_TP197_0.5_200619	SE207831D.039	%	40 - 130%	54
	0407_TP200_1.0_200618	SE207831D.046	%	40 - 130%	62
	0407_TP221_1.0_200619	SE207831D.047	%	40 - 130%	56

PAH (Polynuclear Aromatic Hydrocarbons) in Soil — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP200_1.0_200618	SE207831D.046	%	70 - 130%	18 ①
	0407_TP221_1.0_200619	SE207831D.047	%	70 - 130%	24 ①
d14-p-terphenyl (Surrogate)	0407_TP200_1.0_200618	SE207831D.046	%	70 - 130%	74
	0407_TP221_1.0_200619	SE207831D.047	%	70 - 130%	90
d5-nitrobenzene (Surrogate)	0407_TP200_1.0_200618	SE207831D.046	%	70 - 130%	78
	0407_TP221_1.0_200619	SE207831D.047	%	70 - 130%	80

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in ASLP DI Extract

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB205233.001		Naphthalene	µg/L	0.1	<0.1
		2-methylnaphthalene	µg/L	0.1	<0.1
		1-methylnaphthalene	µg/L	0.1	<0.1
		Acenaphthylene	µg/L	0.1	<0.1
		Acenaphthene	µg/L	0.1	<0.1
		Fluorene	µg/L	0.1	<0.1
		Phenanthrene	µg/L	0.1	<0.1
		Anthracene	µg/L	0.1	<0.1
		Fluoranthene	µg/L	0.1	<0.1
		Pyrene	µg/L	0.1	<0.1
		Benzo(a)anthracene	µg/L	0.1	<0.1
		Chrysene	µg/L	0.1	<0.1
		Benzo(a)pyrene	µg/L	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1
		Dibenzo(ah)anthracene	µg/L	0.1	<0.1
		Benzo(ghi)perylene	µg/L	0.1	<0.1
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	70
		2-fluorobiphenyl (Surrogate)	%	-	74
		d14-p-terphenyl (Surrogate)	%	-	110
LB205439.001		Naphthalene	µg/L	0.1	<0.1
		2-methylnaphthalene	µg/L	0.1	<0.1
		1-methylnaphthalene	µg/L	0.1	<0.1
		Acenaphthylene	µg/L	0.1	<0.1
		Acenaphthene	µg/L	0.1	<0.1
		Fluorene	µg/L	0.1	<0.1
		Phenanthrene	µg/L	0.1	<0.1
		Anthracene	µg/L	0.1	<0.1
		Fluoranthene	µg/L	0.1	<0.1
		Pyrene	µg/L	0.1	<0.1
		Benzo(a)anthracene	µg/L	0.1	<0.1
		Chrysene	µg/L	0.1	<0.1
		Benzo(a)pyrene	µg/L	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1
		Dibenzo(ah)anthracene	µg/L	0.1	<0.1
		Benzo(ghi)perylene	µg/L	0.1	<0.1
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	56
		2-fluorobiphenyl (Surrogate)	%	-	66
		d14-p-terphenyl (Surrogate)	%	-	94

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB205421.001		Naphthalene	mg/kg	0.1	<0.1
		2-methylnaphthalene	mg/kg	0.1	<0.1
		1-methylnaphthalene	mg/kg	0.1	<0.1
		Acenaphthylene	mg/kg	0.1	<0.1
		Acenaphthene	mg/kg	0.1	<0.1
		Fluorene	mg/kg	0.1	<0.1
		Phenanthrene	mg/kg	0.1	<0.1
		Anthracene	mg/kg	0.1	<0.1
		Fluoranthene	mg/kg	0.1	<0.1
		Pyrene	mg/kg	0.1	<0.1
		Benzo(a)anthracene	mg/kg	0.1	<0.1
		Chrysene	mg/kg	0.1	<0.1
		Benzo(a)pyrene	mg/kg	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	98
		2-fluorobiphenyl (Surrogate)	%	-	100
		d14-p-terphenyl (Surrogate)	%	-	98

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Original	Duplicate	Parameter	Units	LOR

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in ASLP DI Extract

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205233.002		Naphthalene	µg/L	0.1	31	40	60 - 140	76
		Acenaphthylene	µg/L	0.1	36	40	60 - 140	90
		Acenaphthene	µg/L	0.1	32	40	60 - 140	80
		Phenanthrene	µg/L	0.1	38	40	60 - 140	95
		Anthracene	µg/L	0.1	31	40	60 - 140	77
		Fluoranthene	µg/L	0.1	36	40	60 - 140	90
		Pyrene	µg/L	0.1	36	40	60 - 140	89
		Benzo(a)pyrene	µg/L	0.1	40	40	60 - 140	101
	Surrogates	d5-nitrobenzene (Surrogate)	µg/L	-	0.4	0.5	40 - 130	86
		2-fluorobiphenyl (Surrogate)	µg/L	-	0.4	0.5	40 - 130	84
		d14-p-terphenyl (Surrogate)	µg/L	-	0.5	0.5	40 - 130	94
LB205439.002		Naphthalene	µg/L	0.1	29	40	60 - 140	74
		Acenaphthylene	µg/L	0.1	37	40	60 - 140	92
		Acenaphthene	µg/L	0.1	38	40	60 - 140	94
		Phenanthrene	µg/L	0.1	39	40	60 - 140	97
		Anthracene	µg/L	0.1	38	40	60 - 140	94
		Fluoranthene	µg/L	0.1	38	40	60 - 140	95
		Pyrene	µg/L	0.1	41	40	60 - 140	103
		Benzo(a)pyrene	µg/L	0.1	47	40	60 - 140	117
	Surrogates	d5-nitrobenzene (Surrogate)	µg/L	-	0.3	0.5	40 - 130	56
		2-fluorobiphenyl (Surrogate)	µg/L	-	0.3	0.5	40 - 130	64
		d14-p-terphenyl (Surrogate)	µg/L	-	0.4	0.5	40 - 130	86

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205421.002		Naphthalene	mg/kg	0.1	4.4	4	60 - 140	111
		Acenaphthylene	mg/kg	0.1	4.2	4	60 - 140	104
		Acenaphthene	mg/kg	0.1	4.7	4	60 - 140	116
		Phenanthrene	mg/kg	0.1	4.6	4	60 - 140	114
		Anthracene	mg/kg	0.1	4.3	4	60 - 140	108
		Fluoranthene	mg/kg	0.1	4.2	4	60 - 140	105
		Pyrene	mg/kg	0.1	4.2	4	60 - 140	106
		Benzo(a)pyrene	mg/kg	0.1	4.6	4	60 - 140	116
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	88
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	94
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	90

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

QC Sample	Sample Number	Parameter	Units	LOR

MATRIX SPIKE DUPLICATES

SE207831D R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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Good morning

Please book these additional jobs in.

Please be very carefully as there are lots of jobs

Regards,

[redacted]
Environment, Health & Safety
Client Manager
Phone: +61 (0)2 8594 0400
Direct:
Mobile: [redacted]
(Please note my new working hours of Mon-Fri 6:00am-2:00pm)



Covid-19 update: SGS Australia is open, with our Business Service Continuity Plans being put in place to ensure your project can be delivered as normal, please click here to see further details on our Business & Services Continuity Plans.

From: [redacted]@slrconsulting.com>
Sent: Tuesday, 21 July 2020 5:03 PM
To: [redacted]@sgs.com>
Cc: [redacted]@slrconsulting.com>
Subject: [EXTERNAL] 610.30041 DHA Randwick - Additional Analysis

*** WARNING: this message is from an EXTERNAL SENDER. Please be cautious, particularly with links and attachments. ***

Hi [redacted]

Can we please schedule the following analyses:

pH, clay content, TOC & CEC:

Report number	Sample ID
SE207695	TP002_0.1_200615
SE207695	TP002_1.5_200615
SE207695	TP005_0.1_200616
SE207695	TP005_1.5_200616
SE207695	TP049_0.1_200617
SE207695	TP049_1.0_200617
SE208047	TP092_0.1_200624
SE208047	TP092_1.0_200624
SE207831	TP220_0.1_200618
SE207831	TP220_1.0_200618
SE207831	TP221_0.1_200619
SE207831	TP221_1.0_200619
SE207998	TP230_0.1_200622
SE207998	TP230_1.8_200622
SE207591	TP018_0.1_200615
SE207591	TP018_1.0_200615
SE208047	TP092_0.1_200624
SE208047	TP092_1.0_200624
SE207911	TP095_0.1_200623
SE207911	TP095_1.0_200623
SE207731	TP073_0.1_200619
SE207731	TP073_1.0_200619
SE208659	TP133_0.1_200701
SE208659	TP133_1.0_200701
SE208142	TP151_0.1_200629
SE208142	TP151_1.0_200629
SE208137	TP183_0.1_200625
SE208137	TP183_0.5_200625

Additional analysis:

Report number	Sample ID	Parameter
SE208081	0407_TP241_1.0_200625	Pb & Zn
SE207731	0407_TP73_0.5_200619	Cr

ASLP Leach:

Report number	Sample ID	Parameter
SE208046	0407_TP237_0.5_200624	8 metals
SE208081	0407_TP241_0.5_200625	8 metals
SE208133	0407_TP111_0.1_200626	8 metals
SE208142	0407_TP256_0.1_200629	8 metals
SE207831	0407_TP222_0.1_200619	8 metals
SE207731	0407_TP73_0.1_200619	8 metals
SE207850	0407_TP162_0.1_200617	PAHs include B(a)P

SE207831	0407_TP197_0.1_200619	PAHs include B(a)P
SE207831	0407_TP197_0.5_200619	PAHs include B(a)P
SE207831	0407_TP200_0.5_200618	PAHs include B(a)P
SE207831	0407_TP200_1.0_200618	Total and leachable PAHs including B(a)P
SE207831	0407_TP209_0.5_200619	PAHs include B(a)P
SE207831	0407_TP221_0.5_200619	PAHs include B(a)P
SE207831	0407_TP221_1.0_200619	Total and leachable PAHs including B(a)P
SE207824	0407_TP231_0.1_200622	PAHs include B(a)P
SE208161	0407_BH41_0.0_200625	PFOS, PFOA, PfHxS
SE208046	0407_QC160_200624	PFOS, PFOA, PfHxS
SE207824	0407_QC130_200622	PFOS, PFOA, PfHxS

Let me know if you have any questions.

Many thanks,

[redacted]

SLR

[redacted]
Associate - Land Quality & Remediation

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SLR Consulting Australia Pty Ltd
Level 2, 15 Astor Terrace, Brisbane, QLD, Australia, 4000

WINNERS: RoSPA Gold Award, 2017
WINNERS : International Business Excellence Award, 2016

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SAMPLE RECEIPT ADVICE

SE207731C

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000671--000673**
Samples	17

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Tue 21/7/2020
Report Due	Wed 29/7/2020
SGS Reference	**SE207731C**

SUBMISSION DETAILS

This is to confirm that 17 samples were received on Tuesday 21/7/2020. Results are expected to be ready by COB Wednesday 29/7/2020.
Please quote SGS reference SE207731C when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	1 Soil
Date documentation received	21/7/2020@5:03pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	10°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

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SAMPLE RECEIPT ADVICE

SE207731C

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	ASLP (Australian Standard Leaching Procedure) DI	Mercury in ASLP DI Water Extract	Metals in ASLP DI Extract by ICPOES
011	0407_TP73_0.1_200619	1	1	7

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	17

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207731C R0**
Date Received	21/7/2020
Date Reported	29/7/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

SIGNATORIES

[redacted]

Senior Organic Chemist/Metals Chemist

Metals/Inorganics Team Leader

ASLP (Australian Standard Leaching Procedure) DI Water [AN007/AS4439.3] Tested: 23/7/2020

PARAMETER	UOM	LOR	0407_TP73_0.1_2006 19 SOIL - 19/6/2020 SE207731C.011
pH of solids leachate	pH Units	-	**7.2**

Metals in ASLP DI Extract by ICPOES [AN320] Tested: 29/7/2020

PARAMETER	UOM	LOR	0407_TP73_0.1_2006 19 SOIL - 19/6/2020 SE207731C.011
Arsenic, As	mg/L	0.02	<0.02
Cadmium, Cd	mg/L	0.001	<0.001
Chromium, Cr	mg/L	0.005	**0.086**
Copper, Cu	mg/L	0.005	<0.005
Lead, Pb	mg/L	0.02	**0.04**
Nickel, Ni	mg/L	0.005	<0.005
Zinc, Zn	mg/L	0.01	**0.06**

Mercury in ASLP DI Water Extract [AN311(Perth) /AN312] Tested: 29/7/2020

PARAMETER	UOM	LOR	0407_TP73_0.1_2006 19 SOIL - 19/6/2020 SE207731C.011
Mercury	mg/L	0.0001	<0.0001

METHOD	METHODOLOGY SUMMARY
AN007/AS4439.3	Contaminants of interest in a waste material are leached out of the waste with a selected leaching solution under controlled conditions. The ratio of sample to extraction fluid is 100 g to 2 L (1 to 20 by mass). The concentration of each contaminant of interest is determined in the leachate by appropriate methods after separation from the sample by filtering. Based on AS4439.3.
AN020	Unpreserved water sample is filtered through a 0.45µm membrane filter and acidified with nitric acid similar to APHA3030B.
AN311(Perth) /AN312	Mercury by Cold Vapour AAS in Waters: Mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500.
AN320	Metals by ICP-OES: Samples are preserved with 10% nitric acid for a wide range of metals and some non-metals. This solution is measured by Inductively Coupled Plasma. Solutions are aspirated into an argon plasma at 8000-10000K and emit characteristic energy or light as a result of electron transitions through unique energy levels. The emitted light is focused onto a diffraction grating where it is separated into components .
AN320	Photomultipliers or CCDs are used to measure the light intensity at specific wavelengths. This intensity is directly proportional to concentration. Corrections are required to compensate for spectral overlap between elements . Reference APHA 3120 B.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety .

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STATEMENT OF QA/QC PERFORMANCE

SE207731C R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	17

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207731C R0**
Date Received	21 Jul 2020
Date Reported	29 Jul 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Extraction Date	ASLP (Australian Standard Leaching Procedure) DI Water	1 item
	Mercury in ASLP DI Water Extract	1 item
Analysis Date	ASLP (Australian Standard Leaching Procedure) DI Water	1 item
	Mercury in ASLP DI Water Extract	1 item

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	1 Soil
Date documentation received	21/7/2020@5:03pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	10°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE207731C R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

ASLP (Australian Standard Leaching Procedure) DI Water

Method: ME-(AU)-[ENV]AN007/AS4439.3

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP73_0.1_200619	SE207731C.011	LB205010	19 Jun 2020	21 Jul 2020	03 Jul 2020	23 Jul 2020†	03 Jul 2020	29 Jul 2020†

Mercury in ASLP DI Water Extract

Method: ME-(AU)-[ENV]AN311(Perth) /AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP73_0.1_200619	SE207731C.011	LB205432	19 Jun 2020	21 Jul 2020	24 Jul 2020	29 Jul 2020†	24 Jul 2020	29 Jul 2020†

Metals in ASLP DI Extract by ICPOES

Method: ME-(AU)-[ENV]AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP73_0.1_200619	SE207731C.011	LB205430	19 Jun 2020	21 Jul 2020	16 Dec 2020	29 Jul 2020	25 Jan 2021	29 Jul 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No surrogates were required for this job.

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Metals in ASLP DI Extract by ICPOES — **Method: ME-(AU)-[ENV]AN320**

Sample Number	Parameter	Units	LOR	Result
LB205430.001	Arsenic, As	mg/L	0.02	<0.02
	Cadmium, Cd	mg/L	0.001	<0.001
	Chromium, Cr	mg/L	0.005	<0.005
	Copper, Cu	mg/L	0.005	<0.005
	Lead, Pb	mg/L	0.02	<0.02
	Nickel, Ni	mg/L	0.005	<0.005
	Zinc, Zn	mg/L	0.01	<0.01

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No duplicates were required for this job.

LABORATORY CONTROL SAMPLES

SE207731C R0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Sample Number	Parameter	Units	LOR

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spikes were required for this job.

MATRIX SPIKE DUPLICATES

SE207731C R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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Hi [redacted]

Can we please schedule analysis for the samples referenced in the table below on a three day turn around.

Sample ID	Lab Report	Analysis Request
0407_QC170_200626	SE208133	Suite A
0407_QC171_200626	SE208133	Suite A
0407_QC175_200626	SE208133	Suite A
0407_TP206_0.5_200618	SE207831	Suite A
BH011_1.0_200625	SE208848	OCP/OPP

Additionally, I'm trying to track down RWBB_QC201_200615. Can you tell me if it was sent to Eurofins as per COC?

Thanks for your help,



SLR

[redacted]
Project Consultant - Land Quality & Remediation

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SLR is encouraging staff to work remotely and implement flexible working hours if necessary.
If you have received this email outside of regular office hours, it is not expected that you will respond until your own working hours commence.

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WINNERS: RoSPA Gold Award, 2017 WINNERS: International Business Excellence Award, 2016

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SAMPLE RECEIPT ADVICE

SE208848A

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks - Additional**
Order Number	**610.30041**
Samples	32

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Fri 7/8/2020
Report Due	Wed 12/8/2020
SGS Reference	**SE208848A**

SUBMISSION DETAILS

This is to confirm that 32 samples were received on Friday 7/8/2020. Results are expected to be ready by COB Wednesday 12/8/2020. Please quote SGS reference SE208848A when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	1 Soil
Date documentation received	7/8/2020@11:31AM	Type of documentation received	Email
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	3.7°C	Sufficient sample for analysis	Yes
Turnaround time requested	Three Days		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

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SAMPLE RECEIPT ADVICE

SE208848A

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks - Additional

SUMMARY OF ANALYSIS

No.	Sample ID	Moisture Content	OC Pesticides in Soil	OP Pesticides in Soil
032	0407_BH11_1.0_200625	1	29	14

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks - Additional**
Order Number	**610.30041**
Samples	32

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208848A R0**
Date Received	7/8/2020
Date Reported	12/8/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

SIGNATORIES

[redacted]

Organic Section Head

OC Pesticides in Soil [AN420] Tested: 10/8/2020

PARAMETER	UOM	LOR	0407_BH11_1.0_200(25 SOIL - 25/6/2020 SE208848A.032
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1
Lindane	mg/kg	0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1
Aldrin	mg/kg	0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2
Endrin	mg/kg	0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1
Isodrin	mg/kg	0.1	<0.1
Mirex	mg/kg	0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1

OP Pesticides in Soil [AN420] Tested: 10/8/2020

PARAMETER	UOM	LOR	0407_BH11_1.0_200(25 SOIL - 25/6/2020 SE208848A.032
Dichlorvos	mg/kg	0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2
Malathion	mg/kg	0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2
Methidathion	mg/kg	0.5	<0.5
Ethion	mg/kg	0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7

Moisture Content [AN002] Tested: 10/8/2020

PARAMETER	UOM	LOR	0407_BH11_1.0_2006 25 SOIL - 25/6/2020 SE208848A.032
% Moisture	%w/w	1	**1.0**

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE208848A R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks - Additional**
Order Number	**610.30041**
Samples	32

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208848A R0**
Date Received	07 Aug 2020
Date Reported	12 Aug 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Extraction Date	Moisture Content	1 item
	OC Pesticides in Soil	1 item
	OP Pesticides in Soil	1 item

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	1 Soil
Date documentation received	7/8/2020@11:31AM	Type of documentation received	Email
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	3.7°C	Sufficient sample for analysis	Yes
Turnaround time requested	Three Days		

HOLDING TIME SUMMARY

SE208848A R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH11_1.0_200625	SE208848A.032	LB206377	25 Jun 2020	07 Aug 2020	09 Jul 2020	10 Aug 2020†	15 Aug 2020	11 Aug 2020

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH11_1.0_200625	SE208848A.032	LB206416	25 Jun 2020	07 Aug 2020	09 Jul 2020	10 Aug 2020†	19 Sep 2020	11 Aug 2020

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH11_1.0_200625	SE208848A.032	LB206416	25 Jun 2020	07 Aug 2020	09 Jul 2020	10 Aug 2020†	19 Sep 2020	12 Aug 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_BH11_1.0_200625	SE208848A.032	%	60 - 130%	106

OP Pesticides in Soil — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_BH11_1.0_200625	SE208848A.032	%	60 - 130%	93
d14-p-terphenyl (Surrogate)	0407_BH11_1.0_200625	SE208848A.032	%	60 - 130%	87

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB206416.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	107

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB206416.001		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	84
		d14-p-terphenyl (Surrogate)	%	-	100

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208848A.032	LB206416.012		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.16	0.16	30	2

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208848A.032	LB206416.014		Dichlorvos	mg/kg	0.5	<0.5	0	200	0
			Dimethoate	mg/kg	0.5	<0.5	0	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	0.0111794994	200	0
			Fenitrothion	mg/kg	0.2	<0.2	0	200	0
			Malathion	mg/kg	0.2	<0.2	0	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	0	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	0	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	0	200	0
			Methidathion	mg/kg	0.5	<0.5	0	200	0
			Ethion	mg/kg	0.2	<0.2	0	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	0	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	0	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.4634638655	30	0
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4096861651	30	6

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206416.002		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	89
		Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	97
		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	91
		Dieldrin	mg/kg	0.2	<0.2	0.2	60 - 140	96
		Endrin	mg/kg	0.2	<0.2	0.2	60 - 140	90
		p,p'-DDT	mg/kg	0.1	0.1	0.2	60 - 140	73
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.16	0.15	40 - 130	103

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206416.002		Dichlorvos	mg/kg	0.5	1.7	2	60 - 140	85
		Diazinon (Dimpylate)	mg/kg	0.5	2.2	2	60 - 140	110
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.0	2	60 - 140	102
		Ethion	mg/kg	0.2	1.9	2	60 - 140	96
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	84
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	86

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

QC Sample	Sample Number	Parameter	Units	LOR

MATRIX SPIKE DUPLICATES

SE208848A R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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Hi [redacted]

Can we please schedule analysis for the samples referenced in the table below on a three day turn around.

Sample ID	Lab Report	Analysis Request
0407_QC170_200626	SE208133	Suite A
0407_QC171_200626	SE208133	Suite A
0407_QC175_200626	SE208133	Suite A
0407_TP206_0.5_200618	SE207831	Suite A
BH011_1.0_200625	SE208848	OCP/OPP

Additionally, I'm trying to track down RWBB_QC201_200615. Can you tell me if it was sent to Eurofins as per COC?

Thanks for your help,

SGS EHS Alexandria Laboratory

SE208133B COC
Received: 10–Aug–2020

SLR

[redacted]
Project Consultant - Land Quality & Remediation

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WINNERS: RoSPA Gold Award, 2017

WINNERS: International Business Excellence Award, 2016

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SAMPLE RECEIPT ADVICE

SE208133B

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks-Addtional**
Order Number	**610.30041**
Samples	25

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Fri 7/8/2020
Report Due	Wed 12/8/2020
SGS Reference	**SE208133B**

SUBMISSION DETAILS

This is to confirm that 25 samples were received on Friday 7/8/2020. Results are expected to be ready by COB Wednesday 12/8/2020. Please quote SGS reference SE208133B when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	3 Soil
Date documentation received	7/8/2020@11:31AM	Type of documentation received	Email
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	3.7°C	Sufficient sample for analysis	Yes
Turnaround time requested	Three Days		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

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SAMPLE RECEIPT ADVICE

SE208133B

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks-Addtional

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	Speciated Phenols in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
023	0407_QC170_200626	29	14	26	11	18	10	81	7
024	0407_QC171_200626	29	14	26	11	18	10	81	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE208133B

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks-Addtional

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	Speciated Phenols in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
025	0407_QC175_200626	29	14	26	11	18	10	81	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
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SAMPLE RECEIPT ADVICE

SE208133B

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks-Addtional

SUMMARY OF ANALYSIS

No.	Sample ID	Mercury in Soil	Moisture Content	Total Recoverable Elements in Soil/Waste
023	0407_QC170_200626	1	1	7
024	0407_QC171_200626	1	1	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE208133B

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks-Addtional

SUMMARY OF ANALYSIS

No.	Sample ID	Mercury in Soil	Moisture Content	Total Recoverable Elements in Soil/Waste
025	0407_QC175_200626	1	1	7

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks-Addtional**
Order Number	**610.30041**
Samples	25

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208133B R0**
Date Received	7/8/2020
Date Reported	12/8/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

SIGNATORIES

[redacted]

Chemist | Senior Organic Chemist/Metals Chemist | Metals/Inorganics Team Leader

[redacted]

Organic Section Head

VOC's in Soil [AN433] Tested: 10/8/2020

PARAMETER	UOM	LOR	0407_QC170_20062(SOIL - 26/6/2020 SE208133B.023	0407_QC171_20062(SOIL - 26/6/2020 SE208133B.024	0407_QC175_20062(SOIL - 26/6/2020 SE208133B.025
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1

VOC's in Soil [AN433] Tested: 10/8/2020 (continued)

PARAMETER	UOM	LOR	0407_QC170_20062(SOIL - 26/6/2020 SE208133B.023	0407_QC171_20062(SOIL - 26/6/2020 SE208133B.024	0407_QC175_20062(SOIL - 26/6/2020 SE208133B.025
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6
Total VOC*	mg/kg	24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 10/8/2020

PARAMETER	UOM	LOR	0407_QC170_20062(SOIL - 26/6/2020 SE208133B.023	0407_QC171_20062(SOIL - 26/6/2020 SE208133B.024	0407_QC175_20062(SOIL - 26/6/2020 SE208133B.025
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 10/8/2020

PARAMETER	UOM	LOR	0407_QC170_20062(SOIL - 26/6/2020 SE208133B.023	0407_QC171_20062(SOIL - 26/6/2020 SE208133B.024	0407_QC175_20062(SOIL - 26/6/2020 SE208133B.025
TRH C10-C14	mg/kg	20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 10/8/2020

PARAMETER	UOM	LOR	0407_QC170_20062(SOIL - 26/6/2020 SE208133B.023	0407_QC171_20062(SOIL - 26/6/2020 SE208133B.024	0407_QC175_20062(SOIL - 26/6/2020 SE208133B.025
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	**0.2**	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	**0.5**	<0.1
Pyrene	mg/kg	0.1	<0.1	**0.5**	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	**0.2**	<0.1
Chrysene	mg/kg	0.1	<0.1	**0.3**	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	**0.2**	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	**0.2**	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	**0.3**	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	**0.2**	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	**0.2**	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	**0.3**	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	**0.4**	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	**0.4**	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	**2.7**	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	**2.7**	<0.8

Speciated Phenols in Soil [AN420] Tested: 10/8/2020

PARAMETER	UOM	LOR	0407_QC170_20062(SOIL - 26/6/2020 SE208133B.023	0407_QC171_20062(SOIL - 26/6/2020 SE208133B.024	0407_QC175_20062(SOIL - 26/6/2020 SE208133B.025
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2

OC Pesticides in Soil [AN420] Tested: 10/8/2020

PARAMETER	UOM	LOR	0407_QC170_20062(SOIL - 26/6/2020 SE208133B.023	0407_QC171_20062(SOIL - 26/6/2020 SE208133B.024	0407_QC175_20062(SOIL - 26/6/2020 SE208133B.025
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1

OP Pesticides in Soil [AN420] Tested: 10/8/2020

PARAMETER	UOM	LOR	0407_QC170_20062(SOIL - 26/6/2020 SE208133B.023	0407_QC171_20062(SOIL - 26/6/2020 SE208133B.024	0407_QC175_20062(SOIL - 26/6/2020 SE208133B.025
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7

PCBs in Soil [AN420] Tested: 10/8/2020

PARAMETER	UOM	LOR	0407_QC170_20062(SOIL - 26/6/2020 SE208133B.023	0407_QC171_20062(SOIL - 26/6/2020 SE208133B.024	0407_QC175_20062(SOIL - 26/6/2020 SE208133B.025
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 10/8/2020

PARAMETER	UOM	LOR	0407_QC170_20062(SOIL - 26/6/2020 SE208133B.023	0407_QC171_20062(SOIL - 26/6/2020 SE208133B.024	0407_QC175_20062(SOIL - 26/6/2020 SE208133B.025
Arsenic, As	mg/kg	1	<1	**8**	<1
Cadmium, Cd	mg/kg	0.3	<0.3	**0.4**	<0.3
Chromium, Cr	mg/kg	0.5	**2.0**	**24**	<0.5
Copper, Cu	mg/kg	0.5	**6.4**	**61**	<0.5
Lead, Pb	mg/kg	1	**26**	**100**	<1
Nickel, Ni	mg/kg	0.5	**0.8**	**13**	<0.5
Zinc, Zn	mg/kg	2	**20**	**270**	<2.0

Mercury in Soil [AN312] Tested: 10/8/2020

PARAMETER	UOM	LOR	0407_QC170_20062(SOIL - 26/6/2020 SE208133B.023	0407_QC171_20062(SOIL - 26/6/2020 SE208133B.024	0407_QC175_20062(SOIL - 26/6/2020 SE208133B.025
Mercury	mg/kg	0.05	**0.12**	**0.12**	<0.05

Moisture Content [AN002] Tested: 10/8/2020

PARAMETER	UOM	LOR	0407_QC170_20062(SOIL - 26/6/2020 SE208133B.023	0407_QC171_20062(SOIL - 26/6/2020 SE208133B.024	0407_QC175_20062(SOIL - 26/6/2020 SE208133B.025
% Moisture	%w/w	1	**5.3**	**18.4**	**2.8**

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid , mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser . Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents .
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS /ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE208133B R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks-Addtional**
Order Number	**610.30041**
Samples	25

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208133B R0**
Date Received	07 Aug 2020
Date Reported	12 Aug 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Extraction Date	Mercury in Soil	3 items
	Moisture Content	3 items
	OC Pesticides in Soil	3 items
	OP Pesticides in Soil	3 items
	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	3 items
	PCBs in Soil	3 items
	Speciated Phenols in Soil	3 items
	TRH (Total Recoverable Hydrocarbons) in Soil	3 items
	VOC's in Soil	3 items
	Volatile Petroleum Hydrocarbons in Soil	3 items
Analysis Date	Mercury in Soil	3 items

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	3 Soil
Date documentation received	7/8/2020@11:31AM	Type of documentation received	Email
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	3.7°C	Sufficient sample for analysis	Yes
Turnaround time requested	Three Days		

HOLDING TIME SUMMARY

SE208133B R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC170_200626	SE208133B.023	LB206420	26 Jun 2020	07 Aug 2020	24 Jul 2020	10 Aug 2020†	24 Jul 2020	11 Aug 2020†
0407_QC171_200626	SE208133B.024	LB206420	26 Jun 2020	07 Aug 2020	24 Jul 2020	10 Aug 2020†	24 Jul 2020	11 Aug 2020†
0407_QC175_200626	SE208133B.025	LB206420	26 Jun 2020	07 Aug 2020	24 Jul 2020	10 Aug 2020†	24 Jul 2020	11 Aug 2020†

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC170_200626	SE208133B.023	LB206377	26 Jun 2020	07 Aug 2020	10 Jul 2020	10 Aug 2020†	15 Aug 2020	11 Aug 2020
0407_QC171_200626	SE208133B.024	LB206377	26 Jun 2020	07 Aug 2020	10 Jul 2020	10 Aug 2020†	15 Aug 2020	11 Aug 2020
0407_QC175_200626	SE208133B.025	LB206377	26 Jun 2020	07 Aug 2020	10 Jul 2020	10 Aug 2020†	15 Aug 2020	11 Aug 2020

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC170_200626	SE208133B.023	LB206416	26 Jun 2020	07 Aug 2020	10 Jul 2020	10 Aug 2020†	19 Sep 2020	11 Aug 2020
0407_QC171_200626	SE208133B.024	LB206416	26 Jun 2020	07 Aug 2020	10 Jul 2020	10 Aug 2020†	19 Sep 2020	11 Aug 2020
0407_QC175_200626	SE208133B.025	LB206416	26 Jun 2020	07 Aug 2020	10 Jul 2020	10 Aug 2020†	19 Sep 2020	11 Aug 2020

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC170_200626	SE208133B.023	LB206416	26 Jun 2020	07 Aug 2020	10 Jul 2020	10 Aug 2020†	19 Sep 2020	12 Aug 2020
0407_QC171_200626	SE208133B.024	LB206416	26 Jun 2020	07 Aug 2020	10 Jul 2020	10 Aug 2020†	19 Sep 2020	12 Aug 2020
0407_QC175_200626	SE208133B.025	LB206416	26 Jun 2020	07 Aug 2020	10 Jul 2020	10 Aug 2020†	19 Sep 2020	12 Aug 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC170_200626	SE208133B.023	LB206416	26 Jun 2020	07 Aug 2020	10 Jul 2020	10 Aug 2020†	19 Sep 2020	12 Aug 2020
0407_QC171_200626	SE208133B.024	LB206416	26 Jun 2020	07 Aug 2020	10 Jul 2020	10 Aug 2020†	19 Sep 2020	12 Aug 2020
0407_QC175_200626	SE208133B.025	LB206416	26 Jun 2020	07 Aug 2020	10 Jul 2020	10 Aug 2020†	19 Sep 2020	12 Aug 2020

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC170_200626	SE208133B.023	LB206416	26 Jun 2020	07 Aug 2020	10 Jul 2020	10 Aug 2020†	19 Sep 2020	11 Aug 2020
0407_QC171_200626	SE208133B.024	LB206416	26 Jun 2020	07 Aug 2020	10 Jul 2020	10 Aug 2020†	19 Sep 2020	11 Aug 2020
0407_QC175_200626	SE208133B.025	LB206416	26 Jun 2020	07 Aug 2020	10 Jul 2020	10 Aug 2020†	19 Sep 2020	11 Aug 2020

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC170_200626	SE208133B.023	LB206416	26 Jun 2020	07 Aug 2020	10 Jul 2020	10 Aug 2020†	19 Sep 2020	11 Aug 2020
0407_QC171_200626	SE208133B.024	LB206416	26 Jun 2020	07 Aug 2020	10 Jul 2020	10 Aug 2020†	19 Sep 2020	11 Aug 2020
0407_QC175_200626	SE208133B.025	LB206416	26 Jun 2020	07 Aug 2020	10 Jul 2020	10 Aug 2020†	19 Sep 2020	11 Aug 2020

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC170_200626	SE208133B.023	LB206418	26 Jun 2020	07 Aug 2020	23 Dec 2020	10 Aug 2020	23 Dec 2020	11 Aug 2020
0407_QC171_200626	SE208133B.024	LB206418	26 Jun 2020	07 Aug 2020	23 Dec 2020	10 Aug 2020	23 Dec 2020	11 Aug 2020
0407_QC175_200626	SE208133B.025	LB206418	26 Jun 2020	07 Aug 2020	23 Dec 2020	10 Aug 2020	23 Dec 2020	11 Aug 2020

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC170_200626	SE208133B.023	LB206416	26 Jun 2020	07 Aug 2020	10 Jul 2020	10 Aug 2020†	19 Sep 2020	11 Aug 2020
0407_QC171_200626	SE208133B.024	LB206416	26 Jun 2020	07 Aug 2020	10 Jul 2020	10 Aug 2020†	19 Sep 2020	11 Aug 2020
0407_QC175_200626	SE208133B.025	LB206416	26 Jun 2020	07 Aug 2020	10 Jul 2020	10 Aug 2020†	19 Sep 2020	11 Aug 2020

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC170_200626	SE208133B.023	LB206415	26 Jun 2020	07 Aug 2020	10 Jul 2020	10 Aug 2020†	19 Sep 2020	11 Aug 2020
0407_QC171_200626	SE208133B.024	LB206415	26 Jun 2020	07 Aug 2020	10 Jul 2020	10 Aug 2020†	19 Sep 2020	11 Aug 2020
0407_QC175_200626	SE208133B.025	LB206415	26 Jun 2020	07 Aug 2020	10 Jul 2020	10 Aug 2020†	19 Sep 2020	11 Aug 2020

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC170_200626	SE208133B.023	LB206415	26 Jun 2020	07 Aug 2020	10 Jul 2020	10 Aug 2020†	19 Sep 2020	11 Aug 2020
0407_QC171_200626	SE208133B.024	LB206415	26 Jun 2020	07 Aug 2020	10 Jul 2020	10 Aug 2020†	19 Sep 2020	11 Aug 2020
0407_QC175_200626	SE208133B.025	LB206415	26 Jun 2020	07 Aug 2020	10 Jul 2020	10 Aug 2020†	19 Sep 2020	11 Aug 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_QC170_200626	SE208133B.023	%	60 - 130%	111
	0407_QC171_200626	SE208133B.024	%	60 - 130%	119
	0407_QC175_200626	SE208133B.025	%	60 - 130%	107

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_QC170_200626	SE208133B.023	%	60 - 130%	93
	0407_QC171_200626	SE208133B.024	%	60 - 130%	88
	0407_QC175_200626	SE208133B.025	%	60 - 130%	91
d14-p-terphenyl (Surrogate)	0407_QC170_200626	SE208133B.023	%	60 - 130%	87
	0407_QC171_200626	SE208133B.024	%	60 - 130%	85
	0407_QC175_200626	SE208133B.025	%	60 - 130%	88

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_QC170_200626	SE208133B.023	%	70 - 130%	93
	0407_QC171_200626	SE208133B.024	%	70 - 130%	88
	0407_QC175_200626	SE208133B.025	%	70 - 130%	91
d14-p-terphenyl (Surrogate)	0407_QC170_200626	SE208133B.023	%	70 - 130%	87
	0407_QC171_200626	SE208133B.024	%	70 - 130%	85
	0407_QC175_200626	SE208133B.025	%	70 - 130%	88
d5-nitrobenzene (Surrogate)	0407_QC170_200626	SE208133B.023	%	70 - 130%	88
	0407_QC171_200626	SE208133B.024	%	70 - 130%	86
	0407_QC175_200626	SE208133B.025	%	70 - 130%	87

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_QC170_200626	SE208133B.023	%	60 - 130%	111
	0407_QC171_200626	SE208133B.024	%	60 - 130%	119
	0407_QC175_200626	SE208133B.025	%	60 - 130%	107

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	0407_QC170_200626	SE208133B.023	%	70 - 130%	86
	0407_QC171_200626	SE208133B.024	%	70 - 130%	79
	0407_QC175_200626	SE208133B.025	%	70 - 130%	89
d5-phenol (Surrogate)	0407_QC170_200626	SE208133B.023	%	50 - 130%	83
	0407_QC171_200626	SE208133B.024	%	50 - 130%	79
	0407_QC175_200626	SE208133B.025	%	50 - 130%	86

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_QC170_200626	SE208133B.023	%	60 - 130%	86
	0407_QC171_200626	SE208133B.024	%	60 - 130%	82
	0407_QC175_200626	SE208133B.025	%	60 - 130%	87
d4-1,2-dichloroethane (Surrogate)	0407_QC170_200626	SE208133B.023	%	60 - 130%	84
	0407_QC171_200626	SE208133B.024	%	60 - 130%	81
	0407_QC175_200626	SE208133B.025	%	60 - 130%	84
d8-toluene (Surrogate)	0407_QC170_200626	SE208133B.023	%	60 - 130%	85
	0407_QC171_200626	SE208133B.024	%	60 - 130%	82
	0407_QC175_200626	SE208133B.025	%	60 - 130%	87

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_QC170_200626	SE208133B.023	%	60 - 130%	86
	0407_QC171_200626	SE208133B.024	%	60 - 130%	82
	0407_QC175_200626	SE208133B.025	%	60 - 130%	87
d4-1,2-dichloroethane (Surrogate)	0407_QC170_200626	SE208133B.023	%	60 - 130%	84
	0407_QC171_200626	SE208133B.024	%	60 - 130%	81
	0407_QC175_200626	SE208133B.025	%	60 - 130%	84
d8-toluene (Surrogate)	0407_QC170_200626	SE208133B.023	%	60 - 130%	85
	0407_QC171_200626	SE208133B.024	%	60 - 130%	82
	0407_QC175_200626	SE208133B.025	%	60 - 130%	87

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result
LB206420.001	Mercury	mg/kg	0.05	<0.05

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB206416.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	107

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB206416.001		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	84
		d14-p-terphenyl (Surrogate)	%	-	100

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB206416.001	Naphthalene	mg/kg	0.1	<0.1
	2-methylnaphthalene	mg/kg	0.1	<0.1
	1-methylnaphthalene	mg/kg	0.1	<0.1
	Acenaphthylene	mg/kg	0.1	<0.1
	Acenaphthene	mg/kg	0.1	<0.1
	Fluorene	mg/kg	0.1	<0.1
	Phenanthrene	mg/kg	0.1	<0.1
	Anthracene	mg/kg	0.1	<0.1
	Fluoranthene	mg/kg	0.1	<0.1
	Pyrene	mg/kg	0.1	<0.1
	Benzo(a)anthracene	mg/kg	0.1	<0.1
	Chrysene	mg/kg	0.1	<0.1
	Benzo(a)pyrene	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB206416.001		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	90
		2-fluorobiphenyl (Surrogate)	%	-	84
		d14-p-terphenyl (Surrogate)	%	-	100

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB206416.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	107

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB206416.001		Phenol	mg/kg	0.5	<0.5
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5
		2-nitrophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
		Pentachlorophenol	mg/kg	0.5	<0.5
		2,4-dinitrophenol	mg/kg	2	<2
		4-chloro-3-methylphenol	mg/kg	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	77
		d5-phenol (Surrogate)	%	-	76

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB206418.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB206416.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number	Parameter	Units	LOR

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB206415.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		o-xylene	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB206415.001	Oxygenated Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	86
		d8-toluene (Surrogate)	%	-	81
		Bromofluorobenzene (Surrogate)	%	-	85
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB206415.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	86

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208133B.025	LB206420.008	Mercury	mg/kg	0.05	<0.05	<0.05	200	0

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208848A.032	LB206416.012		Hexachlorobenzene (HCB)	mg/kg	0.1	0	0	200	0
			Alpha BHC	mg/kg	0.1	0	0	200	0
			Lindane	mg/kg	0.1	0	0	200	0
			Heptachlor	mg/kg	0.1	0	0	200	0
			Aldrin	mg/kg	0.1	0	0	200	0
			Beta BHC	mg/kg	0.1	0	0	200	0
			Delta BHC	mg/kg	0.1	0	0	200	0
			Heptachlor epoxide	mg/kg	0.1	0	0	200	0
			o,p'-DDE	mg/kg	0.1	0	0	200	0
			Alpha Endosulfan	mg/kg	0.2	0	0	200	0
			Gamma Chlordane	mg/kg	0.1	0	0	200	0
			Alpha Chlordane	mg/kg	0.1	0	0	200	0
			trans-Nonachlor	mg/kg	0.1	0	0	200	0
			p,p'-DDE	mg/kg	0.1	0	0	200	0
			Dieldrin	mg/kg	0.2	0	0	200	0
			Endrin	mg/kg	0.2	0	0	200	0
			o,p'-DDD	mg/kg	0.1	0	0	200	0
			o,p'-DDT	mg/kg	0.1	0	0	200	0
			Beta Endosulfan	mg/kg	0.2	0	0	200	0
			p,p'-DDD	mg/kg	0.1	0	0	200	0
			p,p'-DDT	mg/kg	0.1	0	0	200	0
			Endosulfan sulphate	mg/kg	0.1	0	0	200	0
			Endrin Aldehyde	mg/kg	0.1	0	0	200	0
			Methoxychlor	mg/kg	0.1	0	0	200	0
			Endrin Ketone	mg/kg	0.1	0	0	200	0
			Isodrin	mg/kg	0.1	0	0	200	0
			Mirex	mg/kg	0.1	0	0	200	0
			Total CLP OC Pesticides	mg/kg	1	0	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.159	0.163	30	2

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208848A.032	LB206416.014		Dichlorvos	mg/kg	0.5	0	0	200	0
			Dimethoate	mg/kg	0.5	0	0	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	0.012093621	90.011179499	4 200	0
			Fenitrothion	mg/kg	0.2	0	0	200	0
			Malathion	mg/kg	0.2	0	0	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	0	0	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	0	0	200	0
			Bromophos Ethyl	mg/kg	0.2	0	0	200	0
			Methidathion	mg/kg	0.5	0	0	200	0
			Ethion	mg/kg	0.2	0	0	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	0	0	200	0
			Total OP Pesticides*	mg/kg	1.7	0	0	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.465442870	30.463463865	5 30	0
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.437112183	20.409686165	1 30	6

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE1207831E.04	LB206416.013	Phenol	mg/kg	0.5	0.01	0.01	200	0
8		2-methyl phenol (o-cresol)	mg/kg	0.5	0	0	200	0
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	0	0	200	0
		Total Cresol	mg/kg	1.5	0	0	200	0
		2-chlorophenol	mg/kg	0.5	0	0	200	0
		2,4-dimethylphenol	mg/kg	0.5	0	0	200	0
		2,6-dichlorophenol	mg/kg	0.5	0	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil (continued) — Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE1207831E.04	LB206416.013		2,4-dichlorophenol	mg/kg	0.5	0	0	200	0
8			2,4,6-trichlorophenol	mg/kg	0.5	0	0	200	0
			2-nitrophenol	mg/kg	0.5	0	0	200	0
			4-nitrophenol	mg/kg	1	0	0	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	0	0	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	0	0	200	0
			Pentachlorophenol	mg/kg	0.5	0	0	200	0
			2,4-dinitrophenol	mg/kg	2	0	0	200	0
			4-chloro-3-methylphenol	mg/kg	2	0	0	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.83	3.7	30	3
			d5-phenol (Surrogate)	mg/kg	-	1.53	1.46	30	5

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES — Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208133B.025	LB206418.009	Arsenic, As	mg/kg	1	<1	<1	200	0
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	<0.5	<0.5	200	0
		Copper, Cu	mg/kg	0.5	<0.5	<0.5	151	0
		Nickel, Ni	mg/kg	0.5	<0.5	<0.5	200	0
		Lead, Pb	mg/kg	1	<1	<1	189	0
		Zinc, Zn	mg/kg	2	<2.0	<2.0	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206420.002	Mercury	mg/kg	0.05	0.22	0.2	70 - 130	108

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206416.002		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	89
		Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	97
		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	91
		Dieldrin	mg/kg	0.2	<0.2	0.2	60 - 140	96
		Endrin	mg/kg	0.2	<0.2	0.2	60 - 140	90
		p,p'-DDT	mg/kg	0.1	0.1	0.2	60 - 140	73
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.16	0.15	40 - 130	103

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206416.002		Dichlorvos	mg/kg	0.5	1.7	2	60 - 140	85
		Diazinon (Dimpylate)	mg/kg	0.5	2.2	2	60 - 140	110
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.0	2	60 - 140	102
		Ethion	mg/kg	0.2	1.9	2	60 - 140	96
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	84
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	86

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206416.002		Naphthalene	mg/kg	0.1	4.0	4	60 - 140	100
		Acenaphthylene	mg/kg	0.1	4.0	4	60 - 140	100
		Acenaphthene	mg/kg	0.1	4.2	4	60 - 140	104
		Phenanthrene	mg/kg	0.1	4.3	4	60 - 140	108
		Anthracene	mg/kg	0.1	4.3	4	60 - 140	106
		Fluoranthene	mg/kg	0.1	4.1	4	60 - 140	103
		Pyrene	mg/kg	0.1	4.4	4	60 - 140	109
		Benzo(a)pyrene	mg/kg	0.1	4.7	4	60 - 140	117
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	88
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	84
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	86

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206416.002	Arochlor 1260	mg/kg	0.2	0.3	0.4	60 - 140	79

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206416.002		Phenol	mg/kg	0.5	1.0	1	70 - 130	102
		2,4-dichlorophenol	mg/kg	0.5	1.3	1	70 - 130	125
		2,4,6-trichlorophenol	mg/kg	0.5	0.8	1	70 - 130	75
		Pentachlorophenol	mg/kg	0.5	0.8	1	70 - 130	80
	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.9	5	40 - 130	97
		d5-phenol (Surrogate)	mg/kg	-	2.1	2	40 - 130	103

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206418.002	Arsenic, As	mg/kg	1	330	318.22	80 - 120	103
	Cadmium, Cd	mg/kg	0.3	5.9	5.41	80 - 120	108
	Chromium, Cr	mg/kg	0.5	39	38.31	80 - 120	103
	Copper, Cu	mg/kg	0.5	290	290	80 - 120	100
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	99
	Lead, Pb	mg/kg	1	93	89.9	80 - 120	103
	Zinc, Zn	mg/kg	2	270	273	80 - 120	100

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206416.002		TRH C10-C14	mg/kg	20	41	40	60 - 140	103
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	90
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	78
	TRH F Bands	TRH >C10-C16	mg/kg	25	40	40	60 - 140	100
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	75
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	80

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206415.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	4.4	5	60 - 140	88
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	5.1	5	60 - 140	103
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	4.9	5	60 - 140	97
	Halogenated	Chlorobenzene	mg/kg	0.1	5.4	5	60 - 140	107
	Monocyclic	Benzene	mg/kg	0.1	5.5	5	60 - 140	109
	Aromatic	Toluene	mg/kg	0.1	5.4	5	60 - 140	108
		Ethylbenzene	mg/kg	0.1	5.4	5	60 - 140	108
		m/p-xylene	mg/kg	0.2	10	10	60 - 140	104
		o-xylene	mg/kg	0.1	5.3	5	60 - 140	106
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.1	10	70 - 130	91
		d8-toluene (Surrogate)	mg/kg	-	9.1	10	70 - 130	91
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.9	10	70 - 130	89
	Trihalomethan	Chloroform	mg/kg	0.1	4.8	5	60 - 140	97

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206415.002		TRH C6-C10	mg/kg	25	90	92.5	60 - 140	97
		TRH C6-C9	mg/kg	20	79	80	60 - 140	99
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.1	10	70 - 130	91
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.9	10	70 - 130	89
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	58	62.5	60 - 140	92

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES — **Method: ME-(AU)-[ENV]AN040/AN320**

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE209475A.00	LB206418.004	Lead, Pb	mg/kg	1	52	<1	50	104

MATRIX SPIKE DUPLICATES

SE208133B R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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This test report shall not be reproduced, except in full.

Hi [redacted]

Can we please schedule analysis for the samples referenced in the table below on a three day turn around.

Sample ID	Lab Report	Analysis Request
0407_QC170_200626	SE208133	Suite A
0407_QC171_200626	SE208133	Suite A
0407_QC175_200626	SE208133	Suite A
0407_TP206_0.5_200618	SE207831	Suite A
BH011_1.0_200625	SE208848	OCP/OPP

Additionally, I'm trying to track down RWBB_QC201_200615. Can you tell me if it was sent to Eurofins as per COC?

Thanks for your help,

SLR

[redacted]

Project Consultant - Land Quality & Remediation

SGS EHS Alexandria Laboratory

SE207831E COC
Received: 07 – Aug – 2020

Please note in response to the COVID-19 Pandemic and physical distancing recom[illegible]
SLR is encouraging staff to work remotely and implement flexible working hours if necessary.
If you have received this email outside of regular office hours, it is not expected that you will respond until your own working hours commence.

d +61 7 3858 4887
m [redacted]
e [redacted]@slrconsulting.com

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Level 2, 15 Astor Terrace, Brisbane, QLD, Australia, 4000

WINNERS: RoSPA Gold Award, 2017

WINNERS: International Business Excellence Award, 2016

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SAMPLE RECEIPT ADVICE

SE207831E

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks-Additional**
Order Number	**610.30041**
Samples	48

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Fri 7/8/2020
Report Due	Wed 12/8/2020
SGS Reference	**SE207831E**

SUBMISSION DETAILS

This is to confirm that 48 samples were received on Friday 7/8/2020. Results are expected to be ready by COB Wednesday 12/8/2020. Please quote SGS reference SE207831E when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	1 Soil
Date documentation received	7/8/2020!@11:31am	Type of documentation received	Email
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	8°C	Sufficient sample for analysis	Yes
Turnaround time requested	Three Days		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

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SAMPLE RECEIPT ADVICE

SE207831E

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks-Additional

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	Speciated Phenols in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
048	0407_TP206_0.5_200618	29	14	26	11	18	10	81	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE207831E

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks-Additional

SUMMARY OF ANALYSIS

No.	Sample ID	Mercury in Soil	Moisture Content	Total Recoverable Elements in Soil/Waste
048	0407_TP206_0.5_200618	1	1	7

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks-Additional**
Order Number	**610.30041**
Samples	48

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207831E R0**
Date Received	7/8/2020
Date Reported	12/8/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

SIGNATORIES

[redacted]

Chemist | Metals/Inorganics Team Leader | Organic Section Head

VOC's in Soil [AN433] Tested: 11/8/2020

PARAMETER	UOM	LOR	0407_TP206_0.5_20(618 SOIL - 18/6/2020 SE207831E.048
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
Chloromethane	mg/kg	1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
Bromomethane	mg/kg	1	<1
Chloroethane	mg/kg	1	<1
Trichlorofluoromethane	mg/kg	1	<1
Acetone (2-propanone)	mg/kg	10	<10
Iodomethane	mg/kg	5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1
Vinyl acetate	mg/kg	10	<10
MEK (2-butanone)	mg/kg	10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1
Chloroform	mg/kg	0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1
Benzene	mg/kg	0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
2-nitropropane	mg/kg	10	<10
Bromodichloromethane	mg/kg	0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1
Toluene	mg/kg	0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1
Bromoform	mg/kg	0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2
cis-1,4-dichloro-2-butene	mg/kg	1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
o-xylene	mg/kg	0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3
1,2,3-trichloropropane	mg/kg	0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1

VOC's in Soil [AN433] Tested: 11/8/2020 (continued)

PARAMETER	UOM	LOR	0407_TP206_0.5_20(618 SOIL - 18/6/2020 SE207831E.048
n-propylbenzene	mg/kg	0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
Total BTEX	mg/kg	0.6	<0.6
Total VOC*	mg/kg	24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 11/8/2020

PARAMETER	UOM	LOR	0407_TP206_0.5_20(618 SOIL - 18/6/2020 SE207831E.048
Benzene (F0)	mg/kg	0.1	<0.1
TRH C6-C9	mg/kg	20	<20
TRH C6-C10	mg/kg	25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 11/8/2020

PARAMETER	UOM	LOR	0407_TP206_0.5_20(618 SOIL - 18/6/2020 SE207831E.048
TRH C10-C14	mg/kg	20	<20
TRH C15-C28	mg/kg	45	<45
TRH C29-C36	mg/kg	45	<45
TRH C37-C40	mg/kg	100	<100
TRH >C10-C16	mg/kg	25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120
TRH C10-C36 Total	mg/kg	110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 11/8/2020

PARAMETER	UOM	LOR	0407_TP206_0.5_20(618 SOIL - 18/6/2020 SE207831E.048
Naphthalene	mg/kg	0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1
Fluorene	mg/kg	0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1
Anthracene	mg/kg	0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1
Pyrene	mg/kg	0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1
Chrysene	mg/kg	0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8

Speciated Phenols in Soil [AN420] Tested: 11/8/2020

PARAMETER	UOM	LOR	0407_TP206_0.5_20(618 SOIL - 18/6/2020 SE207831E.048
Phenol	mg/kg	0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
Total Cresol	mg/kg	1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5
4-nitrophenol	mg/kg	1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
Pentachlorophenol	mg/kg	0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2
4-chloro-3-methylphenol	mg/kg	2	<2

OC Pesticides in Soil [AN420] Tested: 11/8/2020

PARAMETER	UOM	LOR	0407_TP206_0.5_20(618 SOIL - 18/6/2020 SE207831E.048
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1
Lindane	mg/kg	0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1
Aldrin	mg/kg	0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2
Endrin	mg/kg	0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1
Isodrin	mg/kg	0.1	<0.1
Mirex	mg/kg	0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1

OP Pesticides in Soil [AN420] Tested: 11/8/2020

PARAMETER	UOM	LOR	0407_TP206_0.5_20(618 SOIL - 18/6/2020 SE207831E.048
Dichlorvos	mg/kg	0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2
Malathion	mg/kg	0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2
Methidathion	mg/kg	0.5	<0.5
Ethion	mg/kg	0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7

PCBs in Soil [AN420] Tested: 11/8/2020

PARAMETER	UOM	LOR	0407_TP206_0.5_20(618 SOIL - 18/6/2020 SE207831E.048
Arochlor 1016	mg/kg	0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 11/8/2020

PARAMETER	UOM	LOR	0407_TP206_0.5_20(618 SOIL - 18/6/2020 SE207831E.048
Arsenic, As	mg/kg	1	**4**
Cadmium, Cd	mg/kg	0.3	<0.3
Chromium, Cr	mg/kg	0.5	**3.7**
Copper, Cu	mg/kg	0.5	**9.1**
Lead, Pb	mg/kg	1	<1
Nickel, Ni	mg/kg	0.5	**24**
Zinc, Zn	mg/kg	2	**24**

Mercury in Soil [AN312] Tested: 11/8/2020

PARAMETER	UOM	LOR	0407_TP206_0.5_20(618 SOIL - 18/6/2020 SE207831E.048
Mercury	mg/kg	0.05	**0.47**

Moisture Content [AN002] Tested: 11/8/2020

PARAMETER	UOM	LOR	0407_TP206_0.5_20(618 SOIL - 18/6/2020 SE207831E.048
% Moisture	%w/w	1	**4.3**

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid, mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents .
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE207831E R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks-Additional**
Order Number	**610.30041**
Samples	48

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207831E R0**
Date Received	07 Aug 2020
Date Reported	12 Aug 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Extraction Date	Mercury in Soil	1 item
	OC Pesticides in Soil	1 item
	OP Pesticides in Soil	1 item
	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	1 item
	PCBs in Soil	1 item
	Speciated Phenols in Soil	1 item
	TRH (Total Recoverable Hydrocarbons) in Soil	1 item
	VOC's in Soil	1 item
	Volatile Petroleum Hydrocarbons in Soil	1 item
Analysis Date	Mercury in Soil	1 item

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	1 Soil
Date documentation received	7/8/2020!@11:31am	Type of documentation received	Email
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	8°C	Sufficient sample for analysis	Yes
Turnaround time requested	Three Days		

HOLDING TIME SUMMARY

SE207831E R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP206_0.5_200618	SE207831E.048	LB206467	18 Jun 2020	07 Aug 2020	16 Jul 2020	11 Aug 2020†	16 Jul 2020	11 Aug 2020†

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP206_0.5_200618	SE207831E.048	LB206452	18 Jun 2020	07 Aug 2020	02 Jul 2020	11 Aug 2020†	20 Sep 2020	11 Aug 2020

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP206_0.5_200618	SE207831E.048	LB206452	18 Jun 2020	07 Aug 2020	02 Jul 2020	11 Aug 2020†	20 Sep 2020	11 Aug 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP206_0.5_200618	SE207831E.048	LB206452	18 Jun 2020	07 Aug 2020	02 Jul 2020	11 Aug 2020†	20 Sep 2020	11 Aug 2020

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP206_0.5_200618	SE207831E.048	LB206452	18 Jun 2020	07 Aug 2020	02 Jul 2020	11 Aug 2020†	20 Sep 2020	11 Aug 2020

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP206_0.5_200618	SE207831E.048	LB206452	18 Jun 2020	07 Aug 2020	02 Jul 2020	11 Aug 2020†	20 Sep 2020	11 Aug 2020

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP197_0.1_200619	SE207831E.038	LB206511	19 Jun 2020	07 Aug 2020	16 Dec 2020	11 Aug 2020	16 Dec 2020	11 Aug 2020
0407_TP206_0.5_200618	SE207831E.048	LB206512	18 Jun 2020	07 Aug 2020	15 Dec 2020	11 Aug 2020	15 Dec 2020	11 Aug 2020

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP206_0.5_200618	SE207831E.048	LB206452	18 Jun 2020	07 Aug 2020	02 Jul 2020	11 Aug 2020†	20 Sep 2020	11 Aug 2020

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP206_0.5_200618	SE207831E.048	LB206438	18 Jun 2020	07 Aug 2020	02 Jul 2020	11 Aug 2020†	20 Sep 2020	11 Aug 2020

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP206_0.5_200618	SE207831E.048	LB206438	18 Jun 2020	07 Aug 2020	02 Jul 2020	11 Aug 2020†	20 Sep 2020	11 Aug 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP206_0.5_200618	SE207831E.048	%	60 - 130%	117

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP206_0.5_200618	SE207831E.048	%	60 - 130%	92
d14-p-terphenyl (Surrogate)	0407_TP206_0.5_200618	SE207831E.048	%	60 - 130%	93

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP206_0.5_200618	SE207831E.048	%	70 - 130%	92
d14-p-terphenyl (Surrogate)	0407_TP206_0.5_200618	SE207831E.048	%	70 - 130%	93
d5-nitrobenzene (Surrogate)	0407_TP206_0.5_200618	SE207831E.048	%	70 - 130%	85

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP206_0.5_200618	SE207831E.048	%	60 - 130%	117

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	0407_TP206_0.5_200618	SE207831E.048	%	70 - 130%	77
d5-phenol (Surrogate)	0407_TP206_0.5_200618	SE207831E.048	%	50 - 130%	77

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP206_0.5_200618	SE207831E.048	%	60 - 130%	79
d4-1,2-dichloroethane (Surrogate)	0407_TP206_0.5_200618	SE207831E.048	%	60 - 130%	75
d8-toluene (Surrogate)	0407_TP206_0.5_200618	SE207831E.048	%	60 - 130%	76

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP206_0.5_200618	SE207831E.048	%	60 - 130%	79
d4-1,2-dichloroethane (Surrogate)	0407_TP206_0.5_200618	SE207831E.048	%	60 - 130%	75
d8-toluene (Surrogate)	0407_TP206_0.5_200618	SE207831E.048	%	60 - 130%	76

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result
LB206467.001	Mercury	mg/kg	0.05	<0.05

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB206452.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	107

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB206452.001		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	100
		d14-p-terphenyl (Surrogate)	%	-	98

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB206452.001	Naphthalene	mg/kg	0.1	<0.1
	2-methylnaphthalene	mg/kg	0.1	<0.1
	1-methylnaphthalene	mg/kg	0.1	<0.1
	Acenaphthylene	mg/kg	0.1	<0.1
	Acenaphthene	mg/kg	0.1	<0.1
	Fluorene	mg/kg	0.1	<0.1
	Phenanthrene	mg/kg	0.1	<0.1
	Anthracene	mg/kg	0.1	<0.1
	Fluoranthene	mg/kg	0.1	<0.1
	Pyrene	mg/kg	0.1	<0.1
	Benzo(a)anthracene	mg/kg	0.1	<0.1
	Chrysene	mg/kg	0.1	<0.1
	Benzo(a)pyrene	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB206452.001		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	98
		2-fluorobiphenyl (Surrogate)	%	-	100
		d14-p-terphenyl (Surrogate)	%	-	98

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB206452.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	107

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB206452.001		Phenol	mg/kg	0.5	<0.5
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5
		2-nitrophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
		Pentachlorophenol	mg/kg	0.5	<0.5
		2,4-dinitrophenol	mg/kg	2	<2
		4-chloro-3-methylphenol	mg/kg	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	77
		d5-phenol (Surrogate)	%	-	76

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB206512.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB206452.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number	Parameter	Units	LOR

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB206438.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		o-xylene	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB206438.001	Oxygenated Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	84
		d8-toluene (Surrogate)	%	-	81
		Bromofluorobenzene (Surrogate)	%	-	85
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB206438.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	84

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207831E.048	LB206438.004	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207831E.048	LB206438.004	Oxygenated	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.5	8.4	50	11
			d8-toluene (Surrogate)	mg/kg	-	7.6	8.1	50	7
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.9	8.5	50	7
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207831E.048	LB206438.004		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.5	8.4	30	11
			d8-toluene (Surrogate)	mg/kg	-	7.6	8.1	30	7
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.9	8.5	30	7
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206467.002	Mercury	mg/kg	0.05	0.22	0.2	70 - 130	112

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206452.002		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	89
		Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	97
		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	91
		Dieldrin	mg/kg	0.2	<0.2	0.2	60 - 140	96
		Endrin	mg/kg	0.2	<0.2	0.2	60 - 140	90
		p,p'-DDT	mg/kg	0.1	0.1	0.2	60 - 140	73
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.16	0.15	40 - 130	103

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206452.002		Dichlorvos	mg/kg	0.5	1.5	2	60 - 140	75
		Diazinon (Dimpylate)	mg/kg	0.5	1.7	2	60 - 140	87
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.9	2	60 - 140	94
		Ethion	mg/kg	0.2	1.6	2	60 - 140	82
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	94
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	90

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206452.002		Naphthalene	mg/kg	0.1	4.4	4	60 - 140	111
		Acenaphthylene	mg/kg	0.1	4.2	4	60 - 140	104
		Acenaphthene	mg/kg	0.1	4.7	4	60 - 140	116
		Phenanthrene	mg/kg	0.1	4.6	4	60 - 140	114
		Anthracene	mg/kg	0.1	4.3	4	60 - 140	108
		Fluoranthene	mg/kg	0.1	4.2	4	60 - 140	105
		Pyrene	mg/kg	0.1	4.2	4	60 - 140	106
		Benzo(a)pyrene	mg/kg	0.1	4.6	4	60 - 140	116
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	88
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	94
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	90

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206452.002	Arochlor 1260	mg/kg	0.2	0.3	0.4	60 - 140	79

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206452.002		Phenol	mg/kg	0.5	1.0	1	70 - 130	102
		2,4-dichlorophenol	mg/kg	0.5	1.3	1	70 - 130	125
		2,4,6-trichlorophenol	mg/kg	0.5	0.8	1	70 - 130	75
		Pentachlorophenol	mg/kg	0.5	0.8	1	70 - 130	80
	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.9	5	40 - 130	97
		d5-phenol (Surrogate)	mg/kg	-	2.1	2	40 - 130	103

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206512.002	Arsenic, As	mg/kg	1	310	318.22	80 - 120	99
	Cadmium, Cd	mg/kg	0.3	5.6	5.41	80 - 120	104
	Chromium, Cr	mg/kg	0.5	38	38.31	80 - 120	98
	Copper, Cu	mg/kg	0.5	280	290	80 - 120	96
	Nickel, Ni	mg/kg	0.5	180	187	80 - 120	95
	Lead, Pb	mg/kg	1	88	89.9	80 - 120	98
	Zinc, Zn	mg/kg	2	260	273	80 - 120	96

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206452.002		TRH C10-C14	mg/kg	20	43	40	60 - 140	108
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	93
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	83
	TRH F Bands	TRH >C10-C16	mg/kg	25	43	40	60 - 140	108
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	83
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	85

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206438.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	4.4	5	60 - 140	88
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	5.1	5	60 - 140	103
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	4.9	5	60 - 140	97
	Halogenated	Chlorobenzene	mg/kg	0.1	5.4	5	60 - 140	107
	Monocyclic	Benzene	mg/kg	0.1	5.0	5	60 - 140	100
	Aromatic	Toluene	mg/kg	0.1	5.1	5	60 - 140	103
		Ethylbenzene	mg/kg	0.1	5.1	5	60 - 140	103
		m/p-xylene	mg/kg	0.2	10	10	60 - 140	101
		o-xylene	mg/kg	0.1	5.0	5	60 - 140	100
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.9	10	70 - 130	89
		d8-toluene (Surrogate)	mg/kg	-	8.5	10	70 - 130	85
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.4	10	70 - 130	94
	Trihalomethan	Chloroform	mg/kg	0.1	4.8	5	60 - 140	97

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206438.002		TRH C6-C10	mg/kg	25	90	92.5	60 - 140	97
		TRH C6-C9	mg/kg	20	79	80	60 - 140	99
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.9	10	70 - 130	89
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.4	10	70 - 130	94
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	59	62.5	60 - 140	95

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

QC Sample	Sample Number	Parameter	Units	LOR

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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Good morning

Please book these additional jobs in.

Please be very carefully as there are lots of jobs

Regards,

[redacted]
Environment, Health & Safety
Client Manager
Phone: +61 (0)2 8594 0400
Direct:
Mobile: [redacted]
(Please note my new working hours of Mon-Fri 6:00am-2:00pm)



Covid-19 update: SGS Australia is open, with our Business Service Continuity Plans being put in place to ensure your project can be delivered as normal, please click here to see further details on our Business & Services Continuity Plans.

From: [redacted]slrconsulting.com>
Sent: Tuesday, 21 July 2020 5:03 PM
To: [redacted]@sgs.com>
Cc: [redacted]@slrconsulting.com>
Subject: [EXTERNAL] 610.30041 DHA Randwick - Additional Analysis

*** WARNING: this message is from an EXTERNAL SENDER. Please be cautious, particularly with links and attachments. ***

Hi [redacted]

Can we please schedule the following analyses:

pH, clay content, TOC & CEC:

Report number	Sample ID
SE207695	TP002_0.1_200615
SE207695	TP002_1.5_200615
SE207695	TP005_0.1_200616
SE207695	TP005_1.5_200616
SE207695	TP049_0.1_200617
SE207695	TP049_1.0_200617
SE208047	TP092_0.1_200624
SE208047	TP092_1.0_200624
SE207831	TP220_0.1_200618
SE207831	TP220_1.0_200618
SE207831	TP221_0.1_200619
SE207831	TP221_1.0_200619
SE207998	TP230_0.1_200622
SE207998	TP230_1.8_200622
SE207591	TP018_0.1_200615
SE207591	TP018_1.0_200615
SE208047	TP092_0.1_200624
SE208047	TP092_1.0_200624
SE207911	TP095_0.1_200623
SE207911	TP095_1.0_200623
SE207731	TP073_0.1_200619
SE207731	TP073_1.0_200619
SE208659	TP133_0.1_200701
SE208659	TP133_1.0_200701
SE208142	TP151_0.1_200629
SE208142	TP151_1.0_200629
SE208137	TP183_0.1_200625
SE208137	TP183_0.5_200625

Additional analysis:

Report number	Sample ID	Parameter
SE208081	0407_TP241_1.0_200625	Pb & Zn
SE207731	0407_TP73_0.5_200619	Cr

ASLP Leach:

Report number	Sample ID	Parameter
SE208046	0407_TP237_0.5_200624	8 metals
SE208081	0407_TP241_0.5_200625	8 metals
SE208133	0407_TP111_0.1_200626	8 metals
SE208142	0407_TP256_0.1_200629	8 metals
SE207831	0407_TP222_0.1_200619	8 metals
SE207731	0407_TP73_0.1_200619	8 metals
SE207850	0407_TP162_0.1_200617	PAHs include B(a)P

SE207831	0407_TP197_0.1_200619	PAHs include B(a)P
SE207831	0407_TP197_0.5_200619	PAHs include B(a)P
SE207831	0407_TP200_0.5_200618	PAHs include B(a)P
SE207831	0407_TP200_1.0_200618	Total and leachable PAHs including B(a)P
SE207831	0407_TP209_0.5_200619	PAHs include B(a)P
SE207831	0407_TP221_0.5_200619	PAHs include B(a)P
SE207831	0407_TP221_1.0_200619	Total and leachable PAHs including B(a)P
SE207824	0407_TP231_0.1_200622	PAHs include B(a)P
SE208161	0407_BH41_0.0_200625	PFOS, PFOA, PfHxS
SE208046	0407_QC160_200624	PFOS, PFOA, PfHxS
SE207824	0407_QC130_200622	PFOS, PFOA, PfHxS

Let me know if you have any questions.

Many thanks,

[redacted]

SLR

[redacted]
Associate - Land Quality & Remediation

Please note in response to the COVID-19 Pandemic and physical distancing recommendations from the Australian Government, SLR is encouraging staff to work remotely and implement flexible working hours if necessary.
If you have received this email outside of regular office hours, it is not expected that you will respond until your own working hours commence.

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o [redacted]
m
e [redacted]@slrconsulting.com

SLR Consulting Australia Pty Ltd
Level 2, 15 Astor Terrace, Brisbane, QLD, Australia, 4000

WINNERS: RoSPA Gold Award, 2017
WINNERS : International Business Excellence Award, 2016

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SAMPLE RECEIPT ADVICE

SE208142A

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000690-000692**
Samples	17

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Tue 21/7/2020
Report Due	Wed 29/7/2020
SGS Reference	**SE208142A**

SUBMISSION DETAILS

This is to confirm that 17 samples were received on Tuesday 21/7/2020. Results are expected to be ready by COB Wednesday 29/7/2020.
Please quote SGS reference SE208142A when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	2 Soil
Date documentation received	21/7/2020@5:03pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	3.5°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

% Clay subcontracted to SGS Cairns, 2/58 Comport St, Portsmith QLD 4870, NATA Accreditation Number: 2562, Site Number: 3146.

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SAMPLE RECEIPT ADVICE

SE208142A

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Exchangeable Cations and Cation Exchange Capacity	Moisture Content	Particle sizing of soils <75µm by hydrometer	Particle sizing of soils by sieving	pH in soil (1:5)	TOC in Soil
007	0407_TP151_0.1_200629	13	1	1	2	1	2
017	0407_TP151_1.0_200629	13	1	1	2	1	2

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	17

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208142A R0**
Date Received	21/7/2020
Date Reported	6/8/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

% Clay subcontracted to SGS Cairns, 2/58 Comport St, Portsmith QLD 4870, NATA Accreditation Number: 2562, Site Number: 3146. CE147459

SIGNATORIES

[redacted]

Senior Organic Chemist/Metals Chemist

Inorganic/Metals Chemist

pH in soil (1:5) [AN101] Tested: 29/7/2020

PARAMETER	UOM	LOR	0407_TP151_0.1_20(629 SOIL - 29/6/2020 SE208142A.007	0407_TP151_1.0_20(629 SOIL - 29/6/2020 SE208142A.017
pH	pH Units	0.1	**8.0**	**5.5**

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR) [AN122] Tested: 24/7/2020

PARAMETER	UOM	LOR	0407_TP151_0.1_20(629 SOIL - 29/6/2020 SE208142A.007	0407_TP151_1.0_20(629 SOIL - 29/6/2020 SE208142A.017
Exchangeable Sodium, Na	mg/kg	2	28	12
Exchangeable Sodium, Na	meq/100g	0.01	0.12	0.05
Exchangeable Sodium Percentage*	%	0.1	0.3	3.1
Exchangeable Potassium, K	mg/kg	2	150	17
Exchangeable Potassium, K	meq/100g	0.01	0.38	0.04
Exchangeable Potassium Percentage*	%	0.1	1.1	2.6
Exchangeable Calcium, Ca	mg/kg	2	7000	270
Exchangeable Calcium, Ca	meq/100g	0.01	35	1.3
Exchangeable Calcium Percentage*	%	0.1	97.3	80.9
Exchangeable Magnesium, Mg	mg/kg	2	58	27
Exchangeable Magnesium, Mg	meq/100g	0.02	0.47	0.22
Exchangeable Magnesium Percentage*	%	0.1	1.3	13.4
Cation Exchange Capacity	meq/100g	0.02	36	1.7

TOC in Soil [AN188] Tested: 29/7/2020

PARAMETER	UOM	LOR	0407_TP151_0.1_20(629 SOIL - 29/6/2020 SE208142A.007	0407_TP151_1.0_20(629 SOIL - 29/6/2020 SE208142A.017
Total Organic Carbon	%w/w	0.05	**3.0**	**0.54**
Organic Matter (calc)*	%w/w	0.1	**5.1**	**0.9**

Moisture Content [AN002] Tested: 24/7/2020

PARAMETER	UOM	LOR	0407_TP151_0.1_20(629 SOIL - 29/6/2020 SE208142A.007	0407_TP151_1.0_20(629 SOIL - 29/6/2020 SE208142A.017
% Moisture	%w/w	1	**19.5**	**11.4**

Particle sizing of soils by sieving [AN005] Tested: 6/8/2020

PARAMETER	UOM	LOR	0407_TP151_0.1_20(629 SOIL - 29/6/2020 SE208142A.007	0407_TP151_1.0_20(629 SOIL - 29/6/2020 SE208142A.017
Passing 75µm*	%w/w	1	**33**	**2**
Retained 75µm*	%w/w	1	**67**	**98**

Particle sizing of soils <75µm by hydrometer [AN005] Tested: 6/8/2020

PARAMETER	UOM	LOR	0407_TP151_0.1_20(629 SOIL - 29/6/2020 SE208142A.007
Clay (<0.002mm)*	%w/w	0.1	**10**

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN005	The particle size distribution of a soil is determined by wet sieving, using a maximum of 900 mL of deionised water to sieve all fractions down to 75 µm. Referenced to AS1289.3.6.1 and AS1141.11.
AN005	Following wet sieving of the sample,(particles smaller than 75 µm) a dispersing solution is added and a hydrometer is used to measure sedimentation. Soil density is determined and the percentage of each size fraction calculated. Referenced to AS1289.3.6.3.
AN101	pH in Soil Sludge Sediment and Water: pH is measured electrometrically using a combination electrode and is calibrated against 3 buffers purchased commercially. For soils, sediments and sludges, an extract with water (or 0.01M CaCl2) is made at a ratio of 1:5 and the pH determined and reported on the extract. Reference APHA 4500-H+.
AN122	Exchangeable Cations, CEC and ESP: Soil sample is extracted in 1M Ammonium Acetate at pH=7 (or 1M Ammonium Chloride at pH=7) with cations (Na, K, Ca & Mg) then determined by ICP OES/ICP MS and reported as Exchangeable Cations. For saline soils, these results can be corrected for water soluble cations and reported as Exchangeable cations in meq/100g or soil can be pre-treated (aqueous ethanol/aqueous glycerol) prior to extraction. Cation Exchange Capacity (CEC) is the sum of the exchangeable cations in meq/100g.
AN122	The Exchangeable Sodium Percentage (ESP) is calculated as the exchangeable sodium divided by the CEC (all in meq/100g) times 100. ESP can be used to categorise the sodicity of the soil as below: ESP < 6% non-sodic ESP 6-15% sodic ESP >15% strongly sodic Method is referenced to Rayment and Lyons, 2011, sections 15D3 and 15N1.-
AN188	The organic material in the soil sample is oxidised with chromic acid in the presence of excess sulfuric acid, without external heat being applied. The excess dichromate ion is determined by titration with standard ammonium iron (II) sulfate solution and the amount of oxidised material is calculated from the quantity of dichromate reduced. Referenced to NEPM 105 and AS1289.1.1.1.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS		LABORATORY DETAILS	
Contact	Admin	Manager	[redacted]
Client	SGS EHS SYDNEY	Laboratory	SGS Cairns Environmental
Address	5258 201 EHS SYDNEY UNIT 16 33 MADDOX STREET ALEXANDRIA NSW 2015	Address	Unit 2, 58 Comport St Portsmith QLD 4870
Telephone	0285940400	Telephone	+61 07 4035 5111
Facsimile	0285940499	Facsimile	+61 07 4035 5122
Email	au.environmental.sydney@sgs.com	Email	AU.Environmental.Cairns@sgs.com
Project	**610.30041 Randwick Barracks**	SGS Reference	**CE147459 R0**
Order Number	**SE208142A**	Date Received	21 Jul 2020
Samples	17	Date Reported	06 Aug 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(3146).

SIGNATORIES

[redacted]

Operations Manager

Parameter	Units	LOR	Sample Number: CE147459.001 Sample Matrix: Soil Sample Date: 29 Jun 2020 Sample Name: SE208142A.001	CE147459.002 Soil 29 Jun 2020 SE208142A.002	CE147459.003 Soil 29 Jun 2020 SE208142A.003	CE147459.004 Soil 29 Jun 2020 SE208142A.004
Moisture Content Method: AN002 Tested: 31/7/2020						
% Moisture	%w/w	1	-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020						
Passing 75µm	%w/w	1	-	-	-	-
Retained 75µm	%w/w	1	-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020						
Clay (<0.002mm)	%w/w	0.1	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147459.005 Soil 29 Jun 2020 SE208142A.005	CE147459.006 Soil 29 Jun 2020 SE208142A.006	CE147459.007 Soil 29 Jun 2020 SE208142A.007	CE147459.008 Soil 29 Jun 2020 SE208142A.008
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	**20**	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	**33**	-
Retained 75µm	%w/w	1		-	-	**67**	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020							
Clay (<0.002mm)	%w/w	0.1		-	-	**10**	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147459.009 Soil 29 Jun 2020 SE208142A.009	CE147459.010 Soil 29 Jun 2020 SE208142A.010	CE147459.011 Soil 29 Jun 2020 SE208142A.011	CE147459.012 Soil 29 Jun 2020 SE208142A.012
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020							
Clay (<0.002mm)	%w/w	0.1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name CE147459.013 Soil 29 Jun 2020 SE208142A.013	CE147459.014 Soil 29 Jun 2020 SE208142A.014	CE147459.015 Material 29 Jun 2020 SE208142A.015	CE147459.016 Material 29 Jun 2020 SE208142A.016
Moisture Content Method: AN002 Tested: 31/7/2020						
% Moisture	%w/w	1	-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020						
Passing 75µm	%w/w	1	-	-	-	-
Retained 75µm	%w/w	1	-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020						
Clay (<0.002mm)	%w/w	0.1	-	-	-	-

Parameter	Units	LOR	Sample Number: CE147459.017 Sample Matrix: Soil Sample Date: 29 Jun 2020 Sample Name: SE208142A.017
Moisture Content Method: AN002 Tested: 30/7/2020			
% Moisture	%w/w	1	**9.6**
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020			
Passing 75µm	%w/w	1	**2**
Retained 75µm	%w/w	1	**98**
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020			
Clay (<0.002mm)	%w/w	0.1	-

QC SUMMARY

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula：*the absolute difference of the two results divided by the average of the two results as a percentage.* Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

No QC samples were reported for this job.

METHOD SUMMARY

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN005	The particle size distribution of a soil is determined by wet sieving, using a maximum of 900 mL of deionised water to sieve all fractions down to 75 µm. Referenced to AS1289.3.6.1 and AS1141.11.
AN005	Following wet sieving of the sample,(particles smaller than 75 µm) a dispersing solution is added and a hydrometer is used to measure sedimentation. Soil density is determined and the percentage of each size fraction calculated. Referenced to AS1289.3.6.3.

FOOTNOTES

IS	Insufficient sample for analysis.	LOR	Limit of Reporting
LNR	Sample listed, but not received.	↑↓	Raised or Lowered Limit of Reporting
*	NATA accreditation does not cover the performance of this service.	QFH	QC result is above the upper tolerance
		QFL	QC result is below the lower tolerance
**	Indicative data, theoretical holding time exceeded.	-	The sample was not analysed for this analyte
		NVL	Not Validated

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calcuated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE208142A R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	17

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208142A R0**
Date Received	21 Jul 2020
Date Reported	06 Aug 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Extraction Date	Moisture Content	2 items
	pH in soil (1:5)	2 items
	TOC in Soil	2 items
Analysis Date	Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)	2 items
	TOC in Soil	2 items

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	2 Soil
Date documentation received	21/7/2020@5:03pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	3.5°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE208142A R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)

Method: ME-(AU)-[ENV]AN122

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP151_0.1_200629	SE208142A.007	LB205097	29 Jun 2020	21 Jul 2020	27 Jul 2020	24 Jul 2020	27 Jul 2020	29 Jul 2020†
0407_TP151_1.0_200629	SE208142A.017	LB205097	29 Jun 2020	21 Jul 2020	27 Jul 2020	24 Jul 2020	27 Jul 2020	29 Jul 2020†

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP151_0.1_200629	SE208142A.007	LB205094	29 Jun 2020	21 Jul 2020	13 Jul 2020	24 Jul 2020†	29 Jul 2020	29 Jul 2020
0407_TP151_1.0_200629	SE208142A.017	LB205094	29 Jun 2020	21 Jul 2020	13 Jul 2020	24 Jul 2020†	29 Jul 2020	29 Jul 2020

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP151_0.1_200629	SE208142A.007	LB205437	29 Jun 2020	21 Jul 2020	06 Jul 2020	29 Jul 2020†	30 Jul 2020	29 Jul 2020
0407_TP151_1.0_200629	SE208142A.017	LB205437	29 Jun 2020	21 Jul 2020	06 Jul 2020	29 Jul 2020†	30 Jul 2020	29 Jul 2020

TOC in Soil

Method: ME-(AU)-[ENV]AN188

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP151_0.1_200629	SE208142A.007	LB205429	29 Jun 2020	21 Jul 2020	27 Jul 2020	29 Jul 2020†	27 Jul 2020	29 Jul 2020†
0407_TP151_1.0_200629	SE208142A.017	LB205429	29 Jun 2020	21 Jul 2020	27 Jul 2020	29 Jul 2020†	27 Jul 2020	29 Jul 2020†

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No surrogates were required for this job.

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)

Method: ME-(AU)-[ENV]AN122

Sample Number	Parameter	Units	LOR	Result
LB205097.001	Exchangeable Sodium, Na	mg/kg	2	0
	Exchangeable Potassium, K	mg/kg	2	0
	Exchangeable Calcium, Ca	mg/kg	2	0
	Exchangeable Magnesium, Mg	mg/kg	2	0

TOC in Soil

Method: ME-(AU)-[ENV]AN188

Sample Number	Parameter	Units	LOR	Result
LB205429.001	Total Organic Carbon	%w/w	0.05	<0.05

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207831B.008	LB205094.011	% Moisture	%w/w	1	4.00508582324	4.0345821325	55	1

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207591B.003	LB205437.025	pH	pH Units	0.1	6.684	6.438	32	4
SE207998A.026	LB205437.024	pH	pH Units	0.1	5.8	5.553	32	4

TOC in Soil

Method: ME-(AU)-[ENV]AN188

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207831B.007	LB205429.004	Total Organic Carbon	%w/w	0.05	8.827219898910.0156258578		31	13

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)

Method: ME-(AU)-[ENV]AN122

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205097.002	Exchangeable Sodium, Na	meq/100g	0.01	0.19	0.194	80 - 120	99
	Exchangeable Potassium, K	meq/100g	0.01	0.58	0.63	80 - 120	91
	Exchangeable Calcium, Ca	meq/100g	0.01	6.3	6.3	80 - 120	100
	Exchangeable Magnesium, Mg	meq/100g	0.02	0.91	1.11	80 - 120	82

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205437.003	pH	pH Units	0.1	7.5	7.415	98 - 102	101

TOC in Soil

Method: ME-(AU)-[ENV]AN188

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205429.002	Total Organic Carbon	%w/w	0.05	0.29	0.325	80 - 120	90

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

TOC in Soil — **Method: ME-(AU)-[ENV]AN188**

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208142A.01	LB205429.019	Total Organic Carbon	%w/w	0.05	0.51	0.54	-	-

MATRIX SPIKE DUPLICATES

SE208142A R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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Good morning

Please book these additional jobs in.

Please be very carefully as there are lots of jobs

Regards,

[redacted]
Environment, Health & Safety
Client Manager
Phone: +61 (0)2 8594 0400
Direct:
Mobile: [redacted]
(Please note my new working hours of Mon-Fri 6:00am-2:00pm)



Covid-19 update: SGS Australia is open, with our Business Service Continuity Plans being put in place to ensure your project can be delivered as normal, please click here to see further details on our Business & Services Continuity Plans.

From: [redacted]@slrconsulting.com>
Sent: Tuesday, 21 July 2020 5:03 PM
To: [redacted]@sgs.com>
Cc: [redacted]@slrconsulting.com>
Subject: [EXTERNAL] 610.30041 DHA Randwick - Additional Analysis

*** WARNING: this message is from an EXTERNAL SENDER. Please be cautious, particularly with links and attachments. ***

Hi [redacted]

Can we please schedule the following analyses:

pH, clay content, TOC & CEC:

Report number	Sample ID
SE207695	TP002_0.1_200615
SE207695	TP002_1.5_200615
SE207695	TP005_0.1_200616
SE207695	TP005_1.5_200616
SE207695	TP049_0.1_200617
SE207695	TP049_1.0_200617
SE208047	TP092_0.1_200624
SE208047	TP092_1.0_200624
SE207831	TP220_0.1_200618
SE207831	TP220_1.0_200618
SE207831	TP221_0.1_200619
SE207831	TP221_1.0_200619
SE207998	TP230_0.1_200622
SE207998	TP230_1.8_200622
SE207591	TP018_0.1_200615
SE207591	TP018_1.0_200615
SE208047	TP092_0.1_200624
SE208047	TP092_1.0_200624
SE207911	TP095_0.1_200623
SE207911	TP095_1.0_200623
SE207731	TP073_0.1_200619
SE207731	TP073_1.0_200619
SE208659	TP133_0.1_200701
SE208659	TP133_1.0_200701
SE208142	TP151_0.1_200629
SE208142	TP151_1.0_200629
SE208137	TP183_0.1_200625
SE208137	TP183_0.5_200625

Additional analysis:

Report number	Sample ID	Parameter
SE208081	0407_TP241_1.0_200625	Pb & Zn
SE207731	0407_TP73_0.5_200619	Cr

ASLP Leach:

Report number	Sample ID	Parameter
SE208046	0407_TP237_0.5_200624	8 metals
SE208081	0407_TP241_0.5_200625	8 metals
SE208133	0407_TP111_0.1_200626	8 metals
SE208142	0407_TP256_0.1_200629	8 metals
SE207831	0407_TP222_0.1_200619	8 metals
SE207731	0407_TP73_0.1_200619	8 metals
SE207850	0407_TP162_0.1_200617	PAHs include B(a)P

SE207831	0407_TP197_0.1_200619	PAHs include B(a)P
SE207831	0407_TP197_0.5_200619	PAHs include B(a)P
SE207831	0407_TP200_0.5_200618	PAHs include B(a)P
SE207831	0407_TP200_1.0_200618	Total and leachable PAHs including B(a)P
SE207831	0407_TP209_0.5_200619	PAHs include B(a)P
SE207831	0407_TP221_0.5_200619	PAHs include B(a)P
SE207831	0407_TP221_1.0_200619	Total and leachable PAHs including B(a)P
SE207824	0407_TP231_0.1_200622	PAHs include B(a)P
SE208161	0407_BH41_0.0_200625	PFOS, PFOA, PfHxS
SE208046	0407_QC160_200624	PFOS, PFOA, PfHxS
SE207824	0407_QC130_200622	PFOS, PFOA, PfHxS

Let me know if you have any questions.

Many thanks,

[redacted]

SLR

[redacted]

Associate - Land Quality & Remediation

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If you have received this email outside of regular office hours, it is not expected that you will respond until your own working hours commence.

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o [redacted]
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Level 2, 15 Astor Terrace, Brisbane, QLD, Australia, 4000

WINNERS: RoSPA Gold Award, 2017

WINNERS : International Business Excellence Award, 2016

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SAMPLE RECEIPT ADVICE

SE207831B

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	46

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Tue 21/7/2020
Report Due	Wed 29/7/2020
SGS Reference	**SE207831B**

SUBMISSION DETAILS

This is to confirm that 46 samples were received on Tuesday 21/7/2020. Results are expected to be ready by COB Wednesday 29/7/2020.
Please quote SGS reference SE207831B when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	4 Soil
Date documentation received	21/7/2020@5:03pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	8°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

% Clay subcontracted to SGS Cairns, 2/58 Comport St, Portsmith QLD 4870, NATA Accreditation Number: 2562, Site Number: 3146.

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SAMPLE RECEIPT ADVICE

SE207831B

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Exchangeable Cations and Cation Exchange Capacity	Moisture Content	Particle sizing of soils <75µm by hydrometer	Particle sizing of soils by sieving	pH in soil (1:5)	TOC in Soil
007	0407_TP220_0.1_200618	13	1	1	2	1	2
008	0407_TP220_1.0_200618	13	1	1	2	1	2

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE207831B

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Exchangeable Cations and Cation Exchange Capacity	Moisture Content	Particle sizing of soils <75µm by hydrometer	Particle sizing of soils by sieving	pH in soil (1:5)	TOC in Soil
026	0407_TP221_0.1_200619	13	1	1	2	1	2
046	0407_TP221_1.0_200619	13	1	1	2	1	2

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	46

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207831B R0**
Date Received	21/7/2020
Date Reported	6/8/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

% Clay subcontracted to SGS Cairns, 2/58 Comport St, Portsmith QLD 4870, NATA Accreditation Number: 2562, Site Number: 3146. CE147457

SIGNATORIES

[redacted]

Senior Organic Chemist/Metals Chemist

Inorganic/Metals Chemist

pH in soil (1:5) [AN101] Tested: 29/7/2020

PARAMETER	UOM	LOR	0407_TP220_0.1_20(618 SOIL - 18/6/2020 SE207831B.007	0407_TP220_1.0_20(618 SOIL - 18/6/2020 SE207831B.008	0407_TP221_0.1_20(619 SOIL - 19/6/2020 SE207831B.026	0407_TP221_1.0_20(619 SOIL - 19/6/2020 SE207831B.046
pH	pH Units	0.1	**7.4**	**6.9**	**6.9**	**6.8**

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR) [AN122] Tested: 24/7/2020

PARAMETER	UOM	LOR	0407_TP220_0.1_20(618 SOIL - 18/6/2020 SE207831B.007	0407_TP220_1.0_20(618 SOIL - 18/6/2020 SE207831B.008	0407_TP221_0.1_20(619 SOIL - 19/6/2020 SE207831B.026	0407_TP221_1.0_20(619 SOIL - 19/6/2020 SE207831B.046
Exchangeable Sodium, Na	mg/kg	2	47	<2	18	4
Exchangeable Sodium, Na	meq/100g	0.01	0.20	<0.01	0.08	0.02
Exchangeable Sodium Percentage*	%	0.1	0.4	1.0	1.3	3.0
Exchangeable Potassium, K	mg/kg	2	250	<2	64	2
Exchangeable Potassium, K	meq/100g	0.01	0.64	<0.01	0.16	<0.01
Exchangeable Potassium Percentage*	%	0.1	1.3	0.7	2.6	1.0
Exchangeable Calcium, Ca	mg/kg	2	9700	140	1100	100
Exchangeable Calcium, Ca	meq/100g	0.01	48	0.70	5.4	0.52
Exchangeable Calcium Percentage*	%	0.1	95.5	97.4	88.3	90.6
Exchangeable Magnesium, Mg	mg/kg	2	170	<2	58	4
Exchangeable Magnesium, Mg	meq/100g	0.02	1.4	<0.02	0.48	0.03
Exchangeable Magnesium Percentage*	%	0.1	2.8	0.9	7.8	5.3
Cation Exchange Capacity	meq/100g	0.02	51	0.71	6.1	0.57

Moisture Content [AN002] Tested: 24/7/2020

PARAMETER	UOM	LOR	0407_TP220_0.1_20(618 SOIL - 18/6/2020 SE207831B.007	0407_TP220_1.0_20(618 SOIL - 18/6/2020 SE207831B.008	0407_TP221_0.1_20(619 SOIL - 19/6/2020 SE207831B.026	0407_TP221_1.0_20(619 SOIL - 19/6/2020 SE207831B.046
% Moisture	%w/w	1	**40.6**	**4.0**	**18.1**	**12.4**

TOC in Soil [AN188] Tested: 29/7/2020

PARAMETER	UOM	LOR	0407_TP220_0.1_20(618 SOIL - 18/6/2020 SE207831B.007	0407_TP220_1.0_20(618 SOIL - 18/6/2020 SE207831B.008	0407_TP221_0.1_20(619 SOIL - 19/6/2020 SE207831B.026	0407_TP221_1.0_20(619 SOIL - 19/6/2020 SE207831B.046
Total Organic Carbon	%w/w	0.05	**8.8**	**0.48**	**1.7**	**0.11**
Organic Matter (calc)*	%w/w	0.1	**15**	**0.8**	**3.0**	**0.2**

Particle sizing of soils by sieving [AN005] Tested: 6/8/2020

PARAMETER	UOM	LOR	0407_TP220_0.1_20(618 SOIL - 18/6/2020 SE207831B.007	0407_TP220_1.0_20(618 SOIL - 18/6/2020 SE207831B.008	0407_TP221_0.1_20(619 SOIL - 19/6/2020 SE207831B.026	0407_TP221_1.0_20(619 SOIL - 19/6/2020 SE207831B.046
Passing 75µm*	%w/w	1	**39**	<1	**11**	**4**
Retained 75µm*	%w/w	1	**61**	**100**	**89**	**96**

Particle sizing of soils <75µm by hydrometer [AN005] Tested: 6/8/2020

PARAMETER	UOM	LOR	0407_TP220_0.1_20(618 SOIL - 18/6/2020 SE207831B.007
Clay (<0.002mm)*	%w/w	0.1	**8.0**

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN005	The particle size distribution of a soil is determined by wet sieving, using a maximum of 900 mL of deionised water to sieve all fractions down to 75 µm. Referenced to AS1289.3.6.1 and AS1141.11.
AN005	Following wet sieving of the sample,(particles smaller than 75 µm) a dispersing solution is added and a hydrometer is used to measure sedimentation. Soil density is determined and the percentage of each size fraction calculated. Referenced to AS1289.3.6.3.
AN101	pH in Soil Sludge Sediment and Water: pH is measured electrometrically using a combination electrode and is calibrated against 3 buffers purchased commercially. For soils, sediments and sludges, an extract with water (or 0.01M CaCl2) is made at a ratio of 1:5 and the pH determined and reported on the extract. Reference APHA 4500-H+.
AN122	Exchangeable Cations, CEC and ESP: Soil sample is extracted in 1M Ammonium Acetate at pH=7 (or 1M Ammonium Chloride at pH=7) with cations (Na, K, Ca & Mg) then determined by ICP OES/ICP MS and reported as Exchangeable Cations. For saline soils, these results can be corrected for water soluble cations and reported as Exchangeable cations in meq/100g or soil can be pre-treated (aqueous ethanol/aqueous glycerol) prior to extraction. Cation Exchange Capacity (CEC) is the sum of the exchangeable cations in meq/100g.
AN122	The Exchangeable Sodium Percentage (ESP) is calculated as the exchangeable sodium divided by the CEC (all in meq/100g) times 100. ESP can be used to categorise the sodicity of the soil as below: ESP < 6% non-sodic ESP 6-15% sodic ESP >15% strongly sodic Method is referenced to Rayment and Lyons, 2011, sections 15D3 and 15N1.-
AN188	The organic material in the soil sample is oxidised with chromic acid in the presence of excess sulfuric acid, without external heat being applied. The excess dichromate ion is determined by titration with standard ammonium iron (II) sulfate solution and the amount of oxidised material is calculated from the quantity of dichromate reduced. Referenced to NEPM 105 and AS1289.1.1.1.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	Admin
Client	SGS EHS SYDNEY
Address	5258 201 EHS SYDNEY UNIT 16 33 MADDOX STREET ALEXANDRIA NSW 2015
Telephone	0285940400
Facsimile	0285940499
Email	au.environmental.sydney@sgs.com
Project	**610.30041 Randwick Barracks**
Order Number	**SE207831B**
Samples	46

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Cairns Environmental
Address	Unit 2, 58 Comport St Portsmith QLD 4870
Telephone	+61 07 4035 5111
Facsimile	+61 07 4035 5122
Email	AU.Environmental.Cairns@sgs.com
SGS Reference	**CE147457 R0**
Date Received	21 Jul 2020
Date Reported	06 Aug 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(3146).

SIGNATORIES

[redacted]

Operations Manager

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147457.001 Soil 18 Jun 2020 SE207831B.001	CE147457.002 Soil 18 Jun 2020 SE207831B.002	CE147457.003 Soil 18 Jun 2020 SE207831B.003	CE147457.004 Soil 18 Jun 2020 SE207831B.004
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020							
Clay (<0.002mm)	%w/w	0.1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147457.005 Soil 18 Jun 2020 SE207831B.005	CE147457.006 Soil 18 Jun 2020 SE207831B.006	CE147457.007 Soil 18 Jun 2020 SE207831B.007	CE147457.008 Soil 18 Jun 2020 SE207831B.008
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	**31**	**4.6**
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	**39**	<1
Retained 75µm	%w/w	1		-	-	**61**	**100**
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020							
Clay (<0.002mm)	%w/w	0.1		-	-	**8.0**	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147457.009 Soil 18 Jun 2020 SE207831B.009	CE147457.010 Soil 18 Jun 2020 SE207831B.010	CE147457.011 Soil 18 Jun 2020 SE207831B.011	CE147457.012 Soil 18 Jun 2020 SE207831B.012
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020							
Clay (<0.002mm)	%w/w	0.1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147457.013 Soil 18 Jun 2020 SE207831B.013	CE147457.014 Soil 18 Jun 2020 SE207831B.014	CE147457.015 Soil 18 Jun 2020 SE207831B.015	CE147457.016 Soil 18 Jun 2020 SE207831B.016
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020							
Clay (<0.002mm)	%w/w	0.1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147457.017 Soil 18 Jun 2020 SE207831B.017	CE147457.018 Soil 18 Jun 2020 SE207831B.018	CE147457.019 Soil 18 Jun 2020 SE207831B.019	CE147457.020 Soil 18 Jun 2020 SE207831B.020
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020							
Clay (<0.002mm)	%w/w	0.1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147457.021 Soil 18 Jun 2020 SE207831B.021	CE147457.022 Soil 18 Jun 2020 SE207831B.022	CE147457.023 Soil 18 Jun 2020 SE207831B.023	CE147457.024 Soil 19 Jun 2020 SE207831B.024
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020							
Clay (<0.002mm)	%w/w	0.1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name CE147457.025 Material 19 Jun 2020 SE207831B.025	CE147457.026 Soil 19 Jun 2020 SE207831B.026	CE147457.027 Soil 19 Jun 2020 SE207831B.027	CE147457.028 Soil 19 Jun 2020 SE207831B.028
Moisture Content Method: AN002 Tested: 31/7/2020						
% Moisture	%w/w	1	-	**18**	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020						
Passing 75µm	%w/w	1	-	**11**	-	-
Retained 75µm	%w/w	1	-	**89**	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020						
Clay (<0.002mm)	%w/w	0.1	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147457.029 Soil 19 Jun 2020 SE207831B.029	CE147457.030 Soil 19 Jun 2020 SE207831B.030	CE147457.031 Soil 19 Jun 2020 SE207831B.031	CE147457.032 Soil 19 Jun 2020 SE207831B.032
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020							
Clay (<0.002mm)	%w/w	0.1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147457.033 Soil 19 Jun 2020 SE207831B.033	CE147457.034 Material 19 Jun 2020 SE207831B.034	CE147457.035 Soil 19 Jun 2020 SE207831B.035	CE147457.036 Soil 19 Jun 2020 SE207831B.036
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020							
Clay (<0.002mm)	%w/w	0.1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name CE147457.037 Material 19 Jun 2020 SE207831B.037	CE147457.038 Soil 19 Jun 2020 SE207831B.038	CE147457.039 Soil 19 Jun 2020 SE207831B.039	CE147457.040 Soil 19 Jun 2020 SE207831B.040
Moisture Content Method: AN002 Tested: 31/7/2020						
% Moisture	%w/w	1	-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020						
Passing 75µm	%w/w	1	-	-	-	-
Retained 75µm	%w/w	1	-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020						
Clay (<0.002mm)	%w/w	0.1	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147457.041 Soil 19 Jun 2020 SE207831B.041	CE147457.042 Soil 19 Jun 2020 SE207831B.042	CE147457.043 Soil 19 Jun 2020 SE207831B.043	CE147457.044 Soil 19 Jun 2020 SE207831B.044
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020							
Clay (<0.002mm)	%w/w	0.1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147457.045 Soil 19 Jun 2020 SE207831B.045	CE147457.046 Soil 19 Jun 2020 SE207831B.046
Moisture Content Method: AN002 Tested: 31/7/2020					
% Moisture	%w/w	1		-	**13**
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020					
Passing 75µm	%w/w	1		-	**4**
Retained 75µm	%w/w	1		-	**96**
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020					
Clay (<0.002mm)	%w/w	0.1		-	-

QC SUMMARY

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage.* Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

No QC samples were reported for this job.

METHOD SUMMARY

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN005	The particle size distribution of a soil is determined by wet sieving, using a maximum of 900 mL of deionised water to sieve all fractions down to 75 µm. Referenced to AS1289.3.6.1 and AS1141.11.
AN005	Following wet sieving of the sample,(particles smaller than 75 µm) a dispersing solution is added and a hydrometer is used to measure sedimentation. Soil density is determined and the percentage of each size fraction calculated. Referenced to AS1289.3.6.3.

FOOTNOTES

IS	Insufficient sample for analysis.	LOR	Limit of Reporting
LNR	Sample listed, but not received.	↑↓	Raised or Lowered Limit of Reporting
*	NATA accreditation does not cover the performance of this service.	QFH	QC result is above the upper tolerance
		QFL	QC result is below the lower tolerance
**	Indicative data, theoretical holding time exceeded.	-	The sample was not analysed for this analyte
		NVL	Not Validated

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calcuated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE207831B R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	46

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207831B R0**
Date Received	21 Jul 2020
Date Reported	06 Aug 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Extraction Date	Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)	4 items
	Moisture Content	4 items
	pH in soil (1:5)	4 items
	TOC in Soil	4 items
Analysis Date	Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)	4 items
	TOC in Soil	4 items

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	4 Soil
Date documentation received	21/7/2020@5:03pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	8°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE207831B R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)

Method: ME-(AU)-[ENV]AN122

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP220_0.1_200618	SE207831B.007	LB205096	18 Jun 2020	21 Jul 2020	16 Jul 2020	24 Jul 2020†	16 Jul 2020	28 Jul 2020†
0407_TP220_1.0_200618	SE207831B.008	LB205096	18 Jun 2020	21 Jul 2020	16 Jul 2020	24 Jul 2020†	16 Jul 2020	28 Jul 2020†
0407_TP221_0.1_200619	SE207831B.026	LB205096	19 Jun 2020	21 Jul 2020	17 Jul 2020	24 Jul 2020†	17 Jul 2020	28 Jul 2020†
0407_TP221_1.0_200619	SE207831B.046	LB205096	19 Jun 2020	21 Jul 2020	17 Jul 2020	24 Jul 2020†	17 Jul 2020	28 Jul 2020†

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP220_0.1_200618	SE207831B.007	LB205094	18 Jun 2020	21 Jul 2020	02 Jul 2020	24 Jul 2020†	29 Jul 2020	28 Jul 2020
0407_TP220_1.0_200618	SE207831B.008	LB205094	18 Jun 2020	21 Jul 2020	02 Jul 2020	24 Jul 2020†	29 Jul 2020	28 Jul 2020
0407_TP221_0.1_200619	SE207831B.026	LB205094	19 Jun 2020	21 Jul 2020	03 Jul 2020	24 Jul 2020†	29 Jul 2020	28 Jul 2020
0407_TP221_1.0_200619	SE207831B.046	LB205094	19 Jun 2020	21 Jul 2020	03 Jul 2020	24 Jul 2020†	29 Jul 2020	28 Jul 2020

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP220_0.1_200618	SE207831B.007	LB205437	18 Jun 2020	21 Jul 2020	25 Jun 2020	29 Jul 2020†	30 Jul 2020	29 Jul 2020
0407_TP220_1.0_200618	SE207831B.008	LB205437	18 Jun 2020	21 Jul 2020	25 Jun 2020	29 Jul 2020†	30 Jul 2020	29 Jul 2020
0407_TP221_0.1_200619	SE207831B.026	LB205437	19 Jun 2020	21 Jul 2020	26 Jun 2020	29 Jul 2020†	30 Jul 2020	29 Jul 2020
0407_TP221_1.0_200619	SE207831B.046	LB205437	19 Jun 2020	21 Jul 2020	26 Jun 2020	29 Jul 2020†	30 Jul 2020	29 Jul 2020

TOC in Soil

Method: ME-(AU)-[ENV]AN188

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP220_0.1_200618	SE207831B.007	LB205429	18 Jun 2020	21 Jul 2020	16 Jul 2020	29 Jul 2020†	16 Jul 2020	29 Jul 2020†
0407_TP220_1.0_200618	SE207831B.008	LB205429	18 Jun 2020	21 Jul 2020	16 Jul 2020	29 Jul 2020†	16 Jul 2020	29 Jul 2020†
0407_TP221_0.1_200619	SE207831B.026	LB205429	19 Jun 2020	21 Jul 2020	17 Jul 2020	29 Jul 2020†	17 Jul 2020	29 Jul 2020†
0407_TP221_1.0_200619	SE207831B.046	LB205429	19 Jun 2020	21 Jul 2020	17 Jul 2020	29 Jul 2020†	17 Jul 2020	29 Jul 2020†

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No surrogates were required for this job.

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR) — Method: ME-(AU)-[ENV]AN122

Sample Number	Parameter	Units	LOR	Result
LB205096.001	Exchangeable Sodium, Na	mg/kg	2	0
	Exchangeable Potassium, K	mg/kg	2	0
	Exchangeable Calcium, Ca	mg/kg	2	0
	Exchangeable Magnesium, Mg	mg/kg	2	0

TOC in Soil — Method: ME-(AU)-[ENV]AN188

Sample Number	Parameter	Units	LOR	Result
LB205429.001	Total Organic Carbon	%w/w	0.05	<0.05

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207831B.008	LB205094.011	% Moisture	%w/w	1	4.0	4.0	55	1

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207591B.003	LB205437.025	pH	pH Units	0.1	6.684	6.438	32	4
SE207998A.026	LB205437.024	pH	pH Units	0.1	5.8	5.553	32	4

TOC in Soil

Method: ME-(AU)-[ENV]AN188

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207831B.007	LB205429.004	Total Organic Carbon	%w/w	0.05	8.8	10	31	13

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR) — Method: ME-(AU)-[ENV]AN122

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205096.002	Exchangeable Sodium, Na	meq/100g	0.01	0.19	0.194	80 - 120	97
	Exchangeable Potassium, K	meq/100g	0.01	0.58	0.63	80 - 120	92
	Exchangeable Calcium, Ca	meq/100g	0.01	6.9	6.3	80 - 120	109
	Exchangeable Magnesium, Mg	meq/100g	0.02	0.94	1.11	80 - 120	85

pH in soil (1:5) — Method: ME-(AU)-[ENV]AN101

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205437.003	pH	pH Units	0.1	7.5	7.415	98 - 102	101

TOC in Soil — Method: ME-(AU)-[ENV]AN188

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205429.002	Total Organic Carbon	%w/w	0.05	0.29	0.325	80 - 120	90

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

TOC in Soil — **Method: ME-(AU)-[ENV]AN188**

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208142A.01	LB205429.019	Total Organic Carbon	%w/w	0.05	0.51	0.54	-	-

MATRIX SPIKE DUPLICATES

SE207831B R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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Good morning

Please book these additional jobs in.

Please be very carefully as there are lots of jobs

Regards,

[redacted]
Environment, Health & Safety
Client Manager
Phone: +61 (0)2 8594 0400
Direct:
Mobile: [redacted]
(Please note my new working hours of Mon-Fri 6:00am-2:00pm)



Covid-19 update: SGS Australia is open, with our Business Service Continuity Plans being put in place to ensure your project can be delivered as normal, please click here to see further details on our Business & Services Continuity Plans.

From: [redacted]@slrconsulting.com>
Sent: Tuesday, 21 July 2020 5:03 PM
To: [redacted]@sgs.com>
Cc: [redacted]@slrconsulting.com>
Subject: [EXTERNAL] 610.30041 DHA Randwick - Additional Analysis

*** WARNING: this message is from an EXTERNAL SENDER. Please be cautious, particularly with links and attachments. ***

Hi [redacted]

Can we please schedule the following analyses:

pH, clay content, TOC & CEC:

Report number	Sample ID
SE207695	TP002_0.1_200615
SE207695	TP002_1.5_200615
SE207695	TP005_0.1_200616
SE207695	TP005_1.5_200616
SE207695	TP049_0.1_200617
SE207695	TP049_1.0_200617
SE208047	TP092_0.1_200624
SE208047	TP092_1.0_200624
SE207831	TP220_0.1_200618
SE207831	TP220_1.0_200618
SE207831	TP221_0.1_200619
SE207831	TP221_1.0_200619
SE207998	TP230_0.1_200622
SE207998	TP230_1.8_200622
SE207591	TP018_0.1_200615
SE207591	TP018_1.0_200615
SE208047	TP092_0.1_200624
SE208047	TP092_1.0_200624
SE207911	TP095_0.1_200623
SE207911	TP095_1.0_200623
SE207731	TP073_0.1_200619
SE207731	TP073_1.0_200619
SE208659	TP133_0.1_200701
SE208659	TP133_1.0_200701
SE208142	TP151_0.1_200629
SE208142	TP151_1.0_200629
SE208137	TP183_0.1_200625
SE208137	TP183_0.5_200625

Additional analysis:

Report number	Sample ID	Parameter
SE208081	0407_TP241_1.0_200625	Pb & Zn
SE207731	0407_TP73_0.5_200619	Cr

ASLP Leach:

Report number	Sample ID	Parameter
SE208046	0407_TP237_0.5_200624	8 metals
SE208081	0407_TP241_0.5_200625	8 metals
SE208133	0407_TP111_0.1_200626	8 metals
SE208142	0407_TP256_0.1_200629	8 metals
SE207831	0407_TP222_0.1_200619	8 metals
SE207731	0407_TP73_0.1_200619	8 metals
SE207850	0407_TP162_0.1_200617	PAHs include B(a)P

SE207831	0407_TP197_0.1_200619	PAHs include B(a)P
SE207831	0407_TP197_0.5_200619	PAHs include B(a)P
SE207831	0407_TP200_0.5_200618	PAHs include B(a)P
SE207831	0407_TP200_1.0_200618	Total and leachable PAHs including B(a)P
SE207831	0407_TP209_0.5_200619	PAHs include B(a)P
SE207831	0407_TP221_0.5_200619	PAHs include B(a)P
SE207831	0407_TP221_1.0_200619	Total and leachable PAHs including B(a)P
SE207824	0407_TP231_0.1_200622	PAHs include B(a)P
SE208161	0407_BH41_0.0_200625	PFOS, PFOA, PfHxS
SE208046	0407_QC160_200624	PFOS, PFOA, PfHxS
SE207824	0407_QC130_200622	PFOS, PFOA, PfHxS

Let me know if you have any questions.

Many thanks,

[redacted]

SLR

[redacted]

Associate - Land Quality & Remediation

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If you have received this email outside of regular office hours, it is not expected that you will respond until your own working hours commence.

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o [redacted]
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e [redacted]@slrconsulting.com

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Level 2, 15 Astor Terrace, Brisbane, QLD, Australia, 4000

WINNERS: RoSPA Gold Award, 2017

WINNERS : International Business Excellence Award, 2016

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SAMPLE RECEIPT ADVICE

SE207591B

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000661--000663**
Samples	29

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Tue 21/7/2020
Report Due	Wed 29/7/2020
SGS Reference	**SE207591B**

SUBMISSION DETAILS

This is to confirm that 29 samples were received on Tuesday 21/7/2020. Results are expected to be ready by COB Wednesday 29/7/2020.
Please quote SGS reference SE207591B when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	2 Soil
Date documentation received	21/7/2020@5:03pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	11°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

% Clay subcontracted to SGS Cairns, 2/58 Comport St, Portsmith QLD 4870, NATA Accreditation Number: 2562, Site Number: 3146.

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SAMPLE RECEIPT ADVICE

SE207591B

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Exchangeable Cations and Cation Exchange Capacity	Moisture Content	Particle sizing of soils <75µm by hydrometer	Particle sizing of soils by sieving	pH in soil (1:5)	TOC in Soil
003	0407_TP18_0.1_200615	13	1	1	2	1	2

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE207591B

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Exchangeable Cations and Cation Exchange Capacity	Moisture Content	Particle sizing of soils <75µm by hydrometer	Particle sizing of soils by sieving	pH in soil (1:5)	TOC in Soil
029	0407_TP18_1.0_200615	13	1	1	2	1	2

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	29

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207591B R0**
Date Received	21/7/2020
Date Reported	6/8/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

% Clay subcontracted to SGS Cairns, 2/58 Comport St, Portsmith QLD 4870, NATA Accreditation Number: 2562, Site Number: 3146. CE147463

SIGNATORIES

[redacted]

Senior Organic Chemist/Metals Chemist Inorganic/Metals Chemist

pH in soil (1:5) [AN101] Tested: 29/7/2020

PARAMETER	UOM	LOR	0407_TP18_0.1_200 15 SOIL - 15/6/2020 SE207591B.003	0407_TP18_1.0_200 15 SOIL - 16/6/2020 SE207591B.029
pH	pH Units	0.1	**6.7**	**6.5**

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR) [AN122] Tested: 24/7/2020

PARAMETER	UOM	LOR	0407_TP18_0.1_200(15 SOIL - 15/6/2020 SE207591B.003	0407_TP18_1.0_200(15 SOIL - 16/6/2020 SE207591B.029
Exchangeable Sodium, Na	mg/kg	2	**16**	**5**
Exchangeable Sodium, Na	meq/100g	0.01	**0.07**	**0.02**
Exchangeable Sodium Percentage*	%	0.1	**1.5**	**9.6**
Exchangeable Potassium, K	mg/kg	2	**69**	**8**
Exchangeable Potassium, K	meq/100g	0.01	**0.18**	**0.02**
Exchangeable Potassium Percentage*	%	0.1	**4.0**	**8.2**
Exchangeable Calcium, Ca	mg/kg	2	**720**	**39**
Exchangeable Calcium, Ca	meq/100g	0.01	**3.6**	**0.19**
Exchangeable Calcium Percentage*	%	0.1	**80.8**	**78.5**
Exchangeable Magnesium, Mg	mg/kg	2	**74**	<2
Exchangeable Magnesium, Mg	meq/100g	0.02	**0.61**	<0.02
Exchangeable Magnesium Percentage*	%	0.1	**13.7**	**3.8**
Cation Exchange Capacity	meq/100g	0.02	**4.5**	**0.25**

TOC in Soil [AN188] Tested: 29/7/2020

PARAMETER	UOM	LOR	0407_TP18_0.1_200(15 SOIL - 15/6/2020 SE207591B.003	0407_TP18_1.0_200(15 SOIL - 16/6/2020 SE207591B.029
Total Organic Carbon	%w/w	0.05	**1.3**	**0.10**
Organic Matter (calc)*	%w/w	0.1	**2.3**	**0.2**

Moisture Content [AN002] Tested: 24/7/2020

PARAMETER	UOM	LOR	0407_TP18_0.1_20015 SOIL - 15/6/2020 SE207591B.003	0407_TP18_1.0_20015 SOIL - 16/6/2020 SE207591B.029
% Moisture	%w/w	1	**11.3**	**1.4**

Particle sizing of soils by sieving [AN005] Tested: 6/8/2020

PARAMETER	UOM	LOR	0407_TP18_0.1_200(15 SOIL - 15/6/2020 SE207591B.003	0407_TP18_1.0_200(15 SOIL - 16/6/2020 SE207591B.029
Passing 75µm*	%w/w	1	**31**	<1
Retained 75µm*	%w/w	1	**69**	**100**

Particle sizing of soils <75µm by hydrometer [AN005] Tested: 6/8/2020

PARAMETER	UOM	LOR	0407_TP18_0.1_2006 15 SOIL - 15/6/2020 SE207591B.003
Clay (<0.002mm)*	%w/w	0.1	10

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN005	The particle size distribution of a soil is determined by wet sieving, using a maximum of 900 mL of deionised water to sieve all fractions down to 75 µm. Referenced to AS1289.3.6.1 and AS1141.11.
AN005	Following wet sieving of the sample,(particles smaller than 75 µm) a dispersing solution is added and a hydrometer is used to measure sedimentation. Soil density is determined and the percentage of each size fraction calculated. Referenced to AS1289.3.6.3.
AN101	pH in Soil Sludge Sediment and Water: pH is measured electrometrically using a combination electrode and is calibrated against 3 buffers purchased commercially. For soils, sediments and sludges, an extract with water (or 0.01M CaCl2) is made at a ratio of 1:5 and the pH determined and reported on the extract. Reference APHA 4500-H+.
AN122	Exchangeable Cations, CEC and ESP: Soil sample is extracted in 1M Ammonium Acetate at pH=7 (or 1M Ammonium Chloride at pH=7) with cations (Na, K, Ca & Mg) then determined by ICP OES/ICP MS and reported as Exchangeable Cations. For saline soils, these results can be corrected for water soluble cations and reported as Exchangeable cations in meq/100g or soil can be pre-treated (aqueous ethanol/aqueous glycerol) prior to extraction. Cation Exchange Capacity (CEC) is the sum of the exchangeable cations in meq/100g.
AN122	The Exchangeable Sodium Percentage (ESP) is calculated as the exchangeable sodium divided by the CEC (all in meq/100g) times 100. ESP can be used to categorise the sodicity of the soil as below: ESP < 6% non-sodic ESP 6-15% sodic ESP >15% strongly sodic Method is referenced to Rayment and Lyons, 2011, sections 15D3 and 15N1.-
AN188	The organic material in the soil sample is oxidised with chromic acid in the presence of excess sulfuric acid, without external heat being applied. The excess dichromate ion is determined by titration with standard ammonium iron (II) sulfate solution and the amount of oxidised material is calculated from the quantity of dichromate reduced. Referenced to NEPM 105 and AS1289.1.1.1.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS		LABORATORY DETAILS	
Contact	Admin	Manager	[redacted]
Client	SGS EHS SYDNEY	Laboratory	SGS Cairns Environmental
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Facsimile	0285940499	Facsimile	+61 07 4035 5122
Email	au.environmental.sydney@sgs.com	Email	AU.Environmental.Cairns@sgs.com
Project	**610.30041 Randwick Barracks**	SGS Reference	**CE147463 R0**
Order Number	**SE207591B**	Date Received	21 Jul 2020
Samples	29	Date Reported	06 Aug 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(3146).

SIGNATORIES

[redacted]

Operations Manager

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147463.001 Soil 15 Jun 2020 SE207591B.001	CE147463.002 Soil 15 Jun 2020 SE207591B.002	CE147463.003 Soil 15 Jun 2020 SE207591B.003	CE147463.004 Soil 15 Jun 2020 SE207591B.004
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	**11**	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	**31**	-
Retained 75µm	%w/w	1		-	-	**69**	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020							
Clay (<0.002mm)	%w/w	0.1		-	-	**10**	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147463.005 Soil 15 Jun 2020 SE207591B.005	CE147463.006 Soil 15 Jun 2020 SE207591B.006	CE147463.007 Soil 15 Jun 2020 SE207591B.007	CE147463.008 Soil 15 Jun 2020 SE207591B.008
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020							
Clay (<0.002mm)	%w/w	0.1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147463.009 Soil 15 Jun 2020 SE207591B.009	CE147463.010 Soil 16 Jun 2020 SE207591B.010	CE147463.011 Soil 16 Jun 2020 SE207591B.011	CE147463.012 Soil 16 Jun 2020 SE207591B.012
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020							
Clay (<0.002mm)	%w/w	0.1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147463.013 Soil 16 Jun 2020 SE207591B.013	CE147463.014 Soil 16 Jun 2020 SE207591B.014	CE147463.015 Soil 16 Jun 2020 SE207591B.015	CE147463.016 Soil 16 Jun 2020 SE207591B.016
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020							
Clay (<0.002mm)	%w/w	0.1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147463.017 Soil 16 Jun 2020 SE207591B.017	CE147463.018 Soil 16 Jun 2020 SE207591B.018	CE147463.019 Soil 16 Jun 2020 SE207591B.019	CE147463.020 Soil 16 Jun 2020 SE207591B.020
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020							
Clay (<0.002mm)	%w/w	0.1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147463.021 Soil 16 Jun 2020 SE207591B.021	CE147463.022 Soil 16 Jun 2020 SE207591B.022	CE147463.023 Soil 16 Jun 2020 SE207591B.023	CE147463.024 Soil 16 Jun 2020 SE207591B.024
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020							
Clay (<0.002mm)	%w/w	0.1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147463.025 Soil 16 Jun 2020 SE207591B.025	CE147463.026 Soil 16 Jun 2020 SE207591B.026	CE147463.027 Material 16 Jun 2020 SE207591B.027	CE147463.028 Material 16 Jun 2020 SE207591B.028
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020							
Clay (<0.002mm)	%w/w	0.1		-	-	-	-

Parameter	Units	LOR	Sample Number: CE147463.029 Sample Matrix: Soil Sample Date: 16 Jun 2020 Sample Name: SE207591B.029
Moisture Content Method: AN002 Tested: 30/7/2020			
% Moisture	%w/w	1	**1.2**
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020			
Passing 75µm	%w/w	1	<1
Retained 75µm	%w/w	1	**100**
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020			
Clay (<0.002mm)	%w/w	0.1	-

QC SUMMARY

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage.* Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

No QC samples were reported for this job.

METHOD SUMMARY

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN005	The particle size distribution of a soil is determined by wet sieving, using a maximum of 900 mL of deionised water to sieve all fractions down to 75 µm. Referenced to AS1289.3.6.1 and AS1141.11.
AN005	Following wet sieving of the sample,(particles smaller than 75 µm) a dispersing solution is added and a hydrometer is used to measure sedimentation. Soil density is determined and the percentage of each size fraction calculated. Referenced to AS1289.3.6.3.

FOOTNOTES

IS	Insufficient sample for analysis.	LOR	Limit of Reporting
LNR	Sample listed, but not received.	↑↓	Raised or Lowered Limit of Reporting
*	NATA accreditation does not cover the performance of this service.	QFH	QC result is above the upper tolerance
		QFL	QC result is below the lower tolerance
**	Indicative data, theoretical holding time exceeded.	-	The sample was not analysed for this analyte
		NVL	Not Validated

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calcuated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE207591B R0

CLIENT DETAILS

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Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	29

LABORATORY DETAILS

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SGS Reference	**SE207591B R0**
Date Received	21 Jul 2020
Date Reported	06 Aug 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Extraction Date	Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)	2 items
	Moisture Content	2 items
	pH in soil (1:5)	2 items
	TOC in Soil	2 items
Analysis Date	Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)	3 items
	TOC in Soil	2 items

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	2 Soil
Date documentation received	21/7/2020@5:03pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	11°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE207591B R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)

Method: ME-(AU)-[ENV]AN122

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP18_0.1_200615	SE207591B.003	LB205097	15 Jun 2020	21 Jul 2020	13 Jul 2020	24 Jul 2020†	13 Jul 2020	29 Jul 2020†
0407_TP18_1.0_200615	SE207591B.029	LB205097	16 Jun 2020	21 Jul 2020	14 Jul 2020	24 Jul 2020†	14 Jul 2020	29 Jul 2020†

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP18_0.1_200615	SE207591B.003	LB205094	15 Jun 2020	21 Jul 2020	29 Jun 2020	24 Jul 2020†	29 Jul 2020	29 Jul 2020
0407_TP18_1.0_200615	SE207591B.029	LB205094	16 Jun 2020	21 Jul 2020	30 Jun 2020	24 Jul 2020†	29 Jul 2020	29 Jul 2020

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP18_0.1_200615	SE207591B.003	LB205437	15 Jun 2020	21 Jul 2020	22 Jun 2020	29 Jul 2020†	30 Jul 2020	29 Jul 2020
0407_TP18_1.0_200615	SE207591B.029	LB205437	16 Jun 2020	21 Jul 2020	23 Jun 2020	29 Jul 2020†	30 Jul 2020	29 Jul 2020

TOC in Soil

Method: ME-(AU)-[ENV]AN188

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP18_0.1_200615	SE207591B.003	LB205429	15 Jun 2020	21 Jul 2020	13 Jul 2020	29 Jul 2020†	13 Jul 2020	29 Jul 2020†
0407_TP18_1.0_200615	SE207591B.029	LB205429	16 Jun 2020	21 Jul 2020	14 Jul 2020	29 Jul 2020†	14 Jul 2020	29 Jul 2020†

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No surrogates were required for this job.

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR) — Method: ME-(AU)-[ENV]AN122

Sample Number	Parameter	Units	LOR	Result
LB205097.001	Exchangeable Sodium, Na	mg/kg	2	0
	Exchangeable Potassium, K	mg/kg	2	0
	Exchangeable Calcium, Ca	mg/kg	2	0
	Exchangeable Magnesium, Mg	mg/kg	2	0

TOC in Soil — Method: ME-(AU)-[ENV]AN188

Sample Number	Parameter	Units	LOR	Result
LB205429.001	Total Organic Carbon	%w/w	0.05	<0.05

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207831B.008	LB205094.011	% Moisture	%w/w	1	4.0	4.0	55	1

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207591B.003	LB205437.025	pH	pH Units	0.1	6.7	6.438	32	4
SE207998A.026	LB205437.024	pH	pH Units	0.1	5.8	5.553	32	4

TOC in Soil

Method: ME-(AU)-[ENV]AN188

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207831B.007	LB205429.004	Total Organic Carbon	%w/w	0.05	8.8	10	31	13

LABORATORY CONTROL SAMPLES

SE207591B R0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)

Method: ME-(AU)-[ENV]AN122

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205097.002	Exchangeable Sodium, Na	meq/100g	0.01	0.19	0.194	80 - 120	99
	Exchangeable Potassium, K	meq/100g	0.01	0.58	0.63	80 - 120	91
	Exchangeable Calcium, Ca	meq/100g	0.01	6.3	6.3	80 - 120	100
	Exchangeable Magnesium, Mg	meq/100g	0.02	0.91	1.11	80 - 120	82

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205437.003	pH	pH Units	0.1	7.5	7.415	98 - 102	101

TOC in Soil

Method: ME-(AU)-[ENV]AN188

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205429.002	Total Organic Carbon	%w/w	0.05	0.29	0.325	80 - 120	90

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

TOC in Soil — **Method: ME-(AU)-[ENV]AN188**

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208142A.01	LB205429.019	Total Organic Carbon	%w/w	0.05	0.51	0.54	-	-

MATRIX SPIKE DUPLICATES

SE207591B R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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This test report shall not be reproduced, except in full.

Good morning

Please book these additional jobs in.

Please be very carefully as there are lots of jobs

Regards,

[redacted]
Environment, Health & Safety
Client Manager
Phone: +61 (0)2 8594 0400
Direct:
Mobile: [redacted]
(Please note my new working hours of Mon-Fri 6:00am-2:00pm)



Covid-19 update: SGS Australia is open, with our Business Service Continuity Plans being put in place to ensure your project can be delivered as normal, please click here to see further details on our Business & Services Continuity Plans.

From: [redacted]@slrconsulting.com>
Sent: Tuesday, 21 July 2020 5:03 PM
To: [redacted]@sgs.com>
Cc: [redacted]@slrconsulting.com>
Subject: [EXTERNAL] 610.30041 DHA Randwick - Additional Analysis

*** WARNING: this message is from an EXTERNAL SENDER. Please be cautious, particularly with links and attachments. ***

Hi [redacted]

Can we please schedule the following analyses:

pH, clay content, TOC & CEC:

Report number	Sample ID
SE207695	TP002_0.1_200615
SE207695	TP002_1.5_200615
SE207695	TP005_0.1_200616
SE207695	TP005_1.5_200616
SE207695	TP049_0.1_200617
SE207695	TP049_1.0_200617
SE208047	TP092_0.1_200624
SE208047	TP092_1.0_200624
SE207831	TP220_0.1_200618
SE207831	TP220_1.0_200618
SE207831	TP221_0.1_200619
SE207831	TP221_1.0_200619
SE207998	TP230_0.1_200622
SE207998	TP230_1.8_200622
SE207591	TP018_0.1_200615
SE207591	TP018_1.0_200615
SE208047	TP092_0.1_200624
SE208047	TP092_1.0_200624
SE207911	TP095_0.1_200623
SE207911	TP095_1.0_200623
SE207731	TP073_0.1_200619
SE207731	TP073_1.0_200619
SE208659	TP133_0.1_200701
SE208659	TP133_1.0_200701
SE208142	TP151_0.1_200629
SE208142	TP151_1.0_200629
SE208137	TP183_0.1_200625
SE208137	TP183_0.5_200625

Additional analysis:

Report number	Sample ID	Parameter
SE208081	0407_TP241_1.0_200625	Pb & Zn
SE207731	0407_TP73_0.5_200619	Cr

ASLP Leach:

Report number	Sample ID	Parameter
SE208046	0407_TP237_0.5_200624	8 metals
SE208081	0407_TP241_0.5_200625	8 metals
SE208133	0407_TP111_0.1_200626	8 metals
SE208142	0407_TP256_0.1_200629	8 metals
SE207831	0407_TP222_0.1_200619	8 metals
SE207731	0407_TP73_0.1_200619	8 metals
SE207850	0407_TP162_0.1_200617	PAHs include B(a)P

SE207831	0407_TP197_0.1_200619	PAHs include B(a)P
SE207831	0407_TP197_0.5_200619	PAHs include B(a)P
SE207831	0407_TP200_0.5_200618	PAHs include B(a)P
SE207831	0407_TP200_1.0_200618	Total and leachable PAHs including B(a)P
SE207831	0407_TP209_0.5_200619	PAHs include B(a)P
SE207831	0407_TP221_0.5_200619	PAHs include B(a)P
SE207831	0407_TP221_1.0_200619	Total and leachable PAHs including B(a)P
SE207824	0407_TP231_0.1_200622	PAHs include B(a)P
SE208161	0407_BH41_0.0_200625	PFOS, PFOA, PfHxS
SE208046	0407_QC160_200624	PFOS, PFOA, PfHxS
SE207824	0407_QC130_200622	PFOS, PFOA, PfHxS

Let me know if you have any questions.

Many thanks,

[redacted]

SLR

[redacted]

Associate - Land Quality & Remediation

Please note in response to the COVID-19 Pandemic and physical distancing recommendations from the Australian Government, SLR is encouraging staff to work remotely and implement flexible working hours if necessary.
If you have received this email outside of regular office hours, it is not expected that you will respond until your own working hours commence.

d +61 7 3117 5227
o [redacted]
m
e [redacted]@slrconsulting.com

SLR Consulting Australia Pty Ltd
Level 2, 15 Astor Terrace, Brisbane, QLD, Australia, 4000

WINNERS: RoSPA Gold Award, 2017

WINNERS : International Business Excellence Award, 2016

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SAMPLE RECEIPT ADVICE

SE207998A

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	26

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Tue 21/7/2020
Report Due	Wed 29/7/2020
SGS Reference	**SE207998A**

SUBMISSION DETAILS

This is to confirm that 26 samples were received on Tuesday 21/7/2020. Results are expected to be ready by COB Wednesday 29/7/2020.
Please quote SGS reference SE207998A when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	2 Soil
Date documentation received	21/7/2020@5:03pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	5.4°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

% Clay subcontracted to SGS Cairns, 2/58 Comport St, Portsmith QLD 4870, NATA Accreditation Number: 2562, Site Number: 3146.

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SAMPLE RECEIPT ADVICE

SE207998A

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Exchangeable Cations and Cation Exchange Capacity	Moisture Content	Particle sizing of soils <75µm by hydrometer	Particle sizing of soils by sieving	pH in soil (1:5)	TOC in Soil
018	0407_TP230_0.1_200622	13	1	1	2	1	2

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE207998A

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Exchangeable Cations and Cation Exchange Capacity	Moisture Content	Particle sizing of soils <75µm by hydrometer	Particle sizing of soils by sieving	pH in soil (1:5)	TOC in Soil
026	0407_TP230_1.8_200622	13	1	1	2	1	2

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	26

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207998A R0**
Date Received	21/7/2020
Date Reported	6/8/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

% Clay subcontracted to SGS Cairns, 2/58 Comport St, Portsmith QLD 4870, NATA Accreditation Number: 2562, Site Number: 3146. CE147461

SIGNATORIES

[redacted]

Senior Organic Chemist/Metals Chemist

Inorganic/Metals Chemist

pH in soil (1:5) [AN101] Tested: 29/7/2020

PARAMETER	UOM	LOR	0407_TP230_0.1_20(622 SOIL - 22/6/2020 SE207998A.018	0407_TP230_1.8_20(622 SOIL - 22/6/2020 SE207998A.026
pH	pH Units	0.1	**7.3**	**5.8**

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR) [AN122] Tested: 24/7/2020

PARAMETER	UOM	LOR	0407_TP230_0.1_20(622 SOIL - 22/6/2020 SE207998A.018	0407_TP230_1.8_20(622 SOIL - 22/6/2020 SE207998A.026
Exchangeable Sodium, Na	mg/kg	2	**49**	<2
Exchangeable Sodium, Na	meq/100g	0.01	**0.21**	<0.01
Exchangeable Sodium Percentage*	%	0.1	**0.4**	**5.9**
Exchangeable Potassium, K	mg/kg	2	**320**	<2
Exchangeable Potassium, K	meq/100g	0.01	**0.82**	<0.01
Exchangeable Potassium Percentage*	%	0.1	**1.7**	**2.4**
Exchangeable Calcium, Ca	mg/kg	2	**8900**	**17**
Exchangeable Calcium, Ca	meq/100g	0.01	**45**	**0.09**
Exchangeable Calcium Percentage*	%	0.1	**93.5**	**77.8**
Exchangeable Magnesium, Mg	mg/kg	2	**250**	<2
Exchangeable Magnesium, Mg	meq/100g	0.02	**2.1**	<0.02
Exchangeable Magnesium Percentage*	%	0.1	**4.3**	**14.0**
Cation Exchange Capacity	meq/100g	0.02	**48**	**0.11**

TOC in Soil [AN188] Tested: 28/7/2020

PARAMETER	UOM	LOR	0407_TP230_0.1_20(622 SOIL - 22/6/2020 SE207998A.018	0407_TP230_1.8_20(622 SOIL - 22/6/2020 SE207998A.026
Total Organic Carbon	%w/w	0.05	**9.1**	<0.05
Organic Matter (calc)*	%w/w	0.1	**16**	<0.1

Moisture Content [AN002] Tested: 24/7/2020

PARAMETER	UOM	LOR	0407_TP230_0.1_20(622 SOIL - 22/6/2020 SE207998A.018	0407_TP230_1.8_20(622 SOIL - 22/6/2020 SE207998A.026
% Moisture	%w/w	1	**44.2**	**4.9**

Particle sizing of soils by sieving [AN005] Tested: 6/8/2020

PARAMETER	UOM	LOR	0407_TP230_0.1_20(622 SOIL - 22/6/2020 SE207998A.018	0407_TP230_1.8_20(622 SOIL - 22/6/2020 SE207998A.026
Passing 75µm*	%w/w	1	**25**	**2**
Retained 75µm*	%w/w	1	**75**	**98**

Particle sizing of soils <75µm by hydrometer [AN005] Tested: 6/8/2020

PARAMETER	UOM	LOR	0407_TP230_0.1_20(622 SOIL - 22/6/2020 SE207998A.018
Clay (<0.002mm)*	%w/w	0.1	**6.0**

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN005	The particle size distribution of a soil is determined by wet sieving, using a maximum of 900 mL of deionised water to sieve all fractions down to 75 µm. Referenced to AS1289.3.6.1 and AS1141.11.
AN005	Following wet sieving of the sample,(particles smaller than 75 µm) a dispersing solution is added and a hydrometer is used to measure sedimentation. Soil density is determined and the percentage of each size fraction calculated. Referenced to AS1289.3.6.3.
AN101	pH in Soil Sludge Sediment and Water: pH is measured electrometrically using a combination electrode and is calibrated against 3 buffers purchased commercially. For soils, sediments and sludges, an extract with water (or 0.01M CaCl2) is made at a ratio of 1:5 and the pH determined and reported on the extract. Reference APHA 4500-H+.
AN122	Exchangeable Cations, CEC and ESP: Soil sample is extracted in 1M Ammonium Acetate at pH=7 (or 1M Ammonium Chloride at pH=7) with cations (Na, K, Ca & Mg) then determined by ICP OES/ICP MS and reported as Exchangeable Cations. For saline soils, these results can be corrected for water soluble cations and reported as Exchangeable cations in meq/100g or soil can be pre-treated (aqueous ethanol/aqueous glycerol) prior to extraction. Cation Exchange Capacity (CEC) is the sum of the exchangeable cations in meq/100g.
AN122	The Exchangeable Sodium Percentage (ESP) is calculated as the exchangeable sodium divided by the CEC (all in meq/100g) times 100. ESP can be used to categorise the sodicity of the soil as below: ESP < 6% non-sodic ESP 6-15% sodic ESP >15% strongly sodic Method is referenced to Rayment and Lyons, 2011, sections 15D3 and 15N1.-
AN188	The organic material in the soil sample is oxidised with chromic acid in the presence of excess sulfuric acid, without external heat being applied. The excess dichromate ion is determined by titration with standard ammonium iron (II) sulfate solution and the amount of oxidised material is calculated from the quantity of dichromate reduced. Referenced to NEPM 105 and AS1289.1.1.1.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	Admin
Client	SGS EHS SYDNEY
Address	5258 201 EHS SYDNEY UNIT 16 33 MADDOX STREET ALEXANDRIA NSW 2015
Telephone	0285940400
Facsimile	0285940499
Email	au.environmental.sydney@sgs.com
Project	**610.30041 Randwick Barracks**
Order Number	**SE207998A**
Samples	26

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Cairns Environmental
Address	Unit 2, 58 Comport St Portsmith QLD 4870
Telephone	+61 07 4035 5111
Facsimile	+61 07 4035 5122
Email	AU.Environmental.Cairns@sgs.com
SGS Reference	**CE147461 R0**
Date Received	21 Jul 2020
Date Reported	06 Aug 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(3146).

SIGNATORIES

[redacted]

Operations Manager

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147461.001 Soil 22 Jun 2020 SE207998A.001	CE147461.002 Soil 22 Jun 2020 SE207998A.002	CE147461.003 Soil 22 Jun 2020 SE207998A.003	CE147461.004 Soil 22 Jun 2020 SE207998A.004
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020							
Clay (<0.002mm)	%w/w	0.1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147461.005 Soil 22 Jun 2020 SE207998A.005	CE147461.006 Soil 22 Jun 2020 SE207998A.006	CE147461.007 Soil 22 Jun 2020 SE207998A.007	CE147461.008 Soil 22 Jun 2020 SE207998A.008
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020							
Clay (<0.002mm)	%w/w	0.1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147461.009 Soil 22 Jun 2020 SE207998A.009	CE147461.010 Soil 22 Jun 2020 SE207998A.010	CE147461.011 Soil 22 Jun 2020 SE207998A.011	CE147461.012 Soil 22 Jun 2020 SE207998A.012
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020							
Clay (<0.002mm)	%w/w	0.1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147461.013 Soil 22 Jun 2020 SE207998A.013	CE147461.014 Soil 22 Jun 2020 SE207998A.014	CE147461.015 Soil 22 Jun 2020 SE207998A.015	CE147461.016 Soil 22 Jun 2020 SE207998A.016
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020							
Clay (<0.002mm)	%w/w	0.1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147461.017 Soil 22 Jun 2020 SE207998A.017	CE147461.018 Soil 22 Jun 2020 SE207998A.018	CE147461.019 Soil 22 Jun 2020 SE207998A.019	CE147461.020 Soil 22 Jun 2020 SE207998A.020
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	**38**	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	**25**	-	-
Retained 75µm	%w/w	1		-	**75**	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020							
Clay (<0.002mm)	%w/w	0.1		-	**6.0**	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147461.021 Soil 22 Jun 2020 SE207998A.021	CE147461.022 Soil 22 Jun 2020 SE207998A.022	CE147461.023 Soil 22 Jun 2020 SE207998A.023	CE147461.024 Soil 22 Jun 2020 SE207998A.024
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020							
Clay (<0.002mm)	%w/w	0.1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name CE147461.025 Soil 22 Jun 2020 SE207998A.025	CE147461.026 Soil 22 Jun 2020 SE207998A.026
Moisture Content Method: AN002 Tested: 31/7/2020				
% Moisture	%w/w	1	-	**4.9**
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020				
Passing 75µm	%w/w	1	-	**2**
Retained 75µm	%w/w	1	-	**98**
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020				
Clay (<0.002mm)	%w/w	0.1	-	-

QC SUMMARY

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage.* Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

No QC samples were reported for this job.

METHOD SUMMARY

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN005	The particle size distribution of a soil is determined by wet sieving, using a maximum of 900 mL of deionised water to sieve all fractions down to 75 µm. Referenced to AS1289.3.6.1 and AS1141.11.
AN005	Following wet sieving of the sample,(particles smaller than 75 µm) a dispersing solution is added and a hydrometer is used to measure sedimentation. Soil density is determined and the percentage of each size fraction calculated. Referenced to AS1289.3.6.3.

FOOTNOTES

IS	Insufficient sample for analysis.	LOR	Limit of Reporting
LNR	Sample listed, but not received.	↑↓	Raised or Lowered Limit of Reporting
*	NATA accreditation does not cover the performance of this service.	QFH	QC result is above the upper tolerance
		QFL	QC result is below the lower tolerance
**	Indicative data, theoretical holding time exceeded.	-	The sample was not analysed for this analyte
		NVL	Not Validated

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calcuated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE207998A R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	26

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207998A R0**
Date Received	21 Jul 2020
Date Reported	06 Aug 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Extraction Date	Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)	2 items
	Moisture Content	2 items
	pH in soil (1:5)	2 items
	TOC in Soil	2 items
Analysis Date	Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)	2 items
	TOC in Soil	2 items

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	2 Soil
Date documentation received	21/7/2020@5:03pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	5.4°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE207998A R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)

Method: ME-(AU)-[ENV]AN122

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP230_0.1_200622	SE207998A.018	LB205096	22 Jun 2020	21 Jul 2020	20 Jul 2020	24 Jul 2020†	20 Jul 2020	28 Jul 2020†
0407_TP230_1.8_200622	SE207998A.026	LB205096	22 Jun 2020	21 Jul 2020	20 Jul 2020	24 Jul 2020†	20 Jul 2020	28 Jul 2020†

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP230_0.1_200622	SE207998A.018	LB205094	22 Jun 2020	21 Jul 2020	06 Jul 2020	24 Jul 2020†	29 Jul 2020	28 Jul 2020
0407_TP230_1.8_200622	SE207998A.026	LB205094	22 Jun 2020	21 Jul 2020	06 Jul 2020	24 Jul 2020†	29 Jul 2020	28 Jul 2020

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP230_0.1_200622	SE207998A.018	LB205437	22 Jun 2020	21 Jul 2020	29 Jun 2020	29 Jul 2020†	30 Jul 2020	29 Jul 2020
0407_TP230_1.8_200622	SE207998A.026	LB205437	22 Jun 2020	21 Jul 2020	29 Jun 2020	29 Jul 2020†	30 Jul 2020	29 Jul 2020

TOC in Soil

Method: ME-(AU)-[ENV]AN188

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP230_0.1_200622	SE207998A.018	LB205343	22 Jun 2020	21 Jul 2020	20 Jul 2020	28 Jul 2020†	20 Jul 2020	28 Jul 2020†
0407_TP230_1.8_200622	SE207998A.026	LB205343	22 Jun 2020	21 Jul 2020	20 Jul 2020	28 Jul 2020†	20 Jul 2020	28 Jul 2020†

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No surrogates were required for this job.

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)

Method: ME-(AU)-[ENV]AN122

Sample Number	Parameter	Units	LOR	Result
LB205096.001	Exchangeable Sodium, Na	mg/kg	2	0
	Exchangeable Potassium, K	mg/kg	2	0
	Exchangeable Calcium, Ca	mg/kg	2	0
	Exchangeable Magnesium, Mg	mg/kg	2	0

TOC in Soil

Method: ME-(AU)-[ENV]AN188

Sample Number	Parameter	Units	LOR	Result
LB205343.001	Total Organic Carbon	%w/w	0.05	<0.05

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207831B.008	LB205094.011	% Moisture	%w/w	1	4.00508582324	4.0345821325	55	1

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207591B.003	LB205437.025	pH	pH Units	0.1	6.684	6.438	32	4
SE207998A.026	LB205437.024	pH	pH Units	0.1	5.8	5.553	32	4

TOC in Soil

Method: ME-(AU)-[ENV]AN188

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207695A.051	LB205343.008	Total Organic Carbon	%w/w	0.05	32	36.003116201€	30	11

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)

Method: ME-(AU)-[ENV]AN122

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205096.002	Exchangeable Sodium, Na	meq/100g	0.01	0.19	0.194	80 - 120	97
	Exchangeable Potassium, K	meq/100g	0.01	0.58	0.63	80 - 120	92
	Exchangeable Calcium, Ca	meq/100g	0.01	6.9	6.3	80 - 120	109
	Exchangeable Magnesium, Mg	meq/100g	0.02	0.94	1.11	80 - 120	85

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205437.003	pH	pH Units	0.1	7.5	7.415	98 - 102	101

TOC in Soil

Method: ME-(AU)-[ENV]AN188

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205343.002	Total Organic Carbon	%w/w	0.05	0.31	0.325	80 - 120	96

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

TOC in Soil — **Method: ME-(AU)-[ENV]AN188**

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207998A.02	LB205343.015	Total Organic Carbon	%w/w	0.05	0.36	<0.05	-	-

MATRIX SPIKE DUPLICATES

SE207998A R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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Good morning

Please book these additional jobs in.

Please be very carefully as there are lots of jobs

Regards,

[redacted]
Environment, Health & Safety
Client Manager
Phone: +61 (0)2 8594 0400
Direct:
Mobile: [redacted]
(Please note my new working hours of Mon-Fri 6:00am-2:00pm)



Covid-19 update: SGS Australia is open, with our Business Service Continuity Plans being put in place to ensure your project can be delivered as normal, please click here to see further details on our Business & Services Continuity Plans.

From: [redacted]@slrconsulting.com>
Sent: Tuesday, 21 July 2020 5:03 PM
To: [redacted]@sgs.com>
Cc: [redacted]@slrconsulting.com>
Subject: [EXTERNAL] 610.30041 DHA Randwick - Additional Analysis

*** WARNING: this message is from an EXTERNAL SENDER. Please be cautious, particularly with links and attachments. ***

Hi [redacted]

Can we please schedule the following analyses:

pH, clay content, TOC & CEC:

Report number	Sample ID
SE207695	TP002_0.1_200615
SE207695	TP002_1.5_200615
SE207695	TP005_0.1_200616
SE207695	TP005_1.5_200616
SE207695	TP049_0.1_200617
SE207695	TP049_1.0_200617
SE208047	TP092_0.1_200624
SE208047	TP092_1.0_200624
SE207831	TP220_0.1_200618
SE207831	TP220_1.0_200618
SE207831	TP221_0.1_200619
SE207831	TP221_1.0_200619
SE207998	TP230_0.1_200622
SE207998	TP230_1.8_200622
SE207591	TP018_0.1_200615
SE207591	TP018_1.0_200615
SE208047	TP092_0.1_200624
SE208047	TP092_1.0_200624
SE207911	TP095_0.1_200623
SE207911	TP095_1.0_200623
SE207731	TP073_0.1_200619
SE207731	TP073_1.0_200619
SE208659	TP133_0.1_200701
SE208659	TP133_1.0_200701
SE208142	TP151_0.1_200629
SE208142	TP151_1.0_200629
SE208137	TP183_0.1_200625
SE208137	TP183_0.5_200625

Additional analysis:

Report number	Sample ID	Parameter
SE208081	0407_TP241_1.0_200625	Pb & Zn
SE207731	0407_TP73_0.5_200619	Cr

ASLP Leach:

Report number	Sample ID	Parameter
SE208046	0407_TP237_0.5_200624	8 metals
SE208081	0407_TP241_0.5_200625	8 metals
SE208133	0407_TP111_0.1_200626	8 metals
SE208142	0407_TP256_0.1_200629	8 metals
SE207831	0407_TP222_0.1_200619	8 metals
SE207731	0407_TP73_0.1_200619	8 metals
SE207850	0407_TP162_0.1_200617	PAHs include B(a)P

SE207831	0407_TP197_0.1_200619	PAHs include B(a)P
SE207831	0407_TP197_0.5_200619	PAHs include B(a)P
SE207831	0407_TP200_0.5_200618	PAHs include B(a)P
SE207831	0407_TP200_1.0_200618	Total and leachable PAHs including B(a)P
SE207831	0407_TP209_0.5_200619	PAHs include B(a)P
SE207831	0407_TP221_0.5_200619	PAHs include B(a)P
SE207831	0407_TP221_1.0_200619	Total and leachable PAHs including B(a)P
SE207824	0407_TP231_0.1_200622	PAHs include B(a)P
SE208161	0407_BH41_0.0_200625	PFOS, PFOA, PfHxS
SE208046	0407_QC160_200624	PFOS, PFOA, PfHxS
SE207824	0407_QC130_200622	PFOS, PFOA, PfHxS

Let me know if you have any questions.

Many thanks,

[redacted]

SLR

[redacted]

Associate - Land Quality & Remediation

Please note in response to the COVID-19 Pandemic and physical distancing recommendations from the Australian Government, SLR is encouraging staff to work remotely and implement flexible working hours if necessary.
If you have received this email outside of regular office hours, it is not expected that you will respond until your own working hours commence.

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o [redacted]
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e [redacted]@slrconsulting.com

SLR Consulting Australia Pty Ltd
Level 2, 15 Astor Terrace, Brisbane, QLD, Australia, 4000

WINNERS: RoSPA Gold Award, 2017

WINNERS : International Business Excellence Award, 2016

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SAMPLE RECEIPT ADVICE

SE208142A

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000690-000692**
Samples	17

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Tue 21/7/2020
Report Due	Wed 29/7/2020
SGS Reference	**SE208142A**

SUBMISSION DETAILS

This is to confirm that 17 samples were received on Tuesday 21/7/2020. Results are expected to be ready by COB Wednesday 29/7/2020.
Please quote SGS reference SE208142A when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	2 Soil
Date documentation received	21/7/2020@5:03pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	3.5°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

% Clay subcontracted to SGS Cairns, 2/58 Comport St, Portsmith QLD 4870, NATA Accreditation Number: 2562, Site Number: 3146.

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SAMPLE RECEIPT ADVICE

SE208142A

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Exchangeable Cations and Cation Exchange Capacity	Moisture Content	Particle sizing of soils <75µm by hydrometer	Particle sizing of soils by sieving	pH in soil (1:5)	TOC in Soil
007	0407_TP151_0.1_200629	13	1	1	2	1	2
017	0407_TP151_1.0_200629	13	1	1	2	1	2

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	17

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208142A R0**
Date Received	21/7/2020
Date Reported	6/8/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

% Clay subcontracted to SGS Cairns, 2/58 Comport St, Portsmith QLD 4870, NATA Accreditation Number: 2562, Site Number: 3146. CE147459

SIGNATORIES

[redacted]

Senior Organic Chemist/Metals Chemist

Inorganic/Metals Chemist

pH in soil (1:5) [AN101] Tested: 29/7/2020

PARAMETER	UOM	LOR	0407_TP151_0.1_20(629 SOIL - 29/6/2020 SE208142A.007	0407_TP151_1.0_20(629 SOIL - 29/6/2020 SE208142A.017
pH	pH Units	0.1	**8.0**	**5.5**

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR) [AN122] Tested: 24/7/2020

PARAMETER	UOM	LOR	0407_TP151_0.1_20(629 SOIL - 29/6/2020 SE208142A.007	0407_TP151_1.0_20(629 SOIL - 29/6/2020 SE208142A.017
Exchangeable Sodium, Na	mg/kg	2	28	12
Exchangeable Sodium, Na	meq/100g	0.01	0.12	0.05
Exchangeable Sodium Percentage*	%	0.1	0.3	3.1
Exchangeable Potassium, K	mg/kg	2	150	17
Exchangeable Potassium, K	meq/100g	0.01	0.38	0.04
Exchangeable Potassium Percentage*	%	0.1	1.1	2.6
Exchangeable Calcium, Ca	mg/kg	2	7000	270
Exchangeable Calcium, Ca	meq/100g	0.01	35	1.3
Exchangeable Calcium Percentage*	%	0.1	97.3	80.9
Exchangeable Magnesium, Mg	mg/kg	2	58	27
Exchangeable Magnesium, Mg	meq/100g	0.02	0.47	0.22
Exchangeable Magnesium Percentage*	%	0.1	1.3	13.4
Cation Exchange Capacity	meq/100g	0.02	36	1.7

TOC in Soil [AN188] Tested: 29/7/2020

PARAMETER	UOM	LOR	0407_TP151_0.1_20(629 SOIL - 29/6/2020 SE208142A.007	0407_TP151_1.0_20(629 SOIL - 29/6/2020 SE208142A.017
Total Organic Carbon	%w/w	0.05	**3.0**	**0.54**
Organic Matter (calc)*	%w/w	0.1	**5.1**	**0.9**

Moisture Content [AN002] Tested: 24/7/2020

PARAMETER	UOM	LOR	0407_TP151_0.1_20(629 SOIL - 29/6/2020 SE208142A.007	0407_TP151_1.0_20(629 SOIL - 29/6/2020 SE208142A.017
% Moisture	%w/w	1	**19.5**	**11.4**

Particle sizing of soils by sieving [AN005] Tested: 6/8/2020

PARAMETER	UOM	LOR	0407_TP151_0.1_20(629 SOIL - 29/6/2020 SE208142A.007	0407_TP151_1.0_20(629 SOIL - 29/6/2020 SE208142A.017
Passing 75µm*	%w/w	1	**33**	**2**
Retained 75µm*	%w/w	1	**67**	**98**

Particle sizing of soils <75µm by hydrometer [AN005] Tested: 6/8/2020

PARAMETER	UOM	LOR	0407_TP151_0.1_20(629 SOIL - 29/6/2020 SE208142A.007
Clay (<0.002mm)*	%w/w	0.1	**10**

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN005	The particle size distribution of a soil is determined by wet sieving, using a maximum of 900 mL of deionised water to sieve all fractions down to 75 µm. Referenced to AS1289.3.6.1 and AS1141.11.
AN005	Following wet sieving of the sample,(particles smaller than 75 µm) a dispersing solution is added and a hydrometer is used to measure sedimentation. Soil density is determined and the percentage of each size fraction calculated. Referenced to AS1289.3.6.3.
AN101	pH in Soil Sludge Sediment and Water: pH is measured electrometrically using a combination electrode and is calibrated against 3 buffers purchased commercially. For soils, sediments and sludges, an extract with water (or 0.01M CaCl2) is made at a ratio of 1:5 and the pH determined and reported on the extract. Reference APHA 4500-H+.
AN122	Exchangeable Cations, CEC and ESP: Soil sample is extracted in 1M Ammonium Acetate at pH=7 (or 1M Ammonium Chloride at pH=7) with cations (Na, K, Ca & Mg) then determined by ICP OES/ICP MS and reported as Exchangeable Cations. For saline soils, these results can be corrected for water soluble cations and reported as Exchangeable cations in meq/100g or soil can be pre-treated (aqueous ethanol/aqueous glycerol) prior to extraction. Cation Exchange Capacity (CEC) is the sum of the exchangeable cations in meq/100g.
AN122	The Exchangeable Sodium Percentage (ESP) is calculated as the exchangeable sodium divided by the CEC (all in meq/100g) times 100. ESP can be used to categorise the sodicity of the soil as below: ESP < 6% non-sodic ESP 6-15% sodic ESP >15% strongly sodic Method is referenced to Rayment and Lyons, 2011, sections 15D3 and 15N1.-
AN188	The organic material in the soil sample is oxidised with chromic acid in the presence of excess sulfuric acid, without external heat being applied. The excess dichromate ion is determined by titration with standard ammonium iron (II) sulfate solution and the amount of oxidised material is calculated from the quantity of dichromate reduced. Referenced to NEPM 105 and AS1289.1.1.1.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

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Email	au.environmental.sydney@sgs.com
Project	**610.30041 Randwick Barracks**
Order Number	**SE208142A**
Samples	17

LABORATORY DETAILS

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SGS Reference	**CE147459 R0**
Date Received	21 Jul 2020
Date Reported	06 Aug 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(3146).

SIGNATORIES

[redacted]

Operations Manager

Parameter	Units	LOR	Sample Number: CE147459.001 Sample Matrix: Soil Sample Date: 29 Jun 2020 Sample Name: SE208142A.001	CE147459.002 Soil 29 Jun 2020 SE208142A.002	CE147459.003 Soil 29 Jun 2020 SE208142A.003	CE147459.004 Soil 29 Jun 2020 SE208142A.004
Moisture Content Method: AN002 Tested: 31/7/2020						
% Moisture	%w/w	1	-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020						
Passing 75µm	%w/w	1	-	-	-	-
Retained 75µm	%w/w	1	-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020						
Clay (<0.002mm)	%w/w	0.1	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147459.005 Soil 29 Jun 2020 SE208142A.005	CE147459.006 Soil 29 Jun 2020 SE208142A.006	CE147459.007 Soil 29 Jun 2020 SE208142A.007	CE147459.008 Soil 29 Jun 2020 SE208142A.008
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	**20**	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	**33**	-
Retained 75µm	%w/w	1		-	-	**67**	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020							
Clay (<0.002mm)	%w/w	0.1		-	-	**10**	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147459.009 Soil 29 Jun 2020 SE208142A.009	CE147459.010 Soil 29 Jun 2020 SE208142A.010	CE147459.011 Soil 29 Jun 2020 SE208142A.011	CE147459.012 Soil 29 Jun 2020 SE208142A.012
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020							
Clay (<0.002mm)	%w/w	0.1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name CE147459.013 Soil 29 Jun 2020 SE208142A.013	CE147459.014 Soil 29 Jun 2020 SE208142A.014	CE147459.015 Material 29 Jun 2020 SE208142A.015	CE147459.016 Material 29 Jun 2020 SE208142A.016
Moisture Content Method: AN002 Tested: 31/7/2020						
% Moisture	%w/w	1	-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020						
Passing 75µm	%w/w	1	-	-	-	-
Retained 75µm	%w/w	1	-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020						
Clay (<0.002mm)	%w/w	0.1	-	-	-	-

Parameter	Units	LOR	Sample Number: CE147459.017 Sample Matrix: Soil Sample Date: 29 Jun 2020 Sample Name: SE208142A.017
Moisture Content Method: AN002 Tested: 30/7/2020			
% Moisture	%w/w	1	**9.6**
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020			
Passing 75µm	%w/w	1	**2**
Retained 75µm	%w/w	1	**98**
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020			
Clay (<0.002mm)	%w/w	0.1	-

QC SUMMARY

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula：*the absolute difference of the two results divided by the average of the two results as a percentage.* Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

No QC samples were reported for this job.

METHOD SUMMARY

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN005	The particle size distribution of a soil is determined by wet sieving, using a maximum of 900 mL of deionised water to sieve all fractions down to 75 µm. Referenced to AS1289.3.6.1 and AS1141.11.
AN005	Following wet sieving of the sample,(particles smaller than 75 µm) a dispersing solution is added and a hydrometer is used to measure sedimentation. Soil density is determined and the percentage of each size fraction calculated. Referenced to AS1289.3.6.3.

FOOTNOTES

IS	Insufficient sample for analysis.	LOR	Limit of Reporting
LNR	Sample listed, but not received.	↑↓	Raised or Lowered Limit of Reporting
*	NATA accreditation does not cover the performance of this service.	QFH	QC result is above the upper tolerance
		QFL	QC result is below the lower tolerance
**	Indicative data, theoretical holding time exceeded.	-	The sample was not analysed for this analyte
		NVL	Not Validated

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calcuated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE208142A R0

CLIENT DETAILS

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Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	17

LABORATORY DETAILS

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Laboratory	SGS Alexandria Environmental
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Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208142A R0**
Date Received	21 Jul 2020
Date Reported	06 Aug 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Extraction Date	Moisture Content	2 items
	pH in soil (1:5)	2 items
	TOC in Soil	2 items
Analysis Date	Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)	2 items
	TOC in Soil	2 items

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	2 Soil
Date documentation received	21/7/2020@5:03pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	3.5°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

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SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)

Method: ME-(AU)-[ENV]AN122

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP151_0.1_200629	SE208142A.007	LB205097	29 Jun 2020	21 Jul 2020	27 Jul 2020	24 Jul 2020	27 Jul 2020	29 Jul 2020†
0407_TP151_1.0_200629	SE208142A.017	LB205097	29 Jun 2020	21 Jul 2020	27 Jul 2020	24 Jul 2020	27 Jul 2020	29 Jul 2020†

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP151_0.1_200629	SE208142A.007	LB205094	29 Jun 2020	21 Jul 2020	13 Jul 2020	24 Jul 2020†	29 Jul 2020	29 Jul 2020
0407_TP151_1.0_200629	SE208142A.017	LB205094	29 Jun 2020	21 Jul 2020	13 Jul 2020	24 Jul 2020†	29 Jul 2020	29 Jul 2020

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP151_0.1_200629	SE208142A.007	LB205437	29 Jun 2020	21 Jul 2020	06 Jul 2020	29 Jul 2020†	30 Jul 2020	29 Jul 2020
0407_TP151_1.0_200629	SE208142A.017	LB205437	29 Jun 2020	21 Jul 2020	06 Jul 2020	29 Jul 2020†	30 Jul 2020	29 Jul 2020

TOC in Soil

Method: ME-(AU)-[ENV]AN188

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP151_0.1_200629	SE208142A.007	LB205429	29 Jun 2020	21 Jul 2020	27 Jul 2020	29 Jul 2020†	27 Jul 2020	29 Jul 2020†
0407_TP151_1.0_200629	SE208142A.017	LB205429	29 Jun 2020	21 Jul 2020	27 Jul 2020	29 Jul 2020†	27 Jul 2020	29 Jul 2020†

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No surrogates were required for this job.

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)

Method: ME-(AU)-[ENV]AN122

Sample Number	Parameter	Units	LOR	Result
LB205097.001	Exchangeable Sodium, Na	mg/kg	2	0
	Exchangeable Potassium, K	mg/kg	2	0
	Exchangeable Calcium, Ca	mg/kg	2	0
	Exchangeable Magnesium, Mg	mg/kg	2	0

TOC in Soil

Method: ME-(AU)-[ENV]AN188

Sample Number	Parameter	Units	LOR	Result
LB205429.001	Total Organic Carbon	%w/w	0.05	<0.05

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207831B.008	LB205094.011	% Moisture	%w/w	1	4.00508582324	4.0345821325	55	1

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207591B.003	LB205437.025	pH	pH Units	0.1	6.684	6.438	32	4
SE207998A.026	LB205437.024	pH	pH Units	0.1	5.8	5.553	32	4

TOC in Soil

Method: ME-(AU)-[ENV]AN188

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207831B.007	LB205429.004	Total Organic Carbon	%w/w	0.05	8.827219898910.0156258578		31	13

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)

Method: ME-(AU)-[ENV]AN122

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205097.002	Exchangeable Sodium, Na	meq/100g	0.01	0.19	0.194	80 - 120	99
	Exchangeable Potassium, K	meq/100g	0.01	0.58	0.63	80 - 120	91
	Exchangeable Calcium, Ca	meq/100g	0.01	6.3	6.3	80 - 120	100
	Exchangeable Magnesium, Mg	meq/100g	0.02	0.91	1.11	80 - 120	82

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205437.003	pH	pH Units	0.1	7.5	7.415	98 - 102	101

TOC in Soil

Method: ME-(AU)-[ENV]AN188

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205429.002	Total Organic Carbon	%w/w	0.05	0.29	0.325	80 - 120	90

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

TOC in Soil — **Method: ME-(AU)-[ENV]AN188**

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208142A.01	LB205429.019	Total Organic Carbon	%w/w	0.05	0.51	0.54	-	-

MATRIX SPIKE DUPLICATES

SE208142A R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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This test report shall not be reproduced, except in full.

Good morning

Please book these additional jobs in.

Please be very carefully as there are lots of jobs

Regards,

[redacted]
Environment, Health & Safety
Client Manager
Phone: +61 (0)2 8594 0400
Direct:
Mobile: [redacted]
(Please note my new working hours of Mon-Fri 6:00am-2:00pm)



Covid-19 update: SGS Australia is open, with our Business Service Continuity Plans being put in place to ensure your project can be delivered as normal, please click here to see further details on our Business & Services Continuity Plans.

From: [redacted]@slrconsulting.com>
Sent: Tuesday, 21 July 2020 5:03 PM
To: [redacted]@sgs.com>
Cc: [redacted]@slrconsulting.com>
Subject: [EXTERNAL] 610.30041 DHA Randwick - Additional Analysis

*** WARNING: this message is from an EXTERNAL SENDER. Please be cautious, particularly with links and attachments. ***

Hi [redacted]

Can we please schedule the following analyses:

pH, clay content, TOC & CEC:

Report number	Sample ID
SE207695	TP002_0.1_200615
SE207695	TP002_1.5_200615
SE207695	TP005_0.1_200616
SE207695	TP005_1.5_200616
SE207695	TP049_0.1_200617
SE207695	TP049_1.0_200617
SE208047	TP092_0.1_200624
SE208047	TP092_1.0_200624
SE207831	TP220_0.1_200618
SE207831	TP220_1.0_200618
SE207831	TP221_0.1_200619
SE207831	TP221_1.0_200619
SE207998	TP230_0.1_200622
SE207998	TP230_1.8_200622
SE207591	TP018_0.1_200615
SE207591	TP018_1.0_200615
SE208047	TP092_0.1_200624
SE208047	TP092_1.0_200624
SE207911	TP095_0.1_200623
SE207911	TP095_1.0_200623
SE207731	TP073_0.1_200619
SE207731	TP073_1.0_200619
SE208659	TP133_0.1_200701
SE208659	TP133_1.0_200701
SE208142	TP151_0.1_200629
SE208142	TP151_1.0_200629
SE208137	TP183_0.1_200625
SE208137	TP183_0.5_200625

Additional analysis:

Report number	Sample ID	Parameter
SE208081	0407_TP241_1.0_200625	Pb & Zn
SE207731	0407_TP73_0.5_200619	Cr

ASLP Leach:

Report number	Sample ID	Parameter
SE208046	0407_TP237_0.5_200624	8 metals
SE208081	0407_TP241_0.5_200625	8 metals
SE208133	0407_TP111_0.1_200626	8 metals
SE208142	0407_TP256_0.1_200629	8 metals
SE207831	0407_TP222_0.1_200619	8 metals
SE207731	0407_TP73_0.1_200619	8 metals
SE207850	0407_TP162_0.1_200617	PAHs include B(a)P

SE207831	0407_TP197_0.1_200619	PAHs include B(a)P
SE207831	0407_TP197_0.5_200619	PAHs include B(a)P
SE207831	0407_TP200_0.5_200618	PAHs include B(a)P
SE207831	0407_TP200_1.0_200618	Total and leachable PAHs including B(a)P
SE207831	0407_TP209_0.5_200619	PAHs include B(a)P
SE207831	0407_TP221_0.5_200619	PAHs include B(a)P
SE207831	0407_TP221_1.0_200619	Total and leachable PAHs including B(a)P
SE207824	0407_TP231_0.1_200622	PAHs include B(a)P
SE208161	0407_BH41_0.0_200625	PFOS, PFOA, PfHxS
SE208046	0407_QC160_200624	PFOS, PFOA, PfHxS
SE207824	0407_QC130_200622	PFOS, PFOA, PfHxS

Let me know if you have any questions.

Many thanks,

[redacted]

SLR

[redacted]

Associate - Land Quality & Remediation

Please note in response to the COVID-19 Pandemic and physical distancing recommendations from the Australian Government, SLR is encouraging staff to work remotely and implement flexible working hours if necessary.
If you have received this email outside of regular office hours, it is not expected that you will respond until your own working hours commence.

d +61 7 3117 5227
o [redacted]
m [redacted]
e [redacted]@slrconsulting.com

SLR Consulting Australia Pty Ltd
Level 2, 15 Astor Terrace, Brisbane, QLD, Australia, 4000

WINNERS: RoSPA Gold Award, 2017
WINNERS : International Business Excellence Award, 2016

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SAMPLE RECEIPT ADVICE

SE207831B

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	46

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Tue 21/7/2020
Report Due	Wed 29/7/2020
SGS Reference	**SE207831B**

SUBMISSION DETAILS

This is to confirm that 46 samples were received on Tuesday 21/7/2020. Results are expected to be ready by COB Wednesday 29/7/2020.
Please quote SGS reference SE207831B when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	4 Soil
Date documentation received	21/7/2020@5:03pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	8°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

% Clay subcontracted to SGS Cairns, 2/58 Comport St, Portsmith QLD 4870, NATA Accreditation Number: 2562, Site Number: 3146.

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SAMPLE RECEIPT ADVICE

SE207831B

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Exchangeable Cations and Cation Exchange Capacity	Moisture Content	Particle sizing of soils <75µm by hydrometer	Particle sizing of soils by sieving	pH in soil (1:5)	TOC in Soil
007	0407_TP220_0.1_200618	13	1	1	2	1	2
008	0407_TP220_1.0_200618	13	1	1	2	1	2

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE207831B

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Exchangeable Cations and Cation Exchange Capacity	Moisture Content	Particle sizing of soils <75µm by hydrometer	Particle sizing of soils by sieving	pH in soil (1:5)	TOC in Soil
026	0407_TP221_0.1_200619	13	1	1	2	1	2
046	0407_TP221_1.0_200619	13	1	1	2	1	2

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	46

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207831B R0**
Date Received	21/7/2020
Date Reported	6/8/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

% Clay subcontracted to SGS Cairns, 2/58 Comport St, Portsmith QLD 4870, NATA Accreditation Number: 2562, Site Number: 3146. CE147457

SIGNATORIES

[redacted]

Senior Organic Chemist/Metals Chemist

Inorganic/Metals Chemist

pH in soil (1:5) [AN101] Tested: 29/7/2020

PARAMETER	UOM	LOR	0407_TP220_0.1_20(618 SOIL - 18/6/2020 SE207831B.007	0407_TP220_1.0_20(618 SOIL - 18/6/2020 SE207831B.008	0407_TP221_0.1_20(619 SOIL - 19/6/2020 SE207831B.026	0407_TP221_1.0_20(619 SOIL - 19/6/2020 SE207831B.046
pH	pH Units	0.1	**7.4**	**6.9**	**6.9**	**6.8**

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR) [AN122] Tested: 24/7/2020

PARAMETER	UOM	LOR	0407_TP220_0.1_20(618 SOIL - 18/6/2020 SE207831B.007	0407_TP220_1.0_20(618 SOIL - 18/6/2020 SE207831B.008	0407_TP221_0.1_20(619 SOIL - 19/6/2020 SE207831B.026	0407_TP221_1.0_20(619 SOIL - 19/6/2020 SE207831B.046
Exchangeable Sodium, Na	mg/kg	2	47	<2	18	4
Exchangeable Sodium, Na	meq/100g	0.01	0.20	<0.01	0.08	0.02
Exchangeable Sodium Percentage*	%	0.1	0.4	1.0	1.3	3.0
Exchangeable Potassium, K	mg/kg	2	250	<2	64	2
Exchangeable Potassium, K	meq/100g	0.01	0.64	<0.01	0.16	<0.01
Exchangeable Potassium Percentage*	%	0.1	1.3	0.7	2.6	1.0
Exchangeable Calcium, Ca	mg/kg	2	9700	140	1100	100
Exchangeable Calcium, Ca	meq/100g	0.01	48	0.70	5.4	0.52
Exchangeable Calcium Percentage*	%	0.1	95.5	97.4	88.3	90.6
Exchangeable Magnesium, Mg	mg/kg	2	170	<2	58	4
Exchangeable Magnesium, Mg	meq/100g	0.02	1.4	<0.02	0.48	0.03
Exchangeable Magnesium Percentage*	%	0.1	2.8	0.9	7.8	5.3
Cation Exchange Capacity	meq/100g	0.02	51	0.71	6.1	0.57

Moisture Content [AN002] Tested: 24/7/2020

PARAMETER	UOM	LOR	0407_TP220_0.1_20(618 SOIL - 18/6/2020 SE207831B.007	0407_TP220_1.0_20(618 SOIL - 18/6/2020 SE207831B.008	0407_TP221_0.1_20(619 SOIL - 19/6/2020 SE207831B.026	0407_TP221_1.0_20(619 SOIL - 19/6/2020 SE207831B.046
% Moisture	%w/w	1	**40.6**	**4.0**	**18.1**	**12.4**

TOC in Soil [AN188] Tested: 29/7/2020

PARAMETER	UOM	LOR	0407_TP220_0.1_20(618 SOIL - 18/6/2020 SE207831B.007	0407_TP220_1.0_20(618 SOIL - 18/6/2020 SE207831B.008	0407_TP221_0.1_20(619 SOIL - 19/6/2020 SE207831B.026	0407_TP221_1.0_20(619 SOIL - 19/6/2020 SE207831B.046
Total Organic Carbon	%w/w	0.05	**8.8**	**0.48**	**1.7**	**0.11**
Organic Matter (calc)*	%w/w	0.1	**15**	**0.8**	**3.0**	**0.2**

Particle sizing of soils by sieving [AN005] Tested: 6/8/2020

PARAMETER	UOM	LOR	0407_TP220_0.1_20(618 SOIL - 18/6/2020 SE207831B.007	0407_TP220_1.0_20(618 SOIL - 18/6/2020 SE207831B.008	0407_TP221_0.1_20(619 SOIL - 19/6/2020 SE207831B.026	0407_TP221_1.0_20(619 SOIL - 19/6/2020 SE207831B.046
Passing 75µm*	%w/w	1	**39**	<1	**11**	**4**
Retained 75µm*	%w/w	1	**61**	**100**	**89**	**96**

Particle sizing of soils <75µm by hydrometer [AN005] Tested: 6/8/2020

PARAMETER	UOM	LOR	0407_TP220_0.1_20(618 SOIL - 18/6/2020 SE207831B.007
Clay (<0.002mm)*	%w/w	0.1	**8.0**

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN005	The particle size distribution of a soil is determined by wet sieving, using a maximum of 900 mL of deionised water to sieve all fractions down to 75 µm. Referenced to AS1289.3.6.1 and AS1141.11.
AN005	Following wet sieving of the sample,(particles smaller than 75 µm) a dispersing solution is added and a hydrometer is used to measure sedimentation. Soil density is determined and the percentage of each size fraction calculated. Referenced to AS1289.3.6.3.
AN101	pH in Soil Sludge Sediment and Water: pH is measured electrometrically using a combination electrode and is calibrated against 3 buffers purchased commercially. For soils, sediments and sludges, an extract with water (or 0.01M CaCl2) is made at a ratio of 1:5 and the pH determined and reported on the extract. Reference APHA 4500-H+.
AN122	Exchangeable Cations, CEC and ESP: Soil sample is extracted in 1M Ammonium Acetate at pH=7 (or 1M Ammonium Chloride at pH=7) with cations (Na, K, Ca & Mg) then determined by ICP OES/ICP MS and reported as Exchangeable Cations. For saline soils, these results can be corrected for water soluble cations and reported as Exchangeable cations in meq/100g or soil can be pre-treated (aqueous ethanol/aqueous glycerol) prior to extraction. Cation Exchange Capacity (CEC) is the sum of the exchangeable cations in meq/100g.
AN122	The Exchangeable Sodium Percentage (ESP) is calculated as the exchangeable sodium divided by the CEC (all in meq/100g) times 100. ESP can be used to categorise the sodicity of the soil as below: ESP < 6% non-sodic ESP 6-15% sodic ESP >15% strongly sodic Method is referenced to Rayment and Lyons, 2011, sections 15D3 and 15N1.-
AN188	The organic material in the soil sample is oxidised with chromic acid in the presence of excess sulfuric acid, without external heat being applied. The excess dichromate ion is determined by titration with standard ammonium iron (II) sulfate solution and the amount of oxidised material is calculated from the quantity of dichromate reduced. Referenced to NEPM 105 and AS1289.1.1.1.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS		LABORATORY DETAILS	
Contact	Admin	Manager	[redacted]
Client	SGS EHS SYDNEY	Laboratory	SGS Cairns Environmental
Address	5258 201 EHS SYDNEY UNIT 16 33 MADDOX STREET ALEXANDRIA NSW 2015	Address	Unit 2, 58 Comport St Portsmith QLD 4870
Telephone	0285940400	Telephone	+61 07 4035 5111
Facsimile	0285940499	Facsimile	+61 07 4035 5122
Email	au.environmental.sydney@sgs.com	Email	AU.Environmental.Cairns@sgs.com
Project	**610.30041 Randwick Barracks**	SGS Reference	**CE147457 R0**
Order Number	**SE207831B**	Date Received	21 Jul 2020
Samples	46	Date Reported	06 Aug 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(3146).

SIGNATORIES

[redacted]

Operations Manager

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147457.001 Soil 18 Jun 2020 SE207831B.001	CE147457.002 Soil 18 Jun 2020 SE207831B.002	CE147457.003 Soil 18 Jun 2020 SE207831B.003	CE147457.004 Soil 18 Jun 2020 SE207831B.004
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020							
Clay (<0.002mm)	%w/w	0.1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147457.005 Soil 18 Jun 2020 SE207831B.005	CE147457.006 Soil 18 Jun 2020 SE207831B.006	CE147457.007 Soil 18 Jun 2020 SE207831B.007	CE147457.008 Soil 18 Jun 2020 SE207831B.008
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	**31**	**4.6**
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	**39**	<1
Retained 75µm	%w/w	1		-	-	**61**	**100**
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020							
Clay (<0.002mm)	%w/w	0.1		-	-	**8.0**	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147457.009 Soil 18 Jun 2020 SE207831B.009	CE147457.010 Soil 18 Jun 2020 SE207831B.010	CE147457.011 Soil 18 Jun 2020 SE207831B.011	CE147457.012 Soil 18 Jun 2020 SE207831B.012
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020							
Clay (<0.002mm)	%w/w	0.1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147457.013 Soil 18 Jun 2020 SE207831B.013	CE147457.014 Soil 18 Jun 2020 SE207831B.014	CE147457.015 Soil 18 Jun 2020 SE207831B.015	CE147457.016 Soil 18 Jun 2020 SE207831B.016
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020							
Clay (<0.002mm)	%w/w	0.1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147457.017 Soil 18 Jun 2020 SE207831B.017	CE147457.018 Soil 18 Jun 2020 SE207831B.018	CE147457.019 Soil 18 Jun 2020 SE207831B.019	CE147457.020 Soil 18 Jun 2020 SE207831B.020
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020							
Clay (<0.002mm)	%w/w	0.1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147457.021 Soil 18 Jun 2020 SE207831B.021	CE147457.022 Soil 18 Jun 2020 SE207831B.022	CE147457.023 Soil 18 Jun 2020 SE207831B.023	CE147457.024 Soil 19 Jun 2020 SE207831B.024
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020							
Clay (<0.002mm)	%w/w	0.1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name CE147457.025 Material 19 Jun 2020 SE207831B.025	CE147457.026 Soil 19 Jun 2020 SE207831B.026	CE147457.027 Soil 19 Jun 2020 SE207831B.027	CE147457.028 Soil 19 Jun 2020 SE207831B.028
Moisture Content Method: AN002 Tested: 31/7/2020						
% Moisture	%w/w	1	-	**18**	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020						
Passing 75µm	%w/w	1	-	**11**	-	-
Retained 75µm	%w/w	1	-	**89**	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020						
Clay (<0.002mm)	%w/w	0.1	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147457.029 Soil 19 Jun 2020 SE207831B.029	CE147457.030 Soil 19 Jun 2020 SE207831B.030	CE147457.031 Soil 19 Jun 2020 SE207831B.031	CE147457.032 Soil 19 Jun 2020 SE207831B.032
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020							
Clay (<0.002mm)	%w/w	0.1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147457.033 Soil 19 Jun 2020 SE207831B.033	CE147457.034 Material 19 Jun 2020 SE207831B.034	CE147457.035 Soil 19 Jun 2020 SE207831B.035	CE147457.036 Soil 19 Jun 2020 SE207831B.036
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020							
Clay (<0.002mm)	%w/w	0.1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name CE147457.037 Material 19 Jun 2020 SE207831B.037	CE147457.038 Soil 19 Jun 2020 SE207831B.038	CE147457.039 Soil 19 Jun 2020 SE207831B.039	CE147457.040 Soil 19 Jun 2020 SE207831B.040
Moisture Content Method: AN002 Tested: 31/7/2020						
% Moisture	%w/w	1	-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020						
Passing 75µm	%w/w	1	-	-	-	-
Retained 75µm	%w/w	1	-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020						
Clay (<0.002mm)	%w/w	0.1	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147457.041 Soil 19 Jun 2020 SE207831B.041	CE147457.042 Soil 19 Jun 2020 SE207831B.042	CE147457.043 Soil 19 Jun 2020 SE207831B.043	CE147457.044 Soil 19 Jun 2020 SE207831B.044
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020							
Clay (<0.002mm)	%w/w	0.1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147457.045 Soil 19 Jun 2020 SE207831B.045	CE147457.046 Soil 19 Jun 2020 SE207831B.046
Moisture Content Method: AN002 Tested: 31/7/2020					
% Moisture	%w/w	1		-	**13**
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020					
Passing 75µm	%w/w	1		-	**4**
Retained 75µm	%w/w	1		-	**96**
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020					
Clay (<0.002mm)	%w/w	0.1		-	-

QC SUMMARY

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage.* Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

No QC samples were reported for this job.

METHOD SUMMARY

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN005	The particle size distribution of a soil is determined by wet sieving, using a maximum of 900 mL of deionised water to sieve all fractions down to 75 µm. Referenced to AS1289.3.6.1 and AS1141.11.
AN005	Following wet sieving of the sample,(particles smaller than 75 µm) a dispersing solution is added and a hydrometer is used to measure sedimentation. Soil density is determined and the percentage of each size fraction calculated. Referenced to AS1289.3.6.3.

FOOTNOTES

IS	Insufficient sample for analysis.	LOR	Limit of Reporting
LNR	Sample listed, but not received.	↑↓	Raised or Lowered Limit of Reporting
*	NATA accreditation does not cover the performance of this service.	QFH	QC result is above the upper tolerance
		QFL	QC result is below the lower tolerance
**	Indicative data, theoretical holding time exceeded.	-	The sample was not analysed for this analyte
		NVL	Not Validated

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calcuated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE207831B R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	46

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207831B R0**
Date Received	21 Jul 2020
Date Reported	06 Aug 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Extraction Date	Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)	4 items
	Moisture Content	4 items
	pH in soil (1:5)	4 items
	TOC in Soil	4 items
Analysis Date	Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)	4 items
	TOC in Soil	4 items

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	4 Soil
Date documentation received	21/7/2020@5:03pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	8°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

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SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)

Method: ME-(AU)-[ENV]AN122

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP220_0.1_200618	SE207831B.007	LB205096	18 Jun 2020	21 Jul 2020	16 Jul 2020	24 Jul 2020†	16 Jul 2020	28 Jul 2020†
0407_TP220_1.0_200618	SE207831B.008	LB205096	18 Jun 2020	21 Jul 2020	16 Jul 2020	24 Jul 2020†	16 Jul 2020	28 Jul 2020†
0407_TP221_0.1_200619	SE207831B.026	LB205096	19 Jun 2020	21 Jul 2020	17 Jul 2020	24 Jul 2020†	17 Jul 2020	28 Jul 2020†
0407_TP221_1.0_200619	SE207831B.046	LB205096	19 Jun 2020	21 Jul 2020	17 Jul 2020	24 Jul 2020†	17 Jul 2020	28 Jul 2020†

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP220_0.1_200618	SE207831B.007	LB205094	18 Jun 2020	21 Jul 2020	02 Jul 2020	24 Jul 2020†	29 Jul 2020	28 Jul 2020
0407_TP220_1.0_200618	SE207831B.008	LB205094	18 Jun 2020	21 Jul 2020	02 Jul 2020	24 Jul 2020†	29 Jul 2020	28 Jul 2020
0407_TP221_0.1_200619	SE207831B.026	LB205094	19 Jun 2020	21 Jul 2020	03 Jul 2020	24 Jul 2020†	29 Jul 2020	28 Jul 2020
0407_TP221_1.0_200619	SE207831B.046	LB205094	19 Jun 2020	21 Jul 2020	03 Jul 2020	24 Jul 2020†	29 Jul 2020	28 Jul 2020

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP220_0.1_200618	SE207831B.007	LB205437	18 Jun 2020	21 Jul 2020	25 Jun 2020	29 Jul 2020†	30 Jul 2020	29 Jul 2020
0407_TP220_1.0_200618	SE207831B.008	LB205437	18 Jun 2020	21 Jul 2020	25 Jun 2020	29 Jul 2020†	30 Jul 2020	29 Jul 2020
0407_TP221_0.1_200619	SE207831B.026	LB205437	19 Jun 2020	21 Jul 2020	26 Jun 2020	29 Jul 2020†	30 Jul 2020	29 Jul 2020
0407_TP221_1.0_200619	SE207831B.046	LB205437	19 Jun 2020	21 Jul 2020	26 Jun 2020	29 Jul 2020†	30 Jul 2020	29 Jul 2020

TOC in Soil

Method: ME-(AU)-[ENV]AN188

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP220_0.1_200618	SE207831B.007	LB205429	18 Jun 2020	21 Jul 2020	16 Jul 2020	29 Jul 2020†	16 Jul 2020	29 Jul 2020†
0407_TP220_1.0_200618	SE207831B.008	LB205429	18 Jun 2020	21 Jul 2020	16 Jul 2020	29 Jul 2020†	16 Jul 2020	29 Jul 2020†
0407_TP221_0.1_200619	SE207831B.026	LB205429	19 Jun 2020	21 Jul 2020	17 Jul 2020	29 Jul 2020†	17 Jul 2020	29 Jul 2020†
0407_TP221_1.0_200619	SE207831B.046	LB205429	19 Jun 2020	21 Jul 2020	17 Jul 2020	29 Jul 2020†	17 Jul 2020	29 Jul 2020†

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No surrogates were required for this job.

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR) — Method: ME-(AU)-[ENV]AN122

Sample Number	Parameter	Units	LOR	Result
LB205096.001	Exchangeable Sodium, Na	mg/kg	2	0
	Exchangeable Potassium, K	mg/kg	2	0
	Exchangeable Calcium, Ca	mg/kg	2	0
	Exchangeable Magnesium, Mg	mg/kg	2	0

TOC in Soil — Method: ME-(AU)-[ENV]AN188

Sample Number	Parameter	Units	LOR	Result
LB205429.001	Total Organic Carbon	%w/w	0.05	<0.05

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207831B.008	LB205094.011	% Moisture	%w/w	1	4.0	4.0	55	1

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207591B.003	LB205437.025	pH	pH Units	0.1	6.684	6.438	32	4
SE207998A.026	LB205437.024	pH	pH Units	0.1	5.8	5.553	32	4

TOC in Soil

Method: ME-(AU)-[ENV]AN188

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207831B.007	LB205429.004	Total Organic Carbon	%w/w	0.05	8.8	10	31	13

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR) — Method: ME-(AU)-[ENV]AN122

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205096.002	Exchangeable Sodium, Na	meq/100g	0.01	0.19	0.194	80 - 120	97
	Exchangeable Potassium, K	meq/100g	0.01	0.58	0.63	80 - 120	92
	Exchangeable Calcium, Ca	meq/100g	0.01	6.9	6.3	80 - 120	109
	Exchangeable Magnesium, Mg	meq/100g	0.02	0.94	1.11	80 - 120	85

pH in soil (1:5) — Method: ME-(AU)-[ENV]AN101

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205437.003	pH	pH Units	0.1	7.5	7.415	98 - 102	101

TOC in Soil — Method: ME-(AU)-[ENV]AN188

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205429.002	Total Organic Carbon	%w/w	0.05	0.29	0.325	80 - 120	90

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

TOC in Soil — **Method: ME-(AU)-[ENV]AN188**

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208142A.01	LB205429.019	Total Organic Carbon	%w/w	0.05	0.51	0.54	-	-

MATRIX SPIKE DUPLICATES

SE207831B R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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Good morning

Please book these additional jobs in.

Please be very carefully as there are lots of jobs

Regards,

[redacted]
Environment, Health & Safety
Client Manager
Phone: +61 (0)2 8594 0400
Direct:
Mobile: [redacted]
(Please note my new working hours of Mon-Fri 6:00am-2:00pm)



Covid-19 update: SGS Australia is open, with our Business Service Continuity Plans being put in place to ensure your project can be delivered as normal, please click here to see further details on our Business & Services Continuity Plans.

From: [redacted]@slrconsulting.com>
Sent: Tuesday, 21 July 2020 5:03 PM
To: [redacted]@sgs.com>
Cc: [redacted]@slrconsulting.com>
Subject: [EXTERNAL] 610.30041 DHA Randwick - Additional Analysis

*** WARNING: this message is from an EXTERNAL SENDER. Please be cautious, particularly with links and attachments. ***

Hi [redacted]

Can we please schedule the following analyses:

pH, clay content, TOC & CEC:

Report number	Sample ID
SE207695	TP002_0.1_200615
SE207695	TP002_1.5_200615
SE207695	TP005_0.1_200616
SE207695	TP005_1.5_200616
SE207695	TP049_0.1_200617
SE207695	TP049_1.0_200617
SE208047	TP092_0.1_200624
SE208047	TP092_1.0_200624
SE207831	TP220_0.1_200618
SE207831	TP220_1.0_200618
SE207831	TP221_0.1_200619
SE207831	TP221_1.0_200619
SE207998	TP230_0.1_200622
SE207998	TP230_1.8_200622
SE207591	TP018_0.1_200615
SE207591	TP018_1.0_200615
SE208047	TP092_0.1_200624
SE208047	TP092_1.0_200624
SE207911	TP095_0.1_200623
SE207911	TP095_1.0_200623
SE207731	TP073_0.1_200619
SE207731	TP073_1.0_200619
SE208659	TP133_0.1_200701
SE208659	TP133_1.0_200701
SE208142	TP151_0.1_200629
SE208142	TP151_1.0_200629
SE208137	TP183_0.1_200625
SE208137	TP183_0.5_200625

Additional analysis:

Report number	Sample ID	Parameter
SE208081	0407_TP241_1.0_200625	Pb & Zn
SE207731	0407_TP73_0.5_200619	Cr

ASLP Leach:

Report number	Sample ID	Parameter
SE208046	0407_TP237_0.5_200624	8 metals
SE208081	0407_TP241_0.5_200625	8 metals
SE208133	0407_TP111_0.1_200626	8 metals
SE208142	0407_TP256_0.1_200629	8 metals
SE207831	0407_TP222_0.1_200619	8 metals
SE207731	0407_TP73_0.1_200619	8 metals
SE207850	0407_TP162_0.1_200617	PAHs include B(a)P

SE207831	0407_TP197_0.1_200619	PAHs include B(a)P
SE207831	0407_TP197_0.5_200619	PAHs include B(a)P
SE207831	0407_TP200_0.5_200618	PAHs include B(a)P
SE207831	0407_TP200_1.0_200618	Total and leachable PAHs including B(a)P
SE207831	0407_TP209_0.5_200619	PAHs include B(a)P
SE207831	0407_TP221_0.5_200619	PAHs include B(a)P
SE207831	0407_TP221_1.0_200619	Total and leachable PAHs including B(a)P
SE207824	0407_TP231_0.1_200622	PAHs include B(a)P
SE208161	0407_BH41_0.0_200625	PFOS, PFOA, PfHxS
SE208046	0407_QC160_200624	PFOS, PFOA, PfHxS
SE207824	0407_QC130_200622	PFOS, PFOA, PfHxS

Let me know if you have any questions.

Many thanks,

[redacted]

SLR

[redacted]

Associate - Land Quality & Remediation

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WINNERS: RoSPA Gold Award, 2017

WINNERS : International Business Excellence Award, 2016

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SAMPLE RECEIPT ADVICE

SE207591B

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000661--000663**
Samples	29

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Tue 21/7/2020
Report Due	Wed 29/7/2020
SGS Reference	**SE207591B**

SUBMISSION DETAILS

This is to confirm that 29 samples were received on Tuesday 21/7/2020. Results are expected to be ready by COB Wednesday 29/7/2020.
Please quote SGS reference SE207591B when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	2 Soil
Date documentation received	21/7/2020@5:03pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	11°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

% Clay subcontracted to SGS Cairns, 2/58 Comport St, Portsmith QLD 4870, NATA Accreditation Number: 2562, Site Number: 3146.

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SAMPLE RECEIPT ADVICE

SE207591B

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Exchangeable Cations and Cation Exchange Capacity	Moisture Content	Particle sizing of soils <75µm by hydrometer	Particle sizing of soils by sieving	pH in soil (1:5)	TOC in Soil
003	0407_TP18_0.1_200615	13	1	1	2	1	2

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE207591B

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Exchangeable Cations and Cation Exchange Capacity	Moisture Content	Particle sizing of soils <75µm by hydrometer	Particle sizing of soils by sieving	pH in soil (1:5)	TOC in Soil
029	0407_TP18_1.0_200615	13	1	1	2	1	2

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	29

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207591B R0**
Date Received	21/7/2020
Date Reported	6/8/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

% Clay subcontracted to SGS Cairns, 2/58 Comport St, Portsmith QLD 4870, NATA Accreditation Number: 2562, Site Number: 3146. CE147463

SIGNATORIES

[redacted]

Senior Organic Chemist/Metals Chemist

Inorganic/Metals Chemist

pH in soil (1:5) [AN101] Tested: 29/7/2020

PARAMETER	UOM	LOR	0407_TP18_0.1_200 15 SOIL - 15/6/2020 SE207591B.003	0407_TP18_1.0_200 15 SOIL - 16/6/2020 SE207591B.029
pH	pH Units	0.1	**6.7**	**6.5**

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR) [AN122] Tested: 24/7/2020

PARAMETER	UOM	LOR	0407_TP18_0.1_200(15 SOIL - 15/6/2020 SE207591B.003	0407_TP18_1.0_200(15 SOIL - 16/6/2020 SE207591B.029
Exchangeable Sodium, Na	mg/kg	2	**16**	**5**
Exchangeable Sodium, Na	meq/100g	0.01	**0.07**	**0.02**
Exchangeable Sodium Percentage*	%	0.1	**1.5**	**9.6**
Exchangeable Potassium, K	mg/kg	2	**69**	**8**
Exchangeable Potassium, K	meq/100g	0.01	**0.18**	**0.02**
Exchangeable Potassium Percentage*	%	0.1	**4.0**	**8.2**
Exchangeable Calcium, Ca	mg/kg	2	**720**	**39**
Exchangeable Calcium, Ca	meq/100g	0.01	**3.6**	**0.19**
Exchangeable Calcium Percentage*	%	0.1	**80.8**	**78.5**
Exchangeable Magnesium, Mg	mg/kg	2	**74**	<2
Exchangeable Magnesium, Mg	meq/100g	0.02	**0.61**	<0.02
Exchangeable Magnesium Percentage*	%	0.1	**13.7**	**3.8**
Cation Exchange Capacity	meq/100g	0.02	**4.5**	**0.25**

TOC in Soil [AN188] Tested: 29/7/2020

PARAMETER	UOM	LOR	0407_TP18_0.1_200(15 SOIL - 15/6/2020 SE207591B.003	0407_TP18_1.0_200(15 SOIL - 16/6/2020 SE207591B.029
Total Organic Carbon	%w/w	0.05	**1.3**	**0.10**
Organic Matter (calc)*	%w/w	0.1	**2.3**	**0.2**

Moisture Content [AN002] Tested: 24/7/2020

PARAMETER	UOM	LOR	0407_TP18_0.1_20015 SOIL - 15/6/2020 SE207591B.003	0407_TP18_1.0_20015 SOIL - 16/6/2020 SE207591B.029
% Moisture	%w/w	1	**11.3**	**1.4**

Particle sizing of soils by sieving [AN005] Tested: 6/8/2020

PARAMETER	UOM	LOR	0407_TP18_0.1_200(15 SOIL - 15/6/2020 SE207591B.003	0407_TP18_1.0_200(15 SOIL - 16/6/2020 SE207591B.029
Passing 75µm*	%w/w	1	**31**	<1
Retained 75µm*	%w/w	1	**69**	**100**

Particle sizing of soils <75µm by hydrometer [AN005] Tested: 6/8/2020

PARAMETER	UOM	LOR	0407_TP18_0.1_2006 15 SOIL - 15/6/2020 SE207591B.003
Clay (<0.002mm)*	%w/w	0.1	10

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN005	The particle size distribution of a soil is determined by wet sieving, using a maximum of 900 mL of deionised water to sieve all fractions down to 75 µm. Referenced to AS1289.3.6.1 and AS1141.11.
AN005	Following wet sieving of the sample,(particles smaller than 75 µm) a dispersing solution is added and a hydrometer is used to measure sedimentation. Soil density is determined and the percentage of each size fraction calculated. Referenced to AS1289.3.6.3.
AN101	pH in Soil Sludge Sediment and Water: pH is measured electrometrically using a combination electrode and is calibrated against 3 buffers purchased commercially. For soils, sediments and sludges, an extract with water (or 0.01M CaCl2) is made at a ratio of 1:5 and the pH determined and reported on the extract. Reference APHA 4500-H+.
AN122	Exchangeable Cations, CEC and ESP: Soil sample is extracted in 1M Ammonium Acetate at pH=7 (or 1M Ammonium Chloride at pH=7) with cations (Na, K, Ca & Mg) then determined by ICP OES/ICP MS and reported as Exchangeable Cations. For saline soils, these results can be corrected for water soluble cations and reported as Exchangeable cations in meq/100g or soil can be pre-treated (aqueous ethanol/aqueous glycerol) prior to extraction. Cation Exchange Capacity (CEC) is the sum of the exchangeable cations in meq/100g.
AN122	The Exchangeable Sodium Percentage (ESP) is calculated as the exchangeable sodium divided by the CEC (all in meq/100g) times 100. ESP can be used to categorise the sodicity of the soil as below: ESP < 6% non-sodic ESP 6-15% sodic ESP >15% strongly sodic Method is referenced to Rayment and Lyons, 2011, sections 15D3 and 15N1.-
AN188	The organic material in the soil sample is oxidised with chromic acid in the presence of excess sulfuric acid, without external heat being applied. The excess dichromate ion is determined by titration with standard ammonium iron (II) sulfate solution and the amount of oxidised material is calculated from the quantity of dichromate reduced. Referenced to NEPM 105 and AS1289.1.1.1.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS		LABORATORY DETAILS	
Contact	Admin	Manager	[redacted]
Client	SGS EHS SYDNEY	Laboratory	SGS Cairns Environmental
Address	5258 201 EHS SYDNEY UNIT 16 33 MADDOX STREET ALEXANDRIA NSW 2015	Address	Unit 2, 58 Comport St Portsmith QLD 4870
Telephone	0285940400	Telephone	+61 07 4035 5111
Facsimile	0285940499	Facsimile	+61 07 4035 5122
Email	au.environmental.sydney@sgs.com	Email	AU.Environmental.Cairns@sgs.com
Project	**610.30041 Randwick Barracks**	SGS Reference	**CE147463 R0**
Order Number	**SE207591B**	Date Received	21 Jul 2020
Samples	29	Date Reported	06 Aug 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(3146).

SIGNATORIES

[redacted]

Operations Manager

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147463.001 Soil 15 Jun 2020 SE207591B.001	CE147463.002 Soil 15 Jun 2020 SE207591B.002	CE147463.003 Soil 15 Jun 2020 SE207591B.003	CE147463.004 Soil 15 Jun 2020 SE207591B.004
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	**11**	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	**31**	-
Retained 75µm	%w/w	1		-	-	**69**	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020							
Clay (<0.002mm)	%w/w	0.1		-	-	**10**	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147463.005 Soil 15 Jun 2020 SE207591B.005	CE147463.006 Soil 15 Jun 2020 SE207591B.006	CE147463.007 Soil 15 Jun 2020 SE207591B.007	CE147463.008 Soil 15 Jun 2020 SE207591B.008
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020							
Clay (<0.002mm)	%w/w	0.1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147463.009 Soil 15 Jun 2020 SE207591B.009	CE147463.010 Soil 16 Jun 2020 SE207591B.010	CE147463.011 Soil 16 Jun 2020 SE207591B.011	CE147463.012 Soil 16 Jun 2020 SE207591B.012
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020							
Clay (<0.002mm)	%w/w	0.1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147463.013 Soil 16 Jun 2020 SE207591B.013	CE147463.014 Soil 16 Jun 2020 SE207591B.014	CE147463.015 Soil 16 Jun 2020 SE207591B.015	CE147463.016 Soil 16 Jun 2020 SE207591B.016
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020							
Clay (<0.002mm)	%w/w	0.1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147463.017 Soil 16 Jun 2020 SE207591B.017	CE147463.018 Soil 16 Jun 2020 SE207591B.018	CE147463.019 Soil 16 Jun 2020 SE207591B.019	CE147463.020 Soil 16 Jun 2020 SE207591B.020
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020							
Clay (<0.002mm)	%w/w	0.1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147463.021 Soil 16 Jun 2020 SE207591B.021	CE147463.022 Soil 16 Jun 2020 SE207591B.022	CE147463.023 Soil 16 Jun 2020 SE207591B.023	CE147463.024 Soil 16 Jun 2020 SE207591B.024
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020							
Clay (<0.002mm)	%w/w	0.1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147463.025 Soil 16 Jun 2020 SE207591B.025	CE147463.026 Soil 16 Jun 2020 SE207591B.026	CE147463.027 Material 16 Jun 2020 SE207591B.027	CE147463.028 Material 16 Jun 2020 SE207591B.028
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020							
Clay (<0.002mm)	%w/w	0.1		-	-	-	-

Parameter	Units	LOR	Sample Number: CE147463.029 Sample Matrix: Soil Sample Date: 16 Jun 2020 Sample Name: SE207591B.029
Moisture Content Method: AN002 Tested: 30/7/2020			
% Moisture	%w/w	1	**1.2**
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020			
Passing 75µm	%w/w	1	<1
Retained 75µm	%w/w	1	**100**
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020			
Clay (<0.002mm)	%w/w	0.1	-

QC SUMMARY

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage.* Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

No QC samples were reported for this job.

METHOD SUMMARY

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN005	The particle size distribution of a soil is determined by wet sieving, using a maximum of 900 mL of deionised water to sieve all fractions down to 75 µm. Referenced to AS1289.3.6.1 and AS1141.11.
AN005	Following wet sieving of the sample,(particles smaller than 75 µm) a dispersing solution is added and a hydrometer is used to measure sedimentation. Soil density is determined and the percentage of each size fraction calculated. Referenced to AS1289.3.6.3.

FOOTNOTES

IS	Insufficient sample for analysis.	LOR	Limit of Reporting
LNR	Sample listed, but not received.	↑↓	Raised or Lowered Limit of Reporting
*	NATA accreditation does not cover the performance of this service.	QFH	QC result is above the upper tolerance
		QFL	QC result is below the lower tolerance
**	Indicative data, theoretical holding time exceeded.	-	The sample was not analysed for this analyte
		NVL	Not Validated

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calcuated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE207591B R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
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Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	29

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207591B R0**
Date Received	21 Jul 2020
Date Reported	06 Aug 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Extraction Date	Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)	2 items
	Moisture Content	2 items
	pH in soil (1:5)	2 items
	TOC in Soil	2 items
Analysis Date	Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)	3 items
	TOC in Soil	2 items

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	2 Soil
Date documentation received	21/7/2020@5:03pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	11°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE207591B R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)

Method: ME-(AU)-[ENV]AN122

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP18_0.1_200615	SE207591B.003	LB205097	15 Jun 2020	21 Jul 2020	13 Jul 2020	24 Jul 2020†	13 Jul 2020	29 Jul 2020†
0407_TP18_1.0_200615	SE207591B.029	LB205097	16 Jun 2020	21 Jul 2020	14 Jul 2020	24 Jul 2020†	14 Jul 2020	29 Jul 2020†

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP18_0.1_200615	SE207591B.003	LB205094	15 Jun 2020	21 Jul 2020	29 Jun 2020	24 Jul 2020†	29 Jul 2020	29 Jul 2020
0407_TP18_1.0_200615	SE207591B.029	LB205094	16 Jun 2020	21 Jul 2020	30 Jun 2020	24 Jul 2020†	29 Jul 2020	29 Jul 2020

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP18_0.1_200615	SE207591B.003	LB205437	15 Jun 2020	21 Jul 2020	22 Jun 2020	29 Jul 2020†	30 Jul 2020	29 Jul 2020
0407_TP18_1.0_200615	SE207591B.029	LB205437	16 Jun 2020	21 Jul 2020	23 Jun 2020	29 Jul 2020†	30 Jul 2020	29 Jul 2020

TOC in Soil

Method: ME-(AU)-[ENV]AN188

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP18_0.1_200615	SE207591B.003	LB205429	15 Jun 2020	21 Jul 2020	13 Jul 2020	29 Jul 2020†	13 Jul 2020	29 Jul 2020†
0407_TP18_1.0_200615	SE207591B.029	LB205429	16 Jun 2020	21 Jul 2020	14 Jul 2020	29 Jul 2020†	14 Jul 2020	29 Jul 2020†

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No surrogates were required for this job.

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR) — Method: ME-(AU)-[ENV]AN122

Sample Number	Parameter	Units	LOR	Result
LB205097.001	Exchangeable Sodium, Na	mg/kg	2	0
	Exchangeable Potassium, K	mg/kg	2	0
	Exchangeable Calcium, Ca	mg/kg	2	0
	Exchangeable Magnesium, Mg	mg/kg	2	0

TOC in Soil — Method: ME-(AU)-[ENV]AN188

Sample Number	Parameter	Units	LOR	Result
LB205429.001	Total Organic Carbon	%w/w	0.05	<0.05

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207831B.008	LB205094.011	% Moisture	%w/w	1	4.0	4.0	55	1

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207591B.003	LB205437.025	pH	pH Units	0.1	6.7	6.438	32	4
SE207998A.026	LB205437.024	pH	pH Units	0.1	5.8	5.553	32	4

TOC in Soil

Method: ME-(AU)-[ENV]AN188

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207831B.007	LB205429.004	Total Organic Carbon	%w/w	0.05	8.8	10	31	13

LABORATORY CONTROL SAMPLES

SE207591B R0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)

Method: ME-(AU)-[ENV]AN122

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205097.002	Exchangeable Sodium, Na	meq/100g	0.01	0.19	0.194	80 - 120	99
	Exchangeable Potassium, K	meq/100g	0.01	0.58	0.63	80 - 120	91
	Exchangeable Calcium, Ca	meq/100g	0.01	6.3	6.3	80 - 120	100
	Exchangeable Magnesium, Mg	meq/100g	0.02	0.91	1.11	80 - 120	82

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205437.003	pH	pH Units	0.1	7.5	7.415	98 - 102	101

TOC in Soil

Method: ME-(AU)-[ENV]AN188

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205429.002	Total Organic Carbon	%w/w	0.05	0.29	0.325	80 - 120	90

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

TOC in Soil — **Method: ME-(AU)-[ENV]AN188**

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208142A.01	LB205429.019	Total Organic Carbon	%w/w	0.05	0.51	0.54	-	-

MATRIX SPIKE DUPLICATES

SE207591B R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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Good morning

Please book these additional jobs in.

Please be very carefully as there are lots of jobs

Regards,

[redacted]
Environment, Health & Safety
Client Manager
Phone: +61 (0)2 8594 0400
Direct:
Mobile: [redacted]
(Please note my new working hours of Mon-Fri 6:00am-2:00pm)



Covid-19 update: SGS Australia is open, with our Business Service Continuity Plans being put in place to ensure your project can be delivered as normal, please click here to see further details on our Business & Services Continuity Plans.

From: [redacted]@slrconsulting.com>
Sent: Tuesday, 21 July 2020 5:03 PM
To: [redacted]@sgs.com>
Cc: [redacted]@slrconsulting.com>
Subject: [EXTERNAL] 610.30041 DHA Randwick - Additional Analysis

*** WARNING: this message is from an EXTERNAL SENDER. Please be cautious, particularly with links and attachments. ***

Hi [redacted]

Can we please schedule the following analyses:

pH, clay content, TOC & CEC:

Report number	Sample ID
SE207695	TP002_0.1_200615
SE207695	TP002_1.5_200615
SE207695	TP005_0.1_200616
SE207695	TP005_1.5_200616
SE207695	TP049_0.1_200617
SE207695	TP049_1.0_200617
SE208047	TP092_0.1_200624
SE208047	TP092_1.0_200624
SE207831	TP220_0.1_200618
SE207831	TP220_1.0_200618
SE207831	TP221_0.1_200619
SE207831	TP221_1.0_200619
SE207998	TP230_0.1_200622
SE207998	TP230_1.8_200622
SE207591	TP018_0.1_200615
SE207591	TP018_1.0_200615
SE208047	TP092_0.1_200624
SE208047	TP092_1.0_200624
SE207911	TP095_0.1_200623
SE207911	TP095_1.0_200623
SE207731	TP073_0.1_200619
SE207731	TP073_1.0_200619
SE208659	TP133_0.1_200701
SE208659	TP133_1.0_200701
SE208142	TP151_0.1_200629
SE208142	TP151_1.0_200629
SE208137	TP183_0.1_200625
SE208137	TP183_0.5_200625

Additional analysis:

Report number	Sample ID	Parameter
SE208081	0407_TP241_1.0_200625	Pb & Zn
SE207731	0407_TP73_0.5_200619	Cr

ASLP Leach:

Report number	Sample ID	Parameter
SE208046	0407_TP237_0.5_200624	8 metals
SE208081	0407_TP241_0.5_200625	8 metals
SE208133	0407_TP111_0.1_200626	8 metals
SE208142	0407_TP256_0.1_200629	8 metals
SE207831	0407_TP222_0.1_200619	8 metals
SE207731	0407_TP73_0.1_200619	8 metals
SE207850	0407_TP162_0.1_200617	PAHs include B(a)P

SE207831	0407_TP197_0.1_200619	PAHs include B(a)P
SE207831	0407_TP197_0.5_200619	PAHs include B(a)P
SE207831	0407_TP200_0.5_200618	PAHs include B(a)P
SE207831	0407_TP200_1.0_200618	Total and leachable PAHs including B(a)P
SE207831	0407_TP209_0.5_200619	PAHs include B(a)P
SE207831	0407_TP221_0.5_200619	PAHs include B(a)P
SE207831	0407_TP221_1.0_200619	Total and leachable PAHs including B(a)P
SE207824	0407_TP231_0.1_200622	PAHs include B(a)P
SE208161	0407_BH41_0.0_200625	PFOS, PFOA, PfHxS
SE208046	0407_QC160_200624	PFOS, PFOA, PfHxS
SE207824	0407_QC130_200622	PFOS, PFOA, PfHxS

Let me know if you have any questions.

Many thanks,

[redacted]

SLR

[redacted]
Associate - Land Quality & Remediation

Please note in response to the COVID-19 Pandemic and physical distancing recommendations from the Australian Government, SLR is encouraging staff to work remotely and implement flexible working hours if necessary.
If you have received this email outside of regular office hours, it is not expected that you will respond until your own working hours commence.

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o [redacted]
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Level 2, 15 Astor Terrace, Brisbane, QLD, Australia, 4000

WINNERS: RoSPA Gold Award, 2017
WINNERS : International Business Excellence Award, 2016

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SAMPLE RECEIPT ADVICE

SE207998A

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	26

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Tue 21/7/2020
Report Due	Wed 29/7/2020
SGS Reference	**SE207998A**

SUBMISSION DETAILS

This is to confirm that 26 samples were received on Tuesday 21/7/2020. Results are expected to be ready by COB Wednesday 29/7/2020.
Please quote SGS reference SE207998A when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	2 Soil
Date documentation received	21/7/2020@5:03pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	5.4°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

% Clay subcontracted to SGS Cairns, 2/58 Comport St, Portsmith QLD 4870, NATA Accreditation Number: 2562, Site Number: 3146.

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SAMPLE RECEIPT ADVICE

SE207998A

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Exchangeable Cations and Cation Exchange Capacity	Moisture Content	Particle sizing of soils <75µm by hydrometer	Particle sizing of soils by sieving	pH in soil (1:5)	TOC in Soil
018	0407_TP230_0.1_200622	13	1	1	2	1	2

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE207998A

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Exchangeable Cations and Cation Exchange Capacity	Moisture Content	Particle sizing of soils <75µm by hydrometer	Particle sizing of soils by sieving	pH in soil (1:5)	TOC in Soil
026	0407_TP230_1.8_200622	13	1	1	2	1	2

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS		LABORATORY DETAILS	
Contact	Admin	Manager	[redacted]
Client	SGS EHS SYDNEY	Laboratory	SGS Cairns Environmental
Address	5258 201 EHS SYDNEY UNIT 16 33 MADDOX STREET ALEXANDRIA NSW 2015	Address	Unit 2, 58 Comport St Portsmith QLD 4870
Telephone	0285940400	Telephone	+61 07 4035 5111
Facsimile	0285940499	Facsimile	+61 07 4035 5122
Email	au.environmental.sydney@sgs.com	Email	AU.Environmental.Cairns@sgs.com
Project	**610.30041 Randwick Barracks**	SGS Reference	**CE147461 R0**
Order Number	**SE207998A**	Date Received	21 Jul 2020
Samples	26	Date Reported	06 Aug 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(3146).

SIGNATORIES

[redacted]

Operations Manager

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147461.001 Soil 22 Jun 2020 SE207998A.001	CE147461.002 Soil 22 Jun 2020 SE207998A.002	CE147461.003 Soil 22 Jun 2020 SE207998A.003	CE147461.004 Soil 22 Jun 2020 SE207998A.004
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020							
Clay (<0.002mm)	%w/w	0.1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147461.005 Soil 22 Jun 2020 SE207998A.005	CE147461.006 Soil 22 Jun 2020 SE207998A.006	CE147461.007 Soil 22 Jun 2020 SE207998A.007	CE147461.008 Soil 22 Jun 2020 SE207998A.008
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020							
Clay (<0.002mm)	%w/w	0.1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147461.009 Soil 22 Jun 2020 SE207998A.009	CE147461.010 Soil 22 Jun 2020 SE207998A.010	CE147461.011 Soil 22 Jun 2020 SE207998A.011	CE147461.012 Soil 22 Jun 2020 SE207998A.012
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020							
Clay (<0.002mm)	%w/w	0.1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147461.013 Soil 22 Jun 2020 SE207998A.013	CE147461.014 Soil 22 Jun 2020 SE207998A.014	CE147461.015 Soil 22 Jun 2020 SE207998A.015	CE147461.016 Soil 22 Jun 2020 SE207998A.016
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020							
Clay (<0.002mm)	%w/w	0.1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147461.017 Soil 22 Jun 2020 SE207998A.017	CE147461.018 Soil 22 Jun 2020 SE207998A.018	CE147461.019 Soil 22 Jun 2020 SE207998A.019	CE147461.020 Soil 22 Jun 2020 SE207998A.020
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	**38**	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	**25**	-	-
Retained 75µm	%w/w	1		-	**75**	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020							
Clay (<0.002mm)	%w/w	0.1		-	**6.0**	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147461.021 Soil 22 Jun 2020 SE207998A.021	CE147461.022 Soil 22 Jun 2020 SE207998A.022	CE147461.023 Soil 22 Jun 2020 SE207998A.023	CE147461.024 Soil 22 Jun 2020 SE207998A.024
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020							
Clay (<0.002mm)	%w/w	0.1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name CE147461.025 Soil 22 Jun 2020 SE207998A.025	CE147461.026 Soil 22 Jun 2020 SE207998A.026
Moisture Content Method: AN002 Tested: 31/7/2020				
% Moisture	%w/w	1	-	**4.9**
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020				
Passing 75µm	%w/w	1	-	**2**
Retained 75µm	%w/w	1	-	**98**
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020				
Clay (<0.002mm)	%w/w	0.1	-	-

QC SUMMARY

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage.* Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

No QC samples were reported for this job.

METHOD SUMMARY

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN005	The particle size distribution of a soil is determined by wet sieving, using a maximum of 900 mL of deionised water to sieve all fractions down to 75 µm. Referenced to AS1289.3.6.1 and AS1141.11.
AN005	Following wet sieving of the sample,(particles smaller than 75 µm) a dispersing solution is added and a hydrometer is used to measure sedimentation. Soil density is determined and the percentage of each size fraction calculated. Referenced to AS1289.3.6.3.

FOOTNOTES

IS	Insufficient sample for analysis.	LOR	Limit of Reporting
LNR	Sample listed, but not received.	↑↓	Raised or Lowered Limit of Reporting
*	NATA accreditation does not cover the performance of this service.	QFH	QC result is above the upper tolerance
		QFL	QC result is below the lower tolerance
**	Indicative data, theoretical holding time exceeded.	-	The sample was not analysed for this analyte
		NVL	Not Validated

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calcuated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	26

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207998A R0**
Date Received	21/7/2020
Date Reported	6/8/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

% Clay subcontracted to SGS Cairns, 2/58 Comport St, Portsmith QLD 4870, NATA Accreditation Number: 2562, Site Number: 3146. CE147461

SIGNATORIES

[redacted]

Senior Organic Chemist/Metals Chemist

Inorganic/Metals Chemist

pH in soil (1:5) [AN101] Tested: 29/7/2020

PARAMETER	UOM	LOR	0407_TP230_0.1_20(622 SOIL - 22/6/2020 SE207998A.018	0407_TP230_1.8_20(622 SOIL - 22/6/2020 SE207998A.026
pH	pH Units	0.1	**7.3**	**5.8**

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR) [AN122] Tested: 24/7/2020

PARAMETER	UOM	LOR	0407_TP230_0.1_20(622 SOIL - 22/6/2020 SE207998A.018	0407_TP230_1.8_20(622 SOIL - 22/6/2020 SE207998A.026
Exchangeable Sodium, Na	mg/kg	2	**49**	<2
Exchangeable Sodium, Na	meq/100g	0.01	**0.21**	<0.01
Exchangeable Sodium Percentage*	%	0.1	**0.4**	**5.9**
Exchangeable Potassium, K	mg/kg	2	**320**	<2
Exchangeable Potassium, K	meq/100g	0.01	**0.82**	<0.01
Exchangeable Potassium Percentage*	%	0.1	**1.7**	**2.4**
Exchangeable Calcium, Ca	mg/kg	2	**8900**	**17**
Exchangeable Calcium, Ca	meq/100g	0.01	**45**	**0.09**
Exchangeable Calcium Percentage*	%	0.1	**93.5**	**77.8**
Exchangeable Magnesium, Mg	mg/kg	2	**250**	<2
Exchangeable Magnesium, Mg	meq/100g	0.02	**2.1**	<0.02
Exchangeable Magnesium Percentage*	%	0.1	**4.3**	**14.0**
Cation Exchange Capacity	meq/100g	0.02	**48**	**0.11**

TOC in Soil [AN188] Tested: 28/7/2020

PARAMETER	UOM	LOR	0407_TP230_0.1_20(622 SOIL - 22/6/2020 SE207998A.018	0407_TP230_1.8_20(622 SOIL - 22/6/2020 SE207998A.026
Total Organic Carbon	%w/w	0.05	**9.1**	<0.05
Organic Matter (calc)*	%w/w	0.1	**16**	<0.1

Moisture Content [AN002] Tested: 24/7/2020

PARAMETER	UOM	LOR	0407_TP230_0.1_20(622 SOIL - 22/6/2020 SE207998A.018	0407_TP230_1.8_20(622 SOIL - 22/6/2020 SE207998A.026
% Moisture	%w/w	1	**44.2**	**4.9**

Particle sizing of soils by sieving [AN005] Tested: 6/8/2020

PARAMETER	UOM	LOR	0407_TP230_0.1_20(622 SOIL - 22/6/2020 SE207998A.018	0407_TP230_1.8_20(622 SOIL - 22/6/2020 SE207998A.026
Passing 75µm*	%w/w	1	**25**	**2**
Retained 75µm*	%w/w	1	**75**	**98**

Particle sizing of soils <75µm by hydrometer [AN005] Tested: 6/8/2020

PARAMETER	UOM	LOR	0407_TP230_0.1_20(622 SOIL - 22/6/2020 SE207998A.018
Clay (<0.002mm)*	%w/w	0.1	**6.0**

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN005	The particle size distribution of a soil is determined by wet sieving, using a maximum of 900 mL of deionised water to sieve all fractions down to 75 µm. Referenced to AS1289.3.6.1 and AS1141.11.
AN005	Following wet sieving of the sample,(particles smaller than 75 µm) a dispersing solution is added and a hydrometer is used to measure sedimentation. Soil density is determined and the percentage of each size fraction calculated. Referenced to AS1289.3.6.3.
AN101	pH in Soil Sludge Sediment and Water: pH is measured electrometrically using a combination electrode and is calibrated against 3 buffers purchased commercially. For soils, sediments and sludges, an extract with water (or 0.01M CaCl2) is made at a ratio of 1:5 and the pH determined and reported on the extract. Reference APHA 4500-H+.
AN122	Exchangeable Cations, CEC and ESP: Soil sample is extracted in 1M Ammonium Acetate at pH=7 (or 1M Ammonium Chloride at pH=7) with cations (Na, K, Ca & Mg) then determined by ICP OES/ICP MS and reported as Exchangeable Cations. For saline soils, these results can be corrected for water soluble cations and reported as Exchangeable cations in meq/100g or soil can be pre-treated (aqueous ethanol/aqueous glycerol) prior to extraction. Cation Exchange Capacity (CEC) is the sum of the exchangeable cations in meq/100g.
AN122	The Exchangeable Sodium Percentage (ESP) is calculated as the exchangeable sodium divided by the CEC (all in meq/100g) times 100. ESP can be used to categorise the sodicity of the soil as below: ESP < 6% non-sodic ESP 6-15% sodic ESP >15% strongly sodic Method is referenced to Rayment and Lyons, 2011, sections 15D3 and 15N1.-
AN188	The organic material in the soil sample is oxidised with chromic acid in the presence of excess sulfuric acid, without external heat being applied. The excess dichromate ion is determined by titration with standard ammonium iron (II) sulfate solution and the amount of oxidised material is calculated from the quantity of dichromate reduced. Referenced to NEPM 105 and AS1289.1.1.1.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

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Solid samples expressed on a dry weight basis.

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Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE207998A R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
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Manager	[redacted]
Laboratory	SGS Alexandria Environmental
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Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207998A R0**
Date Received	21 Jul 2020
Date Reported	06 Aug 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Extraction Date	Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)	2 items
	Moisture Content	2 items
	pH in soil (1:5)	2 items
	TOC in Soil	2 items
Analysis Date	Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)	2 items
	TOC in Soil	2 items

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	2 Soil
Date documentation received	21/7/2020@5:03pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	5.4°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE207998A R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)

Method: ME-(AU)-[ENV]AN122

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP230_0.1_200622	SE207998A.018	LB205096	22 Jun 2020	21 Jul 2020	20 Jul 2020	24 Jul 2020†	20 Jul 2020	28 Jul 2020†
0407_TP230_1.8_200622	SE207998A.026	LB205096	22 Jun 2020	21 Jul 2020	20 Jul 2020	24 Jul 2020†	20 Jul 2020	28 Jul 2020†

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP230_0.1_200622	SE207998A.018	LB205094	22 Jun 2020	21 Jul 2020	06 Jul 2020	24 Jul 2020†	29 Jul 2020	28 Jul 2020
0407_TP230_1.8_200622	SE207998A.026	LB205094	22 Jun 2020	21 Jul 2020	06 Jul 2020	24 Jul 2020†	29 Jul 2020	28 Jul 2020

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP230_0.1_200622	SE207998A.018	LB205437	22 Jun 2020	21 Jul 2020	29 Jun 2020	29 Jul 2020†	30 Jul 2020	29 Jul 2020
0407_TP230_1.8_200622	SE207998A.026	LB205437	22 Jun 2020	21 Jul 2020	29 Jun 2020	29 Jul 2020†	30 Jul 2020	29 Jul 2020

TOC in Soil

Method: ME-(AU)-[ENV]AN188

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP230_0.1_200622	SE207998A.018	LB205343	22 Jun 2020	21 Jul 2020	20 Jul 2020	28 Jul 2020†	20 Jul 2020	28 Jul 2020†
0407_TP230_1.8_200622	SE207998A.026	LB205343	22 Jun 2020	21 Jul 2020	20 Jul 2020	28 Jul 2020†	20 Jul 2020	28 Jul 2020†

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No surrogates were required for this job.

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)

Method: ME-(AU)-[ENV]AN122

Sample Number	Parameter	Units	LOR	Result
LB205096.001	Exchangeable Sodium, Na	mg/kg	2	0
	Exchangeable Potassium, K	mg/kg	2	0
	Exchangeable Calcium, Ca	mg/kg	2	0
	Exchangeable Magnesium, Mg	mg/kg	2	0

TOC in Soil

Method: ME-(AU)-[ENV]AN188

Sample Number	Parameter	Units	LOR	Result
LB205343.001	Total Organic Carbon	%w/w	0.05	<0.05

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207831B.008	LB205094.011	% Moisture	%w/w	1	4.00508582324	4.0345821325	55	1

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207591B.003	LB205437.025	pH	pH Units	0.1	6.684	6.438	32	4
SE207998A.026	LB205437.024	pH	pH Units	0.1	5.8	5.553	32	4

TOC in Soil

Method: ME-(AU)-[ENV]AN188

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207695A.051	LB205343.008	Total Organic Carbon	%w/w	0.05	32	36.003116201€	30	11

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)

Method: ME-(AU)-[ENV]AN122

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205096.002	Exchangeable Sodium, Na	meq/100g	0.01	0.19	0.194	80 - 120	97
	Exchangeable Potassium, K	meq/100g	0.01	0.58	0.63	80 - 120	92
	Exchangeable Calcium, Ca	meq/100g	0.01	6.9	6.3	80 - 120	109
	Exchangeable Magnesium, Mg	meq/100g	0.02	0.94	1.11	80 - 120	85

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205437.003	pH	pH Units	0.1	7.5	7.415	98 - 102	101

TOC in Soil

Method: ME-(AU)-[ENV]AN188

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205343.002	Total Organic Carbon	%w/w	0.05	0.31	0.325	80 - 120	96

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

TOC in Soil — **Method: ME-(AU)-[ENV]AN188**

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207998A.02	LB205343.015	Total Organic Carbon	%w/w	0.05	0.36	<0.05	-	-

MATRIX SPIKE DUPLICATES

SE207998A R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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SAMPLE RECEIPT ADVICE

SE208090A

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	23

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Tue 21/7/2020
Report Due	Fri 31/7/2020
SGS Reference	**SE208090A**

SUBMISSION DETAILS

This is to confirm that 23 samples were received on Tuesday 21/7/2020. Results are expected to be ready by COB Friday 31/7/2020. Please quote SGS reference SE208090A when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	2 Soil
Date documentation received	21/7/2020@5:03pm	Type of documentation received	Email
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	4.7°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

Clay content subcontracted to SGS Cairns, 2/58 Comport St, Portsmith QLD 4870, NATA Accreditation Number: 2562, Site Number: 3146. CE147460

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SAMPLE RECEIPT ADVICE

SE208090A

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Exchangeable Cations and Cation Exchange Capacity	Particle sizing of soils by sieving	pH in soil (1:5)	TOC in Soil
009	0407_TP183_0.1_200625	13	2	1	2
011	0407_TP183_0.5_200625	13	2	1	2

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	Admin
Client	SGS EHS SYDNEY
Address	5258 201 EHS SYDNEY UNIT 16 33 MADDOX STREET ALEXANDRIA NSW 2015
Telephone	0285940400
Facsimile	0285940499
Email	au.environmental.sydney@sgs.com
Project	**610.30041 Randwick Barracks**
Order Number	**SE208090A**
Samples	23

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Cairns Environmental
Address	Unit 2, 58 Comport St Portsmith QLD 4870
Telephone	+61 07 4035 5111
Facsimile	+61 07 4035 5122
Email	AU.Environmental.Cairns@sgs.com
SGS Reference	**CE147460 R0**
Date Received	21 Jul 2020
Date Reported	06 Aug 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(3146).

Particle sizing of soils <75um by Hydrometer not conducted where insuffient sample passes the 75um fraction.

SIGNATORIES

[redacted]

Operations Manager

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147460.001 Soil 25 Jun 2020 SE208090A.001	CE147460.002 Soil 25 Jun 2020 SE208090A.002	CE147460.003 Material 25 Jun 2020 SE208090A.003	CE147460.004 Soil 25 Jun 2020 SE208090A.004
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147460.005 Soil 25 Jun 2020 SE208090A.005	CE147460.006 Soil 25 Jun 2020 SE208090A.006	CE147460.007 Soil 25 Jun 2020 SE208090A.007	CE147460.008 Soil 25 Jun 2020 SE208090A.008
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147460.009 Soil 25 Jun 2020 SE208090A.009	CE147460.010 Material 25 Jun 2020 SE208090A.010	CE147460.011 Soil 25 Jun 2020 SE208090A.011	CE147460.012 Soil 25 Jun 2020 SE208090A.012
Moisture Content Method: AN002 Tested: 30/7/2020							
% Moisture	%w/w	1		**19**	-	**14**	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		**16**	-	**11**	-
Retained 75µm	%w/w	1		**85**	-	**89**	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147460.013 Soil 25 Jun 2020 SE208090A.013	CE147460.014 Soil 25 Jun 2020 SE208090A.014	CE147460.015 Soil 25 Jun 2020 SE208090A.015	CE147460.016 Soil 25 Jun 2020 SE208090A.016
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147460.017 Soil 25 Jun 2020 SE208090A.017	CE147460.018 Soil 25 Jun 2020 SE208090A.018	CE147460.019 Soil 25 Jun 2020 SE208090A.019	CE147460.020 Soil 25 Jun 2020 SE208090A.020
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147460.021 Soil 25 Jun 2020 SE208090A.021	CE147460.022 Soil 25 Jun 2020 SE208090A.022	CE147460.023 Soil 25 Jun 2020 SE208090A.023
Moisture Content Method: AN002 Tested: 31/7/2020						
% Moisture	%w/w	1		-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020						
Passing 75µm	%w/w	1		-	-	-
Retained 75µm	%w/w	1		-	-	-

QC SUMMARY

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage.* Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

No QC samples were reported for this job.

METHOD SUMMARY

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN005	The particle size distribution of a soil is determined by wet sieving, using a maximum of 900 mL of deionised water to sieve all fractions down to 75 µm. Referenced to AS1289.3.6.1 and AS1141.11.

FOOTNOTES

IS	Insufficient sample for analysis.	LOR	Limit of Reporting
LNR	Sample listed, but not received.	↑↓	Raised or Lowered Limit of Reporting
*	NATA accreditation does not cover the performance of this service.	QFH	QC result is above the upper tolerance
		QFL	QC result is below the lower tolerance
**	Indicative data, theoretical holding time exceeded.	-	The sample was not analysed for this analyte
		NVL	Not Validated

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calcuated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	23

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208090A R0**
Date Received	21/7/2020
Date Reported	6/8/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

Clay content subcontracted to SGS Cairns, 2/58 Comport St, Portsmith QLD 4870, NATA Accreditation Number: 2562, Site Number: 3146. CE147460

SIGNATORIES

[redacted]

Senior Organic Chemist/Metals Chemist | Metals/Inorganics Team Leader | Inorganic/Metals Chemist

pH in soil (1:5) [AN101] Tested: 30/7/2020

PARAMETER	UOM	LOR	0407_TP183_0.1_20(625 SOIL - 25/6/2020 SE208090A.009	0407_TP183_0.5_20(625 SOIL - 25/6/2020 SE208090A.011
pH	pH Units	0.1	**6.9**	**8.8**

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR) [AN122] Tested: 29/7/2020

PARAMETER	UOM	LOR	0407_TP183_0.1_20(625 SOIL - 25/6/2020 SE208090A.009	0407_TP183_0.5_20(625 SOIL - 25/6/2020 SE208090A.011
Exchangeable Sodium, Na	mg/kg	2	37	72
Exchangeable Sodium, Na	meq/100g	0.01	0.16	0.31
Exchangeable Sodium Percentage*	%	0.1	1.5	2.1
Exchangeable Potassium, K	mg/kg	2	27	24
Exchangeable Potassium, K	meq/100g	0.01	0.07	0.06
Exchangeable Potassium Percentage*	%	0.1	0.7	0.4
Exchangeable Calcium, Ca	mg/kg	2	1900	2800
Exchangeable Calcium, Ca	meq/100g	0.01	9.5	14
Exchangeable Calcium Percentage*	%	0.1	89.0	95.0
Exchangeable Magnesium, Mg	mg/kg	2	110	46
Exchangeable Magnesium, Mg	meq/100g	0.02	0.94	0.38
Exchangeable Magnesium Percentage*	%	0.1	8.8	2.5
Cation Exchange Capacity	meq/100g	0.02	11	15

TOC in Soil [AN188] Tested: 30/7/2020

PARAMETER	UOM	LOR	0407_TP183_0.1_20(625 SOIL - 25/6/2020 SE208090A.009	0407_TP183_0.5_20(625 SOIL - 25/6/2020 SE208090A.011
Total Organic Carbon	%w/w	0.05	2.8	0.63
Organic Matter (calc)*	%w/w	0.1	4.9	1.1

Particle sizing of soils by sieving [AN005] Tested: 6/8/2020

PARAMETER	UOM	LOR	0407_TP183_0.1_20(625 SOIL - 25/6/2020 SE208090A.009	0407_TP183_0.5_20(625 SOIL - 25/6/2020 SE208090A.011
Passing 75µm*	%w/w	1	**16**	**11**
Retained 75µm*	%w/w	1	**85**	**89**

METHOD	METHODOLOGY SUMMARY
AN005	The particle size distribution of a soil is determined by wet sieving, using a maximum of 900 mL of deionised water to sieve all fractions down to 75 µm. Referenced to AS1289.3.6.1 and AS1141.11.
AN005	Following wet sieving of the sample,(particles smaller than 75 µm) a dispersing solution is added and a hydrometer is used to measure sedimentation. Soil density is determined and the percentage of each size fraction calculated. Referenced to AS1289.3.6.3.
AN101	pH in Soil Sludge Sediment and Water: pH is measured electrometrically using a combination electrode and is calibrated against 3 buffers purchased commercially. For soils, sediments and sludges, an extract with water (or 0.01M CaCl2) is made at a ratio of 1:5 and the pH determined and reported on the extract. Reference APHA 4500-H+.
AN122	Exchangeable Cations, CEC and ESP: Soil sample is extracted in 1M Ammonium Acetate at pH=7 (or 1M Ammonium Chloride at pH=7) with cations (Na, K, Ca & Mg) then determined by ICP OES/ICP MS and reported as Exchangeable Cations. For saline soils, these results can be corrected for water soluble cations and reported as Exchangeable cations in meq/100g or soil can be pre-treated (aqueous ethanol/aqueous glycerol) prior to extraction. Cation Exchange Capacity (CEC) is the sum of the exchangeable cations in meq/100g.
AN122	The Exchangeable Sodium Percentage (ESP) is calculated as the exchangeable sodium divided by the CEC (all in meq/100g) times 100. ESP can be used to categorise the sodicity of the soil as below: ESP < 6% non-sodic ESP 6-15% sodic ESP >15% strongly sodic Method is referenced to Rayment and Lyons, 2011, sections 15D3 and 15N1.-
AN188	The organic material in the soil sample is oxidised with chromic acid in the presence of excess sulfuric acid, without external heat being applied. The excess dichromate ion is determined by titration with standard ammonium iron (II) sulfate solution and the amount of oxidised material is calculated from the quantity of dichromate reduced. Referenced to NEPM 105 and AS1289.1.1.1.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE208090A R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	23

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208090A R0**
Date Received	21 Jul 2020
Date Reported	06 Aug 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Extraction Date	Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)	2 items
	pH in soil (1:5)	2 items
	TOC in Soil	2 items
Analysis Date	Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)	2 items
	TOC in Soil	2 items

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	2 Soil
Date documentation received	21/7/2020@5:03pm	Type of documentation received	Email
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	4.7°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE208090A R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)

Method: ME-(AU)-[ENV]AN122

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP183_0.1_200625	SE208090A.009	LB205550	25 Jun 2020	21 Jul 2020	23 Jul 2020	29 Jul 2020†	23 Jul 2020	31 Jul 2020†
0407_TP183_0.5_200625	SE208090A.011	LB205550	25 Jun 2020	21 Jul 2020	23 Jul 2020	29 Jul 2020†	23 Jul 2020	31 Jul 2020†

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP183_0.1_200625	SE208090A.009	LB205634	25 Jun 2020	21 Jul 2020	02 Jul 2020	30 Jul 2020†	31 Jul 2020	30 Jul 2020
0407_TP183_0.5_200625	SE208090A.011	LB205634	25 Jun 2020	21 Jul 2020	02 Jul 2020	30 Jul 2020†	31 Jul 2020	30 Jul 2020

TOC in Soil

Method: ME-(AU)-[ENV]AN188

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP183_0.1_200625	SE208090A.009	LB205584	25 Jun 2020	21 Jul 2020	23 Jul 2020	30 Jul 2020†	23 Jul 2020	30 Jul 2020†
0407_TP183_0.5_200625	SE208090A.011	LB205584	25 Jun 2020	21 Jul 2020	23 Jul 2020	30 Jul 2020†	23 Jul 2020	30 Jul 2020†

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No surrogates were required for this job.

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR) — Method: ME-(AU)-[ENV]AN122

Sample Number	Parameter	Units	LOR	Result
LB205550.001	Exchangeable Sodium, Na	mg/kg	2	0
	Exchangeable Potassium, K	mg/kg	2	0
	Exchangeable Calcium, Ca	mg/kg	2	0
	Exchangeable Magnesium, Mg	mg/kg	2	0

TOC in Soil — Method: ME-(AU)-[ENV]AN188

Sample Number	Parameter	Units	LOR	Result
LB205584.001	Total Organic Carbon	%w/w	0.05	<0.05

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208090A.011	LB205634.025	pH	pH Units	0.1	8.8	8.9	31	1
SE209178.003	LB205634.026	pH	pH Units	0.1	6.3	6.216	32	2

TOC in Soil

Method: ME-(AU)-[ENV]AN188

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE209218.001	LB205584.004	Total Organic Carbon	%w/w	0.05	0.92	0.98	35	6

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)

Method: ME-(AU)-[ENV]AN122

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205550.002	Exchangeable Sodium, Na	meq/100g	0.01	0.19	0.194	80 - 120	100
	Exchangeable Potassium, K	meq/100g	0.01	0.59	0.63	80 - 120	93
	Exchangeable Calcium, Ca	meq/100g	0.01	5.9	6.3	80 - 120	94
	Exchangeable Magnesium, Mg	meq/100g	0.02	1.0	1.11	80 - 120	91

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205634.003	pH	pH Units	0.1	7.4	7.415	98 - 102	100

TOC in Soil

Method: ME-(AU)-[ENV]AN188

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205584.002	Total Organic Carbon	%w/w	0.05	0.30	0.325	80 - 120	91

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

TOC in Soil — **Method: ME-(AU)-[ENV]AN188**

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208090A.01	LB205584.009	Total Organic Carbon	%w/w	0.05	0.99	0.63	-	-

MATRIX SPIKE DUPLICATES

SE208090A R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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This test report shall not be reproduced, except in full.

Good morning

Please book these additional jobs in.

Please be very carefully as there are lots of jobs

Regards,

[redacted]
Environment, Health & Safety
Client Manager
Phone: +61 (0)2 8594 0400
Direct:
Mobile: [redacted]
(Please note my new working hours of Mon-Fri 6:00am-2:00pm)



Covid-19 update: SGS Australia is open, with our Business Service Continuity Plans being put in place to ensure your project can be delivered as normal, please click here to see further details on our Business & Services Continuity Plans.

From: [redacted]@slrconsulting.com>
Sent: Tuesday, 21 July 2020 5:03 PM
To: [redacted]sgs.com>
Cc: [redacted]@slrconsulting.com>
Subject: [EXTERNAL] 610.30041 DHA Randwick - Additional Analysis

*** WARNING: this message is from an EXTERNAL SENDER. Please be cautious, particularly with links and attachments. ***

Hi [redacted]

Can we please schedule the following analyses:

pH, clay content, TOC & CEC:

Report number	Sample ID
SE207695	TP002_0.1_200615
SE207695	TP002_1.5_200615
SE207695	TP005_0.1_200616
SE207695	TP005_1.5_200616
SE207695	TP049_0.1_200617
SE207695	TP049_1.0_200617
SE208047	TP092_0.1_200624
SE208047	TP092_1.0_200624
SE207831	TP220_0.1_200618
SE207831	TP220_1.0_200618
SE207831	TP221_0.1_200619
SE207831	TP221_1.0_200619
SE207998	TP230_0.1_200622
SE207998	TP230_1.8_200622
SE207591	TP018_0.1_200615
SE207591	TP018_1.0_200615
SE208047	TP092_0.1_200624
SE208047	TP092_1.0_200624
SE207911	TP095_0.1_200623
SE207911	TP095_1.0_200623
SE207731	TP073_0.1_200619
SE207731	TP073_1.0_200619
SE208659	TP133_0.1_200701
SE208659	TP133_1.0_200701
SE208142	TP151_0.1_200629
SE208142	TP151_1.0_200629
SE208137	TP183_0.1_200625
SE208137	TP183_0.5_200625

Additional analysis:

Report number	Sample ID	Parameter
SE208081	0407_TP241_1.0_200625	Pb & Zn
SE207731	0407_TP73_0.5_200619	Cr

ASLP Leach:

Report number	Sample ID	Parameter
SE208046	0407_TP237_0.5_200624	8 metals
SE208081	0407_TP241_0.5_200625	8 metals
SE208133	0407_TP111_0.1_200626	8 metals
SE208142	0407_TP256_0.1_200629	8 metals
SE207831	0407_TP222_0.1_200619	8 metals
SE207731	0407_TP73_0.1_200619	8 metals
SE207850	0407_TP162_0.1_200617	PAHs include B(a)P

SE207831	0407_TP197_0.1_200619	PAHs include B(a)P
SE207831	0407_TP197_0.5_200619	PAHs include B(a)P
SE207831	0407_TP200_0.5_200618	PAHs include B(a)P
SE207831	0407_TP200_1.0_200618	Total and leachable PAHs including B(a)P
SE207831	0407_TP209_0.5_200619	PAHs include B(a)P
SE207831	0407_TP221_0.5_200619	PAHs include B(a)P
SE207831	0407_TP221_1.0_200619	Total and leachable PAHs including B(a)P
SE207824	0407_TP231_0.1_200622	PAHs include B(a)P
SE208161	0407_BH41_0.0_200625	PFOS, PFOA, PfHxS
SE208046	0407_QC160_200624	PFOS, PFOA, PfHxS
SE207824	0407_QC130_200622	PFOS, PFOA, PfHxS

Let me know if you have any questions.

Many thanks,

[redacted]

SLR

[redacted]

Associate - Land Quality & Remediation

Please note in response to the COVID-19 Pandemic and physical distancing recommendations from the Australian Government, SLR is encouraging staff to work remotely and implement flexible working hours if necessary.
If you have received this email outside of regular office hours, it is not expected that you will respond until your own working hours commence.

d +61 7 3117 5227
o [redacted]
m
e [redacted]@slrconsulting.com

SLR Consulting Australia Pty Ltd
Level 2, 15 Astor Terrace, Brisbane, QLD, Australia, 4000

WINNERS: RoSPA Gold Award, 2017
WINNERS : International Business Excellence Award, 2016

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SAMPLE RECEIPT ADVICE

SE208659A

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	23

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Tue 21/7/2020
Report Due	Wed 29/7/2020
SGS Reference	**SE208659A**

SUBMISSION DETAILS

This is to confirm that 23 samples were received on Tuesday 21/7/2020. Results are expected to be ready by COB Wednesday 29/7/2020.
Please quote SGS reference SE208659A when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	2 Soil
Date documentation received	21/7/2020@5:03pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	4.7°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

% Clay subcontracted to SGS Cairns, 2/58 Comport St, Portsmith QLD 4870, NATA Accreditation Number: 2562, Site Number: 3146.

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SAMPLE RECEIPT ADVICE

SE208659A

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Exchangeable Cations and Cation Exchange Capacity	Moisture Content	Particle sizing of soils <75µm by hydrometer	Particle sizing of soils by sieving	pH in soil (1:5)	TOC in Soil
011	0407_TP133_0.1_200701	13	1	1	2	1	2
023	0407_TP133_1.0_200701	13	1	1	2	1	2

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	23

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208659A R0**
Date Received	21/7/2020
Date Reported	6/8/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

% Clay subcontracted to SGS Cairns, 2/58 Comport St, Portsmith QLD 4870, NATA Accreditation Number: 2562, Site Number: 3146. CE147456

SIGNATORIES

[redacted]

Senior Organic Chemist/Metals Chemist Inorganic/Metals Chemist

pH in soil (1:5) [AN101] Tested: 29/7/2020

PARAMETER	UOM	LOR	0407_TP133_0.1_20(701 SOIL - 1/7/2020 SE208659A.011	0407_TP133_1.0_20(701 SOIL - 1/7/2020 SE208659A.023
pH	pH Units	0.1	**5.6**	**6.2**

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR) [AN122] Tested: 24/7/2020

PARAMETER	UOM	LOR	0407_TP133_0.1_20(701 SOIL - 1/7/2020 SE208659A.011	0407_TP133_1.0_20(701 SOIL - 1/7/2020 SE208659A.023
Exchangeable Sodium, Na	mg/kg	2	**5**	**2**
Exchangeable Sodium, Na	meq/100g	0.01	**0.02**	<0.01
Exchangeable Sodium Percentage*	%	0.1	**2.6**	**3.4**
Exchangeable Potassium, K	mg/kg	2	**24**	<2
Exchangeable Potassium, K	meq/100g	0.01	**0.06**	<0.01
Exchangeable Potassium Percentage*	%	0.1	**6.7**	**1.6**
Exchangeable Calcium, Ca	mg/kg	2	**130**	**43**
Exchangeable Calcium, Ca	meq/100g	0.01	**0.64**	**0.22**
Exchangeable Calcium Percentage*	%	0.1	**70.6**	**80.0**
Exchangeable Magnesium, Mg	mg/kg	2	**22**	**5**
Exchangeable Magnesium, Mg	meq/100g	0.02	**0.18**	**0.04**
Exchangeable Magnesium Percentage*	%	0.1	**20.2**	**15.0**
Cation Exchange Capacity	meq/100g	0.02	**0.91**	**0.27**

TOC in Soil [AN188] Tested: 29/7/2020

PARAMETER	UOM	LOR	0407_TP133_0.1_20(701 SOIL - 1/7/2020 SE208659A.011	0407_TP133_1.0_20(701 SOIL - 1/7/2020 SE208659A.023
Total Organic Carbon	%w/w	0.05	**0.99**	**0.08**
Organic Matter (calc)*	%w/w	0.1	**1.7**	**0.1**

Moisture Content [AN002] Tested: 24/7/2020

PARAMETER	UOM	LOR	0407_TP133_0.1_20(701 SOIL - 1/7/2020 SE208659A.011	0407_TP133_1.0_20(701 SOIL - 1/7/2020 SE208659A.023
% Moisture	%w/w	1	**7.1**	**4.5**

Particle sizing of soils by sieving [AN005] Tested: 6/8/2020

PARAMETER	UOM	LOR	0407_TP133_0.1_20(701 SOIL - 1/7/2020 SE208659A.011	0407_TP133_1.0_20(701 SOIL - 1/7/2020 SE208659A.023
Passing 75µm*	%w/w	1	**2**	**2**
Retained 75µm*	%w/w	1	**98**	**98**

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN005	The particle size distribution of a soil is determined by wet sieving, using a maximum of 900 mL of deionised water to sieve all fractions down to 75 µm. Referenced to AS1289.3.6.1 and AS1141.11.
AN005	Following wet sieving of the sample,(particles smaller than 75 µm) a dispersing solution is added and a hydrometer is used to measure sedimentation. Soil density is determined and the percentage of each size fraction calculated. Referenced to AS1289.3.6.3.
AN101	pH in Soil Sludge Sediment and Water: pH is measured electrometrically using a combination electrode and is calibrated against 3 buffers purchased commercially. For soils, sediments and sludges, an extract with water (or 0.01M CaCl2) is made at a ratio of 1:5 and the pH determined and reported on the extract. Reference APHA 4500-H+.
AN122	Exchangeable Cations, CEC and ESP: Soil sample is extracted in 1M Ammonium Acetate at pH=7 (or 1M Ammonium Chloride at pH=7) with cations (Na, K, Ca & Mg) then determined by ICP OES/ICP MS and reported as Exchangeable Cations. For saline soils, these results can be corrected for water soluble cations and reported as Exchangeable cations in meq/100g or soil can be pre-treated (aqueous ethanol/aqueous glycerol) prior to extraction. Cation Exchange Capacity (CEC) is the sum of the exchangeable cations in meq/100g.
AN122	The Exchangeable Sodium Percentage (ESP) is calculated as the exchangeable sodium divided by the CEC (all in meq/100g) times 100. ESP can be used to categorise the sodicity of the soil as below: ESP < 6% non-sodic ESP 6-15% sodic ESP >15% strongly sodic Method is referenced to Rayment and Lyons, 2011, sections 15D3 and 15N1.-
AN188	The organic material in the soil sample is oxidised with chromic acid in the presence of excess sulfuric acid, without external heat being applied. The excess dichromate ion is determined by titration with standard ammonium iron (II) sulfate solution and the amount of oxidised material is calculated from the quantity of dichromate reduced. Referenced to NEPM 105 and AS1289.1.1.1.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	Admin
Client	SGS EHS SYDNEY
Address	5258 201 EHS SYDNEY UNIT 16 33 MADDOX STREET ALEXANDRIA NSW 2015
Telephone	0285940400
Facsimile	0285940499
Email	au.environmental.sydney@sgs.com
Project	**610.30041 Randwick Barracks**
Order Number	**SE208659A**
Samples	23

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Cairns Environmental
Address	Unit 2, 58 Comport St Portsmith QLD 4870
Telephone	+61 07 4035 5111
Facsimile	+61 07 4035 5122
Email	AU.Environmental.Cairns@sgs.com
SGS Reference	**CE147456 R0**
Date Received	21 Jul 2020
Date Reported	06 Aug 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(3146).

Particle sizing of soils <75um by Hydrometer not conducted where insuffient sample passes the 75um fraction.

SIGNATORIES

[redacted]

Operations Manager

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147456.001 Soil 07 Jan 2020 SE208659A.001	CE147456.002 Soil 07 Jan 2020 SE208659A.002	CE147456.003 Soil 07 Jan 2020 SE208659A.003	CE147456.004 Soil 07 Jan 2020 SE208659A.004
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147456.005 Soil 07 Jan 2020 SE208659A.005	CE147456.006 Soil 07 Jan 2020 SE208659A.006	CE147456.007 Soil 07 Jan 2020 SE208659A.007	CE147456.008 Soil 07 Jan 2020 SE208659A.008
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147456.009 Soil 07 Jan 2020 SE208659A.009	CE147456.010 Soil 07 Jan 2020 SE208659A.010	CE147456.011 Soil 07 Jan 2020 SE208659A.011	CE147456.012 Soil 07 Jan 2020 SE208659A.012
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	**6.9**	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	**2**	-
Retained 75µm	%w/w	1		-	-	**98**	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147456.013 Soil 07 Jan 2020 SE208659A.013	CE147456.014 Soil 07 Jan 2020 SE208659A.014	CE147456.015 Soil 07 Jan 2020 SE208659A.015	CE147456.016 Soil 07 Jan 2020 SE208659A.016
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147456.017 Soil 07 Jan 2020 SE208659A.017	CE147456.018 Soil 07 Jan 2020 SE208659A.018	CE147456.019 Soil 07 Jan 2020 SE208659A.019	CE147456.020 Soil 07 Jan 2020 SE208659A.020
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147456.021 Material 07 Jan 2020 SE208659A.021	CE147456.022 Material 07 Jan 2020 SE208659A.022	CE147456.023 Soil 07 Jan 2020 SE208659A.023
Moisture Content Method: AN002 Tested: 31/7/2020						
% Moisture	%w/w	1		-	-	**4.7**
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020						
Passing 75µm	%w/w	1		-	-	**2**
Retained 75µm	%w/w	1		-	-	**98**

QC SUMMARY

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage.* Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

No QC samples were reported for this job.

METHOD SUMMARY

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN005	The particle size distribution of a soil is determined by wet sieving, using a maximum of 900 mL of deionised water to sieve all fractions down to 75 µm. Referenced to AS1289.3.6.1 and AS1141.11.

FOOTNOTES

IS	Insufficient sample for analysis.	LOR	Limit of Reporting
LNR	Sample listed, but not received.	↑↓	Raised or Lowered Limit of Reporting
*	NATA accreditation does not cover the performance of this service.	QFH	QC result is above the upper tolerance
		QFL	QC result is below the lower tolerance
**	Indicative data, theoretical holding time exceeded.	-	The sample was not analysed for this analyte
		NVL	Not Validated

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calcuated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE208659A R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	23

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208659A R0**
Date Received	21 Jul 2020
Date Reported	06 Aug 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Extraction Date	Moisture Content	2 items
	pH in soil (1:5)	2 items

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	2 Soil
Date documentation received	21/7/2020@5:03pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	4.7°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE208659A R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)

Method: ME-(AU)-[ENV]AN122

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP133_0.1_200701	SE208659A.011	LB205097	01 Jul 2020	21 Jul 2020	29 Jul 2020	24 Jul 2020	29 Jul 2020	29 Jul 2020
0407_TP133_1.0_200701	SE208659A.023	LB205097	01 Jul 2020	21 Jul 2020	29 Jul 2020	24 Jul 2020	29 Jul 2020	29 Jul 2020

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP133_0.1_200701	SE208659A.011	LB205094	01 Jul 2020	21 Jul 2020	15 Jul 2020	24 Jul 2020†	29 Jul 2020	29 Jul 2020
0407_TP133_1.0_200701	SE208659A.023	LB205094	01 Jul 2020	21 Jul 2020	15 Jul 2020	24 Jul 2020†	29 Jul 2020	29 Jul 2020

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP133_0.1_200701	SE208659A.011	LB205437	01 Jul 2020	21 Jul 2020	08 Jul 2020	29 Jul 2020†	30 Jul 2020	29 Jul 2020
0407_TP133_1.0_200701	SE208659A.023	LB205437	01 Jul 2020	21 Jul 2020	08 Jul 2020	29 Jul 2020†	30 Jul 2020	29 Jul 2020

TOC in Soil

Method: ME-(AU)-[ENV]AN188

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP133_0.1_200701	SE208659A.011	LB205429	01 Jul 2020	21 Jul 2020	29 Jul 2020	29 Jul 2020	29 Jul 2020	29 Jul 2020
0407_TP133_1.0_200701	SE208659A.023	LB205429	01 Jul 2020	21 Jul 2020	29 Jul 2020	29 Jul 2020	29 Jul 2020	29 Jul 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No surrogates were required for this job.

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR) — Method: ME-(AU)-[ENV]AN122

Sample Number	Parameter	Units	LOR	Result
LB205097.001	Exchangeable Sodium, Na	mg/kg	2	0
	Exchangeable Potassium, K	mg/kg	2	0
	Exchangeable Calcium, Ca	mg/kg	2	0
	Exchangeable Magnesium, Mg	mg/kg	2	0

TOC in Soil — Method: ME-(AU)-[ENV]AN188

Sample Number	Parameter	Units	LOR	Result
LB205429.001	Total Organic Carbon	%w/w	0.05	<0.05

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207831B.008	LB205094.011	% Moisture	%w/w	1	4.00508582324	4.0345821325	55	1

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207591B.003	LB205437.025	pH	pH Units	0.1	6.684	6.438	32	4
SE207998A.026	LB205437.024	pH	pH Units	0.1	5.78	5.553	32	4

TOC in Soil

Method: ME-(AU)-[ENV]AN188

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207831B.007	LB205429.004	Total Organic Carbon	%w/w	0.05	8.827219898910.0156258578		31	13

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)

Method: ME-(AU)-[ENV]AN122

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205097.002	Exchangeable Sodium, Na	meq/100g	0.01	0.19	0.194	80 - 120	99
	Exchangeable Potassium, K	meq/100g	0.01	0.58	0.63	80 - 120	91
	Exchangeable Calcium, Ca	meq/100g	0.01	6.3	6.3	80 - 120	100
	Exchangeable Magnesium, Mg	meq/100g	0.02	0.91	1.11	80 - 120	82

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205437.003	pH	pH Units	0.1	7.5	7.415	98 - 102	101

TOC in Soil

Method: ME-(AU)-[ENV]AN188

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205429.002	Total Organic Carbon	%w/w	0.05	0.29	0.325	80 - 120	90

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

TOC in Soil — **Method: ME-(AU)-[ENV]AN188**

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208142A.01	LB205429.019	Total Organic Carbon	%w/w	0.05	0.51	0.53812093762	-	-

MATRIX SPIKE DUPLICATES

SE208659A R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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Good morning

Please book these additional jobs in.

Please be very carefully as there are lots of jobs

Regards,

[redacted]
Environment, Health & Safety
Client Manager
Phone: +61 (0)2 8594 0400
Direct:
Mobile: [redacted]
(Please note my new working hours of Mon-Fri 6:00am-2:00pm)



Covid-19 update: SGS Australia is open, with our Business Service Continuity Plans being put in place to ensure your project can be delivered as normal, please click here to see further details on our Business & Services Continuity Plans.

From: [redacted]slrconsulting.com>
Sent: Tuesday, 21 July 2020 5:03 PM
To: [redacted]@sgs.com>
Cc: [redacted]@slrconsulting.com>
Subject: [EXTERNAL] 610.30041 DHA Randwick - Additional Analysis

*** WARNING: this message is from an EXTERNAL SENDER. Please be cautious, particularly with links and attachments. ***

Hi [redacted]

Can we please schedule the following analyses:

pH, clay content, TOC & CEC:

Report number	Sample ID
SE207695	TP002_0.1_200615
SE207695	TP002_1.5_200615
SE207695	TP005_0.1_200616
SE207695	TP005_1.5_200616
SE207695	TP049_0.1_200617
SE207695	TP049_1.0_200617
SE208047	TP092_0.1_200624
SE208047	TP092_1.0_200624
SE207831	TP220_0.1_200618
SE207831	TP220_1.0_200618
SE207831	TP221_0.1_200619
SE207831	TP221_1.0_200619
SE207998	TP230_0.1_200622
SE207998	TP230_1.8_200622
SE207591	TP018_0.1_200615
SE207591	TP018_1.0_200615
SE208047	TP092_0.1_200624
SE208047	TP092_1.0_200624
SE207911	TP095_0.1_200623
SE207911	TP095_1.0_200623
SE207731	TP073_0.1_200619
SE207731	TP073_1.0_200619
SE208659	TP133_0.1_200701
SE208659	TP133_1.0_200701
SE208142	TP151_0.1_200629
SE208142	TP151_1.0_200629
SE208137	TP183_0.1_200625
SE208137	TP183_0.5_200625

Additional analysis:

Report number	Sample ID	Parameter
SE208081	0407_TP241_1.0_200625	Pb & Zn
SE207731	0407_TP73_0.5_200619	Cr

ASLP Leach:

Report number	Sample ID	Parameter
SE208046	0407_TP237_0.5_200624	8 metals
SE208081	0407_TP241_0.5_200625	8 metals
SE208133	0407_TP111_0.1_200626	8 metals
SE208142	0407_TP256_0.1_200629	8 metals
SE207831	0407_TP222_0.1_200619	8 metals
SE207731	0407_TP73_0.1_200619	8 metals
SE207850	0407_TP162_0.1_200617	PAHs include B(a)P

SE207831	0407_TP197_0.1_200619	PAHs include B(a)P
SE207831	0407_TP197_0.5_200619	PAHs include B(a)P
SE207831	0407_TP200_0.5_200618	PAHs include B(a)P
SE207831	0407_TP200_1.0_200618	Total and leachable PAHs including B(a)P
SE207831	0407_TP209_0.5_200619	PAHs include B(a)P
SE207831	0407_TP221_0.5_200619	PAHs include B(a)P
SE207831	0407_TP221_1.0_200619	Total and leachable PAHs including B(a)P
SE207824	0407_TP231_0.1_200622	PAHs include B(a)P
SE208161	0407_BH41_0.0_200625	PFOS, PFOA, PfHxS
SE208046	0407_QC160_200624	PFOS, PFOA, PfHxS
SE207824	0407_QC130_200622	PFOS, PFOA, PfHxS

Let me know if you have any questions.

Many thanks,

[redacted]

SLR

[redacted]

Associate - Land Quality & Remediation

Please note in response to the COVID-19 Pandemic and physical distancing recommendations from the Australian Government, SLR is encouraging staff to work remotely and implement flexible working hours if necessary.
If you have received this email outside of regular office hours, it is not expected that you will respond until your own working hours commence.

d +61 7 3117 5227
o [redacted]
m
e [redacted]@slrconsulting.com

SLR Consulting Australia Pty Ltd
Level 2, 15 Astor Terrace, Brisbane, QLD, Australia, 4000

WINNERS: RoSPA Gold Award, 2017

WINNERS : International Business Excellence Award, 2016

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SAMPLE RECEIPT ADVICE

SE208047A

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	32

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Tue 21/7/2020
Report Due	Wed 29/7/2020
SGS Reference	**SE208047A**

SUBMISSION DETAILS

This is to confirm that 32 samples were received on Tuesday 21/7/2020. Results are expected to be ready by COB Wednesday 29/7/2020.
Please quote SGS reference SE208047A when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	2 Soil
Date documentation received	21/7/2020@5:03pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	5.3°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

% Clay subcontracted to SGS Cairns, 2/58 Comport St, Portsmith QLD 4870, NATA Accreditation Number: 2562, Site Number: 3146.

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SAMPLE RECEIPT ADVICE

SE208047A

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Exchangeable Cations and Cation Exchange Capacity	Moisture Content	Particle sizing of soils <75µm by hydrometer	Particle sizing of soils by sieving	pH in soil (1:5)	TOC in Soil
020	0407_TP092_0.1_200624	13	1	1	2	1	2

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE208047A

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Exchangeable Cations and Cation Exchange Capacity	Moisture Content	Particle sizing of soils <75µm by hydrometer	Particle sizing of soils by sieving	pH in soil (1:5)	TOC in Soil
032	0407_TP092_1.0_200624	13	1	1	2	1	2

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	32

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208047A R0**
Date Received	21/7/2020
Date Reported	6/8/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

% Clay subcontracted to SGS Cairns, 2/58 Comport St, Portsmith QLD 4870, NATA Accreditation Number: 2562, Site Number: 3146. CE147462

SIGNATORIES

[redacted]

Senior Organic Chemist/Metals Chemist

Inorganic/Metals Chemist

pH in soil (1:5) [AN101] Tested: 29/7/2020

PARAMETER	UOM	LOR	0407_TP092_0.1_20(624 SOIL - 24/6/2020 SE208047A.020	0407_TP092_1.0_20(624 SOIL - 24/6/2020 SE208047A.032
pH	pH Units	0.1	**11.5**	**7.9**

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR) [AN122] Tested: 24/7/2020

PARAMETER	UOM	LOR	0407_TP092_0.1_20(624 SOIL - 24/6/2020 SE208047A.020	0407_TP092_1.0_20(624 SOIL - 24/6/2020 SE208047A.032
Exchangeable Sodium, Na	mg/kg	2	**71**	**2**
Exchangeable Sodium, Na	meq/100g	0.01	**0.31**	<0.01
Exchangeable Sodium Percentage*	%	0.1	**1.1**	**14.3**
Exchangeable Potassium, K	mg/kg	2	**91**	<2
Exchangeable Potassium, K	meq/100g	0.01	**0.23**	<0.01
Exchangeable Potassium Percentage*	%	0.1	**0.8**	**5.8**
Exchangeable Calcium, Ca	mg/kg	2	**5400**	**10**
Exchangeable Calcium, Ca	meq/100g	0.01	**27**	**0.05**
Exchangeable Calcium Percentage*	%	0.1	**97.6**	**77.4**
Exchangeable Magnesium, Mg	mg/kg	2	**15**	<2
Exchangeable Magnesium, Mg	meq/100g	0.02	**0.12**	<0.02
Exchangeable Magnesium Percentage*	%	0.1	**0.4**	**2.5**
Cation Exchange Capacity	meq/100g	0.02	**28**	**0.06**

TOC in Soil [AN188] Tested: 28/7/2020

PARAMETER	UOM	LOR	0407_TP092_0.1_20(624 SOIL - 24/6/2020 SE208047A.020	0407_TP092_1.0_20(624 SOIL - 24/6/2020 SE208047A.032
Total Organic Carbon	%w/w	0.05	**0.12**	<0.05
Organic Matter (calc)*	%w/w	0.1	**0.2**	<0.1

Moisture Content [AN002] Tested: 24/7/2020

PARAMETER	UOM	LOR	0407_TP092_0.1_20(624 SOIL - 24/6/2020 SE208047A.020	0407_TP092_1.0_20(624 SOIL - 24/6/2020 SE208047A.032
% Moisture	%w/w	1	**2.9**	**1.4**

Particle sizing of soils by sieving [AN005] Tested: 6/8/2020

PARAMETER	UOM	LOR	0407_TP092_0.1_20(624 SOIL - 24/6/2020 SE208047A.020	0407_TP092_1.0_20(624 SOIL - 24/6/2020 SE208047A.032
Passing 75µm*	%w/w	1	<1	<1
Retained 75µm*	%w/w	1	99	99

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN005	The particle size distribution of a soil is determined by wet sieving, using a maximum of 900 mL of deionised water to sieve all fractions down to 75 µm. Referenced to AS1289.3.6.1 and AS1141.11.
AN005	Following wet sieving of the sample,(particles smaller than 75 µm) a dispersing solution is added and a hydrometer is used to measure sedimentation. Soil density is determined and the percentage of each size fraction calculated. Referenced to AS1289.3.6.3.
AN101	pH in Soil Sludge Sediment and Water: pH is measured electrometrically using a combination electrode and is calibrated against 3 buffers purchased commercially. For soils, sediments and sludges, an extract with water (or 0.01M CaCl2) is made at a ratio of 1:5 and the pH determined and reported on the extract. Reference APHA 4500-H+.
AN122	Exchangeable Cations, CEC and ESP: Soil sample is extracted in 1M Ammonium Acetate at pH=7 (or 1M Ammonium Chloride at pH=7) with cations (Na, K, Ca & Mg) then determined by ICP OES/ICP MS and reported as Exchangeable Cations. For saline soils, these results can be corrected for water soluble cations and reported as Exchangeable cations in meq/100g or soil can be pre-treated (aqueous ethanol/aqueous glycerol) prior to extraction. Cation Exchange Capacity (CEC) is the sum of the exchangeable cations in meq/100g.
AN122	The Exchangeable Sodium Percentage (ESP) is calculated as the exchangeable sodium divided by the CEC (all in meq/100g) times 100. ESP can be used to categorise the sodicity of the soil as below: ESP < 6% non-sodic ESP 6-15% sodic ESP >15% strongly sodic Method is referenced to Rayment and Lyons, 2011, sections 15D3 and 15N1.-
AN188	The organic material in the soil sample is oxidised with chromic acid in the presence of excess sulfuric acid, without external heat being applied. The excess dichromate ion is determined by titration with standard ammonium iron (II) sulfate solution and the amount of oxidised material is calculated from the quantity of dichromate reduced. Referenced to NEPM 105 and AS1289.1.1.1.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

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Email	au.environmental.sydney@sgs.com
Project	**610.30041 Randwick Barracks**
Order Number	**SE208047A**
Samples	32

LABORATORY DETAILS

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Facsimile	+61 07 4035 5122
Email	AU.Environmental.Cairns@sgs.com
SGS Reference	**CE147462 R0**
Date Received	21 Jul 2020
Date Reported	06 Aug 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(3146).

Particle sizing of soils <75um by Hydrometer not conducted where insuffient sample passes the 75um fraction.

SIGNATORIES

[redacted]

Operations Manager

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147462.001 Soil 24 Jun 2020 SE208047A.001	CE147462.002 Soil 24 Jun 2020 SE208047A.002	CE147462.003 Soil 24 Jun 2020 SE208047A.003	CE147462.004 Soil 24 Jun 2020 SE208047A.004
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147462.005 Soil 23 Jun 2020 SE208047A.005	CE147462.006 Soil 23 Jun 2020 SE208047A.006	CE147462.007 Soil 23 Jun 2020 SE208047A.007	CE147462.008 Water 23 Jun 2020 SE208047A.008
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147462.009 Soil 24 Jun 2020 SE208047A.009	CE147462.010 Soil 24 Jun 2020 SE208047A.010	CE147462.011 Soil 24 Jun 2020 SE208047A.011	CE147462.012 Soil 24 Jun 2020 SE208047A.012
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147462.013 Soil 24 Jun 2020 SE208047A.013	CE147462.014 Soil 24 Jun 2020 SE208047A.014	CE147462.015 Soil 24 Jun 2020 SE208047A.015	CE147462.016 Soil 24 Jun 2020 SE208047A.016
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147462.017 Soil 24 Jun 2020 SE208047A.017	CE147462.018 Soil 24 Jun 2020 SE208047A.018	CE147462.019 Soil 24 Jun 2020 SE208047A.019	CE147462.020 Soil 24 Jun 2020 SE208047A.020
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	**3.5**
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	<1
Retained 75µm	%w/w	1		-	-	-	**99**

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147462.021 Soil 24 Jun 2020 SE208047A.021	CE147462.022 Soil 24 Jun 2020 SE208047A.022	CE147462.023 Soil 24 Jun 2020 SE208047A.023	CE147462.024 Soil 24 Jun 2020 SE208047A.024
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147462.025 Soil 24 Jun 2020 SE208047A.025	CE147462.026 Soil 24 Jun 2020 SE208047A.026	CE147462.027 Soil 24 Jun 2020 SE208047A.027	CE147462.028 Soil 24 Jun 2020 SE208047A.028
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147462.029 Soil 24 Jun 2020 SE208047A.029	CE147462.030 Soil 24 Jun 2020 SE208047A.030	CE147462.031 Soil 24 Jun 2020 SE208047A.031	CE147462.032 Soil 24 Jun 2020 SE208047A.032
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	**1.6**
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	<1
Retained 75µm	%w/w	1		-	-	-	**99**

QC SUMMARY

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage.* Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

No QC samples were reported for this job.

METHOD SUMMARY

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN005	The particle size distribution of a soil is determined by wet sieving, using a maximum of 900 mL of deionised water to sieve all fractions down to 75 µm. Referenced to AS1289.3.6.1 and AS1141.11.

FOOTNOTES

IS	Insufficient sample for analysis.	LOR	Limit of Reporting
LNR	Sample listed, but not received.	↑↓	Raised or Lowered Limit of Reporting
*	NATA accreditation does not cover the performance of this service.	QFH	QC result is above the upper tolerance
		QFL	QC result is below the lower tolerance
**	Indicative data, theoretical holding time exceeded.	-	The sample was not analysed for this analyte
		NVL	Not Validated

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calcuated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE208047A R0

CLIENT DETAILS

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Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	32

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SGS Reference	**SE208047A R0**
Date Received	21 Jul 2020
Date Reported	06 Aug 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Extraction Date	Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)	2 items
	Moisture Content	2 items
	pH in soil (1:5)	2 items
	TOC in Soil	2 items
Analysis Date	Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)	2 items
	TOC in Soil	2 items

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	2 Soil
Date documentation received	21/7/2020@5:03pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	5.3°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE208047A R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)

Method: ME-(AU)-[ENV]AN122

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP092_0.1_200624	SE208047A.020	LB205096	24 Jun 2020	21 Jul 2020	22 Jul 2020	24 Jul 2020†	22 Jul 2020	28 Jul 2020†
0407_TP092_1.0_200624	SE208047A.032	LB205096	24 Jun 2020	21 Jul 2020	22 Jul 2020	24 Jul 2020†	22 Jul 2020	28 Jul 2020†

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP092_0.1_200624	SE208047A.020	LB205094	24 Jun 2020	21 Jul 2020	08 Jul 2020	24 Jul 2020†	29 Jul 2020	28 Jul 2020
0407_TP092_1.0_200624	SE208047A.032	LB205094	24 Jun 2020	21 Jul 2020	08 Jul 2020	24 Jul 2020†	29 Jul 2020	28 Jul 2020

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP092_0.1_200624	SE208047A.020	LB205438	24 Jun 2020	21 Jul 2020	01 Jul 2020	29 Jul 2020†	30 Jul 2020	29 Jul 2020
0407_TP092_1.0_200624	SE208047A.032	LB205438	24 Jun 2020	21 Jul 2020	01 Jul 2020	29 Jul 2020†	30 Jul 2020	29 Jul 2020

TOC in Soil

Method: ME-(AU)-[ENV]AN188

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP092_0.1_200624	SE208047A.020	LB205343	24 Jun 2020	21 Jul 2020	22 Jul 2020	28 Jul 2020†	22 Jul 2020	28 Jul 2020†
0407_TP092_1.0_200624	SE208047A.032	LB205343	24 Jun 2020	21 Jul 2020	22 Jul 2020	28 Jul 2020†	22 Jul 2020	28 Jul 2020†

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No surrogates were required for this job.

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)

Method: ME-(AU)-[ENV]AN122

Sample Number	Parameter	Units	LOR	Result
LB205096.001	Exchangeable Sodium, Na	mg/kg	2	0
	Exchangeable Potassium, K	mg/kg	2	0
	Exchangeable Calcium, Ca	mg/kg	2	0
	Exchangeable Magnesium, Mg	mg/kg	2	0

TOC in Soil

Method: ME-(AU)-[ENV]AN188

Sample Number	Parameter	Units	LOR	Result
LB205343.001	Total Organic Carbon	%w/w	0.05	<0.05

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207831B.008	LB205094.011	% Moisture	%w/w	1	4.00508582324	4.0345821325	55	1

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208047A.032	LB205438.012	pH	pH Units	0.1	7.9	6.9	31	13

TOC in Soil

Method: ME-(AU)-[ENV]AN188

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207695A.051	LB205343.008	Total Organic Carbon	%w/w	0.05	32	36.003116201	30	11

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)

Method: ME-(AU)-[ENV]AN122

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205096.002	Exchangeable Sodium, Na	meq/100g	0.01	0.19	0.194	80 - 120	97
	Exchangeable Potassium, K	meq/100g	0.01	0.58	0.63	80 - 120	92
	Exchangeable Calcium, Ca	meq/100g	0.01	6.9	6.3	80 - 120	109
	Exchangeable Magnesium, Mg	meq/100g	0.02	0.94	1.11	80 - 120	85

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205438.003	pH	pH Units	0.1	7.5	7.415	98 - 102	101

TOC in Soil

Method: ME-(AU)-[ENV]AN188

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205343.002	Total Organic Carbon	%w/w	0.05	0.31	0.325	80 - 120	96

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

TOC in Soil — **Method: ME-(AU)-[ENV]AN188**

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207998A.02	LB205343.015	Total Organic Carbon	%w/w	0.05	0.36	0.00912992855	-	-

MATRIX SPIKE DUPLICATES

SE208047A R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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This test report shall not be reproduced, except in full.

Good morning

Please book these additional jobs in.

Please be very carefully as there are lots of jobs

Regards,

[redacted]
Environment, Health & Safety
Client Manager
Phone: +61 (0)2 8594 0400
Direct:
Mobile: [redacted]
(Please note my new working hours of Mon-Fri 6:00am-2:00pm)



Covid-19 update: SGS Australia is open, with our Business Service Continuity Plans being put in place to ensure your project can be delivered as normal, please click here to see further details on our Business & Services Continuity Plans.

From: [redacted]@slrconsulting.com>
Sent: Tuesday, 21 July 2020 5:03 PM
To: [redacted]@sgs.com>
Cc: [redacted]@slrconsulting.com>
Subject: [EXTERNAL] 610.30041 DHA Randwick - Additional Analysis

*** WARNING: this message is from an EXTERNAL SENDER. Please be cautious, particularly with links and attachments. ***

Hi [redacted]

Can we please schedule the following analyses:

pH, clay content, TOC & CEC:

Report number	Sample ID
SE207695	TP002_0.1_200615
SE207695	TP002_1.5_200615
SE207695	TP005_0.1_200616
SE207695	TP005_1.5_200616
SE207695	TP049_0.1_200617
SE207695	TP049_1.0_200617
SE208047	TP092_0.1_200624
SE208047	TP092_1.0_200624
SE207831	TP220_0.1_200618
SE207831	TP220_1.0_200618
SE207831	TP221_0.1_200619
SE207831	TP221_1.0_200619
SE207998	TP230_0.1_200622
SE207998	TP230_1.8_200622
SE207591	TP018_0.1_200615
SE207591	TP018_1.0_200615
SE208047	TP092_0.1_200624
SE208047	TP092_1.0_200624
SE207911	TP095_0.1_200623
SE207911	TP095_1.0_200623
SE207731	TP073_0.1_200619
SE207731	TP073_1.0_200619
SE208659	TP133_0.1_200701
SE208659	TP133_1.0_200701
SE208142	TP151_0.1_200629
SE208142	TP151_1.0_200629
SE208137	TP183_0.1_200625
SE208137	TP183_0.5_200625

Additional analysis:

Report number	Sample ID	Parameter
SE208081	0407_TP241_1.0_200625	Pb & Zn
SE207731	0407_TP73_0.5_200619	Cr

ASLP Leach:

Report number	Sample ID	Parameter
SE208046	0407_TP237_0.5_200624	8 metals
SE208081	0407_TP241_0.5_200625	8 metals
SE208133	0407_TP111_0.1_200626	8 metals
SE208142	0407_TP256_0.1_200629	8 metals
SE207831	0407_TP222_0.1_200619	8 metals
SE207731	0407_TP73_0.1_200619	8 metals
SE207850	0407_TP162_0.1_200617	PAHs include B(a)P

SE207831	0407_TP197_0.1_200619	PAHs include B(a)P
SE207831	0407_TP197_0.5_200619	PAHs include B(a)P
SE207831	0407_TP200_0.5_200618	PAHs include B(a)P
SE207831	0407_TP200_1.0_200618	Total and leachable PAHs including B(a)P
SE207831	0407_TP209_0.5_200619	PAHs include B(a)P
SE207831	0407_TP221_0.5_200619	PAHs include B(a)P
SE207831	0407_TP221_1.0_200619	Total and leachable PAHs including B(a)P
SE207824	0407_TP231_0.1_200622	PAHs include B(a)P
SE208161	0407_BH41_0.0_200625	PFOS, PFOA, PfHxS
SE208046	0407_QC160_200624	PFOS, PFOA, PfHxS
SE207824	0407_QC130_200622	PFOS, PFOA, PfHxS

Let me know if you have any questions.

Many thanks,

[redacted]

SLR

[redacted]
Associate - Land Quality & Remediation

Please note in response to the COVID-19 Pandemic and physical distancing recommendations from the Australian Government, SLR is encouraging staff to work remotely and implement flexible working hours if necessary.
If you have received this email outside of regular office hours, it is not expected that you will respond until your own working hours commence.

d +61 7 3117 5227
o [redacted]
m
e [redacted]@slrconsulting.com

SLR Consulting Australia Pty Ltd
Level 2, 15 Astor Terrace, Brisbane, QLD, Australia, 4000

WINNERS: RoSPA Gold Award, 2017
WINNERS : International Business Excellence Award, 2016

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SAMPLE RECEIPT ADVICE

SE207731A

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000671--000673**
Samples	17

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Tue 21/7/2020
Report Due	Wed 29/7/2020
SGS Reference	**SE207731A**

SUBMISSION DETAILS

This is to confirm that 17 samples were received on Tuesday 21/7/2020. Results are expected to be ready by COB Wednesday 29/7/2020.
Please quote SGS reference SE207731A when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	2 Soil
Date documentation received	21/7/2020@5:03pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	10°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

% Clay subcontracted to SGS Cairns, 2/58 Comport St, Portsmith QLD 4870, NATA Accreditation Number: 2562, Site Number: 3146.

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SAMPLE RECEIPT ADVICE

SE207731A

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Exchangeable Cations and Cation Exchange Capacity	Moisture Content	Particle sizing of soils <75µm by hydrometer	Particle sizing of soils by sieving	pH in soil (1:5)	TOC in Soil
011	0407_TP73_0.1_200619	13	1	1	2	1	2
012	0407_TP73_1.0_200619	13	1	1	2	1	2

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	17

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207731A R0**
Date Received	21/7/2020
Date Reported	6/8/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

% Clay subcontracted to SGS Cairns, 2/58 Comport St, Portsmith QLD 4870, NATA Accreditation Number: 2562, Site Number: 3146. CE147458

SIGNATORIES

[redacted]

Senior Organic Chemist/Metals Chemist

Inorganic/Metals Chemist

pH in soil (1:5) [AN101] Tested: 29/7/2020

PARAMETER	UOM	LOR	0407_TP73_0.1_20019 SOIL - 19/6/2020 SE207731A.011	0407_TP73_1.0_20019 SOIL - 19/6/2020 SE207731A.012
pH	pH Units	0.1	**6.9**	**6.9**

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR) [AN122] Tested: 24/7/2020

PARAMETER	UOM	LOR	0407_TP73_0.1_20019 SOIL - 19/6/2020 SE207731A.011	0407_TP73_1.0_20019 SOIL - 19/6/2020 SE207731A.012
Exchangeable Sodium, Na	mg/kg	2	9	5
Exchangeable Sodium, Na	meq/100g	0.01	0.04	0.02
Exchangeable Sodium Percentage*	%	0.1	2.2	1.7
Exchangeable Potassium, K	mg/kg	2	25	7
Exchangeable Potassium, K	meq/100g	0.01	0.06	0.02
Exchangeable Potassium Percentage*	%	0.1	3.5	1.4
Exchangeable Calcium, Ca	mg/kg	2	310	250
Exchangeable Calcium, Ca	meq/100g	0.01	1.5	1.3
Exchangeable Calcium Percentage*	%	0.1	86.0	94.9
Exchangeable Magnesium, Mg	mg/kg	2	18	3
Exchangeable Magnesium, Mg	meq/100g	0.02	0.15	0.03
Exchangeable Magnesium Percentage*	%	0.1	8.4	2.1
Cation Exchange Capacity	meq/100g	0.02	1.8	1.3

TOC in Soil [AN188] Tested: 29/7/2020

PARAMETER	UOM	LOR	0407_TP73_0.1_20019 SOIL - 19/6/2020 SE207731A.011	0407_TP73_1.0_20019 SOIL - 19/6/2020 SE207731A.012
Total Organic Carbon	%w/w	0.05	**0.76**	**0.14**
Organic Matter (calc)*	%w/w	0.1	**1.3**	**0.2**

Particle sizing of soils by sieving [AN005] Tested: 6/8/2020

PARAMETER	UOM	LOR	0407_TP73_0.1_20019 SOIL - 19/6/2020 SE207731A.011	0407_TP73_1.0_20019 SOIL - 19/6/2020 SE207731A.012
Passing 75µm*	%w/w	1	**3**	**2**
Retained 75µm*	%w/w	1	**97**	**98**

METHOD	METHODOLOGY SUMMARY
AN005	The particle size distribution of a soil is determined by wet sieving, using a maximum of 900 mL of deionised water to sieve all fractions down to 75 µm. Referenced to AS1289.3.6.1 and AS1141.11.
AN005	Following wet sieving of the sample,(particles smaller than 75 µm) a dispersing solution is added and a hydrometer is used to measure sedimentation. Soil density is determined and the percentage of each size fraction calculated. Referenced to AS1289.3.6.3.
AN101	pH in Soil Sludge Sediment and Water: pH is measured electrometrically using a combination electrode and is calibrated against 3 buffers purchased commercially. For soils, sediments and sludges, an extract with water (or 0.01M CaCl2) is made at a ratio of 1:5 and the pH determined and reported on the extract. Reference APHA 4500-H+.
AN122	Exchangeable Cations, CEC and ESP: Soil sample is extracted in 1M Ammonium Acetate at pH=7 (or 1M Ammonium Chloride at pH=7) with cations (Na, K, Ca & Mg) then determined by ICP OES/ICP MS and reported as Exchangeable Cations. For saline soils, these results can be corrected for water soluble cations and reported as Exchangeable cations in meq/100g or soil can be pre-treated (aqueous ethanol/aqueous glycerol) prior to extraction. Cation Exchange Capacity (CEC) is the sum of the exchangeable cations in meq/100g.
AN122	The Exchangeable Sodium Percentage (ESP) is calculated as the exchangeable sodium divided by the CEC (all in meq/100g) times 100. ESP can be used to categorise the sodicity of the soil as below: ESP < 6% non-sodic ESP 6-15% sodic ESP >15% strongly sodic Method is referenced to Rayment and Lyons, 2011, sections 15D3 and 15N1.-
AN188	The organic material in the soil sample is oxidised with chromic acid in the presence of excess sulfuric acid, without external heat being applied. The excess dichromate ion is determined by titration with standard ammonium iron (II) sulfate solution and the amount of oxidised material is calculated from the quantity of dichromate reduced. Referenced to NEPM 105 and AS1289.1.1.1.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	Admin
Client	SGS EHS SYDNEY
Address	5258 201 EHS SYDNEY UNIT 16 33 MADDOX STREET ALEXANDRIA NSW 2015
Telephone	0285940400
Facsimile	0285940499
Email	au.environmental.sydney@sgs.com
Project	**610.30041 Randwick Barracks**
Order Number	**SE207731A**
Samples	17

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Cairns Environmental
Address	Unit 2, 58 Comport St Portsmith QLD 4870
Telephone	+61 07 4035 5111
Facsimile	+61 07 4035 5122
Email	AU.Environmental.Cairns@sgs.com
SGS Reference	**CE147458 R0**
Date Received	21 Jul 2020
Date Reported	06 Aug 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(3146).

Particle sizing of soils <75um by Hydrometer not conducted where insuffient sample passes the 75um fraction.

SIGNATORIES

[redacted]

Operations Manager

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147458.001 Soil 19 Jun 2020 SE207731A.001	CE147458.002 Soil 19 Jun 2020 SE207731A.002	CE147458.003 Soil 19 Jun 2020 SE207731A.003	CE147458.004 Soil 19 Jun 2020 SE207731A.004
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147458.005 Soil 19 Jun 2020 SE207731A.005	CE147458.006 Soil 19 Jun 2020 SE207731A.006	CE147458.007 Soil 19 Jun 2020 SE207731A.007	CE147458.008 Soil 19 Jun 2020 SE207731A.008
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147458.009 Soil 19 Jun 2020 SE207731A.009	CE147458.010 Soil 19 Jun 2020 SE207731A.010	CE147458.011 Soil 19 Jun 2020 SE207731A.011	CE147458.012 Soil 19 Jun 2020 SE207731A.012
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	**5.4**	**6.1**
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	**3**	**2**
Retained 75µm	%w/w	1		-	-	**97**	**98**

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147458.013 Material 19 Jun 2020 SE207731A.013	CE147458.014 Material 19 Jun 2020 SE207731A.014	CE147458.015 Material 19 Jun 2020 SE207731A.015	CE147458.016 Material 19 Jun 2020 SE207731A.016
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-

Parameter	Units	LOR	Sample Number: CE147458.017 Sample Matrix: Soil Sample Date: 19 Jun 2020 Sample Name: SE207731A.017
Moisture Content Method: AN002 Tested: 31/7/2020			
% Moisture	%w/w	1	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020			
Passing 75µm	%w/w	1	-
Retained 75µm	%w/w	1	-

QC SUMMARY

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula：*the absolute difference of the two results divided by the average of the two results as a percentage.* Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

No QC samples were reported for this job.

METHOD SUMMARY

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN005	The particle size distribution of a soil is determined by wet sieving, using a maximum of 900 mL of deionised water to sieve all fractions down to 75 µm. Referenced to AS1289.3.6.1 and AS1141.11.

FOOTNOTES

IS	Insufficient sample for analysis.	LOR	Limit of Reporting
LNR	Sample listed, but not received.	↑↓	Raised or Lowered Limit of Reporting
*	NATA accreditation does not cover the performance of this service.	QFH	QC result is above the upper tolerance
		QFL	QC result is below the lower tolerance
**	Indicative data, theoretical holding time exceeded.	-	The sample was not analysed for this analyte
		NVL	Not Validated

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calcuated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

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If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client only. Any unauthorized alteration, forgery or

STATEMENT OF QA/QC PERFORMANCE

SE207731A R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	17

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207731A R0**
Date Received	21 Jul 2020
Date Reported	06 Aug 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Extraction Date	Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)	2 items
	pH in soil (1:5)	2 items
	TOC in Soil	2 items
Analysis Date	Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)	2 items
	TOC in Soil	2 items

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	2 Soil
Date documentation received	21/7/2020@5:03pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	10°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE207731A R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)

Method: ME-(AU)-[ENV]AN122

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP73_0.1_200619	SE207731A.011	LB205097	19 Jun 2020	21 Jul 2020	17 Jul 2020	24 Jul 2020†	17 Jul 2020	29 Jul 2020†
0407_TP73_1.0_200619	SE207731A.012	LB205097	19 Jun 2020	21 Jul 2020	17 Jul 2020	24 Jul 2020†	17 Jul 2020	29 Jul 2020†

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP73_0.1_200619	SE207731A.011	LB205437	19 Jun 2020	21 Jul 2020	26 Jun 2020	29 Jul 2020†	30 Jul 2020	29 Jul 2020
0407_TP73_1.0_200619	SE207731A.012	LB205437	19 Jun 2020	21 Jul 2020	26 Jun 2020	29 Jul 2020†	30 Jul 2020	29 Jul 2020

TOC in Soil

Method: ME-(AU)-[ENV]AN188

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP73_0.1_200619	SE207731A.011	LB205429	19 Jun 2020	21 Jul 2020	17 Jul 2020	29 Jul 2020†	17 Jul 2020	29 Jul 2020†
0407_TP73_1.0_200619	SE207731A.012	LB205429	19 Jun 2020	21 Jul 2020	17 Jul 2020	29 Jul 2020†	17 Jul 2020	29 Jul 2020†

SURROGATES

SE207731A R0

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No surrogates were required for this job.

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR) — Method: ME-(AU)-[ENV]AN122

Sample Number	Parameter	Units	LOR	Result
LB205097.001	Exchangeable Sodium, Na	mg/kg	2	0
	Exchangeable Potassium, K	mg/kg	2	0
	Exchangeable Calcium, Ca	mg/kg	2	0
	Exchangeable Magnesium, Mg	mg/kg	2	0

TOC in Soil — Method: ME-(AU)-[ENV]AN188

Sample Number	Parameter	Units	LOR	Result
LB205429.001	Total Organic Carbon	%w/w	0.05	<0.05

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207591B.003	LB205437.025	pH	pH Units	0.1	6.684	6.438	32	4
SE207998A.026	LB205437.024	pH	pH Units	0.1	5.78	5.553	32	4

TOC in Soil

Method: ME-(AU)-[ENV]AN188

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207831B.007	LB205429.004	Total Organic Carbon	%w/w	0.05	8.827219898910.0156258578		31	13

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)

Method: ME-(AU)-[ENV]AN122

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205097.002	Exchangeable Sodium, Na	meq/100g	0.01	0.19	0.194	80 - 120	99
	Exchangeable Potassium, K	meq/100g	0.01	0.58	0.63	80 - 120	91
	Exchangeable Calcium, Ca	meq/100g	0.01	6.3	6.3	80 - 120	100
	Exchangeable Magnesium, Mg	meq/100g	0.02	0.91	1.11	80 - 120	82

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205437.003	pH	pH Units	0.1	7.5	7.415	98 - 102	101

TOC in Soil

Method: ME-(AU)-[ENV]AN188

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205429.002	Total Organic Carbon	%w/w	0.05	0.29	0.325	80 - 120	90

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

TOC in Soil — **Method: ME-(AU)-[ENV]AN188**

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208142A.01	LB205429.019	Total Organic Carbon	%w/w	0.05	0.51	0.53812093762	-	-

MATRIX SPIKE DUPLICATES

SE207731A R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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Good morning

Please book these additional jobs in.

Please be very carefully as there are lots of jobs

Regards,

[redacted]
Environment, Health & Safety
Client Manager
Phone: +61 (0)2 8594 0400
Direct:
Mobile: [redacted]
(Please note my new working hours of Mon-Fri 6:00am-2:00pm)



Covid-19 update: SGS Australia is open, with our Business Service Continuity Plans being put in place to ensure your project can be delivered as normal, please click here to see further details on our Business & Services Continuity Plans.

From: [redacted]@slrconsulting.com>
Sent: Tuesday, 21 July 2020 5:03 PM
To: [redacted]sgs.com>
Cc: [redacted]@slrconsulting.com>
Subject: [EXTERNAL] 610.30041 DHA Randwick - Additional Analysis

*** WARNING: this message is from an EXTERNAL SENDER. Please be cautious, particularly with links and attachments. ***

Hi [redacted]

Can we please schedule the following analyses:

pH, clay content, TOC & CEC:

Report number	Sample ID
SE207695	TP002_0.1_200615
SE207695	TP002_1.5_200615
SE207695	TP005_0.1_200616
SE207695	TP005_1.5_200616
SE207695	TP049_0.1_200617
SE207695	TP049_1.0_200617
SE208047	TP092_0.1_200624
SE208047	TP092_1.0_200624
SE207831	TP220_0.1_200618
SE207831	TP220_1.0_200618
SE207831	TP221_0.1_200619
SE207831	TP221_1.0_200619
SE207998	TP230_0.1_200622
SE207998	TP230_1.8_200622
SE207591	TP018_0.1_200615
SE207591	TP018_1.0_200615
SE208047	TP092_0.1_200624
SE208047	TP092_1.0_200624
SE207911	TP095_0.1_200623
SE207911	TP095_1.0_200623
SE207731	TP073_0.1_200619
SE207731	TP073_1.0_200619
SE208659	TP133_0.1_200701
SE208659	TP133_1.0_200701
SE208142	TP151_0.1_200629
SE208142	TP151_1.0_200629
SE208137	TP183_0.1_200625
SE208137	TP183_0.5_200625

Additional analysis:

Report number	Sample ID	Parameter
SE208081	0407_TP241_1.0_200625	Pb & Zn
SE207731	0407_TP73_0.5_200619	Cr

ASLP Leach:

Report number	Sample ID	Parameter
SE208046	0407_TP237_0.5_200624	8 metals
SE208081	0407_TP241_0.5_200625	8 metals
SE208133	0407_TP111_0.1_200626	8 metals
SE208142	0407_TP256_0.1_200629	8 metals
SE207831	0407_TP222_0.1_200619	8 metals
SE207731	0407_TP73_0.1_200619	8 metals
SE207850	0407_TP162_0.1_200617	PAHs include B(a)P

SE207831	0407_TP197_0.1_200619	PAHs include B(a)P
SE207831	0407_TP197_0.5_200619	PAHs include B(a)P
SE207831	0407_TP200_0.5_200618	PAHs include B(a)P
SE207831	0407_TP200_1.0_200618	Total and leachable PAHs including B(a)P
SE207831	0407_TP209_0.5_200619	PAHs include B(a)P
SE207831	0407_TP221_0.5_200619	PAHs include B(a)P
SE207831	0407_TP221_1.0_200619	Total and leachable PAHs including B(a)P
SE207824	0407_TP231_0.1_200622	PAHs include B(a)P
SE208161	0407_BH41_0.0_200625	PFOS, PFOA, PfHxS
SE208046	0407_QC160_200624	PFOS, PFOA, PfHxS
SE207824	0407_QC130_200622	PFOS, PFOA, PfHxS

Let me know if you have any questions.

Many thanks,

[redacted]

SLR

[redacted]
Associate - Land Quality & Remediation

Please note in response to the COVID-19 Pandemic and physical distancing recommendations from the Australian Government, SLR is encouraging staff to work remotely and implement flexible working hours if necessary.
If you have received this email outside of regular office hours, it is not expected that you will respond until your own working hours commence.

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o [redacted]
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e [redacted]@slrconsulting.com

SLR Consulting Australia Pty Ltd
Level 2, 15 Astor Terrace, Brisbane, QLD, Australia, 4000

WINNERS: RoSPA Gold Award, 2017
WINNERS : International Business Excellence Award, 2016

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SAMPLE RECEIPT ADVICE

SE207911A

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**000677--00679**
Samples	23

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Tue 21/7/2020
Report Due	Wed 29/7/2020
SGS Reference	**SE207911A**

SUBMISSION DETAILS

This is to confirm that 23 samples were received on Tuesday 21/7/2020. Results are expected to be ready by COB Wednesday 29/7/2020.
Please quote SGS reference SE207911A when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	2 Soil
Date documentation received	21/7/2020@5:03pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	5.4°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

% Clay subcontracted to SGS Cairns, 2/58 Comport St, Portsmith QLD 4870, NATA Accreditation Number: 2562, Site Number: 3146.

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SAMPLE RECEIPT ADVICE

SE207911A

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Exchangeable Cations and Cation Exchange Capacity	Moisture Content	Particle sizing of soils <75µm by hydrometer	Particle sizing of soils by sieving	pH in soil (1:5)	TOC in Soil
009	0407_TP95_0.1_200623	13	1	1	2	1	2
010	0407_TP95_1.0_200623	13	1	1	2	1	2

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	23

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207911A R0**
Date Received	21/7/2020
Date Reported	6/8/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

% Clay subcontracted to SGS Cairns, 2/58 Comport St, Portsmith QLD 4870, NATA Accreditation Number: 2562, Site Number: 3146. CE147464

SIGNATORIES

[redacted]

Senior Organic Chemist/Metals Chemist

Inorganic/Metals Chemist

pH in soil (1:5) [AN101] Tested: 29/7/2020

PARAMETER	UOM	LOR	0407_TP95_0.1_200(23 SOIL - 23/6/2020 SE207911A.009	0407_TP95_1.0_200(23 SOIL - 23/6/2020 SE207911A.010
pH	pH Units	0.1	**6.0**	**6.0**

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR) [AN122] Tested: 24/7/2020

PARAMETER	UOM	LOR	0407_TP95_0.1_200(23 SOIL - 23/6/2020 SE207911A.009	0407_TP95_1.0_200(23 SOIL - 23/6/2020 SE207911A.010
Exchangeable Sodium, Na	mg/kg	2	**3**	**2**
Exchangeable Sodium, Na	meq/100g	0.01	**0.01**	**0.01**
Exchangeable Sodium Percentage*	%	0.1	**4.7**	**42.9**
Exchangeable Potassium, K	mg/kg	2	**3**	<2
Exchangeable Potassium, K	meq/100g	0.01	<0.01	<0.01
Exchangeable Potassium Percentage*	%	0.1	**3.0**	**20.4**
Exchangeable Calcium, Ca	mg/kg	2	**50**	<2
Exchangeable Calcium, Ca	meq/100g	0.01	**0.25**	<0.01
Exchangeable Calcium Percentage*	%	0.1	**89.1**	**30.6**
Exchangeable Magnesium, Mg	mg/kg	2	<2	<2
Exchangeable Magnesium, Mg	meq/100g	0.02	<0.02	<0.02
Exchangeable Magnesium Percentage*	%	0.1	**3.1**	**6.0**
Cation Exchange Capacity	meq/100g	0.02	**0.28**	**0.02**

TOC in Soil [AN188] Tested: 29/7/2020

PARAMETER	UOM	LOR	0407_TP95_0.1_200(23 SOIL - 23/6/2020 SE207911A.009	0407_TP95_1.0_200(23 SOIL - 23/6/2020 SE207911A.010
Total Organic Carbon	%w/w	0.05	**0.13**	**0.06**
Organic Matter (calc)*	%w/w	0.1	**0.2**	**0.1**

Particle sizing of soils by sieving [AN005] Tested: 6/8/2020

PARAMETER	UOM	LOR	0407_TP95_0.1_200(23 SOIL - 23/6/2020 SE207911A.009	0407_TP95_1.0_200(23 SOIL - 23/6/2020 SE207911A.010
Passing 75µm*	%w/w	1	<1	<1
Retained 75µm*	%w/w	1	100	100

Particle sizing of soils <75µm by hydrometer [AN005] Tested: 6/8/2020

PARAMETER	UOM	LOR	0407_TP95_0.1_200(23 SOIL - 23/6/2020 SE207911A.009	0407_TP95_1.0_200(23 SOIL - 23/6/2020 SE207911A.010
Clay (<0.002mm)*	%w/w	0.1	<0.1	<0.1

METHOD	METHODOLOGY SUMMARY
AN005	The particle size distribution of a soil is determined by wet sieving, using a maximum of 900 mL of deionised water to sieve all fractions down to 75 µm. Referenced to AS1289.3.6.1 and AS1141.11.
AN005	Following wet sieving of the sample,(particles smaller than 75 µm) a dispersing solution is added and a hydrometer is used to measure sedimentation. Soil density is determined and the percentage of each size fraction calculated. Referenced to AS1289.3.6.3.
AN101	pH in Soil Sludge Sediment and Water: pH is measured electrometrically using a combination electrode and is calibrated against 3 buffers purchased commercially. For soils, sediments and sludges, an extract with water (or 0.01M CaCl2) is made at a ratio of 1:5 and the pH determined and reported on the extract. Reference APHA 4500-H+.
AN122	Exchangeable Cations, CEC and ESP: Soil sample is extracted in 1M Ammonium Acetate at pH=7 (or 1M Ammonium Chloride at pH=7) with cations (Na, K, Ca & Mg) then determined by ICP OES/ICP MS and reported as Exchangeable Cations. For saline soils, these results can be corrected for water soluble cations and reported as Exchangeable cations in meq/100g or soil can be pre-treated (aqueous ethanol/aqueous glycerol) prior to extraction. Cation Exchange Capacity (CEC) is the sum of the exchangeable cations in meq/100g.
AN122	The Exchangeable Sodium Percentage (ESP) is calculated as the exchangeable sodium divided by the CEC (all in meq/100g) times 100. ESP can be used to categorise the sodicity of the soil as below: ESP < 6% non-sodic ESP 6-15% sodic ESP >15% strongly sodic Method is referenced to Rayment and Lyons, 2011, sections 15D3 and 15N1.-
AN188	The organic material in the soil sample is oxidised with chromic acid in the presence of excess sulfuric acid, without external heat being applied. The excess dichromate ion is determined by titration with standard ammonium iron (II) sulfate solution and the amount of oxidised material is calculated from the quantity of dichromate reduced. Referenced to NEPM 105 and AS1289.1.1.1.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	Admin
Client	SGS EHS SYDNEY
Address	5258 201 EHS SYDNEY UNIT 16 33 MADDOX STREET ALEXANDRIA NSW 2015
Telephone	0285940400
Facsimile	0285940499
Email	au.environmental.sydney@sgs.com
Project	**610.30041 Randwick Barracks**
Order Number	**SE207911A**
Samples	23

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Cairns Environmental
Address	Unit 2, 58 Comport St Portsmith QLD 4870
Telephone	+61 07 4035 5111
Facsimile	+61 07 4035 5122
Email	AU.Environmental.Cairns@sgs.com
SGS Reference	**CE147464 R0**
Date Received	21 Jul 2020
Date Reported	06 Aug 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(3146).

SIGNATORIES

[redacted]

Operations Manager

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147464.001 Soil 23 Jun 2020 SE207911A.001	CE147464.002 Soil 23 Jun 2020 SE207911A.002	CE147464.003 Soil 23 Jun 2020 SE207911A.003	CE147464.004 Soil 23 Jun 2020 SE207911A.004
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020							
Clay (<0.002mm)	%w/w	0.1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147464.005 Soil 23 Jun 2020 SE207911A.005	CE147464.006 Soil 23 Jun 2020 SE207911A.006	CE147464.007 Soil 23 Jun 2020 SE207911A.007	CE147464.008 Soil 23 Jun 2020 SE207911A.008
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020							
Clay (<0.002mm)	%w/w	0.1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name CE147464.009 Soil 23 Jun 2020 SE207911A.009	CE147464.010 Soil 23 Jun 2020 SE207911A.010	CE147464.011 Soil 23 Jun 2020 SE207911A.011	CE147464.012 Soil 23 Jun 2020 SE207911A.012
Moisture Content Method: AN002 Tested: 30/7/2020						
% Moisture	%w/w	1	**4.4**	**3.5**	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020						
Passing 75µm	%w/w	1	<1	<1	-	-
Retained 75µm	%w/w	1	**100**	**100**	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020						
Clay (<0.002mm)	%w/w	0.1	<0.1	<0.1	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147464.013 Soil 23 Jun 2020 SE207911A.013	CE147464.014 Soil 23 Jun 2020 SE207911A.014	CE147464.015 Soil 23 Jun 2020 SE207911A.015	CE147464.016 Soil 23 Jun 2020 SE207911A.016
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020							
Clay (<0.002mm)	%w/w	0.1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147464.017 Soil 23 Jun 2020 SE207911A.017	CE147464.018 Soil 23 Jun 2020 SE207911A.018	CE147464.019 Soil 23 Jun 2020 SE207911A.019	CE147464.020 Soil 23 Jun 2020 SE207911A.020
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020							
Clay (<0.002mm)	%w/w	0.1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147464.021 Soil 23 Jun 2020 SE207911A.021	CE147464.022 Soil 23 Jun 2020 SE207911A.022	CE147464.023 Soil 23 Jun 2020 SE207911A.023
Moisture Content Method: AN002 Tested: 31/7/2020						
% Moisture	%w/w	1		-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020						
Passing 75µm	%w/w	1		-	-	-
Retained 75µm	%w/w	1		-	-	-
Particle sizing of soils <75µm by hydrometer Method: AN005 Tested: 5/8/2020						
Clay (<0.002mm)	%w/w	0.1		-	-	-

QC SUMMARY

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula：*the absolute difference of the two results divided by the average of the two results as a percentage.* Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

No QC samples were reported for this job.

METHOD SUMMARY

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN005	The particle size distribution of a soil is determined by wet sieving, using a maximum of 900 mL of deionised water to sieve all fractions down to 75 µm. Referenced to AS1289.3.6.1 and AS1141.11.
AN005	Following wet sieving of the sample,(particles smaller than 75 µm) a dispersing solution is added and a hydrometer is used to measure sedimentation. Soil density is determined and the percentage of each size fraction calculated. Referenced to AS1289.3.6.3.

FOOTNOTES

IS	Insufficient sample for analysis.	LOR	Limit of Reporting
LNR	Sample listed, but not received.	↑↓	Raised or Lowered Limit of Reporting
*	NATA accreditation does not cover the performance of this service.	QFH	QC result is above the upper tolerance
		QFL	QC result is below the lower tolerance
**	Indicative data, theoretical holding time exceeded.	-	The sample was not analysed for this analyte
		NVL	Not Validated

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calcuated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE207911A R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
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Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	23

LABORATORY DETAILS

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Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207911A R0**
Date Received	21 Jul 2020
Date Reported	06 Aug 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Extraction Date	Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)	2 items
	pH in soil (1:5)	2 items
	TOC in Soil	2 items
Analysis Date	Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)	2 items
	TOC in Soil	2 items

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	2 Soil
Date documentation received	21/7/2020@5:03pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	5.4°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE207911A R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)

Method: ME-(AU)-[ENV]AN122

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP95_0.1_200623	SE207911A.009	LB205097	23 Jun 2020	21 Jul 2020	21 Jul 2020	24 Jul 2020†	21 Jul 2020	29 Jul 2020†
0407_TP95_1.0_200623	SE207911A.010	LB205097	23 Jun 2020	21 Jul 2020	21 Jul 2020	24 Jul 2020†	21 Jul 2020	29 Jul 2020†

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP95_0.1_200623	SE207911A.009	LB205437	23 Jun 2020	21 Jul 2020	30 Jun 2020	29 Jul 2020†	30 Jul 2020	29 Jul 2020
0407_TP95_1.0_200623	SE207911A.010	LB205437	23 Jun 2020	21 Jul 2020	30 Jun 2020	29 Jul 2020†	30 Jul 2020	29 Jul 2020

TOC in Soil

Method: ME-(AU)-[ENV]AN188

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP95_0.1_200623	SE207911A.009	LB205429	23 Jun 2020	21 Jul 2020	21 Jul 2020	29 Jul 2020†	21 Jul 2020	29 Jul 2020†
0407_TP95_1.0_200623	SE207911A.010	LB205429	23 Jun 2020	21 Jul 2020	21 Jul 2020	29 Jul 2020†	21 Jul 2020	29 Jul 2020†

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No surrogates were required for this job.

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)

Method: ME-(AU)-[ENV]AN122

Sample Number	Parameter	Units	LOR	Result
LB205097.001	Exchangeable Sodium, Na	mg/kg	2	0
	Exchangeable Potassium, K	mg/kg	2	0
	Exchangeable Calcium, Ca	mg/kg	2	0
	Exchangeable Magnesium, Mg	mg/kg	2	0

TOC in Soil

Method: ME-(AU)-[ENV]AN188

Sample Number	Parameter	Units	LOR	Result
LB205429.001	Total Organic Carbon	%w/w	0.05	<0.05

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207591B.003	LB205437.025	pH	pH Units	0.1	6.684	6.438	32	4
SE207998A.026	LB205437.024	pH	pH Units	0.1	5.78	5.553	32	4

TOC in Soil

Method: ME-(AU)-[ENV]AN188

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207831B.007	LB205429.004	Total Organic Carbon	%w/w	0.05	8.827219898910.0156258578		31	13

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)

Method: ME-(AU)-[ENV]AN122

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205097.002	Exchangeable Sodium, Na	meq/100g	0.01	0.19	0.194	80 - 120	99
	Exchangeable Potassium, K	meq/100g	0.01	0.58	0.63	80 - 120	91
	Exchangeable Calcium, Ca	meq/100g	0.01	6.3	6.3	80 - 120	100
	Exchangeable Magnesium, Mg	meq/100g	0.02	0.91	1.11	80 - 120	82

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205437.003	pH	pH Units	0.1	7.5	7.415	98 - 102	101

TOC in Soil

Method: ME-(AU)-[ENV]AN188

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205429.002	Total Organic Carbon	%w/w	0.05	0.29	0.325	80 - 120	90

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

TOC in Soil — **Method: ME-(AU)-[ENV]AN188**

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208142A.01	LB205429.019	Total Organic Carbon	%w/w	0.05	0.51	0.53812093762	-	-

MATRIX SPIKE DUPLICATES

SE207911A R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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Good morning

Please book these additional jobs in.

Please be very carefully as there are lots of jobs

Regards,

[redacted]
Environment, Health & Safety
Client Manager
Phone: +61 (0)2 8594 0400
Direct:
Mobile: [redacted]
(Please note my new working hours of Mon-Fri 6:00am-2:00pm)



Covid-19 update: SGS Australia is open, with our Business Service Continuity Plans being put in place to ensure your project can be delivered as normal, please click here to see further details on our Business & Services Continuity Plans.

From: [redacted]@slrconsulting.com>
Sent: Tuesday, 21 July 2020 5:03 PM
To: [redacted]@sgs.com>
Cc: [redacted]@slrconsulting.com>
Subject: [EXTERNAL] 610.30041 DHA Randwick - Additional Analysis

*** WARNING: this message is from an EXTERNAL SENDER. Please be cautious, particularly with links and attachments. ***

Hi [redacted]

Can we please schedule the following analyses:

pH, clay content, TOC & CEC:

Report number	Sample ID
SE207695	TP002_0.1_200615
SE207695	TP002_1.5_200615
SE207695	TP005_0.1_200616
SE207695	TP005_1.5_200616
SE207695	TP049_0.1_200617
SE207695	TP049_1.0_200617
SE208047	TP092_0.1_200624
SE208047	TP092_1.0_200624
SE207831	TP220_0.1_200618
SE207831	TP220_1.0_200618
SE207831	TP221_0.1_200619
SE207831	TP221_1.0_200619
SE207998	TP230_0.1_200622
SE207998	TP230_1.8_200622
SE207591	TP018_0.1_200615
SE207591	TP018_1.0_200615
SE208047	TP092_0.1_200624
SE208047	TP092_1.0_200624
SE207911	TP095_0.1_200623
SE207911	TP095_1.0_200623
SE207731	TP073_0.1_200619
SE207731	TP073_1.0_200619
SE208659	TP133_0.1_200701
SE208659	TP133_1.0_200701
SE208142	TP151_0.1_200629
SE208142	TP151_1.0_200629
SE208137	TP183_0.1_200625
SE208137	TP183_0.5_200625

Additional analysis:

Report number	Sample ID	Parameter
SE208081	0407_TP241_1.0_200625	Pb & Zn
SE207731	0407_TP73_0.5_200619	Cr

ASLP Leach:

Report number	Sample ID	Parameter
SE208046	0407_TP237_0.5_200624	8 metals
SE208081	0407_TP241_0.5_200625	8 metals
SE208133	0407_TP111_0.1_200626	8 metals
SE208142	0407_TP256_0.1_200629	8 metals
SE207831	0407_TP222_0.1_200619	8 metals
SE207731	0407_TP73_0.1_200619	8 metals
SE207850	0407_TP162_0.1_200617	PAHs include B(a)P

SE207831	0407_TP197_0.1_200619	PAHs include B(a)P
SE207831	0407_TP197_0.5_200619	PAHs include B(a)P
SE207831	0407_TP200_0.5_200618	PAHs include B(a)P
SE207831	0407_TP200_1.0_200618	Total and leachable PAHs including B(a)P
SE207831	0407_TP209_0.5_200619	PAHs include B(a)P
SE207831	0407_TP221_0.5_200619	PAHs include B(a)P
SE207831	0407_TP221_1.0_200619	Total and leachable PAHs including B(a)P
SE207824	0407_TP231_0.1_200622	PAHs include B(a)P
SE208161	0407_BH41_0.0_200625	PFOS, PFOA, PfHxS
SE208046	0407_QC160_200624	PFOS, PFOA, PfHxS
SE207824	0407_QC130_200622	PFOS, PFOA, PfHxS

Let me know if you have any questions.

Many thanks,

[redacted]

SLR

[redacted]

Associate - Land Quality & Remediation

Please note in response to the COVID-19 Pandemic and physical distancing recommendations from the Australian Government, SLR is encouraging staff to work remotely and implement flexible working hours if necessary.
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d +61 7 3117 5227
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WINNERS: RoSPA Gold Award, 2017

WINNERS : International Business Excellence Award, 2016

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SAMPLE RECEIPT ADVICE

SE207695A

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barrack**
Order Number	**000552--000557**
Samples	53

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Tue 21/7/2020
Report Due	Wed 29/7/2020
SGS Reference	**SE207695A**

SUBMISSION DETAILS

This is to confirm that 53 samples were received on Tuesday 21/7/2020. Results are expected to be ready by COB Wednesday 29/7/2020.
Please quote SGS reference SE207695A when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	6 Soil
Date documentation received	21/7/2020@5:03pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	14°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

% Clay subcontracted to SGS Cairns, 2/58 Comport St, Portsmith QLD 4870, NATA Accreditation Number: 2562, Site Number: 3146.

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SAMPLE RECEIPT ADVICE

SE207695A

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barrack

SUMMARY OF ANALYSIS

No.	Sample ID	Exchangeable Cations and Cation Exchange Capacity	Moisture Content	Particle sizing of soils <75µm by hydrometer	Particle sizing of soils by sieving	pH in soil (1:5)	TOC in Soil
004	0407_TP002_1.5_200615	13	1	1	2	1	2
009	0407_TP005_0.1_200616	13	1	1	2	1	2

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE207695A

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barrack

SUMMARY OF ANALYSIS

No.	Sample ID	Exchangeable Cations and Cation Exchange Capacity	Moisture Content	Particle sizing of soils <75µm by hydrometer	Particle sizing of soils by sieving	pH in soil (1:5)	TOC in Soil
031	0407_TP049_0.1_200617	13	1	1	2	1	2

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE207695A

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barrack

SUMMARY OF ANALYSIS

No.	Sample ID	Exchangeable Cations and Cation Exchange Capacity	Moisture Content	Particle sizing of soils <75µm by hydrometer	Particle sizing of soils by sieving	pH in soil (1:5)	TOC in Soil
051	0407_TP002_0.1_200615	13	1	1	2	1	2
052	0407_TP005_1.5_200616	13	1	1	2	1	2
053	0407_TP049_1.0_200617	13	1	1	2	1	2

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barrack**
Order Number	**610.30041**
Samples	53

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207695A R0**
Date Received	21/7/2020
Date Reported	6/8/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

% Clay subcontracted to SGS Cairns, 2/58 Comport St, Portsmith QLD 4870, NATA Accreditation Number: 2562, Site Number: 3146. CE147455

SIGNATORIES

[redacted]

Senior Organic Chemist/Metals Chemist Inorganic/Metals Chemist

pH in soil (1:5) [AN101] Tested: 29/7/2020

PARAMETER	UOM	LOR	0407_TP002_1.5_20(615 SOIL - 15/6/2020 SE207695A.004	0407_TP005_0.1_20(616 SOIL - 16/6/2020 SE207695A.009	0407_TP049_0.1_20(617 SOIL - 17/6/2020 SE207695A.031	0407_TP002_0.1_20(615 SOIL - 17/6/2020 SE207695A.051	0407_TP005_1.5_20(616 SOIL - 17/6/2020 SE207695A.052
pH	pH Units	0.1	**7.7**	**6.9**	**9.0**	**7.7**	**6.5**

PARAMETER	UOM	LOR	0407_TP049_1.0_20(617 SOIL - 17/6/2020 SE207695A.053
pH	pH Units	0.1	**8.3**

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR) [AN122] Tested: 24/7/2020

PARAMETER	UOM	LOR	0407_TP002_1.5_20(615 SOIL - 15/6/2020 SE207695A.004	0407_TP005_0.1_20(616 SOIL - 16/6/2020 SE207695A.009	0407_TP049_0.1_20(617 SOIL - 17/6/2020 SE207695A.031	0407_TP002_0.1_20(615 SOIL - 17/6/2020 SE207695A.051	0407_TP005_1.5_20(616 SOIL - 17/6/2020 SE207695A.052
Exchangeable Sodium, Na	mg/kg	2	7	150	82	510	7
Exchangeable Sodium, Na	meq/100g	0.01	0.03	0.67	0.36	2.2	0.03
Exchangeable Sodium Percentage*	%	0.1	3.6	1.2	0.9	1.8	18.3
Exchangeable Potassium, K	mg/kg	2	31	860	160	2000	20
Exchangeable Potassium, K	meq/100g	0.01	0.08	2.2	0.41	5.0	0.05
Exchangeable Potassium Percentage*	%	0.1	8.9	3.9	1.1	4.2	32.2
Exchangeable Calcium, Ca	mg/kg	2	130	9400	7400	19000	13
Exchangeable Calcium, Ca	meq/100g	0.01	0.67	47	37	96	0.06
Exchangeable Calcium Percentage*	%	0.1	74.6	83.3	97.5	79.5	40.6
Exchangeable Magnesium, Mg	mg/kg	2	14	800	24	2100	<2
Exchangeable Magnesium, Mg	meq/100g	0.02	0.11	6.6	0.19	17	<0.02
Exchangeable Magnesium Percentage*	%	0.1	12.9	11.6	0.5	14.5	8.8
Cation Exchange Capacity	meq/100g	0.02	0.89	57	38	120	0.16

PARAMETER	UOM	LOR	0407_TP049_1.0_20(617 SOIL - 17/6/2020 SE207695A.053
Exchangeable Sodium, Na	mg/kg	2	3
Exchangeable Sodium, Na	meq/100g	0.01	0.01
Exchangeable Sodium Percentage*	%	0.1	0.7
Exchangeable Potassium, K	mg/kg	2	3
Exchangeable Potassium, K	meq/100g	0.01	<0.01
Exchangeable Potassium Percentage*	%	0.1	0.5
Exchangeable Calcium, Ca	mg/kg	2	360
Exchangeable Calcium, Ca	meq/100g	0.01	1.8
Exchangeable Calcium Percentage*	%	0.1	98.2
Exchangeable Magnesium, Mg	mg/kg	2	<2
Exchangeable Magnesium, Mg	meq/100g	0.02	<0.02
Exchangeable Magnesium Percentage*	%	0.1	0.6
Cation Exchange Capacity	meq/100g	0.02	1.8

TOC in Soil [AN188] Tested: 28/7/2020

PARAMETER	UOM	LOR	0407_TP002_1.5_20(615 SOIL - 15/6/2020 SE207695A.004	0407_TP005_0.1_20(616 SOIL - 16/6/2020 SE207695A.009	0407_TP049_0.1_20(617 SOIL - 17/6/2020 SE207695A.031	0407_TP002_0.1_20(615 SOIL - 17/6/2020 SE207695A.051	0407_TP005_1.5_20(616 SOIL - 17/6/2020 SE207695A.052
Total Organic Carbon	%w/w	0.05	0.51	42	0.21	32	0.23
Organic Matter (calc)*	%w/w	0.1	0.9	72	0.4	56	0.4

PARAMETER	UOM	LOR	0407_TP049_1.0_20(617 SOIL - 17/6/2020 SE207695A.053
Total Organic Carbon	%w/w	0.05	0.51
Organic Matter (calc)*	%w/w	0.1	0.9

Moisture Content [AN002] Tested: 24/7/2020

PARAMETER	UOM	LOR	0407_TP002_1.5_20(615 SOIL - 15/6/2020 SE207695A.004	0407_TP005_0.1_20(616 SOIL - 16/6/2020 SE207695A.009	0407_TP049_0.1_20(617 SOIL - 17/6/2020 SE207695A.031	0407_TP002_0.1_20(615 SOIL - 17/6/2020 SE207695A.051	0407_TP005_1.5_20(616 SOIL - 17/6/2020 SE207695A.052
% Moisture	%w/w	1	5.2	66.1	11.9	58.6	4.6

PARAMETER	UOM	LOR	0407_TP049_1.0_20(617 SOIL - 17/6/2020 SE207695A.053
% Moisture	%w/w	1	6.4

Particle sizing of soils by sieving [AN005] Tested: 6/8/2020

PARAMETER	UOM	LOR	0407_TP002_1.5_20(615 SOIL - 15/6/2020 SE207695A.004	0407_TP005_0.1_20(616 SOIL - 16/6/2020 SE207695A.009	0407_TP049_0.1_20(617 SOIL - 17/6/2020 SE207695A.031	0407_TP002_0.1_20(615 SOIL - 17/6/2020 SE207695A.051	0407_TP005_1.5_20(616 SOIL - 17/6/2020 SE207695A.052
Passing 75µm*	%w/w	1	3	6	1	10	<1
Retained 75µm*	%w/w	1	97	94	99	90	100

PARAMETER	UOM	LOR	0407_TP049_1.0_20(617 SOIL - 17/6/2020 SE207695A.053
Passing 75µm*	%w/w	1	1
Retained 75µm*	%w/w	1	99

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN005	The particle size distribution of a soil is determined by wet sieving, using a maximum of 900 mL of deionised water to sieve all fractions down to 75 µm. Referenced to AS1289.3.6.1 and AS1141.11.
AN005	Following wet sieving of the sample,(particles smaller than 75 µm) a dispersing solution is added and a hydrometer is used to measure sedimentation. Soil density is determined and the percentage of each size fraction calculated. Referenced to AS1289.3.6.3.
AN101	pH in Soil Sludge Sediment and Water: pH is measured electrometrically using a combination electrode and is calibrated against 3 buffers purchased commercially. For soils, sediments and sludges, an extract with water (or 0.01M CaCl2) is made at a ratio of 1:5 and the pH determined and reported on the extract. Reference APHA 4500-H+.
AN122	Exchangeable Cations, CEC and ESP: Soil sample is extracted in 1M Ammonium Acetate at pH=7 (or 1M Ammonium Chloride at pH=7) with cations (Na, K, Ca & Mg) then determined by ICP OES/ICP MS and reported as Exchangeable Cations. For saline soils, these results can be corrected for water soluble cations and reported as Exchangeable cations in meq/100g or soil can be pre-treated (aqueous ethanol/aqueous glycerol) prior to extraction. Cation Exchange Capacity (CEC) is the sum of the exchangeable cations in meq/100g.
AN122	The Exchangeable Sodium Percentage (ESP) is calculated as the exchangeable sodium divided by the CEC (all in meq/100g) times 100. ESP can be used to categorise the sodicity of the soil as below: ESP < 6% non-sodic ESP 6-15% sodic ESP >15% strongly sodic Method is referenced to Rayment and Lyons, 2011, sections 15D3 and 15N1.-
AN188	The organic material in the soil sample is oxidised with chromic acid in the presence of excess sulfuric acid, without external heat being applied. The excess dichromate ion is determined by titration with standard ammonium iron (II) sulfate solution and the amount of oxidised material is calculated from the quantity of dichromate reduced. Referenced to NEPM 105 and AS1289.1.1.1.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS		LABORATORY DETAILS	
Contact	Admin	Manager	[redacted]
Client	SGS EHS SYDNEY	Laboratory	SGS Cairns Environmental
Address	5258 201 EHS SYDNEY UNIT 16 33 MADDOX STREET ALEXANDRIA NSW 2015	Address	Unit 2, 58 Comport St Portsmith QLD 4870
Telephone	0285940400	Telephone	+61 07 4035 5111
Facsimile	0285940499	Facsimile	+61 07 4035 5122
Email	au.environmental.sydney@sgs.com	Email	AU.Environmental.Cairns@sgs.com
Project	**610.30041 Randwick Barracks**	SGS Reference	**CE147455 R0**
Order Number	**SE207695A**	Date Received	21 Jul 2020
Samples	53	Date Reported	06 Aug 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(3146).

Particle sizing of soils <75um by Hydrometer not conducted where insuffient sample passes the 75um fraction.

SIGNATORIES

[redacted]

Operations Manager

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147455.001 Soil 15 Jun 2020 SE207695A.001	CE147455.002 Soil 15 Jun 2020 SE207695A.002	CE147455.003 Soil 15 Jun 2020 SE207695A.003	CE147455.004 Soil 15 Jun 2020 SE207695A.004
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	**5.4**
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	**3**
Retained 75µm	%w/w	1		-	-	-	**97**

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147455.005 Soil 16 Jun 2020 SE207695A.005	CE147455.006 Soil 16 Jun 2020 SE207695A.006	CE147455.007 Soil 16 Jun 2020 SE207695A.007	CE147455.008 Soil 16 Jun 2020 SE207695A.008
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name CE147455.009 Soil 16 Jun 2020 SE207695A.009	CE147455.010 Soil 16 Jun 2020 SE207695A.010	CE147455.011 Soil 16 Jun 2020 SE207695A.011	CE147455.012 Soil 16 Jun 2020 SE207695A.012
Moisture Content Method: AN002 Tested: 30/7/2020						
% Moisture	%w/w	1	**60**	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020						
Passing 75µm	%w/w	1	**6**	-	-	-
Retained 75µm	%w/w	1	**94**	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147455.013 Soil 16 Jun 2020 SE207695A.013	CE147455.014 Soil 16 Jun 2020 SE207695A.014	CE147455.015 Soil 16 Jun 2020 SE207695A.015	CE147455.016 Soil 16 Jun 2020 SE207695A.016
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147455.017 Soil 16 Jun 2020 SE207695A.017	CE147455.018 Soil 16 Jun 2020 SE207695A.018	CE147455.019 Material 16 Jun 2020 SE207695A.019	CE147455.020 Material 16 Jun 2020 SE207695A.020
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name CE147455.021 Material 16 Jun 2020 SE207695A.021	CE147455.022 Material 16 Jun 2020 SE207695A.022	CE147455.023 Soil 17 Jun 2020 SE207695A.023	CE147455.024 Soil 17 Jun 2020 SE207695A.024
Moisture Content Method: AN002 Tested: 31/7/2020						
% Moisture	%w/w	1	-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020						
Passing 75µm	%w/w	1	-	-	-	-
Retained 75µm	%w/w	1	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147455.025 Soil 17 Jun 2020 SE207695A.025	CE147455.026 Soil 17 Jun 2020 SE207695A.026	CE147455.027 Soil 17 Jun 2020 SE207695A.027	CE147455.028 Material 17 Jun 2020 SE207695A.028
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147455.029 Soil 17 Jun 2020 SE207695A.029	CE147455.030 Material 17 Jun 2020 SE207695A.030	CE147455.031 Soil 17 Jun 2020 SE207695A.031	CE147455.032 Soil 17 Jun 2020 SE207695A.032
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	**12**	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	**1**	-
Retained 75µm	%w/w	1		-	-	**99**	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147455.033 Soil 17 Jun 2020 SE207695A.033	CE147455.034 Soil 17 Jun 2020 SE207695A.034	CE147455.035 Material 17 Jun 2020 SE207695A.035	CE147455.036 Material 17 Jun 2020 SE207695A.036
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147455.037 Material 17 Jun 2020 SE207695A.037	CE147455.038 Material 17 Jun 2020 SE207695A.038	CE147455.039 Soil 17 Jun 2020 SE207695A.039	CE147455.040 Soil 17 Jun 2020 SE207695A.040
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Material Sample Date Sample Name	CE147455.041 Soil 17 Jun 2020 SE207695A.041	CE147455.042 Soil 17 Jun 2020 SE207695A.042	CE147455.043 Soil 17 Jun 2020 SE207695A.043	CE147455.044 Soil 17 Jun 2020 SE207695A.044
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147455.045 Soil 16 Jun 2020 SE207695A.045	CE147455.046 Soil 17 Jun 2020 SE207695A.046	CE147455.047 Soil 17 Jun 2020 SE207695A.047	CE147455.048 Material 16 Jun 2020 SE207695A.048
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	-	-
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	-	-
Retained 75µm	%w/w	1		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	CE147455.049 Material 17 Jun 2020 SE207695A.049	CE147455.050 Material 17 Jun 2020 SE207695A.050	CE147455.051 Soil 17 Jun 2020 SE207695A.051	CE147455.052 Soil 17 Jun 2020 SE207695A.052
Moisture Content Method: AN002 Tested: 31/7/2020							
% Moisture	%w/w	1		-	-	**56**	**4.3**
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020							
Passing 75µm	%w/w	1		-	-	**10**	<1
Retained 75µm	%w/w	1		-	-	**90**	**100**

Parameter	Units	LOR	Sample Number CE147455.053 Sample Matrix Soil Sample Date 17 Jun 2020 Sample Name SE207695A.053
Moisture Content Method: AN002 Tested: 30/7/2020			
% Moisture	%w/w	1	**5.9**
Particle sizing of soils by sieving Method: AN005 Tested: 5/8/2020			
Passing 75µm	%w/w	1	**1**
Retained 75µm	%w/w	1	**99**

QC SUMMARY

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula：*the absolute difference of the two results divided by the average of the two results as a percentage.* Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

No QC samples were reported for this job.

METHOD SUMMARY

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN005	The particle size distribution of a soil is determined by wet sieving, using a maximum of 900 mL of deionised water to sieve all fractions down to 75 µm. Referenced to AS1289.3.6.1 and AS1141.11.

FOOTNOTES

IS	Insufficient sample for analysis.	LOR	Limit of Reporting
LNR	Sample listed, but not received.	↑↓	Raised or Lowered Limit of Reporting
*	NATA accreditation does not cover the performance of this service.	QFH	QC result is above the upper tolerance
		QFL	QC result is below the lower tolerance
**	Indicative data, theoretical holding time exceeded.	-	The sample was not analysed for this analyte
		NVL	Not Validated

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calcuated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE207695A R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barrack**
Order Number	**610.30041**
Samples	53

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207695A R0**
Date Received	21 Jul 2020
Date Reported	06 Aug 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Extraction Date	Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)	6 items
	Moisture Content	6 items
	pH in soil (1:5)	6 items
	TOC in Soil	6 items
Analysis Date	Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)	7 items
	TOC in Soil	6 items

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	6 Soil
Date documentation received	21/7/2020@5:03pm	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	14°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE207695A R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)

Method: ME-(AU)-[ENV]AN122

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP002_1.5_200615	SE207695A.004	LB205096	15 Jun 2020	21 Jul 2020	13 Jul 2020	24 Jul 2020†	13 Jul 2020	28 Jul 2020†
0407_TP005_0.1_200616	SE207695A.009	LB205096	16 Jun 2020	21 Jul 2020	14 Jul 2020	24 Jul 2020†	14 Jul 2020	28 Jul 2020†
0407_TP049_0.1_200617	SE207695A.031	LB205096	17 Jun 2020	21 Jul 2020	15 Jul 2020	24 Jul 2020†	15 Jul 2020	28 Jul 2020†
0407_TP002_0.1_200615	SE207695A.051	LB205096	17 Jun 2020	21 Jul 2020	15 Jul 2020	24 Jul 2020†	15 Jul 2020	28 Jul 2020†
0407_TP005_1.5_200616	SE207695A.052	LB205096	17 Jun 2020	21 Jul 2020	15 Jul 2020	24 Jul 2020†	15 Jul 2020	28 Jul 2020†
0407_TP049_1.0_200617	SE207695A.053	LB205096	17 Jun 2020	21 Jul 2020	15 Jul 2020	24 Jul 2020†	15 Jul 2020	28 Jul 2020†

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP002_1.5_200615	SE207695A.004	LB205094	15 Jun 2020	21 Jul 2020	29 Jun 2020	24 Jul 2020†	29 Jul 2020	28 Jul 2020
0407_TP005_0.1_200616	SE207695A.009	LB205094	16 Jun 2020	21 Jul 2020	30 Jun 2020	24 Jul 2020†	29 Jul 2020	28 Jul 2020
0407_TP049_0.1_200617	SE207695A.031	LB205094	17 Jun 2020	21 Jul 2020	01 Jul 2020	24 Jul 2020†	29 Jul 2020	28 Jul 2020
0407_TP002_0.1_200615	SE207695A.051	LB205094	17 Jun 2020	21 Jul 2020	01 Jul 2020	24 Jul 2020†	29 Jul 2020	28 Jul 2020
0407_TP005_1.5_200616	SE207695A.052	LB205094	17 Jun 2020	21 Jul 2020	01 Jul 2020	24 Jul 2020†	29 Jul 2020	28 Jul 2020
0407_TP049_1.0_200617	SE207695A.053	LB205094	17 Jun 2020	21 Jul 2020	01 Jul 2020	24 Jul 2020†	29 Jul 2020	28 Jul 2020

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP002_1.5_200615	SE207695A.004	LB205438	15 Jun 2020	21 Jul 2020	22 Jun 2020	29 Jul 2020†	30 Jul 2020	29 Jul 2020
0407_TP005_0.1_200616	SE207695A.009	LB205438	16 Jun 2020	21 Jul 2020	23 Jun 2020	29 Jul 2020†	30 Jul 2020	29 Jul 2020
0407_TP049_0.1_200617	SE207695A.031	LB205438	17 Jun 2020	21 Jul 2020	24 Jun 2020	29 Jul 2020†	30 Jul 2020	29 Jul 2020
0407_TP002_0.1_200615	SE207695A.051	LB205438	17 Jun 2020	21 Jul 2020	24 Jun 2020	29 Jul 2020†	30 Jul 2020	29 Jul 2020
0407_TP005_1.5_200616	SE207695A.052	LB205438	17 Jun 2020	21 Jul 2020	24 Jun 2020	29 Jul 2020†	30 Jul 2020	29 Jul 2020
0407_TP049_1.0_200617	SE207695A.053	LB205438	17 Jun 2020	21 Jul 2020	24 Jun 2020	29 Jul 2020†	30 Jul 2020	29 Jul 2020

TOC in Soil

Method: ME-(AU)-[ENV]AN188

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP002_1.5_200615	SE207695A.004	LB205343	15 Jun 2020	21 Jul 2020	13 Jul 2020	28 Jul 2020†	13 Jul 2020	28 Jul 2020†
0407_TP005_0.1_200616	SE207695A.009	LB205343	16 Jun 2020	21 Jul 2020	14 Jul 2020	28 Jul 2020†	14 Jul 2020	28 Jul 2020†
0407_TP049_0.1_200617	SE207695A.031	LB205343	17 Jun 2020	21 Jul 2020	15 Jul 2020	28 Jul 2020†	15 Jul 2020	28 Jul 2020†
0407_TP002_0.1_200615	SE207695A.051	LB205343	17 Jun 2020	21 Jul 2020	15 Jul 2020	28 Jul 2020†	15 Jul 2020	28 Jul 2020†
0407_TP005_1.5_200616	SE207695A.052	LB205343	17 Jun 2020	21 Jul 2020	15 Jul 2020	28 Jul 2020†	15 Jul 2020	28 Jul 2020†
0407_TP049_1.0_200617	SE207695A.053	LB205343	17 Jun 2020	21 Jul 2020	15 Jul 2020	28 Jul 2020†	15 Jul 2020	28 Jul 2020†

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No surrogates were required for this job.

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR) — Method: ME-(AU)-[ENV]AN122

Sample Number	Parameter	Units	LOR	Result
LB205096.001	Exchangeable Sodium, Na	mg/kg	2	0
	Exchangeable Potassium, K	mg/kg	2	0
	Exchangeable Calcium, Ca	mg/kg	2	0
	Exchangeable Magnesium, Mg	mg/kg	2	0

TOC in Soil — Method: ME-(AU)-[ENV]AN188

Sample Number	Parameter	Units	LOR	Result
LB205343.001	Total Organic Carbon	%w/w	0.05	<0.05

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Moisture Content

Method: ME-(AU)-[ENV]AN002

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207831B.008	LB205094.011	% Moisture	%w/w	1	4.00508582324	4.0345821325	55	1

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208047A.032	LB205438.012	pH	pH Units	0.1	7.915	6.935	31	13

TOC in Soil

Method: ME-(AU)-[ENV]AN188

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207695A.051	LB205343.008	Total Organic Carbon	%w/w	0.05	32	36.003116201€	30	11

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Exchangeable Cations and Cation Exchange Capacity (CEC/ESP/SAR)

Method: ME-(AU)-[ENV]AN122

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205096.002	Exchangeable Sodium, Na	meq/100g	0.01	0.19	0.194	80 - 120	97
	Exchangeable Potassium, K	meq/100g	0.01	0.58	0.63	80 - 120	92
	Exchangeable Calcium, Ca	meq/100g	0.01	6.9	6.3	80 - 120	109
	Exchangeable Magnesium, Mg	meq/100g	0.02	0.94	1.11	80 - 120	85

pH in soil (1:5)

Method: ME-(AU)-[ENV]AN101

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205438.003	pH	pH Units	0.1	7.5	7.415	98 - 102	101

TOC in Soil

Method: ME-(AU)-[ENV]AN188

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205343.002	Total Organic Carbon	%w/w	0.05	0.31	0.325	80 - 120	96

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

TOC in Soil — **Method: ME-(AU)-[ENV]AN188**

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE207998A.02	LB205343.015	Total Organic Carbon	%w/w	0.05	0.36	0.00912992855	-	-

MATRIX SPIKE DUPLICATES

SE207695A R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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Hi [redacted]

Can we please schedule analysis for the samples referenced in the table below on a three day turn around.

Sample ID	Lab Report	Analysis Request
0407_QC170_200626	SE208133	Suite A
0407_QC171_200626	SE208133	Suite A
0407_QC175_200626	SE208133	Suite A
0407_TP206_0.5_200618	SE207831	Suite A
BH011_1.0_200625	SE208848	OCP/OPP

Additionally, I'm trying to track down RWBB_QC201_200615. Can you tell me if it was sent to Eurofins as per COC?

Thanks for your help,



SLR

[redacted]
Project Consultant - Land Quality & Remediation

Please note in response to the COVID-19 Pandemic and physical distancing recommendations from the Australian Government, SLR is encouraging staff to work remotely and implement flexible working hours if necessary.
If you have received this email outside of regular office hours, it is not expected that you will respond until your own working hours commence.

d +61 7 3858 4887
o [redacted]
m [redacted]
e [redacted]@slrconsulting.com

SLR Consulting Australia Pty Ltd
Level 2, 15 Astor Terrace, Brisbane, QLD, Australia, 4000

WINNERS: RoSPA Gold Award, 2017 WINNERS: International Business Excellence Award, 2016

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SAMPLE RECEIPT ADVICE

SE208848A

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks - Additional**
Order Number	**610.30041**
Samples	32

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Fri 7/8/2020
Report Due	Wed 12/8/2020
SGS Reference	**SE208848A**

SUBMISSION DETAILS

This is to confirm that 32 samples were received on Friday 7/8/2020. Results are expected to be ready by COB Wednesday 12/8/2020. Please quote SGS reference SE208848A when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	1 Soil
Date documentation received	7/8/2020@11:31AM	Type of documentation received	Email
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	3.7°C	Sufficient sample for analysis	Yes
Turnaround time requested	Three Days		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

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SAMPLE RECEIPT ADVICE

SE208848A

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks - Additional

SUMMARY OF ANALYSIS

No.	Sample ID	Moisture Content	OC Pesticides in Soil	OP Pesticides in Soil
032	0407_BH11_1.0_200625	1	29	14

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks - Additional**
Order Number	**610.30041**
Samples	32

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208848A R0**
Date Received	7/8/2020
Date Reported	12/8/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

SIGNATORIES

[redacted]

Organic Section Head

OC Pesticides in Soil [AN420] Tested: 10/8/2020

PARAMETER	UOM	LOR	0407_BH11_1.0_200(25 SOIL - 25/6/2020 SE208848A.032
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1
Lindane	mg/kg	0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1
Aldrin	mg/kg	0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2
Endrin	mg/kg	0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1
Isodrin	mg/kg	0.1	<0.1
Mirex	mg/kg	0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1

OP Pesticides in Soil [AN420] Tested: 10/8/2020

PARAMETER	UOM	LOR	0407_BH11_1.0_200(25 SOIL - 25/6/2020 SE208848A.032
Dichlorvos	mg/kg	0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2
Malathion	mg/kg	0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2
Methidathion	mg/kg	0.5	<0.5
Ethion	mg/kg	0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7

Moisture Content [AN002] Tested: 10/8/2020

PARAMETER	UOM	LOR	0407_BH11_1.0_2006 25 SOIL - 25/6/2020 SE208848A.032
% Moisture	%w/w	1	**1.0**

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE208848A R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks - Additional**
Order Number	**610.30041**
Samples	32

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208848A R0**
Date Received	07 Aug 2020
Date Reported	12 Aug 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Extraction Date	Moisture Content	1 item
	OC Pesticides in Soil	1 item
	OP Pesticides in Soil	1 item

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	1 Soil
Date documentation received	7/8/2020@11:31AM	Type of documentation received	Email
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	3.7°C	Sufficient sample for analysis	Yes
Turnaround time requested	Three Days		

HOLDING TIME SUMMARY

SE208848A R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH11_1.0_200625	SE208848A.032	LB206377	25 Jun 2020	07 Aug 2020	09 Jul 2020	10 Aug 2020†	15 Aug 2020	11 Aug 2020

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH11_1.0_200625	SE208848A.032	LB206416	25 Jun 2020	07 Aug 2020	09 Jul 2020	10 Aug 2020†	19 Sep 2020	11 Aug 2020

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_BH11_1.0_200625	SE208848A.032	LB206416	25 Jun 2020	07 Aug 2020	09 Jul 2020	10 Aug 2020†	19 Sep 2020	12 Aug 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_BH11_1.0_200625	SE208848A.032	%	60 - 130%	106

OP Pesticides in Soil — Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_BH11_1.0_200625	SE208848A.032	%	60 - 130%	93
d14-p-terphenyl (Surrogate)	0407_BH11_1.0_200625	SE208848A.032	%	60 - 130%	87

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB206416.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	107

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB206416.001		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	84
		d14-p-terphenyl (Surrogate)	%	-	100

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208848A.032	LB206416.012		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Lindane	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor	mg/kg	0.1	<0.1	<0.1	200	0
			Aldrin	mg/kg	0.1	<0.1	<0.1	200	0
			Beta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Delta BHC	mg/kg	0.1	<0.1	<0.1	200	0
			Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDE	mg/kg	0.1	<0.1	<0.1	200	0
			Dieldrin	mg/kg	0.2	<0.2	<0.2	200	0
			Endrin	mg/kg	0.2	<0.2	<0.2	200	0
			o,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			o,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	200	0
			p,p'-DDD	mg/kg	0.1	<0.1	<0.1	200	0
			p,p'-DDT	mg/kg	0.1	<0.1	<0.1	200	0
			Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	200	0
			Methoxychlor	mg/kg	0.1	<0.1	<0.1	200	0
			Endrin Ketone	mg/kg	0.1	<0.1	<0.1	200	0
			Isodrin	mg/kg	0.1	<0.1	<0.1	200	0
			Mirex	mg/kg	0.1	<0.1	<0.1	200	0
			Total CLP OC Pesticides	mg/kg	1	<1	<1	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.16	0.16	30	2

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208848A.032	LB206416.014		Dichlorvos	mg/kg	0.5	<0.5	0	200	0
			Dimethoate	mg/kg	0.5	<0.5	0	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	<0.5	0.0111794994	200	0
			Fenitrothion	mg/kg	0.2	<0.2	0	200	0
			Malathion	mg/kg	0.2	<0.2	0	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	0	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	0	200	0
			Bromophos Ethyl	mg/kg	0.2	<0.2	0	200	0
			Methidathion	mg/kg	0.5	<0.5	0	200	0
			Ethion	mg/kg	0.2	<0.2	0	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	0	200	0
			Total OP Pesticides*	mg/kg	1.7	<1.7	0	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.4634638655	30	0
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.4096861651	30	6

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206416.002		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	89
		Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	97
		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	91
		Dieldrin	mg/kg	0.2	<0.2	0.2	60 - 140	96
		Endrin	mg/kg	0.2	<0.2	0.2	60 - 140	90
		p,p'-DDT	mg/kg	0.1	0.1	0.2	60 - 140	73
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.16	0.15	40 - 130	103

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206416.002		Dichlorvos	mg/kg	0.5	1.7	2	60 - 140	85
		Diazinon (Dimpylate)	mg/kg	0.5	2.2	2	60 - 140	110
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.0	2	60 - 140	102
		Ethion	mg/kg	0.2	1.9	2	60 - 140	96
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	84
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	86

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

QC Sample	Sample Number	Parameter	Units	LOR

MATRIX SPIKE DUPLICATES

SE208848A R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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Hi [redacted]

Can we please schedule analysis for the samples referenced in the table below on a three day turn around.

Sample ID	Lab Report	Analysis Request
0407_QC170_200626	SE208133	Suite A
0407_QC171_200626	SE208133	Suite A
0407_QC175_200626	SE208133	Suite A
0407_TP206_0.5_200618	SE207831	Suite A
BH011_1.0_200625	SE208848	OCP/OPP

Additionally, I'm trying to track down RWBB_QC201_200615. Can you tell me if it was sent to Eurofins as per COC?

Thanks for your help,

SGS EHS Alexandria Laboratory
SE208133B COC
Received: 10–Aug–2020

SLR

[redacted]
Project Consultant - Land Quality & Remediation

Please note in response to the COVID-19 Pandemic and physical distancing recommendations from the Australian Government,
SLR is encouraging staff to work remotely and implement flexible working hours if necessary.
If you have received this email outside of regular office hours, it is not expected that you will respond until your own working hours commence.

d +61 7 3858 4887
o [redacted]
m [redacted]
e [redacted]@slrconsulting.com

SLR Consulting Australia Pty Ltd
Level 2, 15 Astor Terrace, Brisbane, QLD, Australia, 4000

WINNERS: RoSPA Gold Award, 2017
WINNERS: International Business Excellence Award, 2016

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SAMPLE RECEIPT ADVICE

SE208133B

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks-Addtional**
Order Number	**610.30041**
Samples	25

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Fri 7/8/2020
Report Due	Wed 12/8/2020
SGS Reference	**SE208133B**

SUBMISSION DETAILS

This is to confirm that 25 samples were received on Friday 7/8/2020. Results are expected to be ready by COB Wednesday 12/8/2020. Please quote SGS reference SE208133B when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	3 Soil
Date documentation received	7/8/2020@11:31AM	Type of documentation received	Email
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	3.7°C	Sufficient sample for analysis	Yes
Turnaround time requested	Three Days		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

This document is issued by the Company under its General Conditions of Service accessible at www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

SAMPLE RECEIPT ADVICE

SE208133B

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks-Addtional

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	Speciated Phenols in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
023	0407_QC170_200626	29	14	26	11	18	10	81	7
024	0407_QC171_200626	29	14	26	11	18	10	81	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE208133B

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks-Addtional

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	Speciated Phenols in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
025	0407_QC175_200626	29	14	26	11	18	10	81	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
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SAMPLE RECEIPT ADVICE

SE208133B

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks-Addtional

SUMMARY OF ANALYSIS

No.	Sample ID	Mercury in Soil	Moisture Content	Total Recoverable Elements in Soil/Waste
023	0407_QC170_200626	1	1	7
024	0407_QC171_200626	1	1	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE208133B

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks-Addtional

SUMMARY OF ANALYSIS

No.	Sample ID	Mercury in Soil	Moisture Content	Total Recoverable Elements in Soil/Waste
025	0407_QC175_200626	1	1	7

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks-Addtional**
Order Number	**610.30041**
Samples	25

LABORATORY DETAILS

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Laboratory	SGS Alexandria Environmental
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Telephone	+61 2 8594 0400
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SGS Reference	**SE208133B R0**
Date Received	7/8/2020
Date Reported	12/8/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

SIGNATORIES

[redacted]

Chemist | Senior Organic Chemist/Metals Chemist | Metals/Inorganics Team Leader

[redacted]

Organic Section Head

VOC's in Soil [AN433] Tested: 10/8/2020

PARAMETER	UOM	LOR	0407_QC170_20062(SOIL - 26/6/2020 SE208133B.023	0407_QC171_20062(SOIL - 26/6/2020 SE208133B.024	0407_QC175_20062(SOIL - 26/6/2020 SE208133B.025
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	<1
Chloromethane	mg/kg	1	<1	<1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	<0.1
Bromomethane	mg/kg	1	<1	<1	<1
Chloroethane	mg/kg	1	<1	<1	<1
Trichlorofluoromethane	mg/kg	1	<1	<1	<1
Acetone (2-propanone)	mg/kg	10	<10	<10	<10
Iodomethane	mg/kg	5	<5	<5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1	<0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5	<0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
Vinyl acetate	mg/kg	10	<10	<10	<10
MEK (2-butanone)	mg/kg	10	<10	<10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1	<0.1	<0.1
Chloroform	mg/kg	0.1	<0.1	<0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	<0.1
Benzene	mg/kg	0.1	<0.1	<0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	<0.1
2-nitropropane	mg/kg	10	<10	<10	<10
Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
Toluene	mg/kg	0.1	<0.1	<0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5	<5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
Bromoform	mg/kg	0.1	<0.1	<0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2	<0.2	<0.2
cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	<0.1
o-xylene	mg/kg	0.1	<0.1	<0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3	<0.3	<0.3
1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	<1
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1	<0.1	<0.1

VOC's in Soil [AN433] Tested: 10/8/2020 (continued)

PARAMETER	UOM	LOR	0407_QC170_20062(SOIL - 26/6/2020 SE208133B.023	0407_QC171_20062(SOIL - 26/6/2020 SE208133B.024	0407_QC175_20062(SOIL - 26/6/2020 SE208133B.025
n-propylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1	<0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	<0.1
Total BTEX	mg/kg	0.6	<0.6	<0.6	<0.6
Total VOC*	mg/kg	24	<24	<24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	<1.8

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 10/8/2020

PARAMETER	UOM	LOR	0407_QC170_20062(SOIL - 26/6/2020 SE208133B.023	0407_QC171_20062(SOIL - 26/6/2020 SE208133B.024	0407_QC175_20062(SOIL - 26/6/2020 SE208133B.025
Benzene (F0)	mg/kg	0.1	<0.1	<0.1	<0.1
TRH C6-C9	mg/kg	20	<20	<20	<20
TRH C6-C10	mg/kg	25	<25	<25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	<25

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 10/8/2020

PARAMETER	UOM	LOR	0407_QC170_20062(SOIL - 26/6/2020 SE208133B.023	0407_QC171_20062(SOIL - 26/6/2020 SE208133B.024	0407_QC175_20062(SOIL - 26/6/2020 SE208133B.025
TRH C10-C14	mg/kg	20	<20	<20	<20
TRH C15-C28	mg/kg	45	<45	<45	<45
TRH C29-C36	mg/kg	45	<45	<45	<45
TRH C37-C40	mg/kg	100	<100	<100	<100
TRH >C10-C16	mg/kg	25	<25	<25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25	<25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90	<90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120	<120	<120
TRH C10-C36 Total	mg/kg	110	<110	<110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210	<210	<210

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 10/8/2020

PARAMETER	UOM	LOR	0407_QC170_20062(SOIL - 26/6/2020 SE208133B.023	0407_QC171_20062(SOIL - 26/6/2020 SE208133B.024	0407_QC175_20062(SOIL - 26/6/2020 SE208133B.025
Naphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1	**0.2**	<0.1
Anthracene	mg/kg	0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1	**0.5**	<0.1
Pyrene	mg/kg	0.1	<0.1	**0.5**	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1	**0.2**	<0.1
Chrysene	mg/kg	0.1	<0.1	**0.3**	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1	**0.2**	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1	**0.2**	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1	**0.3**	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1	**0.2**	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1	**0.2**	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2	**0.3**	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3	**0.4**	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2	**0.4**	<0.2
Total PAH (18)	mg/kg	0.8	<0.8	**2.7**	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8	**2.7**	<0.8

Speciated Phenols in Soil [AN420] Tested: 10/8/2020

PARAMETER	UOM	LOR	0407_QC170_20062(SOIL - 26/6/2020 SE208133B.023	0407_QC171_20062(SOIL - 26/6/2020 SE208133B.024	0407_QC175_20062(SOIL - 26/6/2020 SE208133B.025
Phenol	mg/kg	0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1	<1	<1
Total Cresol	mg/kg	1.5	<1.5	<1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5	<0.5	<0.5
4-nitrophenol	mg/kg	1	<1	<1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1	<1	<1
Pentachlorophenol	mg/kg	0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2	<2	<2
4-chloro-3-methylphenol	mg/kg	2	<2	<2	<2

OC Pesticides in Soil [AN420] Tested: 10/8/2020

PARAMETER	UOM	LOR	0407_QC170_20062(SOIL - 26/6/2020 SE208133B.023	0407_QC171_20062(SOIL - 26/6/2020 SE208133B.024	0407_QC175_20062(SOIL - 26/6/2020 SE208133B.025
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1	<0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1	<0.1	<0.1
Lindane	mg/kg	0.1	<0.1	<0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1	<0.1	<0.1
Aldrin	mg/kg	0.1	<0.1	<0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1	<0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1	<0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1	<0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1	<0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1	<0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2	<0.2	<0.2
Endrin	mg/kg	0.2	<0.2	<0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2	<0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1	<0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1	<0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1	<0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1	<0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1	<0.1	<0.1
Isodrin	mg/kg	0.1	<0.1	<0.1	<0.1
Mirex	mg/kg	0.1	<0.1	<0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1	<1	<1

OP Pesticides in Soil [AN420] Tested: 10/8/2020

PARAMETER	UOM	LOR	0407_QC170_20062(SOIL - 26/6/2020 SE208133B.023	0407_QC171_20062(SOIL - 26/6/2020 SE208133B.024	0407_QC175_20062(SOIL - 26/6/2020 SE208133B.025
Dichlorvos	mg/kg	0.5	<0.5	<0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5	<0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2	<0.2	<0.2
Malathion	mg/kg	0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2	<0.2	<0.2
Methidathion	mg/kg	0.5	<0.5	<0.5	<0.5
Ethion	mg/kg	0.2	<0.2	<0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2	<0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7	<1.7	<1.7

PCBs in Soil [AN420] Tested: 10/8/2020

PARAMETER	UOM	LOR	0407_QC170_20062(SOIL - 26/6/2020 SE208133B.023	0407_QC171_20062(SOIL - 26/6/2020 SE208133B.024	0407_QC175_20062(SOIL - 26/6/2020 SE208133B.025
Arochlor 1016	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2	<0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2	<0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1	<1	<1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 10/8/2020

PARAMETER	UOM	LOR	0407_QC170_20062(SOIL - 26/6/2020 SE208133B.023	0407_QC171_20062(SOIL - 26/6/2020 SE208133B.024	0407_QC175_20062(SOIL - 26/6/2020 SE208133B.025
Arsenic, As	mg/kg	1	<1	**8**	<1
Cadmium, Cd	mg/kg	0.3	<0.3	**0.4**	<0.3
Chromium, Cr	mg/kg	0.5	**2.0**	**24**	<0.5
Copper, Cu	mg/kg	0.5	**6.4**	**61**	<0.5
Lead, Pb	mg/kg	1	**26**	**100**	<1
Nickel, Ni	mg/kg	0.5	**0.8**	**13**	<0.5
Zinc, Zn	mg/kg	2	**20**	**270**	<2.0

Mercury in Soil [AN312] Tested: 10/8/2020

PARAMETER	UOM	LOR	0407_QC170_20062(SOIL - 26/6/2020 SE208133B.023	0407_QC171_20062(SOIL - 26/6/2020 SE208133B.024	0407_QC175_20062(SOIL - 26/6/2020 SE208133B.025
Mercury	mg/kg	0.05	**0.12**	**0.12**	<0.05

Moisture Content [AN002] Tested: 10/8/2020

PARAMETER	UOM	LOR	0407_QC170_20062(SOIL - 26/6/2020 SE208133B.023	0407_QC171_20062(SOIL - 26/6/2020 SE208133B.024	0407_QC175_20062(SOIL - 26/6/2020 SE208133B.025
% Moisture	%w/w	1	**5.3**	**18.4**	**2.8**

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid , mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser . Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents .
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS /ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE208133B R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks-Addtional**
Order Number	**610.30041**
Samples	25

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208133B R0**
Date Received	07 Aug 2020
Date Reported	12 Aug 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Extraction Date	Mercury in Soil	3 items
	Moisture Content	3 items
	OC Pesticides in Soil	3 items
	OP Pesticides in Soil	3 items
	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	3 items
	PCBs in Soil	3 items
	Speciated Phenols in Soil	3 items
	TRH (Total Recoverable Hydrocarbons) in Soil	3 items
	VOC's in Soil	3 items
	Volatile Petroleum Hydrocarbons in Soil	3 items
Analysis Date	Mercury in Soil	3 items

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	3 Soil
Date documentation received	7/8/2020@11:31AM	Type of documentation received	Email
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	3.7°C	Sufficient sample for analysis	Yes
Turnaround time requested	Three Days		

HOLDING TIME SUMMARY

SE208133B R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC170_200626	SE208133B.023	LB206420	26 Jun 2020	07 Aug 2020	24 Jul 2020	10 Aug 2020†	24 Jul 2020	11 Aug 2020†
0407_QC171_200626	SE208133B.024	LB206420	26 Jun 2020	07 Aug 2020	24 Jul 2020	10 Aug 2020†	24 Jul 2020	11 Aug 2020†
0407_QC175_200626	SE208133B.025	LB206420	26 Jun 2020	07 Aug 2020	24 Jul 2020	10 Aug 2020†	24 Jul 2020	11 Aug 2020†

Moisture Content

Method: ME-(AU)-[ENV]AN002

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC170_200626	SE208133B.023	LB206377	26 Jun 2020	07 Aug 2020	10 Jul 2020	10 Aug 2020†	15 Aug 2020	11 Aug 2020
0407_QC171_200626	SE208133B.024	LB206377	26 Jun 2020	07 Aug 2020	10 Jul 2020	10 Aug 2020†	15 Aug 2020	11 Aug 2020
0407_QC175_200626	SE208133B.025	LB206377	26 Jun 2020	07 Aug 2020	10 Jul 2020	10 Aug 2020†	15 Aug 2020	11 Aug 2020

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC170_200626	SE208133B.023	LB206416	26 Jun 2020	07 Aug 2020	10 Jul 2020	10 Aug 2020†	19 Sep 2020	11 Aug 2020
0407_QC171_200626	SE208133B.024	LB206416	26 Jun 2020	07 Aug 2020	10 Jul 2020	10 Aug 2020†	19 Sep 2020	11 Aug 2020
0407_QC175_200626	SE208133B.025	LB206416	26 Jun 2020	07 Aug 2020	10 Jul 2020	10 Aug 2020†	19 Sep 2020	11 Aug 2020

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC170_200626	SE208133B.023	LB206416	26 Jun 2020	07 Aug 2020	10 Jul 2020	10 Aug 2020†	19 Sep 2020	12 Aug 2020
0407_QC171_200626	SE208133B.024	LB206416	26 Jun 2020	07 Aug 2020	10 Jul 2020	10 Aug 2020†	19 Sep 2020	12 Aug 2020
0407_QC175_200626	SE208133B.025	LB206416	26 Jun 2020	07 Aug 2020	10 Jul 2020	10 Aug 2020†	19 Sep 2020	12 Aug 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC170_200626	SE208133B.023	LB206416	26 Jun 2020	07 Aug 2020	10 Jul 2020	10 Aug 2020†	19 Sep 2020	12 Aug 2020
0407_QC171_200626	SE208133B.024	LB206416	26 Jun 2020	07 Aug 2020	10 Jul 2020	10 Aug 2020†	19 Sep 2020	12 Aug 2020
0407_QC175_200626	SE208133B.025	LB206416	26 Jun 2020	07 Aug 2020	10 Jul 2020	10 Aug 2020†	19 Sep 2020	12 Aug 2020

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC170_200626	SE208133B.023	LB206416	26 Jun 2020	07 Aug 2020	10 Jul 2020	10 Aug 2020†	19 Sep 2020	11 Aug 2020
0407_QC171_200626	SE208133B.024	LB206416	26 Jun 2020	07 Aug 2020	10 Jul 2020	10 Aug 2020†	19 Sep 2020	11 Aug 2020
0407_QC175_200626	SE208133B.025	LB206416	26 Jun 2020	07 Aug 2020	10 Jul 2020	10 Aug 2020†	19 Sep 2020	11 Aug 2020

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC170_200626	SE208133B.023	LB206416	26 Jun 2020	07 Aug 2020	10 Jul 2020	10 Aug 2020†	19 Sep 2020	11 Aug 2020
0407_QC171_200626	SE208133B.024	LB206416	26 Jun 2020	07 Aug 2020	10 Jul 2020	10 Aug 2020†	19 Sep 2020	11 Aug 2020
0407_QC175_200626	SE208133B.025	LB206416	26 Jun 2020	07 Aug 2020	10 Jul 2020	10 Aug 2020†	19 Sep 2020	11 Aug 2020

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC170_200626	SE208133B.023	LB206418	26 Jun 2020	07 Aug 2020	23 Dec 2020	10 Aug 2020	23 Dec 2020	11 Aug 2020
0407_QC171_200626	SE208133B.024	LB206418	26 Jun 2020	07 Aug 2020	23 Dec 2020	10 Aug 2020	23 Dec 2020	11 Aug 2020
0407_QC175_200626	SE208133B.025	LB206418	26 Jun 2020	07 Aug 2020	23 Dec 2020	10 Aug 2020	23 Dec 2020	11 Aug 2020

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC170_200626	SE208133B.023	LB206416	26 Jun 2020	07 Aug 2020	10 Jul 2020	10 Aug 2020†	19 Sep 2020	11 Aug 2020
0407_QC171_200626	SE208133B.024	LB206416	26 Jun 2020	07 Aug 2020	10 Jul 2020	10 Aug 2020†	19 Sep 2020	11 Aug 2020
0407_QC175_200626	SE208133B.025	LB206416	26 Jun 2020	07 Aug 2020	10 Jul 2020	10 Aug 2020†	19 Sep 2020	11 Aug 2020

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC170_200626	SE208133B.023	LB206415	26 Jun 2020	07 Aug 2020	10 Jul 2020	10 Aug 2020†	19 Sep 2020	11 Aug 2020
0407_QC171_200626	SE208133B.024	LB206415	26 Jun 2020	07 Aug 2020	10 Jul 2020	10 Aug 2020†	19 Sep 2020	11 Aug 2020
0407_QC175_200626	SE208133B.025	LB206415	26 Jun 2020	07 Aug 2020	10 Jul 2020	10 Aug 2020†	19 Sep 2020	11 Aug 2020

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_QC170_200626	SE208133B.023	LB206415	26 Jun 2020	07 Aug 2020	10 Jul 2020	10 Aug 2020†	19 Sep 2020	11 Aug 2020
0407_QC171_200626	SE208133B.024	LB206415	26 Jun 2020	07 Aug 2020	10 Jul 2020	10 Aug 2020†	19 Sep 2020	11 Aug 2020
0407_QC175_200626	SE208133B.025	LB206415	26 Jun 2020	07 Aug 2020	10 Jul 2020	10 Aug 2020†	19 Sep 2020	11 Aug 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_QC170_200626	SE208133B.023	%	60 - 130%	111
	0407_QC171_200626	SE208133B.024	%	60 - 130%	119
	0407_QC175_200626	SE208133B.025	%	60 - 130%	107

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_QC170_200626	SE208133B.023	%	60 - 130%	93
	0407_QC171_200626	SE208133B.024	%	60 - 130%	88
	0407_QC175_200626	SE208133B.025	%	60 - 130%	91
d14-p-terphenyl (Surrogate)	0407_QC170_200626	SE208133B.023	%	60 - 130%	87
	0407_QC171_200626	SE208133B.024	%	60 - 130%	85
	0407_QC175_200626	SE208133B.025	%	60 - 130%	88

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_QC170_200626	SE208133B.023	%	70 - 130%	93
	0407_QC171_200626	SE208133B.024	%	70 - 130%	88
	0407_QC175_200626	SE208133B.025	%	70 - 130%	91
d14-p-terphenyl (Surrogate)	0407_QC170_200626	SE208133B.023	%	70 - 130%	87
	0407_QC171_200626	SE208133B.024	%	70 - 130%	85
	0407_QC175_200626	SE208133B.025	%	70 - 130%	88
d5-nitrobenzene (Surrogate)	0407_QC170_200626	SE208133B.023	%	70 - 130%	88
	0407_QC171_200626	SE208133B.024	%	70 - 130%	86
	0407_QC175_200626	SE208133B.025	%	70 - 130%	87

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_QC170_200626	SE208133B.023	%	60 - 130%	111
	0407_QC171_200626	SE208133B.024	%	60 - 130%	119
	0407_QC175_200626	SE208133B.025	%	60 - 130%	107

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	0407_QC170_200626	SE208133B.023	%	70 - 130%	86
	0407_QC171_200626	SE208133B.024	%	70 - 130%	79
	0407_QC175_200626	SE208133B.025	%	70 - 130%	89
d5-phenol (Surrogate)	0407_QC170_200626	SE208133B.023	%	50 - 130%	83
	0407_QC171_200626	SE208133B.024	%	50 - 130%	79
	0407_QC175_200626	SE208133B.025	%	50 - 130%	86

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_QC170_200626	SE208133B.023	%	60 - 130%	86
	0407_QC171_200626	SE208133B.024	%	60 - 130%	82
	0407_QC175_200626	SE208133B.025	%	60 - 130%	87
d4-1,2-dichloroethane (Surrogate)	0407_QC170_200626	SE208133B.023	%	60 - 130%	84
	0407_QC171_200626	SE208133B.024	%	60 - 130%	81
	0407_QC175_200626	SE208133B.025	%	60 - 130%	84
d8-toluene (Surrogate)	0407_QC170_200626	SE208133B.023	%	60 - 130%	85
	0407_QC171_200626	SE208133B.024	%	60 - 130%	82
	0407_QC175_200626	SE208133B.025	%	60 - 130%	87

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_QC170_200626	SE208133B.023	%	60 - 130%	86
	0407_QC171_200626	SE208133B.024	%	60 - 130%	82
	0407_QC175_200626	SE208133B.025	%	60 - 130%	87
d4-1,2-dichloroethane (Surrogate)	0407_QC170_200626	SE208133B.023	%	60 - 130%	84
	0407_QC171_200626	SE208133B.024	%	60 - 130%	81
	0407_QC175_200626	SE208133B.025	%	60 - 130%	84
d8-toluene (Surrogate)	0407_QC170_200626	SE208133B.023	%	60 - 130%	85
	0407_QC171_200626	SE208133B.024	%	60 - 130%	82
	0407_QC175_200626	SE208133B.025	%	60 - 130%	87

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result
LB206420.001	Mercury	mg/kg	0.05	<0.05

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB206416.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	107

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB206416.001		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	84
		d14-p-terphenyl (Surrogate)	%	-	100

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB206416.001	Naphthalene	mg/kg	0.1	<0.1
	2-methylnaphthalene	mg/kg	0.1	<0.1
	1-methylnaphthalene	mg/kg	0.1	<0.1
	Acenaphthylene	mg/kg	0.1	<0.1
	Acenaphthene	mg/kg	0.1	<0.1
	Fluorene	mg/kg	0.1	<0.1
	Phenanthrene	mg/kg	0.1	<0.1
	Anthracene	mg/kg	0.1	<0.1
	Fluoranthene	mg/kg	0.1	<0.1
	Pyrene	mg/kg	0.1	<0.1
	Benzo(a)anthracene	mg/kg	0.1	<0.1
	Chrysene	mg/kg	0.1	<0.1
	Benzo(a)pyrene	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB206416.001		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	90
		2-fluorobiphenyl (Surrogate)	%	-	84
		d14-p-terphenyl (Surrogate)	%	-	100

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB206416.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	107

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB206416.001		Phenol	mg/kg	0.5	<0.5
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5
		2-nitrophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
		Pentachlorophenol	mg/kg	0.5	<0.5
		2,4-dinitrophenol	mg/kg	2	<2
		4-chloro-3-methylphenol	mg/kg	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	77
		d5-phenol (Surrogate)	%	-	76

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB206418.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB206416.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number	Parameter	Units	LOR

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB206415.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		o-xylene	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB206415.001	Oxygenated Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	86
		d8-toluene (Surrogate)	%	-	81
		Bromofluorobenzene (Surrogate)	%	-	85
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB206415.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	86

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208133B.025	LB206420.008	Mercury	mg/kg	0.05	<0.05	<0.05	200	0

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208848A.032	LB206416.012		Hexachlorobenzene (HCB)	mg/kg	0.1	0	0	200	0
			Alpha BHC	mg/kg	0.1	0	0	200	0
			Lindane	mg/kg	0.1	0	0	200	0
			Heptachlor	mg/kg	0.1	0	0	200	0
			Aldrin	mg/kg	0.1	0	0	200	0
			Beta BHC	mg/kg	0.1	0	0	200	0
			Delta BHC	mg/kg	0.1	0	0	200	0
			Heptachlor epoxide	mg/kg	0.1	0	0	200	0
			o,p'-DDE	mg/kg	0.1	0	0	200	0
			Alpha Endosulfan	mg/kg	0.2	0	0	200	0
			Gamma Chlordane	mg/kg	0.1	0	0	200	0
			Alpha Chlordane	mg/kg	0.1	0	0	200	0
			trans-Nonachlor	mg/kg	0.1	0	0	200	0
			p,p'-DDE	mg/kg	0.1	0	0	200	0
			Dieldrin	mg/kg	0.2	0	0	200	0
			Endrin	mg/kg	0.2	0	0	200	0
			o,p'-DDD	mg/kg	0.1	0	0	200	0
			o,p'-DDT	mg/kg	0.1	0	0	200	0
			Beta Endosulfan	mg/kg	0.2	0	0	200	0
			p,p'-DDD	mg/kg	0.1	0	0	200	0
			p,p'-DDT	mg/kg	0.1	0	0	200	0
			Endosulfan sulphate	mg/kg	0.1	0	0	200	0
			Endrin Aldehyde	mg/kg	0.1	0	0	200	0
			Methoxychlor	mg/kg	0.1	0	0	200	0
			Endrin Ketone	mg/kg	0.1	0	0	200	0
			Isodrin	mg/kg	0.1	0	0	200	0
			Mirex	mg/kg	0.1	0	0	200	0
			Total CLP OC Pesticides	mg/kg	1	0	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.159	0.163	30	2

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208848A.032	LB206416.014		Dichlorvos	mg/kg	0.5	0	0	200	0
			Dimethoate	mg/kg	0.5	0	0	200	0
			Diazinon (Dimpylate)	mg/kg	0.5	0.012093621	90.011179499	4 200	0
			Fenitrothion	mg/kg	0.2	0	0	200	0
			Malathion	mg/kg	0.2	0	0	200	0
			Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	0	0	200	0
			Parathion-ethyl (Parathion)	mg/kg	0.2	0	0	200	0
			Bromophos Ethyl	mg/kg	0.2	0	0	200	0
			Methidathion	mg/kg	0.5	0	0	200	0
			Ethion	mg/kg	0.2	0	0	200	0
			Azinphos-methyl (Guthion)	mg/kg	0.2	0	0	200	0
			Total OP Pesticides*	mg/kg	1.7	0	0	200	0
		Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.465442870	30.463463865	5 30	0
			d14-p-terphenyl (Surrogate)	mg/kg	-	0.437112183	20.409686165	1 30	6

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE1207831E.04	LB206416.013	Phenol	mg/kg	0.5	0.01	0.01	200	0
8		2-methyl phenol (o-cresol)	mg/kg	0.5	0	0	200	0
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	0	0	200	0
		Total Cresol	mg/kg	1.5	0	0	200	0
		2-chlorophenol	mg/kg	0.5	0	0	200	0
		2,4-dimethylphenol	mg/kg	0.5	0	0	200	0
		2,6-dichlorophenol	mg/kg	0.5	0	0	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Soil (continued) — Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE1207831E.04	LB206416.013		2,4-dichlorophenol	mg/kg	0.5	0	0	200	0
8			2,4,6-trichlorophenol	mg/kg	0.5	0	0	200	0
			2-nitrophenol	mg/kg	0.5	0	0	200	0
			4-nitrophenol	mg/kg	1	0	0	200	0
			2,4,5-trichlorophenol	mg/kg	0.5	0	0	200	0
			2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	0	0	200	0
			Pentachlorophenol	mg/kg	0.5	0	0	200	0
			2,4-dinitrophenol	mg/kg	2	0	0	200	0
			4-chloro-3-methylphenol	mg/kg	2	0	0	200	0
		Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	3.83	3.7	30	3
			d5-phenol (Surrogate)	mg/kg	-	1.53	1.46	30	5

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES — Method: ME-(AU)-[ENV]AN040/AN320

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208133B.025	LB206418.009	Arsenic, As	mg/kg	1	<1	<1	200	0
		Cadmium, Cd	mg/kg	0.3	<0.3	<0.3	200	0
		Chromium, Cr	mg/kg	0.5	<0.5	<0.5	200	0
		Copper, Cu	mg/kg	0.5	<0.5	<0.5	151	0
		Nickel, Ni	mg/kg	0.5	<0.5	<0.5	200	0
		Lead, Pb	mg/kg	1	<1	<1	189	0
		Zinc, Zn	mg/kg	2	<2.0	<2.0	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206420.002	Mercury	mg/kg	0.05	0.22	0.2	70 - 130	108

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206416.002		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	89
		Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	97
		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	91
		Dieldrin	mg/kg	0.2	<0.2	0.2	60 - 140	96
		Endrin	mg/kg	0.2	<0.2	0.2	60 - 140	90
		p,p'-DDT	mg/kg	0.1	0.1	0.2	60 - 140	73
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.16	0.15	40 - 130	103

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206416.002		Dichlorvos	mg/kg	0.5	1.7	2	60 - 140	85
		Diazinon (Dimpylate)	mg/kg	0.5	2.2	2	60 - 140	110
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	2.0	2	60 - 140	102
		Ethion	mg/kg	0.2	1.9	2	60 - 140	96
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	84
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	86

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206416.002		Naphthalene	mg/kg	0.1	4.0	4	60 - 140	100
		Acenaphthylene	mg/kg	0.1	4.0	4	60 - 140	100
		Acenaphthene	mg/kg	0.1	4.2	4	60 - 140	104
		Phenanthrene	mg/kg	0.1	4.3	4	60 - 140	108
		Anthracene	mg/kg	0.1	4.3	4	60 - 140	106
		Fluoranthene	mg/kg	0.1	4.1	4	60 - 140	103
		Pyrene	mg/kg	0.1	4.4	4	60 - 140	109
		Benzo(a)pyrene	mg/kg	0.1	4.7	4	60 - 140	117
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	88
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	84
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	86

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206416.002	Arochlor 1260	mg/kg	0.2	0.3	0.4	60 - 140	79

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206416.002		Phenol	mg/kg	0.5	1.0	1	70 - 130	102
		2,4-dichlorophenol	mg/kg	0.5	1.3	1	70 - 130	125
		2,4,6-trichlorophenol	mg/kg	0.5	0.8	1	70 - 130	75
		Pentachlorophenol	mg/kg	0.5	0.8	1	70 - 130	80
	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.9	5	40 - 130	97
		d5-phenol (Surrogate)	mg/kg	-	2.1	2	40 - 130	103

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206418.002	Arsenic, As	mg/kg	1	330	318.22	80 - 120	103
	Cadmium, Cd	mg/kg	0.3	5.9	5.41	80 - 120	108
	Chromium, Cr	mg/kg	0.5	39	38.31	80 - 120	103
	Copper, Cu	mg/kg	0.5	290	290	80 - 120	100
	Nickel, Ni	mg/kg	0.5	190	187	80 - 120	99
	Lead, Pb	mg/kg	1	93	89.9	80 - 120	103
	Zinc, Zn	mg/kg	2	270	273	80 - 120	100

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206416.002		TRH C10-C14	mg/kg	20	41	40	60 - 140	103
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	90
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	78
	TRH F Bands	TRH >C10-C16	mg/kg	25	40	40	60 - 140	100
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	75
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	80

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206415.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	4.4	5	60 - 140	88
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	5.1	5	60 - 140	103
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	4.9	5	60 - 140	97
	Halogenated	Chlorobenzene	mg/kg	0.1	5.4	5	60 - 140	107
	Monocyclic	Benzene	mg/kg	0.1	5.5	5	60 - 140	109
	Aromatic	Toluene	mg/kg	0.1	5.4	5	60 - 140	108
		Ethylbenzene	mg/kg	0.1	5.4	5	60 - 140	108
		m/p-xylene	mg/kg	0.2	10	10	60 - 140	104
		o-xylene	mg/kg	0.1	5.3	5	60 - 140	106
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.1	10	70 - 130	91
		d8-toluene (Surrogate)	mg/kg	-	9.1	10	70 - 130	91
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.9	10	70 - 130	89
	Trihalomethan	Chloroform	mg/kg	0.1	4.8	5	60 - 140	97

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206415.002		TRH C6-C10	mg/kg	25	90	92.5	60 - 140	97
		TRH C6-C9	mg/kg	20	79	80	60 - 140	99
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	9.1	10	70 - 130	91
		Bromofluorobenzene (Surrogate)	mg/kg	-	8.9	10	70 - 130	89
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	58	62.5	60 - 140	92

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES — **Method: ME-(AU)-[ENV]AN040/AN320**

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE209475A.00	LB206418.004	Lead, Pb	mg/kg	1	52	<1	50	104

MATRIX SPIKE DUPLICATES

SE208133B R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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This test report shall not be reproduced, except in full.

Hi [redacted]

Can we please schedule analysis for the samples referenced in the table below on a three day turn around.

Sample ID	Lab Report	Analysis Request
0407_QC170_200626	SE208133	Suite A
0407_QC171_200626	SE208133	Suite A
0407_QC175_200626	SE208133	Suite A
0407_TP206_0.5_200618	SE207831	Suite A
BH011_1.0_200625	SE208848	OCP/OPP

Additionally, I'm trying to track down RWBB_QC201_200615. Can you tell me if it was sent to Eurofins as per COC?

Thanks for your help,

SLR

[redacted]
Project Consultant - Land Quality & Remediation

SGS EHS Alexandria Laboratory
SE207831E COC
Received: 07 – Aug – 2020

Please note in response to the COVID-19 Pandemic and physical distancing recom[illegible]
SLR is encouraging staff to work remotely and implement flexible working hours if necessary.
If you have received this email outside of regular office hours, it is not expected that you will respond until your own working hours commence.

d +61 7 3858 4887
m [redacted]
e [redacted]@slrconsulting.com

SLR Consulting Australia Pty Ltd
Level 2, 15 Astor Terrace, Brisbane, QLD, Australia, 4000

WINNERS: RoSPA Gold Award, 2017
WINNERS: International Business Excellence Award, 2016

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SAMPLE RECEIPT ADVICE

SE207831E

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks-Additional**
Order Number	**610.30041**
Samples	48

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Fri 7/8/2020
Report Due	Wed 12/8/2020
SGS Reference	**SE207831E**

SUBMISSION DETAILS

This is to confirm that 48 samples were received on Friday 7/8/2020. Results are expected to be ready by COB Wednesday 12/8/2020. Please quote SGS reference SE207831E when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	1 Soil
Date documentation received	7/8/2020!@11:31am	Type of documentation received	Email
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	8°C	Sufficient sample for analysis	Yes
Turnaround time requested	Three Days		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

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SAMPLE RECEIPT ADVICE

SE207831E

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks-Additional

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Soil	OP Pesticides in Soil	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	PCBs in Soil	Speciated Phenols in Soil	TRH (Total Recoverable Hydrocarbons) in Soil	VOC's in Soil	Volatile Petroleum Hydrocarbons in Soil
048	0407_TP206_0.5_200618	29	14	26	11	18	10	81	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE207831E

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks-Additional

SUMMARY OF ANALYSIS

No.	Sample ID	Mercury in Soil	Moisture Content	Total Recoverable Elements in Soil/Waste
048	0407_TP206_0.5_200618	1	1	7

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks-Additional**
Order Number	**610.30041**
Samples	48

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207831E R0**
Date Received	7/8/2020
Date Reported	12/8/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

SIGNATORIES

[redacted]

Chemist | Metals/Inorganics Team Leader | Organic Section Head

VOC's in Soil [AN433] Tested: 11/8/2020

PARAMETER	UOM	LOR	0407_TP206_0.5_20(618 SOIL - 18/6/2020 SE207831E.048
Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
Chloromethane	mg/kg	1	<1
Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
Bromomethane	mg/kg	1	<1
Chloroethane	mg/kg	1	<1
Trichlorofluoromethane	mg/kg	1	<1
Acetone (2-propanone)	mg/kg	10	<10
Iodomethane	mg/kg	5	<5
1,1-dichloroethene	mg/kg	0.1	<0.1
Acrylonitrile	mg/kg	0.1	<0.1
Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
Allyl chloride	mg/kg	0.1	<0.1
Carbon disulfide	mg/kg	0.5	<0.5
trans-1,2-dichloroethene	mg/kg	0.1	<0.1
MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
1,1-dichloroethane	mg/kg	0.1	<0.1
Vinyl acetate	mg/kg	10	<10
MEK (2-butanone)	mg/kg	10	<10
cis-1,2-dichloroethene	mg/kg	0.1	<0.1
Bromochloromethane	mg/kg	0.1	<0.1
Chloroform	mg/kg	0.1	<0.1
2,2-dichloropropane	mg/kg	0.1	<0.1
1,2-dichloroethane	mg/kg	0.1	<0.1
1,1,1-trichloroethane	mg/kg	0.1	<0.1
1,1-dichloropropene	mg/kg	0.1	<0.1
Carbon tetrachloride	mg/kg	0.1	<0.1
Benzene	mg/kg	0.1	<0.1
Dibromomethane	mg/kg	0.1	<0.1
1,2-dichloropropane	mg/kg	0.1	<0.1
Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
2-nitropropane	mg/kg	10	<10
Bromodichloromethane	mg/kg	0.1	<0.1
MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
cis-1,3-dichloropropene	mg/kg	0.1	<0.1
trans-1,3-dichloropropene	mg/kg	0.1	<0.1
1,1,2-trichloroethane	mg/kg	0.1	<0.1
Toluene	mg/kg	0.1	<0.1
1,3-dichloropropane	mg/kg	0.1	<0.1
Chlorodibromomethane	mg/kg	0.1	<0.1
2-hexanone (MBK)	mg/kg	5	<5
1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
Chlorobenzene	mg/kg	0.1	<0.1
Ethylbenzene	mg/kg	0.1	<0.1
Bromoform	mg/kg	0.1	<0.1
m/p-xylene	mg/kg	0.2	<0.2
cis-1,4-dichloro-2-butene	mg/kg	1	<1
Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
o-xylene	mg/kg	0.1	<0.1
Total Xylenes	mg/kg	0.3	<0.3
1,2,3-trichloropropane	mg/kg	0.1	<0.1
trans-1,4-dichloro-2-butene	mg/kg	1	<1
Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
Bromobenzene	mg/kg	0.1	<0.1

VOC's in Soil [AN433] Tested: 11/8/2020 (continued)

PARAMETER	UOM	LOR	0407_TP206_0.5_20(618 SOIL - 18/6/2020 SE207831E.048
n-propylbenzene	mg/kg	0.1	<0.1
2-chlorotoluene	mg/kg	0.1	<0.1
4-chlorotoluene	mg/kg	0.1	<0.1
1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
tert-butylbenzene	mg/kg	0.1	<0.1
1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
sec-butylbenzene	mg/kg	0.1	<0.1
1,3-dichlorobenzene	mg/kg	0.1	<0.1
1,4-dichlorobenzene	mg/kg	0.1	<0.1
p-isopropyltoluene	mg/kg	0.1	<0.1
1,2-dichlorobenzene	mg/kg	0.1	<0.1
n-butylbenzene	mg/kg	0.1	<0.1
1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
Naphthalene	mg/kg	0.1	<0.1
Hexachlorobutadiene	mg/kg	0.1	<0.1
1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
Total BTEX	mg/kg	0.6	<0.6
Total VOC*	mg/kg	24	<24
Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0
Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8

Volatile Petroleum Hydrocarbons in Soil [AN433] Tested: 11/8/2020

PARAMETER	UOM	LOR	0407_TP206_0.5_20(618 SOIL - 18/6/2020 SE207831E.048
Benzene (F0)	mg/kg	0.1	<0.1
TRH C6-C9	mg/kg	20	<20
TRH C6-C10	mg/kg	25	<25
TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25

TRH (Total Recoverable Hydrocarbons) in Soil [AN403] Tested: 11/8/2020

PARAMETER	UOM	LOR	0407_TP206_0.5_20(618 SOIL - 18/6/2020 SE207831E.048
TRH C10-C14	mg/kg	20	<20
TRH C15-C28	mg/kg	45	<45
TRH C29-C36	mg/kg	45	<45
TRH C37-C40	mg/kg	100	<100
TRH >C10-C16	mg/kg	25	<25
TRH >C10-C16 - Naphthalene (F2)	mg/kg	25	<25
TRH >C16-C34 (F3)	mg/kg	90	<90
TRH >C34-C40 (F4)	mg/kg	120	<120
TRH C10-C36 Total	mg/kg	110	<110
TRH >C10-C40 Total (F bands)	mg/kg	210	<210

PAH (Polynuclear Aromatic Hydrocarbons) in Soil [AN420] Tested: 11/8/2020

PARAMETER	UOM	LOR	0407_TP206_0.5_20(618 SOIL - 18/6/2020 SE207831E.048
Naphthalene	mg/kg	0.1	<0.1
2-methylnaphthalene	mg/kg	0.1	<0.1
1-methylnaphthalene	mg/kg	0.1	<0.1
Acenaphthylene	mg/kg	0.1	<0.1
Acenaphthene	mg/kg	0.1	<0.1
Fluorene	mg/kg	0.1	<0.1
Phenanthrene	mg/kg	0.1	<0.1
Anthracene	mg/kg	0.1	<0.1
Fluoranthene	mg/kg	0.1	<0.1
Pyrene	mg/kg	0.1	<0.1
Benzo(a)anthracene	mg/kg	0.1	<0.1
Chrysene	mg/kg	0.1	<0.1
Benzo(b&j)fluoranthene	mg/kg	0.1	<0.1
Benzo(k)fluoranthene	mg/kg	0.1	<0.1
Benzo(a)pyrene	mg/kg	0.1	<0.1
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
Benzo(ghi)perylene	mg/kg	0.1	<0.1
Carcinogenic PAHs, BaP TEQ <LOR=0	TEQ (mg/kg)	0.2	<0.2
Carcinogenic PAHs, BaP TEQ <LOR=LOR	TEQ (mg/kg)	0.3	<0.3
Carcinogenic PAHs, BaP TEQ <LOR=LOR/2	TEQ (mg/kg)	0.2	<0.2
Total PAH (18)	mg/kg	0.8	<0.8
Total PAH (NEPM/WHO 16)	mg/kg	0.8	<0.8

Speciated Phenols in Soil [AN420] Tested: 11/8/2020

PARAMETER	UOM	LOR	0407_TP206_0.5_20(618 SOIL - 18/6/2020 SE207831E.048
Phenol	mg/kg	0.5	<0.5
2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
Total Cresol	mg/kg	1.5	<1.5
2-chlorophenol	mg/kg	0.5	<0.5
2,4-dimethylphenol	mg/kg	0.5	<0.5
2,6-dichlorophenol	mg/kg	0.5	<0.5
2,4-dichlorophenol	mg/kg	0.5	<0.5
2,4,6-trichlorophenol	mg/kg	0.5	<0.5
2-nitrophenol	mg/kg	0.5	<0.5
4-nitrophenol	mg/kg	1	<1
2,4,5-trichlorophenol	mg/kg	0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
Pentachlorophenol	mg/kg	0.5	<0.5
2,4-dinitrophenol	mg/kg	2	<2
4-chloro-3-methylphenol	mg/kg	2	<2

OC Pesticides in Soil [AN420] Tested: 11/8/2020

PARAMETER	UOM	LOR	0407_TP206_0.5_20(618 SOIL - 18/6/2020 SE207831E.048
Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
Alpha BHC	mg/kg	0.1	<0.1
Lindane	mg/kg	0.1	<0.1
Heptachlor	mg/kg	0.1	<0.1
Aldrin	mg/kg	0.1	<0.1
Beta BHC	mg/kg	0.1	<0.1
Delta BHC	mg/kg	0.1	<0.1
Heptachlor epoxide	mg/kg	0.1	<0.1
o,p'-DDE	mg/kg	0.1	<0.1
Alpha Endosulfan	mg/kg	0.2	<0.2
Gamma Chlordane	mg/kg	0.1	<0.1
Alpha Chlordane	mg/kg	0.1	<0.1
trans-Nonachlor	mg/kg	0.1	<0.1
p,p'-DDE	mg/kg	0.1	<0.1
Dieldrin	mg/kg	0.2	<0.2
Endrin	mg/kg	0.2	<0.2
o,p'-DDD	mg/kg	0.1	<0.1
o,p'-DDT	mg/kg	0.1	<0.1
Beta Endosulfan	mg/kg	0.2	<0.2
p,p'-DDD	mg/kg	0.1	<0.1
p,p'-DDT	mg/kg	0.1	<0.1
Endosulfan sulphate	mg/kg	0.1	<0.1
Endrin Aldehyde	mg/kg	0.1	<0.1
Methoxychlor	mg/kg	0.1	<0.1
Endrin Ketone	mg/kg	0.1	<0.1
Isodrin	mg/kg	0.1	<0.1
Mirex	mg/kg	0.1	<0.1
Total CLP OC Pesticides	mg/kg	1	<1

OP Pesticides in Soil [AN420] Tested: 11/8/2020

PARAMETER	UOM	LOR	0407_TP206_0.5_20(618 SOIL - 18/6/2020 SE207831E.048
Dichlorvos	mg/kg	0.5	<0.5
Dimethoate	mg/kg	0.5	<0.5
Diazinon (Dimpylate)	mg/kg	0.5	<0.5
Fenitrothion	mg/kg	0.2	<0.2
Malathion	mg/kg	0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
Bromophos Ethyl	mg/kg	0.2	<0.2
Methidathion	mg/kg	0.5	<0.5
Ethion	mg/kg	0.2	<0.2
Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
Total OP Pesticides*	mg/kg	1.7	<1.7

PCBs in Soil [AN420] Tested: 11/8/2020

PARAMETER	UOM	LOR	0407_TP206_0.5_20(618 SOIL - 18/6/2020 SE207831E.048
Arochlor 1016	mg/kg	0.2	<0.2
Arochlor 1221	mg/kg	0.2	<0.2
Arochlor 1232	mg/kg	0.2	<0.2
Arochlor 1242	mg/kg	0.2	<0.2
Arochlor 1248	mg/kg	0.2	<0.2
Arochlor 1254	mg/kg	0.2	<0.2
Arochlor 1260	mg/kg	0.2	<0.2
Arochlor 1262	mg/kg	0.2	<0.2
Arochlor 1268	mg/kg	0.2	<0.2
Total PCBs (Arochlors)	mg/kg	1	<1

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES [AN040/AN320] Tested: 11/8/2020

PARAMETER	UOM	LOR	0407_TP206_0.5_20(618 SOIL - 18/6/2020 SE207831E.048
Arsenic, As	mg/kg	1	**4**
Cadmium, Cd	mg/kg	0.3	<0.3
Chromium, Cr	mg/kg	0.5	**3.7**
Copper, Cu	mg/kg	0.5	**9.1**
Lead, Pb	mg/kg	1	<1
Nickel, Ni	mg/kg	0.5	**24**
Zinc, Zn	mg/kg	2	**24**

Mercury in Soil [AN312] Tested: 11/8/2020

PARAMETER	UOM	LOR	0407_TP206_0.5_20(618 SOIL - 18/6/2020 SE207831E.048
Mercury	mg/kg	0.05	**0.47**

Moisture Content [AN002] Tested: 11/8/2020

PARAMETER	UOM	LOR	0407_TP206_0.5_20(618 SOIL - 18/6/2020 SE207831E.048
% Moisture	%w/w	1	**4.3**

METHOD	METHODOLOGY SUMMARY
AN002	The test is carried out by drying (at either 40°C or 105°C) a known mass of sample in a weighed evaporating basin. After fully dry the sample is re-weighed. Samples such as sludge and sediment having high percentages of moisture will take some time in a drying oven for complete removal of water.
AN040/AN320	A portion of sample is digested with nitric acid to decompose organic matter and hydrochloric acid to complete the digestion of metals. The digest is then analysed by ICP OES with metals results reported on the dried sample basis. Based on USEPA method 200.8 and 6010C.
AN040	A portion of sample is digested with Nitric acid to decompose organic matter and Hydrochloric acid to complete the digestion of metals and then filtered for analysis by ASS or ICP as per USEPA Method 200.8.
AN312	Mercury by Cold Vapour AAS in Soils: After digestion with nitric acid, hydrogen peroxide and hydrochloric acid, mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). F2 is reported directly and also corrected by subtracting Naphthalene (from VOC method AN433) where available.
AN403	Additionally, the volatile C6-C9 fraction may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoverable Hydrocarbons - Silica (TRH-Si) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents .
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE207831E R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks-Additional**
Order Number	**610.30041**
Samples	48

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE207831E R0**
Date Received	07 Aug 2020
Date Reported	12 Aug 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Extraction Date	Mercury in Soil	1 item
	OC Pesticides in Soil	1 item
	OP Pesticides in Soil	1 item
	PAH (Polynuclear Aromatic Hydrocarbons) in Soil	1 item
	PCBs in Soil	1 item
	Speciated Phenols in Soil	1 item
	TRH (Total Recoverable Hydrocarbons) in Soil	1 item
	VOC's in Soil	1 item
	Volatile Petroleum Hydrocarbons in Soil	1 item
Analysis Date	Mercury in Soil	1 item

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	1 Soil
Date documentation received	7/8/2020!@11:31am	Type of documentation received	Email
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	8°C	Sufficient sample for analysis	Yes
Turnaround time requested	Three Days		

HOLDING TIME SUMMARY

SE207831E R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP206_0.5_200618	SE207831E.048	LB206467	18 Jun 2020	07 Aug 2020	16 Jul 2020	11 Aug 2020†	16 Jul 2020	11 Aug 2020†

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP206_0.5_200618	SE207831E.048	LB206452	18 Jun 2020	07 Aug 2020	02 Jul 2020	11 Aug 2020†	20 Sep 2020	11 Aug 2020

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP206_0.5_200618	SE207831E.048	LB206452	18 Jun 2020	07 Aug 2020	02 Jul 2020	11 Aug 2020†	20 Sep 2020	11 Aug 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP206_0.5_200618	SE207831E.048	LB206452	18 Jun 2020	07 Aug 2020	02 Jul 2020	11 Aug 2020†	20 Sep 2020	11 Aug 2020

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP206_0.5_200618	SE207831E.048	LB206452	18 Jun 2020	07 Aug 2020	02 Jul 2020	11 Aug 2020†	20 Sep 2020	11 Aug 2020

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP206_0.5_200618	SE207831E.048	LB206452	18 Jun 2020	07 Aug 2020	02 Jul 2020	11 Aug 2020†	20 Sep 2020	11 Aug 2020

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP197_0.1_200619	SE207831E.038	LB206511	19 Jun 2020	07 Aug 2020	16 Dec 2020	11 Aug 2020	16 Dec 2020	11 Aug 2020
0407_TP206_0.5_200618	SE207831E.048	LB206512	18 Jun 2020	07 Aug 2020	15 Dec 2020	11 Aug 2020	15 Dec 2020	11 Aug 2020

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP206_0.5_200618	SE207831E.048	LB206452	18 Jun 2020	07 Aug 2020	02 Jul 2020	11 Aug 2020†	20 Sep 2020	11 Aug 2020

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP206_0.5_200618	SE207831E.048	LB206438	18 Jun 2020	07 Aug 2020	02 Jul 2020	11 Aug 2020†	20 Sep 2020	11 Aug 2020

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
0407_TP206_0.5_200618	SE207831E.048	LB206438	18 Jun 2020	07 Aug 2020	02 Jul 2020	11 Aug 2020†	20 Sep 2020	11 Aug 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP206_0.5_200618	SE207831E.048	%	60 - 130%	117

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP206_0.5_200618	SE207831E.048	%	60 - 130%	92
d14-p-terphenyl (Surrogate)	0407_TP206_0.5_200618	SE207831E.048	%	60 - 130%	93

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	0407_TP206_0.5_200618	SE207831E.048	%	70 - 130%	92
d14-p-terphenyl (Surrogate)	0407_TP206_0.5_200618	SE207831E.048	%	70 - 130%	93
d5-nitrobenzene (Surrogate)	0407_TP206_0.5_200618	SE207831E.048	%	70 - 130%	85

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	0407_TP206_0.5_200618	SE207831E.048	%	60 - 130%	117

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	0407_TP206_0.5_200618	SE207831E.048	%	70 - 130%	77
d5-phenol (Surrogate)	0407_TP206_0.5_200618	SE207831E.048	%	50 - 130%	77

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP206_0.5_200618	SE207831E.048	%	60 - 130%	79
d4-1,2-dichloroethane (Surrogate)	0407_TP206_0.5_200618	SE207831E.048	%	60 - 130%	75
d8-toluene (Surrogate)	0407_TP206_0.5_200618	SE207831E.048	%	60 - 130%	76

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	0407_TP206_0.5_200618	SE207831E.048	%	60 - 130%	79
d4-1,2-dichloroethane (Surrogate)	0407_TP206_0.5_200618	SE207831E.048	%	60 - 130%	75
d8-toluene (Surrogate)	0407_TP206_0.5_200618	SE207831E.048	%	60 - 130%	76

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result
LB206467.001	Mercury	mg/kg	0.05	<0.05

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB206452.001		Hexachlorobenzene (HCB)	mg/kg	0.1	<0.1
		Alpha BHC	mg/kg	0.1	<0.1
		Lindane	mg/kg	0.1	<0.1
		Heptachlor	mg/kg	0.1	<0.1
		Aldrin	mg/kg	0.1	<0.1
		Beta BHC	mg/kg	0.1	<0.1
		Delta BHC	mg/kg	0.1	<0.1
		Heptachlor epoxide	mg/kg	0.1	<0.1
		Alpha Endosulfan	mg/kg	0.2	<0.2
		Gamma Chlordane	mg/kg	0.1	<0.1
		Alpha Chlordane	mg/kg	0.1	<0.1
		p,p'-DDE	mg/kg	0.1	<0.1
		Dieldrin	mg/kg	0.2	<0.2
		Endrin	mg/kg	0.2	<0.2
		Beta Endosulfan	mg/kg	0.2	<0.2
		p,p'-DDD	mg/kg	0.1	<0.1
		p,p'-DDT	mg/kg	0.1	<0.1
		Endosulfan sulphate	mg/kg	0.1	<0.1
		Endrin Aldehyde	mg/kg	0.1	<0.1
		Methoxychlor	mg/kg	0.1	<0.1
		Endrin Ketone	mg/kg	0.1	<0.1
		Isodrin	mg/kg	0.1	<0.1
		Mirex	mg/kg	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	107

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB206452.001		Dichlorvos	mg/kg	0.5	<0.5
		Dimethoate	mg/kg	0.5	<0.5
		Diazinon (Dimpylate)	mg/kg	0.5	<0.5
		Fenitrothion	mg/kg	0.2	<0.2
		Malathion	mg/kg	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	<0.2
		Parathion-ethyl (Parathion)	mg/kg	0.2	<0.2
		Bromophos Ethyl	mg/kg	0.2	<0.2
		Methidathion	mg/kg	0.5	<0.5
		Ethion	mg/kg	0.2	<0.2
		Azinphos-methyl (Guthion)	mg/kg	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	100
		d14-p-terphenyl (Surrogate)	%	-	98

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB206452.001	Naphthalene	mg/kg	0.1	<0.1
	2-methylnaphthalene	mg/kg	0.1	<0.1
	1-methylnaphthalene	mg/kg	0.1	<0.1
	Acenaphthylene	mg/kg	0.1	<0.1
	Acenaphthene	mg/kg	0.1	<0.1
	Fluorene	mg/kg	0.1	<0.1
	Phenanthrene	mg/kg	0.1	<0.1
	Anthracene	mg/kg	0.1	<0.1
	Fluoranthene	mg/kg	0.1	<0.1
	Pyrene	mg/kg	0.1	<0.1
	Benzo(a)anthracene	mg/kg	0.1	<0.1
	Chrysene	mg/kg	0.1	<0.1
	Benzo(a)pyrene	mg/kg	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB206452.001		Indeno(1,2,3-cd)pyrene	mg/kg	0.1	<0.1
		Dibenzo(ah)anthracene	mg/kg	0.1	<0.1
		Benzo(ghi)perylene	mg/kg	0.1	<0.1
		Total PAH (18)	mg/kg	0.8	<0.8
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	98
		2-fluorobiphenyl (Surrogate)	%	-	100
		d14-p-terphenyl (Surrogate)	%	-	98

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB206452.001		Arochlor 1016	mg/kg	0.2	<0.2
		Arochlor 1221	mg/kg	0.2	<0.2
		Arochlor 1232	mg/kg	0.2	<0.2
		Arochlor 1242	mg/kg	0.2	<0.2
		Arochlor 1248	mg/kg	0.2	<0.2
		Arochlor 1254	mg/kg	0.2	<0.2
		Arochlor 1260	mg/kg	0.2	<0.2
		Arochlor 1262	mg/kg	0.2	<0.2
		Arochlor 1268	mg/kg	0.2	<0.2
		Total PCBs (Arochlors)	mg/kg	1	<1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	107

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB206452.001		Phenol	mg/kg	0.5	<0.5
		2-methyl phenol (o-cresol)	mg/kg	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	mg/kg	1	<1
		2-chlorophenol	mg/kg	0.5	<0.5
		2,4-dimethylphenol	mg/kg	0.5	<0.5
		2,6-dichlorophenol	mg/kg	0.5	<0.5
		2,4-dichlorophenol	mg/kg	0.5	<0.5
		2,4,6-trichlorophenol	mg/kg	0.5	<0.5
		2-nitrophenol	mg/kg	0.5	<0.5
		4-nitrophenol	mg/kg	1	<1
		2,4,5-trichlorophenol	mg/kg	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	mg/kg	1	<1
		Pentachlorophenol	mg/kg	0.5	<0.5
		2,4-dinitrophenol	mg/kg	2	<2
		4-chloro-3-methylphenol	mg/kg	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	77
		d5-phenol (Surrogate)	%	-	76

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result
LB206512.001	Arsenic, As	mg/kg	1	<1
	Cadmium, Cd	mg/kg	0.3	<0.3
	Chromium, Cr	mg/kg	0.5	<0.5
	Copper, Cu	mg/kg	0.5	<0.5
	Nickel, Ni	mg/kg	0.5	<0.5
	Lead, Pb	mg/kg	1	<1
	Zinc, Zn	mg/kg	2	<2.0

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB206452.001	TRH C10-C14	mg/kg	20	<20
	TRH C15-C28	mg/kg	45	<45
	TRH C29-C36	mg/kg	45	<45
	TRH C37-C40	mg/kg	100	<100
	TRH C10-C36 Total	mg/kg	110	<110

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number	Parameter	Units	LOR

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB206438.001	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1
		1,2-dichloropropane	mg/kg	0.1	<0.1
		cis-1,3-dichloropropene	mg/kg	0.1	<0.1
		trans-1,3-dichloropropene	mg/kg	0.1	<0.1
		1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1
		Chloromethane	mg/kg	1	<1
		Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1
		Bromomethane	mg/kg	1	<1
		Chloroethane	mg/kg	1	<1
		Trichlorofluoromethane	mg/kg	1	<1
		Iodomethane	mg/kg	5	<5
		1,1-dichloroethene	mg/kg	0.1	<0.1
		Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5
		Allyl chloride	mg/kg	0.1	<0.1
		trans-1,2-dichloroethene	mg/kg	0.1	<0.1
		1,1-dichloroethane	mg/kg	0.1	<0.1
		cis-1,2-dichloroethene	mg/kg	0.1	<0.1
		Bromochloromethane	mg/kg	0.1	<0.1
		1,2-dichloroethane	mg/kg	0.1	<0.1
		1,1,1-trichloroethane	mg/kg	0.1	<0.1
		1,1-dichloropropene	mg/kg	0.1	<0.1
		Carbon tetrachloride	mg/kg	0.1	<0.1
		Dibromomethane	mg/kg	0.1	<0.1
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1
		1,1,2-trichloroethane	mg/kg	0.1	<0.1
		1,3-dichloropropane	mg/kg	0.1	<0.1
		Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1
		1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1
		cis-1,4-dichloro-2-butene	mg/kg	1	<1
		1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1
		1,2,3-trichloropropane	mg/kg	0.1	<0.1
		trans-1,4-dichloro-2-butene	mg/kg	1	<1
		1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1
		Hexachlorobutadiene	mg/kg	0.1	<0.1
	Halogenated Aromatics	Chlorobenzene	mg/kg	0.1	<0.1
		Bromobenzene	mg/kg	0.1	<0.1
		2-chlorotoluene	mg/kg	0.1	<0.1
		4-chlorotoluene	mg/kg	0.1	<0.1
		1,3-dichlorobenzene	mg/kg	0.1	<0.1
		1,4-dichlorobenzene	mg/kg	0.1	<0.1
		1,2-dichlorobenzene	mg/kg	0.1	<0.1
		1,2,4-trichlorobenzene	mg/kg	0.1	<0.1
		1,2,3-trichlorobenzene	mg/kg	0.1	<0.1
	Monocyclic Aromatic Hydrocarbons	Benzene	mg/kg	0.1	<0.1
		Toluene	mg/kg	0.1	<0.1
		Ethylbenzene	mg/kg	0.1	<0.1
		m/p-xylene	mg/kg	0.2	<0.2
		Styrene (Vinyl benzene)	mg/kg	0.1	<0.1
		o-xylene	mg/kg	0.1	<0.1
		Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1
		n-propylbenzene	mg/kg	0.1	<0.1
		1,3,5-trimethylbenzene	mg/kg	0.1	<0.1
		tert-butylbenzene	mg/kg	0.1	<0.1
		1,2,4-trimethylbenzene	mg/kg	0.1	<0.1
		sec-butylbenzene	mg/kg	0.1	<0.1
		p-isopropyltoluene	mg/kg	0.1	<0.1
		n-butylbenzene	mg/kg	0.1	<0.1
	Nitrogenous Compounds	Acrylonitrile	mg/kg	0.1	<0.1
		2-nitropropane	mg/kg	10	<10
	Oxygenated Compounds	Acetone (2-propanone)	mg/kg	10	<10

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB206438.001	Oxygenated Compounds	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1
		Vinyl acetate	mg/kg	10	<10
		MEK (2-butanone)	mg/kg	10	<10
		MIBK (4-methyl-2-pentanone)	mg/kg	1	<1
		2-hexanone (MBK)	mg/kg	5	<5
	Polycyclic VOCs	Naphthalene	mg/kg	0.1	<0.1
	Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	84
		d8-toluene (Surrogate)	%	-	81
		Bromofluorobenzene (Surrogate)	%	-	85
	Totals	Total BTEX	mg/kg	0.6	<0.6
		Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
		Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8
	Trihalomethanes	Chloroform	mg/kg	0.1	<0.1
		Bromodichloromethane	mg/kg	0.1	<0.1
		Chlorodibromomethane	mg/kg	0.1	<0.1
		Bromoform	mg/kg	0.1	<0.1

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB206438.001		TRH C6-C9	mg/kg	20	<20
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	84

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207831E.048	LB206438.004	Fumigants	2,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,3-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dibromoethane (EDB)	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	mg/kg	1	<1	<1	200	0
		Aliphatics	Chloromethane	mg/kg	1	<1	<1	200	0
			Vinyl chloride (Chloroethene)	mg/kg	0.1	<0.1	<0.1	200	0
			Bromomethane	mg/kg	1	<1	<1	200	0
			Chloroethane	mg/kg	1	<1	<1	200	0
			Trichlorofluoromethane	mg/kg	1	<1	<1	200	0
			Iodomethane	mg/kg	5	<5	<5	200	0
			1,1-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Dichloromethane (Methylene chloride)	mg/kg	0.5	<0.5	<0.5	200	0
			Allyl chloride	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,2-dichloroethene	mg/kg	0.1	<0.1	<0.1	200	0
			Bromochloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,1-dichloropropene	mg/kg	0.1	<0.1	<0.1	200	0
			Carbon tetrachloride	mg/kg	0.1	<0.1	<0.1	200	0
			Dibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,2-trichloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	mg/kg	0.1	<0.1	<0.1	200	0
			1,1,1,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			cis-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,1,2,2-tetrachloroethane	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			trans-1,4-dichloro-2-butene	mg/kg	1	<1	<1	200	0
			1,2-dibromo-3-chloropropane	mg/kg	0.1	<0.1	<0.1	200	0
			Hexachlorobutadiene	mg/kg	0.1	<0.1	<0.1	200	0
		Halogenated	Chlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatics	Bromobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			2-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			4-chlorotoluene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,4-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2-dichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,3-trichlorobenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Monocyclic	Benzene	mg/kg	0.1	<0.1	<0.1	200	0
		Aromatic	Toluene	mg/kg	0.1	<0.1	<0.1	200	0
			Ethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			m/p-xylene	mg/kg	0.2	<0.2	<0.2	200	0
			Styrene (Vinyl benzene)	mg/kg	0.1	<0.1	<0.1	200	0
			o-xylene	mg/kg	0.1	<0.1	<0.1	200	0
			Isopropylbenzene (Cumene)	mg/kg	0.1	<0.1	<0.1	200	0
			n-propylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,3,5-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			tert-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			1,2,4-trimethylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			sec-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
			p-isopropyltoluene	mg/kg	0.1	<0.1	<0.1	200	0
			n-butylbenzene	mg/kg	0.1	<0.1	<0.1	200	0
		Nitrogenous	Acrylonitrile	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	2-nitropropane	mg/kg	10	<10	<10	200	0
		Oxygenated	Acetone (2-propanone)	mg/kg	10	<10	<10	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOC's in Soil (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207831E.048	LB206438.004	Oxygenated	MtBE (Methyl-tert-butyl ether)	mg/kg	0.1	<0.1	<0.1	200	0
		Compounds	Vinyl acetate	mg/kg	10	<10	<10	200	0
			MEK (2-butanone)	mg/kg	10	<10	<10	200	0
			MIBK (4-methyl-2-pentanone)	mg/kg	1	<1	<1	200	0
			2-hexanone (MBK)	mg/kg	5	<5	<5	200	0
		Polycyclic	Naphthalene	mg/kg	0.1	<0.1	<0.1	200	0
		Sulphonated	Carbon disulfide	mg/kg	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.5	8.4	50	11
			d8-toluene (Surrogate)	mg/kg	-	7.6	8.1	50	7
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.9	8.5	50	7
		Totals	Total Xylenes	mg/kg	0.3	<0.3	<0.3	200	0
			Total BTEX	mg/kg	0.6	<0.6	<0.6	200	0
			Total VOC*	mg/kg	24	<24	<24	200	0
			Total Volatile Chlorinated Hydrocarbons*	mg/kg	3	<3.0	<3.0	200	0
			Total Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
			Total Other Chlorinated Hydrocarbons VIC EPA*	mg/kg	1.8	<1.8	<1.8	200	0
		Trihalomethan	Chloroform	mg/kg	0.1	<0.1	<0.1	200	0
		es	Bromodichloromethane	mg/kg	0.1	<0.1	<0.1	200	0
			Chlorodibromomethane	mg/kg	0.1	<0.1	<0.1	200	0
			Bromoform	mg/kg	0.1	<0.1	<0.1	200	0

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE207831E.048	LB206438.004		TRH C6-C10	mg/kg	25	<25	<25	200	0
			TRH C6-C9	mg/kg	20	<20	<20	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	7.5	8.4	30	11
			d8-toluene (Surrogate)	mg/kg	-	7.6	8.1	30	7
			Bromofluorobenzene (Surrogate)	mg/kg	-	7.9	8.5	30	7
		VPH F Bands	Benzene (F0)	mg/kg	0.1	<0.1	<0.1	200	0
			TRH C6-C10 minus BTEX (F1)	mg/kg	25	<25	<25	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury in Soil

Method: ME-(AU)-[ENV]AN312

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206467.002	Mercury	mg/kg	0.05	0.22	0.2	70 - 130	112

OC Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206452.002		Heptachlor	mg/kg	0.1	0.2	0.2	60 - 140	89
		Aldrin	mg/kg	0.1	0.2	0.2	60 - 140	97
		Delta BHC	mg/kg	0.1	0.2	0.2	60 - 140	91
		Dieldrin	mg/kg	0.2	<0.2	0.2	60 - 140	96
		Endrin	mg/kg	0.2	<0.2	0.2	60 - 140	90
		p,p'-DDT	mg/kg	0.1	0.1	0.2	60 - 140	73
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	mg/kg	-	0.16	0.15	40 - 130	103

OP Pesticides in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206452.002		Dichlorvos	mg/kg	0.5	1.5	2	60 - 140	75
		Diazinon (Dimpylate)	mg/kg	0.5	1.7	2	60 - 140	87
		Chlorpyrifos (Chlorpyrifos Ethyl)	mg/kg	0.2	1.9	2	60 - 140	94
		Ethion	mg/kg	0.2	1.6	2	60 - 140	82
	Surrogates	2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	94
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	90

PAH (Polynuclear Aromatic Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206452.002		Naphthalene	mg/kg	0.1	4.4	4	60 - 140	111
		Acenaphthylene	mg/kg	0.1	4.2	4	60 - 140	104
		Acenaphthene	mg/kg	0.1	4.7	4	60 - 140	116
		Phenanthrene	mg/kg	0.1	4.6	4	60 - 140	114
		Anthracene	mg/kg	0.1	4.3	4	60 - 140	108
		Fluoranthene	mg/kg	0.1	4.2	4	60 - 140	105
		Pyrene	mg/kg	0.1	4.2	4	60 - 140	106
		Benzo(a)pyrene	mg/kg	0.1	4.6	4	60 - 140	116
	Surrogates	d5-nitrobenzene (Surrogate)	mg/kg	-	0.4	0.5	40 - 130	88
		2-fluorobiphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	94
		d14-p-terphenyl (Surrogate)	mg/kg	-	0.5	0.5	40 - 130	90

PCBs in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206452.002	Arochlor 1260	mg/kg	0.2	0.3	0.4	60 - 140	79

Speciated Phenols in Soil

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206452.002		Phenol	mg/kg	0.5	1.0	1	70 - 130	102
		2,4-dichlorophenol	mg/kg	0.5	1.3	1	70 - 130	125
		2,4,6-trichlorophenol	mg/kg	0.5	0.8	1	70 - 130	75
		Pentachlorophenol	mg/kg	0.5	0.8	1	70 - 130	80
	Surrogates	2,4,6-Tribromophenol (Surrogate)	mg/kg	-	4.9	5	40 - 130	97
		d5-phenol (Surrogate)	mg/kg	-	2.1	2	40 - 130	103

Total Recoverable Elements in Soil/Waste Solids/Materials by ICPOES

Method: ME-(AU)-[ENV]AN040/AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206512.002	Arsenic, As	mg/kg	1	310	318.22	80 - 120	99
	Cadmium, Cd	mg/kg	0.3	5.6	5.41	80 - 120	104
	Chromium, Cr	mg/kg	0.5	38	38.31	80 - 120	98
	Copper, Cu	mg/kg	0.5	280	290	80 - 120	96
	Nickel, Ni	mg/kg	0.5	180	187	80 - 120	95
	Lead, Pb	mg/kg	1	88	89.9	80 - 120	98
	Zinc, Zn	mg/kg	2	260	273	80 - 120	96

TRH (Total Recoverable Hydrocarbons) in Soil

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

TRH (Total Recoverable Hydrocarbons) in Soil (continued)

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206452.002		TRH C10-C14	mg/kg	20	43	40	60 - 140	108
		TRH C15-C28	mg/kg	45	<45	40	60 - 140	93
		TRH C29-C36	mg/kg	45	<45	40	60 - 140	83
	TRH F Bands	TRH >C10-C16	mg/kg	25	43	40	60 - 140	108
		TRH >C16-C34 (F3)	mg/kg	90	<90	40	60 - 140	83
		TRH >C34-C40 (F4)	mg/kg	120	<120	20	60 - 140	85

VOC's in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206438.002	Halogenated	1,1-dichloroethene	mg/kg	0.1	4.4	5	60 - 140	88
	Aliphatics	1,2-dichloroethane	mg/kg	0.1	5.1	5	60 - 140	103
		Trichloroethene (Trichloroethylene -TCE)	mg/kg	0.1	4.9	5	60 - 140	97
	Halogenated	Chlorobenzene	mg/kg	0.1	5.4	5	60 - 140	107
	Monocyclic	Benzene	mg/kg	0.1	5.0	5	60 - 140	100
	Aromatic	Toluene	mg/kg	0.1	5.1	5	60 - 140	103
		Ethylbenzene	mg/kg	0.1	5.1	5	60 - 140	103
		m/p-xylene	mg/kg	0.2	10	10	60 - 140	101
		o-xylene	mg/kg	0.1	5.0	5	60 - 140	100
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.9	10	70 - 130	89
		d8-toluene (Surrogate)	mg/kg	-	8.5	10	70 - 130	85
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.4	10	70 - 130	94
	Trihalomethan	Chloroform	mg/kg	0.1	4.8	5	60 - 140	97

Volatile Petroleum Hydrocarbons in Soil

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB206438.002		TRH C6-C10	mg/kg	25	90	92.5	60 - 140	97
		TRH C6-C9	mg/kg	20	79	80	60 - 140	99
	Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/kg	-	8.9	10	70 - 130	89
		Bromofluorobenzene (Surrogate)	mg/kg	-	9.4	10	70 - 130	94
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	mg/kg	25	59	62.5	60 - 140	95

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

QC Sample	Sample Number	Parameter	Units	LOR

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client only. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law.

This test report shall not be reproduced, except in full.

000664

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

SLR

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- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT:	DHA
PROJECT:	Randwick Barracks
PROJECT NUMBER:	610.30041
PROJECT MANAGER:	[redacted]
PM CONTACT No:	[redacted]
LABORATORY:	SGS
LABORATORY ADDRESS:	Sydney
SAMPLER:	[redacted]
SAMPLER CONTACT No:	[redacted]
Email Reports and Invoices to:	LGoslde@slrconsulting.com

Turnaround Time (TAT)

☑ Standard TAT

☐ Non Standard or Urgent TAT

Required TAT:

COC Number 1 of 3

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: Suite A	Hold	Additional Information (Comment on any gross contamination or specific requirements)
	RWBB_TP44_0.1_200617	17.6.20	Soil		X		
	RWBB_TP44_0.5_200617				X		
	RWBB_TP45_0.1_200617				X		
	RWBB_TP45_0.5_200617				X		
	RWBB_TP45_1.0_200617					X	
	RWBB_TP54_0.1_200617				X		
	RWBB_TP54_0.5_200617				X		
	RWBB_TP54_1.0_200617					X	
	RWBB_TP63_0.1_200617				X		
	RWBB_TP63_0.5_200617				X		
	RWBB_QC101_200617				X		
	RWBB_QC209_200617	↓	↓		* Forward to Eurofins for Suite A		

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	**Received by**	Sign [redacted]	Date / Time 18/6/20	**Temperature Received:**
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	# 726660

000665

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

SLR

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- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT:	DHA
PROJECT:	Randwick Barracks
PROJECT NUMBER:	610.30041
PROJECT MANAGER:	[redacted]
PM CONTACT No:	
LABORATORY:	SGS
LABORATORY ADDRESS:	Sydney
SAMPLER:	[redacted]
SAMPLER CONTACT No:	
Email Reports and Invoices to:	LGRSYD@slrconsulting.com

Turnaround Time (TAT)

☑ Standard TAT

☐ Non Standard or Urgent TAT

Required TAT:

COC Number: 2 of 3

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A							Hold	Additional Information (Comment on any gross contamination or specific requirements)
	RWBB_TP68_0.1_200617	17-6-20	Soil		X								
	RWBB_TP68_0.5_200617				X								
	RWBB_TP68_1.0_200617											X	
	RWBB_TP69_0.1_200617				X								
	RWBB_TP69_0.5_200617											X	
	RWBB_TP69_1.0_200617				X								
	RWBB_TP70_0.1_200617				X								
	RWBB_TP70_0.5_200617				X								
	RWBB_TP70_1.0_200617											X	
	RWBB_TP71_0.1_200617				X								
	RWBB_TP71_0.5_200617				X								
	RWBB_TP71_1.0_200617											X	

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	Received by	Sign [redacted]	Date / Time 18/6/20
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time

Temperature Received: #726660

000666

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

SLR

PROJECT OFFICE (Tick one)

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- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT: DHA

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGER: [redacted]

PM CONTACT No:

LABORATORY: SGS

LABORATORY ADDRESS: Sydney

SAMPLER: [redacted]

SAMPLER CONTACT No:

Email Reports and Invoices to: LGRS1@slrconsulting.com

Turnaround Time (TAT)

☑ Standard TAT

☐ Non Standard or Urgent TAT

Required TAT:

COC Number 3 of 3

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	Asbestos	Hold	Additional Information (Comment on any gross contamination or specific requirements)
	RWBB_TP72_0.1_20617	17:20	Soil		X			
	RWBB_TP72_0.5_20617						X	
	RWBB_TP72_1.0_20617				X			
	RWBB_QC13_200617				X			
	RWBB_QC213_200617				*Please forward to Eurofins for Suite A.			
	RWBB_TP71_A01_20617		ACM			X		

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	Received by	Sign [redacted]	e / Time 19/6	Temperature Received:
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	# 726660
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

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NATA # 1261 Site # 20794

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Phone : +61 8 9251 9600
NATA # 1261 Site # 23736

ABN – 50 005 085 521 e.mail : EnviroSales@eurofins.com web : www.eurofins.com.au

Sample Receipt Advice

Company name:	**SLR Consulting (Sydney)**
Contact name:	[redacted]
Project name:	RANDWICK BARRACK
Project ID:	610_30041
COC number:	Not provided
Turn around time:	5 Day
Date/Time received:	Jun 18, 2020 3:14 PM
Eurofins reference:	**726660**

Sample information

☑ A detailed list of analytes logged into our LIMS, is included in the attached summary table.

☑ All samples have been received as described on the above COC.

☑ COC has been completed correctly.

☑ Attempt to chill was evident.

☑ Appropriately preserved sample containers have been used.

☑ All samples were received in good condition.

☑ Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.

☑ Appropriate sample containers have been used.

☒ Split sample sent to requested external lab.

☒ Some samples have been subcontracted.

N/A Custody Seals intact (if used).

Contact notes

If you have any questions with respect to these samples please contact:

[redacted] on Phone : [redacted] or by e.mail: [redacted]@eurofins.com

Results will be delivered electronically via e.mail to [redacted]@slrconsulting.com.

Note: A copy of these results will also be delivered to the general SLR Consulting (Sydney) email address.

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Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACK
Project ID: 610_30041

Order No.:
Report #: 726660
Phone: 02 9428 8100
Fax:

Received: Jun 18, 2020 3:14 PM
Due: Jun 25, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7
Melbourne Laboratory - NATA Site # 1254 & 14271										
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	RWBB_QC209-200617	Jun 17, 2020		Soil	S20-Jn32919	X	X	X	X	X
Test Counts						1	1	1	1	1

Certificate of Analysis

eurofins | Environment Testing

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025–Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus
North Sydney
NSW 2060

Attention:	[redacted]
Report	726660-AID
Project Name	RANDWICK BARRACK
Project ID	610_30041
Received Date	Jun 18, 2020
Date Reported	Jun 25, 2020

Methodology:

Asbestos Fibre Identification	Conducted in accordance with the Australian Standard AS 4964 – 2004: Method for the Qualitative Identification of Asbestos in Bulk Samples and in-house Method LTM-ASB-8020 by polarised light microscopy (PLM) and dispersion staining (DS) techniques. *NOTE: Positive Trace Analysis results indicate the sample contains detectable respirable fibres.*
Unknown Mineral Fibres	Mineral fibres of unknown type, as determined by PLM with DS, may require another analytical technique, such as Electron Microscopy, to confirm unequivocal identity. *NOTE: While Actinolite, Anthophyllite and Tremolite asbestos may be detected by PLM with DS, due to variability in the optical properties of these materials, AS4964 requires that these are reported as UMF unless confirmed by an independent technique.*
Subsampling Soil Samples	The whole sample submitted is first dried and then passed through a 10mm sieve followed by a 2mm sieve. All fibrous matter greater than 10mm, greater than 2mm as well as the material passing through the 2mm sieve are retained and analysed for the presence of asbestos. If the sub 2mm fraction is greater than approximately 30 to 60g then a sub-sampling routine based on ISO 3082:2009(E) is employed. *NOTE: Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be sub-sampled for trace analysis, in accordance with AS 4964-2004.*
Bonded asbestos-containing material (ACM)	The material is first examined and any fibres isolated for identification by PLM and DS. Where required, interfering matrices may be removed by disintegration using a range of heat, chemical or physical treatments, possibly in combination.The resultant material is then further examined in accordance with AS 4964 - 2004. *NOTE: Even after disintegration it may be difficult to detect the presence of asbestos in some asbestos-containing bulk materials using PLM and DS. This is due to the low grade or small length or diameter of the asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos-containing sealants and mastics, asbestos-containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.*
Limit of Reporting	The performance limitation of the AS 4964 (2004) method for non-homogeneous samples is around 0.1 g/kg (equivalent to 0.01% (w/w)). Where no asbestos is found by PLM and DS, including Trace Analysis, this is considered to be at the nominal reporting limit of 0.01% (w/w). The NEPM screening level of 0.001% (w/w) is intended as an on-site determination, not a laboratory Limit of Reporting (LOR), per se. Examination of a large sample size (e.g. 500 mL) may improve the likelihood of detecting asbestos, particularly AF, to aid assessment against the NEPM criteria. Gravimetric determinations to this level of accuracy are outside of AS 4964 and hence NATA Accreditation does not cover the performance of this service (non-NATA results shown with an asterisk). *NOTE: NATA News March 2014, p.7, states in relation to AS 4964: "This is a qualitative method with a nominal reporting limit of 0.01 % " and that currently in Australia "there is no validated method available for the quantification of asbestos".This report is consistent with the analytical procedures and reporting recommendations in the NEPM and the WA DoH.*

Accredited for compliance with ISO/IEC 17025–Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Project Name RANDWICK BARRACK
Project ID 610_30041
Date Sampled Jun 17, 2020
Report 726660-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
RWBB_QC209-200617	20-Jn32919	Jun 17, 2020	Approximate Sample 86g Sample consisted of: Beige fine-grained sandy soil	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Asbestos - LTM-ASB-8020	Sydney	Jun 22, 2020	Indefinite

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NATA # 1261 Site # 18217

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NATA # 1261 Site # 20794

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Christchurch
43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACK
Project ID: 610_30041

Order No.:
Report #: 726660
Phone: 02 9428 8100
Fax:

Received: Jun 18, 2020 3:14 PM
Due: Jun 25, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271										
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	RWBB_QC209-200617	Jun 17, 2020		Soil	S20-Jn32919	X	X	X	X	X
Test Counts						1	1	1	1	1

Internal Quality Control Review and Glossary

General

1. QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Samples were analysed on an 'as received' basis.
4. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
5. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the Sample Receipt Advice.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

Units

% w/w: weight for weight basis	grams per kilogram
Filter loading:	fibres/100 graticule areas
Reported Concentration:	fibres/mL
Flowrate:	L/min

Terms

Dry	Sample is dried by heating prior to analysis
LOR	Limit of Reporting
COC	Chain of Custody
SRA	Sample Receipt Advice
ISO	International Standards Organisation
AS	Australian Standards
WA DOH	Reference document for the NEPM. Government of Western Australia, Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia (2009), including supporting document Recommended Procedures for Laboratory Analysis of Asbestos in Soil (2011)
NEPM	National Environment Protection (Assessment of Site Contamination) Measure, 2013 (as amended)
ACM	Asbestos Containing Materials. Asbestos contained within a non-asbestos matrix, typically presented in bonded and/or sound condition. For the purposes of the NEPM, ACM is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
AF	Asbestos Fines. Asbestos containing materials, including friable, weathered and bonded materials, able to pass a 7mm x 7mm sieve. Considered under the NEPM as equivalent to “non-bonded / friable”.
FA	Fibrous Asbestos. Asbestos containing materials in a friable and/or severely weathered condition. For the purposes of the NEPM, FA is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
Friable	Asbestos-containing materials of any size that may be broken or crumbled by hand pressure. For the purposes of the NEPM, this includes both AF and FA. It is outside of the laboratory’s remit to assess degree of friability.
Trace Analysis	Analytical procedure used to detect the presence of respirable fibres in the matrix.

Comments

The sample received was not collected in an approved asbestos bag and was therefore sub-sampled from the 250mL glass jar. Valid sub-sampling procedures were applied so as to ensure that the sub-sample to be analysed accurately represented the sample received.

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N/A	Not applicable

Asbestos Counter/Identifier:

[redacted] Senior Analyst-Asbestos (NSW)

Authorised by:

[redacted] Senior Analyst-Asbestos (NSW)

General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

Eurofins shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.

SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus,
North Sydney
NSW 2060

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: [redacted]

Report **726660-S**
Project name RANDWICK BARRACK
Project ID 610_30041
Received Date Jun 18, 2020

Client Sample ID			**RWBB_QC209-200617**
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-Jn32919**
Date Sampled			**Jun 17, 2020**
Test/Reference	LOR	Unit	
Total Recoverable Hydrocarbons - 1999 NEPM Fractions			
TRH C6-C9	20	mg/kg	< 20
TRH C10-C14	20	mg/kg	< 20
TRH C15-C28	50	mg/kg	< 50
TRH C29-C36	50	mg/kg	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50
BTEX			
Benzene	0.1	mg/kg	< 0.1
Toluene	0.1	mg/kg	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2
o-Xylene	0.1	mg/kg	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3
4-Bromofluorobenzene (surr.)	1	%	65
Volatile Organics			
1.1-Dichloroethane	0.5	mg/kg	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5

Client Sample ID			RWBB_QC209-200617
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-Jn32919**
Date Sampled			**Jun 17, 2020**
Test/Reference	LOR	Unit	
Volatile Organics			
Benzene	0.1	mg/kg	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5
Bromoform	0.5	mg/kg	< 0.5
Bromomethane	0.5	mg/kg	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5
Chloroethane	0.5	mg/kg	< 0.5
Chloroform	0.5	mg/kg	< 0.5
Chloromethane	0.5	mg/kg	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1
Iodomethane	0.5	mg/kg	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5
o-Xylene	0.1	mg/kg	< 0.1
Styrene	0.5	mg/kg	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5
Toluene	0.1	mg/kg	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3
Total MAH*	0.5	mg/kg	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5
4-Bromofluorobenzene (surr.)	1	%	65
Toluene-d8 (surr.)	1	%	105
Total Recoverable Hydrocarbons - 2013 NEPM Fractions			
Naphthalene[N02]	0.5	mg/kg	< 0.5
TRH C6-C10	20	mg/kg	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20
TRH >C10-C16	50	mg/kg	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50
TRH >C16-C34	100	mg/kg	< 100
TRH >C34-C40	100	mg/kg	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100

Client Sample ID			RWBB_QC209-200617
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-Jn32919**
Date Sampled			**Jun 17, 2020**
Test/Reference	LOR	Unit	
Polycyclic Aromatic Hydrocarbons			
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2
Acenaphthene	0.5	mg/kg	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5
Anthracene	0.5	mg/kg	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5
Chrysene	0.5	mg/kg	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5
Fluorene	0.5	mg/kg	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5
Naphthalene	0.5	mg/kg	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5
Pyrene	0.5	mg/kg	< 0.5
Total PAH*	0.5	mg/kg	< 0.5
2-Fluorobiphenyl (surr.)	1	%	96
p-Terphenyl-d14 (surr.)	1	%	103
Organochlorine Pesticides			
Chlordanes - Total	0.1	mg/kg	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05
a-BHC	0.05	mg/kg	< 0.05
Aldrin	0.05	mg/kg	< 0.05
b-BHC	0.05	mg/kg	< 0.05
d-BHC	0.05	mg/kg	< 0.05
Dieldrin	0.05	mg/kg	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05
Endrin	0.05	mg/kg	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05
Heptachlor	0.05	mg/kg	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05
Methoxychlor	0.2	mg/kg	< 0.2
Toxaphene	1	mg/kg	< 1
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.2
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.2
Dibutylchlorendate (surr.)	1	%	110
Tetrachloro-m-xylene (surr.)	1	%	106

Client Sample ID			RWBB_QC209-200617
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-Jn32919**
Date Sampled			**Jun 17, 2020**
Test/Reference	LOR	Unit	
Organophosphorus Pesticides			
Azinphos-methyl	0.2	mg/kg	< 0.2
Bolstar	0.2	mg/kg	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2
Coumaphos	2	mg/kg	< 2
Demeton-S	0.2	mg/kg	< 0.2
Demeton-O	0.2	mg/kg	< 0.2
Diazinon	0.2	mg/kg	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2
Dimethoate	0.2	mg/kg	< 0.2
Disulfoton	0.2	mg/kg	< 0.2
EPN	0.2	mg/kg	< 0.2
Ethion	0.2	mg/kg	< 0.2
Ethoprop	0.2	mg/kg	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2
Fenthion	0.2	mg/kg	< 0.2
Malathion	0.2	mg/kg	< 0.2
Merphos	0.2	mg/kg	< 0.2
Methyl parathion	0.2	mg/kg	< 0.2
Mevinphos	0.2	mg/kg	< 0.2
Monocrotophos	2	mg/kg	< 2
Naled	0.2	mg/kg	< 0.2
Omethoate	2	mg/kg	< 2
Phorate	0.2	mg/kg	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2
Ronnel	0.2	mg/kg	< 0.2
Terbufos	0.2	mg/kg	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2
Tokuthion	0.2	mg/kg	< 0.2
Trichloronate	0.2	mg/kg	< 0.2
Triphenylphosphate (surr.)	1	%	106
Polychlorinated Biphenyls			
Aroclor-1016	0.5	mg/kg	< 0.5
Aroclor-1221	0.1	mg/kg	< 0.1
Aroclor-1232	0.5	mg/kg	< 0.5
Aroclor-1242	0.5	mg/kg	< 0.5
Aroclor-1248	0.5	mg/kg	< 0.5
Aroclor-1254	0.5	mg/kg	< 0.5
Aroclor-1260	0.5	mg/kg	< 0.5
Total PCB*	0.5	mg/kg	< 0.5
Dibutylchlorendate (surr.)	1	%	110
Tetrachloro-m-xylene (surr.)	1	%	106

Client Sample ID			RWBB_QC209-200617
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-Jn32919**
Date Sampled			**Jun 17, 2020**
Test/Reference	LOR	Unit	
Phenols (Halogenated)			
2-Chlorophenol	0.5	mg/kg	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1
Pentachlorophenol	1	mg/kg	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10
Total Halogenated Phenol*	1	mg/kg	< 1
Phenols (non-Halogenated)			
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2
2-Nitrophenol	1	mg/kg	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4
4-Nitrophenol	5	mg/kg	< 5
Dinoseb	20	mg/kg	< 20
Phenol	0.5	mg/kg	< 0.5
Total Non-Halogenated Phenol*	20	mg/kg	< 20
Phenol-d6 (surr.)	1	%	64
Heavy Metals			
Arsenic	2	mg/kg	< 2
Cadmium	0.4	mg/kg	< 0.4
Chromium	5	mg/kg	< 5
Copper	5	mg/kg	< 5
Lead	5	mg/kg	< 5
Mercury	0.1	mg/kg	< 0.1
Nickel	5	mg/kg	< 5
Zinc	5	mg/kg	< 5
% Moisture	1	%	3.3

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Sydney	Jun 24, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Sydney	Jun 24, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jun 24, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jun 24, 2020	
- Method: LTM-ORG-2010 TRH C6-C40			
Polycyclic Aromatic Hydrocarbons	Sydney	Jun 24, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (Halogenated)	Sydney	Jun 24, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (non-Halogenated)	Sydney	Jun 24, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Metals M8	Sydney	Jun 24, 2020	180 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Volatile Organics	Sydney	Jun 24, 2020	7 Days
- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices			
Eurofins | mgt Suite B15			
Organochlorine Pesticides	Sydney	Jun 24, 2020	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Organophosphorus Pesticides	Sydney	Jun 24, 2020	14 Days
- Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS			
Polychlorinated Biphenyls	Sydney	Jun 24, 2020	28 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
% Moisture	Sydney	Jun 22, 2020	14 Days
- Method: LTM-GEN-7080 Moisture			

eurofins | Environment Testing

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IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACK
Project ID: 610_30041

Order No.:
Report #: 726660
Phone: 02 9428 8100
Fax:

Received: Jun 18, 2020 3:14 PM
Due: Jun 25, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7
Melbourne Laboratory - NATA Site # 1254 & 14271										
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	RWBB_QC209-200617	Jun 17, 2020		Soil	S20-Jn32919	X	X	X	X	X
Test Counts						1	1	1	1	1

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

****NOTE:** pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram

mg/L: milligrams per litre

ug/L: micrograms per litre

ppm: Parts per million

ppb: Parts per billion

%: Percentage

org/100mL: Organisms per 100 millilitres

NTU: Nephelometric Turbidity Units

MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version 5.3
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling.Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
Method Blank							
BTEX							
Benzene	mg/kg	< 0.1			0.1	Pass	
Toluene	mg/kg	< 0.1			0.1	Pass	
Ethylbenzene	mg/kg	< 0.1			0.1	Pass	
m&p-Xylenes	mg/kg	< 0.2			0.2	Pass	
o-Xylene	mg/kg	< 0.1			0.1	Pass	
Xylenes - Total*	mg/kg	< 0.3			0.3	Pass	
Method Blank							
Volatile Organics							
1.1-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
1.1.1-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.1.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dibromoethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.3-Trichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.4-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.3.5-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.4-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
2-Butanone (MEK)	mg/kg	< 0.5			0.5	Pass	
2-Propanone (Acetone)	mg/kg	< 0.5			0.5	Pass	
4-Chlorotoluene	mg/kg	< 0.5			0.5	Pass	
4-Methyl-2-pentanone (MIBK)	mg/kg	< 0.5			0.5	Pass	
Allyl chloride	mg/kg	< 0.5			0.5	Pass	
Bromobenzene	mg/kg	< 0.5			0.5	Pass	
Bromochloromethane	mg/kg	< 0.5			0.5	Pass	
Bromodichloromethane	mg/kg	< 0.5			0.5	Pass	
Bromoform	mg/kg	< 0.5			0.5	Pass	
Bromomethane	mg/kg	< 0.5			0.5	Pass	
Carbon disulfide	mg/kg	< 0.5			0.5	Pass	
Carbon Tetrachloride	mg/kg	< 0.5			0.5	Pass	
Chlorobenzene	mg/kg	< 0.5			0.5	Pass	
Chloroethane	mg/kg	< 0.5			0.5	Pass	
Chloroform	mg/kg	< 0.5			0.5	Pass	
Chloromethane	mg/kg	< 0.5			0.5	Pass	
cis-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
cis-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Dibromochloromethane	mg/kg	< 0.5			0.5	Pass	
Dibromomethane	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Dichlorodifluoromethane	mg/kg	< 0.5			0.5	Pass	
Iodomethane	mg/kg	< 0.5			0.5	Pass	
Isopropyl benzene (Cumene)	mg/kg	< 0.5			0.5	Pass	
Methylene Chloride	mg/kg	< 0.5			0.5	Pass	
Styrene	mg/kg	< 0.5			0.5	Pass	
Tetrachloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Trichloroethene	mg/kg	< 0.5			0.5	Pass	
Trichlorofluoromethane	mg/kg	< 0.5			0.5	Pass	
Vinyl chloride	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Organochlorine Pesticides							
Chlordanes - Total	mg/kg	< 0.1			0.1	Pass	
4.4'-DDD	mg/kg	< 0.05			0.05	Pass	
4.4'-DDE	mg/kg	< 0.05			0.05	Pass	
4.4'-DDT	mg/kg	< 0.05			0.05	Pass	
a-BHC	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-BHC	mg/kg	< 0.05			0.05	Pass	
d-BHC	mg/kg	< 0.05			0.05	Pass	
Dieldrin	mg/kg	< 0.05			0.05	Pass	
Endosulfan I	mg/kg	< 0.05			0.05	Pass	
Endosulfan II	mg/kg	< 0.05			0.05	Pass	
Endosulfan sulphate	mg/kg	< 0.05			0.05	Pass	
Endrin	mg/kg	< 0.05			0.05	Pass	
Endrin aldehyde	mg/kg	< 0.05			0.05	Pass	
Endrin ketone	mg/kg	< 0.05			0.05	Pass	
g-BHC (Lindane)	mg/kg	< 0.05			0.05	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Heptachlor	mg/kg	< 0.05			0.05	Pass	
Heptachlor epoxide	mg/kg	< 0.05			0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05			0.05	Pass	
Methoxychlor	mg/kg	< 0.2			0.2	Pass	
Toxaphene	mg/kg	< 1			1	Pass	
Method Blank							
Organophosphorus Pesticides							
Azinphos-methyl	mg/kg	< 0.2			0.2	Pass	
Bolstar	mg/kg	< 0.2			0.2	Pass	
Chlorfenvinphos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos-methyl	mg/kg	< 0.2			0.2	Pass	
Coumaphos	mg/kg	< 2			2	Pass	
Demeton-S	mg/kg	< 0.2			0.2	Pass	
Demeton-O	mg/kg	< 0.2			0.2	Pass	
Diazinon	mg/kg	< 0.2			0.2	Pass	
Dichlorvos	mg/kg	< 0.2			0.2	Pass	
Dimethoate	mg/kg	< 0.2			0.2	Pass	
Disulfoton	mg/kg	< 0.2			0.2	Pass	
EPN	mg/kg	< 0.2			0.2	Pass	
Ethion	mg/kg	< 0.2			0.2	Pass	
Ethoprop	mg/kg	< 0.2			0.2	Pass	
Ethyl parathion	mg/kg	< 0.2			0.2	Pass	
Fenitrothion	mg/kg	< 0.2			0.2	Pass	
Fensulfothion	mg/kg	< 0.2			0.2	Pass	
Fenthion	mg/kg	< 0.2			0.2	Pass	
Malathion	mg/kg	< 0.2			0.2	Pass	
Merphos	mg/kg	< 0.2			0.2	Pass	
Methyl parathion	mg/kg	< 0.2			0.2	Pass	
Mevinphos	mg/kg	< 0.2			0.2	Pass	
Monocrotophos	mg/kg	< 2			2	Pass	
Naled	mg/kg	< 0.2			0.2	Pass	
Omethoate	mg/kg	< 2			2	Pass	
Phorate	mg/kg	< 0.2			0.2	Pass	
Pirimiphos-methyl	mg/kg	< 0.2			0.2	Pass	
Pyrazophos	mg/kg	< 0.2			0.2	Pass	
Ronnel	mg/kg	< 0.2			0.2	Pass	
Terbufos	mg/kg	< 0.2			0.2	Pass	
Tetrachlorvinphos	mg/kg	< 0.2			0.2	Pass	
Tokuthion	mg/kg	< 0.2			0.2	Pass	
Trichloronate	mg/kg	< 0.2			0.2	Pass	
Method Blank							
Polychlorinated Biphenyls							
Aroclor-1016	mg/kg	< 0.5			0.5	Pass	
Aroclor-1221	mg/kg	< 0.1			0.1	Pass	
Aroclor-1232	mg/kg	< 0.5			0.5	Pass	
Aroclor-1242	mg/kg	< 0.5			0.5	Pass	
Aroclor-1248	mg/kg	< 0.5			0.5	Pass	
Aroclor-1254	mg/kg	< 0.5			0.5	Pass	
Aroclor-1260	mg/kg	< 0.5			0.5	Pass	
Total PCB*	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Phenols (Halogenated)							
2-Chlorophenol	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2.4-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4.5-Trichlorophenol	mg/kg	< 1			1	Pass	
2.4.6-Trichlorophenol	mg/kg	< 1			1	Pass	
2.6-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
4-Chloro-3-methylphenol	mg/kg	< 1			1	Pass	
Pentachlorophenol	mg/kg	< 1			1	Pass	
Tetrachlorophenols - Total	mg/kg	< 10			10	Pass	
Method Blank							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	mg/kg	< 20			20	Pass	
2-Methyl-4.6-dinitrophenol	mg/kg	< 5			5	Pass	
2-Methylphenol (o-Cresol)	mg/kg	< 0.2			0.2	Pass	
2-Nitrophenol	mg/kg	< 1			1	Pass	
2.4-Dimethylphenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dinitrophenol	mg/kg	< 5			5	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/kg	< 0.4			0.4	Pass	
4-Nitrophenol	mg/kg	< 5			5	Pass	
Dinoseb	mg/kg	< 20			20	Pass	
Phenol	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Nickel	mg/kg	< 5			5	Pass	
Zinc	mg/kg	< 5			5	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	%	107			70-130	Pass	
TRH C10-C14	%	76			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	96			70-130	Pass	
Toluene	%	117			70-130	Pass	
Ethylbenzene	%	124			70-130	Pass	
m&p-Xylenes	%	119			70-130	Pass	
o-Xylene	%	124			70-130	Pass	
Xylenes - Total*	%	121			70-130	Pass	
LCS - % Recovery							
Volatile Organics							
1.1-Dichloroethene	%	88			70-130	Pass	
1.1.1-Trichloroethane	%	87			70-130	Pass	
1.2-Dichlorobenzene	%	91			70-130	Pass	
1.2-Dichloroethane	%	88			70-130	Pass	
Trichloroethene	%	79			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	97			70-130	Pass	
TRH C6-C10	%	108			70-130	Pass	
TRH >C10-C16	%	76			70-130	Pass	
LCS - % Recovery							

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	92			70-130	Pass	
Acenaphthylene	%	92			70-130	Pass	
Anthracene	%	84			70-130	Pass	
Benz(a)anthracene	%	90			70-130	Pass	
Benzo(a)pyrene	%	92			70-130	Pass	
Benzo(b&j)fluoranthene	%	96			70-130	Pass	
Benzo(g.h.i)perylene	%	107			70-130	Pass	
Benzo(k)fluoranthene	%	85			70-130	Pass	
Chrysene	%	91			70-130	Pass	
Dibenz(a.h)anthracene	%	103			70-130	Pass	
Fluoranthene	%	78			70-130	Pass	
Fluorene	%	94			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	97			70-130	Pass	
Naphthalene	%	91			70-130	Pass	
Phenanthrene	%	88			70-130	Pass	
Pyrene	%	82			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	97			70-130	Pass	
4.4'-DDD	%	79			70-130	Pass	
4.4'-DDE	%	92			70-130	Pass	
4.4'-DDT	%	106			70-130	Pass	
a-BHC	%	83			70-130	Pass	
Aldrin	%	79			70-130	Pass	
b-BHC	%	86			70-130	Pass	
d-BHC	%	87			70-130	Pass	
Dieldrin	%	89			70-130	Pass	
Endosulfan I	%	71			70-130	Pass	
Endosulfan II	%	95			70-130	Pass	
Endosulfan sulphate	%	89			70-130	Pass	
Endrin	%	108			70-130	Pass	
Endrin aldehyde	%	112			70-130	Pass	
Endrin ketone	%	87			70-130	Pass	
g-BHC (Lindane)	%	92			70-130	Pass	
Heptachlor	%	100			70-130	Pass	
Heptachlor epoxide	%	74			70-130	Pass	
Hexachlorobenzene	%	83			70-130	Pass	
Methoxychlor	%	106			70-130	Pass	
LCS - % Recovery							
Organophosphorus Pesticides							
Diazinon	%	92			70-130	Pass	
Dimethoate	%	102			70-130	Pass	
Ethion	%	118			70-130	Pass	
Fenitrothion	%	96			70-130	Pass	
Methyl parathion	%	102			70-130	Pass	
Mevinphos	%	111			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls							
Aroclor-1016	%	83			70-130	Pass	
Aroclor-1260	%	85			70-130	Pass	
LCS - % Recovery							
Phenols (Halogenated)							
2-Chlorophenol	%	91			30-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2.4-Dichlorophenol	%	87			30-130	Pass	
2.4.5-Trichlorophenol	%	80			30-130	Pass	
2.4.6-Trichlorophenol	%	80			30-130	Pass	
2.6-Dichlorophenol	%	79			30-130	Pass	
4-Chloro-3-methylphenol	%	77			30-130	Pass	
Pentachlorophenol	%	70			30-130	Pass	
Tetrachlorophenols - Total	%	88			30-130	Pass	
LCS - % Recovery							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	%	81			30-130	Pass	
2-Methyl-4.6-dinitrophenol	%	89			30-130	Pass	
2-Methylphenol (o-Cresol)	%	73			30-130	Pass	
2-Nitrophenol	%	102			30-130	Pass	
2.4-Dimethylphenol	%	74			30-130	Pass	
2.4-Dinitrophenol	%	83			30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	%	73			30-130	Pass	
4-Nitrophenol	%	102			30-130	Pass	
Dinoseb	%	93			30-130	Pass	
Phenol	%	88			30-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	91			70-130	Pass	
Cadmium	%	97			70-130	Pass	
Chromium	%	94			70-130	Pass	
Copper	%	96			70-130	Pass	
Lead	%	93			70-130	Pass	
Mercury	%	96			70-130	Pass	
Nickel	%	95			70-130	Pass	
Zinc	%	92			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C6-C9	S20-Jn35873	NCP	%	75			70-130	Pass	
TRH C10-C14	S20-Jn35873	NCP	%	70			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	S20-Jn35873	NCP	%	89			70-130	Pass	
Toluene	S20-Jn35873	NCP	%	114			70-130	Pass	
Ethylbenzene	S20-Jn35873	NCP	%	112			70-130	Pass	
m&p-Xylenes	S20-Jn35873	NCP	%	111			70-130	Pass	
o-Xylene	S20-Jn35873	NCP	%	109			70-130	Pass	
Xylenes - Total*	S20-Jn35873	NCP	%	111			70-130	Pass	
Spike - % Recovery									
Volatile Organics				Result 1					
1.1.1-Trichloroethane	S20-Jn35158	NCP	%	83			70-130	Pass	
1.2-Dichlorobenzene	S20-Jn35158	NCP	%	87			70-130	Pass	
1.2-Dichloroethane	S20-Jn35158	NCP	%	79			70-130	Pass	
Trichloroethene	S20-Jn35158	NCP	%	78			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
Naphthalene	S20-Jn35873	NCP	%	99			70-130	Pass	
TRH C6-C10	S20-Jn35873	NCP	%	80			70-130	Pass	
TRH >C10-C16	S20-Jn35141	NCP	%	83			70-130	Pass	
Spike - % Recovery									

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	S20-Jn36640	NCP	%	78			70-130	Pass	
Acenaphthylene	S20-Jn36640	NCP	%	71			70-130	Pass	
Anthracene	S20-Jn27250	NCP	%	84			70-130	Pass	
Benz(a)anthracene	S20-Jn36640	NCP	%	92			70-130	Pass	
Benzo(a)pyrene	S20-Jn36640	NCP	%	121			70-130	Pass	
Benzo(b&j)fluoranthene	S20-Jn27250	NCP	%	90			70-130	Pass	
Benzo(g.h.i)perylene	S20-Jn36640	NCP	%	80			70-130	Pass	
Benzo(k)fluoranthene	S20-Jn36640	NCP	%	100			70-130	Pass	
Chrysene	S20-Jn36640	NCP	%	94			70-130	Pass	
Dibenz(a.h)anthracene	S20-Jn27250	NCP	%	100			70-130	Pass	
Fluoranthene	S20-Jn36640	NCP	%	95			70-130	Pass	
Fluorene	S20-Jn27250	NCP	%	97			70-130	Pass	
Indeno(1.2.3-cd)pyrene	S20-Jn36640	NCP	%	72			70-130	Pass	
Naphthalene	S20-Jn36640	NCP	%	79			70-130	Pass	
Phenanthrene	S20-Jn36640	NCP	%	91			70-130	Pass	
Pyrene	S20-Jn36640	NCP	%	97			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	S20-Jn34074	NCP	%	106			70-130	Pass	
Cadmium	S20-Jn34074	NCP	%	101			70-130	Pass	
Chromium	S20-Jn34074	NCP	%	104			70-130	Pass	
Copper	S20-Jn34074	NCP	%	100			70-130	Pass	
Lead	S20-Jn34074	NCP	%	107			70-130	Pass	
Mercury	S20-Jn34074	NCP	%	103			70-130	Pass	
Nickel	S20-Jn34074	NCP	%	98			70-130	Pass	
Zinc	S20-Jn34074	NCP	%	103			70-130	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C6-C9	S20-Jn35872	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	S20-Jn39527	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	S20-Jn39527	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	S20-Jn39527	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S20-Jn35872	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Toluene	S20-Jn35872	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Ethylbenzene	S20-Jn35872	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
m&p-Xylenes	S20-Jn35872	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
o-Xylene	S20-Jn35872	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes - Total*	S20-Jn35872	NCP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
1.1-Dichloroethane	S20-Jn28969	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1-Dichloroethene	S20-Jn28969	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1-Trichloroethane	S20-Jn28969	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	S20-Jn28969	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2-Trichloroethane	S20-Jn28969	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	S20-Jn28969	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dibromoethane	S20-Jn28969	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichlorobenzene	S20-Jn28969	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloroethane	S20-Jn28969	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloropropane	S20-Jn28969	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
1.2.3-Trichloropropane	S20-Jn28969	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trimethylbenzene	S20-Jn28969	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichlorobenzene	S20-Jn28969	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichloropropane	S20-Jn28969	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3.5-Trimethylbenzene	S20-Jn28969	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.4-Dichlorobenzene	S20-Jn28969	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Butanone (MEK)	S20-Jn28969	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Propanone (Acetone)	S20-Jn28969	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chlorotoluene	S20-Jn28969	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Methyl-2-pentanone (MIBK)	S20-Jn28969	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Allyl chloride	S20-Jn28969	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromobenzene	S20-Jn28969	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromochloromethane	S20-Jn28969	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromodichloromethane	S20-Jn28969	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromoform	S20-Jn28969	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromomethane	S20-Jn28969	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon disulfide	S20-Jn28969	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon Tetrachloride	S20-Jn28969	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chlorobenzene	S20-Jn28969	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroethane	S20-Jn28969	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroform	S20-Jn28969	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloromethane	S20-Jn28969	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.2-Dichloroethene	S20-Jn28969	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.3-Dichloropropene	S20-Jn28969	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromochloromethane	S20-Jn28969	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromomethane	S20-Jn28969	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dichlorodifluoromethane	S20-Jn28969	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Iodomethane	S20-Jn28969	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Isopropyl benzene (Cumene)	S20-Jn28969	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Methylene Chloride	S20-Jn28969	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Styrene	S20-Jn28969	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Tetrachloroethene	S20-Jn28969	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.2-Dichloroethene	S20-Jn28969	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.3-Dichloropropene	S20-Jn28969	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichloroethene	S20-Jn28969	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichlorofluoromethane	S20-Jn28969	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Vinyl chloride	S20-Jn28969	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	S20-Jn35872	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	S20-Jn35872	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH >C10-C16	S20-Jn39527	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	S20-Jn39527	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	S20-Jn39527	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	S20-Jn29252	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	S20-Jn29252	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	S20-Jn29252	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	S20-Jn29252	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	S20-Jn29252	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	S20-Jn29252	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	S20-Jn29252	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	S20-Jn29252	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Chrysene	S20-Jn29252	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	S20-Jn29252	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	S20-Jn29252	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	S20-Jn29252	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	S20-Jn29252	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	S20-Jn29252	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	S20-Jn29252	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	S20-Jn29252	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	S20-Jn29252	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	S20-Jn29252	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	S20-Jn29252	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	S20-Jn29252	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-BHC	S20-Jn29252	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	S20-Jn29252	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-BHC	S20-Jn29252	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-BHC	S20-Jn29252	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	S20-Jn29252	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	S20-Jn29252	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	S20-Jn29252	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	S20-Jn29252	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	S20-Jn29252	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	S20-Jn29252	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	S20-Jn29252	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-BHC (Lindane)	S20-Jn29252	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	S20-Jn29252	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	S20-Jn29252	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	S20-Jn29252	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	S20-Jn29252	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Azinphos-methyl	S20-Jn29252	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Bolstar	S20-Jn29252	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorfenvinphos	S20-Jn29252	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos	S20-Jn29252	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos-methyl	S20-Jn29252	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Coumaphos	S20-Jn29252	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Demeton-S	S20-Jn29252	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Demeton-O	S20-Jn29252	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Diazinon	S20-Jn29252	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dichlorvos	S20-Jn29252	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dimethoate	S20-Jn29252	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Disulfoton	S20-Jn29252	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
EPN	S20-Jn29252	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethion	S20-Jn29252	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethoprop	S20-Jn29252	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethyl parathion	S20-Jn29252	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenitrothion	S20-Jn29252	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fensulfothion	S20-Jn29252	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenthion	S20-Jn29252	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Malathion	S20-Jn29252	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Merphos	S20-Jn29252	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Methyl parathion	S20-Jn29252	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	

Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Mevinphos	S20-Jn29252	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Monocrotophos	S20-Jn29252	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Naled	S20-Jn29252	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Omethoate	S20-Jn29252	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Phorate	S20-Jn29252	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pirimiphos-methyl	S20-Jn29252	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pyrazophos	S20-Jn29252	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ronnel	S20-Jn29252	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Terbufos	S20-Jn29252	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tetrachlorvinphos	S20-Jn29252	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tokuthion	S20-Jn29252	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Trichloronate	S20-Jn29252	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Aroclor-1016	S20-Jn27249	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1221	S20-Jn27249	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1232	S20-Jn27249	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1242	S20-Jn27249	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1248	S20-Jn27249	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1254	S20-Jn27249	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1260	S20-Jn27249	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Total PCB*	S20-Jn27249	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	S20-Jn34073	NCP	mg/kg	6.6	8.0	20	30%	Pass	
Cadmium	S20-Jn34073	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	S20-Jn34073	NCP	mg/kg	16	14	9.0	30%	Pass	
Copper	S20-Jn34073	NCP	mg/kg	5.7	6.0	6.0	30%	Pass	
Lead	S20-Jn34073	NCP	mg/kg	9.8	11	16	30%	Pass	
Mercury	S20-Jn34073	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Nickel	S20-Jn34073	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Zinc	S20-Jn34073	NCP	mg/kg	12	19	42	30%	Fail	Q15
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	S20-Jn34077	NCP	%	11	11	1.0	30%	Pass	

Comments

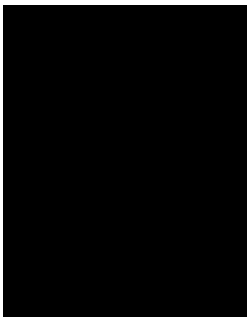
Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
Q15	The RPD reported passes Eurofins Environment Testing's QC - Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report.

Authorised By



Analytical Services Manager
Senior Analyst-Organic (NSW)
Senior Analyst-Metal (NSW)
Senior Analyst-Asbestos (NSW)

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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000661

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

SLR

PROJECT OFFICE (Tick one)
- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☑ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT: DHA

PROJECT: 610.300411

PROJECT NUMBER: Randwick Barracks

PROJECT MANAGER: [redacted]

PM CONTACT No:

COMMENTS OR ADDITIONAL DIRECTIONS

LABORATORY: SGS

LABORATORY ADDRESS: Sydney

SAMPLER: [redacted]

SAMPLER CONTACT No:

Email Reports and Invoices to: LOR549@slrconsulting.com

Turnaround Time (TAT)
- ☑ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT:

COC Number: 1 of 3

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	Asbestos	TRH C6-C10 BTEXN	Hold.	Additional Information (Comment on any gross contamination or specific requirements)
1	RWBB_TP17_0.1_200615	15.6.20	Soil		X	X			
2	RWBB_TP17_0.5_200615				X	X			
	RWBB_TP17_1.0_200615								
3	RWBB_TP18_0.1_200615							X	
4	RWBB_TP18_0.5_200615				X	X			
	RWBB_TP18_1.0_200615				X	X			
5	RWBB_TP09_0.1_200615							X	
6	RWBB_TP09_0.5_200615				X	X			
7	RWBB_QC101_200615				X	X			
8	RWBB_QC501_200615						X		Trip Spike
9	RWBB_QC103_200616	16.6.20	Soil				X		Trip Blank
10	RWBB_QC203_200616	"	"		X				
					X				

SGS EHS Sydney COC

SE207591

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	Received by	Sign [redacted]	Date / Time 16/6 16:30	Temperature Received:	
Relinquished By	Sign	Date / Time	Received by	Sign [redacted]	Date / Time 18/6 11:30 AM	15.00°C	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time		

#726790

000662

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

SLR

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Dawin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☑ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT: DHA

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.300

PROJECT MANAGER:

PM CONTACT No:

COMMENTS OR ADDITIONAL DIRECTIONS

LABORATORY: SGS

LABORATORY ADDRESS: Sydney

SAMPLER:

SAMPLER CONTACT No: [redacted]

Email Reports and Invoices [redacted]@slrconsulting.com

Turnaround Time (TAT)

☑ Standard TAT

☐ Non Standard or Urgent TAT

Required TAT:

COC Number 2 of 3

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: Suite A	Hold.	Additional Information (Comment on any gross contamination or specific requirements)
11	RWBB_QC105_200616	16.6.20	Soil.		X		
12	RWBB_QC205_200616				X		
13	RWBB_TP06_0.1_200616				X		
14	RWBB_TP06_0.5_200616				X		
	RWBB_TP06_1.0_200616						
15	RWBB_TP07_0.1_200616					X	
16	RWBB_TP07_0.5_200616				X		
	RWBB_TP07_1.0_200616				X		
17	RWBB_TP08_0.1_200616					X	
18	RWBB_TP08_0.5_200616				X		
19	RWBB_TP26_0.1_200616				X		
20	RWBB_TP26_0.5_200616				X		

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	Received by	Sign [redacted]	Date / Time 16/6 16.30	Temperature Received:
Relinquished By	Sign	Date / Time	Received by	Sign [redacted]	Date / Time 18/6 11:30am	11°C
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

#726790

Certificate of Analysis

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NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025–Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus
North Sydney
NSW 2060

Attention:	[redacted]
Report	726790-AID
Project Name	RANDWICK BARRACKS
Project ID	610.30041
Received Date	Jun 18, 2020
Date Reported	Jun 26, 2020

Methodology:

Asbestos Fibre Identification	Conducted in accordance with the Australian Standard AS 4964 – 2004: Method for the Qualitative Identification of Asbestos in Bulk Samples and in-house Method LTM-ASB-8020 by polarised light microscopy (PLM) and dispersion staining (DS) techniques. *NOTE: Positive Trace Analysis results indicate the sample contains detectable respirable fibres.*
Unknown Mineral Fibres	Mineral fibres of unknown type, as determined by PLM with DS, may require another analytical technique, such as Electron Microscopy, to confirm unequivocal identity. *NOTE: While Actinolite, Anthophyllite and Tremolite asbestos may be detected by PLM with DS, due to variability in the optical properties of these materials, AS4964 requires that these are reported as UMF unless confirmed by an independent technique.*
Subsampling Soil Samples	The whole sample submitted is first dried and then passed through a 10mm sieve followed by a 2mm sieve. All fibrous matter greater than 10mm, greater than 2mm as well as the material passing through the 2mm sieve are retained and analysed for the presence of asbestos. If the sub 2mm fraction is greater than approximately 30 to 60g then a sub-sampling routine based on ISO 3082:2009(E) is employed. *NOTE: Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be sub-sampled for trace analysis, in accordance with AS 4964-2004.*
Bonded asbestos-containing material (ACM)	The material is first examined and any fibres isolated for identification by PLM and DS. Where required, interfering matrices may be removed by disintegration using a range of heat, chemical or physical treatments, possibly in combination.The resultant material is then further examined in accordance with AS 4964 - 2004. *NOTE: Even after disintegration it may be difficult to detect the presence of asbestos in some asbestos-containing bulk materials using PLM and DS. This is due to the low grade or small length or diameter of the asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos-containing sealants and mastics, asbestos-containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.*
Limit of Reporting	The performance limitation of the AS 4964 (2004) method for non-homogeneous samples is around 0.1 g/kg (equivalent to 0.01% (w/w)). Where no asbestos is found by PLM and DS, including Trace Analysis, this is considered to be at the nominal reporting limit of 0.01% (w/w). The NEPM screening level of 0.001% (w/w) is intended as an on-site determination, not a laboratory Limit of Reporting (LOR), per se. Examination of a large sample size (e.g. 500 mL) may improve the likelihood of detecting asbestos, particularly AF, to aid assessment against the NEPM criteria. Gravimetric determinations to this level of accuracy are outside of AS 4964 and hence NATA Accreditation does not cover the performance of this service (non-NATA results shown with an asterisk). *NOTE: NATA News March 2014, p.7, states in relation to AS 4964: "This is a qualitative method with a nominal reporting limit of 0.01 % " and that currently in Australia "there is no validated method available for the quantification of asbestos".This report is consistent with the analytical procedures and reporting recommendations in the NEPM and the WA DoH.*

Project Name RANDWICK BARRACKS
Project ID 610.30041
Date Sampled Jun 16, 2020
Report 726790-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
RWBB_QC203_200616	20-Jn34165	Jun 16, 2020	Approximate Sample 97g Sample consisted of: Brown coarse-grained sandy soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
RWBB_QC205_200616	20-Jn34166	Jun 16, 2020	Approximate Sample 108g Sample consisted of: Brown coarse-grained sandy soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
RWBB_QC209_200616	20-Jn34167	Jun 16, 2020	Approximate Sample 96g Sample consisted of: Brown coarse-grained sandy soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
RWBB_QC213_200616	20-Jn34168	Jun 16, 2020	Approximate Sample 43g Sample consisted of: Beige fine-grained sandy soil	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Asbestos - LTM-ASB-8020	Sydney	Jun 22, 2020	Indefinite

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Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 726790
Phone: 02 9428 8100
Fax:

Received: Jun 18, 2020 11:30 AM
Due: Jun 25, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271										
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	RWBB_QC203_200616	Jun 16, 2020		Soil	S20-Jn34165	X	X	X	X	X
2	RWBB_QC205_200616	Jun 16, 2020		Soil	S20-Jn34166	X	X	X	X	X
3	RWBB_QC209_200616	Jun 16, 2020		Soil	S20-Jn34167	X	X	X	X	X
4	RWBB_QC213_200616	Jun 16, 2020		Soil	S20-Jn34168	X	X	X	X	X
Test Counts						4	4	4	4	4

Internal Quality Control Review and Glossary

General

1. QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Samples were analysed on an 'as received' basis.
4. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
5. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the Sample Receipt Advice.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

Units

% w/w: weight for weight basis	grams per kilogram
Filter loading:	fibres/100 graticule areas
Reported Concentration:	fibres/mL
Flowrate:	L/min

Terms

Dry	Sample is dried by heating prior to analysis
LOR	Limit of Reporting
COC	Chain of Custody
SRA	Sample Receipt Advice
ISO	International Standards Organisation
AS	Australian Standards
WA DOH	Reference document for the NEPM. Government of Western Australia, Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia (2009), including supporting document Recommended Procedures for Laboratory Analysis of Asbestos in Soil (2011)
NEPM	National Environment Protection (Assessment of Site Contamination) Measure, 2013 (as amended)
ACM	Asbestos Containing Materials. Asbestos contained within a non-asbestos matrix, typically presented in bonded and/or sound condition. For the purposes of the NEPM, ACM is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
AF	Asbestos Fines. Asbestos containing materials, including friable, weathered and bonded materials, able to pass a 7mm x 7mm sieve. Considered under the NEPM as equivalent to “non-bonded / friable”.
FA	Fibrous Asbestos. Asbestos containing materials in a friable and/or severely weathered condition. For the purposes of the NEPM, FA is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
Friable	Asbestos-containing materials of any size that may be broken or crumbled by hand pressure. For the purposes of the NEPM, this includes both AF and FA. It is outside of the laboratory’s remit to assess degree of friability.
Trace Analysis	Analytical procedure used to detect the presence of respirable fibres in the matrix.

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N/A	Not applicable

Asbestos Counter/Identifier:

[redacted] Senior Analyst-Asbestos (NSW)

Authorised by:

[redacted] Senior Analyst-Asbestos (NSW)

General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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Certificate of Analysis

SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus,
North Sydney
NSW 2060

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: [redacted]

Report **726790-S**
Project name RANDWICK BARRACKS
Project ID 610.30041
Received Date Jun 18, 2020

Client Sample ID			RWBB_QC203_200616	RWBB_QC205_200616	RWBB_QC209_200616	RWBB_QC213_200616
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn34165**	**S20-Jn34166**	**S20-Jn34167**	**S20-Jn34168**
Date Sampled			**Jun 16, 2020**	**Jun 16, 2020**	**Jun 16, 2020**	**Jun 16, 2020**
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50	< 50	< 50	< 50
BTEX						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	77	80	75	77
Volatile Organics						
1.1-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			RWBB_QC203_200616	RWBB_QC205_200616	RWBB_QC209_200616	RWBB_QC213_200616
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn34165**	**S20-Jn34166**	**S20-Jn34167**	**S20-Jn34168**
Date Sampled			**Jun 16, 2020**	**Jun 16, 2020**	**Jun 16, 2020**	**Jun 16, 2020**
Test/Reference	LOR	Unit				
Volatile Organics						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromoform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Iodomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Styrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
Total MAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Bromofluorobenzene (surr.)	1	%	77	80	75	77
Toluene-d8 (surr.)	1	%	104	125	110	109
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100	< 100	< 100

Client Sample ID			RWBB_QC203_200616	RWBB_QC205_200616	RWBB_QC209_200616	RWBB_QC213_200616
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn34165**	**S20-Jn34166**	**S20-Jn34167**	**S20-Jn34168**
Date Sampled			**Jun 16, 2020**	**Jun 16, 2020**	**Jun 16, 2020**	**Jun 16, 2020**
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 2	< 2	< 2	< 2
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	< 2	< 2	< 2	< 2
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	2.9	2.9	2.9	2.9
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 2	< 2	< 2	< 2
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 2	< 2	< 2	< 2
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 2	< 2	< 2	< 2
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 2	< 2	< 2	< 2
2-Fluorobiphenyl (surr.)	1	%	79	60	68	64
p-Terphenyl-d14 (surr.)	1	%	98	101	97	85
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
a-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
b-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
d-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Toxaphene	1	mg/kg	< 1	< 1	< 1	< 1
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Dibutylchlorendate (surr.)	1	%	132	147	122	108
Tetrachloro-m-xylene (surr.)	1	%	115	109	113	97

Client Sample ID			RWBB_QC203_200616	RWBB_QC205_200616	RWBB_QC209_200616	RWBB_QC213_200616
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn34165**	**S20-Jn34166**	**S20-Jn34167**	**S20-Jn34168**
Date Sampled			**Jun 16, 2020**	**Jun 16, 2020**	**Jun 16, 2020**	**Jun 16, 2020**
Test/Reference	LOR	Unit				
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Bolstar	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Coumaphos	2	mg/kg	< 2	< 2	< 2	< 2
Demeton-S	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Demeton-O	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Diazinon	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Dimethoate	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Disulfoton	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
EPN	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ethion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ethoprop	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Fenthion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Malathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Merphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Methyl parathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Mevinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Monocrotophos	2	mg/kg	< 2	< 2	< 2	< 2
Naled	0.2	mg/kg	< 2	< 2	< 2	< 2
Omethoate	2	mg/kg	< 2	< 2	< 2	< 2
Phorate	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ronnel	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Terbufos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Tokuthion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Trichloronate	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Triphenylphosphate (surr.)	1	%	96	102	93	69
Polychlorinated Biphenyls						
Aroclor-1016	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1232	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1242	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1248	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1254	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1260	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PCB*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibutylchlorendate (surr.)	1	%	132	147	122	108
Tetrachloro-m-xylene (surr.)	1	%	115	109	113	97

Client Sample ID			RWBB_QC203_200616	RWBB_QC205_200616	RWBB_QC209_200616	RWBB_QC213_200616
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn34165**	**S20-Jn34166**	**S20-Jn34167**	**S20-Jn34168**
Date Sampled			**Jun 16, 2020**	**Jun 16, 2020**	**Jun 16, 2020**	**Jun 16, 2020**
Test/Reference	LOR	Unit				
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1	< 1
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
2-Nitrophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
4-Nitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
Phenol-d6 (surr.)	1	%	81	65	73	64
Heavy Metals						
Arsenic	2	mg/kg	< 2	< 2	< 2	< 2
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	< 5	< 5	< 5	< 5
Copper	5	mg/kg	< 5	< 5	< 5	< 5
Lead	5	mg/kg	17	< 5	< 5	< 5
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	< 5	< 5	< 5	< 5
Zinc	5	mg/kg	12	< 5	16	< 5
% Moisture	1	%	7.4	4.2	4.2	3.7

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Sydney	Jun 24, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Sydney	Jun 24, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jun 24, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jun 24, 2020	
- Method: LTM-ORG-2010 TRH C6-C40			
Polycyclic Aromatic Hydrocarbons	Sydney	Jun 24, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (Halogenated)	Sydney	Jun 24, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (non-Halogenated)	Sydney	Jun 24, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Metals M8	Sydney	Jun 24, 2020	180 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Volatile Organics	Sydney	Jun 24, 2020	7 Days
- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices			
Eurofins | mgt Suite B15			
Organochlorine Pesticides	Sydney	Jun 24, 2020	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Organophosphorus Pesticides	Sydney	Jun 24, 2020	14 Days
- Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS			
Polychlorinated Biphenyls	Sydney	Jun 24, 2020	28 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
% Moisture	Sydney	Jun 22, 2020	14 Days
- Method: LTM-GEN-7080 Moisture			

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Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 726790
Phone: 02 9428 8100
Fax:

Received: Jun 18, 2020 11:30 AM
Due: Jun 25, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7
Melbourne Laboratory - NATA Site # 1254 & 14271										
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	RWBB_QC203_200616	Jun 16, 2020		Soil	S20-Jn34165	X	X	X	X	X
2	RWBB_QC205_200616	Jun 16, 2020		Soil	S20-Jn34166	X	X	X	X	X
3	RWBB_QC209_200616	Jun 16, 2020		Soil	S20-Jn34167	X	X	X	X	X
4	RWBB_QC213_200616	Jun 16, 2020		Soil	S20-Jn34168	X	X	X	X	X
Test Counts						4	4	4	4	4

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

****NOTE:** pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram
mg/L: milligrams per litre
ug/L: micrograms per litre
ppm: Parts per million
ppb: Parts per billion
%: Percentage
org/100mL: Organisms per 100 millilitres
NTU: Nephelometric Turbidity Units
MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version 5.3
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling.Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
Method Blank							
BTEX							
Benzene	mg/kg	< 0.1			0.1	Pass	
Toluene	mg/kg	< 0.1			0.1	Pass	
Ethylbenzene	mg/kg	< 0.1			0.1	Pass	
m&p-Xylenes	mg/kg	< 0.2			0.2	Pass	
o-Xylene	mg/kg	< 0.1			0.1	Pass	
Xylenes - Total*	mg/kg	< 0.3			0.3	Pass	
Method Blank							
Volatile Organics							
1.1-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
1.1.1-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.1.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dibromoethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.3-Trichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.4-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.3.5-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.4-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
2-Butanone (MEK)	mg/kg	< 0.5			0.5	Pass	
2-Propanone (Acetone)	mg/kg	< 0.5			0.5	Pass	
4-Chlorotoluene	mg/kg	< 0.5			0.5	Pass	
4-Methyl-2-pentanone (MIBK)	mg/kg	< 0.5			0.5	Pass	
Allyl chloride	mg/kg	< 0.5			0.5	Pass	
Bromobenzene	mg/kg	< 0.5			0.5	Pass	
Bromochloromethane	mg/kg	< 0.5			0.5	Pass	
Bromodichloromethane	mg/kg	< 0.5			0.5	Pass	
Bromoform	mg/kg	< 0.5			0.5	Pass	
Bromomethane	mg/kg	< 0.5			0.5	Pass	
Carbon disulfide	mg/kg	< 0.5			0.5	Pass	
Carbon Tetrachloride	mg/kg	< 0.5			0.5	Pass	
Chlorobenzene	mg/kg	< 0.5			0.5	Pass	
Chloroethane	mg/kg	< 0.5			0.5	Pass	
Chloroform	mg/kg	< 0.5			0.5	Pass	
Chloromethane	mg/kg	< 0.5			0.5	Pass	
cis-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
cis-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Dibromochloromethane	mg/kg	< 0.5			0.5	Pass	
Dibromomethane	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Dichlorodifluoromethane	mg/kg	< 0.5			0.5	Pass	
Iodomethane	mg/kg	< 0.5			0.5	Pass	
Isopropyl benzene (Cumene)	mg/kg	< 0.5			0.5	Pass	
Methylene Chloride	mg/kg	< 0.5			0.5	Pass	
Styrene	mg/kg	< 0.5			0.5	Pass	
Tetrachloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Trichloroethene	mg/kg	< 0.5			0.5	Pass	
Trichlorofluoromethane	mg/kg	< 0.5			0.5	Pass	
Vinyl chloride	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Organochlorine Pesticides							
Chlordanes - Total	mg/kg	< 0.1			0.1	Pass	
4.4'-DDD	mg/kg	< 0.05			0.05	Pass	
4.4'-DDE	mg/kg	< 0.05			0.05	Pass	
4.4'-DDT	mg/kg	< 0.05			0.05	Pass	
a-BHC	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-BHC	mg/kg	< 0.05			0.05	Pass	
d-BHC	mg/kg	< 0.05			0.05	Pass	
Dieldrin	mg/kg	< 0.05			0.05	Pass	
Endosulfan I	mg/kg	< 0.05			0.05	Pass	
Endosulfan II	mg/kg	< 0.05			0.05	Pass	
Endosulfan sulphate	mg/kg	< 0.05			0.05	Pass	
Endrin	mg/kg	< 0.05			0.05	Pass	
Endrin aldehyde	mg/kg	< 0.05			0.05	Pass	
Endrin ketone	mg/kg	< 0.05			0.05	Pass	
g-BHC (Lindane)	mg/kg	< 0.05			0.05	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Heptachlor	mg/kg	< 0.05			0.05	Pass	
Heptachlor epoxide	mg/kg	< 0.05			0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05			0.05	Pass	
Methoxychlor	mg/kg	< 0.2			0.2	Pass	
Toxaphene	mg/kg	< 1			1	Pass	
Method Blank							
Organophosphorus Pesticides							
Azinphos-methyl	mg/kg	< 0.2			0.2	Pass	
Bolstar	mg/kg	< 0.2			0.2	Pass	
Chlorfenvinphos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos-methyl	mg/kg	< 0.2			0.2	Pass	
Coumaphos	mg/kg	< 2			2	Pass	
Demeton-S	mg/kg	< 0.2			0.2	Pass	
Demeton-O	mg/kg	< 0.2			0.2	Pass	
Diazinon	mg/kg	< 0.2			0.2	Pass	
Dichlorvos	mg/kg	< 0.2			0.2	Pass	
Dimethoate	mg/kg	< 0.2			0.2	Pass	
Disulfoton	mg/kg	< 0.2			0.2	Pass	
EPN	mg/kg	< 0.2			0.2	Pass	
Ethion	mg/kg	< 0.2			0.2	Pass	
Ethoprop	mg/kg	< 0.2			0.2	Pass	
Ethyl parathion	mg/kg	< 0.2			0.2	Pass	
Fenitrothion	mg/kg	< 0.2			0.2	Pass	
Fensulfothion	mg/kg	< 0.2			0.2	Pass	
Fenthion	mg/kg	< 0.2			0.2	Pass	
Malathion	mg/kg	< 0.2			0.2	Pass	
Merphos	mg/kg	< 0.2			0.2	Pass	
Methyl parathion	mg/kg	< 0.2			0.2	Pass	
Mevinphos	mg/kg	< 0.2			0.2	Pass	
Monocrotophos	mg/kg	< 2			2	Pass	
Naled	mg/kg	< 0.2			0.2	Pass	
Omethoate	mg/kg	< 2			2	Pass	
Phorate	mg/kg	< 0.2			0.2	Pass	
Pirimiphos-methyl	mg/kg	< 0.2			0.2	Pass	
Pyrazophos	mg/kg	< 0.2			0.2	Pass	
Ronnel	mg/kg	< 0.2			0.2	Pass	
Terbufos	mg/kg	< 0.2			0.2	Pass	
Tetrachlorvinphos	mg/kg	< 0.2			0.2	Pass	
Tokuthion	mg/kg	< 0.2			0.2	Pass	
Trichloronate	mg/kg	< 0.2			0.2	Pass	
Method Blank							
Polychlorinated Biphenyls							
Aroclor-1016	mg/kg	< 0.5			0.5	Pass	
Aroclor-1221	mg/kg	< 0.1			0.1	Pass	
Aroclor-1232	mg/kg	< 0.5			0.5	Pass	
Aroclor-1242	mg/kg	< 0.5			0.5	Pass	
Aroclor-1248	mg/kg	< 0.5			0.5	Pass	
Aroclor-1254	mg/kg	< 0.5			0.5	Pass	
Aroclor-1260	mg/kg	< 0.5			0.5	Pass	
Total PCB*	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Phenols (Halogenated)							
2-Chlorophenol	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2.4-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4.5-Trichlorophenol	mg/kg	< 1			1	Pass	
2.4.6-Trichlorophenol	mg/kg	< 1			1	Pass	
2.6-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
4-Chloro-3-methylphenol	mg/kg	< 1			1	Pass	
Pentachlorophenol	mg/kg	< 1			1	Pass	
Tetrachlorophenols - Total	mg/kg	< 10			10	Pass	
Method Blank							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	mg/kg	< 20			20	Pass	
2-Methyl-4.6-dinitrophenol	mg/kg	< 5			5	Pass	
2-Methylphenol (o-Cresol)	mg/kg	< 0.2			0.2	Pass	
2-Nitrophenol	mg/kg	< 1			1	Pass	
2.4-Dimethylphenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dinitrophenol	mg/kg	< 5			5	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/kg	< 0.4			0.4	Pass	
4-Nitrophenol	mg/kg	< 5			5	Pass	
Dinoseb	mg/kg	< 20			20	Pass	
Phenol	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Nickel	mg/kg	< 5			5	Pass	
Zinc	mg/kg	< 5			5	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	%	107			70-130	Pass	
TRH C10-C14	%	78			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	86			70-130	Pass	
Toluene	%	81			70-130	Pass	
Ethylbenzene	%	90			70-130	Pass	
m&p-Xylenes	%	99			70-130	Pass	
o-Xylene	%	95			70-130	Pass	
Xylenes - Total*	%	98			70-130	Pass	
LCS - % Recovery							
Volatile Organics							
1.1-Dichloroethene	%	88			70-130	Pass	
1.1.1-Trichloroethane	%	87			70-130	Pass	
1.2-Dichlorobenzene	%	91			70-130	Pass	
1.2-Dichloroethane	%	88			70-130	Pass	
Trichloroethene	%	79			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	88			70-130	Pass	
TRH C6-C10	%	108			70-130	Pass	
TRH >C10-C16	%	81			70-130	Pass	
LCS - % Recovery							

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	94			70-130	Pass	
Acenaphthylene	%	89			70-130	Pass	
Anthracene	%	82			70-130	Pass	
Benz(a)anthracene	%	79			70-130	Pass	
Benzo(a)pyrene	%	84			70-130	Pass	
Benzo(b&j)fluoranthene	%	82			70-130	Pass	
Benzo(g.h.i)perylene	%	108			70-130	Pass	
Benzo(k)fluoranthene	%	102			70-130	Pass	
Chrysene	%	87			70-130	Pass	
Dibenz(a.h)anthracene	%	98			70-130	Pass	
Fluoranthene	%	86			70-130	Pass	
Fluorene	%	87			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	100			70-130	Pass	
Naphthalene	%	88			70-130	Pass	
Phenanthrene	%	89			70-130	Pass	
Pyrene	%	87			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	99			70-130	Pass	
4.4'-DDD	%	84			70-130	Pass	
4.4'-DDE	%	87			70-130	Pass	
4.4'-DDT	%	125			70-130	Pass	
a-BHC	%	91			70-130	Pass	
Aldrin	%	75			70-130	Pass	
b-BHC	%	96			70-130	Pass	
d-BHC	%	90			70-130	Pass	
Dieldrin	%	85			70-130	Pass	
Endosulfan I	%	86			70-130	Pass	
Endosulfan II	%	88			70-130	Pass	
Endosulfan sulphate	%	106			70-130	Pass	
Endrin	%	102			70-130	Pass	
Endrin aldehyde	%	89			70-130	Pass	
Endrin ketone	%	97			70-130	Pass	
g-BHC (Lindane)	%	94			70-130	Pass	
Heptachlor	%	116			70-130	Pass	
Heptachlor epoxide	%	94			70-130	Pass	
Hexachlorobenzene	%	83			70-130	Pass	
Methoxychlor	%	115			70-130	Pass	
LCS - % Recovery							
Organophosphorus Pesticides							
Diazinon	%	88			70-130	Pass	
Dimethoate	%	92			70-130	Pass	
Ethion	%	112			70-130	Pass	
Fenitrothion	%	99			70-130	Pass	
Methyl parathion	%	91			70-130	Pass	
Mevinphos	%	123			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls							
Aroclor-1016	%	86			70-130	Pass	
Aroclor-1260	%	108			70-130	Pass	
LCS - % Recovery							
Phenols (Halogenated)							
2-Chlorophenol	%	99			30-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2.4-Dichlorophenol	%	97			30-130	Pass	
2.4.5-Trichlorophenol	%	90			30-130	Pass	
2.4.6-Trichlorophenol	%	86			30-130	Pass	
2.6-Dichlorophenol	%	82			30-130	Pass	
4-Chloro-3-methylphenol	%	83			30-130	Pass	
Pentachlorophenol	%	79			30-130	Pass	
Tetrachlorophenols - Total	%	72			30-130	Pass	
LCS - % Recovery							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	%	101			30-130	Pass	
2-Methyl-4.6-dinitrophenol	%	121			30-130	Pass	
2-Methylphenol (o-Cresol)	%	75			30-130	Pass	
2-Nitrophenol	%	124			30-130	Pass	
2.4-Dimethylphenol	%	78			30-130	Pass	
2.4-Dinitrophenol	%	120			30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	%	89			30-130	Pass	
4-Nitrophenol	%	101			30-130	Pass	
Dinoseb	%	118			30-130	Pass	
Phenol	%	77			30-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	99			70-130	Pass	
Cadmium	%	98			70-130	Pass	
Chromium	%	98			70-130	Pass	
Copper	%	97			70-130	Pass	
Lead	%	97			70-130	Pass	
Mercury	%	99			70-130	Pass	
Nickel	%	97			70-130	Pass	
Zinc	%	99			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C6-C9	S20-Jn35873	NCP	%	75			70-130	Pass	
TRH C10-C14	S20-Jn30492	NCP	%	94			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	S20-Jn35873	NCP	%	89			70-130	Pass	
Toluene	S20-Jn35873	NCP	%	114			70-130	Pass	
Ethylbenzene	S20-Jn35873	NCP	%	112			70-130	Pass	
m&p-Xylenes	S20-Jn35873	NCP	%	111			70-130	Pass	
o-Xylene	S20-Jn35873	NCP	%	109			70-130	Pass	
Xylenes - Total*	S20-Jn35873	NCP	%	111			70-130	Pass	
Spike - % Recovery									
Volatile Organics				Result 1					
1.1.1-Trichloroethane	S20-Jn35158	NCP	%	83			70-130	Pass	
1.2-Dichlorobenzene	S20-Jn35158	NCP	%	87			70-130	Pass	
1.2-Dichloroethane	S20-Jn35158	NCP	%	79			70-130	Pass	
Trichloroethene	S20-Jn35158	NCP	%	78			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
Naphthalene	S20-Jn35873	NCP	%	99			70-130	Pass	
TRH C6-C10	S20-Jn35873	NCP	%	80			70-130	Pass	
TRH >C10-C16	S20-Jn30492	NCP	%	96			70-130	Pass	
Spike - % Recovery									

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	S20-Jn37681	NCP	%	111			70-130	Pass	
Acenaphthylene	S20-Jn37681	NCP	%	104			70-130	Pass	
Anthracene	S20-Jn37681	NCP	%	101			70-130	Pass	
Benz(a)anthracene	S20-Jn37681	NCP	%	94			70-130	Pass	
Benzo(a)pyrene	S20-Jn37681	NCP	%	105			70-130	Pass	
Benzo(b&j)fluoranthene	S20-Jn37681	NCP	%	108			70-130	Pass	
Benzo(g.h.i)perylene	S20-Jn37681	NCP	%	71			70-130	Pass	
Benzo(k)fluoranthene	S20-Jn37681	NCP	%	126			70-130	Pass	
Chrysene	S20-Jn37681	NCP	%	107			70-130	Pass	
Dibenz(a.h)anthracene	S20-Jn37681	NCP	%	78			70-130	Pass	
Fluoranthene	S20-Jn37681	NCP	%	105			70-130	Pass	
Fluorene	S20-Jn37681	NCP	%	105			70-130	Pass	
Indeno(1.2.3-cd)pyrene	S20-Jn37681	NCP	%	79			70-130	Pass	
Naphthalene	S20-Jn37681	NCP	%	107			70-130	Pass	
Phenanthrene	S20-Jn37681	NCP	%	105			70-130	Pass	
Pyrene	S20-Jn37681	NCP	%	108			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
Chlordanes - Total	S20-Jn35873	NCP	%	98			70-130	Pass	
4.4'-DDD	S20-Jn35873	NCP	%	101			70-130	Pass	
4.4'-DDE	S20-Jn35873	NCP	%	96			70-130	Pass	
4.4'-DDT	S20-Jn35873	NCP	%	115			70-130	Pass	
a-BHC	S20-Jn35873	NCP	%	83			70-130	Pass	
Aldrin	S20-Jn35873	NCP	%	85			70-130	Pass	
b-BHC	S20-Jn35873	NCP	%	102			70-130	Pass	
d-BHC	S20-Jn35873	NCP	%	101			70-130	Pass	
Dieldrin	S20-Jn35873	NCP	%	102			70-130	Pass	
Endosulfan I	S20-Jn35873	NCP	%	92			70-130	Pass	
Endosulfan II	S20-Jn35873	NCP	%	89			70-130	Pass	
Endosulfan sulphate	S20-Jn35873	NCP	%	103			70-130	Pass	
Endrin	S20-Jn35873	NCP	%	111			70-130	Pass	
Endrin aldehyde	S20-Jn35873	NCP	%	86			70-130	Pass	
Endrin ketone	S20-Jn35873	NCP	%	96			70-130	Pass	
g-BHC (Lindane)	S20-Jn35873	NCP	%	105			70-130	Pass	
Heptachlor	S20-Jn35873	NCP	%	115			70-130	Pass	
Heptachlor epoxide	S20-Jn35873	NCP	%	83			70-130	Pass	
Hexachlorobenzene	S20-Jn35873	NCP	%	90			70-130	Pass	
Methoxychlor	S20-Jn35873	NCP	%	95			70-130	Pass	
Spike - % Recovery									
Organophosphorus Pesticides				Result 1					
Diazinon	S20-Jn37681	NCP	%	103			70-130	Pass	
Dimethoate	S20-Jn37681	NCP	%	113			70-130	Pass	
Ethion	S20-Jn37681	NCP	%	113			70-130	Pass	
Fenitrothion	S20-Jn37681	NCP	%	113			70-130	Pass	
Methyl parathion	S20-Jn37681	NCP	%	110			70-130	Pass	
Mevinphos	S20-Jn35873	NCP	%	127			70-130	Pass	
Spike - % Recovery									
Polychlorinated Biphenyls				Result 1					
Aroclor-1016	S20-Jn35873	NCP	%	91			70-130	Pass	
Aroclor-1260	S20-Jn35873	NCP	%	95			70-130	Pass	
Spike - % Recovery									
Phenols (Halogenated)				Result 1					
2-Chlorophenol	S20-Jn37681	NCP	%	108			30-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2.4-Dichlorophenol	S20-Jn37681	NCP	%	104			30-130	Pass	
2.4.5-Trichlorophenol	S20-Jn35873	NCP	%	83			30-130	Pass	
2.4.6-Trichlorophenol	S20-Jn35873	NCP	%	94			30-130	Pass	
2.6-Dichlorophenol	S20-Jn37681	NCP	%	102			30-130	Pass	
4-Chloro-3-methylphenol	S20-Jn37681	NCP	%	72			30-130	Pass	
Pentachlorophenol	S20-Jn37681	NCP	%	91			30-130	Pass	
Tetrachlorophenols - Total	S20-Jn37681	NCP	%	94			30-130	Pass	
Spike - % Recovery									
Phenols (non-Halogenated)				Result 1					
2-Methyl-4.6-dinitrophenol	S20-Jn37681	NCP	%	104			30-130	Pass	
2-Methylphenol (o-Cresol)	S20-Jn37681	NCP	%	81			30-130	Pass	
2-Nitrophenol	S20-Jn37681	NCP	%	129			30-130	Pass	
2.4-Dinitrophenol	S20-Jn37681	NCP	%	88			70-130	Pass	
3&4-Methylphenol (m&p-Cresol)	S20-Jn37681	NCP	%	77			30-130	Pass	
4-Nitrophenol	S20-Jn37681	NCP	%	104			30-130	Pass	
Dinoseb	S20-Jn37681	NCP	%	116			30-130	Pass	
Phenol	S20-Jn37681	NCP	%	88			30-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	S20-Jn34168	CP	%	98			70-130	Pass	
Cadmium	S20-Jn34168	CP	%	98			70-130	Pass	
Chromium	S20-Jn34168	CP	%	97			70-130	Pass	
Copper	S20-Jn34168	CP	%	98			70-130	Pass	
Lead	S20-Jn34168	CP	%	96			70-130	Pass	
Mercury	S20-Jn34168	CP	%	98			70-130	Pass	
Nickel	S20-Jn34168	CP	%	99			70-130	Pass	
Zinc	S20-Jn34168	CP	%	99			70-130	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C6-C9	S20-Jn35872	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	S20-Jn34088	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	S20-Jn34088	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	S20-Jn34088	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S20-Jn35872	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Toluene	S20-Jn35872	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Ethylbenzene	S20-Jn35872	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
m&p-Xylenes	S20-Jn35872	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
o-Xylene	S20-Jn35872	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes - Total*	S20-Jn35872	NCP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
1.1-Dichloroethane	S20-Jn37679	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1-Dichloroethene	S20-Jn37679	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1-Trichloroethane	S20-Jn37679	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	S20-Jn37679	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2-Trichloroethane	S20-Jn37679	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	S20-Jn37679	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dibromoethane	S20-Jn37679	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichlorobenzene	S20-Jn37679	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloroethane	S20-Jn37679	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloropropane	S20-Jn37679	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
1.2.3-Trichloropropane	S20-Jn37679	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trimethylbenzene	S20-Jn37679	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichlorobenzene	S20-Jn37679	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichloropropane	S20-Jn37679	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3.5-Trimethylbenzene	S20-Jn37679	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.4-Dichlorobenzene	S20-Jn37679	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Butanone (MEK)	S20-Jn37679	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Propanone (Acetone)	S20-Jn37679	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chlorotoluene	S20-Jn37679	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Methyl-2-pentanone (MIBK)	S20-Jn37679	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Allyl chloride	S20-Jn37679	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromobenzene	S20-Jn37679	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromochloromethane	S20-Jn37679	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromodichloromethane	S20-Jn37679	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromoform	S20-Jn37679	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromomethane	S20-Jn37679	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon disulfide	S20-Jn37679	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon Tetrachloride	S20-Jn37679	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chlorobenzene	S20-Jn37679	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroethane	S20-Jn37679	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroform	S20-Jn37679	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloromethane	S20-Jn37679	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.2-Dichloroethene	S20-Jn37679	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.3-Dichloropropene	S20-Jn37679	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromochloromethane	S20-Jn37679	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromomethane	S20-Jn37679	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dichlorodifluoromethane	S20-Jn37679	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Iodomethane	S20-Jn37679	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Isopropyl benzene (Cumene)	S20-Jn37679	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Methylene Chloride	S20-Jn37679	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Styrene	S20-Jn37679	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Tetrachloroethene	S20-Jn37679	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.2-Dichloroethene	S20-Jn37679	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.3-Dichloropropene	S20-Jn37679	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichloroethene	S20-Jn37679	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichlorofluoromethane	S20-Jn37679	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Vinyl chloride	S20-Jn37679	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	S20-Jn35872	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	S20-Jn35872	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH >C10-C16	S20-Jn34088	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	S20-Jn34088	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	S20-Jn34088	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	S20-Jn30437	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	S20-Jn30437	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	S20-Jn30437	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	S20-Jn30437	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	S20-Jn30437	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	S20-Jn30437	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	S20-Jn30437	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Benzo(k)fluoranthene	S20-Jn30437	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Chrysene	S20-Jn30437	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	S20-Jn30437	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Fluoranthene	S20-Jn30437	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	S20-Jn30437	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	S20-Jn30437	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Naphthalene	S20-Jn30437	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	S20-Jn30437	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	S20-Jn30437	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	S20-Jn30437	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	S20-Jn30437	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	S20-Jn30437	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	S20-Jn30437	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-BHC	S20-Jn30437	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	S20-Jn30437	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-BHC	S20-Jn30437	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-BHC	S20-Jn30437	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	S20-Jn30437	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	S20-Jn30437	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	S20-Jn30437	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	S20-Jn30437	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	S20-Jn30437	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	S20-Jn30437	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	S20-Jn30437	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-BHC (Lindane)	S20-Jn30437	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	S20-Jn30437	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	S20-Jn30437	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	S20-Jn30437	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	S20-Jn30437	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Azinphos-methyl	S20-Jn30437	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Bolstar	S20-Jn30437	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorfenvinphos	S20-Jn30437	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos	S20-Jn30437	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos-methyl	S20-Jn30437	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Coumaphos	S20-Jn30437	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Demeton-S	S20-Jn30437	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Demeton-O	S20-Jn30437	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Diazinon	S20-Jn30437	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dichlorvos	S20-Jn30437	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dimethoate	S20-Jn30437	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Disulfoton	S20-Jn30437	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
EPN	S20-Jn30437	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethion	S20-Jn30437	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethoprop	S20-Jn30437	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethyl parathion	S20-Jn30437	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenitrothion	S20-Jn30437	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fensulfothion	S20-Jn30437	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenthion	S20-Jn30437	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Malathion	S20-Jn30437	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Merphos	S20-Jn30437	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Methyl parathion	S20-Jn30437	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	

Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Mevinphos	S20-Jn30437	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Monocrotophos	S20-Jn30437	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Naled	S20-Jn30437	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Omethoate	S20-Jn30437	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Phorate	S20-Jn30437	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pirimiphos-methyl	S20-Jn30437	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pyrazophos	S20-Jn30437	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ronnel	S20-Jn30437	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Terbufos	S20-Jn30437	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tetrachlorvinphos	S20-Jn30437	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tokuthion	S20-Jn30437	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Trichloronate	S20-Jn30437	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Aroclor-1016	S20-Jn30437	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1221	S20-Jn30437	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1232	S20-Jn30437	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1242	S20-Jn30437	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1248	S20-Jn30437	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1254	S20-Jn30437	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1260	S20-Jn30437	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Total PCB*	S20-Jn30437	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Phenols (Halogenated)				Result 1	Result 2	RPD			
2-Chlorophenol	S20-Jn30437	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dichlorophenol	S20-Jn30437	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4.5-Trichlorophenol	S20-Jn30437	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4.6-Trichlorophenol	S20-Jn30437	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2.6-Dichlorophenol	S20-Jn30437	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chloro-3-methylphenol	S20-Jn30437	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Pentachlorophenol	S20-Jn30437	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Tetrachlorophenols - Total	S20-Jn30437	NCP	mg/kg	< 10	< 10	<1	30%	Pass	
Duplicate									
Phenols (non-Halogenated)				Result 1	Result 2	RPD			
2-Cyclohexyl-4.6-dinitrophenol	S20-Jn30437	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
2-Methyl-4.6-dinitrophenol	S20-Jn30437	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Methylphenol (o-Cresol)	S20-Jn30437	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
2-Nitrophenol	S20-Jn30437	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4-Dimethylphenol	S20-Jn30437	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dinitrophenol	S20-Jn30437	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
3&4-Methylphenol (m&p-Cresol)	S20-Jn30437	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
4-Nitrophenol	S20-Jn30437	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Dinoseb	S20-Jn30437	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
Phenol	S20-Jn30437	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	S20-Jn34077	NCP	%	11	11	1.0	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	S20-Jn34167	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Cadmium	S20-Jn34167	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	S20-Jn34167	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Copper	S20-Jn34167	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Lead	S20-Jn34167	CP	mg/kg	< 5	< 5	<1	30%	Pass	

Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Mercury	S20-Jn34167	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Nickel	S20-Jn34167	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Zinc	S20-Jn34167	CP	mg/kg	16	10	45	30%	Fail	Q15

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
Q15	The RPD reported passes Eurofins Environment Testing's QC - Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report.

Authorised By

[redacted]

Analytical Services Manager
Senior Analyst-Organic (NSW)
Senior Analyst-Metal (NSW)
Senior Analyst-Asbestos (NSW)

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

SLR

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- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☑ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT: DHA	**LABORATORY:** SGS	**Turnaround Time (TAT)**	**COC Number** 4 of 4
PROJECT: Randwick Barracks	**LABORATORY ADDRESS:** SYD	☑ Standard TAT	
PROJECT NUMBER: 610.30041	**SAMPLER:** [redacted]	☐ Non Standard or Urgent TAT	
PROJECT MANAGER: [redacted]	**SAMPLER CONTACT No:**	**Required TAT:**	
PM CONTACT No: [redacted]	**Email Reports and Invoices to:** LGRSM@slrconsulting.com		

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: Suite A	TRH c6-10 BTEXN	PFAS						Additional Information (Comment on any grass contamination or specific requirements)
	RW33_QC118_200618	18/6/20	Soil		X	X							
*	RW33_QC216_200618	1	1										DUP
*	RW33_QC218_200618	1	1										Trip Blank
				* Please forward to Eurofins for Suite A *									
	RW33_QC403_200618					X				3 PFAS			
	RW33_QC503_200618					X							

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	**Received by**	Sign [redacted]	Date / Time 19/6/20	**Temperature Received:** #726837
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

eurofins | Environment Testing

Melbourne
6 Monterey Road
Dandenong South Vic 3175
Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

Sydney
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16 Mars Road
Lane Cove West NSW 2066
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

Brisbane
1/21 Smallwood Place
Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Perth
2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261 Site # 23736

ABN – 50 005 085 521 e.mail : EnviroSales@eurofins.com web : www.eurofins.com.au

Sample Receipt Advice

Company name:	**SLR Consulting (Sydney)**
Contact name:	[redacted]
Project name:	RANDWICK BARRACK
Project ID:	610.30041
COC number:	Not provided
Turn around time:	5 Day
Date/Time received:	Jun 19, 2020 4:02 PM
Eurofins reference:	**726837**

Sample information

☑ A detailed list of analytes logged into our LIMS, is included in the attached summary table.

☑ All samples have been received as described on the above COC.

☑ COC has been completed correctly.

☑ Attempt to chill was evident.

☑ Appropriately preserved sample containers have been used.

☑ All samples were received in good condition.

☑ Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.

☑ Appropriate sample containers have been used.

☒ Split sample sent to requested external lab.

☒ Some samples have been subcontracted.

N/A Custody Seals intact (if used).

Contact notes

If you have any questions with respect to these samples please contact:

[redacted] on Phone : (+61) 2 9900 8490 or by e.mail: [redacted]@eurofins.com

Results will be delivered electronically via e.mail to [redacted]@slrconsulting.com.

Note: A copy of these results will also be delivered to the general SLR Consulting (Sydney) email address.

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ABN – 50 005 085 521 web : www.eurofins.com.au e.mail : EnviroSales@eurofins.com

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Penrose, Auckland 1061
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IANZ # 1327

Christchurch
43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACK
Project ID: 610.30041

Order No.:
Report #: 726837
Phone: 02 9428 8100
Fax:

Received: Jun 19, 2020 4:02 PM
Due: Jun 26, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A	Per- and Polyfluoroalkyl Substances (PFASs)
Melbourne Laboratory - NATA Site # 1254 & 14271											
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	
Brisbane Laboratory - NATA Site # 20794											X
Perth Laboratory - NATA Site # 23736											
External Laboratory											
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**						
1	RWBB_QC216_200618	Jun 18, 2020		Soil	S20-Jn34788	X	X	X	X	X	X
2	RWBB_QC218_200618	Jun 18, 2020		Soil	S20-Jn34789	X	X	X	X	X	X
Test Counts						2	2	2	2	2	2

Certificate of Analysis

eurofins | Environment Testing

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025–Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus
North Sydney
NSW 2060

Attention:	[redacted]
Report	726837-AID
Project Name	RANDWICK BARRACK
Project ID	610.30041
Received Date	Jun 19, 2020
Date Reported	Jun 29, 2020

Methodology:

Asbestos Fibre Identification	Conducted in accordance with the Australian Standard AS 4964 – 2004: Method for the Qualitative Identification of Asbestos in Bulk Samples and in-house Method LTM-ASB-8020 by polarised light microscopy (PLM) and dispersion staining (DS) techniques. *NOTE: Positive Trace Analysis results indicate the sample contains detectable respirable fibres.*
Unknown Mineral Fibres	Mineral fibres of unknown type, as determined by PLM with DS, may require another analytical technique, such as Electron Microscopy, to confirm unequivocal identity. *NOTE: While Actinolite, Anthophyllite and Tremolite asbestos may be detected by PLM with DS, due to variability in the optical properties of these materials, AS4964 requires that these are reported as UMF unless confirmed by an independent technique.*
Subsampling Soil Samples	The whole sample submitted is first dried and then passed through a 10mm sieve followed by a 2mm sieve. All fibrous matter greater than 10mm, greater than 2mm as well as the material passing through the 2mm sieve are retained and analysed for the presence of asbestos. If the sub 2mm fraction is greater than approximately 30 to 60g then a sub-sampling routine based on ISO 3082:2009(E) is employed. *NOTE: Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be sub-sampled for trace analysis, in accordance with AS 4964-2004.*
Bonded asbestos-containing material (ACM)	The material is first examined and any fibres isolated for identification by PLM and DS. Where required, interfering matrices may be removed by disintegration using a range of heat, chemical or physical treatments, possibly in combination.The resultant material is then further examined in accordance with AS 4964 - 2004. *NOTE: Even after disintegration it may be difficult to detect the presence of asbestos in some asbestos-containing bulk materials using PLM and DS. This is due to the low grade or small length or diameter of the asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos-containing sealants and mastics, asbestos-containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.*
Limit of Reporting	The performance limitation of the AS 4964 (2004) method for non-homogeneous samples is around 0.1 g/kg (equivalent to 0.01% (w/w)). Where no asbestos is found by PLM and DS, including Trace Analysis, this is considered to be at the nominal reporting limit of 0.01% (w/w). The NEPM screening level of 0.001% (w/w) is intended as an on-site determination, not a laboratory Limit of Reporting (LOR), per se. Examination of a large sample size (e.g. 500 mL) may improve the likelihood of detecting asbestos, particularly AF, to aid assessment against the NEPM criteria. Gravimetric determinations to this level of accuracy are outside of AS 4964 and hence NATA Accreditation does not cover the performance of this service (non-NATA results shown with an asterisk). *NOTE: NATA News March 2014, p.7, states in relation to AS 4964: "This is a qualitative method with a nominal reporting limit of 0.01 % " and that currently in Australia "there is no validated method available for the quantification of asbestos".This report is consistent with the analytical procedures and reporting recommendations in the NEPM and the WA DoH.*

Project Name RANDWICK BARRACK
Project ID 610.30041
Date Sampled Jun 18, 2020
Report 726837-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
RWBB_QC216_200618	20-Jn34788	Jun 18, 2020	Approximate Sample 76g Sample consisted of: Brown fine-grained sandy soil	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
RWBB_QC218_200618	20-Jn34789	Jun 18, 2020	Approximate Sample 50g Sample consisted of: Brown fine-grained sandy soil	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Asbestos - LTM-ASB-8020	Sydney	Jun 22, 2020	Indefinite

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Rolleston, Christchurch 7675
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IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACK
Project ID: 610.30041

Order No.:
Report #: 726837
Phone: 02 9428 8100
Fax:

Received: Jun 19, 2020 4:02 PM
Due: Jun 26, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : Andrew Black

Sample Detail						Asbestos - AS4964	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A	Per- and Polyfluoroalkyl Substances (PFASs)
Melbourne Laboratory - NATA Site # 1254 & 14271											
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	
Brisbane Laboratory - NATA Site # 20794											X
Perth Laboratory - NATA Site # 23736											
External Laboratory											
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**						
1	RWBB_QC216_200618	Jun 18, 2020		Soil	S20-Jn34788	X	X	X	X	X	X
2	RWBB_QC218_200618	Jun 18, 2020		Soil	S20-Jn34789	X	X	X	X	X	X
Test Counts						2	2	2	2	2	2

Internal Quality Control Review and Glossary

General

1. QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Samples were analysed on an 'as received' basis.
4. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
5. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the Sample Receipt Advice.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

Units

% w/w: weight for weight basis	grams per kilogram
Filter loading:	fibres/100 graticule areas
Reported Concentration:	fibres/mL
Flowrate:	L/min

Terms

Dry	Sample is dried by heating prior to analysis
LOR	Limit of Reporting
COC	Chain of Custody
SRA	Sample Receipt Advice
ISO	International Standards Organisation
AS	Australian Standards
WA DOH	Reference document for the NEPM. Government of Western Australia, Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia (2009), including supporting document Recommended Procedures for Laboratory Analysis of Asbestos in Soil (2011)
NEPM	National Environment Protection (Assessment of Site Contamination) Measure, 2013 (as amended)
ACM	Asbestos Containing Materials. Asbestos contained within a non-asbestos matrix, typically presented in bonded and/or sound condition. For the purposes of the NEPM, ACM is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
AF	Asbestos Fines. Asbestos containing materials, including friable, weathered and bonded materials, able to pass a 7mm x 7mm sieve. Considered under the NEPM as equivalent to “non-bonded / friable”.
FA	Fibrous Asbestos. Asbestos containing materials in a friable and/or severely weathered condition. For the purposes of the NEPM, FA is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
Friable	Asbestos-containing materials of any size that may be broken or crumbled by hand pressure. For the purposes of the NEPM, this includes both AF and FA. It is outside of the laboratory’s remit to assess degree of friability.
Trace Analysis	Analytical procedure used to detect the presence of respirable fibres in the matrix.

Comments

The samples received were not collected in an approved asbestos bag and was therefore sub-sampled from the 250mL glass jar. Valid sub-sampling procedures were applied so as to ensure that the sub-samples to be analysed accurately represented the samples received.

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N/A	Not applicable

Asbestos Counter/Identifier:

[redacted] Senior Analyst-Asbestos (NSW)

Authorised by:

[redacted] Senior Analyst-Asbestos (NSW)

General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus,
North Sydney
NSW 2060

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: [redacted]

Report **726837-S**
Project name RANDWICK BARRACK
Project ID 610.30041
Received Date Jun 19, 2020

Client Sample ID			**RWBB_QC216_200618**	**RWBB_QC218_200618**
Sample Matrix			**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn34788**	**S20-Jn34789**
Date Sampled			**Jun 18, 2020**	**Jun 18, 2020**
Test/Reference	LOR	Unit		
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				
TRH C6-C9	20	mg/kg	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50	< 50
BTEX				
Benzene	0.1	mg/kg	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	72	78
Volatile Organics				
1.1-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5	< 0.5

Client Sample ID			RWBB_QC216_200618	RWBB_QC218_200618
Sample Matrix			**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn34788**	**S20-Jn34789**
Date Sampled			**Jun 18, 2020**	**Jun 18, 2020**
Test/Reference	LOR	Unit		
Volatile Organics				
Benzene	0.1	mg/kg	< 0.1	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5	< 0.5
Bromoform	0.5	mg/kg	< 0.5	< 0.5
Bromomethane	0.5	mg/kg	< 0.5	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5	< 0.5
Chloroethane	0.5	mg/kg	< 0.5	< 0.5
Chloroform	0.5	mg/kg	< 0.5	< 0.5
Chloromethane	0.5	mg/kg	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1
Iodomethane	0.5	mg/kg	< 0.5	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5	< 0.5
o-Xylene	0.1	mg/kg	< 0.1	< 0.1
Styrene	0.5	mg/kg	< 0.5	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5	< 0.5
Toluene	0.1	mg/kg	< 0.1	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3
Total MAH*	0.5	mg/kg	< 0.5	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5
4-Bromofluorobenzene (surr.)	1	%	72	78
Toluene-d8 (surr.)	1	%	97	87
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100

Client Sample ID			RWBB_QC216_200618	RWBB_QC218_200618
Sample Matrix			**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn34788**	**S20-Jn34789**
Date Sampled			**Jun 18, 2020**	**Jun 18, 2020**
Test/Reference	LOR	Unit		
Polycyclic Aromatic Hydrocarbons				
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	82	87
p-Terphenyl-d14 (surr.)	1	%	98	96
Organochlorine Pesticides				
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05
a-BHC	0.05	mg/kg	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05
b-BHC	0.05	mg/kg	< 0.05	< 0.05
d-BHC	0.05	mg/kg	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	0.38	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05
Methoxychlor	0.2	mg/kg	< 0.2	< 0.2
Toxaphene	1	mg/kg	< 1	< 1
Aldrin and Dieldrin (Total)*	0.05	mg/kg	0.38	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	0.38	< 0.2
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.2	< 0.2
Dibutylchlorendate (surr.)	1	%	89	67
Tetrachloro-m-xylene (surr.)	1	%	98	100

Client Sample ID			RWBB_QC216_200618	RWBB_QC218_200618
Sample Matrix			**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn34788**	**S20-Jn34789**
Date Sampled			**Jun 18, 2020**	**Jun 18, 2020**
Test/Reference	LOR	Unit		
Organophosphorus Pesticides				
Azinphos-methyl	0.2	mg/kg	< 0.2	< 0.2
Bolstar	0.2	mg/kg	< 0.2	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2	< 0.2
Coumaphos	2	mg/kg	< 2	< 2
Demeton-S	0.2	mg/kg	< 0.2	< 0.2
Demeton-O	0.2	mg/kg	< 0.2	< 0.2
Diazinon	0.2	mg/kg	< 0.2	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2	< 0.2
Dimethoate	0.2	mg/kg	< 0.2	< 0.2
Disulfoton	0.2	mg/kg	< 0.2	< 0.2
EPN	0.2	mg/kg	< 0.2	< 0.2
Ethion	0.2	mg/kg	< 0.2	< 0.2
Ethoprop	0.2	mg/kg	< 0.2	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2	< 0.2
Fenthion	0.2	mg/kg	< 0.2	< 0.2
Malathion	0.2	mg/kg	< 0.2	< 0.2
Merphos	0.2	mg/kg	< 0.2	< 0.2
Methyl parathion	0.2	mg/kg	< 0.2	< 0.2
Mevinphos	0.2	mg/kg	< 0.2	< 0.2
Monocrotophos	2	mg/kg	< 2	< 2
Naled	0.2	mg/kg	< 0.2	< 0.2
Omethoate	2	mg/kg	< 2	< 2
Phorate	0.2	mg/kg	< 0.2	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2	< 0.2
Ronnel	0.2	mg/kg	< 0.2	< 0.2
Terbufos	0.2	mg/kg	< 0.2	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2	< 0.2
Tokuthion	0.2	mg/kg	< 0.2	< 0.2
Trichloronate	0.2	mg/kg	< 0.2	< 0.2
Triphenylphosphate (surr.)	1	%	96	114
Polychlorinated Biphenyls				
Aroclor-1016	0.5	mg/kg	< 0.5	< 0.5
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1
Aroclor-1232	0.5	mg/kg	< 0.5	< 0.5
Aroclor-1242	0.5	mg/kg	< 0.5	< 0.5
Aroclor-1248	0.5	mg/kg	< 0.5	< 0.5
Aroclor-1254	0.5	mg/kg	< 0.5	< 0.5
Aroclor-1260	0.5	mg/kg	< 0.5	< 0.5
Total PCB*	0.5	mg/kg	< 0.5	< 0.5
Dibutylchlorendate (surr.)	1	%	89	67
Tetrachloro-m-xylene (surr.)	1	%	98	100

Client Sample ID			RWBB_QC216_200618	RWBB_QC218_200618
Sample Matrix			**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn34788**	**S20-Jn34789**
Date Sampled			**Jun 18, 2020**	**Jun 18, 2020**
Test/Reference	LOR	Unit		
Phenols (Halogenated)				
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1
Phenols (non-Halogenated)				
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2
2-Nitrophenol	1	mg/kg	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5	< 5
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4
4-Nitrophenol	5	mg/kg	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20
Phenol-d6 (surr.)	1	%	97	97
Heavy Metals				
Arsenic	2	mg/kg	< 2	< 2
Cadmium	0.4	mg/kg	< 0.4	< 0.4
Chromium	5	mg/kg	< 5	< 5
Copper	5	mg/kg	< 5	< 5
Lead	5	mg/kg	9.8	11
Mercury	0.1	mg/kg	< 0.1	< 0.1
Nickel	5	mg/kg	< 5	< 5
Zinc	5	mg/kg	37	18
% Moisture	1	%	4.8	3.0
Perfluoroalkyl carboxylic acids (PFCAs)				
Perfluorobutanoic acid (PFBA)[N11]	5	ug/kg	< 5	< 5
Perfluoropentanoic acid (PFPeA)[N11]	5	ug/kg	< 5	< 5
Perfluorohexanoic acid (PFHxA)[N11]	5	ug/kg	< 5	< 5
Perfluoroheptanoic acid (PFHpA)[N11]	5	ug/kg	< 5	< 5
Perfluorooctanoic acid (PFOA)[N11]	5	ug/kg	< 5	< 5
Perfluorononanoic acid (PFNA)[N11]	5	ug/kg	< 5	< 5
Perfluorodecanoic acid (PFDA)[N11]	5	ug/kg	< 5	< 5
Perfluoroundecanoic acid (PFUnDA)[N11]	5	ug/kg	< 5	< 5
Perfluorododecanoic acid (PFDoDA)[N11]	5	ug/kg	< 5	< 5
Perfluorotridecanoic acid (PFTrDA)[N15]	5	ug/kg	< 5	< 5
Perfluorotetradecanoic acid (PFTeDA)[N11]	5	ug/kg	< 5	< 5
13C4-PFBA (surr.)	1	%	124	129
13C5-PFPeA (surr.)	1	%	135	141
13C5-PFHxA (surr.)	1	%	115	128

Client Sample ID			RWBB_QC216_200618	RWBB_QC218_200618
Sample Matrix			**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn34788**	**S20-Jn34789**
Date Sampled			**Jun 18, 2020**	**Jun 18, 2020**
Test/Reference	LOR	Unit		
Perfluoroalkyl carboxylic acids (PFCAs)				
13C4-PFHpA (surr.)	1	%	110	126
13C8-PFOA (surr.)	1	%	106	125
13C5-PFNA (surr.)	1	%	111	129
13C6-PFDA (surr.)	1	%	132	139
13C2-PFUnDA (surr.)	1	%	103	103
13C2-PFDoDA (surr.)	1	%	148	151
13C2-PFTeDA (surr.)	1	%	101	99
Perfluoroalkyl sulfonamido substances				
Perfluorooctane sulfonamide (FOSA)[N11]	5	ug/kg	< 5	< 5
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)[N11]	5	ug/kg	< 5	< 5
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)[N11]	5	ug/kg	< 5	< 5
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)[N11]	5	ug/kg	< 5	< 5
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)[N11]	5	ug/kg	< 5	< 5
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)[N11]	10	ug/kg	< 10	< 10
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)[N11]	10	ug/kg	< 10	< 10
13C8-FOSA (surr.)	1	%	125	125
D3-N-MeFOSA (surr.)	1	%	99	104
D5-N-EtFOSA (surr.)	1	%	INT	INT
D7-N-MeFOSE (surr.)	1	%	133	131
D9-N-EtFOSE (surr.)	1	%	65	68
D5-N-EtFOSAA (surr.)	1	%	95	102
D3-N-MeFOSAA (surr.)	1	%	84	97
Perfluoroalkyl sulfonic acids (PFSAs)				
Perfluorobutanesulfonic acid (PFBS)[N11]	5	ug/kg	< 5	< 5
Perfluorononanesulfonic acid (PFNS)[N15]	5	ug/kg	< 5	< 5
Perfluoropropanesulfonic acid (PFPrS)[N15]	5	ug/kg	< 5	< 5
Perfluoropentanesulfonic acid (PFPeS)[N15]	5	ug/kg	< 5	< 5
Perfluorohexanesulfonic acid (PFHxS)[N11]	5	ug/kg	< 5	< 5
Perfluoroheptanesulfonic acid (PFHpS)[N15]	5	ug/kg	< 5	< 5
Perfluorooctanesulfonic acid (PFOS)[N11]	5	ug/kg	< 5	< 5
Perfluorodecanesulfonic acid (PFDS)[N15]	5	ug/kg	< 5	< 5
13C3-PFBS (surr.)	1	%	123	114
18O2-PFHxS (surr.)	1	%	124	138
13C8-PFOS (surr.)	1	%	129	136
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	5	ug/kg	< 5	< 5
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)[N11]	10	ug/kg	< 10	< 10
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	5	ug/kg	< 5	< 5
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	5	ug/kg	< 5	< 5
13C2-4:2 FTSA (surr.)	1	%	77	119
13C2-6:2 FTSA (surr.)	1	%	72	109
13C2-8:2 FTSA (surr.)	1	%	86	94
13C2-10:2 FTSA (surr.)	1	%	95	98

Client Sample ID			RWBB_QC216_200618	RWBB_QC218_200618
Sample Matrix			**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn34788**	**S20-Jn34789**
Date Sampled			**Jun 18, 2020**	**Jun 18, 2020**
Test/Reference	LOR	Unit		
PFASs Summations				
Sum (PFHxS + PFOS)*	5	ug/kg	< 5	< 5
Sum of US EPA PFAS (PFOS + PFOA)*	5	ug/kg	< 5	< 5
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	5	ug/kg	< 5	< 5
Sum of WA DWER PFAS (n=10)*	10	ug/kg	< 10	< 10
Sum of PFASs (n=30)*	50	ug/kg	< 50	< 50

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Sydney	Jun 25, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Sydney	Jun 25, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jun 25, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jun 25, 2020	
- Method: LTM-ORG-2010 TRH C6-C40			
Polycyclic Aromatic Hydrocarbons	Sydney	Jun 25, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (Halogenated)	Sydney	Jun 25, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (non-Halogenated)	Sydney	Jun 25, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Metals M8	Sydney	Jun 25, 2020	180 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Volatile Organics	Sydney	Jun 25, 2020	7 Days
- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices			
Eurofins | mgt Suite B15			
Organochlorine Pesticides	Sydney	Jun 25, 2020	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Organophosphorus Pesticides	Sydney	Jun 25, 2020	14 Days
- Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS			
Polychlorinated Biphenyls	Sydney	Jun 25, 2020	28 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
% Moisture	Sydney	Jun 22, 2020	14 Days
- Method: LTM-GEN-7080 Moisture			
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs)	Brisbane	Jun 24, 2020	180 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonamido substances	Brisbane	Jun 24, 2020	180 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonic acids (PFSAs)	Brisbane	Jun 24, 2020	180 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)	Brisbane	Jun 24, 2020	180 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			

eurofins | Environment Testing

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Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACK
Project ID: 610.30041

Order No.:
Report #: 726837
Phone: 02 9428 8100
Fax:

Received: Jun 19, 2020 4:02 PM
Due: Jun 26, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A	Per- and Polyfluoroalkyl Substances (PFASs)
Melbourne Laboratory - NATA Site # 1254 & 14271											
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	
Brisbane Laboratory - NATA Site # 20794											X
Perth Laboratory - NATA Site # 23736											
External Laboratory											
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**						
1	RWBB_QC216_200618	Jun 18, 2020		Soil	S20-Jn34788	X	X	X	X	X	X
2	RWBB_QC218_200618	Jun 18, 2020		Soil	S20-Jn34789	X	X	X	X	X	X
Test Counts						2	2	2	2	2	2

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

****NOTE:** pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram
mg/L: milligrams per litre
ug/L: micrograms per litre
ppm: Parts per million
ppb: Parts per billion
%: Percentage
org/100mL: Organisms per 100 millilitres
NTU: Nephelometric Turbidity Units
MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version 5.3
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling.Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
Method Blank							
BTEX							
Benzene	mg/kg	< 0.1			0.1	Pass	
Toluene	mg/kg	< 0.1			0.1	Pass	
Ethylbenzene	mg/kg	< 0.1			0.1	Pass	
m&p-Xylenes	mg/kg	< 0.2			0.2	Pass	
o-Xylene	mg/kg	< 0.1			0.1	Pass	
Xylenes - Total*	mg/kg	< 0.3			0.3	Pass	
Method Blank							
Volatile Organics							
1.1-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
1.1.1-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.1.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dibromoethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.3-Trichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.4-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.3.5-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.4-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
2-Butanone (MEK)	mg/kg	< 0.5			0.5	Pass	
2-Propanone (Acetone)	mg/kg	< 0.5			0.5	Pass	
4-Chlorotoluene	mg/kg	< 0.5			0.5	Pass	
4-Methyl-2-pentanone (MIBK)	mg/kg	< 0.5			0.5	Pass	
Allyl chloride	mg/kg	< 0.5			0.5	Pass	
Bromobenzene	mg/kg	< 0.5			0.5	Pass	
Bromochloromethane	mg/kg	< 0.5			0.5	Pass	
Bromodichloromethane	mg/kg	< 0.5			0.5	Pass	
Bromoform	mg/kg	< 0.5			0.5	Pass	
Bromomethane	mg/kg	< 0.5			0.5	Pass	
Carbon disulfide	mg/kg	< 0.5			0.5	Pass	
Carbon Tetrachloride	mg/kg	< 0.5			0.5	Pass	
Chlorobenzene	mg/kg	< 0.5			0.5	Pass	
Chloroethane	mg/kg	< 0.5			0.5	Pass	
Chloroform	mg/kg	< 0.5			0.5	Pass	
Chloromethane	mg/kg	< 0.5			0.5	Pass	
cis-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
cis-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Dibromochloromethane	mg/kg	< 0.5			0.5	Pass	
Dibromomethane	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Dichlorodifluoromethane	mg/kg	< 0.5			0.5	Pass	
Iodomethane	mg/kg	< 0.5			0.5	Pass	
Isopropyl benzene (Cumene)	mg/kg	< 0.5			0.5	Pass	
Methylene Chloride	mg/kg	< 0.5			0.5	Pass	
Styrene	mg/kg	< 0.5			0.5	Pass	
Tetrachloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Trichloroethene	mg/kg	< 0.5			0.5	Pass	
Trichlorofluoromethane	mg/kg	< 0.5			0.5	Pass	
Vinyl chloride	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Organochlorine Pesticides							
Chlordanes - Total	mg/kg	< 0.1			0.1	Pass	
4.4'-DDD	mg/kg	< 0.05			0.05	Pass	
4.4'-DDE	mg/kg	< 0.05			0.05	Pass	
4.4'-DDT	mg/kg	< 0.05			0.05	Pass	
a-BHC	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-BHC	mg/kg	< 0.05			0.05	Pass	
d-BHC	mg/kg	< 0.05			0.05	Pass	
Dieldrin	mg/kg	< 0.05			0.05	Pass	
Endosulfan I	mg/kg	< 0.05			0.05	Pass	
Endosulfan II	mg/kg	< 0.05			0.05	Pass	
Endosulfan sulphate	mg/kg	< 0.05			0.05	Pass	
Endrin	mg/kg	< 0.05			0.05	Pass	
Endrin aldehyde	mg/kg	< 0.05			0.05	Pass	
Endrin ketone	mg/kg	< 0.05			0.05	Pass	
g-BHC (Lindane)	mg/kg	< 0.05			0.05	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Heptachlor	mg/kg	< 0.05			0.05	Pass	
Heptachlor epoxide	mg/kg	< 0.05			0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05			0.05	Pass	
Methoxychlor	mg/kg	< 0.2			0.2	Pass	
Toxaphene	mg/kg	< 1			1	Pass	
Method Blank							
Organophosphorus Pesticides							
Azinphos-methyl	mg/kg	< 0.2			0.2	Pass	
Bolstar	mg/kg	< 0.2			0.2	Pass	
Chlorfenvinphos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos-methyl	mg/kg	< 0.2			0.2	Pass	
Coumaphos	mg/kg	< 2			2	Pass	
Demeton-S	mg/kg	< 0.2			0.2	Pass	
Demeton-O	mg/kg	< 0.2			0.2	Pass	
Diazinon	mg/kg	< 0.2			0.2	Pass	
Dichlorvos	mg/kg	< 0.2			0.2	Pass	
Dimethoate	mg/kg	< 0.2			0.2	Pass	
Disulfoton	mg/kg	< 0.2			0.2	Pass	
EPN	mg/kg	< 0.2			0.2	Pass	
Ethion	mg/kg	< 0.2			0.2	Pass	
Ethoprop	mg/kg	< 0.2			0.2	Pass	
Ethyl parathion	mg/kg	< 0.2			0.2	Pass	
Fenitrothion	mg/kg	< 0.2			0.2	Pass	
Fensulfothion	mg/kg	< 0.2			0.2	Pass	
Fenthion	mg/kg	< 0.2			0.2	Pass	
Malathion	mg/kg	< 0.2			0.2	Pass	
Merphos	mg/kg	< 0.2			0.2	Pass	
Methyl parathion	mg/kg	< 0.2			0.2	Pass	
Mevinphos	mg/kg	< 0.2			0.2	Pass	
Monocrotophos	mg/kg	< 2			2	Pass	
Naled	mg/kg	< 0.2			0.2	Pass	
Omethoate	mg/kg	< 2			2	Pass	
Phorate	mg/kg	< 0.2			0.2	Pass	
Pirimiphos-methyl	mg/kg	< 0.2			0.2	Pass	
Pyrazophos	mg/kg	< 0.2			0.2	Pass	
Ronnel	mg/kg	< 0.2			0.2	Pass	
Terbufos	mg/kg	< 0.2			0.2	Pass	
Tetrachlorvinphos	mg/kg	< 0.2			0.2	Pass	
Tokuthion	mg/kg	< 0.2			0.2	Pass	
Trichloronate	mg/kg	< 0.2			0.2	Pass	
Method Blank							
Polychlorinated Biphenyls							
Aroclor-1016	mg/kg	< 0.5			0.5	Pass	
Aroclor-1221	mg/kg	< 0.1			0.1	Pass	
Aroclor-1232	mg/kg	< 0.5			0.5	Pass	
Aroclor-1242	mg/kg	< 0.5			0.5	Pass	
Aroclor-1248	mg/kg	< 0.5			0.5	Pass	
Aroclor-1254	mg/kg	< 0.5			0.5	Pass	
Aroclor-1260	mg/kg	< 0.5			0.5	Pass	
Total PCB*	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Phenols (Halogenated)							
2-Chlorophenol	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2.4-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4.5-Trichlorophenol	mg/kg	< 1			1	Pass	
2.4.6-Trichlorophenol	mg/kg	< 1			1	Pass	
2.6-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
4-Chloro-3-methylphenol	mg/kg	< 1			1	Pass	
Pentachlorophenol	mg/kg	< 1			1	Pass	
Tetrachlorophenols - Total	mg/kg	< 10			10	Pass	
Method Blank							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	mg/kg	< 20			20	Pass	
2-Methyl-4.6-dinitrophenol	mg/kg	< 5			5	Pass	
2-Methylphenol (o-Cresol)	mg/kg	< 0.2			0.2	Pass	
2-Nitrophenol	mg/kg	< 1			1	Pass	
2.4-Dimethylphenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dinitrophenol	mg/kg	< 5			5	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/kg	< 0.4			0.4	Pass	
4-Nitrophenol	mg/kg	< 5			5	Pass	
Dinoseb	mg/kg	< 20			20	Pass	
Phenol	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Nickel	mg/kg	< 5			5	Pass	
Zinc	mg/kg	< 5			5	Pass	
Method Blank							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	ug/kg	< 5			5	Pass	
Perfluoropentanoic acid (PFPeA)	ug/kg	< 5			5	Pass	
Perfluorohexanoic acid (PFHxA)	ug/kg	< 5			5	Pass	
Perfluoroheptanoic acid (PFHpA)	ug/kg	< 5			5	Pass	
Perfluorooctanoic acid (PFOA)	ug/kg	< 5			5	Pass	
Perfluorononanoic acid (PFNA)	ug/kg	< 5			5	Pass	
Perfluorodecanoic acid (PFDA)	ug/kg	< 5			5	Pass	
Perfluoroundecanoic acid (PFUnDA)	ug/kg	< 5			5	Pass	
Perfluorododecanoic acid (PFDoDA)	ug/kg	< 5			5	Pass	
Perfluorotridecanoic acid (PFTrDA)	ug/kg	< 5			5	Pass	
Perfluorotetradecanoic acid (PFTeDA)	ug/kg	< 5			5	Pass	
Method Blank							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	ug/kg	< 5			5	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	ug/kg	< 5			5	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	ug/kg	< 5			5	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	ug/kg	< 5			5	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	ug/kg	< 5			5	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	ug/kg	< 10			10	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	ug/kg	< 10			10	Pass	
Method Blank							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	ug/kg	< 5			5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Perfluorononanesulfonic acid (PFNS)	ug/kg	< 5			5	Pass	
Perfluoropropanesulfonic acid (PFPrS)	ug/kg	< 5			5	Pass	
Perfluoropentanesulfonic acid (PFPeS)	ug/kg	< 5			5	Pass	
Perfluorohexanesulfonic acid (PFHxS)	ug/kg	< 5			5	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	ug/kg	< 5			5	Pass	
Perfluorooctanesulfonic acid (PFOS)	ug/kg	< 5			5	Pass	
Perfluorodecanesulfonic acid (PFDS)	ug/kg	< 5			5	Pass	
Method Blank							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	ug/kg	< 5			5	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	ug/kg	< 10			10	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	ug/kg	< 5			5	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	ug/kg	< 5			5	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C10-C14	%	75			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	129			70-130	Pass	
Toluene	%	112			70-130	Pass	
Ethylbenzene	%	104			70-130	Pass	
m&p-Xylenes	%	103			70-130	Pass	
o-Xylene	%	99			70-130	Pass	
Xylenes - Total*	%	102			70-130	Pass	
LCS - % Recovery							
Volatile Organics							
1.1.1-Trichloroethane	%	106			70-130	Pass	
1.2-Dichlorobenzene	%	107			70-130	Pass	
1.2-Dichloroethane	%	125			70-130	Pass	
Trichloroethene	%	124			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	90			70-130	Pass	
TRH >C10-C16	%	78			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	118			70-130	Pass	
Anthracene	%	74			70-130	Pass	
Benz(a)anthracene	%	109			70-130	Pass	
Benzo(a)pyrene	%	118			70-130	Pass	
Benzo(b&j)fluoranthene	%	118			70-130	Pass	
Benzo(g.h.i)perylene	%	85			70-130	Pass	
Benzo(k)fluoranthene	%	110			70-130	Pass	
Chrysene	%	114			70-130	Pass	
Dibenz(a.h)anthracene	%	119			70-130	Pass	
Fluoranthene	%	85			70-130	Pass	
Fluorene	%	110			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	117			70-130	Pass	
Naphthalene	%	123			70-130	Pass	
Phenanthrene	%	98			70-130	Pass	
Pyrene	%	93			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	71			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
4.4'-DDD	%	97			70-130	Pass	
4.4'-DDE	%	95			70-130	Pass	
4.4'-DDT	%	88			70-130	Pass	
a-BHC	%	101			70-130	Pass	
Aldrin	%	75			70-130	Pass	
b-BHC	%	107			70-130	Pass	
d-BHC	%	100			70-130	Pass	
Dieldrin	%	93			70-130	Pass	
Endosulfan I	%	87			70-130	Pass	
Endosulfan II	%	92			70-130	Pass	
Endosulfan sulphate	%	80			70-130	Pass	
Endrin	%	83			70-130	Pass	
Endrin aldehyde	%	88			70-130	Pass	
Endrin ketone	%	77			70-130	Pass	
g-BHC (Lindane)	%	100			70-130	Pass	
Heptachlor	%	96			70-130	Pass	
Heptachlor epoxide	%	76			70-130	Pass	
Hexachlorobenzene	%	85			70-130	Pass	
Methoxychlor	%	87			70-130	Pass	
LCS - % Recovery							
Organophosphorus Pesticides							
Diazinon	%	125			70-130	Pass	
Dimethoate	%	130			70-130	Pass	
Ethion	%	98			70-130	Pass	
Fenitrothion	%	73			70-130	Pass	
Methyl parathion	%	101			70-130	Pass	
Mevinphos	%	103			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls							
Aroclor-1016	%	92			70-130	Pass	
LCS - % Recovery							
Phenols (Halogenated)							
2-Chlorophenol	%	86			30-130	Pass	
2.4-Dichlorophenol	%	109			30-130	Pass	
2.4.5-Trichlorophenol	%	124			30-130	Pass	
2.4.6-Trichlorophenol	%	101			30-130	Pass	
2.6-Dichlorophenol	%	103			30-130	Pass	
4-Chloro-3-methylphenol	%	114			30-130	Pass	
Pentachlorophenol	%	95			30-130	Pass	
Tetrachlorophenols - Total	%	56			30-130	Pass	
LCS - % Recovery							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	%	90			30-130	Pass	
2-Methyl-4.6-dinitrophenol	%	108			30-130	Pass	
2-Methylphenol (o-Cresol)	%	74			30-130	Pass	
2-Nitrophenol	%	100			30-130	Pass	
2.4-Dimethylphenol	%	83			30-130	Pass	
2.4-Dinitrophenol	%	88			30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	%	102			30-130	Pass	
Dinoseb	%	106			30-130	Pass	
Phenol	%	85			30-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	117			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Cadmium	%	113			70-130	Pass	
Chromium	%	110			70-130	Pass	
Copper	%	106			70-130	Pass	
Lead	%	117			70-130	Pass	
Mercury	%	116			70-130	Pass	
Nickel	%	107			70-130	Pass	
Zinc	%	109			70-130	Pass	
LCS - % Recovery							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	%	101			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	96			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	99			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	104			50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	111			50-150	Pass	
Perfluorononanoic acid (PFNA)	%	111			50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	103			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	99			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	118			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	%	106			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	120			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	%	84			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	113			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	134			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	%	84			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	%	64			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	110			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	120			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	%	86			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	%	114			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	%	105			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	%	98			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	%	106			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	%	120			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	%	93			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	%	131			50-150	Pass	
LCS - % Recovery							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	119			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	%	126			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	109			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	%	125			50-150	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C10-C14	S20-Jn45820	NCP	%	91			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	S20-Jn34685	NCP	%	103			70-130	Pass	
Toluene	S20-Jn34685	NCP	%	72			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Ethylbenzene	S20-Jn34685	NCP	%	74			70-130	Pass	
m&p-Xylenes	S20-Jn34685	NCP	%	74			70-130	Pass	
o-Xylene	S20-Jn34685	NCP	%	78			70-130	Pass	
Xylenes - Total*	S20-Jn34685	NCP	%	75			70-130	Pass	
Spike - % Recovery									
Volatile Organics				Result 1					
1.1-Dichloroethene	S20-Jn34685	NCP	%	72			70-130	Pass	
1.1.1-Trichloroethane	S20-Jn34685	NCP	%	82			70-130	Pass	
1.2-Dichlorobenzene	S20-Jn34685	NCP	%	86			70-130	Pass	
1.2-Dichloroethane	S20-Jn34685	NCP	%	91			70-130	Pass	
Trichloroethene	S20-Jn34685	NCP	%	90			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
TRH >C10-C16	S20-Jn45820	NCP	%	124			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	S20-Jn40538	NCP	%	117			70-130	Pass	
Anthracene	S20-Jn40538	NCP	%	106			70-130	Pass	
Benz(a)anthracene	S20-Jn40538	NCP	%	114			70-130	Pass	
Benzo(a)pyrene	S20-Jn40538	NCP	%	130			70-130	Pass	
Benzo(b&j)fluoranthene	S20-Jn40538	NCP	%	128			70-130	Pass	
Benzo(k)fluoranthene	S20-Jn40538	NCP	%	120			70-130	Pass	
Chrysene	S20-Jn40538	NCP	%	122			70-130	Pass	
Dibenz(a.h)anthracene	S20-Jn40538	NCP	%	129			70-130	Pass	
Fluoranthene	S20-Jn40538	NCP	%	101			70-130	Pass	
Fluorene	S20-Jn40538	NCP	%	124			70-130	Pass	
Naphthalene	S20-Jn40538	NCP	%	128			70-130	Pass	
Phenanthrene	S20-Jn40538	NCP	%	110			70-130	Pass	
Pyrene	S20-Jn40538	NCP	%	112			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	S20-Jn34113	NCP	%	112			70-130	Pass	
Cadmium	S20-Jn34113	NCP	%	106			70-130	Pass	
Chromium	S20-Jn34113	NCP	%	101			70-130	Pass	
Copper	S20-Jn34113	NCP	%	112			70-130	Pass	
Lead	S20-Jn34113	NCP	%	111			70-130	Pass	
Mercury	S20-Jn34113	NCP	%	108			70-130	Pass	
Nickel	S20-Jn34113	NCP	%	103			70-130	Pass	
Zinc	S20-Jn34113	NCP	%	115			70-130	Pass	
Spike - % Recovery									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1					
Perfluorobutanoic acid (PFBA)	S20-Jn39839	NCP	%	79			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	S20-Jn39839	NCP	%	75			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	S20-Jn39839	NCP	%	73			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	S20-Jn39839	NCP	%	78			50-150	Pass	
Perfluorooctanoic acid (PFOA)	S20-Jn39839	NCP	%	79			50-150	Pass	
Perfluorononanoic acid (PFNA)	S20-Jn39839	NCP	%	82			50-150	Pass	
Perfluorodecanoic acid (PFDA)	S20-Jn39839	NCP	%	71			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	S20-Jn39839	NCP	%	75			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	S20-Jn39839	NCP	%	101			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	S20-Jn39839	NCP	%	81			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	S20-Jn39839	NCP	%	94			50-150	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Perfluoroalkyl sulfonamido substances				Result 1					
Perfluorooctane sulfonamide (FOSA)	S20-Jn39839	NCP	%	65			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	S20-Jn39839	NCP	%	87			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	S20-Jn39839	NCP	%	80			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	S20-Jn39839	NCP	%	61			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	S20-Jn39839	NCP	%	60			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	S20-Jn39839	NCP	%	79			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	S20-Jn39839	NCP	%	86			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1					
Perfluorobutanesulfonic acid (PFBS)	S20-Jn39839	NCP	%	73			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	S20-Jn39839	NCP	%	105			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	S20-Jn39839	NCP	%	101			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	S20-Jn39839	NCP	%	92			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	S20-Jn39839	NCP	%	77			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	S20-Jn39839	NCP	%	114			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	S20-Jn39839	NCP	%	73			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	S20-Jn39839	NCP	%	97			50-150	Pass	
Spike - % Recovery									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1					
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	S20-Jn39839	NCP	%	90			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	S20-Jn39839	NCP	%	119			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	S20-Jn39839	NCP	%	98			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	S20-Jn39839	NCP	%	100			50-150	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C6-C9	S20-Jn34684	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	S20-Jn32466	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	S20-Jn32466	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	S20-Jn32466	NCP	mg/kg	< 50	< 50	<1	30%	Pass	

Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S20-Jn34684	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Toluene	S20-Jn34684	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Ethylbenzene	S20-Jn34684	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
m&p-Xylenes	S20-Jn34684	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
o-Xylene	S20-Jn34684	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes - Total*	S20-Jn34684	NCP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
1.1-Dichloroethane	S20-Jn34684	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1-Dichloroethene	S20-Jn34684	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1-Trichloroethane	S20-Jn34684	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	S20-Jn34684	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2-Trichloroethane	S20-Jn34684	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	S20-Jn34684	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dibromoethane	S20-Jn34684	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichlorobenzene	S20-Jn34684	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloroethane	S20-Jn34684	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloropropane	S20-Jn34684	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.3-Trichloropropane	S20-Jn34684	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trimethylbenzene	S20-Jn34684	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichlorobenzene	S20-Jn34684	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichloropropane	S20-Jn34684	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3.5-Trimethylbenzene	S20-Jn34684	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.4-Dichlorobenzene	S20-Jn34684	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Butanone (MEK)	S20-Jn34684	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Propanone (Acetone)	S20-Jn34684	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chlorotoluene	S20-Jn34684	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Methyl-2-pentanone (MIBK)	S20-Jn34684	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Allyl chloride	S20-Jn34684	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromobenzene	S20-Jn34684	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromochloromethane	S20-Jn34684	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromodichloromethane	S20-Jn34684	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromoform	S20-Jn34684	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromomethane	S20-Jn34684	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon disulfide	S20-Jn34684	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon Tetrachloride	S20-Jn34684	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chlorobenzene	S20-Jn34684	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroethane	S20-Jn34684	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroform	S20-Jn34684	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloromethane	S20-Jn34684	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.2-Dichloroethene	S20-Jn34684	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.3-Dichloropropene	S20-Jn34684	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromochloromethane	S20-Jn34684	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromomethane	S20-Jn34684	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dichlorodifluoromethane	S20-Jn34684	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Iodomethane	S20-Jn34684	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Isopropyl benzene (Cumene)	S20-Jn34684	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Methylene Chloride	S20-Jn34684	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Styrene	S20-Jn34684	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Tetrachloroethene	S20-Jn34684	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.2-Dichloroethene	S20-Jn34684	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.3-Dichloropropene	S20-Jn34684	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichloroethene	S20-Jn34684	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichlorofluoromethane	S20-Jn34684	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Vinyl chloride	S20-Jn34684	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	S20-Jn34684	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	S20-Jn34684	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH >C10-C16	S20-Jn32466	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	S20-Jn32466	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	S20-Jn32466	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	S20-Jn37960	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	S20-Jn37960	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	S20-Jn37960	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	S20-Jn37960	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	S20-Jn37960	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	S20-Jn37960	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	S20-Jn37960	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	S20-Jn37960	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	S20-Jn37960	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	S20-Jn37960	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	S20-Jn37960	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	S20-Jn37960	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	S20-Jn37960	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	S20-Jn37960	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	S20-Jn37960	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	S20-Jn37960	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	S20-Jn37960	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	S20-Jn37960	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	S20-Jn37960	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	S20-Jn37960	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-BHC	S20-Jn37960	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	S20-Jn37960	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-BHC	S20-Jn37960	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-BHC	S20-Jn37960	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	S20-Jn37960	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	S20-Jn37960	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	S20-Jn37960	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	S20-Jn37960	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	S20-Jn37960	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	S20-Jn37960	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	S20-Jn37960	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-BHC (Lindane)	S20-Jn37960	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	S20-Jn37960	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	S20-Jn37960	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	S20-Jn37960	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Azinphos-methyl	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Bolstar	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorfenvinphos	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos-methyl	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Coumaphos	S20-Jn37960	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Demeton-S	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	

Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Demeton-O	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Diazinon	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dichlorvos	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dimethoate	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Disulfoton	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
EPN	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethion	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethoprop	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethyl parathion	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenitrothion	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fensulfothion	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenthion	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Malathion	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Merphos	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Methyl parathion	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Mevinphos	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Monocrotophos	S20-Jn37960	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Naled	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Omethoate	S20-Jn37960	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Phorate	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pirimiphos-methyl	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pyrazophos	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ronnel	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Terbufos	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tetrachlorvinphos	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tokuthion	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Trichloronate	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Aroclor-1016	S20-Jn37960	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1221	S20-Jn37960	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1232	S20-Jn37960	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1242	S20-Jn37960	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1248	S20-Jn37960	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1254	S20-Jn37960	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1260	S20-Jn37960	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Total PCB*	S20-Jn37960	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	S20-Jn34795	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Cadmium	S20-Jn34795	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	S20-Jn34795	NCP	mg/kg	5.2	5.8	10	30%	Pass	
Copper	S20-Jn34795	NCP	mg/kg	6.5	5.2	23	30%	Pass	
Lead	S20-Jn34795	NCP	mg/kg	18	24	27	30%	Pass	
Mercury	S20-Jn34795	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Nickel	S20-Jn34795	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Zinc	S20-Jn34795	NCP	mg/kg	28	38	28	30%	Pass	
Duplicate									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD			
Perfluorobutanoic acid (PFBA)	S20-Jn39838	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	S20-Jn39838	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	S20-Jn39838	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	S20-Jn39838	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	S20-Jn39838	NCP	ug/kg	< 5	< 5	<1	30%	Pass	

Duplicate									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD			
Perfluorononanoic acid (PFNA)	S20-Jn39838	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	S20-Jn39838	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	S20-Jn39838	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	S20-Jn39838	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	S20-Jn39838	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	S20-Jn39838	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
Perfluorooctane sulfonamide (FOSA)	S20-Jn39838	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	S20-Jn39838	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	S20-Jn39838	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	S20-Jn39838	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	S20-Jn39838	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	S20-Jn39838	NCP	ug/kg	< 10	< 10	<1	30%	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	S20-Jn39838	NCP	ug/kg	< 10	< 10	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD			
Perfluorobutanesulfonic acid (PFBS)	S20-Jn39838	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorononanesulfonic acid (PFNS)	S20-Jn39838	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropropanesulfonic acid (PFPrS)	S20-Jn39838	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropentanesulfonic acid (PFPeS)	S20-Jn39838	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorohexanesulfonic acid (PFHxS)	S20-Jn39838	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	S20-Jn39838	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorooctanesulfonic acid (PFOS)	S20-Jn39838	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorodecanesulfonic acid (PFDS)	S20-Jn39838	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Duplicate									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1	Result 2	RPD			
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	S20-Jn39838	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	S20-Jn39838	NCP	ug/kg	< 10	< 10	<1	30%	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	S20-Jn39838	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	S20-Jn39838	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	S20-Jn34789	CP	%	3.0	4.8	47	30%	Fail	Q15

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
N11	Isotope dilution is used for calibration of each native compound for which an exact labelled analogue is available (Isotope Dilution Quantitation). The isotopically labelled analogues allow identification and recovery correction of the concentration of the associated native PFAS compounds.
N15	Where the native PFAS compound does not have labelled analogue then the quantification is made using the Extracted Internal Standard Analyte with the closest retention time to the analyte and no recovery correction has been made (Internal Standard Quantitation).
Q15	The RPD reported passes Eurofins Environment Testing's QC - Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report.

Authorised By

[redacted]

Analytical Services Manager
Senior Analyst-Organic (NSW)
Senior Analyst-Metal (NSW)
Senior Analyst-Asbestos (NSW)
Senior Analyst-PFAS (QLD)

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

Eurofins shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.

000553

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Dawin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☐ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT:	~~DHA~~ SLR	LABORATORY:	SGS
PROJECT:	610.30041	LABORATORY ADDRESS:	Sydney
PROJECT NUMBER:		SAMPLER:	[redacted]
PROJECT MANAGER:	[redacted]	SAMPLER CONTACT No:	
PM CONTACT No:		Email Reports and Invoices to:	

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT:

COC Number 2 of 6

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, Water, ACM, etc)	Containers and Preservatives	Suite A	HOCD							Additional Information (Comment on any gross contamination or specific requirements)
	RWBB_QC100_200616	16.6.20	~~1x g.jar~~ ~~1x PFAS~~ SOIL	1 x g.jar 1 x pfas	/								
	RWBB_QC200_200616				/								send to eurofins
	RWBB_TP004_1.0_200616			jar, PFAS, asbestos		/							
	RWBB_TP005_0.1_200616			jar, PFAS, Asbestos	/								
	RWBB_TP005_0.5_200616					/							
	RWBB_TP005_1.0_200616				/								
	RWBB_TP005_1.5_200616			jar, PFAS		/							
	RWBB_TP013_0.1_200616			1 x jar, PFAS Asbestos	/								
	RWBB_TP013_0.5_200616					/							
	RWBB_TP013_1.0_200616			1 x jar 1 x pfas	/								
	RWBB_TP031_0.1_200616			1 jar, PFAS asbestos	/								
	RWBB_TP031_0.5_200616				/								

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign ~~1540~~ [redacted] ~~17.6.20~~	Date / Time 1540 17.6.20	Received by	Sign [redacted]	Date / Time	Temperature Received:
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time 19/6/20	

726839

000554

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

SLR

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
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- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
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- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☐ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
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- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT: ~~DHA~~ SLR	**LABORATORY:** SGS	**Turnaround Time (TAT)**	**COC Number** 3 of 6
PROJECT: 610.30041	**LABORATORY ADDRESS:** Sydney	☐ Standard TAT	
PROJECT NUMBER:	**SAMPLER:** [redacted]	☐ Non Standard or Urgent TAT	
PROJECT MANAGER: [redacted]	**SAMPLER CONTACT No:**	**Required TAT:**	
PM CONTACT No:	**Email Reports and Invoices to:**		

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: Suite A	HOCD	Asbestos ID	Additional Information (Comment on any gross contamination or specific requirements)
	RWBB_QC104_200616	16.6.20	Soil	jar	/			
	RWBB_QC204_200616			jar	/			sent to eurofins
	RWBB_TP031_1.0_200616			jar, PFAS		/		
●	RWBB_TP040_0.1_200616			jar, PFAS, ASBds	/	/		
	RWBB_TP040_0.5_200616			↓				
	RWBB_TP040_1.0_200616			jar, PFAS	/	/		
	RWBB_TP039_0.1_200616			jar, PFAS, ACM	/	/		
	RWBB_TP039_0.5_200616			↓				
	RWBB_TP039_1.0_200616	↓	↓	jar, pfas.	/			
●	RWBB_TP039_0.1_ACM_200616		ACM	~~pfas~~ Asbestos			/	
●	RWBB_TP039_0.2_ACM1_200616		ACM	Asbestos			/	
●	RWBB_TP039_0.2_ACM2_200616		ACM	Asbestos			/	

I attest that the proper field sampling procedures were [redacted] collection of these samples.

Relinquished By Sampler	Sign [redacted]	Date / Time 17.6.20 1540	Received by	Sign [redacted]	Date / Time	Temperature Received:
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time 19/6/20	

726859

000557

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

SLR

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
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- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
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- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT: SLR	**LABORATORY:** SGS Sydney	**Turnaround Time (TAT)**	**COC Number** 6 of 6
PROJECT:	**LABORATORY ADDRESS:**		
PROJECT NUMBER: 610.30041	**SAMPLER:** [redacted]	☐ Standard TAT	
PROJECT MANAGER: [redacted]	**SAMPLER CONTACT No:**	☐ Non Standard or Urgent TAT	
PM CONTACT No:	**Email Reports and Invoices to:**	**Required TAT:**	

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	HOLD	Additional Information (Comment on any gross contamination or specific requirements)
	RWBB_TP052_0.1_200617	17.6.20	Soil	1 jar, PFAS, metals	✓		
	RWBB_[redacted]_QC111_QC4H_200617			jar, PFAS,	✓		
	RWBB_[redacted]_QC211_200617			↓	✓		duplicate
	RWBB_TP052_0.1_ACM_200617		ACM	bag	✓		
	RWBB_TP052_0.5_200617		Soil	jar, PFAS, asbestos	✓		
	RWBB_TP052_1.0_200617			jar, PFAS		✓	
	RWBB_TP053_0.1_200617			jar, pfas, asb	✓		
	RWBB_TP053_0.5_200617	↓	↓	jar, PFAS.	✓		

I attest that the proper field sampling procedu[redacted]g the collection of these samples.

Relinquished By Sampler	Sign [redacted]	Date / Time 17.6.20 1540	**Received by**	Sign [redacted]	Date / Time	**Temperature Received:**
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time 19/6/20	

726839

eurofins | Environment Testing

Melbourne
6 Monterey Road
Dandenong South Vic 3175
Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

Sydney
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Lane Cove West NSW 2066
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

Brisbane
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Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Perth
2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261 Site # 23736

ABN – 50 005 085 521 e.mail : EnviroSales@eurofins.com web : www.eurofins.com.au

Sample Receipt Advice

Company name:	**SLR Consulting (Sydney)**
Contact name:	[redacted]
Project name:	610.30041
Project ID:	RANDWICK BARRACK
COC number:	Not provided
Turn around time:	5 Day
Date/Time received:	Jun 19, 2020 4:02 PM
Eurofins reference:	**726839**

Sample information

☑ A detailed list of analytes logged into our LIMS, is included in the attached summary table.

☑ All samples have been received as described on the above COC.

☑ COC has been completed correctly.

☑ Attempt to chill was evident.

☑ Appropriately preserved sample containers have been used.

☑ All samples were received in good condition.

☑ Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.

☑ Appropriate sample containers have been used.

☒ Split sample sent to requested external lab.

☒ Some samples have been subcontracted.

N/A Custody Seals intact (if used).

Contact notes

If you have any questions with respect to these samples please contact:

[redacted] on Phone : [redacted] or by e.mail: [redacted]@eurofins.com

Results will be delivered electronically via e.mail to [redacted]@slrconsulting.com.

Note: A copy of these results will also be delivered to the general SLR Consulting (Sydney) email address.

eurofins | Environment Testing

ABN – 50 005 085 521 web : www.eurofins.com.au e.mail : EnviroSales@eurofins.com

Australia

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Site # 1254 & 14271

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NATA # 1261 Site # 18217

Brisbane
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NATA # 1261 Site # 20794

Perth
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NATA # 1261
Site # 23736

New Zealand

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Penrose, Auckland 1061
Phone : +64 9 526 45 51
IANZ # 1327

Christchurch
43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: 610.30041
Project ID: RANDWICK BARRACK

Order No.:
Report #: 726839
Phone: 02 9428 8100
Fax:

Received: Jun 19, 2020 4:02 PM
Due: Jun 26, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271										
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	RWBB_QC200_200616	Jun 16, 2020		Soil	S20-Jn34793	X	X	X	X	X
2	RWBB_QC204_200616	Jun 16, 2020		Soil	S20-Jn34794	X	X	X	X	X
3	RWBB_QC211_200616	Jun 16, 2020		Soil	S20-Jn34795	X	X	X	X	X
Test Counts						3	3	3	3	3

Certificate of Analysis

eurofins | Environment Testing

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025–Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus
North Sydney
NSW 2060

Attention:	[redacted]
Report	726839-AID
Project Name	610.30041
Project ID	RANDWICK BARRACK
Received Date	Jun 19, 2020
Date Reported	Jun 29, 2020

Methodology:

Asbestos Fibre Identification	Conducted in accordance with the Australian Standard AS 4964 – 2004: Method for the Qualitative Identification of Asbestos in Bulk Samples and in-house Method LTM-ASB-8020 by polarised light microscopy (PLM) and dispersion staining (DS) techniques. *NOTE: Positive Trace Analysis results indicate the sample contains detectable respirable fibres.*
Unknown Mineral Fibres	Mineral fibres of unknown type, as determined by PLM with DS, may require another analytical technique, such as Electron Microscopy, to confirm unequivocal identity. *NOTE: While Actinolite, Anthophyllite and Tremolite asbestos may be detected by PLM with DS, due to variability in the optical properties of these materials, AS4964 requires that these are reported as UMF unless confirmed by an independent technique.*
Subsampling Soil Samples	The whole sample submitted is first dried and then passed through a 10mm sieve followed by a 2mm sieve. All fibrous matter greater than 10mm, greater than 2mm as well as the material passing through the 2mm sieve are retained and analysed for the presence of asbestos. If the sub 2mm fraction is greater than approximately 30 to 60g then a sub-sampling routine based on ISO 3082:2009(E) is employed. *NOTE: Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be sub-sampled for trace analysis, in accordance with AS 4964-2004.*
Bonded asbestos-containing material (ACM)	The material is first examined and any fibres isolated for identification by PLM and DS. Where required, interfering matrices may be removed by disintegration using a range of heat, chemical or physical treatments, possibly in combination.The resultant material is then further examined in accordance with AS 4964 - 2004. *NOTE: Even after disintegration it may be difficult to detect the presence of asbestos in some asbestos-containing bulk materials using PLM and DS. This is due to the low grade or small length or diameter of the asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos-containing sealants and mastics, asbestos-containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.*
Limit of Reporting	The performance limitation of the AS 4964 (2004) method for non-homogeneous samples is around 0.1 g/kg (equivalent to 0.01% (w/w)). Where no asbestos is found by PLM and DS, including Trace Analysis, this is considered to be at the nominal reporting limit of 0.01% (w/w). The NEPM screening level of 0.001% (w/w) is intended as an on-site determination, not a laboratory Limit of Reporting (LOR), per se. Examination of a large sample size (e.g. 500 mL) may improve the likelihood of detecting asbestos, particularly AF, to aid assessment against the NEPM criteria. Gravimetric determinations to this level of accuracy are outside of AS 4964 and hence NATA Accreditation does not cover the performance of this service (non-NATA results shown with an asterisk). *NOTE: NATA News March 2014, p.7, states in relation to AS 4964: "This is a qualitative method with a nominal reporting limit of 0.01 % " and that currently in Australia "there is no validated method available for the quantification of asbestos".This report is consistent with the analytical procedures and reporting recommendations in the NEPM and the WA DoH.*

Accredited for compliance with ISO/IEC 17025–Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Project Name 610.30041
Project ID RANDWICK BARRACK
Date Sampled Jun 16, 2020
Report 726839-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
RWBB_QC200_200616	20-Jn34793	Jun 16, 2020	Approximate Sample 60g Sample consisted of: Brown fine-grained sandy soil	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
RWBB_QC204_200616	20-Jn34794	Jun 16, 2020	Approximate Sample 51g Sample consisted of: Brown coarse-grained soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
RWBB_QC211_200616	20-Jn34795	Jun 16, 2020	Approximate Sample 69g Sample consisted of: Brown fine-grained sandy soil	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Asbestos - LTM-ASB-8020	Sydney	Jun 22, 2020	Indefinite

eurofins | Environment Testing

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Company Name: SLR Consulting (Sydney)
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Project Name: 610.30041
Project ID: RANDWICK BARRACK

Order No.:
Report #: 726839
Phone: 02 9428 8100
Fax:

Received: Jun 19, 2020 4:02 PM
Due: Jun 26, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271										
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	RWBB_QC200_200616	Jun 16, 2020		Soil	S20-Jn34793	X	X	X	X	X
2	RWBB_QC204_200616	Jun 16, 2020		Soil	S20-Jn34794	X	X	X	X	X
3	RWBB_QC211_200616	Jun 16, 2020		Soil	S20-Jn34795	X	X	X	X	X
Test Counts						3	3	3	3	3

Internal Quality Control Review and Glossary

General

1. QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Samples were analysed on an 'as received' basis.
4. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
5. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the Sample Receipt Advice.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

Units

% w/w: weight for weight basis	grams per kilogram
Filter loading:	fibres/100 graticule areas
Reported Concentration:	fibres/mL
Flowrate:	L/min

Terms

Dry	Sample is dried by heating prior to analysis
LOR	Limit of Reporting
COC	Chain of Custody
SRA	Sample Receipt Advice
ISO	International Standards Organisation
AS	Australian Standards
WA DOH	Reference document for the NEPM. Government of Western Australia, Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia (2009), including supporting document Recommended Procedures for Laboratory Analysis of Asbestos in Soil (2011)
NEPM	National Environment Protection (Assessment of Site Contamination) Measure, 2013 (as amended)
ACM	Asbestos Containing Materials. Asbestos contained within a non-asbestos matrix, typically presented in bonded and/or sound condition. For the purposes of the NEPM, ACM is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
AF	Asbestos Fines. Asbestos containing materials, including friable, weathered and bonded materials, able to pass a 7mm x 7mm sieve. Considered under the NEPM as equivalent to “non-bonded / friable”.
FA	Fibrous Asbestos. Asbestos containing materials in a friable and/or severely weathered condition. For the purposes of the NEPM, FA is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
Friable	Asbestos-containing materials of any size that may be broken or crumbled by hand pressure. For the purposes of the NEPM, this includes both AF and FA. It is outside of the laboratory’s remit to assess degree of friability.
Trace Analysis	Analytical procedure used to detect the presence of respirable fibres in the matrix.

Comments

The samples received were not collected in an approved asbestos bag and was therefore sub-sampled from the 250mL glass jar. Valid sub-sampling procedures were applied so as to ensure that the sub-samples to be analysed accurately represented the samples received.

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

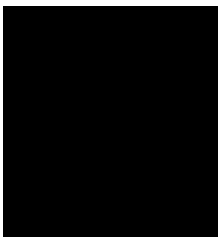
Qualifier Codes/Comments

Code	Description
N/A	Not applicable

Asbestos Counter/Identifier:

[redacted] Senior Analyst-Asbestos (NSW)

Authorised by:



Senior Analyst-Asbestos (NSW)

General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus,
North Sydney
NSW 2060

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: [redacted]

Report **726839-S**
Project name 610.30041
Project ID RANDWICK BARRACK
Received Date Jun 19, 2020

Client Sample ID			RWBB_QC200_200616	RWBB_QC204_200616	RWBB_QC211_200616
Sample Matrix			**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn34793**	**S20-Jn34794**	**S20-Jn34795**
Date Sampled			**Jun 16, 2020**	**Jun 16, 2020**	**Jun 16, 2020**
Test/Reference	LOR	Unit			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions					
TRH C6-C9	20	mg/kg	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50	< 50	< 50
BTEX					
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	79	83	75
Volatile Organics					
1.1-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5	< 0.5	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5

Client Sample ID			RWBB_QC200_200616	RWBB_QC204_200616	RWBB_QC211_200616
Sample Matrix			Soil	Soil	Soil
Eurofins Sample No.			S20-Jn34793	S20-Jn34794	S20-Jn34795
Date Sampled			Jun 16, 2020	Jun 16, 2020	Jun 16, 2020
Test/Reference	LOR	Unit			
Volatile Organics					
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Bromoform	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Bromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Chloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Chloroform	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Chloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Iodomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	< 0.5	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Styrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3
Total MAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5
4-Bromofluorobenzene (surr.)	1	%	79	83	75
Toluene-d8 (surr.)	1	%	108	93	85
Total Recoverable Hydrocarbons - 2013 NEPM Fractions					
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100	< 100

Client Sample ID			RWBB_QC200_200616	RWBB_QC204_200616	RWBB_QC211_200616
Sample Matrix			**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn34793**	**S20-Jn34794**	**S20-Jn34795**
Date Sampled			**Jun 16, 2020**	**Jun 16, 2020**	**Jun 16, 2020**
Test/Reference	LOR	Unit			
Polycyclic Aromatic Hydrocarbons					
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	100	98	102
p-Terphenyl-d14 (surr.)	1	%	82	87	97
Organochlorine Pesticides					
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05
a-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05
b-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05
d-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Methoxychlor	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Toxaphene	1	mg/kg	< 1	< 1	< 1
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.2	< 0.2	< 0.2
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.2	< 0.2	< 0.2
Dibutylchlorendate (surr.)	1	%	97	95	90
Tetrachloro-m-xylene (surr.)	1	%	82	86	94

Client Sample ID			RWBB_QC200_200616	RWBB_QC204_200616	RWBB_QC211_200616
Sample Matrix			Soil	Soil	Soil
Eurofins Sample No.			S20-Jn34793	S20-Jn34794	S20-Jn34795
Date Sampled			Jun 16, 2020	Jun 16, 2020	Jun 16, 2020
Test/Reference	LOR	Unit			
Organophosphorus Pesticides					
Azinphos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Bolstar	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Coumaphos	2	mg/kg	< 2	< 2	< 2
Demeton-S	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Demeton-O	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Diazinon	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Dimethoate	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Disulfoton	0.2	mg/kg	< 0.2	< 0.2	< 0.2
EPN	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Ethion	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Ethoprop	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Fenthion	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Malathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Merphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Methyl parathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Mevinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Monocrotophos	2	mg/kg	< 2	< 2	< 2
Naled	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Omethoate	2	mg/kg	< 2	< 2	< 2
Phorate	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Ronnel	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Terbufos	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Tokuthion	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Trichloronate	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Triphenylphosphate (surr.)	1	%	68	65	70
Polychlorinated Biphenyls					
Aroclor-1016	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Aroclor-1232	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Aroclor-1242	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Aroclor-1248	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Aroclor-1254	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Aroclor-1260	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Total PCB*	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Dibutylchlorendate (surr.)	1	%	97	95	90
Tetrachloro-m-xylene (surr.)	1	%	82	86	94

Client Sample ID			RWBB_QC200_200616	RWBB_QC204_200616	RWBB_QC211_200616
Sample Matrix			**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn34793**	**S20-Jn34794**	**S20-Jn34795**
Date Sampled			**Jun 16, 2020**	**Jun 16, 2020**	**Jun 16, 2020**
Test/Reference	LOR	Unit			
Phenols (Halogenated)					
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1
Phenols (non-Halogenated)					
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	< 0.2
2-Nitrophenol	1	mg/kg	< 1	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5	< 5	< 5
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	< 0.4
4-Nitrophenol	5	mg/kg	< 5	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20
Phenol-d6 (surr.)	1	%	80	116	52
Heavy Metals					
Arsenic	2	mg/kg	< 2	2.2	< 2
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	< 5	11	5.2
Copper	5	mg/kg	11	23	6.5
Lead	5	mg/kg	17	29	18
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	< 5	8.2	< 5
Zinc	5	mg/kg	8.1	40	28
% Moisture	1	%	6.6	17	6.5

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Sydney	Jun 25, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Sydney	Jun 25, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jun 25, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jun 25, 2020	
- Method: LTM-ORG-2010 TRH C6-C40			
Polycyclic Aromatic Hydrocarbons	Sydney	Jun 25, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (Halogenated)	Sydney	Jun 25, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (non-Halogenated)	Sydney	Jun 25, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Metals M8	Sydney	Jun 25, 2020	180 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Volatile Organics	Sydney	Jun 25, 2020	7 Days
- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices			
Eurofins | mgt Suite B15			
Organochlorine Pesticides	Sydney	Jun 25, 2020	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Organophosphorus Pesticides	Sydney	Jun 25, 2020	14 Days
- Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS			
Polychlorinated Biphenyls	Sydney	Jun 25, 2020	28 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
% Moisture	Sydney	Jun 22, 2020	14 Days
- Method: LTM-GEN-7080 Moisture			

eurofins | Environment Testing

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Company Name: SLR Consulting (Sydney)
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Project Name: 610.30041
Project ID: RANDWICK BARRACK

Order No.:
Report #: 726839
Phone: 02 9428 8100
Fax:

Received: Jun 19, 2020 4:02 PM
Due: Jun 26, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271										
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	RWBB_QC200_200616	Jun 16, 2020		Soil	S20-Jn34793	X	X	X	X	X
2	RWBB_QC204_200616	Jun 16, 2020		Soil	S20-Jn34794	X	X	X	X	X
3	RWBB_QC211_200616	Jun 16, 2020		Soil	S20-Jn34795	X	X	X	X	X
Test Counts						3	3	3	3	3

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

****NOTE:** pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram
mg/L: milligrams per litre
ug/L: micrograms per litre
ppm: Parts per million
ppb: Parts per billion
%: Percentage
org/100mL: Organisms per 100 millilitres
NTU: Nephelometric Turbidity Units
MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version 5.3
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling.Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C6-C9	S20-Jn34684	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	S20-Jn32466	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	S20-Jn32466	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	S20-Jn32466	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	S20-Jn46137	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	S20-Jn46137	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	S20-Jn46137	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	S20-Jn46137	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	S20-Jn46137	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	S20-Jn46137	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	S20-Jn46137	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	S20-Jn46137	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	S20-Jn46137	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	S20-Jn46137	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	S20-Jn46137	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	S20-Jn46137	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	S20-Jn46137	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	S20-Jn46137	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	S20-Jn46137	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	S20-Jn46137	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	S20-Jn46137	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	S20-Jn46137	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	S20-Jn46137	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	S20-Jn46137	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-BHC	S20-Jn46137	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	S20-Jn46137	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-BHC	S20-Jn46137	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-BHC	S20-Jn46137	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	S20-Jn46137	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	S20-Jn46137	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	S20-Jn46137	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	S20-Jn46137	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	S20-Jn46137	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	S20-Jn46137	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	S20-Jn46137	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-BHC (Lindane)	S20-Jn46137	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	S20-Jn46137	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	S20-Jn46137	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	S20-Jn46137	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	S20-Jn46137	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Azinphos-methyl	S20-Jn46137	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Bolstar	S20-Jn46137	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorfenvinphos	S20-Jn46137	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos	S20-Jn46137	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	

Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Chlorpyrifos-methyl	S20-Jn46137	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Coumaphos	S20-Jn46137	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Demeton-S	S20-Jn46137	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Demeton-O	S20-Jn46137	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Diazinon	S20-Jn46137	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dichlorvos	S20-Jn46137	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dimethoate	S20-Jn46137	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Disulfoton	S20-Jn46137	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
EPN	S20-Jn46137	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethion	S20-Jn46137	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethoprop	S20-Jn46137	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethyl parathion	S20-Jn46137	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenitrothion	S20-Jn46137	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fensulfothion	S20-Jn46137	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenthion	S20-Jn46137	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Malathion	S20-Jn46137	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Merphos	S20-Jn46137	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Methyl parathion	S20-Jn46137	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Mevinphos	S20-Jn46137	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Monocrotophos	S20-Jn46137	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Naled	S20-Jn46137	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Omethoate	S20-Jn46137	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Phorate	S20-Jn46137	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pirimiphos-methyl	S20-Jn46137	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pyrazophos	S20-Jn46137	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ronnel	S20-Jn46137	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Terbufos	S20-Jn46137	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tetrachlorvinphos	S20-Jn46137	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tokuthion	S20-Jn46137	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Trichloronate	S20-Jn46137	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	S20-Jn34794	CP	%	17	19	14	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	S20-Jn34795	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Cadmium	S20-Jn34795	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	S20-Jn34795	CP	mg/kg	5.2	5.8	10	30%	Pass	
Copper	S20-Jn34795	CP	mg/kg	6.5	5.2	23	30%	Pass	
Lead	S20-Jn34795	CP	mg/kg	18	24	27	30%	Pass	
Mercury	S20-Jn34795	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Nickel	S20-Jn34795	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Zinc	S20-Jn34795	CP	mg/kg	28	38	28	30%	Pass	

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs

Authorised By

[redacted]

Analytical Services Manager
Senior Analyst-Organic (NSW)
Senior Analyst-Metal (NSW)
Senior Analyst-Asbestos (NSW)

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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000673

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

SLR

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☑ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT:	DHA
PROJECT:	Randwick Barracks
PROJECT NUMBER:	610.30041
PROJECT MANAGER:	[redacted]
PM CONTACT No:	[redacted]
LABORATORY:	SGS
LABORATORY ADDRESS:	Syd
SAMPLER:	[redacted]
SAMPLER CONTACT No:	
Email Reports and Invoices to:	LQR340@slrconsulting.com

Turnaround Time (TAT)

- ☑ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT:

COC Number: 3 of 3

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	PFAS	Asbestos					Hold.	Additional Information (Comment on any gross contamination or specific requirements)
	0407_TP65_AO1_200619	19.6.20	ACM				X						
	0407_TP65_AO2_200619		ACM									X	
	0407_QC120_200619		Soil		X	X							
	0407_QC220_200619		Soil	*	Please forward to Eurofins for same as QC120*								

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	Received by	Sign [redacted]	me 22/6/20
Relinquished By	Sign	Date / Time	Received by	Sign	me
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time

Temperature Received: 11.53°C

#727157

eurofins | Environment Testing

Melbourne
6 Monterey Road
Dandenong South Vic 3175
Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

Sydney
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NATA # 1261 Site # 18217

Brisbane
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Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Perth
2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261 Site # 23736

ABN – 50 005 085 521 e.mail : EnviroSales@eurofins.com web : www.eurofins.com.au

Sample Receipt Advice

Company name:	**SLR Consulting (Sydney)**
Contact name:	[redacted]
Project name:	RANDWICK BARRACKS
Project ID:	610.30041
COC number:	Not provided
Turn around time:	5 Day
Date/Time received:	Jun 22, 2020 2:44 PM
Eurofins reference:	**727157**

Sample information

☑ A detailed list of analytes logged into our LIMS, is included in the attached summary table.

☑ All samples have been received as described on the above COC.

☑ COC has been completed correctly.

☑ Attempt to chill was evident.

☑ Appropriately preserved sample containers have been used.

☑ All samples were received in good condition.

☑ Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.

☒ Appropriate sample containers have been used.

☒ Split sample sent to requested external lab.

☒ Some samples have been subcontracted.

N/A Custody Seals intact (if used).

Contact notes

If you have any questions with respect to these samples please contact:

[redacted] on Phone : [redacted] or by e.mail: [redacted]@eurofins.com

Results will be delivered electronically via e.mail to [redacted]@slrconsulting.com.

Note: A copy of these results will also be delivered to the general SLR Consulting (Sydney) email address.

eurofins | Environment Testing

ABN – 50 005 085 521 web : www.eurofins.com.au e.mail : EnviroSales@eurofins.com

Australia

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NATA # 1261 Site # 20794

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NATA # 1261
Site # 23736

New Zealand

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Penrose, Auckland 1061
Phone : +64 9 526 45 51
IANZ # 1327

Christchurch
43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 727157
Phone: 02 9428 8100
Fax:

Received: Jun 22, 2020 2:44 PM
Due: Jun 29, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A	Per- and Polyfluoroalkyl Substances (PFASs)
Melbourne Laboratory - NATA Site # 1254 & 14271											
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	
Brisbane Laboratory - NATA Site # 20794											X
Perth Laboratory - NATA Site # 23736											
External Laboratory											
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**						
1	0407_QC220_200619	Jun 19, 2020		Soil	S20-Jn37297	X	X	X	X	X	X
Test Counts						1	1	1	1	1	1

Certificate of Analysis

eurofins | Environment Testing

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025–Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus
North Sydney
NSW 2060

Attention:	[redacted]
Report	727157-AID
Project Name	RANDWICK BARRACKS
Project ID	610.30041
Received Date	Jun 22, 2020
Date Reported	Jun 29, 2020

Methodology:

Asbestos Fibre Identification	Conducted in accordance with the Australian Standard AS 4964 – 2004: Method for the Qualitative Identification of Asbestos in Bulk Samples and in-house Method LTM-ASB-8020 by polarised light microscopy (PLM) and dispersion staining (DS) techniques. *NOTE: Positive Trace Analysis results indicate the sample contains detectable respirable fibres.*
Unknown Mineral Fibres	Mineral fibres of unknown type, as determined by PLM with DS, may require another analytical technique, such as Electron Microscopy, to confirm unequivocal identity. *NOTE: While Actinolite, Anthophyllite and Tremolite asbestos may be detected by PLM with DS, due to variability in the optical properties of these materials, AS4964 requires that these are reported as UMF unless confirmed by an independent technique.*
Subsampling Soil Samples	The whole sample submitted is first dried and then passed through a 10mm sieve followed by a 2mm sieve. All fibrous matter greater than 10mm, greater than 2mm as well as the material passing through the 2mm sieve are retained and analysed for the presence of asbestos. If the sub 2mm fraction is greater than approximately 30 to 60g then a sub-sampling routine based on ISO 3082:2009(E) is employed. *NOTE: Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be sub-sampled for trace analysis, in accordance with AS 4964-2004.*
Bonded asbestos-containing material (ACM)	The material is first examined and any fibres isolated for identification by PLM and DS. Where required, interfering matrices may be removed by disintegration using a range of heat, chemical or physical treatments, possibly in combination.The resultant material is then further examined in accordance with AS 4964 - 2004. *NOTE: Even after disintegration it may be difficult to detect the presence of asbestos in some asbestos-containing bulk materials using PLM and DS. This is due to the low grade or small length or diameter of the asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos-containing sealants and mastics, asbestos-containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.*
Limit of Reporting	The performance limitation of the AS 4964 (2004) method for non-homogeneous samples is around 0.1 g/kg (equivalent to 0.01% (w/w)). Where no asbestos is found by PLM and DS, including Trace Analysis, this is considered to be at the nominal reporting limit of 0.01% (w/w). The NEPM screening level of 0.001% (w/w) is intended as an on-site determination, not a laboratory Limit of Reporting (LOR), per se. Examination of a large sample size (e.g. 500 mL) may improve the likelihood of detecting asbestos, particularly AF, to aid assessment against the NEPM criteria. Gravimetric determinations to this level of accuracy are outside of AS 4964 and hence NATA Accreditation does not cover the performance of this service (non-NATA results shown with an asterisk). *NOTE: NATA News March 2014, p.7, states in relation to AS 4964: "This is a qualitative method with a nominal reporting limit of 0.01 % " and that currently in Australia "there is no validated method available for the quantification of asbestos".This report is consistent with the analytical procedures and reporting recommendations in the NEPM and the WA DoH.*

Accredited for compliance with ISO/IEC 17025–Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Project Name RANDWICK BARRACKS
Project ID 610.30041
Date Sampled Jun 19, 2020
Report 727157-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
0407_QC220_200619	20-Jn37297	Jun 19, 2020	Approximate Sample 67g Sample consisted of: Grey fine-grained sandy soil and organic debris	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Asbestos - LTM-ASB-8020	Sydney	Jun 23, 2020	Indefinite

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ABN – 50 005 085 521 web : www.eurofins.com.au e.mail : EnviroSales@eurofins.com

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Phone : 0800 856 450
IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 727157
Phone: 02 9428 8100
Fax:

Received: Jun 22, 2020 2:44 PM
Due: Jun 29, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A	Per- and Polyfluoroalkyl Substances (PFASs)
Melbourne Laboratory - NATA Site # 1254 & 14271											
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	
Brisbane Laboratory - NATA Site # 20794											X
Perth Laboratory - NATA Site # 23736											
External Laboratory											
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**						
1	0407_QC220_200619	Jun 19, 2020		Soil	S20-Jn37297	X	X	X	X	X	X
Test Counts						1	1	1	1	1	1

Internal Quality Control Review and Glossary

General

1. QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Samples were analysed on an 'as received' basis.
4. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
5. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the Sample Receipt Advice.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

Units

% w/w: weight for weight basis	grams per kilogram
Filter loading:	fibres/100 graticule areas
Reported Concentration:	fibres/mL
Flowrate:	L/min

Terms

Dry	Sample is dried by heating prior to analysis
LOR	Limit of Reporting
COC	Chain of Custody
SRA	Sample Receipt Advice
ISO	International Standards Organisation
AS	Australian Standards
WA DOH	Reference document for the NEPM. Government of Western Australia, Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia (2009), including supporting document Recommended Procedures for Laboratory Analysis of Asbestos in Soil (2011)
NEPM	National Environment Protection (Assessment of Site Contamination) Measure, 2013 (as amended)
ACM	Asbestos Containing Materials. Asbestos contained within a non-asbestos matrix, typically presented in bonded and/or sound condition. For the purposes of the NEPM, ACM is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
AF	Asbestos Fines. Asbestos containing materials, including friable, weathered and bonded materials, able to pass a 7mm x 7mm sieve. Considered under the NEPM as equivalent to “non-bonded / friable”.
FA	Fibrous Asbestos. Asbestos containing materials in a friable and/or severely weathered condition. For the purposes of the NEPM, FA is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
Friable	Asbestos-containing materials of any size that may be broken or crumbled by hand pressure. For the purposes of the NEPM, this includes both AF and FA. It is outside of the laboratory’s remit to assess degree of friability.
Trace Analysis	Analytical procedure used to detect the presence of respirable fibres in the matrix.

Comments

The sample received was not collected in an approved asbestos bag and was therefore sub-sampled from the 250mL glass jar. Valid sub-sampling procedures were applied so as to ensure that the sub-sample to be analysed accurately represented the sample received.

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	No
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

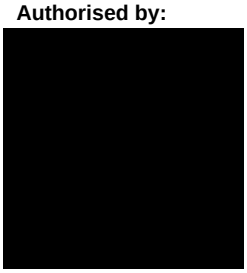
Qualifier Codes/Comments

Code	Description
N/A	Not applicable

Asbestos Counter/Identifier:

[redacted] Senior Analyst-Asbestos (NSW)

Authorised by:



Senior Analyst-Asbestos (NSW)

General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus,
North Sydney
NSW 2060

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: [redacted]

Report **727157-S**
Project name RANDWICK BARRACKS
Project ID 610.30041
Received Date Jun 22, 2020

Client Sample ID			**0407_QC220_200619**
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-Jn37297**
Date Sampled			**Jun 19, 2020**
Test/Reference	LOR	Unit	
Total Recoverable Hydrocarbons - 1999 NEPM Fractions			
TRH C6-C9	20	mg/kg	< 20
TRH C10-C14	20	mg/kg	20
TRH C15-C28	50	mg/kg	< 50
TRH C29-C36	50	mg/kg	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50
BTEX			
Benzene	0.1	mg/kg	< 0.1
Toluene	0.1	mg/kg	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2
o-Xylene	0.1	mg/kg	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3
4-Bromofluorobenzene (surr.)	1	%	79
Volatile Organics			
1.1-Dichloroethane	0.5	mg/kg	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5

Client Sample ID			0407_QC220_200619
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-Jn37297**
Date Sampled			**Jun 19, 2020**
Test/Reference	LOR	Unit	
Volatile Organics			
Benzene	0.1	mg/kg	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5
Bromoform	0.5	mg/kg	< 0.5
Bromomethane	0.5	mg/kg	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5
Chloroethane	0.5	mg/kg	< 0.5
Chloroform	0.5	mg/kg	< 0.5
Chloromethane	0.5	mg/kg	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1
Iodomethane	0.5	mg/kg	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5
o-Xylene	0.1	mg/kg	< 0.1
Styrene	0.5	mg/kg	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5
Toluene	0.1	mg/kg	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3
Total MAH*	0.5	mg/kg	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5
4-Bromofluorobenzene (surr.)	1	%	79
Toluene-d8 (surr.)	1	%	64
Total Recoverable Hydrocarbons - 2013 NEPM Fractions			
Naphthalene[N02]	0.5	mg/kg	< 0.5
TRH C6-C10	20	mg/kg	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20
TRH >C10-C16	50	mg/kg	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50
TRH >C16-C34	100	mg/kg	< 100
TRH >C34-C40	100	mg/kg	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100

Client Sample ID			0407_QC220_200619
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-Jn37297**
Date Sampled			**Jun 19, 2020**
Test/Reference	LOR	Unit	
Polycyclic Aromatic Hydrocarbons			
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2
Acenaphthene	0.5	mg/kg	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5
Anthracene	0.5	mg/kg	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5
Chrysene	0.5	mg/kg	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5
Fluorene	0.5	mg/kg	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5
Naphthalene	0.5	mg/kg	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5
Pyrene	0.5	mg/kg	< 0.5
Total PAH*	0.5	mg/kg	< 0.5
2-Fluorobiphenyl (surr.)	1	%	76
p-Terphenyl-d14 (surr.)	1	%	90
Organochlorine Pesticides			
Chlordanes - Total	0.1	mg/kg	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.1
a-BHC	0.05	mg/kg	< 0.05
Aldrin	0.05	mg/kg	< 0.05
b-BHC	0.05	mg/kg	< 0.05
d-BHC	0.05	mg/kg	< 0.05
Dieldrin	0.05	mg/kg	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05
Endrin	0.05	mg/kg	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.1
Endrin ketone	0.05	mg/kg	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05
Heptachlor	0.05	mg/kg	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05
Methoxychlor	0.2	mg/kg	< 0.4
Toxaphene	1	mg/kg	< 1
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.1
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.4
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.4
Dibutylchlorendate (surr.)	1	%	77
Tetrachloro-m-xylene (surr.)	1	%	98

Client Sample ID			0407_QC220_200619
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-Jn37297**
Date Sampled			**Jun 19, 2020**
Test/Reference	LOR	Unit	
Organophosphorus Pesticides			
Azinphos-methyl	0.2	mg/kg	< 0.2
Bolstar	0.2	mg/kg	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2
Coumaphos	2	mg/kg	< 2
Demeton-S	0.2	mg/kg	< 0.2
Demeton-O	0.2	mg/kg	< 0.2
Diazinon	0.2	mg/kg	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2
Dimethoate	0.2	mg/kg	< 0.2
Disulfoton	0.2	mg/kg	< 0.2
EPN	0.2	mg/kg	< 0.2
Ethion	0.2	mg/kg	< 0.2
Ethoprop	0.2	mg/kg	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2
Fenthion	0.2	mg/kg	< 0.2
Malathion	0.2	mg/kg	< 0.2
Merphos	0.2	mg/kg	< 0.2
Methyl parathion	0.2	mg/kg	< 0.2
Mevinphos	0.2	mg/kg	< 0.2
Monocrotophos	2	mg/kg	< 2
Naled	0.2	mg/kg	< 1
Omethoate	2	mg/kg	< 2
Phorate	0.2	mg/kg	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2
Ronnel	0.2	mg/kg	< 0.2
Terbufos	0.2	mg/kg	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2
Tokuthion	0.2	mg/kg	< 0.2
Trichloronate	0.2	mg/kg	< 0.2
Triphenylphosphate (surr.)	1	%	INT
Polychlorinated Biphenyls			
Aroclor-1016	0.5	mg/kg	< 0.5
Aroclor-1221	0.1	mg/kg	< 0.1
Aroclor-1232	0.5	mg/kg	< 0.5
Aroclor-1242	0.5	mg/kg	< 0.5
Aroclor-1248	0.5	mg/kg	< 0.5
Aroclor-1254	0.5	mg/kg	< 0.5
Aroclor-1260	0.5	mg/kg	< 0.5
Total PCB*	0.5	mg/kg	< 0.5
Dibutylchlorendate (surr.)	1	%	77
Tetrachloro-m-xylene (surr.)	1	%	98

Client Sample ID			0407_QC220_200619
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-Jn37297**
Date Sampled			**Jun 19, 2020**
Test/Reference	LOR	Unit	
Phenols (Halogenated)			
2-Chlorophenol	0.5	mg/kg	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1
Pentachlorophenol	1	mg/kg	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10
Total Halogenated Phenol*	1	mg/kg	< 1
Phenols (non-Halogenated)			
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2
2-Nitrophenol	1	mg/kg	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4
4-Nitrophenol	5	mg/kg	< 5
Dinoseb	20	mg/kg	< 20
Phenol	0.5	mg/kg	< 0.5
Total Non-Halogenated Phenol*	20	mg/kg	< 20
Phenol-d6 (surr.)	1	%	INT
Heavy Metals			
Arsenic	2	mg/kg	< 2
Cadmium	0.4	mg/kg	< 0.4
Chromium	5	mg/kg	< 5
Copper	5	mg/kg	< 5
Lead	5	mg/kg	< 5
Mercury	0.1	mg/kg	< 0.1
Nickel	5	mg/kg	< 5
Zinc	5	mg/kg	< 5
% Moisture	1	%	4.5
Perfluoroalkyl carboxylic acids (PFCAs)			
Perfluorobutanoic acid (PFBA)[N11]	5	ug/kg	< 5
Perfluoropentanoic acid (PFPeA)[N11]	5	ug/kg	< 5
Perfluorohexanoic acid (PFHxA)[N11]	5	ug/kg	< 5
Perfluoroheptanoic acid (PFHpA)[N11]	5	ug/kg	< 5
Perfluorooctanoic acid (PFOA)[N11]	5	ug/kg	< 5
Perfluorononanoic acid (PFNA)[N11]	5	ug/kg	< 5
Perfluorodecanoic acid (PFDA)[N11]	5	ug/kg	< 5
Perfluoroundecanoic acid (PFUnDA)[N11]	5	ug/kg	< 5
Perfluorododecanoic acid (PFDoDA)[N11]	5	ug/kg	< 5
Perfluorotridecanoic acid (PFTrDA)[N15]	5	ug/kg	< 5
Perfluorotetradecanoic acid (PFTeDA)[N11]	5	ug/kg	< 5
13C4-PFBA (surr.)	1	%	129
13C5-PFPeA (surr.)	1	%	147
13C5-PFHxA (surr.)	1	%	136

Client Sample ID			0407_QC220_200619
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-Jn37297**
Date Sampled			**Jun 19, 2020**
Test/Reference	LOR	Unit	
Perfluoroalkyl carboxylic acids (PFCAs)			
13C4-PFHpA (surr.)	1	%	131
13C8-PFOA (surr.)	1	%	154
13C5-PFNA (surr.)	1	%	159
13C6-PFDA (surr.)	1	%	158
13C2-PFUnDA (surr.)	1	%	100
13C2-PFDoDA (surr.)	1	%	148
13C2-PFTeDA (surr.)	1	%	92
Perfluoroalkyl sulfonamido substances			
Perfluorooctane sulfonamide (FOSA)[N11]	5	ug/kg	< 5
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)[N11]	5	ug/kg	< 5
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)[N11]	5	ug/kg	< 5
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)[N11]	5	ug/kg	< 5
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)[N11]	5	ug/kg	< 5
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)[N11]	10	ug/kg	< 10
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)[N11]	10	ug/kg	< 10
13C8-FOSA (surr.)	1	%	119
D3-N-MeFOSA (surr.)	1	%	80
D5-N-EtFOSA (surr.)	1	%	155
D7-N-MeFOSE (surr.)	1	%	93
D9-N-EtFOSE (surr.)	1	%	42
D5-N-EtFOSAA (surr.)	1	%	99
D3-N-MeFOSAA (surr.)	1	%	93
Perfluoroalkyl sulfonic acids (PFSAs)			
Perfluorobutanesulfonic acid (PFBS)[N11]	5	ug/kg	< 5
Perfluorononanesulfonic acid (PFNS)[N15]	5	ug/kg	< 5
Perfluoropropanesulfonic acid (PFPrS)[N15]	5	ug/kg	< 5
Perfluoropentanesulfonic acid (PFPeS)[N15]	5	ug/kg	< 5
Perfluorohexanesulfonic acid (PFHxS)[N11]	5	ug/kg	< 5
Perfluoroheptanesulfonic acid (PFHpS)[N15]	5	ug/kg	< 5
Perfluorooctanesulfonic acid (PFOS)[N11]	5	ug/kg	< 5
Perfluorodecanesulfonic acid (PFDS)[N15]	5	ug/kg	< 5
13C3-PFBS (surr.)	1	%	127
18O2-PFHxS (surr.)	1	%	141
13C8-PFOS (surr.)	1	%	135
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)			
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	5	ug/kg	< 5
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)[N11]	10	ug/kg	< 10
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	5	ug/kg	< 5
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	5	ug/kg	< 5
13C2-4:2 FTSA (surr.)	1	%	INT
13C2-6:2 FTSA (surr.)	1	%	179
13C2-8:2 FTSA (surr.)	1	%	177
13C2-10:2 FTSA (surr.)	1	%	101

Client Sample ID			**0407_QC220_200619**
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-Jn37297**
Date Sampled			**Jun 19, 2020**
Test/Reference	LOR	Unit	
PFASs Summations			
Sum (PFHxS + PFOS)*	5	ug/kg	< 5
Sum of US EPA PFAS (PFOS + PFOA)*	5	ug/kg	< 5
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	5	ug/kg	< 5
Sum of WA DWER PFAS (n=10)*	10	ug/kg	< 10
Sum of PFASs (n=30)*	50	ug/kg	< 50

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Sydney	Jun 25, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Sydney	Jun 25, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jun 25, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jun 25, 2020	
- Method: LTM-ORG-2010 TRH C6-C40			
Polycyclic Aromatic Hydrocarbons	Sydney	Jun 25, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (Halogenated)	Sydney	Jun 25, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (non-Halogenated)	Sydney	Jun 25, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Metals M8	Sydney	Jun 25, 2020	180 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Volatile Organics	Sydney	Jun 25, 2020	7 Days
- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices			
Eurofins | mgt Suite B15			
Organochlorine Pesticides	Sydney	Jun 25, 2020	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Organophosphorus Pesticides	Sydney	Jun 25, 2020	14 Days
- Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS			
Polychlorinated Biphenyls	Sydney	Jun 25, 2020	28 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
% Moisture	Sydney	Jun 23, 2020	14 Days
- Method: LTM-GEN-7080 Moisture			
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs)	Brisbane	Jun 24, 2020	180 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonamido substances	Brisbane	Jun 24, 2020	180 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonic acids (PFSAs)	Brisbane	Jun 24, 2020	180 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)	Brisbane	Jun 24, 2020	180 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			

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Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 727157
Phone: 02 9428 8100
Fax:

Received: Jun 22, 2020 2:44 PM
Due: Jun 29, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A	Per- and Polyfluoroalkyl Substances (PFASs)
Melbourne Laboratory - NATA Site # 1254 & 14271											
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	
Brisbane Laboratory - NATA Site # 20794											X
Perth Laboratory - NATA Site # 23736											
External Laboratory											
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**						
1	0407_QC220_200619	Jun 19, 2020		Soil	S20-Jn37297	X	X	X	X	X	X
Test Counts						1	1	1	1	1	1

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

****NOTE:** pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram
mg/L: milligrams per litre
ug/L: micrograms per litre
ppm: Parts per million
ppb: Parts per billion
%: Percentage
org/100mL: Organisms per 100 millilitres
NTU: Nephelometric Turbidity Units
MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version 5.3
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling.Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
Method Blank							
BTEX							
Benzene	mg/kg	< 0.1			0.1	Pass	
Toluene	mg/kg	< 0.1			0.1	Pass	
Ethylbenzene	mg/kg	< 0.1			0.1	Pass	
m&p-Xylenes	mg/kg	< 0.2			0.2	Pass	
o-Xylene	mg/kg	< 0.1			0.1	Pass	
Xylenes - Total*	mg/kg	< 0.3			0.3	Pass	
Method Blank							
Volatile Organics							
1.1-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
1.1.1-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.1.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dibromoethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.3-Trichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.4-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.3.5-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.4-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
2-Butanone (MEK)	mg/kg	< 0.5			0.5	Pass	
2-Propanone (Acetone)	mg/kg	< 0.5			0.5	Pass	
4-Chlorotoluene	mg/kg	< 0.5			0.5	Pass	
4-Methyl-2-pentanone (MIBK)	mg/kg	< 0.5			0.5	Pass	
Allyl chloride	mg/kg	< 0.5			0.5	Pass	
Bromobenzene	mg/kg	< 0.5			0.5	Pass	
Bromochloromethane	mg/kg	< 0.5			0.5	Pass	
Bromodichloromethane	mg/kg	< 0.5			0.5	Pass	
Bromoform	mg/kg	< 0.5			0.5	Pass	
Bromomethane	mg/kg	< 0.5			0.5	Pass	
Carbon disulfide	mg/kg	< 0.5			0.5	Pass	
Carbon Tetrachloride	mg/kg	< 0.5			0.5	Pass	
Chlorobenzene	mg/kg	< 0.5			0.5	Pass	
Chloroethane	mg/kg	< 0.5			0.5	Pass	
Chloroform	mg/kg	< 0.5			0.5	Pass	
Chloromethane	mg/kg	< 0.5			0.5	Pass	
cis-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
cis-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Dibromochloromethane	mg/kg	< 0.5			0.5	Pass	
Dibromomethane	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Dichlorodifluoromethane	mg/kg	< 0.5			0.5	Pass	
Iodomethane	mg/kg	< 0.5			0.5	Pass	
Isopropyl benzene (Cumene)	mg/kg	< 0.5			0.5	Pass	
Methylene Chloride	mg/kg	< 0.5			0.5	Pass	
Styrene	mg/kg	< 0.5			0.5	Pass	
Tetrachloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Trichloroethene	mg/kg	< 0.5			0.5	Pass	
Trichlorofluoromethane	mg/kg	< 0.5			0.5	Pass	
Vinyl chloride	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Organochlorine Pesticides							
Chlordanes - Total	mg/kg	< 0.1			0.1	Pass	
4.4'-DDD	mg/kg	< 0.05			0.05	Pass	
4.4'-DDE	mg/kg	< 0.05			0.05	Pass	
4.4'-DDT	mg/kg	< 0.05			0.05	Pass	
a-BHC	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-BHC	mg/kg	< 0.05			0.05	Pass	
d-BHC	mg/kg	< 0.05			0.05	Pass	
Dieldrin	mg/kg	< 0.05			0.05	Pass	
Endosulfan I	mg/kg	< 0.05			0.05	Pass	
Endosulfan II	mg/kg	< 0.05			0.05	Pass	
Endosulfan sulphate	mg/kg	< 0.05			0.05	Pass	
Endrin	mg/kg	< 0.05			0.05	Pass	
Endrin aldehyde	mg/kg	< 0.05			0.05	Pass	
Endrin ketone	mg/kg	< 0.05			0.05	Pass	
g-BHC (Lindane)	mg/kg	< 0.05			0.05	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Heptachlor	mg/kg	< 0.05			0.05	Pass	
Heptachlor epoxide	mg/kg	< 0.05			0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05			0.05	Pass	
Methoxychlor	mg/kg	< 0.2			0.2	Pass	
Toxaphene	mg/kg	< 1			1	Pass	
Method Blank							
Organophosphorus Pesticides							
Azinphos-methyl	mg/kg	< 0.2			0.2	Pass	
Bolstar	mg/kg	< 0.2			0.2	Pass	
Chlorfenvinphos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos-methyl	mg/kg	< 0.2			0.2	Pass	
Coumaphos	mg/kg	< 2			2	Pass	
Demeton-S	mg/kg	< 0.2			0.2	Pass	
Demeton-O	mg/kg	< 0.2			0.2	Pass	
Diazinon	mg/kg	< 0.2			0.2	Pass	
Dichlorvos	mg/kg	< 0.2			0.2	Pass	
Dimethoate	mg/kg	< 0.2			0.2	Pass	
Disulfoton	mg/kg	< 0.2			0.2	Pass	
EPN	mg/kg	< 0.2			0.2	Pass	
Ethion	mg/kg	< 0.2			0.2	Pass	
Ethoprop	mg/kg	< 0.2			0.2	Pass	
Ethyl parathion	mg/kg	< 0.2			0.2	Pass	
Fenitrothion	mg/kg	< 0.2			0.2	Pass	
Fensulfothion	mg/kg	< 0.2			0.2	Pass	
Fenthion	mg/kg	< 0.2			0.2	Pass	
Malathion	mg/kg	< 0.2			0.2	Pass	
Merphos	mg/kg	< 0.2			0.2	Pass	
Methyl parathion	mg/kg	< 0.2			0.2	Pass	
Mevinphos	mg/kg	< 0.2			0.2	Pass	
Monocrotophos	mg/kg	< 2			2	Pass	
Naled	mg/kg	< 0.2			0.2	Pass	
Omethoate	mg/kg	< 2			2	Pass	
Phorate	mg/kg	< 0.2			0.2	Pass	
Pirimiphos-methyl	mg/kg	< 0.2			0.2	Pass	
Pyrazophos	mg/kg	< 0.2			0.2	Pass	
Ronnel	mg/kg	< 0.2			0.2	Pass	
Terbufos	mg/kg	< 0.2			0.2	Pass	
Tetrachlorvinphos	mg/kg	< 0.2			0.2	Pass	
Tokuthion	mg/kg	< 0.2			0.2	Pass	
Trichloronate	mg/kg	< 0.2			0.2	Pass	
Method Blank							
Polychlorinated Biphenyls							
Aroclor-1016	mg/kg	< 0.5			0.5	Pass	
Aroclor-1221	mg/kg	< 0.1			0.1	Pass	
Aroclor-1232	mg/kg	< 0.5			0.5	Pass	
Aroclor-1242	mg/kg	< 0.5			0.5	Pass	
Aroclor-1248	mg/kg	< 0.5			0.5	Pass	
Aroclor-1254	mg/kg	< 0.5			0.5	Pass	
Aroclor-1260	mg/kg	< 0.5			0.5	Pass	
Total PCB*	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Phenols (Halogenated)							
2-Chlorophenol	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2.4-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4.5-Trichlorophenol	mg/kg	< 1			1	Pass	
2.4.6-Trichlorophenol	mg/kg	< 1			1	Pass	
2.6-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
4-Chloro-3-methylphenol	mg/kg	< 1			1	Pass	
Pentachlorophenol	mg/kg	< 1			1	Pass	
Tetrachlorophenols - Total	mg/kg	< 10			10	Pass	
Method Blank							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	mg/kg	< 20			20	Pass	
2-Methyl-4.6-dinitrophenol	mg/kg	< 5			5	Pass	
2-Methylphenol (o-Cresol)	mg/kg	< 0.2			0.2	Pass	
2-Nitrophenol	mg/kg	< 1			1	Pass	
2.4-Dimethylphenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dinitrophenol	mg/kg	< 5			5	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/kg	< 0.4			0.4	Pass	
4-Nitrophenol	mg/kg	< 5			5	Pass	
Dinoseb	mg/kg	< 20			20	Pass	
Phenol	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Nickel	mg/kg	< 5			5	Pass	
Zinc	mg/kg	< 5			5	Pass	
Method Blank							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	ug/kg	< 5			5	Pass	
Perfluoropentanoic acid (PFPeA)	ug/kg	< 5			5	Pass	
Perfluorohexanoic acid (PFHxA)	ug/kg	< 5			5	Pass	
Perfluoroheptanoic acid (PFHpA)	ug/kg	< 5			5	Pass	
Perfluorooctanoic acid (PFOA)	ug/kg	< 5			5	Pass	
Perfluorononanoic acid (PFNA)	ug/kg	< 5			5	Pass	
Perfluorodecanoic acid (PFDA)	ug/kg	< 5			5	Pass	
Perfluoroundecanoic acid (PFUnDA)	ug/kg	< 5			5	Pass	
Perfluorododecanoic acid (PFDoDA)	ug/kg	< 5			5	Pass	
Perfluorotridecanoic acid (PFTrDA)	ug/kg	< 5			5	Pass	
Perfluorotetradecanoic acid (PFTeDA)	ug/kg	< 5			5	Pass	
Method Blank							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	ug/kg	< 5			5	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	ug/kg	< 5			5	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	ug/kg	< 5			5	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	ug/kg	< 5			5	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	ug/kg	< 5			5	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	ug/kg	< 10			10	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	ug/kg	< 10			10	Pass	
Method Blank							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	ug/kg	< 5			5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Perfluorononanesulfonic acid (PFNS)	ug/kg	< 5			5	Pass	
Perfluoropropanesulfonic acid (PFPrS)	ug/kg	< 5			5	Pass	
Perfluoropentanesulfonic acid (PFPeS)	ug/kg	< 5			5	Pass	
Perfluorohexanesulfonic acid (PFHxS)	ug/kg	< 5			5	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	ug/kg	< 5			5	Pass	
Perfluorooctanesulfonic acid (PFOS)	ug/kg	< 5			5	Pass	
Perfluorodecanesulfonic acid (PFDS)	ug/kg	< 5			5	Pass	
Method Blank							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	ug/kg	< 5			5	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	ug/kg	< 10			10	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	ug/kg	< 5			5	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	ug/kg	< 5			5	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C10-C14	%	72			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	87			70-130	Pass	
Toluene	%	112			70-130	Pass	
Ethylbenzene	%	90			70-130	Pass	
m&p-Xylenes	%	91			70-130	Pass	
o-Xylene	%	91			70-130	Pass	
Xylenes - Total*	%	91			70-130	Pass	
LCS - % Recovery							
Volatile Organics							
1.1.1-Trichloroethane	%	106			70-130	Pass	
1.2-Dichlorobenzene	%	107			70-130	Pass	
1.2-Dichloroethane	%	125			70-130	Pass	
Trichloroethene	%	124			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	78			70-130	Pass	
TRH >C10-C16	%	74			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	118			70-130	Pass	
Anthracene	%	74			70-130	Pass	
Benz(a)anthracene	%	109			70-130	Pass	
Benzo(a)pyrene	%	118			70-130	Pass	
Benzo(b&j)fluoranthene	%	118			70-130	Pass	
Benzo(g.h.i)perylene	%	85			70-130	Pass	
Benzo(k)fluoranthene	%	110			70-130	Pass	
Chrysene	%	114			70-130	Pass	
Dibenz(a.h)anthracene	%	119			70-130	Pass	
Fluoranthene	%	85			70-130	Pass	
Fluorene	%	110			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	117			70-130	Pass	
Naphthalene	%	123			70-130	Pass	
Phenanthrene	%	98			70-130	Pass	
Pyrene	%	93			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	71			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
4.4'-DDD	%	97			70-130	Pass	
4.4'-DDE	%	95			70-130	Pass	
4.4'-DDT	%	88			70-130	Pass	
a-BHC	%	101			70-130	Pass	
Aldrin	%	75			70-130	Pass	
b-BHC	%	107			70-130	Pass	
d-BHC	%	100			70-130	Pass	
Dieldrin	%	93			70-130	Pass	
Endosulfan I	%	87			70-130	Pass	
Endosulfan II	%	92			70-130	Pass	
Endosulfan sulphate	%	80			70-130	Pass	
Endrin	%	83			70-130	Pass	
Endrin aldehyde	%	88			70-130	Pass	
Endrin ketone	%	77			70-130	Pass	
g-BHC (Lindane)	%	100			70-130	Pass	
Heptachlor	%	96			70-130	Pass	
Heptachlor epoxide	%	76			70-130	Pass	
Hexachlorobenzene	%	85			70-130	Pass	
Methoxychlor	%	87			70-130	Pass	
LCS - % Recovery							
Organophosphorus Pesticides							
Diazinon	%	125			70-130	Pass	
Dimethoate	%	130			70-130	Pass	
Ethion	%	98			70-130	Pass	
Fenitrothion	%	73			70-130	Pass	
Methyl parathion	%	101			70-130	Pass	
Mevinphos	%	103			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls							
Aroclor-1016	%	92			70-130	Pass	
LCS - % Recovery							
Phenols (Halogenated)							
2-Chlorophenol	%	86			30-130	Pass	
2.4-Dichlorophenol	%	109			30-130	Pass	
2.4.5-Trichlorophenol	%	124			30-130	Pass	
2.4.6-Trichlorophenol	%	101			30-130	Pass	
2.6-Dichlorophenol	%	103			30-130	Pass	
4-Chloro-3-methylphenol	%	114			30-130	Pass	
Pentachlorophenol	%	95			30-130	Pass	
Tetrachlorophenols - Total	%	56			30-130	Pass	
LCS - % Recovery							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	%	90			30-130	Pass	
2-Methyl-4.6-dinitrophenol	%	108			30-130	Pass	
2-Methylphenol (o-Cresol)	%	74			30-130	Pass	
2-Nitrophenol	%	100			30-130	Pass	
2.4-Dimethylphenol	%	83			30-130	Pass	
2.4-Dinitrophenol	%	88			30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	%	102			30-130	Pass	
Dinoseb	%	106			30-130	Pass	
Phenol	%	85			30-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	99			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Cadmium	%	103			70-130	Pass	
Chromium	%	104			70-130	Pass	
Copper	%	101			70-130	Pass	
Lead	%	103			70-130	Pass	
Mercury	%	103			70-130	Pass	
Nickel	%	103			70-130	Pass	
Zinc	%	97			70-130	Pass	
LCS - % Recovery							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	%	101			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	96			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	99			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	104			50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	111			50-150	Pass	
Perfluorononanoic acid (PFNA)	%	111			50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	103			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	99			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	118			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	%	106			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	120			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	%	84			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	113			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	134			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	%	84			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	%	64			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	110			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	120			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	%	86			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	%	114			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	%	105			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	%	98			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	%	106			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	%	120			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	%	93			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	%	131			50-150	Pass	
LCS - % Recovery							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	119			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	%	126			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	109			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	%	125			50-150	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C10-C14	S20-Jn38586	NCP	%	72			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	S20-Jn34685	NCP	%	103			70-130	Pass	
Toluene	S20-Jn34685	NCP	%	72			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Ethylbenzene	S20-Jn34685	NCP	%	74			70-130	Pass	
m&p-Xylenes	S20-Jn34685	NCP	%	74			70-130	Pass	
o-Xylene	S20-Jn34685	NCP	%	78			70-130	Pass	
Xylenes - Total*	S20-Jn34685	NCP	%	75			70-130	Pass	
Spike - % Recovery									
Volatile Organics				Result 1					
1.1-Dichloroethene	S20-Jn34685	NCP	%	72			70-130	Pass	
1.1.1-Trichloroethane	S20-Jn34685	NCP	%	82			70-130	Pass	
1.2-Dichlorobenzene	S20-Jn34685	NCP	%	86			70-130	Pass	
1.2-Dichloroethane	S20-Jn34685	NCP	%	91			70-130	Pass	
Trichloroethene	S20-Jn34685	NCP	%	90			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
TRH >C10-C16	S20-Jn38586	NCP	%	74			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	S20-Jn40538	NCP	%	117			70-130	Pass	
Anthracene	S20-Jn40538	NCP	%	106			70-130	Pass	
Benz(a)anthracene	S20-Jn40538	NCP	%	114			70-130	Pass	
Benzo(a)pyrene	S20-Jn40538	NCP	%	130			70-130	Pass	
Benzo(b&j)fluoranthene	S20-Jn40538	NCP	%	128			70-130	Pass	
Benzo(k)fluoranthene	S20-Jn40538	NCP	%	120			70-130	Pass	
Chrysene	S20-Jn40538	NCP	%	122			70-130	Pass	
Dibenz(a.h)anthracene	S20-Jn40538	NCP	%	129			70-130	Pass	
Fluoranthene	S20-Jn40538	NCP	%	101			70-130	Pass	
Fluorene	S20-Jn40538	NCP	%	124			70-130	Pass	
Naphthalene	S20-Jn40538	NCP	%	128			70-130	Pass	
Phenanthrene	S20-Jn40538	NCP	%	110			70-130	Pass	
Pyrene	S20-Jn40538	NCP	%	112			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	S20-Jn45071	NCP	%	107			70-130	Pass	
Cadmium	S20-Jn45071	NCP	%	109			70-130	Pass	
Chromium	S20-Jn45071	NCP	%	115			70-130	Pass	
Copper	S20-Jn45071	NCP	%	116			70-130	Pass	
Lead	S20-Jn40543	NCP	%	100			70-130	Pass	
Mercury	S20-Jn45071	NCP	%	120			70-130	Pass	
Nickel	S20-Jn45071	NCP	%	109			70-130	Pass	
Zinc	S20-Jn40543	NCP	%	89			70-130	Pass	
Spike - % Recovery									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1					
Perfluorobutanoic acid (PFBA)	S20-Jn39839	NCP	%	79			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	S20-Jn39839	NCP	%	75			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	S20-Jn39839	NCP	%	73			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	S20-Jn39839	NCP	%	78			50-150	Pass	
Perfluorooctanoic acid (PFOA)	S20-Jn39839	NCP	%	79			50-150	Pass	
Perfluorononanoic acid (PFNA)	S20-Jn39839	NCP	%	82			50-150	Pass	
Perfluorodecanoic acid (PFDA)	S20-Jn39839	NCP	%	71			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	S20-Jn39839	NCP	%	75			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	S20-Jn39839	NCP	%	101			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	S20-Jn39839	NCP	%	81			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	S20-Jn39839	NCP	%	94			50-150	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Perfluoroalkyl sulfonamido substances				Result 1					
Perfluorooctane sulfonamide (FOSA)	S20-Jn39839	NCP	%	65			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	S20-Jn39839	NCP	%	87			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	S20-Jn39839	NCP	%	80			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	S20-Jn39839	NCP	%	61			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	S20-Jn39839	NCP	%	60			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	S20-Jn39839	NCP	%	79			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	S20-Jn39839	NCP	%	86			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1					
Perfluorobutanesulfonic acid (PFBS)	S20-Jn39839	NCP	%	73			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	S20-Jn39839	NCP	%	105			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	S20-Jn39839	NCP	%	101			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	S20-Jn39839	NCP	%	92			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	S20-Jn39839	NCP	%	77			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	S20-Jn39839	NCP	%	114			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	S20-Jn39839	NCP	%	73			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	S20-Jn39839	NCP	%	97			50-150	Pass	
Spike - % Recovery									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1					
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	S20-Jn39839	NCP	%	90			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	S20-Jn39839	NCP	%	119			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	S20-Jn39839	NCP	%	98			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	S20-Jn39839	NCP	%	100			50-150	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C6-C9	S20-Jn45819	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	S20-Jn38620	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	S20-Jn38620	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	S20-Jn38620	NCP	mg/kg	< 50	< 50	<1	30%	Pass	

Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S20-Jn45819	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Toluene	S20-Jn45819	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Ethylbenzene	S20-Jn45819	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
m&p-Xylenes	S20-Jn45819	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
o-Xylene	S20-Jn45819	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes - Total*	S20-Jn45819	NCP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
1.1-Dichloroethane	S20-Jn45819	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1-Dichloroethene	S20-Jn45819	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1-Trichloroethane	S20-Jn45819	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	S20-Jn45819	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2-Trichloroethane	S20-Jn45819	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	S20-Jn45819	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dibromoethane	S20-Jn45819	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichlorobenzene	S20-Jn45819	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloroethane	S20-Jn45819	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloropropane	S20-Jn45819	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.3-Trichloropropane	S20-Jn45819	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trimethylbenzene	S20-Jn45819	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichlorobenzene	S20-Jn45819	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichloropropane	S20-Jn45819	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3.5-Trimethylbenzene	S20-Jn45819	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.4-Dichlorobenzene	S20-Jn45819	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Butanone (MEK)	S20-Jn45819	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Propanone (Acetone)	S20-Jn45819	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chlorotoluene	S20-Jn45819	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Methyl-2-pentanone (MIBK)	S20-Jn45819	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Allyl chloride	S20-Jn45819	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromobenzene	S20-Jn45819	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromochloromethane	S20-Jn45819	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromodichloromethane	S20-Jn45819	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromoform	S20-Jn45819	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromomethane	S20-Jn45819	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon disulfide	S20-Jn45819	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon Tetrachloride	S20-Jn45819	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chlorobenzene	S20-Jn45819	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroethane	S20-Jn45819	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroform	S20-Jn45819	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloromethane	S20-Jn45819	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.2-Dichloroethene	S20-Jn45819	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.3-Dichloropropene	S20-Jn45819	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromochloromethane	S20-Jn45819	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromomethane	S20-Jn45819	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dichlorodifluoromethane	S20-Jn45819	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Iodomethane	S20-Jn45819	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Isopropyl benzene (Cumene)	S20-Jn45819	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Methylene Chloride	S20-Jn45819	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Styrene	S20-Jn45819	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Tetrachloroethene	S20-Jn45819	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.2-Dichloroethene	S20-Jn45819	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.3-Dichloropropene	S20-Jn45819	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichloroethene	S20-Jn45819	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichlorofluoromethane	S20-Jn45819	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Vinyl chloride	S20-Jn45819	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	S20-Jn45819	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	S20-Jn45819	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH >C10-C16	S20-Jn38620	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	S20-Jn38620	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	S20-Jn38620	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	S20-Jn37960	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	S20-Jn37960	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	S20-Jn37960	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	S20-Jn37960	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	S20-Jn37960	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	S20-Jn37960	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	S20-Jn37960	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	S20-Jn37960	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	S20-Jn37960	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	S20-Jn37960	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	S20-Jn37960	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	S20-Jn37960	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	S20-Jn37960	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	S20-Jn37960	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	S20-Jn37960	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	S20-Jn37960	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	S20-Jn37960	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	S20-Jn37960	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	S20-Jn37960	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	S20-Jn37960	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-BHC	S20-Jn37960	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	S20-Jn37960	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-BHC	S20-Jn37960	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-BHC	S20-Jn37960	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	S20-Jn37960	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	S20-Jn37960	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	S20-Jn37960	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	S20-Jn37960	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	S20-Jn37960	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	S20-Jn37960	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	S20-Jn37960	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-BHC (Lindane)	S20-Jn37960	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	S20-Jn37960	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	S20-Jn37960	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	S20-Jn37960	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Azinphos-methyl	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Bolstar	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorfenvinphos	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos-methyl	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Coumaphos	S20-Jn37960	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Demeton-S	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	

Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Demeton-O	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Diazinon	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dichlorvos	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dimethoate	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Disulfoton	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
EPN	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethion	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethoprop	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethyl parathion	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenitrothion	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fensulfothion	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenthion	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Malathion	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Merphos	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Methyl parathion	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Mevinphos	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Monocrotophos	S20-Jn37960	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Naled	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Omethoate	S20-Jn37960	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Phorate	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pirimiphos-methyl	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pyrazophos	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ronnel	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Terbufos	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tetrachlorvinphos	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tokuthion	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Trichloronate	S20-Jn37960	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Aroclor-1016	S20-Jn37960	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1221	S20-Jn37960	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1232	S20-Jn37960	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1242	S20-Jn37960	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1248	S20-Jn37960	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1254	S20-Jn37960	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1260	S20-Jn37960	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Total PCB*	S20-Jn37960	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	S20-Jn40318	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Cadmium	S20-Jn40318	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	S20-Jn40318	NCP	mg/kg	6.4	6.7	4.0	30%	Pass	
Copper	S20-Jn40318	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Lead	S20-Jn40318	NCP	mg/kg	8.8	8.4	5.0	30%	Pass	
Mercury	S20-Jn40318	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Nickel	S20-Jn40318	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Zinc	S20-Jn40318	NCP	mg/kg	9.8	7.9	22	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	S20-Jn37150	NCP	%	11	12	7.0	30%	Pass	

Duplicate									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD			
Perfluorobutanoic acid (PFBA)	S20-Jn39838	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	S20-Jn39838	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	S20-Jn39838	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	S20-Jn39838	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	S20-Jn39838	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	S20-Jn39838	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	S20-Jn39838	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	S20-Jn39838	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	S20-Jn39838	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	S20-Jn39838	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	S20-Jn39838	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
Perfluorooctane sulfonamide (FOSA)	S20-Jn39838	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	S20-Jn39838	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	S20-Jn39838	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	S20-Jn39838	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	S20-Jn39838	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	S20-Jn39838	NCP	ug/kg	< 10	< 10	<1	30%	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	S20-Jn39838	NCP	ug/kg	< 10	< 10	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD			
Perfluorobutanesulfonic acid (PFBS)	S20-Jn39838	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorononanesulfonic acid (PFNS)	S20-Jn39838	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropropanesulfonic acid (PFPrS)	S20-Jn39838	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropentanesulfonic acid (PFPeS)	S20-Jn39838	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorohexanesulfonic acid (PFHxS)	S20-Jn39838	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	S20-Jn39838	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorooctanesulfonic acid (PFOS)	S20-Jn39838	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorodecanesulfonic acid (PFDS)	S20-Jn39838	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Duplicate									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1	Result 2	RPD			
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	S20-Jn39838	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	S20-Jn39838	NCP	ug/kg	< 10	< 10	<1	30%	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	S20-Jn39838	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	S20-Jn39838	NCP	ug/kg	< 5	< 5	<1	30%	Pass	

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	No
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
N11	Isotope dilution is used for calibration of each native compound for which an exact labelled analogue is available (Isotope Dilution Quantitation). The isotopically labelled analogues allow identification and recovery correction of the concentration of the associated native PFAS compounds.
N15	Where the native PFAS compound does not have labelled analogue then the quantification is made using the Extracted Internal Standard Analyte with the closest retention time to the analyte and no recovery correction has been made (Internal Standard Quantitation).

Authorised By

[redacted]

Analytical Services Manager
Senior Analyst-Organic (NSW)
Senior Analyst-Metal (NSW)
Senior Analyst-Asbestos (NSW)
Senior Analyst-PFAS (QLD)

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

Eurofins shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

SLR

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Dawin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☒ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Stuart Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ

CLIENT: Defence Housing Australia

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGER: [redacted]

PM CONTACT No: [redacted]

LABORATORY: SGS Australia

LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015

SAMPLER [redacted]

SAMPLER CONTACT No [redacted]

Email Reports and Invoices to: LQRSYD@slrconsulting.com [redacted]

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number of

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: Suite A	Asbestos ONLY	HOLD	C6-C10/BETXN				Additional Information (Comment on any gross contamination or specific requirements)
	0407_QC117_200618	18/06/2020	Soil	jar, pfas	×							~~sample jars and bags have~~ been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
	0407_QC217_200618	18/06/2020	Soil	jar, pfas	×							Please send to Eurofins
	0407_QC115_200618	18/06/2020	Soil	jar, pfas	×							
	0407_QC215_200618	18/06/2020	Soil	jar, pfas	×							Please send to Eurofins
	0407_QC121_200619	19/06/2020	Soil	jar, pfas	×							
	0407_QC221_200619	19/06/2020	Soil	jar, pfas	×							Please send to Eurofins
	0407_QC119_200619	19/06/2020	Soil	jar, pfas	×							
	0407_QC219_200619	19/06/2020	Soil	jar, pfas	×							Please send to Eurofins
	0407_QC410_200619	19/06/2020	Trip Blank	vial				×				
	0407_QC510_200619	19/06/2020	Trip Spike	vial				×				

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 18/06/2020	**Received by**	[redacted]	Date / Time 23/6/20 2:59PM	**Temperature Received:** 17.4°C
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

#727279

Eurofins Environment Testing Australia Pty Ltd
ABN: 50 005 085 521
Phone: +61 3 8564 5000
e.mail: EnviroRemittances@eurofins.com

Tax Invoice

SLR Consulting
PO Box 2003 ATTN ACCTS PAYABLE
North Sydney
NSW 2059

Purchase Order #: Not provided
Invoice #: 567434
Date: Jul 01, 2020
Report #: 727279
Project Name: RANDWICK BARRACKS
Project ID: 610.30041
Contact: [redacted]

Description	Quantity	Price	Total	Notes
Solid Samples				
Asbestos - AS4964	4	[redacted]		
Eurofins | mgt Suite B15	4			
Eurofins | mgt Suite B7A	4			
Volatile Organics	4			

Nett Total		[redacted]
GST		
Total Inc GST		

This invoice is subject to Eurofins General Terms of Sales. Copies available on request or at http://environment.eurofins.com.au

Please detach and return with payment to:
Postal:
Eurofins Environment Testing
6 Monterey Road
Dandenong South
Victoria, 3175

Please EFT Payments to:
Eurofins Environment Testing
BSB 063-498
Acct No: 10057019
e.mail Remittances:
EnviroRemittances@eurofins.com

Invoice Number : 567434
Amount Inc GST : $759.44

TERMS STRICTLY 30 DAYS

eurofins | Environment Testing

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NATA # 1261 Site # 20794

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Phone : +61 8 9251 9600
NATA # 1261 Site # 23736

ABN – 50 005 085 521 e.mail : EnviroSales@eurofins.com web : www.eurofins.com.au

Sample Receipt Advice

Company name:	**SLR Consulting (Sydney)**
Contact name:	[redacted]
Project name:	RANDWICK BARRACKS
Project ID:	610.30041
COC number:	Not provided
Turn around time:	5 Day
Date/Time received:	Jun 23, 2020 2:59 PM
Eurofins reference:	**727279**

Sample information

☑ A detailed list of analytes logged into our LIMS, is included in the attached summary table.

☑ All samples have been received as described on the above COC.

☑ COC has been completed correctly.

☑ Attempt to chill was evident.

☑ Appropriately preserved sample containers have been used.

☑ All samples were received in good condition.

☑ Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.

☑ Appropriate sample containers have been used.

☒ Split sample sent to requested external lab.

☒ Some samples have been subcontracted.

N/A Custody Seals intact (if used).

Contact notes

If you have any questions with respect to these samples please contact:

[redacted] on Phone : [redacted] or by e.mail: [redacted]@eurofins.com

Results will be delivered electronically via e.mail to [redacted]@slrconsulting.com.

Note: A copy of these results will also be delivered to the general SLR Consulting (Sydney) email address.

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NATA # 1261 Site # 20794

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Penrose, Auckland 1061
Phone : +64 9 526 45 51
IANZ # 1327

Christchurch
43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 727279
Phone: 02 9428 8100
Fax:

Received: Jun 23, 2020 2:59 PM
Due: Jun 30, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271										
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	0407_QC217_200618	Jun 18, 2020		Soil	S20-Jn38812	X	X	X	X	X
2	0407_QC215_200618	Jun 18, 2020		Soil	S20-Jn38813	X	X	X	X	X
3	0407_QC221_200619	Jun 19, 2020		Soil	S20-Jn38814	X	X	X	X	X
4	0407_QC219_200619	Jun 19, 2020		Soil	S20-Jn38815	X	X	X	X	X
Test Counts						4	4	4	4	4

Certificate of Analysis

eurofins | Environment Testing

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025–Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus
North Sydney
NSW 2060

Attention:	[redacted]
Report	727279-AID
Project Name	RANDWICK BARRACKS
Project ID	610.30041
Received Date	Jun 23, 2020
Date Reported	Jul 01, 2020

Methodology:

Asbestos Fibre Identification	Conducted in accordance with the Australian Standard AS 4964 – 2004: Method for the Qualitative Identification of Asbestos in Bulk Samples and in-house Method LTM-ASB-8020 by polarised light microscopy (PLM) and dispersion staining (DS) techniques. *NOTE: Positive Trace Analysis results indicate the sample contains detectable respirable fibres.*
Unknown Mineral Fibres	Mineral fibres of unknown type, as determined by PLM with DS, may require another analytical technique, such as Electron Microscopy, to confirm unequivocal identity. *NOTE: While Actinolite, Anthophyllite and Tremolite asbestos may be detected by PLM with DS, due to variability in the optical properties of these materials, AS4964 requires that these are reported as UMF unless confirmed by an independent technique.*
Subsampling Soil Samples	The whole sample submitted is first dried and then passed through a 10mm sieve followed by a 2mm sieve. All fibrous matter greater than 10mm, greater than 2mm as well as the material passing through the 2mm sieve are retained and analysed for the presence of asbestos. If the sub 2mm fraction is greater than approximately 30 to 60g then a sub-sampling routine based on ISO 3082:2009(E) is employed. *NOTE: Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be sub-sampled for trace analysis, in accordance with AS 4964-2004.*
Bonded asbestos-containing material (ACM)	The material is first examined and any fibres isolated for identification by PLM and DS. Where required, interfering matrices may be removed by disintegration using a range of heat, chemical or physical treatments, possibly in combination.The resultant material is then further examined in accordance with AS 4964 - 2004. *NOTE: Even after disintegration it may be difficult to detect the presence of asbestos in some asbestos-containing bulk materials using PLM and DS. This is due to the low grade or small length or diameter of the asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos-containing sealants and mastics, asbestos-containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.*
Limit of Reporting	The performance limitation of the AS 4964 (2004) method for non-homogeneous samples is around 0.1 g/kg (equivalent to 0.01% (w/w)). Where no asbestos is found by PLM and DS, including Trace Analysis, this is considered to be at the nominal reporting limit of 0.01% (w/w). The NEPM screening level of 0.001% (w/w) is intended as an on-site determination, not a laboratory Limit of Reporting (LOR), per se. Examination of a large sample size (e.g. 500 mL) may improve the likelihood of detecting asbestos, particularly AF, to aid assessment against the NEPM criteria. Gravimetric determinations to this level of accuracy are outside of AS 4964 and hence NATA Accreditation does not cover the performance of this service (non-NATA results shown with an asterisk). *NOTE: NATA News March 2014, p.7, states in relation to AS 4964: "This is a qualitative method with a nominal reporting limit of 0.01 % " and that currently in Australia "there is no validated method available for the quantification of asbestos".This report is consistent with the analytical procedures and reporting recommendations in the NEPM and the WA DoH.*

Project Name RANDWICK BARRACKS
Project ID 610.30041
Date Sampled Jun 18, 2020 to Jun 19, 2020
Report 727279-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
0407_QC217_200618	20-Jn38812	Jun 18, 2020	Approximate Sample 59g Sample consisted of: Brown coarse-grained soil, rocks and organic debris	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
0407_QC215_200618	20-Jn38813	Jun 18, 2020	Approximate Sample 80g Sample consisted of: Brown coarse-grained sandy soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
0407_QC221_200619	20-Jn38814	Jun 19, 2020	Approximate Sample 84g Sample consisted of: Brown coarse-grained soil, cement, glass and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
0407_QC219_200619	20-Jn38815	Jun 19, 2020	Approximate Sample 69g Sample consisted of: Brown coarse-grained sandy soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Asbestos - LTM-ASB-8020	Sydney	Jun 23, 2020	Indefinite

eurofins | Environment Testing

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NATA # 1261 Site # 18217

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IANZ # 1327

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Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 727279
Phone: 02 9428 8100
Fax:

Received: Jun 23, 2020 2:59 PM
Due: Jun 30, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271										
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	0407_QC217_200618	Jun 18, 2020		Soil	S20-Jn38812	X	X	X	X	X
2	0407_QC215_200618	Jun 18, 2020		Soil	S20-Jn38813	X	X	X	X	X
3	0407_QC221_200619	Jun 19, 2020		Soil	S20-Jn38814	X	X	X	X	X
4	0407_QC219_200619	Jun 19, 2020		Soil	S20-Jn38815	X	X	X	X	X
Test Counts						4	4	4	4	4

Internal Quality Control Review and Glossary

General

1. QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Samples were analysed on an 'as received' basis.
4. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
5. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the Sample Receipt Advice.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

Units

% w/w: weight for weight basis	grams per kilogram
Filter loading:	fibres/100 graticule areas
Reported Concentration:	fibres/mL
Flowrate:	L/min

Terms

Dry	Sample is dried by heating prior to analysis
LOR	Limit of Reporting
COC	Chain of Custody
SRA	Sample Receipt Advice
ISO	International Standards Organisation
AS	Australian Standards
WA DOH	Reference document for the NEPM. Government of Western Australia, Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia (2009), including supporting document Recommended Procedures for Laboratory Analysis of Asbestos in Soil (2011)
NEPM	National Environment Protection (Assessment of Site Contamination) Measure, 2013 (as amended)
ACM	Asbestos Containing Materials. Asbestos contained within a non-asbestos matrix, typically presented in bonded and/or sound condition. For the purposes of the NEPM, ACM is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
AF	Asbestos Fines. Asbestos containing materials, including friable, weathered and bonded materials, able to pass a 7mm x 7mm sieve. Considered under the NEPM as equivalent to “non-bonded / friable”.
FA	Fibrous Asbestos. Asbestos containing materials in a friable and/or severely weathered condition. For the purposes of the NEPM, FA is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
Friable	Asbestos-containing materials of any size that may be broken or crumbled by hand pressure. For the purposes of the NEPM, this includes both AF and FA. It is outside of the laboratory’s remit to assess degree of friability.
Trace Analysis	Analytical procedure used to detect the presence of respirable fibres in the matrix.

Comments

The samples received were not collected in an approved asbestos bag and was therefore sub-sampled from the 250mL glass jar. Valid sub-sampling procedures were applied so as to ensure that the sub-samples to be analysed accurately represented the samples received.

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N/A	Not applicable

Asbestos Counter/Identifier:

[redacted] Senior Analyst-Asbestos (NSW)

Authorised by:

[redacted] Senior Analyst-Asbestos (NSW)

General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

Eurofins shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.

000676

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

SLR

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Dawin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☑ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT: DHA

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGER: [redacted]

PM CONTACT No:

COMMENTS OR ADDITIONAL DIRECTIONS

LABORATORY: SCS

LABORATORY ADDRESS: Syd

SAMPLER: [redacted]

SAMPLER CONTACT No:

Email Reports and Invoices to: LQRSYD@slrconsulting.com

Turnaround Time (TAT)

☑ Standard TAT

☐ Non Standard or Urgent TAT

Required TAT:

COC Number 3 of 3

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	PFAS	Asbestos					Hold	Additional Information (Comment on any gross contamination or specific requirements)
	0407_QC125_200622	22620	Soil		X	X							
	0407_QC130_200622				X	X							
*	0407_QC235_200622												
*	0407_QC225_200622												
*	0407_QC230_200622												
	0407_TP232_A01_200622		ACM									X	
	0407_TP231_A02_200622						X						
	0407_TP231_A01_200622						X					*	
	0407_TP233_A01_200622						X						
	0407_TP232_A01_200622						X						

* Please forward to Eurofins for Suite A and PFAS

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	Received by	[redacted]	Date / Time 23/6/20 2:59 PM	Temperature Received: 17.4°C
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

#727282

eurofins | Environment Testing

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Site # 1254 & 14271

Sydney
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NATA # 1261 Site # 18217

Brisbane
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Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Perth
2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261 Site # 23736

ABN – 50 005 085 521 e.mail : EnviroSales@eurofins.com web : www.eurofins.com.au

Sample Receipt Advice

Company name:	**SLR Consulting (Sydney)**
Contact name:	[redacted]
Project name:	RANDWICK BARRACKS
Project ID:	610.30041
COC number:	Not provided
Turn around time:	5 Day
Date/Time received:	Jun 23, 2020 2:59 PM
Eurofins reference:	**727282**

Sample information

☑ A detailed list of analytes logged into our LIMS, is included in the attached summary table.

☑ All samples have been received as described on the above COC.

☑ COC has been completed correctly.

☑ Attempt to chill was evident.

☑ Appropriately preserved sample containers have been used.

☑ All samples were received in good condition.

☑ Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.

☑ Appropriate sample containers have been used.

☒ Split sample sent to requested external lab.

☒ Some samples have been subcontracted.

N/A Custody Seals intact (if used).

Contact notes

If you have any questions with respect to these samples please contact:

[redacted] on Phone : [redacted] or by e.mail: [redacted]@eurofins.com

Results will be delivered electronically via e.mail to [redacted]@slrconsulting.com.

Note: A copy of these results will also be delivered to the general SLR Consulting (Sydney) email address.

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ABN – 50 005 085 521 web : www.eurofins.com.au e.mail : EnviroSales@eurofins.com

Australia

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Phone : +64 9 526 45 51
IANZ # 1327

Christchurch
43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 727282
Phone: 02 9428 8100
Fax:

Received: Jun 23, 2020 2:59 PM
Due: Jun 30, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A	Per- and Polyfluoroalkyl Substances (PFASs)
Melbourne Laboratory - NATA Site # 1254 & 14271											
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	
Brisbane Laboratory - NATA Site # 20794											X
Perth Laboratory - NATA Site # 23736											
External Laboratory											
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**						
1	0407_QC235_200622	Jun 22, 2020		Soil	S20-Jn38873	X	X	X	X	X	X
2	0407_QC225_200622	Jun 22, 2020		Soil	S20-Jn38874	X	X	X	X	X	X
3	0407_QC230_200622	Jun 22, 2020		Soil	S20-Jn38875	X	X	X	X	X	X
Test Counts						3	3	3	3	3	3

Certificate of Analysis

eurofins | Environment Testing

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025–Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus
North Sydney
NSW 2060

Attention:	[redacted]
Report	727282-AID
Project Name	RANDWICK BARRACKS
Project ID	610.30041
Received Date	Jun 23, 2020
Date Reported	Jul 01, 2020

Methodology:

Asbestos Fibre Identification	Conducted in accordance with the Australian Standard AS 4964 – 2004: Method for the Qualitative Identification of Asbestos in Bulk Samples and in-house Method LTM-ASB-8020 by polarised light microscopy (PLM) and dispersion staining (DS) techniques. *NOTE: Positive Trace Analysis results indicate the sample contains detectable respirable fibres.*
Unknown Mineral Fibres	Mineral fibres of unknown type, as determined by PLM with DS, may require another analytical technique, such as Electron Microscopy, to confirm unequivocal identity. *NOTE: While Actinolite, Anthophyllite and Tremolite asbestos may be detected by PLM with DS, due to variability in the optical properties of these materials, AS4964 requires that these are reported as UMF unless confirmed by an independent technique.*
Subsampling Soil Samples	The whole sample submitted is first dried and then passed through a 10mm sieve followed by a 2mm sieve. All fibrous matter greater than 10mm, greater than 2mm as well as the material passing through the 2mm sieve are retained and analysed for the presence of asbestos. If the sub 2mm fraction is greater than approximately 30 to 60g then a sub-sampling routine based on ISO 3082:2009(E) is employed. *NOTE: Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be sub-sampled for trace analysis, in accordance with AS 4964-2004.*
Bonded asbestos-containing material (ACM)	The material is first examined and any fibres isolated for identification by PLM and DS. Where required, interfering matrices may be removed by disintegration using a range of heat, chemical or physical treatments, possibly in combination.The resultant material is then further examined in accordance with AS 4964 - 2004. *NOTE: Even after disintegration it may be difficult to detect the presence of asbestos in some asbestos-containing bulk materials using PLM and DS. This is due to the low grade or small length or diameter of the asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos-containing sealants and mastics, asbestos-containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.*
Limit of Reporting	The performance limitation of the AS 4964 (2004) method for non-homogeneous samples is around 0.1 g/kg (equivalent to 0.01% (w/w)). Where no asbestos is found by PLM and DS, including Trace Analysis, this is considered to be at the nominal reporting limit of 0.01% (w/w). The NEPM screening level of 0.001% (w/w) is intended as an on-site determination, not a laboratory Limit of Reporting (LOR), per se. Examination of a large sample size (e.g. 500 mL) may improve the likelihood of detecting asbestos, particularly AF, to aid assessment against the NEPM criteria. Gravimetric determinations to this level of accuracy are outside of AS 4964 and hence NATA Accreditation does not cover the performance of this service (non-NATA results shown with an asterisk). *NOTE: NATA News March 2014, p.7, states in relation to AS 4964: "This is a qualitative method with a nominal reporting limit of 0.01 % " and that currently in Australia "there is no validated method available for the quantification of asbestos".This report is consistent with the analytical procedures and reporting recommendations in the NEPM and the WA DoH.*

Accredited for compliance with ISO/IEC 17025–Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Project Name RANDWICK BARRACKS
Project ID 610.30041
Date Sampled Jun 22, 2020
Report 727282-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
0407_QC235_200622	20-Jn38873	Jun 22, 2020	Approximate Sample 76g Sample consisted of: Brown coarse-grained sandy soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
0407_QC225_200622	20-Jn38874	Jun 22, 2020	Approximate Sample 70g Sample consisted of: Brown coarse-grained sandy soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
0407_QC230_200622	20-Jn38875	Jun 22, 2020	Approximate Sample 75g Sample consisted of: Brown coarse-grained sandy soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Asbestos - LTM-ASB-8020	Sydney	Jun 23, 2020	Indefinite

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Phone : 0800 856 450
IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 727282
Phone: 02 9428 8100
Fax:

Received: Jun 23, 2020 2:59 PM
Due: Jun 30, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A	Per- and Polyfluoroalkyl Substances (PFASs)
Melbourne Laboratory - NATA Site # 1254 & 14271											
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	
Brisbane Laboratory - NATA Site # 20794											X
Perth Laboratory - NATA Site # 23736											
External Laboratory											
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**						
1	0407_QC235_200622	Jun 22, 2020		Soil	S20-Jn38873	X	X	X	X	X	X
2	0407_QC225_200622	Jun 22, 2020		Soil	S20-Jn38874	X	X	X	X	X	X
3	0407_QC230_200622	Jun 22, 2020		Soil	S20-Jn38875	X	X	X	X	X	X
Test Counts						3	3	3	3	3	3

Internal Quality Control Review and Glossary

General

1. QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Samples were analysed on an 'as received' basis.
4. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
5. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the Sample Receipt Advice.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

Units

% w/w: weight for weight basis	grams per kilogram
Filter loading:	fibres/100 graticule areas
Reported Concentration:	fibres/mL
Flowrate:	L/min

Terms

Dry	Sample is dried by heating prior to analysis
LOR	Limit of Reporting
COC	Chain of Custody
SRA	Sample Receipt Advice
ISO	International Standards Organisation
AS	Australian Standards
WA DOH	Reference document for the NEPM. Government of Western Australia, Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia (2009), including supporting document Recommended Procedures for Laboratory Analysis of Asbestos in Soil (2011)
NEPM	National Environment Protection (Assessment of Site Contamination) Measure, 2013 (as amended)
ACM	Asbestos Containing Materials. Asbestos contained within a non-asbestos matrix, typically presented in bonded and/or sound condition. For the purposes of the NEPM, ACM is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
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FA	Fibrous Asbestos. Asbestos containing materials in a friable and/or severely weathered condition. For the purposes of the NEPM, FA is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
Friable	Asbestos-containing materials of any size that may be broken or crumbled by hand pressure. For the purposes of the NEPM, this includes both AF and FA. It is outside of the laboratory’s remit to assess degree of friability.
Trace Analysis	Analytical procedure used to detect the presence of respirable fibres in the matrix.

Comments

The samples received were not collected in an approved asbestos bag and was therefore sub-sampled from the 250mL glass jar. Valid sub-sampling procedures were applied so as to ensure that the sub-samples to be analysed accurately represented the samples received.

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N/A	Not applicable

Asbestos Counter/Identifier:

[redacted] Senior Analyst-Asbestos (NSW)

Authorised by:

[redacted] Senior Analyst-Asbestos (NSW)

General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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Tenancy 202, Submarine School, Sub Base Platypus,
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NSW 2060

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: [redacted]

Report **727282-S**
Project name RANDWICK BARRACKS
Project ID 610.30041
Received Date Jun 23, 2020

Client Sample ID			**0407_QC235_200622**	**0407_QC225_200622**	**0407_QC230_200622**
Sample Matrix			**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn38873**	**S20-Jn38874**	**S20-Jn38875**
Date Sampled			**Jun 22, 2020**	**Jun 22, 2020**	**Jun 22, 2020**
Test/Reference	LOR	Unit			
BTEX					
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	111	95	104
Volatile Organics					
1.1-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5	< 0.5	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Bromoform	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Bromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5

Client Sample ID			0407_QC235_200622	0407_QC225_200622	0407_QC230_200622
Sample Matrix			**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn38873**	**S20-Jn38874**	**S20-Jn38875**
Date Sampled			**Jun 22, 2020**	**Jun 22, 2020**	**Jun 22, 2020**
Test/Reference	LOR	Unit			
Volatile Organics					
Carbon disulfide	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Chloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Chloroform	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Chloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Iodomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	< 0.5	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Styrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3
Total MAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5
4-Bromofluorobenzene (surr.)	1	%	111	95	104
Toluene-d8 (surr.)	1	%	106	91	89
Total Recoverable Hydrocarbons - 2013 NEPM Fractions					
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100	< 100
Total Recoverable Hydrocarbons					
TRH C6-C9	20	mg/kg	< 20	< 20	< 20
Total Recoverable Hydrocarbons - 1999 NEPM Fractions					
TRH C10-C14	20	mg/kg	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50	< 50	< 50

Client Sample ID			0407_QC235_200622	0407_QC225_200622	0407_QC230_200622
Sample Matrix			**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn38873**	**S20-Jn38874**	**S20-Jn38875**
Date Sampled			**Jun 22, 2020**	**Jun 22, 2020**	**Jun 22, 2020**
Test/Reference	LOR	Unit			
Polycyclic Aromatic Hydrocarbons					
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	80	84	75
p-Terphenyl-d14 (surr.)	1	%	78	83	75
Organochlorine Pesticides					
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05
a-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05
b-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05
d-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Methoxychlor	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Toxaphene	1	mg/kg	< 1	< 1	< 1
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.2	< 0.2	< 0.2
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.2	< 0.2	< 0.2
Dibutylchlorendate (surr.)	1	%	61	55	51
Tetrachloro-m-xylene (surr.)	1	%	95	96	92

Client Sample ID			0407_QC235_200622	0407_QC225_200622	0407_QC230_200622
Sample Matrix			**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn38873**	**S20-Jn38874**	**S20-Jn38875**
Date Sampled			**Jun 22, 2020**	**Jun 22, 2020**	**Jun 22, 2020**
Test/Reference	LOR	Unit			
Organophosphorus Pesticides					
Azinphos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Bolstar	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Coumaphos	2	mg/kg	< 2	< 2	< 2
Demeton-S	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Demeton-O	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Diazinon	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Dimethoate	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Disulfoton	0.2	mg/kg	< 0.2	< 0.2	< 0.2
EPN	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Ethion	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Ethoprop	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Fenthion	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Malathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Merphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Methyl parathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Mevinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Monocrotophos	2	mg/kg	< 2	< 2	< 2
Naled	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Omethoate	2	mg/kg	< 2	< 2	< 2
Phorate	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Ronnel	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Terbufos	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Tokuthion	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Trichloronate	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Triphenylphosphate (surr.)	1	%	81	79	75
Polychlorinated Biphenyls					
Aroclor-1016	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Aroclor-1232	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Aroclor-1242	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Aroclor-1248	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Aroclor-1254	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Aroclor-1260	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Total PCB*	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Dibutylchlorendate (surr.)	1	%	61	55	51
Tetrachloro-m-xylene (surr.)	1	%	95	96	92

Client Sample ID			0407_QC235_200622	0407_QC225_200622	0407_QC230_200622
Sample Matrix			Soil	Soil	Soil
Eurofins Sample No.			S20-Jn38873	S20-Jn38874	S20-Jn38875
Date Sampled			Jun 22, 2020	Jun 22, 2020	Jun 22, 2020
Test/Reference	LOR	Unit			
Phenols (Halogenated)					
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1
Phenols (non-Halogenated)					
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	< 0.2
2-Nitrophenol	1	mg/kg	< 1	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5	< 5	< 5
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	< 0.4
4-Nitrophenol	5	mg/kg	< 5	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20
Phenol-d6 (surr.)	1	%	55	59	59
Heavy Metals					
Arsenic	2	mg/kg	< 2	< 2	< 2
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	< 5	< 5	< 5
Copper	5	mg/kg	< 5	6.6	< 5
Lead	5	mg/kg	6.0	20	< 5
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	< 5	< 5	< 5
Zinc	5	mg/kg	< 5	30	17
% Moisture	1	%	4.7	5.3	4.0
Perfluoroalkyl carboxylic acids (PFCAs)					
Perfluorobutanoic acid (PFBA)[N11]	5	ug/kg	< 5	< 5	< 5
Perfluoropentanoic acid (PFPeA)[N11]	5	ug/kg	< 5	< 5	< 5
Perfluorohexanoic acid (PFHxA)[N11]	5	ug/kg	< 5	< 5	< 5
Perfluoroheptanoic acid (PFHpA)[N11]	5	ug/kg	< 5	< 5	< 5
Perfluorooctanoic acid (PFOA)[N11]	5	ug/kg	< 5	< 5	< 5
Perfluorononanoic acid (PFNA)[N11]	5	ug/kg	< 5	< 5	< 5
Perfluorodecanoic acid (PFDA)[N11]	5	ug/kg	< 5	< 5	< 5
Perfluoroundecanoic acid (PFUnDA)[N11]	5	ug/kg	< 5	< 5	< 5
Perfluorododecanoic acid (PFDoDA)[N11]	5	ug/kg	< 5	< 5	< 5
Perfluorotridecanoic acid (PFTrDA)[N15]	5	ug/kg	< 5	< 5	< 5
Perfluorotetradecanoic acid (PFTeDA)[N11]	5	ug/kg	< 5	< 5	< 5
13C4-PFBA (surr.)	1	%	107	101	100
13C5-PFPeA (surr.)	1	%	143	118	129
13C5-PFHxA (surr.)	1	%	130	99	103

Client Sample ID			0407_QC235_200622	0407_QC225_200622	0407_QC230_200622
Sample Matrix			Soil	Soil	Soil
Eurofins Sample No.			S20-Jn38873	S20-Jn38874	S20-Jn38875
Date Sampled			Jun 22, 2020	Jun 22, 2020	Jun 22, 2020
Test/Reference	LOR	Unit			
Perfluoroalkyl carboxylic acids (PFCAs)					
13C4-PFHpA (surr.)	1	%	156	119	132
13C8-PFOA (surr.)	1	%	173	133	141
13C5-PFNA (surr.)	1	%	128	122	122
13C6-PFDA (surr.)	1	%	78	80	77
13C2-PFUnDA (surr.)	1	%	70	81	85
13C2-PFDoDA (surr.)	1	%	78	76	75
13C2-PFTeDA (surr.)	1	%	119	138	133
Perfluoroalkyl sulfonamido substances					
Perfluorooctane sulfonamide (FOSA)[N11]	5	ug/kg	< 5	< 5	< 5
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)[N11]	5	ug/kg	< 5	< 5	< 5
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)[N11]	5	ug/kg	< 5	< 5	< 5
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)[N11]	5	ug/kg	< 5	< 5	< 5
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)[N11]	5	ug/kg	< 5	< 5	< 5
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)[N11]	10	ug/kg	< 10	< 10	< 10
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)[N11]	10	ug/kg	< 10	< 10	< 10
13C8-FOSA (surr.)	1	%	97	97	95
D3-N-MeFOSA (surr.)	1	%	98	102	94
D5-N-EtFOSA (surr.)	1	%	91	98	100
D7-N-MeFOSE (surr.)	1	%	80	107	110
D9-N-EtFOSE (surr.)	1	%	112	129	139
D5-N-EtFOSAA (surr.)	1	%	76	76	82
D3-N-MeFOSAA (surr.)	1	%	55	85	90
Perfluoroalkyl sulfonic acids (PFSAs)					
Perfluorobutanesulfonic acid (PFBS)[N11]	5	ug/kg	< 5	< 5	< 5
Perfluorononanesulfonic acid (PFNS)[N15]	5	ug/kg	< 5	< 5	< 5
Perfluoropropanesulfonic acid (PFPrS)[N15]	5	ug/kg	< 5	< 5	< 5
Perfluoropentanesulfonic acid (PFPeS)[N15]	5	ug/kg	< 5	< 5	< 5
Perfluorohexanesulfonic acid (PFHxS)[N11]	5	ug/kg	< 5	< 5	< 5
Perfluoroheptanesulfonic acid (PFHpS)[N15]	5	ug/kg	< 5	< 5	< 5
Perfluorooctanesulfonic acid (PFOS)[N11]	5	ug/kg	< 5	< 5	< 5
Perfluorodecanesulfonic acid (PFDS)[N15]	5	ug/kg	< 5	< 5	< 5
13C3-PFBS (surr.)	1	%	120	112	122
18O2-PFHxS (surr.)	1	%	131	129	123
13C8-PFOS (surr.)	1	%	126	117	114
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)					
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	5	ug/kg	< 5	< 5	< 5
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)[N11]	10	ug/kg	< 10	< 10	< 10
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	5	ug/kg	< 5	< 5	< 5
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	5	ug/kg	< 5	< 5	< 5
13C2-4:2 FTSA (surr.)	1	%	INT	119	126
13C2-6:2 FTSA (surr.)	1	%	158	118	146
13C2-8:2 FTSA (surr.)	1	%	104	95	119
13C2-10:2 FTSA (surr.)	1	%	71	84	89

Client Sample ID			0407_QC235_200622	0407_QC225_200622	0407_QC230_200622
Sample Matrix			**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn38873**	**S20-Jn38874**	**S20-Jn38875**
Date Sampled			**Jun 22, 2020**	**Jun 22, 2020**	**Jun 22, 2020**
Test/Reference	LOR	Unit			
PFASs Summations					
Sum (PFHxS + PFOS)*	5	ug/kg	< 5	< 5	< 5
Sum of US EPA PFAS (PFOS + PFOA)*	5	ug/kg	< 5	< 5	< 5
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	5	ug/kg	< 5	< 5	< 5
Sum of WA DWER PFAS (n=10)*	10	ug/kg	< 10	< 10	< 10
Sum of PFASs (n=30)*	50	ug/kg	< 50	< 50	< 50

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
BTEX	Sydney	Jun 27, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jun 27, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jun 27, 2020	
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons	Sydney	Jun 27, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Sydney	Jun 27, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Polycyclic Aromatic Hydrocarbons	Sydney	Jun 27, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (Halogenated)	Sydney	Jun 27, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (non-Halogenated)	Sydney	Jun 27, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Metals M8	Sydney	Jun 27, 2020	180 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Volatile Organics	Sydney	Jun 27, 2020	7 Days
- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices			
Eurofins | mgt Suite B15			
Organochlorine Pesticides	Sydney	Jun 27, 2020	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Organophosphorus Pesticides	Sydney	Jun 27, 2020	14 Days
- Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS			
Polychlorinated Biphenyls	Sydney	Jun 27, 2020	28 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
% Moisture	Sydney	Jun 23, 2020	14 Days
- Method: LTM-GEN-7080 Moisture			
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs)	Brisbane	Jun 24, 2020	180 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonamido substances	Brisbane	Jun 24, 2020	180 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonic acids (PFSAs)	Brisbane	Jun 24, 2020	180 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)	Brisbane	Jun 24, 2020	180 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			

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Sydney
Unit F3, Building F
16 Mars Road
Lane Cove West NSW 2066
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

Brisbane
1/21 Smallwood Place
Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Perth
2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261
Site # 23736

New Zealand

Auckland
35 O'Rorke Road
Penrose, Auckland 1061
Phone : +64 9 526 45 51
IANZ # 1327

Christchurch
43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 727282
Phone: 02 9428 8100
Fax:

Received: Jun 23, 2020 2:59 PM
Due: Jun 30, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A	Per- and Polyfluoroalkyl Substances (PFASs)
Melbourne Laboratory - NATA Site # 1254 & 14271											
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	
Brisbane Laboratory - NATA Site # 20794											X
Perth Laboratory - NATA Site # 23736											
External Laboratory											
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**						
1	0407_QC235_200622	Jun 22, 2020		Soil	S20-Jn38873	X	X	X	X	X	X
2	0407_QC225_200622	Jun 22, 2020		Soil	S20-Jn38874	X	X	X	X	X	X
3	0407_QC230_200622	Jun 22, 2020		Soil	S20-Jn38875	X	X	X	X	X	X
Test Counts						3	3	3	3	3	3

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

****NOTE:** pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram

mg/L: milligrams per litre

ug/L: micrograms per litre

ppm: Parts per million

ppb: Parts per billion

%: Percentage

org/100mL: Organisms per 100 millilitres

NTU: Nephelometric Turbidity Units

MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version 5.3
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling.Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Polychlorinated Biphenyls							
Aroclor-1016	mg/kg	< 0.5			0.5	Pass	
Aroclor-1221	mg/kg	< 0.1			0.1	Pass	
Aroclor-1232	mg/kg	< 0.5			0.5	Pass	
Aroclor-1242	mg/kg	< 0.5			0.5	Pass	
Aroclor-1248	mg/kg	< 0.5			0.5	Pass	
Aroclor-1254	mg/kg	< 0.5			0.5	Pass	
Aroclor-1260	mg/kg	< 0.5			0.5	Pass	
Total PCB*	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Phenols (Halogenated)							
2-Chlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4.5-Trichlorophenol	mg/kg	< 1			1	Pass	
2.4.6-Trichlorophenol	mg/kg	< 1			1	Pass	
2.6-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
4-Chloro-3-methylphenol	mg/kg	< 1			1	Pass	
Pentachlorophenol	mg/kg	< 1			1	Pass	
Tetrachlorophenols - Total	mg/kg	< 10			10	Pass	
Method Blank							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	mg/kg	< 20			20	Pass	
2-Methyl-4.6-dinitrophenol	mg/kg	< 5			5	Pass	
2-Methylphenol (o-Cresol)	mg/kg	< 0.2			0.2	Pass	
2-Nitrophenol	mg/kg	< 1			1	Pass	
2.4-Dimethylphenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dinitrophenol	mg/kg	< 5			5	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/kg	< 0.4			0.4	Pass	
4-Nitrophenol	mg/kg	< 5			5	Pass	
Dinoseb	mg/kg	< 20			20	Pass	
Phenol	mg/kg	< 0.5			0.5	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls							
Aroclor-1016	%	88			70-130	Pass	
Aroclor-1260	%	104			70-130	Pass	
LCS - % Recovery							
Phenols (Halogenated)							
2-Chlorophenol	%	91			30-130	Pass	
2.4-Dichlorophenol	%	102			30-130	Pass	
2.4.5-Trichlorophenol	%	104			30-130	Pass	
2.4.6-Trichlorophenol	%	104			30-130	Pass	
2.6-Dichlorophenol	%	84			30-130	Pass	
4-Chloro-3-methylphenol	%	89			30-130	Pass	
Pentachlorophenol	%	82			30-130	Pass	
Tetrachlorophenols - Total	%	97			30-130	Pass	
LCS - % Recovery							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	%	109			30-130	Pass	
2-Methyl-4.6-dinitrophenol	%	116			30-130	Pass	
2-Methylphenol (o-Cresol)	%	70			30-130	Pass	
2-Nitrophenol	%	123			30-130	Pass	

Test			Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2.4-Dimethylphenol			%	81			30-130	Pass	
2.4-Dinitrophenol			%	89			30-130	Pass	
3&4-Methylphenol (m&p-Cresol)			%	88			30-130	Pass	
4-Nitrophenol			%	95			30-130	Pass	
Dinoseb			%	121			30-130	Pass	
Phenol			%	78			30-130	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C6-C9	S20-Jn43783	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C10-C14	S20-Jn44769	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	S20-Jn44769	NCP	mg/kg	89	77	14	30%	Pass	
TRH C29-C36	S20-Jn44769	NCP	mg/kg	110	110	4.0	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	S20-Jn38584	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	S20-Jn38584	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	S20-Jn38584	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	S20-Jn38584	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	S20-Jn38584	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	S20-Jn38584	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	S20-Jn38584	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	S20-Jn38584	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	S20-Jn38584	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	S20-Jn38584	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	S20-Jn38584	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	S20-Jn38584	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	S20-Jn38584	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	S20-Jn38584	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	S20-Jn38584	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	S20-Jn38584	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	S20-Jn38584	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDE	S20-Jn38584	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-BHC	S20-Jn38584	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	S20-Jn38584	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	S20-Jn38584	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	S20-Jn38813	NCP	%	18	19	2.0	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	S20-Jn38875	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Cadmium	S20-Jn38875	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	S20-Jn38875	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Copper	S20-Jn38875	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Lead	S20-Jn38875	CP	mg/kg	< 5	5.3	16	30%	Pass	
Mercury	S20-Jn38875	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Nickel	S20-Jn38875	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Zinc	S20-Jn38875	CP	mg/kg	17	20	12	30%	Pass	

Duplicate								
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD		
Perfluorobutanoic acid (PFBA)	S20-Jn38875	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoropentanoic acid (PFPeA)	S20-Jn38875	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorohexanoic acid (PFHxA)	S20-Jn38875	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoroheptanoic acid (PFHpA)	S20-Jn38875	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorooctanoic acid (PFOA)	S20-Jn38875	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorononanoic acid (PFNA)	S20-Jn38875	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorodecanoic acid (PFDA)	S20-Jn38875	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoroundecanoic acid (PFUnDA)	S20-Jn38875	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorododecanoic acid (PFDoDA)	S20-Jn38875	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorotridecanoic acid (PFTrDA)	S20-Jn38875	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorotetradecanoic acid (PFTeDA)	S20-Jn38875	CP	ug/kg	< 5	< 5	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD		
Perfluorooctane sulfonamide (FOSA)	S20-Jn38875	CP	ug/kg	< 5	< 5	<1	30%	Pass
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	S20-Jn38875	CP	ug/kg	< 5	< 5	<1	30%	Pass
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	S20-Jn38875	CP	ug/kg	< 5	< 5	<1	30%	Pass
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	S20-Jn38875	CP	ug/kg	< 5	< 5	<1	30%	Pass
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	S20-Jn38875	CP	ug/kg	< 5	< 5	<1	30%	Pass
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	S20-Jn38875	CP	ug/kg	< 10	< 10	<1	30%	Pass
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	S20-Jn38875	CP	ug/kg	< 10	< 10	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD		
Perfluorobutanesulfonic acid (PFBS)	S20-Jn38875	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorononanesulfonic acid (PFNS)	S20-Jn38875	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoropropanesulfonic acid (PFPrS)	S20-Jn38875	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoropentanesulfonic acid (PFPeS)	S20-Jn38875	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorohexanesulfonic acid (PFHxS)	S20-Jn38875	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluoroheptanesulfonic acid (PFHpS)	S20-Jn38875	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorooctanesulfonic acid (PFOS)	S20-Jn38875	CP	ug/kg	< 5	< 5	<1	30%	Pass
Perfluorodecanesulfonic acid (PFDS)	S20-Jn38875	CP	ug/kg	< 5	< 5	<1	30%	Pass
Duplicate								
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1	Result 2	RPD		
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	S20-Jn38875	CP	ug/kg	< 5	< 5	<1	30%	Pass
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	S20-Jn38875	CP	ug/kg	< 10	< 10	<1	30%	Pass
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	S20-Jn38875	CP	ug/kg	< 5	< 5	<1	30%	Pass
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	S20-Jn38875	CP	ug/kg	< 5	< 5	<1	30%	Pass

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
N11	Isotope dilution is used for calibration of each native compound for which an exact labelled analogue is available (Isotope Dilution Quantitation). The isotopically labelled analogues allow identification and recovery correction of the concentration of the associated native PFAS compounds.
N15	Where the native PFAS compound does not have labelled analogue then the quantification is made using the Extracted Internal Standard Analyte with the closest retention time to the analyte and no recovery correction has been made (Internal Standard Quantitation).

Authorised By

[redacted]

Analytical Services Manager
Senior Analyst-Organic (NSW)
Senior Analyst-Metal (NSW)
Senior Analyst-Asbestos (NSW)
Senior Analyst-PFAS (QLD)

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

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- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
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- ☐ NELSON: 6/A Cambridge [illegible] Port Nelson, 7020 NZ
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SLR

CLIENT: Defence Housing Australia	**LABORATORY: SGS Australia**
PROJECT: Randwick Barracks	**LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015**
PROJECT NUMBER: 610.30041	**SAMPLER** [redacted]
PROJECT MANAGER [redacted]	**SAMPLER CONTACT No** [redacted]
PM CONTACT No: [redacted]	**Email Reports and Invoices to: LQRSYD@slrconsulting.com** [redacted]
COMMENTS OR ADDITIONAL DIRECTIONS	**Turnaround Time (TAT)** ☐ Standard TAT ☐ Non Standard or Urgent TAT **Required TAT: Standard**
	COC Number of

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: Suite A, PFAS	Asbestos ONLY	HOLD							Additional Information (Comment on any gross contamination or specific requirements)
	0407_TP118_0.1_200617	17-06-2020	Soil		x									Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
	0407_TP118_0.5_200617	17-06-2020	Soil		x									
	0407_TP118_1.0_200617	17-06-2020	Soil				x							
	0407_TP119_0.1_200617	17-06-2020	Soil		x									
	0407_TP119_0.3_200617	17-06-2020	Soil				x							
	0407_TP119_1.0_200617	17-06-2020	Soil		x									
	0407_TP120_0.1_200617	17-06-2020	Soil		x									
	0407_TP120_0.8_200617	17-06-2020	Soil		x									
	0407_TP120_1.5_200617	17-06-2020	Soil				x							
	0407_QC114_200617	17-06-2020	Soil		x									
	0407_QC214_200617	17-06-2020	Soil		x									
														Please send to Eurofins

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 17-06-2020	**Received by**	Sign [redacted]	Date / Time 24/6	**Temperature Received:**	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	12.20°C	

727687

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

SLR

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☒ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
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- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ DARWIN: 21 Parap Rd, Dawin, NT 0820
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ

CLIENT: Defence Housing Australia	**LABORATORY: SGS Australia**	**Turnaround Time (TAT)** / **COC Number**
PROJECT: Randwick Barracks	**LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015**	of
PROJECT NUMBER: 610.30041	**SAMPLER** [redacted]	☐ Standard TAT
PROJECT MANAGER: [redacted]	**SAMPLER CONTACT No** [redacted]	☐ Non Standard or Urgent TAT
PM CONTACT No [redacted]	**Email Reports and Invoices to: LQRSYD@slrconsulting.com** [redacted]	**Required TAT: Standard**

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A, PFAS	Asbestos ONLY	HOLD						**Additional Information** *(Comment on any gross contamination or specific requirements)*
	0407_TP121_0.2_200617	17-06-2020	Soil		x								Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
	0407_TP121_0.5_200617	17-06-2020	Soil		x								
	0407_TP121_1.1_200617	17-06-2020	Soil				x						
	0407_TP148_0.1_200617	17-06-2020	Soil		x								
	0407_TP148_0.5_200617	17-06-2020	Soil		x								
	0407_TP148_1.0_200617	17-06-2020	Soil				x						
	0407_TP149_0.1_200617	17-06-2020	Soil		x								
	0407_TP149_0.5_200617	17-06-2020	Soil		x								
	0407_TP149_1.0_200617	17-06-2020	Soil				x						
	0407_TP149_2.0_200617	17-06-2020	Soil				x						
	0407_TP149_0.1-0.2_200617	17-06-2020	Soil				x						Please send to Eurofins
	0407_TP149_1.0-1.1_200617	17-06-2020	Soil				x						

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 17-06-2020	**Received by**	Sign [redacted]	Date / Time 24/6	**Temperature Received:**
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
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SLR

CLIENT: Defence Housing Australia	LABORATORY: SGS Australia
PROJECT: Randwick Barracks	LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015
PROJECT NUMBER: 610.30041	SAMPLER [redacted]
PROJECT MANAGER [redacted]	SAMPLER CONTACT No: [redacted]
PM CONTACT No: [redacted]	Email Reports and Invoices to: LQRSYD@slrconsulting.com [redacted]

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number

of

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A, PFAS	Asbestos ONLY	HOLD						Additional Information (Comment on any gross contamination or specific requirements)
	0407_TP150_0.1_200617	17-06-2020	Soil		x								Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
	0407_TP150_0.5_200617	17-06-2020	Soil		x								
	0407_TP150_1.0_200617	17-06-2020	Soil				x						
	0407_TP162_0.1_200617	17-06-2020	Soil		x								
	0407_TP162_0.3_200617	17-06-2020	Soil		x								
	0407_TP162_0.5_200617	17-06-2020	Soil				x						
	0407_TP162_1.0_200617	17-06-2020	Soil				x						
	0407_TP163_0.1_200617	17-06-2020	Soil		x								
	0407_TP163_0.4_200617	17-06-2020	Soil		x								
	0407_TP163_1.0_200617	17-06-2020	Soil				x						
	0407_QC108_200617	17-06-2020	Soil		x								
	0407_QC208_200617	17-06-2020	Soil		x								Please send to Eurofins

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time	17-06-2020	Received by	Sign [redacted]	Date / Time	24/6
Relinquished By	Sign	Date / Time		Received by	Sign	Date / Time	

Temperature Received:

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

SLR

PROJECT OFFICE (Tick one)

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- ☐

CLIENT: Defence Housing Australia	**LABORATORY: SGS Australia**
PROJECT: Randwick Barracks	**LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015**
PROJECT NUMBER: 610.30041	**SAMPLER:** [redacted]
PROJECT MANAGER [redacted]	**SAMPLER CONTACT No:** [redacted]
PM CONTACT No [redacted]	**Email Reports and Invoices to: LQRSYD@slrconsulting.com ;** [redacted]

Turnaround Time (TAT)

☐ Standard TAT

☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number of

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: Suite A, PFAS	Asbestos ONLY	HOLD						**Additional Information** *(Comment on any gross contamination or specific requirements)*
	0407_TP189_0.1_200617	17-06-2020	Soil		x								Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
	0407_TP189_0.4_200617	17-06-2020	Soil		x								
	0407_TP189_1.0_200617	17-06-2020	Soil				x						
	0407_QC112_200617	17-06-2020	Soil		x								
	0407_QC212_200617	17-06-2020	Soil		x								Please send to Eurofins
	0407_TP190_0.1_200617	17-06-2020	Soil		x								
	0407_TP190_0.5_200617	17-06-2020	Soil		x								
	0407_TP190_1.1_200617	17-06-2020	Soil				x						
	0407_TP191_0.1_200617	17-06-2020	Soil		x								
	0407_TP191_0.4_200617	17-06-2020	Soil		x								
	0407_TP191_1.0_200617	17-06-2020	Soil				x						

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time	17-06-2020	Received by	Sign [redacted]	Date / Time	24/6
Relinquished By	Sign	Date / Time		Received by	Sign	Date / Time	

Temperature Received:

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
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- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ

SLR

CLIENT: Defence Housing Australia	**LABORATORY:** SGS Australia
PROJECT: Randwick Barracks	**LABORATORY ADDRESS:** Unit 16/33 Maddox St, Alexandria NSW 2015
PROJECT NUMBER: 610.30041	**SAMPLER** [redacted]
PROJECT MANAGER: [redacted]	**SAMPLER CONTACT No** [redacted]
PM CONTACT No: [redacted]	**Email Reports and Invoices to:** LQRSYD@slrconsulting.com ; [redacted]

Turnaround Time (TAT) — **COC Number** of

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A, PFAS	Asbestos ONLY	HOLD						Additional Information (Comment on any gross contamination or specific requirements)
	0407_QC11[redacted]_200617	17-06-2020	Soil		x								Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
	0407_QC21[redacted]_200617	17-06-2020	Soil		x								Please send to Eurofins
	0407_TP148_0.1-0.2_200617	17-06-2020	Soil				x						
	0407_TP148_0.9-1.0_200617	17-06-2020	Soil				x						

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time	17-06-2020	**Received by**	Sign	Date / Time	24/6
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	

Temperature Received:

eurofins | Environment Testing

Melbourne
6 Monterey Road
Dandenong South Vic 3175
Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

Sydney
Unit F3, Building F
16 Mars Road
Lane Cove West NSW 2066
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

Brisbane
1/21 Smallwood Place
Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Perth
2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261 Site # 23736

ABN – 50 005 085 521 e.mail : EnviroSales@eurofins.com web : www.eurofins.com.au

Sample Receipt Advice

Company name:	**SLR Consulting (Sydney)**
Contact name:	[redacted]
Project name:	RANDWICK BARRACKS
Project ID:	610.30041
COC number:	Not provided
Turn around time:	5 Day
Date/Time received:	Jun 24, 2020 3:24 PM
Eurofins reference:	**727687**

Sample information

☑ A detailed list of analytes logged into our LIMS, is included in the attached summary table.

☑ All samples have been received as described on the above COC.

☑ COC has been completed correctly.

☑ Attempt to chill was evident.

☑ Appropriately preserved sample containers have been used.

☑ All samples were received in good condition.

☑ Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.

☑ Appropriate sample containers have been used.

☒ Split sample sent to requested external lab.

☒ Some samples have been subcontracted.

N/A Custody Seals intact (if used).

Notes

No PFAS tubs received, PFAS analysis cancelled.

Contact notes

If you have any questions with respect to these samples please contact:

[redacted] on Phone : [redacted] or by e.mail: [redacted]@eurofins.com

Results will be delivered electronically via e.mail to [redacted]@slrconsulting.com.

Note: A copy of these results will also be delivered to the general SLR Consulting (Sydney) email address.

eurofins | Environment Testing

ABN – 50 005 085 521 web : www.eurofins.com.au e.mail : EnviroSales@eurofins.com

Australia

Melbourne
6 Monterey Road
Dandenong South VIC 3175
Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

Sydney
Unit F3, Building F
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NATA # 1261 Site # 20794

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2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261
Site # 23736

New Zealand

Auckland
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Penrose, Auckland 1061
Phone : +64 9 526 45 51
IANZ # 1327

Christchurch
43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 727687
Phone: 02 9428 8100
Fax:

Received: Jun 24, 2020 3:24 PM
Due: Jul 1, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	HOLD	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271											
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794											
Perth Laboratory - NATA Site # 23736											
External Laboratory											
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**						
1	0407_QC214_200617	Jun 17, 2020		Soil	S20-Jn42796	X		X	X	X	X
2	0407_TP149_0.1-0.2_200617	Jun 17, 2020		Soil	S20-Jn42797		X				
3	0407_QC208_200617	Jun 17, 2020		Soil	S20-Jn42798	X		X	X	X	X
4	0407_QC212_200617	Jun 17, 2020		Soil	S20-Jn42799	X		X	X	X	X
5	0407_QC210_200617	Jun 17, 2020		Soil	S20-Jn42800	X		X	X	X	X
Test Counts						4	1	4	4	4	4

Certificate of Analysis

eurofins | Environment Testing

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025–Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus
North Sydney
NSW 2060

Attention:	[redacted]
Report	727687-AID
Project Name	RANDWICK BARRACKS
Project ID	610.30041
Received Date	Jun 24, 2020
Date Reported	Jul 02, 2020

Methodology:

Asbestos Fibre Identification	Conducted in accordance with the Australian Standard AS 4964 – 2004: Method for the Qualitative Identification of Asbestos in Bulk Samples and in-house Method LTM-ASB-8020 by polarised light microscopy (PLM) and dispersion staining (DS) techniques. *NOTE: Positive Trace Analysis results indicate the sample contains detectable respirable fibres.*
Unknown Mineral Fibres	Mineral fibres of unknown type, as determined by PLM with DS, may require another analytical technique, such as Electron Microscopy, to confirm unequivocal identity. *NOTE: While Actinolite, Anthophyllite and Tremolite asbestos may be detected by PLM with DS, due to variability in the optical properties of these materials, AS4964 requires that these are reported as UMF unless confirmed by an independent technique.*
Subsampling Soil Samples	The whole sample submitted is first dried and then passed through a 10mm sieve followed by a 2mm sieve. All fibrous matter greater than 10mm, greater than 2mm as well as the material passing through the 2mm sieve are retained and analysed for the presence of asbestos. If the sub 2mm fraction is greater than approximately 30 to 60g then a sub-sampling routine based on ISO 3082:2009(E) is employed. *NOTE: Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be sub-sampled for trace analysis, in accordance with AS 4964-2004.*
Bonded asbestos-containing material (ACM)	The material is first examined and any fibres isolated for identification by PLM and DS. Where required, interfering matrices may be removed by disintegration using a range of heat, chemical or physical treatments, possibly in combination.The resultant material is then further examined in accordance with AS 4964 - 2004. *NOTE: Even after disintegration it may be difficult to detect the presence of asbestos in some asbestos-containing bulk materials using PLM and DS. This is due to the low grade or small length or diameter of the asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos-containing sealants and mastics, asbestos-containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.*
Limit of Reporting	The performance limitation of the AS 4964 (2004) method for non-homogeneous samples is around 0.1 g/kg (equivalent to 0.01% (w/w)). Where no asbestos is found by PLM and DS, including Trace Analysis, this is considered to be at the nominal reporting limit of 0.01% (w/w). The NEPM screening level of 0.001% (w/w) is intended as an on-site determination, not a laboratory Limit of Reporting (LOR), per se. Examination of a large sample size (e.g. 500 mL) may improve the likelihood of detecting asbestos, particularly AF, to aid assessment against the NEPM criteria. Gravimetric determinations to this level of accuracy are outside of AS 4964 and hence NATA Accreditation does not cover the performance of this service (non-NATA results shown with an asterisk). *NOTE: NATA News March 2014, p.7, states in relation to AS 4964: "This is a qualitative method with a nominal reporting limit of 0.01 % " and that currently in Australia "there is no validated method available for the quantification of asbestos".This report is consistent with the analytical procedures and reporting recommendations in the NEPM and the WA DoH.*

Project Name RANDWICK BARRACKS
Project ID 610.30041
Date Sampled Jun 17, 2020
Report 727687-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
0407_QC214_200617	20-Jn42796	Jun 17, 2020	Approximate Sample 57g Sample consisted of: Beige fine-grained sandy soil	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
0407_QC208_200617	20-Jn42798	Jun 17, 2020	Approximate Sample 83g Sample consisted of: Beige fine-grained sandy soil	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
0407_QC212_200617	20-Jn42799	Jun 17, 2020	Approximate Sample 53g Sample consisted of: Brown fine-grained sandy soil	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
0407_QC210_200617	20-Jn42800	Jun 17, 2020	Approximate Sample 59g Sample consisted of: Brown fine-grained sandy soil	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Asbestos - LTM-ASB-8020	Sydney	Jun 25, 2020	Indefinite

eurofins | Environment Testing

ABN – 50 005 085 521 web : www.eurofins.com.au e.mail : EnviroSales@eurofins.com

Australia

Melbourne
6 Monterey Road
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Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

Sydney
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Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

Brisbane
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Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Perth
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Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261
Site # 23736

New Zealand

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IANZ # 1327

Christchurch
43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 727687
Phone: 02 9428 8100
Fax:

Received: Jun 24, 2020 3:24 PM
Due: Jul 1, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	HOLD	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271											
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794											
Perth Laboratory - NATA Site # 23736											
External Laboratory											
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**						
1	0407_QC214_200617	Jun 17, 2020		Soil	S20-Jn42796	X		X	X	X	X
2	0407_TP149_0.1-0.2_200617	Jun 17, 2020		Soil	S20-Jn42797		X				
3	0407_QC208_200617	Jun 17, 2020		Soil	S20-Jn42798	X		X	X	X	X
4	0407_QC212_200617	Jun 17, 2020		Soil	S20-Jn42799	X		X	X	X	X
5	0407_QC210_200617	Jun 17, 2020		Soil	S20-Jn42800	X		X	X	X	X
Test Counts						4	1	4	4	4	4

Internal Quality Control Review and Glossary

General

1. QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Samples were analysed on an 'as received' basis.
4. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
5. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the Sample Receipt Advice.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

Units

% w/w: weight for weight basis	grams per kilogram
Filter loading:	fibres/100 graticule areas
Reported Concentration:	fibres/mL
Flowrate:	L/min

Terms

Dry	Sample is dried by heating prior to analysis
LOR	Limit of Reporting
COC	Chain of Custody
SRA	Sample Receipt Advice
ISO	International Standards Organisation
AS	Australian Standards
WA DOH	Reference document for the NEPM. Government of Western Australia, Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia (2009), including supporting document Recommended Procedures for Laboratory Analysis of Asbestos in Soil (2011)
NEPM	National Environment Protection (Assessment of Site Contamination) Measure, 2013 (as amended)
ACM	Asbestos Containing Materials. Asbestos contained within a non-asbestos matrix, typically presented in bonded and/or sound condition. For the purposes of the NEPM, ACM is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
AF	Asbestos Fines. Asbestos containing materials, including friable, weathered and bonded materials, able to pass a 7mm x 7mm sieve. Considered under the NEPM as equivalent to “non-bonded / friable”.
FA	Fibrous Asbestos. Asbestos containing materials in a friable and/or severely weathered condition. For the purposes of the NEPM, FA is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
Friable	Asbestos-containing materials of any size that may be broken or crumbled by hand pressure. For the purposes of the NEPM, this includes both AF and FA. It is outside of the laboratory’s remit to assess degree of friability.
Trace Analysis	Analytical procedure used to detect the presence of respirable fibres in the matrix.

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N/A	Not applicable

Asbestos Counter/Identifier:

[redacted] Senior Analyst-Asbestos (NSW)

Authorised by:

[redacted] Senior Analyst-Asbestos (NSW)

General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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Certificate of Analysis

SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus,
North Sydney
NSW 2060

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: [redacted]

Report **727687-S**
Project name RANDWICK BARRACKS
Project ID 610.30041
Received Date Jun 24, 2020

Client Sample ID			0407_QC214_200617	0407_QC208_200617	0407_QC212_200617	0407_QC210_200617
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn42796**	**S20-Jn42798**	**S20-Jn42799**	**S20-Jn42800**
Date Sampled			**Jun 17, 2020**	**Jun 17, 2020**	**Jun 17, 2020**	**Jun 17, 2020**
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50	< 50	< 50	< 50
BTEX						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	89	84	84	77
Volatile Organics						
1.1-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			0407_QC214_200617	0407_QC208_200617	0407_QC212_200617	0407_QC210_200617
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S20-Jn42796	S20-Jn42798	S20-Jn42799	S20-Jn42800
Date Sampled			Jun 17, 2020	Jun 17, 2020	Jun 17, 2020	Jun 17, 2020
Test/Reference	LOR	Unit				
Volatile Organics						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromoform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Iodomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Styrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
Total MAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Bromofluorobenzene (surr.)	1	%	89	84	84	77
Toluene-d8 (surr.)	1	%	88	105	100	102
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100	< 100	< 100

Client Sample ID			0407_QC214_200617	0407_QC208_200617	0407_QC212_200617	0407_QC210_200617
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn42796**	**S20-Jn42798**	**S20-Jn42799**	**S20-Jn42800**
Date Sampled			**Jun 17, 2020**	**Jun 17, 2020**	**Jun 17, 2020**	**Jun 17, 2020**
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	101	103	86	102
p-Terphenyl-d14 (surr.)	1	%	94	94	81	104
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
a-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
b-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
d-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Toxaphene	1	mg/kg	< 1	< 1	< 1	< 1
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Dibutylchlorendate (surr.)	1	%	99	96	88	101
Tetrachloro-m-xylene (surr.)	1	%	95	93	81	101

Client Sample ID			0407_QC214_200617	0407_QC208_200617	0407_QC212_200617	0407_QC210_200617
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S20-Jn42796	S20-Jn42798	S20-Jn42799	S20-Jn42800
Date Sampled			Jun 17, 2020	Jun 17, 2020	Jun 17, 2020	Jun 17, 2020
Test/Reference	LOR	Unit				
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Bolstar	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Coumaphos	2	mg/kg	< 2	< 2	< 2	< 2
Demeton-S	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Demeton-O	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Diazinon	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Dimethoate	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Disulfoton	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
EPN	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ethion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ethoprop	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Fenthion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Malathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Merphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Methyl parathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Mevinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Monocrotophos	2	mg/kg	< 2	< 2	< 2	< 2
Naled	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Omethoate	2	mg/kg	< 2	< 2	< 2	< 2
Phorate	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ronnel	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Terbufos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Tokuthion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Trichloronate	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Triphenylphosphate (surr.)	1	%	104	99	90	115
Polychlorinated Biphenyls						
Aroclor-1016	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1232	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1242	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1248	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1254	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1260	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PCB*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibutylchlorendate (surr.)	1	%	99	96	88	101
Tetrachloro-m-xylene (surr.)	1	%	95	93	81	101

Client Sample ID			0407_QC214_200617	0407_QC208_200617	0407_QC212_200617	0407_QC210_200617
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn42796**	**S20-Jn42798**	**S20-Jn42799**	**S20-Jn42800**
Date Sampled			**Jun 17, 2020**	**Jun 17, 2020**	**Jun 17, 2020**	**Jun 17, 2020**
Test/Reference	LOR	Unit				
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1	< 1
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
2-Nitrophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
4-Nitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
Phenol-d6 (surr.)	1	%	103	93	79	88
Heavy Metals						
Arsenic	2	mg/kg	< 2	< 2	< 2	< 2
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	< 5	< 5	< 5	< 5
Copper	5	mg/kg	< 5	< 5	< 5	< 5
Lead	5	mg/kg	< 5	< 5	< 5	7.9
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	< 5	< 5	< 5	< 5
Zinc	5	mg/kg	< 5	< 5	< 5	10.0
% Moisture	1	%	17	1.2	3.7	9.9

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Sydney	Jun 30, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Sydney	Jun 30, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jun 30, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jun 30, 2020	
- Method: LTM-ORG-2010 TRH C6-C40			
Polycyclic Aromatic Hydrocarbons	Sydney	Jun 30, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (Halogenated)	Sydney	Jun 30, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (non-Halogenated)	Sydney	Jun 30, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Metals M8	Sydney	Jun 30, 2020	180 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Volatile Organics	Sydney	Jun 30, 2020	7 Days
- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices			
Eurofins | mgt Suite B15			
Organochlorine Pesticides	Sydney	Jun 30, 2020	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Organophosphorus Pesticides	Sydney	Jun 30, 2020	14 Days
- Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS			
Polychlorinated Biphenyls	Sydney	Jun 30, 2020	28 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
% Moisture	Sydney	Jun 25, 2020	14 Days
- Method: LTM-GEN-7080 Moisture			

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Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 727687
Phone: 02 9428 8100
Fax:

Received: Jun 24, 2020 3:24 PM
Due: Jul 1, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	HOLD	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271											
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794											
Perth Laboratory - NATA Site # 23736											
External Laboratory											
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**						
1	0407_QC214_200617	Jun 17, 2020		Soil	S20-Jn42796	X		X	X	X	X
2	0407_TP149_0.1-0.2_200617	Jun 17, 2020		Soil	S20-Jn42797		X				
3	0407_QC208_200617	Jun 17, 2020		Soil	S20-Jn42798	X		X	X	X	X
4	0407_QC212_200617	Jun 17, 2020		Soil	S20-Jn42799	X		X	X	X	X
5	0407_QC210_200617	Jun 17, 2020		Soil	S20-Jn42800	X		X	X	X	X
Test Counts						4	1	4	4	4	4

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

****NOTE:** pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram
mg/L: milligrams per litre
ug/L: micrograms per litre
ppm: Parts per million
ppb: Parts per billion
%: Percentage
org/100mL: Organisms per 100 millilitres
NTU: Nephelometric Turbidity Units
MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version 5.3
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling.Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
Method Blank							
BTEX							
Benzene	mg/kg	< 0.1			0.1	Pass	
Toluene	mg/kg	< 0.1			0.1	Pass	
Ethylbenzene	mg/kg	< 0.1			0.1	Pass	
m&p-Xylenes	mg/kg	< 0.2			0.2	Pass	
o-Xylene	mg/kg	< 0.1			0.1	Pass	
Xylenes - Total*	mg/kg	< 0.3			0.3	Pass	
Method Blank							
Volatile Organics							
1.1-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
1.1.1-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.1.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dibromoethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.3-Trichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.4-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.3.5-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.4-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
2-Butanone (MEK)	mg/kg	< 0.5			0.5	Pass	
2-Propanone (Acetone)	mg/kg	< 0.5			0.5	Pass	
4-Chlorotoluene	mg/kg	< 0.5			0.5	Pass	
4-Methyl-2-pentanone (MIBK)	mg/kg	< 0.5			0.5	Pass	
Allyl chloride	mg/kg	< 0.5			0.5	Pass	
Bromobenzene	mg/kg	< 0.5			0.5	Pass	
Bromochloromethane	mg/kg	< 0.5			0.5	Pass	
Bromodichloromethane	mg/kg	< 0.5			0.5	Pass	
Bromoform	mg/kg	< 0.5			0.5	Pass	
Bromomethane	mg/kg	< 0.5			0.5	Pass	
Carbon disulfide	mg/kg	< 0.5			0.5	Pass	
Carbon Tetrachloride	mg/kg	< 0.5			0.5	Pass	
Chlorobenzene	mg/kg	< 0.5			0.5	Pass	
Chloroethane	mg/kg	< 0.5			0.5	Pass	
Chloroform	mg/kg	< 0.5			0.5	Pass	
Chloromethane	mg/kg	< 0.5			0.5	Pass	
cis-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
cis-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Dibromochloromethane	mg/kg	< 0.5			0.5	Pass	
Dibromomethane	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Dichlorodifluoromethane	mg/kg	< 0.5			0.5	Pass	
Iodomethane	mg/kg	< 0.5			0.5	Pass	
Isopropyl benzene (Cumene)	mg/kg	< 0.5			0.5	Pass	
Methylene Chloride	mg/kg	< 0.5			0.5	Pass	
Styrene	mg/kg	< 0.5			0.5	Pass	
Tetrachloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Trichloroethene	mg/kg	< 0.5			0.5	Pass	
Trichlorofluoromethane	mg/kg	< 0.5			0.5	Pass	
Vinyl chloride	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Organochlorine Pesticides							
Chlordanes - Total	mg/kg	< 0.1			0.1	Pass	
4.4'-DDD	mg/kg	< 0.05			0.05	Pass	
4.4'-DDE	mg/kg	< 0.05			0.05	Pass	
4.4'-DDT	mg/kg	< 0.05			0.05	Pass	
a-BHC	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-BHC	mg/kg	< 0.05			0.05	Pass	
d-BHC	mg/kg	< 0.05			0.05	Pass	
Dieldrin	mg/kg	< 0.05			0.05	Pass	
Endosulfan I	mg/kg	< 0.05			0.05	Pass	
Endosulfan II	mg/kg	< 0.05			0.05	Pass	
Endosulfan sulphate	mg/kg	< 0.05			0.05	Pass	
Endrin	mg/kg	< 0.05			0.05	Pass	
Endrin aldehyde	mg/kg	< 0.05			0.05	Pass	
Endrin ketone	mg/kg	< 0.05			0.05	Pass	
g-BHC (Lindane)	mg/kg	< 0.05			0.05	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Heptachlor	mg/kg	< 0.05			0.05	Pass	
Heptachlor epoxide	mg/kg	< 0.05			0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05			0.05	Pass	
Methoxychlor	mg/kg	< 0.2			0.2	Pass	
Toxaphene	mg/kg	< 1			1	Pass	
Method Blank							
Organophosphorus Pesticides							
Azinphos-methyl	mg/kg	< 0.2			0.2	Pass	
Bolstar	mg/kg	< 0.2			0.2	Pass	
Chlorfenvinphos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos-methyl	mg/kg	< 0.2			0.2	Pass	
Coumaphos	mg/kg	< 2			2	Pass	
Demeton-S	mg/kg	< 0.2			0.2	Pass	
Demeton-O	mg/kg	< 0.2			0.2	Pass	
Diazinon	mg/kg	< 0.2			0.2	Pass	
Dichlorvos	mg/kg	< 0.2			0.2	Pass	
Dimethoate	mg/kg	< 0.2			0.2	Pass	
Disulfoton	mg/kg	< 0.2			0.2	Pass	
EPN	mg/kg	< 0.2			0.2	Pass	
Ethion	mg/kg	< 0.2			0.2	Pass	
Ethoprop	mg/kg	< 0.2			0.2	Pass	
Ethyl parathion	mg/kg	< 0.2			0.2	Pass	
Fenitrothion	mg/kg	< 0.2			0.2	Pass	
Fensulfothion	mg/kg	< 0.2			0.2	Pass	
Fenthion	mg/kg	< 0.2			0.2	Pass	
Malathion	mg/kg	< 0.2			0.2	Pass	
Merphos	mg/kg	< 0.2			0.2	Pass	
Methyl parathion	mg/kg	< 0.2			0.2	Pass	
Mevinphos	mg/kg	< 0.2			0.2	Pass	
Monocrotophos	mg/kg	< 2			2	Pass	
Naled	mg/kg	< 0.2			0.2	Pass	
Omethoate	mg/kg	< 2			2	Pass	
Phorate	mg/kg	< 0.2			0.2	Pass	
Pirimiphos-methyl	mg/kg	< 0.2			0.2	Pass	
Pyrazophos	mg/kg	< 0.2			0.2	Pass	
Ronnel	mg/kg	< 0.2			0.2	Pass	
Terbufos	mg/kg	< 0.2			0.2	Pass	
Tetrachlorvinphos	mg/kg	< 0.2			0.2	Pass	
Tokuthion	mg/kg	< 0.2			0.2	Pass	
Trichloronate	mg/kg	< 0.2			0.2	Pass	
Method Blank							
Polychlorinated Biphenyls							
Aroclor-1016	mg/kg	< 0.5			0.5	Pass	
Aroclor-1221	mg/kg	< 0.1			0.1	Pass	
Aroclor-1232	mg/kg	< 0.5			0.5	Pass	
Aroclor-1242	mg/kg	< 0.5			0.5	Pass	
Aroclor-1248	mg/kg	< 0.5			0.5	Pass	
Aroclor-1254	mg/kg	< 0.5			0.5	Pass	
Aroclor-1260	mg/kg	< 0.5			0.5	Pass	
Total PCB*	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Phenols (Halogenated)							
2-Chlorophenol	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2.4-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4.5-Trichlorophenol	mg/kg	< 1			1	Pass	
2.4.6-Trichlorophenol	mg/kg	< 1			1	Pass	
2.6-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
4-Chloro-3-methylphenol	mg/kg	< 1			1	Pass	
Pentachlorophenol	mg/kg	< 1			1	Pass	
Tetrachlorophenols - Total	mg/kg	< 10			10	Pass	
Method Blank							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	mg/kg	< 20			20	Pass	
2-Methyl-4.6-dinitrophenol	mg/kg	< 5			5	Pass	
2-Methylphenol (o-Cresol)	mg/kg	< 0.2			0.2	Pass	
2-Nitrophenol	mg/kg	< 1			1	Pass	
2.4-Dimethylphenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dinitrophenol	mg/kg	< 5			5	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/kg	< 0.4			0.4	Pass	
4-Nitrophenol	mg/kg	< 5			5	Pass	
Dinoseb	mg/kg	< 20			20	Pass	
Phenol	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Nickel	mg/kg	< 5			5	Pass	
Zinc	mg/kg	< 5			5	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	%	95			70-130	Pass	
TRH C10-C14	%	81			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	105			70-130	Pass	
Toluene	%	108			70-130	Pass	
Ethylbenzene	%	100			70-130	Pass	
m&p-Xylenes	%	100			70-130	Pass	
o-Xylene	%	99			70-130	Pass	
Xylenes - Total*	%	100			70-130	Pass	
LCS - % Recovery							
Volatile Organics							
1.1-Dichloroethene	%	108			70-130	Pass	
1.1.1-Trichloroethane	%	101			70-130	Pass	
1.2-Dichlorobenzene	%	94			70-130	Pass	
1.2-Dichloroethane	%	108			70-130	Pass	
Trichloroethene	%	99			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	91			70-130	Pass	
TRH C6-C10	%	93			70-130	Pass	
TRH >C10-C16	%	78			70-130	Pass	
LCS - % Recovery							

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	122			70-130	Pass	
Acenaphthylene	%	129			70-130	Pass	
Anthracene	%	122			70-130	Pass	
Benz(a)anthracene	%	117			70-130	Pass	
Benzo(a)pyrene	%	126			70-130	Pass	
Benzo(b&j)fluoranthene	%	111			70-130	Pass	
Benzo(g.h.i)perylene	%	130			70-130	Pass	
Benzo(k)fluoranthene	%	128			70-130	Pass	
Chrysene	%	123			70-130	Pass	
Dibenz(a.h)anthracene	%	112			70-130	Pass	
Fluoranthene	%	126			70-130	Pass	
Fluorene	%	129			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	115			70-130	Pass	
Naphthalene	%	120			70-130	Pass	
Phenanthrene	%	128			70-130	Pass	
Pyrene	%	125			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	99			70-130	Pass	
4.4'-DDD	%	104			70-130	Pass	
4.4'-DDE	%	107			70-130	Pass	
4.4'-DDT	%	109			70-130	Pass	
a-BHC	%	107			70-130	Pass	
Aldrin	%	107			70-130	Pass	
b-BHC	%	102			70-130	Pass	
d-BHC	%	130			70-130	Pass	
Dieldrin	%	107			70-130	Pass	
Endosulfan I	%	104			70-130	Pass	
Endosulfan II	%	105			70-130	Pass	
Endosulfan sulphate	%	108			70-130	Pass	
Endrin	%	111			70-130	Pass	
Endrin aldehyde	%	86			70-130	Pass	
Endrin ketone	%	107			70-130	Pass	
g-BHC (Lindane)	%	106			70-130	Pass	
Heptachlor	%	110			70-130	Pass	
Heptachlor epoxide	%	107			70-130	Pass	
Hexachlorobenzene	%	104			70-130	Pass	
Methoxychlor	%	108			70-130	Pass	
LCS - % Recovery							
Organophosphorus Pesticides							
Diazinon	%	122			70-130	Pass	
Dimethoate	%	108			70-130	Pass	
Ethion	%	109			70-130	Pass	
Fenitrothion	%	116			70-130	Pass	
Methyl parathion	%	125			70-130	Pass	
Mevinphos	%	124			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls							
Aroclor-1016	%	95			70-130	Pass	
Aroclor-1260	%	98			70-130	Pass	
LCS - % Recovery							
Phenols (Halogenated)							
2-Chlorophenol	%	119			30-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2.4-Dichlorophenol	%	123			30-130	Pass	
2.4.5-Trichlorophenol	%	128			30-130	Pass	
2.4.6-Trichlorophenol	%	124			30-130	Pass	
2.6-Dichlorophenol	%	130			30-130	Pass	
4-Chloro-3-methylphenol	%	124			30-130	Pass	
Pentachlorophenol	%	100			30-130	Pass	
Tetrachlorophenols - Total	%	115			30-130	Pass	
LCS - % Recovery							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	%	94			30-130	Pass	
2-Methyl-4.6-dinitrophenol	%	85			30-130	Pass	
2-Methylphenol (o-Cresol)	%	91			30-130	Pass	
2-Nitrophenol	%	123			30-130	Pass	
2.4-Dimethylphenol	%	117			30-130	Pass	
2.4-Dinitrophenol	%	95			30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	%	119			30-130	Pass	
4-Nitrophenol	%	117			30-130	Pass	
Dinoseb	%	113			30-130	Pass	
Phenol	%	114			30-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	92			70-130	Pass	
Cadmium	%	92			70-130	Pass	
Chromium	%	91			70-130	Pass	
Copper	%	90			70-130	Pass	
Lead	%	96			70-130	Pass	
Mercury	%	99			70-130	Pass	
Nickel	%	93			70-130	Pass	
Zinc	%	87			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C10-C14	S20-Jn42403	NCP	%	1.0			70-130	Fail	Q08
Spike - % Recovery									
BTEX				Result 1					
Benzene	S20-Jl01196	NCP	%	79			70-130	Pass	
Toluene	S20-Jl01196	NCP	%	78			70-130	Pass	
Ethylbenzene	S20-Jl01196	NCP	%	76			70-130	Pass	
m&p-Xylenes	S20-Jl01196	NCP	%	77			70-130	Pass	
o-Xylene	S20-Jl01196	NCP	%	78			70-130	Pass	
Xylenes - Total*	S20-Jl01196	NCP	%	78			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	S20-Jn51230	NCP	%	92			70-130	Pass	
Acenaphthylene	S20-Jn51230	NCP	%	89			70-130	Pass	
Anthracene	S20-Jn51230	NCP	%	81			70-130	Pass	
Benz(a)anthracene	S20-Jn51230	NCP	%	80			70-130	Pass	
Benzo(a)pyrene	S20-Jn51230	NCP	%	83			70-130	Pass	
Benzo(b&j)fluoranthene	S20-Jn51230	NCP	%	78			70-130	Pass	
Benzo(g.h.i)perylene	S20-Jn51230	NCP	%	72			70-130	Pass	
Benzo(k)fluoranthene	S20-Jn51230	NCP	%	86			70-130	Pass	
Chrysene	S20-Jn51230	NCP	%	87			70-130	Pass	
Dibenz(a.h)anthracene	S20-Jn43051	NCP	%	94			70-130	Pass	
Fluoranthene	S20-Jn51230	NCP	%	81			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Fluorene	S20-Jn51230	NCP	%	89			70-130	Pass	
Indeno(1.2.3-cd)pyrene	S20-Jn43051	NCP	%	93			70-130	Pass	
Naphthalene	S20-Jn51230	NCP	%	87			70-130	Pass	
Phenanthrene	S20-Jn51230	NCP	%	85			70-130	Pass	
Pyrene	S20-Jn51230	NCP	%	79			70-130	Pass	
Spike - % Recovery									
Organophosphorus Pesticides				Result 1					
Diazinon	S20-Jn51230	NCP	%	87			70-130	Pass	
Ethion	S20-Jn51230	NCP	%	71			70-130	Pass	
Fenitrothion	S20-Jn51230	NCP	%	75			70-130	Pass	
Methyl parathion	S20-Jn51230	NCP	%	74			70-130	Pass	
Mevinphos	S20-Jn51230	NCP	%	80			70-130	Pass	
Spike - % Recovery									
Polychlorinated Biphenyls				Result 1					
Total PCB*	S20-Jn51230	NCP	%	91			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	S20-Jn42796	CP	%	104			70-130	Pass	
Cadmium	S20-Jn42796	CP	%	103			70-130	Pass	
Chromium	S20-Jn42796	CP	%	112			70-130	Pass	
Copper	S20-Jn42796	CP	%	116			70-130	Pass	
Lead	S20-Jn42796	CP	%	111			70-130	Pass	
Mercury	S20-Jn42796	CP	%	119			70-130	Pass	
Nickel	S20-Jn42796	CP	%	115			70-130	Pass	
Zinc	S20-Jn42796	CP	%	102			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
Chlordanes - Total	S20-Jn42798	CP	%	101			70-130	Pass	
4.4'-DDD	S20-Jn42798	CP	%	112			70-130	Pass	
4.4'-DDE	S20-Jn42798	CP	%	94			70-130	Pass	
4.4'-DDT	S20-Jn42798	CP	%	96			70-130	Pass	
a-BHC	S20-Jn42798	CP	%	107			70-130	Pass	
Aldrin	S20-Jn42798	CP	%	108			70-130	Pass	
b-BHC	S20-Jn42798	CP	%	102			70-130	Pass	
d-BHC	S20-Jn42798	CP	%	130			70-130	Pass	
Dieldrin	S20-Jn42798	CP	%	110			70-130	Pass	
Endosulfan I	S20-Jn42798	CP	%	106			70-130	Pass	
Endosulfan II	S20-Jn42798	CP	%	110			70-130	Pass	
Endosulfan sulphate	S20-Jn42798	CP	%	117			70-130	Pass	
Endrin	S20-Jn42798	CP	%	105			70-130	Pass	
Endrin aldehyde	S20-Jn42798	CP	%	103			70-130	Pass	
Endrin ketone	S20-Jn42798	CP	%	120			70-130	Pass	
g-BHC (Lindane)	S20-Jn42798	CP	%	106			70-130	Pass	
Heptachlor	S20-Jn42798	CP	%	103			70-130	Pass	
Heptachlor epoxide	S20-Jn42798	CP	%	109			70-130	Pass	
Hexachlorobenzene	S20-Jn42798	CP	%	101			70-130	Pass	
Methoxychlor	S20-Jn42798	CP	%	111			70-130	Pass	
Spike - % Recovery									
Polychlorinated Biphenyls				Result 1					
Aroclor-1260	S20-Jn42798	CP	%	85			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C6-C9	S20-Jl01195	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	S20-Jn42852	NCP	mg/kg	< 20	73	140	30%	Fail	Q15
TRH C15-C28	S20-Jn42852	NCP	mg/kg	< 50	120	120	30%	Fail	Q15
TRH C29-C36	S20-Jn42852	NCP	mg/kg	< 50	73	93	30%	Fail	Q15
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S20-Jl01195	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Toluene	S20-Jl01195	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Ethylbenzene	S20-Jl01195	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
m&p-Xylenes	S20-Jl01195	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
o-Xylene	S20-Jl01195	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes - Total*	S20-Jl01195	NCP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
1.1-Dichloroethane	S20-Jl01195	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1-Dichloroethene	S20-Jl01195	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1-Trichloroethane	S20-Jl01195	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	S20-Jl01195	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2-Trichloroethane	S20-Jl01195	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	S20-Jl01195	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dibromoethane	S20-Jl01195	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichlorobenzene	S20-Jl01195	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloroethane	S20-Jl01195	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloropropane	S20-Jl01195	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.3-Trichloropropane	S20-Jl01195	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trimethylbenzene	S20-Jl01195	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichlorobenzene	S20-Jl01195	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichloropropane	S20-Jl01195	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3.5-Trimethylbenzene	S20-Jl01195	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.4-Dichlorobenzene	S20-Jl01195	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Butanone (MEK)	S20-Jl01195	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Propanone (Acetone)	S20-Jl01195	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chlorotoluene	S20-Jl01195	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Methyl-2-pentanone (MIBK)	S20-Jl01195	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Allyl chloride	S20-Jl01195	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromobenzene	S20-Jl01195	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromochloromethane	S20-Jl01195	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromodichloromethane	S20-Jl01195	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromoform	S20-Jl01195	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromomethane	S20-Jl01195	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon disulfide	S20-Jl01195	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon Tetrachloride	S20-Jl01195	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chlorobenzene	S20-Jl01195	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroethane	S20-Jl01195	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroform	S20-Jl01195	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloromethane	S20-Jl01195	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.2-Dichloroethene	S20-Jl01195	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.3-Dichloropropene	S20-Jl01195	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromochloromethane	S20-Jl01195	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromomethane	S20-Jl01195	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dichlorodifluoromethane	S20-Jl01195	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Iodomethane	S20-Jl01195	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
Isopropyl benzene (Cumene)	S20-Jl01195	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Methylene Chloride	S20-Jl01195	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Styrene	S20-Jl01195	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Tetrachloroethene	S20-Jl01195	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.2-Dichloroethene	S20-Jl01195	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.3-Dichloropropene	S20-Jl01195	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichloroethene	S20-Jl01195	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichlorofluoromethane	S20-Jl01195	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Vinyl chloride	S20-Jl01195	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	S20-Jl01195	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	S20-Jl01195	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH >C10-C16	S20-Jn42852	NCP	mg/kg	< 50	71	140	30%	Fail	Q15
TRH >C16-C34	S20-Jn42852	NCP	mg/kg	< 100	150	110	30%	Fail	Q15
TRH >C34-C40	S20-Jn42852	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	S20-Jn43052	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	S20-Jn43052	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	S20-Jn43052	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	S20-Jn43052	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	S20-Jn43052	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	S20-Jn43052	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	S20-Jn43052	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	S20-Jn43052	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	S20-Jn43052	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	S20-Jn43052	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	S20-Jn43052	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	S20-Jn43052	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	S20-Jn43052	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	S20-Jn43052	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	S20-Jn43052	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	S20-Jn43052	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Azinphos-methyl	S20-Jn43052	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Bolstar	S20-Jn43052	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorfenvinphos	S20-Jn43052	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos	S20-Jn43052	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos-methyl	S20-Jn43052	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Coumaphos	S20-Jn43052	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Demeton-S	S20-Jn43052	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Demeton-O	S20-Jn43052	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Diazinon	S20-Jn43052	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dichlorvos	S20-Jn43052	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dimethoate	S20-Jn43052	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Disulfoton	S20-Jn43052	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
EPN	S20-Jn43052	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethion	S20-Jn43052	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethoprop	S20-Jn43052	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethyl parathion	S20-Jn43052	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenitrothion	S20-Jn43052	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fensulfothion	S20-Jn43052	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	

Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Fenthion	S20-Jn43052	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Malathion	S20-Jn43052	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Merphos	S20-Jn43052	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Methyl parathion	S20-Jn43052	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Mevinphos	S20-Jn43052	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Monocrotophos	S20-Jn43052	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Naled	S20-Jn43052	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Omethoate	S20-Jn43052	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Phorate	S20-Jn43052	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pirimiphos-methyl	S20-Jn43052	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pyrazophos	S20-Jn43052	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ronnel	S20-Jn43052	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Terbufos	S20-Jn43052	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tetrachlorvinphos	S20-Jn43052	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tokuthion	S20-Jn43052	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Trichloronate	S20-Jn43052	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Total PCB*	S20-Jn51229	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	S20-Jn42763	NCP	mg/kg	< 2	2.2	71	30%	Fail	Q15
Cadmium	S20-Jn42763	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	S20-Jn42763	NCP	mg/kg	13	15	14	30%	Pass	
Copper	S20-Jn42763	NCP	mg/kg	16	46	97	30%	Fail	Q15
Lead	S20-Jn42763	NCP	mg/kg	8.5	18	73	30%	Fail	Q15
Mercury	S20-Jn42763	NCP	mg/kg	< 0.1	0.1	49	30%	Fail	Q15
Nickel	S20-Jn42763	NCP	mg/kg	19	37	66	30%	Fail	Q15
Zinc	S20-Jn42763	NCP	mg/kg	59	110	57	30%	Fail	Q02
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	S20-Jn42796	CP	%	17	17	5.0	30%	Pass	

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
Q02	The duplicate %RPD is outside the recommended acceptance criteria. Further analysis indicates sample heterogeneity as the cause
Q08	The matrix spike recovery is outside of the recommended acceptance criteria. An acceptable recovery was obtained for the laboratory control sample indicating a sample matrix interference.
Q15	The RPD reported passes Eurofins Environment Testing's QC - Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report.

Authorised By

[redacted]

Analytical Services Manager
Senior Analyst-Organic (NSW)
Senior Analyst-Metal (NSW)
Senior Analyst-Asbestos (NSW)

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

Eurofins shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Dawin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☒ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Stuart Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7010 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐

SLR

CLIENT: Defence Housing Australia

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGER: [redacted]

PM CONTACT N [redacted]

LABORATORY: SGS Australia

LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015

SAMPLE [redacted]

SAMPLER CONTACT N [redacted]

Email Reports and invoices to: LQRSYD@slrconsulting.com [redacted]

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number of

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only	HOLD				Additional Information (Comment on any gross contamination or specific requirements)
	0407_TP116_0.1-0.2_200619	19-06-2020	Soil					x					Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
	0407_TP116_0.6_200619	19-06-2020	Soil					x					
	0407_QC123_200619	19-06-2020	Soil		x								
	0407_QC223_200619	19-06-2020	Soil										Please send to Eurofins
	0407_TP124_0.1_200619	19-06-2020	Soil		x								
	0407_TP124_0.5_200619	19-06-2020	Soil		x								
	0407_TP124_1.0_200619	19-06-2020	Soil						x				
	0407_TP124_0.1-0.2_200619	19-06-2020	Soil					x					
	0407_TP125_0.1_200619	19-06-2020	Soil		x								
	0407_TP125_0.5_200619	19-06-2020	Soil						x				
	0407_TP125_1.0_200619	19-06-2020	Soil		x								
	0407_TP125_0.1-0.2_200619	19-06-2020	Soil					x					

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 19-06-2020	**Received by**	Sign [redacted]	Date / Time 24/6	**Temperature Received:**	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	12.20 °C	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time		

+ 727698

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

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- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐

SLR

CLIENT: Defence Housing Australia	LABORATORY: SGS Australia
PROJECT: Randwick Barracks	LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015
PROJECT NUMBER: 610.30041	SAMPLER [redacted]
PROJECT MANAGER [redacted]	SAMPLER CONTACT No: [redacted]
PM CONTACT No [redacted]	Email Reports and Invoices to: LQRSYD@slrconsulting.com [redacted]

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number

of

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only	HOLD				Additional Information (Comment on any gross contamination or specific requirements)
	0407_TP126_0.1_200619	19-06-2020	Soil		x								Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
	0407_TP126_0.5_200619	19-06-2020	Soil		x								
	0407_TP126_1.0_200619	19-06-2020	Soil						x				
	0407_TP126_0.1-0.2_200619	19-06-2020	Soil					x					
	0407_QC124_200619	19-06-2020	Soil		x								
	0407_QC224_200619	19-06-2020	Soil										Please send to Eurofins
	0407_TP136_0.1_200619	19-06-2020	Soil		x								
	0407_TP136_0.5_200619	19-06-2020	Soil						x				
	0407_TP136_1.0_200619	19-06-2020	Soil		x								
	0407_TP136_0.1-0.2_200619	19-06-2020	Soil					x					
		19-06-2020	Soil										
		19-06-2020	Soil										

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time	19-06-2020	Received by	Sign [redacted]	Date / Time	24/6
Relinquished By	Sign	Date / Time		Received by	Sign	Date / Time	
Relinquished By	Sign	Date / Time		Received by	Sign	Date / Time	

Temperature Received:

727698

eurofins | Environment Testing

Melbourne
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Brisbane
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Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

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Phone : +61 8 9251 9600
NATA # 1261 Site # 23736

ABN – 50 005 085 521 e.mail : EnviroSales@eurofins.com web : www.eurofins.com.au

Sample Receipt Advice

Company name:	**SLR Consulting (Sydney)**
Contact name:	[redacted]
Project name:	RANDWICK BARRACKS
Project ID:	610.30041
COC number:	Not provided
Turn around time:	5 Day
Date/Time received:	Jun 24, 2020 3:24 PM
Eurofins reference:	**727698**

Sample information

☑ A detailed list of analytes logged into our LIMS, is included in the attached summary table.

☑ All samples have been received as described on the above COC.

☑ COC has been completed correctly.

☑ Attempt to chill was evident.

☑ Appropriately preserved sample containers have been used.

☑ All samples were received in good condition.

☑ Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.

☑ Appropriate sample containers have been used.

☒ Split sample sent to requested external lab.

☒ Some samples have been subcontracted.

N/A Custody Seals intact (if used).

Contact notes

If you have any questions with respect to these samples please contact:

[redacted] on Phone : [redacted] or by e.mail: [redacted]@eurofins.com

Results will be delivered electronically via e.mail to [redacted]@slrconsulting.com.

Note: A copy of these results will also be delivered to the general SLR Consulting (Sydney) email address.

eurofins | Environment Testing

ABN – 50 005 085 521 web : www.eurofins.com.au e.mail : EnviroSales@eurofins.com

Australia

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NATA # 1261 Site # 18217

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1/21 Smallwood Place
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NATA # 1261 Site # 20794

Perth
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Phone : +61 8 9251 9600
NATA # 1261
Site # 23736

New Zealand

Auckland
35 O'Rorke Road
Penrose, Auckland 1061
Phone : +64 9 526 45 51
IANZ # 1327

Christchurch
43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 727698
Phone: 02 9428 8100
Fax:

Received: Jun 24, 2020 3:24 PM
Due: Jul 1, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	HOLD	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271											
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794											
Perth Laboratory - NATA Site # 23736											
External Laboratory											
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**						
1	0407_QC223_200619	Jun 19, 2020		Soil	S20-Jn42808	X		X	X	X	X
2	0407_QC224_200619	Jun 19, 2020		Soil	S20-Jn42809		X				
Test Counts						1	1	1	1	1	1

Certificate of Analysis

eurofins | Environment Testing

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025–Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus
North Sydney
NSW 2060

Attention:	[redacted]
Report	727698-AID
Project Name	RANDWICK BARRACKS
Project ID	610.30041
Received Date	Jun 24, 2020
Date Reported	Jul 01, 2020

Methodology:

Asbestos Fibre Identification	Conducted in accordance with the Australian Standard AS 4964 – 2004: Method for the Qualitative Identification of Asbestos in Bulk Samples and in-house Method LTM-ASB-8020 by polarised light microscopy (PLM) and dispersion staining (DS) techniques. *NOTE: Positive Trace Analysis results indicate the sample contains detectable respirable fibres.*
Unknown Mineral Fibres	Mineral fibres of unknown type, as determined by PLM with DS, may require another analytical technique, such as Electron Microscopy, to confirm unequivocal identity. *NOTE: While Actinolite, Anthophyllite and Tremolite asbestos may be detected by PLM with DS, due to variability in the optical properties of these materials, AS4964 requires that these are reported as UMF unless confirmed by an independent technique.*
Subsampling Soil Samples	The whole sample submitted is first dried and then passed through a 10mm sieve followed by a 2mm sieve. All fibrous matter greater than 10mm, greater than 2mm as well as the material passing through the 2mm sieve are retained and analysed for the presence of asbestos. If the sub 2mm fraction is greater than approximately 30 to 60g then a sub-sampling routine based on ISO 3082:2009(E) is employed. *NOTE: Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be sub-sampled for trace analysis, in accordance with AS 4964-2004.*
Bonded asbestos-containing material (ACM)	The material is first examined and any fibres isolated for identification by PLM and DS. Where required, interfering matrices may be removed by disintegration using a range of heat, chemical or physical treatments, possibly in combination.The resultant material is then further examined in accordance with AS 4964 - 2004. *NOTE: Even after disintegration it may be difficult to detect the presence of asbestos in some asbestos-containing bulk materials using PLM and DS. This is due to the low grade or small length or diameter of the asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos-containing sealants and mastics, asbestos-containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.*
Limit of Reporting	The performance limitation of the AS 4964 (2004) method for non-homogeneous samples is around 0.1 g/kg (equivalent to 0.01% (w/w)). Where no asbestos is found by PLM and DS, including Trace Analysis, this is considered to be at the nominal reporting limit of 0.01% (w/w). The NEPM screening level of 0.001% (w/w) is intended as an on-site determination, not a laboratory Limit of Reporting (LOR), per se. Examination of a large sample size (e.g. 500 mL) may improve the likelihood of detecting asbestos, particularly AF, to aid assessment against the NEPM criteria. Gravimetric determinations to this level of accuracy are outside of AS 4964 and hence NATA Accreditation does not cover the performance of this service (non-NATA results shown with an asterisk). *NOTE: NATA News March 2014, p.7, states in relation to AS 4964: "This is a qualitative method with a nominal reporting limit of 0.01 % " and that currently in Australia "there is no validated method available for the quantification of asbestos".This report is consistent with the analytical procedures and reporting recommendations in the NEPM and the WA DoH.*

Accredited for compliance with ISO/IEC 17025–Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Project Name RANDWICK BARRACKS
Project ID 610.30041
Date Sampled Jun 19, 2020
Report 727698-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
0407_QC223_200619	20-Jn42808	Jun 19, 2020	Approximate Sample 59g Sample consisted of: Brown fine-grained sandy soil	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Asbestos - LTM-ASB-8020	Sydney	Jun 25, 2020	Indefinite

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ABN – 50 005 085 521 web : www.eurofins.com.au e.mail : EnviroSales@eurofins.com

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Phone : 0800 856 450
IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 727698
Phone: 02 9428 8100
Fax:

Received: Jun 24, 2020 3:24 PM
Due: Jul 1, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	HOLD	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271											
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794											
Perth Laboratory - NATA Site # 23736											
External Laboratory											
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**						
1	0407_QC223_200619	Jun 19, 2020		Soil	S20-Jn42808	X		X	X	X	X
2	0407_QC224_200619	Jun 19, 2020		Soil	S20-Jn42809		X				
Test Counts						1	1	1	1	1	1

Internal Quality Control Review and Glossary

General

1. QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Samples were analysed on an 'as received' basis.
4. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
5. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the Sample Receipt Advice.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

Units

% w/w: weight for weight basis	grams per kilogram
Filter loading:	fibres/100 graticule areas
Reported Concentration:	fibres/mL
Flowrate:	L/min

Terms

Dry	Sample is dried by heating prior to analysis
LOR	Limit of Reporting
COC	Chain of Custody
SRA	Sample Receipt Advice
ISO	International Standards Organisation
AS	Australian Standards
WA DOH	Reference document for the NEPM. Government of Western Australia, Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia (2009), including supporting document Recommended Procedures for Laboratory Analysis of Asbestos in Soil (2011)
NEPM	National Environment Protection (Assessment of Site Contamination) Measure, 2013 (as amended)
ACM	Asbestos Containing Materials. Asbestos contained within a non-asbestos matrix, typically presented in bonded and/or sound condition. For the purposes of the NEPM, ACM is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
AF	Asbestos Fines. Asbestos containing materials, including friable, weathered and bonded materials, able to pass a 7mm x 7mm sieve. Considered under the NEPM as equivalent to “non-bonded / friable”.
FA	Fibrous Asbestos. Asbestos containing materials in a friable and/or severely weathered condition. For the purposes of the NEPM, FA is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
Friable	Asbestos-containing materials of any size that may be broken or crumbled by hand pressure. For the purposes of the NEPM, this includes both AF and FA. It is outside of the laboratory’s remit to assess degree of friability.
Trace Analysis	Analytical procedure used to detect the presence of respirable fibres in the matrix.

Comments

The sample received was not collected in an approved asbestos bag and was therefore sub-sampled from the 250mL glass jar. Valid sub-sampling procedures were applied so as to ensure that the sub-sample to be analysed accurately represented the sample received.

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N/A	Not applicable

Asbestos Counter/Identifier:

[redacted] Senior Analyst-Asbestos (NSW)

Authorised by:

[redacted] Senior Analyst-Asbestos (NSW)

General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

Eurofins shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.

SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus,
North Sydney
NSW 2060

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: [redacted]

Report **727698-S**
Project name RANDWICK BARRACKS
Project ID 610.30041
Received Date Jun 24, 2020

Client Sample ID			**0407_QC223_200619**
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-Jn42808**
Date Sampled			**Jun 19, 2020**
Test/Reference	LOR	Unit	
Total Recoverable Hydrocarbons - 1999 NEPM Fractions			
TRH C6-C9	20	mg/kg	< 20
TRH C10-C14	20	mg/kg	< 20
TRH C15-C28	50	mg/kg	< 50
TRH C29-C36	50	mg/kg	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50
BTEX			
Benzene	0.1	mg/kg	< 0.1
Toluene	0.1	mg/kg	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2
o-Xylene	0.1	mg/kg	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3
4-Bromofluorobenzene (surr.)	1	%	79
Volatile Organics			
1.1-Dichloroethane	0.5	mg/kg	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5

Client Sample ID			0407_QC223_200619
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-Jn42808**
Date Sampled			**Jun 19, 2020**
Test/Reference	LOR	Unit	
Volatile Organics			
Benzene	0.1	mg/kg	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5
Bromoform	0.5	mg/kg	< 0.5
Bromomethane	0.5	mg/kg	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5
Chloroethane	0.5	mg/kg	< 0.5
Chloroform	0.5	mg/kg	< 0.5
Chloromethane	0.5	mg/kg	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1
Iodomethane	0.5	mg/kg	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5
o-Xylene	0.1	mg/kg	< 0.1
Styrene	0.5	mg/kg	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5
Toluene	0.1	mg/kg	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3
Total MAH*	0.5	mg/kg	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5
4-Bromofluorobenzene (surr.)	1	%	79
Toluene-d8 (surr.)	1	%	81
Total Recoverable Hydrocarbons - 2013 NEPM Fractions			
Naphthalene[N02]	0.5	mg/kg	< 0.5
TRH C6-C10	20	mg/kg	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20
TRH >C10-C16	50	mg/kg	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50
TRH >C16-C34	100	mg/kg	< 100
TRH >C34-C40	100	mg/kg	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100

Client Sample ID			0407_QC223_200619
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-Jn42808**
Date Sampled			**Jun 19, 2020**
Test/Reference	LOR	Unit	
Polycyclic Aromatic Hydrocarbons			
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2
Acenaphthene	0.5	mg/kg	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5
Anthracene	0.5	mg/kg	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5
Chrysene	0.5	mg/kg	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5
Fluorene	0.5	mg/kg	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5
Naphthalene	0.5	mg/kg	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5
Pyrene	0.5	mg/kg	< 0.5
Total PAH*	0.5	mg/kg	< 0.5
2-Fluorobiphenyl (surr.)	1	%	52
p-Terphenyl-d14 (surr.)	1	%	85
Organochlorine Pesticides			
Chlordanes - Total	0.1	mg/kg	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05
a-BHC	0.05	mg/kg	< 0.05
Aldrin	0.05	mg/kg	< 0.05
b-BHC	0.05	mg/kg	< 0.05
d-BHC	0.05	mg/kg	< 0.05
Dieldrin	0.05	mg/kg	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05
Endrin	0.05	mg/kg	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05
Heptachlor	0.05	mg/kg	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05
Methoxychlor	0.2	mg/kg	< 0.2
Toxaphene	1	mg/kg	< 1
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.2
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.2
Dibutylchlorendate (surr.)	1	%	75
Tetrachloro-m-xylene (surr.)	1	%	85

Client Sample ID			0407_QC223_200619
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-Jn42808**
Date Sampled			**Jun 19, 2020**
Test/Reference	LOR	Unit	
Organophosphorus Pesticides			
Azinphos-methyl	0.2	mg/kg	< 0.2
Bolstar	0.2	mg/kg	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2
Coumaphos	2	mg/kg	< 2
Demeton-S	0.2	mg/kg	< 0.2
Demeton-O	0.2	mg/kg	< 0.2
Diazinon	0.2	mg/kg	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2
Dimethoate	0.2	mg/kg	< 0.2
Disulfoton	0.2	mg/kg	< 0.2
EPN	0.2	mg/kg	< 0.2
Ethion	0.2	mg/kg	< 0.2
Ethoprop	0.2	mg/kg	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2
Fenthion	0.2	mg/kg	< 0.2
Malathion	0.2	mg/kg	< 0.2
Merphos	0.2	mg/kg	< 0.2
Methyl parathion	0.2	mg/kg	< 0.2
Mevinphos	0.2	mg/kg	< 0.2
Monocrotophos	2	mg/kg	< 2
Naled	0.2	mg/kg	< 0.2
Omethoate	2	mg/kg	< 2
Phorate	0.2	mg/kg	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2
Ronnel	0.2	mg/kg	< 0.2
Terbufos	0.2	mg/kg	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2
Tokuthion	0.2	mg/kg	< 0.2
Trichloronate	0.2	mg/kg	< 0.2
Triphenylphosphate (surr.)	1	%	85
Polychlorinated Biphenyls			
Aroclor-1016	0.5	mg/kg	< 0.5
Aroclor-1221	0.1	mg/kg	< 0.1
Aroclor-1232	0.5	mg/kg	< 0.5
Aroclor-1242	0.5	mg/kg	< 0.5
Aroclor-1248	0.5	mg/kg	< 0.5
Aroclor-1254	0.5	mg/kg	< 0.5
Aroclor-1260	0.5	mg/kg	< 0.5
Total PCB*	0.5	mg/kg	< 0.5
Dibutylchlorendate (surr.)	1	%	75
Tetrachloro-m-xylene (surr.)	1	%	85

Client Sample ID			0407_QC223_200619
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-Jn42808**
Date Sampled			**Jun 19, 2020**
Test/Reference	LOR	Unit	
Phenols (Halogenated)			
2-Chlorophenol	0.5	mg/kg	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1
Pentachlorophenol	1	mg/kg	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10
Total Halogenated Phenol*	1	mg/kg	< 1
Phenols (non-Halogenated)			
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2
2-Nitrophenol	1	mg/kg	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4
4-Nitrophenol	5	mg/kg	< 5
Dinoseb	20	mg/kg	< 20
Phenol	0.5	mg/kg	< 0.5
Total Non-Halogenated Phenol*	20	mg/kg	< 20
Phenol-d6 (surr.)	1	%	59
Heavy Metals			
Arsenic	2	mg/kg	< 2
Cadmium	0.4	mg/kg	< 0.4
Chromium	5	mg/kg	< 5
Copper	5	mg/kg	< 5
Lead	5	mg/kg	< 5
Mercury	0.1	mg/kg	< 0.1
Nickel	5	mg/kg	< 5
Zinc	5	mg/kg	< 5
% Moisture	1	%	7.7

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Sydney	Jun 30, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Sydney	Jun 30, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jun 30, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jun 30, 2020	
- Method: LTM-ORG-2010 TRH C6-C40			
Polycyclic Aromatic Hydrocarbons	Sydney	Jun 30, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (Halogenated)	Sydney	Jun 30, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (non-Halogenated)	Sydney	Jun 30, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Metals M8	Sydney	Jun 30, 2020	180 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Volatile Organics	Sydney	Jun 30, 2020	7 Days
- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices			
Eurofins | mgt Suite B15			
Organochlorine Pesticides	Sydney	Jun 30, 2020	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Organophosphorus Pesticides	Sydney	Jun 30, 2020	14 Days
- Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS			
Polychlorinated Biphenyls	Sydney	Jun 30, 2020	28 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
% Moisture	Sydney	Jun 25, 2020	14 Days
- Method: LTM-GEN-7080 Moisture			

eurofins | Environment Testing

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Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 727698
Phone: 02 9428 8100
Fax:

Received: Jun 24, 2020 3:24 PM
Due: Jul 1, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	HOLD	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271											
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794											
Perth Laboratory - NATA Site # 23736											
External Laboratory											
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**						
1	0407_QC223_200619	Jun 19, 2020		Soil	S20-Jn42808	X		X	X	X	X
2	0407_QC224_200619	Jun 19, 2020		Soil	S20-Jn42809		X				
Test Counts						1	1	1	1	1	1

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

****NOTE:** pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram

mg/L: milligrams per litre

ug/L: micrograms per litre

ppm: Parts per million

ppb: Parts per billion

%: Percentage

org/100mL: Organisms per 100 millilitres

NTU: Nephelometric Turbidity Units

MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version 5.3
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling.Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
Method Blank							
BTEX							
Benzene	mg/kg	< 0.1			0.1	Pass	
Toluene	mg/kg	< 0.1			0.1	Pass	
Ethylbenzene	mg/kg	< 0.1			0.1	Pass	
m&p-Xylenes	mg/kg	< 0.2			0.2	Pass	
o-Xylene	mg/kg	< 0.1			0.1	Pass	
Xylenes - Total*	mg/kg	< 0.3			0.3	Pass	
Method Blank							
Volatile Organics							
1.1-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
1.1.1-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.1.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dibromoethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.3-Trichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.4-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.3.5-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.4-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
2-Butanone (MEK)	mg/kg	< 0.5			0.5	Pass	
2-Propanone (Acetone)	mg/kg	< 0.5			0.5	Pass	
4-Chlorotoluene	mg/kg	< 0.5			0.5	Pass	
4-Methyl-2-pentanone (MIBK)	mg/kg	< 0.5			0.5	Pass	
Allyl chloride	mg/kg	< 0.5			0.5	Pass	
Bromobenzene	mg/kg	< 0.5			0.5	Pass	
Bromochloromethane	mg/kg	< 0.5			0.5	Pass	
Bromodichloromethane	mg/kg	< 0.5			0.5	Pass	
Bromoform	mg/kg	< 0.5			0.5	Pass	
Bromomethane	mg/kg	< 0.5			0.5	Pass	
Carbon disulfide	mg/kg	< 0.5			0.5	Pass	
Carbon Tetrachloride	mg/kg	< 0.5			0.5	Pass	
Chlorobenzene	mg/kg	< 0.5			0.5	Pass	
Chloroethane	mg/kg	< 0.5			0.5	Pass	
Chloroform	mg/kg	< 0.5			0.5	Pass	
Chloromethane	mg/kg	< 0.5			0.5	Pass	
cis-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
cis-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Dibromochloromethane	mg/kg	< 0.5			0.5	Pass	
Dibromomethane	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Dichlorodifluoromethane	mg/kg	< 0.5			0.5	Pass	
Iodomethane	mg/kg	< 0.5			0.5	Pass	
Isopropyl benzene (Cumene)	mg/kg	< 0.5			0.5	Pass	
Methylene Chloride	mg/kg	< 0.5			0.5	Pass	
Styrene	mg/kg	< 0.5			0.5	Pass	
Tetrachloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Trichloroethene	mg/kg	< 0.5			0.5	Pass	
Trichlorofluoromethane	mg/kg	< 0.5			0.5	Pass	
Vinyl chloride	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Organochlorine Pesticides							
Chlordanes - Total	mg/kg	< 0.1			0.1	Pass	
4.4'-DDD	mg/kg	< 0.05			0.05	Pass	
4.4'-DDE	mg/kg	< 0.05			0.05	Pass	
4.4'-DDT	mg/kg	< 0.05			0.05	Pass	
a-BHC	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-BHC	mg/kg	< 0.05			0.05	Pass	
d-BHC	mg/kg	< 0.05			0.05	Pass	
Dieldrin	mg/kg	< 0.05			0.05	Pass	
Endosulfan I	mg/kg	< 0.05			0.05	Pass	
Endosulfan II	mg/kg	< 0.05			0.05	Pass	
Endosulfan sulphate	mg/kg	< 0.05			0.05	Pass	
Endrin	mg/kg	< 0.05			0.05	Pass	
Endrin aldehyde	mg/kg	< 0.05			0.05	Pass	
Endrin ketone	mg/kg	< 0.05			0.05	Pass	
g-BHC (Lindane)	mg/kg	< 0.05			0.05	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Heptachlor	mg/kg	< 0.05			0.05	Pass	
Heptachlor epoxide	mg/kg	< 0.05			0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05			0.05	Pass	
Methoxychlor	mg/kg	< 0.2			0.2	Pass	
Toxaphene	mg/kg	< 1			1	Pass	
Method Blank							
Organophosphorus Pesticides							
Azinphos-methyl	mg/kg	< 0.2			0.2	Pass	
Bolstar	mg/kg	< 0.2			0.2	Pass	
Chlorfenvinphos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos-methyl	mg/kg	< 0.2			0.2	Pass	
Coumaphos	mg/kg	< 2			2	Pass	
Demeton-S	mg/kg	< 0.2			0.2	Pass	
Demeton-O	mg/kg	< 0.2			0.2	Pass	
Diazinon	mg/kg	< 0.2			0.2	Pass	
Dichlorvos	mg/kg	< 0.2			0.2	Pass	
Dimethoate	mg/kg	< 0.2			0.2	Pass	
Disulfoton	mg/kg	< 0.2			0.2	Pass	
EPN	mg/kg	< 0.2			0.2	Pass	
Ethion	mg/kg	< 0.2			0.2	Pass	
Ethoprop	mg/kg	< 0.2			0.2	Pass	
Ethyl parathion	mg/kg	< 0.2			0.2	Pass	
Fenitrothion	mg/kg	< 0.2			0.2	Pass	
Fensulfothion	mg/kg	< 0.2			0.2	Pass	
Fenthion	mg/kg	< 0.2			0.2	Pass	
Malathion	mg/kg	< 0.2			0.2	Pass	
Merphos	mg/kg	< 0.2			0.2	Pass	
Methyl parathion	mg/kg	< 0.2			0.2	Pass	
Mevinphos	mg/kg	< 0.2			0.2	Pass	
Monocrotophos	mg/kg	< 2			2	Pass	
Naled	mg/kg	< 0.2			0.2	Pass	
Omethoate	mg/kg	< 2			2	Pass	
Phorate	mg/kg	< 0.2			0.2	Pass	
Pirimiphos-methyl	mg/kg	< 0.2			0.2	Pass	
Pyrazophos	mg/kg	< 0.2			0.2	Pass	
Ronnel	mg/kg	< 0.2			0.2	Pass	
Terbufos	mg/kg	< 0.2			0.2	Pass	
Tetrachlorvinphos	mg/kg	< 0.2			0.2	Pass	
Tokuthion	mg/kg	< 0.2			0.2	Pass	
Trichloronate	mg/kg	< 0.2			0.2	Pass	
Method Blank							
Polychlorinated Biphenyls							
Aroclor-1016	mg/kg	< 0.5			0.5	Pass	
Aroclor-1221	mg/kg	< 0.1			0.1	Pass	
Aroclor-1232	mg/kg	< 0.5			0.5	Pass	
Aroclor-1242	mg/kg	< 0.5			0.5	Pass	
Aroclor-1248	mg/kg	< 0.5			0.5	Pass	
Aroclor-1254	mg/kg	< 0.5			0.5	Pass	
Aroclor-1260	mg/kg	< 0.5			0.5	Pass	
Total PCB*	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Phenols (Halogenated)							
2-Chlorophenol	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2.4-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4.5-Trichlorophenol	mg/kg	< 1			1	Pass	
2.4.6-Trichlorophenol	mg/kg	< 1			1	Pass	
2.6-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
4-Chloro-3-methylphenol	mg/kg	< 1			1	Pass	
Pentachlorophenol	mg/kg	< 1			1	Pass	
Tetrachlorophenols - Total	mg/kg	< 10			10	Pass	
Method Blank							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	mg/kg	< 20			20	Pass	
2-Methyl-4.6-dinitrophenol	mg/kg	< 5			5	Pass	
2-Methylphenol (o-Cresol)	mg/kg	< 0.2			0.2	Pass	
2-Nitrophenol	mg/kg	< 1			1	Pass	
2.4-Dimethylphenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dinitrophenol	mg/kg	< 5			5	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/kg	< 0.4			0.4	Pass	
4-Nitrophenol	mg/kg	< 5			5	Pass	
Dinoseb	mg/kg	< 20			20	Pass	
Phenol	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Nickel	mg/kg	< 5			5	Pass	
Zinc	mg/kg	< 5			5	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	%	95			70-130	Pass	
TRH C10-C14	%	89			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	105			70-130	Pass	
Toluene	%	108			70-130	Pass	
Ethylbenzene	%	100			70-130	Pass	
m&p-Xylenes	%	100			70-130	Pass	
o-Xylene	%	99			70-130	Pass	
Xylenes - Total*	%	100			70-130	Pass	
LCS - % Recovery							
Volatile Organics							
1.1-Dichloroethene	%	108			70-130	Pass	
1.1.1-Trichloroethane	%	101			70-130	Pass	
1.2-Dichlorobenzene	%	94			70-130	Pass	
1.2-Dichloroethane	%	108			70-130	Pass	
Trichloroethene	%	99			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	91			70-130	Pass	
TRH C6-C10	%	93			70-130	Pass	
TRH >C10-C16	%	78			70-130	Pass	
LCS - % Recovery							

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	109			70-130	Pass	
Acenaphthylene	%	111			70-130	Pass	
Anthracene	%	118			70-130	Pass	
Benz(a)anthracene	%	121			70-130	Pass	
Benzo(a)pyrene	%	114			70-130	Pass	
Benzo(b&j)fluoranthene	%	122			70-130	Pass	
Benzo(g.h.i)perylene	%	114			70-130	Pass	
Benzo(k)fluoranthene	%	125			70-130	Pass	
Chrysene	%	113			70-130	Pass	
Dibenz(a.h)anthracene	%	109			70-130	Pass	
Fluoranthene	%	112			70-130	Pass	
Fluorene	%	113			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	114			70-130	Pass	
Naphthalene	%	107			70-130	Pass	
Phenanthrene	%	117			70-130	Pass	
Pyrene	%	111			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	86			70-130	Pass	
4.4'-DDD	%	78			70-130	Pass	
4.4'-DDE	%	78			70-130	Pass	
4.4'-DDT	%	91			70-130	Pass	
a-BHC	%	79			70-130	Pass	
Aldrin	%	72			70-130	Pass	
b-BHC	%	81			70-130	Pass	
d-BHC	%	79			70-130	Pass	
Dieldrin	%	93			70-130	Pass	
Endosulfan I	%	94			70-130	Pass	
Endosulfan II	%	71			70-130	Pass	
Endosulfan sulphate	%	78			70-130	Pass	
Endrin	%	85			70-130	Pass	
Endrin aldehyde	%	87			70-130	Pass	
Endrin ketone	%	70			70-130	Pass	
g-BHC (Lindane)	%	81			70-130	Pass	
Heptachlor	%	73			70-130	Pass	
Heptachlor epoxide	%	77			70-130	Pass	
Hexachlorobenzene	%	81			70-130	Pass	
Methoxychlor	%	87			70-130	Pass	
LCS - % Recovery							
Organophosphorus Pesticides							
Diazinon	%	108			70-130	Pass	
Dimethoate	%	117			70-130	Pass	
Ethion	%	116			70-130	Pass	
Mevinphos	%	124			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls							
Aroclor-1016	%	105			70-130	Pass	
Aroclor-1260	%	100			70-130	Pass	
LCS - % Recovery							
Phenols (Halogenated)							
2-Chlorophenol	%	107			30-130	Pass	
2.4-Dichlorophenol	%	113			30-130	Pass	
2.6-Dichlorophenol	%	115			30-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
4-Chloro-3-methylphenol	%	116			30-130	Pass	
Pentachlorophenol	%	126			30-130	Pass	
LCS - % Recovery							
Phenols (non-Halogenated)							
2-Methyl-4.6-dinitrophenol	%	123			30-130	Pass	
2-Methylphenol (o-Cresol)	%	106			30-130	Pass	
2-Nitrophenol	%	130			30-130	Pass	
2.4-Dimethylphenol	%	105			30-130	Pass	
2.4-Dinitrophenol	%	95			30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	%	108			30-130	Pass	
Phenol	%	107			30-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	91			70-130	Pass	
Cadmium	%	92			70-130	Pass	
Chromium	%	96			70-130	Pass	
Copper	%	96			70-130	Pass	
Lead	%	91			70-130	Pass	
Mercury	%	100			70-130	Pass	
Nickel	%	97			70-130	Pass	
Zinc	%	89			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C10-C14	S20-Jn39790	NCP	%	99			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
TRH >C10-C16	S20-Jn39790	NCP	%	94			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	S20-Jn42451	NCP	%	95			70-130	Pass	
Cadmium	S20-Jn42451	NCP	%	96			70-130	Pass	
Chromium	S20-Jn42451	NCP	%	83			70-130	Pass	
Copper	S20-Jn42451	NCP	%	92			70-130	Pass	
Lead	S20-Jn42451	NCP	%	87			70-130	Pass	
Mercury	S20-Jn42451	NCP	%	107			70-130	Pass	
Nickel	S20-Jn42451	NCP	%	86			70-130	Pass	
Zinc	S20-Jn42451	NCP	%	78			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1	Result 2	RPD	Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C10-C14	S20-Jn42224	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	S20-Jn42224	NCP	mg/kg	55	94	53	30%	Fail	Q15
TRH C29-C36	S20-Jn42224	NCP	mg/kg	64	85	29	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
TRH >C10-C16	S20-Jn42224	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	S20-Jn42224	NCP	mg/kg	100	160	42	30%	Fail	Q15
TRH >C34-C40	S20-Jn42224	NCP	mg/kg	< 100	< 100	<1	30%	Pass	

Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	S20-Jn42401	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	S20-Jn42401	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	S20-Jn42401	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	S20-Jn42401	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	S20-Jn42401	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	S20-Jn42401	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	S20-Jn42401	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	S20-Jn42401	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	S20-Jn42401	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	S20-Jn42401	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	S20-Jn42401	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	S20-Jn42401	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	S20-Jn42401	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	S20-Jn42401	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	S20-Jn42401	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	S20-Jn42401	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	S20-Jn42401	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	S20-Jn42401	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	S20-Jn42401	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	S20-Jn42225	NCP	mg/kg	< 0.5	< 0.05	<1	30%	Pass	
a-BHC	S20-Jn42401	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	S20-Jn42401	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-BHC	S20-Jn42401	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-BHC	S20-Jn42401	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	S20-Jn42401	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	S20-Jn42401	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	S20-Jn42401	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	S20-Jn42401	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	S20-Jn42401	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	S20-Jn42401	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	S20-Jn42401	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-BHC (Lindane)	S20-Jn42401	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	S20-Jn42401	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	S20-Jn42401	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	S20-Jn42401	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	S20-Jn42401	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Azinphos-methyl	S20-Jn42401	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Bolstar	S20-Jn42401	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorfenvinphos	S20-Jn42401	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos	S20-Jn42401	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos-methyl	S20-Jn42401	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Coumaphos	S20-Jn42401	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Demeton-S	S20-Jn42401	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Demeton-O	S20-Jn42401	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Diazinon	S20-Jn42401	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dichlorvos	S20-Jn42401	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dimethoate	S20-Jn42401	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Disulfoton	S20-Jn42401	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
EPN	S20-Jn42401	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethion	S20-Jn42401	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	

Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Ethoprop	S20-Jn42401	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethyl parathion	S20-Jn42401	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenitrothion	S20-Jn42401	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fensulfothion	S20-Jn42401	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenthion	S20-Jn42401	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Malathion	S20-Jn42401	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Merphos	S20-Jn42401	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Methyl parathion	S20-Jn42401	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Mevinphos	S20-Jn42401	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Monocrotophos	S20-Jn42401	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Naled	S20-Jn42401	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Omethoate	S20-Jn42401	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Phorate	S20-Jn42401	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pirimiphos-methyl	S20-Jn42401	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pyrazophos	S20-Jn42401	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ronnel	S20-Jn42401	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Terbufos	S20-Jn42401	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tetrachlorvinphos	S20-Jn42401	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tokuthion	S20-Jn42401	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Trichloronate	S20-Jn42401	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Aroclor-1016	S20-Jn42401	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1221	S20-Jn42401	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1232	S20-Jn42401	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1242	S20-Jn42401	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1248	S20-Jn42401	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1254	S20-Jn42401	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1260	S20-Jn42401	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Total PCB*	S20-Jn42401	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Phenols (Halogenated)				Result 1	Result 2	RPD			
2-Chlorophenol	S20-Jn42401	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dichlorophenol	S20-Jn42401	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4.5-Trichlorophenol	S20-Jn42401	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4.6-Trichlorophenol	S20-Jn42401	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2.6-Dichlorophenol	S20-Jn42401	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chloro-3-methylphenol	S20-Jn42401	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Pentachlorophenol	S20-Jn42401	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Tetrachlorophenols - Total	S20-Jn42401	NCP	mg/kg	< 10	< 10	<1	30%	Pass	
Duplicate									
Phenols (non-Halogenated)				Result 1	Result 2	RPD			
2-Cyclohexyl-4.6-dinitrophenol	S20-Jn42401	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
2-Methyl-4.6-dinitrophenol	S20-Jn42401	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Methylphenol (o-Cresol)	S20-Jn42401	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
2-Nitrophenol	S20-Jn42401	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4-Dimethylphenol	S20-Jn42401	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dinitrophenol	S20-Jn42401	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
3&4-Methylphenol (m&p-Cresol)	S20-Jn42401	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
4-Nitrophenol	S20-Jn42401	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Dinoseb	S20-Jn42401	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
Phenol	S20-Jn42401	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	S20-Jn42474	NCP	mg/kg	8.9	7.8	13	30%	Pass	
Cadmium	S20-Jn42474	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	S20-Jn42474	NCP	mg/kg	21	22	6.0	30%	Pass	
Copper	S20-Jn42474	NCP	mg/kg	21	23	9.0	30%	Pass	
Lead	S20-Jn42474	NCP	mg/kg	11	15	25	30%	Pass	
Mercury	S20-Jn42474	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Nickel	S20-Jn42474	NCP	mg/kg	20	21	7.0	30%	Pass	
Zinc	S20-Jn42474	NCP	mg/kg	44	44	1.0	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	S20-Jn42796	NCP	%	17	17	5.0	30%	Pass	

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
Q15	The RPD reported passes Eurofins Environment Testing's QC - Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report.

Authorised By

[redacted]

Analytical Services Manager
Senior Analyst-Organic (NSW)
Senior Analyst-Metal (NSW)
Senior Analyst-Asbestos (NSW)

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

SLR

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
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- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
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- ☒ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
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- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐

CLIENT: Defence Housing Australia

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGER: [redacted]

PM CONTACT No: [redacted]

COMMENTS OR ADDITIONAL DIRECTIONS

LABORATORY: SGS Australia

LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015

SAMPLER [redacted]

SAMPLER CONTACT No [redacted]

Email Reports and Invoices to: LQRSYD@slrconsulting.com [redacted]

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number 2 of 9

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only	HOLD				Additional Information (Comment on any gross contamination or specific requirements)
	0407_BH0030_0.1-0.2_200622	22-06-2020	Soil					x					Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
	0407_BH0030_0.4-0.5_200622	22-06-2020	Soil					x					
	0407_TP010_0.1_200622	22-06-2020	Soil		x								
	0407_TP010_0.5_200622	22-06-2020	Soil		x								
	0407_TP010_1.0_200622	22-06-2020	Soil						x				
	0407_TP010_0.1-0.2_200622	22-06-2020	Soil					x					
	0407_TP011_0.1_200622	22-06-2020	Soil		x								
	0407_TP011_0.5_200622	22-06-2020	Soil						x				
	0407_TP011_1.0_200622	22-06-2020	Soil		x								
	0407_TP011_0.1-0.2_200622	22-06-2020	Soil					x					
	0407_QC136_200622	22-06-2020	Soil		x								
	0407_QC236_200622	22-06-2020	Soil										Please send to Eurofins for Suite A analysis

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 22-06-2020	**Received by**	[redacted]	Date / Time 25/6/20 1:35PM
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time

Temperature Received: 14.0°C

#727943.

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

SLR

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
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- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
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- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
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- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐

CLIENT: Defence Housing Australia

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGER: [redacted]

PM CONTACT No [redacted]

LABORATORY: SGS Australia

LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015

SAMPLER [redacted]

SAMPLER CONTACT No [redacted]

Email Reports and Invoices to: LQRSYD@slrconsulting.com ; [redacted]

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number 7 of 9

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only	HOLD	Suite D	Asbestos, MTBEs		Additional Information (Comment on any gross contamination or specific requirements)
	0407_QC128_200622	22-06-2020	Soil		x								Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
	0407_QC228_200622	22-06-2020	Soil										Please send to Eurofins for Suite A
	0407_TP145_0.1-0.2_200622	22-06-2020	Soil					x					
	0407_TP146_0.1_200622	22-06-2020	Soil		x								
	0407_TP146_0.5_200622	22-06-2020	Soil		x								
	0407_TP146_1.0_200622	22-06-2020	Soil						x				
	0407_TP146_0.1-0.2_200622	22-06-2020	Soil					x					
	0407_QC129_200622	22-06-2020	Soil		x								
	0407_QC229_200622	22-06-2020	Soil										Please send to Eurofins for Suite A
	0407_TP158_0.1_200622	22-06-2020	Soil		x								
	0407_TP158_0.5_200622	22-06-2020	Soil						x				
	0407_TP158_1.0_200622	22-06-2020	Soil		x								

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 22-06-2020	**Received by**	Sign [redacted]	Date / Time 25/6/20 1:35 PM	**Temperature Received:** 14.0°C
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

#727943

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

SLR

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- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐

CLIENT: Defence Housing Australia	**LABORATORY: SGS Australia**
PROJECT: Randwick Barracks	**LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015**
PROJECT NUMBER: 610.30041	**SAMPLER: MR**
PROJECT MANAGER: [redacted]	**SAMPLER CONTACT No:** [redacted]
PM CONTACT No [redacted]	**Email Reports and invoices to: LQRSYD@slrconsulting.com ;** [redacted]

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number 8 of 9

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only	HOLD	Suite D	Asbestos, MTBEs		Additional Information (Comment on any gross contamination or specific requirements)
	0407_QC132_200622	22-06-2020	Soil		x								Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
	0407_QC232_200622	22-06-2020	Soil										Please send to Eurofins for Suite A
	0407_TP158_0.1-0.2_200622	22-06-2020	Soil					x					
	0407_TP159_0.1_200622	22-06-2020	Soil		x								
	0407_TP159_0.5_200622	22-06-2020	Soil						x				
	0407_TP159_1.0_200622	22-06-2020	Soil		x								
	0407_TP159_0.1-0.2_200622	22-06-2020	Soil					x					
	0407_TP160_0.1_200622	22-06-2020	Soil		x								
	0407_TP160_0.5_200622	22-06-2020	Soil		x								
	0407_TP160_1.0_200622	22-06-2020	Soil						x				
	0407_QC131_200622	22-06-2020	Soil		x								
	0407_QC231_200622	22-06-2020	Soil										Please send to Eurofins for Suite A

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	MR	Date / Time	22-06-2020	**Received by**	Sign [redacted]	Date / Time	25/6/20 1:35PM
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	

Temperature Received: 14.0°C

#727943.

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NATA # 1261 Site # 20794

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Phone : +61 8 9251 9600
NATA # 1261 Site # 23736

ABN – 50 005 085 521 e.mail : EnviroSales@eurofins.com web : www.eurofins.com.au

Sample Receipt Advice

Company name:	**SLR Consulting (Sydney)**
Contact name:	[redacted]
Project name:	RANDWICK BARRACKS
Project ID:	610.30041
COC number:	Not provided
Turn around time:	5 Day
Date/Time received:	Jun 25, 2020 1:35 PM
Eurofins reference:	**727943**

Sample information

☑ A detailed list of analytes logged into our LIMS, is included in the attached summary table.

☑ All samples have been received as described on the above COC.

☑ COC has been completed correctly.

☑ Attempt to chill was evident.

☑ Appropriately preserved sample containers have been used.

☑ All samples were received in good condition.

☑ Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.

☑ Appropriate sample containers have been used.

☒ Split sample sent to requested external lab.

☒ Some samples have been subcontracted.

N/A Custody Seals intact (if used).

Contact notes

If you have any questions with respect to these samples please contact:

[redacted] Phone : [redacted] or by e.mail: [redacted]@eurofins.com

Results will be delivered electronically via e.mail to [redacted]@slrconsulting.com.

Note: A copy of these results will also be delivered to the general SLR Consulting (Sydney) email address.

eurofins | Environment Testing

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Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 727943
Phone: 02 9428 8100
Fax:

Received: Jun 25, 2020 1:35 PM
Due: Jul 2, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271										
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	0407_QC236_200622	Jun 22, 2020		Soil	S20-Jn44834	X	X	X	X	X
2	0407_QC228_200622	Jun 22, 2020		Soil	S20-Jn44835	X	X	X	X	X
3	0407_QC229_200622	Jun 22, 2020		Soil	S20-Jn44836	X	X	X	X	X
4	0407_QC232_200622	Jun 22, 2020		Soil	S20-Jn44837	X	X	X	X	X
5	0407_QC231_200622	Jun 22, 2020		Soil	S20-Jn44838	X	X	X	X	X
Test Counts						5	5	5	5	5

Certificate of Analysis

eurofins | Environment Testing

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025–Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus
North Sydney
NSW 2060

Attention:	[redacted]
Report	727943-AID
Project Name	RANDWICK BARRACKS
Project ID	610.30041
Received Date	Jun 25, 2020
Date Reported	Jul 02, 2020

Methodology:

Asbestos Fibre Identification	Conducted in accordance with the Australian Standard AS 4964 – 2004: Method for the Qualitative Identification of Asbestos in Bulk Samples and in-house Method LTM-ASB-8020 by polarised light microscopy (PLM) and dispersion staining (DS) techniques. *NOTE: Positive Trace Analysis results indicate the sample contains detectable respirable fibres.*
Unknown Mineral Fibres	Mineral fibres of unknown type, as determined by PLM with DS, may require another analytical technique, such as Electron Microscopy, to confirm unequivocal identity. *NOTE: While Actinolite, Anthophyllite and Tremolite asbestos may be detected by PLM with DS, due to variability in the optical properties of these materials, AS4964 requires that these are reported as UMF unless confirmed by an independent technique.*
Subsampling Soil Samples	The whole sample submitted is first dried and then passed through a 10mm sieve followed by a 2mm sieve. All fibrous matter greater than 10mm, greater than 2mm as well as the material passing through the 2mm sieve are retained and analysed for the presence of asbestos. If the sub 2mm fraction is greater than approximately 30 to 60g then a sub-sampling routine based on ISO 3082:2009(E) is employed. *NOTE: Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be sub-sampled for trace analysis, in accordance with AS 4964-2004.*
Bonded asbestos-containing material (ACM)	The material is first examined and any fibres isolated for identification by PLM and DS. Where required, interfering matrices may be removed by disintegration using a range of heat, chemical or physical treatments, possibly in combination.The resultant material is then further examined in accordance with AS 4964 - 2004. *NOTE: Even after disintegration it may be difficult to detect the presence of asbestos in some asbestos-containing bulk materials using PLM and DS. This is due to the low grade or small length or diameter of the asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos-containing sealants and mastics, asbestos-containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.*
Limit of Reporting	The performance limitation of the AS 4964 (2004) method for non-homogeneous samples is around 0.1 g/kg (equivalent to 0.01% (w/w)). Where no asbestos is found by PLM and DS, including Trace Analysis, this is considered to be at the nominal reporting limit of 0.01% (w/w). The NEPM screening level of 0.001% (w/w) is intended as an on-site determination, not a laboratory Limit of Reporting (LOR), per se. Examination of a large sample size (e.g. 500 mL) may improve the likelihood of detecting asbestos, particularly AF, to aid assessment against the NEPM criteria. Gravimetric determinations to this level of accuracy are outside of AS 4964 and hence NATA Accreditation does not cover the performance of this service (non-NATA results shown with an asterisk). *NOTE: NATA News March 2014, p.7, states in relation to AS 4964: "This is a qualitative method with a nominal reporting limit of 0.01 % " and that currently in Australia "there is no validated method available for the quantification of asbestos".This report is consistent with the analytical procedures and reporting recommendations in the NEPM and the WA DoH.*

Accredited for compliance with ISO/IEC 17025–Testing
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Project Name RANDWICK BARRACKS
Project ID 610.30041
Date Sampled Jun 22, 2020
Report 727943-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
0407_QC236_200622	20-Jn44834	Jun 22, 2020	Approximate Sample 60g Sample consisted of: Brown coarse-grained sandy soil	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
0407_QC228_200622	20-Jn44835	Jun 22, 2020	Approximate Sample 63g Sample consisted of: Brown coarse-grained sandy soil	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
0407_QC229_200622	20-Jn44836	Jun 22, 2020	Approximate Sample 47g Sample consisted of: White coarse-grained sandy soil	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
0407_QC232_200622	20-Jn44837	Jun 22, 2020	Approximate Sample 52g Sample consisted of: Brown coarse-grained sandy soil	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
0407_QC231_200622	20-Jn44838	Jun 22, 2020	Approximate Sample 69g Sample consisted of: Brown coarse-grained sandy soil	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Asbestos - LTM-ASB-8020	Sydney	Jun 25, 2020	Indefinite

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NATA # 1261 Site # 20794

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Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
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Sample Detail						Asbestos - AS4964	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271										
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	0407_QC236_200622	Jun 22, 2020		Soil	S20-Jn44834	X	X	X	X	X
2	0407_QC228_200622	Jun 22, 2020		Soil	S20-Jn44835	X	X	X	X	X
3	0407_QC229_200622	Jun 22, 2020		Soil	S20-Jn44836	X	X	X	X	X
4	0407_QC232_200622	Jun 22, 2020		Soil	S20-Jn44837	X	X	X	X	X
5	0407_QC231_200622	Jun 22, 2020		Soil	S20-Jn44838	X	X	X	X	X
Test Counts						5	5	5	5	5

Internal Quality Control Review and Glossary

General

1. QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Samples were analysed on an 'as received' basis.
4. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
5. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the Sample Receipt Advice.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

Units

% w/w: weight for weight basis	grams per kilogram
Filter loading:	fibres/100 graticule areas
Reported Concentration:	fibres/mL
Flowrate:	L/min

Terms

Dry	Sample is dried by heating prior to analysis
LOR	Limit of Reporting
COC	Chain of Custody
SRA	Sample Receipt Advice
ISO	International Standards Organisation
AS	Australian Standards
WA DOH	Reference document for the NEPM. Government of Western Australia, Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia (2009), including supporting document Recommended Procedures for Laboratory Analysis of Asbestos in Soil (2011)
NEPM	National Environment Protection (Assessment of Site Contamination) Measure, 2013 (as amended)
ACM	Asbestos Containing Materials. Asbestos contained within a non-asbestos matrix, typically presented in bonded and/or sound condition. For the purposes of the NEPM, ACM is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
AF	Asbestos Fines. Asbestos containing materials, including friable, weathered and bonded materials, able to pass a 7mm x 7mm sieve. Considered under the NEPM as equivalent to “non-bonded / friable”.
FA	Fibrous Asbestos. Asbestos containing materials in a friable and/or severely weathered condition. For the purposes of the NEPM, FA is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
Friable	Asbestos-containing materials of any size that may be broken or crumbled by hand pressure. For the purposes of the NEPM, this includes both AF and FA. It is outside of the laboratory’s remit to assess degree of friability.
Trace Analysis	Analytical procedure used to detect the presence of respirable fibres in the matrix.

Comments

The samples received were not collected in an approved asbestos bag and was therefore sub-sampled from the 250mL glass jar. Valid sub-sampling procedures were applied so as to ensure that the sub-samples to be analysed accurately represented the samples received.

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

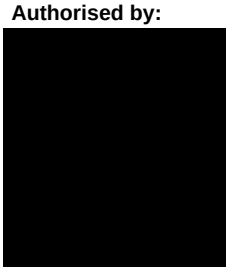
Qualifier Codes/Comments

Code	Description
N/A	Not applicable

Asbestos Counter/Identifier:

[redacted] Senior Analyst-Asbestos (NSW)

Authorised by:



Senior Analyst-Asbestos (NSW)

General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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Certificate of Analysis

SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus,
North Sydney
NSW 2060

NATA Accredited
Accreditation Number 1261
Site Number 18217

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The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: [redacted]

Report **727943-S**
Project name RANDWICK BARRACKS
Project ID 610.30041
Received Date Jun 25, 2020

Client Sample ID			0407_QC236_200622	0407_QC228_200622	0407_QC229_200622	0407_QC232_200622
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn44834**	**S20-Jn44835**	**S20-Jn44836**	**S20-Jn44837**
Date Sampled			**Jun 22, 2020**	**Jun 22, 2020**	**Jun 22, 2020**	**Jun 22, 2020**
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50	< 50	< 50	< 50
BTEX						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	70	82	72	71
Volatile Organics						
1.1-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			0407_QC236_200622	0407_QC228_200622	0407_QC229_200622	0407_QC232_200622
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S20-Jn44834	S20-Jn44835	S20-Jn44836	S20-Jn44837
Date Sampled			Jun 22, 2020	Jun 22, 2020	Jun 22, 2020	Jun 22, 2020
Test/Reference	LOR	Unit				
Volatile Organics						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromoform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Iodomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Styrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
Total MAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Bromofluorobenzene (surr.)	1	%	70	82	72	71
Toluene-d8 (surr.)	1	%	84	105	91	82
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100	< 100	< 100

Client Sample ID			0407_QC236_200622	0407_QC228_200622	0407_QC229_200622	0407_QC232_200622
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S20-Jn44834	S20-Jn44835	S20-Jn44836	S20-Jn44837
Date Sampled			Jun 22, 2020	Jun 22, 2020	Jun 22, 2020	Jun 22, 2020
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	99	114	108	85
p-Terphenyl-d14 (surr.)	1	%	108	120	117	93
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
a-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
b-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
d-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Toxaphene	1	mg/kg	< 1	< 1	< 1	< 1
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Dibutylchlorendate (surr.)	1	%	106	110	99	135
Tetrachloro-m-xylene (surr.)	1	%	105	110	100	117

Client Sample ID			0407_QC236_200622	0407_QC228_200622	0407_QC229_200622	0407_QC232_200622
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn44834**	**S20-Jn44835**	**S20-Jn44836**	**S20-Jn44837**
Date Sampled			**Jun 22, 2020**	**Jun 22, 2020**	**Jun 22, 2020**	**Jun 22, 2020**
Test/Reference	LOR	Unit				
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Bolstar	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Coumaphos	2	mg/kg	< 2	< 2	< 2	< 2
Demeton-S	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Demeton-O	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Diazinon	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Dimethoate	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Disulfoton	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
EPN	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ethion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ethoprop	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Fenthion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Malathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Merphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Methyl parathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Mevinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Monocrotophos	2	mg/kg	< 2	< 2	< 2	< 2
Naled	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Omethoate	2	mg/kg	< 2	< 2	< 2	< 2
Phorate	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ronnel	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Terbufos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Tokuthion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Trichloronate	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Triphenylphosphate (surr.)	1	%	58	111	105	74
Polychlorinated Biphenyls						
Aroclor-1016	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1232	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1242	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1248	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1254	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1260	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PCB*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibutylchlorendate (surr.)	1	%	106	110	99	135
Tetrachloro-m-xylene (surr.)	1	%	105	110	100	117

Client Sample ID			0407_QC236_200622	0407_QC228_200622	0407_QC229_200622	0407_QC232_200622
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S20-Jn44834	S20-Jn44835	S20-Jn44836	S20-Jn44837
Date Sampled			Jun 22, 2020	Jun 22, 2020	Jun 22, 2020	Jun 22, 2020
Test/Reference	LOR	Unit				
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1	< 1
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
2-Nitrophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
4-Nitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
Phenol-d6 (surr.)	1	%	97	117	108	87
Heavy Metals						
Arsenic	2	mg/kg	< 2	< 2	< 2	< 2
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	5.7	< 5	< 5	8.0
Copper	5	mg/kg	< 5	< 5	< 5	8.2
Lead	5	mg/kg	< 5	< 5	< 5	30
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	< 5	< 5	< 5	< 5
Zinc	5	mg/kg	< 5	7.7	< 5	11
% Moisture	1	%	4.7	6.2	3.2	19

Client Sample ID			0407_QC231_200622
Sample Matrix			Soil
Eurofins Sample No.			S20-Jn44838
Date Sampled			Jun 22, 2020
Test/Reference	LOR	Unit	
Total Recoverable Hydrocarbons - 1999 NEPM Fractions			
TRH C6-C9	20	mg/kg	< 20
TRH C10-C14	20	mg/kg	< 20
TRH C15-C28	50	mg/kg	< 50
TRH C29-C36	50	mg/kg	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50

Client Sample ID			0407_QC231_200622
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-Jn44838**
Date Sampled			**Jun 22, 2020**
Test/Reference	LOR	Unit	
BTEX			
Benzene	0.1	mg/kg	< 0.1
Toluene	0.1	mg/kg	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2
o-Xylene	0.1	mg/kg	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3
4-Bromofluorobenzene (surr.)	1	%	72
Volatile Organics			
1.1-Dichloroethane	0.5	mg/kg	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5
Benzene	0.1	mg/kg	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5
Bromoform	0.5	mg/kg	< 0.5
Bromomethane	0.5	mg/kg	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5
Chloroethane	0.5	mg/kg	< 0.5
Chloroform	0.5	mg/kg	< 0.5
Chloromethane	0.5	mg/kg	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1
Iodomethane	0.5	mg/kg	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5

Client Sample ID			0407_QC231_200622
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-Jn44838**
Date Sampled			**Jun 22, 2020**
Test/Reference	LOR	Unit	
Volatile Organics			
m&p-Xylenes	0.2	mg/kg	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5
o-Xylene	0.1	mg/kg	< 0.1
Styrene	0.5	mg/kg	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5
Toluene	0.1	mg/kg	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3
Total MAH*	0.5	mg/kg	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5
4-Bromofluorobenzene (surr.)	1	%	72
Toluene-d8 (surr.)	1	%	79
Total Recoverable Hydrocarbons - 2013 NEPM Fractions			
Naphthalene[N02]	0.5	mg/kg	< 0.5
TRH C6-C10	20	mg/kg	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20
TRH >C10-C16	50	mg/kg	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50
TRH >C16-C34	100	mg/kg	< 100
TRH >C34-C40	100	mg/kg	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100
Polycyclic Aromatic Hydrocarbons			
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2
Acenaphthene	0.5	mg/kg	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5
Anthracene	0.5	mg/kg	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5
Chrysene	0.5	mg/kg	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5
Fluorene	0.5	mg/kg	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5
Naphthalene	0.5	mg/kg	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5
Pyrene	0.5	mg/kg	< 0.5
Total PAH*	0.5	mg/kg	< 0.5
2-Fluorobiphenyl (surr.)	1	%	84
p-Terphenyl-d14 (surr.)	1	%	87

Client Sample ID			0407_QC231_200622
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-Jn44838**
Date Sampled			**Jun 22, 2020**
Test/Reference	LOR	Unit	
Organochlorine Pesticides			
Chlordanes - Total	0.1	mg/kg	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05
a-BHC	0.05	mg/kg	< 0.05
Aldrin	0.05	mg/kg	< 0.05
b-BHC	0.05	mg/kg	< 0.05
d-BHC	0.05	mg/kg	< 0.05
Dieldrin	0.05	mg/kg	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05
Endrin	0.05	mg/kg	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05
Heptachlor	0.05	mg/kg	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05
Methoxychlor	0.2	mg/kg	< 0.2
Toxaphene	1	mg/kg	< 1
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.2
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.2
Dibutylchlorendate (surr.)	1	%	107
Tetrachloro-m-xylene (surr.)	1	%	97
Organophosphorus Pesticides			
Azinphos-methyl	0.2	mg/kg	< 0.2
Bolstar	0.2	mg/kg	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2
Coumaphos	2	mg/kg	< 2
Demeton-S	0.2	mg/kg	< 0.2
Demeton-O	0.2	mg/kg	< 0.2
Diazinon	0.2	mg/kg	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2
Dimethoate	0.2	mg/kg	< 0.2
Disulfoton	0.2	mg/kg	< 0.2
EPN	0.2	mg/kg	< 0.2
Ethion	0.2	mg/kg	< 0.2
Ethoprop	0.2	mg/kg	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2
Fenthion	0.2	mg/kg	< 0.2
Malathion	0.2	mg/kg	< 0.2
Merphos	0.2	mg/kg	< 0.2

Client Sample ID			0407_QC231_200622
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-Jn44838**
Date Sampled			**Jun 22, 2020**
Test/Reference	LOR	Unit	
Organophosphorus Pesticides			
Methyl parathion	0.2	mg/kg	< 0.2
Mevinphos	0.2	mg/kg	< 0.2
Monocrotophos	2	mg/kg	< 2
Naled	0.2	mg/kg	< 0.2
Omethoate	2	mg/kg	< 2
Phorate	0.2	mg/kg	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2
Ronnel	0.2	mg/kg	< 0.2
Terbufos	0.2	mg/kg	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2
Tokuthion	0.2	mg/kg	< 0.2
Trichloronate	0.2	mg/kg	< 0.2
Triphenylphosphate (surr.)	1	%	73
Polychlorinated Biphenyls			
Aroclor-1016	0.5	mg/kg	< 0.5
Aroclor-1221	0.1	mg/kg	< 0.1
Aroclor-1232	0.5	mg/kg	< 0.5
Aroclor-1242	0.5	mg/kg	< 0.5
Aroclor-1248	0.5	mg/kg	< 0.5
Aroclor-1254	0.5	mg/kg	< 0.5
Aroclor-1260	0.5	mg/kg	< 0.5
Total PCB*	0.5	mg/kg	< 0.5
Dibutylchlorendate (surr.)	1	%	107
Tetrachloro-m-xylene (surr.)	1	%	97
Phenols (Halogenated)			
2-Chlorophenol	0.5	mg/kg	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1
Pentachlorophenol	1	mg/kg	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10
Total Halogenated Phenol*	1	mg/kg	< 1
Phenols (non-Halogenated)			
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2
2-Nitrophenol	1	mg/kg	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4
4-Nitrophenol	5	mg/kg	< 5
Dinoseb	20	mg/kg	< 20
Phenol	0.5	mg/kg	< 0.5
Total Non-Halogenated Phenol*	20	mg/kg	< 20
Phenol-d6 (surr.)	1	%	87

Client Sample ID			0407_QC231_200622
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-Jn44838**
Date Sampled			**Jun 22, 2020**
Test/Reference	LOR	Unit	
Heavy Metals			
Arsenic	2	mg/kg	< 2
Cadmium	0.4	mg/kg	< 0.4
Chromium	5	mg/kg	5.5
Copper	5	mg/kg	< 5
Lead	5	mg/kg	< 5
Mercury	0.1	mg/kg	< 0.1
Nickel	5	mg/kg	17
Zinc	5	mg/kg	< 5
% Moisture	1	%	5.4

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Sydney	Jul 01, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Sydney	Jul 01, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jul 01, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jul 01, 2020	
- Method: LTM-ORG-2010 TRH C6-C40			
Polycyclic Aromatic Hydrocarbons	Sydney	Jul 01, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (Halogenated)	Sydney	Jul 01, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (non-Halogenated)	Sydney	Jul 01, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Metals M8	Sydney	Jul 01, 2020	180 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Volatile Organics	Sydney	Jul 01, 2020	7 Days
- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices			
Eurofins | mgt Suite B15			
Organochlorine Pesticides	Sydney	Jul 01, 2020	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Organophosphorus Pesticides	Sydney	Jul 01, 2020	14 Days
- Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS			
Polychlorinated Biphenyls	Sydney	Jul 01, 2020	28 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
% Moisture	Sydney	Jun 25, 2020	14 Days
- Method: LTM-GEN-7080 Moisture			

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IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 727943
Phone: 02 9428 8100
Fax:

Received: Jun 25, 2020 1:35 PM
Due: Jul 2, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271										
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	0407_QC236_200622	Jun 22, 2020		Soil	S20-Jn44834	X	X	X	X	X
2	0407_QC228_200622	Jun 22, 2020		Soil	S20-Jn44835	X	X	X	X	X
3	0407_QC229_200622	Jun 22, 2020		Soil	S20-Jn44836	X	X	X	X	X
4	0407_QC232_200622	Jun 22, 2020		Soil	S20-Jn44837	X	X	X	X	X
5	0407_QC231_200622	Jun 22, 2020		Soil	S20-Jn44838	X	X	X	X	X
Test Counts						5	5	5	5	5

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

****NOTE:** pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram

mg/L: milligrams per litre

ug/L: micrograms per litre

ppm: Parts per million

ppb: Parts per billion

%: Percentage

org/100mL: Organisms per 100 millilitres

NTU: Nephelometric Turbidity Units

MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version 5.3
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling.Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
Method Blank							
BTEX							
Benzene	mg/kg	< 0.1			0.1	Pass	
Toluene	mg/kg	< 0.1			0.1	Pass	
Ethylbenzene	mg/kg	< 0.1			0.1	Pass	
m&p-Xylenes	mg/kg	< 0.2			0.2	Pass	
o-Xylene	mg/kg	< 0.1			0.1	Pass	
Xylenes - Total*	mg/kg	< 0.3			0.3	Pass	
Method Blank							
Volatile Organics							
1.1-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
1.1.1-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.1.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dibromoethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.3-Trichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.4-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.3.5-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.4-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
2-Butanone (MEK)	mg/kg	< 0.5			0.5	Pass	
2-Propanone (Acetone)	mg/kg	< 0.5			0.5	Pass	
4-Chlorotoluene	mg/kg	< 0.5			0.5	Pass	
4-Methyl-2-pentanone (MIBK)	mg/kg	< 0.5			0.5	Pass	
Allyl chloride	mg/kg	< 0.5			0.5	Pass	
Bromobenzene	mg/kg	< 0.5			0.5	Pass	
Bromochloromethane	mg/kg	< 0.5			0.5	Pass	
Bromodichloromethane	mg/kg	< 0.5			0.5	Pass	
Bromoform	mg/kg	< 0.5			0.5	Pass	
Bromomethane	mg/kg	< 0.5			0.5	Pass	
Carbon disulfide	mg/kg	< 0.5			0.5	Pass	
Carbon Tetrachloride	mg/kg	< 0.5			0.5	Pass	
Chlorobenzene	mg/kg	< 0.5			0.5	Pass	
Chloroethane	mg/kg	< 0.5			0.5	Pass	
Chloroform	mg/kg	< 0.5			0.5	Pass	
Chloromethane	mg/kg	< 0.5			0.5	Pass	
cis-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
cis-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Dibromochloromethane	mg/kg	< 0.5			0.5	Pass	
Dibromomethane	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Dichlorodifluoromethane	mg/kg	< 0.5			0.5	Pass	
Iodomethane	mg/kg	< 0.5			0.5	Pass	
Isopropyl benzene (Cumene)	mg/kg	< 0.5			0.5	Pass	
Methylene Chloride	mg/kg	< 0.5			0.5	Pass	
Styrene	mg/kg	< 0.5			0.5	Pass	
Tetrachloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Trichloroethene	mg/kg	< 0.5			0.5	Pass	
Trichlorofluoromethane	mg/kg	< 0.5			0.5	Pass	
Vinyl chloride	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Organochlorine Pesticides							
Chlordanes - Total	mg/kg	< 0.1			0.1	Pass	
4.4'-DDD	mg/kg	< 0.05			0.05	Pass	
4.4'-DDE	mg/kg	< 0.05			0.05	Pass	
4.4'-DDT	mg/kg	< 0.05			0.05	Pass	
a-BHC	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-BHC	mg/kg	< 0.05			0.05	Pass	
d-BHC	mg/kg	< 0.05			0.05	Pass	
Dieldrin	mg/kg	< 0.05			0.05	Pass	
Endosulfan I	mg/kg	< 0.05			0.05	Pass	
Endosulfan II	mg/kg	< 0.05			0.05	Pass	
Endosulfan sulphate	mg/kg	< 0.05			0.05	Pass	
Endrin	mg/kg	< 0.05			0.05	Pass	
Endrin aldehyde	mg/kg	< 0.05			0.05	Pass	
Endrin ketone	mg/kg	< 0.05			0.05	Pass	
g-BHC (Lindane)	mg/kg	< 0.05			0.05	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Heptachlor	mg/kg	< 0.05			0.05	Pass	
Heptachlor epoxide	mg/kg	< 0.05			0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05			0.05	Pass	
Methoxychlor	mg/kg	< 0.2			0.2	Pass	
Toxaphene	mg/kg	< 1			1	Pass	
Method Blank							
Organophosphorus Pesticides							
Azinphos-methyl	mg/kg	< 0.2			0.2	Pass	
Bolstar	mg/kg	< 0.2			0.2	Pass	
Chlorfenvinphos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos-methyl	mg/kg	< 0.2			0.2	Pass	
Coumaphos	mg/kg	< 2			2	Pass	
Demeton-S	mg/kg	< 0.2			0.2	Pass	
Demeton-O	mg/kg	< 0.2			0.2	Pass	
Diazinon	mg/kg	< 0.2			0.2	Pass	
Dichlorvos	mg/kg	< 0.2			0.2	Pass	
Dimethoate	mg/kg	< 0.2			0.2	Pass	
Disulfoton	mg/kg	< 0.2			0.2	Pass	
EPN	mg/kg	< 0.2			0.2	Pass	
Ethion	mg/kg	< 0.2			0.2	Pass	
Ethoprop	mg/kg	< 0.2			0.2	Pass	
Ethyl parathion	mg/kg	< 0.2			0.2	Pass	
Fenitrothion	mg/kg	< 0.2			0.2	Pass	
Fensulfothion	mg/kg	< 0.2			0.2	Pass	
Fenthion	mg/kg	< 0.2			0.2	Pass	
Malathion	mg/kg	< 0.2			0.2	Pass	
Merphos	mg/kg	< 0.2			0.2	Pass	
Methyl parathion	mg/kg	< 0.2			0.2	Pass	
Mevinphos	mg/kg	< 0.2			0.2	Pass	
Monocrotophos	mg/kg	< 2			2	Pass	
Naled	mg/kg	< 0.2			0.2	Pass	
Omethoate	mg/kg	< 2			2	Pass	
Phorate	mg/kg	< 0.2			0.2	Pass	
Pirimiphos-methyl	mg/kg	< 0.2			0.2	Pass	
Pyrazophos	mg/kg	< 0.2			0.2	Pass	
Ronnel	mg/kg	< 0.2			0.2	Pass	
Terbufos	mg/kg	< 0.2			0.2	Pass	
Tetrachlorvinphos	mg/kg	< 0.2			0.2	Pass	
Tokuthion	mg/kg	< 0.2			0.2	Pass	
Trichloronate	mg/kg	< 0.2			0.2	Pass	
Method Blank							
Polychlorinated Biphenyls							
Aroclor-1016	mg/kg	< 0.5			0.5	Pass	
Aroclor-1221	mg/kg	< 0.1			0.1	Pass	
Aroclor-1232	mg/kg	< 0.5			0.5	Pass	
Aroclor-1242	mg/kg	< 0.5			0.5	Pass	
Aroclor-1248	mg/kg	< 0.5			0.5	Pass	
Aroclor-1254	mg/kg	< 0.5			0.5	Pass	
Aroclor-1260	mg/kg	< 0.5			0.5	Pass	
Total PCB*	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Phenols (Halogenated)							
2-Chlorophenol	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2.4-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4.5-Trichlorophenol	mg/kg	< 1			1	Pass	
2.4.6-Trichlorophenol	mg/kg	< 1			1	Pass	
2.6-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
4-Chloro-3-methylphenol	mg/kg	< 1			1	Pass	
Pentachlorophenol	mg/kg	< 1			1	Pass	
Tetrachlorophenols - Total	mg/kg	< 10			10	Pass	
Method Blank							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	mg/kg	< 20			20	Pass	
2-Methyl-4.6-dinitrophenol	mg/kg	< 5			5	Pass	
2-Methylphenol (o-Cresol)	mg/kg	< 0.2			0.2	Pass	
2-Nitrophenol	mg/kg	< 1			1	Pass	
2.4-Dimethylphenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dinitrophenol	mg/kg	< 5			5	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/kg	< 0.4			0.4	Pass	
4-Nitrophenol	mg/kg	< 5			5	Pass	
Dinoseb	mg/kg	< 20			20	Pass	
Phenol	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Nickel	mg/kg	< 5			5	Pass	
Zinc	mg/kg	< 5			5	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	%	95			70-130	Pass	
TRH C10-C14	%	120			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	116			70-130	Pass	
Toluene	%	119			70-130	Pass	
Ethylbenzene	%	112			70-130	Pass	
m&p-Xylenes	%	113			70-130	Pass	
o-Xylene	%	111			70-130	Pass	
Xylenes - Total*	%	113			70-130	Pass	
LCS - % Recovery							
Volatile Organics							
1.1-Dichloroethene	%	128			70-130	Pass	
1.1.1-Trichloroethane	%	106			70-130	Pass	
1.2-Dichlorobenzene	%	94			70-130	Pass	
1.2-Dichloroethane	%	122			70-130	Pass	
Trichloroethene	%	111			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	75			70-130	Pass	
TRH C6-C10	%	93			70-130	Pass	
TRH >C10-C16	%	114			70-130	Pass	
LCS - % Recovery							

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	77			70-130	Pass	
Acenaphthylene	%	88			70-130	Pass	
Anthracene	%	80			70-130	Pass	
Benz(a)anthracene	%	111			70-130	Pass	
Benzo(a)pyrene	%	73			70-130	Pass	
Benzo(b&j)fluoranthene	%	77			70-130	Pass	
Benzo(g.h.i)perylene	%	72			70-130	Pass	
Benzo(k)fluoranthene	%	78			70-130	Pass	
Chrysene	%	119			70-130	Pass	
Dibenz(a.h)anthracene	%	113			70-130	Pass	
Fluoranthene	%	78			70-130	Pass	
Fluorene	%	76			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	115			70-130	Pass	
Naphthalene	%	82			70-130	Pass	
Phenanthrene	%	83			70-130	Pass	
Pyrene	%	89			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	99			70-130	Pass	
4.4'-DDD	%	105			70-130	Pass	
4.4'-DDE	%	102			70-130	Pass	
4.4'-DDT	%	102			70-130	Pass	
a-BHC	%	105			70-130	Pass	
Aldrin	%	106			70-130	Pass	
b-BHC	%	103			70-130	Pass	
d-BHC	%	128			70-130	Pass	
Dieldrin	%	105			70-130	Pass	
Endosulfan I	%	90			70-130	Pass	
Endosulfan II	%	104			70-130	Pass	
Endosulfan sulphate	%	107			70-130	Pass	
Endrin	%	104			70-130	Pass	
Endrin aldehyde	%	91			70-130	Pass	
Endrin ketone	%	107			70-130	Pass	
g-BHC (Lindane)	%	105			70-130	Pass	
Heptachlor	%	106			70-130	Pass	
Heptachlor epoxide	%	105			70-130	Pass	
Hexachlorobenzene	%	104			70-130	Pass	
Methoxychlor	%	106			70-130	Pass	
LCS - % Recovery							
Organophosphorus Pesticides							
Dimethoate	%	119			70-130	Pass	
Ethion	%	119			70-130	Pass	
Fenitrothion	%	124			70-130	Pass	
Mevinphos	%	118			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls							
Aroclor-1260	%	99			70-130	Pass	
LCS - % Recovery							
Phenols (Halogenated)							
2-Chlorophenol	%	115			30-130	Pass	
2.4-Dichlorophenol	%	113			30-130	Pass	
2.4.5-Trichlorophenol	%	125			30-130	Pass	
2.4.6-Trichlorophenol	%	118			30-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2.6-Dichlorophenol	%	115			30-130	Pass	
4-Chloro-3-methylphenol	%	120			30-130	Pass	
Pentachlorophenol	%	114			30-130	Pass	
LCS - % Recovery							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	%	118			30-130	Pass	
2-Methyl-4.6-dinitrophenol	%	110			30-130	Pass	
2-Methylphenol (o-Cresol)	%	111			30-130	Pass	
2-Nitrophenol	%	121			30-130	Pass	
2.4-Dimethylphenol	%	100			30-130	Pass	
2.4-Dinitrophenol	%	81			30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	%	119			30-130	Pass	
4-Nitrophenol	%	115			30-130	Pass	
Dinoseb	%	128			30-130	Pass	
Phenol	%	113			30-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	96			70-130	Pass	
Cadmium	%	92			70-130	Pass	
Chromium	%	97			70-130	Pass	
Copper	%	97			70-130	Pass	
Lead	%	107			70-130	Pass	
Mercury	%	114			70-130	Pass	
Nickel	%	100			70-130	Pass	
Zinc	%	87			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C10-C14	S20-Jn43217	NCP	%	104			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	S20-Jl01196	NCP	%	79			70-130	Pass	
Toluene	S20-Jl01196	NCP	%	78			70-130	Pass	
Ethylbenzene	S20-Jl01196	NCP	%	76			70-130	Pass	
m&p-Xylenes	S20-Jl01196	NCP	%	77			70-130	Pass	
o-Xylene	S20-Jl01196	NCP	%	78			70-130	Pass	
Xylenes - Total*	S20-Jl01196	NCP	%	78			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
TRH >C10-C16	S20-Jn43217	NCP	%	92			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
Chlordanes - Total	S20-Jn42798	NCP	%	101			70-130	Pass	
4.4'-DDD	S20-Jn42798	NCP	%	112			70-130	Pass	
4.4'-DDE	S20-Jn42798	NCP	%	94			70-130	Pass	
4.4'-DDT	S20-Jn42798	NCP	%	96			70-130	Pass	
a-BHC	S20-Jn42798	NCP	%	107			70-130	Pass	
Aldrin	S20-Jn42798	NCP	%	108			70-130	Pass	
b-BHC	S20-Jn42798	NCP	%	102			70-130	Pass	
d-BHC	S20-Jn42798	NCP	%	130			70-130	Pass	
Dieldrin	S20-Jn42798	NCP	%	110			70-130	Pass	
Endosulfan I	S20-Jn42798	NCP	%	106			70-130	Pass	
Endosulfan II	S20-Jn42798	NCP	%	110			70-130	Pass	
Endosulfan sulphate	S20-Jn42798	NCP	%	117			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Endrin	S20-Jn42798	NCP	%	105			70-130	Pass	
Endrin aldehyde	S20-Jn42798	NCP	%	103			70-130	Pass	
Endrin ketone	S20-Jn42798	NCP	%	120			70-130	Pass	
g-BHC (Lindane)	S20-Jn42798	NCP	%	106			70-130	Pass	
Heptachlor	S20-Jn42798	NCP	%	103			70-130	Pass	
Heptachlor epoxide	S20-Jn42798	NCP	%	109			70-130	Pass	
Hexachlorobenzene	S20-Jn42798	NCP	%	101			70-130	Pass	
Methoxychlor	S20-Jn42798	NCP	%	111			70-130	Pass	
Spike - % Recovery									
Polychlorinated Biphenyls				Result 1					
Aroclor-1260	S20-Jn42798	NCP	%	85			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	W20-Jn43758	NCP	%	88			70-130	Pass	
Cadmium	W20-Jn43758	NCP	%	89			70-130	Pass	
Chromium	W20-Jn43758	NCP	%	83			70-130	Pass	
Copper	W20-Jn43758	NCP	%	89			70-130	Pass	
Lead	W20-Jn43758	NCP	%	89			70-130	Pass	
Mercury	W20-Jn43758	NCP	%	99			70-130	Pass	
Nickel	W20-Jn43758	NCP	%	89			70-130	Pass	
Zinc	W20-Jn43758	NCP	%	80			70-130	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C6-C9	S20-Jn44834	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	S20-Jn43216	NCP	mg/kg	21	< 20	57	30%	Fail	Q15
TRH C15-C28	S20-Jn43216	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	S20-Jn43216	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S20-Jn44834	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Toluene	S20-Jn44834	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Ethylbenzene	S20-Jn44834	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
m&p-Xylenes	S20-Jn44834	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
o-Xylene	S20-Jn44834	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes - Total*	S20-Jn44834	CP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
1.1-Dichloroethane	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1-Dichloroethene	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1-Trichloroethane	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2-Trichloroethane	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dibromoethane	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichlorobenzene	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloroethane	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloropropane	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.3-Trichloropropane	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trimethylbenzene	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichlorobenzene	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichloropropane	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3.5-Trimethylbenzene	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.4-Dichlorobenzene	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
2-Butanone (MEK)	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Propanone (Acetone)	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chlorotoluene	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Methyl-2-pentanone (MIBK)	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Allyl chloride	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromobenzene	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromochloromethane	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromodichloromethane	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromoform	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromomethane	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon disulfide	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon Tetrachloride	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chlorobenzene	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroethane	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroform	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloromethane	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.2-Dichloroethene	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.3-Dichloropropene	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromochloromethane	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromomethane	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dichlorodifluoromethane	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Iodomethane	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Isopropyl benzene (Cumene)	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Methylene Chloride	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Styrene	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Tetrachloroethene	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.2-Dichloroethene	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.3-Dichloropropene	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichloroethene	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichlorofluoromethane	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Vinyl chloride	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	S20-Jn44834	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH >C10-C16	S20-Jn43216	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	S20-Jn43216	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	S20-Jn43216	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Phenanthrene	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	S20-Jn44834	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	S20-Jn44834	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	S20-Jn44834	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	S20-Jn44834	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-BHC	S20-Jn44834	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	S20-Jn44834	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-BHC	S20-Jn44834	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-BHC	S20-Jn44834	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	S20-Jn44834	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	S20-Jn44834	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	S20-Jn44834	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	S20-Jn44834	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	S20-Jn44834	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	S20-Jn44834	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	S20-Jn44834	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-BHC (Lindane)	S20-Jn44834	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	S20-Jn44834	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	S20-Jn44834	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	S20-Jn44834	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	S20-Jn44834	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Toxaphene	S20-Jn42796	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Azinphos-methyl	S20-Jn44834	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Bolstar	S20-Jn44834	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorfenvinphos	S20-Jn44834	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos	S20-Jn44834	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos-methyl	S20-Jn44834	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Coumaphos	S20-Jn44834	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Demeton-S	S20-Jn44834	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Demeton-O	S20-Jn44834	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Diazinon	S20-Jn44834	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dichlorvos	S20-Jn44834	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dimethoate	S20-Jn44834	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Disulfoton	S20-Jn44834	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
EPN	S20-Jn44834	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethion	S20-Jn44834	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethoprop	S20-Jn44834	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethyl parathion	S20-Jn44834	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenitrothion	S20-Jn44834	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fensulfothion	S20-Jn44834	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenthion	S20-Jn44834	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Malathion	S20-Jn44834	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Merphos	S20-Jn44834	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Methyl parathion	S20-Jn44834	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Mevinphos	S20-Jn44834	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Monocrotophos	S20-Jn44834	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Naled	S20-Jn44834	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Omethoate	S20-Jn44834	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Phorate	S20-Jn44834	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	

Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Pirimiphos-methyl	S20-Jn44834	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pyrazophos	S20-Jn44834	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ronnel	S20-Jn44834	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Terbufos	S20-Jn44834	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tetrachlorvinphos	S20-Jn44834	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tokuthion	S20-Jn44834	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Trichloronate	S20-Jn44834	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Aroclor-1016	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1221	S20-Jn44834	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1232	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1242	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1248	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1254	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1260	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Phenols (Halogenated)				Result 1	Result 2	RPD			
2-Chlorophenol	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dichlorophenol	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4.5-Trichlorophenol	S20-Jn44834	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4.6-Trichlorophenol	S20-Jn44834	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.6-Dichlorophenol	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chloro-3-methylphenol	S20-Jn44834	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Pentachlorophenol	S20-Jn44834	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Tetrachlorophenols - Total	S20-Jn44834	CP	mg/kg	< 10	< 10	<1	30%	Pass	
Duplicate									
Phenols (non-Halogenated)				Result 1	Result 2	RPD			
2-Cyclohexyl-4.6-dinitrophenol	S20-Jn44834	CP	mg/kg	< 20	< 20	<1	30%	Pass	
2-Methyl-4.6-dinitrophenol	S20-Jn44834	CP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Methylphenol (o-Cresol)	S20-Jn44834	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
2-Nitrophenol	S20-Jn44834	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4-Dimethylphenol	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dinitrophenol	S20-Jn44834	CP	mg/kg	< 5	< 5	<1	30%	Pass	
3&4-Methylphenol (m&p-Cresol)	S20-Jn44834	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
4-Nitrophenol	S20-Jn44834	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Dinoseb	S20-Jn44834	CP	mg/kg	< 20	< 20	<1	30%	Pass	
Phenol	S20-Jn44834	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	N20-Jn51054	NCP	mg/kg	6.1	10	52	30%	Fail	Q15
Cadmium	N20-Jn51054	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	N20-Jn51054	NCP	mg/kg	25	37	38	30%	Fail	Q15
Copper	N20-Jn51054	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Lead	N20-Jn51054	NCP	mg/kg	11	13	20	30%	Pass	
Mercury	N20-Jn51054	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Nickel	N20-Jn51054	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Zinc	N20-Jn51054	NCP	mg/kg	12	14	14	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	S20-Jn44938	NCP	%	5.4	4.5	18	30%	Pass	

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
Q15	The RPD reported passes Eurofins Environment Testing's QC - Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report.

Authorised By

[redacted]

Analytical Services Manager
Senior Analyst-Organic (NSW)
Senior Analyst-Metal (NSW)
Senior Analyst-Asbestos (NSW)

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

Eurofins shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ❄ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ

CLIENT: Defence Housing Australia

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGER [redacted]

PM CONTACT No: [redacted]

COMMENTS OR ADDITIONAL DIRECTIONS

LABORATORY: SGS Australia

LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015

SAMPLER [redacted]

SAMPLER CONTACT No [redacted]

Email Reports and Invoices to: LQRSYD@slrconsulting.com [redacted]

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number of

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	Asbestos ONLY	HOLD	C6-C10/BETXN					Additional Information (Comment on any gross contamination or specific requirements)
	0407_QC126_200622	22/06/2020	Soil	jar, pfas	x								Please hold all PFAS containers
	0407_QC226_200622	22/06/2020	Soil	jar, pfas	x								Please send to Eurofins
	0407_QC127_200622	22/06/2020	Soil	jar, pfas	x								
	0407_QC227_200622	22/06/2020	Soil	jar, pfas	x								Please send to Eurofins
	0407_QC134_200622	22/06/2020	Soil	jar, pfas	x								
	0407_QC234_200622	22/06/2020	Soil	jar, pfas	x								Please send to Eurofins
	0407_QC137_200622	22/06/2020	Soil	jar, pfas	x								
	0407_QC237_200622	22/06/2020	Soil	jar, pfas	x								Please send to Eurofins
	0407_QC411_200619	22/06/2020	Trip Blank	vial				x					
	0407_QC511_200619	22/06/2020	Trip Spike	vial				x					

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time	18/06/2020	**Received by**	Sign [redacted]	Date / Time	26/6/20
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	

Temperature Received:

728378

eurofins | Environment Testing

Melbourne
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Dandenong South Vic 3175
Phone : +61 3 8564 5000
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Site # 1254 & 14271

Sydney
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NATA # 1261 Site # 18217

Brisbane
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Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Perth
2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261 Site # 23736

ABN – 50 005 085 521 e.mail : EnviroSales@eurofins.com web : www.eurofins.com.au

Sample Receipt Advice

Company name:	**SLR Consulting (Sydney)**
Contact name:	[redacted]
Project name:	RANDWICK BARRACKS
Project ID:	610.30041
COC number:	Not provided
Turn around time:	5 Day
Date/Time received:	Jun 26, 2020 3:00 PM
Eurofins reference:	**728378**

Sample information

☑ A detailed list of analytes logged into our LIMS, is included in the attached summary table.

☑ All samples have been received as described on the above COC.

☑ COC has been completed correctly.

☑ Attempt to chill was evident.

☑ Appropriately preserved sample containers have been used.

☑ All samples were received in good condition.

☑ Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.

☑ Appropriate sample containers have been used.

☒ Split sample sent to requested external lab.

☒ Some samples have been subcontracted.

N/A Custody Seals intact (if used).

Contact notes

If you have any questions with respect to these samples please contact:

[redacted] on Phone : [redacted] or by e.mail: [redacted]@eurofins.com

Results will be delivered electronically via e.mail to [redacted]@slrconsulting.com.

Note: A copy of these results will also be delivered to the general SLR Consulting (Sydney) email address.

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ABN – 50 005 085 521 web : www.eurofins.com.au e.mail : EnviroSales@eurofins.com

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IANZ # 1327

Christchurch
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Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 728378
Phone: 02 9428 8100
Fax:

Received: Jun 26, 2020 3:00 PM
Due: Jul 3, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	HOLD	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271											
Sydney Laboratory - NATA Site # 18217						X		X	X	X	X
Brisbane Laboratory - NATA Site # 20794							X				
Perth Laboratory - NATA Site # 23736											
External Laboratory											
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**						
1	0407_QC226_200622	Jun 22, 2020		Soil	S20-Jn48785	X	X	X	X	X	X
2	0407_QC227_200622	Jun 22, 2020		Soil	S20-Jn48786	X	X	X	X	X	X
3	0407_QC234_200622	Jun 22, 2020		Soil	S20-Jn48787	X	X	X	X	X	X
4	0407_QC237_200622	Jun 22, 2020		Soil	S20-Jn48788	X	X	X	X	X	X
Test Counts						4	4	4	4	4	4

Certificate of Analysis

eurofins | Environment Testing

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025–Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus
North Sydney
NSW 2060

Attention:	[redacted]
Report	728378-AID
Project Name	RANDWICK BARRACKS
Project ID	610.30041
Received Date	Jun 26, 2020
Date Reported	Jul 06, 2020

Methodology:

Asbestos Fibre Identification	Conducted in accordance with the Australian Standard AS 4964 – 2004: Method for the Qualitative Identification of Asbestos in Bulk Samples and in-house Method LTM-ASB-8020 by polarised light microscopy (PLM) and dispersion staining (DS) techniques. *NOTE: Positive Trace Analysis results indicate the sample contains detectable respirable fibres.*
Unknown Mineral Fibres	Mineral fibres of unknown type, as determined by PLM with DS, may require another analytical technique, such as Electron Microscopy, to confirm unequivocal identity. *NOTE: While Actinolite, Anthophyllite and Tremolite asbestos may be detected by PLM with DS, due to variability in the optical properties of these materials, AS4964 requires that these are reported as UMF unless confirmed by an independent technique.*
Subsampling Soil Samples	The whole sample submitted is first dried and then passed through a 10mm sieve followed by a 2mm sieve. All fibrous matter greater than 10mm, greater than 2mm as well as the material passing through the 2mm sieve are retained and analysed for the presence of asbestos. If the sub 2mm fraction is greater than approximately 30 to 60g then a sub-sampling routine based on ISO 3082:2009(E) is employed. *NOTE: Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be sub-sampled for trace analysis, in accordance with AS 4964-2004.*
Bonded asbestos-containing material (ACM)	The material is first examined and any fibres isolated for identification by PLM and DS. Where required, interfering matrices may be removed by disintegration using a range of heat, chemical or physical treatments, possibly in combination.The resultant material is then further examined in accordance with AS 4964 - 2004. *NOTE: Even after disintegration it may be difficult to detect the presence of asbestos in some asbestos-containing bulk materials using PLM and DS. This is due to the low grade or small length or diameter of the asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos-containing sealants and mastics, asbestos-containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.*
Limit of Reporting	The performance limitation of the AS 4964 (2004) method for non-homogeneous samples is around 0.1 g/kg (equivalent to 0.01% (w/w)). Where no asbestos is found by PLM and DS, including Trace Analysis, this is considered to be at the nominal reporting limit of 0.01% (w/w). The NEPM screening level of 0.001% (w/w) is intended as an on-site determination, not a laboratory Limit of Reporting (LOR), per se. Examination of a large sample size (e.g. 500 mL) may improve the likelihood of detecting asbestos, particularly AF, to aid assessment against the NEPM criteria. Gravimetric determinations to this level of accuracy are outside of AS 4964 and hence NATA Accreditation does not cover the performance of this service (non-NATA results shown with an asterisk). *NOTE: NATA News March 2014, p.7, states in relation to AS 4964: "This is a qualitative method with a nominal reporting limit of 0.01 % " and that currently in Australia "there is no validated method available for the quantification of asbestos".This report is consistent with the analytical procedures and reporting recommendations in the NEPM and the WA DoH.*

Accredited for compliance with ISO/IEC 17025–Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Project Name RANDWICK BARRACKS
Project ID 610.30041
Date Sampled Jun 22, 2020
Report 728378-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
0407_QC226_200622	20-Jn48785	Jun 22, 2020	Approximate Sample 57g Sample consisted of: Brown coarse-grained sandy soil and organic debris	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
0407_QC227_200622	20-Jn48786	Jun 22, 2020	Approximate Sample 71g Sample consisted of: Brown coarse-grained soil, rocks and bituminous material	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
0407_QC234_200622	20-Jn48787	Jun 22, 2020	Approximate Sample 13g Sample consisted of: Brown coarse-grained sandy soil and organic debris	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
0407_QC237_200622	20-Jn48788	Jun 22, 2020	Approximate Sample 36g Sample consisted of: Brown coarse-grained sandy soil, organic debris and plaster-like material	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Asbestos - LTM-ASB-8020	Sydney	Jun 29, 2020	Indefinite

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NATA # 1261 Site # 20794

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NATA # 1261
Site # 23736

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IANZ # 1327

Christchurch
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Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 728378
Phone: 02 9428 8100
Fax:

Received: Jun 26, 2020 3:00 PM
Due: Jul 3, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	HOLD	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271											
Sydney Laboratory - NATA Site # 18217						X		X	X	X	X
Brisbane Laboratory - NATA Site # 20794							X				
Perth Laboratory - NATA Site # 23736											
External Laboratory											
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**						
1	0407_QC226_200622	Jun 22, 2020		Soil	S20-Jn48785	X	X	X	X	X	X
2	0407_QC227_200622	Jun 22, 2020		Soil	S20-Jn48786	X	X	X	X	X	X
3	0407_QC234_200622	Jun 22, 2020		Soil	S20-Jn48787	X	X	X	X	X	X
4	0407_QC237_200622	Jun 22, 2020		Soil	S20-Jn48788	X	X	X	X	X	X
Test Counts						4	4	4	4	4	4

Internal Quality Control Review and Glossary

General

1. QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Samples were analysed on an 'as received' basis.
4. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
5. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the Sample Receipt Advice.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

Units

% w/w: weight for weight basis	grams per kilogram
Filter loading:	fibres/100 graticule areas
Reported Concentration:	fibres/mL
Flowrate:	L/min

Terms

Dry	Sample is dried by heating prior to analysis
LOR	Limit of Reporting
COC	Chain of Custody
SRA	Sample Receipt Advice
ISO	International Standards Organisation
AS	Australian Standards
WA DOH	Reference document for the NEPM. Government of Western Australia, Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia (2009), including supporting document Recommended Procedures for Laboratory Analysis of Asbestos in Soil (2011)
NEPM	National Environment Protection (Assessment of Site Contamination) Measure, 2013 (as amended)
ACM	Asbestos Containing Materials. Asbestos contained within a non-asbestos matrix, typically presented in bonded and/or sound condition. For the purposes of the NEPM, ACM is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
AF	Asbestos Fines. Asbestos containing materials, including friable, weathered and bonded materials, able to pass a 7mm x 7mm sieve. Considered under the NEPM as equivalent to “non-bonded / friable”.
FA	Fibrous Asbestos. Asbestos containing materials in a friable and/or severely weathered condition. For the purposes of the NEPM, FA is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
Friable	Asbestos-containing materials of any size that may be broken or crumbled by hand pressure. For the purposes of the NEPM, this includes both AF and FA. It is outside of the laboratory’s remit to assess degree of friability.
Trace Analysis	Analytical procedure used to detect the presence of respirable fibres in the matrix.

Comments

The samples received were not collected in an approved asbestos bag and was therefore sub-sampled from the 250mL glass jar. Valid sub-sampling procedures were applied so as to ensure that the sub-samples to be analysed accurately represented the samples received.

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

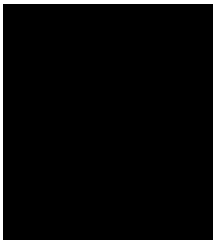
Qualifier Codes/Comments

Code	Description
N/A	Not applicable

Asbestos Counter/Identifier:

[redacted] Senior Analyst-Asbestos (NSW)

Authorised by:



Senior Analyst-Asbestos (NSW)

General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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Certificate of Analysis

SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus,
North Sydney
NSW 2060

NATA Accredited
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Accredited for compliance with ISO/IEC 17025 – Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: [redacted]

Report **728378-S**
Project name RANDWICK BARRACKS
Project ID 610.30041
Received Date Jun 26, 2020

Client Sample ID			0407_QC226_200622	[G01]0407_QC227_200622	[G01]0407_QC234_200622	0407_QC237_200622
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn48785**	**S20-Jn48786**	**S20-Jn48787**	**S20-Jn48788**
Date Sampled			**Jun 22, 2020**	**Jun 22, 2020**	**Jun 22, 2020**	**Jun 22, 2020**
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	20	mg/kg	< 20	< 20	< 40	< 20
TRH C10-C14	20	mg/kg	< 20	< 200	86	49
TRH C15-C28	50	mg/kg	70	< 500	920	230
TRH C29-C36	50	mg/kg	56	< 500	450	200
TRH C10-C36 (Total)	50	mg/kg	126	< 500	1456	479
BTEX						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.2	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.2	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.2	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.4	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.2	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.6	< 0.3
4-Bromofluorobenzene (surr.)	1	%	91	86	78	76
Volatile Organics						
1.1-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 1	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 1	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 1	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 1	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 1	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 1	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5	< 0.5	< 1	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 1	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 1	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 1	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 1	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 1	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 1	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 1	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 1	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 1	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5	< 0.5	< 1	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5	< 0.5	< 1	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5	< 0.5	< 1	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	< 0.5	< 1	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 1	< 0.5

Client Sample ID			0407_QC226_200622	G01 0407_QC227_200622	G01 0407_QC234_200622	0407_QC237_200622
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn48785**	**S20-Jn48786**	**S20-Jn48787**	**S20-Jn48788**
Date Sampled			**Jun 22, 2020**	**Jun 22, 2020**	**Jun 22, 2020**	**Jun 22, 2020**
Test/Reference	LOR	Unit				
Volatile Organics						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.2	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5	< 0.5	< 1	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 1	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5	< 0.5	< 1	< 0.5
Bromoform	0.5	mg/kg	< 0.5	< 0.5	< 1	< 0.5
Bromomethane	0.5	mg/kg	< 0.5	< 0.5	< 1	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5	< 0.5	< 1	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5	< 0.5	< 1	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 1	< 0.5
Chloroethane	0.5	mg/kg	< 0.5	< 0.5	< 1	< 0.5
Chloroform	0.5	mg/kg	< 0.5	< 0.5	< 1	< 0.5
Chloromethane	0.5	mg/kg	< 0.5	< 0.5	< 1	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 1	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 1	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 1	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5	< 0.5	< 1	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 1	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.2	< 0.1
Iodomethane	0.5	mg/kg	< 0.5	< 0.5	< 1	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	< 0.5	< 1	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.4	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5	< 0.5	< 1	< 0.5
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.2	< 0.1
Styrene	0.5	mg/kg	< 0.5	< 0.5	< 1	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5	< 0.5	< 1	< 0.5
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.2	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 1	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 1	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 1	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 1	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 1	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.6	< 0.3
Total MAH*	0.5	mg/kg	< 0.5	< 0.5	< 1	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 1	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 1	< 0.5
4-Bromofluorobenzene (surr.)	1	%	91	86	78	76
Toluene-d8 (surr.)	1	%	98	87	83	88
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene N02	0.5	mg/kg	< 0.5	< 0.5	< 1	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 40	< 20
TRH C6-C10 less BTEX (F1) N04	20	mg/kg	< 20	< 20	< 40	< 20
TRH >C10-C16	50	mg/kg	< 50	< 500	150	57
TRH >C10-C16 less Naphthalene (F2) N01	50	mg/kg	< 50	< 500	150	57
TRH >C16-C34	100	mg/kg	110	< 1000	1100	330
TRH >C34-C40	100	mg/kg	< 100	< 1000	410	180
TRH >C10-C40 (total)*	100	mg/kg	110	< 1000	1660	567

Client Sample ID			0407_QC226_200622	[G01]0407_QC227_200622	[G01]0407_QC234_200622	0407_QC237_200622
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S20-Jn48785	S20-Jn48786	S20-Jn48787	S20-Jn48788
Date Sampled			Jun 22, 2020	Jun 22, 2020	Jun 22, 2020	Jun 22, 2020
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	1.0	16	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	1.3	19	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.6	22	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	1.0	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	0.5	9.8	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	0.8	13	< 0.5	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	0.7	9.9	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	0.8	13	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	10	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	1.4	18	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	3.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	1.4	21	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	5.6	99.2	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	80	95	91	95
p-Terphenyl-d14 (surr.)	1	%	121	113	129	106
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 1	< 0.1	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.05
a-BHC	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.05
b-BHC	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.05
d-BHC	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.05
Methoxychlor	0.2	mg/kg	< 0.2	< 2	< 0.2	< 0.2
Toxaphene	1	mg/kg	< 1	< 10	< 1	< 1
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.5	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.2	< 2	< 0.2	< 0.2
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.2	< 2	< 0.2	< 0.2
Dibutylchlorendate (surr.)	1	%	INT	INT	129	118
Tetrachloro-m-xylene (surr.)	1	%	98	116	101	112

Client Sample ID			0407_QC226_200622	G01 0407_QC227_200622	G01 0407_QC234_200622	0407_QC237_200622
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn48785**	**S20-Jn48786**	**S20-Jn48787**	**S20-Jn48788**
Date Sampled			**Jun 22, 2020**	**Jun 22, 2020**	**Jun 22, 2020**	**Jun 22, 2020**
Test/Reference	LOR	Unit				
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Bolstar	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Coumaphos	2	mg/kg	< 2	< 2	< 2	< 2
Demeton-S	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Demeton-O	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Diazinon	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Dimethoate	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Disulfoton	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
EPN	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ethion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ethoprop	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Fenthion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Malathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Merphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Methyl parathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Mevinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Monocrotophos	2	mg/kg	< 2	< 2	< 2	< 2
Naled	0.2	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Omethoate	2	mg/kg	< 2	< 2	< 2	< 2
Phorate	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ronnel	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Terbufos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Tokuthion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Trichloronate	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Triphenylphosphate (surr.)	1	%	106	91	100	98
Polychlorinated Biphenyls						
Aroclor-1016	0.5	mg/kg	< 0.5	< 5	< 0.5	< 0.5
Aroclor-1221	0.1	mg/kg	< 0.1	< 1	< 0.1	< 0.1
Aroclor-1232	0.5	mg/kg	< 0.5	< 5	< 0.5	< 0.5
Aroclor-1242	0.5	mg/kg	< 0.5	< 5	< 0.5	< 0.5
Aroclor-1248	0.5	mg/kg	< 0.5	< 5	< 0.5	< 0.5
Aroclor-1254	0.5	mg/kg	< 0.5	< 5	< 0.5	< 0.5
Aroclor-1260	0.5	mg/kg	< 0.5	< 5	< 0.5	< 0.5
Total PCB*	0.5	mg/kg	< 0.5	< 5	< 0.5	< 0.5
Dibutylchlorendate (surr.)	1	%	INT	INT	129	118
Tetrachloro-m-xylene (surr.)	1	%	98	116	101	112

Client Sample ID			0407_QC226_200622	[G01]0407_QC227_200622	[G01]0407_QC234_200622	0407_QC237_200622
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S20-Jn48785	S20-Jn48786	S20-Jn48787	S20-Jn48788
Date Sampled			Jun 22, 2020	Jun 22, 2020	Jun 22, 2020	Jun 22, 2020
Test/Reference	LOR	Unit				
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1	< 1
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
2-Nitrophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
4-Nitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
Phenol-d6 (surr.)	1	%	89	72	103	114
Heavy Metals						
Arsenic	2	mg/kg	3.3	< 2	< 2	4.9
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	< 5	9.4	5.3	23
Copper	5	mg/kg	6.4	54	18	28
Lead	5	mg/kg	40	17	32	59
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	< 5	8.8	< 5	7.9
Zinc	5	mg/kg	50	58	96	190
% Moisture	1	%	14	8.0	69	42

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Sydney	Jul 01, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Sydney	Jul 01, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jul 01, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jul 01, 2020	
- Method: LTM-ORG-2010 TRH C6-C40			
Polycyclic Aromatic Hydrocarbons	Sydney	Jul 01, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (Halogenated)	Sydney	Jul 01, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (non-Halogenated)	Sydney	Jul 01, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Metals M8	Sydney	Jul 01, 2020	180 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Volatile Organics	Sydney	Jul 01, 2020	7 Days
- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices			
Eurofins | mgt Suite B15			
Organochlorine Pesticides	Sydney	Jul 01, 2020	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Organophosphorus Pesticides	Sydney	Jul 01, 2020	14 Days
- Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS			
Polychlorinated Biphenyls	Sydney	Jul 01, 2020	28 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
% Moisture	Sydney	Jun 29, 2020	14 Days
- Method: LTM-GEN-7080 Moisture			

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Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 728378
Phone: 02 9428 8100
Fax:

Received: Jun 26, 2020 3:00 PM
Due: Jul 3, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager [redacted]

Sample Detail						Asbestos - AS4964	HOLD	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271											
Sydney Laboratory - NATA Site # 18217						X		X	X	X	X
Brisbane Laboratory - NATA Site # 20794							X				
Perth Laboratory - NATA Site # 23736											
External Laboratory											
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**						
1	0407_QC226_200622	Jun 22, 2020		Soil	S20-Jn48785	X	X	X	X	X	X
2	0407_QC227_200622	Jun 22, 2020		Soil	S20-Jn48786	X	X	X	X	X	X
3	0407_QC234_200622	Jun 22, 2020		Soil	S20-Jn48787	X	X	X	X	X	X
4	0407_QC237_200622	Jun 22, 2020		Soil	S20-Jn48788	X	X	X	X	X	X
Test Counts						4	4	4	4	4	4

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

****NOTE:** pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram | **mg/L:** milligrams per litre | **ug/L:** micrograms per litre

ppm: Parts per million | **ppb:** Parts per billion | **%:** Percentage

org/100mL: Organisms per 100 millilitres | **NTU:** Nephelometric Turbidity Units | **MPN/100mL:** Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version 5.3
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling.Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
Method Blank							
BTEX							
Benzene	mg/kg	< 0.1			0.1	Pass	
Toluene	mg/kg	< 0.1			0.1	Pass	
Ethylbenzene	mg/kg	< 0.1			0.1	Pass	
m&p-Xylenes	mg/kg	< 0.2			0.2	Pass	
o-Xylene	mg/kg	< 0.1			0.1	Pass	
Xylenes - Total*	mg/kg	< 0.3			0.3	Pass	
Method Blank							
Volatile Organics							
1.1-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
1.1.1-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.1.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dibromoethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.3-Trichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.4-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.3.5-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.4-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
2-Butanone (MEK)	mg/kg	< 0.5			0.5	Pass	
2-Propanone (Acetone)	mg/kg	< 0.5			0.5	Pass	
4-Chlorotoluene	mg/kg	< 0.5			0.5	Pass	
4-Methyl-2-pentanone (MIBK)	mg/kg	< 0.5			0.5	Pass	
Allyl chloride	mg/kg	< 0.5			0.5	Pass	
Bromobenzene	mg/kg	< 0.5			0.5	Pass	
Bromochloromethane	mg/kg	< 0.5			0.5	Pass	
Bromodichloromethane	mg/kg	< 0.5			0.5	Pass	
Bromoform	mg/kg	< 0.5			0.5	Pass	
Bromomethane	mg/kg	< 0.5			0.5	Pass	
Carbon disulfide	mg/kg	< 0.5			0.5	Pass	
Carbon Tetrachloride	mg/kg	< 0.5			0.5	Pass	
Chlorobenzene	mg/kg	< 0.5			0.5	Pass	
Chloroethane	mg/kg	< 0.5			0.5	Pass	
Chloroform	mg/kg	< 0.5			0.5	Pass	
Chloromethane	mg/kg	< 0.5			0.5	Pass	
cis-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
cis-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Dibromochloromethane	mg/kg	< 0.5			0.5	Pass	
Dibromomethane	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Dichlorodifluoromethane	mg/kg	< 0.5			0.5	Pass	
Iodomethane	mg/kg	< 0.5			0.5	Pass	
Isopropyl benzene (Cumene)	mg/kg	< 0.5			0.5	Pass	
Methylene Chloride	mg/kg	< 0.5			0.5	Pass	
Styrene	mg/kg	< 0.5			0.5	Pass	
Tetrachloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Trichloroethene	mg/kg	< 0.5			0.5	Pass	
Trichlorofluoromethane	mg/kg	< 0.5			0.5	Pass	
Vinyl chloride	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Organochlorine Pesticides							
Chlordanes - Total	mg/kg	< 0.1			0.1	Pass	
4.4'-DDD	mg/kg	< 0.05			0.05	Pass	
4.4'-DDE	mg/kg	< 0.05			0.05	Pass	
4.4'-DDT	mg/kg	< 0.05			0.05	Pass	
a-BHC	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-BHC	mg/kg	< 0.05			0.05	Pass	
d-BHC	mg/kg	< 0.05			0.05	Pass	
Dieldrin	mg/kg	< 0.05			0.05	Pass	
Endosulfan I	mg/kg	< 0.05			0.05	Pass	
Endosulfan II	mg/kg	< 0.05			0.05	Pass	
Endosulfan sulphate	mg/kg	< 0.05			0.05	Pass	
Endrin	mg/kg	< 0.05			0.05	Pass	
Endrin aldehyde	mg/kg	< 0.05			0.05	Pass	
Endrin ketone	mg/kg	< 0.05			0.05	Pass	
g-BHC (Lindane)	mg/kg	< 0.05			0.05	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Heptachlor	mg/kg	< 0.05			0.05	Pass	
Heptachlor epoxide	mg/kg	< 0.05			0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05			0.05	Pass	
Methoxychlor	mg/kg	< 0.2			0.2	Pass	
Toxaphene	mg/kg	< 1			1	Pass	
Method Blank							
Organophosphorus Pesticides							
Azinphos-methyl	mg/kg	< 0.2			0.2	Pass	
Bolstar	mg/kg	< 0.2			0.2	Pass	
Chlorfenvinphos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos-methyl	mg/kg	< 0.2			0.2	Pass	
Coumaphos	mg/kg	< 2			2	Pass	
Demeton-S	mg/kg	< 0.2			0.2	Pass	
Demeton-O	mg/kg	< 0.2			0.2	Pass	
Diazinon	mg/kg	< 0.2			0.2	Pass	
Dichlorvos	mg/kg	< 0.2			0.2	Pass	
Dimethoate	mg/kg	< 0.2			0.2	Pass	
Disulfoton	mg/kg	< 0.2			0.2	Pass	
EPN	mg/kg	< 0.2			0.2	Pass	
Ethion	mg/kg	< 0.2			0.2	Pass	
Ethoprop	mg/kg	< 0.2			0.2	Pass	
Ethyl parathion	mg/kg	< 0.2			0.2	Pass	
Fenitrothion	mg/kg	< 0.2			0.2	Pass	
Fensulfothion	mg/kg	< 0.2			0.2	Pass	
Fenthion	mg/kg	< 0.2			0.2	Pass	
Malathion	mg/kg	< 0.2			0.2	Pass	
Merphos	mg/kg	< 0.2			0.2	Pass	
Methyl parathion	mg/kg	< 0.2			0.2	Pass	
Mevinphos	mg/kg	< 0.2			0.2	Pass	
Monocrotophos	mg/kg	< 2			2	Pass	
Naled	mg/kg	< 0.2			0.2	Pass	
Omethoate	mg/kg	< 2			2	Pass	
Phorate	mg/kg	< 0.2			0.2	Pass	
Pirimiphos-methyl	mg/kg	< 0.2			0.2	Pass	
Pyrazophos	mg/kg	< 0.2			0.2	Pass	
Ronnel	mg/kg	< 0.2			0.2	Pass	
Terbufos	mg/kg	< 0.2			0.2	Pass	
Tetrachlorvinphos	mg/kg	< 0.2			0.2	Pass	
Tokuthion	mg/kg	< 0.2			0.2	Pass	
Trichloronate	mg/kg	< 0.2			0.2	Pass	
Method Blank							
Polychlorinated Biphenyls							
Aroclor-1016	mg/kg	< 0.5			0.5	Pass	
Aroclor-1221	mg/kg	< 0.1			0.1	Pass	
Aroclor-1232	mg/kg	< 0.5			0.5	Pass	
Aroclor-1242	mg/kg	< 0.5			0.5	Pass	
Aroclor-1248	mg/kg	< 0.5			0.5	Pass	
Aroclor-1254	mg/kg	< 0.5			0.5	Pass	
Aroclor-1260	mg/kg	< 0.5			0.5	Pass	
Total PCB*	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Phenols (Halogenated)							
2-Chlorophenol	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2.4-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4.5-Trichlorophenol	mg/kg	< 1			1	Pass	
2.4.6-Trichlorophenol	mg/kg	< 1			1	Pass	
2.6-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
4-Chloro-3-methylphenol	mg/kg	< 1			1	Pass	
Pentachlorophenol	mg/kg	< 1			1	Pass	
Tetrachlorophenols - Total	mg/kg	< 10			10	Pass	
Method Blank							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	mg/kg	< 20			20	Pass	
2-Methyl-4.6-dinitrophenol	mg/kg	< 5			5	Pass	
2-Methylphenol (o-Cresol)	mg/kg	< 0.2			0.2	Pass	
2-Nitrophenol	mg/kg	< 1			1	Pass	
2.4-Dimethylphenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dinitrophenol	mg/kg	< 5			5	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/kg	< 0.4			0.4	Pass	
4-Nitrophenol	mg/kg	< 5			5	Pass	
Dinoseb	mg/kg	< 20			20	Pass	
Phenol	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Nickel	mg/kg	< 5			5	Pass	
Zinc	mg/kg	< 5			5	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	%	95			70-130	Pass	
TRH C10-C14	%	118			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	111			70-130	Pass	
Toluene	%	115			70-130	Pass	
Ethylbenzene	%	107			70-130	Pass	
m&p-Xylenes	%	108			70-130	Pass	
o-Xylene	%	106			70-130	Pass	
Xylenes - Total*	%	108			70-130	Pass	
LCS - % Recovery							
Volatile Organics							
1.1-Dichloroethene	%	128			70-130	Pass	
1.1.1-Trichloroethane	%	102			70-130	Pass	
1.2-Dichlorobenzene	%	93			70-130	Pass	
1.2-Dichloroethane	%	109			70-130	Pass	
Trichloroethene	%	107			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	87			70-130	Pass	
TRH C6-C10	%	93			70-130	Pass	
TRH >C10-C16	%	108			70-130	Pass	
LCS - % Recovery							

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	87			70-130	Pass	
Acenaphthylene	%	88			70-130	Pass	
Anthracene	%	99			70-130	Pass	
Benz(a)anthracene	%	83			70-130	Pass	
Benzo(a)pyrene	%	91			70-130	Pass	
Benzo(b&j)fluoranthene	%	90			70-130	Pass	
Benzo(g.h.i)perylene	%	73			70-130	Pass	
Benzo(k)fluoranthene	%	97			70-130	Pass	
Chrysene	%	85			70-130	Pass	
Dibenz(a.h)anthracene	%	90			70-130	Pass	
Fluoranthene	%	103			70-130	Pass	
Fluorene	%	96			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	85			70-130	Pass	
Naphthalene	%	89			70-130	Pass	
Phenanthrene	%	103			70-130	Pass	
Pyrene	%	113			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	105			70-130	Pass	
4.4'-DDD	%	95			70-130	Pass	
4.4'-DDE	%	100			70-130	Pass	
4.4'-DDT	%	106			70-130	Pass	
a-BHC	%	95			70-130	Pass	
Aldrin	%	114			70-130	Pass	
b-BHC	%	84			70-130	Pass	
d-BHC	%	100			70-130	Pass	
Dieldrin	%	93			70-130	Pass	
Endosulfan I	%	123			70-130	Pass	
Endosulfan II	%	82			70-130	Pass	
Endosulfan sulphate	%	108			70-130	Pass	
Endrin	%	112			70-130	Pass	
Endrin aldehyde	%	94			70-130	Pass	
Endrin ketone	%	125			70-130	Pass	
g-BHC (Lindane)	%	100			70-130	Pass	
Heptachlor	%	99			70-130	Pass	
Heptachlor epoxide	%	105			70-130	Pass	
Hexachlorobenzene	%	96			70-130	Pass	
Methoxychlor	%	116			70-130	Pass	
LCS - % Recovery							
Organophosphorus Pesticides							
Diazinon	%	93			70-130	Pass	
Dimethoate	%	75			70-130	Pass	
Ethion	%	76			70-130	Pass	
Fenitrothion	%	94			70-130	Pass	
Methyl parathion	%	104			70-130	Pass	
Mevinphos	%	87			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls							
Aroclor-1016	%	120			70-130	Pass	
Aroclor-1260	%	91			70-130	Pass	
LCS - % Recovery							
Phenols (Halogenated)							
2-Chlorophenol	%	98			30-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2.4-Dichlorophenol	%	85			30-130	Pass	
2.4.5-Trichlorophenol	%	82			30-130	Pass	
2.4.6-Trichlorophenol	%	97			30-130	Pass	
2.6-Dichlorophenol	%	87			30-130	Pass	
4-Chloro-3-methylphenol	%	97			30-130	Pass	
Pentachlorophenol	%	88			30-130	Pass	
Tetrachlorophenols - Total	%	104			30-130	Pass	
LCS - % Recovery							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	%	93			30-130	Pass	
2-Methyl-4.6-dinitrophenol	%	80			30-130	Pass	
2-Methylphenol (o-Cresol)	%	115			30-130	Pass	
2-Nitrophenol	%	94			30-130	Pass	
2.4-Dimethylphenol	%	90			30-130	Pass	
2.4-Dinitrophenol	%	80			30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	%	109			30-130	Pass	
4-Nitrophenol	%	80			30-130	Pass	
Dinoseb	%	87			30-130	Pass	
Phenol	%	115			30-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	106			70-130	Pass	
Cadmium	%	106			70-130	Pass	
Chromium	%	106			70-130	Pass	
Copper	%	107			70-130	Pass	
Lead	%	107			70-130	Pass	
Mercury	%	105			70-130	Pass	
Nickel	%	106			70-130	Pass	
Zinc	%	103			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C10-C14	W20-Jn49078	NCP	%	118			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	S20-Jl01196	NCP	%	79			70-130	Pass	
Toluene	S20-Jl01196	NCP	%	78			70-130	Pass	
Ethylbenzene	S20-Jl01196	NCP	%	76			70-130	Pass	
m&p-Xylenes	S20-Jl01196	NCP	%	77			70-130	Pass	
o-Xylene	S20-Jl01196	NCP	%	78			70-130	Pass	
Xylenes - Total*	S20-Jl01196	NCP	%	78			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
TRH >C10-C16	W20-Jn49078	NCP	%	106			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Benzo(b&j)fluoranthene	S20-Jn47643	NCP	%	125			70-130	Pass	
Benzo(g.h.i)perylene	S20-Jn51115	NCP	%	79			70-130	Pass	
Benzo(k)fluoranthene	S20-Jn47643	NCP	%	129			70-130	Pass	
Dibenz(a.h)anthracene	S20-Jn51115	NCP	%	95			70-130	Pass	
Indeno(1.2.3-cd)pyrene	S20-Jn51115	NCP	%	89			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
4.4'-DDD	S20-Jn51115	NCP	%	105			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Endosulfan II	S20-Jn47643	NCP	%	104			70-130	Pass	
Spike - % Recovery									
Phenols (Halogenated)				Result 1					
Pentachlorophenol	S20-Jl03501	NCP	%	104			30-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	S20-Jn49135	NCP	%	107			70-130	Pass	
Cadmium	S20-Jn49135	NCP	%	103			70-130	Pass	
Chromium	S20-Jn49135	NCP	%	106			70-130	Pass	
Copper	S20-Jn49135	NCP	%	106			70-130	Pass	
Lead	S20-Jn49135	NCP	%	106			70-130	Pass	
Mercury	S20-Jn49135	NCP	%	105			70-130	Pass	
Nickel	S20-Jn49135	NCP	%	110			70-130	Pass	
Zinc	S20-Jn49135	NCP	%	104			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	S20-Jn48788	CP	%	103			70-130	Pass	
Acenaphthylene	S20-Jn48788	CP	%	104			70-130	Pass	
Anthracene	S20-Jn48788	CP	%	112			70-130	Pass	
Benz(a)anthracene	S20-Jn48788	CP	%	107			70-130	Pass	
Benzo(a)pyrene	S20-Jn48788	CP	%	111			70-130	Pass	
Chrysene	S20-Jn48788	CP	%	85			70-130	Pass	
Fluoranthene	S20-Jn48788	CP	%	120			70-130	Pass	
Fluorene	S20-Jn48788	CP	%	99			70-130	Pass	
Naphthalene	S20-Jn48788	CP	%	102			70-130	Pass	
Phenanthrene	S20-Jn48788	CP	%	109			70-130	Pass	
Pyrene	S20-Jn48788	CP	%	115			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
Chlordanes - Total	S20-Jn48788	CP	%	108			70-130	Pass	
4.4'-DDE	S20-Jn48788	CP	%	113			70-130	Pass	
4.4'-DDT	S20-Jn48788	CP	%	78			70-130	Pass	
a-BHC	S20-Jn48788	CP	%	94			70-130	Pass	
Aldrin	S20-Jn48788	CP	%	122			70-130	Pass	
b-BHC	S20-Jn48788	CP	%	103			70-130	Pass	
d-BHC	S20-Jn48788	CP	%	114			70-130	Pass	
Dieldrin	S20-Jn48788	CP	%	115			70-130	Pass	
Endosulfan I	S20-Jn48788	CP	%	130			70-130	Pass	
Endosulfan sulphate	S20-Jn48788	CP	%	108			70-130	Pass	
Endrin	S20-Jn48788	CP	%	126			70-130	Pass	
Endrin aldehyde	S20-Jn48788	CP	%	94			70-130	Pass	
Endrin ketone	S20-Jn48788	CP	%	110			70-130	Pass	
g-BHC (Lindane)	S20-Jn48788	CP	%	99			70-130	Pass	
Heptachlor	S20-Jn48788	CP	%	125			70-130	Pass	
Heptachlor epoxide	S20-Jn48788	CP	%	123			70-130	Pass	
Hexachlorobenzene	S20-Jn48788	CP	%	106			70-130	Pass	
Methoxychlor	S20-Jn48788	CP	%	85			70-130	Pass	
Spike - % Recovery									
Organophosphorus Pesticides				Result 1					
Diazinon	S20-Jn48788	CP	%	110			70-130	Pass	
Dimethoate	S20-Jn48788	CP	%	123			70-130	Pass	
Ethion	S20-Jn48788	CP	%	130			70-130	Pass	
Fenitrothion	S20-Jn48788	CP	%	122			70-130	Pass	
Methyl parathion	S20-Jn48788	CP	%	121			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Mevinphos	S20-Jn48788	CP	%	119			70-130	Pass	
Spike - % Recovery									
Polychlorinated Biphenyls				Result 1					
Aroclor-1016	S20-Jn48788	CP	%	81			70-130	Pass	
Aroclor-1260	S20-Jn48788	CP	%	119			70-130	Pass	
Spike - % Recovery									
Phenols (Halogenated)				Result 1					
2-Chlorophenol	S20-Jn48788	CP	%	109			30-130	Pass	
2.4-Dichlorophenol	S20-Jn48788	CP	%	110			30-130	Pass	
2.4.5-Trichlorophenol	S20-Jn48788	CP	%	101			30-130	Pass	
2.4.6-Trichlorophenol	S20-Jn48788	CP	%	103			30-130	Pass	
2.6-Dichlorophenol	S20-Jn48788	CP	%	101			30-130	Pass	
4-Chloro-3-methylphenol	S20-Jn48788	CP	%	129			30-130	Pass	
Tetrachlorophenols - Total	S20-Jn48788	CP	%	99			30-130	Pass	
Spike - % Recovery									
Phenols (non-Halogenated)				Result 1					
2-Cyclohexyl-4.6-dinitrophenol	S20-Jn48788	CP	%	113			30-130	Pass	
2-Methyl-4.6-dinitrophenol	S20-Jn48788	CP	%	102			30-130	Pass	
2-Methylphenol (o-Cresol)	S20-Jn48788	CP	%	121			30-130	Pass	
2-Nitrophenol	S20-Jn48788	CP	%	122			30-130	Pass	
2.4-Dimethylphenol	S20-Jn48788	CP	%	76			30-130	Pass	
2.4-Dinitrophenol	S20-Jn48788	CP	%	86			70-130	Pass	
3&4-Methylphenol (m&p-Cresol)	S20-Jn48788	CP	%	119			30-130	Pass	
4-Nitrophenol	S20-Jn48788	CP	%	124			30-130	Pass	
Dinoseb	S20-Jn48788	CP	%	114			30-130	Pass	
Phenol	S20-Jn48788	CP	%	125			30-130	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C6-C9	S20-Jn44834	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	W20-Jn49074	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	W20-Jn49074	NCP	mg/kg	< 50	57	53	30%	Fail	Q15
TRH C29-C36	W20-Jn49074	NCP	mg/kg	< 50	51	41	30%	Fail	Q15
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S20-Jn44834	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Toluene	S20-Jn44834	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Ethylbenzene	S20-Jn44834	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
m&p-Xylenes	S20-Jn44834	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
o-Xylene	S20-Jn44834	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes - Total*	S20-Jn44834	NCP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
1.1-Dichloroethane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1-Dichloroethene	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1-Trichloroethane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2-Trichloroethane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dibromoethane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichlorobenzene	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloroethane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloropropane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.3-Trichloropropane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
1.2.4-Trimethylbenzene	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichlorobenzene	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichloropropane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3.5-Trimethylbenzene	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.4-Dichlorobenzene	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Butanone (MEK)	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Propanone (Acetone)	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chlorotoluene	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Methyl-2-pentanone (MIBK)	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Allyl chloride	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromobenzene	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromochloromethane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromodichloromethane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromoform	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromomethane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon disulfide	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon Tetrachloride	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chlorobenzene	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroethane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroform	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloromethane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.2-Dichloroethene	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.3-Dichloropropene	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromochloromethane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromomethane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dichlorodifluoromethane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Iodomethane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Isopropyl benzene (Cumene)	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Methylene Chloride	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Styrene	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Tetrachloroethene	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.2-Dichloroethene	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.3-Dichloropropene	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichloroethene	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichlorofluoromethane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Vinyl chloride	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	S20-Jn44834	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH >C10-C16	W20-Jn49074	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	W20-Jn49074	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	W20-Jn49074	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	S20-Jn49132	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	S20-Jn49132	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	S20-Jn49132	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	S20-Jn49132	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	S20-Jn49132	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	S20-Jn49132	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	S20-Jn49132	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	S20-Jn49132	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	S20-Jn49132	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Dibenz(a.h)anthracene	S20-Jn49132	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	S20-Jn49132	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	S20-Jn49132	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	S20-Jn49132	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	S20-Jn49132	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	S20-Jn49132	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	S20-Jn49132	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	S20-Jn49132	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	S20-Jn49132	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	S20-Jn49132	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	S20-Jn49132	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-BHC	S20-Jn49132	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	S20-Jn49132	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-BHC	S20-Jn49132	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-BHC	S20-Jn49132	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	S20-Jn49132	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	S20-Jn49132	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	S20-Jn49132	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	S20-Jn49132	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	S20-Jn49132	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	S20-Jn49132	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	S20-Jn49132	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-BHC (Lindane)	S20-Jn49132	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	S20-Jn49132	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	S20-Jn49132	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	S20-Jn49132	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	S20-Jn49132	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Azinphos-methyl	S20-Jn49132	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Bolstar	S20-Jn49132	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorfenvinphos	S20-Jn49132	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos	S20-Jn49132	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos-methyl	S20-Jn49132	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Coumaphos	S20-Jn49132	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Demeton-S	S20-Jn49132	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Demeton-O	S20-Jn49132	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Diazinon	S20-Jn49132	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dichlorvos	S20-Jn49132	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dimethoate	S20-Jn49132	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Disulfoton	S20-Jn49132	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
EPN	S20-Jn49132	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethion	S20-Jn49132	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethoprop	S20-Jn49132	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethyl parathion	S20-Jn49132	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenitrothion	S20-Jn49132	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fensulfothion	S20-Jn49132	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenthion	S20-Jn49132	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Malathion	S20-Jn49132	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Merphos	S20-Jn49132	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Methyl parathion	S20-Jn49132	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Mevinphos	S20-Jn49132	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	

Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Monocrotophos	S20-Jn49132	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Naled	S20-Jn49132	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Omethoate	S20-Jn49132	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Phorate	S20-Jn49132	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pirimiphos-methyl	S20-Jn49132	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pyrazophos	S20-Jn49132	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ronnel	S20-Jn49132	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Terbufos	S20-Jn49132	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tetrachlorvinphos	S20-Jn49132	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tokuthion	S20-Jn49132	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Trichloronate	S20-Jn49132	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Aroclor-1016	S20-Jn44999	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1221	S20-Jn44999	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1232	S20-Jn44999	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1242	S20-Jn44999	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1248	S20-Jn44999	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1254	S20-Jn44999	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1260	S20-Jn44999	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Total PCB*	S20-Jn44999	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Phenols (Halogenated)				Result 1	Result 2	RPD			
2-Chlorophenol	S20-Jn49132	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dichlorophenol	S20-Jn49132	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4.5-Trichlorophenol	S20-Jn49132	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4.6-Trichlorophenol	S20-Jn49132	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2.6-Dichlorophenol	S20-Jn49132	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chloro-3-methylphenol	S20-Jn49132	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Pentachlorophenol	S20-Jn49132	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Tetrachlorophenols - Total	S20-Jn49132	NCP	mg/kg	< 10	< 10	<1	30%	Pass	
Duplicate									
Phenols (non-Halogenated)				Result 1	Result 2	RPD			
2-Cyclohexyl-4.6-dinitrophenol	S20-Jn49132	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
2-Methyl-4.6-dinitrophenol	S20-Jn49132	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Methylphenol (o-Cresol)	S20-Jn49132	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
2-Nitrophenol	S20-Jn49132	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4-Dimethylphenol	S20-Jn49132	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dinitrophenol	S20-Jn49132	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
3&4-Methylphenol (m&p-Cresol)	S20-Jn49132	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
4-Nitrophenol	S20-Jn49132	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Dinoseb	S20-Jn49132	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
Phenol	S20-Jn49132	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	S20-Jn47650	NCP	%	13	14	5.0	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	S20-Jn48786	CP	mg/kg	< 2	2.5	24	30%	Pass	
Cadmium	S20-Jn48786	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	S20-Jn48786	CP	mg/kg	9.4	16	54	30%	Fail	Q15
Copper	S20-Jn48786	CP	mg/kg	54	37	39	30%	Fail	Q15
Lead	S20-Jn48786	CP	mg/kg	17	21	21	30%	Pass	
Mercury	S20-Jn48786	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	

Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Nickel	S20-Jn48786	CP	mg/kg	8.8	14	49	30%	Fail	Q15
Zinc	S20-Jn48786	CP	mg/kg	58	75	26	30%	Pass	

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
G01	The LORs have been raised due to matrix interference
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
Q15	The RPD reported passes Eurofins Environment Testing's QC - Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report.

Authorised By

[redacted]

Analytical Services Manager
Senior Analyst-Organic (NSW)
Senior Analyst-Metal (NSW)
Senior Analyst-Asbestos (NSW)

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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CHAIN OF CUSTODY DOCUMENTATION

SLR

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Dawin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☒ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐

CLIENT: Defence Housing Australia

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGER: [redacted]

PM CONTACT No: [redacted]

COMMENTS OR ADDITIONAL DIRECTIONS

LABORATORY: SGS Australia

LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015

SAMPLER: [redacted]

SAMPLER CONTACT No: [redacted]

Email Reports and Invoices to: LQRSYD@slrconsulting.com ; [redacted]

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number of

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: Suite A	Asbestos ONLY	HOLD	C6-C10/BETXN						Additional Information (Comment on any gross contamination or specific requirements)
	0407_QC141_200623	23/06/2020	Soil	jar, pfas	x									Please hold all PFAS containers
	0407_QC241_200623	23/06/2020	Soil	jar, pfas	x									Please send to Eurofins
	0407_QC138_200623	23/06/2020	Soil	jar, pfas	x									
	0407_QC238_200623	23/06/2020	Soil	jar, pfas	x									Please send to Eurofins
	0407_QC411_200623	23/06/2020	Trip Blank	vial				x						
	0407_QC511_200623	23/06/2020	Trip Spike	vial				x						

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time	18/06/2020	**Received by**	Sign [redacted]	Date / Time	26/6/20 3:00PM
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	**Temperature Received:** 17.10°C
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	

#728435

[redacted] 26/06/20 3PM #728435

[redacted] (Sydney)

From: [redacted]@slrconsulting.com>
Sent: Thursday, 25 June 2020 7:39 PM
To: [redacted]
Subject: [EXTERNAL] RE: SE207912-610.30041

*** WARNING: this message is from an EXTERNAL SENDER. Please be cautious, particularly with links and attachments. ***

Hi [redacted]

Yes, please analyse QC133 for Suite A, and forward QC233 to Eurofins for analysis of Suite A. My apologies for the confusion.

Thank you.

SLR

[redacted]

Senior Project Consultant - Land Quality & Remediation

Please note in response to the COVID-19 Pandemic and physical distancing recommendations from the Australian Government, SLR is encouraging staff to work remotely and implement flexible working hours if necessary. If you have received this email outside of regular office hours, it is not expected that you will respond until your own working hours commence.

d +61 9424 2220
o +61 2 9427 8100
m +61 404 840 134
e [redacted]slrconsulting.com

SLR Consulting Australia Pty Ltd
202 Submarine School, Sub Base Platypus, North Sydney, NSW, Australia, 2060

WINNERS: RoSPA Gold Award, 2017 WINNERS: International Business Excellence Award, 2016

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Any advice or opinion is provided on the basis that it has been prepared by SLR with reasonable skill, care and diligence, taking account of the manpower, timescales and resources devoted to it by agreement with its Client. It is subject to the terms and conditions of any appointment to which it relates. Parties with whom SLR is not in a contractual relationship in relation to the subject of the message should not use or place reliance on any information, advice, recommendations and opinions in this message and any attachment(s) for any purpose.

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From: [redacted] (Sydney [redacted]@sgs.com>
Sent: Thursday, 25 June 2020 11:23 AM
To: [redacted]
[redacted]@slrconsulting.com>
Subject: SE207912-610.30041

Dear All,

eurofins | Environment Testing

Melbourne
6 Monterey Road
Dandenong South Vic 3175
Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

Sydney
Unit F3, Building F
16 Mars Road
Lane Cove West NSW 2066
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

Brisbane
1/21 Smallwood Place
Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Perth
2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261 Site # 23736

ABN – 50 005 085 521 e.mail : EnviroSales@eurofins.com web : www.eurofins.com.au

Sample Receipt Advice

Company name:	**SLR Consulting (Sydney)**
Contact name:	[redacted]
Project name:	RANDWICK BARRACKS
Project ID:	610.30041
COC number:	Not provided
Turn around time:	5 Day
Date/Time received:	Jun 26, 2020 3:00 PM
Eurofins reference:	**728435**

Sample information

☑ A detailed list of analytes logged into our LIMS, is included in the attached summary table.

☑ All samples have been received as described on the above COC.

☑ COC has been completed correctly.

☑ Attempt to chill was evident.

☑ Appropriately preserved sample containers have been used.

☑ All samples were received in good condition.

☑ Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.

☑ Appropriate sample containers have been used.

☒ Split sample sent to requested external lab.

☒ Some samples have been subcontracted.

N/A Custody Seals intact (if used).

Contact notes

If you have any questions with respect to these samples please contact:

[redacted] on Phone : [redacted] or by e.mail: [redacted]@eurofins.com

Results will be delivered electronically via e.mail to [redacted]@slrconsulting.com.

Note: A copy of these results will also be delivered to the general SLR Consulting (Sydney) email address.

eurofins | Environment Testing

ABN – 50 005 085 521 web : www.eurofins.com.au e.mail : EnviroSales@eurofins.com

Australia

Melbourne
6 Monterey Road
Dandenong South VIC 3175
Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

Sydney
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16 Mars Road
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Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

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Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Perth
2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261
Site # 23736

New Zealand

Auckland
35 O'Rorke Road
Penrose, Auckland 1061
Phone : +64 9 526 45 51
IANZ # 1327

Christchurch
43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 728435
Phone: 02 9428 8100
Fax:

Received: Jun 26, 2020 3:00 PM
Due: Jul 3, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271										
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	0407_QC241_200623	Jun 23, 2020		Soil	S20-Jn49124	X	X	X	X	X
2	0407_QC233_200623	Jun 23, 2020		Soil	S20-Jn49125	X	X	X	X	X
3	0407_QC238_200623	Jun 23, 2020		Soil	S20-Jn49126	X	X	X	X	X
Test Counts						3	3	3	3	3

Certificate of Analysis

eurofins | Environment Testing

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025–Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus
North Sydney
NSW 2060

Attention:	[redacted]
Report	728435-AID
Project Name	RANDWICK BARRACKS
Project ID	610.30041
Received Date	Jun 26, 2020
Date Reported	Jul 06, 2020

Methodology:

Asbestos Fibre Identification	Conducted in accordance with the Australian Standard AS 4964 – 2004: Method for the Qualitative Identification of Asbestos in Bulk Samples and in-house Method LTM-ASB-8020 by polarised light microscopy (PLM) and dispersion staining (DS) techniques. *NOTE: Positive Trace Analysis results indicate the sample contains detectable respirable fibres.*
Unknown Mineral Fibres	Mineral fibres of unknown type, as determined by PLM with DS, may require another analytical technique, such as Electron Microscopy, to confirm unequivocal identity. *NOTE: While Actinolite, Anthophyllite and Tremolite asbestos may be detected by PLM with DS, due to variability in the optical properties of these materials, AS4964 requires that these are reported as UMF unless confirmed by an independent technique.*
Subsampling Soil Samples	The whole sample submitted is first dried and then passed through a 10mm sieve followed by a 2mm sieve. All fibrous matter greater than 10mm, greater than 2mm as well as the material passing through the 2mm sieve are retained and analysed for the presence of asbestos. If the sub 2mm fraction is greater than approximately 30 to 60g then a sub-sampling routine based on ISO 3082:2009(E) is employed. *NOTE: Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be sub-sampled for trace analysis, in accordance with AS 4964-2004.*
Bonded asbestos-containing material (ACM)	The material is first examined and any fibres isolated for identification by PLM and DS. Where required, interfering matrices may be removed by disintegration using a range of heat, chemical or physical treatments, possibly in combination.The resultant material is then further examined in accordance with AS 4964 - 2004. *NOTE: Even after disintegration it may be difficult to detect the presence of asbestos in some asbestos-containing bulk materials using PLM and DS. This is due to the low grade or small length or diameter of the asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos-containing sealants and mastics, asbestos-containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.*
Limit of Reporting	The performance limitation of the AS 4964 (2004) method for non-homogeneous samples is around 0.1 g/kg (equivalent to 0.01% (w/w)). Where no asbestos is found by PLM and DS, including Trace Analysis, this is considered to be at the nominal reporting limit of 0.01% (w/w). The NEPM screening level of 0.001% (w/w) is intended as an on-site determination, not a laboratory Limit of Reporting (LOR), per se. Examination of a large sample size (e.g. 500 mL) may improve the likelihood of detecting asbestos, particularly AF, to aid assessment against the NEPM criteria. Gravimetric determinations to this level of accuracy are outside of AS 4964 and hence NATA Accreditation does not cover the performance of this service (non-NATA results shown with an asterisk). *NOTE: NATA News March 2014, p.7, states in relation to AS 4964: "This is a qualitative method with a nominal reporting limit of 0.01 % " and that currently in Australia "there is no validated method available for the quantification of asbestos".This report is consistent with the analytical procedures and reporting recommendations in the NEPM and the WA DoH.*

Accredited for compliance with ISO/IEC 17025–Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Project Name RANDWICK BARRACKS
Project ID 610.30041
Date Sampled Jun 23, 2020
Report 728435-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
0407_QC241_200623	20-Jn49124	Jun 23, 2020	Approximate Sample 33g Sample consisted of: Brown coarse-grained sandy soil and organic debris	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
0407_QC233_200623	20-Jn49125	Jun 23, 2020	Approximate Sample 61g Sample consisted of: White fine-grained sandy soil	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
0407_QC238_200623	20-Jn49126	Jun 23, 2020	Approximate Sample 41g Sample consisted of: Brown coarse-grained sandy soil and cement material	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Asbestos - LTM-ASB-8020	Sydney	Jun 29, 2020	Indefinite

eurofins | Environment Testing

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Australia

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NATA # 1261
Site # 1254 & 14271

Sydney
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Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

Brisbane
1/21 Smallwood Place
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NATA # 1261 Site # 20794

Perth
2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261
Site # 23736

New Zealand

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Phone : +64 9 526 45 51
IANZ # 1327

Christchurch
43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 728435
Phone: 02 9428 8100
Fax:

Received: Jun 26, 2020 3:00 PM
Due: Jul 3, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271										
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	0407_QC241_200623	Jun 23, 2020		Soil	S20-Jn49124	X	X	X	X	X
2	0407_QC233_200623	Jun 23, 2020		Soil	S20-Jn49125	X	X	X	X	X
3	0407_QC238_200623	Jun 23, 2020		Soil	S20-Jn49126	X	X	X	X	X
Test Counts						3	3	3	3	3

Internal Quality Control Review and Glossary

General

1. QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Samples were analysed on an 'as received' basis.
4. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
5. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the Sample Receipt Advice.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

Units

% w/w: weight for weight basis	grams per kilogram
Filter loading:	fibres/100 graticule areas
Reported Concentration:	fibres/mL
Flowrate:	L/min

Terms

Dry	Sample is dried by heating prior to analysis
LOR	Limit of Reporting
COC	Chain of Custody
SRA	Sample Receipt Advice
ISO	International Standards Organisation
AS	Australian Standards
WA DOH	Reference document for the NEPM. Government of Western Australia, Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia (2009), including supporting document Recommended Procedures for Laboratory Analysis of Asbestos in Soil (2011)
NEPM	National Environment Protection (Assessment of Site Contamination) Measure, 2013 (as amended)
ACM	Asbestos Containing Materials. Asbestos contained within a non-asbestos matrix, typically presented in bonded and/or sound condition. For the purposes of the NEPM, ACM is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
AF	Asbestos Fines. Asbestos containing materials, including friable, weathered and bonded materials, able to pass a 7mm x 7mm sieve. Considered under the NEPM as equivalent to “non-bonded / friable”.
FA	Fibrous Asbestos. Asbestos containing materials in a friable and/or severely weathered condition. For the purposes of the NEPM, FA is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
Friable	Asbestos-containing materials of any size that may be broken or crumbled by hand pressure. For the purposes of the NEPM, this includes both AF and FA. It is outside of the laboratory’s remit to assess degree of friability.
Trace Analysis	Analytical procedure used to detect the presence of respirable fibres in the matrix.

Comments

The samples received were not collected in an approved asbestos bag and was therefore sub-sampled from the 250mL glass jar. Valid sub-sampling procedures were applied so as to ensure that the sub-samples to be analysed accurately represented the samples received.

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

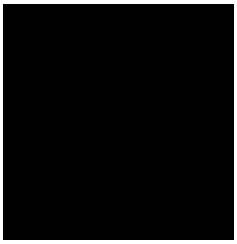
Qualifier Codes/Comments

Code	Description
N/A	Not applicable

Asbestos Counter/Identifier:

[redacted] Senior Analyst-Asbestos (NSW)

Authorised by:



Senior Analyst-Asbestos (NSW)

General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus,
North Sydney
NSW 2060

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: [redacted]

Report **728435-S**
Project name RANDWICK BARRACKS
Project ID 610.30041
Received Date Jun 26, 2020

Client Sample ID			0407_QC241_200623	0407_QC233_200623	0407_QC238_200623
Sample Matrix			**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn49124**	**S20-Jn49125**	**S20-Jn49126**
Date Sampled			**Jun 23, 2020**	**Jun 23, 2020**	**Jun 23, 2020**
Test/Reference	LOR	Unit			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions					
TRH C6-C9	20	mg/kg	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	41	< 20	< 20
TRH C15-C28	50	mg/kg	270	< 50	130
TRH C29-C36	50	mg/kg	210	< 50	120
TRH C10-C36 (Total)	50	mg/kg	521	< 50	250
BTEX					
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	92	132	85
Volatile Organics					
1.1-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5	< 0.5	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5

Client Sample ID			0407_QC241_200623	0407_QC233_200623	0407_QC238_200623
Sample Matrix			**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn49124**	**S20-Jn49125**	**S20-Jn49126**
Date Sampled			**Jun 23, 2020**	**Jun 23, 2020**	**Jun 23, 2020**
Test/Reference	LOR	Unit			
Volatile Organics					
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Bromoform	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Bromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Chloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Chloroform	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Chloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Iodomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	< 0.5	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Styrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3
Total MAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5
4-Bromofluorobenzene (surr.)	1	%	92	132	85
Toluene-d8 (surr.)	1	%	99	85	84
Total Recoverable Hydrocarbons - 2013 NEPM Fractions					
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	50	< 50	< 50
TRH >C16-C34	100	mg/kg	380	< 100	200
TRH >C34-C40	100	mg/kg	200	< 100	110
TRH >C10-C40 (total)*	100	mg/kg	630	< 100	310

Client Sample ID			0407_QC241_200623	0407_QC233_200623	0407_QC238_200623
Sample Matrix			**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn49124**	**S20-Jn49125**	**S20-Jn49126**
Date Sampled			**Jun 23, 2020**	**Jun 23, 2020**	**Jun 23, 2020**
Test/Reference	LOR	Unit			
Polycyclic Aromatic Hydrocarbons					
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	84	105	71
p-Terphenyl-d14 (surr.)	1	%	102	93	73
Organochlorine Pesticides					
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05
a-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05
b-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05
d-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	0.06	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Methoxychlor	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Toxaphene	1	mg/kg	< 1	< 1	< 1
Aldrin and Dieldrin (Total)*	0.05	mg/kg	0.06	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.2	< 0.2	< 0.2
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.2	< 0.2	< 0.2
Dibutylchlorendate (surr.)	1	%	83	93	125
Tetrachloro-m-xylene (surr.)	1	%	50	68	75

Client Sample ID			0407_QC241_200623	0407_QC233_200623	0407_QC238_200623
Sample Matrix			**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn49124**	**S20-Jn49125**	**S20-Jn49126**
Date Sampled			**Jun 23, 2020**	**Jun 23, 2020**	**Jun 23, 2020**
Test/Reference	LOR	Unit			
Organophosphorus Pesticides					
Azinphos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Bolstar	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Coumaphos	2	mg/kg	< 2	< 2	< 2
Demeton-S	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Demeton-O	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Diazinon	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Dimethoate	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Disulfoton	0.2	mg/kg	< 0.2	< 0.2	< 0.2
EPN	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Ethion	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Ethoprop	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Fenthion	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Malathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Merphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Methyl parathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Mevinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Monocrotophos	2	mg/kg	< 2	< 2	< 2
Naled	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Omethoate	2	mg/kg	< 2	< 2	< 2
Phorate	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Ronnel	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Terbufos	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Tokuthion	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Trichloronate	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Triphenylphosphate (surr.)	1	%	70	87	109
Polychlorinated Biphenyls					
Aroclor-1016	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Aroclor-1232	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Aroclor-1242	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Aroclor-1248	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Aroclor-1254	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Aroclor-1260	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Total PCB*	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Dibutylchlorendate (surr.)	1	%	83	93	125
Tetrachloro-m-xylene (surr.)	1	%	50	68	75

Client Sample ID			0407_QC241_200623	0407_QC233_200623	0407_QC238_200623
Sample Matrix			**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn49124**	**S20-Jn49125**	**S20-Jn49126**
Date Sampled			**Jun 23, 2020**	**Jun 23, 2020**	**Jun 23, 2020**
Test/Reference	LOR	Unit			
Phenols (Halogenated)					
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1
Phenols (non-Halogenated)					
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	< 0.2
2-Nitrophenol	1	mg/kg	< 1	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5	< 5	< 5
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	< 0.4
4-Nitrophenol	5	mg/kg	< 5	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20
Phenol-d6 (surr.)	1	%	71	88	61
Heavy Metals					
Arsenic	2	mg/kg	9.2	< 2	9.7
Cadmium	0.4	mg/kg	< 0.4	< 0.4	0.7
Chromium	5	mg/kg	26	< 5	35
Copper	5	mg/kg	71	< 5	170
Lead	5	mg/kg	120	< 5	170
Mercury	0.1	mg/kg	0.1	< 0.1	0.2
Nickel	5	mg/kg	20	< 5	24
Zinc	5	mg/kg	330	< 5	620
% Moisture	1	%	30	1.4	23

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Sydney	Jul 01, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Sydney	Jul 01, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jul 01, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jul 01, 2020	
- Method: LTM-ORG-2010 TRH C6-C40			
Polycyclic Aromatic Hydrocarbons	Sydney	Jul 01, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (Halogenated)	Sydney	Jul 01, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (non-Halogenated)	Sydney	Jul 01, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Metals M8	Sydney	Jul 01, 2020	180 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Volatile Organics	Sydney	Jul 01, 2020	7 Days
- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices			
Eurofins | mgt Suite B15			
Organochlorine Pesticides	Sydney	Jul 01, 2020	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Organophosphorus Pesticides	Sydney	Jul 01, 2020	14 Days
- Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS			
Polychlorinated Biphenyls	Sydney	Jul 01, 2020	28 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
% Moisture	Sydney	Jun 29, 2020	14 Days
- Method: LTM-GEN-7080 Moisture			

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Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 728435
Phone: 02 9428 8100
Fax:

Received: Jun 26, 2020 3:00 PM
Due: Jul 3, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271										
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	0407_QC241_200623	Jun 23, 2020		Soil	S20-Jn49124	X	X	X	X	X
2	0407_QC233_200623	Jun 23, 2020		Soil	S20-Jn49125	X	X	X	X	X
3	0407_QC238_200623	Jun 23, 2020		Soil	S20-Jn49126	X	X	X	X	X
Test Counts						3	3	3	3	3

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

****NOTE:** pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram
mg/L: milligrams per litre
ug/L: micrograms per litre
ppm: Parts per million
ppb: Parts per billion
%: Percentage
org/100mL: Organisms per 100 millilitres
NTU: Nephelometric Turbidity Units
MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version 5.3
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling.Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
Method Blank							
BTEX							
Benzene	mg/kg	< 0.1			0.1	Pass	
Toluene	mg/kg	< 0.1			0.1	Pass	
Ethylbenzene	mg/kg	< 0.1			0.1	Pass	
m&p-Xylenes	mg/kg	< 0.2			0.2	Pass	
o-Xylene	mg/kg	< 0.1			0.1	Pass	
Xylenes - Total*	mg/kg	< 0.3			0.3	Pass	
Method Blank							
Volatile Organics							
1.1-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
1.1.1-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.1.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dibromoethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.3-Trichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.4-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.3.5-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.4-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
2-Butanone (MEK)	mg/kg	< 0.5			0.5	Pass	
2-Propanone (Acetone)	mg/kg	< 0.5			0.5	Pass	
4-Chlorotoluene	mg/kg	< 0.5			0.5	Pass	
4-Methyl-2-pentanone (MIBK)	mg/kg	< 0.5			0.5	Pass	
Allyl chloride	mg/kg	< 0.5			0.5	Pass	
Bromobenzene	mg/kg	< 0.5			0.5	Pass	
Bromochloromethane	mg/kg	< 0.5			0.5	Pass	
Bromodichloromethane	mg/kg	< 0.5			0.5	Pass	
Bromoform	mg/kg	< 0.5			0.5	Pass	
Bromomethane	mg/kg	< 0.5			0.5	Pass	
Carbon disulfide	mg/kg	< 0.5			0.5	Pass	
Carbon Tetrachloride	mg/kg	< 0.5			0.5	Pass	
Chlorobenzene	mg/kg	< 0.5			0.5	Pass	
Chloroethane	mg/kg	< 0.5			0.5	Pass	
Chloroform	mg/kg	< 0.5			0.5	Pass	
Chloromethane	mg/kg	< 0.5			0.5	Pass	
cis-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
cis-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Dibromochloromethane	mg/kg	< 0.5			0.5	Pass	
Dibromomethane	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Dichlorodifluoromethane	mg/kg	< 0.5			0.5	Pass	
Iodomethane	mg/kg	< 0.5			0.5	Pass	
Isopropyl benzene (Cumene)	mg/kg	< 0.5			0.5	Pass	
Methylene Chloride	mg/kg	< 0.5			0.5	Pass	
Styrene	mg/kg	< 0.5			0.5	Pass	
Tetrachloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Trichloroethene	mg/kg	< 0.5			0.5	Pass	
Trichlorofluoromethane	mg/kg	< 0.5			0.5	Pass	
Vinyl chloride	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Organochlorine Pesticides							
Chlordanes - Total	mg/kg	< 0.1			0.1	Pass	
4.4'-DDD	mg/kg	< 0.05			0.05	Pass	
4.4'-DDE	mg/kg	< 0.05			0.05	Pass	
4.4'-DDT	mg/kg	< 0.05			0.05	Pass	
a-BHC	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-BHC	mg/kg	< 0.05			0.05	Pass	
d-BHC	mg/kg	< 0.05			0.05	Pass	
Dieldrin	mg/kg	< 0.05			0.05	Pass	
Endosulfan I	mg/kg	< 0.05			0.05	Pass	
Endosulfan II	mg/kg	< 0.05			0.05	Pass	
Endosulfan sulphate	mg/kg	< 0.05			0.05	Pass	
Endrin	mg/kg	< 0.05			0.05	Pass	
Endrin aldehyde	mg/kg	< 0.05			0.05	Pass	
Endrin ketone	mg/kg	< 0.05			0.05	Pass	
g-BHC (Lindane)	mg/kg	< 0.05			0.05	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Heptachlor	mg/kg	< 0.05			0.05	Pass	
Heptachlor epoxide	mg/kg	< 0.05			0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05			0.05	Pass	
Methoxychlor	mg/kg	< 0.2			0.2	Pass	
Toxaphene	mg/kg	< 1			1	Pass	
Method Blank							
Organophosphorus Pesticides							
Azinphos-methyl	mg/kg	< 0.2			0.2	Pass	
Bolstar	mg/kg	< 0.2			0.2	Pass	
Chlorfenvinphos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos-methyl	mg/kg	< 0.2			0.2	Pass	
Coumaphos	mg/kg	< 2			2	Pass	
Demeton-S	mg/kg	< 0.2			0.2	Pass	
Demeton-O	mg/kg	< 0.2			0.2	Pass	
Diazinon	mg/kg	< 0.2			0.2	Pass	
Dichlorvos	mg/kg	< 0.2			0.2	Pass	
Dimethoate	mg/kg	< 0.2			0.2	Pass	
Disulfoton	mg/kg	< 0.2			0.2	Pass	
EPN	mg/kg	< 0.2			0.2	Pass	
Ethion	mg/kg	< 0.2			0.2	Pass	
Ethoprop	mg/kg	< 0.2			0.2	Pass	
Ethyl parathion	mg/kg	< 0.2			0.2	Pass	
Fenitrothion	mg/kg	< 0.2			0.2	Pass	
Fensulfothion	mg/kg	< 0.2			0.2	Pass	
Fenthion	mg/kg	< 0.2			0.2	Pass	
Malathion	mg/kg	< 0.2			0.2	Pass	
Merphos	mg/kg	< 0.2			0.2	Pass	
Methyl parathion	mg/kg	< 0.2			0.2	Pass	
Mevinphos	mg/kg	< 0.2			0.2	Pass	
Monocrotophos	mg/kg	< 2			2	Pass	
Naled	mg/kg	< 0.2			0.2	Pass	
Omethoate	mg/kg	< 2			2	Pass	
Phorate	mg/kg	< 0.2			0.2	Pass	
Pirimiphos-methyl	mg/kg	< 0.2			0.2	Pass	
Pyrazophos	mg/kg	< 0.2			0.2	Pass	
Ronnel	mg/kg	< 0.2			0.2	Pass	
Terbufos	mg/kg	< 0.2			0.2	Pass	
Tetrachlorvinphos	mg/kg	< 0.2			0.2	Pass	
Tokuthion	mg/kg	< 0.2			0.2	Pass	
Trichloronate	mg/kg	< 0.2			0.2	Pass	
Method Blank							
Polychlorinated Biphenyls							
Aroclor-1016	mg/kg	< 0.5			0.5	Pass	
Aroclor-1221	mg/kg	< 0.1			0.1	Pass	
Aroclor-1232	mg/kg	< 0.5			0.5	Pass	
Aroclor-1242	mg/kg	< 0.5			0.5	Pass	
Aroclor-1248	mg/kg	< 0.5			0.5	Pass	
Aroclor-1254	mg/kg	< 0.5			0.5	Pass	
Aroclor-1260	mg/kg	< 0.5			0.5	Pass	
Total PCB*	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Phenols (Halogenated)							
2-Chlorophenol	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2.4-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4.5-Trichlorophenol	mg/kg	< 1			1	Pass	
2.4.6-Trichlorophenol	mg/kg	< 1			1	Pass	
2.6-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
4-Chloro-3-methylphenol	mg/kg	< 1			1	Pass	
Pentachlorophenol	mg/kg	< 1			1	Pass	
Tetrachlorophenols - Total	mg/kg	< 10			10	Pass	
Method Blank							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	mg/kg	< 20			20	Pass	
2-Methyl-4.6-dinitrophenol	mg/kg	< 5			5	Pass	
2-Methylphenol (o-Cresol)	mg/kg	< 0.2			0.2	Pass	
2-Nitrophenol	mg/kg	< 1			1	Pass	
2.4-Dimethylphenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dinitrophenol	mg/kg	< 5			5	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/kg	< 0.4			0.4	Pass	
4-Nitrophenol	mg/kg	< 5			5	Pass	
Dinoseb	mg/kg	< 20			20	Pass	
Phenol	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Nickel	mg/kg	< 5			5	Pass	
Zinc	mg/kg	< 5			5	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	%	95			70-130	Pass	
TRH C10-C14	%	118			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	111			70-130	Pass	
Toluene	%	115			70-130	Pass	
Ethylbenzene	%	107			70-130	Pass	
m&p-Xylenes	%	108			70-130	Pass	
o-Xylene	%	106			70-130	Pass	
Xylenes - Total*	%	108			70-130	Pass	
LCS - % Recovery							
Volatile Organics							
1.1-Dichloroethene	%	128			70-130	Pass	
1.1.1-Trichloroethane	%	102			70-130	Pass	
1.2-Dichlorobenzene	%	93			70-130	Pass	
1.2-Dichloroethane	%	109			70-130	Pass	
Trichloroethene	%	107			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	87			70-130	Pass	
TRH C6-C10	%	93			70-130	Pass	
TRH >C10-C16	%	108			70-130	Pass	
LCS - % Recovery							

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	88			70-130	Pass	
Acenaphthylene	%	82			70-130	Pass	
Anthracene	%	89			70-130	Pass	
Benz(a)anthracene	%	84			70-130	Pass	
Benzo(a)pyrene	%	99			70-130	Pass	
Benzo(b&j)fluoranthene	%	90			70-130	Pass	
Benzo(g.h.i)perylene	%	120			70-130	Pass	
Benzo(k)fluoranthene	%	98			70-130	Pass	
Chrysene	%	92			70-130	Pass	
Dibenz(a.h)anthracene	%	79			70-130	Pass	
Fluoranthene	%	82			70-130	Pass	
Fluorene	%	92			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	83			70-130	Pass	
Naphthalene	%	93			70-130	Pass	
Phenanthrene	%	83			70-130	Pass	
Pyrene	%	81			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	78			70-130	Pass	
4.4'-DDD	%	77			70-130	Pass	
4.4'-DDE	%	78			70-130	Pass	
4.4'-DDT	%	122			70-130	Pass	
a-BHC	%	89			70-130	Pass	
Aldrin	%	78			70-130	Pass	
b-BHC	%	88			70-130	Pass	
d-BHC	%	86			70-130	Pass	
Dieldrin	%	90			70-130	Pass	
Endosulfan I	%	94			70-130	Pass	
Endosulfan II	%	90			70-130	Pass	
Endosulfan sulphate	%	79			70-130	Pass	
Endrin	%	73			70-130	Pass	
Endrin aldehyde	%	88			70-130	Pass	
Endrin ketone	%	94			70-130	Pass	
g-BHC (Lindane)	%	93			70-130	Pass	
Heptachlor	%	85			70-130	Pass	
Heptachlor epoxide	%	72			70-130	Pass	
Hexachlorobenzene	%	80			70-130	Pass	
Methoxychlor	%	93			70-130	Pass	
LCS - % Recovery							
Organophosphorus Pesticides							
Diazinon	%	86			70-130	Pass	
Ethion	%	88			70-130	Pass	
Fenitrothion	%	87			70-130	Pass	
Methyl parathion	%	101			70-130	Pass	
Mevinphos	%	72			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls							
Aroclor-1016	%	120			70-130	Pass	
Aroclor-1260	%	91			70-130	Pass	
LCS - % Recovery							
Phenols (Halogenated)							
2-Chlorophenol	%	83			30-130	Pass	
2.4-Dichlorophenol	%	111			30-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2.4.5-Trichlorophenol	%	110			30-130	Pass	
2.4.6-Trichlorophenol	%	99			30-130	Pass	
2.6-Dichlorophenol	%	115			30-130	Pass	
4-Chloro-3-methylphenol	%	123			30-130	Pass	
Pentachlorophenol	%	106			30-130	Pass	
Tetrachlorophenols - Total	%	90			30-130	Pass	
LCS - % Recovery							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	%	104			30-130	Pass	
2-Methyl-4.6-dinitrophenol	%	121			30-130	Pass	
2-Methylphenol (o-Cresol)	%	124			30-130	Pass	
2-Nitrophenol	%	116			30-130	Pass	
2.4-Dimethylphenol	%	114			30-130	Pass	
2.4-Dinitrophenol	%	105			30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	%	124			30-130	Pass	
4-Nitrophenol	%	123			30-130	Pass	
Dinoseb	%	118			30-130	Pass	
Phenol	%	84			30-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	106			70-130	Pass	
Cadmium	%	106			70-130	Pass	
Chromium	%	106			70-130	Pass	
Copper	%	107			70-130	Pass	
Lead	%	107			70-130	Pass	
Mercury	%	105			70-130	Pass	
Nickel	%	106			70-130	Pass	
Zinc	%	103			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C10-C14	W20-Jn49078	NCP	%	118			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	S20-Jl01196	NCP	%	79			70-130	Pass	
Toluene	S20-Jl01196	NCP	%	78			70-130	Pass	
Ethylbenzene	S20-Jl01196	NCP	%	76			70-130	Pass	
m&p-Xylenes	S20-Jl01196	NCP	%	77			70-130	Pass	
o-Xylene	S20-Jl01196	NCP	%	78			70-130	Pass	
Xylenes - Total*	S20-Jl01196	NCP	%	78			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
TRH >C10-C16	W20-Jn49078	NCP	%	106			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	S20-Jl00854	NCP	%	92			70-130	Pass	
Acenaphthylene	S20-Jl00854	NCP	%	80			70-130	Pass	
Anthracene	S20-Jl00854	NCP	%	102			70-130	Pass	
Benz(a)anthracene	S20-Jl00854	NCP	%	110			70-130	Pass	
Benzo(a)pyrene	S20-Jl00854	NCP	%	99			70-130	Pass	
Benzo(b&j)fluoranthene	S20-Jl00854	NCP	%	124			70-130	Pass	
Benzo(g.h.i)perylene	S20-Jl00854	NCP	%	95			70-130	Pass	
Benzo(k)fluoranthene	S20-Jn48584	NCP	%	92			70-130	Pass	
Chrysene	S20-Jl00854	NCP	%	107			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Dibenz(a.h)anthracene	S20-Jn48584	NCP	%	73			70-130	Pass	
Fluoranthene	S20-Jl00854	NCP	%	123			70-130	Pass	
Fluorene	S20-Jl00854	NCP	%	95			70-130	Pass	
Indeno(1.2.3-cd)pyrene	S20-Jl00854	NCP	%	79			70-130	Pass	
Naphthalene	S20-Jl00854	NCP	%	101			70-130	Pass	
Phenanthrene	S20-Jl00854	NCP	%	118			70-130	Pass	
Pyrene	S20-Jl00854	NCP	%	123			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
Chlordanes - Total	S20-Jn48584	NCP	%	76			70-130	Pass	
4.4'-DDD	S20-Jn47544	NCP	%	112			70-130	Pass	
4.4'-DDE	S20-Jn47544	NCP	%	89			70-130	Pass	
4.4'-DDT	S20-Jn48584	NCP	%	103			70-130	Pass	
a-BHC	S20-Jn48584	NCP	%	71			70-130	Pass	
Aldrin	S20-Jn48584	NCP	%	80			70-130	Pass	
b-BHC	S20-Jn48584	NCP	%	80			70-130	Pass	
d-BHC	S20-Jn47544	NCP	%	88			70-130	Pass	
Dieldrin	S20-Jn47544	NCP	%	86			70-130	Pass	
Endosulfan I	S20-Jn47544	NCP	%	107			70-130	Pass	
Endosulfan II	S20-Jn47544	NCP	%	103			70-130	Pass	
Endosulfan sulphate	S20-Jn47544	NCP	%	88			70-130	Pass	
Endrin	S20-Jn47544	NCP	%	87			70-130	Pass	
Endrin aldehyde	W20-Jn43761	NCP	%	92			70-130	Pass	
Endrin ketone	S20-Jn48584	NCP	%	85			70-130	Pass	
g-BHC (Lindane)	S20-Jn48584	NCP	%	79			70-130	Pass	
Heptachlor	S20-Jn48584	NCP	%	85			70-130	Pass	
Heptachlor epoxide	S20-Jn47544	NCP	%	74			70-130	Pass	
Hexachlorobenzene	S20-Jn48584	NCP	%	74			70-130	Pass	
Methoxychlor	S20-Jn48584	NCP	%	94			70-130	Pass	
Spike - % Recovery									
Organophosphorus Pesticides				Result 1					
Diazinon	S20-Jl00854	NCP	%	86			70-130	Pass	
Dimethoate	S20-Jn47544	NCP	%	82			70-130	Pass	
Ethion	S20-Jl00854	NCP	%	80			70-130	Pass	
Fenitrothion	S20-Jl00854	NCP	%	78			70-130	Pass	
Methyl parathion	S20-Jl00854	NCP	%	93			70-130	Pass	
Mevinphos	S20-Jn47544	NCP	%	107			70-130	Pass	
Spike - % Recovery									
Polychlorinated Biphenyls				Result 1					
Aroclor-1016	W20-Jn43761	NCP	%	119			70-130	Pass	
Aroclor-1260	S20-Jn48584	NCP	%	111			70-130	Pass	
Total PCB*	S20-Jn48584	NCP	%	111			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	S20-Jn49135	NCP	%	107			70-130	Pass	
Cadmium	S20-Jn49135	NCP	%	103			70-130	Pass	
Chromium	S20-Jn49135	NCP	%	106			70-130	Pass	
Copper	S20-Jn49135	NCP	%	106			70-130	Pass	
Lead	S20-Jn49135	NCP	%	106			70-130	Pass	
Mercury	S20-Jn49135	NCP	%	105			70-130	Pass	
Nickel	S20-Jn49135	NCP	%	110			70-130	Pass	
Zinc	S20-Jn49135	NCP	%	104			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C6-C9	S20-Jn44834	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	W20-Jn49074	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	W20-Jn49074	NCP	mg/kg	< 50	57	53	30%	Fail	Q15
TRH C29-C36	W20-Jn49074	NCP	mg/kg	< 50	51	41	30%	Fail	Q15
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S20-Jn44834	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Toluene	S20-Jn44834	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Ethylbenzene	S20-Jn44834	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
m&p-Xylenes	S20-Jn44834	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
o-Xylene	S20-Jn44834	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes - Total*	S20-Jn44834	NCP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
1.1-Dichloroethane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1-Dichloroethene	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1-Trichloroethane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2-Trichloroethane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dibromoethane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichlorobenzene	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloroethane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloropropane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.3-Trichloropropane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trimethylbenzene	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichlorobenzene	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichloropropane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3.5-Trimethylbenzene	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.4-Dichlorobenzene	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Butanone (MEK)	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Propanone (Acetone)	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chlorotoluene	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Methyl-2-pentanone (MIBK)	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Allyl chloride	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromobenzene	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromochloromethane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromodichloromethane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromoform	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromomethane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon disulfide	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon Tetrachloride	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chlorobenzene	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroethane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroform	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloromethane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.2-Dichloroethene	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.3-Dichloropropene	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromochloromethane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromomethane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dichlorodifluoromethane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Iodomethane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
Isopropyl benzene (Cumene)	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Methylene Chloride	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Styrene	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Tetrachloroethene	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.2-Dichloroethene	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.3-Dichloropropene	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichloroethene	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichlorofluoromethane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Vinyl chloride	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	S20-Jn44834	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH >C10-C16	W20-Jn49074	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	W20-Jn49074	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	W20-Jn49074	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	S20-Jn42538	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	S20-Jn42538	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	S20-Jn42538	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	S20-Jn42538	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	S20-Jn42538	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	S20-Jn42538	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	S20-Jn42538	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	S20-Jn42538	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	S20-Jn42538	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	S20-Jn42538	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	S20-Jn42538	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	S20-Jn42538	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	S20-Jn42538	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	S20-Jn42538	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	S20-Jn42538	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	S20-Jn42538	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	S20-Jn47541	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	S20-Jn47541	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	S20-Jn47541	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	S20-Jn47541	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-BHC	S20-Jn47541	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	S20-Jn47541	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-BHC	S20-Jn47541	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-BHC	S20-Jn47541	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	S20-Jn47541	NCP	mg/kg	< 0.05	0.10	<1	30%	Pass	
Endosulfan I	S20-Jn47541	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	S20-Jn47541	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	S20-Jn47541	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	S20-Jn47541	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	S20-Jn47541	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	S20-Jn47541	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-BHC (Lindane)	S20-Jn47541	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	S20-Jn47541	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	S20-Jn47541	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	

Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Hexachlorobenzene	S20-Jn47541	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	S20-Jn47541	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Azinphos-methyl	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Bolstar	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Chlorfenvinphos	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Chlorpyrifos	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Chlorpyrifos-methyl	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Coumaphos	S20-Jn42538	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
Demeton-S	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Demeton-O	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Diazinon	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Dichlorvos	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Dimethoate	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Disulfoton	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
EPN	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Ethion	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Ethoprop	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Ethyl parathion	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Fenitrothion	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Fensulfothion	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Fenthion	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Malathion	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Merphos	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Methyl parathion	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Mevinphos	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Monocrotophos	S20-Jn42538	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
Naled	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Omethoate	S20-Jn42538	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
Phorate	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Pirimiphos-methyl	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Pyrazophos	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Ronnel	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Terbufos	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Tetrachlorvinphos	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Tokuthion	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Trichloronate	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Aroclor-1016	S20-Jn47541	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1221	S20-Jn47541	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1232	S20-Jn47541	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1242	S20-Jn47541	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1248	S20-Jn47541	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1254	S20-Jn47541	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1260	S20-Jn47541	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Total PCB*	S20-Jn47541	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	S20-Jn48786	NCP	mg/kg	< 2	2.5	24	30%	Pass	
Cadmium	S20-Jn48786	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	S20-Jn48786	NCP	mg/kg	9.4	16	54	30%	Fail	Q15
Copper	S20-Jn48786	NCP	mg/kg	54	37	39	30%	Fail	Q15

Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Lead	S20-Jn48786	NCP	mg/kg	17	21	21	30%	Pass	
Mercury	S20-Jn48786	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Nickel	S20-Jn48786	NCP	mg/kg	8.8	14	49	30%	Fail	Q15
Zinc	S20-Jn48786	NCP	mg/kg	58	75	26	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	S20-Jn47650	NCP	%	13	14	5.0	30%	Pass	

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
Q15	The RPD reported passes Eurofins Environment Testing's QC - Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report.

Authorised By

[redacted]

Analytical Services Manager
Senior Analyst-Organic (NSW)
Senior Analyst-Metal (NSW)
Senior Analyst-Asbestos (NSW)

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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E-MAILED 23/6 @8.02

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4127
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
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- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ

SLR

CLIENT: Defence Housing Australia	LABORATORY: SGS Australia	Turnaround Time (TAT)	COC Number 1 of 5
PROJECT: Randwick Barracks	LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015	☐ Standard TAT	
PROJECT NUMBER: 610.30041	SAMPLER: [redacted]	☐ Non Standard or Urgent TAT	
PROJECT MANAGER [redacted]	SAMPLER CONTACT No: [redacted]		
PM CONTACT No [redacted]	Email Reports and Invoices to: LQRSYD@slrconsulting.com ; [redacted]	Required TAT: Standard	

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only	HOLD	Suite D			Additional Information (Comment on any gross contamination or specific requirements)
	0407_TP014_0.1_200623	23-06-2020	Soil		x								Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
	0407_TP014_0.5_200623	23-06-2020	Soil		x								
	0407_TP014_1.0_200623	23-06-2020	Soil						x				
	0407_TP014_0.1-0.2_200623	23-06-2020	Soil					x					
	0407_QC142_200623	23-06-2020	Soil		x								
	0407_QC242_200623	23-06-2020	Soil										Please send to Eurofins for Suite A
	0407_TP015_0.1_200623	23-06-2020	Soil							x			
	0407_TP015_0.5_200623	23-06-2020	Soil							x			
	0407_TP015_1.0_200623	23-06-2020	Soil						x				
	0407_TP015_0.1-0.2_200623	23-06-2020	Soil						x				
	0407_TP016_0.1_200623	23-06-2020	Soil		x								
	0407_TP016_0.5_200623	23-06-2020	Soil						x				

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time	23-06-2020	Received by	[redacted]	Date / Time	26/6/20 3pm
Relinquished By	Sign	Date / Time		Received by	Sign	Date / Time	Temperature Received: 17.10 °C
Relinquished By	Sign	Date / Time		Received by	Sign	Date / Time	

#728439

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

SLR

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☒ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
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- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ

CLIENT: Defence Housing Australia	LABORATORY: SGS Australia
PROJECT: Randwick Barracks	LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015
PROJECT NUMBER: 610.30041	SAMPLER [redacted]
PROJECT MANAGER: [redacted]	SAMPLER CONTACT [redacted]
PM CONTACT No: [redacted]	Email Reports and Invoices to: LQRSYD@slrconsulting.com ; [redacted]
COMMENTS OR ADDITIONAL DIRECTIONS	

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number: 2 of 5

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only	HOLD	Suite D			Additional Information (Comment on any gross contamination or specific requirements)
	0407_TP016_1.0_200623	23-06-2020	Soil		x								Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
	0407_TP016_0.1-0.2_200623	23-06-2020	Soil					x					
	0407_QC140_200623	23-06-2020	Soil		x								
	0407_QC240_200623	23-06-2020	Soil										Please send to Eurofins for Suite A
	0407_TP024_0.1_200623	23-06-2020	Soil							x			
	0407_TP024_0.5_200623	23-06-2020	Soil						x				
	0407_TP024_1.0_200623	23-06-2020	Soil							x			
	0407_TP024_0.1-0.2_200623	23-06-2020	Soil						x				
	0407_TP023_0.1_200623	23-06-2020	Soil		x								
	0407_TP023_0.5_200623	23-06-2020	Soil						x				
	0407_TP023_1.0_200623	23-06-2020	Soil		x								
	0407_TP023_0.1-0.2_200623	23-06-2020	Soil					x					

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 23-06-2020	Received by	Sig [redacted]	Date / Time 26/6/20 3 PM	Temperature Received:
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	17.10°C
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

#728439.

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

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PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
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- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
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- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ

CLIENT: Defence Housing Australia	**LABORATORY: SGS Australia**
PROJECT: Randwick Barracks	**LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015**
PROJECT NUMBER: 610.30041	**SAMPLER** [redacted]
PROJECT MANAGER [redacted]	**SAMPLER CONTACT No** [redacted]
PM CONTACT No [redacted]	**Email Reports and Invoices to: LQR5YD@slrconsulting.com** [redacted]

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number 3 of 5

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only	HOLD	Suite D			Additional Information *(Comment on any gross contamination or specific requirements)*
	0407_TP025_0.1_200623	23-06-2020	Soil		x								Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
	0407_TP025_0.5_200623	23-06-2020	Soil		x								
	0407_TP025_1.0_200623	23-06-2020	Soil						x				
	0407_TP025_0.1-0.2_200623	23-06-2020	Soil					x					
	0407_TP032_0.1_200623	23-06-2020	Soil		x								
	0407_TP032_0.5_200623	23-06-2020	Soil						x				
	0407_TP032_1.0_200623	23-06-2020	Soil		x								
	0407_TP032_0.1-0.2_200623	23-06-2020	Soil					x					
	0407_QC143_200623	23-06-2020	Soil		x								
	0407_QC243_200623	23-06-2020	Soil										Please send to Eurofins for Suite A
	0407_TP033_0.1_200623	23-06-2020	Soil		x								
	0407_TP033_0.5_200623	23-06-2020	Soil		x								

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 23-06-2020	**Received by**	Sign [redacted]	Date / Time 26/6/20 3PM
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time

Temperature Received: 17.10°C

#728439

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

SLR

PROJECT OFFICE (Tick one)

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- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ

CLIENT: Defence Housing Australia

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGE: [redacted]

PM CONTACT No: [redacted]

LABORATORY: SGS Australia

LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015

SAMPLER: [redacted]

SAMPLER CONTACT No: [redacted]

Email Reports and Invoices to: LQRSYD@slrconsulting.com ; [redacted]

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number 4 of 5

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only	HOLD	Suite D	TRH, BTEXN, and VOCs ONLY		Additional Information (Comment on any gross contamination or specific requirements)
	0407_TP033_1.0_200623	23-06-2020	Soil						X				Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
	0407_TP033_1.6_200623	23-06-2020	Soil								X		
	0407_TP033_2.6_200623	23-06-2020	Soil								X		
	0407_TP033_3.6_200623	23-06-2020	Soil								X		
	0407_TP033_4.6_200623	23-06-2020	Soil								X		
	0407_TP033_5.6_200623	23-06-2020	Soil								X		
	0407_TP033_6.0_200623	23-06-2020	Soil								X		
	0407_TP033_7.6_200623	23-06-2020	Soil								X		
	0407_QC146_200623	23-06-2020	Soil		X								
	0407_QC246_200623	23-06-2020	Soil										Please send to Eurofins for Suite A

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 23-06-2020	**Received by**	Sign [redacted]	Date / Time 26/6/20 3pm	**Temperature Received:**	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	17.10°C	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time		

#728439

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

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- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ

CLIENT: Defence Housing Australia	LABORATORY: SGS Australia
PROJECT: Randwick Barracks	LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015
PROJECT NUMBER: 610.30041	SAMPLER: [redacted]
PROJECT MANAGER [redacted]	SAMPLER CONTACT No: [redacted]
PM CONTACT No [redacted]	Email Reports and Invoices to: LQRSYD@slrconsulting.com ; [redacted]

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number 5 of 5

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only	HOLD	Suite D	Suite E and H	Suite F	Additional Information (Comment on any gross contamination or specific requirements)
	0407_TP041_0.1_200623	23-06-2020	Soil								x		Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
	0407_TP041_0.5_200623	23-06-2020	Soil						x				
	0407_TP041_1.0_200623	23-06-2020	Soil								x		
	0407_TP041_0.1-0.2_200623	23-06-2020	Soil						x				
	0407_TP042_0.1_200623	23-06-2020	Soil									x	
	0407_TP042_0.5_200623	23-06-2020	Soil									x	
	0407_TP042_1.0_200623	23-06-2020	Soil						x				
	0407_TP042_0.1-0.2_200623	23-06-2020	Soil						x				
	0407_QC145_200623	23-06-2020	Soil									x	
	0407_QC245_200623	23-06-2020	Soil										Please send to Eurofins for Suite A

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time	23-06-2020	Received by	Sign [redacted]	Date / Time	26/6/20 3PM
Relinquished By	Sign	Date / Time		Received by	Sign	Date / Time	
Relinquished By	Sign	Date / Time		Received by	Sign	Date / Time	

Temperature Received: 17.10°C

#728439.

eurofins | Environment Testing

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Site # 1254 & 14271

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NATA # 1261 Site # 23736

ABN – 50 005 085 521 e.mail : EnviroSales@eurofins.com web : www.eurofins.com.au

Sample Receipt Advice

Company name:	**SLR Consulting (Sydney)**
Contact name:	[redacted]
Project name:	RANDWICK BARRACKS
Project ID:	610.30041
COC number:	Not provided
Turn around time:	5 Day
Date/Time received:	Jun 26, 2020 3:00 PM
Eurofins reference:	**728439**

Sample information

☑ A detailed list of analytes logged into our LIMS, is included in the attached summary table.

☑ All samples have been received as described on the above COC.

☑ COC has been completed correctly.

☑ Attempt to chill was evident.

☑ Appropriately preserved sample containers have been used.

☑ All samples were received in good condition.

☑ Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.

☑ Appropriate sample containers have been used.

☒ Split sample sent to requested external lab.

☒ Some samples have been subcontracted.

N/A Custody Seals intact (if used).

Contact notes

If you have any questions with respect to these samples please contact:

[redacted] on Phone : [redacted] or by e.mail: [redacted]@eurofins.com

Results will be delivered electronically via e.mail to [redacted]@slrconsulting.com.

Note: A copy of these results will also be delivered to the general SLR Consulting (Sydney) email address.

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IANZ # 1327

Christchurch
43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 728439
Phone: 02 9428 8100
Fax:

Received: Jun 26, 2020 3:00 PM
Due: Jul 3, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271										
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	0407_QC242_200623	Jun 23, 2020		Soil	S20-Jn49132	X	X	X	X	X
2	0407_QC240_200623	Jun 23, 2020		Soil	S20-Jn49133	X	X	X	X	X
3	0407_QC243_200623	Jun 23, 2020		Soil	S20-Jn49134	X	X	X	X	X
4	0407_QC246_200623	Jun 23, 2020		Soil	S20-Jn49135	X	X	X	X	X
5	0407_QC245_200623	Jun 23, 2020		Soil	S20-Jn49136	X	X	X	X	X
Test Counts						5	5	5	5	5

Certificate of Analysis

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NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025–Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus
North Sydney
NSW 2060

Attention:	[redacted]
Report	728439-AID
Project Name	RANDWICK BARRACKS
Project ID	610.30041
Received Date	Jun 26, 2020
Date Reported	Jul 06, 2020

Methodology:

Asbestos Fibre Identification	Conducted in accordance with the Australian Standard AS 4964 – 2004: Method for the Qualitative Identification of Asbestos in Bulk Samples and in-house Method LTM-ASB-8020 by polarised light microscopy (PLM) and dispersion staining (DS) techniques. *NOTE: Positive Trace Analysis results indicate the sample contains detectable respirable fibres.*
Unknown Mineral Fibres	Mineral fibres of unknown type, as determined by PLM with DS, may require another analytical technique, such as Electron Microscopy, to confirm unequivocal identity. *NOTE: While Actinolite, Anthophyllite and Tremolite asbestos may be detected by PLM with DS, due to variability in the optical properties of these materials, AS4964 requires that these are reported as UMF unless confirmed by an independent technique.*
Subsampling Soil Samples	The whole sample submitted is first dried and then passed through a 10mm sieve followed by a 2mm sieve. All fibrous matter greater than 10mm, greater than 2mm as well as the material passing through the 2mm sieve are retained and analysed for the presence of asbestos. If the sub 2mm fraction is greater than approximately 30 to 60g then a sub-sampling routine based on ISO 3082:2009(E) is employed. *NOTE: Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be sub-sampled for trace analysis, in accordance with AS 4964-2004.*
Bonded asbestos-containing material (ACM)	The material is first examined and any fibres isolated for identification by PLM and DS. Where required, interfering matrices may be removed by disintegration using a range of heat, chemical or physical treatments, possibly in combination.The resultant material is then further examined in accordance with AS 4964 - 2004. *NOTE: Even after disintegration it may be difficult to detect the presence of asbestos in some asbestos-containing bulk materials using PLM and DS. This is due to the low grade or small length or diameter of the asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos-containing sealants and mastics, asbestos-containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.*
Limit of Reporting	The performance limitation of the AS 4964 (2004) method for non-homogeneous samples is around 0.1 g/kg (equivalent to 0.01% (w/w)). Where no asbestos is found by PLM and DS, including Trace Analysis, this is considered to be at the nominal reporting limit of 0.01% (w/w). The NEPM screening level of 0.001% (w/w) is intended as an on-site determination, not a laboratory Limit of Reporting (LOR), per se. Examination of a large sample size (e.g. 500 mL) may improve the likelihood of detecting asbestos, particularly AF, to aid assessment against the NEPM criteria. Gravimetric determinations to this level of accuracy are outside of AS 4964 and hence NATA Accreditation does not cover the performance of this service (non-NATA results shown with an asterisk). *NOTE: NATA News March 2014, p.7, states in relation to AS 4964: "This is a qualitative method with a nominal reporting limit of 0.01 % " and that currently in Australia "there is no validated method available for the quantification of asbestos".This report is consistent with the analytical procedures and reporting recommendations in the NEPM and the WA DoH.*

Project Name RANDWICK BARRACKS
Project ID 610.30041
Date Sampled Jun 23, 2020
Report 728439-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
0407_QC242_200623	20-Jn49132	Jun 23, 2020	Approximate Sample 51g Sample consisted of: Brown fine-grained sandy soil	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
0407_QC240_200623	20-Jn49133	Jun 23, 2020	Approximate Sample 32g Sample consisted of: White fine-grained sandy soil	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
0407_QC243_200623	20-Jn49134	Jun 23, 2020	Approximate Sample 59g Sample consisted of: Brown fine-grained sandy soil	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
0407_QC246_200623	20-Jn49135	Jun 23, 2020	Approximate Sample 66g Sample consisted of: Brown fine-grained sandy soil and bituminous material	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
0407_QC245_200623	20-Jn49136	Jun 23, 2020	Approximate Sample 50g Sample consisted of: Brown fine-grained sandy soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Asbestos - LTM-ASB-8020	Sydney	Jun 29, 2020	Indefinite

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IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 728439
Phone: 02 9428 8100
Fax:

Received: Jun 26, 2020 3:00 PM
Due: Jul 3, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271										
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	0407_QC242_200623	Jun 23, 2020		Soil	S20-Jn49132	X	X	X	X	X
2	0407_QC240_200623	Jun 23, 2020		Soil	S20-Jn49133	X	X	X	X	X
3	0407_QC243_200623	Jun 23, 2020		Soil	S20-Jn49134	X	X	X	X	X
4	0407_QC246_200623	Jun 23, 2020		Soil	S20-Jn49135	X	X	X	X	X
5	0407_QC245_200623	Jun 23, 2020		Soil	S20-Jn49136	X	X	X	X	X
Test Counts						5	5	5	5	5

Internal Quality Control Review and Glossary

General

1. QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Samples were analysed on an 'as received' basis.
4. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
5. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the Sample Receipt Advice.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

Units

% w/w: weight for weight basis	grams per kilogram
Filter loading:	fibres/100 graticule areas
Reported Concentration:	fibres/mL
Flowrate:	L/min

Terms

Dry	Sample is dried by heating prior to analysis
LOR	Limit of Reporting
COC	Chain of Custody
SRA	Sample Receipt Advice
ISO	International Standards Organisation
AS	Australian Standards
WA DOH	Reference document for the NEPM. Government of Western Australia, Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia (2009), including supporting document Recommended Procedures for Laboratory Analysis of Asbestos in Soil (2011)
NEPM	National Environment Protection (Assessment of Site Contamination) Measure, 2013 (as amended)
ACM	Asbestos Containing Materials. Asbestos contained within a non-asbestos matrix, typically presented in bonded and/or sound condition. For the purposes of the NEPM, ACM is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
AF	Asbestos Fines. Asbestos containing materials, including friable, weathered and bonded materials, able to pass a 7mm x 7mm sieve. Considered under the NEPM as equivalent to “non-bonded / friable”.
FA	Fibrous Asbestos. Asbestos containing materials in a friable and/or severely weathered condition. For the purposes of the NEPM, FA is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
Friable	Asbestos-containing materials of any size that may be broken or crumbled by hand pressure. For the purposes of the NEPM, this includes both AF and FA. It is outside of the laboratory’s remit to assess degree of friability.
Trace Analysis	Analytical procedure used to detect the presence of respirable fibres in the matrix.

Comments

The samples received were not collected in an approved asbestos bag and was therefore sub-sampled from the 250mL glass jar. Valid sub-sampling procedures were applied so as to ensure that the sub-samples to be analysed accurately represented the samples received.

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N/A	Not applicable

Asbestos Counter/Identifier:

[redacted] Senior Analyst-Asbestos (NSW)

Authorised by:

[redacted] Senior Analyst-Asbestos (NSW)

General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

Eurofins shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.

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Certificate of Analysis

SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus,
North Sydney
NSW 2060

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: [redacted]

Report **728439-S**
Project name RANDWICK BARRACKS
Project ID 610.30041
Received Date Jun 26, 2020

Client Sample ID			0407_QC242_200623	0407_QC240_200623	0407_QC243_200623	0407_QC246_200623
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn49132**	**S20-Jn49133**	**S20-Jn49134**	**S20-Jn49135**
Date Sampled			**Jun 23, 2020**	**Jun 23, 2020**	**Jun 23, 2020**	**Jun 23, 2020**
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50	< 50	< 50	< 50
BTEX						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	74	90	96	93
Volatile Organics						
1.1-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			0407_QC242_200623	0407_QC240_200623	0407_QC243_200623	0407_QC246_200623
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S20-Jn49132	S20-Jn49133	S20-Jn49134	S20-Jn49135
Date Sampled			Jun 23, 2020	Jun 23, 2020	Jun 23, 2020	Jun 23, 2020
Test/Reference	LOR	Unit				
Volatile Organics						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromoform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Iodomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Styrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
Total MAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Bromofluorobenzene (surr.)	1	%	74	90	96	93
Toluene-d8 (surr.)	1	%	87	92	96	97
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100	< 100	< 100

Client Sample ID			0407_QC242_200623	0407_QC240_200623	0407_QC243_200623	0407_QC246_200623
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S20-Jn49132	S20-Jn49133	S20-Jn49134	S20-Jn49135
Date Sampled			Jun 23, 2020	Jun 23, 2020	Jun 23, 2020	Jun 23, 2020
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	93	80	80	92
p-Terphenyl-d14 (surr.)	1	%	101	109	117	115
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
a-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
b-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
d-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Toxaphene	1	mg/kg	< 1	< 1	< 1	< 1
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Dibutylchlorendate (surr.)	1	%	71	114	107	INT
Tetrachloro-m-xylene (surr.)	1	%	93	104	108	100

Client Sample ID			0407_QC242_200623	0407_QC240_200623	0407_QC243_200623	0407_QC246_200623
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn49132**	**S20-Jn49133**	**S20-Jn49134**	**S20-Jn49135**
Date Sampled			**Jun 23, 2020**	**Jun 23, 2020**	**Jun 23, 2020**	**Jun 23, 2020**
Test/Reference	LOR	Unit				
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Bolstar	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Coumaphos	2	mg/kg	< 2	< 2	< 2	< 2
Demeton-S	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Demeton-O	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Diazinon	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Dimethoate	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Disulfoton	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
EPN	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ethion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ethoprop	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Fenthion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Malathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Merphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Methyl parathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Mevinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Monocrotophos	2	mg/kg	< 2	< 2	< 2	< 2
Naled	0.2	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Omethoate	2	mg/kg	< 2	< 2	< 2	< 2
Phorate	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ronnel	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Terbufos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Tokuthion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Trichloronate	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Triphenylphosphate (surr.)	1	%	99	96	95	97
Polychlorinated Biphenyls						
Aroclor-1016	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1232	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1242	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1248	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1254	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1260	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PCB*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibutylchlorendate (surr.)	1	%	71	114	107	INT
Tetrachloro-m-xylene (surr.)	1	%	93	104	108	100

Client Sample ID			0407_QC242_200623	0407_QC240_200623	0407_QC243_200623	0407_QC246_200623
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S20-Jn49132	S20-Jn49133	S20-Jn49134	S20-Jn49135
Date Sampled			Jun 23, 2020	Jun 23, 2020	Jun 23, 2020	Jun 23, 2020
Test/Reference	LOR	Unit				
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1	< 1
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
2-Nitrophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
4-Nitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
Phenol-d6 (surr.)	1	%	112	79	93	90
Heavy Metals						
Arsenic	2	mg/kg	< 2	< 2	< 2	< 2
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	< 5	< 5	< 5	< 5
Copper	5	mg/kg	< 5	< 5	< 5	< 5
Lead	5	mg/kg	< 5	< 5	5.2	< 5
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	< 5	< 5	< 5	< 5
Zinc	5	mg/kg	< 5	< 5	< 5	< 5
% Moisture	1	%	9.0	1.6	8.2	3.3

Client Sample ID			0407_QC245_200623
Sample Matrix			Soil
Eurofins Sample No.			S20-Jn49136
Date Sampled			Jun 23, 2020
Test/Reference	LOR	Unit	
Total Recoverable Hydrocarbons - 1999 NEPM Fractions			
TRH C6-C9	20	mg/kg	< 20
TRH C10-C14	20	mg/kg	< 20
TRH C15-C28	50	mg/kg	< 50
TRH C29-C36	50	mg/kg	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50

Client Sample ID			0407_QC245_200623
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-Jn49136**
Date Sampled			**Jun 23, 2020**
Test/Reference	LOR	Unit	
BTEX			
Benzene	0.1	mg/kg	< 0.1
Toluene	0.1	mg/kg	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2
o-Xylene	0.1	mg/kg	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3
4-Bromofluorobenzene (surr.)	1	%	91
Volatile Organics			
1.1-Dichloroethane	0.5	mg/kg	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5
Benzene	0.1	mg/kg	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5
Bromoform	0.5	mg/kg	< 0.5
Bromomethane	0.5	mg/kg	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5
Chloroethane	0.5	mg/kg	< 0.5
Chloroform	0.5	mg/kg	< 0.5
Chloromethane	0.5	mg/kg	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1
Iodomethane	0.5	mg/kg	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5

Client Sample ID			0407_QC245_200623
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-Jn49136**
Date Sampled			**Jun 23, 2020**
Test/Reference	LOR	Unit	
Volatile Organics			
m&p-Xylenes	0.2	mg/kg	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5
o-Xylene	0.1	mg/kg	< 0.1
Styrene	0.5	mg/kg	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5
Toluene	0.1	mg/kg	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3
Total MAH*	0.5	mg/kg	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5
4-Bromofluorobenzene (surr.)	1	%	91
Toluene-d8 (surr.)	1	%	93
Total Recoverable Hydrocarbons - 2013 NEPM Fractions			
Naphthalene[N02]	0.5	mg/kg	< 0.5
TRH C6-C10	20	mg/kg	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20
TRH >C10-C16	50	mg/kg	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50
TRH >C16-C34	100	mg/kg	< 100
TRH >C34-C40	100	mg/kg	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100
Polycyclic Aromatic Hydrocarbons			
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2
Acenaphthene	0.5	mg/kg	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5
Anthracene	0.5	mg/kg	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5
Chrysene	0.5	mg/kg	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5
Fluorene	0.5	mg/kg	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5
Naphthalene	0.5	mg/kg	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5
Pyrene	0.5	mg/kg	< 0.5
Total PAH*	0.5	mg/kg	< 0.5
2-Fluorobiphenyl (surr.)	1	%	72
p-Terphenyl-d14 (surr.)	1	%	101

Client Sample ID			0407_QC245_200623
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-Jn49136**
Date Sampled			**Jun 23, 2020**
Test/Reference	LOR	Unit	
Organochlorine Pesticides			
Chlordanes - Total	0.1	mg/kg	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05
a-BHC	0.05	mg/kg	< 0.05
Aldrin	0.05	mg/kg	< 0.05
b-BHC	0.05	mg/kg	< 0.05
d-BHC	0.05	mg/kg	< 0.05
Dieldrin	0.05	mg/kg	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05
Endrin	0.05	mg/kg	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05
Heptachlor	0.05	mg/kg	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05
Methoxychlor	0.2	mg/kg	< 0.2
Toxaphene	1	mg/kg	< 1
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.2
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.2
Dibutylchlorendate (surr.)	1	%	62
Tetrachloro-m-xylene (surr.)	1	%	102
Organophosphorus Pesticides			
Azinphos-methyl	0.2	mg/kg	< 0.2
Bolstar	0.2	mg/kg	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2
Coumaphos	2	mg/kg	< 2
Demeton-S	0.2	mg/kg	< 0.2
Demeton-O	0.2	mg/kg	< 0.2
Diazinon	0.2	mg/kg	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2
Dimethoate	0.2	mg/kg	< 0.2
Disulfoton	0.2	mg/kg	< 0.2
EPN	0.2	mg/kg	< 0.2
Ethion	0.2	mg/kg	< 0.2
Ethoprop	0.2	mg/kg	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2
Fenthion	0.2	mg/kg	< 0.2
Malathion	0.2	mg/kg	< 0.2
Merphos	0.2	mg/kg	< 0.2

Client Sample ID			0407_QC245_200623
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-Jn49136**
Date Sampled			**Jun 23, 2020**
Test/Reference	LOR	Unit	
Organophosphorus Pesticides			
Methyl parathion	0.2	mg/kg	< 0.2
Mevinphos	0.2	mg/kg	< 0.2
Monocrotophos	2	mg/kg	< 2
Naled	0.2	mg/kg	< 0.5
Omethoate	2	mg/kg	< 2
Phorate	0.2	mg/kg	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2
Ronnel	0.2	mg/kg	< 0.2
Terbufos	0.2	mg/kg	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2
Tokuthion	0.2	mg/kg	< 0.2
Trichloronate	0.2	mg/kg	< 0.2
Triphenylphosphate (surr.)	1	%	87
Polychlorinated Biphenyls			
Aroclor-1016	0.5	mg/kg	< 0.5
Aroclor-1221	0.1	mg/kg	< 0.1
Aroclor-1232	0.5	mg/kg	< 0.5
Aroclor-1242	0.5	mg/kg	< 0.5
Aroclor-1248	0.5	mg/kg	< 0.5
Aroclor-1254	0.5	mg/kg	< 0.5
Aroclor-1260	0.5	mg/kg	< 0.5
Total PCB*	0.5	mg/kg	< 0.5
Dibutylchlorendate (surr.)	1	%	62
Tetrachloro-m-xylene (surr.)	1	%	102
Phenols (Halogenated)			
2-Chlorophenol	0.5	mg/kg	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1
Pentachlorophenol	1	mg/kg	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10
Total Halogenated Phenol*	1	mg/kg	< 1
Phenols (non-Halogenated)			
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2
2-Nitrophenol	1	mg/kg	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4
4-Nitrophenol	5	mg/kg	< 5
Dinoseb	20	mg/kg	< 20
Phenol	0.5	mg/kg	< 0.5
Total Non-Halogenated Phenol*	20	mg/kg	< 20
Phenol-d6 (surr.)	1	%	98

Client Sample ID			0407_QC245_200623
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-Jn49136**
Date Sampled			**Jun 23, 2020**
Test/Reference	LOR	Unit	
Heavy Metals			
Arsenic	2	mg/kg	< 2
Cadmium	0.4	mg/kg	< 0.4
Chromium	5	mg/kg	< 5
Copper	5	mg/kg	< 5
Lead	5	mg/kg	< 5
Mercury	0.1	mg/kg	< 0.1
Nickel	5	mg/kg	< 5
Zinc	5	mg/kg	< 5
% Moisture	1	%	5.4

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Sydney	Jul 01, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Sydney	Jul 01, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jul 01, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jul 01, 2020	
- Method: LTM-ORG-2010 TRH C6-C40			
Polycyclic Aromatic Hydrocarbons	Sydney	Jul 01, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (Halogenated)	Sydney	Jul 01, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (non-Halogenated)	Sydney	Jul 01, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Metals M8	Sydney	Jul 01, 2020	180 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Volatile Organics	Sydney	Jul 01, 2020	7 Days
- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices			
Eurofins | mgt Suite B15			
Organochlorine Pesticides	Sydney	Jul 01, 2020	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Organophosphorus Pesticides	Sydney	Jul 01, 2020	14 Days
- Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS			
Polychlorinated Biphenyls	Sydney	Jul 01, 2020	28 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
% Moisture	Sydney	Jun 29, 2020	14 Days
- Method: LTM-GEN-7080 Moisture			

eurofins | Environment Testing

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Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 728439
Phone: 02 9428 8100
Fax:

Received: Jun 26, 2020 3:00 PM
Due: Jul 3, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271										
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	0407_QC242_200623	Jun 23, 2020		Soil	S20-Jn49132	X	X	X	X	X
2	0407_QC240_200623	Jun 23, 2020		Soil	S20-Jn49133	X	X	X	X	X
3	0407_QC243_200623	Jun 23, 2020		Soil	S20-Jn49134	X	X	X	X	X
4	0407_QC246_200623	Jun 23, 2020		Soil	S20-Jn49135	X	X	X	X	X
5	0407_QC245_200623	Jun 23, 2020		Soil	S20-Jn49136	X	X	X	X	X
Test Counts						5	5	5	5	5

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

****NOTE:** pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram
mg/L: milligrams per litre
ug/L: micrograms per litre
ppm: Parts per million
ppb: Parts per billion
%: Percentage
org/100mL: Organisms per 100 millilitres
NTU: Nephelometric Turbidity Units
MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version 5.3
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling.Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
Method Blank							
BTEX							
Benzene	mg/kg	< 0.1			0.1	Pass	
Toluene	mg/kg	< 0.1			0.1	Pass	
Ethylbenzene	mg/kg	< 0.1			0.1	Pass	
m&p-Xylenes	mg/kg	< 0.2			0.2	Pass	
o-Xylene	mg/kg	< 0.1			0.1	Pass	
Xylenes - Total*	mg/kg	< 0.3			0.3	Pass	
Method Blank							
Volatile Organics							
1.1-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
1.1.1-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.1.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dibromoethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.3-Trichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.4-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.3.5-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.4-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
2-Butanone (MEK)	mg/kg	< 0.5			0.5	Pass	
2-Propanone (Acetone)	mg/kg	< 0.5			0.5	Pass	
4-Chlorotoluene	mg/kg	< 0.5			0.5	Pass	
4-Methyl-2-pentanone (MIBK)	mg/kg	< 0.5			0.5	Pass	
Allyl chloride	mg/kg	< 0.5			0.5	Pass	
Bromobenzene	mg/kg	< 0.5			0.5	Pass	
Bromochloromethane	mg/kg	< 0.5			0.5	Pass	
Bromodichloromethane	mg/kg	< 0.5			0.5	Pass	
Bromoform	mg/kg	< 0.5			0.5	Pass	
Bromomethane	mg/kg	< 0.5			0.5	Pass	
Carbon disulfide	mg/kg	< 0.5			0.5	Pass	
Carbon Tetrachloride	mg/kg	< 0.5			0.5	Pass	
Chlorobenzene	mg/kg	< 0.5			0.5	Pass	
Chloroethane	mg/kg	< 0.5			0.5	Pass	
Chloroform	mg/kg	< 0.5			0.5	Pass	
Chloromethane	mg/kg	< 0.5			0.5	Pass	
cis-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
cis-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Dibromochloromethane	mg/kg	< 0.5			0.5	Pass	
Dibromomethane	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Dichlorodifluoromethane	mg/kg	< 0.5			0.5	Pass	
Iodomethane	mg/kg	< 0.5			0.5	Pass	
Isopropyl benzene (Cumene)	mg/kg	< 0.5			0.5	Pass	
Methylene Chloride	mg/kg	< 0.5			0.5	Pass	
Styrene	mg/kg	< 0.5			0.5	Pass	
Tetrachloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Trichloroethene	mg/kg	< 0.5			0.5	Pass	
Trichlorofluoromethane	mg/kg	< 0.5			0.5	Pass	
Vinyl chloride	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Organochlorine Pesticides							
Chlordanes - Total	mg/kg	< 0.1			0.1	Pass	
4.4'-DDD	mg/kg	< 0.05			0.05	Pass	
4.4'-DDE	mg/kg	< 0.05			0.05	Pass	
4.4'-DDT	mg/kg	< 0.05			0.05	Pass	
a-BHC	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-BHC	mg/kg	< 0.05			0.05	Pass	
d-BHC	mg/kg	< 0.05			0.05	Pass	
Dieldrin	mg/kg	< 0.05			0.05	Pass	
Endosulfan I	mg/kg	< 0.05			0.05	Pass	
Endosulfan II	mg/kg	< 0.05			0.05	Pass	
Endosulfan sulphate	mg/kg	< 0.05			0.05	Pass	
Endrin	mg/kg	< 0.05			0.05	Pass	
Endrin aldehyde	mg/kg	< 0.05			0.05	Pass	
Endrin ketone	mg/kg	< 0.05			0.05	Pass	
g-BHC (Lindane)	mg/kg	< 0.05			0.05	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Heptachlor	mg/kg	< 0.05			0.05	Pass	
Heptachlor epoxide	mg/kg	< 0.05			0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05			0.05	Pass	
Methoxychlor	mg/kg	< 0.2			0.2	Pass	
Toxaphene	mg/kg	< 1			1	Pass	
Method Blank							
Organophosphorus Pesticides							
Azinphos-methyl	mg/kg	< 0.2			0.2	Pass	
Bolstar	mg/kg	< 0.2			0.2	Pass	
Chlorfenvinphos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos-methyl	mg/kg	< 0.2			0.2	Pass	
Coumaphos	mg/kg	< 2			2	Pass	
Demeton-S	mg/kg	< 0.2			0.2	Pass	
Demeton-O	mg/kg	< 0.2			0.2	Pass	
Diazinon	mg/kg	< 0.2			0.2	Pass	
Dichlorvos	mg/kg	< 0.2			0.2	Pass	
Dimethoate	mg/kg	< 0.2			0.2	Pass	
Disulfoton	mg/kg	< 0.2			0.2	Pass	
EPN	mg/kg	< 0.2			0.2	Pass	
Ethion	mg/kg	< 0.2			0.2	Pass	
Ethoprop	mg/kg	< 0.2			0.2	Pass	
Ethyl parathion	mg/kg	< 0.2			0.2	Pass	
Fenitrothion	mg/kg	< 0.2			0.2	Pass	
Fensulfothion	mg/kg	< 0.2			0.2	Pass	
Fenthion	mg/kg	< 0.2			0.2	Pass	
Malathion	mg/kg	< 0.2			0.2	Pass	
Merphos	mg/kg	< 0.2			0.2	Pass	
Methyl parathion	mg/kg	< 0.2			0.2	Pass	
Mevinphos	mg/kg	< 0.2			0.2	Pass	
Monocrotophos	mg/kg	< 2			2	Pass	
Naled	mg/kg	< 0.2			0.2	Pass	
Omethoate	mg/kg	< 2			2	Pass	
Phorate	mg/kg	< 0.2			0.2	Pass	
Pirimiphos-methyl	mg/kg	< 0.2			0.2	Pass	
Pyrazophos	mg/kg	< 0.2			0.2	Pass	
Ronnel	mg/kg	< 0.2			0.2	Pass	
Terbufos	mg/kg	< 0.2			0.2	Pass	
Tetrachlorvinphos	mg/kg	< 0.2			0.2	Pass	
Tokuthion	mg/kg	< 0.2			0.2	Pass	
Trichloronate	mg/kg	< 0.2			0.2	Pass	
Method Blank							
Polychlorinated Biphenyls							
Aroclor-1016	mg/kg	< 0.5			0.5	Pass	
Aroclor-1221	mg/kg	< 0.1			0.1	Pass	
Aroclor-1232	mg/kg	< 0.5			0.5	Pass	
Aroclor-1242	mg/kg	< 0.5			0.5	Pass	
Aroclor-1248	mg/kg	< 0.5			0.5	Pass	
Aroclor-1254	mg/kg	< 0.5			0.5	Pass	
Aroclor-1260	mg/kg	< 0.5			0.5	Pass	
Total PCB*	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Phenols (Halogenated)							
2-Chlorophenol	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2.4-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4.5-Trichlorophenol	mg/kg	< 1			1	Pass	
2.4.6-Trichlorophenol	mg/kg	< 1			1	Pass	
2.6-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
4-Chloro-3-methylphenol	mg/kg	< 1			1	Pass	
Pentachlorophenol	mg/kg	< 1			1	Pass	
Tetrachlorophenols - Total	mg/kg	< 10			10	Pass	
Method Blank							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	mg/kg	< 20			20	Pass	
2-Methyl-4.6-dinitrophenol	mg/kg	< 5			5	Pass	
2-Methylphenol (o-Cresol)	mg/kg	< 0.2			0.2	Pass	
2-Nitrophenol	mg/kg	< 1			1	Pass	
2.4-Dimethylphenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dinitrophenol	mg/kg	< 5			5	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/kg	< 0.4			0.4	Pass	
4-Nitrophenol	mg/kg	< 5			5	Pass	
Dinoseb	mg/kg	< 20			20	Pass	
Phenol	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Nickel	mg/kg	< 5			5	Pass	
Zinc	mg/kg	< 5			5	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	%	95			70-130	Pass	
TRH C10-C14	%	99			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	111			70-130	Pass	
Toluene	%	115			70-130	Pass	
Ethylbenzene	%	107			70-130	Pass	
m&p-Xylenes	%	108			70-130	Pass	
o-Xylene	%	106			70-130	Pass	
Xylenes - Total*	%	108			70-130	Pass	
LCS - % Recovery							
Volatile Organics							
1.1-Dichloroethene	%	128			70-130	Pass	
1.1.1-Trichloroethane	%	102			70-130	Pass	
1.2-Dichlorobenzene	%	93			70-130	Pass	
1.2-Dichloroethane	%	109			70-130	Pass	
Trichloroethene	%	107			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	87			70-130	Pass	
TRH C6-C10	%	93			70-130	Pass	
TRH >C10-C16	%	94			70-130	Pass	
LCS - % Recovery							

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	87			70-130	Pass	
Acenaphthylene	%	88			70-130	Pass	
Anthracene	%	99			70-130	Pass	
Benz(a)anthracene	%	83			70-130	Pass	
Benzo(a)pyrene	%	91			70-130	Pass	
Benzo(b&j)fluoranthene	%	90			70-130	Pass	
Benzo(g.h.i)perylene	%	73			70-130	Pass	
Benzo(k)fluoranthene	%	97			70-130	Pass	
Chrysene	%	85			70-130	Pass	
Dibenz(a.h)anthracene	%	90			70-130	Pass	
Fluoranthene	%	103			70-130	Pass	
Fluorene	%	96			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	85			70-130	Pass	
Naphthalene	%	89			70-130	Pass	
Phenanthrene	%	103			70-130	Pass	
Pyrene	%	113			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	105			70-130	Pass	
4.4'-DDD	%	95			70-130	Pass	
4.4'-DDE	%	100			70-130	Pass	
4.4'-DDT	%	106			70-130	Pass	
a-BHC	%	95			70-130	Pass	
Aldrin	%	114			70-130	Pass	
b-BHC	%	84			70-130	Pass	
d-BHC	%	100			70-130	Pass	
Dieldrin	%	93			70-130	Pass	
Endosulfan I	%	123			70-130	Pass	
Endosulfan II	%	82			70-130	Pass	
Endosulfan sulphate	%	108			70-130	Pass	
Endrin	%	112			70-130	Pass	
Endrin aldehyde	%	94			70-130	Pass	
Endrin ketone	%	125			70-130	Pass	
g-BHC (Lindane)	%	100			70-130	Pass	
Heptachlor	%	99			70-130	Pass	
Heptachlor epoxide	%	105			70-130	Pass	
Hexachlorobenzene	%	96			70-130	Pass	
Methoxychlor	%	116			70-130	Pass	
LCS - % Recovery							
Organophosphorus Pesticides							
Diazinon	%	93			70-130	Pass	
Dimethoate	%	75			70-130	Pass	
Ethion	%	76			70-130	Pass	
Fenitrothion	%	94			70-130	Pass	
Methyl parathion	%	104			70-130	Pass	
Mevinphos	%	87			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls							
Aroclor-1016	%	120			70-130	Pass	
Aroclor-1260	%	91			70-130	Pass	
LCS - % Recovery							
Phenols (Halogenated)							
2-Chlorophenol	%	98			30-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2.4-Dichlorophenol	%	85			30-130	Pass	
2.4.5-Trichlorophenol	%	82			30-130	Pass	
2.4.6-Trichlorophenol	%	97			30-130	Pass	
2.6-Dichlorophenol	%	87			30-130	Pass	
4-Chloro-3-methylphenol	%	97			30-130	Pass	
Pentachlorophenol	%	88			30-130	Pass	
Tetrachlorophenols - Total	%	104			30-130	Pass	
LCS - % Recovery							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	%	93			30-130	Pass	
2-Methyl-4.6-dinitrophenol	%	80			30-130	Pass	
2-Methylphenol (o-Cresol)	%	115			30-130	Pass	
2-Nitrophenol	%	94			30-130	Pass	
2.4-Dimethylphenol	%	90			30-130	Pass	
2.4-Dinitrophenol	%	80			30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	%	109			30-130	Pass	
4-Nitrophenol	%	80			30-130	Pass	
Dinoseb	%	87			30-130	Pass	
Phenol	%	115			30-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	106			70-130	Pass	
Cadmium	%	106			70-130	Pass	
Chromium	%	106			70-130	Pass	
Copper	%	107			70-130	Pass	
Lead	%	107			70-130	Pass	
Mercury	%	105			70-130	Pass	
Nickel	%	106			70-130	Pass	
Zinc	%	103			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C10-C14	N20-Jn45295	NCP	%	114			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	S20-Jl01196	NCP	%	79			70-130	Pass	
Toluene	S20-Jl01196	NCP	%	78			70-130	Pass	
Ethylbenzene	S20-Jl01196	NCP	%	76			70-130	Pass	
m&p-Xylenes	S20-Jl01196	NCP	%	77			70-130	Pass	
o-Xylene	S20-Jl01196	NCP	%	78			70-130	Pass	
Xylenes - Total*	S20-Jl01196	NCP	%	78			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
TRH >C10-C16	N20-Jn45295	NCP	%	109			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	S20-Jn48788	NCP	%	103			70-130	Pass	
Acenaphthylene	S20-Jn48788	NCP	%	104			70-130	Pass	
Anthracene	S20-Jn48788	NCP	%	112			70-130	Pass	
Benz(a)anthracene	S20-Jn48788	NCP	%	107			70-130	Pass	
Benzo(a)pyrene	S20-Jn48788	NCP	%	111			70-130	Pass	
Benzo(b&j)fluoranthene	S20-Jn47643	NCP	%	125			70-130	Pass	
Benzo(g.h.i)perylene	S20-Jn51115	NCP	%	79			70-130	Pass	
Benzo(k)fluoranthene	S20-Jn47643	NCP	%	129			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Chrysene	S20-Jn48788	NCP	%	85			70-130	Pass	
Dibenz(a.h)anthracene	S20-Jn51115	NCP	%	95			70-130	Pass	
Fluoranthene	S20-Jn48788	NCP	%	120			70-130	Pass	
Fluorene	S20-Jn48788	NCP	%	99			70-130	Pass	
Indeno(1.2.3-cd)pyrene	S20-Jn51115	NCP	%	89			70-130	Pass	
Naphthalene	S20-Jn48788	NCP	%	102			70-130	Pass	
Phenanthrene	S20-Jn48788	NCP	%	109			70-130	Pass	
Pyrene	S20-Jn48788	NCP	%	115			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
Chlordanes - Total	S20-Jn48788	NCP	%	108			70-130	Pass	
4.4'-DDD	S20-Jn51115	NCP	%	105			70-130	Pass	
4.4'-DDE	S20-Jn48788	NCP	%	113			70-130	Pass	
4.4'-DDT	S20-Jn48788	NCP	%	78			70-130	Pass	
a-BHC	S20-Jn48788	NCP	%	94			70-130	Pass	
Aldrin	S20-Jn48788	NCP	%	122			70-130	Pass	
b-BHC	S20-Jn48788	NCP	%	103			70-130	Pass	
d-BHC	S20-Jn48788	NCP	%	114			70-130	Pass	
Dieldrin	S20-Jn48788	NCP	%	115			70-130	Pass	
Endosulfan I	S20-Jn48788	NCP	%	130			70-130	Pass	
Endosulfan II	S20-Jn47643	NCP	%	104			70-130	Pass	
Endosulfan sulphate	S20-Jn48788	NCP	%	108			70-130	Pass	
Endrin	S20-Jn48788	NCP	%	126			70-130	Pass	
Endrin aldehyde	S20-Jn48788	NCP	%	94			70-130	Pass	
Endrin ketone	S20-Jn48788	NCP	%	110			70-130	Pass	
g-BHC (Lindane)	S20-Jn48788	NCP	%	99			70-130	Pass	
Heptachlor	S20-Jn48788	NCP	%	125			70-130	Pass	
Heptachlor epoxide	S20-Jn48788	NCP	%	123			70-130	Pass	
Hexachlorobenzene	S20-Jn48788	NCP	%	106			70-130	Pass	
Methoxychlor	S20-Jn48788	NCP	%	85			70-130	Pass	
Spike - % Recovery									
Organophosphorus Pesticides				Result 1					
Diazinon	S20-Jn48788	NCP	%	110			70-130	Pass	
Dimethoate	S20-Jn48788	NCP	%	123			70-130	Pass	
Ethion	S20-Jn48788	NCP	%	130			70-130	Pass	
Fenitrothion	S20-Jn48788	NCP	%	122			70-130	Pass	
Methyl parathion	S20-Jn48788	NCP	%	121			70-130	Pass	
Mevinphos	S20-Jn48788	NCP	%	119			70-130	Pass	
Spike - % Recovery									
Polychlorinated Biphenyls				Result 1					
Aroclor-1016	S20-Jn48788	NCP	%	81			70-130	Pass	
Aroclor-1260	S20-Jn48788	NCP	%	119			70-130	Pass	
Spike - % Recovery									
Phenols (Halogenated)				Result 1					
2-Chlorophenol	S20-Jn48788	NCP	%	109			30-130	Pass	
2.4-Dichlorophenol	S20-Jn48788	NCP	%	110			30-130	Pass	
2.4.5-Trichlorophenol	S20-Jn48788	NCP	%	101			30-130	Pass	
2.4.6-Trichlorophenol	S20-Jn48788	NCP	%	103			30-130	Pass	
2.6-Dichlorophenol	S20-Jn48788	NCP	%	101			30-130	Pass	
4-Chloro-3-methylphenol	S20-Jn48788	NCP	%	129			30-130	Pass	
Pentachlorophenol	S20-Jl03501	NCP	%	104			30-130	Pass	
Tetrachlorophenols - Total	S20-Jn48788	NCP	%	99			30-130	Pass	
Spike - % Recovery									
Phenols (non-Halogenated)				Result 1					

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2-Cyclohexyl-4.6-dinitrophenol	S20-Jn48788	NCP	%	113			30-130	Pass	
2-Methyl-4.6-dinitrophenol	S20-Jn48788	NCP	%	102			30-130	Pass	
2-Methylphenol (o-Cresol)	S20-Jn48788	NCP	%	121			30-130	Pass	
2-Nitrophenol	S20-Jn48788	NCP	%	122			30-130	Pass	
2.4-Dimethylphenol	S20-Jn48788	NCP	%	76			30-130	Pass	
2.4-Dinitrophenol	S20-Jn48788	NCP	%	86			70-130	Pass	
3&4-Methylphenol (m&p-Cresol)	S20-Jn48788	NCP	%	119			30-130	Pass	
4-Nitrophenol	S20-Jn48788	NCP	%	124			30-130	Pass	
Dinoseb	S20-Jn48788	NCP	%	114			30-130	Pass	
Phenol	S20-Jn48788	NCP	%	125			30-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	S20-Jn49135	CP	%	107			70-130	Pass	
Cadmium	S20-Jn49135	CP	%	103			70-130	Pass	
Chromium	S20-Jn49135	CP	%	106			70-130	Pass	
Copper	S20-Jn49135	CP	%	106			70-130	Pass	
Lead	S20-Jn49135	CP	%	106			70-130	Pass	
Mercury	S20-Jn49135	CP	%	105			70-130	Pass	
Nickel	S20-Jn49135	CP	%	110			70-130	Pass	
Zinc	S20-Jn49135	CP	%	104			70-130	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C6-C9	S20-Jn44834	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	S20-Jn49132	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	S20-Jn49132	CP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	S20-Jn49132	CP	mg/kg	< 50	< 50	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S20-Jn44834	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Toluene	S20-Jn44834	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Ethylbenzene	S20-Jn44834	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
m&p-Xylenes	S20-Jn44834	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
o-Xylene	S20-Jn44834	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes - Total*	S20-Jn44834	NCP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
1.1-Dichloroethane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1-Dichloroethene	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1-Trichloroethane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2-Trichloroethane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dibromoethane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichlorobenzene	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloroethane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloropropane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.3-Trichloropropane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trimethylbenzene	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichlorobenzene	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichloropropane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3.5-Trimethylbenzene	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.4-Dichlorobenzene	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Butanone (MEK)	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
2-Propanone (Acetone)	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chlorotoluene	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Methyl-2-pentanone (MIBK)	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Allyl chloride	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromobenzene	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromochloromethane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromodichloromethane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromoform	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromomethane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon disulfide	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon Tetrachloride	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chlorobenzene	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroethane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroform	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloromethane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.2-Dichloroethene	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.3-Dichloropropene	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromochloromethane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromomethane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dichlorodifluoromethane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Iodomethane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Isopropyl benzene (Cumene)	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Methylene Chloride	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Styrene	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Tetrachloroethene	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.2-Dichloroethene	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.3-Dichloropropene	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichloroethene	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichlorofluoromethane	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Vinyl chloride	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	S20-Jn44834	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	S20-Jn44834	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH >C10-C16	S20-Jn49132	CP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	S20-Jn49132	CP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	S20-Jn49132	CP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	S20-Jn49132	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	S20-Jn49132	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	S20-Jn49132	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	S20-Jn49132	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	S20-Jn49132	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	S20-Jn49132	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	S20-Jn49132	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	S20-Jn49132	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	S20-Jn49132	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	S20-Jn49132	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	S20-Jn49132	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	S20-Jn49132	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	S20-Jn49132	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	S20-Jn49132	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	S20-Jn49132	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	S20-Jn49132	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	S20-Jn49132	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	S20-Jn49132	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	S20-Jn49132	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	S20-Jn49132	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-BHC	S20-Jn49132	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	S20-Jn49132	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-BHC	S20-Jn49132	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-BHC	S20-Jn49132	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	S20-Jn49132	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	S20-Jn49132	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	S20-Jn49132	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	S20-Jn49132	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	S20-Jn49132	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	S20-Jn49132	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	S20-Jn49132	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-BHC (Lindane)	S20-Jn49132	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	S20-Jn49132	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	S20-Jn49132	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	S20-Jn49132	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	S20-Jn49132	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Azinphos-methyl	S20-Jn49132	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Bolstar	S20-Jn49132	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorfenvinphos	S20-Jn49132	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos	S20-Jn49132	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos-methyl	S20-Jn49132	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Coumaphos	S20-Jn49132	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Demeton-S	S20-Jn49132	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Demeton-O	S20-Jn49132	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Diazinon	S20-Jn49132	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dichlorvos	S20-Jn49132	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dimethoate	S20-Jn49132	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Disulfoton	S20-Jn49132	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
EPN	S20-Jn49132	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethion	S20-Jn49132	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethoprop	S20-Jn49132	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethyl parathion	S20-Jn49132	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenitrothion	S20-Jn49132	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fensulfothion	S20-Jn49132	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenthion	S20-Jn49132	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Malathion	S20-Jn49132	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Merphos	S20-Jn49132	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Methyl parathion	S20-Jn49132	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Mevinphos	S20-Jn49132	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Monocrotophos	S20-Jn49132	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Naled	S20-Jn49132	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Omethoate	S20-Jn49132	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Phorate	S20-Jn49132	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pirimiphos-methyl	S20-Jn49132	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pyrazophos	S20-Jn49132	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ronnel	S20-Jn49132	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Terbufos	S20-Jn49132	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tetrachlorvinphos	S20-Jn49132	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	

Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Tokuthion	S20-Jn49132	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Trichloronate	S20-Jn49132	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Aroclor-1016	S20-Jn44999	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1221	S20-Jn44999	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1232	S20-Jn44999	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1242	S20-Jn44999	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1248	S20-Jn44999	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1254	S20-Jn44999	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1260	S20-Jn44999	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Total PCB*	S20-Jn44999	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Phenols (Halogenated)				Result 1	Result 2	RPD			
2-Chlorophenol	S20-Jn49132	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dichlorophenol	S20-Jn49132	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4.5-Trichlorophenol	S20-Jn49132	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4.6-Trichlorophenol	S20-Jn49132	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.6-Dichlorophenol	S20-Jn49132	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chloro-3-methylphenol	S20-Jn49132	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Pentachlorophenol	S20-Jn49132	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Tetrachlorophenols - Total	S20-Jn49132	CP	mg/kg	< 10	< 10	<1	30%	Pass	
Duplicate									
Phenols (non-Halogenated)				Result 1	Result 2	RPD			
2-Cyclohexyl-4.6-dinitrophenol	S20-Jn49132	CP	mg/kg	< 20	< 20	<1	30%	Pass	
2-Methyl-4.6-dinitrophenol	S20-Jn49132	CP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Methylphenol (o-Cresol)	S20-Jn49132	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
2-Nitrophenol	S20-Jn49132	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4-Dimethylphenol	S20-Jn49132	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dinitrophenol	S20-Jn49132	CP	mg/kg	< 5	< 5	<1	30%	Pass	
3&4-Methylphenol (m&p-Cresol)	S20-Jn49132	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
4-Nitrophenol	S20-Jn49132	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Dinoseb	S20-Jn49132	CP	mg/kg	< 20	< 20	<1	30%	Pass	
Phenol	S20-Jn49132	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	S20-Jn49134	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Cadmium	S20-Jn49134	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	S20-Jn49134	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Copper	S20-Jn49134	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Lead	S20-Jn49134	CP	mg/kg	5.2	12	83	30%	Fail	Q15
Mercury	S20-Jn49134	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Nickel	S20-Jn49134	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Zinc	S20-Jn49134	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	S20-Jn49136	CP	%	5.4	4.8	12	30%	Pass	

Comments

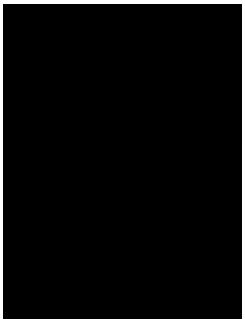
Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
Q15	The RPD reported passes Eurofins Environment Testing's QC - Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report.

Authorised By



Analytical Services Manager
Senior Analyst-Organic (NSW)
Senior Analyst-Metal (NSW)
Senior Analyst-Asbestos (NSW)

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

Eurofins shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.

000682

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Dawin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☑ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT:	DHA
PROJECT:	Randwick Barracks
PROJECT NUMBER:	610.30041
PROJECT MANAGER:	[redacted]
PM CONTACT No:	
LABORATORY:	SGS
LABORATORY ADDRESS:	SYD
SAMPLER:	[redacted]
SAMPLER CONTACT No:	
Email Reports and Invoices to:	LQRSYD@slrconsulting.com

Turnaround Time (TAT)

☑ Standard TAT

☐ Non Standard or Urgent TAT

Required TAT:

COC Number 3 of 3

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: Suite A	PFAS						Additional Information (Comment on any gross contamination or specific requirements)
	0407_QC252_200624	24/6/20	Soil	Please forward to Eurofins for suite A and PFAS								
	0407_QC260_200624	〃	〃									

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	**Received by**	Sign [redacted]	Date / Time 29/6/20 1:30pm	**Temperature Received:** 19.40°C
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

#728527

eurofins | Environment Testing

Melbourne
6 Monterey Road
Dandenong South Vic 3175
Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

Sydney
Unit F3, Building F
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Lane Cove West NSW 2066
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

Brisbane
1/21 Smallwood Place
Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Perth
2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261 Site # 23736

ABN – 50 005 085 521 e.mail : EnviroSales@eurofins.com web : www.eurofins.com.au

Sample Receipt Advice

Company name:	**SLR Consulting (Sydney)**
Contact name:	[redacted]
Project name:	RANDWICK BARRACKS
Project ID:	610.30041
COC number:	000682
Turn around time:	5 Day
Date/Time received:	Jun 29, 2020 1:30 PM
Eurofins reference:	**728527**

Sample information

☑ A detailed list of analytes logged into our LIMS, is included in the attached summary table.

☑ All samples have been received as described on the above COC.

☑ COC has been completed correctly.

☑ Attempt to chill was evident.

☑ Appropriately preserved sample containers have been used.

☑ All samples were received in good condition.

☑ Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.

☑ Appropriate sample containers have been used.

☒ Split sample sent to requested external lab.

☒ Some samples have been subcontracted.

N/A Custody Seals intact (if used).

Contact notes

If you have any questions with respect to these samples please contact:

[redacted] on Phone : [redacted] or by e.mail: [redacted]@eurofins.com

Results will be delivered electronically via e.mail to [redacted]@slrconsulting.com.

Note: A copy of these results will also be delivered to the general SLR Consulting (Sydney) email address.

eurofins | Environment Testing

ABN – 50 005 085 521 web : www.eurofins.com.au e.mail : EnviroSales@eurofins.com

Australia

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NATA # 1261 Site # 18217

Brisbane
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NATA # 1261 Site # 20794

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Kewdale WA 6105
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NATA # 1261
Site # 23736

New Zealand

Auckland
35 O'Rorke Road
Penrose, Auckland 1061
Phone : +64 9 526 45 51
IANZ # 1327

Christchurch
43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 728527
Phone: 02 9428 8100
Fax:

Received: Jun 29, 2020 1:30 PM
Due: Jul 6, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A	Per- and Polyfluoroalkyl Substances (PFASs)
Melbourne Laboratory - NATA Site # 1254 & 14271											
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	
Brisbane Laboratory - NATA Site # 20794											X
Perth Laboratory - NATA Site # 23736											
External Laboratory											
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**						
1	0407_QC252_200624	Jun 24, 2020		Soil	S20-Jn49805	X	X	X	X	X	X
2	0407_QC260_200624	Jun 24, 2020		Soil	S20-Jn49806	X	X	X	X	X	X
Test Counts						2	2	2	2	2	2

Certificate of Analysis

eurofins | Environment Testing

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025–Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus
North Sydney
NSW 2060

Attention:	LQRSYD
Report	728527-AID
Project Name	RANDWICK BARRACKS
Project ID	610.30041
Received Date	Jun 29, 2020
Date Reported	Jul 06, 2020

Methodology:

Asbestos Fibre Identification	Conducted in accordance with the Australian Standard AS 4964 – 2004: Method for the Qualitative Identification of Asbestos in Bulk Samples and in-house Method LTM-ASB-8020 by polarised light microscopy (PLM) and dispersion staining (DS) techniques. *NOTE: Positive Trace Analysis results indicate the sample contains detectable respirable fibres.*
Unknown Mineral Fibres	Mineral fibres of unknown type, as determined by PLM with DS, may require another analytical technique, such as Electron Microscopy, to confirm unequivocal identity. *NOTE: While Actinolite, Anthophyllite and Tremolite asbestos may be detected by PLM with DS, due to variability in the optical properties of these materials, AS4964 requires that these are reported as UMF unless confirmed by an independent technique.*
Subsampling Soil Samples	The whole sample submitted is first dried and then passed through a 10mm sieve followed by a 2mm sieve. All fibrous matter greater than 10mm, greater than 2mm as well as the material passing through the 2mm sieve are retained and analysed for the presence of asbestos. If the sub 2mm fraction is greater than approximately 30 to 60g then a sub-sampling routine based on ISO 3082:2009(E) is employed. *NOTE: Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be sub-sampled for trace analysis, in accordance with AS 4964-2004.*
Bonded asbestos-containing material (ACM)	The material is first examined and any fibres isolated for identification by PLM and DS. Where required, interfering matrices may be removed by disintegration using a range of heat, chemical or physical treatments, possibly in combination.The resultant material is then further examined in accordance with AS 4964 - 2004. *NOTE: Even after disintegration it may be difficult to detect the presence of asbestos in some asbestos-containing bulk materials using PLM and DS. This is due to the low grade or small length or diameter of the asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos-containing sealants and mastics, asbestos-containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.*
Limit of Reporting	The performance limitation of the AS 4964 (2004) method for non-homogeneous samples is around 0.1 g/kg (equivalent to 0.01% (w/w)). Where no asbestos is found by PLM and DS, including Trace Analysis, this is considered to be at the nominal reporting limit of 0.01% (w/w). The NEPM screening level of 0.001% (w/w) is intended as an on-site determination, not a laboratory Limit of Reporting (LOR), per se. Examination of a large sample size (e.g. 500 mL) may improve the likelihood of detecting asbestos, particularly AF, to aid assessment against the NEPM criteria. Gravimetric determinations to this level of accuracy are outside of AS 4964 and hence NATA Accreditation does not cover the performance of this service (non-NATA results shown with an asterisk). *NOTE: NATA News March 2014, p.7, states in relation to AS 4964: "This is a qualitative method with a nominal reporting limit of 0.01 % " and that currently in Australia "there is no validated method available for the quantification of asbestos".This report is consistent with the analytical procedures and reporting recommendations in the NEPM and the WA DoH.*

Accredited for compliance with ISO/IEC 17025–Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Project Name RANDWICK BARRACKS
Project ID 610.30041
Date Sampled Jun 24, 2020
Report 728527-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
0407_QC252_200624	20-Jn49805	Jun 24, 2020	Approximate Sample 50g Sample consisted of: Brown fine-grained sandy soil	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
0407_QC260_200624	20-Jn49806	Jun 24, 2020	Approximate Sample 51g Sample consisted of: Brown coarse-grained soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Asbestos - LTM-ASB-8020	Sydney	Jun 29, 2020	Indefinite

eurofins | Environment Testing

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Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 728527
Phone: 02 9428 8100
Fax:

Received: Jun 29, 2020 1:30 PM
Due: Jul 6, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A	Per- and Polyfluoroalkyl Substances (PFASs)
Melbourne Laboratory - NATA Site # 1254 & 14271											
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	
Brisbane Laboratory - NATA Site # 20794											X
Perth Laboratory - NATA Site # 23736											
External Laboratory											
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**						
1	0407_QC252_200624	Jun 24, 2020		Soil	S20-Jn49805	X	X	X	X	X	X
2	0407_QC260_200624	Jun 24, 2020		Soil	S20-Jn49806	X	X	X	X	X	X
Test Counts						2	2	2	2	2	2

Internal Quality Control Review and Glossary

General

1. QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Samples were analysed on an 'as received' basis.
4. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
5. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the Sample Receipt Advice.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

Units

% w/w: weight for weight basis	grams per kilogram
Filter loading:	fibres/100 graticule areas
Reported Concentration:	fibres/mL
Flowrate:	L/min

Terms

Dry	Sample is dried by heating prior to analysis
LOR	Limit of Reporting
COC	Chain of Custody
SRA	Sample Receipt Advice
ISO	International Standards Organisation
AS	Australian Standards
WA DOH	Reference document for the NEPM. Government of Western Australia, Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia (2009), including supporting document Recommended Procedures for Laboratory Analysis of Asbestos in Soil (2011)
NEPM	National Environment Protection (Assessment of Site Contamination) Measure, 2013 (as amended)
ACM	Asbestos Containing Materials. Asbestos contained within a non-asbestos matrix, typically presented in bonded and/or sound condition. For the purposes of the NEPM, ACM is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
AF	Asbestos Fines. Asbestos containing materials, including friable, weathered and bonded materials, able to pass a 7mm x 7mm sieve. Considered under the NEPM as equivalent to “non-bonded / friable”.
FA	Fibrous Asbestos. Asbestos containing materials in a friable and/or severely weathered condition. For the purposes of the NEPM, FA is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
Friable	Asbestos-containing materials of any size that may be broken or crumbled by hand pressure. For the purposes of the NEPM, this includes both AF and FA. It is outside of the laboratory’s remit to assess degree of friability.
Trace Analysis	Analytical procedure used to detect the presence of respirable fibres in the matrix.

Comments

The samples received were not collected in an approved asbestos bag and was therefore sub-sampled from the 250mL glass jar. Valid sub-sampling procedures were applied so as to ensure that the sub-samples to be analysed accurately represented the samples received.

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N/A	Not applicable

Asbestos Counter/Identifier:

[redacted] Senior Analyst-Asbestos (NSW)

Authorised by:

[redacted] Senior Analyst-Asbestos (NSW)

General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus,
North Sydney
NSW 2060

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: **LQRSYD**

Report **728527-S**
Project name RANDWICK BARRACKS
Project ID 610.30041
Received Date Jun 29, 2020

Client Sample ID			**0407_QC252_200624**	**0407_QC260_200624**
Sample Matrix			**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn49805**	**S20-Jn49806**
Date Sampled			**Jun 24, 2020**	**Jun 24, 2020**
Test/Reference	LOR	Unit		
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				
TRH C6-C9	20	mg/kg	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	150
TRH C29-C36	50	mg/kg	< 50	330
TRH C10-C36 (Total)	50	mg/kg	< 50	480
BTEX				
Benzene	0.1	mg/kg	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	68	73
Volatile Organics				
1.1-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5	< 0.5

Client Sample ID			0407_QC252_200624	0407_QC260_200624
Sample Matrix			**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn49805**	**S20-Jn49806**
Date Sampled			**Jun 24, 2020**	**Jun 24, 2020**
Test/Reference	LOR	Unit		
Volatile Organics				
Benzene	0.1	mg/kg	< 0.1	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5	< 0.5
Bromoform	0.5	mg/kg	< 0.5	< 0.5
Bromomethane	0.5	mg/kg	< 0.5	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5	< 0.5
Chloroethane	0.5	mg/kg	< 0.5	< 0.5
Chloroform	0.5	mg/kg	< 0.5	< 0.5
Chloromethane	0.5	mg/kg	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1
Iodomethane	0.5	mg/kg	< 0.5	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5	< 0.5
o-Xylene	0.1	mg/kg	< 0.1	< 0.1
Styrene	0.5	mg/kg	< 0.5	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5	< 0.5
Toluene	0.1	mg/kg	< 0.1	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3
Total MAH*	0.5	mg/kg	< 0.5	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5
4-Bromofluorobenzene (surr.)	1	%	68	73
Toluene-d8 (surr.)	1	%	100	98
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	410
TRH >C34-C40	100	mg/kg	< 100	270
TRH >C10-C40 (total)*	100	mg/kg	< 100	680

Client Sample ID			0407_QC252_200624	0407_QC260_200624
Sample Matrix			**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn49805**	**S20-Jn49806**
Date Sampled			**Jun 24, 2020**	**Jun 24, 2020**
Test/Reference	LOR	Unit		
Polycyclic Aromatic Hydrocarbons				
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5	0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	0.5
2-Fluorobiphenyl (surr.)	1	%	65	54
p-Terphenyl-d14 (surr.)	1	%	105	61
Organochlorine Pesticides				
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05
a-BHC	0.05	mg/kg	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05
b-BHC	0.05	mg/kg	< 0.05	< 0.05
d-BHC	0.05	mg/kg	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05
Methoxychlor	0.2	mg/kg	< 0.2	< 0.2
Toxaphene	1	mg/kg	< 1	< 1
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.2	< 0.2
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.2	< 0.2
Dibutylchlorendate (surr.)	1	%	76	79
Tetrachloro-m-xylene (surr.)	1	%	91	69

Client Sample ID			0407_QC252_200624	0407_QC260_200624
Sample Matrix			**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn49805**	**S20-Jn49806**
Date Sampled			**Jun 24, 2020**	**Jun 24, 2020**
Test/Reference	LOR	Unit		
Organophosphorus Pesticides				
Azinphos-methyl	0.2	mg/kg	< 0.2	< 0.2
Bolstar	0.2	mg/kg	< 0.2	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2	< 0.2
Coumaphos	2	mg/kg	< 2	< 2
Demeton-S	0.2	mg/kg	< 0.2	< 0.2
Demeton-O	0.2	mg/kg	< 0.2	< 0.2
Diazinon	0.2	mg/kg	< 0.2	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2	< 0.2
Dimethoate	0.2	mg/kg	< 0.2	< 0.2
Disulfoton	0.2	mg/kg	< 0.2	< 0.2
EPN	0.2	mg/kg	< 0.2	< 0.2
Ethion	0.2	mg/kg	< 0.2	< 0.2
Ethoprop	0.2	mg/kg	< 0.2	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2	< 0.2
Fenthion	0.2	mg/kg	< 0.2	< 0.2
Malathion	0.2	mg/kg	< 0.2	< 0.2
Merphos	0.2	mg/kg	< 0.2	< 0.2
Methyl parathion	0.2	mg/kg	< 0.2	< 0.2
Mevinphos	0.2	mg/kg	< 0.2	< 0.2
Monocrotophos	2	mg/kg	< 2	< 2
Naled	0.2	mg/kg	< 0.2	< 0.2
Omethoate	2	mg/kg	< 2	< 2
Phorate	0.2	mg/kg	< 0.2	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2	< 0.2
Ronnel	0.2	mg/kg	< 0.2	< 0.2
Terbufos	0.2	mg/kg	< 0.2	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2	< 0.2
Tokuthion	0.2	mg/kg	< 0.2	< 0.2
Trichloronate	0.2	mg/kg	< 0.2	< 0.2
Triphenylphosphate (surr.)	1	%	INT	76
Polychlorinated Biphenyls				
Aroclor-1016	0.5	mg/kg	< 0.5	< 0.5
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1
Aroclor-1232	0.5	mg/kg	< 0.5	< 0.5
Aroclor-1242	0.5	mg/kg	< 0.5	< 0.5
Aroclor-1248	0.5	mg/kg	< 0.5	< 0.5
Aroclor-1254	0.5	mg/kg	< 0.5	< 0.5
Aroclor-1260	0.5	mg/kg	< 0.5	< 0.5
Total PCB*	0.5	mg/kg	< 0.5	< 0.5
Dibutylchlorendate (surr.)	1	%	76	79
Tetrachloro-m-xylene (surr.)	1	%	91	69

Client Sample ID			0407_QC252_200624	0407_QC260_200624
Sample Matrix			**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn49805**	**S20-Jn49806**
Date Sampled			**Jun 24, 2020**	**Jun 24, 2020**
Test/Reference	LOR	Unit		
Phenols (Halogenated)				
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1
Phenols (non-Halogenated)				
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2
2-Nitrophenol	1	mg/kg	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5	< 5
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4
4-Nitrophenol	5	mg/kg	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20
Phenol-d6 (surr.)	1	%	82	51
Heavy Metals				
Arsenic	2	mg/kg	< 2	6.6
Cadmium	0.4	mg/kg	< 0.4	< 0.4
Chromium	5	mg/kg	< 5	20
Copper	5	mg/kg	< 5	43
Lead	5	mg/kg	5.7	64
Mercury	0.1	mg/kg	< 0.1	< 0.1
Nickel	5	mg/kg	< 5	12
Zinc	5	mg/kg	< 5	160
% Moisture	1	%	22	26
Perfluoroalkyl carboxylic acids (PFCAs)				
Perfluorobutanoic acid (PFBA)[N11]	5	ug/kg	< 5	< 5
Perfluoropentanoic acid (PFPeA)[N11]	5	ug/kg	< 5	< 5
Perfluorohexanoic acid (PFHxA)[N11]	5	ug/kg	< 5	< 5
Perfluoroheptanoic acid (PFHpA)[N11]	5	ug/kg	< 5	< 5
Perfluorooctanoic acid (PFOA)[N11]	5	ug/kg	< 5	< 5
Perfluorononanoic acid (PFNA)[N11]	5	ug/kg	< 5	< 5
Perfluorodecanoic acid (PFDA)[N11]	5	ug/kg	< 5	< 5
Perfluoroundecanoic acid (PFUnDA)[N11]	5	ug/kg	< 5	< 5
Perfluorododecanoic acid (PFDoDA)[N11]	5	ug/kg	< 5	< 5
Perfluorotridecanoic acid (PFTrDA)[N15]	5	ug/kg	< 5	< 5
Perfluorotetradecanoic acid (PFTeDA)[N11]	5	ug/kg	< 5	< 5
13C4-PFBA (surr.)	1	%	84	66
13C5-PFPeA (surr.)	1	%	95	85
13C5-PFHxA (surr.)	1	%	97	89

Client Sample ID			0407_QC252_200624	0407_QC260_200624
Sample Matrix			Soil	Soil
Eurofins Sample No.			S20-Jn49805	S20-Jn49806
Date Sampled			Jun 24, 2020	Jun 24, 2020
Test/Reference	LOR	Unit		
Perfluoroalkyl carboxylic acids (PFCAs)				
13C4-PFHpA (surr.)	1	%	89	85
13C8-PFOA (surr.)	1	%	88	93
13C5-PFNA (surr.)	1	%	95	95
13C6-PFDA (surr.)	1	%	117	102
13C2-PFUnDA (surr.)	1	%	120	98
13C2-PFDoDA (surr.)	1	%	128	102
13C2-PFTeDA (surr.)	1	%	96	92
Perfluoroalkyl sulfonamido substances				
Perfluorooctane sulfonamide (FOSA)[N11]	5	ug/kg	< 5	< 5
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)[N11]	5	ug/kg	< 5	< 5
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)[N11]	5	ug/kg	< 5	< 5
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)[N11]	5	ug/kg	< 5	< 5
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)[N11]	5	ug/kg	< 5	< 5
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)[N11]	10	ug/kg	< 10	< 10
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)[N11]	10	ug/kg	< 10	< 10
13C8-FOSA (surr.)	1	%	72	61
D3-N-MeFOSA (surr.)	1	%	126	95
D5-N-EtFOSA (surr.)	1	%	91	65
D7-N-MeFOSE (surr.)	1	%	108	61
D9-N-EtFOSE (surr.)	1	%	101	69
D5-N-EtFOSAA (surr.)	1	%	87	72
D3-N-MeFOSAA (surr.)	1	%	89	57
Perfluoroalkyl sulfonic acids (PFSAs)				
Perfluorobutanesulfonic acid (PFBS)[N11]	5	ug/kg	< 5	< 5
Perfluorononanesulfonic acid (PFNS)[N15]	5	ug/kg	< 5	< 5
Perfluoropropanesulfonic acid (PFPrS)[N15]	5	ug/kg	< 5	< 5
Perfluoropentanesulfonic acid (PFPeS)[N15]	5	ug/kg	< 5	< 5
Perfluorohexanesulfonic acid (PFHxS)[N11]	5	ug/kg	< 5	< 5
Perfluoroheptanesulfonic acid (PFHpS)[N15]	5	ug/kg	< 5	< 5
Perfluorooctanesulfonic acid (PFOS)[N11]	5	ug/kg	< 5	[N09]8.0
Perfluorodecanesulfonic acid (PFDS)[N15]	5	ug/kg	< 5	< 5
13C3-PFBS (surr.)	1	%	93	81
18O2-PFHxS (surr.)	1	%	97	76
13C8-PFOS (surr.)	1	%	102	83
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	5	ug/kg	< 5	< 5
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)[N11]	10	ug/kg	< 10	< 10
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	5	ug/kg	< 5	< 5
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	5	ug/kg	< 5	< 5
13C2-4:2 FTSA (surr.)	1	%	118	194
13C2-6:2 FTSA (surr.)	1	%	111	INT
13C2-8:2 FTSA (surr.)	1	%	88	121
13C2-10:2 FTSA (surr.)	1	%	87	74

Client Sample ID			0407_QC252_200624	0407_QC260_200624
Sample Matrix			**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn49805**	**S20-Jn49806**
Date Sampled			**Jun 24, 2020**	**Jun 24, 2020**
Test/Reference	LOR	Unit		
PFASs Summations				
Sum (PFHxS + PFOS)*	5	ug/kg	< 5	8
Sum of US EPA PFAS (PFOS + PFOA)*	5	ug/kg	< 5	8
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	5	ug/kg	< 5	8
Sum of WA DWER PFAS (n=10)*	10	ug/kg	< 10	< 10
Sum of PFASs (n=30)*	50	ug/kg	< 50	< 50

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Sydney	Jul 02, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Sydney	Jul 02, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jul 02, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jul 02, 2020	
- Method: LTM-ORG-2010 TRH C6-C40			
Polycyclic Aromatic Hydrocarbons	Sydney	Jul 02, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (Halogenated)	Sydney	Jul 02, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (non-Halogenated)	Sydney	Jul 02, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Metals M8	Sydney	Jul 02, 2020	180 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Volatile Organics	Sydney	Jul 02, 2020	7 Days
- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices			
Eurofins | mgt Suite B15			
Organochlorine Pesticides	Sydney	Jul 02, 2020	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Organophosphorus Pesticides	Sydney	Jul 02, 2020	14 Days
- Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS			
Polychlorinated Biphenyls	Sydney	Jul 02, 2020	28 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
% Moisture	Sydney	Jun 29, 2020	14 Days
- Method: LTM-GEN-7080 Moisture			
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs)	Brisbane	Jul 01, 2020	180 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonamido substances	Brisbane	Jul 01, 2020	180 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonic acids (PFSAs)	Brisbane	Jul 01, 2020	180 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)	Brisbane	Jul 01, 2020	180 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			

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Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 728527
Phone: 02 9428 8100
Fax:

Received: Jun 29, 2020 1:30 PM
Due: Jul 6, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A	Per- and Polyfluoroalkyl Substances (PFASs)
Melbourne Laboratory - NATA Site # 1254 & 14271											
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	
Brisbane Laboratory - NATA Site # 20794											X
Perth Laboratory - NATA Site # 23736											
External Laboratory											
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**						
1	0407_QC252_200624	Jun 24, 2020		Soil	S20-Jn49805	X	X	X	X	X	X
2	0407_QC260_200624	Jun 24, 2020		Soil	S20-Jn49806	X	X	X	X	X	X
Test Counts						2	2	2	2	2	2

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

****NOTE:** pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram
mg/L: milligrams per litre
ug/L: micrograms per litre
ppm: Parts per million
ppb: Parts per billion
%: Percentage
org/100mL: Organisms per 100 millilitres
NTU: Nephelometric Turbidity Units
MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version 5.3
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling.Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
Method Blank							
BTEX							
Benzene	mg/kg	< 0.1			0.1	Pass	
Toluene	mg/kg	< 0.1			0.1	Pass	
Ethylbenzene	mg/kg	< 0.1			0.1	Pass	
m&p-Xylenes	mg/kg	< 0.2			0.2	Pass	
o-Xylene	mg/kg	< 0.1			0.1	Pass	
Xylenes - Total*	mg/kg	< 0.3			0.3	Pass	
Method Blank							
Volatile Organics							
1.1-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
1.1.1-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.1.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dibromoethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.3-Trichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.4-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.3.5-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.4-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
2-Butanone (MEK)	mg/kg	< 0.5			0.5	Pass	
2-Propanone (Acetone)	mg/kg	< 0.5			0.5	Pass	
4-Chlorotoluene	mg/kg	< 0.5			0.5	Pass	
4-Methyl-2-pentanone (MIBK)	mg/kg	< 0.5			0.5	Pass	
Allyl chloride	mg/kg	< 0.5			0.5	Pass	
Bromobenzene	mg/kg	< 0.5			0.5	Pass	
Bromochloromethane	mg/kg	< 0.5			0.5	Pass	
Bromodichloromethane	mg/kg	< 0.5			0.5	Pass	
Bromoform	mg/kg	< 0.5			0.5	Pass	
Bromomethane	mg/kg	< 0.5			0.5	Pass	
Carbon disulfide	mg/kg	< 0.5			0.5	Pass	
Carbon Tetrachloride	mg/kg	< 0.5			0.5	Pass	
Chlorobenzene	mg/kg	< 0.5			0.5	Pass	
Chloroethane	mg/kg	< 0.5			0.5	Pass	
Chloroform	mg/kg	< 0.5			0.5	Pass	
Chloromethane	mg/kg	< 0.5			0.5	Pass	
cis-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
cis-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Dibromochloromethane	mg/kg	< 0.5			0.5	Pass	
Dibromomethane	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Dichlorodifluoromethane	mg/kg	< 0.5			0.5	Pass	
Iodomethane	mg/kg	< 0.5			0.5	Pass	
Isopropyl benzene (Cumene)	mg/kg	< 0.5			0.5	Pass	
Methylene Chloride	mg/kg	< 0.5			0.5	Pass	
Styrene	mg/kg	< 0.5			0.5	Pass	
Tetrachloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Trichloroethene	mg/kg	< 0.5			0.5	Pass	
Trichlorofluoromethane	mg/kg	< 0.5			0.5	Pass	
Vinyl chloride	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Organochlorine Pesticides							
Chlordanes - Total	mg/kg	< 0.1			0.1	Pass	
4.4'-DDD	mg/kg	< 0.05			0.05	Pass	
4.4'-DDE	mg/kg	< 0.05			0.05	Pass	
4.4'-DDT	mg/kg	< 0.05			0.05	Pass	
a-BHC	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-BHC	mg/kg	< 0.05			0.05	Pass	
d-BHC	mg/kg	< 0.05			0.05	Pass	
Dieldrin	mg/kg	< 0.05			0.05	Pass	
Endosulfan I	mg/kg	< 0.05			0.05	Pass	
Endosulfan II	mg/kg	< 0.05			0.05	Pass	
Endosulfan sulphate	mg/kg	< 0.05			0.05	Pass	
Endrin	mg/kg	< 0.05			0.05	Pass	
Endrin aldehyde	mg/kg	< 0.05			0.05	Pass	
Endrin ketone	mg/kg	< 0.05			0.05	Pass	
g-BHC (Lindane)	mg/kg	< 0.05			0.05	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Heptachlor	mg/kg	< 0.05			0.05	Pass	
Heptachlor epoxide	mg/kg	< 0.05			0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05			0.05	Pass	
Methoxychlor	mg/kg	< 0.2			0.2	Pass	
Toxaphene	mg/kg	< 1			1	Pass	
Method Blank							
Organophosphorus Pesticides							
Azinphos-methyl	mg/kg	< 0.2			0.2	Pass	
Bolstar	mg/kg	< 0.2			0.2	Pass	
Chlorfenvinphos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos-methyl	mg/kg	< 0.2			0.2	Pass	
Coumaphos	mg/kg	< 2			2	Pass	
Demeton-S	mg/kg	< 0.2			0.2	Pass	
Demeton-O	mg/kg	< 0.2			0.2	Pass	
Diazinon	mg/kg	< 0.2			0.2	Pass	
Dichlorvos	mg/kg	< 0.2			0.2	Pass	
Dimethoate	mg/kg	< 0.2			0.2	Pass	
Disulfoton	mg/kg	< 0.2			0.2	Pass	
EPN	mg/kg	< 0.2			0.2	Pass	
Ethion	mg/kg	< 0.2			0.2	Pass	
Ethoprop	mg/kg	< 0.2			0.2	Pass	
Ethyl parathion	mg/kg	< 0.2			0.2	Pass	
Fenitrothion	mg/kg	< 0.2			0.2	Pass	
Fensulfothion	mg/kg	< 0.2			0.2	Pass	
Fenthion	mg/kg	< 0.2			0.2	Pass	
Malathion	mg/kg	< 0.2			0.2	Pass	
Merphos	mg/kg	< 0.2			0.2	Pass	
Methyl parathion	mg/kg	< 0.2			0.2	Pass	
Mevinphos	mg/kg	< 0.2			0.2	Pass	
Monocrotophos	mg/kg	< 2			2	Pass	
Naled	mg/kg	< 0.2			0.2	Pass	
Omethoate	mg/kg	< 2			2	Pass	
Phorate	mg/kg	< 0.2			0.2	Pass	
Pirimiphos-methyl	mg/kg	< 0.2			0.2	Pass	
Pyrazophos	mg/kg	< 0.2			0.2	Pass	
Ronnel	mg/kg	< 0.2			0.2	Pass	
Terbufos	mg/kg	< 0.2			0.2	Pass	
Tetrachlorvinphos	mg/kg	< 0.2			0.2	Pass	
Tokuthion	mg/kg	< 0.2			0.2	Pass	
Trichloronate	mg/kg	< 0.2			0.2	Pass	
Method Blank							
Polychlorinated Biphenyls							
Aroclor-1016	mg/kg	< 0.5			0.5	Pass	
Aroclor-1221	mg/kg	< 0.1			0.1	Pass	
Aroclor-1232	mg/kg	< 0.5			0.5	Pass	
Aroclor-1242	mg/kg	< 0.5			0.5	Pass	
Aroclor-1248	mg/kg	< 0.5			0.5	Pass	
Aroclor-1254	mg/kg	< 0.5			0.5	Pass	
Aroclor-1260	mg/kg	< 0.5			0.5	Pass	
Total PCB*	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Phenols (Halogenated)							
2-Chlorophenol	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2.4-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4.5-Trichlorophenol	mg/kg	< 1			1	Pass	
2.4.6-Trichlorophenol	mg/kg	< 1			1	Pass	
2.6-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
4-Chloro-3-methylphenol	mg/kg	< 1			1	Pass	
Pentachlorophenol	mg/kg	< 1			1	Pass	
Tetrachlorophenols - Total	mg/kg	< 10			10	Pass	
Method Blank							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	mg/kg	< 20			20	Pass	
2-Methyl-4.6-dinitrophenol	mg/kg	< 5			5	Pass	
2-Methylphenol (o-Cresol)	mg/kg	< 0.2			0.2	Pass	
2-Nitrophenol	mg/kg	< 1			1	Pass	
2.4-Dimethylphenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dinitrophenol	mg/kg	< 5			5	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/kg	< 0.4			0.4	Pass	
4-Nitrophenol	mg/kg	< 5			5	Pass	
Dinoseb	mg/kg	< 20			20	Pass	
Phenol	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Nickel	mg/kg	< 5			5	Pass	
Zinc	mg/kg	< 5			5	Pass	
Method Blank							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	ug/kg	< 5			5	Pass	
Perfluoropentanoic acid (PFPeA)	ug/kg	< 5			5	Pass	
Perfluorohexanoic acid (PFHxA)	ug/kg	< 5			5	Pass	
Perfluoroheptanoic acid (PFHpA)	ug/kg	< 5			5	Pass	
Perfluorooctanoic acid (PFOA)	ug/kg	< 5			5	Pass	
Perfluorononanoic acid (PFNA)	ug/kg	< 5			5	Pass	
Perfluorodecanoic acid (PFDA)	ug/kg	< 5			5	Pass	
Perfluoroundecanoic acid (PFUnDA)	ug/kg	< 5			5	Pass	
Perfluorododecanoic acid (PFDoDA)	ug/kg	< 5			5	Pass	
Perfluorotridecanoic acid (PFTrDA)	ug/kg	< 5			5	Pass	
Perfluorotetradecanoic acid (PFTeDA)	ug/kg	< 5			5	Pass	
Method Blank							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	ug/kg	< 5			5	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	ug/kg	< 5			5	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	ug/kg	< 5			5	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	ug/kg	< 5			5	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	ug/kg	< 5			5	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	ug/kg	< 10			10	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	ug/kg	< 10			10	Pass	
Method Blank							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	ug/kg	< 5			5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Perfluorononanesulfonic acid (PFNS)	ug/kg	< 5			5	Pass	
Perfluoropropanesulfonic acid (PFPrS)	ug/kg	< 5			5	Pass	
Perfluoropentanesulfonic acid (PFPeS)	ug/kg	< 5			5	Pass	
Perfluorohexanesulfonic acid (PFHxS)	ug/kg	< 5			5	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	ug/kg	< 5			5	Pass	
Perfluorooctanesulfonic acid (PFOS)	ug/kg	< 5			5	Pass	
Perfluorodecanesulfonic acid (PFDS)	ug/kg	< 5			5	Pass	
Method Blank							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	ug/kg	< 5			5	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	ug/kg	< 10			10	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	ug/kg	< 5			5	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	ug/kg	< 5			5	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C10-C14	%	89			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	100			70-130	Pass	
Toluene	%	101			70-130	Pass	
Ethylbenzene	%	96			70-130	Pass	
m&p-Xylenes	%	98			70-130	Pass	
o-Xylene	%	99			70-130	Pass	
Xylenes - Total*	%	98			70-130	Pass	
LCS - % Recovery							
Volatile Organics							
1.1-Dichloroethene	%	112			70-130	Pass	
1.1.1-Trichloroethane	%	95			70-130	Pass	
1.2-Dichlorobenzene	%	95			70-130	Pass	
1.2-Dichloroethane	%	103			70-130	Pass	
Trichloroethene	%	96			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	90			70-130	Pass	
TRH >C10-C16	%	78			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	81			70-130	Pass	
Acenaphthylene	%	100			70-130	Pass	
Anthracene	%	86			70-130	Pass	
Benz(a)anthracene	%	88			70-130	Pass	
Benzo(a)pyrene	%	92			70-130	Pass	
Benzo(b&j)fluoranthene	%	94			70-130	Pass	
Benzo(g.h.i)perylene	%	116			70-130	Pass	
Benzo(k)fluoranthene	%	107			70-130	Pass	
Chrysene	%	88			70-130	Pass	
Dibenz(a.h)anthracene	%	114			70-130	Pass	
Fluoranthene	%	73			70-130	Pass	
Fluorene	%	105			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	113			70-130	Pass	
Naphthalene	%	87			70-130	Pass	
Phenanthrene	%	77			70-130	Pass	
Pyrene	%	93			70-130	Pass	
LCS - % Recovery							

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Organochlorine Pesticides							
Chlordanes - Total	%	87			70-130	Pass	
4.4'-DDD	%	81			70-130	Pass	
4.4'-DDE	%	74			70-130	Pass	
4.4'-DDT	%	84			70-130	Pass	
a-BHC	%	88			70-130	Pass	
Aldrin	%	120			70-130	Pass	
b-BHC	%	86			70-130	Pass	
d-BHC	%	89			70-130	Pass	
Dieldrin	%	90			70-130	Pass	
Endosulfan I	%	77			70-130	Pass	
Endosulfan II	%	85			70-130	Pass	
Endosulfan sulphate	%	76			70-130	Pass	
Endrin	%	97			70-130	Pass	
Endrin aldehyde	%	104			70-130	Pass	
Endrin ketone	%	86			70-130	Pass	
g-BHC (Lindane)	%	86			70-130	Pass	
Heptachlor	%	95			70-130	Pass	
Heptachlor epoxide	%	85			70-130	Pass	
Hexachlorobenzene	%	74			70-130	Pass	
Methoxychlor	%	95			70-130	Pass	
LCS - % Recovery							
Organophosphorus Pesticides							
Diazinon	%	86			70-130	Pass	
Dimethoate	%	73			70-130	Pass	
Ethion	%	90			70-130	Pass	
Fenitrothion	%	126			70-130	Pass	
Methyl parathion	%	116			70-130	Pass	
Mevinphos	%	110			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls							
Aroclor-1016	%	82			70-130	Pass	
Aroclor-1260	%	123			70-130	Pass	
LCS - % Recovery							
Phenols (Halogenated)							
2-Chlorophenol	%	79			30-130	Pass	
2.4-Dichlorophenol	%	93			30-130	Pass	
2.4.5-Trichlorophenol	%	108			30-130	Pass	
2.4.6-Trichlorophenol	%	90			30-130	Pass	
4-Chloro-3-methylphenol	%	105			30-130	Pass	
Pentachlorophenol	%	78			30-130	Pass	
Tetrachlorophenols - Total	%	91			30-130	Pass	
LCS - % Recovery							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	%	83			30-130	Pass	
2-Methyl-4.6-dinitrophenol	%	88			30-130	Pass	
2-Methylphenol (o-Cresol)	%	79			30-130	Pass	
2-Nitrophenol	%	89			30-130	Pass	
2.4-Dimethylphenol	%	77			30-130	Pass	
2.4-Dinitrophenol	%	95			30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	%	94			30-130	Pass	
4-Nitrophenol	%	90			30-130	Pass	
Dinoseb	%	87			30-130	Pass	
Phenol	%	73			30-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
LCS - % Recovery							
Heavy Metals							
Arsenic	%	96			70-130	Pass	
Cadmium	%	97			70-130	Pass	
Chromium	%	96			70-130	Pass	
Copper	%	95			70-130	Pass	
Lead	%	98			70-130	Pass	
Mercury	%	101			70-130	Pass	
Nickel	%	96			70-130	Pass	
Zinc	%	90			70-130	Pass	
LCS - % Recovery							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	%	112			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	111			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	114			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	118			50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	111			50-150	Pass	
Perfluorononanoic acid (PFNA)	%	116			50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	105			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	114			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	122			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	%	103			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	127			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	%	121			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	108			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	110			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	%	113			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	%	72			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	117			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	117			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	%	106			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	%	105			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	%	105			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	%	109			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	%	98			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	%	109			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	%	108			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	%	101			50-150	Pass	
LCS - % Recovery							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	114			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	%	90			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	103			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	%	104			50-150	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C10-C14	S20-Jn39790	NCP	%	99			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	S20-Jl05171	NCP	%	81			70-130	Pass	
Toluene	S20-Jl05171	NCP	%	76			70-130	Pass	
Ethylbenzene	S20-Jl05171	NCP	%	77			70-130	Pass	
m&p-Xylenes	S20-Jl05171	NCP	%	76			70-130	Pass	
o-Xylene	S20-Jl05171	NCP	%	82			70-130	Pass	
Xylenes - Total*	S20-Jl05171	NCP	%	78			70-130	Pass	
Spike - % Recovery									
Volatile Organics				Result 1					
1.1-Dichloroethene	S20-Jl05171	NCP	%	86			70-130	Pass	
1.1.1-Trichloroethane	S20-Jl05171	NCP	%	78			70-130	Pass	
1.2-Dichlorobenzene	S20-Jl05171	NCP	%	75			70-130	Pass	
1.2-Dichloroethane	S20-Jl05171	NCP	%	81			70-130	Pass	
Trichloroethene	S20-Jl05171	NCP	%	78			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
TRH >C10-C16	S20-Jn39790	NCP	%	94			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	S20-Jn50043	NCP	%	101			70-130	Pass	
Acenaphthylene	S20-Jn50043	NCP	%	113			70-130	Pass	
Anthracene	S20-Jn50043	NCP	%	100			70-130	Pass	
Benz(a)anthracene	S20-Jn50043	NCP	%	129			70-130	Pass	
Benzo(a)pyrene	S20-Jn50043	NCP	%	113			70-130	Pass	
Benzo(b&j)fluoranthene	S20-Jn50043	NCP	%	125			70-130	Pass	
Benzo(k)fluoranthene	S20-Jn50043	NCP	%	129			70-130	Pass	
Chrysene	S20-Jn50043	NCP	%	129			70-130	Pass	
Dibenz(a.h)anthracene	S20-Jn50043	NCP	%	120			70-130	Pass	
Fluoranthene	S20-Jn50043	NCP	%	91			70-130	Pass	
Fluorene	S20-Jn50043	NCP	%	121			70-130	Pass	
Indeno(1.2.3-cd)pyrene	S20-Jn50043	NCP	%	118			70-130	Pass	
Naphthalene	S20-Jn50043	NCP	%	111			70-130	Pass	
Phenanthrene	S20-Jn50043	NCP	%	96			70-130	Pass	
Pyrene	S20-Jn50043	NCP	%	80			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
Chlordanes - Total	S20-Jn50043	NCP	%	73			70-130	Pass	
4.4'-DDD	S20-Jn50043	NCP	%	78			70-130	Pass	
4.4'-DDT	S20-Jn50043	NCP	%	73			70-130	Pass	
a-BHC	S20-Jn50043	NCP	%	96			70-130	Pass	
Aldrin	S20-Jn50043	NCP	%	73			70-130	Pass	
b-BHC	S20-Jn50043	NCP	%	97			70-130	Pass	
d-BHC	S20-Jn50043	NCP	%	90			70-130	Pass	
Endosulfan I	S20-Jn50043	NCP	%	77			70-130	Pass	
Endosulfan II	S20-Jn50043	NCP	%	82			70-130	Pass	
Endrin ketone	S20-Jn50043	NCP	%	85			70-130	Pass	
g-BHC (Lindane)	S20-Jn50043	NCP	%	76			70-130	Pass	
Heptachlor	S20-Jn50043	NCP	%	82			70-130	Pass	
Heptachlor epoxide	S20-Jn50043	NCP	%	72			70-130	Pass	
Hexachlorobenzene	S20-Jn50043	NCP	%	79			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Methoxychlor	S20-Jn50043	NCP	%	86			70-130	Pass	
Spike - % Recovery									
Polychlorinated Biphenyls				Result 1					
Aroclor-1016	S20-Jn50043	NCP	%	80			70-130	Pass	
Aroclor-1260	S20-Jn50043	NCP	%	84			70-130	Pass	
Spike - % Recovery									
Phenols (Halogenated)				Result 1					
2-Chlorophenol	S20-Jn50043	NCP	%	115			30-130	Pass	
2.4-Dichlorophenol	S20-Jn50043	NCP	%	129			30-130	Pass	
Pentachlorophenol	S20-Jn50043	NCP	%	100			30-130	Pass	
Spike - % Recovery									
Phenols (non-Halogenated)				Result 1					
2-Methyl-4.6-dinitrophenol	S20-Jn50043	NCP	%	124			30-130	Pass	
2-Methylphenol (o-Cresol)	S20-Jn50043	NCP	%	125			30-130	Pass	
2.4-Dimethylphenol	S20-Jn50043	NCP	%	128			30-130	Pass	
2.4-Dinitrophenol	S20-Jn50043	NCP	%	120			70-130	Pass	
4-Nitrophenol	S20-Jn50043	NCP	%	128			30-130	Pass	
Dinoseb	S20-Jn50043	NCP	%	113			30-130	Pass	
Phenol	S20-Jn50043	NCP	%	124			30-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	S20-Jn49770	NCP	%	113			70-130	Pass	
Cadmium	S20-Jn49770	NCP	%	124			70-130	Pass	
Chromium	S20-Jn49770	NCP	%	116			70-130	Pass	
Copper	S20-Jn49770	NCP	%	81			70-130	Pass	
Lead	S20-Jn47026	NCP	%	99			70-130	Pass	
Mercury	S20-Jn49770	NCP	%	115			70-130	Pass	
Nickel	S20-Jn49770	NCP	%	115			70-130	Pass	
Zinc	S20-Jn47026	NCP	%	107			70-130	Pass	
Spike - % Recovery									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1					
Perfluorobutanoic acid (PFBA)	S20-Jn51442	NCP	%	110			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	S20-Jn51442	NCP	%	105			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	S20-Jn51442	NCP	%	108			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	S20-Jn51442	NCP	%	110			50-150	Pass	
Perfluorooctanoic acid (PFOA)	S20-Jn51442	NCP	%	105			50-150	Pass	
Perfluorononanoic acid (PFNA)	S20-Jn51442	NCP	%	115			50-150	Pass	
Perfluorodecanoic acid (PFDA)	S20-Jn51442	NCP	%	101			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	S20-Jn51442	NCP	%	107			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	S20-Jn51442	NCP	%	107			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	S20-Jn51442	NCP	%	92			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	S20-Jn51442	NCP	%	111			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonamido substances				Result 1					
Perfluorooctane sulfonamide (FOSA)	S20-Jn51442	NCP	%	123			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	S20-Jn51442	NCP	%	117			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	S20-Jn51442	NCP	%	101			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	S20-Jn51442	NCP	%	104			50-150	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	S20-Jn51442	NCP	%	74			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	S20-Jn51442	NCP	%	108			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	S20-Jn51442	NCP	%	109			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1					
Perfluorobutanesulfonic acid (PFBS)	S20-Jn51442	NCP	%	96			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	S20-Jn51442	NCP	%	104			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	S20-Jn51442	NCP	%	98			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	S20-Jn51442	NCP	%	105			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	S20-Jn51442	NCP	%	94			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	S20-Jn51442	NCP	%	103			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	S20-Jn51442	NCP	%	103			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	S20-Jn51442	NCP	%	98			50-150	Pass	
Spike - % Recovery									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1					
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	S20-Jn51442	NCP	%	105			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	S20-Jn51442	NCP	%	99			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	S20-Jn51442	NCP	%	92			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	S20-Jn51442	NCP	%	99			50-150	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C6-C9	S20-Jl05988	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	S20-Jn42224	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	S20-Jn42224	NCP	mg/kg	55	94	53	30%	Fail	Q15
TRH C29-C36	S20-Jn42224	NCP	mg/kg	64	85	29	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S20-Jl05988	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Toluene	S20-Jl05988	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Ethylbenzene	S20-Jl05988	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
m&p-Xylenes	S20-Jl05988	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
o-Xylene	S20-Jl05988	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes - Total*	S20-Jl05988	NCP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
1.1-Dichloroethane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1-Dichloroethene	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1-Trichloroethane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
1.1.2-Trichloroethane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dibromoethane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichlorobenzene	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloroethane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloropropane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.3-Trichloropropane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trimethylbenzene	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichlorobenzene	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichloropropane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3.5-Trimethylbenzene	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.4-Dichlorobenzene	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Butanone (MEK)	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Propanone (Acetone)	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chlorotoluene	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Methyl-2-pentanone (MIBK)	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Allyl chloride	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromobenzene	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromochloromethane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromodichloromethane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromoform	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromomethane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon disulfide	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon Tetrachloride	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chlorobenzene	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroethane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroform	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloromethane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.2-Dichloroethene	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.3-Dichloropropene	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromochloromethane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromomethane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dichlorodifluoromethane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Iodomethane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Isopropyl benzene (Cumene)	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Methylene Chloride	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Styrene	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Tetrachloroethene	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.2-Dichloroethene	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.3-Dichloropropene	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichloroethene	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichlorofluoromethane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Vinyl chloride	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	S20-Jl05988	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH >C10-C16	S20-Jn42224	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	S20-Jn42224	NCP	mg/kg	100	160	42	30%	Fail	Q15
TRH >C34-C40	S20-Jn42224	NCP	mg/kg	< 100	< 100	<1	30%	Pass	

Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	S20-Jn50042	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	S20-Jn50042	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	S20-Jn50042	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	S20-Jn50042	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	S20-Jn50042	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	S20-Jn50042	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	S20-Jn50042	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	S20-Jn50042	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	S20-Jn50042	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	S20-Jn50042	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	S20-Jn50042	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	S20-Jn50042	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	S20-Jn50042	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	S20-Jn50042	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	S20-Jn50042	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	S20-Jn50042	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	S20-Jn50042	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	S20-Jn50042	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	S20-Jn50042	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	S20-Jn50042	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-BHC	S20-Jn50042	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	S20-Jn50042	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-BHC	S20-Jn50042	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-BHC	S20-Jn50042	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	S20-Jn50042	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	S20-Jn50042	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	S20-Jn50042	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	S20-Jn50042	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	S20-Jn50042	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	S20-Jn50042	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	S20-Jn50042	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-BHC (Lindane)	S20-Jn50042	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	S20-Jn50042	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	S20-Jn50042	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	S20-Jn50042	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	S20-Jn50042	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Azinphos-methyl	S20-Jn50042	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Bolstar	S20-Jn50042	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorfenvinphos	S20-Jn50042	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos	S20-Jn50042	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos-methyl	S20-Jn50042	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Coumaphos	S20-Jn50042	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Demeton-S	S20-Jn50042	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Demeton-O	S20-Jn50042	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Diazinon	S20-Jn50042	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dichlorvos	S20-Jn50042	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dimethoate	S20-Jn50042	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Disulfoton	S20-Jn50042	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
EPN	S20-Jn50042	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethion	S20-Jn50042	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	

Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Ethoprop	S20-Jn50042	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethyl parathion	S20-Jn50042	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenitrothion	S20-Jn50042	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fensulfothion	S20-Jn50042	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenthion	S20-Jn50042	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Malathion	S20-Jn50042	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Merphos	S20-Jn50042	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Methyl parathion	S20-Jn50042	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Mevinphos	S20-Jn50042	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Monocrotophos	S20-Jn50042	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Naled	S20-Jn50042	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Omethoate	S20-Jn50042	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Phorate	S20-Jn50042	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pirimiphos-methyl	S20-Jn50042	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pyrazophos	S20-Jn50042	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ronnel	S20-Jn50042	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Terbufos	S20-Jn50042	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tetrachlorvinphos	S20-Jn50042	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tokuthion	S20-Jn50042	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Trichloronate	S20-Jn50042	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Aroclor-1016	S20-Jn50042	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1221	S20-Jn50042	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1232	S20-Jn50042	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1242	S20-Jn50042	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1248	S20-Jn50042	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1254	S20-Jn50042	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1260	S20-Jn50042	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Total PCB*	S20-Jn50042	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Phenols (Halogenated)				Result 1	Result 2	RPD			
2-Chlorophenol	S20-Jn50042	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dichlorophenol	S20-Jn50042	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4.5-Trichlorophenol	S20-Jn50042	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4.6-Trichlorophenol	S20-Jn50042	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2.6-Dichlorophenol	S20-Jn50042	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chloro-3-methylphenol	S20-Jn50042	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Pentachlorophenol	S20-Jn50042	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Tetrachlorophenols - Total	S20-Jn50042	NCP	mg/kg	< 10	< 10	<1	30%	Pass	
Duplicate									
Phenols (non-Halogenated)				Result 1	Result 2	RPD			
2-Cyclohexyl-4.6-dinitrophenol	S20-Jn50042	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
2-Methyl-4.6-dinitrophenol	S20-Jn50042	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Methylphenol (o-Cresol)	S20-Jn50042	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
2-Nitrophenol	S20-Jn50042	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4-Dimethylphenol	S20-Jn50042	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dinitrophenol	S20-Jn50042	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
3&4-Methylphenol (m&p-Cresol)	S20-Jn50042	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
4-Nitrophenol	S20-Jn50042	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Dinoseb	S20-Jn50042	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
Phenol	S20-Jn50042	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	S20-Jn49746	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Cadmium	S20-Jn49746	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	S20-Jn49746	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Copper	S20-Jn49746	NCP	mg/kg	28	51	59	30%	Fail	Q15
Lead	S20-Jn49746	NCP	mg/kg	29	28	6.0	30%	Pass	
Mercury	S20-Jn49746	NCP	mg/kg	0.2	0.2	8.0	30%	Pass	
Nickel	S20-Jn49746	NCP	mg/kg	< 5	10	82	30%	Fail	Q15
Zinc	S20-Jn49746	NCP	mg/kg	70	170	85	30%	Fail	Q02
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	S20-Jn49773	NCP	%	15	16	8.0	30%	Pass	
Duplicate									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD			
Perfluorobutanoic acid (PFBA)	S20-Jn49805	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	S20-Jn49805	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	S20-Jn49805	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	S20-Jn49805	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	S20-Jn49805	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	S20-Jn49805	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	S20-Jn49805	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	S20-Jn49805	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	S20-Jn49805	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	S20-Jn49805	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	S20-Jn49805	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
Perfluorooctane sulfonamide (FOSA)	S20-Jn49805	CP	ug/kg	< 5	< 5	<1	30%	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	S20-Jn49805	CP	ug/kg	< 5	< 5	<1	30%	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	S20-Jn49805	CP	ug/kg	< 5	< 5	<1	30%	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	S20-Jn49805	CP	ug/kg	< 5	< 5	<1	30%	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	S20-Jn49805	CP	ug/kg	< 5	< 5	<1	30%	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	S20-Jn49805	CP	ug/kg	< 10	< 10	<1	30%	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	S20-Jn49805	CP	ug/kg	< 10	< 10	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD			
Perfluorobutanesulfonic acid (PFBS)	S20-Jn49805	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorononanesulfonic acid (PFNS)	S20-Jn49805	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropropanesulfonic acid (PFPrS)	S20-Jn49805	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropentanesulfonic acid (PFPeS)	S20-Jn49805	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorohexanesulfonic acid (PFHxS)	S20-Jn49805	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	S20-Jn49805	CP	ug/kg	< 5	< 5	<1	30%	Pass	

Duplicate									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD			
Perfluorooctanesulfonic acid (PFOS)	S20-Jn49805	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorodecanesulfonic acid (PFDS)	S20-Jn49805	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Duplicate									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1	Result 2	RPD			
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	S20-Jn49805	CP	ug/kg	< 5	< 5	<1	30%	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	S20-Jn49805	CP	ug/kg	< 10	< 10	<1	30%	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	S20-Jn49805	CP	ug/kg	< 5	< 5	<1	30%	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	S20-Jn49805	CP	ug/kg	< 5	< 5	<1	30%	Pass	

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
N09	Quantification of linear and branched isomers has been conducted as a single total response using the relative response factor for the corresponding linear/branched standard.
N11	Isotope dilution is used for calibration of each native compound for which an exact labelled analogue is available (Isotope Dilution Quantitation). The isotopically labelled analogues allow identification and recovery correction of the concentration of the associated native PFAS compounds.
N15	Where the native PFAS compound does not have labelled analogue then the quantification is made using the Extracted Internal Standard Analyte with the closest retention time to the analyte and no recovery correction has been made (Internal Standard Quantitation).
Q02	The duplicate %RPD is outside the recommended acceptance criteria. Further analysis indicates sample heterogeneity as the cause
Q15	The RPD reported passes Eurofins Environment Testing's QC - Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report.

Authorised By

[redacted]

Analytical Services Manager
Senior Analyst-Organic (NSW)
Senior Analyst-Metal (NSW)
Senior Analyst-Asbestos (NSW)
Senior Analyst-PFAS (QLD)

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

Eurofins shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.

000685

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

SLR

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Dawin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☑ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT:	DHA
PROJECT:	Randwick Barracks
PROJECT NUMBER:	
PROJECT MANAGER:	
PM CONTACT No:	
COMMENTS OR ADDITIONAL DIRECTIONS	

LABORATORY:	SGS
LABORATORY ADDRESS:	SYD
SAMPLER:	[redacted]
SAMPLER CONTACT No:	
Email Reports and Invoices to:	LABSYD@slrconsulting.com

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT:

COC Number 3 of 3

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: Suite A	[redacted]	Asbestos	Hold	Additional Information (Comment on any gross contamination or specific requirements)
	0407_TP241_A01_200625	25-6-20	ACM				X		
	0407_TP241_A02_200625	"	"					X	
	0407_QC164_200625	"	Soil		X	[redacted]			
	0407_QC165_200625	"	"		X	[redacted]			
	0407_QC264_200625*	"	"	*	Please forward to Eurofins for suite A cost [redacted]				
	0407_QC265_200625*	"	"	*					

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	**Received by**	[redacted]	Date / Time 30/6/20 2:30PM	**Temperature Received:** 15.50°C
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

728713

eurofins | Environment Testing

Melbourne
6 Monterey Road
Dandenong South Vic 3175
Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

Sydney
Unit F3, Building F
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Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

Brisbane
1/21 Smallwood Place
Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Perth
2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261 Site # 23736

ABN – 50 005 085 521 e.mail : EnviroSales@eurofins.com web : www.eurofins.com.au

Sample Receipt Advice

Company name:	**SLR Consulting (Sydney)**
Contact name:	[redacted]
Project name:	RANDWICK BARRACKS
Project ID:	610.30041
COC number:	000685
Turn around time:	5 Day
Date/Time received:	Jun 30, 2020 2:30 PM
Eurofins reference:	**728713**

Sample information

☑ A detailed list of analytes logged into our LIMS, is included in the attached summary table.

☑ All samples have been received as described on the above COC.

☑ COC has been completed correctly.

☑ Attempt to chill was evident.

☑ Appropriately preserved sample containers have been used.

☑ All samples were received in good condition.

☑ Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.

☑ Appropriate sample containers have been used.

☒ Split sample sent to requested external lab.

☒ Some samples have been subcontracted.

N/A Custody Seals intact (if used).

Contact notes

If you have any questions with respect to these samples please contact:

[redacted] on Phone : [redacted] or by e.mail: [redacted]@eurofins.com

Results will be delivered electronically via e.mail to [redacted]@slrconsulting.com.

Note: A copy of these results will also be delivered to the general SLR Consulting (Sydney) email address.

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ABN – 50 005 085 521 web : www.eurofins.com.au e.mail : EnviroSales@eurofins.com

Australia

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NATA # 1261 Site # 18217

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Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Perth
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NATA # 1261
Site # 23736

New Zealand

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Penrose, Auckland 1061
Phone : +64 9 526 45 51
IANZ # 1327

Christchurch
43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 728713
Phone: 02 9428 8100
Fax:

Received: Jun 30, 2020 2:30 PM
Due: Jul 7, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271										
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	0407_QC264_200625	Jun 25, 2020		Soil	S20-Jn51279	X	X	X	X	X
2	0407_QC265_200625	Jun 25, 2020		Soil	S20-Jn51280	X	X	X	X	X
Test Counts						2	2	2	2	2

Certificate of Analysis

eurofins | Environment Testing

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025–Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus
North Sydney
NSW 2060

Attention:	[redacted]
Report	728713-AID
Project Name	RANDWICK BARRACKS
Project ID	610.30041
Received Date	Jun 30, 2020
Date Reported	Jul 07, 2020

Methodology:

Asbestos Fibre Identification	Conducted in accordance with the Australian Standard AS 4964 – 2004: Method for the Qualitative Identification of Asbestos in Bulk Samples and in-house Method LTM-ASB-8020 by polarised light microscopy (PLM) and dispersion staining (DS) techniques. *NOTE: Positive Trace Analysis results indicate the sample contains detectable respirable fibres.*
Unknown Mineral Fibres	Mineral fibres of unknown type, as determined by PLM with DS, may require another analytical technique, such as Electron Microscopy, to confirm unequivocal identity. *NOTE: While Actinolite, Anthophyllite and Tremolite asbestos may be detected by PLM with DS, due to variability in the optical properties of these materials, AS4964 requires that these are reported as UMF unless confirmed by an independent technique.*
Subsampling Soil Samples	The whole sample submitted is first dried and then passed through a 10mm sieve followed by a 2mm sieve. All fibrous matter greater than 10mm, greater than 2mm as well as the material passing through the 2mm sieve are retained and analysed for the presence of asbestos. If the sub 2mm fraction is greater than approximately 30 to 60g then a sub-sampling routine based on ISO 3082:2009(E) is employed. *NOTE: Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be sub-sampled for trace analysis, in accordance with AS 4964-2004.*
Bonded asbestos-containing material (ACM)	The material is first examined and any fibres isolated for identification by PLM and DS. Where required, interfering matrices may be removed by disintegration using a range of heat, chemical or physical treatments, possibly in combination.The resultant material is then further examined in accordance with AS 4964 - 2004. *NOTE: Even after disintegration it may be difficult to detect the presence of asbestos in some asbestos-containing bulk materials using PLM and DS. This is due to the low grade or small length or diameter of the asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos-containing sealants and mastics, asbestos-containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.*
Limit of Reporting	The performance limitation of the AS 4964 (2004) method for non-homogeneous samples is around 0.1 g/kg (equivalent to 0.01% (w/w)). Where no asbestos is found by PLM and DS, including Trace Analysis, this is considered to be at the nominal reporting limit of 0.01% (w/w). The NEPM screening level of 0.001% (w/w) is intended as an on-site determination, not a laboratory Limit of Reporting (LOR), per se. Examination of a large sample size (e.g. 500 mL) may improve the likelihood of detecting asbestos, particularly AF, to aid assessment against the NEPM criteria. Gravimetric determinations to this level of accuracy are outside of AS 4964 and hence NATA Accreditation does not cover the performance of this service (non-NATA results shown with an asterisk). *NOTE: NATA News March 2014, p.7, states in relation to AS 4964: "This is a qualitative method with a nominal reporting limit of 0.01 % " and that currently in Australia "there is no validated method available for the quantification of asbestos".This report is consistent with the analytical procedures and reporting recommendations in the NEPM and the WA DoH.*

Project Name RANDWICK BARRACKS
Project ID 610.30041
Date Sampled Jun 25, 2020
Report 728713-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
0407_QC264_200625	20-Jn51279	Jun 25, 2020	Approximate Sample 56g Sample consisted of: Brown coarse-grained sandy soil and organic debris	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
0407_QC265_200625	20-Jn51280	Jun 25, 2020	Approximate Sample 75g Sample consisted of: Brown coarse-grained sandy soil and organic debris	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Asbestos - LTM-ASB-8020	Sydney	Jun 30, 2020	Indefinite

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ABN – 50 005 085 521 web : www.eurofins.com.au e.mail : EnviroSales@eurofins.com

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Christchurch
43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 728713
Phone: 02 9428 8100
Fax:

Received: Jun 30, 2020 2:30 PM
Due: Jul 7, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271										
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	0407_QC264_200625	Jun 25, 2020		Soil	S20-Jn51279	X	X	X	X	X
2	0407_QC265_200625	Jun 25, 2020		Soil	S20-Jn51280	X	X	X	X	X
Test Counts						2	2	2	2	2

Internal Quality Control Review and Glossary

General

1. QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Samples were analysed on an 'as received' basis.
4. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
5. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the Sample Receipt Advice.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

Units

% w/w: weight for weight basis	grams per kilogram
Filter loading:	fibres/100 graticule areas
Reported Concentration:	fibres/mL
Flowrate:	L/min

Terms

Dry	Sample is dried by heating prior to analysis
LOR	Limit of Reporting
COC	Chain of Custody
SRA	Sample Receipt Advice
ISO	International Standards Organisation
AS	Australian Standards
WA DOH	Reference document for the NEPM. Government of Western Australia, Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia (2009), including supporting document Recommended Procedures for Laboratory Analysis of Asbestos in Soil (2011)
NEPM	National Environment Protection (Assessment of Site Contamination) Measure, 2013 (as amended)
ACM	Asbestos Containing Materials. Asbestos contained within a non-asbestos matrix, typically presented in bonded and/or sound condition. For the purposes of the NEPM, ACM is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
AF	Asbestos Fines. Asbestos containing materials, including friable, weathered and bonded materials, able to pass a 7mm x 7mm sieve. Considered under the NEPM as equivalent to “non-bonded / friable”.
FA	Fibrous Asbestos. Asbestos containing materials in a friable and/or severely weathered condition. For the purposes of the NEPM, FA is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
Friable	Asbestos-containing materials of any size that may be broken or crumbled by hand pressure. For the purposes of the NEPM, this includes both AF and FA. It is outside of the laboratory’s remit to assess degree of friability.
Trace Analysis	Analytical procedure used to detect the presence of respirable fibres in the matrix.

Comments

The samples received were not collected in an approved asbestos bag and was therefore sub-sampled from the 250mL glass jar. Valid sub-sampling procedures were applied so as to ensure that the sub-samples to be analysed accurately represented the samples received.

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N/A	Not applicable

Asbestos Counter/Identifier:

[redacted] Senior Analyst-Asbestos (NSW)

Authorised by:

[redacted] Senior Analyst-Asbestos (NSW)

General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus,
North Sydney
NSW 2060

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: [redacted]

Report **728713-S**
Project name RANDWICK BARRACKS
Project ID 610.30041
Received Date Jun 30, 2020

Client Sample ID			**0407_QC264_200625**	**0407_QC265_200625**
Sample Matrix			**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn51279**	**S20-Jn51280**
Date Sampled			**Jun 25, 2020**	**Jun 25, 2020**
Test/Reference	LOR	Unit		
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				
TRH C6-C9	20	mg/kg	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20
TRH C15-C28	50	mg/kg	64	< 50
TRH C29-C36	50	mg/kg	92	< 50
TRH C10-C36 (Total)	50	mg/kg	156	< 50
BTEX				
Benzene	0.1	mg/kg	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	84	80
Volatile Organics				
1.1-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5	< 0.5

Client Sample ID			0407_QC264_200625	0407_QC265_200625
Sample Matrix			**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn51279**	**S20-Jn51280**
Date Sampled			**Jun 25, 2020**	**Jun 25, 2020**
Test/Reference	LOR	Unit		
Volatile Organics				
Benzene	0.1	mg/kg	< 0.1	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5	< 0.5
Bromoform	0.5	mg/kg	< 0.5	< 0.5
Bromomethane	0.5	mg/kg	< 0.5	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5	< 0.5
Chloroethane	0.5	mg/kg	< 0.5	< 0.5
Chloroform	0.5	mg/kg	< 0.5	< 0.5
Chloromethane	0.5	mg/kg	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1
Iodomethane	0.5	mg/kg	< 0.5	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5	< 0.5
o-Xylene	0.1	mg/kg	< 0.1	< 0.1
Styrene	0.5	mg/kg	< 0.5	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5	< 0.5
Toluene	0.1	mg/kg	< 0.1	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3
Total MAH*	0.5	mg/kg	< 0.5	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5
4-Bromofluorobenzene (surr.)	1	%	84	80
Toluene-d8 (surr.)	1	%	124	103
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	< 50
TRH >C16-C34	100	mg/kg	130	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	130	< 100

Client Sample ID			0407_QC264_200625	0407_QC265_200625
Sample Matrix			**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn51279**	**S20-Jn51280**
Date Sampled			**Jun 25, 2020**	**Jun 25, 2020**
Test/Reference	LOR	Unit		
Polycyclic Aromatic Hydrocarbons				
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	88	80
p-Terphenyl-d14 (surr.)	1	%	95	64
Organochlorine Pesticides				
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05
a-BHC	0.05	mg/kg	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05
b-BHC	0.05	mg/kg	< 0.05	< 0.05
d-BHC	0.05	mg/kg	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05
Methoxychlor	0.2	mg/kg	< 0.2	< 0.2
Toxaphene	1	mg/kg	< 1	< 1
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.2	< 0.2
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.2	< 0.2
Dibutylchlorendate (surr.)	1	%	86	67
Tetrachloro-m-xylene (surr.)	1	%	89	68

Client Sample ID			0407_QC264_200625	0407_QC265_200625
Sample Matrix			**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn51279**	**S20-Jn51280**
Date Sampled			**Jun 25, 2020**	**Jun 25, 2020**
Test/Reference	LOR	Unit		
Organophosphorus Pesticides				
Azinphos-methyl	0.2	mg/kg	< 0.2	< 0.2
Bolstar	0.2	mg/kg	< 0.2	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2	< 0.2
Coumaphos	2	mg/kg	< 2	< 2
Demeton-S	0.2	mg/kg	< 0.2	< 0.2
Demeton-O	0.2	mg/kg	< 0.2	< 0.2
Diazinon	0.2	mg/kg	< 0.2	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2	< 0.2
Dimethoate	0.2	mg/kg	< 0.2	< 0.2
Disulfoton	0.2	mg/kg	< 0.2	< 0.2
EPN	0.2	mg/kg	< 0.2	< 0.2
Ethion	0.2	mg/kg	< 0.2	< 0.2
Ethoprop	0.2	mg/kg	< 0.2	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2	< 0.2
Fenthion	0.2	mg/kg	< 0.2	< 0.2
Malathion	0.2	mg/kg	< 0.2	< 0.2
Merphos	0.2	mg/kg	< 0.2	< 0.2
Methyl parathion	0.2	mg/kg	< 0.2	< 0.2
Mevinphos	0.2	mg/kg	< 0.2	< 0.2
Monocrotophos	2	mg/kg	< 2	< 2
Naled	0.2	mg/kg	< 0.2	< 0.2
Omethoate	2	mg/kg	< 2	< 2
Phorate	0.2	mg/kg	< 0.2	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2	< 0.2
Ronnel	0.2	mg/kg	< 0.2	< 0.2
Terbufos	0.2	mg/kg	< 0.2	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2	< 0.2
Tokuthion	0.2	mg/kg	< 0.2	< 0.2
Trichloronate	0.2	mg/kg	< 0.2	< 0.2
Triphenylphosphate (surr.)	1	%	98	68
Polychlorinated Biphenyls				
Aroclor-1016	0.5	mg/kg	< 0.5	< 0.5
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1
Aroclor-1232	0.5	mg/kg	< 0.5	< 0.5
Aroclor-1242	0.5	mg/kg	< 0.5	< 0.5
Aroclor-1248	0.5	mg/kg	< 0.5	< 0.5
Aroclor-1254	0.5	mg/kg	< 0.5	< 0.5
Aroclor-1260	0.5	mg/kg	< 0.5	< 0.5
Total PCB*	0.5	mg/kg	< 0.5	< 0.5
Dibutylchlorendate (surr.)	1	%	86	67
Tetrachloro-m-xylene (surr.)	1	%	89	68

Client Sample ID			0407_QC264_200625	0407_QC265_200625
Sample Matrix			**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn51279**	**S20-Jn51280**
Date Sampled			**Jun 25, 2020**	**Jun 25, 2020**
Test/Reference	LOR	Unit		
Phenols (Halogenated)				
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1
Phenols (non-Halogenated)				
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2
2-Nitrophenol	1	mg/kg	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5	< 5
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4
4-Nitrophenol	5	mg/kg	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20
Phenol-d6 (surr.)	1	%	73	73
Heavy Metals				
Arsenic	2	mg/kg	7.2	< 2
Cadmium	0.4	mg/kg	< 0.4	< 0.4
Chromium	5	mg/kg	34	< 5
Copper	5	mg/kg	63	< 5
Lead	5	mg/kg	120	< 5
Mercury	0.1	mg/kg	0.1	< 0.1
Nickel	5	mg/kg	17	< 5
Zinc	5	mg/kg	360	< 5
% Moisture	1	%	27	3.7

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Sydney	Jul 02, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Sydney	Jul 02, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jul 02, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jul 02, 2020	
- Method: LTM-ORG-2010 TRH C6-C40			
Polycyclic Aromatic Hydrocarbons	Sydney	Jul 02, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (Halogenated)	Sydney	Jul 02, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (non-Halogenated)	Sydney	Jul 02, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Metals M8	Sydney	Jul 02, 2020	180 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Volatile Organics	Sydney	Jul 02, 2020	7 Days
- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices			
Eurofins | mgt Suite B15			
Organochlorine Pesticides	Sydney	Jul 02, 2020	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Organophosphorus Pesticides	Sydney	Jul 02, 2020	14 Days
- Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS			
Polychlorinated Biphenyls	Sydney	Jul 02, 2020	28 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
% Moisture	Sydney	Jun 30, 2020	14 Days
- Method: LTM-GEN-7080 Moisture			

eurofins | Environment Testing

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Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 728713
Phone: 02 9428 8100
Fax:

Received: Jun 30, 2020 2:30 PM
Due: Jul 7, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271										
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	0407_QC264_200625	Jun 25, 2020		Soil	S20-Jn51279	X	X	X	X	X
2	0407_QC265_200625	Jun 25, 2020		Soil	S20-Jn51280	X	X	X	X	X
Test Counts						2	2	2	2	2

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

****NOTE:** pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram | **mg/L:** milligrams per litre | **ug/L:** micrograms per litre

ppm: Parts per million | **ppb:** Parts per billion | **%:** Percentage

org/100mL: Organisms per 100 millilitres | **NTU:** Nephelometric Turbidity Units | **MPN/100mL:** Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version 5.3
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling.Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
Method Blank							
BTEX							
Benzene	mg/kg	< 0.1			0.1	Pass	
Toluene	mg/kg	< 0.1			0.1	Pass	
Ethylbenzene	mg/kg	< 0.1			0.1	Pass	
m&p-Xylenes	mg/kg	< 0.2			0.2	Pass	
o-Xylene	mg/kg	< 0.1			0.1	Pass	
Xylenes - Total*	mg/kg	< 0.3			0.3	Pass	
Method Blank							
Volatile Organics							
1.1-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
1.1.1-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.1.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dibromoethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.3-Trichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.4-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.3.5-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.4-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
2-Butanone (MEK)	mg/kg	< 0.5			0.5	Pass	
2-Propanone (Acetone)	mg/kg	< 0.5			0.5	Pass	
4-Chlorotoluene	mg/kg	< 0.5			0.5	Pass	
4-Methyl-2-pentanone (MIBK)	mg/kg	< 0.5			0.5	Pass	
Allyl chloride	mg/kg	< 0.5			0.5	Pass	
Bromobenzene	mg/kg	< 0.5			0.5	Pass	
Bromochloromethane	mg/kg	< 0.5			0.5	Pass	
Bromodichloromethane	mg/kg	< 0.5			0.5	Pass	
Bromoform	mg/kg	< 0.5			0.5	Pass	
Bromomethane	mg/kg	< 0.5			0.5	Pass	
Carbon disulfide	mg/kg	< 0.5			0.5	Pass	
Carbon Tetrachloride	mg/kg	< 0.5			0.5	Pass	
Chlorobenzene	mg/kg	< 0.5			0.5	Pass	
Chloroethane	mg/kg	< 0.5			0.5	Pass	
Chloroform	mg/kg	< 0.5			0.5	Pass	
Chloromethane	mg/kg	< 0.5			0.5	Pass	
cis-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
cis-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Dibromochloromethane	mg/kg	< 0.5			0.5	Pass	
Dibromomethane	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Dichlorodifluoromethane	mg/kg	< 0.5			0.5	Pass	
Iodomethane	mg/kg	< 0.5			0.5	Pass	
Isopropyl benzene (Cumene)	mg/kg	< 0.5			0.5	Pass	
Methylene Chloride	mg/kg	< 0.5			0.5	Pass	
Styrene	mg/kg	< 0.5			0.5	Pass	
Tetrachloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Trichloroethene	mg/kg	< 0.5			0.5	Pass	
Trichlorofluoromethane	mg/kg	< 0.5			0.5	Pass	
Vinyl chloride	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Organochlorine Pesticides							
Chlordanes - Total	mg/kg	< 0.1			0.1	Pass	
4.4'-DDD	mg/kg	< 0.05			0.05	Pass	
4.4'-DDE	mg/kg	< 0.05			0.05	Pass	
4.4'-DDT	mg/kg	< 0.05			0.05	Pass	
a-BHC	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-BHC	mg/kg	< 0.05			0.05	Pass	
d-BHC	mg/kg	< 0.05			0.05	Pass	
Dieldrin	mg/kg	< 0.05			0.05	Pass	
Endosulfan I	mg/kg	< 0.05			0.05	Pass	
Endosulfan II	mg/kg	< 0.05			0.05	Pass	
Endosulfan sulphate	mg/kg	< 0.05			0.05	Pass	
Endrin	mg/kg	< 0.05			0.05	Pass	
Endrin aldehyde	mg/kg	< 0.05			0.05	Pass	
Endrin ketone	mg/kg	< 0.05			0.05	Pass	
g-BHC (Lindane)	mg/kg	< 0.05			0.05	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Heptachlor	mg/kg	< 0.05			0.05	Pass	
Heptachlor epoxide	mg/kg	< 0.05			0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05			0.05	Pass	
Methoxychlor	mg/kg	< 0.2			0.2	Pass	
Toxaphene	mg/kg	< 1			1	Pass	
Method Blank							
Organophosphorus Pesticides							
Azinphos-methyl	mg/kg	< 0.2			0.2	Pass	
Bolstar	mg/kg	< 0.2			0.2	Pass	
Chlorfenvinphos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos-methyl	mg/kg	< 0.2			0.2	Pass	
Coumaphos	mg/kg	< 2			2	Pass	
Demeton-S	mg/kg	< 0.2			0.2	Pass	
Demeton-O	mg/kg	< 0.2			0.2	Pass	
Diazinon	mg/kg	< 0.2			0.2	Pass	
Dichlorvos	mg/kg	< 0.2			0.2	Pass	
Dimethoate	mg/kg	< 0.2			0.2	Pass	
Disulfoton	mg/kg	< 0.2			0.2	Pass	
EPN	mg/kg	< 0.2			0.2	Pass	
Ethion	mg/kg	< 0.2			0.2	Pass	
Ethoprop	mg/kg	< 0.2			0.2	Pass	
Ethyl parathion	mg/kg	< 0.2			0.2	Pass	
Fenitrothion	mg/kg	< 0.2			0.2	Pass	
Fensulfothion	mg/kg	< 0.2			0.2	Pass	
Fenthion	mg/kg	< 0.2			0.2	Pass	
Malathion	mg/kg	< 0.2			0.2	Pass	
Merphos	mg/kg	< 0.2			0.2	Pass	
Methyl parathion	mg/kg	< 0.2			0.2	Pass	
Mevinphos	mg/kg	< 0.2			0.2	Pass	
Monocrotophos	mg/kg	< 2			2	Pass	
Naled	mg/kg	< 0.2			0.2	Pass	
Omethoate	mg/kg	< 2			2	Pass	
Phorate	mg/kg	< 0.2			0.2	Pass	
Pirimiphos-methyl	mg/kg	< 0.2			0.2	Pass	
Pyrazophos	mg/kg	< 0.2			0.2	Pass	
Ronnel	mg/kg	< 0.2			0.2	Pass	
Terbufos	mg/kg	< 0.2			0.2	Pass	
Tetrachlorvinphos	mg/kg	< 0.2			0.2	Pass	
Tokuthion	mg/kg	< 0.2			0.2	Pass	
Trichloronate	mg/kg	< 0.2			0.2	Pass	
Method Blank							
Polychlorinated Biphenyls							
Aroclor-1016	mg/kg	< 0.5			0.5	Pass	
Aroclor-1221	mg/kg	< 0.1			0.1	Pass	
Aroclor-1232	mg/kg	< 0.5			0.5	Pass	
Aroclor-1242	mg/kg	< 0.5			0.5	Pass	
Aroclor-1248	mg/kg	< 0.5			0.5	Pass	
Aroclor-1254	mg/kg	< 0.5			0.5	Pass	
Aroclor-1260	mg/kg	< 0.5			0.5	Pass	
Total PCB*	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Phenols (Halogenated)							
2-Chlorophenol	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2.4-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4.5-Trichlorophenol	mg/kg	< 1			1	Pass	
2.4.6-Trichlorophenol	mg/kg	< 1			1	Pass	
2.6-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
4-Chloro-3-methylphenol	mg/kg	< 1			1	Pass	
Pentachlorophenol	mg/kg	< 1			1	Pass	
Tetrachlorophenols - Total	mg/kg	< 10			10	Pass	
Method Blank							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	mg/kg	< 20			20	Pass	
2-Methyl-4.6-dinitrophenol	mg/kg	< 5			5	Pass	
2-Methylphenol (o-Cresol)	mg/kg	< 0.2			0.2	Pass	
2-Nitrophenol	mg/kg	< 1			1	Pass	
2.4-Dimethylphenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dinitrophenol	mg/kg	< 5			5	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/kg	< 0.4			0.4	Pass	
4-Nitrophenol	mg/kg	< 5			5	Pass	
Dinoseb	mg/kg	< 20			20	Pass	
Phenol	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Nickel	mg/kg	< 5			5	Pass	
Zinc	mg/kg	< 5			5	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C10-C14	%	89			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	123			70-130	Pass	
Toluene	%	124			70-130	Pass	
Ethylbenzene	%	112			70-130	Pass	
m&p-Xylenes	%	114			70-130	Pass	
o-Xylene	%	114			70-130	Pass	
Xylenes - Total*	%	114			70-130	Pass	
LCS - % Recovery							
Volatile Organics							
1.1-Dichloroethene	%	112			70-130	Pass	
1.1.1-Trichloroethane	%	122			70-130	Pass	
1.2-Dichlorobenzene	%	112			70-130	Pass	
1.2-Dichloroethane	%	128			70-130	Pass	
Trichloroethene	%	117			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	81			70-130	Pass	
TRH >C10-C16	%	98			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	100			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Acenaphthylene	%	92			70-130	Pass	
Anthracene	%	87			70-130	Pass	
Benz(a)anthracene	%	86			70-130	Pass	
Benzo(a)pyrene	%	93			70-130	Pass	
Benzo(b&j)fluoranthene	%	88			70-130	Pass	
Benzo(g.h.i)perylene	%	111			70-130	Pass	
Benzo(k)fluoranthene	%	94			70-130	Pass	
Chrysene	%	91			70-130	Pass	
Dibenz(a.h)anthracene	%	115			70-130	Pass	
Fluoranthene	%	96			70-130	Pass	
Fluorene	%	92			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	110			70-130	Pass	
Naphthalene	%	96			70-130	Pass	
Phenanthrene	%	91			70-130	Pass	
Pyrene	%	93			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	115			70-130	Pass	
4.4'-DDD	%	91			70-130	Pass	
4.4'-DDE	%	105			70-130	Pass	
4.4'-DDT	%	124			70-130	Pass	
a-BHC	%	98			70-130	Pass	
Aldrin	%	89			70-130	Pass	
b-BHC	%	98			70-130	Pass	
d-BHC	%	94			70-130	Pass	
Dieldrin	%	98			70-130	Pass	
Endosulfan I	%	118			70-130	Pass	
Endosulfan II	%	94			70-130	Pass	
Endosulfan sulphate	%	110			70-130	Pass	
Endrin	%	112			70-130	Pass	
Endrin aldehyde	%	90			70-130	Pass	
Endrin ketone	%	105			70-130	Pass	
g-BHC (Lindane)	%	101			70-130	Pass	
Heptachlor	%	114			70-130	Pass	
Heptachlor epoxide	%	107			70-130	Pass	
Hexachlorobenzene	%	99			70-130	Pass	
Methoxychlor	%	122			70-130	Pass	
LCS - % Recovery							
Organophosphorus Pesticides							
Diazinon	%	99			70-130	Pass	
Dimethoate	%	84			70-130	Pass	
Ethion	%	76			70-130	Pass	
Fenitrothion	%	86			70-130	Pass	
Methyl parathion	%	77			70-130	Pass	
Mevinphos	%	90			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls							
Aroclor-1016	%	84			70-130	Pass	
Aroclor-1260	%	100			70-130	Pass	
LCS - % Recovery							
Phenols (Halogenated)							
2-Chlorophenol	%	115			30-130	Pass	
2.4-Dichlorophenol	%	111			30-130	Pass	
2.4.5-Trichlorophenol	%	75			30-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2.4.6-Trichlorophenol	%	108			30-130	Pass	
2.6-Dichlorophenol	%	121			30-130	Pass	
4-Chloro-3-methylphenol	%	95			30-130	Pass	
Pentachlorophenol	%	109			30-130	Pass	
Tetrachlorophenols - Total	%	103			30-130	Pass	
LCS - % Recovery							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	%	119			30-130	Pass	
2-Methyl-4.6-dinitrophenol	%	89			30-130	Pass	
2-Methylphenol (o-Cresol)	%	111			30-130	Pass	
2-Nitrophenol	%	123			30-130	Pass	
2.4-Dimethylphenol	%	107			30-130	Pass	
2.4-Dinitrophenol	%	88			30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	%	118			30-130	Pass	
4-Nitrophenol	%	129			30-130	Pass	
Dinoseb	%	125			30-130	Pass	
Phenol	%	116			30-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	101			70-130	Pass	
Cadmium	%	98			70-130	Pass	
Chromium	%	101			70-130	Pass	
Copper	%	99			70-130	Pass	
Lead	%	102			70-130	Pass	
Mercury	%	95			70-130	Pass	
Nickel	%	101			70-130	Pass	
Zinc	%	97			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C10-C14	S20-Jn35793	NCP	%	117			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	S20-Jl05171	NCP	%	81			70-130	Pass	
Toluene	S20-Jl05171	NCP	%	76			70-130	Pass	
Ethylbenzene	S20-Jl05171	NCP	%	77			70-130	Pass	
m&p-Xylenes	S20-Jl05171	NCP	%	76			70-130	Pass	
o-Xylene	S20-Jl05171	NCP	%	82			70-130	Pass	
Xylenes - Total*	S20-Jl05171	NCP	%	78			70-130	Pass	
Spike - % Recovery									
Volatile Organics				Result 1					
1.1-Dichloroethene	S20-Jl05171	NCP	%	86			70-130	Pass	
1.1.1-Trichloroethane	S20-Jl05171	NCP	%	78			70-130	Pass	
1.2-Dichlorobenzene	S20-Jl05171	NCP	%	75			70-130	Pass	
1.2-Dichloroethane	S20-Jl05171	NCP	%	81			70-130	Pass	
Trichloroethene	S20-Jl05171	NCP	%	78			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
TRH >C10-C16	S20-Jn35793	NCP	%	103			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	N20-Jn45289	NCP	%	78			70-130	Pass	
Acenaphthylene	N20-Jn45289	NCP	%	79			70-130	Pass	
Anthracene	S20-Jn47627	NCP	%	86			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Benz(a)anthracene	S20-Jn47627	NCP	%	79			70-130	Pass	
Benzo(a)pyrene	S20-Jn47627	NCP	%	78			70-130	Pass	
Benzo(b&j)fluoranthene	S20-Jn47627	NCP	%	80			70-130	Pass	
Benzo(g.h.i)perylene	N20-Jn45289	NCP	%	71			70-130	Pass	
Benzo(k)fluoranthene	N20-Jn45289	NCP	%	70			70-130	Pass	
Chrysene	S20-Jn47627	NCP	%	85			70-130	Pass	
Dibenz(a.h)anthracene	N20-Jn45289	NCP	%	76			70-130	Pass	
Fluoranthene	N20-Jn45289	NCP	%	75			70-130	Pass	
Fluorene	N20-Jn45289	NCP	%	76			70-130	Pass	
Indeno(1.2.3-cd)pyrene	N20-Jn45289	NCP	%	73			70-130	Pass	
Naphthalene	N20-Jn45289	NCP	%	84			70-130	Pass	
Phenanthrene	N20-Jn45289	NCP	%	72			70-130	Pass	
Pyrene	N20-Jn45289	NCP	%	73			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
Chlordanes - Total	N20-Jn45289	NCP	%	78			70-130	Pass	
4.4'-DDD	N20-Jn45289	NCP	%	77			70-130	Pass	
4.4'-DDE	N20-Jn45289	NCP	%	76			70-130	Pass	
4.4'-DDT	N20-Jn45289	NCP	%	83			70-130	Pass	
a-BHC	S20-Jn51230	NCP	%	83			70-130	Pass	
Aldrin	S20-Jn51230	NCP	%	73			70-130	Pass	
b-BHC	S20-Jn51230	NCP	%	84			70-130	Pass	
d-BHC	S20-Jn51230	NCP	%	81			70-130	Pass	
Dieldrin	N20-Jn45289	NCP	%	82			70-130	Pass	
Endosulfan I	N20-Jn45289	NCP	%	83			70-130	Pass	
Endosulfan II	N20-Jn45289	NCP	%	75			70-130	Pass	
Endosulfan sulphate	N20-Jn45289	NCP	%	75			70-130	Pass	
Endrin	N20-Jn45289	NCP	%	96			70-130	Pass	
Endrin aldehyde	S20-Jn51230	NCP	%	73			70-130	Pass	
Endrin ketone	N20-Jn45289	NCP	%	73			70-130	Pass	
g-BHC (Lindane)	S20-Jn51230	NCP	%	86			70-130	Pass	
Heptachlor	S20-Jn51230	NCP	%	80			70-130	Pass	
Heptachlor epoxide	S20-Jn51230	NCP	%	79			70-130	Pass	
Hexachlorobenzene	S20-Jn51230	NCP	%	81			70-130	Pass	
Methoxychlor	N20-Jn45289	NCP	%	85			70-130	Pass	
Spike - % Recovery									
Organophosphorus Pesticides				Result 1					
Diazinon	N20-Jn45289	NCP	%	73			70-130	Pass	
Dimethoate	N20-Jn45289	NCP	%	81			70-130	Pass	
Ethion	N20-Jn45289	NCP	%	77			70-130	Pass	
Fenitrothion	N20-Jn45289	NCP	%	71			70-130	Pass	
Methyl parathion	S20-Jn47627	NCP	%	71			70-130	Pass	
Mevinphos	N20-Jn45289	NCP	%	73			70-130	Pass	
Spike - % Recovery									
Polychlorinated Biphenyls				Result 1					
Aroclor-1260	N20-Jn45289	NCP	%	72			70-130	Pass	
Total PCB*	S20-Jn51230	NCP	%	91			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	S20-Jl03853	NCP	%	98			70-130	Pass	
Cadmium	S20-Jl03853	NCP	%	97			70-130	Pass	
Chromium	S20-Jl03853	NCP	%	98			70-130	Pass	
Copper	S20-Jl03853	NCP	%	101			70-130	Pass	
Lead	S20-Jl03853	NCP	%	100			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Mercury	S20-Jl03853	NCP	%	107			70-130	Pass	
Nickel	S20-Jl03853	NCP	%	100			70-130	Pass	
Zinc	S20-Jl03853	NCP	%	99			70-130	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C6-C9	S20-Jl05988	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	S20-Jn51161	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	S20-Jn51161	NCP	mg/kg	< 50	77	47	30%	Fail	Q15
TRH C29-C36	S20-Jn51161	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S20-Jl05988	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Toluene	S20-Jl05988	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Ethylbenzene	S20-Jl05988	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
m&p-Xylenes	S20-Jl05988	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
o-Xylene	S20-Jl05988	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes - Total*	S20-Jl05988	NCP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
1.1-Dichloroethane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1-Dichloroethene	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1-Trichloroethane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2-Trichloroethane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dibromoethane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichlorobenzene	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloroethane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloropropane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.3-Trichloropropane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trimethylbenzene	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichlorobenzene	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichloropropane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3.5-Trimethylbenzene	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.4-Dichlorobenzene	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Butanone (MEK)	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Propanone (Acetone)	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chlorotoluene	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Methyl-2-pentanone (MIBK)	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Allyl chloride	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromobenzene	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromochloromethane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromodichloromethane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromoform	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromomethane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon disulfide	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon Tetrachloride	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chlorobenzene	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroethane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroform	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloromethane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.2-Dichloroethene	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.3-Dichloropropene	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
Dibromochloromethane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromomethane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dichlorodifluoromethane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Iodomethane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Isopropyl benzene (Cumene)	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Methylene Chloride	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Styrene	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Tetrachloroethene	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.2-Dichloroethene	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.3-Dichloropropene	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichloroethene	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichlorofluoromethane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Vinyl chloride	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	S20-Jl05988	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH >C10-C16	S20-Jn51161	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	S20-Jn51161	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	S20-Jn51161	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	S20-Jn51161	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	S20-Jn51161	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	S20-Jn51161	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	S20-Jn51161	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	S20-Jn51161	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	S20-Jn51161	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	S20-Jn51161	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	S20-Jn51161	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	S20-Jn51161	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	S20-Jn51161	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	S20-Jn51161	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	S20-Jn51161	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	S20-Jn51161	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	S20-Jn51161	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	S20-Jn51161	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	S20-Jn51161	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	S20-Jn51161	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	S20-Jn51161	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	S20-Jn51161	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	S20-Jn51161	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-BHC	S20-Jn51161	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	S20-Jn51161	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-BHC	S20-Jn51161	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-BHC	S20-Jn51161	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	S20-Jn51161	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	S20-Jn51161	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	S20-Jn51161	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	S20-Jn51161	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	S20-Jn51161	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	S20-Jn51161	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	

Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Endrin ketone	S20-Jn51161	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-BHC (Lindane)	S20-Jn51161	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	S20-Jn51161	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	S20-Jn51161	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	S20-Jn51161	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	S20-Jn51161	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Azinphos-methyl	S20-Jn51161	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Bolstar	S20-Jn51161	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorfenvinphos	S20-Jn51161	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos	S20-Jn51161	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos-methyl	S20-Jn51161	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Coumaphos	S20-Jn51161	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Demeton-S	S20-Jn51161	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Demeton-O	S20-Jn51161	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Diazinon	S20-Jn51161	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dichlorvos	S20-Jn51161	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dimethoate	S20-Jn51161	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Disulfoton	S20-Jn51161	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
EPN	S20-Jn51161	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethion	S20-Jn51161	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethoprop	S20-Jn51161	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethyl parathion	S20-Jn51161	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenitrothion	S20-Jn51161	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fensulfothion	S20-Jn51161	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenthion	S20-Jn51161	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Malathion	S20-Jn51161	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Merphos	S20-Jn51161	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Methyl parathion	S20-Jn51161	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Mevinphos	S20-Jn51161	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Monocrotophos	S20-Jn51161	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Naled	S20-Jn51161	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Omethoate	S20-Jn51161	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Phorate	S20-Jn51161	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pirimiphos-methyl	S20-Jn51161	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pyrazophos	S20-Jn51161	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ronnel	S20-Jn51161	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Terbufos	S20-Jn51161	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tetrachlorvinphos	S20-Jn51161	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tokuthion	S20-Jn51161	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Trichloronate	S20-Jn51161	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Aroclor-1016	S20-Jn51161	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1221	S20-Jn51161	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1232	S20-Jn51161	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1242	S20-Jn51161	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1248	S20-Jn51161	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1254	S20-Jn51161	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1260	S20-Jn51161	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Total PCB*	S20-Jn51161	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	S20-Jl03852	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Cadmium	S20-Jl03852	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	S20-Jl03852	NCP	mg/kg	39	21	59	30%	Fail	Q15
Copper	S20-Jl03852	NCP	mg/kg	31	49	45	30%	Fail	Q15
Lead	S20-Jl03852	NCP	mg/kg	23	17	32	30%	Fail	Q15
Mercury	S20-Jl03852	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Nickel	S20-Jl03852	NCP	mg/kg	5.5	6.6	19	30%	Pass	
Zinc	S20-Jl03852	NCP	mg/kg	70	79	12	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	S20-Jn51118	NCP	%	4.6	5.3	15	30%	Pass	

Comments

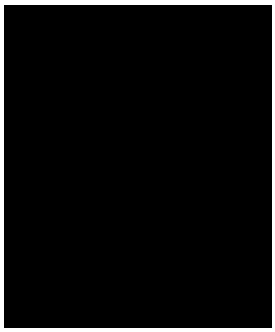
Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
Q15	The RPD reported passes Eurofins Environment Testing's QC - Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report.

Authorised By



Analytical Services Manager
Senior Analyst-Organic (NSW)
Senior Analyst-Metal (NSW)
Senior Analyst-Asbestos (NSW)

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Dawin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Dornville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☒ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐

CLIENT: Defence Housing Australia	**LABORATORY: SGS Australia**	**Turnaround Time (TAT)**	**COC Number**
PROJECT: Randwick Barracks	**LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015**		of
PROJECT NUMBER: 610.30041	**SAMPLER** [redacted]	☐ Standard TAT	
PROJECT MANAGER [redacted]	**SAMPLER CONTACT No** [redacted]	☐ Non Standard or Urgent TAT	
PM CONTACT No [redacted]	**Email Reports and Invoices to: LQRSYD@slrconsulting.com** [redacted]	**Required TAT: Standard**	

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	Asbestos ONLY	HOLD	C6-C10/BETXN					Additional Information *(Comment on any gross contamination or specific requirements)*
	0407_QC161_200624	24/06/2020	Soil	jar, pfas	x								**Please hold all PFAS containers**
	0407_QC261_200624	24/06/2020	Soil	jar, pfas	x								Please send to Eurofins
	0407_QC148_200624	24/06/2020	Soil	jar, pfas	x								
	0407_QC248_200624	24/06/2020	Soil	jar, pfas	x								Please send to Eurofins
	0407_QC149_200624	24/06/2020	Soil	jar, pfas	x								
	0407_QC249_200624	24/06/2020	Soil	jar, pfas	x								
	0407_QC412_200623	23/06/2020	Trip Blank	vial				x					
	0407_QC512_200623	23/06/2020	Trip Spike	vial				x					

I attest that the proper field sampling procedures were used during the collection of these samples.

						Temperature Received:
Relinquished By Sampler	[redacted]	Date / Time 18/06/2020	**Received by**	Sig [redacted]	Date / Time 30/6/20 2:30 PM	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	15.5°C
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

728718

eurofins | Environment Testing

Melbourne
6 Monterey Road
Dandenong South Vic 3175
Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

Sydney
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Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

Brisbane
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Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Perth
2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261 Site # 23736

ABN – 50 005 085 521 e.mail : EnviroSales@eurofins.com web : www.eurofins.com.au

Sample Receipt Advice

Company name:	**SLR Consulting (Sydney)**
Contact name:	[redacted]
Project name:	RANDWICK BARRACKS
Project ID:	610.30041
COC number:	Not provided
Turn around time:	5 Day
Date/Time received:	Jun 30, 2020 2:30 PM
Eurofins reference:	**728718**

Sample information

- ☑ A detailed list of analytes logged into our LIMS, is included in the attached summary table.
- ☑ All samples have been received as described on the above COC.
- ☑ COC has been completed correctly.
- ☑ Attempt to chill was evident.
- ☑ Appropriately preserved sample containers have been used.
- ☑ All samples were received in good condition.
- ☑ Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.
- ☑ Appropriate sample containers have been used.
- ☒ Split sample sent to requested external lab.
- ☒ Some samples have been subcontracted.
- N/A Custody Seals intact (if used).

Notes

Sample 0407_QC249_200624 received extra, logged on hold.

Contact notes

If you have any questions with respect to these samples please contact:

[redacted] on Phone : [redacted] or by e.mail: [redacted]@eurofins.com

Results will be delivered electronically via e.mail to [redacted]@slrconsulting.com.

Note: A copy of these results will also be delivered to the general SLR Consulting (Sydney) email address.

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ABN – 50 005 085 521 web : www.eurofins.com.au e.mail : EnviroSales@eurofins.com

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IANZ # 1327

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43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 728718
Phone: 02 9428 8100
Fax:

Received: Jun 30, 2020 2:30 PM
Due: Jul 7, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	HOLD	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271											
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794											
Perth Laboratory - NATA Site # 23736											
External Laboratory											
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**						
1	0407_QC261_200624	Jun 24, 2020		Soil	S20-Jn51303	X		X	X	X	X
2	0407_QC248_200624	Jun 24, 2020		Soil	S20-Jn51304	X		X	X	X	X
3	0407_QC249_200624	Jun 24, 2020		Soil	S20-Jn51334		X				
Test Counts						2	1	2	2	2	2

Certificate of Analysis

eurofins | Environment Testing

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025–Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus
North Sydney
NSW 2060

Attention:	[redacted]
Report	728718-AID
Project Name	RANDWICK BARRACKS
Project ID	610.30041
Received Date	Jun 30, 2020
Date Reported	Jul 07, 2020

Methodology:

Asbestos Fibre Identification	Conducted in accordance with the Australian Standard AS 4964 – 2004: Method for the Qualitative Identification of Asbestos in Bulk Samples and in-house Method LTM-ASB-8020 by polarised light microscopy (PLM) and dispersion staining (DS) techniques. *NOTE: Positive Trace Analysis results indicate the sample contains detectable respirable fibres.*
Unknown Mineral Fibres	Mineral fibres of unknown type, as determined by PLM with DS, may require another analytical technique, such as Electron Microscopy, to confirm unequivocal identity. *NOTE: While Actinolite, Anthophyllite and Tremolite asbestos may be detected by PLM with DS, due to variability in the optical properties of these materials, AS4964 requires that these are reported as UMF unless confirmed by an independent technique.*
Subsampling Soil Samples	The whole sample submitted is first dried and then passed through a 10mm sieve followed by a 2mm sieve. All fibrous matter greater than 10mm, greater than 2mm as well as the material passing through the 2mm sieve are retained and analysed for the presence of asbestos. If the sub 2mm fraction is greater than approximately 30 to 60g then a sub-sampling routine based on ISO 3082:2009(E) is employed. *NOTE: Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be sub-sampled for trace analysis, in accordance with AS 4964-2004.*
Bonded asbestos-containing material (ACM)	The material is first examined and any fibres isolated for identification by PLM and DS. Where required, interfering matrices may be removed by disintegration using a range of heat, chemical or physical treatments, possibly in combination.The resultant material is then further examined in accordance with AS 4964 - 2004. *NOTE: Even after disintegration it may be difficult to detect the presence of asbestos in some asbestos-containing bulk materials using PLM and DS. This is due to the low grade or small length or diameter of the asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos-containing sealants and mastics, asbestos-containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.*
Limit of Reporting	The performance limitation of the AS 4964 (2004) method for non-homogeneous samples is around 0.1 g/kg (equivalent to 0.01% (w/w)). Where no asbestos is found by PLM and DS, including Trace Analysis, this is considered to be at the nominal reporting limit of 0.01% (w/w). The NEPM screening level of 0.001% (w/w) is intended as an on-site determination, not a laboratory Limit of Reporting (LOR), per se. Examination of a large sample size (e.g. 500 mL) may improve the likelihood of detecting asbestos, particularly AF, to aid assessment against the NEPM criteria. Gravimetric determinations to this level of accuracy are outside of AS 4964 and hence NATA Accreditation does not cover the performance of this service (non-NATA results shown with an asterisk). *NOTE: NATA News March 2014, p.7, states in relation to AS 4964: "This is a qualitative method with a nominal reporting limit of 0.01 % " and that currently in Australia "there is no validated method available for the quantification of asbestos".This report is consistent with the analytical procedures and reporting recommendations in the NEPM and the WA DoH.*

Project Name RANDWICK BARRACKS
Project ID 610.30041
Date Sampled Jun 24, 2020
Report 728718-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
0407_QC261_200624	20-Jn51303	Jun 24, 2020	Approximate Sample 52g Sample consisted of: Brown coarse-grained sandy soil	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
0407_QC248_200624	20-Jn51304	Jun 24, 2020	Approximate Sample 48g Sample consisted of: Brown coarse-grained sandy soil and organic debris	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Asbestos - LTM-ASB-8020	Sydney	Jun 30, 2020	Indefinite

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IANZ # 1327

Christchurch
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Rolleston, Christchurch 7675
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IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 728718
Phone: 02 9428 8100
Fax:

Received: Jun 30, 2020 2:30 PM
Due: Jul 7, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	HOLD	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271											
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794											
Perth Laboratory - NATA Site # 23736											
External Laboratory											
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**						
1	0407_QC261_200624	Jun 24, 2020		Soil	S20-Jn51303	X		X	X	X	X
2	0407_QC248_200624	Jun 24, 2020		Soil	S20-Jn51304	X		X	X	X	X
3	0407_QC249_200624	Jun 24, 2020		Soil	S20-Jn51334		X				
Test Counts						2	1	2	2	2	2

Internal Quality Control Review and Glossary

General

1. QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Samples were analysed on an 'as received' basis.
4. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
5. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the Sample Receipt Advice.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

Units

% w/w: weight for weight basis	grams per kilogram
Filter loading:	fibres/100 graticule areas
Reported Concentration:	fibres/mL
Flowrate:	L/min

Terms

Dry	Sample is dried by heating prior to analysis
LOR	Limit of Reporting
COC	Chain of Custody
SRA	Sample Receipt Advice
ISO	International Standards Organisation
AS	Australian Standards
WA DOH	Reference document for the NEPM. Government of Western Australia, Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia (2009), including supporting document Recommended Procedures for Laboratory Analysis of Asbestos in Soil (2011)
NEPM	National Environment Protection (Assessment of Site Contamination) Measure, 2013 (as amended)
ACM	Asbestos Containing Materials. Asbestos contained within a non-asbestos matrix, typically presented in bonded and/or sound condition. For the purposes of the NEPM, ACM is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
AF	Asbestos Fines. Asbestos containing materials, including friable, weathered and bonded materials, able to pass a 7mm x 7mm sieve. Considered under the NEPM as equivalent to “non-bonded / friable”.
FA	Fibrous Asbestos. Asbestos containing materials in a friable and/or severely weathered condition. For the purposes of the NEPM, FA is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
Friable	Asbestos-containing materials of any size that may be broken or crumbled by hand pressure. For the purposes of the NEPM, this includes both AF and FA. It is outside of the laboratory’s remit to assess degree of friability.
Trace Analysis	Analytical procedure used to detect the presence of respirable fibres in the matrix.

Comments

The samples received were not collected in an approved asbestos bag and was therefore sub-sampled from the 250mL glass jar. Valid sub-sampling procedures were applied so as to ensure that the sub-samples to be analysed accurately represented the samples received.

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N/A	Not applicable

Asbestos Counter/Identifier:

[redacted] Senior Analyst-Asbestos (NSW)

Authorised by:

[redacted] Senior Analyst-Asbestos (NSW)

General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus,
North Sydney
NSW 2060

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: [redacted]

Report **728718-S**
Project name RANDWICK BARRACKS
Project ID 610.30041
Received Date Jun 30, 2020

Client Sample ID			0407_QC261_200624	G01 0407_QC248_200624
Sample Matrix			**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn51303**	**S20-Jn51304**
Date Sampled			**Jun 24, 2020**	**Jun 24, 2020**
Test/Reference	LOR	Unit		
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				
TRH C6-C9	20	mg/kg	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 200
TRH C15-C28	50	mg/kg	< 50	< 500
TRH C29-C36	50	mg/kg	< 50	< 500
TRH C10-C36 (Total)	50	mg/kg	< 50	< 500
BTEX				
Benzene	0.1	mg/kg	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	122	96
Volatile Organics				
1.1-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5	< 0.5

Client Sample ID			0407_QC261_200624	[G01]0407_QC248_200624
Sample Matrix			**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn51303**	**S20-Jn51304**
Date Sampled			**Jun 24, 2020**	**Jun 24, 2020**
Test/Reference	LOR	Unit		
Volatile Organics				
Benzene	0.1	mg/kg	< 0.1	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5	< 0.5
Bromoform	0.5	mg/kg	< 0.5	< 0.5
Bromomethane	0.5	mg/kg	< 0.5	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5	< 0.5
Chloroethane	0.5	mg/kg	< 0.5	< 0.5
Chloroform	0.5	mg/kg	< 0.5	< 0.5
Chloromethane	0.5	mg/kg	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1
Iodomethane	0.5	mg/kg	< 0.5	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5	< 0.5
o-Xylene	0.1	mg/kg	< 0.1	< 0.1
Styrene	0.5	mg/kg	< 0.5	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5	< 0.5
Toluene	0.1	mg/kg	< 0.1	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3
Total MAH*	0.5	mg/kg	< 0.5	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5
4-Bromofluorobenzene (surr.)	1	%	122	96
Toluene-d8 (surr.)	1	%	102	94
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 500
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	< 500
TRH >C16-C34	100	mg/kg	< 100	< 1000
TRH >C34-C40	100	mg/kg	< 100	< 1000
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 1000

Client Sample ID			0407_QC261_200624	[G01]0407_QC248_200624
Sample Matrix			**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn51303**	**S20-Jn51304**
Date Sampled			**Jun 24, 2020**	**Jun 24, 2020**
Test/Reference	LOR	Unit		
Polycyclic Aromatic Hydrocarbons				
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	6.1
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	12
Acenaphthene	0.5	mg/kg	< 0.5	< 5
Acenaphthylene	0.5	mg/kg	< 0.5	< 5
Anthracene	0.5	mg/kg	< 0.5	< 5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5	< 5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 5
Chrysene	0.5	mg/kg	< 0.5	< 5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 5
Fluoranthene	0.5	mg/kg	< 0.5	< 5
Fluorene	0.5	mg/kg	< 0.5	< 5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 5
Naphthalene	0.5	mg/kg	< 0.5	< 5
Phenanthrene	0.5	mg/kg	< 0.5	< 5
Pyrene	0.5	mg/kg	< 0.5	< 5
Total PAH*	0.5	mg/kg	< 0.5	< 5
2-Fluorobiphenyl (surr.)	1	%	66	68
p-Terphenyl-d14 (surr.)	1	%	88	83
Organochlorine Pesticides				
Chlordanes - Total	0.1	mg/kg	0.6	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05
a-BHC	0.05	mg/kg	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05
b-BHC	0.05	mg/kg	< 0.05	< 0.05
d-BHC	0.05	mg/kg	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	0.07	< 0.05
Heptachlor epoxide	0.05	mg/kg	0.17	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05
Methoxychlor	0.2	mg/kg	< 0.2	< 0.2
Toxaphene	1	mg/kg	< 1	< 1
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	0.84	< 0.2
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	0.84	< 0.2
Dibutylchlorendate (surr.)	1	%	117	76
Tetrachloro-m-xylene (surr.)	1	%	127	127

Client Sample ID			0407_QC261_200624	[G01]0407_QC248_200624
Sample Matrix			**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn51303**	**S20-Jn51304**
Date Sampled			**Jun 24, 2020**	**Jun 24, 2020**
Test/Reference	LOR	Unit		
Organophosphorus Pesticides				
Azinphos-methyl	0.2	mg/kg	< 0.2	< 2
Bolstar	0.2	mg/kg	< 0.2	< 2
Chlorfenvinphos	0.2	mg/kg	< 0.2	< 2
Chlorpyrifos	0.2	mg/kg	< 0.2	< 2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2	< 2
Coumaphos	2	mg/kg	< 2	< 20
Demeton-S	0.2	mg/kg	< 0.2	< 2
Demeton-O	0.2	mg/kg	< 0.2	< 2
Diazinon	0.2	mg/kg	< 0.2	< 2
Dichlorvos	0.2	mg/kg	< 0.2	< 2
Dimethoate	0.2	mg/kg	< 0.2	< 2
Disulfoton	0.2	mg/kg	< 0.2	< 2
EPN	0.2	mg/kg	< 0.2	< 2
Ethion	0.2	mg/kg	< 0.2	< 2
Ethoprop	0.2	mg/kg	< 0.2	< 2
Ethyl parathion	0.2	mg/kg	< 0.2	< 2
Fenitrothion	0.2	mg/kg	< 0.2	< 2
Fensulfothion	0.2	mg/kg	< 0.2	< 2
Fenthion	0.2	mg/kg	< 0.2	< 2
Malathion	0.2	mg/kg	< 0.2	< 2
Merphos	0.2	mg/kg	< 0.2	< 2
Methyl parathion	0.2	mg/kg	< 0.2	< 2
Mevinphos	0.2	mg/kg	< 0.2	< 2
Monocrotophos	2	mg/kg	< 2	< 2
Naled	0.2	mg/kg	< 0.2	< 2
Omethoate	2	mg/kg	< 2	< 20
Phorate	0.2	mg/kg	< 0.2	< 2
Pirimiphos-methyl	0.2	mg/kg	< 0.2	< 2
Pyrazophos	0.2	mg/kg	< 0.2	< 2
Ronnel	0.2	mg/kg	< 0.2	< 2
Terbufos	0.2	mg/kg	< 0.2	< 2
Tetrachlorvinphos	0.2	mg/kg	< 0.2	< 2
Tokuthion	0.2	mg/kg	< 0.2	< 2
Trichloronate	0.2	mg/kg	< 0.2	< 2
Triphenylphosphate (surr.)	1	%	64	72
Polychlorinated Biphenyls				
Aroclor-1016	0.5	mg/kg	< 5	< 0.5
Aroclor-1221	0.1	mg/kg	< 5	< 0.1
Aroclor-1232	0.5	mg/kg	< 5	< 0.5
Aroclor-1242	0.5	mg/kg	< 5	< 0.5
Aroclor-1248	0.5	mg/kg	< 5	< 0.5
Aroclor-1254	0.5	mg/kg	< 5	< 0.5
Aroclor-1260	0.5	mg/kg	< 5	< 0.5
Total PCB*	0.5	mg/kg	< 5	< 0.5
Dibutylchlorendate (surr.)	1	%	117	76
Tetrachloro-m-xylene (surr.)	1	%	127	127

Client Sample ID			0407_QC261_200624	[G01]0407_QC248_200624
Sample Matrix			**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn51303**	**S20-Jn51304**
Date Sampled			**Jun 24, 2020**	**Jun 24, 2020**
Test/Reference	LOR	Unit		
Phenols (Halogenated)				
2-Chlorophenol	0.5	mg/kg	< 0.5	< 5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	< 5
2.4.5-Trichlorophenol	1	mg/kg	< 1	< 10
2.4.6-Trichlorophenol	1	mg/kg	< 1	< 10
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	< 5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 10
Pentachlorophenol	1	mg/kg	< 1	< 10
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 10
Phenols (non-Halogenated)				
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 150
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 50
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 5
2-Nitrophenol	1	mg/kg	< 1	< 10
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 5
2.4-Dinitrophenol	5	mg/kg	< 5	< 50
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 10
4-Nitrophenol	5	mg/kg	< 5	< 50
Dinoseb	20	mg/kg	< 20	< 150
Phenol	0.5	mg/kg	< 0.5	< 5
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 150
Phenol-d6 (surr.)	1	%	57	61
Heavy Metals				
Arsenic	2	mg/kg	3.4	2.7
Cadmium	0.4	mg/kg	< 0.4	< 0.4
Chromium	5	mg/kg	13	10
Copper	5	mg/kg	22	32
Lead	5	mg/kg	240	86
Mercury	0.1	mg/kg	0.1	0.1
Nickel	5	mg/kg	< 5	18
Zinc	5	mg/kg	140	240
% Moisture	1	%	25	23

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jul 03, 2020	
- Method: LTM-ORG-2010 TRH C6-C40			
Polycyclic Aromatic Hydrocarbons	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (Halogenated)	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (non-Halogenated)	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Metals M8	Sydney	Jul 03, 2020	180 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Volatile Organics	Sydney	Jul 03, 2020	7 Days
- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices			
Eurofins | mgt Suite B15			
Organochlorine Pesticides	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Organophosphorus Pesticides	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS			
Polychlorinated Biphenyls	Sydney	Jul 03, 2020	28 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
% Moisture	Sydney	Jun 30, 2020	14 Days
- Method: LTM-GEN-7080 Moisture			

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Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 728718
Phone: 02 9428 8100
Fax:

Received: Jun 30, 2020 2:30 PM
Due: Jul 7, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	HOLD	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271											
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794											
Perth Laboratory - NATA Site # 23736											
External Laboratory											
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**						
1	0407_QC261_200624	Jun 24, 2020		Soil	S20-Jn51303	X		X	X	X	X
2	0407_QC248_200624	Jun 24, 2020		Soil	S20-Jn51304	X		X	X	X	X
3	0407_QC249_200624	Jun 24, 2020		Soil	S20-Jn51334		X				
Test Counts						2	1	2	2	2	2

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

****NOTE:** pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram
mg/L: milligrams per litre
ug/L: micrograms per litre
ppm: Parts per million
ppb: Parts per billion
%: Percentage
org/100mL: Organisms per 100 millilitres
NTU: Nephelometric Turbidity Units
MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version 5.3
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling.Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
Method Blank							
BTEX							
Benzene	mg/kg	< 0.1			0.1	Pass	
Toluene	mg/kg	< 0.1			0.1	Pass	
Ethylbenzene	mg/kg	< 0.1			0.1	Pass	
m&p-Xylenes	mg/kg	< 0.2			0.2	Pass	
o-Xylene	mg/kg	< 0.1			0.1	Pass	
Xylenes - Total*	mg/kg	< 0.3			0.3	Pass	
Method Blank							
Volatile Organics							
1.1-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
1.1.1-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.1.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dibromoethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.3-Trichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.4-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.3.5-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.4-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
2-Butanone (MEK)	mg/kg	< 0.5			0.5	Pass	
2-Propanone (Acetone)	mg/kg	< 0.5			0.5	Pass	
4-Chlorotoluene	mg/kg	< 0.5			0.5	Pass	
4-Methyl-2-pentanone (MIBK)	mg/kg	< 0.5			0.5	Pass	
Allyl chloride	mg/kg	< 0.5			0.5	Pass	
Bromobenzene	mg/kg	< 0.5			0.5	Pass	
Bromochloromethane	mg/kg	< 0.5			0.5	Pass	
Bromodichloromethane	mg/kg	< 0.5			0.5	Pass	
Bromoform	mg/kg	< 0.5			0.5	Pass	
Bromomethane	mg/kg	< 0.5			0.5	Pass	
Carbon disulfide	mg/kg	< 0.5			0.5	Pass	
Carbon Tetrachloride	mg/kg	< 0.5			0.5	Pass	
Chlorobenzene	mg/kg	< 0.5			0.5	Pass	
Chloroethane	mg/kg	< 0.5			0.5	Pass	
Chloroform	mg/kg	< 0.5			0.5	Pass	
Chloromethane	mg/kg	< 0.5			0.5	Pass	
cis-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
cis-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Dibromochloromethane	mg/kg	< 0.5			0.5	Pass	
Dibromomethane	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Dichlorodifluoromethane	mg/kg	< 0.5			0.5	Pass	
Iodomethane	mg/kg	< 0.5			0.5	Pass	
Isopropyl benzene (Cumene)	mg/kg	< 0.5			0.5	Pass	
Methylene Chloride	mg/kg	< 0.5			0.5	Pass	
Styrene	mg/kg	< 0.5			0.5	Pass	
Tetrachloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Trichloroethene	mg/kg	< 0.5			0.5	Pass	
Trichlorofluoromethane	mg/kg	< 0.5			0.5	Pass	
Vinyl chloride	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Organochlorine Pesticides							
Chlordanes - Total	mg/kg	< 0.1			0.1	Pass	
4.4'-DDD	mg/kg	< 0.05			0.05	Pass	
4.4'-DDE	mg/kg	< 0.05			0.05	Pass	
4.4'-DDT	mg/kg	< 0.05			0.05	Pass	
a-BHC	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-BHC	mg/kg	< 0.05			0.05	Pass	
d-BHC	mg/kg	< 0.05			0.05	Pass	
Dieldrin	mg/kg	< 0.05			0.05	Pass	
Endosulfan I	mg/kg	< 0.05			0.05	Pass	
Endosulfan II	mg/kg	< 0.05			0.05	Pass	
Endosulfan sulphate	mg/kg	< 0.05			0.05	Pass	
Endrin	mg/kg	< 0.05			0.05	Pass	
Endrin aldehyde	mg/kg	< 0.05			0.05	Pass	
Endrin ketone	mg/kg	< 0.05			0.05	Pass	
g-BHC (Lindane)	mg/kg	< 0.05			0.05	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Heptachlor	mg/kg	< 0.05			0.05	Pass	
Heptachlor epoxide	mg/kg	< 0.05			0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05			0.05	Pass	
Methoxychlor	mg/kg	< 0.2			0.2	Pass	
Toxaphene	mg/kg	< 1			1	Pass	
Method Blank							
Organophosphorus Pesticides							
Azinphos-methyl	mg/kg	< 0.2			0.2	Pass	
Bolstar	mg/kg	< 0.2			0.2	Pass	
Chlorfenvinphos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos-methyl	mg/kg	< 0.2			0.2	Pass	
Coumaphos	mg/kg	< 2			2	Pass	
Demeton-S	mg/kg	< 0.2			0.2	Pass	
Demeton-O	mg/kg	< 0.2			0.2	Pass	
Diazinon	mg/kg	< 0.2			0.2	Pass	
Dichlorvos	mg/kg	< 0.2			0.2	Pass	
Dimethoate	mg/kg	< 0.2			0.2	Pass	
Disulfoton	mg/kg	< 0.2			0.2	Pass	
EPN	mg/kg	< 0.2			0.2	Pass	
Ethion	mg/kg	< 0.2			0.2	Pass	
Ethoprop	mg/kg	< 0.2			0.2	Pass	
Ethyl parathion	mg/kg	< 0.2			0.2	Pass	
Fenitrothion	mg/kg	< 0.2			0.2	Pass	
Fensulfothion	mg/kg	< 0.2			0.2	Pass	
Fenthion	mg/kg	< 0.2			0.2	Pass	
Malathion	mg/kg	< 0.2			0.2	Pass	
Merphos	mg/kg	< 0.2			0.2	Pass	
Methyl parathion	mg/kg	< 0.2			0.2	Pass	
Mevinphos	mg/kg	< 0.2			0.2	Pass	
Monocrotophos	mg/kg	< 2			2	Pass	
Naled	mg/kg	< 0.2			0.2	Pass	
Omethoate	mg/kg	< 2			2	Pass	
Phorate	mg/kg	< 0.2			0.2	Pass	
Pirimiphos-methyl	mg/kg	< 0.2			0.2	Pass	
Pyrazophos	mg/kg	< 0.2			0.2	Pass	
Ronnel	mg/kg	< 0.2			0.2	Pass	
Terbufos	mg/kg	< 0.2			0.2	Pass	
Tetrachlorvinphos	mg/kg	< 0.2			0.2	Pass	
Tokuthion	mg/kg	< 0.2			0.2	Pass	
Trichloronate	mg/kg	< 0.2			0.2	Pass	
Method Blank							
Polychlorinated Biphenyls							
Aroclor-1016	mg/kg	< 0.5			0.5	Pass	
Aroclor-1221	mg/kg	< 0.1			0.1	Pass	
Aroclor-1232	mg/kg	< 0.5			0.5	Pass	
Aroclor-1242	mg/kg	< 0.5			0.5	Pass	
Aroclor-1248	mg/kg	< 0.5			0.5	Pass	
Aroclor-1254	mg/kg	< 0.5			0.5	Pass	
Aroclor-1260	mg/kg	< 0.5			0.5	Pass	
Total PCB*	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Phenols (Halogenated)							
2-Chlorophenol	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2.4-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4.5-Trichlorophenol	mg/kg	< 1			1	Pass	
2.4.6-Trichlorophenol	mg/kg	< 1			1	Pass	
2.6-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
4-Chloro-3-methylphenol	mg/kg	< 1			1	Pass	
Pentachlorophenol	mg/kg	< 1			1	Pass	
Tetrachlorophenols - Total	mg/kg	< 10			10	Pass	
Method Blank							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	mg/kg	< 20			20	Pass	
2-Methyl-4.6-dinitrophenol	mg/kg	< 5			5	Pass	
2-Methylphenol (o-Cresol)	mg/kg	< 0.2			0.2	Pass	
2-Nitrophenol	mg/kg	< 1			1	Pass	
2.4-Dimethylphenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dinitrophenol	mg/kg	< 5			5	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/kg	< 0.4			0.4	Pass	
4-Nitrophenol	mg/kg	< 5			5	Pass	
Dinoseb	mg/kg	< 20			20	Pass	
Phenol	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Nickel	mg/kg	< 5			5	Pass	
Zinc	mg/kg	< 5			5	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C10-C14	%	112			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	123			70-130	Pass	
Toluene	%	124			70-130	Pass	
Ethylbenzene	%	112			70-130	Pass	
m&p-Xylenes	%	114			70-130	Pass	
o-Xylene	%	114			70-130	Pass	
Xylenes - Total*	%	114			70-130	Pass	
LCS - % Recovery							
Volatile Organics							
1.1-Dichloroethene	%	112			70-130	Pass	
1.1.1-Trichloroethane	%	122			70-130	Pass	
1.2-Dichlorobenzene	%	112			70-130	Pass	
1.2-Dichloroethane	%	128			70-130	Pass	
Trichloroethene	%	117			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	81			70-130	Pass	
TRH >C10-C16	%	108			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	100			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Acenaphthylene	%	92			70-130	Pass	
Anthracene	%	87			70-130	Pass	
Benz(a)anthracene	%	86			70-130	Pass	
Benzo(a)pyrene	%	93			70-130	Pass	
Benzo(b&j)fluoranthene	%	88			70-130	Pass	
Benzo(g.h.i)perylene	%	111			70-130	Pass	
Benzo(k)fluoranthene	%	94			70-130	Pass	
Chrysene	%	91			70-130	Pass	
Dibenz(a.h)anthracene	%	115			70-130	Pass	
Fluoranthene	%	96			70-130	Pass	
Fluorene	%	92			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	110			70-130	Pass	
Naphthalene	%	96			70-130	Pass	
Phenanthrene	%	91			70-130	Pass	
Pyrene	%	93			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	115			70-130	Pass	
4.4'-DDD	%	91			70-130	Pass	
4.4'-DDE	%	105			70-130	Pass	
4.4'-DDT	%	124			70-130	Pass	
a-BHC	%	98			70-130	Pass	
Aldrin	%	89			70-130	Pass	
b-BHC	%	98			70-130	Pass	
d-BHC	%	94			70-130	Pass	
Dieldrin	%	98			70-130	Pass	
Endosulfan I	%	118			70-130	Pass	
Endosulfan II	%	94			70-130	Pass	
Endosulfan sulphate	%	110			70-130	Pass	
Endrin	%	112			70-130	Pass	
Endrin aldehyde	%	90			70-130	Pass	
Endrin ketone	%	105			70-130	Pass	
g-BHC (Lindane)	%	101			70-130	Pass	
Heptachlor	%	114			70-130	Pass	
Heptachlor epoxide	%	107			70-130	Pass	
Hexachlorobenzene	%	99			70-130	Pass	
Methoxychlor	%	122			70-130	Pass	
LCS - % Recovery							
Organophosphorus Pesticides							
Diazinon	%	99			70-130	Pass	
Dimethoate	%	84			70-130	Pass	
Ethion	%	76			70-130	Pass	
Fenitrothion	%	86			70-130	Pass	
Methyl parathion	%	77			70-130	Pass	
Mevinphos	%	90			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls							
Aroclor-1260	%	105			70-130	Pass	
LCS - % Recovery							
Phenols (Halogenated)							
2-Chlorophenol	%	115			30-130	Pass	
2.4-Dichlorophenol	%	111			30-130	Pass	
2.4.5-Trichlorophenol	%	75			30-130	Pass	
2.4.6-Trichlorophenol	%	108			30-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2.6-Dichlorophenol	%	121			30-130	Pass	
4-Chloro-3-methylphenol	%	95			30-130	Pass	
Pentachlorophenol	%	109			30-130	Pass	
Tetrachlorophenols - Total	%	103			30-130	Pass	
LCS - % Recovery							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	%	119			30-130	Pass	
2-Methyl-4.6-dinitrophenol	%	89			30-130	Pass	
2-Methylphenol (o-Cresol)	%	111			30-130	Pass	
2-Nitrophenol	%	123			30-130	Pass	
2.4-Dimethylphenol	%	107			30-130	Pass	
2.4-Dinitrophenol	%	88			30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	%	118			30-130	Pass	
4-Nitrophenol	%	129			30-130	Pass	
Dinoseb	%	125			30-130	Pass	
Phenol	%	116			30-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	100			70-130	Pass	
Cadmium	%	99			70-130	Pass	
Chromium	%	106			70-130	Pass	
Copper	%	104			70-130	Pass	
Lead	%	102			70-130	Pass	
Mercury	%	99			70-130	Pass	
Nickel	%	105			70-130	Pass	
Zinc	%	107			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C10-C14	S20-Jn39790	NCP	%	99			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	S20-Jl05171	NCP	%	81			70-130	Pass	
Toluene	S20-Jl05171	NCP	%	76			70-130	Pass	
Ethylbenzene	S20-Jl05171	NCP	%	77			70-130	Pass	
m&p-Xylenes	S20-Jl05171	NCP	%	76			70-130	Pass	
o-Xylene	S20-Jl05171	NCP	%	82			70-130	Pass	
Xylenes - Total*	S20-Jl05171	NCP	%	78			70-130	Pass	
Spike - % Recovery									
Volatile Organics				Result 1					
1.1-Dichloroethene	S20-Jl05171	NCP	%	86			70-130	Pass	
1.1.1-Trichloroethane	S20-Jl05171	NCP	%	78			70-130	Pass	
1.2-Dichlorobenzene	S20-Jl05171	NCP	%	75			70-130	Pass	
1.2-Dichloroethane	S20-Jl05171	NCP	%	81			70-130	Pass	
Trichloroethene	S20-Jl05171	NCP	%	78			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
TRH >C10-C16	S20-Jn39790	NCP	%	94			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	N20-Jn45289	NCP	%	78			70-130	Pass	
Acenaphthylene	N20-Jn45289	NCP	%	79			70-130	Pass	
Anthracene	S20-Jn47627	NCP	%	86			70-130	Pass	
Benz(a)anthracene	S20-Jn47627	NCP	%	79			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Benzo(a)pyrene	S20-Jn47627	NCP	%	78			70-130	Pass	
Benzo(b&j)fluoranthene	S20-Jn47627	NCP	%	80			70-130	Pass	
Benzo(g.h.i)perylene	N20-Jn45289	NCP	%	71			70-130	Pass	
Benzo(k)fluoranthene	N20-Jn45289	NCP	%	70			70-130	Pass	
Chrysene	S20-Jn47627	NCP	%	85			70-130	Pass	
Dibenz(a.h)anthracene	N20-Jn45289	NCP	%	76			70-130	Pass	
Fluoranthene	N20-Jn45289	NCP	%	75			70-130	Pass	
Fluorene	N20-Jn45289	NCP	%	76			70-130	Pass	
Indeno(1.2.3-cd)pyrene	N20-Jn45289	NCP	%	73			70-130	Pass	
Naphthalene	N20-Jn45289	NCP	%	84			70-130	Pass	
Phenanthrene	N20-Jn45289	NCP	%	72			70-130	Pass	
Pyrene	N20-Jn45289	NCP	%	73			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
Chlordanes - Total	N20-Jn45289	NCP	%	78			70-130	Pass	
4.4'-DDD	N20-Jn45289	NCP	%	77			70-130	Pass	
4.4'-DDE	N20-Jn45289	NCP	%	76			70-130	Pass	
4.4'-DDT	N20-Jn45289	NCP	%	83			70-130	Pass	
a-BHC	S20-Jn51230	NCP	%	83			70-130	Pass	
Aldrin	S20-Jn51230	NCP	%	73			70-130	Pass	
b-BHC	S20-Jn51230	NCP	%	84			70-130	Pass	
d-BHC	S20-Jn51230	NCP	%	81			70-130	Pass	
Dieldrin	N20-Jn45289	NCP	%	82			70-130	Pass	
Endosulfan I	N20-Jn45289	NCP	%	83			70-130	Pass	
Endosulfan II	N20-Jn45289	NCP	%	75			70-130	Pass	
Endosulfan sulphate	N20-Jn45289	NCP	%	75			70-130	Pass	
Endrin	N20-Jn45289	NCP	%	96			70-130	Pass	
Endrin aldehyde	S20-Jn51230	NCP	%	73			70-130	Pass	
Endrin ketone	N20-Jn45289	NCP	%	73			70-130	Pass	
g-BHC (Lindane)	S20-Jn51230	NCP	%	86			70-130	Pass	
Heptachlor	S20-Jn51230	NCP	%	80			70-130	Pass	
Heptachlor epoxide	S20-Jn51230	NCP	%	79			70-130	Pass	
Hexachlorobenzene	S20-Jn51230	NCP	%	81			70-130	Pass	
Methoxychlor	N20-Jn45289	NCP	%	85			70-130	Pass	
Spike - % Recovery									
Organophosphorus Pesticides				Result 1					
Diazinon	N20-Jn45289	NCP	%	73			70-130	Pass	
Dimethoate	N20-Jn45289	NCP	%	81			70-130	Pass	
Ethion	N20-Jn45289	NCP	%	77			70-130	Pass	
Fenitrothion	N20-Jn45289	NCP	%	71			70-130	Pass	
Methyl parathion	S20-Jn47627	NCP	%	71			70-130	Pass	
Mevinphos	N20-Jn45289	NCP	%	73			70-130	Pass	
Spike - % Recovery									
Polychlorinated Biphenyls				Result 1					
Aroclor-1260	S20-Jn48035	NCP	%	110			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	S20-Jn51305	NCP	%	117			70-130	Pass	
Cadmium	S20-Jn51305	NCP	%	110			70-130	Pass	
Chromium	S20-Jn51305	NCP	%	107			70-130	Pass	
Copper	S20-Jn51305	NCP	%	95			70-130	Pass	
Lead	S20-Jn51305	NCP	%	115			70-130	Pass	
Mercury	S20-Jn51305	NCP	%	105			70-130	Pass	
Nickel	S20-Jn51305	NCP	%	108			70-130	Pass	
Zinc	S20-Jl07705	NCP	%	119			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C6-C9	S20-Jl05988	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	S20-Jn51324	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	S20-Jn51324	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	S20-Jn51324	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S20-Jl05988	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Toluene	S20-Jl05988	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Ethylbenzene	S20-Jl05988	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
m&p-Xylenes	S20-Jl05988	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
o-Xylene	S20-Jl05988	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes - Total*	S20-Jl05988	NCP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
1.1-Dichloroethane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1-Dichloroethene	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1-Trichloroethane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2-Trichloroethane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dibromoethane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichlorobenzene	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloroethane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloropropane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.3-Trichloropropane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trimethylbenzene	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichlorobenzene	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichloropropane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3.5-Trimethylbenzene	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.4-Dichlorobenzene	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Butanone (MEK)	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Propanone (Acetone)	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chlorotoluene	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Methyl-2-pentanone (MIBK)	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Allyl chloride	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromobenzene	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromochloromethane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromodichloromethane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromoform	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromomethane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon disulfide	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon Tetrachloride	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chlorobenzene	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroethane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroform	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloromethane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.2-Dichloroethene	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.3-Dichloropropene	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromochloromethane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromomethane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dichlorodifluoromethane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Iodomethane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
Isopropyl benzene (Cumene)	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Methylene Chloride	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Styrene	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Tetrachloroethene	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.2-Dichloroethene	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.3-Dichloropropene	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichloroethene	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichlorofluoromethane	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Vinyl chloride	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	S20-Jl05988	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	S20-Jl05988	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH >C10-C16	S20-Jn51324	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	S20-Jn51324	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	S20-Jn51324	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	N20-Jn51079	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	N20-Jn51079	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	N20-Jn51079	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	N20-Jn51079	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	N20-Jn51079	NCP	mg/kg	0.5	< 0.5	40	30%	Fail	Q15
Benzo(b&j)fluoranthene	N20-Jn51079	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	N20-Jn51079	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	N20-Jn51079	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	N20-Jn51079	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	N20-Jn51079	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	N20-Jn51079	NCP	mg/kg	1.6	1.0	43	30%	Fail	Q15
Fluorene	N20-Jn51079	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	N20-Jn51079	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	N20-Jn51079	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	N20-Jn51079	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	N20-Jn51079	NCP	mg/kg	1.5	1.0	41	30%	Fail	Q15
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	S20-Jn51161	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	S20-Jn51161	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	S20-Jn51161	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	S20-Jn51161	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-BHC	S20-Jn51161	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	S20-Jn51161	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-BHC	S20-Jn51161	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-BHC	S20-Jn51161	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	S20-Jn51161	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	S20-Jn51161	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	S20-Jn51161	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	S20-Jn51161	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	S20-Jn51161	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	S20-Jn51161	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	S20-Jn51161	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-BHC (Lindane)	S20-Jn51161	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	S20-Jn51161	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	S20-Jn51161	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	

Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Hexachlorobenzene	S20-Jn51161	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	S20-Jn51161	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Azinphos-methyl	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Bolstar	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorfenvinphos	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos-methyl	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Coumaphos	N20-Jn51079	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Demeton-S	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Demeton-O	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Diazinon	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dichlorvos	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dimethoate	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Disulfoton	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
EPN	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethion	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethoprop	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethyl parathion	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenitrothion	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fensulfothion	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenthion	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Malathion	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Merphos	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Methyl parathion	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Mevinphos	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Monocrotophos	N20-Jn51079	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Naled	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Omethoate	N20-Jn51079	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Phorate	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pirimiphos-methyl	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pyrazophos	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ronnel	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Terbufos	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tetrachlorvinphos	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tokuthion	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Trichloronate	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Aroclor-1016	N20-Jn51079	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1221	N20-Jn51079	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1232	N20-Jn51079	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1242	N20-Jn51079	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1248	N20-Jn51079	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1254	N20-Jn51079	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1260	N20-Jn51079	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	N20-Jn51078	NCP	mg/kg	8.6	9.2	7.0	30%	Pass	
Cadmium	N20-Jn51078	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	N20-Jn51078	NCP	mg/kg	14	14	1.0	30%	Pass	
Copper	N20-Jn51078	NCP	mg/kg	12	14	16	30%	Pass	
Lead	N20-Jn51078	NCP	mg/kg	27	30	8.0	30%	Pass	

Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Mercury	N20-Jn51078	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Nickel	N20-Jn51078	NCP	mg/kg	8.9	10	13	30%	Pass	
Zinc	N20-Jn51078	NCP	mg/kg	76	64	17	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	N20-Jn51085	NCP	%	14	14	2.0	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Toxaphene	N20-Jn51079	NCP	mg/kg	< 1	< 1	<1	30%	Pass	

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
G01	The LORs have been raised due to matrix interference
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
Q15	The RPD reported passes Eurofins Environment Testing's QC - Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report.

Authorised By

[redacted]

Analytical Services Manager
Senior Analyst-Organic (NSW)
Senior Analyst-Metal (NSW)
Senior Analyst-Asbestos (NSW)

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Dawin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☒ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ

CLIENT: Defence Housing Australia	**LABORATORY: SGS Australia**
PROJECT: Randwick Barracks	**LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015**
PROJECT NUMBER: 610.30041	**SAMPLER** [redacted]
PROJECT MANAGER: [redacted]	**SAMPLER CONTACT No** [redacted]
PM CONTACT N [redacted]	**Email Reports and Invoices to: LQRSYD@slrconsulting.com** [redacted]

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number of

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	Asbestos ONLY	HOLD	C6-C10/BETXN					Additional Information (Comment on any gross contamination or specific requirements)
	0407_QC163_200625	25/06/2020	Soil	jar, pfas	x								Please hold all PFAS containers
	0407_QC263_200625	25/06/2020	Soil	jar, pfas	x								Please send to Eurofins
	0407_QC167_200625	25/06/2020	Soil	jar, pfas	x								
	0407_QC267_200625	25/06/2020	Soil	jar, pfas	x								Please send to Eurofins
	0407_QC413_200623	23/06/2020	Trip Blank	vial				x					
	0407_QC513_200623	23/06/2020	Trip Spike	vial				x					

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 18/06/2020	**Received by**	[redacted]	Date / Time 30/6/20 2:30PM	**Temperature Received:** 15.5°C
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

728720

eurofins | Environment Testing

Melbourne
6 Monterey Road
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Site # 1254 & 14271

Sydney
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Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

Brisbane
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Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Perth
2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261 Site # 23736

ABN – 50 005 085 521 e.mail : EnviroSales@eurofins.com web : www.eurofins.com.au

Sample Receipt Advice

Company name:	**SLR Consulting (Sydney)**
Contact name:	[redacted]
Project name:	RANDWICK BARRACKS
Project ID:	610.30041
COC number:	Not provided
Turn around time:	5 Day
Date/Time received:	Jun 30, 2020 2:30 PM
Eurofins reference:	**728720**

Sample information

☑ A detailed list of analytes logged into our LIMS, is included in the attached summary table.

☑ All samples have been received as described on the above COC.

☑ COC has been completed correctly.

☑ Attempt to chill was evident.

☑ Appropriately preserved sample containers have been used.

☑ All samples were received in good condition.

☑ Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.

☑ Appropriate sample containers have been used.

☒ Split sample sent to requested external lab.

☒ Some samples have been subcontracted.

N/A Custody Seals intact (if used).

Contact notes

If you have any questions with respect to these samples please contact:

[redacted] on Phone [redacted] or by e.mail: [redacted]@eurofins.com

Results will be delivered electronically via e.mail to [redacted]@slrconsulting.com.

Note: A copy of these results will also be delivered to the general SLR Consulting (Sydney) email address.

eurofins | Environment Testing

ABN – 50 005 085 521 web : www.eurofins.com.au e.mail : EnviroSales@eurofins.com

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IANZ # 1327

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43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 728720
Phone: 02 9428 8100
Fax:

Received: Jun 30, 2020 2:30 PM
Due: Jul 7, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271										
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	0407_QC263_200625	Jun 25, 2020		Soil	S20-Jn51305	X	X	X	X	X
2	0407_QC267_200625	Jun 25, 2020		Soil	S20-Jn51306	X	X	X	X	X
Test Counts						2	2	2	2	2

Certificate of Analysis

eurofins | Environment Testing

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025–Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus
North Sydney
NSW 2060

Attention:	[redacted]
Report	728720-AID
Project Name	RANDWICK BARRACKS
Project ID	610.30041
Received Date	Jun 30, 2020
Date Reported	Jul 07, 2020

Methodology:

Asbestos Fibre Identification	Conducted in accordance with the Australian Standard AS 4964 – 2004: Method for the Qualitative Identification of Asbestos in Bulk Samples and in-house Method LTM-ASB-8020 by polarised light microscopy (PLM) and dispersion staining (DS) techniques. *NOTE: Positive Trace Analysis results indicate the sample contains detectable respirable fibres.*
Unknown Mineral Fibres	Mineral fibres of unknown type, as determined by PLM with DS, may require another analytical technique, such as Electron Microscopy, to confirm unequivocal identity. *NOTE: While Actinolite, Anthophyllite and Tremolite asbestos may be detected by PLM with DS, due to variability in the optical properties of these materials, AS4964 requires that these are reported as UMF unless confirmed by an independent technique.*
Subsampling Soil Samples	The whole sample submitted is first dried and then passed through a 10mm sieve followed by a 2mm sieve. All fibrous matter greater than 10mm, greater than 2mm as well as the material passing through the 2mm sieve are retained and analysed for the presence of asbestos. If the sub 2mm fraction is greater than approximately 30 to 60g then a sub-sampling routine based on ISO 3082:2009(E) is employed. *NOTE: Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be sub-sampled for trace analysis, in accordance with AS 4964-2004.*
Bonded asbestos-containing material (ACM)	The material is first examined and any fibres isolated for identification by PLM and DS. Where required, interfering matrices may be removed by disintegration using a range of heat, chemical or physical treatments, possibly in combination.The resultant material is then further examined in accordance with AS 4964 - 2004. *NOTE: Even after disintegration it may be difficult to detect the presence of asbestos in some asbestos-containing bulk materials using PLM and DS. This is due to the low grade or small length or diameter of the asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos-containing sealants and mastics, asbestos-containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.*
Limit of Reporting	The performance limitation of the AS 4964 (2004) method for non-homogeneous samples is around 0.1 g/kg (equivalent to 0.01% (w/w)). Where no asbestos is found by PLM and DS, including Trace Analysis, this is considered to be at the nominal reporting limit of 0.01% (w/w). The NEPM screening level of 0.001% (w/w) is intended as an on-site determination, not a laboratory Limit of Reporting (LOR), per se. Examination of a large sample size (e.g. 500 mL) may improve the likelihood of detecting asbestos, particularly AF, to aid assessment against the NEPM criteria. Gravimetric determinations to this level of accuracy are outside of AS 4964 and hence NATA Accreditation does not cover the performance of this service (non-NATA results shown with an asterisk). *NOTE: NATA News March 2014, p.7, states in relation to AS 4964: "This is a qualitative method with a nominal reporting limit of 0.01 % " and that currently in Australia "there is no validated method available for the quantification of asbestos".This report is consistent with the analytical procedures and reporting recommendations in the NEPM and the WA DoH.*

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Project Name RANDWICK BARRACKS
Project ID 610.30041
Date Sampled Jun 25, 2020
Report 728720-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
0407_QC263_200625	20-Jn51305	Jun 25, 2020	Approximate Sample 56g Sample consisted of: Brown coarse-grained sandy soil	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
0407_QC267_200625	20-Jn51306	Jun 25, 2020	Approximate Sample 53g Sample consisted of: Brown coarse-grained sandy soil, bitumen, rocks and organic debris	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Asbestos - LTM-ASB-8020	Sydney	Jun 30, 2020	Indefinite

eurofins | Environment Testing

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Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 728720
Phone: 02 9428 8100
Fax:

Received: Jun 30, 2020 2:30 PM
Due: Jul 7, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271										
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	0407_QC263_200625	Jun 25, 2020		Soil	S20-Jn51305	X	X	X	X	X
2	0407_QC267_200625	Jun 25, 2020		Soil	S20-Jn51306	X	X	X	X	X
Test Counts						2	2	2	2	2

Internal Quality Control Review and Glossary

General

1. QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Samples were analysed on an 'as received' basis.
4. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
5. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the Sample Receipt Advice.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

Units

% w/w: weight for weight basis	grams per kilogram
Filter loading:	fibres/100 graticule areas
Reported Concentration:	fibres/mL
Flowrate:	L/min

Terms

Dry	Sample is dried by heating prior to analysis
LOR	Limit of Reporting
COC	Chain of Custody
SRA	Sample Receipt Advice
ISO	International Standards Organisation
AS	Australian Standards
WA DOH	Reference document for the NEPM. Government of Western Australia, Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia (2009), including supporting document Recommended Procedures for Laboratory Analysis of Asbestos in Soil (2011)
NEPM	National Environment Protection (Assessment of Site Contamination) Measure, 2013 (as amended)
ACM	Asbestos Containing Materials. Asbestos contained within a non-asbestos matrix, typically presented in bonded and/or sound condition. For the purposes of the NEPM, ACM is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
AF	Asbestos Fines. Asbestos containing materials, including friable, weathered and bonded materials, able to pass a 7mm x 7mm sieve. Considered under the NEPM as equivalent to “non-bonded / friable”.
FA	Fibrous Asbestos. Asbestos containing materials in a friable and/or severely weathered condition. For the purposes of the NEPM, FA is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
Friable	Asbestos-containing materials of any size that may be broken or crumbled by hand pressure. For the purposes of the NEPM, this includes both AF and FA. It is outside of the laboratory’s remit to assess degree of friability.
Trace Analysis	Analytical procedure used to detect the presence of respirable fibres in the matrix.

Comments

The samples received were not collected in an approved asbestos bag and was therefore sub-sampled from the 250mL glass jar. Valid sub-sampling procedures were applied so as to ensure that the sub-samples to be analysed accurately represented the samples received.

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

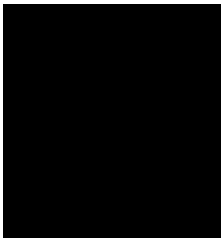
Qualifier Codes/Comments

Code	Description
N/A	Not applicable

Asbestos Counter/Identifier:

[redacted] Senior Analyst-Asbestos (NSW)

Authorised by:



Senior Analyst-Asbestos (NSW)

General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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North Sydney
NSW 2060

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Accreditation Number 1261
Site Number 18217

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Attention: [redacted]

Report **728720-S**
Project name RANDWICK BARRACKS
Project ID 610.30041
Received Date Jun 30, 2020

Client Sample ID			**0407_QC263_200625**	**0407_QC267_200625**
Sample Matrix			**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn51305**	**S20-Jn51306**
Date Sampled			**Jun 25, 2020**	**Jun 25, 2020**
Test/Reference	LOR	Unit		
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				
TRH C6-C9	20	mg/kg	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20
TRH C15-C28	50	mg/kg	83	82
TRH C29-C36	50	mg/kg	< 50	80
TRH C10-C36 (Total)	50	mg/kg	83	162
BTEX				
Benzene	0.1	mg/kg	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	106	108
Volatile Organics				
1.1-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5	< 0.5

Client Sample ID			0407_QC263_200625	0407_QC267_200625
Sample Matrix			**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn51305**	**S20-Jn51306**
Date Sampled			**Jun 25, 2020**	**Jun 25, 2020**
Test/Reference	LOR	Unit		
Volatile Organics				
Benzene	0.1	mg/kg	< 0.1	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5	< 0.5
Bromoform	0.5	mg/kg	< 0.5	< 0.5
Bromomethane	0.5	mg/kg	< 0.5	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5	< 0.5
Chloroethane	0.5	mg/kg	< 0.5	< 0.5
Chloroform	0.5	mg/kg	< 0.5	< 0.5
Chloromethane	0.5	mg/kg	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1
Iodomethane	0.5	mg/kg	< 0.5	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5	< 0.5
o-Xylene	0.1	mg/kg	< 0.1	< 0.1
Styrene	0.5	mg/kg	< 0.5	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5	< 0.5
Toluene	0.1	mg/kg	< 0.1	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3
Total MAH*	0.5	mg/kg	< 0.5	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5
4-Bromofluorobenzene (surr.)	1	%	106	108
Toluene-d8 (surr.)	1	%	112	108
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	< 50
TRH >C16-C34	100	mg/kg	110	150
TRH >C34-C40	100	mg/kg	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	110	150

Client Sample ID			0407_QC263_200625	0407_QC267_200625
Sample Matrix			**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn51305**	**S20-Jn51306**
Date Sampled			**Jun 25, 2020**	**Jun 25, 2020**
Test/Reference	LOR	Unit		
Polycyclic Aromatic Hydrocarbons				
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	0.9	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5
Pyrene	0.5	mg/kg	0.9	< 0.5
Total PAH*	0.5	mg/kg	1.8	< 0.5
2-Fluorobiphenyl (surr.)	1	%	72	75
p-Terphenyl-d14 (surr.)	1	%	94	94
Organochlorine Pesticides				
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05
a-BHC	0.05	mg/kg	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05
b-BHC	0.05	mg/kg	< 0.05	< 0.05
d-BHC	0.05	mg/kg	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05
Methoxychlor	0.2	mg/kg	< 0.2	< 0.2
Toxaphene	1	mg/kg	< 1	< 1
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.2	< 0.2
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.2	< 0.2
Dibutylchlorendate (surr.)	1	%	80	88
Tetrachloro-m-xylene (surr.)	1	%	74	76

Client Sample ID			0407_QC263_200625	0407_QC267_200625
Sample Matrix			**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn51305**	**S20-Jn51306**
Date Sampled			**Jun 25, 2020**	**Jun 25, 2020**
Test/Reference	LOR	Unit		
Organophosphorus Pesticides				
Azinphos-methyl	0.2	mg/kg	< 0.2	< 0.2
Bolstar	0.2	mg/kg	< 0.2	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2	< 0.2
Coumaphos	2	mg/kg	< 2	< 2
Demeton-S	0.2	mg/kg	< 0.2	< 0.2
Demeton-O	0.2	mg/kg	< 0.2	< 0.2
Diazinon	0.2	mg/kg	< 0.2	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2	< 0.2
Dimethoate	0.2	mg/kg	< 0.2	< 0.2
Disulfoton	0.2	mg/kg	< 0.2	< 0.2
EPN	0.2	mg/kg	< 0.2	< 0.2
Ethion	0.2	mg/kg	< 0.2	< 0.2
Ethoprop	0.2	mg/kg	< 0.2	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2	< 0.2
Fenthion	0.2	mg/kg	< 0.2	< 0.2
Malathion	0.2	mg/kg	< 0.2	< 0.2
Merphos	0.2	mg/kg	< 0.2	< 0.2
Methyl parathion	0.2	mg/kg	< 0.2	< 0.2
Mevinphos	0.2	mg/kg	< 0.2	< 0.2
Monocrotophos	2	mg/kg	< 2	< 2
Naled	0.2	mg/kg	< 0.2	< 0.2
Omethoate	2	mg/kg	< 2	< 2
Phorate	0.2	mg/kg	< 0.2	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2	< 0.2
Ronnel	0.2	mg/kg	< 0.2	< 0.2
Terbufos	0.2	mg/kg	< 0.2	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2	< 0.2
Tokuthion	0.2	mg/kg	< 0.2	< 0.2
Trichloronate	0.2	mg/kg	< 0.2	< 0.2
Triphenylphosphate (surr.)	1	%	79	81
Polychlorinated Biphenyls				
Aroclor-1016	0.5	mg/kg	< 0.5	< 0.5
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1
Aroclor-1232	0.5	mg/kg	< 0.5	< 0.5
Aroclor-1242	0.5	mg/kg	< 0.5	< 0.5
Aroclor-1248	0.5	mg/kg	< 0.5	< 0.5
Aroclor-1254	0.5	mg/kg	< 0.5	< 0.5
Aroclor-1260	0.5	mg/kg	< 0.5	< 0.5
Total PCB*	0.5	mg/kg	< 0.5	< 0.5
Dibutylchlorendate (surr.)	1	%	80	88
Tetrachloro-m-xylene (surr.)	1	%	74	76

Client Sample ID			0407_QC263_200625	0407_QC267_200625
Sample Matrix			**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn51305**	**S20-Jn51306**
Date Sampled			**Jun 25, 2020**	**Jun 25, 2020**
Test/Reference	LOR	Unit		
Phenols (Halogenated)				
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1
Phenols (non-Halogenated)				
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2
2-Nitrophenol	1	mg/kg	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5	< 5
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4
4-Nitrophenol	5	mg/kg	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20
Phenol-d6 (surr.)	1	%	66	65
Heavy Metals				
Arsenic	2	mg/kg	3.8	11
Cadmium	0.4	mg/kg	< 0.4	0.7
Chromium	5	mg/kg	11	32
Copper	5	mg/kg	85	95
Lead	5	mg/kg	78	140
Mercury	0.1	mg/kg	0.2	0.1
Nickel	5	mg/kg	8.7	19
Zinc	5	mg/kg	130	470
% Moisture	1	%	15	21

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jul 03, 2020	
- Method: LTM-ORG-2010 TRH C6-C40			
Polycyclic Aromatic Hydrocarbons	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (Halogenated)	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (non-Halogenated)	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Metals M8	Sydney	Jul 03, 2020	180 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Volatile Organics	Sydney	Jul 03, 2020	7 Days
- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices			
Eurofins | mgt Suite B15			
Organochlorine Pesticides	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Organophosphorus Pesticides	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS			
Polychlorinated Biphenyls	Sydney	Jul 03, 2020	28 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
% Moisture	Sydney	Jun 30, 2020	14 Days
- Method: LTM-GEN-7080 Moisture			

eurofins | Environment Testing

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Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 728720
Phone: 02 9428 8100
Fax:

Received: Jun 30, 2020 2:30 PM
Due: Jul 7, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271										
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	0407_QC263_200625	Jun 25, 2020		Soil	S20-Jn51305	X	X	X	X	X
2	0407_QC267_200625	Jun 25, 2020		Soil	S20-Jn51306	X	X	X	X	X
Test Counts						2	2	2	2	2

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

****NOTE:** pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram

mg/L: milligrams per litre

ug/L: micrograms per litre

ppm: Parts per million

ppb: Parts per billion

%: Percentage

org/100mL: Organisms per 100 millilitres

NTU: Nephelometric Turbidity Units

MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version 5.3
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling.Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
Method Blank							
BTEX							
Benzene	mg/kg	< 0.1			0.1	Pass	
Toluene	mg/kg	< 0.1			0.1	Pass	
Ethylbenzene	mg/kg	< 0.1			0.1	Pass	
m&p-Xylenes	mg/kg	< 0.2			0.2	Pass	
o-Xylene	mg/kg	< 0.1			0.1	Pass	
Xylenes - Total*	mg/kg	< 0.3			0.3	Pass	
Method Blank							
Volatile Organics							
1.1-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
1.1.1-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.1.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dibromoethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.3-Trichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.4-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.3.5-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.4-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
2-Butanone (MEK)	mg/kg	< 0.5			0.5	Pass	
2-Propanone (Acetone)	mg/kg	< 0.5			0.5	Pass	
4-Chlorotoluene	mg/kg	< 0.5			0.5	Pass	
4-Methyl-2-pentanone (MIBK)	mg/kg	< 0.5			0.5	Pass	
Allyl chloride	mg/kg	< 0.5			0.5	Pass	
Bromobenzene	mg/kg	< 0.5			0.5	Pass	
Bromochloromethane	mg/kg	< 0.5			0.5	Pass	
Bromodichloromethane	mg/kg	< 0.5			0.5	Pass	
Bromoform	mg/kg	< 0.5			0.5	Pass	
Bromomethane	mg/kg	< 0.5			0.5	Pass	
Carbon disulfide	mg/kg	< 0.5			0.5	Pass	
Carbon Tetrachloride	mg/kg	< 0.5			0.5	Pass	
Chlorobenzene	mg/kg	< 0.5			0.5	Pass	
Chloroethane	mg/kg	< 0.5			0.5	Pass	
Chloroform	mg/kg	< 0.5			0.5	Pass	
Chloromethane	mg/kg	< 0.5			0.5	Pass	
cis-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
cis-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Dibromochloromethane	mg/kg	< 0.5			0.5	Pass	
Dibromomethane	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Dichlorodifluoromethane	mg/kg	< 0.5			0.5	Pass	
Iodomethane	mg/kg	< 0.5			0.5	Pass	
Isopropyl benzene (Cumene)	mg/kg	< 0.5			0.5	Pass	
Methylene Chloride	mg/kg	< 0.5			0.5	Pass	
Styrene	mg/kg	< 0.5			0.5	Pass	
Tetrachloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Trichloroethene	mg/kg	< 0.5			0.5	Pass	
Trichlorofluoromethane	mg/kg	< 0.5			0.5	Pass	
Vinyl chloride	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Organochlorine Pesticides							
Chlordanes - Total	mg/kg	< 0.1			0.1	Pass	
4.4'-DDD	mg/kg	< 0.05			0.05	Pass	
4.4'-DDE	mg/kg	< 0.05			0.05	Pass	
4.4'-DDT	mg/kg	< 0.05			0.05	Pass	
a-BHC	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-BHC	mg/kg	< 0.05			0.05	Pass	
d-BHC	mg/kg	< 0.05			0.05	Pass	
Dieldrin	mg/kg	< 0.05			0.05	Pass	
Endosulfan I	mg/kg	< 0.05			0.05	Pass	
Endosulfan II	mg/kg	< 0.05			0.05	Pass	
Endosulfan sulphate	mg/kg	< 0.05			0.05	Pass	
Endrin	mg/kg	< 0.05			0.05	Pass	
Endrin aldehyde	mg/kg	< 0.05			0.05	Pass	
Endrin ketone	mg/kg	< 0.05			0.05	Pass	
g-BHC (Lindane)	mg/kg	< 0.05			0.05	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Heptachlor	mg/kg	< 0.05			0.05	Pass	
Heptachlor epoxide	mg/kg	< 0.05			0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05			0.05	Pass	
Methoxychlor	mg/kg	< 0.2			0.2	Pass	
Toxaphene	mg/kg	< 1			1	Pass	
Method Blank							
Organophosphorus Pesticides							
Azinphos-methyl	mg/kg	< 0.2			0.2	Pass	
Bolstar	mg/kg	< 0.2			0.2	Pass	
Chlorfenvinphos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos-methyl	mg/kg	< 0.2			0.2	Pass	
Coumaphos	mg/kg	< 2			2	Pass	
Demeton-S	mg/kg	< 0.2			0.2	Pass	
Demeton-O	mg/kg	< 0.2			0.2	Pass	
Diazinon	mg/kg	< 0.2			0.2	Pass	
Dichlorvos	mg/kg	< 0.2			0.2	Pass	
Dimethoate	mg/kg	< 0.2			0.2	Pass	
Disulfoton	mg/kg	< 0.2			0.2	Pass	
EPN	mg/kg	< 0.2			0.2	Pass	
Ethion	mg/kg	< 0.2			0.2	Pass	
Ethoprop	mg/kg	< 0.2			0.2	Pass	
Ethyl parathion	mg/kg	< 0.2			0.2	Pass	
Fenitrothion	mg/kg	< 0.2			0.2	Pass	
Fensulfothion	mg/kg	< 0.2			0.2	Pass	
Fenthion	mg/kg	< 0.2			0.2	Pass	
Malathion	mg/kg	< 0.2			0.2	Pass	
Merphos	mg/kg	< 0.2			0.2	Pass	
Methyl parathion	mg/kg	< 0.2			0.2	Pass	
Mevinphos	mg/kg	< 0.2			0.2	Pass	
Monocrotophos	mg/kg	< 2			2	Pass	
Naled	mg/kg	< 0.2			0.2	Pass	
Omethoate	mg/kg	< 2			2	Pass	
Phorate	mg/kg	< 0.2			0.2	Pass	
Pirimiphos-methyl	mg/kg	< 0.2			0.2	Pass	
Pyrazophos	mg/kg	< 0.2			0.2	Pass	
Ronnel	mg/kg	< 0.2			0.2	Pass	
Terbufos	mg/kg	< 0.2			0.2	Pass	
Tetrachlorvinphos	mg/kg	< 0.2			0.2	Pass	
Tokuthion	mg/kg	< 0.2			0.2	Pass	
Trichloronate	mg/kg	< 0.2			0.2	Pass	
Method Blank							
Polychlorinated Biphenyls							
Aroclor-1016	mg/kg	< 0.5			0.5	Pass	
Aroclor-1221	mg/kg	< 0.1			0.1	Pass	
Aroclor-1232	mg/kg	< 0.5			0.5	Pass	
Aroclor-1242	mg/kg	< 0.5			0.5	Pass	
Aroclor-1248	mg/kg	< 0.5			0.5	Pass	
Aroclor-1254	mg/kg	< 0.5			0.5	Pass	
Aroclor-1260	mg/kg	< 0.5			0.5	Pass	
Total PCB*	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Phenols (Halogenated)							
2-Chlorophenol	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2.4-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4.5-Trichlorophenol	mg/kg	< 1			1	Pass	
2.4.6-Trichlorophenol	mg/kg	< 1			1	Pass	
2.6-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
4-Chloro-3-methylphenol	mg/kg	< 1			1	Pass	
Pentachlorophenol	mg/kg	< 1			1	Pass	
Tetrachlorophenols - Total	mg/kg	< 10			10	Pass	
Method Blank							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	mg/kg	< 20			20	Pass	
2-Methyl-4.6-dinitrophenol	mg/kg	< 5			5	Pass	
2-Methylphenol (o-Cresol)	mg/kg	< 0.2			0.2	Pass	
2-Nitrophenol	mg/kg	< 1			1	Pass	
2.4-Dimethylphenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dinitrophenol	mg/kg	< 5			5	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/kg	< 0.4			0.4	Pass	
4-Nitrophenol	mg/kg	< 5			5	Pass	
Dinoseb	mg/kg	< 20			20	Pass	
Phenol	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Nickel	mg/kg	< 5			5	Pass	
Zinc	mg/kg	< 5			5	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	%	86			70-130	Pass	
TRH C10-C14	%	111			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	80			70-130	Pass	
Toluene	%	85			70-130	Pass	
Ethylbenzene	%	102			70-130	Pass	
m&p-Xylenes	%	112			70-130	Pass	
o-Xylene	%	114			70-130	Pass	
Xylenes - Total*	%	112			70-130	Pass	
LCS - % Recovery							
Volatile Organics							
1.1-Dichloroethene	%	94			70-130	Pass	
1.1.1-Trichloroethane	%	110			70-130	Pass	
1.2-Dichlorobenzene	%	114			70-130	Pass	
1.2-Dichloroethane	%	123			70-130	Pass	
Trichloroethene	%	107			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	81			70-130	Pass	
TRH C6-C10	%	89			70-130	Pass	
TRH >C10-C16	%	106			70-130	Pass	
LCS - % Recovery							

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	100			70-130	Pass	
Acenaphthylene	%	92			70-130	Pass	
Anthracene	%	87			70-130	Pass	
Benz(a)anthracene	%	86			70-130	Pass	
Benzo(a)pyrene	%	93			70-130	Pass	
Benzo(b&j)fluoranthene	%	88			70-130	Pass	
Benzo(g.h.i)perylene	%	111			70-130	Pass	
Benzo(k)fluoranthene	%	94			70-130	Pass	
Chrysene	%	91			70-130	Pass	
Dibenz(a.h)anthracene	%	115			70-130	Pass	
Fluoranthene	%	96			70-130	Pass	
Fluorene	%	92			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	110			70-130	Pass	
Naphthalene	%	96			70-130	Pass	
Phenanthrene	%	91			70-130	Pass	
Pyrene	%	93			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	115			70-130	Pass	
4.4'-DDD	%	91			70-130	Pass	
4.4'-DDE	%	105			70-130	Pass	
4.4'-DDT	%	124			70-130	Pass	
a-BHC	%	98			70-130	Pass	
Aldrin	%	89			70-130	Pass	
b-BHC	%	98			70-130	Pass	
d-BHC	%	94			70-130	Pass	
Dieldrin	%	98			70-130	Pass	
Endosulfan I	%	118			70-130	Pass	
Endosulfan II	%	94			70-130	Pass	
Endosulfan sulphate	%	110			70-130	Pass	
Endrin	%	112			70-130	Pass	
Endrin aldehyde	%	90			70-130	Pass	
Endrin ketone	%	105			70-130	Pass	
g-BHC (Lindane)	%	101			70-130	Pass	
Heptachlor	%	114			70-130	Pass	
Heptachlor epoxide	%	107			70-130	Pass	
Hexachlorobenzene	%	99			70-130	Pass	
Methoxychlor	%	122			70-130	Pass	
LCS - % Recovery							
Organophosphorus Pesticides							
Diazinon	%	99			70-130	Pass	
Dimethoate	%	84			70-130	Pass	
Ethion	%	76			70-130	Pass	
Fenitrothion	%	86			70-130	Pass	
Methyl parathion	%	77			70-130	Pass	
Mevinphos	%	90			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls							
Aroclor-1016	%	84			70-130	Pass	
Aroclor-1260	%	100			70-130	Pass	
LCS - % Recovery							
Phenols (Halogenated)							
2-Chlorophenol	%	115			30-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2.4-Dichlorophenol	%	111			30-130	Pass	
2.4.5-Trichlorophenol	%	75			30-130	Pass	
2.4.6-Trichlorophenol	%	108			30-130	Pass	
2.6-Dichlorophenol	%	121			30-130	Pass	
4-Chloro-3-methylphenol	%	95			30-130	Pass	
Pentachlorophenol	%	109			30-130	Pass	
Tetrachlorophenols - Total	%	103			30-130	Pass	
LCS - % Recovery							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	%	119			30-130	Pass	
2-Methyl-4.6-dinitrophenol	%	89			30-130	Pass	
2-Methylphenol (o-Cresol)	%	111			30-130	Pass	
2-Nitrophenol	%	123			30-130	Pass	
2.4-Dimethylphenol	%	107			30-130	Pass	
2.4-Dinitrophenol	%	88			30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	%	118			30-130	Pass	
4-Nitrophenol	%	129			30-130	Pass	
Dinoseb	%	125			30-130	Pass	
Phenol	%	116			30-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	100			70-130	Pass	
Cadmium	%	99			70-130	Pass	
Chromium	%	106			70-130	Pass	
Copper	%	104			70-130	Pass	
Lead	%	102			70-130	Pass	
Mercury	%	99			70-130	Pass	
Nickel	%	105			70-130	Pass	
Zinc	%	107			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C6-C9	S20-Jl03951	NCP	%	73			70-130	Pass	
TRH C10-C14	N20-Jn45295	NCP	%	114			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	S20-Jn47050	NCP	%	91			70-130	Pass	
Toluene	S20-Jl08811	NCP	%	71			70-130	Pass	
Ethylbenzene	S20-Jl08811	NCP	%	86			70-130	Pass	
m&p-Xylenes	S20-Jl08811	NCP	%	96			70-130	Pass	
o-Xylene	S20-Jl08811	NCP	%	97			70-130	Pass	
Xylenes - Total*	S20-Jl08811	NCP	%	96			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
Naphthalene	S20-Jn47050	NCP	%	110			70-130	Pass	
TRH C6-C10	S20-Jn47050	NCP	%	75			70-130	Pass	
TRH >C10-C16	N20-Jn45295	NCP	%	109			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	N20-Jn45289	NCP	%	78			70-130	Pass	
Acenaphthylene	N20-Jn45289	NCP	%	79			70-130	Pass	
Anthracene	S20-Jn47627	NCP	%	86			70-130	Pass	
Benz(a)anthracene	S20-Jn47627	NCP	%	79			70-130	Pass	
Benzo(a)pyrene	S20-Jn47627	NCP	%	78			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Benzo(b&j)fluoranthene	S20-Jn47627	NCP	%	80			70-130	Pass	
Benzo(g.h.i)perylene	N20-Jn45289	NCP	%	71			70-130	Pass	
Benzo(k)fluoranthene	N20-Jn45289	NCP	%	70			70-130	Pass	
Chrysene	S20-Jn47627	NCP	%	85			70-130	Pass	
Dibenz(a.h)anthracene	N20-Jn45289	NCP	%	76			70-130	Pass	
Fluoranthene	N20-Jn45289	NCP	%	75			70-130	Pass	
Fluorene	N20-Jn45289	NCP	%	76			70-130	Pass	
Indeno(1.2.3-cd)pyrene	N20-Jn45289	NCP	%	73			70-130	Pass	
Naphthalene	N20-Jn45289	NCP	%	84			70-130	Pass	
Phenanthrene	N20-Jn45289	NCP	%	72			70-130	Pass	
Pyrene	N20-Jn45289	NCP	%	73			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
Chlordanes - Total	N20-Jn45289	NCP	%	78			70-130	Pass	
4.4'-DDD	N20-Jn45289	NCP	%	77			70-130	Pass	
4.4'-DDE	N20-Jn45289	NCP	%	76			70-130	Pass	
4.4'-DDT	N20-Jn45289	NCP	%	83			70-130	Pass	
a-BHC	S20-Jn51230	NCP	%	83			70-130	Pass	
Aldrin	S20-Jn51230	NCP	%	73			70-130	Pass	
b-BHC	S20-Jn51230	NCP	%	84			70-130	Pass	
d-BHC	S20-Jn51230	NCP	%	81			70-130	Pass	
Dieldrin	N20-Jn45289	NCP	%	82			70-130	Pass	
Endosulfan I	N20-Jn45289	NCP	%	83			70-130	Pass	
Endosulfan II	N20-Jn45289	NCP	%	75			70-130	Pass	
Endosulfan sulphate	N20-Jn45289	NCP	%	75			70-130	Pass	
Endrin	N20-Jn45289	NCP	%	96			70-130	Pass	
Endrin aldehyde	S20-Jn51230	NCP	%	73			70-130	Pass	
Endrin ketone	N20-Jn45289	NCP	%	73			70-130	Pass	
g-BHC (Lindane)	S20-Jn51230	NCP	%	86			70-130	Pass	
Heptachlor	S20-Jn51230	NCP	%	80			70-130	Pass	
Heptachlor epoxide	S20-Jn51230	NCP	%	79			70-130	Pass	
Hexachlorobenzene	S20-Jn51230	NCP	%	81			70-130	Pass	
Methoxychlor	N20-Jn45289	NCP	%	85			70-130	Pass	
Spike - % Recovery									
Organophosphorus Pesticides				Result 1					
Diazinon	N20-Jn45289	NCP	%	73			70-130	Pass	
Dimethoate	N20-Jn45289	NCP	%	81			70-130	Pass	
Ethion	N20-Jn45289	NCP	%	77			70-130	Pass	
Fenitrothion	N20-Jn45289	NCP	%	71			70-130	Pass	
Methyl parathion	S20-Jn47627	NCP	%	71			70-130	Pass	
Mevinphos	N20-Jn45289	NCP	%	73			70-130	Pass	
Spike - % Recovery									
Polychlorinated Biphenyls				Result 1					
Aroclor-1260	N20-Jn45289	NCP	%	72			70-130	Pass	
Total PCB*	S20-Jn51230	NCP	%	91			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	S20-Jn51305	CP	%	117			70-130	Pass	
Cadmium	S20-Jn51305	CP	%	110			70-130	Pass	
Chromium	S20-Jn51305	CP	%	107			70-130	Pass	
Copper	S20-Jn51305	CP	%	95			70-130	Pass	
Lead	S20-Jn51305	CP	%	115			70-130	Pass	
Mercury	S20-Jn51305	CP	%	105			70-130	Pass	
Nickel	S20-Jn51305	CP	%	108			70-130	Pass	
Zinc	S20-Jl07705	NCP	%	119			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C6-C9	S20-Jn51323	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	S20-Jl03008	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	S20-Jl03008	NCP	mg/kg	68	85	23	30%	Pass	
TRH C29-C36	S20-Jl03008	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S20-Jn51323	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Toluene	S20-Jn51323	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Ethylbenzene	S20-Jn51323	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
m&p-Xylenes	S20-Jn51323	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
o-Xylene	S20-Jn51323	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes - Total*	S20-Jn51323	NCP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
1.1-Dichloroethane	S20-Jn51323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1-Dichloroethene	S20-Jn51323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1-Trichloroethane	S20-Jn51323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	S20-Jn51323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2-Trichloroethane	S20-Jn51323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	S20-Jn51323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dibromoethane	S20-Jn51323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichlorobenzene	S20-Jn51323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloroethane	S20-Jn51323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloropropane	S20-Jn51323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.3-Trichloropropane	S20-Jn51323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trimethylbenzene	S20-Jn51323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichlorobenzene	S20-Jn51323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichloropropane	S20-Jn51323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3.5-Trimethylbenzene	S20-Jn51323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.4-Dichlorobenzene	S20-Jn51323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Butanone (MEK)	S20-Jn51323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Propanone (Acetone)	S20-Jn51323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chlorotoluene	S20-Jn51323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Methyl-2-pentanone (MIBK)	S20-Jn51323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Allyl chloride	S20-Jn51323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromobenzene	S20-Jn51323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromochloromethane	S20-Jn51323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromodichloromethane	S20-Jn51323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromoform	S20-Jn51323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromomethane	S20-Jn51323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon disulfide	S20-Jn51323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon Tetrachloride	S20-Jn51323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chlorobenzene	S20-Jn51323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroethane	S20-Jn51323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroform	S20-Jn51323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloromethane	S20-Jn51323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.2-Dichloroethene	S20-Jn51323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.3-Dichloropropene	S20-Jn51323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromochloromethane	S20-Jn51323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromomethane	S20-Jn51323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dichlorodifluoromethane	S20-Jn51323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Iodomethane	S20-Jn51323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
Isopropyl benzene (Cumene)	S20-Jn51323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Methylene Chloride	S20-Jn51323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Styrene	S20-Jn51323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Tetrachloroethene	S20-Jn51323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.2-Dichloroethene	S20-Jn51323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.3-Dichloropropene	S20-Jn51323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichloroethene	S20-Jn51323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichlorofluoromethane	S20-Jn51323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Vinyl chloride	S20-Jn51323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	S20-Jn51323	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	S20-Jn51323	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH >C10-C16	S20-Jl03008	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	S20-Jl03008	NCP	mg/kg	< 100	110	21	30%	Pass	
TRH >C34-C40	S20-Jl03008	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	N20-Jn51079	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	N20-Jn51079	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	N20-Jn51079	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	N20-Jn51079	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	N20-Jn51079	NCP	mg/kg	0.5	< 0.5	40	30%	Fail	Q15
Benzo(b&j)fluoranthene	N20-Jn51079	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	N20-Jn51079	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	N20-Jn51079	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	N20-Jn51079	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	N20-Jn51079	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	N20-Jn51079	NCP	mg/kg	1.6	1.0	43	30%	Fail	Q15
Fluorene	N20-Jn51079	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	N20-Jn51079	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	N20-Jn51079	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	N20-Jn51079	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	N20-Jn51079	NCP	mg/kg	1.5	1.0	41	30%	Fail	Q15
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	S20-Jn51161	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	S20-Jn51161	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	S20-Jn51161	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	S20-Jn51161	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-BHC	S20-Jn51161	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	S20-Jn51161	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-BHC	S20-Jn51161	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-BHC	S20-Jn51161	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	S20-Jn51161	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	S20-Jn51161	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	S20-Jn51161	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	S20-Jn51161	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	S20-Jn51161	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	S20-Jn51161	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	S20-Jn51161	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-BHC (Lindane)	S20-Jn51161	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	S20-Jn51161	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	S20-Jn51161	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	

Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Hexachlorobenzene	S20-Jn51161	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	S20-Jn51161	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Azinphos-methyl	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Bolstar	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorfenvinphos	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos-methyl	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Coumaphos	N20-Jn51079	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Demeton-S	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Demeton-O	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Diazinon	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dichlorvos	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dimethoate	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Disulfoton	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
EPN	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethion	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethoprop	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethyl parathion	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenitrothion	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fensulfothion	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenthion	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Malathion	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Merphos	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Methyl parathion	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Mevinphos	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Monocrotophos	N20-Jn51079	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Naled	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Omethoate	N20-Jn51079	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Phorate	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pirimiphos-methyl	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pyrazophos	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ronnel	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Terbufos	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tetrachlorvinphos	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tokuthion	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Trichloronate	N20-Jn51079	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Aroclor-1016	S20-Jn51161	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1221	S20-Jn51161	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1232	S20-Jn51161	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1242	S20-Jn51161	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1248	S20-Jn51161	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1254	S20-Jn51161	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1260	S20-Jn51161	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Total PCB*	N20-Jn51079	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	N20-Jn51078	NCP	mg/kg	8.6	9.2	7.0	30%	Pass	
Cadmium	N20-Jn51078	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	N20-Jn51078	NCP	mg/kg	14	14	1.0	30%	Pass	
Copper	N20-Jn51078	NCP	mg/kg	12	14	16	30%	Pass	

Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Lead	N20-Jn51078	NCP	mg/kg	27	30	8.0	30%	Pass	
Mercury	N20-Jn51078	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Nickel	N20-Jn51078	NCP	mg/kg	8.9	10	13	30%	Pass	
Zinc	N20-Jn51078	NCP	mg/kg	76	64	17	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	N20-Jn51085	NCP	%	14	14	2.0	30%	Pass	

Comments

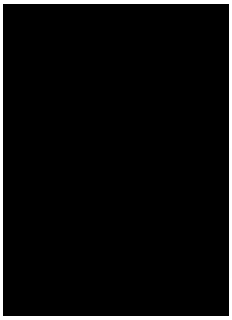
Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
Q15	The RPD reported passes Eurofins Environment Testing's QC - Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report.

Authorised By



Analytical Services Manager
Senior Analyst-Organic (NSW)
Senior Analyst-Metal (NSW)
Senior Analyst-Asbestos (NSW)

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

SLR

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
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- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐

CLIENT: Defence Housing Australia

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGER [redacted]

PM CONTACT No: [redacted]

LABORATORY: SGS Australia

LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015

SAMPLER [redacted]

SAMPLER CONTACT No: [redacted]

Email Reports and Invoices to: LQRSYD@slrconsulting.com [redacted]

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number of

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only	HOLD	Suite D, MTBEs	Suite F		Additional Information (Comment on any gross contamination or specific requirements)
	0407_TP102_0.1_200624	24-06-2020	Soil		x								Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
	0407_TP102_0.5_200624	24-06-2020	Soil		x								
	0407_TP102_1.0_200624	24-06-2020	Soil						x				
	0407_TP102_0.1-0.2_200624	24-06-2020	Soil					x					
	0407_QC157_200624	24-06-2020	Soil		x								
	0407_QC257_200624	24-06-2020	Soil										Please send to Eurofins for Suite A
	0407_TP112_0.1_200624	24-06-2020	Soil		x								
	0407_TP112_0.5_200624	24-06-2020	Soil						x				
	0407_TP112_1.0_200624	24-06-2020	Soil		x								
	0407_TP112_0.1-0.2_200624	24-06-2020	Soil					x					
	0407_QC156_200624	24-06-2020	Soil		x								
	0407_QC256_200624	24-06-2020	Soil										Please send to Eurofins for Suite A

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 24-06-2020	**Received by**	[redacted]	Date / Time 30/6/20 2:30pm	**Temperature Received:** 15.50°C
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

#72872

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

SLR

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
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- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Dornville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☒ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
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- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ

CLIENT: Defence Housing Australia	**LABORATORY:** SGS Australia
PROJECT: Randwick Barracks	**LABORATORY ADDRESS:** Unit 16/33 Maddox St, Alexandria NSW 2015
PROJECT NUMBER: 610.30041	**SAMPLER** [redacted]
PROJECT MANAGER: [redacted]	**SAMPLER CONTACT No:** [redacted]
PM CONTACT No [redacted]	**Email Reports and Invoices to:** LQRSYD@slrconsulting.com [redacted]
COMMENTS OR ADDITIONAL DIRECTIONS	**Turnaround Time (TAT):** ☐ Standard TAT ☐ Non Standard or Urgent TAT — Required TAT: Standard
	COC Number of

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only	HOLD	Suite D, MTBEs	Suite F		Additional Information (Comment on any gross contamination or specific requirements)
	0407_TP082_0.1_200624	24-06-2020	Soil		x								Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
	0407_TP082_0.5_200624	24-06-2020	Soil		x								
	0407_TP082_1.0_200624	24-06-2020	Soil						x				
	0407_TP082_0.1-0.2_200624	24-06-2020	Soil					x					
	0407_QC155_200624	24-06-2020	Soil		x								
	0407_QC255_200624	24-06-2020	Soil										Please send to Eurofins for Suite A
	0407_TP092_0.1_200624	24-06-2020	Soil		x								
	0407_TP092_0.5_200624	24-06-2020	Soil		x								
	0407_TP092_1.0_200624	24-06-2020	Soil						x				
	0407_TP092_0.1-0.2_200624	24-06-2020	Soil					x					
	0407_QC156_200624	24-06-2020	Soil		x								
	0407_QC256_200624	24-06-2020	Soil										Please send to Eurofins for Suite A

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 24-06-2020	**Received by**	[redacted]	Date / Time 30/6/20 2:20 PM
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time

Temperature Received: 15.5°C

#72877

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

SLR

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
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- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐

CLIENT: Defence Housing Australia

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGER: [redacted]

PM CONTACT No [redacted]

LABORATORY: SGS Australia

LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015

SAMPLER: [redacted]

SAMPLER CONTACT No [redacted]

Email Reports and Invoices to: LQRSYD@slrconsulting.com [redacted]

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number of

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS	Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only	HOLD	Suite D, MTBEs	Suite F		Additional Information (Comment on any gross contamination or specific requirements)
	0407_TP043_0.1_200624	24-06-2020	Soil									x		Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
	0407_TP043_0.5_200624	24-06-2020	Soil									x		
	0407_TP043_1.0_200624	24-06-2020	Soil							x				
	0407_QC153_200624	24-06-2020	Soil									x		
	0407_QC253_200624	24-06-2020	Soil											Please send to Eurofins for Suite A
	0407_TP059_0.1_200624	24-06-2020	Soil								x			
	0407_TP059_0.5_200624	24-06-2020	Soil								x			
	0407_TP059_1.0_200624	24-06-2020	Soil							x				
	0407_TP059_0.1-0.2_200624	24-06-2020	Soil						x					
	0407_QC154_200624	24-06-2020	Soil								x			
	0407_QC254_200624	24-06-2020	Soil											Please send to Eurofins for Suite A

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	MR	Date / Time 24-06-2020	**Received by**	[redacted]	Date / Time 30/6/20 2:30pm	**Temperature Received:** 15.50°C
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

#72872

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

E-MAILED 24/6/20 9:45

SLR

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
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- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐

CLIENT: Defence Housing Australia

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGER: [redacted]

PM CONTACT No [redacted]

COMMENTS OR ADDITIONAL DIRECTIONS

LABORATORY: SGS Australia

LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015

SAMPLER: [redacted]

SAMPLER CONTACT No [redacted]

Email Reports and Invoices to: LQRSYD@slrconsulting.com [redacted]

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number

of

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only	HOLD	Suite D	Heavy metals, TPH/BTEXN, PAH, VOC/SVOCs and PFAS		Additional Information (Comment on any gross contamination or specific requirements)
	0407_TP021_0.1_200624	24-06-2020	Soil		x								Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
	0407_TP021_0.5_200624	24-06-2020	Soil		x								
	0407_TP021_1.0_200624	24-06-2020	Soil						x				
	0407_TP021_0.1-0.2_200624	24-06-2020	Soil					x					
	0407_QC150_200624	24-06-2020	Soil		x								
	0407_QC250_200624	24-06-2020	Soil										Please send to Eurofins for Suite A
	0407_TP034_0.1_200623	23-06-2020	Soil		x								
	0407_TP034_0.5_200623	23-06-2020	Soil						x				
	0407_TP034_1.0_200623	23-06-2020	Soil		x								
	0407_TP034_0.1-0.2_200623	23-06-2020	Soil					x					
	0407_QC301_200623	23-06-2020	Water								x		

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time	24-06-2020	**Received by**	[redacted]	Date / Time	30/6/20 2:30pm
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	

Temperature Received: 15-50°C #7287

eurofins | Environment Testing

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NATA # 1261 Site # 18217

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NATA # 1261 Site # 20794

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Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261 Site # 23736

ABN – 50 005 085 521 e.mail : EnviroSales@eurofins.com web : www.eurofins.com.au

Sample Receipt Advice

Company name:	**SLR Consulting (Sydney)**
Contact name:	[redacted]
Project name:	RANDWICK BARRACKS
Project ID:	610.30041
COC number:	Not provided
Turn around time:	5 Day
Date/Time received:	Jun 30, 2020 2:30 PM
Eurofins reference:	**728723**

Sample information

- ☑ A detailed list of analytes logged into our LIMS, is included in the attached summary table.
- ☑ All samples have been received as described on the above COC.
- ☑ COC has been completed correctly.
- ☑ Attempt to chill was evident.
- ☑ Appropriately preserved sample containers have been used.
- ☑ All samples were received in good condition.
- ☑ Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.
- ☑ Appropriate sample containers have been used.
- ☒ Split sample sent to requested external lab.
- ☒ Some samples have been subcontracted.
- N/A Custody Seals intact (if used).

Notes

Sample 0407_QC259_200624 received extra, logged on hold.

Contact notes

If you have any questions with respect to these samples please contact:

[redacted] on Phone : [redacted] or by e.mail: [redacted]@eurofins.com

Results will be delivered electronically via e.mail to [redacted]@slrconsulting.com.

Note: A copy of these results will also be delivered to the general SLR Consulting (Sydney) email address.

eurofins | Environment Testing

ABN – 50 005 085 521 web : www.eurofins.com.au e.mail : EnviroSales@eurofins.com

Australia

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Site # 1254 & 14271

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NATA # 1261 Site # 18217

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NATA # 1261 Site # 20794

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43 Detroit Drive
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IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 728723
Phone: 02 9428 8100
Fax:

Received: Jun 30, 2020 2:30 PM
Due: Jul 7, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	HOLD	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271											
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794											
Perth Laboratory - NATA Site # 23736											
External Laboratory											
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**						
1	0407_QC257_200624	Jun 24, 2020		Soil	S20-Jn51323	X		X	X	X	X
2	0407_QC256_200624	Jun 24, 2020		Soil	S20-Jn51324	X		X	X	X	X
3	0407_QC255_200624	Jun 24, 2020		Soil	S20-Jn51325	X		X	X	X	X
4	0407_QC253_200624	Jun 24, 2020		Soil	S20-Jn51326	X		X	X	X	X
5	0407_QC254_200624	Jun 24, 2020		Soil	S20-Jn51327	X		X	X	X	X
6	0407_QC250_200624	Jun 24, 2020		Soil	S20-Jn51328	X		X	X	X	X

eurofins | Environment Testing

ABN – 50 005 085 521 web : www.eurofins.com.au e.mail : EnviroSales@eurofins.com

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IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 728723
Phone: 02 9428 8100
Fax:

Received: Jun 30, 2020 2:30 PM
Due: Jul 7, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	HOLD	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271											
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794											
Perth Laboratory - NATA Site # 23736											
7	0407_QC259_200624	Jun 24, 2020		Soil	S20-Jn51329		X				
Test Counts						6	1	6	6	6	6

eurofins | Environment Testing

Certificate of Analysis

SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus,
North Sydney
NSW 2060

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: [redacted]

Report **728723-S**
Project name RANDWICK BARRACKS
Project ID 610.30041
Received Date Jun 30, 2020

Client Sample ID			0407_QC257_200624	0407_QC256_200624	0407_QC255_200624	0407_QC253_200624
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn51323**	**S20-Jn51324**	**S20-Jn51325**	**S20-Jn51326**
Date Sampled			**Jun 24, 2020**	**Jun 24, 2020**	**Jun 24, 2020**	**Jun 24, 2020**
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50	< 50	< 50	< 50
BTEX						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	109	90	84	99
Volatile Organics						
1.1-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			0407_QC257_200624	0407_QC256_200624	0407_QC255_200624	0407_QC253_200624
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S20-Jn51323	S20-Jn51324	S20-Jn51325	S20-Jn51326
Date Sampled			Jun 24, 2020	Jun 24, 2020	Jun 24, 2020	Jun 24, 2020
Test/Reference	LOR	Unit				
Volatile Organics						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromoform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Iodomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Styrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
Total MAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Bromofluorobenzene (surr.)	1	%	109	90	84	99
Toluene-d8 (surr.)	1	%	86	94	86	104
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	26	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	26	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100	< 100	< 100

Client Sample ID			0407_QC257_200624	0407_QC256_200624	0407_QC255_200624	0407_QC253_200624
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S20-Jn51323	S20-Jn51324	S20-Jn51325	S20-Jn51326
Date Sampled			Jun 24, 2020	Jun 24, 2020	Jun 24, 2020	Jun 24, 2020
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	80	79	94	69
p-Terphenyl-d14 (surr.)	1	%	102	94	81	80
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
a-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
b-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
d-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Toxaphene	1	mg/kg	< 1	< 1	< 1	< 1
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Dibutylchlorendate (surr.)	1	%	123	102	95	99
Tetrachloro-m-xylene (surr.)	1	%	63	65	70	56

Client Sample ID			0407_QC257_200624	0407_QC256_200624	0407_QC255_200624	0407_QC253_200624
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn51323**	**S20-Jn51324**	**S20-Jn51325**	**S20-Jn51326**
Date Sampled			**Jun 24, 2020**	**Jun 24, 2020**	**Jun 24, 2020**	**Jun 24, 2020**
Test/Reference	LOR	Unit				
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Bolstar	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Coumaphos	2	mg/kg	< 2	< 2	< 2	< 2
Demeton-S	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Demeton-O	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Diazinon	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Dimethoate	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Disulfoton	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
EPN	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ethion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ethoprop	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Fenthion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Malathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Merphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Methyl parathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Mevinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Monocrotophos	2	mg/kg	< 2	< 2	< 2	< 2
Naled	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Omethoate	2	mg/kg	< 2	< 2	< 2	< 2
Phorate	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ronnel	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Terbufos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Tokuthion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Trichloronate	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Triphenylphosphate (surr.)	1	%	86	90	60	67
Polychlorinated Biphenyls						
Aroclor-1016	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1232	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1242	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1248	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1254	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1260	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PCB*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibutylchlorendate (surr.)	1	%	123	102	95	99
Tetrachloro-m-xylene (surr.)	1	%	63	65	70	56

Client Sample ID			0407_QC257_200624	0407_QC256_200624	0407_QC255_200624	0407_QC253_200624
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn51323**	**S20-Jn51324**	**S20-Jn51325**	**S20-Jn51326**
Date Sampled			**Jun 24, 2020**	**Jun 24, 2020**	**Jun 24, 2020**	**Jun 24, 2020**
Test/Reference	LOR	Unit				
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1	< 1
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
2-Nitrophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
4-Nitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
Phenol-d6 (surr.)	1	%	74	79	INT	74
Heavy Metals						
Arsenic	2	mg/kg	< 2	< 2	< 2	< 2
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	< 5	< 5	< 5	< 5
Copper	5	mg/kg	< 5	< 5	< 5	< 5
Lead	5	mg/kg	< 5	< 5	< 5	< 5
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	< 5	< 5	< 5	< 5
Zinc	5	mg/kg	< 5	< 5	< 5	< 5
% Moisture	1	%	8.9	1.4	1.5	2.2

Client Sample ID			0407_QC254_200624	0407_QC250_200624
Sample Matrix			**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn51327**	**S20-Jn51328**
Date Sampled			**Jun 24, 2020**	**Jun 24, 2020**
Test/Reference	LOR	Unit		
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				
TRH C6-C9	20	mg/kg	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20
TRH C15-C28	50	mg/kg	76	< 50
TRH C29-C36	50	mg/kg	380	< 50
TRH C10-C36 (Total)	50	mg/kg	456	< 50

Client Sample ID			0407_QC254_200624	0407_QC250_200624
Sample Matrix			**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn51327**	**S20-Jn51328**
Date Sampled			**Jun 24, 2020**	**Jun 24, 2020**
Test/Reference	LOR	Unit		
BTEX				
Benzene	0.1	mg/kg	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	87	94
Volatile Organics				
1.1-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5	< 0.5
Benzene	0.1	mg/kg	< 0.1	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5	< 0.5
Bromoform	0.5	mg/kg	< 0.5	< 0.5
Bromomethane	0.5	mg/kg	< 0.5	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5	< 0.5
Chloroethane	0.5	mg/kg	< 0.5	< 0.5
Chloroform	0.5	mg/kg	< 0.5	< 0.5
Chloromethane	0.5	mg/kg	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1
Iodomethane	0.5	mg/kg	< 0.5	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	< 0.5

Client Sample ID			0407_QC254_200624	0407_QC250_200624
Sample Matrix			**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn51327**	**S20-Jn51328**
Date Sampled			**Jun 24, 2020**	**Jun 24, 2020**
Test/Reference	LOR	Unit		
Volatile Organics				
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5	< 0.5
o-Xylene	0.1	mg/kg	< 0.1	< 0.1
Styrene	0.5	mg/kg	< 0.5	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5	< 0.5
Toluene	0.1	mg/kg	< 0.1	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3
Total MAH*	0.5	mg/kg	< 0.5	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5
4-Bromofluorobenzene (surr.)	1	%	87	94
Toluene-d8 (surr.)	1	%	96	111
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	< 50
TRH >C16-C34	100	mg/kg	350	< 100
TRH >C34-C40	100	mg/kg	360	< 100
TRH >C10-C40 (total)*	100	mg/kg	710	< 100
Polycyclic Aromatic Hydrocarbons				
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	76	73
p-Terphenyl-d14 (surr.)	1	%	76	83

Client Sample ID			0407_QC254_200624	0407_QC250_200624
Sample Matrix			**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn51327**	**S20-Jn51328**
Date Sampled			**Jun 24, 2020**	**Jun 24, 2020**
Test/Reference	LOR	Unit		
Organochlorine Pesticides				
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05
a-BHC	0.05	mg/kg	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05
b-BHC	0.05	mg/kg	< 0.05	< 0.05
d-BHC	0.05	mg/kg	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.5	< 0.5
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05
Methoxychlor	0.2	mg/kg	< 0.2	< 0.2
Toxaphene	1	mg/kg	< 1	< 1
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.5	< 0.5
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.5	< 0.5
Dibutylchlorendate (surr.)	1	%	131	142
Tetrachloro-m-xylene (surr.)	1	%	83	71
Organophosphorus Pesticides				
Azinphos-methyl	0.2	mg/kg	< 0.2	< 0.2
Bolstar	0.2	mg/kg	< 0.2	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2	< 0.2
Coumaphos	2	mg/kg	< 2	< 2
Demeton-S	0.2	mg/kg	< 0.2	< 0.2
Demeton-O	0.2	mg/kg	< 0.2	< 0.2
Diazinon	0.2	mg/kg	< 0.2	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2	< 0.2
Dimethoate	0.2	mg/kg	< 0.2	< 0.2
Disulfoton	0.2	mg/kg	< 0.2	< 0.2
EPN	0.2	mg/kg	< 0.2	< 0.2
Ethion	0.2	mg/kg	< 0.2	< 0.2
Ethoprop	0.2	mg/kg	< 0.2	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2	< 0.2
Fenthion	0.2	mg/kg	< 0.2	< 0.2
Malathion	0.2	mg/kg	< 0.2	< 0.2
Merphos	0.2	mg/kg	< 0.2	< 0.2

Client Sample ID			0407_QC254_200624	0407_QC250_200624
Sample Matrix			**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn51327**	**S20-Jn51328**
Date Sampled			**Jun 24, 2020**	**Jun 24, 2020**
Test/Reference	LOR	Unit		
Organophosphorus Pesticides				
Methyl parathion	0.2	mg/kg	< 0.2	< 0.2
Mevinphos	0.2	mg/kg	< 0.2	< 0.2
Monocrotophos	2	mg/kg	< 2	< 2
Naled	0.2	mg/kg	< 0.2	< 0.2
Omethoate	2	mg/kg	< 2	< 2
Phorate	0.2	mg/kg	< 0.2	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2	< 0.2
Ronnel	0.2	mg/kg	< 0.2	< 0.2
Terbufos	0.2	mg/kg	< 0.2	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2	< 0.2
Tokuthion	0.2	mg/kg	< 0.2	< 0.2
Trichloronate	0.2	mg/kg	< 0.2	< 0.2
Triphenylphosphate (surr.)	1	%	97	85
Polychlorinated Biphenyls				
Aroclor-1016	0.5	mg/kg	< 0.5	< 0.5
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1
Aroclor-1232	0.5	mg/kg	< 0.5	< 0.5
Aroclor-1242	0.5	mg/kg	< 0.5	< 0.5
Aroclor-1248	0.5	mg/kg	< 0.5	< 0.5
Aroclor-1254	0.5	mg/kg	< 0.5	< 0.5
Aroclor-1260	0.5	mg/kg	< 0.5	< 0.5
Total PCB*	0.5	mg/kg	< 0.5	< 0.5
Dibutylchlorendate (surr.)	1	%	131	142
Tetrachloro-m-xylene (surr.)	1	%	83	71
Phenols (Halogenated)				
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1
Phenols (non-Halogenated)				
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2
2-Nitrophenol	1	mg/kg	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5	< 5
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4
4-Nitrophenol	5	mg/kg	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20
Phenol-d6 (surr.)	1	%	81	83

Client Sample ID			0407_QC254_200624	0407_QC250_200624
Sample Matrix			**Soil**	**Soil**
Eurofins Sample No.			**S20-Jn51327**	**S20-Jn51328**
Date Sampled			**Jun 24, 2020**	**Jun 24, 2020**
Test/Reference	LOR	Unit		
Heavy Metals				
Arsenic	2	mg/kg	< 2	< 2
Cadmium	0.4	mg/kg	< 0.4	< 0.4
Chromium	5	mg/kg	< 5	< 5
Copper	5	mg/kg	11	6.8
Lead	5	mg/kg	< 5	12
Mercury	0.1	mg/kg	< 0.1	< 0.1
Nickel	5	mg/kg	< 5	< 5
Zinc	5	mg/kg	15	< 5
% Moisture	1	%	16	17

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jul 03, 2020	
- Method: LTM-ORG-2010 TRH C6-C40			
Polycyclic Aromatic Hydrocarbons	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (Halogenated)	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (non-Halogenated)	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Metals M8	Sydney	Jul 03, 2020	180 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Volatile Organics	Sydney	Jul 03, 2020	7 Days
- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices			
Eurofins | mgt Suite B15			
Organochlorine Pesticides	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Organophosphorus Pesticides	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS			
Polychlorinated Biphenyls	Sydney	Jul 03, 2020	28 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
% Moisture	Sydney	Jun 30, 2020	14 Days
- Method: LTM-GEN-7080 Moisture			

eurofins | Environment Testing

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Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 728723
Phone: 02 9428 8100
Fax:

Received: Jun 30, 2020 2:30 PM
Due: Jul 7, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	HOLD	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271											
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794											
Perth Laboratory - NATA Site # 23736											
External Laboratory											
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**						
1	0407_QC257_200624	Jun 24, 2020		Soil	S20-Jn51323	X		X	X	X	X
2	0407_QC256_200624	Jun 24, 2020		Soil	S20-Jn51324	X		X	X	X	X
3	0407_QC255_200624	Jun 24, 2020		Soil	S20-Jn51325	X		X	X	X	X
4	0407_QC253_200624	Jun 24, 2020		Soil	S20-Jn51326	X		X	X	X	X
5	0407_QC254_200624	Jun 24, 2020		Soil	S20-Jn51327	X		X	X	X	X
6	0407_QC250_200624	Jun 24, 2020		Soil	S20-Jn51328	X		X	X	X	X

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Rolleston, Christchurch 7675
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Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

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Project ID: 610.30041

Order No.:
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Phone: 02 9428 8100
Fax:

Received: Jun 30, 2020 2:30 PM
Due: Jul 7, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	HOLD	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271											
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794											
Perth Laboratory - NATA Site # 23736											
7	0407_QC259_200624	Jun 24, 2020		Soil	S20-Jn51329		X				
Test Counts						6	1	6	6	6	6

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

****NOTE:** pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram
mg/L: milligrams per litre
ug/L: micrograms per litre
ppm: Parts per million
ppb: Parts per billion
%: Percentage
org/100mL: Organisms per 100 millilitres
NTU: Nephelometric Turbidity Units
MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version 5.3
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling.Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
Method Blank							
BTEX							
Benzene	mg/kg	< 0.1			0.1	Pass	
Toluene	mg/kg	< 0.1			0.1	Pass	
Ethylbenzene	mg/kg	< 0.1			0.1	Pass	
m&p-Xylenes	mg/kg	< 0.2			0.2	Pass	
o-Xylene	mg/kg	< 0.1			0.1	Pass	
Xylenes - Total*	mg/kg	< 0.3			0.3	Pass	
Method Blank							
Volatile Organics							
1.1-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
1.1.1-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.1.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dibromoethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.3-Trichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.4-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.3.5-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.4-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
2-Butanone (MEK)	mg/kg	< 0.5			0.5	Pass	
2-Propanone (Acetone)	mg/kg	< 0.5			0.5	Pass	
4-Chlorotoluene	mg/kg	< 0.5			0.5	Pass	
4-Methyl-2-pentanone (MIBK)	mg/kg	< 0.5			0.5	Pass	
Allyl chloride	mg/kg	< 0.5			0.5	Pass	
Bromobenzene	mg/kg	< 0.5			0.5	Pass	
Bromochloromethane	mg/kg	< 0.5			0.5	Pass	
Bromodichloromethane	mg/kg	< 0.5			0.5	Pass	
Bromoform	mg/kg	< 0.5			0.5	Pass	
Bromomethane	mg/kg	< 0.5			0.5	Pass	
Carbon disulfide	mg/kg	< 0.5			0.5	Pass	
Carbon Tetrachloride	mg/kg	< 0.5			0.5	Pass	
Chlorobenzene	mg/kg	< 0.5			0.5	Pass	
Chloroethane	mg/kg	< 0.5			0.5	Pass	
Chloroform	mg/kg	< 0.5			0.5	Pass	
Chloromethane	mg/kg	< 0.5			0.5	Pass	
cis-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
cis-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Dibromochloromethane	mg/kg	< 0.5			0.5	Pass	
Dibromomethane	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Dichlorodifluoromethane	mg/kg	< 0.5			0.5	Pass	
Iodomethane	mg/kg	< 0.5			0.5	Pass	
Isopropyl benzene (Cumene)	mg/kg	< 0.5			0.5	Pass	
Methylene Chloride	mg/kg	< 0.5			0.5	Pass	
Styrene	mg/kg	< 0.5			0.5	Pass	
Tetrachloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Trichloroethene	mg/kg	< 0.5			0.5	Pass	
Trichlorofluoromethane	mg/kg	< 0.5			0.5	Pass	
Vinyl chloride	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Organochlorine Pesticides							
Chlordanes - Total	mg/kg	< 0.1			0.1	Pass	
4.4'-DDD	mg/kg	< 0.05			0.05	Pass	
4.4'-DDE	mg/kg	< 0.05			0.05	Pass	
4.4'-DDT	mg/kg	< 0.05			0.05	Pass	
a-BHC	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-BHC	mg/kg	< 0.05			0.05	Pass	
d-BHC	mg/kg	< 0.05			0.05	Pass	
Dieldrin	mg/kg	< 0.05			0.05	Pass	
Endosulfan I	mg/kg	< 0.05			0.05	Pass	
Endosulfan II	mg/kg	< 0.05			0.05	Pass	
Endosulfan sulphate	mg/kg	< 0.05			0.05	Pass	
Endrin	mg/kg	< 0.05			0.05	Pass	
Endrin aldehyde	mg/kg	< 0.05			0.05	Pass	
Endrin ketone	mg/kg	< 0.05			0.05	Pass	
g-BHC (Lindane)	mg/kg	< 0.05			0.05	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Heptachlor	mg/kg	< 0.05			0.05	Pass	
Heptachlor epoxide	mg/kg	< 0.05			0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05			0.05	Pass	
Methoxychlor	mg/kg	< 0.2			0.2	Pass	
Toxaphene	mg/kg	< 1			1	Pass	
Method Blank							
Organophosphorus Pesticides							
Azinphos-methyl	mg/kg	< 0.2			0.2	Pass	
Bolstar	mg/kg	< 0.2			0.2	Pass	
Chlorfenvinphos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos-methyl	mg/kg	< 0.2			0.2	Pass	
Coumaphos	mg/kg	< 2			2	Pass	
Demeton-S	mg/kg	< 0.2			0.2	Pass	
Demeton-O	mg/kg	< 0.2			0.2	Pass	
Diazinon	mg/kg	< 0.2			0.2	Pass	
Dichlorvos	mg/kg	< 0.2			0.2	Pass	
Dimethoate	mg/kg	< 0.2			0.2	Pass	
Disulfoton	mg/kg	< 0.2			0.2	Pass	
EPN	mg/kg	< 0.2			0.2	Pass	
Ethion	mg/kg	< 0.2			0.2	Pass	
Ethoprop	mg/kg	< 0.2			0.2	Pass	
Ethyl parathion	mg/kg	< 0.2			0.2	Pass	
Fenitrothion	mg/kg	< 0.2			0.2	Pass	
Fensulfothion	mg/kg	< 0.2			0.2	Pass	
Fenthion	mg/kg	< 0.2			0.2	Pass	
Malathion	mg/kg	< 0.2			0.2	Pass	
Merphos	mg/kg	< 0.2			0.2	Pass	
Methyl parathion	mg/kg	< 0.2			0.2	Pass	
Mevinphos	mg/kg	< 0.2			0.2	Pass	
Monocrotophos	mg/kg	< 2			2	Pass	
Naled	mg/kg	< 0.2			0.2	Pass	
Omethoate	mg/kg	< 2			2	Pass	
Phorate	mg/kg	< 0.2			0.2	Pass	
Pirimiphos-methyl	mg/kg	< 0.2			0.2	Pass	
Pyrazophos	mg/kg	< 0.2			0.2	Pass	
Ronnel	mg/kg	< 0.2			0.2	Pass	
Terbufos	mg/kg	< 0.2			0.2	Pass	
Tetrachlorvinphos	mg/kg	< 0.2			0.2	Pass	
Tokuthion	mg/kg	< 0.2			0.2	Pass	
Trichloronate	mg/kg	< 0.2			0.2	Pass	
Method Blank							
Polychlorinated Biphenyls							
Aroclor-1016	mg/kg	< 0.5			0.5	Pass	
Aroclor-1221	mg/kg	< 0.1			0.1	Pass	
Aroclor-1232	mg/kg	< 0.5			0.5	Pass	
Aroclor-1242	mg/kg	< 0.5			0.5	Pass	
Aroclor-1248	mg/kg	< 0.5			0.5	Pass	
Aroclor-1254	mg/kg	< 0.5			0.5	Pass	
Aroclor-1260	mg/kg	< 0.5			0.5	Pass	
Total PCB*	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Phenols (Halogenated)							
2-Chlorophenol	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2.4-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4.5-Trichlorophenol	mg/kg	< 1			1	Pass	
2.4.6-Trichlorophenol	mg/kg	< 1			1	Pass	
2.6-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
4-Chloro-3-methylphenol	mg/kg	< 1			1	Pass	
Pentachlorophenol	mg/kg	< 1			1	Pass	
Tetrachlorophenols - Total	mg/kg	< 10			10	Pass	
Method Blank							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	mg/kg	< 20			20	Pass	
2-Methyl-4.6-dinitrophenol	mg/kg	< 5			5	Pass	
2-Methylphenol (o-Cresol)	mg/kg	< 0.2			0.2	Pass	
2-Nitrophenol	mg/kg	< 1			1	Pass	
2.4-Dimethylphenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dinitrophenol	mg/kg	< 5			5	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/kg	< 0.4			0.4	Pass	
4-Nitrophenol	mg/kg	< 5			5	Pass	
Dinoseb	mg/kg	< 20			20	Pass	
Phenol	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Nickel	mg/kg	< 5			5	Pass	
Zinc	mg/kg	< 5			5	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	%	86			70-130	Pass	
TRH C10-C14	%	112			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	108			70-130	Pass	
Toluene	%	112			70-130	Pass	
Ethylbenzene	%	121			70-130	Pass	
m&p-Xylenes	%	112			70-130	Pass	
o-Xylene	%	114			70-130	Pass	
Xylenes - Total*	%	112			70-130	Pass	
LCS - % Recovery							
Volatile Organics							
1.1-Dichloroethene	%	94			70-130	Pass	
1.1.1-Trichloroethane	%	110			70-130	Pass	
1.2-Dichlorobenzene	%	114			70-130	Pass	
1.2-Dichloroethane	%	123			70-130	Pass	
Trichloroethene	%	107			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	93			70-130	Pass	
TRH C6-C10	%	89			70-130	Pass	
TRH >C10-C16	%	108			70-130	Pass	
LCS - % Recovery							

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	95			70-130	Pass	
Acenaphthylene	%	82			70-130	Pass	
Anthracene	%	98			70-130	Pass	
Benz(a)anthracene	%	86			70-130	Pass	
Benzo(a)pyrene	%	88			70-130	Pass	
Benzo(b&j)fluoranthene	%	85			70-130	Pass	
Benzo(g.h.i)perylene	%	87			70-130	Pass	
Benzo(k)fluoranthene	%	99			70-130	Pass	
Chrysene	%	97			70-130	Pass	
Dibenz(a.h)anthracene	%	81			70-130	Pass	
Fluoranthene	%	92			70-130	Pass	
Fluorene	%	99			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	79			70-130	Pass	
Naphthalene	%	91			70-130	Pass	
Phenanthrene	%	88			70-130	Pass	
Pyrene	%	88			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	101			70-130	Pass	
4.4'-DDD	%	92			70-130	Pass	
4.4'-DDE	%	90			70-130	Pass	
a-BHC	%	102			70-130	Pass	
Aldrin	%	90			70-130	Pass	
b-BHC	%	97			70-130	Pass	
d-BHC	%	87			70-130	Pass	
Dieldrin	%	100			70-130	Pass	
Endosulfan I	%	108			70-130	Pass	
Endosulfan II	%	96			70-130	Pass	
Endosulfan sulphate	%	94			70-130	Pass	
Endrin	%	90			70-130	Pass	
Endrin aldehyde	%	105			70-130	Pass	
Endrin ketone	%	108			70-130	Pass	
g-BHC (Lindane)	%	105			70-130	Pass	
Heptachlor	%	93			70-130	Pass	
Heptachlor epoxide	%	86			70-130	Pass	
Hexachlorobenzene	%	89			70-130	Pass	
Methoxychlor	%	104			70-130	Pass	
LCS - % Recovery							
Organophosphorus Pesticides							
Diazinon	%	81			70-130	Pass	
Ethion	%	105			70-130	Pass	
Fenitrothion	%	97			70-130	Pass	
Methyl parathion	%	101			70-130	Pass	
Mevinphos	%	73			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls							
Aroclor-1016	%	120			70-130	Pass	
Aroclor-1260	%	91			70-130	Pass	
LCS - % Recovery							
Phenols (Halogenated)							
2-Chlorophenol	%	111			30-130	Pass	
2.4-Dichlorophenol	%	103			30-130	Pass	
2.4.5-Trichlorophenol	%	110			30-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2.4.6-Trichlorophenol	%	99			30-130	Pass	
2.6-Dichlorophenol	%	107			30-130	Pass	
4-Chloro-3-methylphenol	%	94			30-130	Pass	
Pentachlorophenol	%	104			30-130	Pass	
Tetrachlorophenols - Total	%	82			30-130	Pass	
LCS - % Recovery							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	%	98			30-130	Pass	
2-Methyl-4.6-dinitrophenol	%	90			30-130	Pass	
2-Methylphenol (o-Cresol)	%	105			30-130	Pass	
2-Nitrophenol	%	116			30-130	Pass	
2.4-Dimethylphenol	%	101			30-130	Pass	
2.4-Dinitrophenol	%	105			30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	%	105			30-130	Pass	
4-Nitrophenol	%	101			30-130	Pass	
Dinoseb	%	118			30-130	Pass	
Phenol	%	111			30-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	104			70-130	Pass	
Cadmium	%	100			70-130	Pass	
Chromium	%	95			70-130	Pass	
Copper	%	94			70-130	Pass	
Lead	%	97			70-130	Pass	
Mercury	%	93			70-130	Pass	
Nickel	%	96			70-130	Pass	
Zinc	%	100			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C6-C9	S20-Jl03951	NCP	%	73			70-130	Pass	
TRH C10-C14	S20-Jn39790	NCP	%	99			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	S20-Jn47050	NCP	%	91			70-130	Pass	
Toluene	S20-Jl08811	NCP	%	71			70-130	Pass	
Ethylbenzene	S20-Jl08811	NCP	%	86			70-130	Pass	
m&p-Xylenes	S20-Jl08811	NCP	%	96			70-130	Pass	
o-Xylene	S20-Jl08811	NCP	%	97			70-130	Pass	
Xylenes - Total*	S20-Jl08811	NCP	%	96			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
Naphthalene	S20-Jn47050	NCP	%	110			70-130	Pass	
TRH C6-C10	S20-Jn47050	NCP	%	75			70-130	Pass	
TRH >C10-C16	S20-Jn39790	NCP	%	94			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	S20-Jn48584	NCP	%	93			70-130	Pass	
Acenaphthylene	S20-Jn48584	NCP	%	83			70-130	Pass	
Anthracene	S20-Jn48584	NCP	%	94			70-130	Pass	
Benz(a)anthracene	S20-Jn48584	NCP	%	88			70-130	Pass	
Benzo(a)pyrene	S20-Jn48584	NCP	%	90			70-130	Pass	
Benzo(b&j)fluoranthene	S20-Jn48584	NCP	%	89			70-130	Pass	
Benzo(g.h.i)perylene	S20-Jn48584	NCP	%	104			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Benzo(k)fluoranthene	S20-Jn48584	NCP	%	92			70-130	Pass	
Chrysene	S20-Jn48584	NCP	%	96			70-130	Pass	
Dibenz(a.h)anthracene	S20-Jn48584	NCP	%	73			70-130	Pass	
Fluoranthene	S20-Jn48584	NCP	%	95			70-130	Pass	
Fluorene	S20-Jn48584	NCP	%	97			70-130	Pass	
Indeno(1.2.3-cd)pyrene	S20-Jn48584	NCP	%	80			70-130	Pass	
Naphthalene	S20-Jn48584	NCP	%	98			70-130	Pass	
Phenanthrene	S20-Jn48584	NCP	%	86			70-130	Pass	
Pyrene	S20-Jn48584	NCP	%	78			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
Chlordanes - Total	S20-Jn48584	NCP	%	76			70-130	Pass	
4.4'-DDD	S20-Jn47544	NCP	%	112			70-130	Pass	
4.4'-DDE	S20-Jn47544	NCP	%	89			70-130	Pass	
4.4'-DDT	S20-Jn48584	NCP	%	103			70-130	Pass	
a-BHC	S20-Jn48584	NCP	%	71			70-130	Pass	
Aldrin	S20-Jn48584	NCP	%	80			70-130	Pass	
b-BHC	S20-Jn48584	NCP	%	80			70-130	Pass	
d-BHC	S20-Jn47544	NCP	%	88			70-130	Pass	
Dieldrin	S20-Jn47544	NCP	%	86			70-130	Pass	
Endosulfan I	S20-Jn47544	NCP	%	107			70-130	Pass	
Endosulfan II	S20-Jn47544	NCP	%	103			70-130	Pass	
Endosulfan sulphate	S20-Jn47544	NCP	%	88			70-130	Pass	
Endrin	S20-Jn47544	NCP	%	87			70-130	Pass	
Endrin aldehyde	W20-Jn43761	NCP	%	92			70-130	Pass	
Endrin ketone	S20-Jn48584	NCP	%	85			70-130	Pass	
g-BHC (Lindane)	S20-Jn48584	NCP	%	79			70-130	Pass	
Heptachlor	S20-Jn48584	NCP	%	85			70-130	Pass	
Heptachlor epoxide	S20-Jn47544	NCP	%	74			70-130	Pass	
Hexachlorobenzene	S20-Jn48584	NCP	%	74			70-130	Pass	
Methoxychlor	S20-Jn48584	NCP	%	94			70-130	Pass	
Spike - % Recovery									
Organophosphorus Pesticides				Result 1					
Diazinon	S20-Jn48584	NCP	%	89			70-130	Pass	
Dimethoate	S20-Jn47544	NCP	%	82			70-130	Pass	
Ethion	S20-Jn48584	NCP	%	90			70-130	Pass	
Fenitrothion	S20-Jn48584	NCP	%	84			70-130	Pass	
Methyl parathion	S20-Jn48584	NCP	%	99			70-130	Pass	
Mevinphos	S20-Jn47544	NCP	%	107			70-130	Pass	
Spike - % Recovery									
Polychlorinated Biphenyls				Result 1					
Aroclor-1016	W20-Jn43761	NCP	%	119			70-130	Pass	
Aroclor-1260	S20-Jn48584	NCP	%	111			70-130	Pass	
Total PCB*	S20-Jn48584	NCP	%	111			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	S20-Jn51325	CP	%	114			70-130	Pass	
Cadmium	S20-Jn51325	CP	%	106			70-130	Pass	
Chromium	S20-Jn51325	CP	%	103			70-130	Pass	
Copper	S20-Jn51325	CP	%	99			70-130	Pass	
Lead	S20-Jn51325	CP	%	105			70-130	Pass	
Mercury	S20-Jn51325	CP	%	105			70-130	Pass	
Nickel	S20-Jn51325	CP	%	100			70-130	Pass	
Zinc	S20-Jn51325	CP	%	103			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Phenols (Halogenated)				Result 1					
2-Chlorophenol	S20-Jn50043	NCP	%	115			30-130	Pass	
2.4-Dichlorophenol	S20-Jn50043	NCP	%	129			30-130	Pass	
Pentachlorophenol	S20-Jn50043	NCP	%	100			30-130	Pass	
Spike - % Recovery									
Phenols (non-Halogenated)				Result 1					
2-Methyl-4.6-dinitrophenol	S20-Jn50043	NCP	%	124			30-130	Pass	
2-Methylphenol (o-Cresol)	S20-Jn50043	NCP	%	125			30-130	Pass	
2.4-Dimethylphenol	S20-Jn50043	NCP	%	128			30-130	Pass	
2.4-Dinitrophenol	S20-Jn50043	NCP	%	120			70-130	Pass	
4-Nitrophenol	S20-Jn50043	NCP	%	128			30-130	Pass	
Dinoseb	S20-Jn50043	NCP	%	113			30-130	Pass	
Phenol	S20-Jn50043	NCP	%	124			30-130	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C6-C9	S20-Jn51323	CP	mg/kg	< 20	< 20	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S20-Jn51323	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Toluene	S20-Jn51323	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Ethylbenzene	S20-Jn51323	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
m&p-Xylenes	S20-Jn51323	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
o-Xylene	S20-Jn51323	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes - Total*	S20-Jn51323	CP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
1.1-Dichloroethane	S20-Jn51323	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1-Dichloroethene	S20-Jn51323	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1-Trichloroethane	S20-Jn51323	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	S20-Jn51323	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2-Trichloroethane	S20-Jn51323	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	S20-Jn51323	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dibromoethane	S20-Jn51323	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichlorobenzene	S20-Jn51323	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloroethane	S20-Jn51323	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloropropane	S20-Jn51323	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.3-Trichloropropane	S20-Jn51323	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trimethylbenzene	S20-Jn51323	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichlorobenzene	S20-Jn51323	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichloropropane	S20-Jn51323	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3.5-Trimethylbenzene	S20-Jn51323	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.4-Dichlorobenzene	S20-Jn51323	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Butanone (MEK)	S20-Jn51323	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Propanone (Acetone)	S20-Jn51323	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chlorotoluene	S20-Jn51323	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Methyl-2-pentanone (MIBK)	S20-Jn51323	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Allyl chloride	S20-Jn51323	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromobenzene	S20-Jn51323	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromochloromethane	S20-Jn51323	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromodichloromethane	S20-Jn51323	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromoform	S20-Jn51323	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromomethane	S20-Jn51323	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
Carbon disulfide	S20-Jn51323	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon Tetrachloride	S20-Jn51323	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chlorobenzene	S20-Jn51323	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroethane	S20-Jn51323	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroform	S20-Jn51323	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloromethane	S20-Jn51323	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.2-Dichloroethene	S20-Jn51323	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.3-Dichloropropene	S20-Jn51323	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromochloromethane	S20-Jn51323	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromomethane	S20-Jn51323	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dichlorodifluoromethane	S20-Jn51323	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Iodomethane	S20-Jn51323	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Isopropyl benzene (Cumene)	S20-Jn51323	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Methylene Chloride	S20-Jn51323	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Styrene	S20-Jn51323	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Tetrachloroethene	S20-Jn51323	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.2-Dichloroethene	S20-Jn51323	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.3-Dichloropropene	S20-Jn51323	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichloroethene	S20-Jn51323	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichlorofluoromethane	S20-Jn51323	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Vinyl chloride	S20-Jn51323	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	S20-Jn51323	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	S20-Jn51323	CP	mg/kg	< 20	< 20	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	S20-Jn42538	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	S20-Jn42538	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	S20-Jn42538	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	S20-Jn42538	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	S20-Jn42538	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	S20-Jn42538	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	S20-Jn42538	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	S20-Jn42538	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	S20-Jn42538	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	S20-Jn42538	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	S20-Jn42538	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	S20-Jn42538	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	S20-Jn42538	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	S20-Jn42538	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	S20-Jn42538	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	S20-Jn42538	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	S20-Jn47541	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	S20-Jn47541	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	S20-Jn47541	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	S20-Jn47541	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-BHC	S20-Jn47541	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	S20-Jn47541	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-BHC	S20-Jn47541	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-BHC	S20-Jn47541	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	S20-Jn47541	NCP	mg/kg	< 0.05	0.10	<1	30%	Pass	

Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Endosulfan I	S20-Jn47541	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	S20-Jn47541	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	S20-Jn47541	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	S20-Jn47541	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	S20-Jn47541	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	S20-Jn47541	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-BHC (Lindane)	S20-Jn47541	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	S20-Jn47541	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	S20-Jn47541	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	S20-Jn47541	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	S20-Jn47541	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Azinphos-methyl	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Bolstar	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Chlorfenvinphos	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Chlorpyrifos	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Chlorpyrifos-methyl	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Coumaphos	S20-Jn42538	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
Demeton-S	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Demeton-O	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Diazinon	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Dichlorvos	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Dimethoate	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Disulfoton	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
EPN	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Ethion	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Ethoprop	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Ethyl parathion	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Fenitrothion	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Fensulfothion	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Fenthion	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Malathion	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Merphos	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Methyl parathion	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Mevinphos	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Monocrotophos	S20-Jn42538	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
Naled	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Omethoate	S20-Jn42538	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
Phorate	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Pirimiphos-methyl	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Pyrazophos	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Ronnel	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Terbufos	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Tetrachlorvinphos	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Tokuthion	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Trichloronate	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Aroclor-1016	S20-Jn47541	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1221	S20-Jn47541	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1232	S20-Jn47541	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1242	S20-Jn47541	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1248	S20-Jn47541	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Aroclor-1254	S20-Jn47541	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1260	S20-Jn47541	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Total PCB*	S20-Jn47541	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C10-C14	S20-Jn51324	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	S20-Jn51324	CP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	S20-Jn51324	CP	mg/kg	< 50	< 50	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
TRH >C10-C16	S20-Jn51324	CP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	S20-Jn51324	CP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	S20-Jn51324	CP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	S20-Jn51324	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Cadmium	S20-Jn51324	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	S20-Jn51324	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Copper	S20-Jn51324	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Lead	S20-Jn51324	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Mercury	S20-Jn51324	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Nickel	S20-Jn51324	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Zinc	S20-Jn51324	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	S20-Jn51324	CP	%	1.4	1.4	2.0	30%	Pass	
Duplicate									
Phenols (Halogenated)				Result 1	Result 2	RPD			
2-Chlorophenol	S20-Jn50042	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dichlorophenol	S20-Jn50042	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4.5-Trichlorophenol	S20-Jn50042	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4.6-Trichlorophenol	S20-Jn50042	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2.6-Dichlorophenol	S20-Jn50042	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chloro-3-methylphenol	S20-Jn50042	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Pentachlorophenol	S20-Jn50042	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Tetrachlorophenols - Total	S20-Jn50042	NCP	mg/kg	< 10	< 10	<1	30%	Pass	
Duplicate									
Phenols (non-Halogenated)				Result 1	Result 2	RPD			
2-Cyclohexyl-4.6-dinitrophenol	S20-Jn50042	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
2-Methyl-4.6-dinitrophenol	S20-Jn50042	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Methylphenol (o-Cresol)	S20-Jn50042	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
2-Nitrophenol	S20-Jn50042	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4-Dimethylphenol	S20-Jn50042	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dinitrophenol	S20-Jn50042	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
3&4-Methylphenol (m&p-Cresol)	S20-Jn50042	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
4-Nitrophenol	S20-Jn50042	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Dinoseb	S20-Jn50042	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
Phenol	S20-Jn50042	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs

Authorised By

[redacted]

Analytical Services Manager
Senior Analyst-Organic (NSW)
Senior Analyst-Metal (NSW)
Senior Analyst-Asbestos (NSW)

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

Eurofins shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.

000695

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

SLR

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Dawin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☑ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT:	DHA
PROJECT:	Randwick Barracks
PROJECT NUMBER:	610.30041
PROJECT MANAGER:	[redacted]
PM CONTACT No:	
LABORATORY:	SGS
LABORATORY ADDRESS:	SYD
SAMPLER:	[redacted]
SAMPLER CONTACT No:	
Email Reports and Invoices to:	LQR310@slrconsulting.com

Turnaround Time (TAT)

- ☑ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT:

COC Number 3 of 3

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: Suite A	Asbestos						Hold	Additional Information (Comment on any gross contamination or specific requirements)
	0407_TP271_A01_20063030620		ACM			X							
	0407_TP262_A01_200630		1			X							
	0407_QC182_200630		Soil		X								
	0407_QC282_200630		1	Please forward to Eurofins for 'Suite A'									
	0407_TP262_A02_200630		ACM									X	
	0407_TP262_A03_200630		ACM			X							

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	**Received by**	[redacted]	Date / Time 1/7/20 3:45 PM	**Temperature Received:** N/A
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

729090

eurofins | Environment Testing

Melbourne
6 Monterey Road
Dandenong South Vic 3175
Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

Sydney
Unit F3, Building F
16 Mars Road
Lane Cove West NSW 2066
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

Brisbane
1/21 Smallwood Place
Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Perth
2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261 Site # 23736

ABN – 50 005 085 521 e.mail : EnviroSales@eurofins.com web : www.eurofins.com.au

Sample Receipt Advice

Company name:	**SLR Consulting (Sydney)**
Contact name:	[redacted]
Project name:	RANDWICK BARRACKS
Project ID:	610.30041
COC number:	000695
Turn around time:	5 Day
Date/Time received:	Jul 1, 2020 3:45 PM
Eurofins reference:	**729090**

Sample information

☑ A detailed list of analytes logged into our LIMS, is included in the attached summary table.

☑ All samples have been received as described on the above COC.

☑ COC has been completed correctly.

☑ Attempt to chill was evident.

☑ Appropriately preserved sample containers have been used.

☑ All samples were received in good condition.

☑ Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.

☑ Appropriate sample containers have been used.

☒ Split sample sent to requested external lab.

☒ Some samples have been subcontracted.

N/A Custody Seals intact (if used).

Contact notes

If you have any questions with respect to these samples please contact:

[redacted] on Phone : [redacted] or by e.mail: [redacted]@eurofins.com

Results will be delivered electronically via e.mail to [redacted]@slrconsulting.com.

Note: A copy of these results will also be delivered to the general SLR Consulting (Sydney) email address.

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ABN – 50 005 085 521 web : www.eurofins.com.au e.mail : EnviroSales@eurofins.com

Australia

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Site # 1254 & 14271

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Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

Brisbane
1/21 Smallwood Place
Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Perth
2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261
Site # 23736

New Zealand

Auckland
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Penrose, Auckland 1061
Phone : +64 9 526 45 51
IANZ # 1327

Christchurch
43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 729090
Phone: 02 9428 8100
Fax:

Received: Jul 1, 2020 3:45 PM
Due: Jul 8, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271										
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	0407_QC282_200630	Jun 30, 2020		Soil	S20-Jl01505	X	X	X	X	X
Test Counts						1	1	1	1	1

Certificate of Analysis

eurofins | Environment Testing

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025–Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus
North Sydney
NSW 2060

Attention:	[redacted]
Report	729090-AID
Project Name	RANDWICK BARRACKS
Project ID	610.30041
Received Date	Jul 01, 2020
Date Reported	Jul 08, 2020

Methodology:

Asbestos Fibre Identification	Conducted in accordance with the Australian Standard AS 4964 – 2004: Method for the Qualitative Identification of Asbestos in Bulk Samples and in-house Method LTM-ASB-8020 by polarised light microscopy (PLM) and dispersion staining (DS) techniques. *NOTE: Positive Trace Analysis results indicate the sample contains detectable respirable fibres.*
Unknown Mineral Fibres	Mineral fibres of unknown type, as determined by PLM with DS, may require another analytical technique, such as Electron Microscopy, to confirm unequivocal identity. *NOTE: While Actinolite, Anthophyllite and Tremolite asbestos may be detected by PLM with DS, due to variability in the optical properties of these materials, AS4964 requires that these are reported as UMF unless confirmed by an independent technique.*
Subsampling Soil Samples	The whole sample submitted is first dried and then passed through a 10mm sieve followed by a 2mm sieve. All fibrous matter greater than 10mm, greater than 2mm as well as the material passing through the 2mm sieve are retained and analysed for the presence of asbestos. If the sub 2mm fraction is greater than approximately 30 to 60g then a sub-sampling routine based on ISO 3082:2009(E) is employed. *NOTE: Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be sub-sampled for trace analysis, in accordance with AS 4964-2004.*
Bonded asbestos-containing material (ACM)	The material is first examined and any fibres isolated for identification by PLM and DS. Where required, interfering matrices may be removed by disintegration using a range of heat, chemical or physical treatments, possibly in combination.The resultant material is then further examined in accordance with AS 4964 - 2004. *NOTE: Even after disintegration it may be difficult to detect the presence of asbestos in some asbestos-containing bulk materials using PLM and DS. This is due to the low grade or small length or diameter of the asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos-containing sealants and mastics, asbestos-containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.*
Limit of Reporting	The performance limitation of the AS 4964 (2004) method for non-homogeneous samples is around 0.1 g/kg (equivalent to 0.01% (w/w)). Where no asbestos is found by PLM and DS, including Trace Analysis, this is considered to be at the nominal reporting limit of 0.01% (w/w). The NEPM screening level of 0.001% (w/w) is intended as an on-site determination, not a laboratory Limit of Reporting (LOR), per se. Examination of a large sample size (e.g. 500 mL) may improve the likelihood of detecting asbestos, particularly AF, to aid assessment against the NEPM criteria. Gravimetric determinations to this level of accuracy are outside of AS 4964 and hence NATA Accreditation does not cover the performance of this service (non-NATA results shown with an asterisk). *NOTE: NATA News March 2014, p.7, states in relation to AS 4964: "This is a qualitative method with a nominal reporting limit of 0.01 % " and that currently in Australia "there is no validated method available for the quantification of asbestos".This report is consistent with the analytical procedures and reporting recommendations in the NEPM and the WA DoH.*

Accredited for compliance with ISO/IEC 17025–Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Project Name RANDWICK BARRACKS
Project ID 610.30041
Date Sampled Jun 30, 2020
Report 729090-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
0407_QC282_200630	20-JI01505	Jun 30, 2020	Approximate Sample 62g Sample consisted of: Brown coarse-grained sandy soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Asbestos - LTM-ASB-8020	Sydney	Jul 01, 2020	Indefinite

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ABN – 50 005 085 521 web : www.eurofins.com.au e.mail : EnviroSales@eurofins.com

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NATA # 1261
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Penrose, Auckland 1061
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IANZ # 1327

Christchurch
43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 729090
Phone: 02 9428 8100
Fax:

Received: Jul 1, 2020 3:45 PM
Due: Jul 8, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271										
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	0407_QC282_200630	Jun 30, 2020		Soil	S20-Jl01505	X	X	X	X	X
Test Counts						1	1	1	1	1

Internal Quality Control Review and Glossary

General

1. QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Samples were analysed on an 'as received' basis.
4. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
5. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the Sample Receipt Advice.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

Units

% w/w: weight for weight basis	grams per kilogram
Filter loading:	fibres/100 graticule areas
Reported Concentration:	fibres/mL
Flowrate:	L/min

Terms

Dry	Sample is dried by heating prior to analysis
LOR	Limit of Reporting
COC	Chain of Custody
SRA	Sample Receipt Advice
ISO	International Standards Organisation
AS	Australian Standards
WA DOH	Reference document for the NEPM. Government of Western Australia, Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia (2009), including supporting document Recommended Procedures for Laboratory Analysis of Asbestos in Soil (2011)
NEPM	National Environment Protection (Assessment of Site Contamination) Measure, 2013 (as amended)
ACM	Asbestos Containing Materials. Asbestos contained within a non-asbestos matrix, typically presented in bonded and/or sound condition. For the purposes of the NEPM, ACM is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
AF	Asbestos Fines. Asbestos containing materials, including friable, weathered and bonded materials, able to pass a 7mm x 7mm sieve. Considered under the NEPM as equivalent to “non-bonded / friable”.
FA	Fibrous Asbestos. Asbestos containing materials in a friable and/or severely weathered condition. For the purposes of the NEPM, FA is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
Friable	Asbestos-containing materials of any size that may be broken or crumbled by hand pressure. For the purposes of the NEPM, this includes both AF and FA. It is outside of the laboratory’s remit to assess degree of friability.
Trace Analysis	Analytical procedure used to detect the presence of respirable fibres in the matrix.

Comments

The sample received was not collected in an approved asbestos bag and was therefore sub-sampled from the 250mL glass jar. Valid sub-sampling procedures were applied so as to ensure that the sub-sample to be analysed accurately represented the sample received.

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

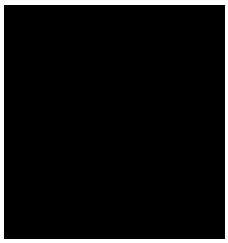
Qualifier Codes/Comments

Code	Description
N/A	Not applicable

Asbestos Counter/Identifier:

[redacted] Senior Analyst-Asbestos (NSW)

Authorised by:



Senior Analyst-Asbestos (NSW)

General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

Eurofins shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.

SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus,
North Sydney
NSW 2060

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: [redacted]

Report **729090-S**
Project name RANDWICK BARRACKS
Project ID 610.30041
Received Date Jul 01, 2020

Client Sample ID			**0407_QC282_200630**
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-Jl01505**
Date Sampled			**Jun 30, 2020**
Test/Reference	LOR	Unit	
Total Recoverable Hydrocarbons - 1999 NEPM Fractions			
TRH C6-C9	20	mg/kg	< 20
TRH C10-C14	20	mg/kg	< 20
TRH C15-C28	50	mg/kg	< 50
TRH C29-C36	50	mg/kg	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50
BTEX			
Benzene	0.1	mg/kg	< 0.1
Toluene	0.1	mg/kg	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2
o-Xylene	0.1	mg/kg	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3
4-Bromofluorobenzene (surr.)	1	%	83
Volatile Organics			
1.1-Dichloroethane	0.5	mg/kg	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5

Client Sample ID			0407_QC282_200630
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-JI01505**
Date Sampled			**Jun 30, 2020**
Test/Reference	LOR	Unit	
Volatile Organics			
Benzene	0.1	mg/kg	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5
Bromoform	0.5	mg/kg	< 0.5
Bromomethane	0.5	mg/kg	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5
Chloroethane	0.5	mg/kg	< 0.5
Chloroform	0.5	mg/kg	< 0.5
Chloromethane	0.5	mg/kg	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1
Iodomethane	0.5	mg/kg	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5
o-Xylene	0.1	mg/kg	< 0.1
Styrene	0.5	mg/kg	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5
Toluene	0.1	mg/kg	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3
Total MAH*	0.5	mg/kg	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5
4-Bromofluorobenzene (surr.)	1	%	83
Toluene-d8 (surr.)	1	%	110
Total Recoverable Hydrocarbons - 2013 NEPM Fractions			
Naphthalene[N02]	0.5	mg/kg	< 0.5
TRH C6-C10	20	mg/kg	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20
TRH >C10-C16	50	mg/kg	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50
TRH >C16-C34	100	mg/kg	< 100
TRH >C34-C40	100	mg/kg	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100

Client Sample ID			0407_QC282_200630
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-JI01505**
Date Sampled			**Jun 30, 2020**
Test/Reference	LOR	Unit	
Polycyclic Aromatic Hydrocarbons			
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2
Acenaphthene	0.5	mg/kg	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5
Anthracene	0.5	mg/kg	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5
Chrysene	0.5	mg/kg	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5
Fluoranthene	0.5	mg/kg	0.5
Fluorene	0.5	mg/kg	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5
Naphthalene	0.5	mg/kg	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5
Pyrene	0.5	mg/kg	< 0.5
Total PAH*	0.5	mg/kg	0.5
2-Fluorobiphenyl (surr.)	1	%	77
p-Terphenyl-d14 (surr.)	1	%	91
Organochlorine Pesticides			
Chlordanes - Total	0.1	mg/kg	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05
a-BHC	0.05	mg/kg	< 0.05
Aldrin	0.05	mg/kg	< 0.05
b-BHC	0.05	mg/kg	< 0.05
d-BHC	0.05	mg/kg	< 0.05
Dieldrin	0.05	mg/kg	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05
Endrin	0.05	mg/kg	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05
Heptachlor	0.05	mg/kg	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05
Methoxychlor	0.2	mg/kg	< 0.2
Toxaphene	1	mg/kg	< 1
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.2
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.2
Dibutylchlorendate (surr.)	1	%	108
Tetrachloro-m-xylene (surr.)	1	%	80

Client Sample ID			0407_QC282_200630
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-JI01505**
Date Sampled			**Jun 30, 2020**
Test/Reference	LOR	Unit	
Organophosphorus Pesticides			
Azinphos-methyl	0.2	mg/kg	< 0.2
Bolstar	0.2	mg/kg	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2
Coumaphos	2	mg/kg	< 2
Demeton-S	0.2	mg/kg	< 0.2
Demeton-O	0.2	mg/kg	< 0.2
Diazinon	0.2	mg/kg	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2
Dimethoate	0.2	mg/kg	< 0.2
Disulfoton	0.2	mg/kg	< 0.2
EPN	0.2	mg/kg	< 0.2
Ethion	0.2	mg/kg	< 0.2
Ethoprop	0.2	mg/kg	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2
Fenthion	0.2	mg/kg	< 0.2
Malathion	0.2	mg/kg	< 0.2
Merphos	0.2	mg/kg	< 0.2
Methyl parathion	0.2	mg/kg	< 0.2
Mevinphos	0.2	mg/kg	< 0.2
Monocrotophos	2	mg/kg	< 2
Naled	0.2	mg/kg	< 0.2
Omethoate	2	mg/kg	< 2
Phorate	0.2	mg/kg	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2
Ronnel	0.2	mg/kg	< 0.2
Terbufos	0.2	mg/kg	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2
Tokuthion	0.2	mg/kg	< 0.2
Trichloronate	0.2	mg/kg	< 0.2
Triphenylphosphate (surr.)	1	%	97
Polychlorinated Biphenyls			
Aroclor-1016	0.5	mg/kg	< 0.5
Aroclor-1221	0.1	mg/kg	< 0.1
Aroclor-1232	0.5	mg/kg	< 0.5
Aroclor-1242	0.5	mg/kg	< 0.5
Aroclor-1248	0.5	mg/kg	< 0.5
Aroclor-1254	0.5	mg/kg	< 0.5
Aroclor-1260	0.5	mg/kg	< 0.5
Total PCB*	0.5	mg/kg	< 0.5
Dibutylchlorendate (surr.)	1	%	108
Tetrachloro-m-xylene (surr.)	1	%	80

Client Sample ID			0407_QC282_200630
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-Jl01505**
Date Sampled			**Jun 30, 2020**
Test/Reference	LOR	Unit	
Phenols (Halogenated)			
2-Chlorophenol	0.5	mg/kg	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1
Pentachlorophenol	1	mg/kg	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10
Total Halogenated Phenol*	1	mg/kg	< 1
Phenols (non-Halogenated)			
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2
2-Nitrophenol	1	mg/kg	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4
4-Nitrophenol	5	mg/kg	< 5
Dinoseb	20	mg/kg	< 20
Phenol	0.5	mg/kg	< 0.5
Total Non-Halogenated Phenol*	20	mg/kg	< 20
Phenol-d6 (surr.)	1	%	69
Heavy Metals			
Arsenic	2	mg/kg	2.0
Cadmium	0.4	mg/kg	< 0.4
Chromium	5	mg/kg	< 5
Copper	5	mg/kg	10
Lead	5	mg/kg	140
Mercury	0.1	mg/kg	0.2
Nickel	5	mg/kg	< 5
Zinc	5	mg/kg	86
% Moisture	1	%	8.7

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jul 03, 2020	
- Method: LTM-ORG-2010 TRH C6-C40			
Polycyclic Aromatic Hydrocarbons	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (Halogenated)	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (non-Halogenated)	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Metals M8	Sydney	Jul 03, 2020	180 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Volatile Organics	Sydney	Jul 03, 2020	7 Days
- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices			
Eurofins | mgt Suite B15			
Organochlorine Pesticides	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Organophosphorus Pesticides	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS			
Polychlorinated Biphenyls	Sydney	Jul 03, 2020	28 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
% Moisture	Sydney	Jul 01, 2020	14 Days
- Method: LTM-GEN-7080 Moisture			

eurofins | Environment Testing

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IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 729090
Phone: 02 9428 8100
Fax:

Received: Jul 1, 2020 3:45 PM
Due: Jul 8, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271										
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	0407_QC282_200630	Jun 30, 2020		Soil	S20-Jl01505	X	X	X	X	X
Test Counts						1	1	1	1	1

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

****NOTE:** pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram

mg/L: milligrams per litre

ug/L: micrograms per litre

ppm: Parts per million

ppb: Parts per billion

%: Percentage

org/100mL: Organisms per 100 millilitres

NTU: Nephelometric Turbidity Units

MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version 5.3
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling.Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
Method Blank							
BTEX							
Benzene	mg/kg	< 0.1			0.1	Pass	
Toluene	mg/kg	< 0.1			0.1	Pass	
Ethylbenzene	mg/kg	< 0.1			0.1	Pass	
m&p-Xylenes	mg/kg	< 0.2			0.2	Pass	
o-Xylene	mg/kg	< 0.1			0.1	Pass	
Xylenes - Total*	mg/kg	< 0.3			0.3	Pass	
Method Blank							
Volatile Organics							
1.1-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
1.1.1-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.1.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dibromoethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.3-Trichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.4-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.3.5-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.4-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
2-Butanone (MEK)	mg/kg	< 0.5			0.5	Pass	
2-Propanone (Acetone)	mg/kg	< 0.5			0.5	Pass	
4-Chlorotoluene	mg/kg	< 0.5			0.5	Pass	
4-Methyl-2-pentanone (MIBK)	mg/kg	< 0.5			0.5	Pass	
Allyl chloride	mg/kg	< 0.5			0.5	Pass	
Bromobenzene	mg/kg	< 0.5			0.5	Pass	
Bromochloromethane	mg/kg	< 0.5			0.5	Pass	
Bromodichloromethane	mg/kg	< 0.5			0.5	Pass	
Bromoform	mg/kg	< 0.5			0.5	Pass	
Bromomethane	mg/kg	< 0.5			0.5	Pass	
Carbon disulfide	mg/kg	< 0.5			0.5	Pass	
Carbon Tetrachloride	mg/kg	< 0.5			0.5	Pass	
Chlorobenzene	mg/kg	< 0.5			0.5	Pass	
Chloroethane	mg/kg	< 0.5			0.5	Pass	
Chloroform	mg/kg	< 0.5			0.5	Pass	
Chloromethane	mg/kg	< 0.5			0.5	Pass	
cis-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
cis-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Dibromochloromethane	mg/kg	< 0.5			0.5	Pass	
Dibromomethane	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Dichlorodifluoromethane	mg/kg	< 0.5			0.5	Pass	
Iodomethane	mg/kg	< 0.5			0.5	Pass	
Isopropyl benzene (Cumene)	mg/kg	< 0.5			0.5	Pass	
Methylene Chloride	mg/kg	< 0.5			0.5	Pass	
Styrene	mg/kg	< 0.5			0.5	Pass	
Tetrachloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Trichloroethene	mg/kg	< 0.5			0.5	Pass	
Trichlorofluoromethane	mg/kg	< 0.5			0.5	Pass	
Vinyl chloride	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Organochlorine Pesticides							
Chlordanes - Total	mg/kg	< 0.1			0.1	Pass	
4.4'-DDD	mg/kg	< 0.05			0.05	Pass	
4.4'-DDE	mg/kg	< 0.05			0.05	Pass	
4.4'-DDT	mg/kg	< 0.05			0.05	Pass	
a-BHC	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-BHC	mg/kg	< 0.05			0.05	Pass	
d-BHC	mg/kg	< 0.05			0.05	Pass	
Dieldrin	mg/kg	< 0.05			0.05	Pass	
Endosulfan I	mg/kg	< 0.05			0.05	Pass	
Endosulfan II	mg/kg	< 0.05			0.05	Pass	
Endosulfan sulphate	mg/kg	< 0.05			0.05	Pass	
Endrin	mg/kg	< 0.05			0.05	Pass	
Endrin aldehyde	mg/kg	< 0.05			0.05	Pass	
Endrin ketone	mg/kg	< 0.05			0.05	Pass	
g-BHC (Lindane)	mg/kg	< 0.05			0.05	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Heptachlor	mg/kg	< 0.05			0.05	Pass	
Heptachlor epoxide	mg/kg	< 0.05			0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05			0.05	Pass	
Methoxychlor	mg/kg	< 0.2			0.2	Pass	
Toxaphene	mg/kg	< 1			1	Pass	
Method Blank							
Organophosphorus Pesticides							
Azinphos-methyl	mg/kg	< 0.2			0.2	Pass	
Bolstar	mg/kg	< 0.2			0.2	Pass	
Chlorfenvinphos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos-methyl	mg/kg	< 0.2			0.2	Pass	
Coumaphos	mg/kg	< 2			2	Pass	
Demeton-S	mg/kg	< 0.2			0.2	Pass	
Demeton-O	mg/kg	< 0.2			0.2	Pass	
Diazinon	mg/kg	< 0.2			0.2	Pass	
Dichlorvos	mg/kg	< 0.2			0.2	Pass	
Dimethoate	mg/kg	< 0.2			0.2	Pass	
Disulfoton	mg/kg	< 0.2			0.2	Pass	
EPN	mg/kg	< 0.2			0.2	Pass	
Ethion	mg/kg	< 0.2			0.2	Pass	
Ethoprop	mg/kg	< 0.2			0.2	Pass	
Ethyl parathion	mg/kg	< 0.2			0.2	Pass	
Fenitrothion	mg/kg	< 0.2			0.2	Pass	
Fensulfothion	mg/kg	< 0.2			0.2	Pass	
Fenthion	mg/kg	< 0.2			0.2	Pass	
Malathion	mg/kg	< 0.2			0.2	Pass	
Merphos	mg/kg	< 0.2			0.2	Pass	
Methyl parathion	mg/kg	< 0.2			0.2	Pass	
Mevinphos	mg/kg	< 0.2			0.2	Pass	
Monocrotophos	mg/kg	< 2			2	Pass	
Naled	mg/kg	< 0.2			0.2	Pass	
Omethoate	mg/kg	< 2			2	Pass	
Phorate	mg/kg	< 0.2			0.2	Pass	
Pirimiphos-methyl	mg/kg	< 0.2			0.2	Pass	
Pyrazophos	mg/kg	< 0.2			0.2	Pass	
Ronnel	mg/kg	< 0.2			0.2	Pass	
Terbufos	mg/kg	< 0.2			0.2	Pass	
Tetrachlorvinphos	mg/kg	< 0.2			0.2	Pass	
Tokuthion	mg/kg	< 0.2			0.2	Pass	
Trichloronate	mg/kg	< 0.2			0.2	Pass	
Method Blank							
Polychlorinated Biphenyls							
Aroclor-1016	mg/kg	< 0.5			0.5	Pass	
Aroclor-1221	mg/kg	< 0.1			0.1	Pass	
Aroclor-1232	mg/kg	< 0.5			0.5	Pass	
Aroclor-1242	mg/kg	< 0.5			0.5	Pass	
Aroclor-1248	mg/kg	< 0.5			0.5	Pass	
Aroclor-1254	mg/kg	< 0.5			0.5	Pass	
Aroclor-1260	mg/kg	< 0.5			0.5	Pass	
Total PCB*	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Phenols (Halogenated)							
2-Chlorophenol	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2.4-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4.5-Trichlorophenol	mg/kg	< 1			1	Pass	
2.4.6-Trichlorophenol	mg/kg	< 1			1	Pass	
2.6-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
4-Chloro-3-methylphenol	mg/kg	< 1			1	Pass	
Pentachlorophenol	mg/kg	< 1			1	Pass	
Tetrachlorophenols - Total	mg/kg	< 10			10	Pass	
Method Blank							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	mg/kg	< 20			20	Pass	
2-Methyl-4.6-dinitrophenol	mg/kg	< 5			5	Pass	
2-Methylphenol (o-Cresol)	mg/kg	< 0.2			0.2	Pass	
2-Nitrophenol	mg/kg	< 1			1	Pass	
2.4-Dimethylphenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dinitrophenol	mg/kg	< 5			5	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/kg	< 0.4			0.4	Pass	
4-Nitrophenol	mg/kg	< 5			5	Pass	
Dinoseb	mg/kg	< 20			20	Pass	
Phenol	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Nickel	mg/kg	< 5			5	Pass	
Zinc	mg/kg	< 5			5	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C10-C14	%	104			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	111			70-130	Pass	
Toluene	%	111			70-130	Pass	
Ethylbenzene	%	105			70-130	Pass	
m&p-Xylenes	%	107			70-130	Pass	
o-Xylene	%	108			70-130	Pass	
Xylenes - Total*	%	107			70-130	Pass	
LCS - % Recovery							
Volatile Organics							
1.1-Dichloroethene	%	121			70-130	Pass	
1.1.1-Trichloroethane	%	107			70-130	Pass	
1.2-Dichlorobenzene	%	106			70-130	Pass	
1.2-Dichloroethane	%	113			70-130	Pass	
Trichloroethene	%	109			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	72			70-130	Pass	
TRH >C10-C16	%	92			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	80			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Acenaphthylene	%	81			70-130	Pass	
Anthracene	%	79			70-130	Pass	
Benz(a)anthracene	%	84			70-130	Pass	
Benzo(a)pyrene	%	76			70-130	Pass	
Benzo(b&j)fluoranthene	%	82			70-130	Pass	
Benzo(g.h.i)perylene	%	81			70-130	Pass	
Benzo(k)fluoranthene	%	83			70-130	Pass	
Chrysene	%	82			70-130	Pass	
Dibenz(a.h)anthracene	%	81			70-130	Pass	
Fluoranthene	%	80			70-130	Pass	
Fluorene	%	81			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	86			70-130	Pass	
Naphthalene	%	83			70-130	Pass	
Phenanthrene	%	85			70-130	Pass	
Pyrene	%	80			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	87			70-130	Pass	
4.4'-DDD	%	94			70-130	Pass	
4.4'-DDE	%	92			70-130	Pass	
4.4'-DDT	%	103			70-130	Pass	
a-BHC	%	87			70-130	Pass	
Aldrin	%	89			70-130	Pass	
b-BHC	%	91			70-130	Pass	
d-BHC	%	91			70-130	Pass	
Dieldrin	%	89			70-130	Pass	
Endosulfan I	%	99			70-130	Pass	
Endosulfan II	%	87			70-130	Pass	
Endosulfan sulphate	%	90			70-130	Pass	
Endrin	%	80			70-130	Pass	
Endrin aldehyde	%	88			70-130	Pass	
Endrin ketone	%	91			70-130	Pass	
g-BHC (Lindane)	%	98			70-130	Pass	
Heptachlor	%	90			70-130	Pass	
Heptachlor epoxide	%	92			70-130	Pass	
Hexachlorobenzene	%	83			70-130	Pass	
Methoxychlor	%	99			70-130	Pass	
LCS - % Recovery							
Organophosphorus Pesticides							
Diazinon	%	72			70-130	Pass	
Dimethoate	%	77			70-130	Pass	
Ethion	%	82			70-130	Pass	
Fenitrothion	%	104			70-130	Pass	
Methyl parathion	%	100			70-130	Pass	
Mevinphos	%	77			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls							
Aroclor-1016	%	110			70-130	Pass	
Aroclor-1260	%	116			70-130	Pass	
LCS - % Recovery							
Phenols (Halogenated)							
2-Chlorophenol	%	83			30-130	Pass	
2.4-Dichlorophenol	%	85			30-130	Pass	
2.4.5-Trichlorophenol	%	101			30-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2.4.6-Trichlorophenol	%	101			30-130	Pass	
2.6-Dichlorophenol	%	88			30-130	Pass	
4-Chloro-3-methylphenol	%	88			30-130	Pass	
Pentachlorophenol	%	87			30-130	Pass	
Tetrachlorophenols - Total	%	88			30-130	Pass	
LCS - % Recovery							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	%	85			30-130	Pass	
2-Methyl-4.6-dinitrophenol	%	88			30-130	Pass	
2-Methylphenol (o-Cresol)	%	83			30-130	Pass	
2-Nitrophenol	%	104			30-130	Pass	
2.4-Dimethylphenol	%	83			30-130	Pass	
2.4-Dinitrophenol	%	111			30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	%	84			30-130	Pass	
4-Nitrophenol	%	106			30-130	Pass	
Dinoseb	%	97			30-130	Pass	
Phenol	%	83			30-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	108			70-130	Pass	
Cadmium	%	105			70-130	Pass	
Chromium	%	106			70-130	Pass	
Copper	%	106			70-130	Pass	
Lead	%	105			70-130	Pass	
Mercury	%	107			70-130	Pass	
Nickel	%	106			70-130	Pass	
Zinc	%	106			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C10-C14	S20-Jn43192	NCP	%	114			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	S20-Jl05171	NCP	%	81			70-130	Pass	
Toluene	S20-Jl05171	NCP	%	76			70-130	Pass	
Ethylbenzene	S20-Jl05171	NCP	%	77			70-130	Pass	
m&p-Xylenes	S20-Jl05171	NCP	%	76			70-130	Pass	
o-Xylene	S20-Jl05171	NCP	%	82			70-130	Pass	
Xylenes - Total*	S20-Jl05171	NCP	%	78			70-130	Pass	
Spike - % Recovery									
Volatile Organics				Result 1					
1.1-Dichloroethene	S20-Jl05171	NCP	%	86			70-130	Pass	
1.1.1-Trichloroethane	S20-Jl05171	NCP	%	78			70-130	Pass	
1.2-Dichlorobenzene	S20-Jl05171	NCP	%	75			70-130	Pass	
1.2-Dichloroethane	S20-Jl05171	NCP	%	81			70-130	Pass	
Trichloroethene	S20-Jl05171	NCP	%	78			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
TRH >C10-C16	S20-Jn43192	NCP	%	99			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	S20-Jl00589	NCP	%	83			70-130	Pass	
Acenaphthylene	S20-Jl00589	NCP	%	80			70-130	Pass	
Anthracene	S20-Jl00589	NCP	%	81			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Benz(a)anthracene	S20-Jl00589	NCP	%	85			70-130	Pass	
Benzo(a)pyrene	S20-Jl00589	NCP	%	75			70-130	Pass	
Benzo(b&j)fluoranthene	S20-Jl00589	NCP	%	80			70-130	Pass	
Benzo(k)fluoranthene	S20-Jl00589	NCP	%	93			70-130	Pass	
Chrysene	S20-Jl00589	NCP	%	70			70-130	Pass	
Fluoranthene	S20-Jl00589	NCP	%	82			70-130	Pass	
Fluorene	S20-Jl00589	NCP	%	81			70-130	Pass	
Naphthalene	S20-Jl00589	NCP	%	82			70-130	Pass	
Phenanthrene	S20-Jl00589	NCP	%	82			70-130	Pass	
Pyrene	S20-Jl00589	NCP	%	82			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
Chlordanes - Total	S20-Jl00589	NCP	%	92			70-130	Pass	
4.4'-DDD	S20-Jl00589	NCP	%	117			70-130	Pass	
4.4'-DDE	S20-Jl00589	NCP	%	88			70-130	Pass	
a-BHC	S20-Jl00589	NCP	%	76			70-130	Pass	
b-BHC	S20-Jl00589	NCP	%	92			70-130	Pass	
d-BHC	S20-Jl00589	NCP	%	84			70-130	Pass	
Dieldrin	S20-Jl00589	NCP	%	91			70-130	Pass	
Endosulfan I	S20-Jl00589	NCP	%	86			70-130	Pass	
Endosulfan sulphate	S20-Jl00589	NCP	%	86			70-130	Pass	
Endrin	S20-Jl00589	NCP	%	82			70-130	Pass	
g-BHC (Lindane)	S20-Jl00589	NCP	%	85			70-130	Pass	
Heptachlor epoxide	S20-Jl00589	NCP	%	96			70-130	Pass	
Hexachlorobenzene	S20-Jl00589	NCP	%	88			70-130	Pass	
Spike - % Recovery									
Organophosphorus Pesticides				Result 1					
Diazinon	S20-Jl00589	NCP	%	73			70-130	Pass	
Dimethoate	S20-Jl00589	NCP	%	94			70-130	Pass	
Ethion	S20-Jl00589	NCP	%	98			70-130	Pass	
Fenitrothion	S20-Jl00589	NCP	%	93			70-130	Pass	
Methyl parathion	S20-Jl00589	NCP	%	91			70-130	Pass	
Mevinphos	S20-Jl00589	NCP	%	98			70-130	Pass	
Spike - % Recovery									
Polychlorinated Biphenyls				Result 1					
Aroclor-1016	S20-Jl00589	NCP	%	103			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	S20-Jl01608	NCP	%	99			70-130	Pass	
Cadmium	S20-Jl01608	NCP	%	101			70-130	Pass	
Chromium	S20-Jl01608	NCP	%	89			70-130	Pass	
Copper	S20-Jl01608	NCP	%	97			70-130	Pass	
Lead	S20-Jl01608	NCP	%	99			70-130	Pass	
Mercury	S20-Jl01608	NCP	%	108			70-130	Pass	
Nickel	S20-Jl01608	NCP	%	93			70-130	Pass	
Zinc	S20-Jl01608	NCP	%	82			70-130	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C6-C9	S20-Jl00570	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	S20-Jn43190	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	S20-Jn43190	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	S20-Jn43190	NCP	mg/kg	< 50	< 50	<1	30%	Pass	

Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S20-JI00570	NCP	mg/kg	< 0.1		<1	30%	Pass	
Toluene	S20-JI00570	NCP	mg/kg	< 0.1		<1	30%	Pass	
Ethylbenzene	S20-JI00570	NCP	mg/kg	< 0.1		<1	30%	Pass	
m&p-Xylenes	S20-JI00570	NCP	mg/kg	< 0.2		<1	30%	Pass	
o-Xylene	S20-JI00570	NCP	mg/kg	< 0.1		<1	30%	Pass	
Xylenes - Total*	S20-JI00570	NCP	mg/kg	< 0.3		<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
1.1-Dichloroethane	S20-JI00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1-Dichloroethene	S20-JI00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1-Trichloroethane	S20-JI00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	S20-JI00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2-Trichloroethane	S20-JI00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	S20-JI00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dibromoethane	S20-JI00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichlorobenzene	S20-JI00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloroethane	S20-JI00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloropropane	S20-JI00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.3-Trichloropropane	S20-JI00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trimethylbenzene	S20-JI00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichlorobenzene	S20-JI00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichloropropane	S20-JI00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3.5-Trimethylbenzene	S20-JI00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.4-Dichlorobenzene	S20-JI00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Butanone (MEK)	S20-JI00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Propanone (Acetone)	S20-JI00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chlorotoluene	S20-JI00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Methyl-2-pentanone (MIBK)	S20-JI00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Allyl chloride	S20-JI00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromobenzene	S20-JI00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromochloromethane	S20-JI00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromodichloromethane	S20-JI00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromoform	S20-JI00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromomethane	S20-JI00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon disulfide	S20-JI00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon Tetrachloride	S20-JI00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chlorobenzene	S20-JI00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroethane	S20-JI00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroform	S20-JI00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloromethane	S20-JI00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.2-Dichloroethene	S20-JI00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.3-Dichloropropene	S20-JI00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromochloromethane	S20-JI00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromomethane	S20-JI00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dichlorodifluoromethane	S20-JI00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Iodomethane	S20-JI00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Isopropyl benzene (Cumene)	S20-JI00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Methylene Chloride	S20-JI00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Styrene	S20-JI00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Tetrachloroethene	S20-JI00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.2-Dichloroethene	S20-JI00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.3-Dichloropropene	S20-JI00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichloroethene	S20-JI00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichlorofluoromethane	S20-JI00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Vinyl chloride	S20-JI00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	S20-Jl00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	S20-Jl00570	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH >C10-C16	S20-Jn43190	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	S20-Jn43190	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	S20-Jn43190	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	S20-Jl08593	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	S20-Jl08593	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	S20-Jl08593	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	S20-Jl08593	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	S20-Jl08593	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	S20-Jl08593	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	S20-Jl08593	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	S20-Jl08593	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	S20-Jl08593	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	S20-Jl08593	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	S20-Jl08593	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	S20-Jl08593	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	S20-Jl08593	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	S20-Jl08593	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	S20-Jl08593	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	S20-Jl08593	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	S20-Jl08593	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	S20-Jl08593	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	S20-Jl08593	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	S20-Jl08593	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
a-BHC	S20-Jl08593	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	S20-Jl08593	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-BHC	S20-Jl08593	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-BHC	S20-Jl08593	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	S20-Jl08593	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	S20-Jl08593	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	S20-Jl08593	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	S20-Jl08593	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	S20-Jl08593	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	S20-Jl08593	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	S20-Jl08593	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-BHC (Lindane)	S20-Jl08593	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	S20-Jl08593	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	S20-Jl08593	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	S20-Jl08593	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Azinphos-methyl	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Bolstar	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorfenvinphos	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos-methyl	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Coumaphos	S20-Jl08593	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Demeton-S	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	

Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Demeton-O	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Diazinon	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dichlorvos	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dimethoate	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Disulfoton	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
EPN	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethion	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethoprop	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethyl parathion	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenitrothion	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fensulfothion	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenthion	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Malathion	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Merphos	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Methyl parathion	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Mevinphos	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Monocrotophos	S20-Jl08593	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Naled	S20-Jl08593	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Omethoate	S20-Jl08593	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Phorate	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pirimiphos-methyl	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pyrazophos	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ronnel	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Terbufos	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tetrachlorvinphos	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tokuthion	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Trichloronate	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Aroclor-1016	S20-Jn42365	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1221	S20-Jn42365	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1232	S20-Jn42365	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1242	S20-Jn42365	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1248	S20-Jn42365	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1254	S20-Jn42365	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1260	S20-Jn42365	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Total PCB*	S20-Jn42365	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Phenols (Halogenated)				Result 1	Result 2	RPD			
2-Chlorophenol	S20-Jn42365	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dichlorophenol	S20-Jn42365	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4.5-Trichlorophenol	S20-Jn42365	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4.6-Trichlorophenol	S20-Jn42365	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2.6-Dichlorophenol	S20-Jn42365	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chloro-3-methylphenol	S20-Jn42365	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Pentachlorophenol	S20-Jn42365	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Tetrachlorophenols - Total	S20-Jn42365	NCP	mg/kg	< 10	< 10	<1	30%	Pass	
Duplicate									
Phenols (non-Halogenated)				Result 1	Result 2	RPD			
2-Cyclohexyl-4.6-dinitrophenol	S20-Jn42365	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
2-Methyl-4.6-dinitrophenol	S20-Jn42365	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Methylphenol (o-Cresol)	S20-Jn42365	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
2-Nitrophenol	S20-Jn42365	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4-Dimethylphenol	S20-Jn42365	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Phenols (non-Halogenated)				Result 1	Result 2	RPD			
2.4-Dinitrophenol	S20-Jn42365	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
3&4-Methylphenol (m&p-Cresol)	S20-Jn42365	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
4-Nitrophenol	S20-Jn42365	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Dinoseb	S20-Jn42365	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
Phenol	S20-Jn42365	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	S20-Jl02349	NCP	mg/kg	10	15	40	30%	Fail	Q15
Cadmium	S20-Jl02349	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	S20-Jl02349	NCP	mg/kg	17	27	43	30%	Fail	Q15
Copper	S20-Jl02349	NCP	mg/kg	27	27	<1	30%	Pass	
Lead	S20-Jl02349	NCP	mg/kg	20	32	48	30%	Fail	Q15
Mercury	S20-Jl02349	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Nickel	S20-Jl02349	NCP	mg/kg	8.7	11	27	30%	Pass	
Zinc	S20-Jl02349	NCP	mg/kg	62	71	13	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	S20-Jl01549	NCP	%	8.3	7.4	12	30%	Pass	

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
Q15	The RPD reported passes Eurofins Environment Testing's QC - Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report.

Authorised By

[redacted]

Analytical Services Manager
Senior Analyst-Organic (NSW)
Senior Analyst-Metal (NSW)
Senior Analyst-Asbestos (NSW)

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

Eurofins shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.

000692

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Dawin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☑ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT:	DHA
PROJECT:	Randwick Barracks
PROJECT NUMBER:	610.30041
PROJECT MANAGER:	[redacted]
PM CONTACT No:	
LABORATORY:	SGS
LABORATORY ADDRESS:	540
SAMPLER:	[redacted]
SAMPLER CONTACT No:	
Email Reports and Invoices to:	LGRS10@slrconsulting.com

Turnaround Time (TAT)

☑ Standard TAT

☐ Non Standard or Urgent TAT

Required TAT:

COC Number 3 of 3

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS	Additional Information (Comment on any gross contamination or specific requirements)
	0407_QC277_200629	29-6-20	Soil	} Please forward to Eurofins for 'suite A'		
	0407_QC279_200629	1	1	"	"	

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	**Received by**	[redacted]	Date / Time	**Temperature Received:**
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	11.20°C
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

#729092

eurofins | Environment Testing

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Dandenong South Vic 3175
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Site # 1254 & 14271

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Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

Brisbane
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Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Perth
2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261 Site # 23736

ABN – 50 005 085 521 e.mail : EnviroSales@eurofins.com web : www.eurofins.com.au

Sample Receipt Advice

Company name:	**SLR Consulting (Sydney)**
Contact name:	[redacted]
Project name:	RANDWICK BARRACKS
Project ID:	610.30041
COC number:	000692
Turn around time:	5 Day
Date/Time received:	Jul 1, 2020 3:45 PM
Eurofins reference:	**729092**

Sample information

☑ A detailed list of analytes logged into our LIMS, is included in the attached summary table.

☑ All samples have been received as described on the above COC.

☑ COC has been completed correctly.

☑ Attempt to chill was evident.

☑ Appropriately preserved sample containers have been used.

☑ All samples were received in good condition.

☑ Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.

☑ Appropriate sample containers have been used.

☒ Split sample sent to requested external lab.

☒ Some samples have been subcontracted.

N/A Custody Seals intact (if used).

Contact notes

If you have any questions with respect to these samples please contact:

[redacted] on Phone : [redacted] or by e.mail: [redacted]@eurofins.com

Results will be delivered electronically via e.mail to [redacted]@slrconsulting.com.

Note: A copy of these results will also be delivered to the general SLR Consulting (Sydney) email address.

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ABN – 50 005 085 521 web : www.eurofins.com.au e.mail : EnviroSales@eurofins.com

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NATA # 1261
Site # 23736

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Penrose, Auckland 1061
Phone : +64 9 526 45 51
IANZ # 1327

Christchurch
43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 729092
Phone: 02 9428 8100
Fax:

Received: Jul 1, 2020 3:45 PM
Due: Jul 8, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271										
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	0407_QC277_200629	Jun 29, 2020		Soil	S20-Jl01511	X	X	X	X	X
2	0407_QC279_200629	Jun 29, 2020		Soil	S20-Jl01512	X	X	X	X	X
Test Counts						2	2	2	2	2

Certificate of Analysis

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NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025–Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus
North Sydney
NSW 2060

Attention:	[redacted]
Report	729092-AID
Project Name	RANDWICK BARRACKS
Project ID	610.30041
Received Date	Jul 01, 2020
Date Reported	Jul 08, 2020

Methodology:

Asbestos Fibre Identification	Conducted in accordance with the Australian Standard AS 4964 – 2004: Method for the Qualitative Identification of Asbestos in Bulk Samples and in-house Method LTM-ASB-8020 by polarised light microscopy (PLM) and dispersion staining (DS) techniques. *NOTE: Positive Trace Analysis results indicate the sample contains detectable respirable fibres.*
Unknown Mineral Fibres	Mineral fibres of unknown type, as determined by PLM with DS, may require another analytical technique, such as Electron Microscopy, to confirm unequivocal identity. *NOTE: While Actinolite, Anthophyllite and Tremolite asbestos may be detected by PLM with DS, due to variability in the optical properties of these materials, AS4964 requires that these are reported as UMF unless confirmed by an independent technique.*
Subsampling Soil Samples	The whole sample submitted is first dried and then passed through a 10mm sieve followed by a 2mm sieve. All fibrous matter greater than 10mm, greater than 2mm as well as the material passing through the 2mm sieve are retained and analysed for the presence of asbestos. If the sub 2mm fraction is greater than approximately 30 to 60g then a sub-sampling routine based on ISO 3082:2009(E) is employed. *NOTE: Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be sub-sampled for trace analysis, in accordance with AS 4964-2004.*
Bonded asbestos-containing material (ACM)	The material is first examined and any fibres isolated for identification by PLM and DS. Where required, interfering matrices may be removed by disintegration using a range of heat, chemical or physical treatments, possibly in combination.The resultant material is then further examined in accordance with AS 4964 - 2004. *NOTE: Even after disintegration it may be difficult to detect the presence of asbestos in some asbestos-containing bulk materials using PLM and DS. This is due to the low grade or small length or diameter of the asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos-containing sealants and mastics, asbestos-containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.*
Limit of Reporting	The performance limitation of the AS 4964 (2004) method for non-homogeneous samples is around 0.1 g/kg (equivalent to 0.01% (w/w)). Where no asbestos is found by PLM and DS, including Trace Analysis, this is considered to be at the nominal reporting limit of 0.01% (w/w). The NEPM screening level of 0.001% (w/w) is intended as an on-site determination, not a laboratory Limit of Reporting (LOR), per se. Examination of a large sample size (e.g. 500 mL) may improve the likelihood of detecting asbestos, particularly AF, to aid assessment against the NEPM criteria. Gravimetric determinations to this level of accuracy are outside of AS 4964 and hence NATA Accreditation does not cover the performance of this service (non-NATA results shown with an asterisk). *NOTE: NATA News March 2014, p.7, states in relation to AS 4964: "This is a qualitative method with a nominal reporting limit of 0.01 % " and that currently in Australia "there is no validated method available for the quantification of asbestos".This report is consistent with the analytical procedures and reporting recommendations in the NEPM and the WA DoH.*

Accredited for compliance with ISO/IEC 17025–Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Project Name RANDWICK BARRACKS
Project ID 610.30041
Date Sampled Jun 29, 2020
Report 729092-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
0407_QC277_200629	20-Jl01511	Jun 29, 2020	Approximate Sample 51g Sample consisted of: Brown coarse-grained sandy soil	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
0407_QC279_200629	20-Jl01512	Jun 29, 2020	Approximate Sample 49g Sample consisted of: Brown coarse-grained sandy soil	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Asbestos - LTM-ASB-8020	Sydney	Jul 01, 2020	Indefinite

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Phone : 0800 856 450
IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 729092
Phone: 02 9428 8100
Fax:

Received: Jul 1, 2020 3:45 PM
Due: Jul 8, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271										
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	0407_QC277_200629	Jun 29, 2020		Soil	S20-Jl01511	X	X	X	X	X
2	0407_QC279_200629	Jun 29, 2020		Soil	S20-Jl01512	X	X	X	X	X
Test Counts						2	2	2	2	2

Internal Quality Control Review and Glossary

General

1. QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Samples were analysed on an 'as received' basis.
4. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
5. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the Sample Receipt Advice.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

Units

% w/w: weight for weight basis	grams per kilogram
Filter loading:	fibres/100 graticule areas
Reported Concentration:	fibres/mL
Flowrate:	L/min

Terms

Dry	Sample is dried by heating prior to analysis
LOR	Limit of Reporting
COC	Chain of Custody
SRA	Sample Receipt Advice
ISO	International Standards Organisation
AS	Australian Standards
WA DOH	Reference document for the NEPM. Government of Western Australia, Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia (2009), including supporting document Recommended Procedures for Laboratory Analysis of Asbestos in Soil (2011)
NEPM	National Environment Protection (Assessment of Site Contamination) Measure, 2013 (as amended)
ACM	Asbestos Containing Materials. Asbestos contained within a non-asbestos matrix, typically presented in bonded and/or sound condition. For the purposes of the NEPM, ACM is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
AF	Asbestos Fines. Asbestos containing materials, including friable, weathered and bonded materials, able to pass a 7mm x 7mm sieve. Considered under the NEPM as equivalent to “non-bonded / friable”.
FA	Fibrous Asbestos. Asbestos containing materials in a friable and/or severely weathered condition. For the purposes of the NEPM, FA is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
Friable	Asbestos-containing materials of any size that may be broken or crumbled by hand pressure. For the purposes of the NEPM, this includes both AF and FA. It is outside of the laboratory’s remit to assess degree of friability.
Trace Analysis	Analytical procedure used to detect the presence of respirable fibres in the matrix.

Comments

The samples received were not collected in an approved asbestos bag and was therefore sub-sampled from the 250mL glass jar. Valid sub-sampling procedures were applied so as to ensure that the sub-samples to be analysed accurately represented the samples received.

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N/A	Not applicable

Asbestos Counter/Identifier:

[redacted] Senior Analyst-Asbestos (NSW)

Authorised by:

[redacted] Senior Analyst-Asbestos (NSW)

General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus,
North Sydney
NSW 2060

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: [redacted]

Report **729092-S**
Project name RANDWICK BARRACKS
Project ID 610.30041
Received Date Jul 01, 2020

Client Sample ID			0407_QC277_200629	0407_QC279_200629
Sample Matrix			**Soil**	**Soil**
Eurofins Sample No.			**S20-Jl01511**	**S20-Jl01512**
Date Sampled			**Jun 29, 2020**	**Jun 29, 2020**
Test/Reference	LOR	Unit		
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				
TRH C6-C9	20	mg/kg	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50
TRH C29-C36	50	mg/kg	< 50	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50	< 50
BTEX				
Benzene	0.1	mg/kg	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	84	91
Volatile Organics				
1.1-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5	< 0.5

Client Sample ID			0407_QC277_200629	0407_QC279_200629
Sample Matrix			**Soil**	**Soil**
Eurofins Sample No.			**S20-JI01511**	**S20-JI01512**
Date Sampled			**Jun 29, 2020**	**Jun 29, 2020**
Test/Reference	LOR	Unit		
Volatile Organics				
Benzene	0.1	mg/kg	< 0.1	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5	< 0.5
Bromoform	0.5	mg/kg	< 0.5	< 0.5
Bromomethane	0.5	mg/kg	< 0.5	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5	< 0.5
Chloroethane	0.5	mg/kg	< 0.5	< 0.5
Chloroform	0.5	mg/kg	< 0.5	< 0.5
Chloromethane	0.5	mg/kg	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1
Iodomethane	0.5	mg/kg	< 0.5	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5	< 0.5
o-Xylene	0.1	mg/kg	< 0.1	< 0.1
Styrene	0.5	mg/kg	< 0.5	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5	< 0.5
Toluene	0.1	mg/kg	< 0.1	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3
Total MAH*	0.5	mg/kg	< 0.5	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5
4-Bromofluorobenzene (surr.)	1	%	84	91
Toluene-d8 (surr.)	1	%	110	117
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100
TRH >C34-C40	100	mg/kg	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100

Client Sample ID			0407_QC277_200629	0407_QC279_200629
Sample Matrix			**Soil**	**Soil**
Eurofins Sample No.			**S20-JI01511**	**S20-JI01512**
Date Sampled			**Jun 29, 2020**	**Jun 29, 2020**
Test/Reference	LOR	Unit		
Polycyclic Aromatic Hydrocarbons				
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	75	88
p-Terphenyl-d14 (surr.)	1	%	117	INT
Organochlorine Pesticides				
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05
a-BHC	0.05	mg/kg	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05
b-BHC	0.05	mg/kg	< 0.05	< 0.05
d-BHC	0.05	mg/kg	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 2	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05
Methoxychlor	0.2	mg/kg	< 0.2	< 0.2
Toxaphene	1	mg/kg	< 1	< 1
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 2	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 2	< 0.2
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.2	< 0.2
Dibutylchlorendate (surr.)	1	%	INT	INT
Tetrachloro-m-xylene (surr.)	1	%	113	136

Client Sample ID			0407_QC277_200629	0407_QC279_200629
Sample Matrix			**Soil**	**Soil**
Eurofins Sample No.			**S20-JI01511**	**S20-JI01512**
Date Sampled			**Jun 29, 2020**	**Jun 29, 2020**
Test/Reference	LOR	Unit		
Organophosphorus Pesticides				
Azinphos-methyl	0.2	mg/kg	< 0.2	< 0.2
Bolstar	0.2	mg/kg	< 0.2	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2	< 0.2
Coumaphos	2	mg/kg	< 2	< 2
Demeton-S	0.2	mg/kg	< 0.2	< 0.2
Demeton-O	0.2	mg/kg	< 0.2	< 0.2
Diazinon	0.2	mg/kg	< 0.2	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2	< 0.2
Dimethoate	0.2	mg/kg	< 0.2	< 0.2
Disulfoton	0.2	mg/kg	< 0.2	< 0.2
EPN	0.2	mg/kg	< 0.2	< 0.2
Ethion	0.2	mg/kg	< 0.2	< 0.2
Ethoprop	0.2	mg/kg	< 0.2	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2	< 0.2
Fenthion	0.2	mg/kg	< 0.2	< 0.2
Malathion	0.2	mg/kg	< 0.2	< 0.2
Merphos	0.2	mg/kg	< 0.2	< 0.2
Methyl parathion	0.2	mg/kg	< 0.2	< 0.2
Mevinphos	0.2	mg/kg	< 0.2	< 0.2
Monocrotophos	2	mg/kg	< 2	< 2
Naled	0.2	mg/kg	< 0.2	< 0.2
Omethoate	2	mg/kg	< 2	< 2
Phorate	0.2	mg/kg	< 0.2	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2	< 0.2
Ronnel	0.2	mg/kg	< 0.2	< 0.2
Terbufos	0.2	mg/kg	< 0.2	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2	< 0.2
Tokuthion	0.2	mg/kg	< 0.2	< 0.2
Trichloronate	0.2	mg/kg	< 0.2	< 0.2
Triphenylphosphate (surr.)	1	%	148	INT
Polychlorinated Biphenyls				
Aroclor-1016	0.5	mg/kg	< 0.5	< 0.5
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1
Aroclor-1232	0.5	mg/kg	< 0.5	< 0.5
Aroclor-1242	0.5	mg/kg	< 0.5	< 0.5
Aroclor-1248	0.5	mg/kg	< 0.5	< 0.5
Aroclor-1254	0.5	mg/kg	< 0.5	< 0.5
Aroclor-1260	0.5	mg/kg	< 0.5	< 0.5
Total PCB*	0.5	mg/kg	< 0.5	< 0.5
Dibutylchlorendate (surr.)	1	%	INT	INT
Tetrachloro-m-xylene (surr.)	1	%	113	136

Client Sample ID			0407_QC277_200629	0407_QC279_200629
Sample Matrix			**Soil**	**Soil**
Eurofins Sample No.			**S20-JI01511**	**S20-JI01512**
Date Sampled			**Jun 29, 2020**	**Jun 29, 2020**
Test/Reference	LOR	Unit		
Phenols (Halogenated)				
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1
Phenols (non-Halogenated)				
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2
2-Nitrophenol	1	mg/kg	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5	< 5
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4
4-Nitrophenol	5	mg/kg	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20
Phenol-d6 (surr.)	1	%	85	93
Heavy Metals				
Arsenic	2	mg/kg	< 2	< 2
Cadmium	0.4	mg/kg	< 0.4	0.5
Chromium	5	mg/kg	< 5	< 5
Copper	5	mg/kg	< 5	7.9
Lead	5	mg/kg	30	30
Mercury	0.1	mg/kg	< 0.1	< 0.1
Nickel	5	mg/kg	< 5	< 5
Zinc	5	mg/kg	30	27
% Moisture	1	%	5.7	4.5

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jul 03, 2020	
- Method: LTM-ORG-2010 TRH C6-C40			
Polycyclic Aromatic Hydrocarbons	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (Halogenated)	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (non-Halogenated)	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Metals M8	Sydney	Jul 03, 2020	180 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Volatile Organics	Sydney	Jul 03, 2020	7 Days
- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices			
Eurofins | mgt Suite B15			
Organochlorine Pesticides	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Organophosphorus Pesticides	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS			
Polychlorinated Biphenyls	Sydney	Jul 03, 2020	28 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
% Moisture	Sydney	Jul 01, 2020	14 Days
- Method: LTM-GEN-7080 Moisture			

eurofins | Environment Testing

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Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 729092
Phone: 02 9428 8100
Fax:

Received: Jul 1, 2020 3:45 PM
Due: Jul 8, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271										
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	0407_QC277_200629	Jun 29, 2020		Soil	S20-Jl01511	X	X	X	X	X
2	0407_QC279_200629	Jun 29, 2020		Soil	S20-Jl01512	X	X	X	X	X
Test Counts						2	2	2	2	2

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

****NOTE:** pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram

mg/L: milligrams per litre

ug/L: micrograms per litre

ppm: Parts per million

ppb: Parts per billion

%: Percentage

org/100mL: Organisms per 100 millilitres

NTU: Nephelometric Turbidity Units

MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version 5.3
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling.Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
Method Blank							
BTEX							
Benzene	mg/kg	< 0.1			0.1	Pass	
Toluene	mg/kg	< 0.1			0.1	Pass	
Ethylbenzene	mg/kg	< 0.1			0.1	Pass	
m&p-Xylenes	mg/kg	< 0.2			0.2	Pass	
o-Xylene	mg/kg	< 0.1			0.1	Pass	
Xylenes - Total*	mg/kg	< 0.3			0.3	Pass	
Method Blank							
Volatile Organics							
1.1-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
1.1.1-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.1.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dibromoethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.3-Trichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.4-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.3.5-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.4-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
2-Butanone (MEK)	mg/kg	< 0.5			0.5	Pass	
2-Propanone (Acetone)	mg/kg	< 0.5			0.5	Pass	
4-Chlorotoluene	mg/kg	< 0.5			0.5	Pass	
4-Methyl-2-pentanone (MIBK)	mg/kg	< 0.5			0.5	Pass	
Allyl chloride	mg/kg	< 0.5			0.5	Pass	
Bromobenzene	mg/kg	< 0.5			0.5	Pass	
Bromochloromethane	mg/kg	< 0.5			0.5	Pass	
Bromodichloromethane	mg/kg	< 0.5			0.5	Pass	
Bromoform	mg/kg	< 0.5			0.5	Pass	
Bromomethane	mg/kg	< 0.5			0.5	Pass	
Carbon disulfide	mg/kg	< 0.5			0.5	Pass	
Carbon Tetrachloride	mg/kg	< 0.5			0.5	Pass	
Chlorobenzene	mg/kg	< 0.5			0.5	Pass	
Chloroethane	mg/kg	< 0.5			0.5	Pass	
Chloroform	mg/kg	< 0.5			0.5	Pass	
Chloromethane	mg/kg	< 0.5			0.5	Pass	
cis-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
cis-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Dibromochloromethane	mg/kg	< 0.5			0.5	Pass	
Dibromomethane	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Dichlorodifluoromethane	mg/kg	< 0.5			0.5	Pass	
Iodomethane	mg/kg	< 0.5			0.5	Pass	
Isopropyl benzene (Cumene)	mg/kg	< 0.5			0.5	Pass	
Methylene Chloride	mg/kg	< 0.5			0.5	Pass	
Styrene	mg/kg	< 0.5			0.5	Pass	
Tetrachloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Trichloroethene	mg/kg	< 0.5			0.5	Pass	
Trichlorofluoromethane	mg/kg	< 0.5			0.5	Pass	
Vinyl chloride	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Organochlorine Pesticides							
Chlordanes - Total	mg/kg	< 0.1			0.1	Pass	
4.4'-DDD	mg/kg	< 0.05			0.05	Pass	
4.4'-DDE	mg/kg	< 0.05			0.05	Pass	
4.4'-DDT	mg/kg	< 0.05			0.05	Pass	
a-BHC	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-BHC	mg/kg	< 0.05			0.05	Pass	
d-BHC	mg/kg	< 0.05			0.05	Pass	
Dieldrin	mg/kg	< 0.05			0.05	Pass	
Endosulfan I	mg/kg	< 0.05			0.05	Pass	
Endosulfan II	mg/kg	< 0.05			0.05	Pass	
Endosulfan sulphate	mg/kg	< 0.05			0.05	Pass	
Endrin	mg/kg	< 0.05			0.05	Pass	
Endrin aldehyde	mg/kg	< 0.05			0.05	Pass	
Endrin ketone	mg/kg	< 0.05			0.05	Pass	
g-BHC (Lindane)	mg/kg	< 0.05			0.05	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Heptachlor	mg/kg	< 0.05			0.05	Pass	
Heptachlor epoxide	mg/kg	< 0.05			0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05			0.05	Pass	
Methoxychlor	mg/kg	< 0.2			0.2	Pass	
Toxaphene	mg/kg	< 1			1	Pass	
Method Blank							
Organophosphorus Pesticides							
Azinphos-methyl	mg/kg	< 0.2			0.2	Pass	
Bolstar	mg/kg	< 0.2			0.2	Pass	
Chlorfenvinphos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos-methyl	mg/kg	< 0.2			0.2	Pass	
Coumaphos	mg/kg	< 2			2	Pass	
Demeton-S	mg/kg	< 0.2			0.2	Pass	
Demeton-O	mg/kg	< 0.2			0.2	Pass	
Diazinon	mg/kg	< 0.2			0.2	Pass	
Dichlorvos	mg/kg	< 0.2			0.2	Pass	
Dimethoate	mg/kg	< 0.2			0.2	Pass	
Disulfoton	mg/kg	< 0.2			0.2	Pass	
EPN	mg/kg	< 0.2			0.2	Pass	
Ethion	mg/kg	< 0.2			0.2	Pass	
Ethoprop	mg/kg	< 0.2			0.2	Pass	
Ethyl parathion	mg/kg	< 0.2			0.2	Pass	
Fenitrothion	mg/kg	< 0.2			0.2	Pass	
Fensulfothion	mg/kg	< 0.2			0.2	Pass	
Fenthion	mg/kg	< 0.2			0.2	Pass	
Malathion	mg/kg	< 0.2			0.2	Pass	
Merphos	mg/kg	< 0.2			0.2	Pass	
Methyl parathion	mg/kg	< 0.2			0.2	Pass	
Mevinphos	mg/kg	< 0.2			0.2	Pass	
Monocrotophos	mg/kg	< 2			2	Pass	
Naled	mg/kg	< 0.2			0.2	Pass	
Omethoate	mg/kg	< 2			2	Pass	
Phorate	mg/kg	< 0.2			0.2	Pass	
Pirimiphos-methyl	mg/kg	< 0.2			0.2	Pass	
Pyrazophos	mg/kg	< 0.2			0.2	Pass	
Ronnel	mg/kg	< 0.2			0.2	Pass	
Terbufos	mg/kg	< 0.2			0.2	Pass	
Tetrachlorvinphos	mg/kg	< 0.2			0.2	Pass	
Tokuthion	mg/kg	< 0.2			0.2	Pass	
Trichloronate	mg/kg	< 0.2			0.2	Pass	
Method Blank							
Polychlorinated Biphenyls							
Aroclor-1016	mg/kg	< 0.5			0.5	Pass	
Aroclor-1221	mg/kg	< 0.1			0.1	Pass	
Aroclor-1232	mg/kg	< 0.5			0.5	Pass	
Aroclor-1242	mg/kg	< 0.5			0.5	Pass	
Aroclor-1248	mg/kg	< 0.5			0.5	Pass	
Aroclor-1254	mg/kg	< 0.5			0.5	Pass	
Aroclor-1260	mg/kg	< 0.5			0.5	Pass	
Total PCB*	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Phenols (Halogenated)							
2-Chlorophenol	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2.4-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4.5-Trichlorophenol	mg/kg	< 1			1	Pass	
2.4.6-Trichlorophenol	mg/kg	< 1			1	Pass	
2.6-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
4-Chloro-3-methylphenol	mg/kg	< 1			1	Pass	
Pentachlorophenol	mg/kg	< 1			1	Pass	
Tetrachlorophenols - Total	mg/kg	< 10			10	Pass	
Method Blank							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	mg/kg	< 20			20	Pass	
2-Methyl-4.6-dinitrophenol	mg/kg	< 5			5	Pass	
2-Methylphenol (o-Cresol)	mg/kg	< 0.2			0.2	Pass	
2-Nitrophenol	mg/kg	< 1			1	Pass	
2.4-Dimethylphenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dinitrophenol	mg/kg	< 5			5	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/kg	< 0.4			0.4	Pass	
4-Nitrophenol	mg/kg	< 5			5	Pass	
Dinoseb	mg/kg	< 20			20	Pass	
Phenol	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Nickel	mg/kg	< 5			5	Pass	
Zinc	mg/kg	< 5			5	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C10-C14	%	104			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	121			70-130	Pass	
Toluene	%	120			70-130	Pass	
Ethylbenzene	%	112			70-130	Pass	
m&p-Xylenes	%	113			70-130	Pass	
o-Xylene	%	114			70-130	Pass	
Xylenes - Total*	%	113			70-130	Pass	
LCS - % Recovery							
Volatile Organics							
1.1-Dichloroethene	%	121			70-130	Pass	
1.1.1-Trichloroethane	%	120			70-130	Pass	
1.2-Dichlorobenzene	%	111			70-130	Pass	
1.2-Dichloroethane	%	123			70-130	Pass	
Trichloroethene	%	120			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	77			70-130	Pass	
TRH >C10-C16	%	92			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	80			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Acenaphthylene	%	81			70-130	Pass	
Anthracene	%	79			70-130	Pass	
Benz(a)anthracene	%	84			70-130	Pass	
Benzo(a)pyrene	%	76			70-130	Pass	
Benzo(b&j)fluoranthene	%	82			70-130	Pass	
Benzo(g.h.i)perylene	%	81			70-130	Pass	
Benzo(k)fluoranthene	%	83			70-130	Pass	
Chrysene	%	82			70-130	Pass	
Dibenz(a.h)anthracene	%	81			70-130	Pass	
Fluoranthene	%	80			70-130	Pass	
Fluorene	%	81			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	86			70-130	Pass	
Naphthalene	%	83			70-130	Pass	
Phenanthrene	%	85			70-130	Pass	
Pyrene	%	80			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	87			70-130	Pass	
4.4'-DDD	%	94			70-130	Pass	
4.4'-DDE	%	92			70-130	Pass	
4.4'-DDT	%	103			70-130	Pass	
a-BHC	%	87			70-130	Pass	
Aldrin	%	89			70-130	Pass	
b-BHC	%	91			70-130	Pass	
d-BHC	%	91			70-130	Pass	
Dieldrin	%	89			70-130	Pass	
Endosulfan I	%	99			70-130	Pass	
Endosulfan II	%	87			70-130	Pass	
Endosulfan sulphate	%	90			70-130	Pass	
Endrin	%	80			70-130	Pass	
Endrin aldehyde	%	88			70-130	Pass	
Endrin ketone	%	91			70-130	Pass	
g-BHC (Lindane)	%	98			70-130	Pass	
Heptachlor	%	90			70-130	Pass	
Heptachlor epoxide	%	92			70-130	Pass	
Hexachlorobenzene	%	83			70-130	Pass	
Methoxychlor	%	99			70-130	Pass	
LCS - % Recovery							
Organophosphorus Pesticides							
Diazinon	%	72			70-130	Pass	
Dimethoate	%	77			70-130	Pass	
Ethion	%	82			70-130	Pass	
Fenitrothion	%	104			70-130	Pass	
Methyl parathion	%	100			70-130	Pass	
Mevinphos	%	77			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls							
Aroclor-1016	%	110			70-130	Pass	
Aroclor-1260	%	116			70-130	Pass	
LCS - % Recovery							
Phenols (Halogenated)							
2-Chlorophenol	%	83			30-130	Pass	
2.4-Dichlorophenol	%	85			30-130	Pass	
2.4.5-Trichlorophenol	%	101			30-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2.4.6-Trichlorophenol	%	101			30-130	Pass	
2.6-Dichlorophenol	%	88			30-130	Pass	
4-Chloro-3-methylphenol	%	88			30-130	Pass	
Pentachlorophenol	%	87			30-130	Pass	
Tetrachlorophenols - Total	%	88			30-130	Pass	
LCS - % Recovery							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	%	85			30-130	Pass	
2-Methyl-4.6-dinitrophenol	%	88			30-130	Pass	
2-Methylphenol (o-Cresol)	%	83			30-130	Pass	
2-Nitrophenol	%	104			30-130	Pass	
2.4-Dimethylphenol	%	83			30-130	Pass	
2.4-Dinitrophenol	%	111			30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	%	84			30-130	Pass	
4-Nitrophenol	%	106			30-130	Pass	
Dinoseb	%	97			30-130	Pass	
Phenol	%	83			30-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	108			70-130	Pass	
Cadmium	%	105			70-130	Pass	
Chromium	%	106			70-130	Pass	
Copper	%	106			70-130	Pass	
Lead	%	105			70-130	Pass	
Mercury	%	107			70-130	Pass	
Nickel	%	106			70-130	Pass	
Zinc	%	106			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C10-C14	S20-Jn43192	NCP	%	114			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	S20-Jl05171	NCP	%	81			70-130	Pass	
Toluene	S20-Jl05171	NCP	%	76			70-130	Pass	
Ethylbenzene	S20-Jl05171	NCP	%	77			70-130	Pass	
m&p-Xylenes	S20-Jl05171	NCP	%	76			70-130	Pass	
o-Xylene	S20-Jl05171	NCP	%	82			70-130	Pass	
Xylenes - Total*	S20-Jl05171	NCP	%	78			70-130	Pass	
Spike - % Recovery									
Volatile Organics				Result 1					
1.1-Dichloroethene	S20-Jl05171	NCP	%	86			70-130	Pass	
1.1.1-Trichloroethane	S20-Jl05171	NCP	%	78			70-130	Pass	
1.2-Dichlorobenzene	S20-Jl05171	NCP	%	75			70-130	Pass	
1.2-Dichloroethane	S20-Jl05171	NCP	%	81			70-130	Pass	
Trichloroethene	S20-Jl05171	NCP	%	78			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
TRH >C10-C16	S20-Jn43192	NCP	%	99			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	S20-Jl00589	NCP	%	83			70-130	Pass	
Acenaphthylene	S20-Jl00589	NCP	%	80			70-130	Pass	
Anthracene	S20-Jl00589	NCP	%	81			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Benz(a)anthracene	S20-Jl00589	NCP	%	85			70-130	Pass	
Benzo(a)pyrene	S20-Jl00589	NCP	%	75			70-130	Pass	
Benzo(b&j)fluoranthene	S20-Jl00589	NCP	%	80			70-130	Pass	
Benzo(k)fluoranthene	S20-Jl00589	NCP	%	93			70-130	Pass	
Chrysene	S20-Jl00589	NCP	%	70			70-130	Pass	
Fluoranthene	S20-Jl00589	NCP	%	82			70-130	Pass	
Fluorene	S20-Jl00589	NCP	%	81			70-130	Pass	
Naphthalene	S20-Jl00589	NCP	%	82			70-130	Pass	
Phenanthrene	S20-Jl00589	NCP	%	82			70-130	Pass	
Pyrene	S20-Jl00589	NCP	%	82			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
Chlordanes - Total	S20-Jl00589	NCP	%	92			70-130	Pass	
4.4'-DDD	S20-Jl00589	NCP	%	117			70-130	Pass	
4.4'-DDE	S20-Jl00589	NCP	%	88			70-130	Pass	
a-BHC	S20-Jl00589	NCP	%	76			70-130	Pass	
b-BHC	S20-Jl00589	NCP	%	92			70-130	Pass	
d-BHC	S20-Jl00589	NCP	%	84			70-130	Pass	
Dieldrin	S20-Jl00589	NCP	%	91			70-130	Pass	
Endosulfan I	S20-Jl00589	NCP	%	86			70-130	Pass	
Endosulfan sulphate	S20-Jl00589	NCP	%	86			70-130	Pass	
Endrin	S20-Jl00589	NCP	%	82			70-130	Pass	
g-BHC (Lindane)	S20-Jl00589	NCP	%	85			70-130	Pass	
Heptachlor epoxide	S20-Jl00589	NCP	%	96			70-130	Pass	
Hexachlorobenzene	S20-Jl00589	NCP	%	88			70-130	Pass	
Spike - % Recovery									
Organophosphorus Pesticides				Result 1					
Diazinon	S20-Jl00589	NCP	%	73			70-130	Pass	
Dimethoate	S20-Jl00589	NCP	%	94			70-130	Pass	
Ethion	S20-Jl00589	NCP	%	98			70-130	Pass	
Fenitrothion	S20-Jl00589	NCP	%	93			70-130	Pass	
Methyl parathion	S20-Jl00589	NCP	%	91			70-130	Pass	
Mevinphos	S20-Jl00589	NCP	%	98			70-130	Pass	
Spike - % Recovery									
Polychlorinated Biphenyls				Result 1					
Aroclor-1016	S20-Jl00589	NCP	%	103			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	S20-Jl01608	NCP	%	99			70-130	Pass	
Cadmium	S20-Jl01608	NCP	%	101			70-130	Pass	
Chromium	S20-Jl01608	NCP	%	89			70-130	Pass	
Copper	S20-Jl01608	NCP	%	97			70-130	Pass	
Lead	S20-Jl01608	NCP	%	99			70-130	Pass	
Mercury	S20-Jl01608	NCP	%	108			70-130	Pass	
Nickel	S20-Jl01608	NCP	%	93			70-130	Pass	
Zinc	S20-Jl01608	NCP	%	82			70-130	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C6-C9	S20-Jl01539	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	S20-Jn43190	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	S20-Jn43190	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	S20-Jn43190	NCP	mg/kg	< 50	< 50	<1	30%	Pass	

Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S20-Jl01539	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Toluene	S20-Jl01539	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Ethylbenzene	S20-Jl01539	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
m&p-Xylenes	S20-Jl01539	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
o-Xylene	S20-Jl01539	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes - Total*	S20-Jl01539	NCP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
1.1-Dichloroethane	S20-Jl01539	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1-Dichloroethene	S20-Jl01539	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1-Trichloroethane	S20-Jl01539	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	S20-Jl01539	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2-Trichloroethane	S20-Jl01539	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	S20-Jl01539	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dibromoethane	S20-Jl01539	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichlorobenzene	S20-Jl01539	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloroethane	S20-Jl01539	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloropropane	S20-Jl01539	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.3-Trichloropropane	S20-Jl01539	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trimethylbenzene	S20-Jl01539	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichlorobenzene	S20-Jl01539	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichloropropane	S20-Jl01539	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3.5-Trimethylbenzene	S20-Jl01539	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.4-Dichlorobenzene	S20-Jl01539	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Butanone (MEK)	S20-Jl01539	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Propanone (Acetone)	S20-Jl01539	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chlorotoluene	S20-Jl01539	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Methyl-2-pentanone (MIBK)	S20-Jl01539	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Allyl chloride	S20-Jl01539	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromobenzene	S20-Jl01539	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromochloromethane	S20-Jl01539	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromodichloromethane	S20-Jl01539	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromoform	S20-Jl01539	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromomethane	S20-Jl01539	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon disulfide	S20-Jl01539	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon Tetrachloride	S20-Jl01539	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chlorobenzene	S20-Jl01539	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroethane	S20-Jl01539	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroform	S20-Jl01539	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloromethane	S20-Jl01539	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.2-Dichloroethene	S20-Jl01539	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.3-Dichloropropene	S20-Jl01539	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromochloromethane	S20-Jl01539	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromomethane	S20-Jl01539	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dichlorodifluoromethane	S20-Jl01539	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Iodomethane	S20-Jl01539	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Isopropyl benzene (Cumene)	S20-Jl01539	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Methylene Chloride	S20-Jl01539	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Styrene	S20-Jl01539	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Tetrachloroethene	S20-Jl01539	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.2-Dichloroethene	S20-Jl01539	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.3-Dichloropropene	S20-Jl01539	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichloroethene	S20-Jl01539	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichlorofluoromethane	S20-Jl01539	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Vinyl chloride	S20-Jl01539	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	S20-Jl01539	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	S20-Jl01539	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH >C10-C16	S20-Jn43190	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	S20-Jn43190	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	S20-Jn43190	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	S20-Jl08593	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	S20-Jl08593	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	S20-Jl08593	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	S20-Jl08593	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	S20-Jl08593	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	S20-Jl08593	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	S20-Jl08593	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	S20-Jl08593	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	S20-Jl08593	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	S20-Jl08593	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	S20-Jl08593	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	S20-Jl08593	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	S20-Jl08593	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	S20-Jl08593	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	S20-Jl08593	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	S20-Jl08593	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	S20-Jl08593	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	S20-Jl08593	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	S20-Jl08593	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	S20-Jl08593	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
a-BHC	S20-Jl08593	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	S20-Jl08593	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-BHC	S20-Jl08593	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-BHC	S20-Jl08593	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	S20-Jl08593	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	S20-Jl08593	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	S20-Jl08593	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	S20-Jl08593	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	S20-Jl08593	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	S20-Jl08593	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	S20-Jl08593	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-BHC (Lindane)	S20-Jl08593	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	S20-Jl08593	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	S20-Jl08593	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	S20-Jl08593	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Azinphos-methyl	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Bolstar	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorfenvinphos	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos-methyl	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Coumaphos	S20-Jl08593	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Demeton-S	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	

Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Demeton-O	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Diazinon	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dichlorvos	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dimethoate	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Disulfoton	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
EPN	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethion	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethoprop	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethyl parathion	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenitrothion	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fensulfothion	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenthion	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Malathion	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Merphos	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Methyl parathion	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Mevinphos	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Monocrotophos	S20-Jl08593	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Naled	S20-Jl08593	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Omethoate	S20-Jl08593	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Phorate	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pirimiphos-methyl	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pyrazophos	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ronnel	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Terbufos	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tetrachlorvinphos	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tokuthion	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Trichloronate	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Aroclor-1016	S20-Jn42365	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1221	S20-Jn42365	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1232	S20-Jn42365	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1242	S20-Jn42365	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1248	S20-Jn42365	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1254	S20-Jn42365	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1260	S20-Jn42365	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Total PCB*	S20-Jn42365	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Phenols (Halogenated)				Result 1	Result 2	RPD			
2-Chlorophenol	S20-Jn42365	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dichlorophenol	S20-Jn42365	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4.5-Trichlorophenol	S20-Jn42365	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4.6-Trichlorophenol	S20-Jn42365	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2.6-Dichlorophenol	S20-Jn42365	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chloro-3-methylphenol	S20-Jn42365	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Pentachlorophenol	S20-Jn42365	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Tetrachlorophenols - Total	S20-Jn42365	NCP	mg/kg	< 10	< 10	<1	30%	Pass	
Duplicate									
Phenols (non-Halogenated)				Result 1	Result 2	RPD			
2-Cyclohexyl-4.6-dinitrophenol	S20-Jn42365	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
2-Methyl-4.6-dinitrophenol	S20-Jn42365	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Methylphenol (o-Cresol)	S20-Jn42365	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
2-Nitrophenol	S20-Jn42365	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4-Dimethylphenol	S20-Jn42365	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Phenols (non-Halogenated)				Result 1	Result 2	RPD			
2.4-Dinitrophenol	S20-Jn42365	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
3&4-Methylphenol (m&p-Cresol)	S20-Jn42365	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
4-Nitrophenol	S20-Jn42365	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Dinoseb	S20-Jn42365	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
Phenol	S20-Jn42365	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	S20-Jl02349	NCP	mg/kg	10	15	40	30%	Fail	Q15
Cadmium	S20-Jl02349	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	S20-Jl02349	NCP	mg/kg	17	27	43	30%	Fail	Q15
Copper	S20-Jl02349	NCP	mg/kg	27	27	<1	30%	Pass	
Lead	S20-Jl02349	NCP	mg/kg	20	32	48	30%	Fail	Q15
Mercury	S20-Jl02349	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Nickel	S20-Jl02349	NCP	mg/kg	8.7	11	27	30%	Pass	
Zinc	S20-Jl02349	NCP	mg/kg	62	71	13	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	S20-Jl01549	NCP	%	8.3	7.4	12	30%	Pass	

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
Q15	The RPD reported passes Eurofins Environment Testing's QC - Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report.

Authorised By

[redacted]

Analytical Services Manager
Senior Analyst-Organic (NSW)
Senior Analyst-Metal (NSW)
Senior Analyst-Asbestos (NSW)

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

Eurofins shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.

000689

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Dawin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☑ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT: DHA	LABORATORY: SGS
PROJECT: Rockhack Barracks	LABORATORY ADDRESS: SYD
PROJECT NUMBER: 610-30041	SAMPLER: [redacted]
PROJECT MANAGER: [redacted]	SAMPLER CONTACT No:
PM CONTACT No:	Email Reports and Invoices to: LGR510@slrconsulting.com

Turnaround Time (TAT)

- ☑ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT:

COC Number: 4 of 4

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: Suite A	Additional Information (Comment on any gross contamination or specific requirements)
	0407_QC270_200626	26.6.20	Soil	>	Pleas Forward to Eurofins for Suite A.	
	0407_QC271_200626	"	"			
	0407_QC275_	"	"			

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign [redacted]	Date / Time	Received by	Sign [redacted]	Date / Time 1/7/20	Temperature Received: 11.20°C
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

eurofins | Environment Testing

Melbourne
6 Monterey Road
Dandenong South Vic 3175
Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

Sydney
Unit F3, Building F
16 Mars Road
Lane Cove West NSW 2066
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

Brisbane
1/21 Smallwood Place
Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Perth
2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261 Site # 23736

ABN – 50 005 085 521 e.mail : EnviroSales@eurofins.com web : www.eurofins.com.au

Sample Receipt Advice

Company name:	**SLR Consulting (Sydney)**
Contact name:	[redacted]
Project name:	RANDWICK BARRACKS
Project ID:	610.30041
COC number:	000689
Turn around time:	5 Day
Date/Time received:	Jul 1, 2020 4:45 PM
Eurofins reference:	**729095**

Sample information

☑ A detailed list of analytes logged into our LIMS, is included in the attached summary table.

☑ All samples have been received as described on the above COC.

☑ COC has been completed correctly.

☑ Attempt to chill was evident.

☑ Appropriately preserved sample containers have been used.

☑ All samples were received in good condition.

☑ Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.

☑ Appropriate sample containers have been used.

☒ Split sample sent to requested external lab.

☒ Some samples have been subcontracted.

N/A Custody Seals intact (if used).

Contact notes

If you have any questions with respect to these samples please contact:

[redacted] on Phone [redacted] or by e.mail: [redacted]@eurofins.com

Results will be delivered electronically via e.mail to [redacted]@slrconsulting.com.

Note: A copy of these results will also be delivered to the general SLR Consulting (Sydney) email address.

eurofins | Environment Testing

ABN – 50 005 085 521 web : www.eurofins.com.au e.mail : EnviroSales@eurofins.com

Australia

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Site # 1254 & 14271

Sydney
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NATA # 1261 Site # 18217

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NATA # 1261 Site # 20794

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Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261
Site # 23736

New Zealand

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35 O'Rorke Road
Penrose, Auckland 1061
Phone : +64 9 526 45 51
IANZ # 1327

Christchurch
43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 729095
Phone: 02 9428 8100
Fax:

Received: Jul 1, 2020 4:45 PM
Due: Jul 8, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271										
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	0407_QC270_200626	Jun 26, 2020		Soil	S20-Jl01519	X	X	X	X	X
2	0407_QC271_200626	Jun 26, 2020		Soil	S20-Jl01520	X	X	X	X	X
3	0407_QC275_200626	Jun 26, 2020		Soil	S20-Jl01521	X	X	X	X	X
Test Counts						3	3	3	3	3

Certificate of Analysis

eurofins | Environment Testing

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025–Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus
North Sydney
NSW 2060

Attention:	[redacted]
Report	729095-AID
Project Name	RANDWICK BARRACKS
Project ID	610.30041
Received Date	Jul 01, 2020
Date Reported	Jul 08, 2020

Methodology:

Asbestos Fibre Identification	Conducted in accordance with the Australian Standard AS 4964 – 2004: Method for the Qualitative Identification of Asbestos in Bulk Samples and in-house Method LTM-ASB-8020 by polarised light microscopy (PLM) and dispersion staining (DS) techniques. *NOTE: Positive Trace Analysis results indicate the sample contains detectable respirable fibres.*
Unknown Mineral Fibres	Mineral fibres of unknown type, as determined by PLM with DS, may require another analytical technique, such as Electron Microscopy, to confirm unequivocal identity. *NOTE: While Actinolite, Anthophyllite and Tremolite asbestos may be detected by PLM with DS, due to variability in the optical properties of these materials, AS4964 requires that these are reported as UMF unless confirmed by an independent technique.*
Subsampling Soil Samples	The whole sample submitted is first dried and then passed through a 10mm sieve followed by a 2mm sieve. All fibrous matter greater than 10mm, greater than 2mm as well as the material passing through the 2mm sieve are retained and analysed for the presence of asbestos. If the sub 2mm fraction is greater than approximately 30 to 60g then a sub-sampling routine based on ISO 3082:2009(E) is employed. *NOTE: Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be sub-sampled for trace analysis, in accordance with AS 4964-2004.*
Bonded asbestos-containing material (ACM)	The material is first examined and any fibres isolated for identification by PLM and DS. Where required, interfering matrices may be removed by disintegration using a range of heat, chemical or physical treatments, possibly in combination.The resultant material is then further examined in accordance with AS 4964 - 2004. *NOTE: Even after disintegration it may be difficult to detect the presence of asbestos in some asbestos-containing bulk materials using PLM and DS. This is due to the low grade or small length or diameter of the asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos-containing sealants and mastics, asbestos-containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.*
Limit of Reporting	The performance limitation of the AS 4964 (2004) method for non-homogeneous samples is around 0.1 g/kg (equivalent to 0.01% (w/w)). Where no asbestos is found by PLM and DS, including Trace Analysis, this is considered to be at the nominal reporting limit of 0.01% (w/w). The NEPM screening level of 0.001% (w/w) is intended as an on-site determination, not a laboratory Limit of Reporting (LOR), per se. Examination of a large sample size (e.g. 500 mL) may improve the likelihood of detecting asbestos, particularly AF, to aid assessment against the NEPM criteria. Gravimetric determinations to this level of accuracy are outside of AS 4964 and hence NATA Accreditation does not cover the performance of this service (non-NATA results shown with an asterisk). *NOTE: NATA News March 2014, p.7, states in relation to AS 4964: "This is a qualitative method with a nominal reporting limit of 0.01 % " and that currently in Australia "there is no validated method available for the quantification of asbestos".This report is consistent with the analytical procedures and reporting recommendations in the NEPM and the WA DoH.*

Accredited for compliance with ISO/IEC 17025–Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Project Name RANDWICK BARRACKS
Project ID 610.30041
Date Sampled Jun 26, 2020
Report 729095-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
0407_QC270_200626	20-JI01519	Jun 26, 2020	Approximate Sample 51g Sample consisted of: Brown coarse-grained sandy soil	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
0407_QC271_200626	20-JI01520	Jun 26, 2020	Approximate Sample 42g Sample consisted of: Brown coarse-grained sandy soil, rocks and organic debris	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
0407_QC275_200626	20-JI01521	Jun 26, 2020	Approximate Sample 58g Sample consisted of: Brown coarse-grained sandy soil	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Asbestos - LTM-ASB-8020	Sydney	Jul 01, 2020	Indefinite

eurofins | Environment Testing

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Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 729095
Phone: 02 9428 8100
Fax:

Received: Jul 1, 2020 4:45 PM
Due: Jul 8, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271										
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	0407_QC270_200626	Jun 26, 2020		Soil	S20-Jl01519	X	X	X	X	X
2	0407_QC271_200626	Jun 26, 2020		Soil	S20-Jl01520	X	X	X	X	X
3	0407_QC275_200626	Jun 26, 2020		Soil	S20-Jl01521	X	X	X	X	X
Test Counts						3	3	3	3	3

Internal Quality Control Review and Glossary

General

1. QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Samples were analysed on an 'as received' basis.
4. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
5. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the Sample Receipt Advice.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

Units

% w/w: weight for weight basis	grams per kilogram
Filter loading:	fibres/100 graticule areas
Reported Concentration:	fibres/mL
Flowrate:	L/min

Terms

Dry	Sample is dried by heating prior to analysis
LOR	Limit of Reporting
COC	Chain of Custody
SRA	Sample Receipt Advice
ISO	International Standards Organisation
AS	Australian Standards
WA DOH	Reference document for the NEPM. Government of Western Australia, Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia (2009), including supporting document Recommended Procedures for Laboratory Analysis of Asbestos in Soil (2011)
NEPM	National Environment Protection (Assessment of Site Contamination) Measure, 2013 (as amended)
ACM	Asbestos Containing Materials. Asbestos contained within a non-asbestos matrix, typically presented in bonded and/or sound condition. For the purposes of the NEPM, ACM is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
AF	Asbestos Fines. Asbestos containing materials, including friable, weathered and bonded materials, able to pass a 7mm x 7mm sieve. Considered under the NEPM as equivalent to “non-bonded / friable”.
FA	Fibrous Asbestos. Asbestos containing materials in a friable and/or severely weathered condition. For the purposes of the NEPM, FA is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
Friable	Asbestos-containing materials of any size that may be broken or crumbled by hand pressure. For the purposes of the NEPM, this includes both AF and FA. It is outside of the laboratory’s remit to assess degree of friability.
Trace Analysis	Analytical procedure used to detect the presence of respirable fibres in the matrix.

Comments

The samples received were not collected in an approved asbestos bag and was therefore sub-sampled from the 250mL glass jar. Valid sub-sampling procedures were applied so as to ensure that the sub-samples to be analysed accurately represented the samples received.

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

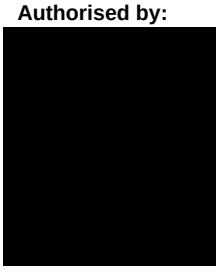
Qualifier Codes/Comments

Code	Description
N/A	Not applicable

Asbestos Counter/Identifier:

[redacted] Senior Analyst-Asbestos (NSW)

Authorised by:



Senior Analyst-Asbestos (NSW)

General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus,
North Sydney
NSW 2060

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: [redacted]

Report **729095-S**
Project name RANDWICK BARRACKS
Project ID 610.30041
Received Date Jul 01, 2020

Client Sample ID			0407_QC270_200626	0407_QC271_200626	0407_QC275_200626
Sample Matrix			**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-Jl01519**	**S20-Jl01520**	**S20-Jl01521**
Date Sampled			**Jun 26, 2020**	**Jun 26, 2020**	**Jun 26, 2020**
Test/Reference	LOR	Unit			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions					
TRH C6-C9	20	mg/kg	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	120	< 50
TRH C29-C36	50	mg/kg	< 50	140	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50	260	< 50
BTEX					
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	83	80	70
Volatile Organics					
1.1-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5	< 0.5	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5

Client Sample ID			0407_QC270_200626	0407_QC271_200626	0407_QC275_200626
Sample Matrix			Soil	Soil	Soil
Eurofins Sample No.			S20-JI01519	S20-JI01520	S20-JI01521
Date Sampled			Jun 26, 2020	Jun 26, 2020	Jun 26, 2020
Test/Reference	LOR	Unit			
Volatile Organics					
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Bromoform	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Bromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Chloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Chloroform	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Chloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Iodomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	< 0.5	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Styrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3
Total MAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5
4-Bromofluorobenzene (surr.)	1	%	83	80	70
Toluene-d8 (surr.)	1	%	108	109	INT
Total Recoverable Hydrocarbons - 2013 NEPM Fractions					
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	270	< 100
TRH >C34-C40	100	mg/kg	< 100	130	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	400	< 100

Client Sample ID			0407_QC270_200626	0407_QC271_200626	0407_QC275_200626
Sample Matrix			**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-JI01519**	**S20-JI01520**	**S20-JI01521**
Date Sampled			**Jun 26, 2020**	**Jun 26, 2020**	**Jun 26, 2020**
Test/Reference	LOR	Unit			
Polycyclic Aromatic Hydrocarbons					
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5
2-Fluorobiphenyl (surr.)	1	%	74	64	68
p-Terphenyl-d14 (surr.)	1	%	92	89	80
Organochlorine Pesticides					
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05
a-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05
b-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05
d-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Methoxychlor	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Toxaphene	1	mg/kg	< 1	< 1	< 1
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.2	< 0.2	< 0.2
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.2	< 0.2	< 0.2
Dibutylchlorendate (surr.)	1	%	110	128	136
Tetrachloro-m-xylene (surr.)	1	%	96	78	85

Client Sample ID			0407_QC270_200626	0407_QC271_200626	0407_QC275_200626
Sample Matrix			**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-JI01519**	**S20-JI01520**	**S20-JI01521**
Date Sampled			**Jun 26, 2020**	**Jun 26, 2020**	**Jun 26, 2020**
Test/Reference	LOR	Unit			
Organophosphorus Pesticides					
Azinphos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Bolstar	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Coumaphos	2	mg/kg	< 2	< 2	< 2
Demeton-S	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Demeton-O	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Diazinon	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Dimethoate	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Disulfoton	0.2	mg/kg	< 0.2	< 0.2	< 0.2
EPN	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Ethion	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Ethoprop	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Fenthion	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Malathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Merphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Methyl parathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Mevinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Monocrotophos	2	mg/kg	< 2	< 2	< 2
Naled	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Omethoate	2	mg/kg	< 2	< 2	< 2
Phorate	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Ronnel	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Terbufos	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Tokuthion	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Trichloronate	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Triphenylphosphate (surr.)	1	%	92	101	93
Polychlorinated Biphenyls					
Aroclor-1016	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Aroclor-1232	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Aroclor-1242	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Aroclor-1248	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Aroclor-1254	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Aroclor-1260	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Total PCB*	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Dibutylchlorendate (surr.)	1	%	110	128	136
Tetrachloro-m-xylene (surr.)	1	%	96	78	85

Client Sample ID			0407_QC270_200626	0407_QC271_200626	0407_QC275_200626
Sample Matrix			**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-JI01519**	**S20-JI01520**	**S20-JI01521**
Date Sampled			**Jun 26, 2020**	**Jun 26, 2020**	**Jun 26, 2020**
Test/Reference	LOR	Unit			
Phenols (Halogenated)					
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1
Phenols (non-Halogenated)					
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	< 0.2
2-Nitrophenol	1	mg/kg	< 1	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5	< 5	< 5
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	< 0.4
4-Nitrophenol	5	mg/kg	< 5	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20
Phenol-d6 (surr.)	1	%	69	59	64
Heavy Metals					
Arsenic	2	mg/kg	< 2	22	< 2
Cadmium	0.4	mg/kg	< 0.4	0.7	< 0.4
Chromium	5	mg/kg	< 5	59	< 5
Copper	5	mg/kg	< 5	68	< 5
Lead	5	mg/kg	11	120	< 5
Mercury	0.1	mg/kg	< 0.1	0.1	< 0.1
Nickel	5	mg/kg	< 5	19	< 5
Zinc	5	mg/kg	41	320	< 5
% Moisture	1	%	4.9	20	3.0

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jul 03, 2020	
- Method: LTM-ORG-2010 TRH C6-C40			
Polycyclic Aromatic Hydrocarbons	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (Halogenated)	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (non-Halogenated)	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Metals M8	Sydney	Jul 03, 2020	180 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Volatile Organics	Sydney	Jul 03, 2020	7 Days
- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices			
Eurofins | mgt Suite B15			
Organochlorine Pesticides	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Organophosphorus Pesticides	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS			
Polychlorinated Biphenyls	Sydney	Jul 03, 2020	28 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
% Moisture	Sydney	Jul 01, 2020	14 Days
- Method: LTM-GEN-7080 Moisture			

eurofins | Environment Testing

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Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 729095
Phone: 02 9428 8100
Fax:

Received: Jul 1, 2020 4:45 PM
Due: Jul 8, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271										
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	0407_QC270_200626	Jun 26, 2020		Soil	S20-Jl01519	X	X	X	X	X
2	0407_QC271_200626	Jun 26, 2020		Soil	S20-Jl01520	X	X	X	X	X
3	0407_QC275_200626	Jun 26, 2020		Soil	S20-Jl01521	X	X	X	X	X
Test Counts						3	3	3	3	3

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

****NOTE:** pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram
mg/L: milligrams per litre
ug/L: micrograms per litre
ppm: Parts per million
ppb: Parts per billion
%: Percentage
org/100mL: Organisms per 100 millilitres
NTU: Nephelometric Turbidity Units
MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version 5.3
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling.Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
Method Blank							
BTEX							
Benzene	mg/kg	< 0.1			0.1	Pass	
Toluene	mg/kg	< 0.1			0.1	Pass	
Ethylbenzene	mg/kg	< 0.1			0.1	Pass	
m&p-Xylenes	mg/kg	< 0.2			0.2	Pass	
o-Xylene	mg/kg	< 0.1			0.1	Pass	
Xylenes - Total*	mg/kg	< 0.3			0.3	Pass	
Method Blank							
Volatile Organics							
1.1-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
1.1.1-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.1.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dibromoethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.3-Trichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.4-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.3.5-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.4-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
2-Butanone (MEK)	mg/kg	< 0.5			0.5	Pass	
2-Propanone (Acetone)	mg/kg	< 0.5			0.5	Pass	
4-Chlorotoluene	mg/kg	< 0.5			0.5	Pass	
4-Methyl-2-pentanone (MIBK)	mg/kg	< 0.5			0.5	Pass	
Allyl chloride	mg/kg	< 0.5			0.5	Pass	
Bromobenzene	mg/kg	< 0.5			0.5	Pass	
Bromochloromethane	mg/kg	< 0.5			0.5	Pass	
Bromodichloromethane	mg/kg	< 0.5			0.5	Pass	
Bromoform	mg/kg	< 0.5			0.5	Pass	
Bromomethane	mg/kg	< 0.5			0.5	Pass	
Carbon disulfide	mg/kg	< 0.5			0.5	Pass	
Carbon Tetrachloride	mg/kg	< 0.5			0.5	Pass	
Chlorobenzene	mg/kg	< 0.5			0.5	Pass	
Chloroethane	mg/kg	< 0.5			0.5	Pass	
Chloroform	mg/kg	< 0.5			0.5	Pass	
Chloromethane	mg/kg	< 0.5			0.5	Pass	
cis-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
cis-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Dibromochloromethane	mg/kg	< 0.5			0.5	Pass	
Dibromomethane	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Dichlorodifluoromethane	mg/kg	< 0.5			0.5	Pass	
Iodomethane	mg/kg	< 0.5			0.5	Pass	
Isopropyl benzene (Cumene)	mg/kg	< 0.5			0.5	Pass	
Methylene Chloride	mg/kg	< 0.5			0.5	Pass	
Styrene	mg/kg	< 0.5			0.5	Pass	
Tetrachloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Trichloroethene	mg/kg	< 0.5			0.5	Pass	
Trichlorofluoromethane	mg/kg	< 0.5			0.5	Pass	
Vinyl chloride	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Organochlorine Pesticides							
Chlordanes - Total	mg/kg	< 0.1			0.1	Pass	
4.4'-DDD	mg/kg	< 0.05			0.05	Pass	
4.4'-DDE	mg/kg	< 0.05			0.05	Pass	
4.4'-DDT	mg/kg	< 0.05			0.05	Pass	
a-BHC	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-BHC	mg/kg	< 0.05			0.05	Pass	
d-BHC	mg/kg	< 0.05			0.05	Pass	
Dieldrin	mg/kg	< 0.05			0.05	Pass	
Endosulfan I	mg/kg	< 0.05			0.05	Pass	
Endosulfan II	mg/kg	< 0.05			0.05	Pass	
Endosulfan sulphate	mg/kg	< 0.05			0.05	Pass	
Endrin	mg/kg	< 0.05			0.05	Pass	
Endrin aldehyde	mg/kg	< 0.05			0.05	Pass	
Endrin ketone	mg/kg	< 0.05			0.05	Pass	
g-BHC (Lindane)	mg/kg	< 0.05			0.05	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Heptachlor	mg/kg	< 0.05			0.05	Pass	
Heptachlor epoxide	mg/kg	< 0.05			0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05			0.05	Pass	
Methoxychlor	mg/kg	< 0.2			0.2	Pass	
Toxaphene	mg/kg	< 1			1	Pass	
Method Blank							
Organophosphorus Pesticides							
Azinphos-methyl	mg/kg	< 0.2			0.2	Pass	
Bolstar	mg/kg	< 0.2			0.2	Pass	
Chlorfenvinphos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos-methyl	mg/kg	< 0.2			0.2	Pass	
Coumaphos	mg/kg	< 2			2	Pass	
Demeton-S	mg/kg	< 0.2			0.2	Pass	
Demeton-O	mg/kg	< 0.2			0.2	Pass	
Diazinon	mg/kg	< 0.2			0.2	Pass	
Dichlorvos	mg/kg	< 0.2			0.2	Pass	
Dimethoate	mg/kg	< 0.2			0.2	Pass	
Disulfoton	mg/kg	< 0.2			0.2	Pass	
EPN	mg/kg	< 0.2			0.2	Pass	
Ethion	mg/kg	< 0.2			0.2	Pass	
Ethoprop	mg/kg	< 0.2			0.2	Pass	
Ethyl parathion	mg/kg	< 0.2			0.2	Pass	
Fenitrothion	mg/kg	< 0.2			0.2	Pass	
Fensulfothion	mg/kg	< 0.2			0.2	Pass	
Fenthion	mg/kg	< 0.2			0.2	Pass	
Malathion	mg/kg	< 0.2			0.2	Pass	
Merphos	mg/kg	< 0.2			0.2	Pass	
Methyl parathion	mg/kg	< 0.2			0.2	Pass	
Mevinphos	mg/kg	< 0.2			0.2	Pass	
Monocrotophos	mg/kg	< 2			2	Pass	
Naled	mg/kg	< 0.2			0.2	Pass	
Omethoate	mg/kg	< 2			2	Pass	
Phorate	mg/kg	< 0.2			0.2	Pass	
Pirimiphos-methyl	mg/kg	< 0.2			0.2	Pass	
Pyrazophos	mg/kg	< 0.2			0.2	Pass	
Ronnel	mg/kg	< 0.2			0.2	Pass	
Terbufos	mg/kg	< 0.2			0.2	Pass	
Tetrachlorvinphos	mg/kg	< 0.2			0.2	Pass	
Tokuthion	mg/kg	< 0.2			0.2	Pass	
Trichloronate	mg/kg	< 0.2			0.2	Pass	
Method Blank							
Polychlorinated Biphenyls							
Aroclor-1016	mg/kg	< 0.5			0.5	Pass	
Aroclor-1221	mg/kg	< 0.1			0.1	Pass	
Aroclor-1232	mg/kg	< 0.5			0.5	Pass	
Aroclor-1242	mg/kg	< 0.5			0.5	Pass	
Aroclor-1248	mg/kg	< 0.5			0.5	Pass	
Aroclor-1254	mg/kg	< 0.5			0.5	Pass	
Aroclor-1260	mg/kg	< 0.5			0.5	Pass	
Total PCB*	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Phenols (Halogenated)							
2-Chlorophenol	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2.4-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4.5-Trichlorophenol	mg/kg	< 1			1	Pass	
2.4.6-Trichlorophenol	mg/kg	< 1			1	Pass	
2.6-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
4-Chloro-3-methylphenol	mg/kg	< 1			1	Pass	
Pentachlorophenol	mg/kg	< 1			1	Pass	
Tetrachlorophenols - Total	mg/kg	< 10			10	Pass	
Method Blank							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	mg/kg	< 20			20	Pass	
2-Methyl-4.6-dinitrophenol	mg/kg	< 5			5	Pass	
2-Methylphenol (o-Cresol)	mg/kg	< 0.2			0.2	Pass	
2-Nitrophenol	mg/kg	< 1			1	Pass	
2.4-Dimethylphenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dinitrophenol	mg/kg	< 5			5	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/kg	< 0.4			0.4	Pass	
4-Nitrophenol	mg/kg	< 5			5	Pass	
Dinoseb	mg/kg	< 20			20	Pass	
Phenol	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Nickel	mg/kg	< 5			5	Pass	
Zinc	mg/kg	< 5			5	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C10-C14	%	95			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	121			70-130	Pass	
Toluene	%	120			70-130	Pass	
Ethylbenzene	%	112			70-130	Pass	
m&p-Xylenes	%	113			70-130	Pass	
o-Xylene	%	114			70-130	Pass	
Xylenes - Total*	%	113			70-130	Pass	
LCS - % Recovery							
Volatile Organics							
1.1-Dichloroethene	%	121			70-130	Pass	
1.1.1-Trichloroethane	%	120			70-130	Pass	
1.2-Dichlorobenzene	%	111			70-130	Pass	
1.2-Dichloroethane	%	123			70-130	Pass	
Trichloroethene	%	120			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	77			70-130	Pass	
TRH >C10-C16	%	95			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	80			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Acenaphthylene	%	80			70-130	Pass	
Anthracene	%	78			70-130	Pass	
Benz(a)anthracene	%	79			70-130	Pass	
Benzo(a)pyrene	%	78			70-130	Pass	
Benzo(b&j)fluoranthene	%	74			70-130	Pass	
Benzo(g.h.i)perylene	%	89			70-130	Pass	
Benzo(k)fluoranthene	%	88			70-130	Pass	
Chrysene	%	82			70-130	Pass	
Dibenz(a.h)anthracene	%	85			70-130	Pass	
Fluoranthene	%	75			70-130	Pass	
Fluorene	%	78			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	88			70-130	Pass	
Naphthalene	%	82			70-130	Pass	
Phenanthrene	%	78			70-130	Pass	
Pyrene	%	74			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	88			70-130	Pass	
4.4'-DDD	%	81			70-130	Pass	
4.4'-DDE	%	76			70-130	Pass	
4.4'-DDT	%	98			70-130	Pass	
a-BHC	%	73			70-130	Pass	
Aldrin	%	73			70-130	Pass	
b-BHC	%	85			70-130	Pass	
d-BHC	%	82			70-130	Pass	
Dieldrin	%	79			70-130	Pass	
Endosulfan I	%	79			70-130	Pass	
Endosulfan II	%	75			70-130	Pass	
Endosulfan sulphate	%	87			70-130	Pass	
Endrin	%	92			70-130	Pass	
Endrin aldehyde	%	90			70-130	Pass	
Endrin ketone	%	77			70-130	Pass	
g-BHC (Lindane)	%	80			70-130	Pass	
Heptachlor	%	79			70-130	Pass	
Heptachlor epoxide	%	79			70-130	Pass	
Hexachlorobenzene	%	79			70-130	Pass	
Methoxychlor	%	101			70-130	Pass	
LCS - % Recovery							
Organophosphorus Pesticides							
Diazinon	%	72			70-130	Pass	
Dimethoate	%	76			70-130	Pass	
Ethion	%	91			70-130	Pass	
Fenitrothion	%	96			70-130	Pass	
Methyl parathion	%	94			70-130	Pass	
Mevinphos	%	84			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls							
Aroclor-1016	%	108			70-130	Pass	
Aroclor-1260	%	116			70-130	Pass	
LCS - % Recovery							
Phenols (Halogenated)							
2-Chlorophenol	%	83			30-130	Pass	
2.4-Dichlorophenol	%	85			30-130	Pass	
2.4.5-Trichlorophenol	%	101			30-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2.4.6-Trichlorophenol	%	101			30-130	Pass	
2.6-Dichlorophenol	%	88			30-130	Pass	
4-Chloro-3-methylphenol	%	88			30-130	Pass	
Pentachlorophenol	%	87			30-130	Pass	
Tetrachlorophenols - Total	%	88			30-130	Pass	
LCS - % Recovery							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	%	85			30-130	Pass	
2-Methyl-4.6-dinitrophenol	%	88			30-130	Pass	
2-Methylphenol (o-Cresol)	%	83			30-130	Pass	
2-Nitrophenol	%	104			30-130	Pass	
2.4-Dimethylphenol	%	83			30-130	Pass	
2.4-Dinitrophenol	%	111			30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	%	84			30-130	Pass	
4-Nitrophenol	%	106			30-130	Pass	
Dinoseb	%	97			30-130	Pass	
Phenol	%	83			30-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	108			70-130	Pass	
Cadmium	%	105			70-130	Pass	
Chromium	%	106			70-130	Pass	
Copper	%	106			70-130	Pass	
Lead	%	105			70-130	Pass	
Mercury	%	107			70-130	Pass	
Nickel	%	106			70-130	Pass	
Zinc	%	106			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C10-C14	S20-Jl05882	NCP	%	109			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	S20-Jl05171	NCP	%	81			70-130	Pass	
Toluene	S20-Jl05171	NCP	%	76			70-130	Pass	
Ethylbenzene	S20-Jl05171	NCP	%	77			70-130	Pass	
m&p-Xylenes	S20-Jl05171	NCP	%	76			70-130	Pass	
o-Xylene	S20-Jl05171	NCP	%	82			70-130	Pass	
Xylenes - Total*	S20-Jl05171	NCP	%	78			70-130	Pass	
Spike - % Recovery									
Volatile Organics				Result 1					
1.1-Dichloroethene	S20-Jl05171	NCP	%	86			70-130	Pass	
1.1.1-Trichloroethane	S20-Jl05171	NCP	%	78			70-130	Pass	
1.2-Dichlorobenzene	S20-Jl05171	NCP	%	75			70-130	Pass	
1.2-Dichloroethane	S20-Jl05171	NCP	%	81			70-130	Pass	
Trichloroethene	S20-Jl05171	NCP	%	78			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
TRH >C10-C16	S20-Jl05882	NCP	%	111			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	S20-Jl00589	NCP	%	83			70-130	Pass	
Acenaphthylene	S20-Jl00589	NCP	%	80			70-130	Pass	
Anthracene	S20-Jl00589	NCP	%	81			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Benz(a)anthracene	S20-Jl00589	NCP	%	85			70-130	Pass	
Benzo(a)pyrene	S20-Jl00589	NCP	%	75			70-130	Pass	
Benzo(b&j)fluoranthene	S20-Jl00589	NCP	%	80			70-130	Pass	
Benzo(k)fluoranthene	S20-Jl00589	NCP	%	93			70-130	Pass	
Chrysene	S20-Jl00589	NCP	%	70			70-130	Pass	
Fluoranthene	S20-Jl00589	NCP	%	82			70-130	Pass	
Fluorene	S20-Jl00589	NCP	%	81			70-130	Pass	
Naphthalene	S20-Jl00589	NCP	%	82			70-130	Pass	
Phenanthrene	S20-Jl00589	NCP	%	82			70-130	Pass	
Pyrene	S20-Jl00589	NCP	%	82			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
Chlordanes - Total	S20-Jl00589	NCP	%	92			70-130	Pass	
4.4'-DDD	S20-Jl00589	NCP	%	117			70-130	Pass	
4.4'-DDE	S20-Jl00589	NCP	%	88			70-130	Pass	
a-BHC	S20-Jl00589	NCP	%	76			70-130	Pass	
b-BHC	S20-Jl00589	NCP	%	92			70-130	Pass	
d-BHC	S20-Jl00589	NCP	%	84			70-130	Pass	
Dieldrin	S20-Jl00589	NCP	%	91			70-130	Pass	
Endosulfan I	S20-Jl00589	NCP	%	86			70-130	Pass	
Endosulfan sulphate	S20-Jl00589	NCP	%	86			70-130	Pass	
Endrin	S20-Jl00589	NCP	%	82			70-130	Pass	
g-BHC (Lindane)	S20-Jl00589	NCP	%	85			70-130	Pass	
Heptachlor epoxide	S20-Jl00589	NCP	%	96			70-130	Pass	
Hexachlorobenzene	S20-Jl00589	NCP	%	88			70-130	Pass	
Spike - % Recovery									
Organophosphorus Pesticides				Result 1					
Diazinon	S20-Jl00589	NCP	%	73			70-130	Pass	
Dimethoate	S20-Jl00589	NCP	%	94			70-130	Pass	
Ethion	S20-Jl00589	NCP	%	98			70-130	Pass	
Fenitrothion	S20-Jl00589	NCP	%	93			70-130	Pass	
Methyl parathion	S20-Jl00589	NCP	%	91			70-130	Pass	
Mevinphos	S20-Jl00589	NCP	%	98			70-130	Pass	
Spike - % Recovery									
Polychlorinated Biphenyls				Result 1					
Aroclor-1016	S20-Jl00589	NCP	%	103			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	S20-Jl01608	NCP	%	99			70-130	Pass	
Cadmium	S20-Jl01608	NCP	%	101			70-130	Pass	
Chromium	S20-Jl01608	NCP	%	89			70-130	Pass	
Copper	S20-Jl01608	NCP	%	97			70-130	Pass	
Lead	S20-Jl01608	NCP	%	99			70-130	Pass	
Mercury	S20-Jl01608	NCP	%	108			70-130	Pass	
Nickel	S20-Jl01608	NCP	%	93			70-130	Pass	
Zinc	S20-Jl01608	NCP	%	82			70-130	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C6-C9	S20-Jl00570	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	S20-Jl05881	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	S20-Jl05881	NCP	mg/kg	< 50	130	110	30%	Fail	Q15
TRH C29-C36	S20-Jl05881	NCP	mg/kg	71	170	82	30%	Fail	Q15

Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S20-Jl00570	NCP	mg/kg	< 0.1		<1	30%	Pass	
Toluene	S20-Jl00570	NCP	mg/kg	< 0.1		<1	30%	Pass	
Ethylbenzene	S20-Jl00570	NCP	mg/kg	< 0.1		<1	30%	Pass	
m&p-Xylenes	S20-Jl00570	NCP	mg/kg	< 0.2		<1	30%	Pass	
o-Xylene	S20-Jl00570	NCP	mg/kg	< 0.1		<1	30%	Pass	
Xylenes - Total*	S20-Jl00570	NCP	mg/kg	< 0.3		<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
1.1-Dichloroethane	S20-Jl00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1-Dichloroethene	S20-Jl00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1-Trichloroethane	S20-Jl00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	S20-Jl00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2-Trichloroethane	S20-Jl00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	S20-Jl00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dibromoethane	S20-Jl00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichlorobenzene	S20-Jl00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloroethane	S20-Jl00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloropropane	S20-Jl00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.3-Trichloropropane	S20-Jl00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trimethylbenzene	S20-Jl00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichlorobenzene	S20-Jl00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichloropropane	S20-Jl00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3.5-Trimethylbenzene	S20-Jl00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.4-Dichlorobenzene	S20-Jl00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Butanone (MEK)	S20-Jl00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Propanone (Acetone)	S20-Jl00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chlorotoluene	S20-Jl00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Methyl-2-pentanone (MIBK)	S20-Jl00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Allyl chloride	S20-Jl00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromobenzene	S20-Jl00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromochloromethane	S20-Jl00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromodichloromethane	S20-Jl00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromoform	S20-Jl00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromomethane	S20-Jl00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon disulfide	S20-Jl00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon Tetrachloride	S20-Jl00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chlorobenzene	S20-Jl00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroethane	S20-Jl00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroform	S20-Jl00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloromethane	S20-Jl00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.2-Dichloroethene	S20-Jl00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.3-Dichloropropene	S20-Jl00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromochloromethane	S20-Jl00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromomethane	S20-Jl00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dichlorodifluoromethane	S20-Jl00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Iodomethane	S20-Jl00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Isopropyl benzene (Cumene)	S20-Jl00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Methylene Chloride	S20-Jl00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Styrene	S20-Jl00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Tetrachloroethene	S20-Jl00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.2-Dichloroethene	S20-Jl00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.3-Dichloropropene	S20-Jl00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichloroethene	S20-Jl00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichlorofluoromethane	S20-Jl00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Vinyl chloride	S20-Jl00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	S20-Jl00570	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	S20-Jl00570	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH >C10-C16	S20-Jl05881	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	S20-Jl05881	NCP	mg/kg	< 100	260	98	30%	Fail	Q15
TRH >C34-C40	S20-Jl05881	NCP	mg/kg	< 100	150	67	30%	Fail	Q15
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	S20-Jl08593	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	S20-Jl08593	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	S20-Jl08593	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	S20-Jl08593	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	S20-Jl08593	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	S20-Jl08593	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	S20-Jl08593	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	S20-Jl08593	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	S20-Jl08593	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	S20-Jl08593	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	S20-Jl08593	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	S20-Jl08593	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	S20-Jl08593	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	S20-Jl08593	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	S20-Jl08593	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	S20-Jl08593	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	S20-Jl08593	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	S20-Jl08593	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	S20-Jl08593	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	S20-Jl08593	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
a-BHC	S20-Jl08593	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	S20-Jl08593	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-BHC	S20-Jl08593	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-BHC	S20-Jl08593	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	S20-Jl08593	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	S20-Jl08593	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	S20-Jl08593	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	S20-Jl08593	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	S20-Jl08593	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	S20-Jl08593	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	S20-Jl08593	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-BHC (Lindane)	S20-Jl08593	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	S20-Jl08593	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	S20-Jl08593	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	S20-Jl08593	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Azinphos-methyl	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Bolstar	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorfenvinphos	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos-methyl	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Coumaphos	S20-Jl08593	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Demeton-S	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	

Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Demeton-O	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Diazinon	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dichlorvos	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dimethoate	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Disulfoton	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
EPN	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethion	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethoprop	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethyl parathion	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenitrothion	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fensulfothion	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenthion	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Malathion	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Merphos	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Methyl parathion	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Mevinphos	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Monocrotophos	S20-Jl08593	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Naled	S20-Jl08593	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Omethoate	S20-Jl08593	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Phorate	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pirimiphos-methyl	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pyrazophos	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ronnel	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Terbufos	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tetrachlorvinphos	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tokuthion	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Trichloronate	S20-Jl08593	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Aroclor-1016	S20-Jn42365	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1221	S20-Jn42365	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1232	S20-Jn42365	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1242	S20-Jn42365	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1248	S20-Jn42365	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1254	S20-Jn42365	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1260	S20-Jn42365	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Total PCB*	S20-Jn42365	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Phenols (Halogenated)				Result 1	Result 2	RPD			
2-Chlorophenol	S20-Jn42365	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dichlorophenol	S20-Jn42365	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4.5-Trichlorophenol	S20-Jn42365	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4.6-Trichlorophenol	S20-Jn42365	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2.6-Dichlorophenol	S20-Jn42365	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chloro-3-methylphenol	S20-Jn42365	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Pentachlorophenol	S20-Jn42365	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Tetrachlorophenols - Total	S20-Jn42365	NCP	mg/kg	< 10	< 10	<1	30%	Pass	
Duplicate									
Phenols (non-Halogenated)				Result 1	Result 2	RPD			
2-Cyclohexyl-4.6-dinitrophenol	S20-Jn42365	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
2-Methyl-4.6-dinitrophenol	S20-Jn42365	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Methylphenol (o-Cresol)	S20-Jn42365	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
2-Nitrophenol	S20-Jn42365	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4-Dimethylphenol	S20-Jn42365	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Phenols (non-Halogenated)				Result 1	Result 2	RPD			
2.4-Dinitrophenol	S20-Jn42365	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
3&4-Methylphenol (m&p-Cresol)	S20-Jn42365	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
4-Nitrophenol	S20-Jn42365	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Dinoseb	S20-Jn42365	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
Phenol	S20-Jn42365	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	S20-Jl02165	NCP	mg/kg	4.8	3.3	38	30%	Fail	Q15
Cadmium	S20-Jl02165	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	S20-Jl02165	NCP	mg/kg	13	9.3	33	30%	Fail	Q15
Copper	S20-Jl02165	NCP	mg/kg	16	15	5.0	30%	Pass	
Lead	S20-Jl02165	NCP	mg/kg	78	86	10	30%	Pass	
Mercury	S20-Jl02165	NCP	mg/kg	0.2	0.1	49	30%	Fail	Q15
Nickel	S20-Jl02165	NCP	mg/kg	6.3	5.2	18	30%	Pass	
Zinc	S20-Jl02165	NCP	mg/kg	83	83	1.0	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	S20-Jl01549	NCP	%	8.3	7.4	12	30%	Pass	

Comments

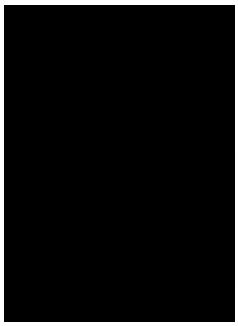
Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
Q15	The RPD reported passes Eurofins Environment Testing's QC - Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report.

Authorised By



Analytical Services Manager
Senior Analyst-Organic (NSW)
Senior Analyst-Metal (NSW)
Senior Analyst-Asbestos (NSW)

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Dawin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ✠ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ

CLIENT: Defence Housing Australia	LABORATORY: SGS Australia	Turnaround Time (TAT)	COC Number
PROJECT: Randwick Barracks	LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015		of
PROJECT NUMBER: 610.30041	SAMPLER: [redacted]	☐ Standard TAT	
PROJECT MANAGER: [redacted]	SAMPLER CONTACT No [redacted]	☐ Non Standard or Urgent TAT	
PM CONTACT No: [redacted]	Email Reports and Invoices to: LQRSYD@slrconsulting.com, [redacted]	Required TAT: Standard	

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	Asbestos ONLY	HOLD	C6-C10/BETXN				Additional Information (Comment on any gross contamination or specific requirements)
	0407_QC163_200626	26/06/2020	Soil	jar, pfas	x							Please hold all PFAS containers
	0407_QC263_200626	26/06/2020	Soil	jar, pfas	x							Please send to Eurofins
	0407_QC168_200626	26/06/2020	Soil	jar, pfas	x							
	0407_QC268_200626	26/06/2020	Soil	jar, pfas	x							Please send to Eurofins
	0407_QC176_200626	26/06/2020	Soil	jar, pfas	x							
	0407_QC276_200626	26/06/2020	Soil	jar, pfas	x							Please send to Eurofins
	0407_QC169_200626	26/06/2020	Soil	jar, pfas	x							
	0407_QC269_200626	26/06/2020	Soil	jar, pfas	x							Please send to Eurofins
	0407_QC172_200626	26/06/2020	Soil	jar, pfas	x							
	0407_QC272_200626	26/06/2020	Soil	jar, pfas	x							Please send to Eurofins
	0407_QC414_200623	23/06/2020	Trip Blank	vial				x				
	0407_QC514_200623	23/06/2020	Trip Spike	vial				x				

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 18/06/2020	Received by	[redacted]	Date / Time	Temperature Received:	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	11.20°C	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time		

#729098

eurofins | Environment Testing

Melbourne
6 Monterey Road
Dandenong South Vic 3175
Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

Sydney
Unit F3, Building F
16 Mars Road
Lane Cove West NSW 2066
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

Brisbane
1/21 Smallwood Place
Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Perth
2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261 Site # 23736

ABN – 50 005 085 521 e.mail : EnviroSales@eurofins.com web : www.eurofins.com.au

Sample Receipt Advice

Company name:	**SLR Consulting (Sydney)**
Contact name:	[redacted]
Project name:	RANDWICK BARRACKS
Project ID:	610.30041
COC number:	Not provided
Turn around time:	5 Day
Date/Time received:	Jul 1, 2020 3:45 PM
Eurofins reference:	**729098**

Sample information

☑ A detailed list of analytes logged into our LIMS, is included in the attached summary table.

☑ All samples have been received as described on the above COC.

☑ COC has been completed correctly.

☑ Attempt to chill was evident.

☑ Appropriately preserved sample containers have been used.

☑ All samples were received in good condition.

☑ Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.

☑ Appropriate sample containers have been used.

☒ Split sample sent to requested external lab.

☒ Some samples have been subcontracted.

N/A Custody Seals intact (if used).

Notes

0407_QC263_200626 not received, analysis cancelled. 0407_QC273_200626 received extra and logged on hold.

Contact notes

If you have any questions with respect to these samples please contact:

Andrew Black on Phone : (+61) 2 9900 8490 or by e.mail: AndrewBlack@eurofins.com

Results will be delivered electronically via e.mail to Hugh Selby - hselby@slrconsulting.com.

Note: A copy of these results will also be delivered to the general SLR Consulting (Sydney) email address.

eurofins | Environment Testing

ABN – 50 005 085 521 web : www.eurofins.com.au e.mail : EnviroSales@eurofins.com

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IANZ # 1327

Christchurch
43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 729098
Phone: 02 9428 8100
Fax:

Received: Jul 1, 2020 3:45 PM
Due: Jul 8, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	CANCELLED	HOLD	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271												
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794												
Perth Laboratory - NATA Site # 23736												
External Laboratory												
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**							
1	0407_QC263_200626	Jun 26, 2020		Soil	S20-Jl01538		X					
2	0407_QC268_200626	Jun 26, 2020		Soil	S20-Jl01539	X			X	X	X	X
3	0407_QC276_200626	Jun 26, 2020		Soil	S20-Jl01540	X			X	X	X	X
4	0407_QC269_200626	Jun 26, 2020		Soil	S20-Jl01541	X			X	X	X	X
5	0407_QC272_200626	Jun 26, 2020		Soil	S20-Jl01542	X			X	X	X	X
6	0407_QC273_200626	Jun 26, 2020		Soil	S20-Jl01543			X				

eurofins | Environment Testing

ABN – 50 005 085 521 web : www.eurofins.com.au e.mail : EnviroSales@eurofins.com

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NATA # 1261 Site # 20794

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NATA # 1261
Site # 23736

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IANZ # 1327

Christchurch
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Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 729098
Phone: 02 9428 8100
Fax:

Received: Jul 1, 2020 3:45 PM
Due: Jul 8, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : Andrew Black

Sample Detail	Asbestos - AS4964	CANCELLED	HOLD	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271							
Sydney Laboratory - NATA Site # 18217	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794							
Perth Laboratory - NATA Site # 23736							
Test Counts	4	1	1	4	4	4	4

Certificate of Analysis

eurofins | Environment Testing

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025–Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus
North Sydney
NSW 2060

Attention:	[redacted]
Report	729098-AID
Project Name	RANDWICK BARRACKS
Project ID	610.30041
Received Date	Jul 01, 2020
Date Reported	Jul 08, 2020

Methodology:

Asbestos Fibre Identification	Conducted in accordance with the Australian Standard AS 4964 – 2004: Method for the Qualitative Identification of Asbestos in Bulk Samples and in-house Method LTM-ASB-8020 by polarised light microscopy (PLM) and dispersion staining (DS) techniques. *NOTE: Positive Trace Analysis results indicate the sample contains detectable respirable fibres.*
Unknown Mineral Fibres	Mineral fibres of unknown type, as determined by PLM with DS, may require another analytical technique, such as Electron Microscopy, to confirm unequivocal identity. *NOTE: While Actinolite, Anthophyllite and Tremolite asbestos may be detected by PLM with DS, due to variability in the optical properties of these materials, AS4964 requires that these are reported as UMF unless confirmed by an independent technique.*
Subsampling Soil Samples	The whole sample submitted is first dried and then passed through a 10mm sieve followed by a 2mm sieve. All fibrous matter greater than 10mm, greater than 2mm as well as the material passing through the 2mm sieve are retained and analysed for the presence of asbestos. If the sub 2mm fraction is greater than approximately 30 to 60g then a sub-sampling routine based on ISO 3082:2009(E) is employed. *NOTE: Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be sub-sampled for trace analysis, in accordance with AS 4964-2004.*
Bonded asbestos-containing material (ACM)	The material is first examined and any fibres isolated for identification by PLM and DS. Where required, interfering matrices may be removed by disintegration using a range of heat, chemical or physical treatments, possibly in combination.The resultant material is then further examined in accordance with AS 4964 - 2004. *NOTE: Even after disintegration it may be difficult to detect the presence of asbestos in some asbestos-containing bulk materials using PLM and DS. This is due to the low grade or small length or diameter of the asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos-containing sealants and mastics, asbestos-containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.*
Limit of Reporting	The performance limitation of the AS 4964 (2004) method for non-homogeneous samples is around 0.1 g/kg (equivalent to 0.01% (w/w)). Where no asbestos is found by PLM and DS, including Trace Analysis, this is considered to be at the nominal reporting limit of 0.01% (w/w). The NEPM screening level of 0.001% (w/w) is intended as an on-site determination, not a laboratory Limit of Reporting (LOR), per se. Examination of a large sample size (e.g. 500 mL) may improve the likelihood of detecting asbestos, particularly AF, to aid assessment against the NEPM criteria. Gravimetric determinations to this level of accuracy are outside of AS 4964 and hence NATA Accreditation does not cover the performance of this service (non-NATA results shown with an asterisk). *NOTE: NATA News March 2014, p.7, states in relation to AS 4964: "This is a qualitative method with a nominal reporting limit of 0.01 % " and that currently in Australia "there is no validated method available for the quantification of asbestos".This report is consistent with the analytical procedures and reporting recommendations in the NEPM and the WA DoH.*

Project Name RANDWICK BARRACKS
Project ID 610.30041
Date Sampled Jun 26, 2020
Report 729098-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
0407_QC268_200626	20-JI01539	Jun 26, 2020	Approximate Sample 26g Sample consisted of: Brown coarse-grained sandy soil, cement material and organic debris	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
0407_QC276_200626	20-JI01540	Jun 26, 2020	Approximate Sample 49g Sample consisted of: Brown coarse-grained sandy soil, bitumen and organic debris	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
0407_QC269_200626	20-JI01541	Jun 26, 2020	Approximate Sample 46g Sample consisted of: Brown coarse-grained sandy soil,plaster-like material and organic debris	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
0407_QC272_200626	20-JI01542	Jun 26, 2020	Approximate Sample 57g Sample consisted of: Brown coarse-grained sandy soil and organic debris	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Asbestos - LTM-ASB-8020	Sydney	Jul 01, 2020	Indefinite

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NATA # 1261 Site # 18217

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NATA # 1261 Site # 20794

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IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 729098
Phone: 02 9428 8100
Fax:

Received: Jul 1, 2020 3:45 PM
Due: Jul 8, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : Andrew Black

Sample Detail						Asbestos - AS4964	CANCELLED	HOLD	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271												
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794												
Perth Laboratory - NATA Site # 23736												
External Laboratory												
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**							
1	0407_QC263_200626	Jun 26, 2020		Soil	S20-Jl01538		X					
2	0407_QC268_200626	Jun 26, 2020		Soil	S20-Jl01539	X			X	X	X	X
3	0407_QC276_200626	Jun 26, 2020		Soil	S20-Jl01540	X			X	X	X	X
4	0407_QC269_200626	Jun 26, 2020		Soil	S20-Jl01541	X			X	X	X	X
5	0407_QC272_200626	Jun 26, 2020		Soil	S20-Jl01542	X			X	X	X	X
6	0407_QC273_200626	Jun 26, 2020		Soil	S20-Jl01543			X				

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Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 729098
Phone: 02 9428 8100
Fax:

Received: Jul 1, 2020 3:45 PM
Due: Jul 8, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail	Asbestos - AS4964	CANCELLED	HOLD	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271							
Sydney Laboratory - NATA Site # 18217	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794							
Perth Laboratory - NATA Site # 23736							
Test Counts	4	1	1	4	4	4	4

Internal Quality Control Review and Glossary

General

1. QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Samples were analysed on an 'as received' basis.
4. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
5. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the Sample Receipt Advice.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

Units

% w/w: weight for weight basis	grams per kilogram
Filter loading:	fibres/100 graticule areas
Reported Concentration:	fibres/mL
Flowrate:	L/min

Terms

Dry	Sample is dried by heating prior to analysis
LOR	Limit of Reporting
COC	Chain of Custody
SRA	Sample Receipt Advice
ISO	International Standards Organisation
AS	Australian Standards
WA DOH	Reference document for the NEPM. Government of Western Australia, Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia (2009), including supporting document Recommended Procedures for Laboratory Analysis of Asbestos in Soil (2011)
NEPM	National Environment Protection (Assessment of Site Contamination) Measure, 2013 (as amended)
ACM	Asbestos Containing Materials. Asbestos contained within a non-asbestos matrix, typically presented in bonded and/or sound condition. For the purposes of the NEPM, ACM is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
AF	Asbestos Fines. Asbestos containing materials, including friable, weathered and bonded materials, able to pass a 7mm x 7mm sieve. Considered under the NEPM as equivalent to “non-bonded / friable”.
FA	Fibrous Asbestos. Asbestos containing materials in a friable and/or severely weathered condition. For the purposes of the NEPM, FA is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
Friable	Asbestos-containing materials of any size that may be broken or crumbled by hand pressure. For the purposes of the NEPM, this includes both AF and FA. It is outside of the laboratory’s remit to assess degree of friability.
Trace Analysis	Analytical procedure used to detect the presence of respirable fibres in the matrix.

Comments

The samples received were not collected in an approved asbestos bag and was therefore sub-sampled from the 250mL glass jar. Valid sub-sampling procedures were applied so as to ensure that the sub-samples to be analysed accurately represented the samples received.

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

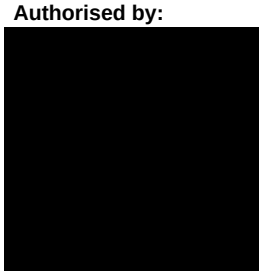
Qualifier Codes/Comments

Code	Description
N/A	Not applicable

Asbestos Counter/Identifier:

[redacted] Senior Analyst-Asbestos (NSW)

Authorised by:



Senior Analyst-Asbestos (NSW)

General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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Certificate of Analysis

SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus,
North Sydney
NSW 2060

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: [redacted]

Report **729098-S**
Project name RANDWICK BARRACKS
Project ID 610.30041
Received Date Jul 01, 2020

Client Sample ID			0407_QC268_200626	0407_QC276_200626	0407_QC269_200626	0407_QC272_200626
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S20-JI01539	S20-JI01540	S20-JI01541	S20-JI01542
Date Sampled			Jun 26, 2020	Jun 26, 2020	Jun 26, 2020	Jun 26, 2020
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	57	22	27	< 20
TRH C15-C28	50	mg/kg	460	98	150	100
TRH C29-C36	50	mg/kg	560	80	140	91
TRH C10-C36 (Total)	50	mg/kg	1077	200	317	191
BTEX						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	86	94	97	90
Volatile Organics						
1.1-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			0407_QC268_200626	0407_QC276_200626	0407_QC269_200626	0407_QC272_200626
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S20-JI01539	S20-JI01540	S20-JI01541	S20-JI01542
Date Sampled			Jun 26, 2020	Jun 26, 2020	Jun 26, 2020	Jun 26, 2020
Test/Reference	LOR	Unit				
Volatile Organics						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromoform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Iodomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Styrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
Total MAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Bromofluorobenzene (surr.)	1	%	86	94	97	90
Toluene-d8 (surr.)	1	%	117	116	114	94
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	72	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	72	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	670	140	230	150
TRH >C34-C40	100	mg/kg	490	< 100	130	< 100
TRH >C10-C40 (total)*	100	mg/kg	1232	140	360	150

Client Sample ID			0407_QC268_200626	0407_QC276_200626	0407_QC269_200626	0407_QC272_200626
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-JI01539**	**S20-JI01540**	**S20-JI01541**	**S20-JI01542**
Date Sampled			**Jun 26, 2020**	**Jun 26, 2020**	**Jun 26, 2020**	**Jun 26, 2020**
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	1.3
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	1.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.8
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	1.0
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	0.9
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	0.9
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	0.8
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	1.3
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	0.8
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	0.5	< 0.5	< 0.5	1.8
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	0.7
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	0.7
Pyrene	0.5	mg/kg	0.7	< 0.5	< 0.5	1.9
Total PAH*	0.5	mg/kg	1.2	< 0.5	< 0.5	10.8
2-Fluorobiphenyl (surr.)	1	%	106	88	67	71
p-Terphenyl-d14 (surr.)	1	%	INT	81	93	90
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
a-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
b-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
d-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	0.14
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Toxaphene	1	mg/kg	< 1	< 1	< 1	< 1
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	0.14
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Dibutylchlorendate (surr.)	1	%	INT	120	116	122
Tetrachloro-m-xylene (surr.)	1	%	102	70	89	89

Client Sample ID			0407_QC268_200626	0407_QC276_200626	0407_QC269_200626	0407_QC272_200626
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-JI01539**	**S20-JI01540**	**S20-JI01541**	**S20-JI01542**
Date Sampled			**Jun 26, 2020**	**Jun 26, 2020**	**Jun 26, 2020**	**Jun 26, 2020**
Test/Reference	LOR	Unit				
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Bolstar	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Coumaphos	2	mg/kg	< 2	< 2	< 2	< 2
Demeton-S	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Demeton-O	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Diazinon	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Dimethoate	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Disulfoton	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
EPN	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ethion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ethoprop	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Fenthion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Malathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Merphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Methyl parathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Mevinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Monocrotophos	2	mg/kg	< 2	< 2	< 2	< 2
Naled	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Omethoate	2	mg/kg	< 2	< 2	< 2	< 2
Phorate	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ronnel	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Terbufos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Tokuthion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Trichloronate	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Triphenylphosphate (surr.)	1	%	149	91	113	98
Polychlorinated Biphenyls						
Aroclor-1016	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1232	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1242	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1248	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1254	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1260	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PCB*	0.5	mg/kg	0.6	< 0.5	< 0.5	< 0.5
Dibutylchlorendate (surr.)	1	%	INT	120	116	122
Tetrachloro-m-xylene (surr.)	1	%	102	70	89	89

Client Sample ID			0407_QC268_200626	0407_QC276_200626	0407_QC269_200626	0407_QC272_200626
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-JI01539**	**S20-JI01540**	**S20-JI01541**	**S20-JI01542**
Date Sampled			**Jun 26, 2020**	**Jun 26, 2020**	**Jun 26, 2020**	**Jun 26, 2020**
Test/Reference	LOR	Unit				
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1	< 1
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
2-Nitrophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
4-Nitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
Phenol-d6 (surr.)	1	%	INT	90	76	66
Heavy Metals						
Arsenic	2	mg/kg	7.6	11	8.2	< 2
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	22	20	50	< 5
Copper	5	mg/kg	71	47	45	11
Lead	5	mg/kg	80	110	100	39
Mercury	0.1	mg/kg	0.1	0.1	0.1	< 0.1
Nickel	5	mg/kg	13	14	17	< 5
Zinc	5	mg/kg	220	190	270	32
% Moisture	1	%	39	32	23	9.7

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Sydney	Jul 02, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Sydney	Jul 02, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jul 02, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jul 02, 2020	
- Method: LTM-ORG-2010 TRH C6-C40			
Polycyclic Aromatic Hydrocarbons	Sydney	Jul 02, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (Halogenated)	Sydney	Jul 02, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (non-Halogenated)	Sydney	Jul 02, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Metals M8	Sydney	Jul 02, 2020	180 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Volatile Organics	Sydney	Jul 02, 2020	7 Days
- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices			
Eurofins | mgt Suite B15			
Organochlorine Pesticides	Sydney	Jul 02, 2020	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Organophosphorus Pesticides	Sydney	Jul 02, 2020	14 Days
- Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS			
Polychlorinated Biphenyls	Sydney	Jul 02, 2020	28 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
% Moisture	Sydney	Jul 01, 2020	14 Days
- Method: LTM-GEN-7080 Moisture			

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Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 729098
Phone: 02 9428 8100
Fax:

Received: Jul 1, 2020 3:45 PM
Due: Jul 8, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	CANCELLED	HOLD	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271												
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794												
Perth Laboratory - NATA Site # 23736												
External Laboratory												
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**							
1	0407_QC263_200626	Jun 26, 2020		Soil	S20-Jl01538		X					
2	0407_QC268_200626	Jun 26, 2020		Soil	S20-Jl01539	X			X	X	X	X
3	0407_QC276_200626	Jun 26, 2020		Soil	S20-Jl01540	X			X	X	X	X
4	0407_QC269_200626	Jun 26, 2020		Soil	S20-Jl01541	X			X	X	X	X
5	0407_QC272_200626	Jun 26, 2020		Soil	S20-Jl01542	X			X	X	X	X
6	0407_QC273_200626	Jun 26, 2020		Soil	S20-Jl01543			X				

eurofins | Environment Testing

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Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 729098
Phone: 02 9428 8100
Fax:

Received: Jul 1, 2020 3:45 PM
Due: Jul 8, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail	Asbestos - AS4964	CANCELLED	HOLD	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271							
Sydney Laboratory - NATA Site # 18217	X	X	X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794							
Perth Laboratory - NATA Site # 23736							
Test Counts	4	1	1	4	4	4	4

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

****NOTE:** pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram
mg/L: milligrams per litre
ug/L: micrograms per litre
ppm: Parts per million
ppb: Parts per billion
%: Percentage
org/100mL: Organisms per 100 millilitres
NTU: Nephelometric Turbidity Units
MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version 5.3
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling.Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
Method Blank							
BTEX							
Benzene	mg/kg	< 0.1			0.1	Pass	
Toluene	mg/kg	< 0.1			0.1	Pass	
Ethylbenzene	mg/kg	< 0.1			0.1	Pass	
m&p-Xylenes	mg/kg	< 0.2			0.2	Pass	
o-Xylene	mg/kg	< 0.1			0.1	Pass	
Xylenes - Total*	mg/kg	< 0.3			0.3	Pass	
Method Blank							
Volatile Organics							
1.1-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
1.1.1-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.1.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dibromoethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.3-Trichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.4-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.3.5-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.4-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
2-Butanone (MEK)	mg/kg	< 0.5			0.5	Pass	
2-Propanone (Acetone)	mg/kg	< 0.5			0.5	Pass	
4-Chlorotoluene	mg/kg	< 0.5			0.5	Pass	
4-Methyl-2-pentanone (MIBK)	mg/kg	< 0.5			0.5	Pass	
Allyl chloride	mg/kg	< 0.5			0.5	Pass	
Bromobenzene	mg/kg	< 0.5			0.5	Pass	
Bromochloromethane	mg/kg	< 0.5			0.5	Pass	
Bromodichloromethane	mg/kg	< 0.5			0.5	Pass	
Bromoform	mg/kg	< 0.5			0.5	Pass	
Bromomethane	mg/kg	< 0.5			0.5	Pass	
Carbon disulfide	mg/kg	< 0.5			0.5	Pass	
Carbon Tetrachloride	mg/kg	< 0.5			0.5	Pass	
Chlorobenzene	mg/kg	< 0.5			0.5	Pass	
Chloroethane	mg/kg	< 0.5			0.5	Pass	
Chloroform	mg/kg	< 0.5			0.5	Pass	
Chloromethane	mg/kg	< 0.5			0.5	Pass	
cis-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
cis-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Dibromochloromethane	mg/kg	< 0.5			0.5	Pass	
Dibromomethane	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Dichlorodifluoromethane	mg/kg	< 0.5			0.5	Pass	
Iodomethane	mg/kg	< 0.5			0.5	Pass	
Isopropyl benzene (Cumene)	mg/kg	< 0.5			0.5	Pass	
Methylene Chloride	mg/kg	< 0.5			0.5	Pass	
Styrene	mg/kg	< 0.5			0.5	Pass	
Tetrachloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Trichloroethene	mg/kg	< 0.5			0.5	Pass	
Trichlorofluoromethane	mg/kg	< 0.5			0.5	Pass	
Vinyl chloride	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Organochlorine Pesticides							
Chlordanes - Total	mg/kg	< 0.1			0.1	Pass	
4.4'-DDD	mg/kg	< 0.05			0.05	Pass	
4.4'-DDE	mg/kg	< 0.05			0.05	Pass	
4.4'-DDT	mg/kg	< 0.05			0.05	Pass	
a-BHC	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-BHC	mg/kg	< 0.05			0.05	Pass	
d-BHC	mg/kg	< 0.05			0.05	Pass	
Dieldrin	mg/kg	< 0.05			0.05	Pass	
Endosulfan I	mg/kg	< 0.05			0.05	Pass	
Endosulfan II	mg/kg	< 0.05			0.05	Pass	
Endosulfan sulphate	mg/kg	< 0.05			0.05	Pass	
Endrin	mg/kg	< 0.05			0.05	Pass	
Endrin aldehyde	mg/kg	< 0.05			0.05	Pass	
Endrin ketone	mg/kg	< 0.05			0.05	Pass	
g-BHC (Lindane)	mg/kg	< 0.05			0.05	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Heptachlor	mg/kg	< 0.05			0.05	Pass	
Heptachlor epoxide	mg/kg	< 0.05			0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05			0.05	Pass	
Methoxychlor	mg/kg	< 0.2			0.2	Pass	
Toxaphene	mg/kg	< 1			1	Pass	
Method Blank							
Organophosphorus Pesticides							
Azinphos-methyl	mg/kg	< 0.2			0.2	Pass	
Bolstar	mg/kg	< 0.2			0.2	Pass	
Chlorfenvinphos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos-methyl	mg/kg	< 0.2			0.2	Pass	
Coumaphos	mg/kg	< 2			2	Pass	
Demeton-S	mg/kg	< 0.2			0.2	Pass	
Demeton-O	mg/kg	< 0.2			0.2	Pass	
Diazinon	mg/kg	< 0.2			0.2	Pass	
Dichlorvos	mg/kg	< 0.2			0.2	Pass	
Dimethoate	mg/kg	< 0.2			0.2	Pass	
Disulfoton	mg/kg	< 0.2			0.2	Pass	
EPN	mg/kg	< 0.2			0.2	Pass	
Ethion	mg/kg	< 0.2			0.2	Pass	
Ethoprop	mg/kg	< 0.2			0.2	Pass	
Ethyl parathion	mg/kg	< 0.2			0.2	Pass	
Fenitrothion	mg/kg	< 0.2			0.2	Pass	
Fensulfothion	mg/kg	< 0.2			0.2	Pass	
Fenthion	mg/kg	< 0.2			0.2	Pass	
Malathion	mg/kg	< 0.2			0.2	Pass	
Merphos	mg/kg	< 0.2			0.2	Pass	
Methyl parathion	mg/kg	< 0.2			0.2	Pass	
Mevinphos	mg/kg	< 0.2			0.2	Pass	
Monocrotophos	mg/kg	< 2			2	Pass	
Naled	mg/kg	< 0.2			0.2	Pass	
Omethoate	mg/kg	< 2			2	Pass	
Phorate	mg/kg	< 0.2			0.2	Pass	
Pirimiphos-methyl	mg/kg	< 0.2			0.2	Pass	
Pyrazophos	mg/kg	< 0.2			0.2	Pass	
Ronnel	mg/kg	< 0.2			0.2	Pass	
Terbufos	mg/kg	< 0.2			0.2	Pass	
Tetrachlorvinphos	mg/kg	< 0.2			0.2	Pass	
Tokuthion	mg/kg	< 0.2			0.2	Pass	
Trichloronate	mg/kg	< 0.2			0.2	Pass	
Method Blank							
Polychlorinated Biphenyls							
Aroclor-1016	mg/kg	< 0.5			0.5	Pass	
Aroclor-1221	mg/kg	< 0.1			0.1	Pass	
Aroclor-1232	mg/kg	< 0.5			0.5	Pass	
Aroclor-1242	mg/kg	< 0.5			0.5	Pass	
Aroclor-1248	mg/kg	< 0.5			0.5	Pass	
Aroclor-1254	mg/kg	< 0.5			0.5	Pass	
Aroclor-1260	mg/kg	< 0.5			0.5	Pass	
Total PCB*	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Phenols (Halogenated)							
2-Chlorophenol	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2.4-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4.5-Trichlorophenol	mg/kg	< 1			1	Pass	
2.4.6-Trichlorophenol	mg/kg	< 1			1	Pass	
2.6-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
4-Chloro-3-methylphenol	mg/kg	< 1			1	Pass	
Pentachlorophenol	mg/kg	< 1			1	Pass	
Tetrachlorophenols - Total	mg/kg	< 10			10	Pass	
Method Blank							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	mg/kg	< 20			20	Pass	
2-Methyl-4.6-dinitrophenol	mg/kg	< 5			5	Pass	
2-Methylphenol (o-Cresol)	mg/kg	< 0.2			0.2	Pass	
2-Nitrophenol	mg/kg	< 1			1	Pass	
2.4-Dimethylphenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dinitrophenol	mg/kg	< 5			5	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/kg	< 0.4			0.4	Pass	
4-Nitrophenol	mg/kg	< 5			5	Pass	
Dinoseb	mg/kg	< 20			20	Pass	
Phenol	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Nickel	mg/kg	< 5			5	Pass	
Zinc	mg/kg	< 5			5	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C10-C14	%	91			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	121			70-130	Pass	
Toluene	%	120			70-130	Pass	
Ethylbenzene	%	112			70-130	Pass	
m&p-Xylenes	%	113			70-130	Pass	
o-Xylene	%	114			70-130	Pass	
Xylenes - Total*	%	113			70-130	Pass	
LCS - % Recovery							
Volatile Organics							
1.1-Dichloroethene	%	121			70-130	Pass	
1.1.1-Trichloroethane	%	120			70-130	Pass	
1.2-Dichlorobenzene	%	111			70-130	Pass	
1.2-Dichloroethane	%	123			70-130	Pass	
Trichloroethene	%	120			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	77			70-130	Pass	
TRH >C10-C16	%	85			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	73			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Acenaphthylene	%	76			70-130	Pass	
Anthracene	%	92			70-130	Pass	
Benz(a)anthracene	%	76			70-130	Pass	
Benzo(a)pyrene	%	80			70-130	Pass	
Benzo(b&j)fluoranthene	%	76			70-130	Pass	
Benzo(g.h.i)perylene	%	82			70-130	Pass	
Benzo(k)fluoranthene	%	89			70-130	Pass	
Chrysene	%	85			70-130	Pass	
Dibenz(a.h)anthracene	%	73			70-130	Pass	
Fluoranthene	%	92			70-130	Pass	
Fluorene	%	78			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	77			70-130	Pass	
Naphthalene	%	80			70-130	Pass	
Phenanthrene	%	90			70-130	Pass	
Pyrene	%	96			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	111			70-130	Pass	
4.4'-DDD	%	99			70-130	Pass	
4.4'-DDE	%	105			70-130	Pass	
4.4'-DDT	%	89			70-130	Pass	
a-BHC	%	107			70-130	Pass	
Aldrin	%	110			70-130	Pass	
b-BHC	%	72			70-130	Pass	
d-BHC	%	95			70-130	Pass	
Dieldrin	%	116			70-130	Pass	
Endosulfan I	%	113			70-130	Pass	
Endosulfan II	%	105			70-130	Pass	
Endosulfan sulphate	%	96			70-130	Pass	
Endrin	%	80			70-130	Pass	
Endrin aldehyde	%	94			70-130	Pass	
Endrin ketone	%	105			70-130	Pass	
g-BHC (Lindane)	%	81			70-130	Pass	
Heptachlor	%	78			70-130	Pass	
Heptachlor epoxide	%	86			70-130	Pass	
Hexachlorobenzene	%	93			70-130	Pass	
Methoxychlor	%	76			70-130	Pass	
LCS - % Recovery							
Organophosphorus Pesticides							
Ethion	%	75			70-130	Pass	
Fenitrothion	%	79			70-130	Pass	
Methyl parathion	%	91			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls							
Aroclor-1016	%	126			70-130	Pass	
Aroclor-1260	%	129			70-130	Pass	
LCS - % Recovery							
Phenols (Halogenated)							
2-Chlorophenol	%	85			30-130	Pass	
2.4-Dichlorophenol	%	84			30-130	Pass	
2.4.5-Trichlorophenol	%	75			30-130	Pass	
2.4.6-Trichlorophenol	%	72			30-130	Pass	
2.6-Dichlorophenol	%	82			30-130	Pass	
4-Chloro-3-methylphenol	%	78			30-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Pentachlorophenol	%	118			30-130	Pass	
Tetrachlorophenols - Total	%	123			30-130	Pass	
LCS - % Recovery							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	%	88			30-130	Pass	
2-Methyl-4.6-dinitrophenol	%	108			30-130	Pass	
2-Methylphenol (o-Cresol)	%	84			30-130	Pass	
2-Nitrophenol	%	93			30-130	Pass	
2.4-Dimethylphenol	%	85			30-130	Pass	
2.4-Dinitrophenol	%	70			30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	%	85			30-130	Pass	
4-Nitrophenol	%	114			30-130	Pass	
Dinoseb	%	98			30-130	Pass	
Phenol	%	89			30-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	103			70-130	Pass	
Cadmium	%	107			70-130	Pass	
Chromium	%	107			70-130	Pass	
Copper	%	114			70-130	Pass	
Lead	%	107			70-130	Pass	
Mercury	%	106			70-130	Pass	
Nickel	%	111			70-130	Pass	
Zinc	%	112			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C10-C14	S20-Jl02320	NCP	%	106			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	S20-Jl05171	NCP	%	81			70-130	Pass	
Toluene	S20-Jl05171	NCP	%	76			70-130	Pass	
Ethylbenzene	S20-Jl05171	NCP	%	77			70-130	Pass	
m&p-Xylenes	S20-Jl05171	NCP	%	76			70-130	Pass	
o-Xylene	S20-Jl05171	NCP	%	82			70-130	Pass	
Xylenes - Total*	S20-Jl05171	NCP	%	78			70-130	Pass	
Spike - % Recovery									
Volatile Organics				Result 1					
1.1-Dichloroethene	S20-Jl05171	NCP	%	86			70-130	Pass	
1.1.1-Trichloroethane	S20-Jl05171	NCP	%	78			70-130	Pass	
1.2-Dichlorobenzene	S20-Jl05171	NCP	%	75			70-130	Pass	
1.2-Dichloroethane	S20-Jl05171	NCP	%	81			70-130	Pass	
Trichloroethene	S20-Jl05171	NCP	%	78			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
TRH >C10-C16	S20-Jl02320	NCP	%	98			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthylene	S20-Jl02320	NCP	%	70			70-130	Pass	
Anthracene	S20-Jl02320	NCP	%	80			70-130	Pass	
Benz(a)anthracene	S20-Jl02320	NCP	%	77			70-130	Pass	
Benzo(a)pyrene	S20-Jl02320	NCP	%	81			70-130	Pass	
Benzo(b&j)fluoranthene	S20-Jl02320	NCP	%	75			70-130	Pass	
Benzo(g.h.i)perylene	S20-Jl02320	NCP	%	80			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Benzo(k)fluoranthene	S20-Jl02320	NCP	%	89			70-130	Pass	
Chrysene	S20-Jl02320	NCP	%	85			70-130	Pass	
Dibenz(a.h)anthracene	S20-Jl02320	NCP	%	70			70-130	Pass	
Fluoranthene	S20-Jl02320	NCP	%	82			70-130	Pass	
Fluorene	S20-Jl02320	NCP	%	91			70-130	Pass	
Indeno(1.2.3-cd)pyrene	S20-Jl02320	NCP	%	72			70-130	Pass	
Naphthalene	S20-Jl02320	NCP	%	80			70-130	Pass	
Phenanthrene	S20-Jl02320	NCP	%	87			70-130	Pass	
Pyrene	S20-Jl02320	NCP	%	84			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
Chlordanes - Total	S20-Jl02320	NCP	%	100			70-130	Pass	
4.4'-DDD	S20-Jl02320	NCP	%	107			70-130	Pass	
4.4'-DDE	S20-Jl02320	NCP	%	98			70-130	Pass	
4.4'-DDT	S20-Jl02320	NCP	%	92			70-130	Pass	
a-BHC	S20-Jl02320	NCP	%	97			70-130	Pass	
Aldrin	S20-Jl02320	NCP	%	114			70-130	Pass	
b-BHC	S20-Jl02320	NCP	%	102			70-130	Pass	
d-BHC	S20-Jl02320	NCP	%	108			70-130	Pass	
Dieldrin	S20-Jl02320	NCP	%	114			70-130	Pass	
Endosulfan I	S20-Jl02320	NCP	%	105			70-130	Pass	
Endosulfan II	S20-Jl02320	NCP	%	113			70-130	Pass	
Endosulfan sulphate	S20-Jl02320	NCP	%	86			70-130	Pass	
Endrin	S20-Jl02320	NCP	%	102			70-130	Pass	
Endrin ketone	S20-Jl02320	NCP	%	87			70-130	Pass	
g-BHC (Lindane)	S20-Jl02320	NCP	%	102			70-130	Pass	
Heptachlor	S20-Jl02320	NCP	%	85			70-130	Pass	
Heptachlor epoxide	S20-Jl02320	NCP	%	96			70-130	Pass	
Hexachlorobenzene	S20-Jl02320	NCP	%	94			70-130	Pass	
Methoxychlor	S20-Jl02320	NCP	%	85			70-130	Pass	
Spike - % Recovery									
Organophosphorus Pesticides				Result 1					
Fenitrothion	S20-Jl02320	NCP	%	86			70-130	Pass	
Methyl parathion	S20-Jl02320	NCP	%	93			70-130	Pass	
Spike - % Recovery									
Polychlorinated Biphenyls				Result 1					
Aroclor-1016	S20-Jl02320	NCP	%	124			70-130	Pass	
Aroclor-1260	S20-Jl02320	NCP	%	123			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	S20-Jl05241	NCP	%	106			70-130	Pass	
Cadmium	S20-Jl05241	NCP	%	107			70-130	Pass	
Chromium	S20-Jl05241	NCP	%	98			70-130	Pass	
Copper	S20-Jl05241	NCP	%	97			70-130	Pass	
Lead	S20-Jl05241	NCP	%	107			70-130	Pass	
Mercury	S20-Jl05241	NCP	%	91			70-130	Pass	
Nickel	S20-Jl05241	NCP	%	97			70-130	Pass	
Zinc	S20-Jl05241	NCP	%	117			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C6-C9	S20-Jl01539	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	S20-Jl02319	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	S20-Jl02319	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	S20-Jl02319	NCP	mg/kg	< 50	< 50	<1	30%	Pass	

Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S20-Jl01539	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Toluene	S20-Jl01539	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Ethylbenzene	S20-Jl01539	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
m&p-Xylenes	S20-Jl01539	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
o-Xylene	S20-Jl01539	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes - Total*	S20-Jl01539	CP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
1.1-Dichloroethane	S20-Jl01539	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1-Dichloroethene	S20-Jl01539	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1-Trichloroethane	S20-Jl01539	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	S20-Jl01539	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2-Trichloroethane	S20-Jl01539	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	S20-Jl01539	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dibromoethane	S20-Jl01539	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichlorobenzene	S20-Jl01539	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloroethane	S20-Jl01539	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloropropane	S20-Jl01539	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.3-Trichloropropane	S20-Jl01539	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trimethylbenzene	S20-Jl01539	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichlorobenzene	S20-Jl01539	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichloropropane	S20-Jl01539	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3.5-Trimethylbenzene	S20-Jl01539	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.4-Dichlorobenzene	S20-Jl01539	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Butanone (MEK)	S20-Jl01539	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Propanone (Acetone)	S20-Jl01539	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chlorotoluene	S20-Jl01539	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Methyl-2-pentanone (MIBK)	S20-Jl01539	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Allyl chloride	S20-Jl01539	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromobenzene	S20-Jl01539	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromochloromethane	S20-Jl01539	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromodichloromethane	S20-Jl01539	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromoform	S20-Jl01539	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromomethane	S20-Jl01539	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon disulfide	S20-Jl01539	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon Tetrachloride	S20-Jl01539	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chlorobenzene	S20-Jl01539	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroethane	S20-Jl01539	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroform	S20-Jl01539	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloromethane	S20-Jl01539	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.2-Dichloroethene	S20-Jl01539	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.3-Dichloropropene	S20-Jl01539	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromochloromethane	S20-Jl01539	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromomethane	S20-Jl01539	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dichlorodifluoromethane	S20-Jl01539	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Iodomethane	S20-Jl01539	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Isopropyl benzene (Cumene)	S20-Jl01539	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Methylene Chloride	S20-Jl01539	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Styrene	S20-Jl01539	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Tetrachloroethene	S20-Jl01539	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.2-Dichloroethene	S20-Jl01539	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.3-Dichloropropene	S20-Jl01539	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichloroethene	S20-Jl01539	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichlorofluoromethane	S20-Jl01539	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Vinyl chloride	S20-Jl01539	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	S20-Jl01539	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	S20-Jl01539	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH >C10-C16	S20-Jl02319	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	S20-Jl02319	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	S20-Jl02319	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	S20-Jl02485	NCP	%	9.6	9.0	7.0	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	S20-Jl01540	CP	mg/kg	11	5.9	59	30%	Fail	Q15
Cadmium	S20-Jl01540	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	S20-Jl01540	CP	mg/kg	20	15	29	30%	Pass	
Copper	S20-Jl01540	CP	mg/kg	47	35	29	30%	Pass	
Lead	S20-Jl01540	CP	mg/kg	110	90	22	30%	Pass	
Mercury	S20-Jl01540	CP	mg/kg	0.1	0.1	8.0	30%	Pass	
Nickel	S20-Jl01540	CP	mg/kg	14	9.7	35	30%	Fail	Q15
Zinc	S20-Jl01540	CP	mg/kg	190	170	13	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	S20-Jl01542	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	S20-Jl01542	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	S20-Jl01542	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	S20-Jl01542	CP	mg/kg	1.0	< 0.5	100	30%	Fail	Q15
Benzo(a)pyrene	S20-Jl01542	CP	mg/kg	0.9	< 0.5	72	30%	Fail	Q15
Benzo(b&j)fluoranthene	S20-Jl01542	CP	mg/kg	0.9	< 0.5	120	30%	Fail	Q15
Benzo(g.h.i)perylene	S20-Jl01542	CP	mg/kg	0.8	< 0.5	98	30%	Fail	Q15
Benzo(k)fluoranthene	S20-Jl01542	CP	mg/kg	1.3	< 0.5	130	30%	Fail	Q15
Chrysene	S20-Jl01542	CP	mg/kg	0.8	< 0.5	88	30%	Fail	Q15
Dibenz(a.h)anthracene	S20-Jl01542	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	S20-Jl01542	CP	mg/kg	1.8	0.7	87	30%	Fail	Q15
Fluorene	S20-Jl01542	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	S20-Jl01542	CP	mg/kg	0.7	< 0.5	91	30%	Fail	Q15
Naphthalene	S20-Jl01542	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	S20-Jl01542	CP	mg/kg	0.7	< 0.5	84	30%	Fail	Q15
Pyrene	S20-Jl01542	CP	mg/kg	1.9	0.8	80	30%	Fail	Q15
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	S20-Jl01542	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	S20-Jl01542	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	S20-Jl01542	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	S20-Jl01542	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-BHC	S20-Jl01542	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	S20-Jl01542	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-BHC	S20-Jl01542	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-BHC	S20-Jl01542	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	S20-Jl01542	CP	mg/kg	0.14	0.27	59	30%	Fail	Q15
Endosulfan I	S20-Jl01542	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	S20-Jl01542	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	S20-Jl01542	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	S20-Jl01542	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	S20-Jl01542	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	S20-Jl01542	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-BHC (Lindane)	S20-Jl01542	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	

Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Heptachlor	S20-Jl01542	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	S20-Jl01542	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	S20-Jl01542	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	S20-Jl01542	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Azinphos-methyl	S20-Jl01542	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Bolstar	S20-Jl01542	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorfenvinphos	S20-Jl01542	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos	S20-Jl01542	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos-methyl	S20-Jl01542	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Coumaphos	S20-Jl01542	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Demeton-S	S20-Jl01542	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Demeton-O	S20-Jl01542	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Diazinon	S20-Jl01542	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dichlorvos	S20-Jl01542	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dimethoate	S20-Jl01542	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Disulfoton	S20-Jl01542	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
EPN	S20-Jl01542	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethion	S20-Jl01542	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethoprop	S20-Jl01542	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethyl parathion	S20-Jl01542	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenitrothion	S20-Jl01542	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fensulfothion	S20-Jl01542	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenthion	S20-Jl01542	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Malathion	S20-Jl01542	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Merphos	S20-Jl01542	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Methyl parathion	S20-Jl01542	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Mevinphos	S20-Jl01542	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Monocrotophos	S20-Jl01542	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Naled	S20-Jl01542	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Omethoate	S20-Jl01542	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Phorate	S20-Jl01542	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pirimiphos-methyl	S20-Jl01542	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pyrazophos	S20-Jl01542	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ronnel	S20-Jl01542	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Terbufos	S20-Jl01542	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tetrachlorvinphos	S20-Jl01542	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tokuthion	S20-Jl01542	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Trichloronate	S20-Jl01542	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Phenols (Halogenated)				Result 1	Result 2	RPD			
2-Chlorophenol	S20-Jl01542	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dichlorophenol	S20-Jl01542	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4.5-Trichlorophenol	S20-Jl01542	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4.6-Trichlorophenol	S20-Jl01542	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.6-Dichlorophenol	S20-Jl01542	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chloro-3-methylphenol	S20-Jl01542	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Pentachlorophenol	S20-Jl01542	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Tetrachlorophenols - Total	S20-Jl01542	CP	mg/kg	< 10	< 10	<1	30%	Pass	

Duplicate									
Phenols (non-Halogenated)				Result 1	Result 2	RPD			
2-Cyclohexyl-4.6-dinitrophenol	S20-Jl01542	CP	mg/kg	< 20	< 20	<1	30%	Pass	
2-Methyl-4.6-dinitrophenol	S20-Jl01542	CP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Methylphenol (o-Cresol)	S20-Jl01542	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
2-Nitrophenol	S20-Jl01542	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4-Dimethylphenol	S20-Jl01542	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dinitrophenol	S20-Jl01542	CP	mg/kg	< 5	< 5	<1	30%	Pass	
3&4-Methylphenol (m&p-Cresol)	S20-Jl01542	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
4-Nitrophenol	S20-Jl01542	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Dinoseb	S20-Jl01542	CP	mg/kg	< 20	< 20	<1	30%	Pass	
Phenol	S20-Jl01542	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Comments

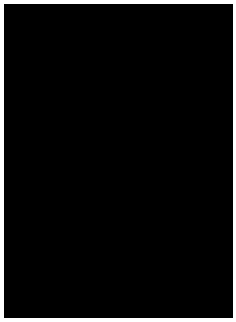
Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
Q15	The RPD reported passes Eurofins Environment Testing's QC - Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report.

Authorised By



Analytical Services Manager
Senior Analyst-Organic (NSW)
Senior Analyst-Metal (NSW)
Senior Analyst-Asbestos (NSW)

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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000697

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

SLR

PROJECT OFFICE (Tick one)

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- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT: DHA

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGER: [redacted]

PM CONTACT No:

LABORATORY: SGS

LABORATORY ADDRESS: 340

SAMPLER: [redacted]

SAMPLER CONTACT No:

Email Reports and Invoices to: LABS4D@slrconsulting.com

Turnaround Time (TAT)

☑ Standard TAT

☐ Non Standard or Urgent TAT

Required TAT:

COC Number: 2 of 3

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	Asbestos					Hold	Additional Information (Comment on any gross contamination or specific requirements)
	0407_TP266_1.5_200701	01-7-20	Soil									
	0407_QC186_200701											
	0407_QC286_200701			* Please forward to Eurofins for "Suite A"								
	0407_TP266_A01_200701		ACM			X						
	0407_TP266_A02_200701					X						
	0407_TP266_A03_200701										X	
	0407_TP266_A04_200701										X	
	0407_TP264_A01_200701					X						
	0407_TP265_A01_200701					X						
	0407_TP265_A02_200701										X	
	0407_TP265_A03_200701										X	
	0407_TP265_A04_200701										X	

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	Received by	Sign [redacted]	Date / Time	Temperature Received:
Relinquished By	Sign	Date / Time	Received by	Sign 2/7/20 3:33PM	Date / Time	24.80°C
Relinquished By	Sign	Date / Time	Received by	Sign [redacted]	Date / Time	

#729445

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ABN – 50 005 085 521 e.mail : EnviroSales@eurofins.com web : www.eurofins.com.au

Sample Receipt Advice

Company name:	**SLR Consulting (Sydney)**
Contact name:	[redacted]
Project name:	RANDWICK BARRACKS
Project ID:	610.30041
COC number:	000697
Turn around time:	5 Day
Date/Time received:	Jul 2, 2020 3:33 PM
Eurofins reference:	**729445**

Sample information

☑ A detailed list of analytes logged into our LIMS, is included in the attached summary table.

☑ All samples have been received as described on the above COC.

☑ COC has been completed correctly.

☑ Attempt to chill was evident.

☑ Appropriately preserved sample containers have been used.

☑ All samples were received in good condition.

☑ Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.

☑ Appropriate sample containers have been used.

☒ Split sample sent to requested external lab.

☒ Some samples have been subcontracted.

N/A Custody Seals intact (if used).

Contact notes

If you have any questions with respect to these samples please contact:

[redacted] on Phone : [redacted] or by e.mail: [redacted]@eurofins.com

Results will be delivered electronically via e.mail to [redacted]@slrconsulting.com.

Note: A copy of these results will also be delivered to the general SLR Consulting (Sydney) email address.

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ABN – 50 005 085 521 web : www.eurofins.com.au e.mail : EnviroSales@eurofins.com

Australia

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NATA # 1261
Site # 1254 & 14271

Sydney
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Lane Cove West NSW 2066
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

Brisbane
1/21 Smallwood Place
Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Perth
2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261
Site # 23736

New Zealand

Auckland
35 O'Rorke Road
Penrose, Auckland 1061
Phone : +64 9 526 45 51
IANZ # 1327

Christchurch
43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 729445
Phone: 02 9428 8100
Fax:

Received: Jul 2, 2020 3:33 PM
Due: Jul 9, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271										
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	0407_QC286_200701	Jul 01, 2020		Soil	S20-Jl04524	X	X	X	X	X
Test Counts						1	1	1	1	1

Certificate of Analysis

eurofins | Environment Testing

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025–Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus
North Sydney
NSW 2060

Attention:	[redacted]
Report	729445-AID
Project Name	RANDWICK BARRACKS
Project ID	610.30041
Received Date	Jul 02, 2020
Date Reported	Jul 09, 2020

Methodology:

Asbestos Fibre Identification	Conducted in accordance with the Australian Standard AS 4964 – 2004: Method for the Qualitative Identification of Asbestos in Bulk Samples and in-house Method LTM-ASB-8020 by polarised light microscopy (PLM) and dispersion staining (DS) techniques. *NOTE: Positive Trace Analysis results indicate the sample contains detectable respirable fibres.*
Unknown Mineral Fibres	Mineral fibres of unknown type, as determined by PLM with DS, may require another analytical technique, such as Electron Microscopy, to confirm unequivocal identity. *NOTE: While Actinolite, Anthophyllite and Tremolite asbestos may be detected by PLM with DS, due to variability in the optical properties of these materials, AS4964 requires that these are reported as UMF unless confirmed by an independent technique.*
Subsampling Soil Samples	The whole sample submitted is first dried and then passed through a 10mm sieve followed by a 2mm sieve. All fibrous matter greater than 10mm, greater than 2mm as well as the material passing through the 2mm sieve are retained and analysed for the presence of asbestos. If the sub 2mm fraction is greater than approximately 30 to 60g then a sub-sampling routine based on ISO 3082:2009(E) is employed. *NOTE: Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be sub-sampled for trace analysis, in accordance with AS 4964-2004.*
Bonded asbestos-containing material (ACM)	The material is first examined and any fibres isolated for identification by PLM and DS. Where required, interfering matrices may be removed by disintegration using a range of heat, chemical or physical treatments, possibly in combination.The resultant material is then further examined in accordance with AS 4964 - 2004. *NOTE: Even after disintegration it may be difficult to detect the presence of asbestos in some asbestos-containing bulk materials using PLM and DS. This is due to the low grade or small length or diameter of the asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos-containing sealants and mastics, asbestos-containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.*
Limit of Reporting	The performance limitation of the AS 4964 (2004) method for non-homogeneous samples is around 0.1 g/kg (equivalent to 0.01% (w/w)). Where no asbestos is found by PLM and DS, including Trace Analysis, this is considered to be at the nominal reporting limit of 0.01% (w/w). The NEPM screening level of 0.001% (w/w) is intended as an on-site determination, not a laboratory Limit of Reporting (LOR), per se. Examination of a large sample size (e.g. 500 mL) may improve the likelihood of detecting asbestos, particularly AF, to aid assessment against the NEPM criteria. Gravimetric determinations to this level of accuracy are outside of AS 4964 and hence NATA Accreditation does not cover the performance of this service (non-NATA results shown with an asterisk). *NOTE: NATA News March 2014, p.7, states in relation to AS 4964: "This is a qualitative method with a nominal reporting limit of 0.01 % " and that currently in Australia "there is no validated method available for the quantification of asbestos".This report is consistent with the analytical procedures and reporting recommendations in the NEPM and the WA DoH.*

Accredited for compliance with ISO/IEC 17025–Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Project Name RANDWICK BARRACKS
Project ID 610.30041
Date Sampled Jul 01, 2020
Report 729445-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
0407_QC286_200701	20-Jl04524	Jul 01, 2020	Approximate Sample 61g Sample consisted of: Brown coarse-grained sandy soil and organic debris	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Asbestos - LTM-ASB-8020	Sydney	Jul 02, 2020	Indefinite

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Site # 23736

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Phone : +64 9 526 45 51
IANZ # 1327

Christchurch
43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 729445
Phone: 02 9428 8100
Fax:

Received: Jul 2, 2020 3:33 PM
Due: Jul 9, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271										
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	0407_QC286_200701	Jul 01, 2020		Soil	S20-Jl04524	X	X	X	X	X
Test Counts						1	1	1	1	1

Internal Quality Control Review and Glossary

General

1. QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Samples were analysed on an 'as received' basis.
4. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
5. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the Sample Receipt Advice.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

Units

% w/w: weight for weight basis	grams per kilogram
Filter loading:	fibres/100 graticule areas
Reported Concentration:	fibres/mL
Flowrate:	L/min

Terms

Dry	Sample is dried by heating prior to analysis
LOR	Limit of Reporting
COC	Chain of Custody
SRA	Sample Receipt Advice
ISO	International Standards Organisation
AS	Australian Standards
WA DOH	Reference document for the NEPM. Government of Western Australia, Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia (2009), including supporting document Recommended Procedures for Laboratory Analysis of Asbestos in Soil (2011)
NEPM	National Environment Protection (Assessment of Site Contamination) Measure, 2013 (as amended)
ACM	Asbestos Containing Materials. Asbestos contained within a non-asbestos matrix, typically presented in bonded and/or sound condition. For the purposes of the NEPM, ACM is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
AF	Asbestos Fines. Asbestos containing materials, including friable, weathered and bonded materials, able to pass a 7mm x 7mm sieve. Considered under the NEPM as equivalent to “non-bonded / friable”.
FA	Fibrous Asbestos. Asbestos containing materials in a friable and/or severely weathered condition. For the purposes of the NEPM, FA is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
Friable	Asbestos-containing materials of any size that may be broken or crumbled by hand pressure. For the purposes of the NEPM, this includes both AF and FA. It is outside of the laboratory’s remit to assess degree of friability.
Trace Analysis	Analytical procedure used to detect the presence of respirable fibres in the matrix.

Comments

The sample received was not collected in an approved asbestos bag and was therefore sub-sampled from the 250mL glass jar. Valid sub-sampling procedures were applied so as to ensure that the sub-sample to be analysed accurately represented the sample received.

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

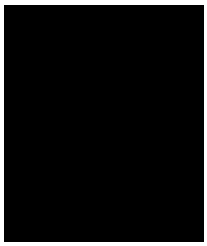
Qualifier Codes/Comments

Code	Description
N/A	Not applicable

Asbestos Counter/Identifier:

[redacted] Senior Analyst-Asbestos (NSW)

Authorised by:



Senior Analyst-Asbestos (NSW)

General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus,
North Sydney
NSW 2060

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: [redacted]

Report **729445-S**
Project name RANDWICK BARRACKS
Project ID 610.30041
Received Date Jul 02, 2020

Client Sample ID			**0407_QC286_200701**
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-Jl04524**
Date Sampled			**Jul 01, 2020**
Test/Reference	LOR	Unit	
BTEX			
Benzene	0.1	mg/kg	< 0.1
Toluene	0.1	mg/kg	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2
o-Xylene	0.1	mg/kg	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3
4-Bromofluorobenzene (surr.)	1	%	81
Volatile Organics			
1.1-Dichloroethane	0.5	mg/kg	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5
Benzene	0.1	mg/kg	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5
Bromoform	0.5	mg/kg	< 0.5
Bromomethane	0.5	mg/kg	< 0.5

Client Sample ID			0407_QC286_200701
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-JI04524**
Date Sampled			**Jul 01, 2020**
Test/Reference	LOR	Unit	
Volatile Organics			
Carbon disulfide	0.5	mg/kg	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5
Chloroethane	0.5	mg/kg	< 0.5
Chloroform	0.5	mg/kg	< 0.5
Chloromethane	0.5	mg/kg	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1
Iodomethane	0.5	mg/kg	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5
o-Xylene	0.1	mg/kg	< 0.1
Styrene	0.5	mg/kg	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5
Toluene	0.1	mg/kg	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3
Total MAH*	0.5	mg/kg	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5
4-Bromofluorobenzene (surr.)	1	%	81
Toluene-d8 (surr.)	1	%	105
Total Recoverable Hydrocarbons - 2013 NEPM Fractions			
Naphthalene[N02]	0.5	mg/kg	< 0.5
TRH C6-C10	20	mg/kg	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20
TRH >C10-C16	50	mg/kg	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50
TRH >C16-C34	100	mg/kg	< 100
TRH >C34-C40	100	mg/kg	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100
Total Recoverable Hydrocarbons			
TRH C6-C9	20	mg/kg	< 20
Total Recoverable Hydrocarbons - 1999 NEPM Fractions			
TRH C10-C14	20	mg/kg	< 20
TRH C15-C28	50	mg/kg	< 50
TRH C29-C36	50	mg/kg	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50

Client Sample ID			0407_QC286_200701
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-JI04524**
Date Sampled			**Jul 01, 2020**
Test/Reference	LOR	Unit	
Polycyclic Aromatic Hydrocarbons			
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2
Acenaphthene	0.5	mg/kg	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5
Anthracene	0.5	mg/kg	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5
Chrysene	0.5	mg/kg	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5
Fluorene	0.5	mg/kg	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5
Naphthalene	0.5	mg/kg	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5
Pyrene	0.5	mg/kg	< 0.5
Total PAH*	0.5	mg/kg	< 0.5
2-Fluorobiphenyl (surr.)	1	%	83
p-Terphenyl-d14 (surr.)	1	%	109
Organochlorine Pesticides			
Chlordanes - Total	0.1	mg/kg	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05
a-BHC	0.05	mg/kg	< 0.05
Aldrin	0.05	mg/kg	< 0.05
b-BHC	0.05	mg/kg	< 0.05
d-BHC	0.05	mg/kg	< 0.05
Dieldrin	0.05	mg/kg	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05
Endrin	0.05	mg/kg	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05
Heptachlor	0.05	mg/kg	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05
Methoxychlor	0.2	mg/kg	< 0.2
Toxaphene	1	mg/kg	< 1
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.2
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.2
Dibutylchlorendate (surr.)	1	%	63
Tetrachloro-m-xylene (surr.)	1	%	62

Client Sample ID			0407_QC286_200701
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-JI04524**
Date Sampled			**Jul 01, 2020**
Test/Reference	LOR	Unit	
Organophosphorus Pesticides			
Azinphos-methyl	0.2	mg/kg	< 0.2
Bolstar	0.2	mg/kg	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2
Coumaphos	2	mg/kg	< 2
Demeton-S	0.2	mg/kg	< 0.2
Demeton-O	0.2	mg/kg	< 0.2
Diazinon	0.2	mg/kg	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2
Dimethoate	0.2	mg/kg	< 0.2
Disulfoton	0.2	mg/kg	< 0.2
EPN	0.2	mg/kg	< 0.2
Ethion	0.2	mg/kg	< 0.2
Ethoprop	0.2	mg/kg	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2
Fenthion	0.2	mg/kg	< 0.2
Malathion	0.2	mg/kg	< 0.2
Merphos	0.2	mg/kg	< 0.2
Methyl parathion	0.2	mg/kg	< 0.2
Mevinphos	0.2	mg/kg	< 0.2
Monocrotophos	2	mg/kg	< 2
Naled	0.2	mg/kg	< 0.2
Omethoate	2	mg/kg	< 2
Phorate	0.2	mg/kg	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2
Ronnel	0.2	mg/kg	< 0.2
Terbufos	0.2	mg/kg	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2
Tokuthion	0.2	mg/kg	< 0.2
Trichloronate	0.2	mg/kg	< 0.2
Triphenylphosphate (surr.)	1	%	69
Polychlorinated Biphenyls			
Aroclor-1016	0.5	mg/kg	< 0.5
Aroclor-1221	0.1	mg/kg	< 0.1
Aroclor-1232	0.5	mg/kg	< 0.5
Aroclor-1242	0.5	mg/kg	< 0.5
Aroclor-1248	0.5	mg/kg	< 0.5
Aroclor-1254	0.5	mg/kg	< 0.5
Aroclor-1260	0.5	mg/kg	< 0.5
Total PCB*	0.5	mg/kg	< 0.5
Dibutylchlorendate (surr.)	1	%	63
Tetrachloro-m-xylene (surr.)	1	%	62

Client Sample ID			0407_QC286_200701
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-JI04524**
Date Sampled			**Jul 01, 2020**
Test/Reference	LOR	Unit	
Phenols (Halogenated)			
2-Chlorophenol	0.5	mg/kg	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1
Pentachlorophenol	1	mg/kg	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10
Total Halogenated Phenol*	1	mg/kg	< 1
Phenols (non-Halogenated)			
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2
2-Nitrophenol	1	mg/kg	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4
4-Nitrophenol	5	mg/kg	< 5
Dinoseb	20	mg/kg	< 20
Phenol	0.5	mg/kg	< 0.5
Total Non-Halogenated Phenol*	20	mg/kg	< 20
Phenol-d6 (surr.)	1	%	69
Heavy Metals			
Arsenic	2	mg/kg	4.0
Cadmium	0.4	mg/kg	< 0.4
Chromium	5	mg/kg	8.0
Copper	5	mg/kg	15
Lead	5	mg/kg	240
Mercury	0.1	mg/kg	0.1
Nickel	5	mg/kg	7.9
Zinc	5	mg/kg	94
% Moisture	1	%	15

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
BTEX	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jul 03, 2020	
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Polycyclic Aromatic Hydrocarbons	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (Halogenated)	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (non-Halogenated)	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Metals M8	Sydney	Jul 03, 2020	180 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Volatile Organics	Sydney	Jul 03, 2020	7 Days
- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices			
Eurofins | mgt Suite B15			
Organochlorine Pesticides	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Organophosphorus Pesticides	Sydney	Jul 03, 2020	14 Days
- Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS			
Polychlorinated Biphenyls	Sydney	Jul 03, 2020	28 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
% Moisture	Sydney	Jul 02, 2020	14 Days
- Method: LTM-GEN-7080 Moisture			

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Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 729445
Phone: 02 9428 8100
Fax:

Received: Jul 2, 2020 3:33 PM
Due: Jul 9, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271										
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	0407_QC286_200701	Jul 01, 2020		Soil	S20-Jl04524	X	X	X	X	X
Test Counts						1	1	1	1	1

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

****NOTE:** pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram
mg/L: milligrams per litre
ug/L: micrograms per litre
ppm: Parts per million
ppb: Parts per billion
%: Percentage
org/100mL: Organisms per 100 millilitres
NTU: Nephelometric Turbidity Units
MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version 5.3
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling.Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
BTEX							
Benzene	mg/kg	< 0.1			0.1	Pass	
Toluene	mg/kg	< 0.1			0.1	Pass	
Ethylbenzene	mg/kg	< 0.1			0.1	Pass	
m&p-Xylenes	mg/kg	< 0.2			0.2	Pass	
o-Xylene	mg/kg	< 0.1			0.1	Pass	
Xylenes - Total*	mg/kg	< 0.3			0.3	Pass	
Method Blank							
Volatile Organics							
1.1-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
1.1.1-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.1.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dibromoethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.3-Trichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.4-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.3.5-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.4-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
2-Butanone (MEK)	mg/kg	< 0.5			0.5	Pass	
2-Propanone (Acetone)	mg/kg	< 0.5			0.5	Pass	
4-Chlorotoluene	mg/kg	< 0.5			0.5	Pass	
4-Methyl-2-pentanone (MIBK)	mg/kg	< 0.5			0.5	Pass	
Allyl chloride	mg/kg	< 0.5			0.5	Pass	
Bromobenzene	mg/kg	< 0.5			0.5	Pass	
Bromochloromethane	mg/kg	< 0.5			0.5	Pass	
Bromodichloromethane	mg/kg	< 0.5			0.5	Pass	
Bromoform	mg/kg	< 0.5			0.5	Pass	
Bromomethane	mg/kg	< 0.5			0.5	Pass	
Carbon disulfide	mg/kg	< 0.5			0.5	Pass	
Carbon Tetrachloride	mg/kg	< 0.5			0.5	Pass	
Chlorobenzene	mg/kg	< 0.5			0.5	Pass	
Chloroethane	mg/kg	< 0.5			0.5	Pass	
Chloroform	mg/kg	< 0.5			0.5	Pass	
Chloromethane	mg/kg	< 0.5			0.5	Pass	
cis-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
cis-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Dibromochloromethane	mg/kg	< 0.5			0.5	Pass	
Dibromomethane	mg/kg	< 0.5			0.5	Pass	
Dichlorodifluoromethane	mg/kg	< 0.5			0.5	Pass	
Iodomethane	mg/kg	< 0.5			0.5	Pass	
Isopropyl benzene (Cumene)	mg/kg	< 0.5			0.5	Pass	
Methylene Chloride	mg/kg	< 0.5			0.5	Pass	
Styrene	mg/kg	< 0.5			0.5	Pass	
Tetrachloroethene	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
trans-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Trichloroethene	mg/kg	< 0.5			0.5	Pass	
Trichlorofluoromethane	mg/kg	< 0.5			0.5	Pass	
Vinyl chloride	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
Total Recoverable Hydrocarbons							
TRH C6-C9	mg/kg	< 20			20	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Organochlorine Pesticides							
Chlordanes - Total	mg/kg	< 0.1			0.1	Pass	
4.4'-DDD	mg/kg	< 0.05			0.05	Pass	
4.4'-DDE	mg/kg	< 0.05			0.05	Pass	
4.4'-DDT	mg/kg	< 0.05			0.05	Pass	
a-BHC	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-BHC	mg/kg	< 0.05			0.05	Pass	
d-BHC	mg/kg	< 0.05			0.05	Pass	
Dieldrin	mg/kg	< 0.05			0.05	Pass	
Endosulfan I	mg/kg	< 0.05			0.05	Pass	
Endosulfan II	mg/kg	< 0.05			0.05	Pass	
Endosulfan sulphate	mg/kg	< 0.05			0.05	Pass	
Endrin	mg/kg	< 0.05			0.05	Pass	
Endrin aldehyde	mg/kg	< 0.05			0.05	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Endrin ketone	mg/kg	< 0.05			0.05	Pass	
g-BHC (Lindane)	mg/kg	< 0.05			0.05	Pass	
Heptachlor	mg/kg	< 0.05			0.05	Pass	
Heptachlor epoxide	mg/kg	< 0.05			0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05			0.05	Pass	
Methoxychlor	mg/kg	< 0.2			0.2	Pass	
Toxaphene	mg/kg	< 1			1	Pass	
Method Blank							
Organophosphorus Pesticides							
Azinphos-methyl	mg/kg	< 0.2			0.2	Pass	
Bolstar	mg/kg	< 0.2			0.2	Pass	
Chlorfenvinphos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos-methyl	mg/kg	< 0.2			0.2	Pass	
Coumaphos	mg/kg	< 2			2	Pass	
Demeton-S	mg/kg	< 0.2			0.2	Pass	
Demeton-O	mg/kg	< 0.2			0.2	Pass	
Diazinon	mg/kg	< 0.2			0.2	Pass	
Dichlorvos	mg/kg	< 0.2			0.2	Pass	
Dimethoate	mg/kg	< 0.2			0.2	Pass	
Disulfoton	mg/kg	< 0.2			0.2	Pass	
EPN	mg/kg	< 0.2			0.2	Pass	
Ethion	mg/kg	< 0.2			0.2	Pass	
Ethoprop	mg/kg	< 0.2			0.2	Pass	
Ethyl parathion	mg/kg	< 0.2			0.2	Pass	
Fenitrothion	mg/kg	< 0.2			0.2	Pass	
Fensulfothion	mg/kg	< 0.2			0.2	Pass	
Fenthion	mg/kg	< 0.2			0.2	Pass	
Malathion	mg/kg	< 0.2			0.2	Pass	
Merphos	mg/kg	< 0.2			0.2	Pass	
Methyl parathion	mg/kg	< 0.2			0.2	Pass	
Mevinphos	mg/kg	< 0.2			0.2	Pass	
Monocrotophos	mg/kg	< 2			2	Pass	
Naled	mg/kg	< 0.2			0.2	Pass	
Omethoate	mg/kg	< 2			2	Pass	
Phorate	mg/kg	< 0.2			0.2	Pass	
Pirimiphos-methyl	mg/kg	< 0.2			0.2	Pass	
Pyrazophos	mg/kg	< 0.2			0.2	Pass	
Ronnel	mg/kg	< 0.2			0.2	Pass	
Terbufos	mg/kg	< 0.2			0.2	Pass	
Tetrachlorvinphos	mg/kg	< 0.2			0.2	Pass	
Tokuthion	mg/kg	< 0.2			0.2	Pass	
Trichloronate	mg/kg	< 0.2			0.2	Pass	
Method Blank							
Polychlorinated Biphenyls							
Aroclor-1016	mg/kg	< 0.5			0.5	Pass	
Aroclor-1221	mg/kg	< 0.1			0.1	Pass	
Aroclor-1232	mg/kg	< 0.5			0.5	Pass	
Aroclor-1242	mg/kg	< 0.5			0.5	Pass	
Aroclor-1248	mg/kg	< 0.5			0.5	Pass	
Aroclor-1254	mg/kg	< 0.5			0.5	Pass	
Aroclor-1260	mg/kg	< 0.5			0.5	Pass	
Total PCB*	mg/kg	< 0.5			0.5	Pass	
Method Blank							

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Phenols (Halogenated)							
2-Chlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4.5-Trichlorophenol	mg/kg	< 1			1	Pass	
2.4.6-Trichlorophenol	mg/kg	< 1			1	Pass	
2.6-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
4-Chloro-3-methylphenol	mg/kg	< 1			1	Pass	
Pentachlorophenol	mg/kg	< 1			1	Pass	
Tetrachlorophenols - Total	mg/kg	< 10			10	Pass	
Method Blank							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	mg/kg	< 20			20	Pass	
2-Methyl-4.6-dinitrophenol	mg/kg	< 5			5	Pass	
2-Methylphenol (o-Cresol)	mg/kg	< 0.2			0.2	Pass	
2-Nitrophenol	mg/kg	< 1			1	Pass	
2.4-Dimethylphenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dinitrophenol	mg/kg	< 5			5	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/kg	< 0.4			0.4	Pass	
4-Nitrophenol	mg/kg	< 5			5	Pass	
Dinoseb	mg/kg	< 20			20	Pass	
Phenol	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Nickel	mg/kg	< 5			5	Pass	
Zinc	mg/kg	< 5			5	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	111			70-130	Pass	
Toluene	%	111			70-130	Pass	
Ethylbenzene	%	105			70-130	Pass	
m&p-Xylenes	%	107			70-130	Pass	
o-Xylene	%	108			70-130	Pass	
Xylenes - Total*	%	107			70-130	Pass	
LCS - % Recovery							
Volatile Organics							
1.1-Dichloroethene	%	121			70-130	Pass	
1.1.1-Trichloroethane	%	107			70-130	Pass	
1.2-Dichlorobenzene	%	106			70-130	Pass	
1.2-Dichloroethane	%	113			70-130	Pass	
Trichloroethene	%	109			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	72			70-130	Pass	
TRH C6-C10	%	81			70-130	Pass	
TRH >C10-C16	%	96			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons							
TRH C6-C9	%	82			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
LCS - % Recovery							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C10-C14	%	101			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	95			70-130	Pass	
Acenaphthylene	%	82			70-130	Pass	
Anthracene	%	98			70-130	Pass	
Benz(a)anthracene	%	86			70-130	Pass	
Benzo(a)pyrene	%	88			70-130	Pass	
Benzo(b&j)fluoranthene	%	85			70-130	Pass	
Benzo(g.h.i)perylene	%	87			70-130	Pass	
Benzo(k)fluoranthene	%	99			70-130	Pass	
Chrysene	%	97			70-130	Pass	
Dibenz(a.h)anthracene	%	81			70-130	Pass	
Fluoranthene	%	92			70-130	Pass	
Fluorene	%	99			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	79			70-130	Pass	
Naphthalene	%	91			70-130	Pass	
Phenanthrene	%	88			70-130	Pass	
Pyrene	%	88			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	101			70-130	Pass	
4.4'-DDD	%	92			70-130	Pass	
4.4'-DDE	%	90			70-130	Pass	
a-BHC	%	102			70-130	Pass	
Aldrin	%	90			70-130	Pass	
b-BHC	%	97			70-130	Pass	
d-BHC	%	87			70-130	Pass	
Dieldrin	%	100			70-130	Pass	
Endosulfan I	%	108			70-130	Pass	
Endosulfan II	%	96			70-130	Pass	
Endosulfan sulphate	%	94			70-130	Pass	
Endrin	%	90			70-130	Pass	
Endrin aldehyde	%	105			70-130	Pass	
Endrin ketone	%	108			70-130	Pass	
g-BHC (Lindane)	%	105			70-130	Pass	
Heptachlor	%	93			70-130	Pass	
Heptachlor epoxide	%	86			70-130	Pass	
Hexachlorobenzene	%	89			70-130	Pass	
Methoxychlor	%	104			70-130	Pass	
LCS - % Recovery							
Organophosphorus Pesticides							
Diazinon	%	81			70-130	Pass	
Ethion	%	105			70-130	Pass	
Fenitrothion	%	97			70-130	Pass	
Methyl parathion	%	101			70-130	Pass	
Mevinphos	%	73			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls							
Aroclor-1016	%	120			70-130	Pass	
Aroclor-1260	%	91			70-130	Pass	
LCS - % Recovery							

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Phenols (Halogenated)							
2-Chlorophenol	%	111			30-130	Pass	
2.4-Dichlorophenol	%	103			30-130	Pass	
2.4.5-Trichlorophenol	%	110			30-130	Pass	
2.4.6-Trichlorophenol	%	99			30-130	Pass	
2.6-Dichlorophenol	%	107			30-130	Pass	
4-Chloro-3-methylphenol	%	94			30-130	Pass	
Pentachlorophenol	%	104			30-130	Pass	
Tetrachlorophenols - Total	%	82			30-130	Pass	
LCS - % Recovery							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	%	98			30-130	Pass	
2-Methyl-4.6-dinitrophenol	%	90			30-130	Pass	
2-Methylphenol (o-Cresol)	%	105			30-130	Pass	
2-Nitrophenol	%	116			30-130	Pass	
2.4-Dimethylphenol	%	101			30-130	Pass	
2.4-Dinitrophenol	%	105			30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	%	105			30-130	Pass	
4-Nitrophenol	%	101			30-130	Pass	
Dinoseb	%	118			30-130	Pass	
Phenol	%	111			30-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	113			70-130	Pass	
Cadmium	%	106			70-130	Pass	
Chromium	%	98			70-130	Pass	
Copper	%	92			70-130	Pass	
Lead	%	98			70-130	Pass	
Mercury	%	90			70-130	Pass	
Nickel	%	95			70-130	Pass	
Zinc	%	89			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
BTEX				Result 1					
Benzene	S20-Jl03910	NCP	%	95			70-130	Pass	
Toluene	S20-Jl03910	NCP	%	79			70-130	Pass	
Ethylbenzene	S20-Jl05171	NCP	%	77			70-130	Pass	
m&p-Xylenes	S20-Jl05171	NCP	%	76			70-130	Pass	
o-Xylene	S20-Jl03910	NCP	%	77			70-130	Pass	
Xylenes - Total*	S20-Jl03910	NCP	%	71			70-130	Pass	
Spike - % Recovery									
Volatile Organics				Result 1					
1.1-Dichloroethene	S20-Jl05171	NCP	%	86			70-130	Pass	
1.1.1-Trichloroethane	S20-Jl05171	NCP	%	78			70-130	Pass	
1.2-Dichlorobenzene	S20-Jl05171	NCP	%	75			70-130	Pass	
1.2-Dichloroethane	S20-Jl05171	NCP	%	81			70-130	Pass	
Trichloroethene	S20-Jl05171	NCP	%	78			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
TRH >C10-C16	S20-Jl00709	NCP	%	105			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C10-C14	S20-Jl00709	NCP	%	110			70-130	Pass	
Spike - % Recovery									

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	S20-Jn48584	NCP	%	93			70-130	Pass	
Acenaphthylene	S20-Jn48584	NCP	%	83			70-130	Pass	
Anthracene	S20-Jn48584	NCP	%	94			70-130	Pass	
Benz(a)anthracene	S20-Jn48584	NCP	%	88			70-130	Pass	
Benzo(a)pyrene	S20-Jn48584	NCP	%	90			70-130	Pass	
Benzo(b&j)fluoranthene	S20-Jn48584	NCP	%	89			70-130	Pass	
Benzo(g.h.i)perylene	S20-Jn48584	NCP	%	104			70-130	Pass	
Benzo(k)fluoranthene	S20-Jn48584	NCP	%	92			70-130	Pass	
Chrysene	S20-Jn48584	NCP	%	96			70-130	Pass	
Dibenz(a.h)anthracene	S20-Jn48584	NCP	%	73			70-130	Pass	
Fluoranthene	S20-Jn48584	NCP	%	95			70-130	Pass	
Fluorene	S20-Jn48584	NCP	%	97			70-130	Pass	
Indeno(1.2.3-cd)pyrene	S20-Jn48584	NCP	%	80			70-130	Pass	
Naphthalene	S20-Jn48584	NCP	%	98			70-130	Pass	
Phenanthrene	S20-Jn48584	NCP	%	86			70-130	Pass	
Pyrene	S20-Jn48584	NCP	%	78			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
Chlordanes - Total	S20-Jn48584	NCP	%	76			70-130	Pass	
4.4'-DDD	S20-Jn47544	NCP	%	112			70-130	Pass	
4.4'-DDE	S20-Jn47544	NCP	%	89			70-130	Pass	
4.4'-DDT	S20-Jn48584	NCP	%	103			70-130	Pass	
a-BHC	S20-Jn48584	NCP	%	71			70-130	Pass	
Aldrin	S20-Jn48584	NCP	%	80			70-130	Pass	
b-BHC	S20-Jn48584	NCP	%	80			70-130	Pass	
d-BHC	S20-Jn47544	NCP	%	88			70-130	Pass	
Dieldrin	S20-Jn47544	NCP	%	86			70-130	Pass	
Endosulfan I	S20-Jn47544	NCP	%	107			70-130	Pass	
Endosulfan II	S20-Jn47544	NCP	%	103			70-130	Pass	
Endosulfan sulphate	S20-Jn47544	NCP	%	88			70-130	Pass	
Endrin	S20-Jn47544	NCP	%	87			70-130	Pass	
Endrin aldehyde	W20-Jn43761	NCP	%	92			70-130	Pass	
Endrin ketone	S20-Jn48584	NCP	%	85			70-130	Pass	
g-BHC (Lindane)	S20-Jn48584	NCP	%	79			70-130	Pass	
Heptachlor	S20-Jn48584	NCP	%	85			70-130	Pass	
Heptachlor epoxide	S20-Jn47544	NCP	%	74			70-130	Pass	
Hexachlorobenzene	S20-Jn48584	NCP	%	74			70-130	Pass	
Methoxychlor	S20-Jn48584	NCP	%	94			70-130	Pass	
Spike - % Recovery									
Organophosphorus Pesticides				Result 1					
Diazinon	S20-Jn48584	NCP	%	89			70-130	Pass	
Dimethoate	S20-Jn47544	NCP	%	82			70-130	Pass	
Ethion	S20-Jn48584	NCP	%	90			70-130	Pass	
Fenitrothion	S20-Jn48584	NCP	%	84			70-130	Pass	
Methyl parathion	S20-Jn48584	NCP	%	99			70-130	Pass	
Mevinphos	S20-Jn47544	NCP	%	107			70-130	Pass	
Spike - % Recovery									
Polychlorinated Biphenyls				Result 1					
Aroclor-1016	W20-Jn43761	NCP	%	119			70-130	Pass	
Aroclor-1260	S20-Jn48584	NCP	%	111			70-130	Pass	
Total PCB*	S20-Jn48584	NCP	%	111			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Arsenic	S20-JI03930	NCP	%	112			70-130	Pass	
Cadmium	S20-JI03930	NCP	%	102			70-130	Pass	
Chromium	S20-JI03930	NCP	%	92			70-130	Pass	
Copper	S20-JI03930	NCP	%	89			70-130	Pass	
Lead	S20-JI03930	NCP	%	122			70-130	Pass	
Mercury	S20-JI03930	NCP	%	90			70-130	Pass	
Nickel	S20-JI03930	NCP	%	89			70-130	Pass	
Zinc	S20-JI03930	NCP	%	86			70-130	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S20-JI02491	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Toluene	S20-JI02491	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Ethylbenzene	S20-JI02491	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
m&p-Xylenes	S20-JI02491	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
o-Xylene	S20-JI02491	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes - Total*	S20-JI02491	NCP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
1.1-Dichloroethane	S20-JI02491	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1-Dichloroethene	S20-JI02491	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1-Trichloroethane	S20-JI02491	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	S20-JI02491	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2-Trichloroethane	S20-JI02491	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	S20-JI02491	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dibromoethane	S20-JI02491	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichlorobenzene	S20-JI02491	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloroethane	S20-JI02491	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloropropane	S20-JI02491	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.3-Trichloropropane	S20-JI02491	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trimethylbenzene	S20-JI02491	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichlorobenzene	S20-JI02491	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichloropropane	S20-JI02491	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3.5-Trimethylbenzene	S20-JI02491	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.4-Dichlorobenzene	S20-JI02491	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Butanone (MEK)	S20-JI02491	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Propanone (Acetone)	S20-JI02491	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chlorotoluene	S20-JI02491	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Methyl-2-pentanone (MIBK)	S20-JI02491	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Allyl chloride	S20-JI02491	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromobenzene	S20-JI02491	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromochloromethane	S20-JI02491	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromodichloromethane	S20-JI02491	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromoform	S20-JI02491	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromomethane	S20-JI02491	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon disulfide	S20-JI02491	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon Tetrachloride	S20-JI02491	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chlorobenzene	S20-JI02491	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroethane	S20-JI02491	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroform	S20-JI02491	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloromethane	S20-JI02491	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.2-Dichloroethene	S20-JI02491	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.3-Dichloropropene	S20-JI02491	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromochloromethane	S20-JI02491	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
Dibromomethane	S20-Jl02491	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dichlorodifluoromethane	S20-Jl02491	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Iodomethane	S20-Jl02491	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Isopropyl benzene (Cumene)	S20-Jl02491	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Methylene Chloride	S20-Jl02491	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Styrene	S20-Jl02491	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Tetrachloroethene	S20-Jl02491	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.2-Dichloroethene	S20-Jl02491	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.3-Dichloropropene	S20-Jl02491	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichloroethene	S20-Jl02491	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichlorofluoromethane	S20-Jl02491	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Vinyl chloride	S20-Jl02491	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	S20-Jl02491	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	S20-Jl02491	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH >C10-C16	S20-Jl00708	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	S20-Jl00708	NCP	mg/kg	< 100	140	64	30%	Fail	Q15
TRH >C34-C40	S20-Jl00708	NCP	mg/kg	< 100	110	55	30%	Fail	Q15
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C6-C9	S20-Jl02491	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C10-C14	S20-Jl00708	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	S20-Jl00708	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	S20-Jl00708	NCP	mg/kg	61	120	69	30%	Fail	Q15
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	S20-Jn42538	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	S20-Jn42538	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	S20-Jn42538	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	S20-Jn42538	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	S20-Jn42538	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	S20-Jn42538	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	S20-Jn42538	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	S20-Jn42538	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	S20-Jn42538	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	S20-Jn42538	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	S20-Jn42538	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	S20-Jn42538	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	S20-Jn42538	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	S20-Jn42538	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	S20-Jn42538	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	S20-Jn42538	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	S20-Jn47541	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	S20-Jn47541	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	S20-Jn47541	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	S20-Jn47541	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-BHC	S20-Jn47541	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	S20-Jn47541	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-BHC	S20-Jn47541	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	

Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
d-BHC	S20-Jn47541	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	S20-Jn47541	NCP	mg/kg	< 0.05	0.10	<1	30%	Pass	
Endosulfan I	S20-Jn47541	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	S20-Jn47541	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	S20-Jn47541	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	S20-Jn47541	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	S20-Jn47541	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	S20-Jn47541	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-BHC (Lindane)	S20-Jn47541	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	S20-Jn47541	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	S20-Jn47541	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	S20-Jn47541	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	S20-Jn47541	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Azinphos-methyl	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Bolstar	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Chlorfenvinphos	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Chlorpyrifos	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Chlorpyrifos-methyl	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Coumaphos	S20-Jn42538	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
Demeton-S	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Demeton-O	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Diazinon	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Dichlorvos	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Dimethoate	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Disulfoton	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
EPN	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Ethion	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Ethoprop	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Ethyl parathion	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Fenitrothion	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Fensulfothion	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Fenthion	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Malathion	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Merphos	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Methyl parathion	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Mevinphos	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Monocrotophos	S20-Jn42538	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
Naled	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Omethoate	S20-Jn42538	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
Phorate	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Pirimiphos-methyl	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Pyrazophos	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Ronnel	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Terbufos	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Tetrachlorvinphos	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Tokuthion	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Trichloronate	S20-Jn42538	NCP	mg/kg	< 2	< 2	<1	30%	Pass	

Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Aroclor-1016	S20-Jn47541	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1221	S20-Jn47541	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1232	S20-Jn47541	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1242	S20-Jn47541	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1248	S20-Jn47541	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1254	S20-Jn47541	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1260	S20-Jn47541	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Total PCB*	S20-Jn47541	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	S20-Jl00587	NCP	mg/kg	8.1	6.8	17	30%	Pass	
Cadmium	S20-Jl00587	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	S20-Jl00587	NCP	mg/kg	22	18	21	30%	Pass	
Copper	S20-Jl00587	NCP	mg/kg	20	17	12	30%	Pass	
Lead	S20-Jl00587	NCP	mg/kg	19	25	29	30%	Pass	
Mercury	S20-Jl00587	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Nickel	S20-Jl00587	NCP	mg/kg	8.1	8.5	5.0	30%	Pass	
Zinc	S20-Jl00587	NCP	mg/kg	58	56	2.0	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	S20-Jl02349	NCP	%	16	16	<1	30%	Pass	

Comments

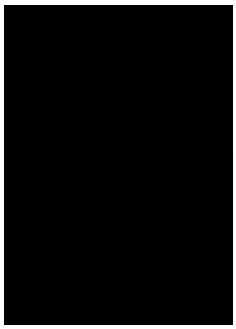
Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
Q15	The RPD reported passes Eurofins Environment Testing's QC - Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report.

Authorised By



Analytical Services Manager
Senior Analyst-Organic (NSW)
Senior Analyst-Metal (NSW)
Senior Analyst-Asbestos (NSW)

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

Eurofins shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

SLR

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☒ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ DARWIN: 21 Parap Rd, Dawin, NT 0820
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐

CLIENT: Defence Housing Australia

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGER: [redacted]

PM CONTACT No: [redacted]

LABORATORY: SGS Australia

LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015

SAMPLER: [redacted]

SAMPLER CONTACT No: [redacted]

Email Reports and Invoices to: LQRSYD@slrconsulting.com [redacted]

Turnaround Time (TAT)

☐ Standard TAT

☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number of

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A (No asbestos)	PFAS	OCP/OPP Only	Asbestos Only	HOLD	Suite F, Suite E, Suite H, Solvents	Heavy metals, TPH/BTEXN, PAH, VOC/SVOCs and PFAS	Suite D, MTBEs	Additional Information (Comment on any gross contamination or specific requirements)
	0407_SH002_0.1_200625	25/06/2020	Soil				x						Sample jars and bags have been designated as RWBB_TPXX_depth_date up until 17/6/20; this has now been updated to 0407_TPXX_depth_date. Please present all results as per this COC
	0407_SH002_0.3_200625	25/06/2020	Soil						x				
	0407_SH002_0.5_200625	25/06/2020	Soil						x				
	0407_SH010_0.3-0.5_200625	25/06/2020	Soil									x	
	0407_SH010_0.5-0.7_200625	25/06/2020	Soil						x				
	0407_SH010_0.7-0.9_200625	25/06/2020	Soil						x				
	0407_SH018_0.1_200625	25/06/2020	Soil		x	x							
	0407_SH020_0.1_200625	25/06/2020	Soil		x	x							
	0407_QC168_200625	25/06/2020	Soil		x	x							
	0407_QC268_200625	25/06/2020	Soil										Please send to Eurofins for Suite A and PFAS
	0407_SH020_0.1_200625	25/06/2020	Soil		x	x							
	0407_SH022_0.1-0.2_200625	25/06/2020	Soil		x	x							

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 25/06/2020	**Received by**	[redacted]	Date / Time 13/7/20 3:23 PM	**Temperature Received:** 8.20°C
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

#731385

eurofins | Environment Testing

Melbourne
6 Monterey Road
Dandenong South Vic 3175
Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

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Brisbane
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Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Perth
2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261 Site # 23736

ABN – 50 005 085 521 e.mail : EnviroSales@eurofins.com web : www.eurofins.com.au

Sample Receipt Advice

Company name:	**SLR Consulting (Sydney)**
Contact name:	[redacted]
Project name:	RANDWICK BARRACKS
Project ID:	610.30041
COC number:	Not provided
Turn around time:	5 Day
Date/Time received:	Jul 13, 2020 3:23 PM
Eurofins reference:	**731385**

Sample information

☑ A detailed list of analytes logged into our LIMS, is included in the attached summary table.

☑ All samples have been received as described on the above COC.

☑ COC has been completed correctly.

☑ Attempt to chill was evident.

☑ Appropriately preserved sample containers have been used.

☑ All samples were received in good condition.

☑ Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.

☑ Appropriate sample containers have been used.

☒ Split sample sent to requested external lab.

☒ Some samples have been subcontracted.

N/A Custody Seals intact (if used).

Contact notes

If you have any questions with respect to these samples please contact:

[redacted] on Phone [redacted] or by e.mail: [redacted]@eurofins.com

Results will be delivered electronically via e.mail to [redacted]@slrconsulting.com.

Note: A copy of these results will also be delivered to the general SLR Consulting (Sydney) email address.

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ABN – 50 005 085 521 web : www.eurofins.com.au e.mail : EnviroSales@eurofins.com

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NATA # 1261
Site # 23736

New Zealand

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Penrose, Auckland 1061
Phone : +64 9 526 45 51
IANZ # 1327

Christchurch
43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041.00000

Order No.:
Report #: 731385
Phone: 02 9428 8100
Fax:

Received: Jul 13, 2020 3:23 PM
Due: Jul 20, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A	Per- and Polyfluoroalkyl Substances (PFASs)
Melbourne Laboratory - NATA Site # 1254 & 14271											
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	
Brisbane Laboratory - NATA Site # 20794											X
Perth Laboratory - NATA Site # 23736											
External Laboratory											
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**						
1	0407_QC268_200625	Jun 25, 2020		Soil	S20-Jl21777	X	X	X	X	X	X
Test Counts						1	1	1	1	1	1

Certificate of Analysis

eurofins | Environment Testing

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025–Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus
North Sydney
NSW 2060

Attention:	[redacted]
Report	731385-AID
Project Name	RANDWICK BARRACKS
Project ID	610.30041.00000
Received Date	Jul 13, 2020
Date Reported	Jul 20, 2020

Methodology:

Asbestos Fibre Identification	Conducted in accordance with the Australian Standard AS 4964 – 2004: Method for the Qualitative Identification of Asbestos in Bulk Samples and in-house Method LTM-ASB-8020 by polarised light microscopy (PLM) and dispersion staining (DS) techniques. *NOTE: Positive Trace Analysis results indicate the sample contains detectable respirable fibres.*
Unknown Mineral Fibres	Mineral fibres of unknown type, as determined by PLM with DS, may require another analytical technique, such as Electron Microscopy, to confirm unequivocal identity. *NOTE: While Actinolite, Anthophyllite and Tremolite asbestos may be detected by PLM with DS, due to variability in the optical properties of these materials, AS4964 requires that these are reported as UMF unless confirmed by an independent technique.*
Subsampling Soil Samples	The whole sample submitted is first dried and then passed through a 10mm sieve followed by a 2mm sieve. All fibrous matter greater than 10mm, greater than 2mm as well as the material passing through the 2mm sieve are retained and analysed for the presence of asbestos. If the sub 2mm fraction is greater than approximately 30 to 60g then a sub-sampling routine based on ISO 3082:2009(E) is employed. *NOTE: Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be sub-sampled for trace analysis, in accordance with AS 4964-2004.*
Bonded asbestos-containing material (ACM)	The material is first examined and any fibres isolated for identification by PLM and DS. Where required, interfering matrices may be removed by disintegration using a range of heat, chemical or physical treatments, possibly in combination.The resultant material is then further examined in accordance with AS 4964 - 2004. *NOTE: Even after disintegration it may be difficult to detect the presence of asbestos in some asbestos-containing bulk materials using PLM and DS. This is due to the low grade or small length or diameter of the asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos-containing sealants and mastics, asbestos-containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.*
Limit of Reporting	The performance limitation of the AS 4964 (2004) method for non-homogeneous samples is around 0.1 g/kg (equivalent to 0.01% (w/w)). Where no asbestos is found by PLM and DS, including Trace Analysis, this is considered to be at the nominal reporting limit of 0.01% (w/w). The NEPM screening level of 0.001% (w/w) is intended as an on-site determination, not a laboratory Limit of Reporting (LOR), per se. Examination of a large sample size (e.g. 500 mL) may improve the likelihood of detecting asbestos, particularly AF, to aid assessment against the NEPM criteria. Gravimetric determinations to this level of accuracy are outside of AS 4964 and hence NATA Accreditation does not cover the performance of this service (non-NATA results shown with an asterisk). *NOTE: NATA News March 2014, p.7, states in relation to AS 4964: "This is a qualitative method with a nominal reporting limit of 0.01 % " and that currently in Australia "there is no validated method available for the quantification of asbestos".This report is consistent with the analytical procedures and reporting recommendations in the NEPM and the WA DoH.*

Accredited for compliance with ISO/IEC 17025–Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Project Name RANDWICK BARRACKS
Project ID 610.30041.00000
Date Sampled Jun 25, 2020
Report 731385-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
0407_QC268_200625	20-JI21777	Jun 25, 2020	Approximate Sample 66g Sample consisted of: Grey coarse-grained sandy soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Asbestos - LTM-ASB-8020	Sydney	Jul 13, 2020	Indefinite

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ABN – 50 005 085 521 web : www.eurofins.com.au e.mail : EnviroSales@eurofins.com

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Site # 23736

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Penrose, Auckland 1061
Phone : +64 9 526 45 51
IANZ # 1327

Christchurch
43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041.00000

Order No.:
Report #: 731385
Phone: 02 9428 8100
Fax:

Received: Jul 13, 2020 3:23 PM
Due: Jul 20, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A	Per- and Polyfluoroalkyl Substances (PFASs)
Melbourne Laboratory - NATA Site # 1254 & 14271											
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	
Brisbane Laboratory - NATA Site # 20794											X
Perth Laboratory - NATA Site # 23736											
External Laboratory											
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**						
1	0407_QC268_200625	Jun 25, 2020		Soil	S20-Jl21777	X	X	X	X	X	X
Test Counts						1	1	1	1	1	1

Internal Quality Control Review and Glossary

General

1. QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Samples were analysed on an 'as received' basis.
4. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
5. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the Sample Receipt Advice.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

Units

% w/w: weight for weight basis	grams per kilogram
Filter loading:	fibres/100 graticule areas
Reported Concentration:	fibres/mL
Flowrate:	L/min

Terms

Dry	Sample is dried by heating prior to analysis
LOR	Limit of Reporting
COC	Chain of Custody
SRA	Sample Receipt Advice
ISO	International Standards Organisation
AS	Australian Standards
WA DOH	Reference document for the NEPM. Government of Western Australia, Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia (2009), including supporting document Recommended Procedures for Laboratory Analysis of Asbestos in Soil (2011)
NEPM	National Environment Protection (Assessment of Site Contamination) Measure, 2013 (as amended)
ACM	Asbestos Containing Materials. Asbestos contained within a non-asbestos matrix, typically presented in bonded and/or sound condition. For the purposes of the NEPM, ACM is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
AF	Asbestos Fines. Asbestos containing materials, including friable, weathered and bonded materials, able to pass a 7mm x 7mm sieve. Considered under the NEPM as equivalent to “non-bonded / friable”.
FA	Fibrous Asbestos. Asbestos containing materials in a friable and/or severely weathered condition. For the purposes of the NEPM, FA is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
Friable	Asbestos-containing materials of any size that may be broken or crumbled by hand pressure. For the purposes of the NEPM, this includes both AF and FA. It is outside of the laboratory’s remit to assess degree of friability.
Trace Analysis	Analytical procedure used to detect the presence of respirable fibres in the matrix.

Comments

The sample received was not collected in an approved asbestos bag and was therefore sub-sampled from the 250mL glass jar. Valid sub-sampling procedures were applied so as to ensure that the sub-sample to be analysed accurately represented the sample received.

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

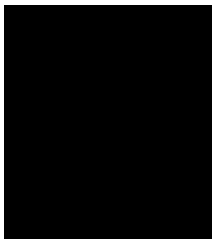
Qualifier Codes/Comments

Code	Description
N/A	Not applicable

Asbestos Counter/Identifier:

[redacted] Senior Analyst-Asbestos (NSW)

Authorised by:



Senior Analyst-Asbestos (NSW)

General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus,
North Sydney
NSW 2060

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: [redacted]

Report **731385-S**
Project name RANDWICK BARRACKS
Project ID 610.30041.00000
Received Date Jul 13, 2020

Client Sample ID			**0407_QC268_200625**
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-Jl21777**
Date Sampled			**Jun 25, 2020**
Test/Reference	LOR	Unit	
Total Recoverable Hydrocarbons - 1999 NEPM Fractions			
TRH C6-C9	20	mg/kg	< 20
TRH C10-C14	20	mg/kg	< 20
TRH C15-C28	50	mg/kg	< 50
TRH C29-C36	50	mg/kg	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50
BTEX			
Benzene	0.1	mg/kg	< 0.1
Toluene	0.1	mg/kg	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2
o-Xylene	0.1	mg/kg	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3
4-Bromofluorobenzene (surr.)	1	%	108
Volatile Organics			
1.1-Dichloroethane	0.5	mg/kg	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5

Client Sample ID			0407_QC268_200625
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-JI21777**
Date Sampled			**Jun 25, 2020**
Test/Reference	LOR	Unit	
Volatile Organics			
Benzene	0.1	mg/kg	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5
Bromoform	0.5	mg/kg	< 0.5
Bromomethane	0.5	mg/kg	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5
Chloroethane	0.5	mg/kg	< 0.5
Chloroform	0.5	mg/kg	< 0.5
Chloromethane	0.5	mg/kg	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1
Iodomethane	0.5	mg/kg	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5
o-Xylene	0.1	mg/kg	< 0.1
Styrene	0.5	mg/kg	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5
Toluene	0.1	mg/kg	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3
Total MAH*	0.5	mg/kg	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5
4-Bromofluorobenzene (surr.)	1	%	108
Toluene-d8 (surr.)	1	%	95
Total Recoverable Hydrocarbons - 2013 NEPM Fractions			
Naphthalene[N02]	0.5	mg/kg	< 0.5
TRH C6-C10	20	mg/kg	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20
TRH >C10-C16	50	mg/kg	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50
TRH >C16-C34	100	mg/kg	< 100
TRH >C34-C40	100	mg/kg	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100

Client Sample ID			0407_QC268_200625
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-Jl21777**
Date Sampled			**Jun 25, 2020**
Test/Reference	LOR	Unit	
Polycyclic Aromatic Hydrocarbons			
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2
Acenaphthene	0.5	mg/kg	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5
Anthracene	0.5	mg/kg	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5
Chrysene	0.5	mg/kg	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5
Fluoranthene	0.5	mg/kg	0.6
Fluorene	0.5	mg/kg	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5
Naphthalene	0.5	mg/kg	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5
Pyrene	0.5	mg/kg	0.5
Total PAH*	0.5	mg/kg	1.1
2-Fluorobiphenyl (surr.)	1	%	65
p-Terphenyl-d14 (surr.)	1	%	86
Organochlorine Pesticides			
Chlordanes - Total	0.1	mg/kg	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05
a-BHC	0.05	mg/kg	< 0.05
Aldrin	0.05	mg/kg	< 0.05
b-BHC	0.05	mg/kg	< 0.05
d-BHC	0.05	mg/kg	< 0.05
Dieldrin	0.05	mg/kg	2.7
Endosulfan I	0.05	mg/kg	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05
Endrin	0.05	mg/kg	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05
Heptachlor	0.05	mg/kg	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05
Methoxychlor	0.2	mg/kg	< 0.2
Toxaphene	1	mg/kg	< 1
Aldrin and Dieldrin (Total)*	0.05	mg/kg	2.7
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	2.7
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.2
Dibutylchlorendate (surr.)	1	%	95
Tetrachloro-m-xylene (surr.)	1	%	86

Client Sample ID			0407_QC268_200625
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-JI21777**
Date Sampled			**Jun 25, 2020**
Test/Reference	LOR	Unit	
Organophosphorus Pesticides			
Azinphos-methyl	0.2	mg/kg	< 0.2
Bolstar	0.2	mg/kg	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2
Coumaphos	2	mg/kg	< 2
Demeton-S	0.2	mg/kg	< 0.2
Demeton-O	0.2	mg/kg	< 0.2
Diazinon	0.2	mg/kg	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2
Dimethoate	0.2	mg/kg	< 0.2
Disulfoton	0.2	mg/kg	< 0.2
EPN	0.2	mg/kg	< 0.2
Ethion	0.2	mg/kg	< 0.2
Ethoprop	0.2	mg/kg	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2
Fenthion	0.2	mg/kg	< 0.2
Malathion	0.2	mg/kg	< 0.2
Merphos	0.2	mg/kg	< 0.2
Methyl parathion	0.2	mg/kg	< 0.2
Mevinphos	0.2	mg/kg	< 0.2
Monocrotophos	2	mg/kg	< 2
Naled	0.2	mg/kg	< 0.2
Omethoate	2	mg/kg	< 2
Phorate	0.2	mg/kg	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2
Ronnel	0.2	mg/kg	< 0.2
Terbufos	0.2	mg/kg	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2
Tokuthion	0.2	mg/kg	< 0.2
Trichloronate	0.2	mg/kg	< 0.2
Triphenylphosphate (surr.)	1	%	93
Polychlorinated Biphenyls			
Aroclor-1016	0.5	mg/kg	< 0.5
Aroclor-1221	0.1	mg/kg	< 0.1
Aroclor-1232	0.5	mg/kg	< 0.5
Aroclor-1242	0.5	mg/kg	< 0.5
Aroclor-1248	0.5	mg/kg	< 0.5
Aroclor-1254	0.5	mg/kg	< 0.5
Aroclor-1260	0.5	mg/kg	< 0.5
Total PCB*	0.5	mg/kg	< 0.5
Dibutylchlorendate (surr.)	1	%	95
Tetrachloro-m-xylene (surr.)	1	%	86

Client Sample ID			0407_QC268_200625
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-JI21777**
Date Sampled			**Jun 25, 2020**
Test/Reference	LOR	Unit	
Phenols (Halogenated)			
2-Chlorophenol	0.5	mg/kg	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1
Pentachlorophenol	1	mg/kg	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10
Total Halogenated Phenol*	1	mg/kg	< 1
Phenols (non-Halogenated)			
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2
2-Nitrophenol	1	mg/kg	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4
4-Nitrophenol	5	mg/kg	< 5
Dinoseb	20	mg/kg	< 20
Phenol	0.5	mg/kg	< 0.5
Total Non-Halogenated Phenol*	20	mg/kg	< 20
Phenol-d6 (surr.)	1	%	73
Heavy Metals			
Arsenic	2	mg/kg	< 2
Cadmium	0.4	mg/kg	< 0.4
Chromium	5	mg/kg	< 5
Copper	5	mg/kg	< 5
Lead	5	mg/kg	< 5
Mercury	0.1	mg/kg	< 0.1
Nickel	5	mg/kg	< 5
Zinc	5	mg/kg	< 5
% Moisture	1	%	5.6
Perfluoroalkyl carboxylic acids (PFCAs)			
Perfluorobutanoic acid (PFBA)[N11]	5	ug/kg	< 5
Perfluoropentanoic acid (PFPeA)[N11]	5	ug/kg	< 5
Perfluorohexanoic acid (PFHxA)[N11]	5	ug/kg	< 5
Perfluoroheptanoic acid (PFHpA)[N11]	5	ug/kg	< 5
Perfluorooctanoic acid (PFOA)[N11]	5	ug/kg	< 5
Perfluorononanoic acid (PFNA)[N11]	5	ug/kg	< 5
Perfluorodecanoic acid (PFDA)[N11]	5	ug/kg	< 5
Perfluoroundecanoic acid (PFUnDA)[N11]	5	ug/kg	< 5
Perfluorododecanoic acid (PFDoDA)[N11]	5	ug/kg	< 5
Perfluorotridecanoic acid (PFTrDA)[N15]	5	ug/kg	< 5
Perfluorotetradecanoic acid (PFTeDA)[N11]	5	ug/kg	< 5
13C4-PFBA (surr.)	1	%	124
13C5-PFPeA (surr.)	1	%	104
13C5-PFHxA (surr.)	1	%	129

Client Sample ID			0407_QC268_200625
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-JI21777**
Date Sampled			**Jun 25, 2020**
Test/Reference	LOR	Unit	
Perfluoroalkyl carboxylic acids (PFCAs)			
13C4-PFHpA (surr.)	1	%	124
13C8-PFOA (surr.)	1	%	127
13C5-PFNA (surr.)	1	%	146
13C6-PFDA (surr.)	1	%	103
13C2-PFUnDA (surr.)	1	%	94
13C2-PFDoDA (surr.)	1	%	112
13C2-PFTeDA (surr.)	1	%	132
Perfluoroalkyl sulfonamido substances			
Perfluorooctane sulfonamide (FOSA)[N11]	5	ug/kg	< 5
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)[N11]	5	ug/kg	< 5
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)[N11]	5	ug/kg	< 5
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)[N11]	5	ug/kg	< 5
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)[N11]	5	ug/kg	< 5
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)[N11]	10	ug/kg	< 10
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)[N11]	10	ug/kg	< 10
13C8-FOSA (surr.)	1	%	98
D3-N-MeFOSA (surr.)	1	%	89
D5-N-EtFOSA (surr.)	1	%	130
D7-N-MeFOSE (surr.)	1	%	82
D9-N-EtFOSE (surr.)	1	%	130
D5-N-EtFOSAA (surr.)	1	%	103
D3-N-MeFOSAA (surr.)	1	%	99
Perfluoroalkyl sulfonic acids (PFSAs)			
Perfluorobutanesulfonic acid (PFBS)[N11]	5	ug/kg	< 5
Perfluorononanesulfonic acid (PFNS)[N15]	5	ug/kg	< 5
Perfluoropropanesulfonic acid (PFPrS)[N15]	5	ug/kg	< 5
Perfluoropentanesulfonic acid (PFPeS)[N15]	5	ug/kg	< 5
Perfluorohexanesulfonic acid (PFHxS)[N11]	5	ug/kg	< 5
Perfluoroheptanesulfonic acid (PFHpS)[N15]	5	ug/kg	< 5
Perfluorooctanesulfonic acid (PFOS)[N11]	5	ug/kg	< 5
Perfluorodecanesulfonic acid (PFDS)[N15]	5	ug/kg	< 5
13C3-PFBS (surr.)	1	%	134
18O2-PFHxS (surr.)	1	%	130
13C8-PFOS (surr.)	1	%	141
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)			
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	5	ug/kg	< 5
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)[N11]	10	ug/kg	< 10
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	5	ug/kg	< 5
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	5	ug/kg	< 5
13C2-4:2 FTSA (surr.)	1	%	175
13C2-6:2 FTSA (surr.)	1	%	135
13C2-8:2 FTSA (surr.)	1	%	122
13C2-10:2 FTSA (surr.)	1	%	125

Client Sample ID			0407_QC268_200625
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-JI21777**
Date Sampled			**Jun 25, 2020**
Test/Reference	LOR	Unit	
PFASs Summations			
Sum (PFHxS + PFOS)*	5	ug/kg	< 5
Sum of US EPA PFAS (PFOS + PFOA)*	5	ug/kg	< 5
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	5	ug/kg	< 5
Sum of WA DWER PFAS (n=10)*	10	ug/kg	< 10
Sum of PFASs (n=30)*	50	ug/kg	< 50

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Sydney	Jul 15, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Sydney	Jul 15, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jul 15, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jul 15, 2020	
- Method: LTM-ORG-2010 TRH C6-C40			
Polycyclic Aromatic Hydrocarbons	Sydney	Jul 15, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (Halogenated)	Sydney	Jul 15, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (non-Halogenated)	Sydney	Jul 15, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Metals M8	Sydney	Jul 15, 2020	180 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Volatile Organics	Sydney	Jul 15, 2020	7 Days
- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices			
Eurofins | mgt Suite B15			
Organochlorine Pesticides	Sydney	Jul 15, 2020	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Organophosphorus Pesticides	Sydney	Jul 15, 2020	14 Days
- Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS			
Polychlorinated Biphenyls	Sydney	Jul 15, 2020	28 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
% Moisture	Sydney	Jul 13, 2020	14 Days
- Method: LTM-GEN-7080 Moisture			
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs)	Brisbane	Jul 16, 2020	180 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonamido substances	Brisbane	Jul 16, 2020	180 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonic acids (PFSAs)	Brisbane	Jul 16, 2020	180 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)	Brisbane	Jul 16, 2020	180 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			

eurofins | Environment Testing

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Project Name: RANDWICK BARRACKS
Project ID: 610.30041.00000

Order No.:
Report #: 731385
Phone: 02 9428 8100
Fax:

Received: Jul 13, 2020 3:23 PM
Due: Jul 20, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A	Per- and Polyfluoroalkyl Substances (PFASs)
Melbourne Laboratory - NATA Site # 1254 & 14271											
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X	
Brisbane Laboratory - NATA Site # 20794											X
Perth Laboratory - NATA Site # 23736											
External Laboratory											
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**						
1	0407_QC268_200625	Jun 25, 2020		Soil	S20-Jl21777	X	X	X	X	X	X
Test Counts						1	1	1	1	1	1

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

****NOTE:** pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram | **mg/L:** milligrams per litre | **ug/L:** micrograms per litre

ppm: Parts per million | **ppb:** Parts per billion | **%:** Percentage

org/100mL: Organisms per 100 millilitres | **NTU:** Nephelometric Turbidity Units | **MPN/100mL:** Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version 5.3
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling.Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
Method Blank							
BTEX							
Benzene	mg/kg	< 0.1			0.1	Pass	
Toluene	mg/kg	< 0.1			0.1	Pass	
Ethylbenzene	mg/kg	< 0.1			0.1	Pass	
m&p-Xylenes	mg/kg	< 0.2			0.2	Pass	
o-Xylene	mg/kg	< 0.1			0.1	Pass	
Xylenes - Total*	mg/kg	< 0.3			0.3	Pass	
Method Blank							
Volatile Organics							
1.1-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
1.1.1-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.1.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dibromoethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.3-Trichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.4-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.3.5-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.4-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
2-Butanone (MEK)	mg/kg	< 0.5			0.5	Pass	
2-Propanone (Acetone)	mg/kg	< 0.5			0.5	Pass	
4-Chlorotoluene	mg/kg	< 0.5			0.5	Pass	
4-Methyl-2-pentanone (MIBK)	mg/kg	< 0.5			0.5	Pass	
Allyl chloride	mg/kg	< 0.5			0.5	Pass	
Bromobenzene	mg/kg	< 0.5			0.5	Pass	
Bromochloromethane	mg/kg	< 0.5			0.5	Pass	
Bromodichloromethane	mg/kg	< 0.5			0.5	Pass	
Bromoform	mg/kg	< 0.5			0.5	Pass	
Bromomethane	mg/kg	< 0.5			0.5	Pass	
Carbon disulfide	mg/kg	< 0.5			0.5	Pass	
Carbon Tetrachloride	mg/kg	< 0.5			0.5	Pass	
Chlorobenzene	mg/kg	< 0.5			0.5	Pass	
Chloroethane	mg/kg	< 0.5			0.5	Pass	
Chloroform	mg/kg	< 0.5			0.5	Pass	
Chloromethane	mg/kg	< 0.5			0.5	Pass	
cis-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
cis-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Dibromochloromethane	mg/kg	< 0.5			0.5	Pass	
Dibromomethane	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Dichlorodifluoromethane	mg/kg	< 0.5			0.5	Pass	
Iodomethane	mg/kg	< 0.5			0.5	Pass	
Isopropyl benzene (Cumene)	mg/kg	< 0.5			0.5	Pass	
Methylene Chloride	mg/kg	< 0.5			0.5	Pass	
Styrene	mg/kg	< 0.5			0.5	Pass	
Tetrachloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Trichloroethene	mg/kg	< 0.5			0.5	Pass	
Trichlorofluoromethane	mg/kg	< 0.5			0.5	Pass	
Vinyl chloride	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Organochlorine Pesticides							
Chlordanes - Total	mg/kg	< 0.1			0.1	Pass	
4.4'-DDD	mg/kg	< 0.05			0.05	Pass	
4.4'-DDE	mg/kg	< 0.05			0.05	Pass	
4.4'-DDT	mg/kg	< 0.05			0.05	Pass	
a-BHC	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-BHC	mg/kg	< 0.05			0.05	Pass	
d-BHC	mg/kg	< 0.05			0.05	Pass	
Dieldrin	mg/kg	< 0.05			0.05	Pass	
Endosulfan I	mg/kg	< 0.05			0.05	Pass	
Endosulfan II	mg/kg	< 0.05			0.05	Pass	
Endosulfan sulphate	mg/kg	< 0.05			0.05	Pass	
Endrin	mg/kg	< 0.05			0.05	Pass	
Endrin aldehyde	mg/kg	< 0.05			0.05	Pass	
Endrin ketone	mg/kg	< 0.05			0.05	Pass	
g-BHC (Lindane)	mg/kg	< 0.05			0.05	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Heptachlor	mg/kg	< 0.05			0.05	Pass	
Heptachlor epoxide	mg/kg	< 0.05			0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05			0.05	Pass	
Methoxychlor	mg/kg	< 0.2			0.2	Pass	
Toxaphene	mg/kg	< 1			1	Pass	
Method Blank							
Organophosphorus Pesticides							
Azinphos-methyl	mg/kg	< 0.2			0.2	Pass	
Bolstar	mg/kg	< 0.2			0.2	Pass	
Chlorfenvinphos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos-methyl	mg/kg	< 0.2			0.2	Pass	
Coumaphos	mg/kg	< 2			2	Pass	
Demeton-S	mg/kg	< 0.2			0.2	Pass	
Demeton-O	mg/kg	< 0.2			0.2	Pass	
Diazinon	mg/kg	< 0.2			0.2	Pass	
Dichlorvos	mg/kg	< 0.2			0.2	Pass	
Dimethoate	mg/kg	< 0.2			0.2	Pass	
Disulfoton	mg/kg	< 0.2			0.2	Pass	
EPN	mg/kg	< 0.2			0.2	Pass	
Ethion	mg/kg	< 0.2			0.2	Pass	
Ethoprop	mg/kg	< 0.2			0.2	Pass	
Ethyl parathion	mg/kg	< 0.2			0.2	Pass	
Fenitrothion	mg/kg	< 0.2			0.2	Pass	
Fensulfothion	mg/kg	< 0.2			0.2	Pass	
Fenthion	mg/kg	< 0.2			0.2	Pass	
Malathion	mg/kg	< 0.2			0.2	Pass	
Merphos	mg/kg	< 0.2			0.2	Pass	
Methyl parathion	mg/kg	< 0.2			0.2	Pass	
Mevinphos	mg/kg	< 0.2			0.2	Pass	
Monocrotophos	mg/kg	< 2			2	Pass	
Naled	mg/kg	< 0.2			0.2	Pass	
Omethoate	mg/kg	< 2			2	Pass	
Phorate	mg/kg	< 0.2			0.2	Pass	
Pirimiphos-methyl	mg/kg	< 0.2			0.2	Pass	
Pyrazophos	mg/kg	< 0.2			0.2	Pass	
Ronnel	mg/kg	< 0.2			0.2	Pass	
Terbufos	mg/kg	< 0.2			0.2	Pass	
Tetrachlorvinphos	mg/kg	< 0.2			0.2	Pass	
Tokuthion	mg/kg	< 0.2			0.2	Pass	
Trichloronate	mg/kg	< 0.2			0.2	Pass	
Method Blank							
Polychlorinated Biphenyls							
Aroclor-1016	mg/kg	< 0.5			0.5	Pass	
Aroclor-1221	mg/kg	< 0.1			0.1	Pass	
Aroclor-1232	mg/kg	< 0.5			0.5	Pass	
Aroclor-1242	mg/kg	< 0.5			0.5	Pass	
Aroclor-1248	mg/kg	< 0.5			0.5	Pass	
Aroclor-1254	mg/kg	< 0.5			0.5	Pass	
Aroclor-1260	mg/kg	< 0.5			0.5	Pass	
Total PCB*	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Phenols (Halogenated)							
2-Chlorophenol	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2.4-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4.5-Trichlorophenol	mg/kg	< 1			1	Pass	
2.4.6-Trichlorophenol	mg/kg	< 1			1	Pass	
2.6-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
4-Chloro-3-methylphenol	mg/kg	< 1			1	Pass	
Pentachlorophenol	mg/kg	< 1			1	Pass	
Tetrachlorophenols - Total	mg/kg	< 10			10	Pass	
Method Blank							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	mg/kg	< 20			20	Pass	
2-Methyl-4.6-dinitrophenol	mg/kg	< 5			5	Pass	
2-Nitrophenol	mg/kg	< 1			1	Pass	
2.4-Dimethylphenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dinitrophenol	mg/kg	< 5			5	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/kg	< 0.4			0.4	Pass	
4-Nitrophenol	mg/kg	< 5			5	Pass	
Dinoseb	mg/kg	< 20			20	Pass	
Phenol	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Nickel	mg/kg	< 5			5	Pass	
Zinc	mg/kg	< 5			5	Pass	
Method Blank							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	ug/kg	< 5			5	Pass	
Perfluoropentanoic acid (PFPeA)	ug/kg	< 5			5	Pass	
Perfluorohexanoic acid (PFHxA)	ug/kg	< 5			5	Pass	
Perfluoroheptanoic acid (PFHpA)	ug/kg	< 5			5	Pass	
Perfluorooctanoic acid (PFOA)	ug/kg	< 5			5	Pass	
Perfluorononanoic acid (PFNA)	ug/kg	< 5			5	Pass	
Perfluorodecanoic acid (PFDA)	ug/kg	< 5			5	Pass	
Perfluoroundecanoic acid (PFUnDA)	ug/kg	< 5			5	Pass	
Perfluorododecanoic acid (PFDoDA)	ug/kg	< 5			5	Pass	
Perfluorotridecanoic acid (PFTrDA)	ug/kg	< 5			5	Pass	
Perfluorotetradecanoic acid (PFTeDA)	ug/kg	< 5			5	Pass	
Method Blank							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	ug/kg	< 5			5	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	ug/kg	< 5			5	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	ug/kg	< 5			5	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	ug/kg	< 5			5	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	ug/kg	< 5			5	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	ug/kg	< 10			10	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	ug/kg	< 10			10	Pass	
Method Blank							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	ug/kg	< 5			5	Pass	
Perfluorononanesulfonic acid (PFNS)	ug/kg	< 5			5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Perfluoropropanesulfonic acid (PFPrS)	ug/kg	< 5			5	Pass	
Perfluoropentanesulfonic acid (PFPeS)	ug/kg	< 5			5	Pass	
Perfluorohexanesulfonic acid (PFHxS)	ug/kg	< 5			5	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	ug/kg	< 5			5	Pass	
Perfluorooctanesulfonic acid (PFOS)	ug/kg	< 5			5	Pass	
Perfluorodecanesulfonic acid (PFDS)	ug/kg	< 5			5	Pass	
Method Blank							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	ug/kg	< 5			5	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	ug/kg	< 10			10	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	ug/kg	< 5			5	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	ug/kg	< 5			5	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	%	120			70-130	Pass	
TRH C10-C14	%	83			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	110			70-130	Pass	
Toluene	%	113			70-130	Pass	
Ethylbenzene	%	102			70-130	Pass	
m&p-Xylenes	%	107			70-130	Pass	
o-Xylene	%	108			70-130	Pass	
Xylenes - Total*	%	107			70-130	Pass	
LCS - % Recovery							
Volatile Organics							
1.1-Dichloroethene	%	126			70-130	Pass	
1.1.1-Trichloroethane	%	115			70-130	Pass	
1.2-Dichlorobenzene	%	106			70-130	Pass	
1.2-Dichloroethane	%	112			70-130	Pass	
Trichloroethene	%	120			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	111			70-130	Pass	
TRH C6-C10	%	78			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	83			70-130	Pass	
Acenaphthylene	%	81			70-130	Pass	
Anthracene	%	90			70-130	Pass	
Benz(a)anthracene	%	85			70-130	Pass	
Benzo(a)pyrene	%	90			70-130	Pass	
Benzo(b&j)fluoranthene	%	82			70-130	Pass	
Benzo(g.h.i)perylene	%	98			70-130	Pass	
Benzo(k)fluoranthene	%	96			70-130	Pass	
Chrysene	%	87			70-130	Pass	
Dibenz(a.h)anthracene	%	91			70-130	Pass	
Fluoranthene	%	90			70-130	Pass	
Fluorene	%	83			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	94			70-130	Pass	
Naphthalene	%	83			70-130	Pass	
Phenanthrene	%	82			70-130	Pass	
Pyrene	%	89			70-130	Pass	
LCS - % Recovery							

Test			Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Organochlorine Pesticides									
Chlordanes - Total			%	79			70-130	Pass	
4.4'-DDE			%	73			70-130	Pass	
b-BHC			%	77			70-130	Pass	
Endosulfan I			%	77			70-130	Pass	
Endosulfan II			%	81			70-130	Pass	
Endosulfan sulphate			%	73			70-130	Pass	
Endrin			%	71			70-130	Pass	
Endrin ketone			%	74			70-130	Pass	
Heptachlor			%	80			70-130	Pass	
Hexachlorobenzene			%	75			70-130	Pass	
Methoxychlor			%	81			70-130	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C6-C9	S20-Jl11850	NCP	%	78			70-130	Pass	
TRH C10-C14	S20-Jl21026	NCP	%	104			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	S20-Jl11850	NCP	%	85			70-130	Pass	
Toluene	S20-Jl11850	NCP	%	88			70-130	Pass	
Ethylbenzene	S20-Jl11850	NCP	%	90			70-130	Pass	
m&p-Xylenes	S20-Jl11850	NCP	%	92			70-130	Pass	
o-Xylene	S20-Jl11850	NCP	%	92			70-130	Pass	
Xylenes - Total*	S20-Jl11850	NCP	%	92			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
Naphthalene	S20-Jl11850	NCP	%	81			70-130	Pass	
TRH C6-C10	S20-Jl11850	NCP	%	81			70-130	Pass	
TRH >C10-C16	S20-Jl21026	NCP	%	95			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	S20-Jl11747	NCP	%	88			70-130	Pass	
Acenaphthylene	S20-Jl11747	NCP	%	87			70-130	Pass	
Anthracene	S20-Jl11747	NCP	%	90			70-130	Pass	
Benz(a)anthracene	S20-Jl11747	NCP	%	108			70-130	Pass	
Benzo(a)pyrene	S20-Jl11747	NCP	%	102			70-130	Pass	
Benzo(b&j)fluoranthene	S20-Jl11747	NCP	%	80			70-130	Pass	
Benzo(g.h.i)perylene	S20-Jl11747	NCP	%	80			70-130	Pass	
Benzo(k)fluoranthene	S20-Jl11747	NCP	%	101			70-130	Pass	
Chrysene	S20-Jl11747	NCP	%	119			70-130	Pass	
Dibenz(a.h)anthracene	S20-Jl11747	NCP	%	89			70-130	Pass	
Fluoranthene	S20-Jl11747	NCP	%	77			70-130	Pass	
Fluorene	S20-Jl11747	NCP	%	90			70-130	Pass	
Indeno(1.2.3-cd)pyrene	S20-Jl11747	NCP	%	79			70-130	Pass	
Naphthalene	S20-Jl11747	NCP	%	88			70-130	Pass	
Phenanthrene	S20-Jl11666	NCP	%	99			70-130	Pass	
Pyrene	S20-Jl11747	NCP	%	84			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
Chlordanes - Total	S20-Jl11666	NCP	%	101			70-130	Pass	
4.4'-DDD	S20-Jl11666	NCP	%	121			70-130	Pass	
4.4'-DDE	S20-Jl11666	NCP	%	104			70-130	Pass	
a-BHC	S20-Jl11666	NCP	%	101			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Aldrin	S20-Jl11666	NCP	%	111			70-130	Pass	
b-BHC	S20-Jl11666	NCP	%	106			70-130	Pass	
d-BHC	S20-Jl11666	NCP	%	109			70-130	Pass	
Dieldrin	S20-Jl11666	NCP	%	81			70-130	Pass	
Endosulfan I	S20-Jl11666	NCP	%	116			70-130	Pass	
Endosulfan II	S20-Jl11666	NCP	%	99			70-130	Pass	
Endosulfan sulphate	S20-Jl11666	NCP	%	88			70-130	Pass	
Endrin	S20-Jl11666	NCP	%	78			70-130	Pass	
Endrin aldehyde	S20-Jl11666	NCP	%	91			70-130	Pass	
Endrin ketone	S20-Jl11666	NCP	%	85			70-130	Pass	
g-BHC (Lindane)	S20-Jl11666	NCP	%	106			70-130	Pass	
Heptachlor	S20-Jl11666	NCP	%	82			70-130	Pass	
Heptachlor epoxide	S20-Jl11666	NCP	%	107			70-130	Pass	
Hexachlorobenzene	S20-Jl11666	NCP	%	102			70-130	Pass	
Spike - % Recovery									
Organophosphorus Pesticides				Result 1					
Diazinon	S20-Jl11747	NCP	%	74			70-130	Pass	
Dimethoate	S20-Jl11747	NCP	%	83			70-130	Pass	
Ethion	S20-Jl11747	NCP	%	94			70-130	Pass	
Fenitrothion	S20-Jl11747	NCP	%	117			70-130	Pass	
Methyl parathion	S20-Jl11747	NCP	%	121			70-130	Pass	
Mevinphos	S20-Jl11747	NCP	%	93			70-130	Pass	
Spike - % Recovery									
Polychlorinated Biphenyls				Result 1					
Aroclor-1016	S20-Jl11666	NCP	%	92			70-130	Pass	
Aroclor-1260	S20-Jl11666	NCP	%	124			70-130	Pass	
Spike - % Recovery									
Phenols (Halogenated)				Result 1					
2-Chlorophenol	S20-Jl11747	NCP	%	95			30-130	Pass	
2.4-Dichlorophenol	S20-Jl11747	NCP	%	90			30-130	Pass	
2.4.6-Trichlorophenol	S20-Jl11747	NCP	%	72			30-130	Pass	
2.6-Dichlorophenol	S20-Jl11747	NCP	%	78			30-130	Pass	
4-Chloro-3-methylphenol	S20-Jl11747	NCP	%	98			30-130	Pass	
Spike - % Recovery									
Phenols (non-Halogenated)				Result 1					
2-Cyclohexyl-4.6-dinitrophenol	S20-Jl11747	NCP	%	102			30-130	Pass	
2-Methyl-4.6-dinitrophenol	S20-Jl11747	NCP	%	102			30-130	Pass	
2-Methylphenol (o-Cresol)	S20-Jl11747	NCP	%	91			30-130	Pass	
2-Nitrophenol	S20-Jl11747	NCP	%	100			30-130	Pass	
2.4-Dimethylphenol	S20-Jl11747	NCP	%	96			30-130	Pass	
2.4-Dinitrophenol	S20-Jl11747	NCP	%	104			70-130	Pass	
3&4-Methylphenol (m&p-Cresol)	S20-Jl11747	NCP	%	94			30-130	Pass	
4-Nitrophenol	S20-Jl11747	NCP	%	96			30-130	Pass	
Dinoseb	S20-Jl11747	NCP	%	96			30-130	Pass	
Phenol	S20-Jl11747	NCP	%	94			30-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	S20-Jl11882	NCP	%	116			70-130	Pass	
Cadmium	S20-Jl11882	NCP	%	113			70-130	Pass	
Chromium	S20-Jl11882	NCP	%	116			70-130	Pass	
Copper	S20-Jl11882	NCP	%	117			70-130	Pass	
Lead	S20-Jl22363	NCP	%	76			70-130	Pass	
Mercury	S20-Jl11882	NCP	%	114			70-130	Pass	
Nickel	S20-Jl11882	NCP	%	116			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Zinc	S20-Jl11882	NCP	%	109			70-130	Pass	
Spike - % Recovery									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1					
Perfluorobutanoic acid (PFBA)	B20-Jl27432	NCP	%	102			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	B20-Jl27432	NCP	%	100			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	B20-Jl27432	NCP	%	106			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	B20-Jl27432	NCP	%	102			50-150	Pass	
Perfluorooctanoic acid (PFOA)	B20-Jl27432	NCP	%	94			50-150	Pass	
Perfluorononanoic acid (PFNA)	B20-Jl27432	NCP	%	102			50-150	Pass	
Perfluorodecanoic acid (PFDA)	B20-Jl27432	NCP	%	104			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	B20-Jl27432	NCP	%	113			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	B20-Jl27432	NCP	%	112			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	B20-Jl27432	NCP	%	92			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	B20-Jl27432	NCP	%	113			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonamido substances				Result 1					
Perfluorooctane sulfonamide (FOSA)	B20-Jl27432	NCP	%	94			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	B20-Jl27432	NCP	%	111			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	B20-Jl27432	NCP	%	126			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	B20-Jl27432	NCP	%	72			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	B20-Jl27432	NCP	%	79			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	B20-Jl27432	NCP	%	117			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	B20-Jl27432	NCP	%	108			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1					
Perfluorobutanesulfonic acid (PFBS)	B20-Jl27432	NCP	%	87			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	B20-Jl27432	NCP	%	141			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	B20-Jl27432	NCP	%	117			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	B20-Jl27432	NCP	%	86			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	B20-Jl27432	NCP	%	99			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	B20-Jl27432	NCP	%	118			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	B20-Jl27432	NCP	%	98			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	B20-Jl27432	NCP	%	140			50-150	Pass	
Spike - % Recovery									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1					
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	B20-Jl27432	NCP	%	116			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	B20-Jl27432	NCP	%	117			50-150	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	B20-JI27432	NCP	%	93			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	B20-JI27432	NCP	%	119			50-150	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C6-C9	S20-JI22860	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	S20-JI23357	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	S20-JI23357	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	S20-JI23357	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S20-JI22860	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Toluene	S20-JI22860	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Ethylbenzene	S20-JI22860	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
m&p-Xylenes	S20-JI22860	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
o-Xylene	S20-JI22860	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes - Total*	S20-JI22860	NCP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
1.1-Dichloroethane	S20-JI22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1-Dichloroethene	S20-JI22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1-Trichloroethane	S20-JI22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	S20-JI22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2-Trichloroethane	S20-JI22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	S20-JI22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dibromoethane	S20-JI22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichlorobenzene	S20-JI22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloroethane	S20-JI22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloropropane	S20-JI22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.3-Trichloropropane	S20-JI22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trimethylbenzene	S20-JI22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichlorobenzene	S20-JI22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichloropropane	S20-JI22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3.5-Trimethylbenzene	S20-JI22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.4-Dichlorobenzene	S20-JI22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Butanone (MEK)	S20-JI22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Propanone (Acetone)	S20-JI22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chlorotoluene	S20-JI22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Methyl-2-pentanone (MIBK)	S20-JI22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Allyl chloride	S20-JI22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromobenzene	S20-JI22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromochloromethane	S20-JI22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromodichloromethane	S20-JI22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromoform	S20-JI22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromomethane	S20-JI22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon disulfide	S20-JI22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon Tetrachloride	S20-JI22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chlorobenzene	S20-JI22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroethane	S20-JI22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroform	S20-JI22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloromethane	S20-JI22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
cis-1.2-Dichloroethene	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.3-Dichloropropene	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromochloromethane	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromomethane	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dichlorodifluoromethane	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Iodomethane	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Isopropyl benzene (Cumene)	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Methylene Chloride	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Styrene	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Tetrachloroethene	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.2-Dichloroethene	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.3-Dichloropropene	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichloroethene	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichlorofluoromethane	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Vinyl chloride	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	S20-Jl22860	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH >C10-C16	S20-Jl23357	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	S20-Jl23357	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	S20-Jl23357	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	S20-Jl11662	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	S20-Jl11662	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	S20-Jl11662	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	S20-Jl11662	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	S20-Jl11662	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	S20-Jl11662	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	S20-Jl11662	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	S20-Jl11662	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	S20-Jl11662	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	S20-Jl11662	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	S20-Jl11662	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	S20-Jl11662	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	S20-Jl11662	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	S20-Jl11662	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	S20-Jl11662	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	S20-Jl11662	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	S20-Jl11662	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	S20-Jl11662	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	S20-Jl11662	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	S20-Jl11662	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-BHC	S20-Jl11662	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	S20-Jl11662	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-BHC	S20-Jl11662	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-BHC	S20-Jl11662	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	S20-Jl11662	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	S20-Jl11662	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	S20-Jl11662	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	S20-Jl11662	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	

Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Endrin	S20-Jl11662	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	S20-Jl11662	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	S20-Jl11662	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-BHC (Lindane)	S20-Jl11662	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	S20-Jl11662	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	S20-Jl11662	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	S20-Jl11662	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	S20-Jl11662	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	S20-Jl11878	NCP	mg/kg	12	11	11	30%	Pass	
Cadmium	S20-Jl11878	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	S20-Jl11878	NCP	mg/kg	27	23	15	30%	Pass	
Copper	S20-Jl11878	NCP	mg/kg	57	47	18	30%	Pass	
Lead	S20-Jl11878	NCP	mg/kg	28	23	19	30%	Pass	
Mercury	S20-Jl11878	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Nickel	S20-Jl11878	NCP	mg/kg	39	27	36	30%	Fail	Q15
Zinc	S20-Jl11878	NCP	mg/kg	160	120	34	30%	Fail	Q02
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	S20-Jl22368	NCP	%	10	8.2	22	30%	Pass	
Duplicate									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD			
Perfluorobutanoic acid (PFBA)	B20-Jl27424	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	B20-Jl27424	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	B20-Jl27424	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	B20-Jl27424	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	B20-Jl27424	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	B20-Jl27424	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	B20-Jl27424	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	B20-Jl27424	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	B20-Jl27424	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	B20-Jl27424	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	B20-Jl27424	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
Perfluorooctane sulfonamide (FOSA)	B20-Jl27424	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	B20-Jl27424	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	B20-Jl27424	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	B20-Jl27424	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	B20-Jl27424	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	B20-Jl27424	NCP	ug/kg	< 10	< 10	<1	30%	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	B20-Jl27424	NCP	ug/kg	< 10	< 10	<1	30%	Pass	

Duplicate									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD			
Perfluorobutanesulfonic acid (PFBS)	B20-Jl27424	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorononanesulfonic acid (PFNS)	B20-Jl27424	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropropanesulfonic acid (PFPrS)	B20-Jl27424	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropentanesulfonic acid (PFPeS)	B20-Jl27424	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorohexanesulfonic acid (PFHxS)	B20-Jl27424	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	B20-Jl27424	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorooctanesulfonic acid (PFOS)	B20-Jl27424	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorodecanesulfonic acid (PFDS)	B20-Jl27424	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Duplicate									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1	Result 2	RPD			
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	B20-Jl27424	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	B20-Jl27424	NCP	ug/kg	< 10	< 10	<1	30%	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	B20-Jl27424	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	B20-Jl27424	NCP	ug/kg	< 5	< 5	<1	30%	Pass	

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
N11	Isotope dilution is used for calibration of each native compound for which an exact labelled analogue is available (Isotope Dilution Quantitation). The isotopically labelled analogues allow identification and recovery correction of the concentration of the associated native PFAS compounds.
N15	Where the native PFAS compound does not have labelled analogue then the quantification is made using the Extracted Internal Standard Analyte with the closest retention time to the analyte and no recovery correction has been made (Internal Standard Quantitation).
Q02	The duplicate %RPD is outside the recommended acceptance criteria. Further analysis indicates sample heterogeneity as the cause
Q15	The RPD reported passes Eurofins Environment Testing's QC - Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report.

Authorised By

[redacted]

Analytical Services Manager
Senior Analyst-Organic (NSW)
Senior Analyst-Metal (NSW)
Senior Analyst-Asbestos (NSW)
Senior Analyst-PFAS (QLD)

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☒ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
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- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ

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CLIENT: Defence Housing Australia	LABORATORY: SGS Australia
PROJECT: Randwick Barracks	LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015
PROJECT NUMBER: 610.30041	SAMPLER: [redacted]
PROJECT MANAGER: [redacted]	SAMPLER CONTACT No [redacted]
PM CONTACT No [redacted]	Email Reports and Invoices to: LQRSYD@slrconsulting.com [redacted]

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number: 2 of 4

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only (for asbestos bags)	HOLD	Suite E and H	Suite B	C6-C10, BTEX for TRIPBLANK and TRIP SPIKE	Additional Information (Comment on any gross contamination or specific requirements)
	0407_TP123_0.1_200701	01-07-2020	Soil		x			x					
	0407_TP123_0.3_200701	01-07-2020	Soil		x			x					
	0407_TP123_0.5_200701	01-07-2020	Soil						x				
	0407_TP123_1.0_200701	01-07-2020	Soil						x				
	0407_TP133_0.1_200701	01-07-2020	Soil		x			x					
	0407_TP133_0.5_200701	01-07-2020	Soil		x			x					
	0407_TP133_1.0_200701	01-07-2020	Soil						x				
	0407_QC185_200701	01-07-2020	Soil		x								
	0407_QC285_200701	01-07-2020	Soil										Please send to Eurofins for Suite A
	0407_TP267_0.1_200701	01-07-2020	Soil		x								
	0407_TP267_0.5_200701	01-07-2020	Soil		x								
	0407_TP267_1.0_200701								x				

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time	01-07-2020	Received by	Sign [redacted]	Date / Time	15/7 1:4
Relinquished By	Sign	Date / Time		Received by	Sign	Date / Time	
Relinquished By	Sign	Date / Time		Received by	Sign	Date / Time	

Temperature Received: 73052 15.53

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CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

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- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ

CLIENT: Defence Housing Australia	**LABORATORY:** SGS Australia
PROJECT: Randwick Barracks	**LABORATORY ADDRESS:** Unit 16/33 Maddox St, Alexandria NSW 2015
PROJECT NUMBER: 610.30041	**SAMPLER** [redacted]
PROJECT MANAGER: [redacted]	**SAMPLER CONTACT No** [redacted]
PM CONTACT N [redacted]	**Email Reports and Invoices to:** LQRSYD@slrconsulting.com [redacted]

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number 3 of 4

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only (for asbestos bags)	HOLD	Suite E and H	Suite B	C6-C10, BTEX for TRIPBLANK and TRIP SPIKE	Additional Information *(Comment on any gross contamination or specific requirements)*
	0407_TP267_0.1_200701	01-07-2020	Soil		x			x					
	0407_TP267_0.5_200701	01-07-2020	Soil		x			x					
	0407_TP267_1.0_200701	01-07-2020	Soil						x				
	0407_TP268_0.1_200701	01-07-2020	Soil		x			x					
	0407_TP268_0.5_200701	01-07-2020	Soil		x			x					
	0407_TP268_1.0_200701	01-07-2020	Soil						x				
	0407_QC187_200701	01-07-2020	Soil		x								
	0407_QC287_200701	01-07-2020	Soil										Please send to Eurofins for Suite A
	0407_TP269_0.1_200701	01-07-2020	Soil		x			x					
	0407_TP269_0.3_200701	01-07-2020	Soil		x			x					
	0407_TP269_0.5_200701	01-07-2020	Soil						x				

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time	01-07-2020	Received by	Sign	Date / Time	Temperature Received:
Relinquished By	Sign	Date / Time		Received by	Sign	Date / Time	
Relinquished By	Sign	Date / Time		Received by	Sign	Date / Time	

732052

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

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- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0820
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- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ

E-MAILED 14/7/20 12:14

CLIENT: Defence Housing Australia

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGER: [redacted]

PM CONTACT No: [redacted]

COMMENTS OR ADDITIONAL DIRECTIONS

LABORATORY: SGS Australia

LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015

SAMPLE [redacted]

SAMPLER CONTACT No: [redacted]

Email Reports and Invoices to: LQRSYD@slrconsulting.com [redacted]

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number of

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	Asbestos ONLY	HOLD	C6-C10/BETXN					Additional Information (Comment on any gross contamination or specific requirements)
													Please hold all PFAS containers
	0407_QC174_200626	26/06/2020	Soil	jar, pfas	x								
	0407_QC274_200626	26/06/2020	Soil	jar, pfas	x								Please send to Eurofins

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time	18/06/2020	Received by	Sign	Date / Time	Temperature Received:
Relinquished By	Sign	Date / Time		Received by	Sign	Date / Time	7.3 2.5 2
Relinquished By	Sign	Date / Time		Received by	Sign	Date / Time	

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

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PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
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CLIENT: Defence Housing Australia	LABORATORY: SGS Australia
PROJECT: Randwick Barracks	LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015
PROJECT NUMBER: 610.30041	SAMPLER [redacted]
PROJECT MANAGER [redacted]	SAMPLER CONTACT No: [redacted]
PM CONTACT N[redacted]	Email Reports and Invoices to: LQRSYD@slrconsulting.com[redacted]
COMMENTS OR ADDITIONAL DIRECTIONS	

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

COC Number: 2 of 4

Required TAT: Standard

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only (for asbestos bags)	HOLD	Suite E and H	Heavy metals, TPH/BTEXN, PAH, VOC/SVOCs and PFAS	C6-C10, BTEX	Additional Information (Comment on any gross contamination or specific requirements)
11	0407_TP172_0.1_200630	30-06-2020	Soil		x			x					
12	0407_TP172_0.3_200630	30-06-2020	Soil		x			x					
	0407_TP172_0.6_200630	30-06-2020	Soil						x				
13	0407_TP173_0.1_200630	30-06-2020	Soil		x			x					
14	0407_TP173_0.5_200630	30-06-2020	Soil		x			x					
	0407_TP173_1.0_200630	30-06-2020	Soil						x				
15	0407_QC181_200630	30-06-2020	Soil		x								
	0407_QC281_200630	30-06-2020	Soil										Please send to Eurofins for Suite A
	0407_TP174_0.1_200630	30-06-2020	Soil		x			x					
	0407_TP174_0.5_200630	30-06-2020	Soil		x			x					
	0407_TP174_0.7_200630	30-06-2020	Soil						x				
	0407_TP174_1.0_200630	30-06-2020	Soil						x				

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 30-06-2020	Received by	Sign [redacted]	Date / Time 30/06/20	Temperature Received:
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time 4.30	73052
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

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CLIENT: Defence Housing Australia	**LABORATORY: SGS Australia**
PROJECT: Randwick Barracks	**LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015**
PROJECT NUMBER: 610.30041	**SAMPLER:** [redacted]
PROJECT MANAGER: [redacted]	**SAMPLER CONTACT No** [redacted]
PM CONTACT No [redacted]	**Email Reports and Invoices to: LQRSYD@slrconsulting.com ;** [redacted]
COMMENTS OR ADDITIONAL DIRECTIONS	

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number 3 of 4

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only (for asbestos bags)	HOLD	Suite E and H	Heavy metals, TPH/BTEXN, PAH, VOC/SVOCs and PFAS	C6-C10, BTEX	Additional Information (Comment on any gross contamination or specific requirements)
	0407_QC180_200630	30-06-2020	Soil		x								
	0407_QC280_200630	30-06-2020	Soil										Please send to Eurofins for Suite A
	0407_TP259_0.1_200630	30-06-2020	Soil		x			x					
	0407_TP259_0.3_200630	30-06-2020	Soil		x			x					
	0407_TP259_0.5_200630	30-06-2020	Soil						x				
	0407_TP259_1.0_200630	30-06-2020	Soil						x				
	0407_QC184_200630	30-06-2020	Soil		x								
	0407_QC284_200630	30-06-2020	Soil										Please send to Eurofins for Suite A
	0407_TP260_0.1_200630	30-06-2020	Soil		x			x					
	0407_TP260_0.1_ACM_200630	30-06-2020	Soil					x					
	0407_TP260_0.3_200630	30-06-2020	Soil						x				
	0407_TP260_0.5_200630	30-06-2020	Soil		x			x					

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time	30-06-2020	Received by	Sign [redacted]	Date / Time	30/06/20
Relinquished By	Sign	Date / Time		Received by	Sign	Date / Time	@4:30
Relinquished By	Sign	Date / Time		Received by	Sign	Date / Time	

Temperature Received: 732052

CHAIN OF CUSTODY DOCUMENTATION

SLR

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Spring Hill, QLD 4000
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☒ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ DARWIN: 21 Parap Rd, Dawin, NT 0820
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ

CLIENT: Defence Housing Australia	LABORATORY: SGS Australia	Turnaround Time (TAT)
PROJECT: Randwick Barracks	LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015	COC Number 4 of 4
PROJECT NUMBER: 610.30041	SAMPLER: MR	☐ Standard TAT
PROJECT MANAGER: [redacted]	SAMPLER CONTACT No: 0404 840 134	☐ Non Standard or Urgent TAT
PM CONTACT No [redacted]	Email Reports and Invoices to: LQRSYD@slrconsulting.com ; [redacted]	Required TAT: Standard

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only (for asbestos bags)	HOLD	Suite E and H	Heavy metals, TPH/BTEXN, PAH, VOC/SVOCs and PFAS	C6-C10, BTEX	Additional Information (Comment on any gross contamination or specific requirements)
	0407_TP260_0.5_ACM_200630	30-06-2020	Soil					x					
	0407_TP260_1.1_200630	30-06-2020	Soil						x				
	0407_QC183_200630	30-06-2020	Soil		x								
	0407_QC283_200630	30-06-2020	Soil										Please send to Eurofins for Suite A
		30-06-2020	Soil										
		30-06-2020	Soil										
		30-06-2020	Soil										
		30-06-2020	Soil										
		30-06-2020	Soil										
		30-06-2020	Soil										
		30-06-2020	Soil										
		30-06-2020	Soil										

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time	30-06-2020	Received by	Sign [redacted]	Date / Time	30/06/20
Relinquished By	Sign	Date / Time		Received by	Sign	Date / Time	@ 4.30
Relinquished By	Sign	Date / Time		Received by	Sign	Date / Time	

Temperature Received: 732052

eurofins | Environment Testing

Melbourne
6 Monterey Road
Dandenong South Vic 3175
Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

Sydney
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16 Mars Road
Lane Cove West NSW 2066
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

Brisbane
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Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Perth
2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261 Site # 23736

ABN – 50 005 085 521 e.mail : EnviroSales@eurofins.com web : www.eurofins.com.au

Sample Receipt Advice

Company name:	**SLR Consulting (Sydney)**
Contact name:	[redacted]
Project name:	RANDWICK BARRACKS
Project ID:	610.30041
COC number:	Not provided
Turn around time:	5 Day
Date/Time received:	Jul 15, 2020 1:42 PM
Eurofins reference:	**732052**

Sample information

☑ A detailed list of analytes logged into our LIMS, is included in the attached summary table.

☑ All samples have been received as described on the above COC.

☑ COC has been completed correctly.

☑ Attempt to chill was evident.

☑ Appropriately preserved sample containers have been used.

☑ All samples were received in good condition.

☑ Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.

☑ Appropriate sample containers have been used.

☒ Split sample sent to requested external lab.

☒ Some samples have been subcontracted.

N/A Custody Seals intact (if used).

Contact notes

If you have any questions with respect to these samples please contact:

[redacted] on Phone : [redacted] or by e.mail: [redacted]eurofins.com

Results will be delivered electronically via e.mail to [redacted]@slrconsulting.com.

Note: A copy of these results will also be delivered to the general SLR Consulting (Sydney) email address.

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43 Detroit Drive
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Phone : 0800 856 450
IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041.00000

Order No.:
Report #: 732052
Phone: 02 9428 8100
Fax:

Received: Jul 15, 2020 1:42 PM
Due: Jul 22, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271										
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	0407_QC285_200701	Jul 01, 2020		Soil	S20-Jl26038	X	X	X	X	X
2	0407_QC287_200701	Jul 01, 2020		Soil	S20-Jl26039	X	X	X	X	X
3	0407_QC274_200626	Jun 26, 2020		Soil	S20-Jl26040	X	X	X	X	X
4	0407_QC281_200630	Jun 30, 2020		Soil	S20-Jl26041	X	X	X	X	X
5	0407_QC280_200630	Jun 30, 2020		Soil	S20-Jl26042	X	X	X	X	X
6	0407_QC284_200630	Jun 30, 2020		Soil	S20-Jl26043	X	X	X	X	X

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Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041.00000

Order No.:
Report #: 732052
Phone: 02 9428 8100
Fax:

Received: Jul 15, 2020 1:42 PM
Due: Jul 22, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271										
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
7	0407_QC283_200630	Jun 30, 2020		Soil	S20-Jl26044	X	X	X	X	X
Test Counts						7	7	7	7	7

Certificate of Analysis

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NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025–Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus
North Sydney
NSW 2060

Attention:	[redacted]
Report	732052-AID
Project Name	RANDWICK BARRACKS
Project ID	610.30041.00000
Received Date	Jul 15, 2020
Date Reported	Jul 22, 2020

Methodology:

Asbestos Fibre Identification	Conducted in accordance with the Australian Standard AS 4964 – 2004: Method for the Qualitative Identification of Asbestos in Bulk Samples and in-house Method LTM-ASB-8020 by polarised light microscopy (PLM) and dispersion staining (DS) techniques. *NOTE: Positive Trace Analysis results indicate the sample contains detectable respirable fibres.*
Unknown Mineral Fibres	Mineral fibres of unknown type, as determined by PLM with DS, may require another analytical technique, such as Electron Microscopy, to confirm unequivocal identity. *NOTE: While Actinolite, Anthophyllite and Tremolite asbestos may be detected by PLM with DS, due to variability in the optical properties of these materials, AS4964 requires that these are reported as UMF unless confirmed by an independent technique.*
Subsampling Soil Samples	The whole sample submitted is first dried and then passed through a 10mm sieve followed by a 2mm sieve. All fibrous matter greater than 10mm, greater than 2mm as well as the material passing through the 2mm sieve are retained and analysed for the presence of asbestos. If the sub 2mm fraction is greater than approximately 30 to 60g then a sub-sampling routine based on ISO 3082:2009(E) is employed. *NOTE: Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be sub-sampled for trace analysis, in accordance with AS 4964-2004.*
Bonded asbestos-containing material (ACM)	The material is first examined and any fibres isolated for identification by PLM and DS. Where required, interfering matrices may be removed by disintegration using a range of heat, chemical or physical treatments, possibly in combination.The resultant material is then further examined in accordance with AS 4964 - 2004. *NOTE: Even after disintegration it may be difficult to detect the presence of asbestos in some asbestos-containing bulk materials using PLM and DS. This is due to the low grade or small length or diameter of the asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos-containing sealants and mastics, asbestos-containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.*
Limit of Reporting	The performance limitation of the AS 4964 (2004) method for non-homogeneous samples is around 0.1 g/kg (equivalent to 0.01% (w/w)). Where no asbestos is found by PLM and DS, including Trace Analysis, this is considered to be at the nominal reporting limit of 0.01% (w/w). The NEPM screening level of 0.001% (w/w) is intended as an on-site determination, not a laboratory Limit of Reporting (LOR), per se. Examination of a large sample size (e.g. 500 mL) may improve the likelihood of detecting asbestos, particularly AF, to aid assessment against the NEPM criteria. Gravimetric determinations to this level of accuracy are outside of AS 4964 and hence NATA Accreditation does not cover the performance of this service (non-NATA results shown with an asterisk). *NOTE: NATA News March 2014, p.7, states in relation to AS 4964: "This is a qualitative method with a nominal reporting limit of 0.01 % " and that currently in Australia "there is no validated method available for the quantification of asbestos".This report is consistent with the analytical procedures and reporting recommendations in the NEPM and the WA DoH.*

Project Name RANDWICK BARRACKS
Project ID 610.30041.00000
Date Sampled Jun 26, 2020 to Jul 01, 2020
Report 732052-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
0407_QC285_200701	20-JI26038	Jul 01, 2020	Approximate Sample 45g Sample consisted of: Brown coarse-grained sandy soil and organic debris	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
0407_QC287_200701	20-JI26039	Jul 01, 2020	Approximate Sample 57g Sample consisted of: Brown coarse-grained sandy soil	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
0407_QC274_200626	20-JI26040	Jun 26, 2020	Approximate Sample 51g Sample consisted of: Brown coarse-grained sandy soil and organic debris	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
0407_QC281_200630	20-JI26041	Jun 30, 2020	Approximate Sample 47g Sample consisted of: Brown coarse-grained sandy soil	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
0407_QC280_200630	20-JI26042	Jun 30, 2020	Approximate Sample 55g Sample consisted of: Brown coarse-grained sandy soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
0407_QC284_200630	20-JI26043	Jun 30, 2020	Approximate Sample 52g Sample consisted of: Brown coarse-grained sandy soil	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
0407_QC283_200630	20-Jl26044	Jun 30, 2020	Approximate Sample 44g Sample consisted of: Brown coarse-grained sandy soil	Chrysotile, amosite and crocidolite asbestos detected in weathered fibrous material. Approximate raw weight of asbestos containing material = 0.0016g Total estimated asbestos content in the sample = 0.00064g* Total estimated asbestos concentration = 0.0014% w/w* No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Asbestos - LTM-ASB-8020	Sydney	Jul 15, 2020	Indefinite

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Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041.00000

Order No.:
Report #: 732052
Phone: 02 9428 8100
Fax:

Received: Jul 15, 2020 1:42 PM
Due: Jul 22, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins Suite B15	Volatile Organics	Moisture Set	Eurofins Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271										
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	0407_QC285_200701	Jul 01, 2020		Soil	S20-Jl26038	X	X	X	X	X
2	0407_QC287_200701	Jul 01, 2020		Soil	S20-Jl26039	X	X	X	X	X
3	0407_QC274_200626	Jun 26, 2020		Soil	S20-Jl26040	X	X	X	X	X
4	0407_QC281_200630	Jun 30, 2020		Soil	S20-Jl26041	X	X	X	X	X
5	0407_QC280_200630	Jun 30, 2020		Soil	S20-Jl26042	X	X	X	X	X
6	0407_QC284_200630	Jun 30, 2020		Soil	S20-Jl26043	X	X	X	X	X

eurofins | Environment Testing

ABN – 50 005 085 521 web : www.eurofins.com.au e.mail : EnviroSales@eurofins.com

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Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041.00000

Order No.:
Report #: 732052
Phone: 02 9428 8100
Fax:

Received: Jul 15, 2020 1:42 PM
Due: Jul 22, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins Suite B15	Volatile Organics	Moisture Set	Eurofins Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271										
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
7	0407_QC283_200630	Jun 30, 2020		Soil	S20-Jl26044	X	X	X	X	X
Test Counts						7	7	7	7	7

Internal Quality Control Review and Glossary

General

1. QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Samples were analysed on an 'as received' basis.
4. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
5. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the Sample Receipt Advice.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

Units

% w/w: weight for weight basis	grams per kilogram
Filter loading:	fibres/100 graticule areas
Reported Concentration:	fibres/mL
Flowrate:	L/min

Terms

Dry	Sample is dried by heating prior to analysis
LOR	Limit of Reporting
COC	Chain of Custody
SRA	Sample Receipt Advice
ISO	International Standards Organisation
AS	Australian Standards
WA DOH	Reference document for the NEPM. Government of Western Australia, Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia (2009), including supporting document Recommended Procedures for Laboratory Analysis of Asbestos in Soil (2011)
NEPM	National Environment Protection (Assessment of Site Contamination) Measure, 2013 (as amended)
ACM	Asbestos Containing Materials. Asbestos contained within a non-asbestos matrix, typically presented in bonded and/or sound condition. For the purposes of the NEPM, ACM is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
AF	Asbestos Fines. Asbestos containing materials, including friable, weathered and bonded materials, able to pass a 7mm x 7mm sieve. Considered under the NEPM as equivalent to “non-bonded / friable”.
FA	Fibrous Asbestos. Asbestos containing materials in a friable and/or severely weathered condition. For the purposes of the NEPM, FA is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
Friable	Asbestos-containing materials of any size that may be broken or crumbled by hand pressure. For the purposes of the NEPM, this includes both AF and FA. It is outside of the laboratory’s remit to assess degree of friability.
Trace Analysis	Analytical procedure used to detect the presence of respirable fibres in the matrix.

Comments

The samples received were not collected in an approved asbestos bag and was therefore sub-sampled from the 250mL glass jar. Valid sub-sampling procedures were applied so as to ensure that the sub-samples to be analysed accurately represented the samples received.

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N/A	Not applicable

Asbestos Counter/Identifier:

[redacted] Senior Analyst-Asbestos (NSW)

Authorised by:

[redacted] Senior Analyst-Asbestos (NSW)

General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

Eurofins shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.

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Certificate of Analysis

SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus,
North Sydney
NSW 2060

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: [redacted]

Report **732052-S**
Project name RANDWICK BARRACKS
Project ID 610.30041.00000
Received Date Jul 15, 2020

Client Sample ID			0407_QC285_200701	0407_QC287_200701	0407_QC274_200626	0407_QC281_200630
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-JI26038**	**S20-JI26039**	**S20-JI26040**	**S20-JI26041**
Date Sampled			**Jul 01, 2020**	**Jul 01, 2020**	**Jun 26, 2020**	**Jun 30, 2020**
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	< 50	130
TRH C29-C36	50	mg/kg	< 50	< 50	< 50	73
TRH C10-C36 (Total)	50	mg/kg	< 50	< 50	< 50	203
BTEX						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	96	104	98	87
Volatile Organics						
1.1-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			0407_QC285_200701	0407_QC287_200701	0407_QC274_200626	0407_QC281_200630
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-Jl26038**	**S20-Jl26039**	**S20-Jl26040**	**S20-Jl26041**
Date Sampled			**Jul 01, 2020**	**Jul 01, 2020**	**Jun 26, 2020**	**Jun 30, 2020**
Test/Reference	LOR	Unit				
Volatile Organics						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromoform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Iodomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Styrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
Total MAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Bromofluorobenzene (surr.)	1	%	96	104	98	87
Toluene-d8 (surr.)	1	%	96	92	90	89
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100	150
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100	< 100	150

Client Sample ID			0407_QC285_200701	0407_QC287_200701	0407_QC274_200626	0407_QC281_200630
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-Jl26038**	**S20-Jl26039**	**S20-Jl26040**	**S20-Jl26041**
Date Sampled			**Jul 01, 2020**	**Jul 01, 2020**	**Jun 26, 2020**	**Jun 30, 2020**
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	2.4
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	2.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	2.9
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	1.0
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	1.9
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	1.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	1.0
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	1.9
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	1.4
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	1.4
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	1.6
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	11.7
2-Fluorobiphenyl (surr.)	1	%	93	94	91	91
p-Terphenyl-d14 (surr.)	1	%	61	60	66	87
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
a-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
b-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
d-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.1	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Toxaphene	1	mg/kg	< 1	< 1	< 1	< 1
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Dibutylchlorendate (surr.)	1	%	83	89	71	92
Tetrachloro-m-xylene (surr.)	1	%	75	81	67	71

Client Sample ID			0407_QC285_200701	0407_QC287_200701	0407_QC274_200626	0407_QC281_200630
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-Jl26038**	**S20-Jl26039**	**S20-Jl26040**	**S20-Jl26041**
Date Sampled			**Jul 01, 2020**	**Jul 01, 2020**	**Jun 26, 2020**	**Jun 30, 2020**
Test/Reference	LOR	Unit				
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Bolstar	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Coumaphos	2	mg/kg	< 2	< 2	< 2	< 2
Demeton-S	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Demeton-O	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Diazinon	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Dimethoate	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Disulfoton	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
EPN	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ethion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ethoprop	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Fenthion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Malathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Merphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Methyl parathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Mevinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Monocrotophos	2	mg/kg	< 2	< 2	< 2	< 2
Naled	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Omethoate	2	mg/kg	< 2	< 2	< 2	< 2
Phorate	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ronnel	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Terbufos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Tokuthion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Trichloronate	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Triphenylphosphate (surr.)	1	%	87	84	86	107
Polychlorinated Biphenyls						
Aroclor-1016	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1232	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1242	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1248	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1254	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1260	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PCB*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibutylchlorendate (surr.)	1	%	83	89	71	92
Tetrachloro-m-xylene (surr.)	1	%	75	81	67	71

Client Sample ID			0407_QC285_200701	0407_QC287_200701	0407_QC274_200626	0407_QC281_200630
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-JI26038**	**S20-JI26039**	**S20-JI26040**	**S20-JI26041**
Date Sampled			**Jul 01, 2020**	**Jul 01, 2020**	**Jun 26, 2020**	**Jun 30, 2020**
Test/Reference	LOR	Unit				
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1	< 1
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
2-Nitrophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
4-Nitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
Phenol-d6 (surr.)	1	%	93	94	92	89
Heavy Metals						
Arsenic	2	mg/kg	< 2	< 2	< 2	< 2
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	< 5	< 5	< 5	< 5
Copper	5	mg/kg	< 5	< 5	< 5	< 5
Lead	5	mg/kg	21	12	7.9	16
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	< 5	< 5	< 5	< 5
Zinc	5	mg/kg	22	17	9.6	39
% Moisture	1	%	7.0	5.1	5.2	19

Client Sample ID			0407_QC280_200630	0407_QC284_200630	0407_QC283_200630
Sample Matrix			**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-JI26042**	**S20-JI26043**	**S20-JI26044**
Date Sampled			**Jun 30, 2020**	**Jun 30, 2020**	**Jun 30, 2020**
Test/Reference	LOR	Unit			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions					
TRH C6-C9	20	mg/kg	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	< 50	< 50	350
TRH C29-C36	50	mg/kg	< 50	< 50	330
TRH C10-C36 (Total)	50	mg/kg	< 50	< 50	680

Client Sample ID			0407_QC280_200630	0407_QC284_200630	0407_QC283_200630
Sample Matrix			Soil	Soil	Soil
Eurofins Sample No.			S20-JI26042	S20-JI26043	S20-JI26044
Date Sampled			Jun 30, 2020	Jun 30, 2020	Jun 30, 2020
Test/Reference	LOR	Unit			
BTEX					
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	114	103	96
Volatile Organics					
1.1-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5	< 0.5	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Bromoform	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Bromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Chloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Chloroform	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Chloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Iodomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	< 0.5	< 0.5

Client Sample ID			0407_QC280_200630	0407_QC284_200630	0407_QC283_200630
Sample Matrix			Soil	Soil	Soil
Eurofins Sample No.			S20-JI26042	S20-JI26043	S20-JI26044
Date Sampled			Jun 30, 2020	Jun 30, 2020	Jun 30, 2020
Test/Reference	LOR	Unit			
Volatile Organics					
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Styrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3
Total MAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5
4-Bromofluorobenzene (surr.)	1	%	114	103	96
Toluene-d8 (surr.)	1	%	102	99	105
Total Recoverable Hydrocarbons - 2013 NEPM Fractions					
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	520
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100	520
Polycyclic Aromatic Hydrocarbons					
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	0.7
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	1.0
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.3
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	0.6
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5	< 0.5	0.7
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Total PAH*	0.5	mg/kg	< 0.5	< 0.5	1.3
2-Fluorobiphenyl (surr.)	1	%	93	95	92
p-Terphenyl-d14 (surr.)	1	%	72	71	94

Client Sample ID			0407_QC280_200630	0407_QC284_200630	0407_QC283_200630
Sample Matrix			**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-Jl26042**	**S20-Jl26043**	**S20-Jl26044**
Date Sampled			**Jun 30, 2020**	**Jun 30, 2020**	**Jun 30, 2020**
Test/Reference	LOR	Unit			
Organochlorine Pesticides					
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05	0.08
a-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05
b-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05
d-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	0.06
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05
Methoxychlor	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Toxaphene	1	mg/kg	< 1	< 1	< 1
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	0.06
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	0.08
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.2	< 0.2	< 0.2
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.2	< 0.2	< 0.2
Dibutylchlorendate (surr.)	1	%	76	106	102
Tetrachloro-m-xylene (surr.)	1	%	76	83	71
Organophosphorus Pesticides					
Azinphos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Bolstar	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Coumaphos	2	mg/kg	< 2	< 2	< 2
Demeton-S	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Demeton-O	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Diazinon	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Dimethoate	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Disulfoton	0.2	mg/kg	< 0.2	< 0.2	< 0.2
EPN	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Ethion	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Ethoprop	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Fenthion	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Malathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Merphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2

Client Sample ID			0407_QC280_200630	0407_QC284_200630	0407_QC283_200630
Sample Matrix			**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-JI26042**	**S20-JI26043**	**S20-JI26044**
Date Sampled			**Jun 30, 2020**	**Jun 30, 2020**	**Jun 30, 2020**
Test/Reference	LOR	Unit			
Organophosphorus Pesticides					
Methyl parathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Mevinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Monocrotophos	2	mg/kg	< 2	< 2	< 2
Naled	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Omethoate	2	mg/kg	< 2	< 2	< 2
Phorate	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Ronnel	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Terbufos	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Tokuthion	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Trichloronate	0.2	mg/kg	< 0.2	< 0.2	< 0.2
Triphenylphosphate (surr.)	1	%	97	91	92
Polychlorinated Biphenyls					
Aroclor-1016	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1	< 0.1
Aroclor-1232	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Aroclor-1242	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Aroclor-1248	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Aroclor-1254	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Aroclor-1260	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Total PCB*	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Dibutylchlorendate (surr.)	1	%	76	106	102
Tetrachloro-m-xylene (surr.)	1	%	76	83	71
Phenols (Halogenated)					
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1
Phenols (non-Halogenated)					
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	< 0.2
2-Nitrophenol	1	mg/kg	< 1	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5	< 5	< 5
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	< 0.4
4-Nitrophenol	5	mg/kg	< 5	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20
Phenol-d6 (surr.)	1	%	93	95	87

Client Sample ID			0407_QC280_200630	0407_QC284_200630	0407_QC283_200630
Sample Matrix			**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-JI26042**	**S20-JI26043**	**S20-JI26044**
Date Sampled			**Jun 30, 2020**	**Jun 30, 2020**	**Jun 30, 2020**
Test/Reference	LOR	Unit			
Heavy Metals					
Arsenic	2	mg/kg	< 2	2.3	3.5
Cadmium	0.4	mg/kg	< 0.4	< 0.4	0.7
Chromium	5	mg/kg	13	20	34
Copper	5	mg/kg	60	22	35
Lead	5	mg/kg	18	69	280
Mercury	0.1	mg/kg	< 0.1	0.2	0.1
Nickel	5	mg/kg	39	5.4	9.4
Zinc	5	mg/kg	60	92	200
% Moisture	1	%	16	11	10

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Sydney	Jul 16, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Sydney	Jul 16, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jul 16, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jul 16, 2020	
- Method: LTM-ORG-2010 TRH C6-C40			
Polycyclic Aromatic Hydrocarbons	Sydney	Jul 16, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (Halogenated)	Sydney	Jul 16, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (non-Halogenated)	Sydney	Jul 16, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Metals M8	Sydney	Jul 16, 2020	180 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Volatile Organics	Sydney	Jul 16, 2020	7 Days
- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices			
Eurofins Suite B15			
Organochlorine Pesticides	Sydney	Jul 16, 2020	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Organophosphorus Pesticides	Sydney	Jul 16, 2020	14 Days
- Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS			
Polychlorinated Biphenyls	Sydney	Jul 16, 2020	28 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
% Moisture	Sydney	Jul 15, 2020	14 Days
- Method: LTM-GEN-7080 Moisture			

eurofins | Environment Testing

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Project Name: RANDWICK BARRACKS
Project ID: 610.30041.00000

Order No.:
Report #: 732052
Phone: 02 9428 8100
Fax:

Received: Jul 15, 2020 1:42 PM
Due: Jul 22, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271										
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	0407_QC285_200701	Jul 01, 2020		Soil	S20-Jl26038	X	X	X	X	X
2	0407_QC287_200701	Jul 01, 2020		Soil	S20-Jl26039	X	X	X	X	X
3	0407_QC274_200626	Jun 26, 2020		Soil	S20-Jl26040	X	X	X	X	X
4	0407_QC281_200630	Jun 30, 2020		Soil	S20-Jl26041	X	X	X	X	X
5	0407_QC280_200630	Jun 30, 2020		Soil	S20-Jl26042	X	X	X	X	X
6	0407_QC284_200630	Jun 30, 2020		Soil	S20-Jl26043	X	X	X	X	X

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NATA # 1261 Site # 18217

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NATA # 1261 Site # 20794

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NATA # 1261
Site # 23736

New Zealand

Auckland
35 O'Rorke Road
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43 Detroit Drive
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Project Name: RANDWICK BARRACKS
Project ID: 610.30041.00000

Order No.:
Report #: 732052
Phone: 02 9428 8100
Fax:

Received: Jul 15, 2020 1:42 PM
Due: Jul 22, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins | mgt Suite B15	Volatile Organics	Moisture Set	Eurofins | mgt Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271										
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
7	0407_QC283_200630	Jun 30, 2020		Soil	S20-Jl26044	X	X	X	X	X
Test Counts						7	7	7	7	7

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

****NOTE:** pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram
mg/L: milligrams per litre
ug/L: micrograms per litre
ppm: Parts per million
ppb: Parts per billion
%: Percentage
org/100mL: Organisms per 100 millilitres
NTU: Nephelometric Turbidity Units
MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version 5.3
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling.Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
Method Blank							
BTEX							
Benzene	mg/kg	< 0.1			0.1	Pass	
Toluene	mg/kg	< 0.1			0.1	Pass	
Ethylbenzene	mg/kg	< 0.1			0.1	Pass	
m&p-Xylenes	mg/kg	< 0.2			0.2	Pass	
o-Xylene	mg/kg	< 0.1			0.1	Pass	
Xylenes - Total*	mg/kg	< 0.3			0.3	Pass	
Method Blank							
Volatile Organics							
1.1-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
1.1.1-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.1.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dibromoethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.3-Trichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.4-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.3.5-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.4-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
2-Butanone (MEK)	mg/kg	< 0.5			0.5	Pass	
2-Propanone (Acetone)	mg/kg	< 0.5			0.5	Pass	
4-Chlorotoluene	mg/kg	< 0.5			0.5	Pass	
4-Methyl-2-pentanone (MIBK)	mg/kg	< 0.5			0.5	Pass	
Allyl chloride	mg/kg	< 0.5			0.5	Pass	
Bromobenzene	mg/kg	< 0.5			0.5	Pass	
Bromochloromethane	mg/kg	< 0.5			0.5	Pass	
Bromodichloromethane	mg/kg	< 0.5			0.5	Pass	
Bromoform	mg/kg	< 0.5			0.5	Pass	
Bromomethane	mg/kg	< 0.5			0.5	Pass	
Carbon disulfide	mg/kg	< 0.5			0.5	Pass	
Carbon Tetrachloride	mg/kg	< 0.5			0.5	Pass	
Chlorobenzene	mg/kg	< 0.5			0.5	Pass	
Chloroethane	mg/kg	< 0.5			0.5	Pass	
Chloroform	mg/kg	< 0.5			0.5	Pass	
Chloromethane	mg/kg	< 0.5			0.5	Pass	
cis-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
cis-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Dibromochloromethane	mg/kg	< 0.5			0.5	Pass	
Dibromomethane	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Dichlorodifluoromethane	mg/kg	< 0.5			0.5	Pass	
Iodomethane	mg/kg	< 0.5			0.5	Pass	
Isopropyl benzene (Cumene)	mg/kg	< 0.5			0.5	Pass	
Methylene Chloride	mg/kg	< 0.5			0.5	Pass	
Styrene	mg/kg	< 0.5			0.5	Pass	
Tetrachloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Trichloroethene	mg/kg	< 0.5			0.5	Pass	
Trichlorofluoromethane	mg/kg	< 0.5			0.5	Pass	
Vinyl chloride	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
Polychlorinated Biphenyls							
Aroclor-1016	mg/kg	< 0.5			0.5	Pass	
Aroclor-1221	mg/kg	< 0.1			0.1	Pass	
Aroclor-1232	mg/kg	< 0.5			0.5	Pass	
Aroclor-1242	mg/kg	< 0.5			0.5	Pass	
Aroclor-1248	mg/kg	< 0.5			0.5	Pass	
Aroclor-1254	mg/kg	< 0.5			0.5	Pass	
Aroclor-1260	mg/kg	< 0.5			0.5	Pass	
Total PCB*	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Nickel	mg/kg	< 5			5	Pass	
Zinc	mg/kg	< 5			5	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C10-C14	%	128			70-130	Pass	
LCS - % Recovery							
BTEX							
Ethylbenzene	%	108			70-130	Pass	
m&p-Xylenes	%	110			70-130	Pass	
o-Xylene	%	112			70-130	Pass	
Xylenes - Total*	%	111			70-130	Pass	
LCS - % Recovery							
Volatile Organics							
1.1-Dichloroethene	%	127			70-130	Pass	
1.1.1-Trichloroethane	%	111			70-130	Pass	
1.2-Dichlorobenzene	%	115			70-130	Pass	
1.2-Dichloroethane	%	114			70-130	Pass	
Trichloroethene	%	111			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	84			70-130	Pass	
TRH >C10-C16	%	121			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls							
Aroclor-1016	%	77			70-130	Pass	
Aroclor-1260	%	75			70-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	113			70-130	Pass	
Cadmium	%	111			70-130	Pass	
Chromium	%	110			70-130	Pass	
Copper	%	110			70-130	Pass	
Lead	%	113			70-130	Pass	
Mercury	%	113			70-130	Pass	
Nickel	%	112			70-130	Pass	
Zinc	%	108			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C6-C9	S20-Jl11850	NCP	%	78			70-130	Pass	
TRH C10-C14	S20-Jl24635	NCP	%	87			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	S20-Jl11850	NCP	%	85			70-130	Pass	
Toluene	S20-Jl11850	NCP	%	88			70-130	Pass	
Ethylbenzene	S20-Jl11850	NCP	%	90			70-130	Pass	
m&p-Xylenes	S20-Jl11850	NCP	%	92			70-130	Pass	
o-Xylene	S20-Jl11850	NCP	%	92			70-130	Pass	
Xylenes - Total*	S20-Jl11850	NCP	%	92			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
TRH >C10-C16	S20-Jl24635	NCP	%	78			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	S20-Jl22468	NCP	%	94			70-130	Pass	
Acenaphthylene	S20-Jl22468	NCP	%	91			70-130	Pass	
Anthracene	S20-Jl22468	NCP	%	105			70-130	Pass	
Benz(a)anthracene	S20-Jl22468	NCP	%	90			70-130	Pass	
Benzo(a)pyrene	S20-Jl22468	NCP	%	98			70-130	Pass	
Benzo(b&j)fluoranthene	S20-Jl22468	NCP	%	86			70-130	Pass	
Benzo(g.h.i)perylene	S20-Jl19400	NCP	%	90			70-130	Pass	
Benzo(k)fluoranthene	S20-Jl22468	NCP	%	118			70-130	Pass	
Chrysene	S20-Jl22468	NCP	%	77			70-130	Pass	
Dibenz(a.h)anthracene	S20-Jl19400	NCP	%	81			70-130	Pass	
Fluoranthene	S20-Jl22468	NCP	%	98			70-130	Pass	
Fluorene	S20-Jl22468	NCP	%	95			70-130	Pass	
Indeno(1.2.3-cd)pyrene	S20-Jl19400	NCP	%	79			70-130	Pass	
Naphthalene	S20-Jl22468	NCP	%	92			70-130	Pass	
Phenanthrene	S20-Jl22468	NCP	%	95			70-130	Pass	
Pyrene	S20-Jl22468	NCP	%	94			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Chlordanes - Total	S20-Jl22468	NCP	%	123			70-130	Pass	
4.4'-DDD	S20-Jl22468	NCP	%	106			70-130	Pass	
4.4'-DDE	S20-Jl22468	NCP	%	120			70-130	Pass	
4.4'-DDT	S20-Jl22468	NCP	%	92			70-130	Pass	
a-BHC	S20-Jl22468	NCP	%	104			70-130	Pass	
Aldrin	S20-Jl22468	NCP	%	99			70-130	Pass	
b-BHC	S20-Jl22468	NCP	%	113			70-130	Pass	
d-BHC	S20-Jl22468	NCP	%	122			70-130	Pass	
Dieldrin	S20-Jl22468	NCP	%	115			70-130	Pass	
Endosulfan I	S20-Jl22468	NCP	%	125			70-130	Pass	
Endosulfan II	S20-Jl22468	NCP	%	95			70-130	Pass	
Endosulfan sulphate	S20-Jl22468	NCP	%	121			70-130	Pass	
Endrin	S20-Jl22468	NCP	%	114			70-130	Pass	
Endrin aldehyde	S20-Jl22468	NCP	%	130			70-130	Pass	
Endrin ketone	S20-Jl22468	NCP	%	114			70-130	Pass	
g-BHC (Lindane)	S20-Jl22468	NCP	%	114			70-130	Pass	
Heptachlor	S20-Jl22468	NCP	%	112			70-130	Pass	
Heptachlor epoxide	S20-Jl22468	NCP	%	125			70-130	Pass	
Hexachlorobenzene	S20-Jl22468	NCP	%	100			70-130	Pass	
Methoxychlor	S20-Jl22468	NCP	%	94			70-130	Pass	
Spike - % Recovery									
Organophosphorus Pesticides				Result 1					
Diazinon	S20-Jl22468	NCP	%	116			70-130	Pass	
Dimethoate	S20-Jl22468	NCP	%	83			70-130	Pass	
Ethion	S20-Jl22468	NCP	%	77			70-130	Pass	
Fenitrothion	S20-Jl22468	NCP	%	85			70-130	Pass	
Methyl parathion	S20-Jl22468	NCP	%	95			70-130	Pass	
Mevinphos	S20-Jl22468	NCP	%	74			70-130	Pass	
Spike - % Recovery									
Polychlorinated Biphenyls				Result 1					
Aroclor-1016	S20-Jl22468	NCP	%	109			70-130	Pass	
Aroclor-1260	S20-Jl22468	NCP	%	122			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	N20-Jl28225	NCP	%	113			70-130	Pass	
Cadmium	N20-Jl28225	NCP	%	111			70-130	Pass	
Chromium	N20-Jl28225	NCP	%	102			70-130	Pass	
Copper	N20-Jl28225	NCP	%	96			70-130	Pass	
Lead	N20-Jl28225	NCP	%	118			70-130	Pass	
Mercury	N20-Jl28225	NCP	%	117			70-130	Pass	
Nickel	N20-Jl28225	NCP	%	92			70-130	Pass	
Zinc	N20-Jl28225	NCP	%	83			70-130	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C6-C9	S20-Jl22860	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S20-Jl22860	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Toluene	S20-Jl22860	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Ethylbenzene	S20-Jl22860	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
m&p-Xylenes	S20-Jl22860	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
o-Xylene	S20-Jl22860	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes - Total*	S20-Jl22860	NCP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	

Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
1.1-Dichloroethane	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1-Dichloroethene	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1-Trichloroethane	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2-Trichloroethane	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dibromoethane	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichlorobenzene	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloroethane	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloropropane	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.3-Trichloropropane	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trimethylbenzene	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichlorobenzene	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichloropropane	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3.5-Trimethylbenzene	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.4-Dichlorobenzene	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Butanone (MEK)	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Propanone (Acetone)	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chlorotoluene	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Methyl-2-pentanone (MIBK)	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Allyl chloride	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromobenzene	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromochloromethane	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromodichloromethane	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromoform	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromomethane	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon disulfide	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon Tetrachloride	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chlorobenzene	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroethane	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroform	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloromethane	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.2-Dichloroethene	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.3-Dichloropropene	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromochloromethane	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromomethane	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dichlorodifluoromethane	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Iodomethane	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Isopropyl benzene (Cumene)	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Methylene Chloride	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Styrene	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Tetrachloroethene	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.2-Dichloroethene	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.3-Dichloropropene	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichloroethene	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichlorofluoromethane	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Vinyl chloride	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	S20-Jl22860	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	S20-Jl22860	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	S20-Jl26039	CP	%	5.1	5.2	2.0	30%	Pass	

Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C10-C14	S20-Jl26042	CP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	S20-Jl26042	CP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	S20-Jl26042	CP	mg/kg	< 50	< 50	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
TRH >C10-C16	S20-Jl26042	CP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	S20-Jl26042	CP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	S20-Jl26042	CP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	S20-Jl26043	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	S20-Jl26043	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	S20-Jl26043	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	S20-Jl26043	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	S20-Jl26043	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	S20-Jl26043	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	S20-Jl26043	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	S20-Jl26043	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	S20-Jl26043	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	S20-Jl26043	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	S20-Jl26043	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	S20-Jl26043	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	S20-Jl26043	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	S20-Jl26043	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	S20-Jl26043	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	S20-Jl26043	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	S20-Jl26043	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	S20-Jl26043	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	S20-Jl26043	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	S20-Jl26043	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-BHC	S20-Jl26043	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	S20-Jl26043	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-BHC	S20-Jl26043	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-BHC	S20-Jl26043	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	S20-Jl26043	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	S20-Jl26043	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	S20-Jl26043	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	S20-Jl26043	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	S20-Jl26043	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	S20-Jl26043	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	S20-Jl26043	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-BHC (Lindane)	S20-Jl26043	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	S20-Jl26043	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	S20-Jl26043	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	S20-Jl26043	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	S20-Jl26043	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Azinphos-methyl	S20-Jl26043	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Bolstar	S20-Jl26043	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorfenvinphos	S20-Jl26043	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos	S20-Jl26043	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	

Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Chlorpyrifos-methyl	S20-Jl26043	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Coumaphos	S20-Jl26043	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Demeton-S	S20-Jl26043	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Demeton-O	S20-Jl26043	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Diazinon	S20-Jl26043	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dichlorvos	S20-Jl26043	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dimethoate	S20-Jl26043	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Disulfoton	S20-Jl26043	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
EPN	S20-Jl26043	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethion	S20-Jl26043	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethoprop	S20-Jl26043	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethyl parathion	S20-Jl26043	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenitrothion	S20-Jl26043	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fensulfothion	S20-Jl26043	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenthion	S20-Jl26043	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Malathion	S20-Jl26043	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Merphos	S20-Jl26043	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Methyl parathion	S20-Jl26043	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Mevinphos	S20-Jl26043	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Monocrotophos	S20-Jl26043	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Naled	S20-Jl26043	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Omethoate	S20-Jl26043	CP	mg/kg	< 2	< 2	<1	30%	Pass	
Phorate	S20-Jl26043	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pirimiphos-methyl	S20-Jl26043	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pyrazophos	S20-Jl26043	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ronnel	S20-Jl26043	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Terbufos	S20-Jl26043	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tetrachlorvinphos	S20-Jl26043	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tokuthion	S20-Jl26043	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Trichloronate	S20-Jl26043	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Aroclor-1016	S20-Jl26043	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1221	S20-Jl26043	CP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1232	S20-Jl26043	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1242	S20-Jl26043	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1248	S20-Jl26043	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1254	S20-Jl26043	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1260	S20-Jl26043	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Total PCB*	S20-Jl26043	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Phenols (Halogenated)				Result 1	Result 2	RPD			
2-Chlorophenol	S20-Jl26043	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dichlorophenol	S20-Jl26043	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4.5-Trichlorophenol	S20-Jl26043	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4.6-Trichlorophenol	S20-Jl26043	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.6-Dichlorophenol	S20-Jl26043	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chloro-3-methylphenol	S20-Jl26043	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Pentachlorophenol	S20-Jl26043	CP	mg/kg	< 1	< 1	<1	30%	Pass	
Tetrachlorophenols - Total	S20-Jl26043	CP	mg/kg	< 10	< 10	<1	30%	Pass	

Duplicate									
Phenols (non-Halogenated)				Result 1	Result 2	RPD			
2-Cyclohexyl-4.6-dinitrophenol	S20-Jl26043	CP	mg/kg	< 20	< 20	<1	30%	Pass	
2-Methyl-4.6-dinitrophenol	S20-Jl26043	CP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Methylphenol (o-Cresol)	S20-Jl26043	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
2-Nitrophenol	S20-Jl26043	CP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4-Dimethylphenol	S20-Jl26043	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dinitrophenol	S20-Jl26043	CP	mg/kg	< 5	< 5	<1	30%	Pass	
3&4-Methylphenol (m&p-Cresol)	S20-Jl26043	CP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
4-Nitrophenol	S20-Jl26043	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Dinoseb	S20-Jl26043	CP	mg/kg	< 20	< 20	<1	30%	Pass	
Phenol	S20-Jl26043	CP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	S20-Jl26044	CP	mg/kg	3.5	2.8	22	30%	Pass	
Cadmium	S20-Jl26044	CP	mg/kg	0.7	0.8	10	30%	Pass	
Chromium	S20-Jl26044	CP	mg/kg	34	37	10	30%	Pass	
Copper	S20-Jl26044	CP	mg/kg	35	42	18	30%	Pass	
Lead	S20-Jl26044	CP	mg/kg	280	290	5.0	30%	Pass	
Mercury	S20-Jl26044	CP	mg/kg	0.1	0.1	<1	30%	Pass	
Nickel	S20-Jl26044	CP	mg/kg	9.4	8.6	10	30%	Pass	
Zinc	S20-Jl26044	CP	mg/kg	200	250	21	30%	Pass	

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs

Authorised By

[redacted]

Analytical Services Manager
Senior Analyst-Organic (NSW)
Senior Analyst-Metal (NSW)
Senior Analyst-Asbestos (NSW)

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

E-MAILED 17/7 @ 10.19

SLR

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Dawin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ● SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Stuet Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ

CLIENT: Defence Housing Australia	**LABORATORY: SGS Australia**	**Turnaround Time (TAT)** / **COC Number** of
PROJECT: Randwick Barracks	**LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015**	
PROJECT NUMBER: 610.30041	**SAMPLER:** [redacted]	☐ Standard TAT
PROJECT MANAGER: [redacted]	**SAMPLER CONTACT No** [redacted]	☐ Non Standard or Urgent TAT
PM CONTACT No: [redacted]	**Email Reports and Invoices to: LQRSYD@slrconsulting.com ;** [redacted]	**Required TAT: Standard**

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: Suite A	PFAS (HOLD)	OCP/OPP Only	Asbestos Only	HOLD	Suite E and H	Heavy metals, TPH/BTEXN, PAH, VOC/SVOCs and PFAS	Suite D, MTBEs	Additional Information (Comment on any gross contamination or specific requirements)
	0407_TP156_0.1_200629	29-06-2020	Soil		x								
	0407_TP156_0.2_200629	29-06-2020	Soil		x								
	0407_TP156_0.3_200629	29-06-2020	Soil						x				
	0407_TP156_0.7_200629	29-06-2020	Soil						x				
	0407_TP156_0.2_ACM_200629	29-06-2020	Soil					x					
	0407_TP170_0.1_200629	29-06-2020	Soil		x								
	0407_TP170_0.3_200629	29-06-2020	Soil		x								
	0407_TP170_0.5_200629	29-06-2020	Soil						x				
	0407_TP170_1.0_200629	29-06-2020	Soil						x				
	0407_TP170_0.3_ACM_200629	29-06-2020	Soil					x					
	0407_QC178_200629	29-06-2020	Soil		x								
	0407_QC278_200629	29-06-2020	Soil										Please send to Eurofins for analysis of Suite A

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 29-06-2020	**Received by**	Sign [redacted]	Date / Time 20/7 1:46	**Temperature Received:**	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	11.2	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time		

A32761

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ABN – 50 005 085 521 e.mail : EnviroSales@eurofins.com web : www.eurofins.com.au

Sample Receipt Advice

Company name:	**SLR Consulting (Sydney)**
Contact name:	[redacted]
Project name:	RANDWICK BARRACKS
Project ID:	610.30041
COC number:	Not provided
Turn around time:	5 Day
Date/Time received:	Jul 20, 2020 1:40 PM
Eurofins reference:	**732761**

Sample information

☑ A detailed list of analytes logged into our LIMS, is included in the attached summary table.

☑ All samples have been received as described on the above COC.

☑ COC has been completed correctly.

☑ Attempt to chill was evident.

☑ Appropriately preserved sample containers have been used.

☑ All samples were received in good condition.

☑ Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.

☑ Appropriate sample containers have been used.

☒ Split sample sent to requested external lab.

☒ Some samples have been subcontracted.

N/A Custody Seals intact (if used).

Contact notes

If you have any questions with respect to these samples please contact:

[redacted] on Phone : [redacted] or by e.mail: [redacted]@eurofins.com

Results will be delivered electronically via e.mail to [redacted]@slrconsulting.com.

Note: A copy of these results will also be delivered to the general SLR Consulting (Sydney) email address.

eurofins | Environment Testing

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Site # 1254 & 14271

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Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

Brisbane
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Murarrie QLD 4172
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NATA # 1261 Site # 20794

Perth
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Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261
Site # 23736

New Zealand

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Penrose, Auckland 1061
Phone : +64 9 526 45 51
IANZ # 1327

Christchurch
43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 732761
Phone: 02 9428 8100
Fax:

Received: Jul 20, 2020 1:40 PM
Due: Jul 27, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins Suite B15	Volatile Organics	Moisture Set	Eurofins Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271										
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	0407_QC278_200629	Jun 29, 2020		Soil	S20-Jl31404	X	X	X	X	X
Test Counts						1	1	1	1	1

Certificate of Analysis

eurofins | Environment Testing

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025–Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus
North Sydney
NSW 2060

Attention:	[redacted]
Report	732761-AID
Project Name	RANDWICK BARRACKS
Project ID	610.30041
Received Date	Jul 20, 2020
Date Reported	Jul 27, 2020

Methodology:

Asbestos Fibre Identification	Conducted in accordance with the Australian Standard AS 4964 – 2004: Method for the Qualitative Identification of Asbestos in Bulk Samples and in-house Method LTM-ASB-8020 by polarised light microscopy (PLM) and dispersion staining (DS) techniques. *NOTE: Positive Trace Analysis results indicate the sample contains detectable respirable fibres.*
Unknown Mineral Fibres	Mineral fibres of unknown type, as determined by PLM with DS, may require another analytical technique, such as Electron Microscopy, to confirm unequivocal identity. *NOTE: While Actinolite, Anthophyllite and Tremolite asbestos may be detected by PLM with DS, due to variability in the optical properties of these materials, AS4964 requires that these are reported as UMF unless confirmed by an independent technique.*
Subsampling Soil Samples	The whole sample submitted is first dried and then passed through a 10mm sieve followed by a 2mm sieve. All fibrous matter greater than 10mm, greater than 2mm as well as the material passing through the 2mm sieve are retained and analysed for the presence of asbestos. If the sub 2mm fraction is greater than approximately 30 to 60g then a sub-sampling routine based on ISO 3082:2009(E) is employed. *NOTE: Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be sub-sampled for trace analysis, in accordance with AS 4964-2004.*
Bonded asbestos-containing material (ACM)	The material is first examined and any fibres isolated for identification by PLM and DS. Where required, interfering matrices may be removed by disintegration using a range of heat, chemical or physical treatments, possibly in combination.The resultant material is then further examined in accordance with AS 4964 - 2004. *NOTE: Even after disintegration it may be difficult to detect the presence of asbestos in some asbestos-containing bulk materials using PLM and DS. This is due to the low grade or small length or diameter of the asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos-containing sealants and mastics, asbestos-containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.*
Limit of Reporting	The performance limitation of the AS 4964 (2004) method for non-homogeneous samples is around 0.1 g/kg (equivalent to 0.01% (w/w)). Where no asbestos is found by PLM and DS, including Trace Analysis, this is considered to be at the nominal reporting limit of 0.01% (w/w). The NEPM screening level of 0.001% (w/w) is intended as an on-site determination, not a laboratory Limit of Reporting (LOR), per se. Examination of a large sample size (e.g. 500 mL) may improve the likelihood of detecting asbestos, particularly AF, to aid assessment against the NEPM criteria. Gravimetric determinations to this level of accuracy are outside of AS 4964 and hence NATA Accreditation does not cover the performance of this service (non-NATA results shown with an asterisk). *NOTE: NATA News March 2014, p.7, states in relation to AS 4964: "This is a qualitative method with a nominal reporting limit of 0.01 % " and that currently in Australia "there is no validated method available for the quantification of asbestos".This report is consistent with the analytical procedures and reporting recommendations in the NEPM and the WA DoH.*

Accredited for compliance with ISO/IEC 17025–Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Project Name RANDWICK BARRACKS
Project ID 610.30041
Date Sampled Jun 29, 2020
Report 732761-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
0407_QC278_200629	20-Jl31404	Jun 29, 2020	Approximate Sample 22g Sample consisted of: Brown coarse-grained soil, rocks and bituminous material	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Asbestos - LTM-ASB-8020	Sydney	Jul 20, 2020	Indefinite

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ABN – 50 005 085 521 web : www.eurofins.com.au e.mail : EnviroSales@eurofins.com

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Christchurch
43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 732761
Phone: 02 9428 8100
Fax:

Received: Jul 20, 2020 1:40 PM
Due: Jul 27, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins Suite B15	Volatile Organics	Moisture Set	Eurofins Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271										
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	0407_QC278_200629	Jun 29, 2020		Soil	S20-Jl31404	X	X	X	X	X
Test Counts						1	1	1	1	1

Internal Quality Control Review and Glossary

General

1. QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Samples were analysed on an 'as received' basis.
4. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
5. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the Sample Receipt Advice.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

Units

% w/w: weight for weight basis	grams per kilogram
Filter loading:	fibres/100 graticule areas
Reported Concentration:	fibres/mL
Flowrate:	L/min

Terms

Dry	Sample is dried by heating prior to analysis
LOR	Limit of Reporting
COC	Chain of Custody
SRA	Sample Receipt Advice
ISO	International Standards Organisation
AS	Australian Standards
WA DOH	Reference document for the NEPM. Government of Western Australia, Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia (2009), including supporting document Recommended Procedures for Laboratory Analysis of Asbestos in Soil (2011)
NEPM	National Environment Protection (Assessment of Site Contamination) Measure, 2013 (as amended)
ACM	Asbestos Containing Materials. Asbestos contained within a non-asbestos matrix, typically presented in bonded and/or sound condition. For the purposes of the NEPM, ACM is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
AF	Asbestos Fines. Asbestos containing materials, including friable, weathered and bonded materials, able to pass a 7mm x 7mm sieve. Considered under the NEPM as equivalent to “non-bonded / friable”.
FA	Fibrous Asbestos. Asbestos containing materials in a friable and/or severely weathered condition. For the purposes of the NEPM, FA is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
Friable	Asbestos-containing materials of any size that may be broken or crumbled by hand pressure. For the purposes of the NEPM, this includes both AF and FA. It is outside of the laboratory’s remit to assess degree of friability.
Trace Analysis	Analytical procedure used to detect the presence of respirable fibres in the matrix.

Comments

The sample received was not collected in an approved asbestos bag and was therefore sub-sampled from the 250mL glass jar. Valid sub-sampling procedures were applied so as to ensure that the sub-sample to be analysed accurately represented the sample received.

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N/A	Not applicable

Asbestos Counter/Identifier:

[redacted] Senior Analyst-Asbestos (NSW)

Authorised by:

[redacted] Senior Analyst-Asbestos (NSW)

General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus,
North Sydney
NSW 2060

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing
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Attention: [redacted]

Report **732761-S**
Project name RANDWICK BARRACKS
Project ID 610.30041
Received Date Jul 20, 2020

Client Sample ID			**0407_QC278_200629**
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-Jl31404**
Date Sampled			**Jun 29, 2020**
Test/Reference	LOR	Unit	
BTEX			
Benzene	0.1	mg/kg	< 0.1
Toluene	0.1	mg/kg	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2
o-Xylene	0.1	mg/kg	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3
4-Bromofluorobenzene (surr.)	1	%	72
Volatile Organics			
1.1-Dichloroethane	0.5	mg/kg	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5
Benzene	0.1	mg/kg	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5
Bromoform	0.5	mg/kg	< 0.5
Bromomethane	0.5	mg/kg	< 0.5

Client Sample ID			0407_QC278_200629
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-Jl31404**
Date Sampled			**Jun 29, 2020**
Test/Reference	LOR	Unit	
Volatile Organics			
Carbon disulfide	0.5	mg/kg	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5
Chloroethane	0.5	mg/kg	< 0.5
Chloroform	0.5	mg/kg	< 0.5
Chloromethane	0.5	mg/kg	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1
Iodomethane	0.5	mg/kg	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5
o-Xylene	0.1	mg/kg	< 0.1
Styrene	0.5	mg/kg	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5
Toluene	0.1	mg/kg	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3
Total MAH*	0.5	mg/kg	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5
4-Bromofluorobenzene (surr.)	1	%	72
Toluene-d8 (surr.)	1	%	93
Total Recoverable Hydrocarbons - 2013 NEPM Fractions			
Naphthalene[N02]	0.5	mg/kg	< 0.5
TRH C6-C10	20	mg/kg	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20
TRH >C10-C16	50	mg/kg	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50
TRH >C16-C34	100	mg/kg	< 100
TRH >C34-C40	100	mg/kg	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100
Total Recoverable Hydrocarbons			
TRH C6-C9	20	mg/kg	< 20
Total Recoverable Hydrocarbons - 1999 NEPM Fractions			
TRH C10-C14	20	mg/kg	< 20
TRH C15-C28	50	mg/kg	< 50
TRH C29-C36	50	mg/kg	< 50
TRH C10-C36 (Total)	50	mg/kg	< 50

Client Sample ID			0407_QC278_200629
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-JI31404**
Date Sampled			**Jun 29, 2020**
Test/Reference	LOR	Unit	
Polycyclic Aromatic Hydrocarbons			
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	0.8
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	1.1
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.4
Acenaphthene	0.5	mg/kg	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5
Anthracene	0.5	mg/kg	< 0.5
Benz(a)anthracene	0.5	mg/kg	0.6
Benzo(a)pyrene	0.5	mg/kg	0.7
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5
Chrysene	0.5	mg/kg	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5
Fluoranthene	0.5	mg/kg	0.9
Fluorene	0.5	mg/kg	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5
Naphthalene	0.5	mg/kg	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5
Pyrene	0.5	mg/kg	1.0
Total PAH*	0.5	mg/kg	3.7
2-Fluorobiphenyl (surr.)	1	%	100
p-Terphenyl-d14 (surr.)	1	%	111
Organochlorine Pesticides			
Chlordanes - Total	0.1	mg/kg	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05
a-BHC	0.05	mg/kg	< 0.05
Aldrin	0.05	mg/kg	< 0.05
b-BHC	0.05	mg/kg	< 0.05
d-BHC	0.05	mg/kg	< 0.05
Dieldrin	0.05	mg/kg	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05
Endrin	0.05	mg/kg	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05
Heptachlor	0.05	mg/kg	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05
Methoxychlor	0.2	mg/kg	< 0.2
Toxaphene	1	mg/kg	< 1
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.2
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.2
Dibutylchlorendate (surr.)	1	%	130
Tetrachloro-m-xylene (surr.)	1	%	100

Client Sample ID			0407_QC278_200629
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-JI31404**
Date Sampled			**Jun 29, 2020**
Test/Reference	LOR	Unit	
Organophosphorus Pesticides			
Azinphos-methyl	0.2	mg/kg	< 0.2
Bolstar	0.2	mg/kg	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2
Coumaphos	2	mg/kg	< 2
Demeton-S	0.2	mg/kg	< 0.2
Demeton-O	0.2	mg/kg	< 0.2
Diazinon	0.2	mg/kg	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2
Dimethoate	0.2	mg/kg	< 0.2
Disulfoton	0.2	mg/kg	< 0.2
EPN	0.2	mg/kg	< 0.2
Ethion	0.2	mg/kg	< 0.2
Ethoprop	0.2	mg/kg	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2
Fenthion	0.2	mg/kg	< 0.2
Malathion	0.2	mg/kg	< 0.2
Merphos	0.2	mg/kg	< 0.2
Methyl parathion	0.2	mg/kg	< 0.2
Mevinphos	0.2	mg/kg	< 0.2
Monocrotophos	2	mg/kg	< 2
Naled	0.2	mg/kg	< 2
Omethoate	2	mg/kg	< 2
Phorate	0.2	mg/kg	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2
Ronnel	0.2	mg/kg	< 0.2
Terbufos	0.2	mg/kg	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2
Tokuthion	0.2	mg/kg	< 0.2
Trichloronate	0.2	mg/kg	< 0.2
Triphenylphosphate (surr.)	1	%	130
Polychlorinated Biphenyls			
Aroclor-1016	0.5	mg/kg	< 0.5
Aroclor-1221	0.1	mg/kg	< 0.1
Aroclor-1232	0.5	mg/kg	< 0.5
Aroclor-1242	0.5	mg/kg	< 0.5
Aroclor-1248	0.5	mg/kg	< 0.5
Aroclor-1254	0.5	mg/kg	< 0.5
Aroclor-1260	0.5	mg/kg	< 0.5
Total PCB*	0.5	mg/kg	< 0.5
Dibutylchlorendate (surr.)	1	%	130
Tetrachloro-m-xylene (surr.)	1	%	100

Client Sample ID			0407_QC278_200629
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-JI31404**
Date Sampled			**Jun 29, 2020**
Test/Reference	LOR	Unit	
Phenols (Halogenated)			
2-Chlorophenol	0.5	mg/kg	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1
Pentachlorophenol	1	mg/kg	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10
Total Halogenated Phenol*	1	mg/kg	< 1
Phenols (non-Halogenated)			
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2
2-Nitrophenol	1	mg/kg	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4
4-Nitrophenol	5	mg/kg	< 5
Dinoseb	20	mg/kg	< 20
Phenol	0.5	mg/kg	< 0.5
Total Non-Halogenated Phenol*	20	mg/kg	< 20
Phenol-d6 (surr.)	1	%	103
Heavy Metals			
Arsenic	2	mg/kg	7.9
Cadmium	0.4	mg/kg	< 0.4
Chromium	5	mg/kg	18
Copper	5	mg/kg	49
Lead	5	mg/kg	87
Mercury	0.1	mg/kg	0.2
Nickel	5	mg/kg	17
Zinc	5	mg/kg	260
% Moisture	1	%	17

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
BTEX	Sydney	Jul 20, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jul 20, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Jul 20, 2020	
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons	Sydney	Jul 20, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Sydney	Jul 20, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Polycyclic Aromatic Hydrocarbons	Sydney	Jul 20, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (Halogenated)	Sydney	Jul 20, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (non-Halogenated)	Sydney	Jul 20, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Metals M8	Sydney	Jul 20, 2020	180 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Volatile Organics	Sydney	Jul 20, 2020	7 Days
- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices			
Eurofins Suite B15			
Organochlorine Pesticides	Sydney	Jul 20, 2020	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Organophosphorus Pesticides	Sydney	Jul 20, 2020	14 Days
- Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS			
Polychlorinated Biphenyls	Sydney	Jul 20, 2020	28 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
% Moisture	Sydney	Jul 20, 2020	14 Days
- Method: LTM-GEN-7080 Moisture			

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Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 732761
Phone: 02 9428 8100
Fax:

Received: Jul 20, 2020 1:40 PM
Due: Jul 27, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins Suite B15	Volatile Organics	Moisture Set	Eurofins Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271										
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	0407_QC278_200629	Jun 29, 2020		Soil	S20-Jl31404	X	X	X	X	X
Test Counts						1	1	1	1	1

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

****NOTE:** pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram

mg/L: milligrams per litre

ug/L: micrograms per litre

ppm: Parts per million

ppb: Parts per billion

%: Percentage

org/100mL: Organisms per 100 millilitres

NTU: Nephelometric Turbidity Units

MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version 5.3
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling.Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
BTEX							
Benzene	mg/kg	< 0.1			0.1	Pass	
Toluene	mg/kg	< 0.1			0.1	Pass	
Ethylbenzene	mg/kg	< 0.1			0.1	Pass	
m&p-Xylenes	mg/kg	< 0.2			0.2	Pass	
o-Xylene	mg/kg	< 0.1			0.1	Pass	
Xylenes - Total*	mg/kg	< 0.3			0.3	Pass	
Method Blank							
Volatile Organics							
1.1-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
1.1.1-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.1.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dibromoethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.3-Trichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.4-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.3.5-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.4-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
2-Butanone (MEK)	mg/kg	< 0.5			0.5	Pass	
2-Propanone (Acetone)	mg/kg	< 0.5			0.5	Pass	
4-Chlorotoluene	mg/kg	< 0.5			0.5	Pass	
4-Methyl-2-pentanone (MIBK)	mg/kg	< 0.5			0.5	Pass	
Allyl chloride	mg/kg	< 0.5			0.5	Pass	
Bromobenzene	mg/kg	< 0.5			0.5	Pass	
Bromochloromethane	mg/kg	< 0.5			0.5	Pass	
Bromodichloromethane	mg/kg	< 0.5			0.5	Pass	
Bromoform	mg/kg	< 0.5			0.5	Pass	
Bromomethane	mg/kg	< 0.5			0.5	Pass	
Carbon disulfide	mg/kg	< 0.5			0.5	Pass	
Carbon Tetrachloride	mg/kg	< 0.5			0.5	Pass	
Chlorobenzene	mg/kg	< 0.5			0.5	Pass	
Chloroethane	mg/kg	< 0.5			0.5	Pass	
Chloroform	mg/kg	< 0.5			0.5	Pass	
Chloromethane	mg/kg	< 0.5			0.5	Pass	
cis-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
cis-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Dibromochloromethane	mg/kg	< 0.5			0.5	Pass	
Dibromomethane	mg/kg	< 0.5			0.5	Pass	
Dichlorodifluoromethane	mg/kg	< 0.5			0.5	Pass	
Iodomethane	mg/kg	< 0.5			0.5	Pass	
Isopropyl benzene (Cumene)	mg/kg	< 0.5			0.5	Pass	
Methylene Chloride	mg/kg	< 0.5			0.5	Pass	
Styrene	mg/kg	< 0.5			0.5	Pass	
Tetrachloroethene	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
trans-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Trichloroethene	mg/kg	< 0.5			0.5	Pass	
Trichlorofluoromethane	mg/kg	< 0.5			0.5	Pass	
Vinyl chloride	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
Total Recoverable Hydrocarbons							
TRH C6-C9	mg/kg	< 20			20	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Organochlorine Pesticides							
Chlordanes - Total	mg/kg	< 0.1			0.1	Pass	
4.4'-DDD	mg/kg	< 0.05			0.05	Pass	
4.4'-DDE	mg/kg	< 0.05			0.05	Pass	
4.4'-DDT	mg/kg	< 0.05			0.05	Pass	
a-BHC	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-BHC	mg/kg	< 0.05			0.05	Pass	
d-BHC	mg/kg	< 0.05			0.05	Pass	
Dieldrin	mg/kg	< 0.05			0.05	Pass	
Endosulfan I	mg/kg	< 0.05			0.05	Pass	
Endosulfan II	mg/kg	< 0.05			0.05	Pass	
Endosulfan sulphate	mg/kg	< 0.05			0.05	Pass	
Endrin	mg/kg	< 0.05			0.05	Pass	
Endrin aldehyde	mg/kg	< 0.05			0.05	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Endrin ketone	mg/kg	< 0.05			0.05	Pass	
g-BHC (Lindane)	mg/kg	< 0.05			0.05	Pass	
Heptachlor	mg/kg	< 0.05			0.05	Pass	
Heptachlor epoxide	mg/kg	< 0.05			0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05			0.05	Pass	
Methoxychlor	mg/kg	< 0.2			0.2	Pass	
Toxaphene	mg/kg	< 1			1	Pass	
Method Blank							
Organophosphorus Pesticides							
Azinphos-methyl	mg/kg	< 0.2			0.2	Pass	
Bolstar	mg/kg	< 0.2			0.2	Pass	
Chlorfenvinphos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos-methyl	mg/kg	< 0.2			0.2	Pass	
Coumaphos	mg/kg	< 2			2	Pass	
Demeton-S	mg/kg	< 0.2			0.2	Pass	
Demeton-O	mg/kg	< 0.2			0.2	Pass	
Diazinon	mg/kg	< 0.2			0.2	Pass	
Dichlorvos	mg/kg	< 0.2			0.2	Pass	
Dimethoate	mg/kg	< 0.2			0.2	Pass	
Disulfoton	mg/kg	< 0.2			0.2	Pass	
EPN	mg/kg	< 0.2			0.2	Pass	
Ethion	mg/kg	< 0.2			0.2	Pass	
Ethoprop	mg/kg	< 0.2			0.2	Pass	
Ethyl parathion	mg/kg	< 0.2			0.2	Pass	
Fenitrothion	mg/kg	< 0.2			0.2	Pass	
Fensulfothion	mg/kg	< 0.2			0.2	Pass	
Fenthion	mg/kg	< 0.2			0.2	Pass	
Malathion	mg/kg	< 0.2			0.2	Pass	
Merphos	mg/kg	< 0.2			0.2	Pass	
Methyl parathion	mg/kg	< 0.2			0.2	Pass	
Mevinphos	mg/kg	< 0.2			0.2	Pass	
Monocrotophos	mg/kg	< 2			2	Pass	
Naled	mg/kg	< 0.2			0.2	Pass	
Omethoate	mg/kg	< 2			2	Pass	
Phorate	mg/kg	< 0.2			0.2	Pass	
Pirimiphos-methyl	mg/kg	< 0.2			0.2	Pass	
Pyrazophos	mg/kg	< 0.2			0.2	Pass	
Ronnel	mg/kg	< 0.2			0.2	Pass	
Terbufos	mg/kg	< 0.2			0.2	Pass	
Tetrachlorvinphos	mg/kg	< 0.2			0.2	Pass	
Tokuthion	mg/kg	< 0.2			0.2	Pass	
Trichloronate	mg/kg	< 0.2			0.2	Pass	
Method Blank							
Polychlorinated Biphenyls							
Aroclor-1016	mg/kg	< 0.5			0.5	Pass	
Aroclor-1221	mg/kg	< 0.1			0.1	Pass	
Aroclor-1232	mg/kg	< 0.5			0.5	Pass	
Aroclor-1242	mg/kg	< 0.5			0.5	Pass	
Aroclor-1248	mg/kg	< 0.5			0.5	Pass	
Aroclor-1254	mg/kg	< 0.5			0.5	Pass	
Aroclor-1260	mg/kg	< 0.5			0.5	Pass	
Total PCB*	mg/kg	< 0.5			0.5	Pass	
Method Blank							

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Phenols (Halogenated)							
2-Chlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4.5-Trichlorophenol	mg/kg	< 1			1	Pass	
2.4.6-Trichlorophenol	mg/kg	< 1			1	Pass	
2.6-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
4-Chloro-3-methylphenol	mg/kg	< 1			1	Pass	
Pentachlorophenol	mg/kg	< 1			1	Pass	
Tetrachlorophenols - Total	mg/kg	< 10			10	Pass	
Method Blank							
Phenols (non-Halogenated)							
2-Methyl-4.6-dinitrophenol	mg/kg	< 5			5	Pass	
2-Methylphenol (o-Cresol)	mg/kg	< 0.2			0.2	Pass	
2-Nitrophenol	mg/kg	< 1			1	Pass	
2.4-Dimethylphenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dinitrophenol	mg/kg	< 5			5	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/kg	< 0.4			0.4	Pass	
4-Nitrophenol	mg/kg	< 5			5	Pass	
Dinoseb	mg/kg	< 20			20	Pass	
Phenol	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Nickel	mg/kg	< 5			5	Pass	
Zinc	mg/kg	< 5			5	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
BTEX				Result 1					
Benzene	S20-Jl27019	NCP	%	81			70-130	Pass	
Toluene	S20-Jl27019	NCP	%	80			70-130	Pass	
Ethylbenzene	S20-Jl27019	NCP	%	74			70-130	Pass	
m&p-Xylenes	S20-Jl27019	NCP	%	86			70-130	Pass	
o-Xylene	S20-Jl27019	NCP	%	90			70-130	Pass	
Xylenes - Total*	S20-Jl27019	NCP	%	87			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
TRH C6-C10	S20-Jl27019	NCP	%	79			70-130	Pass	
TRH >C10-C16	S20-Jl26037	NCP	%	124			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons				Result 1					
TRH C6-C9	S20-Jl27019	NCP	%	75			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C10-C14	S20-Jl26037	NCP	%	121			70-130	Pass	
Spike - % Recovery									
Polycyclic Aromatic Hydrocarbons				Result 1					
Acenaphthene	S20-Jl27946	NCP	%	101			70-130	Pass	
Acenaphthylene	S20-Jl27946	NCP	%	98			70-130	Pass	
Anthracene	S20-Jl27946	NCP	%	108			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Benz(a)anthracene	S20-Jl27946	NCP	%	104			70-130	Pass	
Benzo(a)pyrene	S20-Jl27946	NCP	%	103			70-130	Pass	
Benzo(b&j)fluoranthene	S20-Jl27946	NCP	%	107			70-130	Pass	
Benzo(g.h.i)perylene	S20-Jl27946	NCP	%	112			70-130	Pass	
Benzo(k)fluoranthene	S20-Jl27946	NCP	%	104			70-130	Pass	
Chrysene	S20-Jl27946	NCP	%	103			70-130	Pass	
Dibenz(a.h)anthracene	S20-Jl27946	NCP	%	104			70-130	Pass	
Fluoranthene	S20-Jl27946	NCP	%	105			70-130	Pass	
Fluorene	S20-Jl27946	NCP	%	98			70-130	Pass	
Indeno(1.2.3-cd)pyrene	S20-Jl27946	NCP	%	107			70-130	Pass	
Naphthalene	S20-Jl27946	NCP	%	101			70-130	Pass	
Phenanthrene	S20-Jl27946	NCP	%	98			70-130	Pass	
Pyrene	S20-Jl27946	NCP	%	106			70-130	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
Chlordanes - Total	S20-Jl11666	NCP	%	101			70-130	Pass	
4.4'-DDD	S20-Jl27716	NCP	%	127			70-130	Pass	
4.4'-DDE	S20-Jl27716	NCP	%	130			70-130	Pass	
4.4'-DDT	S20-Jl27716	NCP	%	90			70-130	Pass	
a-BHC	S20-Jl11666	NCP	%	101			70-130	Pass	
Aldrin	S20-Jl11666	NCP	%	111			70-130	Pass	
b-BHC	S20-Jl11666	NCP	%	106			70-130	Pass	
d-BHC	S20-Jl11666	NCP	%	109			70-130	Pass	
Dieldrin	S20-Jl27716	NCP	%	102			70-130	Pass	
Endosulfan I	S20-Jl11666	NCP	%	116			70-130	Pass	
Endosulfan II	S20-Jl11666	NCP	%	99			70-130	Pass	
Endosulfan sulphate	S20-Jl27716	NCP	%	115			70-130	Pass	
Endrin	S20-Jl27716	NCP	%	116			70-130	Pass	
Endrin aldehyde	S20-Jl27716	NCP	%	111			70-130	Pass	
Endrin ketone	S20-Jl27716	NCP	%	124			70-130	Pass	
g-BHC (Lindane)	S20-Jl11666	NCP	%	106			70-130	Pass	
Heptachlor	S20-Jl27716	NCP	%	123			70-130	Pass	
Heptachlor epoxide	S20-Jl27716	NCP	%	130			70-130	Pass	
Hexachlorobenzene	S20-Jl11666	NCP	%	102			70-130	Pass	
Methoxychlor	S20-Jl27716	NCP	%	94			70-130	Pass	
Spike - % Recovery									
Organophosphorus Pesticides				Result 1					
Diazinon	S20-Jl11747	NCP	%	74			70-130	Pass	
Dimethoate	S20-Jl11747	NCP	%	83			70-130	Pass	
Ethion	S20-Jl11747	NCP	%	94			70-130	Pass	
Fenitrothion	S20-Jl11747	NCP	%	117			70-130	Pass	
Methyl parathion	S20-Jl11747	NCP	%	121			70-130	Pass	
Mevinphos	S20-Jl11747	NCP	%	93			70-130	Pass	
Spike - % Recovery									
Polychlorinated Biphenyls				Result 1					
Aroclor-1016	S20-Jl11666	NCP	%	92			70-130	Pass	
Aroclor-1260	S20-Jl27716	NCP	%	115			70-130	Pass	
Spike - % Recovery									
Phenols (Halogenated)				Result 1					
2-Chlorophenol	S20-Jl11747	NCP	%	95			30-130	Pass	
2.4-Dichlorophenol	S20-Jl11747	NCP	%	90			30-130	Pass	
2.4.6-Trichlorophenol	S20-Jl11747	NCP	%	72			30-130	Pass	
2.6-Dichlorophenol	S20-Jl11747	NCP	%	78			30-130	Pass	
4-Chloro-3-methylphenol	S20-Jl11747	NCP	%	98			30-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Phenols (non-Halogenated)				Result 1					
2-Cyclohexyl-4.6-dinitrophenol	S20-Jl11747	NCP	%	102			30-130	Pass	
2-Methyl-4.6-dinitrophenol	S20-Jl11747	NCP	%	102			30-130	Pass	
2-Methylphenol (o-Cresol)	S20-Jl11747	NCP	%	91			30-130	Pass	
2-Nitrophenol	S20-Jl11747	NCP	%	100			30-130	Pass	
2.4-Dimethylphenol	S20-Jl11747	NCP	%	96			30-130	Pass	
2.4-Dinitrophenol	S20-Jl11747	NCP	%	104			70-130	Pass	
3&4-Methylphenol (m&p-Cresol)	S20-Jl11747	NCP	%	94			30-130	Pass	
4-Nitrophenol	S20-Jl11747	NCP	%	96			30-130	Pass	
Dinoseb	S20-Jl11747	NCP	%	96			30-130	Pass	
Phenol	S20-Jl11747	NCP	%	94			30-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	S20-Jl41126	NCP	%	101			75-125	Pass	
Cadmium	S20-Jl41126	NCP	%	106			75-125	Pass	
Chromium	S20-Jl41126	NCP	%	103			75-125	Pass	
Copper	S20-Jl41126	NCP	%	99			75-125	Pass	
Lead	S20-Jl41126	NCP	%	97			75-125	Pass	
Mercury	S20-Jl41126	NCP	%	103			75-125	Pass	
Nickel	S20-Jl41126	NCP	%	109			75-125	Pass	
Zinc	S20-Jl41126	NCP	%	110			75-125	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	W20-Jl30284	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Toluene	W20-Jl30284	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Ethylbenzene	W20-Jl30284	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
m&p-Xylenes	W20-Jl30284	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
o-Xylene	W20-Jl30284	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes - Total*	W20-Jl30284	NCP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
1.1-Dichloroethane	W20-Jl30284	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1-Dichloroethene	W20-Jl30284	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1-Trichloroethane	W20-Jl30284	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	W20-Jl30284	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2-Trichloroethane	W20-Jl30284	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	W20-Jl30284	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dibromoethane	W20-Jl30284	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichlorobenzene	W20-Jl30284	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloroethane	W20-Jl30284	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloropropane	W20-Jl30284	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.3-Trichloropropane	W20-Jl30284	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trimethylbenzene	W20-Jl30284	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichlorobenzene	W20-Jl30284	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichloropropane	W20-Jl30284	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3.5-Trimethylbenzene	W20-Jl30284	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.4-Dichlorobenzene	W20-Jl30284	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Butanone (MEK)	W20-Jl30284	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Propanone (Acetone)	W20-Jl30284	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chlorotoluene	W20-Jl30284	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Methyl-2-pentanone (MIBK)	W20-Jl30284	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Allyl chloride	W20-Jl30284	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
Bromobenzene	W20-JI30284	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromochloromethane	W20-JI30284	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromodichloromethane	W20-JI30284	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromoform	W20-JI30284	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromomethane	W20-JI30284	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon disulfide	W20-JI30284	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon Tetrachloride	W20-JI30284	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chlorobenzene	W20-JI30284	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroethane	W20-JI30284	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroform	W20-JI30284	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloromethane	W20-JI30284	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.2-Dichloroethene	W20-JI30284	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.3-Dichloropropene	W20-JI30284	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromochloromethane	W20-JI30284	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromomethane	W20-JI30284	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dichlorodifluoromethane	W20-JI30284	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Iodomethane	W20-JI30284	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Isopropyl benzene (Cumene)	W20-JI30284	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Methylene Chloride	W20-JI30284	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Styrene	W20-JI30284	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Tetrachloroethene	W20-JI30284	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.2-Dichloroethene	W20-JI30284	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.3-Dichloropropene	W20-JI30284	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichloroethene	W20-JI30284	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichlorofluoromethane	W20-JI30284	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Vinyl chloride	W20-JI30284	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	W20-JI30284	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	W20-JI30284	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH >C10-C16	S20-JI28221	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	S20-JI28221	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	S20-JI28221	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons				Result 1	Result 2	RPD			
TRH C6-C9	W20-JI30284	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C10-C14	S20-JI28221	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	S20-JI28221	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	S20-JI28221	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	S20-JI29421	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	S20-JI29421	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	S20-JI29421	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	S20-JI29421	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	S20-JI29421	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	S20-JI29421	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	S20-JI29421	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	S20-JI29421	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	S20-JI29421	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	S20-JI29421	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	S20-JI29421	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Fluorene	S20-Jl29421	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	S20-Jl29421	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	S20-Jl29421	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	S20-Jl29421	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	S20-Jl29421	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	S20-Jl29421	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	S20-Jl29421	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	S20-Jl29421	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	S20-Jl29421	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-BHC	S20-Jl29421	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	S20-Jl29421	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-BHC	S20-Jl29421	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-BHC	S20-Jl29421	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	S20-Jl29421	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	S20-Jl29421	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	S20-Jl29421	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	S20-Jl29421	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	S20-Jl29421	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	S20-Jl29421	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	S20-Jl29421	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-BHC (Lindane)	S20-Jl29421	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	S20-Jl29421	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	S20-Jl29421	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	S20-Jl29421	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	S20-Jl29421	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Azinphos-methyl	S20-Jl26011	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Bolstar	S20-Jl26011	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorfenvinphos	S20-Jl26011	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos	S20-Jl26011	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos-methyl	S20-Jl26011	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Coumaphos	S20-Jl26011	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Demeton-S	S20-Jl26011	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Demeton-O	S20-Jl26011	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Diazinon	S20-Jl26011	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dichlorvos	S20-Jl26011	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dimethoate	S20-Jl26011	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Disulfoton	S20-Jl26011	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
EPN	S20-Jl26011	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethion	S20-Jl26011	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethoprop	S20-Jl26011	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethyl parathion	S20-Jl26011	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenitrothion	S20-Jl26011	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fensulfothion	S20-Jl26011	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenthion	S20-Jl26011	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Malathion	S20-Jl26011	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Merphos	S20-Jl26011	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Methyl parathion	S20-Jl26011	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Mevinphos	S20-Jl26011	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Monocrotophos	S20-Jl26011	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Naled	S20-Jl26011	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	

Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Omethoate	S20-Jl26011	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Phorate	S20-Jl26011	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pirimiphos-methyl	S20-Jl26011	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pyrazophos	S20-Jl26011	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ronnel	S20-Jl26011	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Terbufos	S20-Jl26011	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tetrachlorvinphos	S20-Jl26011	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tokuthion	S20-Jl26011	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Trichloronate	S20-Jl26011	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Aroclor-1016	S20-Jl27951	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1221	S20-Jl27951	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1232	S20-Jl27951	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1242	S20-Jl27951	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1248	S20-Jl27951	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1254	S20-Jl27951	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1260	S20-Jl27951	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Total PCB*	S20-Jl27951	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	S20-Jl27743	NCP	mg/kg	3.6	3.4	3.0	30%	Pass	
Cadmium	S20-Jl27743	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	S20-Jl27743	NCP	mg/kg	11	11	1.0	30%	Pass	
Copper	S20-Jl27743	NCP	mg/kg	29	25	12	30%	Pass	
Lead	S20-Jl27743	NCP	mg/kg	120	110	7.0	30%	Pass	
Mercury	S20-Jl27743	NCP	mg/kg	2.7	2.5	6.0	30%	Pass	
Nickel	S20-Jl27743	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Zinc	S20-Jl27743	NCP	mg/kg	26	23	9.0	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	S20-Jl32074	NCP	%	12	12	1.0	30%	Pass	

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs

Authorised By

[redacted]

Analytical Services Manager
Senior Analyst-Organic (NSW)
Senior Analyst-Metal (NSW)
Senior Analyst-Asbestos (NSW)

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

Eurofins shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 3, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☑ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Stuart Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT:	DHA
PROJECT:	Randwick Barracks
PROJECT NUMBER:	610.30414
PROJECT MANAGER:	[redacted]
PM CONTACT No:	
LABORATORY:	SGS
LABORATORY ADDRESS:	SYD
SAMPLER:	[redacted]
SAMPLER CONTACT No:	
Email Reports and Invoices to:	LAR510@slrconsulting.com

Turnaround Time (TAT)

- ☑ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT:

COC Number: 1 of 1

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	TDS	major cations/Anions	Suite A	Suite C	Suite B	PFAS	Additional Information (Comment on any gross contamination or specific requirements)
	GW13a	21.7.20	water		X	X	X	X			
	GW018				X	X	X				
	GW017				X	X			X		
	GW012				X	X	X			X	
	QC189				X	X					
	QC188				X	X					
	QC288				~~X~~	~~X~~	Please forward as QC188 to Eurofins for same				
	GW136				X	X	X	X			

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	Received by	[redacted]	Date / Time 22-07-20 2:00PM	Temperature Received: 14.2°C
Relinquished By	Sign	Date / Time	Received by		Date / Time	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

EUROFINS

#733248

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 3, 15 Astor Terrace, Spring Hill, QLD 4000
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- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☑ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Stuart Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT:	DHA
PROJECT:	Randwick Barracks
PROJECT NUMBER:	610.30411
PROJECT MANAGER:	[redacted]
PM CONTACT No:	
LABORATORY:	SGS
LABORATORY ADDRESS:	SYD
SAMPLER:	[redacted]
SAMPLER CONTACT No:	
Email Reports and Invoices to:	LQR510@slrconsulting.com

Turnaround Time (TAT)

- ☑ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT:

COC Number: 1 of 1

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	TDS	major cations/Anions	Suite A	Suite C	Suite B	PFAS	Additional Information (Comment on any gross contamination or specific requirements)
	GW13a	21.7.20	water		X	X	X	X			
	GW018				X	X	X				
	GW017				X	X			X		
	GW012				X	X	X			X	
	QC189				X	X					
	QC188				X	X					
	QC288				~~X~~	~~X~~	Please forward as QC188 to Eurofins for same				
	GW136				X	X	X	X			

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign	Date / Time	Received by	[redacted]	Date / Time 22-07-20 2:00PM	Temperature Received: 14.2°C
Relinquished By	Sign	Date / Time	Received by		Date / Time	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

EUROFINS

#733248

eurofins | Environment Testing

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Site # 1254 & 14271

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Brisbane
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NATA # 1261 Site # 20794

Perth
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Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261 Site # 23736

ABN – 50 005 085 521 e.mail : EnviroSales@eurofins.com web : www.eurofins.com.au

Sample Receipt Advice

Company name:	**SLR Consulting (Sydney)**
Contact name:	[redacted]
Project name:	RANDWICK BARRACKS
Project ID:	610.30041
COC number:	Not provided
Turn around time:	5 Day
Date/Time received:	Jul 22, 2020 2:00 PM
Eurofins reference:	**733248**

Sample information

☑ A detailed list of analytes logged into our LIMS, is included in the attached summary table.

☑ All samples have been received as described on the above COC.

☑ COC has been completed correctly.

☑ Attempt to chill was evident.

☑ Appropriately preserved sample containers have been used.

☑ All samples were received in good condition.

☑ Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.

☑ Appropriate sample containers have been used.

☑ Sample containers for volatile analysis received with zero headspace.

☒ Split sample sent to requested external lab.

☒ Some samples have been subcontracted.

N/A Custody Seals intact (if used).

Contact notes

If you have any questions with respect to these samples please contact:

[redacted] on Phone : [redacted] or by e.mail: [redacted]@eurofins.com

Results will be delivered electronically via e.mail to [redacted]@slrconsulting.com.

Note: A copy of these results will also be delivered to the general SLR Consulting (Sydney) email address.

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ABN – 50 005 085 521 web : www.eurofins.com.au e.mail : EnviroSales@eurofins.com

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NATA # 1261 Site # 20794

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NATA # 1261
Site # 23736

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Penrose, Auckland 1061
Phone : +64 9 526 45 51
IANZ # 1327

Christchurch
43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 733248
Phone: 02 9428 8100
Fax:

Received: Jul 22, 2020 2:00 PM
Due: Jul 29, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Eurofins Suite B11E: Cl/SO4/Alkalinity	Eurofins Suite B11C: Na/K/Ca/Mg	Total Dissolved Solids Dried at 180°C ± 2°C
Melbourne Laboratory - NATA Site # 1254 & 14271						X		
Sydney Laboratory - NATA Site # 18217						X	X	X
Brisbane Laboratory - NATA Site # 20794								
Perth Laboratory - NATA Site # 23736								
External Laboratory								
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**			
1	QC288	Jul 21, 2020		Water	S20-Jl35902	X	X	X
Test Counts						1	1	1

SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus,
North Sydney
NSW 2060

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: [redacted]

Report **733248-W**
Project name RANDWICK BARRACKS
Project ID 610.30041
Received Date Jul 22, 2020

Client Sample ID			**QC288**
Sample Matrix			**Water**
Eurofins Sample No.			**S20-Jl35902**
Date Sampled			**Jul 21, 2020**
Test/Reference	LOR	Unit	
Chloride	1	mg/L	250
Sulphate (as SO4)	2	mg/L	110
Total Dissolved Solids Dried at 180°C ± 2°C	5	mg/L	130
Alkalinity (speciated)			
Bicarbonate Alkalinity (as CaCO3)	20	mg/L	< 20
Carbonate Alkalinity (as CaCO3)	10	mg/L	< 10
Hydroxide Alkalinity (as CaCO3)	20	mg/L	< 20
Total Alkalinity (as CaCO3)	20	mg/L	< 20
Alkali Metals			
Calcium	0.5	mg/L	5.7
Magnesium	0.5	mg/L	7.7
Potassium	0.5	mg/L	2.4
Sodium	0.5	mg/L	42

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Eurofins Suite B11E: Cl/SO4/Alkalinity			
Chloride	Sydney	Jul 22, 2020	28 Days
- Method: E045 /E047 Chloride			
Sulphate (as SO4)	Sydney	Jul 22, 2020	28 Days
- Method: E045 Anions by Ion Chromatography			
Alkalinity (speciated)	Melbourne	Jul 28, 2020	14 Days
- Method: LTM-INO-4250 Alkalinity by Electrometric Titration			
Total Dissolved Solids Dried at 180°C ± 2°C	Sydney	Jul 22, 2020	7 Days
- Method: LTM-INO-4170 Total Dissolved Solids in Water			
Eurofins Suite B11C: Na/K/Ca/Mg	Sydney	Jul 29, 2020	180 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			

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NATA # 1261
Site # 23736

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Penrose, Auckland 1061
Phone : +64 9 526 45 51
IANZ # 1327

Christchurch
43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 733248
Phone: 02 9428 8100
Fax:

Received: Jul 22, 2020 2:00 PM
Due: Jul 29, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager [redacted]

Sample Detail						Eurofins Suite B11E: Cl/SO4/Alkalinity	Eurofins Suite B11C: Na/K/Ca/Mg	Total Dissolved Solids Dried at 180°C ± 2°C
Melbourne Laboratory - NATA Site # 1254 & 14271						X		
Sydney Laboratory - NATA Site # 18217						X	X	X
Brisbane Laboratory - NATA Site # 20794								
Perth Laboratory - NATA Site # 23736								
External Laboratory								
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**			
1	QC288	Jul 21, 2020		Water	S20-Jl35902	X	X	X
Test Counts						1	1	1

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

****NOTE:** pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram
mg/L: milligrams per litre
ug/L: micrograms per litre
ppm: Parts per million
ppb: Parts per billion
%: Percentage
org/100mL: Organisms per 100 millilitres
NTU: Nephelometric Turbidity Units
MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version 5.3
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling.Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Chloride	mg/L	< 1			1	Pass	
Sulphate (as SO4)	mg/L	< 2			2	Pass	
Total Dissolved Solids Dried at 180°C ± 2°C	mg/L	< 5			5	Pass	
Method Blank							
Alkalinity (speciated)							
Bicarbonate Alkalinity (as CaCO3)	mg/L	< 20			20	Pass	
Carbonate Alkalinity (as CaCO3)	mg/L	< 10			10	Pass	
Hydroxide Alkalinity (as CaCO3)	mg/L	< 20			20	Pass	
Total Alkalinity (as CaCO3)	mg/L	< 20			20	Pass	
Method Blank							
Alkali Metals							
Calcium	mg/L	< 0.5			0.5	Pass	
Magnesium	mg/L	< 0.5			0.5	Pass	
Potassium	mg/L	< 0.5			0.5	Pass	
Sodium	mg/L	< 0.5			0.5	Pass	
LCS - % Recovery							
Chloride	%	113			70-130	Pass	
Sulphate (as SO4)	%	104			70-130	Pass	
Total Dissolved Solids Dried at 180°C ± 2°C	%	96			70-130	Pass	
LCS - % Recovery							
Alkalinity (speciated)							
Bicarbonate Alkalinity (as CaCO3)	%	101			70-130	Pass	
Carbonate Alkalinity (as CaCO3)	%	83			70-130	Pass	
Total Alkalinity (as CaCO3)	%	109			70-130	Pass	
LCS - % Recovery							
Alkali Metals							
Calcium	%	98			80-120	Pass	
Magnesium	%	103			80-120	Pass	
Potassium	%	103			80-120	Pass	
Sodium	%	105			80-120	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
				Result 1					
Chloride	S20-Jl36311	NCP	%	86			70-130	Pass	
Sulphate (as SO4)	S20-Jl36311	NCP	%	118			70-130	Pass	
Spike - % Recovery									
Alkalinity (speciated)				Result 1					
Carbonate Alkalinity (as CaCO3)	S20-My33477	NCP	%	83			70-130	Pass	
Total Alkalinity (as CaCO3)	S20-My33477	NCP	%	108			70-130	Pass	
Spike - % Recovery									
Alkali Metals				Result 1					
Calcium	S20-Jl29909	NCP	%	98			75-125	Pass	
Magnesium	S20-Jl29909	NCP	%	94			75-125	Pass	
Potassium	S20-Jl29909	NCP	%	96			75-125	Pass	
Sodium	S20-Jl43600	NCP	%	111			75-125	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
				Result 1	Result 2	RPD			
Chloride	S20-Jl36311	NCP	mg/L	35	30	14	30%	Pass	
Total Dissolved Solids Dried at 180°C ± 2°C	S20-Jl35902	CP	mg/L	130	120	7.0	30%	Pass	

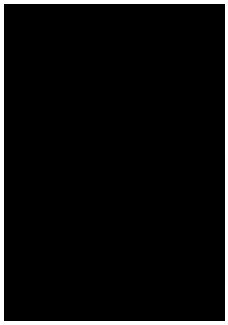
Duplicate									
Alkalinity (speciated)				Result 1	Result 2	RPD			
Bicarbonate Alkalinity (as CaCO3)	S20-My35068	NCP	mg/L	1500	1400	7.0	30%	Pass	
Carbonate Alkalinity (as CaCO3)	S20-My35068	NCP	mg/L	< 10	< 10	<1	30%	Pass	
Hydroxide Alkalinity (as CaCO3)	S20-My35068	NCP	mg/L	< 20	< 20	<1	30%	Pass	
Total Alkalinity (as CaCO3)	S20-My35068	NCP	mg/L	1500	1400	7.0	30%	Pass	
Duplicate									
Alkali Metals				Result 1	Result 2	RPD			
Calcium	S20-Jl29908	NCP	mg/L	< 0.5	< 0.5	<1	30%	Pass	
Magnesium	S20-Jl29908	NCP	mg/L	3.3	3.3	1.0	30%	Pass	
Potassium	S20-Jl29908	NCP	mg/L	1.7	1.7	3.0	30%	Pass	
Sodium	S20-Jl29908	NCP	mg/L	35	34	1.0	30%	Pass	

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Authorised By



Analytical Services Manager
Senior Analyst-Inorganic (NSW)
Senior Analyst-Metal (NSW)
Senior Analyst-Inorganic (VIC)

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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#AU04_Enviro_Sample_NSW

Subject: FW: 3 DAY TAT ADDITIONAL ANALYSIS: FW: 610.30041 Additional Analysis

Importance: High

From: [redacted]@slrconsulting.com>
Sent: Friday, 7 August 2020 11:33 AM
To: [redacted]@eurofins.com>
Cc: [redacted]@slrconsulting.com>; [redacted]@slrconsulting.com>
Subject: 610.30041 Additional Analysis

EXTERNAL EMAIL*

Hi [redacted]

Can we please schedule analysis for the samples referenced in the table below on a three day turn around.

Sample ID	Lab Report	Analysis Request	Comment
0407_QC249_200624	728718	Suite A	Sample on hold with Euro
0407_QC224_200619	727698	Suite A	COC requested sample to to Eurofins, but no analys selected. Assumed on ho
0407_QC256_200624	728723	Suite A	Please relabel the sample 0407_QC259_200624
0407_QC273_200626	729098	Suite A	COC requested sample to to Eurofins, but no analys selected. Assumed on ho
0407_QC266_200625	Unknown	OCP/OPP	COC requested sample to to Eurofins, but no analys selected. Assumed on ho
RWBB_QC201_200615	Unknown	Suite A	-

Thanks for your help, any questions please let me know.

Kind regards,

[redacted]
Project Consultant - Land Quality & Remediation

Please note in response to the COVID-19 Pandemic and physical distancing recommendations from the Australian Government,
SLR is encouraging staff to work remotely and implement flexible working hours if necessary.
If you have received this email outside of regular office hours, it is not expected that you will respond until your own working hours commence.

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SLR Consulting Australia Pty Ltd

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Sample Receipt Advice

Company name:	SLR Consulting (Sydney)
Contact name:	[redacted]
Project name:	ADDITIONAL RANDWICK BARRACKS
Project ID:	610.30041
Turnaround time:	3 Day
Date/Time received	Aug 7, 2020 11:33 AM
Eurofins reference	736687

Sample Information

✓	A detailed list of analytes logged into our LIMS, is included in the attached summary table.
✓	All samples have been received as described on the above COC.
✓	COC has been completed correctly.
✓	Attempt to chill was evident.
✓	Appropriately preserved sample containers have been used.
✓	All samples were received in good condition.
✓	Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.
✓	Appropriate sample containers have been used.
✓	Sample containers for volatile analysis received with zero headspace.
X	Split sample sent to requested external lab.
X	Some samples have been subcontracted.
N/A	Custody Seals intact (if used).

Notes

0407_QC266_200625 and RWBB_QC201_200615 never received by Eurofins.

Contact

If you have any questions with respect to these samples, please contact your Analytical Services Manager:

[redacted] **on phone :** [redacted] **or by email:** [redacted]**@eurofins.com**

Results will be delivered electronically via email to [redacted]@slrconsulting.com.

Note: A copy of these results will also be delivered to the general SLR Consulting (Sydney) email address.

Global Leader - Results you can trust

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Phone : 0800 856 450
IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: ADDITIONAL RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 736687
Phone: 02 9428 8100
Fax:

Received: Aug 7, 2020 11:33 AM
Due: Aug 12, 2020
Priority: 3 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins Suite B15	Volatile Organics	Moisture Set	Eurofins Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271										
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
Newcastle Laboratory										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	0407_QC249_200624	Jun 24, 2020		Soil	S20-Au11048	X	X	X	X	X
2	0407_QC224_200619	Jun 19, 2020		Soil	S20-Au11049	X	X	X	X	X
3	0407_QC259_200624	Jun 24, 2020		Soil	S20-Au11050	X	X	X	X	X
4	0407_QC263_200626	Jun 24, 2020		Soil	S20-Au11051	X	X	X	X	X
Test Counts						4	4	4	4	4

Certificate of Analysis

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Accreditation Number 1261
Site Number 18217

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SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus
North Sydney
NSW 2060

Attention:	[redacted]
Report	736687-AID
Project Name	ADDITIONAL RANDWICK BARRACKS
Project ID	610.30041
Received Date	Aug 07, 2020
Date Reported	Aug 12, 2020

Methodology:

Asbestos Fibre Identification	Conducted in accordance with the Australian Standard AS 4964 – 2004: Method for the Qualitative Identification of Asbestos in Bulk Samples and in-house Method LTM-ASB-8020 by polarised light microscopy (PLM) and dispersion staining (DS) techniques. *NOTE: Positive Trace Analysis results indicate the sample contains detectable respirable fibres.*
Unknown Mineral Fibres	Mineral fibres of unknown type, as determined by PLM with DS, may require another analytical technique, such as Electron Microscopy, to confirm unequivocal identity. *NOTE: While Actinolite, Anthophyllite and Tremolite asbestos may be detected by PLM with DS, due to variability in the optical properties of these materials, AS4964 requires that these are reported as UMF unless confirmed by an independent technique.*
Subsampling Soil Samples	The whole sample submitted is first dried and then passed through a 10mm sieve followed by a 2mm sieve. All fibrous matter greater than 10mm, greater than 2mm as well as the material passing through the 2mm sieve are retained and analysed for the presence of asbestos. If the sub 2mm fraction is greater than approximately 30 to 60g then a sub-sampling routine based on ISO 3082:2009(E) is employed. *NOTE: Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be sub-sampled for trace analysis, in accordance with AS 4964-2004.*
Bonded asbestos-containing material (ACM)	The material is first examined and any fibres isolated for identification by PLM and DS. Where required, interfering matrices may be removed by disintegration using a range of heat, chemical or physical treatments, possibly in combination.The resultant material is then further examined in accordance with AS 4964 - 2004. *NOTE: Even after disintegration it may be difficult to detect the presence of asbestos in some asbestos-containing bulk materials using PLM and DS. This is due to the low grade or small length or diameter of the asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos-containing sealants and mastics, asbestos-containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.*
Limit of Reporting	The performance limitation of the AS 4964 (2004) method for non-homogeneous samples is around 0.1 g/kg (equivalent to 0.01% (w/w)). Where no asbestos is found by PLM and DS, including Trace Analysis, this is considered to be at the nominal reporting limit of 0.01% (w/w). The NEPM screening level of 0.001% (w/w) is intended as an on-site determination, not a laboratory Limit of Reporting (LOR), per se. Examination of a large sample size (e.g. 500 mL) may improve the likelihood of detecting asbestos, particularly AF, to aid assessment against the NEPM criteria. Gravimetric determinations to this level of accuracy are outside of AS 4964 and hence NATA Accreditation does not cover the performance of this service (non-NATA results shown with an asterisk). *NOTE: NATA News March 2014, p.7, states in relation to AS 4964: "This is a qualitative method with a nominal reporting limit of 0.01 % " and that currently in Australia "there is no validated method available for the quantification of asbestos".This report is consistent with the analytical procedures and reporting recommendations in the NEPM and the WA DoH.*

Accredited for compliance with ISO/IEC 17025–Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Project Name ADDITIONAL RANDWICK BARRACKS
Project ID 610.30041
Date Sampled Jun 19, 2020 to Jun 24, 2020
Report 736687-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
0407_QC249_200624	20-Au11048	Jun 24, 2020	Approximate Sample 46g Sample consisted of: Brown coarse-grained sandy soil, rocks and organic debris	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
0407_QC224_200619	20-Au11049	Jun 19, 2020	Approximate Sample 46g Sample consisted of: White fine-grained sandy soil	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
0407_QC259_200624	20-Au11050	Jun 24, 2020	Approximate Sample 60g Sample consisted of: White fine-grained sandy soil	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.
0407_QC263_200626	20-Au11051	Jun 24, 2020	Approximate Sample 32g Sample consisted of: Brown coarse-grained sandy soil, rocks and organic debris	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Asbestos - LTM-ASB-8020	Sydney	Aug 07, 2020	Indefinite

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Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: ADDITIONAL RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 736687
Phone: 02 9428 8100
Fax:

Received: Aug 7, 2020 11:33 AM
Due: Aug 12, 2020
Priority: 3 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins Suite B15	Volatile Organics	Moisture Set	Eurofins Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271										
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
Newcastle Laboratory										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	0407_QC249_200624	Jun 24, 2020		Soil	S20-Au11048	X	X	X	X	X
2	0407_QC224_200619	Jun 19, 2020		Soil	S20-Au11049	X	X	X	X	X
3	0407_QC259_200624	Jun 24, 2020		Soil	S20-Au11050	X	X	X	X	X
4	0407_QC263_200626	Jun 24, 2020		Soil	S20-Au11051	X	X	X	X	X
Test Counts						4	4	4	4	4

Internal Quality Control Review and Glossary

General

1. QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Samples were analysed on an 'as received' basis.
4. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
5. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the Sample Receipt Advice.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

Units

% w/w: weight for weight basis	grams per kilogram
Filter loading:	fibres/100 graticule areas
Reported Concentration:	fibres/mL
Flowrate:	L/min

Terms

Dry	Sample is dried by heating prior to analysis
LOR	Limit of Reporting
COC	Chain of Custody
SRA	Sample Receipt Advice
ISO	International Standards Organisation
AS	Australian Standards
WA DOH	Reference document for the NEPM. Government of Western Australia, Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia (2009), including supporting document Recommended Procedures for Laboratory Analysis of Asbestos in Soil (2011)
NEPM	National Environment Protection (Assessment of Site Contamination) Measure, 2013 (as amended)
ACM	Asbestos Containing Materials. Asbestos contained within a non-asbestos matrix, typically presented in bonded and/or sound condition. For the purposes of the NEPM, ACM is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
AF	Asbestos Fines. Asbestos containing materials, including friable, weathered and bonded materials, able to pass a 7mm x 7mm sieve. Considered under the NEPM as equivalent to “non-bonded / friable”.
FA	Fibrous Asbestos. Asbestos containing materials in a friable and/or severely weathered condition. For the purposes of the NEPM, FA is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
Friable	Asbestos-containing materials of any size that may be broken or crumbled by hand pressure. For the purposes of the NEPM, this includes both AF and FA. It is outside of the laboratory’s remit to assess degree of friability.
Trace Analysis	Analytical procedure used to detect the presence of respirable fibres in the matrix.

Comments

The samples received were not collected in an approved asbestos bag and was therefore sub-sampled from the 250mL glass jar. Valid sub-sampling procedures were applied so as to ensure that the sub-samples to be analysed accurately represented the samples received.

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N/A	Not applicable

Asbestos Counter/Identifier:

[redacted] Senior Analyst-Asbestos (NSW)

Authorised by:

[redacted] Senior Analyst-Asbestos (NSW)

General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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Accreditation Number 1261
Site Number 18217

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The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: [redacted]

Report **736687-S**
Project name ADDITIONAL RANDWICK BARRACKS
Project ID 610.30041
Received Date Aug 07, 2020

Client Sample ID			**0407_QC249_200624**	**0407_QC224_200619**	**0407_QC259_200624**	**0407_QC263_200626**
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-Au11048**	**S20-Au11049**	**S20-Au11050**	**S20-Au11051**
Date Sampled			**Jun 24, 2020**	**Jun 19, 2020**	**Jun 24, 2020**	**Jun 24, 2020**
Test/Reference	LOR	Unit				
Total Recoverable Hydrocarbons - 1999 NEPM Fractions						
TRH C6-C9	20	mg/kg	< 20	< 20	< 20	< 20
TRH C10-C14	20	mg/kg	< 20	< 20	< 20	< 20
TRH C15-C28	50	mg/kg	52	< 50	< 50	120
TRH C29-C36	50	mg/kg	< 50	< 50	< 50	140
TRH C10-C36 (Total)	50	mg/kg	52	< 50	< 50	260
BTEX						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
4-Bromofluorobenzene (surr.)	1	%	86	78	93	88
Volatile Organics						
1.1-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			0407_QC249_200624	0407_QC224_200619	0407_QC259_200624	0407_QC263_200626
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S20-Au11048	S20-Au11049	S20-Au11050	S20-Au11051
Date Sampled			Jun 24, 2020	Jun 19, 2020	Jun 24, 2020	Jun 24, 2020
Test/Reference	LOR	Unit				
Volatile Organics						
Benzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromoform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Iodomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
o-Xylene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Styrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Toluene	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3	< 0.3	< 0.3	< 0.3
Total MAH*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Bromofluorobenzene (surr.)	1	%	86	78	93	88
Toluene-d8 (surr.)	1	%	98	94	94	93
Total Recoverable Hydrocarbons - 2013 NEPM Fractions						
Naphthalene[N02]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
TRH C6-C10	20	mg/kg	< 20	< 20	< 20	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20	< 20	< 20	< 20
TRH >C10-C16	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50	< 50	< 50	< 50
TRH >C16-C34	100	mg/kg	< 100	< 100	< 100	210
TRH >C34-C40	100	mg/kg	< 100	< 100	< 100	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100	< 100	< 100	210

Client Sample ID			0407_QC249_200624	0407_QC224_200619	0407_QC259_200624	0407_QC263_200626
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-Au11048**	**S20-Au11049**	**S20-Au11050**	**S20-Au11051**
Date Sampled			**Jun 24, 2020**	**Jun 19, 2020**	**Jun 24, 2020**	**Jun 24, 2020**
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	0.6	0.6	0.6	0.6
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	1.2	1.2	1.2	1.2
Acenaphthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benz(a)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(a)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(g.h.i)perylene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Benzo(k)fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chrysene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Fluoranthene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	0.9
Fluorene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Naphthalene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Pyrene	0.5	mg/kg	0.5	< 0.5	< 0.5	1.0
Total PAH*	0.5	mg/kg	0.5	< 0.5	< 0.5	1.9
2-Fluorobiphenyl (surr.)	1	%	77	71	79	78
p-Terphenyl-d14 (surr.)	1	%	109	96	104	109
Organochlorine Pesticides						
Chlordanes - Total	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
a-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Aldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
b-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
d-BHC	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Dieldrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.1
Endosulfan I	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Methoxychlor	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Toxaphene	1	mg/kg	< 1	< 1	< 1	< 1
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.1
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Dibutylchlorendate (surr.)	1	%	134	100	101	149
Tetrachloro-m-xylene (surr.)	1	%	97	91	103	96

Client Sample ID			0407_QC249_200624	0407_QC224_200619	0407_QC259_200624	0407_QC263_200626
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-Au11048**	**S20-Au11049**	**S20-Au11050**	**S20-Au11051**
Date Sampled			**Jun 24, 2020**	**Jun 19, 2020**	**Jun 24, 2020**	**Jun 24, 2020**
Test/Reference	LOR	Unit				
Organophosphorus Pesticides						
Azinphos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Bolstar	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Coumaphos	2	mg/kg	< 2	< 2	< 2	< 2
Demeton-S	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Demeton-O	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Diazinon	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Dimethoate	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Disulfoton	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
EPN	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ethion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ethoprop	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Fenthion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Malathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Merphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Methyl parathion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Mevinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Monocrotophos	2	mg/kg	< 2	< 2	< 2	< 2
Naled	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Omethoate	2	mg/kg	< 2	< 2	< 2	< 2
Phorate	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Ronnel	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Terbufos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Tokuthion	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Trichloronate	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Triphenylphosphate (surr.)	1	%	122	104	107	122
Polychlorinated Biphenyls						
Aroclor-1016	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1221	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Aroclor-1232	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1242	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1248	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1254	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor-1260	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total PCB*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibutylchlorendate (surr.)	1	%	134	100	101	149
Tetrachloro-m-xylene (surr.)	1	%	97	91	103	96

Client Sample ID			0407_QC249_200624	0407_QC224_200619	0407_QC259_200624	0407_QC263_200626
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-Au11048**	**S20-Au11049**	**S20-Au11050**	**S20-Au11051**
Date Sampled			**Jun 24, 2020**	**Jun 19, 2020**	**Jun 24, 2020**	**Jun 24, 2020**
Test/Reference	LOR	Unit				
Phenols (Halogenated)						
2-Chlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1	< 1	< 1	< 1
Pentachlorophenol	1	mg/kg	< 1	< 1	< 1	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10	< 10	< 10	< 10
Total Halogenated Phenol*	1	mg/kg	< 1	< 1	< 1	< 1
Phenols (non-Halogenated)						
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20	< 20	< 20	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
2-Nitrophenol	1	mg/kg	< 1	< 1	< 1	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
4-Nitrophenol	5	mg/kg	< 5	< 5	< 5	< 5
Dinoseb	20	mg/kg	< 20	< 20	< 20	< 20
Phenol	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Total Non-Halogenated Phenol*	20	mg/kg	< 20	< 20	< 20	< 20
Phenol-d6 (surr.)	1	%	81	80	72	85
Heavy Metals						
Arsenic	2	mg/kg	2.0	< 2	< 2	< 2
Cadmium	0.4	mg/kg	1.2	1.1	1.0	1.4
Chromium	5	mg/kg	21	< 5	< 5	59
Copper	5	mg/kg	28	< 5	< 5	14
Lead	5	mg/kg	9.9	< 5	< 5	280
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	51	< 5	< 5	< 5
Zinc	5	mg/kg	42	< 5	< 5	61
% Moisture	1	%	14	17	11	29

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Sydney	Aug 08, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Sydney	Aug 08, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Aug 08, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Aug 08, 2020	
- Method: LTM-ORG-2010 TRH C6-C40			
Polycyclic Aromatic Hydrocarbons	Sydney	Aug 08, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (Halogenated)	Sydney	Aug 08, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (non-Halogenated)	Sydney	Aug 08, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Metals M8	Sydney	Aug 08, 2020	180 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Volatile Organics	Sydney	Aug 08, 2020	7 Days
- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices			
Eurofins Suite B15			
Organochlorine Pesticides	Sydney	Aug 08, 2020	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Organophosphorus Pesticides	Sydney	Aug 08, 2020	14 Days
- Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS			
Polychlorinated Biphenyls	Sydney	Aug 08, 2020	28 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
% Moisture	Sydney	Aug 07, 2020	14 Days
- Method: LTM-GEN-7080 Moisture			

eurofins | Environment Testing

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Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: ADDITIONAL RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 736687
Phone: 02 9428 8100
Fax:

Received: Aug 7, 2020 11:33 AM
Due: Aug 12, 2020
Priority: 3 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins Suite B15	Volatile Organics	Moisture Set	Eurofins Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271										
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
Newcastle Laboratory										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	0407_QC249_200624	Jun 24, 2020		Soil	S20-Au11048	X	X	X	X	X
2	0407_QC224_200619	Jun 19, 2020		Soil	S20-Au11049	X	X	X	X	X
3	0407_QC259_200624	Jun 24, 2020		Soil	S20-Au11050	X	X	X	X	X
4	0407_QC263_200626	Jun 24, 2020		Soil	S20-Au11051	X	X	X	X	X
Test Counts						4	4	4	4	4

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

****NOTE:** pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram

mg/L: milligrams per litre

ug/L: micrograms per litre

ppm: Parts per million

ppb: Parts per billion

%: Percentage

org/100mL: Organisms per 100 millilitres

NTU: Nephelometric Turbidity Units

MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version 5.3
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling.Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	mg/kg	< 20			20	Pass	
TRH C10-C14	mg/kg	< 20			20	Pass	
TRH C15-C28	mg/kg	< 50			50	Pass	
TRH C29-C36	mg/kg	< 50			50	Pass	
Method Blank							
BTEX							
Benzene	mg/kg	< 0.1			0.1	Pass	
Toluene	mg/kg	< 0.1			0.1	Pass	
Ethylbenzene	mg/kg	< 0.1			0.1	Pass	
m&p-Xylenes	mg/kg	< 0.2			0.2	Pass	
o-Xylene	mg/kg	< 0.1			0.1	Pass	
Xylenes - Total*	mg/kg	< 0.3			0.3	Pass	
Method Blank							
Volatile Organics							
1.1-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
1.1.1-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.1.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dibromoethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.3-Trichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.4-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.3.5-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.4-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
2-Butanone (MEK)	mg/kg	< 0.5			0.5	Pass	
2-Propanone (Acetone)	mg/kg	< 0.5			0.5	Pass	
4-Chlorotoluene	mg/kg	< 0.5			0.5	Pass	
4-Methyl-2-pentanone (MIBK)	mg/kg	< 0.5			0.5	Pass	
Allyl chloride	mg/kg	< 0.5			0.5	Pass	
Bromobenzene	mg/kg	< 0.5			0.5	Pass	
Bromochloromethane	mg/kg	< 0.5			0.5	Pass	
Bromodichloromethane	mg/kg	< 0.5			0.5	Pass	
Bromoform	mg/kg	< 0.5			0.5	Pass	
Bromomethane	mg/kg	< 0.5			0.5	Pass	
Carbon disulfide	mg/kg	< 0.5			0.5	Pass	
Carbon Tetrachloride	mg/kg	< 0.5			0.5	Pass	
Chlorobenzene	mg/kg	< 0.5			0.5	Pass	
Chloroethane	mg/kg	< 0.5			0.5	Pass	
Chloroform	mg/kg	< 0.5			0.5	Pass	
Chloromethane	mg/kg	< 0.5			0.5	Pass	
cis-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
cis-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Dibromochloromethane	mg/kg	< 0.5			0.5	Pass	
Dibromomethane	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Dichlorodifluoromethane	mg/kg	< 0.5			0.5	Pass	
Iodomethane	mg/kg	< 0.5			0.5	Pass	
Isopropyl benzene (Cumene)	mg/kg	< 0.5			0.5	Pass	
Methylene Chloride	mg/kg	< 0.5			0.5	Pass	
Styrene	mg/kg	< 0.5			0.5	Pass	
Tetrachloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Trichloroethene	mg/kg	< 0.5			0.5	Pass	
Trichlorofluoromethane	mg/kg	< 0.5			0.5	Pass	
Vinyl chloride	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
TRH >C10-C16	mg/kg	< 50			50	Pass	
TRH >C16-C34	mg/kg	< 100			100	Pass	
TRH >C34-C40	mg/kg	< 100			100	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Organochlorine Pesticides							
Chlordanes - Total	mg/kg	< 0.1			0.1	Pass	
4.4'-DDD	mg/kg	< 0.05			0.05	Pass	
4.4'-DDE	mg/kg	< 0.05			0.05	Pass	
4.4'-DDT	mg/kg	< 0.05			0.05	Pass	
a-BHC	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-BHC	mg/kg	< 0.05			0.05	Pass	
d-BHC	mg/kg	< 0.05			0.05	Pass	
Dieldrin	mg/kg	< 0.05			0.05	Pass	
Endosulfan I	mg/kg	< 0.05			0.05	Pass	
Endosulfan II	mg/kg	< 0.05			0.05	Pass	
Endosulfan sulphate	mg/kg	< 0.05			0.05	Pass	
Endrin	mg/kg	< 0.05			0.05	Pass	
Endrin aldehyde	mg/kg	< 0.05			0.05	Pass	
Endrin ketone	mg/kg	< 0.05			0.05	Pass	
g-BHC (Lindane)	mg/kg	< 0.05			0.05	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Heptachlor	mg/kg	< 0.05			0.05	Pass	
Heptachlor epoxide	mg/kg	< 0.05			0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05			0.05	Pass	
Methoxychlor	mg/kg	< 0.2			0.2	Pass	
Toxaphene	mg/kg	< 1			1	Pass	
Method Blank							
Organophosphorus Pesticides							
Azinphos-methyl	mg/kg	< 0.2			0.2	Pass	
Bolstar	mg/kg	< 0.2			0.2	Pass	
Chlorfenvinphos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos-methyl	mg/kg	< 0.2			0.2	Pass	
Coumaphos	mg/kg	< 2			2	Pass	
Demeton-S	mg/kg	< 0.2			0.2	Pass	
Demeton-O	mg/kg	< 0.2			0.2	Pass	
Diazinon	mg/kg	< 0.2			0.2	Pass	
Dichlorvos	mg/kg	< 0.2			0.2	Pass	
Dimethoate	mg/kg	< 0.2			0.2	Pass	
Disulfoton	mg/kg	< 0.2			0.2	Pass	
EPN	mg/kg	< 0.2			0.2	Pass	
Ethion	mg/kg	< 0.2			0.2	Pass	
Ethoprop	mg/kg	< 0.2			0.2	Pass	
Ethyl parathion	mg/kg	< 0.2			0.2	Pass	
Fenitrothion	mg/kg	< 0.2			0.2	Pass	
Fensulfothion	mg/kg	< 0.2			0.2	Pass	
Fenthion	mg/kg	< 0.2			0.2	Pass	
Malathion	mg/kg	< 0.2			0.2	Pass	
Merphos	mg/kg	< 0.2			0.2	Pass	
Methyl parathion	mg/kg	< 0.2			0.2	Pass	
Mevinphos	mg/kg	< 0.2			0.2	Pass	
Monocrotophos	mg/kg	< 2			2	Pass	
Naled	mg/kg	< 0.2			0.2	Pass	
Omethoate	mg/kg	< 2			2	Pass	
Phorate	mg/kg	< 0.2			0.2	Pass	
Pirimiphos-methyl	mg/kg	< 0.2			0.2	Pass	
Pyrazophos	mg/kg	< 0.2			0.2	Pass	
Ronnel	mg/kg	< 0.2			0.2	Pass	
Terbufos	mg/kg	< 0.2			0.2	Pass	
Tetrachlorvinphos	mg/kg	< 0.2			0.2	Pass	
Tokuthion	mg/kg	< 0.2			0.2	Pass	
Trichloronate	mg/kg	< 0.2			0.2	Pass	
Method Blank							
Polychlorinated Biphenyls							
Aroclor-1016	mg/kg	< 0.5			0.5	Pass	
Aroclor-1221	mg/kg	< 0.1			0.1	Pass	
Aroclor-1232	mg/kg	< 0.5			0.5	Pass	
Aroclor-1242	mg/kg	< 0.5			0.5	Pass	
Aroclor-1248	mg/kg	< 0.5			0.5	Pass	
Aroclor-1254	mg/kg	< 0.5			0.5	Pass	
Aroclor-1260	mg/kg	< 0.5			0.5	Pass	
Total PCB*	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Nickel	mg/kg	< 5			5	Pass	
Zinc	mg/kg	< 5			5	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	%	91			70-130	Pass	
TRH C10-C14	%	75			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	95			70-130	Pass	
Toluene	%	105			70-130	Pass	
Ethylbenzene	%	98			70-130	Pass	
m&p-Xylenes	%	101			70-130	Pass	
o-Xylene	%	101			70-130	Pass	
Xylenes - Total*	%	101			70-130	Pass	
LCS - % Recovery							
Volatile Organics							
1.1-Dichloroethene	%	118			70-130	Pass	
1.1.1-Trichloroethane	%	93			70-130	Pass	
1.2-Dichlorobenzene	%	103			70-130	Pass	
1.2-Dichloroethane	%	88			70-130	Pass	
Trichloroethene	%	105			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	104			70-130	Pass	
TRH C6-C10	%	88			70-130	Pass	
TRH >C10-C16	%	73			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	121			70-130	Pass	
Acenaphthylene	%	119			70-130	Pass	
Anthracene	%	121			70-130	Pass	
Benz(a)anthracene	%	111			70-130	Pass	
Benzo(a)pyrene	%	128			70-130	Pass	
Benzo(b&j)fluoranthene	%	122			70-130	Pass	
Benzo(g.h.i)perylene	%	115			70-130	Pass	
Benzo(k)fluoranthene	%	122			70-130	Pass	
Chrysene	%	116			70-130	Pass	
Dibenz(a.h)anthracene	%	115			70-130	Pass	
Fluoranthene	%	121			70-130	Pass	
Fluorene	%	119			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	124			70-130	Pass	
Naphthalene	%	125			70-130	Pass	
Phenanthrene	%	121			70-130	Pass	
Pyrene	%	120			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	91			70-130	Pass	
4.4'-DDD	%	74			70-130	Pass	
4.4'-DDE	%	98			70-130	Pass	
4.4'-DDT	%	95			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
a-BHC	%	88			70-130	Pass	
Aldrin	%	91			70-130	Pass	
b-BHC	%	85			70-130	Pass	
d-BHC	%	88			70-130	Pass	
Dieldrin	%	91			70-130	Pass	
Endosulfan I	%	92			70-130	Pass	
Endosulfan II	%	86			70-130	Pass	
Endosulfan sulphate	%	82			70-130	Pass	
Endrin	%	92			70-130	Pass	
Endrin aldehyde	%	87			70-130	Pass	
Endrin ketone	%	89			70-130	Pass	
g-BHC (Lindane)	%	84			70-130	Pass	
Heptachlor	%	94			70-130	Pass	
Heptachlor epoxide	%	83			70-130	Pass	
Hexachlorobenzene	%	93			70-130	Pass	
Methoxychlor	%	83			70-130	Pass	
LCS - % Recovery							
Organophosphorus Pesticides							
Diazinon	%	105			70-130	Pass	
Dimethoate	%	99			70-130	Pass	
Ethion	%	98			70-130	Pass	
Fenitrothion	%	118			70-130	Pass	
Mevinphos	%	130			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls							
Aroclor-1016	%	74			70-130	Pass	
Aroclor-1260	%	87			70-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	108			80-120	Pass	
Cadmium	%	102			80-120	Pass	
Chromium	%	95			80-120	Pass	
Copper	%	93			80-120	Pass	
Lead	%	103			80-120	Pass	
Mercury	%	100			80-120	Pass	
Nickel	%	95			80-120	Pass	
Zinc	%	90			80-120	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C6-C9	S20-Au14860	NCP	%	76			70-130	Pass	
TRH C10-C14	S20-Au04660	NCP	%	85			70-130	Pass	
Spike - % Recovery									
BTEX				Result 1					
Benzene	S20-Au13849	NCP	%	85			70-130	Pass	
Toluene	S20-Au13849	NCP	%	90			70-130	Pass	
Ethylbenzene	S20-Au13849	NCP	%	90			70-130	Pass	
m&p-Xylenes	S20-Au13849	NCP	%	94			70-130	Pass	
o-Xylene	S20-Au13849	NCP	%	96			70-130	Pass	
Xylenes - Total*	S20-Au13849	NCP	%	95			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
Naphthalene	S20-Au13849	NCP	%	91			70-130	Pass	
TRH C6-C10	S20-Au14860	NCP	%	75			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
TRH >C10-C16	S20-Au04660	NCP	%	82			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	S20-Au06269	NCP	%	103			75-125	Pass	
Cadmium	S20-Au06269	NCP	%	97			75-125	Pass	
Chromium	S20-Au06269	NCP	%	92			75-125	Pass	
Copper	S20-Au06269	NCP	%	91			75-125	Pass	
Lead	S20-Au06269	NCP	%	99			75-125	Pass	
Mercury	S20-Au06269	NCP	%	97			75-125	Pass	
Nickel	S20-Au06269	NCP	%	93			75-125	Pass	
Zinc	S20-Au06269	NCP	%	93			75-125	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C6-C9	B20-Au04888	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	S20-Au06094	NCP	mg/kg	470	390	19	30%	Pass	
TRH C15-C28	S20-Au06094	NCP	mg/kg	1200	1000	17	30%	Pass	
TRH C29-C36	S20-Au06094	NCP	mg/kg	70	71	1.0	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	B20-Au04888	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Toluene	B20-Au04888	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Ethylbenzene	B20-Au04888	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
m&p-Xylenes	B20-Au04888	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
o-Xylene	B20-Au04888	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes - Total*	B20-Au04888	NCP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
1.1-Dichloroethane	S20-Au08218	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1-Dichloroethene	S20-Au08218	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1-Trichloroethane	S20-Au08218	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	S20-Au08218	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2-Trichloroethane	S20-Au08218	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	S20-Au08218	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dibromoethane	S20-Au08218	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichlorobenzene	S20-Au08218	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloroethane	S20-Au08218	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloropropane	S20-Au08218	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.3-Trichloropropane	S20-Au08218	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.4-Trimethylbenzene	S20-Au08218	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichlorobenzene	S20-Au08218	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichloropropane	S20-Au08218	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3.5-Trimethylbenzene	S20-Au08218	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.4-Dichlorobenzene	S20-Au08218	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Butanone (MEK)	S20-Au08218	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2-Propanone (Acetone)	S20-Au08218	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chlorotoluene	S20-Au08218	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Methyl-2-pentanone (MIBK)	S20-Au08218	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Allyl chloride	S20-Au08218	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromobenzene	S20-Au08218	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromochloromethane	S20-Au08218	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromodichloromethane	S20-Au08218	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromoform	S20-Au08218	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromomethane	S20-Au08218	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Volatile Organics				Result 1	Result 2	RPD			
Carbon disulfide	S20-Au08218	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon Tetrachloride	S20-Au08218	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chlorobenzene	S20-Au08218	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroethane	S20-Au08218	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroform	S20-Au08218	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloromethane	S20-Au08218	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.2-Dichloroethene	S20-Au08218	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.3-Dichloropropene	S20-Au08218	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromochloromethane	S20-Au08218	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromomethane	S20-Au08218	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dichlorodifluoromethane	S20-Au08218	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Iodomethane	S20-Au08218	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Isopropyl benzene (Cumene)	S20-Au08218	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Methylene Chloride	S20-Au08218	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Styrene	S20-Au08218	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Tetrachloroethene	S20-Au08218	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.2-Dichloroethene	S20-Au08218	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.3-Dichloropropene	S20-Au08218	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichloroethene	S20-Au08218	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichlorofluoromethane	S20-Au08218	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Vinyl chloride	S20-Au08218	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
Naphthalene	B20-Au04888	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
TRH C6-C10	B20-Au04888	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH >C10-C16	S20-Au06094	NCP	mg/kg	910	750	20	30%	Pass	
TRH >C16-C34	S20-Au06094	NCP	mg/kg	840	730	14	30%	Pass	
TRH >C34-C40	S20-Au06094	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	S20-Au13414	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	S20-Au13414	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	S20-Au13414	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	S20-Au13414	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	S20-Au13414	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	S20-Au13414	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	S20-Au13414	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	S20-Au13414	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	S20-Au13414	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	S20-Au13414	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	S20-Au13414	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	S20-Au13414	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	S20-Au13414	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	S20-Au13414	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	S20-Au13414	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	S20-Au13414	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	S20-Au13414	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	S20-Au13414	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	S20-Au13414	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	S20-Au13414	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-BHC	S20-Au13414	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	S20-Au13414	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	

Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
b-BHC	S20-Au13414	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-BHC	S20-Au13414	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	S20-Au13414	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	S20-Au13414	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	S20-Au13414	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	S20-Au13414	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	S20-Au13414	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	S20-Au13414	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	S20-Au13414	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-BHC (Lindane)	S20-Au13414	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	S20-Au13414	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	S20-Au13414	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	S20-Au13414	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	S20-Au13414	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Azinphos-methyl	S20-Au13414	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Bolstar	S20-Au13414	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorfenvinphos	S20-Au13414	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos	S20-Au13414	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos-methyl	S20-Au13414	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Coumaphos	S20-Au13414	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Demeton-S	S20-Au13414	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Demeton-O	S20-Au13414	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Diazinon	S20-Au13414	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dichlorvos	S20-Au13414	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dimethoate	S20-Au13414	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Disulfoton	S20-Au13414	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
EPN	S20-Au13414	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethion	S20-Au13414	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethoprop	S20-Au13414	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethyl parathion	S20-Au13414	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenitrothion	S20-Au13414	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fensulfothion	S20-Au13414	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenthion	S20-Au13414	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Malathion	S20-Au13414	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Merphos	S20-Au13414	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Methyl parathion	S20-Au13414	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Mevinphos	S20-Au13414	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Monocrotophos	S20-Au13414	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Naled	S20-Au13414	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Omethoate	S20-Au13414	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Phorate	S20-Au13414	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pirimiphos-methyl	S20-Au13414	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pyrazophos	S20-Au13414	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ronnel	S20-Au13414	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Terbufos	S20-Au13414	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tetrachlorvinphos	S20-Au13414	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tokuthion	S20-Au13414	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Trichloronate	S20-Au13414	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	

Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Aroclor-1016	S20-Au13414	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1221	S20-Au13414	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1232	S20-Au13414	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1242	S20-Au13414	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1248	S20-Au13414	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1254	S20-Au13414	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1260	S20-Au13414	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Total PCB*	S20-Au13414	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Phenols (Halogenated)				Result 1	Result 2	RPD			
2-Chlorophenol	S20-Au13414	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dichlorophenol	S20-Au13414	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4.5-Trichlorophenol	S20-Au13414	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4.6-Trichlorophenol	S20-Au13414	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2.6-Dichlorophenol	S20-Au13414	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
4-Chloro-3-methylphenol	S20-Au13414	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Pentachlorophenol	S20-Au13414	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
Tetrachlorophenols - Total	S20-Au13414	NCP	mg/kg	< 10	< 10	<1	30%	Pass	
Duplicate									
Phenols (non-Halogenated)				Result 1	Result 2	RPD			
2-Cyclohexyl-4.6-dinitrophenol	S20-Au13414	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
2-Methyl-4.6-dinitrophenol	S20-Au13414	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
2-Methylphenol (o-Cresol)	S20-Au13414	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
2-Nitrophenol	S20-Au13414	NCP	mg/kg	< 1	< 1	<1	30%	Pass	
2.4-Dimethylphenol	S20-Au13414	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
2.4-Dinitrophenol	S20-Au13414	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
3&4-Methylphenol (m&p-Cresol)	S20-Au13414	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
4-Nitrophenol	S20-Au13414	NCP	mg/kg	< 5	< 5	<1	30%	Pass	
Dinoseb	S20-Au13414	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
Phenol	S20-Au13414	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	S20-Au06267	NCP	mg/kg	5.4	6.3	16	30%	Pass	
Cadmium	S20-Au06267	NCP	mg/kg	1.2	1.2	4.0	30%	Pass	
Chromium	S20-Au06267	NCP	mg/kg	11	11	1.0	30%	Pass	
Copper	S20-Au06267	NCP	mg/kg	26	27	4.0	30%	Pass	
Lead	S20-Au06267	NCP	mg/kg	15	15	2.0	30%	Pass	
Mercury	S20-Au06267	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Nickel	S20-Au06267	NCP	mg/kg	6.8	9.0	29	30%	Pass	
Zinc	S20-Au06267	NCP	mg/kg	62	71	13	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	S20-Au11048	CP	%	14	14	<1	30%	Pass	

Comments

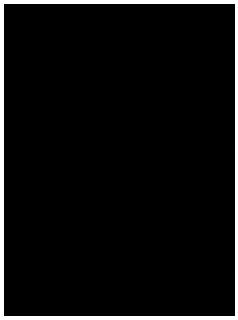
Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs

Authorised By



Analytical Services Manager
Senior Analyst-Organic (NSW)
Senior Analyst-Metal (NSW)
Senior Analyst-Asbestos (NSW)

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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#736974

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Dawin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 23 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☒ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐

CLIENT: Defence Housing Australia

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGER: [redacted]

PM CONTACT No: [redacted]

LABORATORY: SGS Australia

LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015

SAMPLER: [redacted]

SAMPLER CONTACT No: [redacted]

Email Reports and Invoices to: LQRSYD@slrconsulting.com ; [redacted]

Turnaround Time (TAT)

- ☐ Standard TAT
- ☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number of

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: Suite A	Asbestos ONLY	HOLD	C6-C10/BETXN					Additional Information (Comment on any gross contamination or specific requirements)
	0407_QC163_200625	25/06/2020	Soil	jar, pfas	x								Please hold all PFAS containers
	0407_QC263_200625	25/06/2020	Soil	jar, pfas	x								Please send to Eurofins
	0407_QC167_200625	25/06/2020	Soil	jar, pfas	x								
	0407_QC267_200625	25/06/2020	Soil	jar, pfas	x								Please send to Eurofins
	0407_QC413_200623	23/06/2020	Trip Blank	vial				x					
	0407_QC513_200623	23/06/2020	Trip Spike	vial				x					
	0407_162_200625	25/06/2020	Soil	jar, pfas	x								
	0407_262_200625	25/06/2020	Soil	jar, pfas	x								Please send to Eurofins

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 18/06/2020	**Received by**	Sign [redacted]	Date / Time 2:00PM 19/6/2020	**Temperature Received:** 18.4°C
Relinquished By	Sign	Date / Time	**Received by**	Sign [redacted]	Date / Time	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

eurofins | Environment Testing

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Site # 1254 & 14271

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Phone : +61 8 9251 9600
NATA # 1261 Site # 23736

ABN – 50 005 085 521 e.mail : EnviroSales@eurofins.com web : www.eurofins.com.au

Sample Receipt Advice

Company name:	**SLR Consulting (Sydney)**
Contact name:	[redacted]
Project name:	RANDWICK BARRACKS
Project ID:	610.30041
Turnaround time:	5 Day
Date/Time received:	Aug 10, 2020 2:00 PM
Eurofins reference:	**736974**

Sample information

☑ A detailed list of analytes logged into our LIMS, is included in the attached summary table.

☑ All samples have been received as described on the above COC.

☑ COC has been completed correctly.

☑ Attempt to chill was evident.

☑ Appropriately preserved sample containers have been used.

☑ All samples were received in good condition.

☑ Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.

☑ Appropriate sample containers have been used.

☒ Split sample sent to requested external lab.

☒ Some samples have been subcontracted.

N/A Custody Seals intact (if used).

Contact notes

If you have any questions with respect to these samples, please contact your Analytical Sales Manager:

[redacted] on Phone [redacted] or by email: [redacted]@eurofins.com

Results will be delivered electronically via email to [redacted]@slrconsulting.com.

Note: A copy of these results will also be delivered to the general SLR Consulting (Sydney) email address.

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New Zealand

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Phone : +64 9 526 45 51
IANZ # 1327

Christchurch
43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 736974
Phone: 02 9428 8100
Fax:

Received: Aug 10, 2020 2:00 PM
Due: Aug 17, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins Suite B15	Volatile Organics	Moisture Set	Eurofins Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271										
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
Newcastle Laboratory										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	0407_QC262_200625	Jun 25, 2020		Soil	S20-Au14260	X	X	X	X	X
Test Counts						1	1	1	1	1

Certificate of Analysis

eurofins | Environment Testing

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025–Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus
North Sydney
NSW 2060

Attention:	[redacted]
Report	736974-AID
Project Name	RANDWICK BARRACKS
Project ID	610.30041
Received Date	Aug 10, 2020
Date Reported	Aug 17, 2020

Methodology:

Asbestos Fibre Identification	Conducted in accordance with the Australian Standard AS 4964 – 2004: Method for the Qualitative Identification of Asbestos in Bulk Samples and in-house Method LTM-ASB-8020 by polarised light microscopy (PLM) and dispersion staining (DS) techniques. *NOTE: Positive Trace Analysis results indicate the sample contains detectable respirable fibres.*
Unknown Mineral Fibres	Mineral fibres of unknown type, as determined by PLM with DS, may require another analytical technique, such as Electron Microscopy, to confirm unequivocal identity. *NOTE: While Actinolite, Anthophyllite and Tremolite asbestos may be detected by PLM with DS, due to variability in the optical properties of these materials, AS4964 requires that these are reported as UMF unless confirmed by an independent technique.*
Subsampling Soil Samples	The whole sample submitted is first dried and then passed through a 10mm sieve followed by a 2mm sieve. All fibrous matter greater than 10mm, greater than 2mm as well as the material passing through the 2mm sieve are retained and analysed for the presence of asbestos. If the sub 2mm fraction is greater than approximately 30 to 60g then a sub-sampling routine based on ISO 3082:2009(E) is employed. *NOTE: Depending on the nature and size of the soil sample, the sub-2 mm residue material may need to be sub-sampled for trace analysis, in accordance with AS 4964-2004.*
Bonded asbestos-containing material (ACM)	The material is first examined and any fibres isolated for identification by PLM and DS. Where required, interfering matrices may be removed by disintegration using a range of heat, chemical or physical treatments, possibly in combination.The resultant material is then further examined in accordance with AS 4964 - 2004. *NOTE: Even after disintegration it may be difficult to detect the presence of asbestos in some asbestos-containing bulk materials using PLM and DS. This is due to the low grade or small length or diameter of the asbestos fibres present in the material, or to the fact that very fine fibres have been distributed intimately throughout the materials. Vinyl/asbestos floor tiles, some asbestos-containing sealants and mastics, asbestos-containing epoxy resins and some ore samples are examples of these types of material, which are difficult to analyse.*
Limit of Reporting	The performance limitation of the AS 4964 (2004) method for non-homogeneous samples is around 0.1 g/kg (equivalent to 0.01% (w/w)). Where no asbestos is found by PLM and DS, including Trace Analysis, this is considered to be at the nominal reporting limit of 0.01% (w/w). The NEPM screening level of 0.001% (w/w) is intended as an on-site determination, not a laboratory Limit of Reporting (LOR), per se. Examination of a large sample size (e.g. 500 mL) may improve the likelihood of detecting asbestos, particularly AF, to aid assessment against the NEPM criteria. Gravimetric determinations to this level of accuracy are outside of AS 4964 and hence NATA Accreditation does not cover the performance of this service (non-NATA results shown with an asterisk). *NOTE: NATA News March 2014, p.7, states in relation to AS 4964: "This is a qualitative method with a nominal reporting limit of 0.01 % " and that currently in Australia "there is no validated method available for the quantification of asbestos".This report is consistent with the analytical procedures and reporting recommendations in the NEPM and the WA DoH.*

Accredited for compliance with ISO/IEC 17025–Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Project Name RANDWICK BARRACKS
Project ID 610.30041
Date Sampled Jun 25, 2020
Report 736974-AID

Client Sample ID	Eurofins Sample No.	Date Sampled	Sample Description	Result
0407_QC262_200625	20-Au14260	Jun 25, 2020	Approximate Sample 100g Sample consisted of: Brown coarse-grained sandy soil and rocks	No asbestos detected at the reporting limit of 0.01% w/w. Organic fibre detected. No trace asbestos detected.

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Asbestos - LTM-ASB-8020	Sydney	Aug 10, 2020	Indefinite

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IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 736974
Phone: 02 9428 8100
Fax:

Received: Aug 10, 2020 2:00 PM
Due: Aug 17, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins Suite B15	Volatile Organics	Moisture Set	Eurofins Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271										
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
Newcastle Laboratory										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	0407_QC262_200625	Jun 25, 2020		Soil	S20-Au14260	X	X	X	X	X
Test Counts						1	1	1	1	1

Internal Quality Control Review and Glossary

General

1. QC data may be available on request.
2. All soil results are reported on a dry basis, unless otherwise stated.
3. Samples were analysed on an 'as received' basis.
4. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
5. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the Sample Receipt Advice.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

Units

% w/w: weight for weight basis	grams per kilogram
Filter loading:	fibres/100 graticule areas
Reported Concentration:	fibres/mL
Flowrate:	L/min

Terms

Dry	Sample is dried by heating prior to analysis
LOR	Limit of Reporting
COC	Chain of Custody
SRA	Sample Receipt Advice
ISO	International Standards Organisation
AS	Australian Standards
WA DOH	Reference document for the NEPM. Government of Western Australia, Guidelines for the Assessment, Remediation and Management of Asbestos-Contaminated Sites in Western Australia (2009), including supporting document Recommended Procedures for Laboratory Analysis of Asbestos in Soil (2011)
NEPM	National Environment Protection (Assessment of Site Contamination) Measure, 2013 (as amended)
ACM	Asbestos Containing Materials. Asbestos contained within a non-asbestos matrix, typically presented in bonded and/or sound condition. For the purposes of the NEPM, ACM is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
AF	Asbestos Fines. Asbestos containing materials, including friable, weathered and bonded materials, able to pass a 7mm x 7mm sieve. Considered under the NEPM as equivalent to “non-bonded / friable”.
FA	Fibrous Asbestos. Asbestos containing materials in a friable and/or severely weathered condition. For the purposes of the NEPM, FA is generally restricted to those materials that do not pass a 7mm x 7mm sieve.
Friable	Asbestos-containing materials of any size that may be broken or crumbled by hand pressure. For the purposes of the NEPM, this includes both AF and FA. It is outside of the laboratory’s remit to assess degree of friability.
Trace Analysis	Analytical procedure used to detect the presence of respirable fibres in the matrix.

Comments

The sample received was not collected in an approved asbestos bag and was therefore sub-sampled from the 250mL glass jar. Valid sub-sampling procedures were applied so as to ensure that the sub-sample to be analysed accurately represented the sample received.

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N/A	Not applicable

Asbestos Counter/Identifier:

[redacted] Senior Analyst-Asbestos (NSW)

Authorised by:

[redacted] Senior Analyst-Asbestos (NSW)

General Manager

Final Report – this report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus,
North Sydney
NSW 2060

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: [redacted]

Report **736974-S**
Project name RANDWICK BARRACKS
Project ID 610.30041
Received Date Aug 10, 2020

Client Sample ID			**0407_QC262_200625**
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-Au14260**
Date Sampled			**Jun 25, 2020**
Test/Reference	LOR	Unit	
Total Recoverable Hydrocarbons - 1999 NEPM Fractions			
TRH C6-C9	20	mg/kg	< 20
TRH C10-C14	20	mg/kg	< 20
TRH C15-C28	50	mg/kg	65
TRH C29-C36	50	mg/kg	53
TRH C10-C36 (Total)	50	mg/kg	118
BTEX			
Benzene	0.1	mg/kg	< 0.1
Toluene	0.1	mg/kg	< 0.1
Ethylbenzene	0.1	mg/kg	< 0.1
m&p-Xylenes	0.2	mg/kg	< 0.2
o-Xylene	0.1	mg/kg	< 0.1
Xylenes - Total*	0.3	mg/kg	< 0.3
4-Bromofluorobenzene (surr.)	1	%	130
Volatile Organics			
1.1-Dichloroethane	0.5	mg/kg	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5
1.2.4-Trimethylbenzene	0.5	mg/kg	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5
1.3.5-Trimethylbenzene	0.5	mg/kg	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5
2-Butanone (MEK)	0.5	mg/kg	< 0.5
2-Propanone (Acetone)	0.5	mg/kg	< 0.5
4-Chlorotoluene	0.5	mg/kg	< 0.5
4-Methyl-2-pentanone (MIBK)	0.5	mg/kg	< 0.5
Allyl chloride	0.5	mg/kg	< 0.5

Client Sample ID			0407_QC262_200625
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-Au14260**
Date Sampled			**Jun 25, 2020**
Test/Reference	LOR	Unit	
Volatile Organics			
Benzene	0.1	mg/kg	< 0.1
Bromobenzene	0.5	mg/kg	< 0.5
Bromochloromethane	0.5	mg/kg	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5
Bromoform	0.5	mg/kg	< 0.5
Bromomethane	0.5	mg/kg	< 0.5
Carbon disulfide	0.5	mg/kg	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5
Chloroethane	0.5	mg/kg	< 0.5
Chloroform	0.5	mg/kg	< 0.5
Chloromethane	0.5	mg/kg	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5
Dichlorodifluoromethane	0.5	mg/kg	< 0.5
Ethylbenzene	0.1	mg/kg	< 0.1
Iodomethane	0.5	mg/kg	< 0.5
Isopropyl benzene (Cumene)	0.5	mg/kg	< 0.5
m&p-Xylenes	0.2	mg/kg	< 0.2
Methylene Chloride	0.5	mg/kg	< 0.5
o-Xylene	0.1	mg/kg	< 0.1
Styrene	0.5	mg/kg	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5
Toluene	0.1	mg/kg	< 0.1
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5
Xylenes - Total*	0.3	mg/kg	< 0.3
Total MAH*	0.5	mg/kg	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5
4-Bromofluorobenzene (surr.)	1	%	130
Toluene-d8 (surr.)	1	%	86
Total Recoverable Hydrocarbons - 2013 NEPM Fractions			
Naphthalene[N02]	0.5	mg/kg	< 0.5
TRH C6-C10	20	mg/kg	< 20
TRH C6-C10 less BTEX (F1)[N04]	20	mg/kg	< 20
TRH >C10-C16	50	mg/kg	< 50
TRH >C10-C16 less Naphthalene (F2)[N01]	50	mg/kg	< 50
TRH >C16-C34	100	mg/kg	< 100
TRH >C34-C40	100	mg/kg	< 100
TRH >C10-C40 (total)*	100	mg/kg	< 100

Client Sample ID			0407_QC262_200625
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-Au14260**
Date Sampled			**Jun 25, 2020**
Test/Reference	LOR	Unit	
Polycyclic Aromatic Hydrocarbons			
Benzo(a)pyrene TEQ (lower bound) *	0.5	mg/kg	2.2
Benzo(a)pyrene TEQ (medium bound) *	0.5	mg/kg	2.5
Benzo(a)pyrene TEQ (upper bound) *	0.5	mg/kg	2.7
Acenaphthene	0.5	mg/kg	< 0.5
Acenaphthylene	0.5	mg/kg	< 0.5
Anthracene	0.5	mg/kg	< 0.5
Benz(a)anthracene	0.5	mg/kg	0.8
Benzo(a)pyrene	0.5	mg/kg	1.6
Benzo(b&j)fluoranthene[N07]	0.5	mg/kg	2.0
Benzo(g.h.i)perylene	0.5	mg/kg	1.4
Benzo(k)fluoranthene	0.5	mg/kg	2.1
Chrysene	0.5	mg/kg	0.9
Dibenz(a.h)anthracene	0.5	mg/kg	< 0.5
Fluoranthene	0.5	mg/kg	1.1
Fluorene	0.5	mg/kg	< 0.5
Indeno(1.2.3-cd)pyrene	0.5	mg/kg	1.3
Naphthalene	0.5	mg/kg	< 0.5
Phenanthrene	0.5	mg/kg	< 0.5
Pyrene	0.5	mg/kg	1.2
Total PAH*	0.5	mg/kg	12.4
2-Fluorobiphenyl (surr.)	1	%	113
p-Terphenyl-d14 (surr.)	1	%	98
Organochlorine Pesticides			
Chlordanes - Total	0.1	mg/kg	< 0.1
4.4'-DDD	0.05	mg/kg	< 0.05
4.4'-DDE	0.05	mg/kg	< 0.05
4.4'-DDT	0.05	mg/kg	< 0.05
a-BHC	0.05	mg/kg	< 0.05
Aldrin	0.05	mg/kg	< 0.05
b-BHC	0.05	mg/kg	< 0.05
d-BHC	0.05	mg/kg	< 0.05
Dieldrin	0.05	mg/kg	< 0.05
Endosulfan I	0.05	mg/kg	< 0.05
Endosulfan II	0.05	mg/kg	< 0.05
Endosulfan sulphate	0.05	mg/kg	< 0.05
Endrin	0.05	mg/kg	< 0.05
Endrin aldehyde	0.05	mg/kg	< 0.05
Endrin ketone	0.05	mg/kg	< 0.05
g-BHC (Lindane)	0.05	mg/kg	< 0.05
Heptachlor	0.05	mg/kg	< 0.05
Heptachlor epoxide	0.05	mg/kg	< 0.05
Hexachlorobenzene	0.05	mg/kg	< 0.05
Methoxychlor	0.2	mg/kg	< 0.2
Toxaphene	1	mg/kg	< 1
Aldrin and Dieldrin (Total)*	0.05	mg/kg	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	< 0.2
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	< 0.2
Dibutylchlorendate (surr.)	1	%	103
Tetrachloro-m-xylene (surr.)	1	%	129

Client Sample ID			0407_QC262_200625
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-Au14260**
Date Sampled			**Jun 25, 2020**
Test/Reference	LOR	Unit	
Organophosphorus Pesticides			
Azinphos-methyl	0.2	mg/kg	< 0.2
Bolstar	0.2	mg/kg	< 0.2
Chlorfenvinphos	0.2	mg/kg	< 0.2
Chlorpyrifos	0.2	mg/kg	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	< 0.2
Coumaphos	2	mg/kg	< 2
Demeton-S	0.2	mg/kg	< 0.2
Demeton-O	0.2	mg/kg	< 0.2
Diazinon	0.2	mg/kg	< 0.2
Dichlorvos	0.2	mg/kg	< 0.2
Dimethoate	0.2	mg/kg	< 0.2
Disulfoton	0.2	mg/kg	< 0.2
EPN	0.2	mg/kg	< 0.2
Ethion	0.2	mg/kg	< 0.2
Ethoprop	0.2	mg/kg	< 0.2
Ethyl parathion	0.2	mg/kg	< 0.2
Fenitrothion	0.2	mg/kg	< 0.2
Fensulfothion	0.2	mg/kg	< 0.2
Fenthion	0.2	mg/kg	< 0.2
Malathion	0.2	mg/kg	< 0.2
Merphos	0.2	mg/kg	< 0.2
Methyl parathion	0.2	mg/kg	< 0.2
Mevinphos	0.2	mg/kg	< 0.2
Monocrotophos	2	mg/kg	< 2
Naled	0.2	mg/kg	< 0.2
Omethoate	2	mg/kg	< 2
Phorate	0.2	mg/kg	< 0.2
Pirimiphos-methyl	0.2	mg/kg	< 0.2
Pyrazophos	0.2	mg/kg	< 0.2
Ronnel	0.2	mg/kg	< 0.2
Terbufos	0.2	mg/kg	< 0.2
Tetrachlorvinphos	0.2	mg/kg	< 0.2
Tokuthion	0.2	mg/kg	< 0.2
Trichloronate	0.2	mg/kg	< 0.2
Triphenylphosphate (surr.)	1	%	88
Polychlorinated Biphenyls			
Aroclor-1016	0.5	mg/kg	< 0.5
Aroclor-1221	0.1	mg/kg	< 0.1
Aroclor-1232	0.5	mg/kg	< 0.5
Aroclor-1242	0.5	mg/kg	< 0.5
Aroclor-1248	0.5	mg/kg	< 0.5
Aroclor-1254	0.5	mg/kg	< 0.5
Aroclor-1260	0.5	mg/kg	< 0.5
Total PCB*	0.5	mg/kg	< 0.5
Dibutylchlorendate (surr.)	1	%	103
Tetrachloro-m-xylene (surr.)	1	%	129

Client Sample ID			0407_QC262_200625
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-Au14260**
Date Sampled			**Jun 25, 2020**
Test/Reference	LOR	Unit	
Phenols (Halogenated)			
2-Chlorophenol	0.5	mg/kg	< 0.5
2.4-Dichlorophenol	0.5	mg/kg	< 0.5
2.4.5-Trichlorophenol	1	mg/kg	< 1
2.4.6-Trichlorophenol	1	mg/kg	< 1
2.6-Dichlorophenol	0.5	mg/kg	< 0.5
4-Chloro-3-methylphenol	1	mg/kg	< 1
Pentachlorophenol	1	mg/kg	< 1
Tetrachlorophenols - Total	10	mg/kg	< 10
Total Halogenated Phenol*	1	mg/kg	< 1
Phenols (non-Halogenated)			
2-Cyclohexyl-4.6-dinitrophenol	20	mg/kg	< 20
2-Methyl-4.6-dinitrophenol	5	mg/kg	< 5
2-Methylphenol (o-Cresol)	0.2	mg/kg	< 0.2
2-Nitrophenol	1	mg/kg	< 1
2.4-Dimethylphenol	0.5	mg/kg	< 0.5
2.4-Dinitrophenol	5	mg/kg	< 5
3&4-Methylphenol (m&p-Cresol)	0.4	mg/kg	< 0.4
4-Nitrophenol	5	mg/kg	< 5
Dinoseb	20	mg/kg	< 20
Phenol	0.5	mg/kg	< 0.5
Total Non-Halogenated Phenol*	20	mg/kg	< 20
Phenol-d6 (surr.)	1	%	96
Heavy Metals			
Arsenic	2	mg/kg	< 2
Cadmium	0.4	mg/kg	< 0.4
Chromium	5	mg/kg	< 5
Copper	5	mg/kg	24
Lead	5	mg/kg	120
Mercury	0.1	mg/kg	< 0.1
Nickel	5	mg/kg	< 5
Zinc	5	mg/kg	39
% Moisture	1	%	12

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Sydney	Aug 13, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Sydney	Aug 13, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Aug 13, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Aug 13, 2020	
- Method: LTM-ORG-2010 TRH C6-C40			
Polycyclic Aromatic Hydrocarbons	Sydney	Aug 13, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (Halogenated)	Sydney	Aug 13, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (non-Halogenated)	Sydney	Aug 13, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Metals M8	Sydney	Aug 13, 2020	180 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Volatile Organics	Sydney	Aug 13, 2020	7 Days
- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices			
Eurofins Suite B15			
Organochlorine Pesticides	Sydney	Aug 13, 2020	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Organophosphorus Pesticides	Sydney	Aug 13, 2020	14 Days
- Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS			
Polychlorinated Biphenyls	Sydney	Aug 13, 2020	28 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
% Moisture	Sydney	Aug 10, 2020	14 Days
- Method: LTM-GEN-7080 Moisture			

eurofins | Environment Testing

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Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 736974
Phone: 02 9428 8100
Fax:

Received: Aug 10, 2020 2:00 PM
Due: Aug 17, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Asbestos - AS4964	Eurofins Suite B15	Volatile Organics	Moisture Set	Eurofins Suite B7A
Melbourne Laboratory - NATA Site # 1254 & 14271										
Sydney Laboratory - NATA Site # 18217						X	X	X	X	X
Brisbane Laboratory - NATA Site # 20794										
Perth Laboratory - NATA Site # 23736										
Newcastle Laboratory										
External Laboratory										
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**					
1	0407_QC262_200625	Jun 25, 2020		Soil	S20-Au14260	X	X	X	X	X
Test Counts						1	1	1	1	1

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

****NOTE:** pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram

mg/L: milligrams per litre

ug/L: micrograms per litre

ppm: Parts per million

ppb: Parts per billion

%: Percentage

org/100mL: Organisms per 100 millilitres

NTU: Nephelometric Turbidity Units

MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version 5.3
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling.Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	mg/kg	< 20			20	Pass	
Method Blank							
BTEX							
Benzene	mg/kg	< 0.1			0.1	Pass	
Toluene	mg/kg	< 0.1			0.1	Pass	
Ethylbenzene	mg/kg	< 0.1			0.1	Pass	
m&p-Xylenes	mg/kg	< 0.2			0.2	Pass	
o-Xylene	mg/kg	< 0.1			0.1	Pass	
Xylenes - Total*	mg/kg	< 0.3			0.3	Pass	
Method Blank							
Volatile Organics							
1.1-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
1.1.1-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.1.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dibromoethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.3-Trichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.4-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.3.5-Trimethylbenzene	mg/kg	< 0.5			0.5	Pass	
1.4-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
2-Butanone (MEK)	mg/kg	< 0.5			0.5	Pass	
2-Propanone (Acetone)	mg/kg	< 0.5			0.5	Pass	
4-Chlorotoluene	mg/kg	< 0.5			0.5	Pass	
4-Methyl-2-pentanone (MIBK)	mg/kg	< 0.5			0.5	Pass	
Allyl chloride	mg/kg	< 0.5			0.5	Pass	
Bromobenzene	mg/kg	< 0.5			0.5	Pass	
Bromochloromethane	mg/kg	< 0.5			0.5	Pass	
Bromodichloromethane	mg/kg	< 0.5			0.5	Pass	
Bromoform	mg/kg	< 0.5			0.5	Pass	
Bromomethane	mg/kg	< 0.5			0.5	Pass	
Carbon disulfide	mg/kg	< 0.5			0.5	Pass	
Carbon Tetrachloride	mg/kg	< 0.5			0.5	Pass	
Chlorobenzene	mg/kg	< 0.5			0.5	Pass	
Chloroethane	mg/kg	< 0.5			0.5	Pass	
Chloroform	mg/kg	< 0.5			0.5	Pass	
Chloromethane	mg/kg	< 0.5			0.5	Pass	
cis-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
cis-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Dibromochloromethane	mg/kg	< 0.5			0.5	Pass	
Dibromomethane	mg/kg	< 0.5			0.5	Pass	
Dichlorodifluoromethane	mg/kg	< 0.5			0.5	Pass	
Iodomethane	mg/kg	< 0.5			0.5	Pass	
Isopropyl benzene (Cumene)	mg/kg	< 0.5			0.5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Methylene Chloride	mg/kg	< 0.5			0.5	Pass	
Styrene	mg/kg	< 0.5			0.5	Pass	
Tetrachloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Trichloroethene	mg/kg	< 0.5			0.5	Pass	
Trichlorofluoromethane	mg/kg	< 0.5			0.5	Pass	
Vinyl chloride	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/kg	< 0.5			0.5	Pass	
TRH C6-C10	mg/kg	< 20			20	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/kg	< 0.5			0.5	Pass	
Acenaphthylene	mg/kg	< 0.5			0.5	Pass	
Anthracene	mg/kg	< 0.5			0.5	Pass	
Benz(a)anthracene	mg/kg	< 0.5			0.5	Pass	
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
Benzo(b&j)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Benzo(g.h.i)perylene	mg/kg	< 0.5			0.5	Pass	
Benzo(k)fluoranthene	mg/kg	< 0.5			0.5	Pass	
Chrysene	mg/kg	< 0.5			0.5	Pass	
Dibenz(a.h)anthracene	mg/kg	< 0.5			0.5	Pass	
Fluoranthene	mg/kg	< 0.5			0.5	Pass	
Fluorene	mg/kg	< 0.5			0.5	Pass	
Indeno(1.2.3-cd)pyrene	mg/kg	< 0.5			0.5	Pass	
Naphthalene	mg/kg	< 0.5			0.5	Pass	
Phenanthrene	mg/kg	< 0.5			0.5	Pass	
Pyrene	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Organochlorine Pesticides							
Chlordanes - Total	mg/kg	< 0.1			0.1	Pass	
4.4'-DDD	mg/kg	< 0.05			0.05	Pass	
4.4'-DDE	mg/kg	< 0.05			0.05	Pass	
4.4'-DDT	mg/kg	< 0.05			0.05	Pass	
a-BHC	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-BHC	mg/kg	< 0.05			0.05	Pass	
d-BHC	mg/kg	< 0.05			0.05	Pass	
Dieldrin	mg/kg	< 0.05			0.05	Pass	
Endosulfan I	mg/kg	< 0.05			0.05	Pass	
Endosulfan II	mg/kg	< 0.05			0.05	Pass	
Endosulfan sulphate	mg/kg	< 0.05			0.05	Pass	
Endrin	mg/kg	< 0.05			0.05	Pass	
Endrin aldehyde	mg/kg	< 0.05			0.05	Pass	
Endrin ketone	mg/kg	< 0.05			0.05	Pass	
g-BHC (Lindane)	mg/kg	< 0.05			0.05	Pass	
Heptachlor	mg/kg	< 0.05			0.05	Pass	
Heptachlor epoxide	mg/kg	< 0.05			0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05			0.05	Pass	
Methoxychlor	mg/kg	< 0.2			0.2	Pass	
Toxaphene	mg/kg	< 1			1	Pass	
Method Blank							

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Organophosphorus Pesticides							
Azinphos-methyl	mg/kg	< 0.2			0.2	Pass	
Bolstar	mg/kg	< 0.2			0.2	Pass	
Chlorfenvinphos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos-methyl	mg/kg	< 0.2			0.2	Pass	
Coumaphos	mg/kg	< 2			2	Pass	
Demeton-S	mg/kg	< 0.2			0.2	Pass	
Demeton-O	mg/kg	< 0.2			0.2	Pass	
Diazinon	mg/kg	< 0.2			0.2	Pass	
Dichlorvos	mg/kg	< 0.2			0.2	Pass	
Dimethoate	mg/kg	< 0.2			0.2	Pass	
Disulfoton	mg/kg	< 0.2			0.2	Pass	
EPN	mg/kg	< 0.2			0.2	Pass	
Ethion	mg/kg	< 0.2			0.2	Pass	
Ethoprop	mg/kg	< 0.2			0.2	Pass	
Ethyl parathion	mg/kg	< 0.2			0.2	Pass	
Fenitrothion	mg/kg	< 0.2			0.2	Pass	
Fensulfothion	mg/kg	< 0.2			0.2	Pass	
Fenthion	mg/kg	< 0.2			0.2	Pass	
Malathion	mg/kg	< 0.2			0.2	Pass	
Merphos	mg/kg	< 0.2			0.2	Pass	
Methyl parathion	mg/kg	< 0.2			0.2	Pass	
Mevinphos	mg/kg	< 0.2			0.2	Pass	
Monocrotophos	mg/kg	< 2			2	Pass	
Naled	mg/kg	< 0.2			0.2	Pass	
Omethoate	mg/kg	< 2			2	Pass	
Phorate	mg/kg	< 0.2			0.2	Pass	
Pirimiphos-methyl	mg/kg	< 0.2			0.2	Pass	
Pyrazophos	mg/kg	< 0.2			0.2	Pass	
Ronnel	mg/kg	< 0.2			0.2	Pass	
Terbufos	mg/kg	< 0.2			0.2	Pass	
Tetrachlorvinphos	mg/kg	< 0.2			0.2	Pass	
Tokuthion	mg/kg	< 0.2			0.2	Pass	
Trichloronate	mg/kg	< 0.2			0.2	Pass	
Method Blank							
Polychlorinated Biphenyls							
Aroclor-1016	mg/kg	< 0.5			0.5	Pass	
Aroclor-1221	mg/kg	< 0.1			0.1	Pass	
Aroclor-1232	mg/kg	< 0.5			0.5	Pass	
Aroclor-1242	mg/kg	< 0.5			0.5	Pass	
Aroclor-1248	mg/kg	< 0.5			0.5	Pass	
Aroclor-1254	mg/kg	< 0.5			0.5	Pass	
Aroclor-1260	mg/kg	< 0.5			0.5	Pass	
Total PCB*	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Phenols (Halogenated)							
2-Chlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
2.4.5-Trichlorophenol	mg/kg	< 1			1	Pass	
2.4.6-Trichlorophenol	mg/kg	< 1			1	Pass	
2.6-Dichlorophenol	mg/kg	< 0.5			0.5	Pass	
4-Chloro-3-methylphenol	mg/kg	< 1			1	Pass	
Pentachlorophenol	mg/kg	< 1			1	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Tetrachlorophenols - Total	mg/kg	< 10			10	Pass	
Method Blank							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	mg/kg	< 20			20	Pass	
2-Methyl-4.6-dinitrophenol	mg/kg	< 5			5	Pass	
2-Methylphenol (o-Cresol)	mg/kg	< 0.2			0.2	Pass	
2-Nitrophenol	mg/kg	< 1			1	Pass	
2.4-Dimethylphenol	mg/kg	< 0.5			0.5	Pass	
2.4-Dinitrophenol	mg/kg	< 5			5	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/kg	< 0.4			0.4	Pass	
4-Nitrophenol	mg/kg	< 5			5	Pass	
Dinoseb	mg/kg	< 20			20	Pass	
Phenol	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Nickel	mg/kg	< 5			5	Pass	
Zinc	mg/kg	< 5			5	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	100			70-130	Pass	
Toluene	%	104			70-130	Pass	
Ethylbenzene	%	103			70-130	Pass	
m&p-Xylenes	%	105			70-130	Pass	
o-Xylene	%	99			70-130	Pass	
Xylenes - Total*	%	103			70-130	Pass	
LCS - % Recovery							
Volatile Organics							
1.1-Dichloroethene	%	107			70-130	Pass	
1.1.1-Trichloroethane	%	94			70-130	Pass	
1.2-Dichlorobenzene	%	103			70-130	Pass	
1.2-Dichloroethane	%	98			70-130	Pass	
Trichloroethene	%	95			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	86			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	103			70-130	Pass	
Anthracene	%	77			70-130	Pass	
Benz(a)anthracene	%	89			70-130	Pass	
Benzo(a)pyrene	%	87			70-130	Pass	
Benzo(b&j)fluoranthene	%	89			70-130	Pass	
Benzo(g.h.i)perylene	%	106			70-130	Pass	
Benzo(k)fluoranthene	%	102			70-130	Pass	
Chrysene	%	96			70-130	Pass	
Dibenz(a.h)anthracene	%	107			70-130	Pass	
Fluoranthene	%	76			70-130	Pass	
Fluorene	%	89			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Indeno(1.2.3-cd)pyrene	%	112			70-130	Pass	
Naphthalene	%	91			70-130	Pass	
Phenanthrene	%	82			70-130	Pass	
Pyrene	%	74			70-130	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	82			70-130	Pass	
4.4'-DDD	%	75			70-130	Pass	
4.4'-DDE	%	87			70-130	Pass	
4.4'-DDT	%	92			70-130	Pass	
Aldrin	%	82			70-130	Pass	
b-BHC	%	79			70-130	Pass	
d-BHC	%	83			70-130	Pass	
Dieldrin	%	82			70-130	Pass	
Endosulfan I	%	89			70-130	Pass	
Endosulfan II	%	85			70-130	Pass	
Endosulfan sulphate	%	89			70-130	Pass	
Endrin	%	87			70-130	Pass	
Endrin aldehyde	%	85			70-130	Pass	
g-BHC (Lindane)	%	77			70-130	Pass	
Heptachlor	%	87			70-130	Pass	
Methoxychlor	%	77			70-130	Pass	
LCS - % Recovery							
Organophosphorus Pesticides							
Diazinon	%	83			70-130	Pass	
Dimethoate	%	78			70-130	Pass	
Ethion	%	83			70-130	Pass	
Fenitrothion	%	101			70-130	Pass	
Methyl parathion	%	116			70-130	Pass	
Mevinphos	%	87			70-130	Pass	
LCS - % Recovery							
Phenols (Halogenated)							
2-Chlorophenol	%	95			30-130	Pass	
2.4-Dichlorophenol	%	80			30-130	Pass	
2.6-Dichlorophenol	%	74			30-130	Pass	
Pentachlorophenol	%	79			30-130	Pass	
Tetrachlorophenols - Total	%	104			30-130	Pass	
LCS - % Recovery							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	%	72			30-130	Pass	
2-Methyl-4.6-dinitrophenol	%	82			30-130	Pass	
2-Methylphenol (o-Cresol)	%	79			30-130	Pass	
2.4-Dimethylphenol	%	89			30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	%	72			30-130	Pass	
4-Nitrophenol	%	79			30-130	Pass	
Dinoseb	%	91			30-130	Pass	
Phenol	%	102			30-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	97			80-120	Pass	
Cadmium	%	95			80-120	Pass	
Chromium	%	94			80-120	Pass	
Copper	%	92			80-120	Pass	
Lead	%	96			80-120	Pass	

Test			Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Mercury			%	93			80-120	Pass	
Nickel			%	94			80-120	Pass	
Zinc			%	88			80-120	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C6-C9	S20-Au07656	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C10-C14	S20-Au04841	NCP	mg/kg	< 20	< 20	<1	30%	Pass	
TRH C15-C28	S20-Au04841	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH C29-C36	S20-Au04841	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
Duplicate									
BTEX				Result 1	Result 2	RPD			
Benzene	S20-Au07656	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Toluene	S20-Au07656	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Ethylbenzene	S20-Au07656	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
m&p-Xylenes	S20-Au07656	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
o-Xylene	S20-Au07656	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Xylenes - Total*	S20-Au07656	NCP	mg/kg	< 0.3	< 0.3	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
TRH >C10-C16	S20-Au04841	NCP	mg/kg	< 50	< 50	<1	30%	Pass	
TRH >C16-C34	S20-Au04841	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
TRH >C34-C40	S20-Au04841	NCP	mg/kg	< 100	< 100	<1	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Acenaphthene	S20-Au15222	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Acenaphthylene	S20-Au15222	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Anthracene	S20-Au15222	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benz(a)anthracene	S20-Au15222	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(a)pyrene	S20-Au15222	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(b&j)fluoranthene	S20-Au15222	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(g.h.i)perylene	S20-Au15222	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Benzo(k)fluoranthene	S20-Au15222	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chrysene	S20-Au15222	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibenz(a.h)anthracene	S20-Au15222	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluoranthene	S20-Au15222	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Fluorene	S20-Au15222	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Indeno(1.2.3-cd)pyrene	S20-Au15222	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Naphthalene	S20-Au15222	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Phenanthrene	S20-Au15222	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Pyrene	S20-Au15222	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	S20-Au15222	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	S20-Au15222	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	S20-Au15222	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	S20-Au15222	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-BHC	S20-Au15222	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	S20-Au15222	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-BHC	S20-Au15222	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-BHC	S20-Au15222	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	S20-Au15222	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	S20-Au15222	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	S20-Au15222	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	

Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Endosulfan sulphate	S20-Au15222	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	S20-Au15222	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	S20-Au15222	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	S20-Au15222	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-BHC (Lindane)	S20-Au15222	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	S20-Au15222	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	S20-Au15222	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	S20-Au15222	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	S20-Au15222	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Organophosphorus Pesticides				Result 1	Result 2	RPD			
Azinphos-methyl	S20-Au15222	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Bolstar	S20-Au15222	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorfenvinphos	S20-Au15222	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos	S20-Au15222	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Chlorpyrifos-methyl	S20-Au15222	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Coumaphos	S20-Au15222	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Demeton-S	S20-Au15222	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Demeton-O	S20-Au15222	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Diazinon	S20-Au15222	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dichlorvos	S20-Au15222	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Dimethoate	S20-Au15222	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Disulfoton	S20-Au15222	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
EPN	S20-Au15222	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethion	S20-Au15222	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethoprop	S20-Au15222	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ethyl parathion	S20-Au15222	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenitrothion	S20-Au15222	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fensulfothion	S20-Au15222	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Fenthion	S20-Au15222	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Malathion	S20-Au15222	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Merphos	S20-Au15222	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Methyl parathion	S20-Au15222	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Mevinphos	S20-Au15222	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Monocrotophos	S20-Au15222	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Naled	S20-Au15222	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Omethoate	S20-Au15222	NCP	mg/kg	< 2	< 2	<1	30%	Pass	
Phorate	S20-Au15222	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pirimiphos-methyl	S20-Au15222	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Pyrazophos	S20-Au15222	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Ronnel	S20-Au15222	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Terbufos	S20-Au15222	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tetrachlorvinphos	S20-Au15222	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Tokuthion	S20-Au15222	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Trichloronate	S20-Au15222	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Duplicate									
Polychlorinated Biphenyls				Result 1	Result 2	RPD			
Aroclor-1016	S20-Au11432	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1221	S20-Au11432	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
Aroclor-1232	S20-Au11432	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1242	S20-Au11432	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1248	S20-Au11432	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1254	S20-Au11432	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Aroclor-1260	S20-Au11432	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Total PCB*	S20-Au11432	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	S20-Au14224	NCP	mg/kg	10	8.0	23	30%	Pass	
Cadmium	S20-Au14224	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	S20-Au14224	NCP	mg/kg	6.5	7.4	13	30%	Pass	
Copper	S20-Au15004	NCP	mg/kg	6.7	10	41	30%	Fail	Q15
Lead	S20-Au15004	NCP	mg/kg	26	20	27	30%	Pass	
Mercury	S20-Au14224	NCP	mg/kg	0.2	0.1	26	30%	Pass	
Nickel	S20-Au14224	NCP	mg/kg	12	9.4	26	30%	Pass	
Zinc	S20-Au14224	NCP	mg/kg	62	49	24	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	S20-Au14320	NCP	%	18	19	8.0	30%	Pass	

Comments

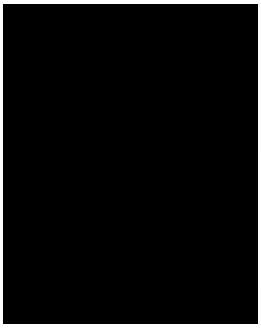
Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
Q15	The RPD reported passes Eurofins Environment Testing's QC - Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report.

Authorised By



Analytical Services Manager
Senior Analyst-Organic (NSW)
Senior Analyst-Metal (NSW)
Senior Analyst-Asbestos (NSW)

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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#AU04_Enviro_Sample_NSW

Subject: FW: 3 DAY TAT FW: 610.30041- Updated COC for Soil Samples

Importance: High

From: [redacted]@slrconsulting.com>
Sent: Thursday, 13 August 2020 3:26 PM
To: [redacted]ck@eurofins.com>
Cc: [redacted]@slrconsulting.com>
Subject: 610.30041- Updated COC for Soil Samples

EXTERNAL EMAIL*

Hello [redacted]

As stated in the email below, SGS have forwarded another two soil samples to your lab for analysis. There will be a note with the delivery about an updated COC.

Please use the points below as instruction for analysis on a three day turn around:

- QC201- analyse for metals only
- QC266- analyse for OCP/OPP only

Kind regards,

[redacted]

SLR

[redacted]

Project Consultant - Land Quality & Remediation

Please note in response to the COVID-19 Pandemic and physical distancing recommendations from the Australian Government,
SLR is encouraging staff to work remotely and implement flexible working hours if necessary.
If you have received this email outside of regular office hours, it is not expected that you will respond until your own working hours commence.

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Any advice or opinion is provided on the basis that it has been prepared by SLR with reasonable skill, care and diligence, taking account of the manpower, timescales

#737742

[redacted] Sydney)

From: [redacted]@slrconsulting.com>
Sent: Thursday, 13 August 2020 12:41 PM
To: [redacted] (Sydney)
Cc: [redacted] Sydney); [redacted] Sydney); [redacted]
Subject: RE: [EXTERNAL] FW: Some unlabelled samples

*** WARNING: this message is from an EXTERNAL SENDER. Please be cautious, particularly with links and attachments. ***

Thanks Paul.

- Please send the extraction of QC101 to Eurofins for metals only
- Please send QC266 to Eurofins for OCP/OPP only

SLR

will send proper COC

[redacted]
Project Consultant - Land Quality & Remediation

Please note in response to the COVID-19 Pandemic and physical distancing recommendations from the Australian Government, SLR is encouraging staff to work remotely and implement flexible working hours if necessary.
If you have received this email outside of regular office hours, it is not expected that you will respond until your own working hours commence.

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From: [redacted]@sgs.com>
Sent: Thursday, 13 August 2020 11:58 AM
To: [redacted]@slrconsulting.com>
Cc: [redacted]@sgs.com> [redacted] Sydney) [redacted]@sgs.com>
Subject: RE: [EXTERNAL] FW: Some unlabelled samples

#737742

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NATA # 1261 Site # 20794

Perth
2/91 Leach Highway
Kewdale WA 6105
Phone : +61 8 9251 9600
NATA # 1261
Site # 23736

Newcastle
4/52 Industrial Drive
Mayfield East NSW 2304
PO Box 60 Wickham 2293
Phone : +61 2 4968 8448

New Zealand

Auckland
35 O'Rorke Road
Penrose, Auckland 1061
Phone : +64 9 526 45 51
IANZ # 1327

Christchurch
43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

Sample Receipt Advice

Company name:	SLR Consulting (Sydney)
Contact name:	[redacted]
Project name:	Not provided
Project ID:	610.30041
Turnaround time:	3 Day
Date/Time received	Aug 13, 2020 4:52 PM
Eurofins reference	737742

Sample Information

✓	A detailed list of analytes logged into our LIMS, is included in the attached summary table.
✓	All samples have been received as described on the above COC.
✓	COC has been completed correctly.
✓	Attempt to chill was evident.
✓	Appropriately preserved sample containers have been used.
✓	All samples were received in good condition.
✓	Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.
✓	Appropriate sample containers have been used.
✓	Sample containers for volatile analysis received with zero headspace.
X	Split sample sent to requested external lab.
X	Some samples have been subcontracted.
N/A	Custody Seals intact (if used).

Notes

Contact

If you have any questions with respect to these samples, please contact your Analytical Services Manager:

[redacted] **on phone :** [redacted] **or by email:** [redacted]**@eurofins.com**

Results will be delivered electronically via email to [redacted]@slrconsulting.com.

Note: A copy of these results will also be delivered to the general SLR Consulting (Sydney) email address.

eurofins | Environment Testing

ABN: 50 005 085 521 web: www.eurofins.com.au email: EnviroSales@eurofins.com

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Site # 1254 & 14271

Sydney
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Lane Cove West NSW 2066
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

Brisbane
1/21 Smallwood Place
Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

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Phone : +64 9 526 45 51
IANZ # 1327

Christchurch
43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name:
Project ID: 610.30041

Order No.:
Report #: 737742
Phone: 02 9428 8100
Fax:

Received: Aug 13, 2020 4:52 PM
Due: Aug 18, 2020
Priority: 3 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Metals M8	Suite B14: OCP/OPP	Moisture Set
Melbourne Laboratory - NATA Site # 1254 & 14271								
Sydney Laboratory - NATA Site # 18217						X	X	X
Brisbane Laboratory - NATA Site # 20794								
Perth Laboratory - NATA Site # 23736								
Newcastle Laboratory								
External Laboratory								
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**			
1	QC201	Jun 15, 2020		Soil	S20-Au19914	X		X
2	QC266	Jun 25, 2020		Soil	S20-Au19915		X	X
Test Counts						1	1	2

SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus,
North Sydney
NSW 2060

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: [redacted]

Report **737742-S**
Project name
Project ID 610.30041
Received Date Aug 13, 2020

Client Sample ID			**QC201**	**QC266**
Sample Matrix			**Soil**	**Soil**
Eurofins Sample No.			**S20-Au19914**	**S20-Au19915**
Date Sampled			**Jun 15, 2020**	**Jun 25, 2020**
Test/Reference	LOR	Unit		
Heavy Metals				
Arsenic	2	mg/kg	< 2	-
Cadmium	0.4	mg/kg	< 0.4	-
Chromium	5	mg/kg	< 5	-
Copper	5	mg/kg	< 5	-
Lead	5	mg/kg	< 5	-
Mercury	0.1	mg/kg	< 0.1	-
Nickel	5	mg/kg	< 5	-
Zinc	5	mg/kg	< 5	-
% Moisture	1	%	1.7	< 1
Organochlorine Pesticides				
Chlordanes - Total	0.1	mg/kg	-	< 0.1
4.4'-DDD	0.05	mg/kg	-	< 0.05
4.4'-DDE	0.05	mg/kg	-	< 0.05
4.4'-DDT	0.05	mg/kg	-	< 0.05
a-BHC	0.05	mg/kg	-	< 0.05
Aldrin	0.05	mg/kg	-	< 0.05
b-BHC	0.05	mg/kg	-	< 0.05
d-BHC	0.05	mg/kg	-	< 0.05
Dieldrin	0.05	mg/kg	-	< 0.05
Endosulfan I	0.05	mg/kg	-	< 0.05
Endosulfan II	0.05	mg/kg	-	< 0.05
Endosulfan sulphate	0.05	mg/kg	-	< 0.05
Endrin	0.05	mg/kg	-	< 0.05
Endrin aldehyde	0.05	mg/kg	-	< 0.05
Endrin ketone	0.05	mg/kg	-	< 0.05
g-BHC (Lindane)	0.05	mg/kg	-	< 0.05
Heptachlor	0.05	mg/kg	-	< 0.05
Heptachlor epoxide	0.05	mg/kg	-	< 0.05
Hexachlorobenzene	0.05	mg/kg	-	< 0.05
Methoxychlor	0.2	mg/kg	-	< 0.2
Toxaphene	1	mg/kg	-	< 1
Aldrin and Dieldrin (Total)*	0.05	mg/kg	-	< 0.05
DDT + DDE + DDD (Total)*	0.05	mg/kg	-	< 0.05
Vic EPA IWRG 621 OCP (Total)*	0.1	mg/kg	-	< 0.2

Client Sample ID			QC201	QC266
Sample Matrix			Soil	Soil
Eurofins Sample No.			S20-Au19914	S20-Au19915
Date Sampled			Jun 15, 2020	Jun 25, 2020
Test/Reference	LOR	Unit		
Organochlorine Pesticides				
Vic EPA IWRG 621 Other OCP (Total)*	0.1	mg/kg	-	< 0.2
Dibutylchlorendate (surr.)	1	%	-	73
Tetrachloro-m-xylene (surr.)	1	%	-	68
Organophosphorus Pesticides				
Azinphos-methyl	0.2	mg/kg	-	< 0.2
Bolstar	0.2	mg/kg	-	< 0.2
Chlorfenvinphos	0.2	mg/kg	-	< 0.2
Chlorpyrifos	0.2	mg/kg	-	< 0.2
Chlorpyrifos-methyl	0.2	mg/kg	-	< 0.2
Coumaphos	2	mg/kg	-	< 2
Demeton-S	0.2	mg/kg	-	< 0.2
Demeton-O	0.2	mg/kg	-	< 0.2
Diazinon	0.2	mg/kg	-	< 0.2
Dichlorvos	0.2	mg/kg	-	< 0.2
Dimethoate	0.2	mg/kg	-	< 0.2
Disulfoton	0.2	mg/kg	-	< 0.2
EPN	0.2	mg/kg	-	< 0.2
Ethion	0.2	mg/kg	-	< 0.2
Ethoprop	0.2	mg/kg	-	< 0.2
Ethyl parathion	0.2	mg/kg	-	< 0.2
Fenitrothion	0.2	mg/kg	-	< 0.2
Fensulfothion	0.2	mg/kg	-	< 0.2
Fenthion	0.2	mg/kg	-	< 0.2
Malathion	0.2	mg/kg	-	< 0.2
Merphos	0.2	mg/kg	-	< 0.2
Methyl parathion	0.2	mg/kg	-	< 0.2
Mevinphos	0.2	mg/kg	-	< 0.2
Monocrotophos	2	mg/kg	-	< 2
Naled	0.2	mg/kg	-	< 0.2
Omethoate	2	mg/kg	-	< 2
Phorate	0.2	mg/kg	-	< 0.2
Pirimiphos-methyl	0.2	mg/kg	-	< 0.2
Pyrazophos	0.2	mg/kg	-	< 0.2
Ronnel	0.2	mg/kg	-	< 0.2
Terbufos	0.2	mg/kg	-	< 0.2
Tetrachlorvinphos	0.2	mg/kg	-	< 0.2
Tokuthion	0.2	mg/kg	-	< 0.2
Trichloronate	0.2	mg/kg	-	< 0.2
Triphenylphosphate (surr.)	1	%	-	76

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Metals M8	Sydney	Aug 14, 2020	180 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
% Moisture	Sydney	Aug 13, 2020	14 Days
- Method: LTM-GEN-7080 Moisture			
Organochlorine Pesticides	Sydney	Aug 14, 2020	14 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Organophosphorus Pesticides	Sydney	Aug 14, 2020	14 Days
- Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS			

eurofins | Environment Testing

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Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name:
Project ID: 610.30041

Order No.:
Report #: 737742
Phone: 02 9428 8100
Fax:

Received: Aug 13, 2020 4:52 PM
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Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Metals M8	Suite B14: OCP/OPP	Moisture Set
Melbourne Laboratory - NATA Site # 1254 & 14271								
Sydney Laboratory - NATA Site # 18217						X	X	X
Brisbane Laboratory - NATA Site # 20794								
Perth Laboratory - NATA Site # 23736								
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External Laboratory								
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**			
1	QC201	Jun 15, 2020		Soil	S20-Au19914	X		X
2	QC266	Jun 25, 2020		Soil	S20-Au19915		X	X
Test Counts						1	1	2

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

****NOTE:** pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram

mg/L: milligrams per litre

ug/L: micrograms per litre

ppm: Parts per million

ppb: Parts per billion

%: Percentage

org/100mL: Organisms per 100 millilitres

NTU: Nephelometric Turbidity Units

MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version 5.3
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling.Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Nickel	mg/kg	< 5			5	Pass	
Zinc	mg/kg	< 5			5	Pass	
Method Blank							
Organochlorine Pesticides							
Chlordanes - Total	mg/kg	< 0.1			0.1	Pass	
4.4'-DDD	mg/kg	< 0.05			0.05	Pass	
4.4'-DDE	mg/kg	< 0.05			0.05	Pass	
4.4'-DDT	mg/kg	< 0.05			0.05	Pass	
a-BHC	mg/kg	< 0.05			0.05	Pass	
Aldrin	mg/kg	< 0.05			0.05	Pass	
b-BHC	mg/kg	< 0.05			0.05	Pass	
d-BHC	mg/kg	< 0.05			0.05	Pass	
Dieldrin	mg/kg	< 0.05			0.05	Pass	
Endosulfan I	mg/kg	< 0.05			0.05	Pass	
Endosulfan II	mg/kg	< 0.05			0.05	Pass	
Endosulfan sulphate	mg/kg	< 0.05			0.05	Pass	
Endrin	mg/kg	< 0.05			0.05	Pass	
Endrin aldehyde	mg/kg	< 0.05			0.05	Pass	
Endrin ketone	mg/kg	< 0.05			0.05	Pass	
g-BHC (Lindane)	mg/kg	< 0.05			0.05	Pass	
Heptachlor	mg/kg	< 0.05			0.05	Pass	
Heptachlor epoxide	mg/kg	< 0.05			0.05	Pass	
Hexachlorobenzene	mg/kg	< 0.05			0.05	Pass	
Methoxychlor	mg/kg	< 0.2			0.2	Pass	
Toxaphene	mg/kg	< 1			1	Pass	
Method Blank							
Organophosphorus Pesticides							
Azinphos-methyl	mg/kg	< 0.2			0.2	Pass	
Bolstar	mg/kg	< 0.2			0.2	Pass	
Chlorfenvinphos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos	mg/kg	< 0.2			0.2	Pass	
Chlorpyrifos-methyl	mg/kg	< 0.2			0.2	Pass	
Coumaphos	mg/kg	< 2			2	Pass	
Demeton-S	mg/kg	< 0.2			0.2	Pass	
Demeton-O	mg/kg	< 0.2			0.2	Pass	
Diazinon	mg/kg	< 0.2			0.2	Pass	
Dichlorvos	mg/kg	< 0.2			0.2	Pass	
Dimethoate	mg/kg	< 0.2			0.2	Pass	
Disulfoton	mg/kg	< 0.2			0.2	Pass	
EPN	mg/kg	< 0.2			0.2	Pass	
Ethion	mg/kg	< 0.2			0.2	Pass	
Ethoprop	mg/kg	< 0.2			0.2	Pass	
Ethyl parathion	mg/kg	< 0.2			0.2	Pass	
Fenitrothion	mg/kg	< 0.2			0.2	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Fensulfothion	mg/kg	< 0.2			0.2	Pass	
Fenthion	mg/kg	< 0.2			0.2	Pass	
Malathion	mg/kg	< 0.2			0.2	Pass	
Merphos	mg/kg	< 0.2			0.2	Pass	
Methyl parathion	mg/kg	< 0.2			0.2	Pass	
Mevinphos	mg/kg	< 0.2			0.2	Pass	
Monocrotophos	mg/kg	< 2			2	Pass	
Naled	mg/kg	< 0.2			0.2	Pass	
Omethoate	mg/kg	< 2			2	Pass	
Phorate	mg/kg	< 0.2			0.2	Pass	
Pirimiphos-methyl	mg/kg	< 0.2			0.2	Pass	
Pyrazophos	mg/kg	< 0.2			0.2	Pass	
Ronnel	mg/kg	< 0.2			0.2	Pass	
Terbufos	mg/kg	< 0.2			0.2	Pass	
Tetrachlorvinphos	mg/kg	< 0.2			0.2	Pass	
Tokuthion	mg/kg	< 0.2			0.2	Pass	
Trichloronate	mg/kg	< 0.2			0.2	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	100			80-120	Pass	
Cadmium	%	101			80-120	Pass	
Chromium	%	111			80-120	Pass	
Copper	%	102			80-120	Pass	
Lead	%	101			80-120	Pass	
Mercury	%	104			80-120	Pass	
Nickel	%	104			80-120	Pass	
Zinc	%	102			80-120	Pass	
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	86			70-130	Pass	
4.4'-DDD	%	75			70-130	Pass	
4.4'-DDE	%	78			70-130	Pass	
4.4'-DDT	%	77			70-130	Pass	
a-BHC	%	76			70-130	Pass	
Aldrin	%	78			70-130	Pass	
b-BHC	%	83			70-130	Pass	
d-BHC	%	81			70-130	Pass	
Dieldrin	%	73			70-130	Pass	
Endosulfan I	%	83			70-130	Pass	
Endosulfan II	%	73			70-130	Pass	
Endosulfan sulphate	%	73			70-130	Pass	
Endrin	%	81			70-130	Pass	
Endrin aldehyde	%	93			70-130	Pass	
Endrin ketone	%	82			70-130	Pass	
g-BHC (Lindane)	%	93			70-130	Pass	
Heptachlor	%	78			70-130	Pass	
Heptachlor epoxide	%	73			70-130	Pass	
Hexachlorobenzene	%	76			70-130	Pass	
Methoxychlor	%	80			70-130	Pass	
LCS - % Recovery							
Organophosphorus Pesticides							
Diazinon	%	92			70-130	Pass	
Dimethoate	%	71			70-130	Pass	
Ethion	%	76			70-130	Pass	

Test			Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Fenitrothion			%	72			70-130	Pass	
Methyl parathion			%	74			70-130	Pass	
Mevinphos			%	88			70-130	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	S20-Au15370	NCP	%	92			75-125	Pass	
Cadmium	S20-Au15370	NCP	%	100			75-125	Pass	
Chromium	S20-Au15370	NCP	%	98			75-125	Pass	
Copper	S20-Au15370	NCP	%	96			75-125	Pass	
Lead	S20-Au09096	NCP	%	118			75-125	Pass	
Mercury	S20-Au15370	NCP	%	108			75-125	Pass	
Nickel	S20-Au15370	NCP	%	94			75-125	Pass	
Zinc	S20-Au15370	NCP	%	90			75-125	Pass	
Spike - % Recovery									
Organochlorine Pesticides				Result 1					
Chlordanes - Total	S20-Au14980	NCP	%	90			70-130	Pass	
4.4'-DDD	S20-Au14980	NCP	%	89			70-130	Pass	
4.4'-DDE	S20-Au14980	NCP	%	90			70-130	Pass	
4.4'-DDT	S20-Au17916	NCP	%	77			70-130	Pass	
a-BHC	S20-Au14980	NCP	%	80			70-130	Pass	
Aldrin	S20-Au14980	NCP	%	78			70-130	Pass	
b-BHC	S20-Au14980	NCP	%	85			70-130	Pass	
d-BHC	S20-Au14980	NCP	%	87			70-130	Pass	
Dieldrin	S20-Au14980	NCP	%	76			70-130	Pass	
Endosulfan I	S20-Au14980	NCP	%	86			70-130	Pass	
Endosulfan II	S20-Au14980	NCP	%	77			70-130	Pass	
Endosulfan sulphate	S20-Au14980	NCP	%	74			70-130	Pass	
Endrin	S20-Au14980	NCP	%	82			70-130	Pass	
Endrin aldehyde	S20-Au14980	NCP	%	74			70-130	Pass	
Endrin ketone	S20-Au14980	NCP	%	87			70-130	Pass	
g-BHC (Lindane)	S20-Au14980	NCP	%	89			70-130	Pass	
Heptachlor	S20-Au14980	NCP	%	81			70-130	Pass	
Heptachlor epoxide	S20-Au14980	NCP	%	77			70-130	Pass	
Hexachlorobenzene	S20-Au14980	NCP	%	80			70-130	Pass	
Methoxychlor	S20-Au11611	NCP	%	73			70-130	Pass	
Spike - % Recovery									
Organophosphorus Pesticides				Result 1					
Diazinon	S20-Au09053	NCP	%	100			70-130	Pass	
Dimethoate	S20-Au09053	NCP	%	92			70-130	Pass	
Ethion	S20-Au09053	NCP	%	105			70-130	Pass	
Fenitrothion	S20-Au09053	NCP	%	101			70-130	Pass	
Methyl parathion	S20-Au09053	NCP	%	100			70-130	Pass	
Mevinphos	S20-Au09053	NCP	%	128			70-130	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	S20-Au15369	NCP	mg/kg	2.7	4.3	46	30%	Fail	Q15
Cadmium	S20-Au15369	NCP	mg/kg	< 0.4	< 0.4	<1	30%	Pass	
Chromium	S20-Au15369	NCP	mg/kg	14	17	20	30%	Pass	
Copper	S20-Au15369	NCP	mg/kg	52	42	21	30%	Pass	
Lead	S20-Au15369	NCP	mg/kg	85	94	10	30%	Pass	
Mercury	S20-Au15369	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Nickel	S20-Au15369	NCP	mg/kg	47	41	14	30%	Pass	
Zinc	S20-Au15369	NCP	mg/kg	60	61	1.0	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	S20-Au20372	NCP	%	10	10	<1	30%	Pass	
Duplicate									
Organochlorine Pesticides				Result 1	Result 2	RPD			
Chlordanes - Total	S20-Au14979	NCP	mg/kg	< 0.1	< 0.1	<1	30%	Pass	
4.4'-DDD	S20-Au14979	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDE	S20-Au14979	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
4.4'-DDT	S20-Au14979	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
a-BHC	S20-Au14979	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Aldrin	S20-Au14979	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
b-BHC	S20-Au14979	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
d-BHC	S20-Au14979	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Dieldrin	S20-Au14979	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan I	S20-Au14979	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan II	S20-Au14979	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endosulfan sulphate	S20-Au14979	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin	S20-Au14979	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin aldehyde	S20-Au14979	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Endrin ketone	S20-Au14979	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
g-BHC (Lindane)	S20-Au14979	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor	S20-Au14979	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Heptachlor epoxide	S20-Au14979	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobenzene	S20-Au14979	NCP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Methoxychlor	S20-Au14979	NCP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
Q15	The RPD reported passes Eurofins Environment Testing's QC - Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report.

Authorised By

[redacted]

Analytical Services Manager
Senior Analyst-Organic (NSW)
Senior Analyst-Metal (NSW)

[redacted]

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

Eurofins shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd
ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☒ SYDNEY: 202 Submarine School, Sub Base Platypus, North Sydney, 2060
- ✓ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2601
- ☐ MACKAY: 21 River Street, Mackay, QLD 4741
- ☐ PERTH: 503 Murray Street, Perth, WA 6001
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4811
- ☐ DARWIN: 21 Parap Rd, Dawin, NT 0821

CLIENT: **Defence Housing Australia**
PROJECT: **Randwick Barracks**
PROJECT NUMBER: **610.30041**
PROJECT MANAGER: [redacted]
PM CONTACT N: [redacted]

LABORATORY: **SGS**
LABORATORY ADDRESS: **Unit 16/33 Maddox St, Alexandria NSW 2015**
SAMPLER: [redacted]
SAMPLER CONTACT No: [redacted]
Email Reports and Invoices to: **LQRSYD@slrconsulting.com,** [redacted]

Turnaround Time (TAT)
✓ **Standard TAT**
☐ **Non Standard or Urgent TAT**
Required TAT: Standard

COC Number: 3 of 4

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	TRH/BTEXN/PAHs/VOC	Suit B and G + OCP/OPPs	Suite C	TRH fraction C6-C10 and PFAS				HOLD	Additional Information (Comment on any gross contamination or specific requirements)
	0407_QC189_201015	15-10-2020	Soil				x						
	0407_QC289_201015	15-10-2020	Soil										Please send to Eurofins for Suite C
	0407_STWR001_BH01_0.2-0.3_201015	15-10-2020	Soil				x						
	0407_STWR001_BH01_1.5-1.6_201015	15-10-2020	Soil				x						
	0407_QC191_201015	15-10-2020	Soil				x						
	0407_QC291_201015	15-10-2020	Soil										Please send to Eurofins for Suite C
	0407_STWR001_BH02_0.2-0.3_201015	15-10-2020	Soil				x						
	0407_STWR001_BH02_1.5-1.6_201015	15-10-2020	Soil				x						
	0407_STWR001_BH02_3.5-3.6_201015	15-10-2020	Soil									x	
	0407_QC192_201015	15-10-2020	Soil				x						
	0407_QC292_201015	15-10-2020	Soil										Please send to Eurofins for Suite C
	0407_STWR002_0.2-0.3_201015	15-10-2020	Soil				x						
	0407_STWR002_0.5-0.6_201015	15-10-2020	Soil				x						
	0407_STWR002_1.9-2.0_201015	15-10-2020	Soil									x	
	0407_QC190_201015	15-10-2020	Soil				x						
	0407_QC290_201015	15-10-2020	Soil										Please send to Eurofins for Suite C

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 15-10-2020	**Received by**	Sig [redacted]	Date / Time 16/10/20	**Temperature Received:**	3pm
Relinquished By	Sign	Date / Time	**Received by**	Sig	Date / Time	14.3°C	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time		

751490

eurofins | Environment Testing

ABN: 50 005 085 521 www.eurofins.com.au EnviroSales@eurofins.com

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Site # 1254 & 14271

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NATA # 1261 Site # 18217

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NATA # 1261 Site # 20794

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IANZ # 1327

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Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

Sample Receipt Advice

Company name:	SLR Consulting (Sydney)
Contact name:	[redacted]
Project name:	RANDWICK BARRACKS
Project ID:	610.30041
Turnaround time:	5 Day
Date/Time received	Oct 26, 2020 9:04 AM
Eurofins reference	751490

Sample Information

✓	A detailed list of analytes logged into our LIMS, is included in the attached summary table.
✓	All samples have been received as described on the above COC.
✓	COC has been completed correctly.
✓	Attempt to chill was evident.
✓	Appropriately preserved sample containers have been used.
✓	All samples were received in good condition.
✓	Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.
✓	Appropriate sample containers have been used.
✓	Sample containers for volatile analysis received with zero headspace.
X	Split sample sent to requested external lab.
X	Some samples have been subcontracted.
N/A	Custody Seals intact (if used).

Notes

Contact

If you have any questions with respect to these samples, please contact your Analytical Services Manager:

[redacted] **on phone :** [redacted] **or by email:** [redacted]**@eurofins.com**

Results will be delivered electronically via email to Hugh Selby - hselby@slrconsulting.com.

Note: A copy of these results will also be delivered to the general SLR Consulting (Sydney) email address.

Global Leader - Results you can trust

eurofins | Environment Testing

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Phone : 0800 856 450
IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 751490
Phone: 02 9428 8100
Fax:

Received: Oct 26, 2020 9:04 AM
Due: Nov 2, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Ammonia (as N)	Nitrate (as N)	Sulphate (as SO4)	Chlorinated Hydrocarbons	Metals M8	Halogenated Volatile Organics	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)
Melbourne Laboratory - NATA Site # 1254 & 14271							X		X				
Sydney Laboratory - NATA Site # 18217						X		X		X	X	X	
Brisbane Laboratory - NATA Site # 20794													X
Perth Laboratory - NATA Site # 23736													
Mayfield Laboratory													
External Laboratory													
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**								
1	0407_QC289_201015	Oct 15, 2020		Soil	S20-Oc32268	X	X	X	X	X	X	X	X
2	0407_QC291_201015	Oct 15, 2020		Soil	S20-Oc32269	X	X	X	X	X	X	X	X
3	0407_QC292_201015	Oct 15, 2020		Soil	S20-Oc32270	X	X	X	X	X	X	X	X
4	0407_QC290_201015	Oct 15, 2020		Soil	S20-Oc32271	X	X	X	X	X	X	X	X
Test Counts						4	4	4	4	4	4	4	4

SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus,
North Sydney
NSW 2060

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: [redacted]

Report **751490-S**
Project name RANDWICK BARRACKS
Project ID 610.30041
Received Date Oct 16, 2020

Client Sample ID			**0407_QC289_201015**	**0407_QC291_201015**	**0407_QC292_201015**	**0407_QC290_201015**
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-Oc32268**	**S20-Oc32269**	**S20-Oc32270**	**S20-Oc32271**
Date Sampled			**Oct 15, 2020**	**Oct 15, 2020**	**Oct 15, 2020**	**Oct 15, 2020**
Test/Reference	LOR	Unit				
Halogenated Volatile Organics						
1.1-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromoform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Bromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloroform	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Chloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Iodomethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Methylene Chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5	< 0.5	< 0.5	< 0.5

Client Sample ID			0407_QC289_201015	0407_QC291_201015	0407_QC292_201015	0407_QC290_201015
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S20-Oc32268	S20-Oc32269	S20-Oc32270	S20-Oc32271
Date Sampled			Oct 15, 2020	Oct 15, 2020	Oct 15, 2020	Oct 15, 2020
Test/Reference	LOR	Unit				
Halogenated Volatile Organics						
4-Bromofluorobenzene (surr.)	1	%	107	109	110	105
Toluene-d8 (surr.)	1	%	105	106	111	106
Chlorinated Hydrocarbons						
1.2-Dichlorobenzene	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
1.2.3-Trichlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
1.2.3.4-Tetrachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
1.2.3.5-Tetrachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
1.2.4-Trichlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
1.2.4.5-Tetrachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
1.3-Dichlorobenzene	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
1.3.5-Trichlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
1.4-Dichlorobenzene	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Benzal chloride	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Benzotrichloride	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Benzyl chloride	0.2	mg/kg	< 0.2	< 0.2	< 0.2	< 0.2
Hexachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorobutadiene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Hexachlorocyclopentadiene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Hexachloroethane	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Pentachlorobenzene	0.05	mg/kg	< 0.05	< 0.05	< 0.05	< 0.05
Tetrachloro-m-xylene (surr.)	1	%	77	89	INT	INT
Ammonia (as N)	5	mg/kg	< 5	< 5	< 5	< 5
Nitrate (as N)	5	mg/kg	< 5	< 5	< 5	< 5
Sulphate (as SO4)	10	mg/kg	14	200	100	73
% Moisture	1	%	2.7	8.0	2.0	8.3
Heavy Metals						
Arsenic	2	mg/kg	< 2	< 2	< 2	< 2
Cadmium	0.4	mg/kg	< 0.4	< 0.4	< 0.4	< 0.4
Chromium	5	mg/kg	< 5	< 5	< 5	< 5
Copper	5	mg/kg	< 5	< 5	< 5	< 5
Lead	5	mg/kg	< 5	7.0	< 5	< 5
Mercury	0.1	mg/kg	< 0.1	< 0.1	< 0.1	< 0.1
Nickel	5	mg/kg	< 5	< 5	< 5	< 5
Zinc	5	mg/kg	< 5	12	11	< 5
Perfluoroalkyl carboxylic acids (PFCAs)						
Perfluorobutanoic acid (PFBA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropentanoic acid (PFPeA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorohexanoic acid (PFHxA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroheptanoic acid (PFHpA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorooctanoic acid (PFOA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorononanoic acid (PFNA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorodecanoic acid (PFDA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroundecanoic acid (PFUnDA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorododecanoic acid (PFDoDA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorotridecanoic acid (PFTrDA)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorotetradecanoic acid (PFTeDA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
13C4-PFBA (surr.)	1	%	121	130	111	124

Client Sample ID			0407_QC289_201015	0407_QC291_201015	0407_QC292_201015	0407_QC290_201015
Sample Matrix			Soil	Soil	Soil	Soil
Eurofins Sample No.			S20-Oc32268	S20-Oc32269	S20-Oc32270	S20-Oc32271
Date Sampled			Oct 15, 2020	Oct 15, 2020	Oct 15, 2020	Oct 15, 2020
Test/Reference	LOR	Unit				
Perfluoroalkyl carboxylic acids (PFCAs)						
13C5-PFPeA (surr.)	1	%	141	144	132	125
13C5-PFHxA (surr.)	1	%	130	136	124	115
13C4-PFHpA (surr.)	1	%	97	113	95	106
13C8-PFOA (surr.)	1	%	117	128	113	125
13C5-PFNA (surr.)	1	%	129	140	118	123
13C6-PFDA (surr.)	1	%	148	155	135	146
13C2-PFUnDA (surr.)	1	%	140	147	128	138
13C2-PFDoDA (surr.)	1	%	150	153	146	151
13C2-PFTeDA (surr.)	1	%	126	158	124	144
Perfluoroalkyl sulfonamido substances						
Perfluorooctane sulfonamide (FOSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)[N11]	10	ug/kg	< 10	< 10	< 10	< 10
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)[N11]	10	ug/kg	< 10	< 10	< 10	< 10
13C8-FOSA (surr.)	1	%	97	113	89	103
D3-N-MeFOSA (surr.)	1	%	73	71	68	81
D5-N-EtFOSA (surr.)	1	%	98	117	102	111
D7-N-MeFOSE (surr.)	1	%	112	112	141	112
D9-N-EtFOSE (surr.)	1	%	126	127	146	127
D5-N-EtFOSAA (surr.)	1	%	117	124	113	118
D3-N-MeFOSAA (surr.)	1	%	108	121	109	108
Perfluoroalkyl sulfonic acids (PFSAs)						
Perfluorobutanesulfonic acid (PFBS)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorononanesulfonic acid (PFNS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropropanesulfonic acid (PFPrS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoropentanesulfonic acid (PFPeS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorohexanesulfonic acid (PFHxS)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluoroheptanesulfonic acid (PFHpS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorooctanesulfonic acid (PFOS)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
Perfluorodecanesulfonic acid (PFDS)[N15]	5	ug/kg	< 5	< 5	< 5	< 5
13C3-PFBS (surr.)	1	%	141	141	131	129
18O2-PFHxS (surr.)	1	%	125	134	122	126
13C8-PFOS (surr.)	1	%	133	141	121	132
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)[N11]	10	ug/kg	< 10	< 10	< 10	< 10
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	5	ug/kg	< 5	< 5	< 5	< 5
13C2-4:2 FTSA (surr.)	1	%	78	86	65	72
13C2-6:2 FTSA (surr.)	1	%	126	111	107	131

Client Sample ID			0407_QC289_201015	0407_QC291_201015	0407_QC292_201015	0407_QC290_201015
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-Oc32268**	**S20-Oc32269**	**S20-Oc32270**	**S20-Oc32271**
Date Sampled			**Oct 15, 2020**	**Oct 15, 2020**	**Oct 15, 2020**	**Oct 15, 2020**
Test/Reference	LOR	Unit				
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)						
13C2-8:2 FTSA (surr.)	1	%	93	123	111	96
13C2-10:2 FTSA (surr.)	1	%	104	119	102	109
PFASs Summations						
Sum (PFHxS + PFOS)*	5	ug/kg	< 5	< 5	< 5	< 5
Sum of US EPA PFAS (PFOS + PFOA)*	5	ug/kg	< 5	< 5	< 5	< 5
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	5	ug/kg	< 5	< 5	< 5	< 5
Sum of WA DWER PFAS (n=10)*	10	ug/kg	< 10	< 10	< 10	< 10
Sum of PFASs (n=30)*	50	ug/kg	< 50	< 50	< 50	< 50

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Halogenated Volatile Organics	Sydney	Oct 28, 2020	7 Days
- Method: E016 Volatile Halogenated Compounds (VHC)			
Chlorinated Hydrocarbons	Melbourne	Nov 02, 2020	14 Days
- Method: USEPA 8121 Chlorinated Hydrocarbons			
Ammonia (as N)	Sydney	Oct 28, 2020	28 Days
- Method: LTM-INO-4200 Ammonia by Discrete Analyser			
Nitrate (as N)	Melbourne	Nov 02, 2020	28 Days
- Method: LTM-INO-4120 Analysis of NOx NO2 NH3 by FIA			
Sulphate (as SO4)	Sydney	Oct 28, 2020	28 Days
- Method: E045 Anions by Ion Chromatography			
Metals M8	Sydney	Oct 28, 2020	180 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
% Moisture	Sydney	Oct 26, 2020	14 Days
- Method: LTM-GEN-7080 Moisture			
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs)	Brisbane	Oct 27, 2020	180 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonamido substances	Brisbane	Oct 27, 2020	14 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonic acids (PFSAs)	Brisbane	Oct 27, 2020	180 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)	Brisbane	Oct 27, 2020	180 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

****NOTE:** pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram
mg/L: milligrams per litre
ug/L: micrograms per litre
ppm: Parts per million
ppb: Parts per billion
%: Percentage
org/100mL: Organisms per 100 millilitres
NTU: Nephelometric Turbidity Units
MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version 5.3
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling.Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Heavy Metals							
Arsenic	mg/kg	0			2	Pass	
Cadmium	mg/kg	0.0038			0.4	Pass	
Chromium	mg/kg	0.13			5	Pass	
Copper	mg/kg	0.0087			5	Pass	
Lead	mg/kg	0.048			5	Pass	
Mercury	mg/kg	0.037			0.1	Pass	
Nickel	mg/kg	0.006			5	Pass	
Zinc	mg/kg	0.027			5	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	99			80-120	Pass	
Cadmium	%	99			80-120	Pass	
Chromium	%	99			80-120	Pass	
Copper	%	95			80-120	Pass	
Lead	%	100			80-120	Pass	
Mercury	%	95			80-120	Pass	
Nickel	%	100			80-120	Pass	
Zinc	%	97			80-120	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1					
Perfluorobutanoic acid (PFBA)	S20-Oc32271	CP	%	102			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	S20-Oc32271	CP	%	99			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	S20-Oc32271	CP	%	101			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	S20-Oc32271	CP	%	106			50-150	Pass	
Perfluorooctanoic acid (PFOA)	S20-Oc32271	CP	%	93			50-150	Pass	
Perfluorononanoic acid (PFNA)	S20-Oc32271	CP	%	104			50-150	Pass	
Perfluorodecanoic acid (PFDA)	S20-Oc32271	CP	%	88			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	S20-Oc32271	CP	%	109			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	S20-Oc32271	CP	%	115			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	S20-Oc32271	CP	%	96			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	S20-Oc32271	CP	%	102			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonamido substances				Result 1					
Perfluorooctane sulfonamide (FOSA)	S20-Oc32271	CP	%	107			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	S20-Oc32271	CP	%	122			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	S20-Oc32271	CP	%	122			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	S20-Oc32271	CP	%	85			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	S20-Oc32271	CP	%	115			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	S20-Oc32271	CP	%	105			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	S20-Oc32271	CP	%	106			50-150	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1					
Perfluorobutanesulfonic acid (PFBS)	S20-Oc32271	CP	%	90			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	S20-Oc32271	CP	%	111			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	S20-Oc32271	CP	%	110			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	S20-Oc32271	CP	%	98			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	S20-Oc32271	CP	%	87			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	S20-Oc32271	CP	%	116			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	S20-Oc32271	CP	%	97			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	S20-Oc32271	CP	%	107			50-150	Pass	
Spike - % Recovery									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1					
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	S20-Oc32271	CP	%	100			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	S20-Oc32271	CP	%	98			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	S20-Oc32271	CP	%	92			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	S20-Oc32271	CP	%	119			50-150	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD			
Perfluorobutanoic acid (PFBA)	S20-Oc32270	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	S20-Oc32270	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	S20-Oc32270	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	S20-Oc32270	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	S20-Oc32270	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	S20-Oc32270	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	S20-Oc32270	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	S20-Oc32270	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	S20-Oc32270	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	S20-Oc32270	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	S20-Oc32270	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
Perfluorooctane sulfonamide (FOSA)	S20-Oc32270	CP	ug/kg	< 5	< 5	<1	30%	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	S20-Oc32270	CP	ug/kg	< 5	< 5	<1	30%	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	S20-Oc32270	CP	ug/kg	< 5	< 5	<1	30%	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	S20-Oc32270	CP	ug/kg	< 5	< 5	<1	30%	Pass	

Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	S20-Oc32270	CP	ug/kg	< 5	< 5	<1	30%	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	S20-Oc32270	CP	ug/kg	< 10	< 10	<1	30%	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	S20-Oc32270	CP	ug/kg	< 10	< 10	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD			
Perfluorobutanesulfonic acid (PFBS)	S20-Oc32270	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorononanesulfonic acid (PFNS)	S20-Oc32270	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropropanesulfonic acid (PFPrS)	S20-Oc32270	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropentanesulfonic acid (PFPeS)	S20-Oc32270	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorohexanesulfonic acid (PFHxS)	S20-Oc32270	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	S20-Oc32270	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorooctanesulfonic acid (PFOS)	S20-Oc32270	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorodecanesulfonic acid (PFDS)	S20-Oc32270	CP	ug/kg	< 5	< 5	<1	30%	Pass	
Duplicate									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1	Result 2	RPD			
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	S20-Oc32270	CP	ug/kg	< 5	< 5	<1	30%	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	S20-Oc32270	CP	ug/kg	< 10	< 10	<1	30%	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	S20-Oc32270	CP	ug/kg	< 5	< 5	<1	30%	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	S20-Oc32270	CP	ug/kg	< 5	< 5	<1	30%	Pass	

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N11	Isotope dilution is used for calibration of each native compound for which an exact labelled analogue is available (Isotope Dilution Quantitation). The isotopically labelled analogues allow identification and recovery correction of the concentration of the associated native PFAS compounds.
N15	Where the native PFAS compound does not have labelled analogue then the quantification is made using the Extracted Internal Standard Analyte with the closest retention time to the analyte and no recovery correction has been made (Internal Standard Quantitation).

Authorised By

[redacted]

Analytical Services Manager
Senior Analyst-Inorganic (NSW)
Senior Analyst-Metal (NSW)
Senior Analyst-Organic (VIC)
Senior Analyst-PFAS (QLD)
Senior Analyst-Inorganic (VIC)

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd
ABN 29 001 584 612

PROJECT OFFICE (Tick one)

☐	BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000	☐	GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227	☐	NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305	☒	SYDNEY: 202 Submarine School, Sub Base Platypus, North Sydney, 2060	✓	MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
☐	CANBERRA: GPO Box 410, Canberra, ACT 2601	☐	MACKAY: 21 River Street, Mackay, QLD 4741	☐	PERTH: 503 Murray Street, Perth, WA 6001	☐	TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4811	☐	DARWIN: 21 Parap Rd, Dawin, NT 0821

CLIENT: Defence Housing Australia
PROJECT: Randwick Barracks
PROJECT NUMBER: 610.30041
PROJECT MANAGER: [redacted]
PM CONTACT No: [redacted]

LABORATORY: SGS
LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015
SAMPLER: [redacted]
SAMPLER CONTACT No: [redacted]
Email Reports and Invoices to: LQRSYD@slrconsulting.com, [redacted]

Turnaround Time (TAT)
✓ Standard TAT
☐ Non Standard or Urgent TAT
Required TAT: Standard

COC Number 2 of 3

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: TRH/BTEXN/PAHs/VOCs	Suit B and G + OCP/OPPs	Suite C	TRH fraction C6-C10 and PFAS				HOLD	Additional Information (Comment on any gross contamination or specific requirements)
	0407_SYDSEW05_0.2-0.3_201016	16-10-2020	Soil				x						
	0407_SYDSEW05_0.6-0.7_201016	16-10-2020	Soil				x						
	0407_SYDSEW05_1.8-1.9_201016	16-10-2020	Soil									x	
	0407_SYDSEW06_0.2-0.3_201016	16-10-2020	Soil				x						
	0407_SYDSEW06_0.6-0.7_201016	16-10-2020	Soil									x	
	0407_SYDSEW06_1.8-1.9_201016	16-10-2020	Soil									x	
	0407_SYDSEW06_2.9-3.0_201016	16-10-2020	Soil				x						
	0407_QC193_201016	16-10-2020	Soil				x						
	0407_QC293_201016	16-10-2020	Soil										Please send to Eurofins for Suite C
	0407_SYDSEW07_0.2-0.3_201016	16-10-2020	Soil				x						
	0407_SYDSEW07_0.6-0.7_201016	16-10-2020	Soil				x						
	0407_SYDSEW07_1.7-1.8_201016	16-10-2020	Soil									x	
	0407_SYDSEW07_3.0-3.1_201016	16-10-2020	Soil									x	
	0407_SYDSEW08_0.2-0.3_201016	16-10-2020	Soil				x						
	0407_SYDSEW08_0.6-0.7_201016	16-10-2020	Soil									x	
	0407_SYDSEW08_1.7-1.8_201016	16-10-2020	Soil				x						

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time	16-10-2020	Received by	Sign [redacted]	Date / Time	19/10/20
Relinquished By	Sign	Date / Time		Received by	Sign	Date / Time	
Relinquished By	Sign	Date / Time		Received by	Sign	Date / Time	

Temperature Received: 250pm

7-53

751492

eurofins | Environment Testing

ABN: 50 005 085 521 www.eurofins.com.au EnviroSales@eurofins.com

Australia

Melbourne
6 Monterey Road
Dandenong South VIC 3175
Phone : +61 3 8564 5000
NATA # 1261
Site # 1254 & 14271

Sydney
Unit F3, Building F
16 Mars Road
Lane Cove West NSW 2066
Phone : +61 2 9900 8400
NATA # 1261 Site # 18217

Brisbane
1/21 Smallwood Place
Murarrie QLD 4172
Phone : +61 7 3902 4600
NATA # 1261 Site # 20794

Perth
2/91 Leach Highway
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NATA # 1261
Site # 23736

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New Zealand

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Penrose, Auckland 1061
Phone : +64 9 526 45 51
IANZ # 1327

Christchurch
43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

Sample Receipt Advice

Company name:	SLR Consulting (Sydney)
Contact name:	[redacted]
Project name:	RANDWICK BARRACKS
Project ID:	610.30041
Turnaround time:	5 Day
Date/Time received	Oct 26, 2020 9:54 AM
Eurofins reference	751492

Sample Information

✓	A detailed list of analytes logged into our LIMS, is included in the attached summary table.
✓	All samples have been received as described on the above COC.
✓	COC has been completed correctly.
✓	Attempt to chill was evident.
✓	Appropriately preserved sample containers have been used.
✓	All samples were received in good condition.
✓	Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.
✓	Appropriate sample containers have been used.
✓	Sample containers for volatile analysis received with zero headspace.
X	Split sample sent to requested external lab.
X	Some samples have been subcontracted.
N/A	Custody Seals intact (if used).

Notes

Contact

If you have any questions with respect to these samples, please contact your Analytical Services Manager:

[redacted] **on phone :** [redacted] **or by email:** [redacted] **@eurofins.com**

Results will be delivered electronically via email to Hugh Selby - hselby@slrconsulting.com.

Note: A copy of these results will also be delivered to the general SLR Consulting (Sydney) email address.

Global Leader - Results you can trust

eurofins | Environment Testing

ABN: 50 005 085 521 web: www.eurofins.com.au email: EnviroSales@eurofins.com

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Christchurch
43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 751492
Phone: 02 9428 8100
Fax:

Received: Oct 26, 2020 9:54 AM
Due: Nov 2, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Ammonia (as N)	Nitrate (as N)	Sulphate (as SO4)	Chlorinated Hydrocarbons	Metals M8	Halogenated Volatile Organics	Moisture Set	Per- and Polyfluoroalkyl Substances (PFASs)
Melbourne Laboratory - NATA Site # 1254 & 14271							X		X				
Sydney Laboratory - NATA Site # 18217						X		X		X	X	X	
Brisbane Laboratory - NATA Site # 20794													X
Perth Laboratory - NATA Site # 23736													
Mayfield Laboratory													
External Laboratory													
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**								
1	0407_QC293_201016	Oct 16, 2020		Soil	S20-Oc32272	X	X	X	X	X	X	X	X
Test Counts						1	1	1	1	1	1	1	1

SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus,
North Sydney
NSW 2060

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: [redacted]

Report **751492-S**
Project name RANDWICK BARRACKS
Project ID 610.30041
Received Date Oct 26, 2020

Client Sample ID			**0407_QC293_201016**
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-Oc32272**
Date Sampled			**Oct 16, 2020**
Test/Reference	LOR	Unit	
Halogenated Volatile Organics			
1.1-Dichloroethane	0.5	mg/kg	< 0.5
1.1-Dichloroethene	0.5	mg/kg	< 0.5
1.1.1-Trichloroethane	0.5	mg/kg	< 0.5
1.1.1.2-Tetrachloroethane	0.5	mg/kg	< 0.5
1.1.2-Trichloroethane	0.5	mg/kg	< 0.5
1.1.2.2-Tetrachloroethane	0.5	mg/kg	< 0.5
1.2-Dibromoethane	0.5	mg/kg	< 0.5
1.2-Dichlorobenzene	0.5	mg/kg	< 0.5
1.2-Dichloroethane	0.5	mg/kg	< 0.5
1.2-Dichloropropane	0.5	mg/kg	< 0.5
1.2.3-Trichloropropane	0.5	mg/kg	< 0.5
1.3-Dichlorobenzene	0.5	mg/kg	< 0.5
1.3-Dichloropropane	0.5	mg/kg	< 0.5
1.4-Dichlorobenzene	0.5	mg/kg	< 0.5
Bromodichloromethane	0.5	mg/kg	< 0.5
Bromoform	0.5	mg/kg	< 0.5
Bromomethane	0.5	mg/kg	< 0.5
Carbon Tetrachloride	0.5	mg/kg	< 0.5
Chlorobenzene	0.5	mg/kg	< 0.5
Chloroform	0.5	mg/kg	< 0.5
Chloromethane	0.5	mg/kg	< 0.5
cis-1.2-Dichloroethene	0.5	mg/kg	< 0.5
cis-1.3-Dichloropropene	0.5	mg/kg	< 0.5
Dibromochloromethane	0.5	mg/kg	< 0.5
Dibromomethane	0.5	mg/kg	< 0.5
Iodomethane	0.5	mg/kg	< 0.5
Methylene Chloride	0.5	mg/kg	< 0.5
Tetrachloroethene	0.5	mg/kg	< 0.5
trans-1.2-Dichloroethene	0.5	mg/kg	< 0.5
trans-1.3-Dichloropropene	0.5	mg/kg	< 0.5
Trichloroethene	0.5	mg/kg	< 0.5
Trichlorofluoromethane	0.5	mg/kg	< 0.5
Vinyl chloride	0.5	mg/kg	< 0.5
Vic EPA IWRG 621 CHC (Total)*	0.5	mg/kg	< 0.5
Vic EPA IWRG 621 Other CHC (Total)*	0.5	mg/kg	< 0.5

Client Sample ID			0407_QC293_201016
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-Oc32272**
Date Sampled			**Oct 16, 2020**
Test/Reference	LOR	Unit	
Halogenated Volatile Organics			
4-Bromofluorobenzene (surr.)	1	%	102
Toluene-d8 (surr.)	1	%	105
Chlorinated Hydrocarbons			
1.2-Dichlorobenzene	0.2	mg/kg	< 0.2
1.2.3-Trichlorobenzene	0.05	mg/kg	< 0.05
1.2.3.4-Tetrachlorobenzene	0.05	mg/kg	< 0.05
1.2.3.5-Tetrachlorobenzene	0.05	mg/kg	< 0.05
1.2.4-Trichlorobenzene	0.05	mg/kg	< 0.05
1.2.4.5-Tetrachlorobenzene	0.05	mg/kg	< 0.05
1.3-Dichlorobenzene	0.2	mg/kg	< 0.2
1.3.5-Trichlorobenzene	0.05	mg/kg	< 0.05
1.4-Dichlorobenzene	0.2	mg/kg	< 0.2
Benzal chloride	0.05	mg/kg	< 0.05
Benzotrichloride	0.05	mg/kg	< 0.05
Benzyl chloride	0.2	mg/kg	< 0.2
Hexachlorobenzene	0.05	mg/kg	< 0.05
Hexachlorobutadiene	0.05	mg/kg	< 0.05
Hexachlorocyclopentadiene	0.05	mg/kg	< 0.05
Hexachloroethane	0.05	mg/kg	< 0.05
Pentachlorobenzene	0.05	mg/kg	< 0.05
Tetrachloro-m-xylene (surr.)	1	%	100
Ammonia (as N)	5	mg/kg	< 5
Nitrate (as N)	5	mg/kg	< 5
Sulphate (as SO4)	10	mg/kg	53
% Moisture	1	%	3.1
Heavy Metals			
Arsenic	2	mg/kg	< 2
Cadmium	0.4	mg/kg	< 0.4
Chromium	5	mg/kg	< 5
Copper	5	mg/kg	< 5
Lead	5	mg/kg	< 5
Mercury	0.1	mg/kg	< 0.1
Nickel	5	mg/kg	< 5
Zinc	5	mg/kg	7.1
Perfluoroalkyl carboxylic acids (PFCAs)			
Perfluorobutanoic acid (PFBA)[N11]	5	ug/kg	< 5
Perfluoropentanoic acid (PFPeA)[N11]	5	ug/kg	< 5
Perfluorohexanoic acid (PFHxA)[N11]	5	ug/kg	< 5
Perfluoroheptanoic acid (PFHpA)[N11]	5	ug/kg	< 5
Perfluorooctanoic acid (PFOA)[N11]	5	ug/kg	< 5
Perfluorononanoic acid (PFNA)[N11]	5	ug/kg	< 5
Perfluorodecanoic acid (PFDA)[N11]	5	ug/kg	< 5
Perfluoroundecanoic acid (PFUnDA)[N11]	5	ug/kg	< 5
Perfluorododecanoic acid (PFDoDA)[N11]	5	ug/kg	< 5
Perfluorotridecanoic acid (PFTrDA)[N15]	5	ug/kg	< 5
Perfluorotetradecanoic acid (PFTeDA)[N11]	5	ug/kg	< 5
13C4-PFBA (surr.)	1	%	113

Client Sample ID			0407_QC293_201016
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-Oc32272**
Date Sampled			**Oct 16, 2020**
Test/Reference	LOR	Unit	
Perfluoroalkyl carboxylic acids (PFCAs)			
13C5-PFPeA (surr.)	1	%	135
13C5-PFHxA (surr.)	1	%	118
13C4-PFHpA (surr.)	1	%	108
13C8-PFOA (surr.)	1	%	113
13C5-PFNA (surr.)	1	%	118
13C6-PFDA (surr.)	1	%	131
13C2-PFUnDA (surr.)	1	%	137
13C2-PFDoDA (surr.)	1	%	135
13C2-PFTeDA (surr.)	1	%	113
Perfluoroalkyl sulfonamido substances			
Perfluorooctane sulfonamide (FOSA)[N11]	5	ug/kg	< 5
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)[N11]	5	ug/kg	< 5
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)[N11]	5	ug/kg	< 5
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)[N11]	5	ug/kg	< 5
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)[N11]	5	ug/kg	< 5
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)[N11]	10	ug/kg	< 10
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)[N11]	10	ug/kg	< 10
13C8-FOSA (surr.)	1	%	81
D3-N-MeFOSA (surr.)	1	%	77
D5-N-EtFOSA (surr.)	1	%	92
D7-N-MeFOSE (surr.)	1	%	109
D9-N-EtFOSE (surr.)	1	%	111
D5-N-EtFOSAA (surr.)	1	%	115
D3-N-MeFOSAA (surr.)	1	%	99
Perfluoroalkyl sulfonic acids (PFSAs)			
Perfluorobutanesulfonic acid (PFBS)[N11]	5	ug/kg	< 5
Perfluorononanesulfonic acid (PFNS)[N15]	5	ug/kg	< 5
Perfluoropropanesulfonic acid (PFPrS)[N15]	5	ug/kg	< 5
Perfluoropentanesulfonic acid (PFPeS)[N15]	5	ug/kg	< 5
Perfluorohexanesulfonic acid (PFHxS)[N11]	5	ug/kg	< 5
Perfluoroheptanesulfonic acid (PFHpS)[N15]	5	ug/kg	< 5
Perfluorooctanesulfonic acid (PFOS)[N11]	5	ug/kg	< 5
Perfluorodecanesulfonic acid (PFDS)[N15]	5	ug/kg	< 5
13C3-PFBS (surr.)	1	%	134
18O2-PFHxS (surr.)	1	%	116
13C8-PFOS (surr.)	1	%	129
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)			
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	5	ug/kg	< 5
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)[N11]	10	ug/kg	< 10
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	5	ug/kg	< 5
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	5	ug/kg	< 5
13C2-4:2 FTSA (surr.)	1	%	93
13C2-6:2 FTSA (surr.)	1	%	118

Client Sample ID			0407_QC293_201016
Sample Matrix			**Soil**
Eurofins Sample No.			**S20-Oc32272**
Date Sampled			**Oct 16, 2020**
Test/Reference	LOR	Unit	
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)			
13C2-8:2 FTSA (surr.)	1	%	101
13C2-10:2 FTSA (surr.)	1	%	107
PFASs Summations			
Sum (PFHxS + PFOS)*	5	ug/kg	< 5
Sum of US EPA PFAS (PFOS + PFOA)*	5	ug/kg	< 5
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	5	ug/kg	< 5
Sum of WA DWER PFAS (n=10)*	10	ug/kg	< 10
Sum of PFASs (n=30)*	50	ug/kg	< 50

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Halogenated Volatile Organics	Sydney	Oct 28, 2020	7 Days
- Method: E016 Volatile Halogenated Compounds (VHC)			
Chlorinated Hydrocarbons	Melbourne	Nov 02, 2020	14 Days
- Method: USEPA 8121 Chlorinated Hydrocarbons			
Ammonia (as N)	Sydney	Oct 28, 2020	28 Days
- Method: LTM-INO-4200 Ammonia by Discrete Analyser			
Nitrate (as N)	Melbourne	Nov 02, 2020	28 Days
- Method: LTM-INO-4120 Analysis of NOx NO2 NH3 by FIA			
Sulphate (as SO4)	Sydney	Oct 28, 2020	28 Days
- Method: E045 Anions by Ion Chromatography			
Metals M8	Sydney	Oct 28, 2020	180 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
% Moisture	Sydney	Oct 26, 2020	14 Days
- Method: LTM-GEN-7080 Moisture			
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs)	Brisbane	Oct 26, 2020	180 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonamido substances	Brisbane	Oct 26, 2020	14 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonic acids (PFSAs)	Brisbane	Oct 27, 2020	180 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)	Brisbane	Oct 27, 2020	180 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

****NOTE:** pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram

mg/L: milligrams per litre

ug/L: micrograms per litre

ppm: Parts per million

ppb: Parts per billion

%: Percentage

org/100mL: Organisms per 100 millilitres

NTU: Nephelometric Turbidity Units

MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version 5.3
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling.Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Halogenated Volatile Organics							
1.1-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
1.1.1-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.1.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2-Trichloroethane	mg/kg	< 0.5			0.5	Pass	
1.1.2.2-Tetrachloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dibromoethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloroethane	mg/kg	< 0.5			0.5	Pass	
1.2-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.2.3-Trichloropropane	mg/kg	< 0.5			0.5	Pass	
1.3-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
1.3-Dichloropropane	mg/kg	< 0.5			0.5	Pass	
1.4-Dichlorobenzene	mg/kg	< 0.5			0.5	Pass	
Bromodichloromethane	mg/kg	< 0.5			0.5	Pass	
Bromoform	mg/kg	< 0.5			0.5	Pass	
Bromomethane	mg/kg	< 0.5			0.5	Pass	
Carbon Tetrachloride	mg/kg	< 0.5			0.5	Pass	
Chlorobenzene	mg/kg	< 0.5			0.5	Pass	
Chloroform	mg/kg	< 0.5			0.5	Pass	
Chloromethane	mg/kg	< 0.5			0.5	Pass	
cis-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
cis-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Dibromochloromethane	mg/kg	< 0.5			0.5	Pass	
Dibromomethane	mg/kg	< 0.5			0.5	Pass	
Iodomethane	mg/kg	< 0.5			0.5	Pass	
Methylene Chloride	mg/kg	< 0.5			0.5	Pass	
Tetrachloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.2-Dichloroethene	mg/kg	< 0.5			0.5	Pass	
trans-1.3-Dichloropropene	mg/kg	< 0.5			0.5	Pass	
Trichloroethene	mg/kg	< 0.5			0.5	Pass	
Trichlorofluoromethane	mg/kg	< 0.5			0.5	Pass	
Vinyl chloride	mg/kg	< 0.5			0.5	Pass	
Method Blank							
Chlorinated Hydrocarbons							
1.2-Dichlorobenzene	mg/kg	< 0.2			0.2	Pass	
1.2.3-Trichlorobenzene	mg/kg	< 0.05			0.05	Pass	
1.2.3.4-Tetrachlorobenzene	mg/kg	< 0.05			0.05	Pass	
1.2.3.5-Tetrachlorobenzene	mg/kg	< 0.05			0.05	Pass	
1.2.4-Trichlorobenzene	mg/kg	< 0.05			0.05	Pass	
1.2.4.5-Tetrachlorobenzene	mg/kg	< 0.05			0.05	Pass	
1.3-Dichlorobenzene	mg/kg	< 0.2			0.2	Pass	
1.3.5-Trichlorobenzene	mg/kg	< 0.05			0.05	Pass	
1.4-Dichlorobenzene	mg/kg	< 0.2			0.2	Pass	
Benzal chloride	mg/kg	< 0.05			0.05	Pass	
Benzotrichloride	mg/kg	< 0.05			0.05	Pass	
Benzyl chloride	mg/kg	< 0.2			0.2	Pass	
Hexachlorobenzene	mg/kg	< 0.05			0.05	Pass	
Hexachlorobutadiene	mg/kg	< 0.05			0.05	Pass	
Hexachlorocyclopentadiene	mg/kg	< 0.05			0.05	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Hexachloroethane	mg/kg	< 0.05			0.05	Pass	
Pentachlorobenzene	mg/kg	< 0.05			0.05	Pass	
Method Blank							
Ammonia (as N)	mg/kg	< 5			5	Pass	
Nitrate (as N)	mg/kg	< 5			5	Pass	
Sulphate (as SO4)	mg/kg	< 10			10	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/kg	< 2			2	Pass	
Cadmium	mg/kg	< 0.4			0.4	Pass	
Chromium	mg/kg	< 5			5	Pass	
Copper	mg/kg	< 5			5	Pass	
Lead	mg/kg	< 5			5	Pass	
Mercury	mg/kg	< 0.1			0.1	Pass	
Nickel	mg/kg	< 5			5	Pass	
Zinc	mg/kg	< 5			5	Pass	
Method Blank							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	ug/kg	< 5			5	Pass	
Perfluoropentanoic acid (PFPeA)	ug/kg	< 5			5	Pass	
Perfluorohexanoic acid (PFHxA)	ug/kg	< 5			5	Pass	
Perfluoroheptanoic acid (PFHpA)	ug/kg	< 5			5	Pass	
Perfluorooctanoic acid (PFOA)	ug/kg	< 5			5	Pass	
Perfluorononanoic acid (PFNA)	ug/kg	< 5			5	Pass	
Perfluorodecanoic acid (PFDA)	ug/kg	< 5			5	Pass	
Perfluoroundecanoic acid (PFUnDA)	ug/kg	< 5			5	Pass	
Perfluorododecanoic acid (PFDoDA)	ug/kg	< 5			5	Pass	
Perfluorotridecanoic acid (PFTrDA)	ug/kg	< 5			5	Pass	
Perfluorotetradecanoic acid (PFTeDA)	ug/kg	< 5			5	Pass	
Method Blank							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	ug/kg	< 5			5	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	ug/kg	< 5			5	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	ug/kg	< 5			5	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	ug/kg	< 5			5	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	ug/kg	< 5			5	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	ug/kg	< 10			10	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	ug/kg	< 10			10	Pass	
Method Blank							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	ug/kg	< 5			5	Pass	
Perfluorononanesulfonic acid (PFNS)	ug/kg	< 5			5	Pass	
Perfluoropropanesulfonic acid (PFPrS)	ug/kg	< 5			5	Pass	
Perfluoropentanesulfonic acid (PFPeS)	ug/kg	< 5			5	Pass	
Perfluorohexanesulfonic acid (PFHxS)	ug/kg	< 5			5	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	ug/kg	< 5			5	Pass	
Perfluorooctanesulfonic acid (PFOS)	ug/kg	< 5			5	Pass	
Perfluorodecanesulfonic acid (PFDS)	ug/kg	< 5			5	Pass	
Method Blank							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	ug/kg	< 5			5	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	ug/kg	< 10			10	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	ug/kg	< 5			5	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	ug/kg	< 5			5	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
LCS - % Recovery							
Halogenated Volatile Organics							
1.1-Dichloroethene	%	98			70-130	Pass	
1.1.1-Trichloroethane	%	92			70-130	Pass	
1.2-Dichlorobenzene	%	94			70-130	Pass	
1.2-Dichloroethane	%	97			70-130	Pass	
Trichloroethene	%	91			70-130	Pass	
LCS - % Recovery							
Ammonia (as N)	%	99			70-130	Pass	
Sulphate (as SO4)	%	109			70-130	Pass	
LCS - % Recovery							
Heavy Metals							
Arsenic	%	99			80-120	Pass	
Cadmium	%	99			80-120	Pass	
Chromium	%	99			80-120	Pass	
Copper	%	95			80-120	Pass	
Lead	%	100			80-120	Pass	
Mercury	%	95			80-120	Pass	
Nickel	%	100			80-120	Pass	
Zinc	%	97			80-120	Pass	
LCS - % Recovery							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	%	101			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	98			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	98			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	97			50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	88			50-150	Pass	
Perfluorononanoic acid (PFNA)	%	96			50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	89			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	102			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	105			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	%	103			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	95			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	%	107			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	108			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	133			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	%	114			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	%	105			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	101			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	96			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	%	83			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	%	111			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	%	86			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	%	79			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	%	87			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	%	112			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	%	100			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	%	109			50-150	Pass	
LCS - % Recovery							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							

Test			Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)			%	105			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)			%	110			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)			%	84			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)			%	108			50-150	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Spike - % Recovery									
Halogenated Volatile Organics				Result 1					
1.1-Dichloroethene	S20-Oc42850	NCP	%	84			70-130	Pass	
1.1.1-Trichloroethane	S20-Oc42850	NCP	%	82			70-130	Pass	
1.2-Dichlorobenzene	S20-Oc42850	NCP	%	80			70-130	Pass	
1.2-Dichloroethane	S20-Oc42850	NCP	%	83			70-130	Pass	
Trichloroethene	S20-Oc42850	NCP	%	79			70-130	Pass	
Spike - % Recovery									
				Result 1					
Ammonia (as N)	S20-Oc32272	CP	%	96			70-130	Pass	
Sulphate (as SO4)	S20-Oc44207	NCP	%	77			70-130	Pass	
Spike - % Recovery									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1					
Perfluorobutanoic acid (PFBA)	S20-Oc42833	NCP	%	105			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	S20-Oc42833	NCP	%	98			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	S20-Oc42833	NCP	%	107			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	S20-Oc42833	NCP	%	104			50-150	Pass	
Perfluorooctanoic acid (PFOA)	S20-Oc42833	NCP	%	104			50-150	Pass	
Perfluorononanoic acid (PFNA)	S20-Oc42833	NCP	%	110			50-150	Pass	
Perfluorodecanoic acid (PFDA)	S20-Oc42833	NCP	%	96			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	S20-Oc42833	NCP	%	113			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	S20-Oc42833	NCP	%	119			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	S20-Oc42833	NCP	%	109			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	S20-Oc42833	NCP	%	115			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonamido substances				Result 1					
Perfluorooctane sulfonamide (FOSA)	S20-Oc42833	NCP	%	106			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	S20-Oc42833	NCP	%	124			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	S20-Oc42833	NCP	%	131			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	S20-Oc42833	NCP	%	115			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	S20-Oc42833	NCP	%	95			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	S20-Oc42833	NCP	%	118			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	S20-Oc42833	NCP	%	107			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1					
Perfluorobutanesulfonic acid (PFBS)	S20-Oc42833	NCP	%	91			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	S20-Oc42833	NCP	%	129			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	S20-Oc42833	NCP	%	110			50-150	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Perfluoropentanesulfonic acid (PFPeS)	S20-Oc42833	NCP	%	97			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	S20-Oc42833	NCP	%	94			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	S20-Oc42833	NCP	%	124			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	S20-Oc42833	NCP	%	102			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	S20-Oc42833	NCP	%	127			50-150	Pass	
Spike - % Recovery									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1					
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	S20-Oc42833	NCP	%	93			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	S20-Oc42833	NCP	%	100			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	S20-Oc42833	NCP	%	107			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	S20-Oc42833	NCP	%	115			50-150	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Halogenated Volatile Organics				Result 1	Result 2	RPD			
1.1-Dichloroethane	S20-Oc42833	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1-Dichloroethene	S20-Oc42833	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1-Trichloroethane	S20-Oc42833	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.1.2-Tetrachloroethane	S20-Oc42833	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2-Trichloroethane	S20-Oc42833	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.1.2.2-Tetrachloroethane	S20-Oc42833	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dibromoethane	S20-Oc42833	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichlorobenzene	S20-Oc42833	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloroethane	S20-Oc42833	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2-Dichloropropane	S20-Oc42833	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.2.3-Trichloropropane	S20-Oc42833	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichlorobenzene	S20-Oc42833	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.3-Dichloropropane	S20-Oc42833	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
1.4-Dichlorobenzene	S20-Oc42833	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromodichloromethane	S20-Oc42833	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromoform	S20-Oc42833	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Bromomethane	S20-Oc42833	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Carbon Tetrachloride	S20-Oc42833	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chlorobenzene	S20-Oc42833	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloroform	S20-Oc42833	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Chloromethane	S20-Oc42833	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.2-Dichloroethene	S20-Oc42833	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
cis-1.3-Dichloropropene	S20-Oc42833	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromochloromethane	S20-Oc42833	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Dibromomethane	S20-Oc42833	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Iodomethane	S20-Oc42833	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Methylene Chloride	S20-Oc42833	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Tetrachloroethene	S20-Oc42833	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.2-Dichloroethene	S20-Oc42833	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
trans-1.3-Dichloropropene	S20-Oc42833	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Trichloroethene	S20-Oc42833	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
Halogenated Volatile Organics				Result 1	Result 2	RPD			
Trichlorofluoromethane	S20-Oc42833	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Vinyl chloride	S20-Oc42833	NCP	mg/kg	< 0.5	< 0.5	<1	30%	Pass	
Duplicate									
Chlorinated Hydrocarbons				Result 1	Result 2	RPD			
1.2-Dichlorobenzene	S20-Oc32272	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
1.2.3-Trichlorobenzene	S20-Oc32272	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
1.2.3.4-Tetrachlorobenzene	S20-Oc32272	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
1.2.3.5-Tetrachlorobenzene	S20-Oc32272	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
1.2.4-Trichlorobenzene	S20-Oc32272	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
1.2.4.5-Tetrachlorobenzene	S20-Oc32272	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
1.3-Dichlorobenzene	S20-Oc32272	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
1.3.5-Trichlorobenzene	S20-Oc32272	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
1.4-Dichlorobenzene	S20-Oc32272	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Benzal chloride	S20-Oc32272	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Benzotrichloride	S20-Oc32272	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Benzyl chloride	S20-Oc32272	CP	mg/kg	< 0.2	< 0.2	<1	30%	Pass	
Hexachlorobenzene	S20-Oc32272	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorobutadiene	S20-Oc32272	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachlorocyclopentadiene	S20-Oc32272	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Hexachloroethane	S20-Oc32272	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Pentachlorobenzene	S20-Oc32272	CP	mg/kg	< 0.05	< 0.05	<1	30%	Pass	
Duplicate									
				Result 1	Result 2	RPD			
Ammonia (as N)	S20-Oc32272	CP	mg/kg	< 5	< 5	<1	30%	Pass	
Sulphate (as SO4)	S20-Oc43013	NCP	mg/kg	400	330	18	30%	Pass	
% Moisture	S20-Oc41817	NCP	%	25	22	13	30%	Pass	
Duplicate									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD			
Perfluorobutanoic acid (PFBA)	S20-Oc39213	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	S20-Oc39213	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	S20-Oc39213	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	S20-Oc39213	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	S20-Oc39213	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	S20-Oc39213	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	S20-Oc39213	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	S20-Oc39213	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	S20-Oc39213	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorotridecanoic acid (PFTrDA)	S20-Oc39213	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorotetradecanoic acid (PFTeDA)	S20-Oc39213	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
Perfluorooctane sulfonamide (FOSA)	S20-Oc39213	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	S20-Oc39213	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	S20-Oc39213	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	S20-Oc39213	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	S20-Oc39213	NCP	ug/kg	< 5	< 5	<1	30%	Pass	

Duplicate									
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD			
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	S20-Oc39213	NCP	ug/kg	< 10	< 10	<1	30%	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	S20-Oc39213	NCP	ug/kg	< 10	< 10	<1	30%	Pass	
Duplicate									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD			
Perfluorobutanesulfonic acid (PFBS)	S20-Oc39213	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorononanesulfonic acid (PFNS)	S20-Oc39213	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropropanesulfonic acid (PFPrS)	S20-Oc39213	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoropentanesulfonic acid (PFPeS)	S20-Oc39213	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorohexanesulfonic acid (PFHxS)	S20-Oc39213	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	S20-Oc39213	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorooctanesulfonic acid (PFOS)	S20-Oc39213	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Perfluorodecanesulfonic acid (PFDS)	S20-Oc39213	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
Duplicate									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1	Result 2	RPD			
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	S20-Oc39213	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	S20-Oc39213	NCP	ug/kg	< 10	< 10	<1	30%	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	S20-Oc39213	NCP	ug/kg	< 5	< 5	<1	30%	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	S20-Oc39213	NCP	ug/kg	< 5	< 5	<1	30%	Pass	

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N11	Isotope dilution is used for calibration of each native compound for which an exact labelled analogue is available (Isotope Dilution Quantitation). The isotopically labelled analogues allow identification and recovery correction of the concentration of the associated native PFAS compounds.
N15	Where the native PFAS compound does not have labelled analogue then the quantification is made using the Extracted Internal Standard Analyte with the closest retention time to the analyte and no recovery correction has been made (Internal Standard Quantitation).

Authorised By

[redacted]

Analytical Services Manager
Senior Analyst-Inorganic (NSW)
Senior Analyst-Metal (NSW)
Senior Analyst-Organic (VIC)
Senior Analyst-PFAS (QLD)
Senior Analyst-Inorganic (VIC)

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

Eurofins shall not be liable for loss, cost, damages or expenses incurred by the client, or any other person or company, resulting from the use of any information or interpretation given in this report. In no case shall Eurofins be liable for consequential damages including, but not limited to, lost profits, damages for failure to meet deadlines and lost production arising from this report. This document shall not be reproduced except in full and relates only to the items tested. Unless indicated otherwise, the tests were performed on the samples as received.

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd
ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
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- ☒ **SYDNEY: 202 Submarine School, Sub Base Platypus, North Sydney, 2060**
- ✓ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
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- ☐ MACKAY: 21 River Street, Mackay, QLD 4741
- ☐ PERTH: 503 Murray Street, Perth, WA 6001
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4811
- ☐ DARWIN: 21 Parap Rd, Dawin, NT 0821

CLIENT: **Defence Housing Australia**
PROJECT: **Randwick Barracks**
PROJECT NUMBER: **610.30041**
PROJECT MANAGER: [redacted]
PM CONTACT No: [redacted]

LABORATORY: **SGS**
LABORATORY ADDRESS: **Unit 16/33 Maddox St, Alexandria NSW 2015**
SAMPLER [redacted]
SAMPLER CONTACT No [redacted]
Email Reports and Invoices to: **LQRSYD@slrconsulting.com,** [redacted]

Turnaround Time (TAT)
✓ Standard TAT
☐ Non Standard or Urgent TAT
Required TAT: Standard

COC Number
1 of 1

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Benzo(a)pyrene			TRH fraction C6-C10 and PFAS				HOLD	Additional Information (Comment on any gross contamination or specific requirements)
	0407_TP222_BH01_0.2-0.3_201019	19-10-2020	Soil		X								
	0407_TP222_BH01_0.5-0.6_201019	19-10-2020	Soil		X								
	0407_QC198_201019	19-10-2020	Soil		X								
	0407_QC298_201019	19-10-2020	Soil										Please send to Eurofins for analysis of BaP
	0407_TP222_BH02_0.2-0.3_201019	19-10-2020	Soil		X								
	0407_TP222_BH02_0.5-0.6_201019	19-10-2020	Soil		X								
	0407_QC200_201019	19-10-2020	Soil		X								
	0407_QC300_201019	19-10-2020	Soil										Please send to Eurofins for analysis of BaP
	0407_TP222_BH03_0.2-0.3_201019	19-10-2020	Soil		X								
	0407_TP222_BH03_0.5-0.6_201019	19-10-2020	Soil		X								
	0407_TP222_BH04_0.2-0.3_201019	19-10-2020	Soil		X								
	0407_TP222_BH04_0.5-0.6_201019	19-10-2020	Soil		X								
	0407_QC199_201019	19-10-2020	Soil		X								
	0407_QC299_201019	19-10-2020	Soil										Please send to Eurofins for analysis of BaP

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time	19-10-2020	**Received by**	Sign [redacted]	Date / Time	21/10/20 3:
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	

Temperature Received: 7.97

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

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- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2601
- ☐ MACKAY: 21 River Street, Mackay, QLD 4741
- ☐ PERTH: 503 Murray Street, Perth, WA 6001
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4811
- ☐ DARWIN: 21 Parap Rd, Darwin, NT 0821

CLIENT: Defence Housing Australia

PROJECT: Randwick Barracks

PROJECT NUMBER: 610.30041

PROJECT MANAGER: [redacted]

PM CONTACT No: [redacted]

LABORATORY: SGS

LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015

SAMPLER: [redacted]

SAMPLER CONTACT No [redacted]

Email Reports and Invoices to: LQRSYD@slrconsulting.com, [redacted]

Turnaround Time (TAT)

✓ Standard TAT

☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number 1 of 1

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: Benzo(a)pyrene			TRH fraction C6-C10 and PFAS				HOLD	Additional Information (Comment on any gross contamination or specific requirements)
	0407_TP210_BH01_0.2-0.3_201019	19-10-2020	Soil		X								
	0407_TP210_BH01_0.5-0.6_201019	19-10-2020	Soil									X	
	0407_TP210_BH01_0.8-0.9_201019	19-10-2020	Soil		X								
	0407_QC194_201019	19-10-2020	Soil		X								
	0407_QC294_201019	19-10-2020	Soil										Please send to Eurofins for analysis of BaP
	0407_TP210_BH02_0.05-0.1_201019	19-10-2020	Soil		X								
	0407_TP210_BH02_0.4-0.5_201019	19-10-2020	Soil		X								
	0407_TP210_BH03_0.2-0.3_201019	19-10-2020	Soil		X								
	0407_TP210_BH03_0.5-0.6_201019	19-10-2020	Soil		X								
	0407_TP210_BH03_0.8-0.9_201019	19-10-2020	Soil									X	
	0407_TP210_BH04_0.2-0.3_201019	19-10-2020	Soil		X								
	0407_TP210_BH04_0.5-0.6_201019	19-10-2020	Soil		X								
	0407_TP210_BH04_0.8-0.9_201019	19-10-2020	Soil									X	
	0407_QC195_201019	19-10-2020	Soil		X								
	0407_QC295_201019	19-10-2020	Soil										Please send to Eurofins for analysis of BaP
		19-10-2020	Soil										

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 19-10-2020	**Received by**	Sign [redacted]	Date / Time 21/10 5:10	**Temperature Received:** 7.97
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

SLR

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- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4811
- ☐ DARWIN: 21 Parap Rd, Dawin, NT 0821

CLIENT: **Defence Housing Australia**
PROJECT: **Randwick Barracks**
PROJECT NUMBER: **610.30041**
PROJECT MANAGE[redacted]
PM CONTACT No[redacted]

LABORATORY: **SGS**
LABORATORY ADDRESS: **Unit 16/33 Maddox St, Alexandria NSW 2015**
SAMPLER: [redacted]
SAMPLER CONTACT No[redacted]
Email Reports and Invoices to: **LQRSYD@slrconsulting.com,** [redacted]

Turnaround Time (TAT)
✓ Standard TAT
☐ Non Standard or Urgent TAT
Required TAT: Standard

COC Number 1 of 1

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: Benzo[a]pyrene			TRH fraction C6-C10 and PFAS				HOLD	Additional Information (Comment on any gross contamination or specific requirements)
	0407_TP211_BH01_0.05-0.1_201019	19-10-2020	Soil		X								
	0407_TP211_BH02_0.05-0.1_201019	19-10-2020	Soil		X								
	0407_TP211_BH03_0.1-0.2_201019	19-10-2020	Soil		X								
	0407_TP221_BH01_0.2-0.3_201019	19-10-2020	Soil		X								
	0407_TP221_BH01_0.5-0.6_201019	19-10-2020	Soil		X								
	0407_TP221_BH02_0.2-0.3_201019	19-10-2020	Soil		X								
	0407_TP221_BH02_0.5-0.6_201019	19-10-2020	Soil		X								
	0407_TP221_BH03_0.2-0.3_201019	19-10-2020	Soil		X								
	0407_TP221_BH03_0.5-0.6_201019	19-10-2020	Soil		X								
	0407_QC196_201019	19-10-2020	Soil		X								
	0407_QC296_201019	19-10-2020	Soil										Please send to Eurofins for analysis of BaP
	0407_TP221_BH04_0.2-0.3_201019	19-10-2020	Soil		X								
	0407_TP221_BH04_0.5-0.6_201019	19-10-2020	Soil		X								
	0407_QC197_201019	19-10-2020	Soil		X								
	0407_QC297_201019	19-10-2020	Soil										Please send to Eurofins for analysis of BaP

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time 19-10-2020	**Received by**	[redacted]	Date / Time 21/10 3:0[illegible]	**Temperature Received:** 7.97
Relinquished By	Sign	Date / Time	**Received by**	[redacted]	Date / Time	
Relinquished By	Sign	Date / Time	**Received by**	Sign	Date / Time	

eurofins | Environment Testing

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Phone : +64 9 526 45 51
IANZ # 1327

Christchurch
43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

Sample Receipt Advice

Company name:	SLR Consulting (Sydney)
Contact name:	[redacted]
Project name:	RANDWICK BARRACKS
Project ID:	610.30041
Turnaround time:	5 Day
Date/Time received	Oct 21, 2020 3:00 PM
Eurofins reference	751957

Sample Information

✓	A detailed list of analytes logged into our LIMS, is included in the attached summary table.
✓	All samples have been received as described on the above COC.
✓	COC has been completed correctly.
✓	Attempt to chill was evident.
✓	Appropriately preserved sample containers have been used.
✓	All samples were received in good condition.
✓	Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.
✓	Appropriate sample containers have been used.
✓	Sample containers for volatile analysis received with zero headspace.
X	Split sample sent to requested external lab.
X	Some samples have been subcontracted.
N/A	Custody Seals intact (if used).

Notes

Contact

If you have any questions with respect to these samples, please contact your Analytical Services Manager:

[redacted] **on phone** [redacted] **or by email:** [redacted] **@eurofins.com**

Results will be delivered electronically via email to Hugh Selby - hselby@slrconsulting.com.

Note: A copy of these results will also be delivered to the general SLR Consulting (Sydney) email address.

Global Leader - Results you can trust

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ABN: 50 005 085 521 web: www.eurofins.com.au email: EnviroSales@eurofins.com

Australia

Melbourne
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Dandenong South VIC 3175
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NATA # 1261
Site # 23736

Newcastle
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Phone : +61 2 4968 8448

New Zealand

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Phone : +64 9 526 45 51
IANZ # 1327

Christchurch
43 Detroit Drive
Rolleston, Christchurch 7675
Phone : 0800 856 450
IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 751957
Phone: 02 9428 8100
Fax:

Received: Oct 21, 2020 3:00 PM
Due: Oct 28, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager [redacted]

Sample Detail						Benzo(a)pyrene	Moisture Set
Melbourne Laboratory - NATA Site # 1254 & 14271							
Sydney Laboratory - NATA Site # 18217						X	X
Brisbane Laboratory - NATA Site # 20794							
Perth Laboratory - NATA Site # 23736							
Mayfield Laboratory							
External Laboratory							
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**		
1	0407_QC298_201019	Oct 19, 2020		Soil	S20-Oc36023	X	X
2	0407_QC300_201019	Oct 19, 2020		Soil	S20-Oc36024	X	X
3	0407_QC299_201019	Oct 19, 2020		Soil	S20-Oc36025	X	X
4	0407_QC294_201019	Oct 19, 2020		Soil	S20-Oc36026	X	X
5	0407_QC295_201019	Oct 19, 2020		Soil	S20-Oc36027	X	X
6	0407_QC296_	Oct 19, 2020		Soil	S20-Oc36028	X	X

eurofins | Environment Testing

ABN: 50 005 085 521 web: www.eurofins.com.au email: EnviroSales@eurofins.com

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IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 751957
Phone: 02 9428 8100
Fax:

Received: Oct 21, 2020 3:00 PM
Due: Oct 28, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Benzo(a)pyrene	Moisture Set
Melbourne Laboratory - NATA Site # 1254 & 14271							
Sydney Laboratory - NATA Site # 18217						X	X
Brisbane Laboratory - NATA Site # 20794							
Perth Laboratory - NATA Site # 23736							
Mayfield Laboratory							
External Laboratory							
	201019						
7	0407_QC297_201019	Oct 19, 2020		Soil	S20-Oc36029	X	X
Test Counts						7	7

SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus,
North Sydney
NSW 2060

NATA Accredited
Accreditation Number 1261
Site Number 18217

Accredited for compliance with ISO/IEC 17025 – Testing
The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

Attention: [redacted]

Report **751957-S**
Project name RANDWICK BARRACKS
Project ID 610.30041
Received Date Oct 21, 2020

Client Sample ID			**0407_QC298_201019**	**0407_QC300_201019**	**0407_QC299_201019**	**0407_QC294_201019**
Sample Matrix			**Soil**	**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-Oc36023**	**S20-Oc36024**	**S20-Oc36025**	**S20-Oc36026**
Date Sampled			**Oct 19, 2020**	**Oct 19, 2020**	**Oct 19, 2020**	**Oct 19, 2020**
Test/Reference	LOR	Unit				
Polycyclic Aromatic Hydrocarbons						
Benzo(a)pyrene	0.5	mg/kg	31	1.9	58	< 0.5
% Moisture	1	%	11	7.3	7.4	3.7

Client Sample ID			**0407_QC295_201019**	**0407_QC296_201019**	**0407_QC297_201019**
Sample Matrix			**Soil**	**Soil**	**Soil**
Eurofins Sample No.			**S20-Oc36027**	**S20-Oc36028**	**S20-Oc36029**
Date Sampled			**Oct 19, 2020**	**Oct 19, 2020**	**Oct 19, 2020**
Test/Reference	LOR	Unit			
Polycyclic Aromatic Hydrocarbons					
Benzo(a)pyrene	0.5	mg/kg	5.3	< 0.5	5.9
% Moisture	1	%	7.3	18	7.7

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Polycyclic Aromatic Hydrocarbons	Sydney	Oct 23, 2020	14 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
% Moisture	Sydney	Oct 21, 2020	14 Days
- Method: LTM-GEN-7080 Moisture			

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

****NOTE:** pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram | **mg/L:** milligrams per litre | **ug/L:** micrograms per litre

ppm: Parts per million | **ppb:** Parts per billion | **%:** Percentage

org/100mL: Organisms per 100 millilitres | **NTU:** Nephelometric Turbidity Units | **MPN/100mL:** Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version 5.3
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling.Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Benzo(a)pyrene	mg/kg	< 0.5			0.5	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Benzo(a)pyrene	%	86			70-130	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Duplicate									
				Result 1	Result 2	RPD			
% Moisture	S20-Oc36024	CP	%	7.3	7.1	2.0	30%	Pass	
Duplicate									
Polycyclic Aromatic Hydrocarbons				Result 1	Result 2	RPD			
Benzo(a)pyrene	S20-Oc36027	CP	mg/kg	5.3	3.9	32	30%	Fail	Q15

Comments

Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
Q15	The RPD reported passes Eurofins Environment Testing's QC - Acceptance Criteria as defined in the Internal Quality Control Review and Glossary page of this report.

Authorised By

[redacted]

Analytical Services Manager
Senior Analyst-Organic (NSW)

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)									
☐	BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000	☐	GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227	☐	NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305	✓	School, Sub Base Platypus, North Sydney, 2060	☐	MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
☐	CANBERRA: GPO Box 410, Canberra, ACT 2601	☐	MACKAY: 21 River Street, Mackay, QLD 4741	☐	PERTH: 503 Murray Street, Perth, WA 6001	☐	TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4811	☐	DARWIN: 21 Parap Rd, Dawin, NT 0821

CLIENT: Defence Housing Australia
PROJECT: Randwick Barracks
PROJECT NUMBER: 610.30041
PROJECT MANAGER [redacted]
PM CONTACT No: [redacted]

LABORATORY: SGS
LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015
SAMPLER [redacted]
SAMPLER CONTACT No [redacted]
Email Reports and Invoices to: LQRSYD@slrconsulting.com [redacted]

Turnaround Time (TAT): ✓ Standard TAT ☐ Non Standard or Urgent TAT
Required TAT: Standard

COC Number: 1 of 1

COMMENTS OR ADDITIONAL DIRECTIONS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	REQUESTED ANALYSIS: Suite A	Suite B	Suite C	Suite G	VOCs	SVOCs	TRH C6-10	PAHs	TRH/BTEXN	PCBs	Phenols	OCP/OPP	PFAS	Metals 8	Additional Information (Comment on any gross contamination or specific requirements)
	GW13a	29/10/2020	Water															x	
	GW13b	29/10/2020	Water		x		x												
	GW12	29/10/2020	Water		x												x		
	GW11	29/10/2020	Water		x												x		
	GW22	29/10/2020	Water		x												x		
	QC526TS	29/10/2020	Water								x						x		
	QC526_TB	29/10/2020	Water								x						x		
	QC317	29/10/2020	Water						x	x		x	x				x	x	
	GW23	29/10/2020	Water		x												x		
	QC201	29/10/2020	Water		x												x		
	QC301	29/10/2020	Water																

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time	29/10/2020 @ 1600	**Received by**	Sign [redacted]	Date / Time	30/10/2020 2:42PM
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	

Temperature Received: 9.96°C

#753861

\\AU1484\H:\Projects SLR\610-SrvSYD\610-SYD\610.30041.00000 I610730 Randwick DHA DSP\01 Project Management\03 Proposal\Addendum to DSI_200901\COC\IR_COC Template.xlsx
Soil Printed

SLR Consulting Australia Pty Ltd

eurofins | Environment Testing

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IANZ # 1290

Sample Receipt Advice

Company name:	SLR Consulting (Sydney)
Contact name:	[redacted]
Project name:	RANDWICK BARRACKS
Project ID:	610.30041
Turnaround time:	5 Day
Date/Time received	Oct 30, 2020 2:42 PM
Eurofins reference	753861

Sample Information

✓	A detailed list of analytes logged into our LIMS, is included in the attached summary table.
✓	All samples have been received as described on the above COC.
✓	COC has been completed correctly.
✓	Attempt to chill was evident.
✓	Appropriately preserved sample containers have been used.
✓	All samples were received in good condition.
✓	Samples have been provided with adequate time to commence analysis in accordance with the relevant holding times.
✓	Appropriate sample containers have been used.
✓	Sample containers for volatile analysis received with zero headspace.
X	Split sample sent to requested external lab.
X	Some samples have been subcontracted.
N/A	Custody Seals intact (if used).

Notes

Contact

If you have any questions with respect to these samples, please contact your Analytical Services Manager:

[redacted] **on phone :** [redacted] **or by email:** [redacted] **@eurofins.com**

Results will be delivered electronically via email to [redacted]@slrconsulting.com.

Note: A copy of these results will also be delivered to the general SLR Consulting (Sydney) email address.

Global Leader - Results you can trust

eurofins | Environment Testing

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IANZ # 1290

Company Name: SLR Consulting (Sydney)
Address: Tenancy 202, Submarine School, Sub Base Platypus, North Sydney NSW 2060

Project Name: RANDWICK BARRACKS
Project ID: 610.30041

Order No.:
Report #: 753861
Phone: 02 9428 8100
Fax:

Received: Oct 30, 2020 2:42 PM
Due: Nov 6, 2020
Priority: 5 Day
Contact Name: [redacted]

Eurofins Analytical Services Manager : [redacted]

Sample Detail						Eurofins Suite B15	Volatile Organics	Eurofins Suite B7A	Per- and Polyfluoroalkyl Substances (PFASs)
Melbourne Laboratory - NATA Site # 1254 & 14271									
Sydney Laboratory - NATA Site # 18217						X	X	X	
Brisbane Laboratory - NATA Site # 20794									X
Perth Laboratory - NATA Site # 23736									
Mayfield Laboratory									
External Laboratory									
No	**Sample ID**	**Sample Date**	**Sampling Time**	**Matrix**	**LAB ID**				
1	QC301	Oct 29, 2020		Water	S20-Oc51650	X	X	X	X
Test Counts						1	1	1	1

SLR Consulting
Tenancy 202, Submarine School, Sub Base Platypus,
North Sydney
NSW 2060

NATA Accredited
Accreditation Number 1261
Site Number 18217

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Attention: [redacted]

Report **753861-W**
Project name RANDWICK BARRACKS
Project ID 610.30041
Received Date Oct 30, 2020

Client Sample ID			**QC301**
Sample Matrix			**Water**
Eurofins Sample No.			**S20-Oc51650**
Date Sampled			**Oct 29, 2020**
Test/Reference	LOR	Unit	
Total Recoverable Hydrocarbons - 1999 NEPM Fractions			
TRH C6-C9	0.02	mg/L	< 0.02
TRH C10-C14	0.05	mg/L	< 0.05
TRH C15-C28	0.1	mg/L	0.2
TRH C29-C36	0.1	mg/L	< 0.1
TRH C10-C36 (Total)	0.1	mg/L	0.2
BTEX			
Benzene	0.001	mg/L	< 0.001
Toluene	0.001	mg/L	< 0.001
Ethylbenzene	0.001	mg/L	< 0.001
m&p-Xylenes	0.002	mg/L	< 0.002
o-Xylene	0.001	mg/L	< 0.001
Xylenes - Total*	0.003	mg/L	< 0.003
4-Bromofluorobenzene (surr.)	1	%	125
Volatile Organics			
1.1-Dichloroethane	0.001	mg/L	< 0.001
1.1-Dichloroethene	0.001	mg/L	< 0.001
1.1.1-Trichloroethane	0.001	mg/L	< 0.001
1.1.1.2-Tetrachloroethane	0.001	mg/L	< 0.001
1.1.2-Trichloroethane	0.001	mg/L	< 0.001
1.1.2.2-Tetrachloroethane	0.001	mg/L	< 0.001
1.2-Dibromoethane	0.001	mg/L	< 0.001
1.2-Dichlorobenzene	0.001	mg/L	< 0.001
1.2-Dichloroethane	0.001	mg/L	< 0.001
1.2-Dichloropropane	0.001	mg/L	< 0.001
1.2.3-Trichloropropane	0.001	mg/L	< 0.001
1.2.4-Trimethylbenzene	0.001	mg/L	< 0.001
1.3-Dichlorobenzene	0.001	mg/L	< 0.001
1.3-Dichloropropane	0.001	mg/L	< 0.001
1.3.5-Trimethylbenzene	0.001	mg/L	< 0.001
1.4-Dichlorobenzene	0.001	mg/L	< 0.001
2-Butanone (MEK)	0.001	mg/L	< 0.001
2-Propanone (Acetone)	0.001	mg/L	< 0.001
4-Chlorotoluene	0.001	mg/L	< 0.001
4-Methyl-2-pentanone (MIBK)	0.001	mg/L	< 0.001
Allyl chloride	0.001	mg/L	< 0.001

Client Sample ID			QC301
Sample Matrix			Water
Eurofins Sample No.			S20-Oc51650
Date Sampled			Oct 29, 2020
Test/Reference	LOR	Unit	
Volatile Organics			
Benzene	0.001	mg/L	< 0.001
Bromobenzene	0.001	mg/L	< 0.001
Bromochloromethane	0.001	mg/L	< 0.001
Bromodichloromethane	0.001	mg/L	< 0.001
Bromoform	0.001	mg/L	< 0.001
Bromomethane	0.001	mg/L	< 0.001
Carbon disulfide	0.001	mg/L	< 0.001
Carbon Tetrachloride	0.001	mg/L	< 0.001
Chlorobenzene	0.001	mg/L	< 0.001
Chloroethane	0.001	mg/L	< 0.001
Chloroform	0.005	mg/L	< 0.005
Chloromethane	0.001	mg/L	< 0.001
cis-1.2-Dichloroethene	0.001	mg/L	< 0.001
cis-1.3-Dichloropropene	0.001	mg/L	< 0.001
Dibromochloromethane	0.001	mg/L	< 0.001
Dibromomethane	0.001	mg/L	< 0.001
Dichlorodifluoromethane	0.001	mg/L	< 0.001
Ethylbenzene	0.001	mg/L	< 0.001
Iodomethane	0.001	mg/L	< 0.001
Isopropyl benzene (Cumene)	0.001	mg/L	< 0.001
m&p-Xylenes	0.002	mg/L	< 0.002
Methylene Chloride	0.001	mg/L	< 0.001
o-Xylene	0.001	mg/L	< 0.001
Styrene	0.001	mg/L	< 0.001
Tetrachloroethene	0.001	mg/L	0.001
Toluene	0.001	mg/L	< 0.001
trans-1.2-Dichloroethene	0.001	mg/L	< 0.001
trans-1.3-Dichloropropene	0.001	mg/L	< 0.001
Trichloroethene	0.001	mg/L	< 0.001
Trichlorofluoromethane	0.001	mg/L	< 0.001
Vinyl chloride	0.001	mg/L	< 0.001
Xylenes - Total*	0.003	mg/L	< 0.003
Total MAH*	0.003	mg/L	< 0.003
Vic EPA IWRG 621 CHC (Total)*	0.005	mg/L	< 0.005
Vic EPA IWRG 621 Other CHC (Total)*	0.005	mg/L	< 0.005
4-Bromofluorobenzene (surr.)	1	%	125
Toluene-d8 (surr.)	1	%	105
Total Recoverable Hydrocarbons - 2013 NEPM Fractions			
Naphthalene[N02]	0.01	mg/L	< 0.01
TRH C6-C10	0.02	mg/L	< 0.02
TRH C6-C10 less BTEX (F1)[N04]	0.02	mg/L	< 0.02
TRH >C10-C16	0.05	mg/L	< 0.05
TRH >C10-C16 less Naphthalene (F2)[N01]	0.05	mg/L	< 0.05
TRH >C16-C34	0.1	mg/L	0.2
TRH >C34-C40	0.1	mg/L	< 0.1
TRH >C10-C40 (total)*	0.1	mg/L	0.2

Client Sample ID			QC301
Sample Matrix			Water
Eurofins Sample No.			S20-Oc51650
Date Sampled			Oct 29, 2020
Test/Reference	LOR	Unit	
Polycyclic Aromatic Hydrocarbons			
Acenaphthene	0.001	mg/L	< 0.001
Acenaphthylene	0.001	mg/L	< 0.001
Anthracene	0.001	mg/L	< 0.001
Benz(a)anthracene	0.001	mg/L	< 0.001
Benzo(a)pyrene	0.001	mg/L	< 0.001
Benzo(b&j)fluoranthene[N07]	0.001	mg/L	< 0.001
Benzo(g.h.i)perylene	0.001	mg/L	< 0.001
Benzo(k)fluoranthene	0.001	mg/L	< 0.001
Chrysene	0.001	mg/L	< 0.001
Dibenz(a.h)anthracene	0.001	mg/L	< 0.001
Fluoranthene	0.001	mg/L	< 0.001
Fluorene	0.001	mg/L	< 0.001
Indeno(1.2.3-cd)pyrene	0.001	mg/L	< 0.001
Naphthalene	0.001	mg/L	< 0.001
Phenanthrene	0.001	mg/L	< 0.001
Pyrene	0.001	mg/L	< 0.001
Total PAH*	0.001	mg/L	< 0.001
2-Fluorobiphenyl (surr.)	1	%	73
p-Terphenyl-d14 (surr.)	1	%	78
Organochlorine Pesticides			
Chlordanes - Total	0.002	mg/L	< 0.002
4.4'-DDD	0.0001	mg/L	< 0.0001
4.4'-DDE	0.0001	mg/L	< 0.0001
4.4'-DDT	0.0001	mg/L	< 0.0001
a-BHC	0.0001	mg/L	< 0.0001
Aldrin	0.0001	mg/L	< 0.0001
b-BHC	0.0001	mg/L	< 0.0001
d-BHC	0.0001	mg/L	< 0.0001
Dieldrin	0.0001	mg/L	< 0.0001
Endosulfan I	0.0001	mg/L	< 0.0001
Endosulfan II	0.0001	mg/L	< 0.0001
Endosulfan sulphate	0.0001	mg/L	< 0.0001
Endrin	0.0001	mg/L	< 0.0001
Endrin aldehyde	0.0001	mg/L	< 0.0001
Endrin ketone	0.0001	mg/L	< 0.0001
g-BHC (Lindane)	0.0001	mg/L	< 0.0001
Heptachlor	0.0001	mg/L	< 0.0001
Heptachlor epoxide	0.0001	mg/L	< 0.0001
Hexachlorobenzene	0.0001	mg/L	< 0.0001
Methoxychlor	0.0002	mg/L	< 0.0002
Toxaphene	0.001	mg/L	< 0.001
Aldrin and Dieldrin (Total)*	0.0002	mg/L	< 0.0002
DDT + DDE + DDD (Total)*	0.0002	mg/L	< 0.0002
Vic EPA IWRG 621 OCP (Total)*	0.002	mg/L	< 0.002
Vic EPA IWRG 621 Other OCP (Total)*	0.002	mg/L	< 0.002
Dibutylchlorendate (surr.)	1	%	99
Tetrachloro-m-xylene (surr.)	1	%	65

Client Sample ID			QC301
Sample Matrix			Water
Eurofins Sample No.			S20-Oc51650
Date Sampled			Oct 29, 2020
Test/Reference	LOR	Unit	
Organophosphorus Pesticides			
Azinphos-methyl	0.002	mg/L	< 0.002
Bolstar	0.002	mg/L	< 0.002
Chlorfenvinphos	0.002	mg/L	< 0.002
Chlorpyrifos	0.02	mg/L	< 0.02
Chlorpyrifos-methyl	0.002	mg/L	< 0.002
Coumaphos	0.02	mg/L	< 0.02
Demeton-S	0.02	mg/L	< 0.02
Demeton-O	0.002	mg/L	< 0.002
Diazinon	0.002	mg/L	< 0.002
Dichlorvos	0.002	mg/L	< 0.002
Dimethoate	0.002	mg/L	< 0.002
Disulfoton	0.002	mg/L	< 0.002
EPN	0.002	mg/L	< 0.002
Ethion	0.002	mg/L	< 0.002
Ethoprop	0.002	mg/L	< 0.002
Ethyl parathion	0.002	mg/L	< 0.002
Fenitrothion	0.002	mg/L	< 0.002
Fensulfothion	0.002	mg/L	< 0.002
Fenthion	0.002	mg/L	< 0.002
Malathion	0.002	mg/L	< 0.002
Merphos	0.002	mg/L	< 0.002
Methyl parathion	0.002	mg/L	< 0.002
Mevinphos	0.002	mg/L	< 0.002
Monocrotophos	0.002	mg/L	< 0.002
Naled	0.002	mg/L	< 0.002
Omethoate	0.002	mg/L	< 0.002
Phorate	0.002	mg/L	< 0.002
Pirimiphos-methyl	0.02	mg/L	< 0.02
Pyrazophos	0.002	mg/L	< 0.002
Ronnel	0.002	mg/L	< 0.002
Terbufos	0.002	mg/L	< 0.002
Tetrachlorvinphos	0.002	mg/L	< 0.002
Tokuthion	0.002	mg/L	< 0.002
Trichloronate	0.002	mg/L	< 0.002
Triphenylphosphate (surr.)	1	%	90
Polychlorinated Biphenyls			
Aroclor-1016	0.005	mg/L	< 0.005
Aroclor-1221	0.001	mg/L	< 0.001
Aroclor-1232	0.005	mg/L	< 0.005
Aroclor-1242	0.005	mg/L	< 0.005
Aroclor-1248	0.005	mg/L	< 0.005
Aroclor-1254	0.005	mg/L	< 0.005
Aroclor-1260	0.005	mg/L	< 0.005
Total PCB*	0.001	mg/L	< 0.001
Dibutylchlorendate (surr.)	1	%	99
Tetrachloro-m-xylene (surr.)	1	%	65

Client Sample ID			QC301
Sample Matrix			Water
Eurofins Sample No.			S20-Oc51650
Date Sampled			Oct 29, 2020
Test/Reference	LOR	Unit	
Phenols (Halogenated)			
2-Chlorophenol	0.003	mg/L	< 0.003
2.4-Dichlorophenol	0.003	mg/L	< 0.003
2.4.5-Trichlorophenol	0.01	mg/L	< 0.01
2.4.6-Trichlorophenol	0.01	mg/L	< 0.01
2.6-Dichlorophenol	0.003	mg/L	< 0.003
4-Chloro-3-methylphenol	0.01	mg/L	< 0.01
Pentachlorophenol	0.01	mg/L	< 0.01
Tetrachlorophenols - Total	0.03	mg/L	< 0.03
Total Halogenated Phenol*	0.01	mg/L	< 0.01
Phenols (non-Halogenated)			
2-Cyclohexyl-4.6-dinitrophenol	0.1	mg/L	< 0.1
2-Methyl-4.6-dinitrophenol	0.03	mg/L	< 0.03
2-Methylphenol (o-Cresol)	0.003	mg/L	< 0.003
2-Nitrophenol	0.01	mg/L	< 0.01
2.4-Dimethylphenol	0.003	mg/L	< 0.003
2.4-Dinitrophenol	0.03	mg/L	< 0.03
3&4-Methylphenol (m&p-Cresol)	0.006	mg/L	< 0.006
4-Nitrophenol	0.03	mg/L	< 0.03
Dinoseb	0.1	mg/L	< 0.1
Phenol	0.003	mg/L	< 0.003
Total Non-Halogenated Phenol*	0.1	mg/L	< 0.1
Phenol-d6 (surr.)	1	%	42
Heavy Metals			
Arsenic	0.001	mg/L	< 0.001
Cadmium	0.0002	mg/L	< 0.0002
Chromium	0.001	mg/L	< 0.001
Copper	0.001	mg/L	0.001
Lead	0.001	mg/L	< 0.001
Mercury	0.0001	mg/L	< 0.0001
Nickel	0.001	mg/L	< 0.001
Zinc	0.005	mg/L	< 0.005
Perfluoroalkyl carboxylic acids (PFCAs)			
Perfluorobutanoic acid (PFBA)[N11]	0.05	ug/L	< 0.05
Perfluoropentanoic acid (PFPeA)[N11]	0.01	ug/L	< 0.01
Perfluorohexanoic acid (PFHxA)[N11]	0.01	ug/L	< 0.01
Perfluoroheptanoic acid (PFHpA)[N11]	0.01	ug/L	< 0.01
Perfluorooctanoic acid (PFOA)[N11]	0.01	ug/L	[N09]0.02
Perfluorononanoic acid (PFNA)[N11]	0.01	ug/L	< 0.01
Perfluorodecanoic acid (PFDA)[N11]	0.01	ug/L	< 0.01
Perfluoroundecanoic acid (PFUnDA)[N11]	0.01	ug/L	< 0.01
Perfluorododecanoic acid (PFDoDA)[N11]	0.01	ug/L	< 0.01
Perfluorotridecanoic acid (PFTrDA)[N15]	0.01	ug/L	< 0.01
Perfluorotetradecanoic acid (PFTeDA)[N11]	0.01	ug/L	< 0.01
13C4-PFBA (surr.)	1	%	104
13C5-PFPeA (surr.)	1	%	62
13C5-PFHxA (surr.)	1	%	64
13C4-PFHpA (surr.)	1	%	70
13C8-PFOA (surr.)	1	%	70
13C5-PFNA (surr.)	1	%	86

Client Sample ID			QC301
Sample Matrix			Water
Eurofins Sample No.			S20-Oc51650
Date Sampled			Oct 29, 2020
Test/Reference	LOR	Unit	
Perfluoroalkyl carboxylic acids (PFCAs)			
13C6-PFDA (surr.)	1	%	78
13C2-PFUnDA (surr.)	1	%	91
13C2-PFDoDA (surr.)	1	%	96
13C2-PFTeDA (surr.)	1	%	72
Perfluoroalkyl sulfonamido substances			
Perfluorooctane sulfonamide (FOSA)[N11]	0.05	ug/L	< 0.05
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)[N11]	0.05	ug/L	< 0.05
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)[N11]	0.05	ug/L	< 0.05
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)[N11]	0.05	ug/L	< 0.05
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)[N11]	0.05	ug/L	< 0.05
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)[N11]	0.05	ug/L	< 0.05
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)[N11]	0.05	ug/L	< 0.05
13C8-FOSA (surr.)	1	%	68
D3-N-MeFOSA (surr.)	1	%	41
D5-N-EtFOSA (surr.)	1	%	69
D7-N-MeFOSE (surr.)	1	%	76
D9-N-EtFOSE (surr.)	1	%	92
D5-N-EtFOSAA (surr.)	1	%	47
D3-N-MeFOSAA (surr.)	1	%	29
Perfluoroalkyl sulfonic acids (PFSAs)			
Perfluorobutanesulfonic acid (PFBS)[N11]	0.01	ug/L	< 0.01
Perfluorononanesulfonic acid (PFNS)[N15]	0.01	ug/L	< 0.01
Perfluoropropanesulfonic acid (PFPrS)[N15]	0.01	ug/L	< 0.01
Perfluoropentanesulfonic acid (PFPeS)[N15]	0.01	ug/L	< 0.01
Perfluorohexanesulfonic acid (PFHxS)[N11]	0.01	ug/L	[N09]0.05
Perfluoroheptanesulfonic acid (PFHpS)[N15]	0.01	ug/L	[N09]< 0.01
Perfluorooctanesulfonic acid (PFOS)[N11]	0.01	ug/L	[N09]0.06
Perfluorodecanesulfonic acid (PFDS)[N15]	0.01	ug/L	< 0.01
13C3-PFBS (surr.)	1	%	129
18O2-PFHxS (surr.)	1	%	117
13C8-PFOS (surr.)	1	%	106
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)			
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)[N11]	0.01	ug/L	< 0.01
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)[N11]	0.05	ug/L	< 0.05
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)[N11]	0.01	ug/L	< 0.01
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)[N11]	0.01	ug/L	< 0.01
13C2-4:2 FTSA (surr.)	1	%	67
13C2-6:2 FTSA (surr.)	1	%	65
13C2-8:2 FTSA (surr.)	1	%	70
13C2-10:2 FTSA (surr.)	1	%	73

Client Sample ID			QC301
Sample Matrix			**Water**
Eurofins Sample No.			**S20-Oc51650**
Date Sampled			**Oct 29, 2020**
Test/Reference	LOR	Unit	
PFASs Summations			
Sum (PFHxS + PFOS)*	0.01	ug/L	0.11
Sum of US EPA PFAS (PFOS + PFOA)*	0.01	ug/L	0.08
Sum of enHealth PFAS (PFHxS + PFOS + PFOA)*	0.01	ug/L	0.13
Sum of WA DWER PFAS (n=10)*	0.05	ug/L	0.13
Sum of PFASs (n=30)*	0.1	ug/L	0.13

Sample History

Where samples are submitted/analysed over several days, the last date of extraction and analysis is reported.
A recent review of our LIMS has resulted in the correction or clarification of some method identifications. Due to this, some of the method reference information on reports has changed. However, no substantive change has been made to our laboratory methods, and as such there is no change in the validity of current or previous results.

If the date and time of sampling are not provided, the Laboratory will not be responsible for compromised results should testing be performed outside the recommended holding time.

Description	Testing Site	Extracted	Holding Time
Total Recoverable Hydrocarbons - 1999 NEPM Fractions	Sydney	Nov 03, 2020	7 Days
- Method: LTM-ORG-2010 TRH C6-C40			
BTEX	Sydney	Oct 30, 2020	14 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Oct 30, 2020	7 Days
- Method: LTM-ORG-2010 TRH C6-C40			
Total Recoverable Hydrocarbons - 2013 NEPM Fractions	Sydney	Nov 03, 2020	
- Method: LTM-ORG-2010 TRH C6-C40			
Polycyclic Aromatic Hydrocarbons	Sydney	Nov 03, 2020	7 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (Halogenated)	Sydney	Nov 03, 2020	7 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Phenols (non-Halogenated)	Sydney	Nov 03, 2020	7 Days
- Method: LTM-ORG-2130 PAH and Phenols in Soil and Water			
Metals M8	Sydney	Oct 30, 2020	180 Days
- Method: LTM-MET-3040 Metals in Waters, Soils & Sediments by ICP-MS			
Volatile Organics	Sydney	Oct 30, 2020	7 Days
- Method: LTM-ORG-2150 VOCs in Soils Liquid and other Aqueous Matrices			
Eurofins Suite B15			
Organochlorine Pesticides	Sydney	Nov 03, 2020	7 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Organophosphorus Pesticides	Sydney	Nov 03, 2020	7 Days
- Method: LTM-ORG-2200 Organophosphorus Pesticides by GC-MS			
Polychlorinated Biphenyls	Sydney	Nov 03, 2020	7 Days
- Method: LTM-ORG-2220 OCP & PCB in Soil and Water			
Per- and Polyfluoroalkyl Substances (PFASs)			
Perfluoroalkyl carboxylic acids (PFCAs)	Brisbane	Nov 03, 2020	14 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonamido substances	Brisbane	Nov 03, 2020	14 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
Perfluoroalkyl sulfonic acids (PFSAs)	Brisbane	Nov 03, 2020	14 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)	Brisbane	Nov 03, 2020	14 Days
- Method: LTM-ORG-2100 Per- and Polyfluoroalkyl Substances (PFAS)			

Internal Quality Control Review and Glossary

General

1. Laboratory QC results for Method Blanks, Duplicates, Matrix Spikes, and Laboratory Control Samples follows guidelines delineated in the National Environment Protection (Assessment of Site Contamination) Measure 1999, as amended May 2013 and are included in this QC report where applicable. Additional QC data may be available on request.
2. All soil/sediment/solid results are reported on a dry basis, unless otherwise stated.
3. All biota/food results are reported on a wet weight basis on the edible portion, unless otherwise stated.
4. Actual LORs are matrix dependant. Quoted LORs may be raised where sample extracts are diluted due to interferences.
5. Results are uncorrected for matrix spikes or surrogate recoveries except for PFAS compounds.
6. SVOC analysis on waters are performed on homogenised, unfiltered samples, unless noted otherwise.
7. Samples were analysed on an 'as received' basis.
8. Information identified on this report with blue colour, indicates data provided by customer, that may have an impact on the results.
9. This report replaces any interim results previously issued.

Holding Times

Please refer to 'Sample Preservation and Container Guide' for holding times (QS3001).

For samples received on the last day of holding time, notification of testing requirements should have been received at least 6 hours prior to sample receipt deadlines as stated on the SRA.

If the Laboratory did not receive the information in the required timeframe, and regardless of any other integrity issues, suitably qualified results may still be reported.

Holding times apply from the date of sampling, therefore compliance to these may be outside the laboratory's control.

For VOCs containing vinyl chloride, styrene and 2-chloroethyl vinyl ether the holding time is 7 days however for all other VOCs such as BTEX or C6-10 TRH then the holding time is 14 days.

****NOTE:** pH duplicates are reported as a range NOT as RPD

Units

mg/kg: milligrams per kilogram
mg/L: milligrams per litre
ug/L: micrograms per litre
ppm: Parts per million
ppb: Parts per billion
%: Percentage
org/100mL: Organisms per 100 millilitres
NTU: Nephelometric Turbidity Units
MPN/100mL: Most Probable Number of organisms per 100 millilitres

Terms

Dry	Where a moisture has been determined on a solid sample the result is expressed on a dry basis.
LOR	Limit of Reporting.
SPIKE	Addition of the analyte to the sample and reported as percentage recovery.
RPD	Relative Percent Difference between two Duplicate pieces of analysis.
LCS	Laboratory Control Sample - reported as percent recovery.
CRM	Certified Reference Material - reported as percent recovery.
Method Blank	In the case of solid samples these are performed on laboratory certified clean sands and in the case of water samples these are performed on de-ionised water.
Surr - Surrogate	The addition of a like compound to the analyte target and reported as percentage recovery.
Duplicate	A second piece of analysis from the same sample and reported in the same units as the result to show comparison.
USEPA	United States Environmental Protection Agency
APHA	American Public Health Association
TCLP	Toxicity Characteristic Leaching Procedure
COC	Chain of Custody
SRA	Sample Receipt Advice
QSM	US Department of Defense Quality Systems Manual Version 5.3
CP	Client Parent - QC was performed on samples pertaining to this report
NCP	Non-Client Parent - QC performed on samples not pertaining to this report, QC is representative of the sequence or batch that client samples were analysed within.
TEQ	Toxic Equivalency Quotient

QC - Acceptance Criteria

RPD Duplicates: Global RPD Duplicates Acceptance Criteria is 30% however the following acceptance guidelines are equally applicable:

Results <10 times the LOR : No Limit

Results between 10-20 times the LOR : RPD must lie between 0-50%

Results >20 times the LOR : RPD must lie between 0-30%

Surrogate Recoveries: Recoveries must lie between 20-130% Phenols & 50-150% PFASs

PFAS field samples that contain surrogate recoveries in excess of the QC limit designated in QSM 5.3 where no positive PFAS results have been reported have been reviewed and no data was affected.

WA DWER (n=10): PFBA, PFPeA, PFHxA, PFHpA, PFOA, PFBS, PFHxS, PFOS, 6:2 FTSA, 8:2 FTSA

QC Data General Comments

1. Where a result is reported as a less than (<), higher than the nominated LOR, this is due to either matrix interference, extract dilution required due to interferences or contaminant levels within the sample, high moisture content or insufficient sample provided.
2. Duplicate data shown within this report that states the word "BATCH" is a Batch Duplicate from outside of your sample batch, but within the laboratory sample batch at a 1:10 ratio. The Parent and Duplicate data shown is not data from your samples.
3. Organochlorine Pesticide analysis - where reporting LCS data, Toxaphene & Chlordane are not added to the LCS.
4. Organochlorine Pesticide analysis - where reporting Spike data, Toxaphene is not added to the Spike.
5. Total Recoverable Hydrocarbons - where reporting Spike & LCS data, a single spike of commercial Hydrocarbon products in the range of C12-C30 is added and it's Total Recovery is reported in the C10-C14 cell of the Report.
6. pH and Free Chlorine analysed in the laboratory - Analysis on this test must begin within 30 minutes of sampling.Therefore laboratory analysis is unlikely to be completed within holding time. Analysis will begin as soon as possible after sample receipt.
7. Recovery Data (Spikes & Surrogates) - where chromatographic interference does not allow the determination of Recovery the term "INT" appears against that analyte.
8. Polychlorinated Biphenyls are spiked only using Aroclor 1260 in Matrix Spikes and LCS.
9. For Matrix Spikes and LCS results a dash " -" in the report means that the specific analyte was not added to the QC sample.
10. Duplicate RPDs are calculated from raw analytical data thus it is possible to have two sets of data.

Quality Control Results

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Method Blank							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	mg/L	< 0.02			0.02	Pass	
TRH C10-C14	mg/L	< 0.05			0.05	Pass	
TRH C29-C36	mg/L	< 0.1			0.1	Pass	
Method Blank							
BTEX							
Benzene	mg/L	< 0.001			0.001	Pass	
Toluene	mg/L	< 0.001			0.001	Pass	
Ethylbenzene	mg/L	< 0.001			0.001	Pass	
m&p-Xylenes	mg/L	< 0.002			0.002	Pass	
o-Xylene	mg/L	< 0.001			0.001	Pass	
Xylenes - Total*	mg/L	< 0.003			0.003	Pass	
Method Blank							
Volatile Organics							
1.1-Dichloroethane	mg/L	< 0.001			0.001	Pass	
1.1-Dichloroethene	mg/L	< 0.001			0.001	Pass	
1.1.1-Trichloroethane	mg/L	< 0.001			0.001	Pass	
1.1.1.2-Tetrachloroethane	mg/L	< 0.001			0.001	Pass	
1.1.2-Trichloroethane	mg/L	< 0.001			0.001	Pass	
1.1.2.2-Tetrachloroethane	mg/L	< 0.001			0.001	Pass	
1.2-Dibromoethane	mg/L	< 0.001			0.001	Pass	
1.2-Dichlorobenzene	mg/L	< 0.001			0.001	Pass	
1.2-Dichloroethane	mg/L	< 0.001			0.001	Pass	
1.2-Dichloropropane	mg/L	< 0.001			0.001	Pass	
1.2.3-Trichloropropane	mg/L	< 0.001			0.001	Pass	
1.2.4-Trimethylbenzene	mg/L	< 0.001			0.001	Pass	
1.3-Dichlorobenzene	mg/L	< 0.001			0.001	Pass	
1.3-Dichloropropane	mg/L	< 0.001			0.001	Pass	
1.3.5-Trimethylbenzene	mg/L	< 0.001			0.001	Pass	
1.4-Dichlorobenzene	mg/L	< 0.001			0.001	Pass	
2-Butanone (MEK)	mg/L	< 0.001			0.001	Pass	
2-Propanone (Acetone)	mg/L	< 0.001			0.001	Pass	
4-Chlorotoluene	mg/L	< 0.001			0.001	Pass	
4-Methyl-2-pentanone (MIBK)	mg/L	< 0.001			0.001	Pass	
Allyl chloride	mg/L	< 0.001			0.001	Pass	
Bromobenzene	mg/L	< 0.001			0.001	Pass	
Bromochloromethane	mg/L	< 0.001			0.001	Pass	
Bromodichloromethane	mg/L	< 0.001			0.001	Pass	
Bromoform	mg/L	< 0.001			0.001	Pass	
Bromomethane	mg/L	< 0.001			0.001	Pass	
Carbon disulfide	mg/L	< 0.001			0.001	Pass	
Carbon Tetrachloride	mg/L	< 0.001			0.001	Pass	
Chlorobenzene	mg/L	< 0.001			0.001	Pass	
Chloroethane	mg/L	< 0.001			0.001	Pass	
Chloroform	mg/L	< 0.005			0.005	Pass	
Chloromethane	mg/L	< 0.001			0.001	Pass	
cis-1.2-Dichloroethene	mg/L	< 0.001			0.001	Pass	
cis-1.3-Dichloropropene	mg/L	< 0.001			0.001	Pass	
Dibromochloromethane	mg/L	< 0.001			0.001	Pass	
Dibromomethane	mg/L	< 0.001			0.001	Pass	
Dichlorodifluoromethane	mg/L	< 0.001			0.001	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Iodomethane	mg/L	< 0.001			0.001	Pass	
Isopropyl benzene (Cumene)	mg/L	< 0.001			0.001	Pass	
Methylene Chloride	mg/L	< 0.001			0.001	Pass	
Styrene	mg/L	< 0.001			0.001	Pass	
Tetrachloroethene	mg/L	< 0.001			0.001	Pass	
trans-1.2-Dichloroethene	mg/L	< 0.001			0.001	Pass	
trans-1.3-Dichloropropene	mg/L	< 0.001			0.001	Pass	
Trichloroethene	mg/L	< 0.001			0.001	Pass	
Trichlorofluoromethane	mg/L	< 0.001			0.001	Pass	
Vinyl chloride	mg/L	< 0.001			0.001	Pass	
Method Blank							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	mg/L	< 0.01			0.01	Pass	
TRH C6-C10	mg/L	< 0.02			0.02	Pass	
TRH >C10-C16	mg/L	< 0.05			0.05	Pass	
TRH >C16-C34	mg/L	< 0.1			0.1	Pass	
TRH >C34-C40	mg/L	< 0.1			0.1	Pass	
Method Blank							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	mg/L	< 0.001			0.001	Pass	
Acenaphthylene	mg/L	< 0.001			0.001	Pass	
Anthracene	mg/L	< 0.001			0.001	Pass	
Benz(a)anthracene	mg/L	< 0.001			0.001	Pass	
Benzo(a)pyrene	mg/L	< 0.001			0.001	Pass	
Benzo(b&j)fluoranthene	mg/L	< 0.001			0.001	Pass	
Benzo(g.h.i)perylene	mg/L	< 0.001			0.001	Pass	
Benzo(k)fluoranthene	mg/L	< 0.001			0.001	Pass	
Chrysene	mg/L	< 0.001			0.001	Pass	
Dibenz(a.h)anthracene	mg/L	< 0.001			0.001	Pass	
Fluoranthene	mg/L	< 0.001			0.001	Pass	
Fluorene	mg/L	< 0.001			0.001	Pass	
Indeno(1.2.3-cd)pyrene	mg/L	< 0.001			0.001	Pass	
Naphthalene	mg/L	< 0.001			0.001	Pass	
Phenanthrene	mg/L	< 0.001			0.001	Pass	
Pyrene	mg/L	< 0.001			0.001	Pass	
Method Blank							
Organochlorine Pesticides							
Chlordanes - Total	mg/L	< 0.002			0.002	Pass	
4.4'-DDD	mg/L	< 0.0001			0.0001	Pass	
4.4'-DDE	mg/L	< 0.0001			0.0001	Pass	
4.4'-DDT	mg/L	< 0.0001			0.0001	Pass	
a-BHC	mg/L	< 0.0001			0.0001	Pass	
Aldrin	mg/L	< 0.0001			0.0001	Pass	
b-BHC	mg/L	< 0.0001			0.0001	Pass	
d-BHC	mg/L	< 0.0001			0.0001	Pass	
Dieldrin	mg/L	< 0.0001			0.0001	Pass	
Endosulfan I	mg/L	< 0.0001			0.0001	Pass	
Endosulfan II	mg/L	< 0.0001			0.0001	Pass	
Endosulfan sulphate	mg/L	< 0.0001			0.0001	Pass	
Endrin	mg/L	< 0.0001			0.0001	Pass	
Endrin aldehyde	mg/L	< 0.0001			0.0001	Pass	
Endrin ketone	mg/L	< 0.0001			0.0001	Pass	
g-BHC (Lindane)	mg/L	< 0.0001			0.0001	Pass	
Heptachlor	mg/L	< 0.0001			0.0001	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Heptachlor epoxide	mg/L	< 0.0001			0.0001	Pass	
Hexachlorobenzene	mg/L	< 0.0001			0.0001	Pass	
Methoxychlor	mg/L	< 0.0002			0.0002	Pass	
Toxaphene	mg/L	< 0.001			0.001	Pass	
Method Blank							
Organophosphorus Pesticides							
Azinphos-methyl	mg/L	< 0.002			0.002	Pass	
Bolstar	mg/L	< 0.002			0.002	Pass	
Chlorfenvinphos	mg/L	< 0.002			0.002	Pass	
Chlorpyrifos	mg/L	< 0.02			0.02	Pass	
Chlorpyrifos-methyl	mg/L	< 0.002			0.002	Pass	
Coumaphos	mg/L	< 0.02			0.02	Pass	
Demeton-S	mg/L	< 0.02			0.02	Pass	
Demeton-O	mg/L	< 0.002			0.002	Pass	
Diazinon	mg/L	< 0.002			0.002	Pass	
Dichlorvos	mg/L	< 0.002			0.002	Pass	
Dimethoate	mg/L	< 0.002			0.002	Pass	
Disulfoton	mg/L	< 0.002			0.002	Pass	
EPN	mg/L	< 0.002			0.002	Pass	
Ethion	mg/L	< 0.002			0.002	Pass	
Ethoprop	mg/L	< 0.002			0.002	Pass	
Ethyl parathion	mg/L	< 0.002			0.002	Pass	
Fenitrothion	mg/L	< 0.002			0.002	Pass	
Fensulfothion	mg/L	< 0.002			0.002	Pass	
Fenthion	mg/L	< 0.002			0.002	Pass	
Malathion	mg/L	< 0.002			0.002	Pass	
Merphos	mg/L	< 0.002			0.002	Pass	
Methyl parathion	mg/L	< 0.002			0.002	Pass	
Mevinphos	mg/L	< 0.002			0.002	Pass	
Monocrotophos	mg/L	< 0.002			0.002	Pass	
Naled	mg/L	< 0.002			0.002	Pass	
Omethoate	mg/L	< 0.002			0.002	Pass	
Phorate	mg/L	< 0.002			0.002	Pass	
Pirimiphos-methyl	mg/L	< 0.02			0.02	Pass	
Pyrazophos	mg/L	< 0.002			0.002	Pass	
Ronnel	mg/L	< 0.002			0.002	Pass	
Terbufos	mg/L	< 0.002			0.002	Pass	
Tetrachlorvinphos	mg/L	< 0.002			0.002	Pass	
Tokuthion	mg/L	< 0.002			0.002	Pass	
Trichloronate	mg/L	< 0.002			0.002	Pass	
Method Blank							
Polychlorinated Biphenyls							
Aroclor-1016	mg/L	< 0.005			0.005	Pass	
Aroclor-1221	mg/L	< 0.001			0.001	Pass	
Aroclor-1232	mg/L	< 0.005			0.005	Pass	
Aroclor-1242	mg/L	< 0.005			0.005	Pass	
Aroclor-1248	mg/L	< 0.005			0.005	Pass	
Aroclor-1254	mg/L	< 0.005			0.005	Pass	
Aroclor-1260	mg/L	< 0.005			0.005	Pass	
Total PCB*	mg/L	< 0.001			0.001	Pass	
Method Blank							
Phenols (Halogenated)							
2-Chlorophenol	mg/L	< 0.003			0.003	Pass	
2.4-Dichlorophenol	mg/L	< 0.003			0.003	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
2.4.5-Trichlorophenol	mg/L	< 0.01			0.01	Pass	
2.4.6-Trichlorophenol	mg/L	< 0.01			0.01	Pass	
2.6-Dichlorophenol	mg/L	< 0.003			0.003	Pass	
4-Chloro-3-methylphenol	mg/L	< 0.01			0.01	Pass	
Pentachlorophenol	mg/L	< 0.01			0.01	Pass	
Tetrachlorophenols - Total	mg/L	< 0.03			0.03	Pass	
Method Blank							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	mg/L	< 0.1			0.1	Pass	
2-Methyl-4.6-dinitrophenol	mg/L	< 0.03			0.03	Pass	
2-Methylphenol (o-Cresol)	mg/L	< 0.003			0.003	Pass	
2-Nitrophenol	mg/L	< 0.01			0.01	Pass	
2.4-Dimethylphenol	mg/L	< 0.003			0.003	Pass	
2.4-Dinitrophenol	mg/L	< 0.03			0.03	Pass	
3&4-Methylphenol (m&p-Cresol)	mg/L	< 0.006			0.006	Pass	
4-Nitrophenol	mg/L	< 0.03			0.03	Pass	
Dinoseb	mg/L	< 0.1			0.1	Pass	
Phenol	mg/L	< 0.003			0.003	Pass	
Method Blank							
Heavy Metals							
Arsenic	mg/L	< 0.001			0.001	Pass	
Cadmium	mg/L	< 0.0002			0.0002	Pass	
Chromium	mg/L	< 0.001			0.001	Pass	
Copper	mg/L	< 0.001			0.001	Pass	
Lead	mg/L	< 0.001			0.001	Pass	
Mercury	mg/L	0.0001			0.0001	Pass	
Nickel	mg/L	< 0.001			0.001	Pass	
Zinc	mg/L	< 0.005			0.005	Pass	
Method Blank							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	ug/L	< 0.05			0.05	Pass	
Perfluoropentanoic acid (PFPeA)	ug/L	< 0.01			0.01	Pass	
Perfluorohexanoic acid (PFHxA)	ug/L	< 0.01			0.01	Pass	
Perfluoroheptanoic acid (PFHpA)	ug/L	< 0.01			0.01	Pass	
Perfluorooctanoic acid (PFOA)	ug/L	< 0.01			0.01	Pass	
Perfluorononanoic acid (PFNA)	ug/L	< 0.01			0.01	Pass	
Perfluorodecanoic acid (PFDA)	ug/L	< 0.01			0.01	Pass	
Perfluoroundecanoic acid (PFUnDA)	ug/L	< 0.01			0.01	Pass	
Perfluorododecanoic acid (PFDoDA)	ug/L	< 0.01			0.01	Pass	
Perfluorotridecanoic acid (PFTrDA)	ug/L	< 0.01			0.01	Pass	
Perfluorotetradecanoic acid (PFTeDA)	ug/L	< 0.01			0.01	Pass	
Method Blank							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	ug/L	< 0.05			0.05	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	ug/L	< 0.05			0.05	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	ug/L	< 0.05			0.05	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	ug/L	< 0.05			0.05	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	ug/L	< 0.05			0.05	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	ug/L	< 0.05			0.05	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	ug/L	< 0.05			0.05	Pass	
Method Blank							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	ug/L	< 0.01			0.01	Pass	
Perfluorononanesulfonic acid (PFNS)	ug/L	< 0.01			0.01	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Perfluoropropanesulfonic acid (PFPrS)	ug/L	< 0.01			0.01	Pass	
Perfluoropentanesulfonic acid (PFPeS)	ug/L	< 0.01			0.01	Pass	
Perfluorohexanesulfonic acid (PFHxS)	ug/L	< 0.01			0.01	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	ug/L	< 0.01			0.01	Pass	
Perfluorooctanesulfonic acid (PFOS)	ug/L	< 0.01			0.01	Pass	
Perfluorodecanesulfonic acid (PFDS)	ug/L	< 0.01			0.01	Pass	
Method Blank							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	ug/L	< 0.01			0.01	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	ug/L	< 0.05			0.05	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	ug/L	< 0.01			0.01	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	ug/L	< 0.01			0.01	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 1999 NEPM Fractions							
TRH C6-C9	%	108			70-130	Pass	
TRH C10-C14	%	92			70-130	Pass	
LCS - % Recovery							
BTEX							
Benzene	%	95			70-130	Pass	
Toluene	%	102			70-130	Pass	
Ethylbenzene	%	99			70-130	Pass	
m&p-Xylenes	%	99			70-130	Pass	
o-Xylene	%	104			70-130	Pass	
Xylenes - Total*	%	101			70-130	Pass	
LCS - % Recovery							
Volatile Organics							
1.1-Dichloroethene	%	108			70-130	Pass	
1.1.1-Trichloroethane	%	96			70-130	Pass	
1.2-Dichlorobenzene	%	100			70-130	Pass	
1.2-Dichloroethane	%	100			70-130	Pass	
Trichloroethene	%	92			70-130	Pass	
LCS - % Recovery							
Total Recoverable Hydrocarbons - 2013 NEPM Fractions							
Naphthalene	%	95			70-130	Pass	
TRH C6-C10	%	110			70-130	Pass	
TRH >C10-C16	%	91			70-130	Pass	
LCS - % Recovery							
Polycyclic Aromatic Hydrocarbons							
Acenaphthene	%	74			70-130	Pass	
Acenaphthylene	%	122			70-130	Pass	
Anthracene	%	79			70-130	Pass	
Benz(a)anthracene	%	92			70-130	Pass	
Benzo(a)pyrene	%	99			70-130	Pass	
Benzo(b&j)fluoranthene	%	105			70-130	Pass	
Benzo(g.h.i)perylene	%	105			70-130	Pass	
Benzo(k)fluoranthene	%	101			70-130	Pass	
Chrysene	%	114			70-130	Pass	
Dibenz(a.h)anthracene	%	94			70-130	Pass	
Fluoranthene	%	89			70-130	Pass	
Fluorene	%	75			70-130	Pass	
Indeno(1.2.3-cd)pyrene	%	94			70-130	Pass	
Naphthalene	%	113			70-130	Pass	
Phenanthrene	%	84			70-130	Pass	
Pyrene	%	90			70-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
LCS - % Recovery							
Organochlorine Pesticides							
Chlordanes - Total	%	91			70-130	Pass	
4.4'-DDD	%	112			70-130	Pass	
4.4'-DDE	%	118			70-130	Pass	
4.4'-DDT	%	108			70-130	Pass	
a-BHC	%	90			70-130	Pass	
Aldrin	%	96			70-130	Pass	
b-BHC	%	110			70-130	Pass	
d-BHC	%	100			70-130	Pass	
Endosulfan I	%	108			70-130	Pass	
Endosulfan II	%	115			70-130	Pass	
Endosulfan sulphate	%	104			70-130	Pass	
Endrin	%	116			70-130	Pass	
Endrin aldehyde	%	88			70-130	Pass	
Endrin ketone	%	129			70-130	Pass	
g-BHC (Lindane)	%	93			70-130	Pass	
Heptachlor	%	93			70-130	Pass	
Heptachlor epoxide	%	112			70-130	Pass	
Hexachlorobenzene	%	99			70-130	Pass	
Methoxychlor	%	99			70-130	Pass	
LCS - % Recovery							
Organophosphorus Pesticides							
Diazinon	%	94			70-130	Pass	
Dimethoate	%	88			70-130	Pass	
Ethion	%	83			70-130	Pass	
Fenitrothion	%	97			70-130	Pass	
Methyl parathion	%	96			70-130	Pass	
Mevinphos	%	92			70-130	Pass	
LCS - % Recovery							
Polychlorinated Biphenyls							
Aroclor-1016	%	90			70-130	Pass	
Aroclor-1260	%	109			70-130	Pass	
LCS - % Recovery							
Phenols (Halogenated)							
2-Chlorophenol	%	65			30-130	Pass	
2.4-Dichlorophenol	%	66			30-130	Pass	
2.4.5-Trichlorophenol	%	68			30-130	Pass	
2.4.6-Trichlorophenol	%	70			30-130	Pass	
2.6-Dichlorophenol	%	56			30-130	Pass	
4-Chloro-3-methylphenol	%	75			30-130	Pass	
Pentachlorophenol	%	74			30-130	Pass	
Tetrachlorophenols - Total	%	71			30-130	Pass	
LCS - % Recovery							
Phenols (non-Halogenated)							
2-Cyclohexyl-4.6-dinitrophenol	%	85			30-130	Pass	
2-Methyl-4.6-dinitrophenol	%	70			30-130	Pass	
2-Methylphenol (o-Cresol)	%	61			30-130	Pass	
2-Nitrophenol	%	68			30-130	Pass	
2.4-Dimethylphenol	%	57			30-130	Pass	
3&4-Methylphenol (m&p-Cresol)	%	62			30-130	Pass	
4-Nitrophenol	%	38			30-130	Pass	
Dinoseb	%	81			30-130	Pass	
Phenol	%	48			30-130	Pass	

Test	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
LCS - % Recovery							
Heavy Metals							
Arsenic	%	98			80-120	Pass	
Cadmium	%	97			80-120	Pass	
Chromium	%	99			80-120	Pass	
Copper	%	93			80-120	Pass	
Lead	%	100			80-120	Pass	
Mercury	%	106			80-120	Pass	
Nickel	%	97			80-120	Pass	
Zinc	%	92			80-120	Pass	
LCS - % Recovery							
Perfluoroalkyl carboxylic acids (PFCAs)							
Perfluorobutanoic acid (PFBA)	%	102			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	%	93			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	%	96			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	%	94			50-150	Pass	
Perfluorooctanoic acid (PFOA)	%	97			50-150	Pass	
Perfluorononanoic acid (PFNA)	%	96			50-150	Pass	
Perfluorodecanoic acid (PFDA)	%	90			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	%	111			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	%	112			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	%	97			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	%	100			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonamido substances							
Perfluorooctane sulfonamide (FOSA)	%	98			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	%	87			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	%	90			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	%	89			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	%	80			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	%	89			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	%	105			50-150	Pass	
LCS - % Recovery							
Perfluoroalkyl sulfonic acids (PFSAs)							
Perfluorobutanesulfonic acid (PFBS)	%	88			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	%	94			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	%	110			50-150	Pass	
Perfluoropentanesulfonic acid (PFPeS)	%	100			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	%	89			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	%	97			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	%	99			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	%	92			50-150	Pass	
LCS - % Recovery							
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)							
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	%	108			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	%	110			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	%	119			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	%	114			50-150	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Spike - % Recovery									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1					
TRH C10-C14	S20-No00650	NCP	%	84			70-130	Pass	
Spike - % Recovery									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1					
TRH >C10-C16	S20-No00650	NCP	%	78			70-130	Pass	
Spike - % Recovery									
Heavy Metals				Result 1					
Arsenic	S20-No03306	NCP	%	96			75-125	Pass	
Cadmium	S20-No03306	NCP	%	95			75-125	Pass	
Chromium	S20-No03306	NCP	%	98			75-125	Pass	
Copper	S20-No03306	NCP	%	91			75-125	Pass	
Lead	S20-No03306	NCP	%	97			75-125	Pass	
Mercury	S20-No03306	NCP	%	104			75-125	Pass	
Nickel	S20-No03306	NCP	%	95			75-125	Pass	
Zinc	S20-No03306	NCP	%	88			75-125	Pass	
Spike - % Recovery									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1					
Perfluorobutanoic acid (PFBA)	S20-Oc51650	CP	%	108			50-150	Pass	
Perfluoropentanoic acid (PFPeA)	S20-Oc51650	CP	%	96			50-150	Pass	
Perfluorohexanoic acid (PFHxA)	S20-Oc51650	CP	%	88			50-150	Pass	
Perfluoroheptanoic acid (PFHpA)	S20-Oc51650	CP	%	93			50-150	Pass	
Perfluorooctanoic acid (PFOA)	S20-Oc51650	CP	%	85			50-150	Pass	
Perfluorononanoic acid (PFNA)	S20-Oc51650	CP	%	91			50-150	Pass	
Perfluorodecanoic acid (PFDA)	S20-Oc51650	CP	%	76			50-150	Pass	
Perfluoroundecanoic acid (PFUnDA)	S20-Oc51650	CP	%	85			50-150	Pass	
Perfluorododecanoic acid (PFDoDA)	S20-Oc51650	CP	%	93			50-150	Pass	
Perfluorotridecanoic acid (PFTrDA)	S20-Oc51650	CP	%	69			50-150	Pass	
Perfluorotetradecanoic acid (PFTeDA)	S20-Oc51650	CP	%	85			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonamido substances				Result 1					
Perfluorooctane sulfonamide (FOSA)	S20-Oc51650	CP	%	82			50-150	Pass	
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	S20-Oc51650	CP	%	99			50-150	Pass	
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	S20-Oc51650	CP	%	101			50-150	Pass	
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	S20-Oc51650	CP	%	71			50-150	Pass	
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	S20-Oc51650	CP	%	79			50-150	Pass	
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	S20-Oc51650	CP	%	72			50-150	Pass	
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	S20-Oc51650	CP	%	93			50-150	Pass	
Spike - % Recovery									
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1					
Perfluorobutanesulfonic acid (PFBS)	S20-Oc51650	CP	%	79			50-150	Pass	
Perfluorononanesulfonic acid (PFNS)	S20-Oc51650	CP	%	90			50-150	Pass	
Perfluoropropanesulfonic acid (PFPrS)	S20-Oc51650	CP	%	91			50-150	Pass	

Test	Lab Sample ID	QA Source	Units	Result 1			Acceptance Limits	Pass Limits	Qualifying Code
Perfluoropentanesulfonic acid (PFPeS)	S20-Oc51650	CP	%	105			50-150	Pass	
Perfluorohexanesulfonic acid (PFHxS)	S20-Oc51650	CP	%	74			50-150	Pass	
Perfluoroheptanesulfonic acid (PFHpS)	S20-Oc51650	CP	%	111			50-150	Pass	
Perfluorooctanesulfonic acid (PFOS)	S20-Oc51650	CP	%	80			50-150	Pass	
Perfluorodecanesulfonic acid (PFDS)	S20-Oc51650	CP	%	78			50-150	Pass	
Spike - % Recovery									
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1					
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	S20-Oc51650	CP	%	104			50-150	Pass	
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	S20-Oc51650	CP	%	99			50-150	Pass	
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	S20-Oc51650	CP	%	101			50-150	Pass	
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	S20-Oc51650	CP	%	84			50-150	Pass	
Test	**Lab Sample ID**	**QA Source**	**Units**	**Result 1**			**Acceptance Limits**	**Pass Limits**	**Qualifying Code**
Duplicate									
Total Recoverable Hydrocarbons - 1999 NEPM Fractions				Result 1	Result 2	RPD			
TRH C10-C14	S20-No02897	NCP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
TRH C15-C28	S20-No02897	NCP	mg/L	< 0.1	< 0.1	<1	30%	Pass	
TRH C29-C36	S20-No02897	NCP	mg/L	< 0.1	< 0.1	<1	30%	Pass	
Duplicate									
Total Recoverable Hydrocarbons - 2013 NEPM Fractions				Result 1	Result 2	RPD			
TRH >C10-C16	S20-No02897	NCP	mg/L	< 0.05	< 0.05	<1	30%	Pass	
TRH >C16-C34	S20-No02897	NCP	mg/L	< 0.1	< 0.1	<1	30%	Pass	
TRH >C34-C40	S20-No02897	NCP	mg/L	< 0.1	< 0.1	<1	30%	Pass	
Duplicate									
Heavy Metals				Result 1	Result 2	RPD			
Arsenic	S20-Oc51020	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Cadmium	S20-Oc51020	NCP	mg/L	< 0.0002	< 0.0002	<1	30%	Pass	
Chromium	S20-Oc51020	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Copper	S20-Oc51020	NCP	mg/L	0.002	0.002	4.0	30%	Pass	
Lead	S20-Oc51020	NCP	mg/L	< 0.001	< 0.001	<1	30%	Pass	
Mercury	S20-Oc51020	NCP	mg/L	< 0.0001	< 0.0001	<1	30%	Pass	
Nickel	S20-Oc51020	NCP	mg/L	0.004	0.005	9.0	30%	Pass	
Zinc	S20-Oc51020	NCP	mg/L	0.014	0.014	<1	30%	Pass	
Duplicate									
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD			
Perfluorobutanoic acid (PFBA)	P20-Oc49749	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass	
Perfluoropentanoic acid (PFPeA)	P20-Oc49749	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorohexanoic acid (PFHxA)	P20-Oc49749	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroheptanoic acid (PFHpA)	P20-Oc49749	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorooctanoic acid (PFOA)	P20-Oc49749	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorononanoic acid (PFNA)	P20-Oc49749	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorodecanoic acid (PFDA)	P20-Oc49749	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluoroundecanoic acid (PFUnDA)	P20-Oc49749	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	
Perfluorododecanoic acid (PFDoDA)	P20-Oc49749	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass	

Duplicate								
Perfluoroalkyl carboxylic acids (PFCAs)				Result 1	Result 2	RPD		
Perfluorotridecanoic acid (PFTrDA)	P20-Oc49749	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorotetradecanoic acid (PFTeDA)	P20-Oc49749	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonamido substances				Result 1	Result 2	RPD		
Perfluorooctane sulfonamide (FOSA)	P20-Oc49749	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methylperfluoro-1-octane sulfonamide (N-MeFOSA)	P20-Oc49749	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethylperfluoro-1-octane sulfonamide (N-EtFOSA)	P20-Oc49749	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-methylperfluoro-1-octane sulfonamido)-ethanol (N-MeFOSE)	P20-Oc49749	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
2-(N-ethylperfluoro-1-octane sulfonamido)-ethanol (N-EtFOSE)	P20-Oc49749	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-ethyl-perfluorooctanesulfonamidoacetic acid (N-EtFOSAA)	P20-Oc49749	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
N-methyl-perfluorooctanesulfonamidoacetic acid (N-MeFOSAA)	P20-Oc49749	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
Duplicate								
Perfluoroalkyl sulfonic acids (PFSAs)				Result 1	Result 2	RPD		
Perfluorobutanesulfonic acid (PFBS)	P20-Oc49749	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorononanesulfonic acid (PFNS)	P20-Oc49749	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropropanesulfonic acid (PFPrS)	P20-Oc49749	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoropentanesulfonic acid (PFPeS)	P20-Oc49749	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorohexanesulfonic acid (PFHxS)	P20-Oc49749	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluoroheptanesulfonic acid (PFHpS)	P20-Oc49749	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorooctanesulfonic acid (PFOS)	P20-Oc49749	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Perfluorodecanesulfonic acid (PFDS)	P20-Oc49749	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
Duplicate								
n:2 Fluorotelomer sulfonic acids (n:2 FTSAs)				Result 1	Result 2	RPD		
1H.1H.2H.2H-perfluorohexanesulfonic acid (4:2 FTSA)	P20-Oc49749	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorooctanesulfonic acid (6:2 FTSA)	P20-Oc49749	NCP	ug/L	< 0.05	< 0.05	<1	30%	Pass
1H.1H.2H.2H-perfluorodecanesulfonic acid (8:2 FTSA)	P20-Oc49749	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass
1H.1H.2H.2H-perfluorododecanesulfonic acid (10:2 FTSA)	P20-Oc49749	NCP	ug/L	< 0.01	< 0.01	<1	30%	Pass

Comments

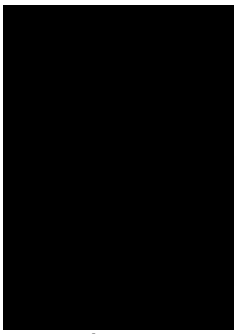
Sample Integrity

Custody Seals Intact (if used)	N/A
Attempt to Chill was evident	Yes
Sample correctly preserved	Yes
Appropriate sample containers have been used	Yes
Sample containers for volatile analysis received with minimal headspace	Yes
Samples received within HoldingTime	Yes
Some samples have been subcontracted	No

Qualifier Codes/Comments

Code	Description
N01	F2 is determined by arithmetically subtracting the "naphthalene" value from the ">C10-C16" value. The naphthalene value used in this calculation is obtained from volatiles (Purge & Trap analysis).
N02	Where we have reported both volatile (P&T GCMS) and semivolatile (GCMS) naphthalene data, results may not be identical. Provided correct sample handling protocols have been followed, any observed differences in results are likely to be due to procedural differences within each methodology. Results determined by both techniques have passed all QAQC acceptance criteria, and are entirely technically valid.
N04	F1 is determined by arithmetically subtracting the "Total BTEX" value from the "C6-C10" value. The "Total BTEX" value is obtained by summing the concentrations of BTEX analytes. The "C6-C10" value is obtained by quantitating against a standard of mixed aromatic/aliphatic analytes.
N07	Please note:- These two PAH isomers closely co-elute using the most contemporary analytical methods and both the reported concentration (and the TEQ) apply specifically to the total of the two co-eluting PAHs
N09	Quantification of linear and branched isomers has been conducted as a single total response using the relative response factor for the corresponding linear/branched standard.
N11	Isotope dilution is used for calibration of each native compound for which an exact labelled analogue is available (Isotope Dilution Quantitation). The isotopically labelled analogues allow identification and recovery correction of the concentration of the associated native PFAS compounds.
N15	Where the native PFAS compound does not have labelled analogue then the quantification is made using the Extracted Internal Standard Analyte with the closest retention time to the analyte and no recovery correction has been made (Internal Standard Quantitation).

Authorised By



Analytical Services Manager
Senior Analyst-Organic (NSW)
Senior Analyst-Metal (NSW)
Senior Analyst-PFAS (QLD)

General Manager

Final report - this Report replaces any previously issued Report

- Indicates Not Requested

* Indicates NATA accreditation does not cover the performance of this service

Measurement uncertainty of test data is available on request or please click here.

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source Sydney.pdf page: 1 SGS Ref: SE208922_COC

SLR

CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ DARWIN: 21 Parap Rd, Dawin, NT 0820
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☑ SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ WOLLONGONG: The Central Building, UoW Innovation Campus, North Wollongong, 2520

CLIENT: DHA	LABORATORY: SGS	Turnaround Time (TAT)	COC Number
PROJECT: Randwick Barracks	LABORATORY ADDRESS: SYD		of
PROJECT NUMBER: 610.30041	SAMPLER: [redacted]	☑ Standard TAT	
PROJECT MANAGER: [redacted]	SAMPLER CONTACT No:	☐ Non Standard or Urgent TAT	
PM CONTACT No:	Email Reports and Invoices to: LGRSYD@slrconsulting.com	Required TAT:	

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite B	Suite G	Suite A	OCP	VOCs	Additional Information (Comment on any gross contamination or specific requirements)
1	GW11	20.7.20	Water				X			
2	GW10				X	X		X		
3	GW08				X	X		X		
4	GW014				X	X			X	
5	GW015				X	X			X	
6	GW016				X					

SGS EHS Sydney COC

SE208922

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	Sign [redacted]	Date / Time 20.7.20 1545	Received by	Sign [redacted]	Date / Time 20/07/20	Temperature Received:
Relinquished By	Sign	Date / Time 20/7 4.20	Received by	Sign	Date / Time 4.20	
Relinquished By	Sign	Date / Time	Received by	Sign	Date / Time	

[redacted] Sydney)

From: AU.Environmental.Sydney (Sydney)
Sent: Monday, 20 July 2020 6:18 PM
To: AU.SampleReceipt.Sydney (Sydney)
Subject: FW: [EXTERNAL] Samples received from JR (SLR) today

Hi [redacted]

Have we received this? Please note additional tests required, let me know.

Kind Regards,

[redacted]
Environment, Health & Safety
Production Manager

SGS Australia Pty Ltd
Unit 16, 33 Maddox Street
Alexandria NSW 2015
Phone: +61 (0)2 8594 0403
Fax: + 61 (0)2 8594 0499
E-mail: [redacted]@sgs.com
Web: www.au.sgs.com

View Your Results Online: engage.sgs.com

From: [redacted]@slrconsulting.com>
Sent: Monday, 20 July 2020 6:06 PM
To: AU.Environmental.Sydney (Sydney) <AU.Environmental.Sydney@sgs.com>
Cc: [redacted]@sgs.com>
Subject: [EXTERNAL] Samples received from JR (SLR) today

*** WARNING: this message is from an EXTERNAL SENDER. Please be cautious, particularly with links and attachments. ***

Hi there,

You would have received an esky containing six (6) groundwater samples collected by JR this afternoon, with hardcopy COCs. In addition to the analytes listed in JR's COC, could you also please analyse all six samples for **TDS** as well as **major cations and anions**?

Thank you.

SLR

[redacted]
Senior Project Consultant - Land Quality & Remediation

Please note in response to the COVID-19 Pandemic and physical distancing recommendations from the Australian Government, SLR is encouraging staff to work remotely and implement flexible working hours if necessary.
If you have received this email outside of regular office hours, it is not expected that you will respond until your own working hours commence.

SAMPLE RECEIPT ADVICE

SE208922

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	6

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Mon 20/7/2020
Report Due	Mon 27/7/2020
SGS Reference	**SE208922**

SUBMISSION DETAILS

This is to confirm that 6 samples were received on Monday 20/7/2020. Results are expected to be ready by COB Monday 27/7/2020. Please quote SGS reference SE208922 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	6 Water
Date documentation received	20/7/2020	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	1.3°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

PFAS subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420.

This document is issued by the Company under its General Conditions of Service accessible at www.sgs.com/en/Terms-and-Conditions.aspx. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein.

SAMPLE RECEIPT ADVICE

SE208922

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Water	OP Pesticides in Water	PAH (Polynuclear Aromatic Hydrocarbons) in Water	PCBs in Water	Speciated Phenols in Water	TRH (Total Recoverable Hydrocarbons) in Water	VOCs in Water	Volatile Petroleum Hydrocarbons in Water
001	GW11	28	13	22	11	18	9	78	7
002	GW10	28	-	-	11	-	9	78	7
003	GW08	28	-	-	11	-	9	78	7
004	GW014	-	-	-	11	-	9	78	7
005	GW015	-	-	-	11	-	9	78	7
006	GW016	-	-	-	11	-	9	11	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE208922

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Fibre Identification in soil	Gravimetric Determination of Asbestos in Soil	Mercury (dissolved) in Water	Per- and Polyfluoroalkyl Substances (PFAS) in	Trace Metals (Dissolved) in Water by ICPMS
001	GW11	2	9	1	-	7
002	GW10	2	9	1	55	7
003	GW08	2	9	1	55	7
004	GW014	2	9	1	55	7
005	GW015	2	9	1	55	7
006	GW016	2	9	1	-	7

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS		LABORATORY DETAILS	
Contact	[redacted]	Manager	[redacted]
Client	SGS EHS SYDNEY	Laboratory	SGS Melbourne EH&S
Address	Unit 16, 33 Maddox Street Alexandria NSW 2015	Address	10/585 Blackburn Road Notting Hill Victoria 3168
Telephone	02 8594 0400	Telephone	+61395743200
Facsimile	02 8594 0499	Facsimile	+61395743399
Email	au.environmental.sydney@sgs.com	Email	Au.SampleReceipt.Melbourne@sgs.com
Project	**610.30041 Randwick Barracks**	SGS Reference	**ME315801 R0**
Order Number	**SE208922**	Date Received	23 Jul 2020
Samples	6	Date Reported	27 Jul 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(14420).

SIGNATORIES

[redacted]

Australian Chemistry Manager

Parameter	Units	LOR				
Sample Number			ME315801.001	ME315801.002	ME315801.003	ME315801.004
Sample Matrix			Water	Water	Water	Water
Sample Date			20 Jul 2020	20 Jul 2020	20 Jul 2020	20 Jul 2020
Sample Name			SE208922.001	SE208922.002	SE208922.003	SE208922.004
Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples - Low Level		**Method: MA-1523**	**Tested: 27/7/2020**			
Perfluorobutanoic acid (PFBA)	µg/L	0.0005	-	**0.0028**	**0.0012**	**0.0006**
Perfluoropentanoic acid (PFPeA)	µg/L	0.0005	-	**0.0050**	**0.0009**	**0.0035**
Perfluorohexanoic acid (PFHxA)	µg/L	0.0005	-	**0.0053**	**0.0026**	**0.0059**
Perfluoroheptanoic acid (PFHpA)	µg/L	0.0005	-	**0.0015**	**0.0012**	**0.0016**
Perfluorooctanoic Acid (PFOA)	µg/L	0.0005	-	**0.0038**	**0.0024**	**0.0049**
Perfluorononanoic acid (PFNA)	µg/L	0.001	-	<0.001	<0.001	<0.001
Perfluorodecanoic acid (PFDA)	µg/L	0.001	-	<0.001	<0.001	<0.001
Perfluoroundecanoic acid (PFUnA)	µg/L	0.001	-	<0.001	<0.001	<0.001
Perfluorododecanoic acid (PFDoA)	µg/L	0.001	-	<0.001	<0.001	<0.001
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.001	-	<0.001	<0.001	<0.001
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.001	-	<0.001	<0.001	<0.001
Perfluorohexadecanoic acid (PFHxDA)	µg/L	0.002	-	<0.002	<0.002	<0.002
Perfluorobutane sulfonate (PFBS)	µg/L	0.001	-	**0.002**	**0.001**	**0.003**
Perfluoropentane sulfonate (PFPeS)	µg/L	0.001	-	<0.001	<0.001	**0.002**
Perfluorohexane sulfonate (PFHxS)	µg/L	0.0002	-	**0.0027**	**0.0019**	**0.011**
Perfluoroheptane sulfonate (PFHpS)	µg/L	0.0002	-	<0.0002	<0.0002	<0.0002
Perfluorooctane sulfonate (PFOS)	µg/L	0.0002	-	**0.0018**	**0.0008**	**0.011**
Sum of PFHxS and PFOS	µg/L	0.0002	-	**0.0045**	**0.0027**	**0.022**
Perfluorononane sulfonate (PFNS)	µg/L	0.0005	-	<0.0005	<0.0005	<0.0005
Perfluorodecane sulfonate (PFDS)	µg/L	0.0005	-	<0.0005	<0.0005	<0.0005
Perfluorododecane sulfonate (PFDoS)	µg/L	0.0005	-	<0.0005	<0.0005	<0.0005
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	µg/L	0.0005	-	<0.0005	<0.0005	<0.0005
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	µg/L	0.0005	-	<0.0005	<0.0005	**0.0070**
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	µg/L	0.0005	-	<0.0005	<0.0005	<0.0005
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.002	-	<0.002	<0.002	<0.002
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	µg/L	0.0025	-	<0.0025	<0.0025	<0.0025
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	µg/L	0.0025	-	<0.0025	<0.0025	<0.0025
2-(N-Methylperfluorooctane sulfonamido)-ethanol	µg/L	0.0025	-	<0.0025	<0.0025	<0.0025
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	µg/L	0.0025	-	<0.0025	<0.0025	<0.0025
N-Methylperfluorooctanesulfonamidoacetic acid	µg/L	0.0025	-	<0.0025	<0.0025	<0.0025
N-Ethylperfluorooctanesulfonamidoacetic Acid	µg/L	0.0025	-	<0.0025	<0.0025	<0.0025
(13C4-PFBA) Surrogate	%	-	-	**102**	**100**	**105**
(13C5-PFPeA) Surrogate	%	-	-	**92**	**98**	**105**
(13C5-PFHxA) Surrogate	%	-	-	**127**	**119**	**131**
(13C4-PFHpA) Surrogate	%	-	-	**103**	**101**	**106**
(13C4_PFOA) Surrogate	%	-	-	**112**	**113**	**113**
(13C9-PFNA) Surrogate	%	-	-	**101**	**99**	**96**
(13C6-PFDA) Surrogate	%	-	-	**116**	**117**	**108**
(13C7-PFUdA) Surrogate	%	-	-	**94**	**91**	**93**
(13C2-PFDoA) Surrogate	%	-	-	**92**	**75**	**99**
(13C2_PFTeDA) Surrogate	%	-	-	**94**	**77**	**97**
(13C2-PFHxDA) Surrogate	%	-	-	**75**	**39**	**51**
(13C3-PFBS) Surrogate	%	-	-	**121**	**107**	**112**
(13C3-PFHxS) Surrogate	%	-	-	**96**	**96**	**90**
(13C8-PFOS) Surrogate	%	-	-	**91**	**106**	**104**
(13C2-4:2 FTS) Surrogate	%	-	-	**105**	**83**	**195**
(13C2-6:2 FTS) Surrogate	%	-	-	**89**	**84**	**202**
(13C2-8:2 FTS) Surrogate	%	-	-	**89**	**74**	**150**
(13C8-PFOSA) Surrogate	%	-	-	**76**	**91**	**79**
(D3-N-MeFOSA) Surrogate	%	-	-	**74**	**87**	**83**
(D5-N-EtFOSA) Surrogate	%	-	-	**85**	**95**	**86**
(D7-N-MeFOSE) Surrogate	%	-	-	**80**	**92**	**80**
(D9-N-EtFOSE) Surrogate	%	-	-	**73**	**87**	**71**
(D3-N-MeFOSAA) Surrogate	%	-	-	**80**	**98**	**101**
(D5-N-EtFOSAA) Surrogate	%	-	-	**102**	**93**	**93**

Parameter	Units	LOR	Sample Number: ME315801.005 Sample Matrix: Water Sample Date: 20 Jul 2020 Sample Name: SE208922.005	Sample Number: ME315801.006 Sample Matrix: Water Sample Date: 20 Jul 2020 Sample Name: SE208922.006
Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples - Low Level		**Method: MA-1523**	**Tested: 23/7/2020**	
Perfluorobutanoic acid (PFBA)	µg/L	0.0005	**0.0009**	-
Perfluoropentanoic acid (PFPeA)	µg/L	0.0005	**0.0013**	-
Perfluorohexanoic acid (PFHxA)	µg/L	0.0005	**0.0049**	-
Perfluoroheptanoic acid (PFHpA)	µg/L	0.0005	**0.0014**	-
Perfluorooctanoic Acid (PFOA)	µg/L	0.0005	<0.0005	-
Perfluorononanoic acid (PFNA)	µg/L	0.001	<0.001	-
Perfluorodecanoic acid (PFDA)	µg/L	0.001	<0.001	-
Perfluoroundecanoic acid (PFUnA)	µg/L	0.001	<0.001	-
Perfluorododecanoic acid (PFDoA)	µg/L	0.001	<0.001	-
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.001	<0.001	-
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.001	<0.001	-
Perfluorohexadecanoic acid (PFHxDA)	µg/L	0.002	<0.002	-
Perfluorobutane sulfonate (PFBS)	µg/L	0.001	**0.003**	-
Perfluoropentane sulfonate (PFPeS)	µg/L	0.001	**0.002**	-
Perfluorohexane sulfonate (PFHxS)	µg/L	0.0002	**0.011**	-
Perfluoroheptane sulfonate (PFHpS)	µg/L	0.0002	<0.0002	-
Perfluorooctane sulfonate (PFOS)	µg/L	0.0002	**0.0007**	-
Sum of PFHxS and PFOS	µg/L	0.0002	**0.011**	-
Perfluorononane sulfonate (PFNS)	µg/L	0.0005	<0.0005	-
Perfluorodecane sulfonate (PFDS)	µg/L	0.0005	<0.0005	-
Perfluorododecane sulfonate (PFDoS)	µg/L	0.0005	<0.0005	-
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	µg/L	0.0005	<0.0005	-
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	µg/L	0.0005	**0.0041**	-
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	µg/L	0.0005	<0.0005	-
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.002	<0.002	-
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	µg/L	0.0025	<0.0025	-
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	µg/L	0.0025	<0.0025	-
2-(N-Methylperfluorooctane sulfonamido)-ethanol	µg/L	0.0025	<0.0025	-
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	µg/L	0.0025	<0.0025	-
N-Methylperfluorooctanesulfonamidoacetic acid	µg/L	0.0025	<0.0025	-
N-Ethylperfluorooctanesulfonamidoacetic Acid	µg/L	0.0025	<0.0025	-
(13C4-PFBA) Surrogate	%	-	**106**	-
(13C5-PFPeA) Surrogate	%	-	**118**	-
(13C5-PFHxA) Surrogate	%	-	**125**	-
(13C4-PFHpA) Surrogate	%	-	**106**	-
(13C4_PFOA) Surrogate	%	-	**110**	-
(13C9-PFNA) Surrogate	%	-	**100**	-
(13C6-PFDA) Surrogate	%	-	**112**	-
(13C7-PFUdA) Surrogate	%	-	**89**	-
(13C2-PFDoA) Surrogate	%	-	**84**	-
(13C2_PFTeDA) Surrogate	%	-	**101**	-
(13C2-PFHxDA) Surrogate	%	-	**66**	-
(13C3-PFBS) Surrogate	%	-	**113**	-
(13C3-PFHxS) Surrogate	%	-	**95**	-
(13C8-PFOS) Surrogate	%	-	**92**	-
(13C2-4:2 FTS) Surrogate	%	-	**164**	-
(13C2-6:2 FTS) Surrogate	%	-	**153**	-
(13C2-8:2 FTS) Surrogate	%	-	**125**	-
(13C8-PFOSA) Surrogate	%	-	**80**	-
(D3-N-MeFOSA) Surrogate	%	-	**71**	-
(D5-N-EtFOSA) Surrogate	%	-	**76**	-
(D7-N-MeFOSE) Surrogate	%	-	**69**	-
(D9-N-EtFOSE) Surrogate	%	-	**69**	-
(D3-N-MeFOSAA) Surrogate	%	-	**98**	-
(D5-N-EtFOSAA) Surrogate	%	-	**91**	-

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage*. Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples - Low Level Method: MA-1523

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Perfluorobutanoic acid (PFBA)	LB034421	µg/L	0.0005	<0.0005	12%	NA
Perfluoropentanoic acid (PFPeA)	LB034421	µg/L	0.0005	<0.0005	10%	NA
Perfluorohexanoic acid (PFHxA)	LB034421	µg/L	0.0005	<0.0005	14%	NA
Perfluoroheptanoic acid (PFHpA)	LB034421	µg/L	0.0005	<0.0005	1%	91%
Perfluorooctanoic Acid (PFOA)	LB034421	µg/L	0.0005	<0.0005	63%	95%
Perfluorononanoic acid (PFNA)	LB034421	µg/L	0.001	<0.001	0%	130%
Perfluorodecanoic acid (PFDA)	LB034421	µg/L	0.001	<0.001	0%	113%
Perfluoroundecanoic acid (PFUnA)	LB034421	µg/L	0.001	<0.001	0%	111%
Perfluorododecanoic acid (PFDoA)	LB034421	µg/L	0.001	<0.001	0%	118%
Perfluorotridecanoic acid (PFTrDA)	LB034421	µg/L	0.001	<0.001	0%	
Perfluorotetradecanoic acid (PFTeDA)	LB034421	µg/L	0.001	<0.001	0%	
Perfluorohexadecanoic acid (PFHxDA)	LB034421	µg/L	0.002	<0.002	0%	NA
Perfluorobutane sulfonate (PFBS)	LB034421	µg/L	0.001	<0.001	6%	NA
Perfluoropentane sulfonate (PFPeS)	LB034421	µg/L	0.001	<0.001	1%	NA
Perfluorohexane sulfonate (PFHxS)	LB034421	µg/L	0.0002	<0.0002	8%	NA
Perfluoroheptane sulfonate (PFHpS)	LB034421	µg/L	0.0002	<0.0002	10%	NA
Perfluorooctane sulfonate (PFOS)	LB034421	µg/L	0.0002	<0.0002	41%	95%
Sum of PFHxS and PFOS	LB034421	µg/L	0.0002	<0.0002	3%	NA
Perfluorononane sulfonate (PFNS)	LB034421	µg/L	0.0005	<0.0005	0%	NA
Perfluorodecane sulfonate (PFDS)	LB034421	µg/L	0.0005	<0.0005	0%	NA
Perfluorododecane sulfonate (PFDoS)	LB034421	µg/L	0.0005	<0.0005	0%	NA
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	LB034421	µg/L	0.0005	<0.0005	0%	NA
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	LB034421	µg/L	0.0005	<0.0005	0%	NA
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	LB034421	µg/L	0.0005	<0.0005	0%	NA
Perfluorooctane sulfonamide (PFOSA)	LB034421	µg/L	0.002	<0.002	0%	71%
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	LB034421	µg/L	0.0025	<0.0025	0%	NA
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	LB034421	µg/L	0.0025	<0.0025	0%	NA
2-(N-Methylperfluorooctane sulfonamido)-ethanol (N-MeFOSE)	LB034421	µg/L	0.0025	<0.0025	0%	NA
2-(N-Ethylperfluorooctane sulfonamido)-ethanol (N-EtFOSE)	LB034421	µg/L	0.0025	<0.0025	0%	NA
N-Methylperfluorooctanesulfonamidoacetic acid (N_MeFOSAA)	LB034421	µg/L	0.0025	<0.0025	0%	NA
N-Ethylperfluorooctanesulfonamidoacetic Acid (N-EtFOSAA)	LB034421	µg/L	0.0025	<0.0025	0%	NA
(13C4-PFBA) Surrogate	LB034421	%	-	99%	1%	100%
(13C5-PFPeA) Surrogate	LB034421	%	-	90%	1%	91%
(13C5-PFHxA) Surrogate	LB034421	%	-	136%	3%	118%
(13C4-PFHpA) Surrogate	LB034421	%	-	114%	3%	101%
(13C4_PFOA) Surrogate	LB034421	%	-	110%	2%	108%
(13C9-PFNA) Surrogate	LB034421	%	-	104%	6%	97%
(13C6-PFDA) Surrogate	LB034421	%	-	100%	12%	104%
(13C7-PFUdA) Surrogate	LB034421	%	-	76%	9%	87%
(13C2-PFDoA) Surrogate	LB034421	%	-	62%	5%	86%
(13C2_PFTeDA) Surrogate	LB034421	%	-	22%	14%	61%
(13C2-PFHxDA) Surrogate	LB034421	%	-	8%	19%	52%
(13C3-PFBS) Surrogate	LB034421	%	-	124%	6%	118%
(13C3-PFHxS) Surrogate	LB034421	%	-	91%	12%	113%
(13C8-PFOS) Surrogate	LB034421	%	-	126%	29%	106%
(13C2-4:2 FTS) Surrogate	LB034421	%	-	211%	7%	186%
(13C2-6:2 FTS) Surrogate	LB034421	%	-	182%	18%	158%
(13C2-8:2 FTS) Surrogate	LB034421	%	-	132%	16%	151%
(13C8-PFOSA) Surrogate	LB034421	%	-	105%	4%	77%
(D3-N-MeFOSA) Surrogate	LB034421	%	-	101%	4%	70%
(D5-N-EtFOSA) Surrogate	LB034421	%	-	94%	4%	68%
(D7-N-MeFOSE) Surrogate	LB034421	%	-	100%	4%	71%
(D9-N-EtFOSE) Surrogate	LB034421	%	-	86%	4%	75%
(D3-N-MeFOSAA) Surrogate	LB034421	%	-	131%	19%	108%
(D5-N-EtFOSAA) Surrogate	LB034421	%	-	124%	6%	114%

METHOD SUMMARY

ME315801 R0

METHOD	METHODOLOGY SUMMARY
MA-1523	This method covers the analysis of per- and polyfluoroalkyl substances (PFAS) in aqueous, solid and biosolid samples and solvent extracts, determined as the total of linear and branched isomers. After spiking with isotopically labelled quantification surrogates and clean-up via SPE cartridges sample extracts are analysed by liquid chromatography/mass spectrometry (LC-MS/MS). PFAS concentrations are determined by isotope dilution quantification.

FOOTNOTES

IS	Insufficient sample for analysis.	LOR	Limit of Reporting
LNR	Sample listed, but not received.	↑↓	Raised or Lowered Limit of Reporting
*	NATA accreditation does not cover the performance of this service.	QFH	QC result is above the upper tolerance
		QFL	QC result is below the lower tolerance
**	Indicative data, theoretical holding time exceeded.	-	The sample was not analysed for this analyte
		NVL	Not Validated

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calcuated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety .

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ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

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Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	6

LABORATORY DETAILS

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SGS Reference	**SE208922 R0**
Date Received	20/7/2020
Date Reported	27/7/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

PFAS subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420. Report No: ME315801

SIGNATORIES

[redacted]

Chemist | Metals/Inorganics Team Leader | Senior Chemist

[redacted]

Organic Section Head

VOCs in Water [AN433] Tested: 24/7/2020

PARAMETER	UOM	LOR	GW11 WATER - 20/7/2020 SE208922.001	GW10 WATER - 20/7/2020 SE208922.002	GW08 WATER - 20/7/2020 SE208922.003	GW014 WATER - 20/7/2020 SE208922.004	GW015 WATER - 20/7/2020 SE208922.005
Benzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Toluene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
m/p-xylene	µg/L	1	<1	<1	<1	<1	<1
o-xylene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Total Xylenes	µg/L	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
Total BTEX	µg/L	3	<3	<3	<3	<3	<3
Naphthalene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dichlorodifluoromethane (CFC-12)	µg/L	5	<5	<5	<5	<5	<5
Chloromethane	µg/L	5	<5	<5	<5	<5	<5
Vinyl chloride (Chloroethene)	µg/L	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Bromomethane	µg/L	10	<10	<10	<10	<10	<10
Chloroethane	µg/L	5	<5	<5	<5	<5	<5
Trichlorofluoromethane	µg/L	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	µg/L	10	<10	<10	<10	<10	<10
Iodomethane	µg/L	5	<5	<5	<5	<5	<5
1,1-dichloroethene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Acrylonitrile	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dichloromethane (Methylene chloride)	µg/L	5	<5	<5	<5	<5	<5
Allyl chloride	µg/L	2	<2	<2	<2	<2	<2
Carbon disulfide	µg/L	2	<2	<2	<2	<2	<2
trans-1,2-dichloroethene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MtBE (Methyl-tert-butyl ether)	µg/L	2	<2	<2	<2	<2	<2
1,1-dichloroethane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Vinyl acetate	µg/L	10	<10	<10	<10	<10	<10
MEK (2-butanone)	µg/L	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	µg/L	0.5	<0.5	<0.5	<0.5	**5.5**	**3.4**
Bromochloromethane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroform (THM)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	**4.8**
2,2-dichloropropane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-dichloroethane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-trichloroethane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1-dichloropropene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Carbon tetrachloride	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-dichloropropane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	<0.5	**2.8**	<0.5	**1.3**	**0.6**
2-nitropropane	µg/L	100	<100	<100	<100	<100	<100
Bromodichloromethane (THM)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	**0.8**
MIBK (4-methyl-2-pentanone)	µg/L	5	<5	<5	<5	<5	<5
cis-1,3-dichloropropene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,3-dichloropropene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-trichloroethane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,3-dichloropropane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane (THM)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-hexanone (MBK)	µg/L	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	<0.5	<0.5	<0.5	**1.8**	**2.1**
1,1,1,2-tetrachloroethane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform (THM)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
cis-1,4-dichloro-2-butene	µg/L	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2,2-tetrachloroethane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2,3-trichloropropane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,4-dichloro-2-butene	µg/L	1	<1	<1	<1	<1	<1

VOCs in Water [AN433] Tested: 24/7/2020 (continued)

PARAMETER	UOM	LOR	GW11 WATER - 20/7/2020 SE208922.001	GW10 WATER - 20/7/2020 SE208922.002	GW08 WATER - 20/7/2020 SE208922.003	GW014 WATER - 20/7/2020 SE208922.004	GW015 WATER - 20/7/2020 SE208922.005
Isopropylbenzene (Cumene)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromobenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
n-propylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-chlorotoluene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-chlorotoluene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,3,5-trimethylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
tert-butylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2,4-trimethylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
sec-butylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,3-dichlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,4-dichlorobenzene	µg/L	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
p-isopropyltoluene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-dichlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
n-butylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-dibromo-3-chloropropane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2,4-trichlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Hexachlorobutadiene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2,3-trichlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Total VOC	µg/L	10	<10	<10	<10	<10	**13**

VOCs in Water [AN433] Tested: 24/7/2020 (continued)

PARAMETER	UOM	LOR	GW016 WATER - 20/7/2020 SE208922.006
Benzene	µg/L	0.5	<0.5
Toluene	µg/L	0.5	<0.5
Ethylbenzene	µg/L	0.5	<0.5
m/p-xylene	µg/L	1	<1
o-xylene	µg/L	0.5	<0.5
Total Xylenes	µg/L	1.5	<1.5
Total BTEX	µg/L	3	<3
Naphthalene	µg/L	0.5	<0.5
Dichlorodifluoromethane (CFC-12)	µg/L	5	-
Chloromethane	µg/L	5	-
Vinyl chloride (Chloroethene)	µg/L	0.3	-
Bromomethane	µg/L	10	-
Chloroethane	µg/L	5	-
Trichlorofluoromethane	µg/L	1	-
Acetone (2-propanone)	µg/L	10	-
Iodomethane	µg/L	5	-
1,1-dichloroethene	µg/L	0.5	-
Acrylonitrile	µg/L	0.5	-
Dichloromethane (Methylene chloride)	µg/L	5	-
Allyl chloride	µg/L	2	-
Carbon disulfide	µg/L	2	-
trans-1,2-dichloroethene	µg/L	0.5	-
MtBE (Methyl-tert-butyl ether)	µg/L	2	-
1,1-dichloroethane	µg/L	0.5	-
Vinyl acetate	µg/L	10	-
MEK (2-butanone)	µg/L	10	-
cis-1,2-dichloroethene	µg/L	0.5	-
Bromochloromethane	µg/L	0.5	-
Chloroform (THM)	µg/L	0.5	-
2,2-dichloropropane	µg/L	0.5	-
1,2-dichloroethane	µg/L	0.5	-
1,1,1-trichloroethane	µg/L	0.5	-
1,1-dichloropropene	µg/L	0.5	-
Carbon tetrachloride	µg/L	0.5	-
Dibromomethane	µg/L	0.5	-
1,2-dichloropropane	µg/L	0.5	-
Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	-
2-nitropropane	µg/L	100	-
Bromodichloromethane (THM)	µg/L	0.5	-
MIBK (4-methyl-2-pentanone)	µg/L	5	-
cis-1,3-dichloropropene	µg/L	0.5	-
trans-1,3-dichloropropene	µg/L	0.5	-
1,1,2-trichloroethane	µg/L	0.5	-
1,3-dichloropropane	µg/L	0.5	-
Dibromochloromethane (THM)	µg/L	0.5	-
2-hexanone (MBK)	µg/L	5	-
1,2-dibromoethane (EDB)	µg/L	0.5	-
Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	-
1,1,1,2-tetrachloroethane	µg/L	0.5	-
Chlorobenzene	µg/L	0.5	-
Bromoform (THM)	µg/L	0.5	-
cis-1,4-dichloro-2-butene	µg/L	1	-
Styrene (Vinyl benzene)	µg/L	0.5	-
1,1,2,2-tetrachloroethane	µg/L	0.5	-
1,2,3-trichloropropane	µg/L	0.5	-
trans-1,4-dichloro-2-butene	µg/L	1	-

VOCs in Water [AN433] Tested: 24/7/2020 (continued)

PARAMETER	UOM	LOR	GW016 WATER - 20/7/2020 SE208922.006
Isopropylbenzene (Cumene)	µg/L	0.5	-
Bromobenzene	µg/L	0.5	-
n-propylbenzene	µg/L	0.5	-
2-chlorotoluene	µg/L	0.5	-
4-chlorotoluene	µg/L	0.5	-
1,3,5-trimethylbenzene	µg/L	0.5	-
tert-butylbenzene	µg/L	0.5	-
1,2,4-trimethylbenzene	µg/L	0.5	-
sec-butylbenzene	µg/L	0.5	-
1,3-dichlorobenzene	µg/L	0.5	-
1,4-dichlorobenzene	µg/L	0.3	-
p-isopropyltoluene	µg/L	0.5	-
1,2-dichlorobenzene	µg/L	0.5	-
n-butylbenzene	µg/L	0.5	-
1,2-dibromo-3-chloropropane	µg/L	0.5	-
1,2,4-trichlorobenzene	µg/L	0.5	-
Hexachlorobutadiene	µg/L	0.5	-
1,2,3-trichlorobenzene	µg/L	0.5	-
Total VOC	µg/L	10	-

Volatile Petroleum Hydrocarbons in Water [AN433] Tested: 24/7/2020

PARAMETER	UOM	LOR	GW11 WATER - 20/7/2020 SE208922.001	GW10 WATER - 20/7/2020 SE208922.002	GW08 WATER - 20/7/2020 SE208922.003	GW014 WATER - 20/7/2020 SE208922.004	GW015 WATER - 20/7/2020 SE208922.005
TRH C6-C9	µg/L	40	<40	<40	<40	<40	<40
Benzene (F0)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TRH C6-C10	µg/L	50	<50	<50	<50	<50	<50
TRH C6-C10 minus BTEX (F1)	µg/L	50	<50	<50	<50	<50	<50

PARAMETER	UOM	LOR	GW016 WATER - 20/7/2020 SE208922.006
TRH C6-C9	µg/L	40	<40
Benzene (F0)	µg/L	0.5	<0.5
TRH C6-C10	µg/L	50	<50
TRH C6-C10 minus BTEX (F1)	µg/L	50	<50

TRH (Total Recoverable Hydrocarbons) in Water [AN403] Tested: 24/7/2020

PARAMETER	UOM	LOR	GW11 WATER - 20/7/2020 SE208922.001	GW10 WATER - 20/7/2020 SE208922.002	GW08 WATER - 20/7/2020 SE208922.003	GW014 WATER - 20/7/2020 SE208922.004	GW015 WATER - 20/7/2020 SE208922.005
TRH C10-C14	µg/L	50	<50	<50	<50	<50	<50
TRH C15-C28	µg/L	200	<200	<200	<200	<200	<200
TRH C29-C36	µg/L	200	<200	<200	<200	<200	<200
TRH C37-C40	µg/L	200	<200	<200	<200	<200	<200
TRH >C10-C16	µg/L	60	<60	<60	<60	<60	<60
TRH >C10-C16 - Naphthalene (F2)	µg/L	60	<60	<60	<60	<60	<60
TRH >C16-C34 (F3)	µg/L	500	<500	<500	<500	<500	<500
TRH >C34-C40 (F4)	µg/L	500	<500	<500	<500	<500	<500
TRH C10-C40	µg/L	320	<320	<320	<320	<320	<320

PARAMETER	UOM	LOR	GW016 WATER - 20/7/2020 SE208922.006
TRH C10-C14	µg/L	50	<50
TRH C15-C28	µg/L	200	<200
TRH C29-C36	µg/L	200	<200
TRH C37-C40	µg/L	200	<200
TRH >C10-C16	µg/L	60	<60
TRH >C10-C16 - Naphthalene (F2)	µg/L	60	<60
TRH >C16-C34 (F3)	µg/L	500	<500
TRH >C34-C40 (F4)	µg/L	500	<500
TRH C10-C40	µg/L	320	<320

PAH (Polynuclear Aromatic Hydrocarbons) in Water [AN420] Tested: 24/7/2020

PARAMETER	UOM	LOR	GW11 WATER - 20/7/2020 SE208922.001
Naphthalene	µg/L	0.1	<0.1
2-methylnaphthalene	µg/L	0.1	<0.1
1-methylnaphthalene	µg/L	0.1	<0.1
Acenaphthylene	µg/L	0.1	<0.1
Acenaphthene	µg/L	0.1	<0.1
Fluorene	µg/L	0.1	<0.1
Phenanthrene	µg/L	0.1	<0.1
Anthracene	µg/L	0.1	<0.1
Fluoranthene	µg/L	0.1	<0.1
Pyrene	µg/L	0.1	<0.1
Benzo(a)anthracene	µg/L	0.1	<0.1
Chrysene	µg/L	0.1	<0.1
Benzo(b&j)fluoranthene	µg/L	0.1	<0.1
Benzo(k)fluoranthene	µg/L	0.1	<0.1
Benzo(a)pyrene	µg/L	0.1	<0.1
Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1
Dibenzo(ah)anthracene	µg/L	0.1	<0.1
Benzo(ghi)perylene	µg/L	0.1	<0.1
Total PAH (18)	µg/L	1	<1

Speciated Phenols in Water [AN420] Tested: 24/7/2020

PARAMETER	UOM	LOR	GW11 WATER - 20/7/2020 SE208922.001
Phenol	µg/L	0.5	<0.5
2-methyl phenol (o-cresol)	µg/L	0.5	<0.5
3/4-methyl phenol (m/p-cresol)	µg/L	1	<1
Total Cresol	µg/L	1.5	<1.5
2-chlorophenol	µg/L	0.5	<0.5
2,4-dimethylphenol	µg/L	0.5	<0.5
2,6-dichlorophenol	µg/L	0.5	<0.5
2,4-dichlorophenol	µg/L	0.5	<0.5
2,4,6-trichlorophenol	µg/L	0.5	<0.5
2-nitrophenol	µg/L	0.5	<0.5
4-nitrophenol	µg/L	1	<1
2,4,5-trichlorophenol	µg/L	0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	µg/L	1	<1
Pentachlorophenol	µg/L	0.5	<0.5
2,4-dinitrophenol	µg/L	2	<2
4-chloro-3-methylphenol	µg/L	2	<2

OC Pesticides in Water [AN420] Tested: 24/7/2020

PARAMETER	UOM	LOR	GW11 WATER - 20/7/2020 SE208922.001	GW10 WATER - 20/7/2020 SE208922.002	GW08 WATER - 20/7/2020 SE208922.003
Alpha BHC	µg/L	0.1	<0.1	<0.1	<0.1
Hexachlorobenzene (HCB)	µg/L	0.1	<0.1	<0.1	<0.1
Beta BHC	µg/L	0.1	<0.1	<0.1	<0.1
Lindane (gamma BHC)	µg/L	0.1	<0.1	<0.1	<0.1
Delta BHC	µg/L	0.1	<0.1	<0.1	<0.1
Heptachlor	µg/L	0.1	<0.1	<0.1	<0.1
Aldrin	µg/L	0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	µg/L	0.1	<0.1	<0.1	<0.1
Gamma Chlordane	µg/L	0.1	<0.1	<0.1	<0.1
Alpha Chlordane	µg/L	0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	µg/L	0.1	<0.1	<0.1	<0.1
o,p'-DDE	µg/L	0.1	<0.1	<0.1	<0.1
p,p'-DDE	µg/L	0.1	<0.1	<0.1	<0.1
Dieldrin	µg/L	0.1	<0.1	<0.1	<0.1
Endrin	µg/L	0.1	<0.1	<0.1	<0.1
Beta Endosulfan	µg/L	0.1	<0.1	<0.1	<0.1
o,p'-DDD	µg/L	0.1	<0.1	<0.1	<0.1
p,p'-DDD	µg/L	0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	µg/L	0.1	<0.1	<0.1	<0.1
o,p'-DDT	µg/L	0.1	<0.1	<0.1	<0.1
p,p'-DDT	µg/L	0.1	<0.1	<0.1	<0.1
Endrin ketone	µg/L	0.1	<0.1	<0.1	<0.1
Methoxychlor	µg/L	0.1	<0.1	<0.1	<0.1
trans-Nonachlor	µg/L	0.1	<0.1	<0.1	<0.1
Endrin aldehyde	µg/L	0.1	<0.1	<0.1	<0.1
Isodrin	µg/L	0.1	<0.1	<0.1	<0.1
Mirex	µg/L	0.1	<0.1	<0.1	<0.1

OP Pesticides in Water [AN420] Tested: 24/7/2020

PARAMETER	UOM	LOR	GW11 WATER - 20/7/2020 SE208922.001
Dichlorvos	µg/L	0.5	<0.5
Dimethoate	µg/L	0.5	<0.5
Diazinon (Dimpylate)	µg/L	0.5	<0.5
Fenitrothion	µg/L	0.2	<0.2
Malathion	µg/L	0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	µg/L	0.2	<0.2
Parathion-ethyl (Parathion)	µg/L	0.2	<0.2
Bromophos Ethyl	µg/L	0.2	<0.2
Methidathion	µg/L	0.5	<0.5
Ethion	µg/L	0.2	<0.2
Azinphos-methyl	µg/L	0.2	<0.2

PCBs in Water [AN420] Tested: 24/7/2020

PARAMETER	UOM	LOR	GW11 WATER - 20/7/2020 SE208922.001	GW10 WATER - 20/7/2020 SE208922.002	GW08 WATER - 20/7/2020 SE208922.003	GW014 WATER - 20/7/2020 SE208922.004	GW015 WATER - 20/7/2020 SE208922.005
Arochlor 1016	µg/L	1	<1	<1	<1	<1	<1
Arochlor 1221	µg/L	1	<1	<1	<1	<1	<1
Arochlor 1232	µg/L	1	<1	<1	<1	<1	<1
Arochlor 1242	µg/L	1	<1	<1	<1	<1	<1
Arochlor 1248	µg/L	1	<1	<1	<1	<1	<1
Arochlor 1254	µg/L	1	<1	<1	<1	<1	<1
Arochlor 1260	µg/L	1	<1	<1	<1	<1	<1
Arochlor 1262	µg/L	1	<1	<1	<1	<1	<1
Arochlor 1268	µg/L	1	<1	<1	<1	<1	<1
Total Arochlors*	µg/L	5	<5	<5	<5	<5	<5

PARAMETER	UOM	LOR	GW016 WATER - 20/7/2020 SE208922.006
Arochlor 1016	µg/L	1	<1
Arochlor 1221	µg/L	1	<1
Arochlor 1232	µg/L	1	<1
Arochlor 1242	µg/L	1	<1
Arochlor 1248	µg/L	1	<1
Arochlor 1254	µg/L	1	<1
Arochlor 1260	µg/L	1	<1
Arochlor 1262	µg/L	1	<1
Arochlor 1268	µg/L	1	<1
Total Arochlors*	µg/L	5	<5

Trace Metals (Dissolved) in Water by ICPMS [AN318] Tested: 24/7/2020

PARAMETER	UOM	LOR	GW11 WATER - 20/7/2020 SE208922.001	GW10 WATER - 20/7/2020 SE208922.002	GW08 WATER - 20/7/2020 SE208922.003	GW014 WATER - 20/7/2020 SE208922.004	GW015 WATER - 20/7/2020 SE208922.005
Arsenic, As	µg/L	1	<1	<1	<1	1	<1
Cadmium, Cd	µg/L	0.1	<0.1	<0.1	0.2	<0.1	<0.1
Chromium, Cr	µg/L	1	<1	<1	<1	4	1
Copper, Cu	µg/L	1	<1	2	3	<1	2
Lead, Pb	µg/L	1	<1	<1	<1	1	<1
Nickel, Ni	µg/L	1	1	<1	<1	6	2
Zinc, Zn	µg/L	5	<5	6	7	29	43

PARAMETER	UOM	LOR	GW016 WATER - 20/7/2020 SE208922.006
Arsenic, As	µg/L	1	1
Cadmium, Cd	µg/L	0.1	<0.1
Chromium, Cr	µg/L	1	2
Copper, Cu	µg/L	1	<1
Lead, Pb	µg/L	1	6
Nickel, Ni	µg/L	1	2
Zinc, Zn	µg/L	5	13

Mercury (dissolved) in Water [AN311(Perth)/AN312] Tested: 24/7/2020

PARAMETER	UOM	LOR	GW11 WATER - 20/7/2020 SE208922.001	GW10 WATER - 20/7/2020 SE208922.002	GW08 WATER - 20/7/2020 SE208922.003	GW014 WATER - 20/7/2020 SE208922.004	GW015 WATER - 20/7/2020 SE208922.005
Mercury	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001

PARAMETER	UOM	LOR	GW016 WATER - 20/7/2020 SE208922.006
Mercury	mg/L	0.0001	<0.0001

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples - Low Level [MA-1523] Tested: 27/7/2020

PARAMETER	UOM	LOR	GW10 WATER - 20/7/2020 SE208922.002	GW08 WATER - 20/7/2020 SE208922.003	GW014 WATER - 20/7/2020 SE208922.004	GW015 WATER - 20/7/2020 SE208922.005
Perfluorobutanoic acid (PFBA)	µg/L	0.0005	**0.0028**	**0.0012**	**0.0006**	**0.0009**
Perfluoropentanoic acid (PFPeA)	µg/L	0.0005	**0.0050**	**0.0009**	**0.0035**	**0.0013**
Perfluorohexanoic acid (PFHxA)	µg/L	0.0005	**0.0053**	**0.0026**	**0.0059**	**0.0049**
Perfluoroheptanoic acid (PFHpA)	µg/L	0.0005	**0.0015**	**0.0012**	**0.0016**	**0.0014**
Perfluorooctanoic Acid (PFOA)	µg/L	0.0005	**0.0038**	**0.0024**	**0.0049**	<0.0005
Perfluorononanoic acid (PFNA)	µg/L	0.001	<0.001	<0.001	<0.001	<0.001
Perfluorodecanoic acid (PFDA)	µg/L	0.001	<0.001	<0.001	<0.001	<0.001
Perfluoroundecanoic acid (PFUnA)	µg/L	0.001	<0.001	<0.001	<0.001	<0.001
Perfluorododecanoic acid (PFDoA)	µg/L	0.001	<0.001	<0.001	<0.001	<0.001
Perfluorotridecanoic acid (PFTrDA)	µg/L	0.001	<0.001	<0.001	<0.001	<0.001
Perfluorotetradecanoic acid (PFTeDA)	µg/L	0.001	<0.001	<0.001	<0.001	<0.001
Perfluorohexadecanoic acid (PFHxDA)	µg/L	0.002	<0.002	<0.002	<0.002	<0.002
Perfluorobutane sulfonate (PFBS)	µg/L	0.001	**0.002**	**0.001**	**0.003**	**0.003**
Perfluoropentane sulfonate (PFPeS)	µg/L	0.001	<0.001	<0.001	**0.002**	**0.002**
Perfluorohexane sulfonate (PFHxS)	µg/L	0.0002	**0.0027**	**0.0019**	**0.011**	**0.011**
Perfluoroheptane sulfonate (PFHpS)	µg/L	0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Perfluorooctane sulfonate (PFOS)	µg/L	0.0002	**0.0018**	**0.0008**	**0.011**	**0.0007**
Sum of PFHxS and PFOS	µg/L	0.0002	**0.0045**	**0.0027**	**0.022**	**0.011**
Perfluorononane sulfonate (PFNS)	µg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Perfluorodecane sulfonate (PFDS)	µg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Perfluorododecane sulfonate (PFDoS)	µg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005
1H,1H,2H,2H-Perfluorohexane sulfonate (4:2) (4:2 FTS)	µg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005
1H,1H,2H,2H-Perfluorooctane sulfonate (6:2) (6:2 FTS)	µg/L	0.0005	<0.0005	<0.0005	**0.0070**	**0.0041**
1H,1H,2H,2H-Perfluorodecane sulfonate (8:2) (8:2 FTS)	µg/L	0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Perfluorooctane sulfonamide (PFOSA)	µg/L	0.002	<0.002	<0.002	<0.002	<0.002
N-Methylperfluorooctane sulfonamide (N-MeFOSA)	µg/L	0.0025	<0.0025	<0.0025	<0.0025	<0.0025
N-Ethylperfluorooctane sulfonamide (N-EtFOSA)	µg/L	0.0025	<0.0025	<0.0025	<0.0025	<0.0025
2-(N-Methylperfluorooctane sulfonamido)-ethanol	µg/L	0.0025	<0.0025	<0.0025	<0.0025	<0.0025
2-(N-Ethylperfluorooctane sulfonamido)-ethanol	µg/L	0.0025	<0.0025	<0.0025	<0.0025	<0.0025
N-Methylperfluorooctanesulfonamidoacetic acid	µg/L	0.0025	<0.0025	<0.0025	<0.0025	<0.0025
N-Ethylperfluorooctanesulfonamidoacetic Acid	µg/L	0.0025	<0.0025	<0.0025	<0.0025	<0.0025

METHOD	METHODOLOGY SUMMARY
AN020	Unpreserved water sample is filtered through a 0.45µm membrane filter and acidified with nitric acid similar to APHA3030B.
AN311(Perth)/AN312	Mercury by Cold Vapour AAS in Waters: Mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500.
AN318	Determination of elements at trace level in waters by ICP-MS technique,, referenced to USEPA 6020B and USEPA 200.8 (5.4).
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). Where F2 is corrected for Naphthalene, the VOC data for Naphthalene is used.
AN403	Additionally, the volatile C6-C9/C6-C10 fractions may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoveerable Hydrocarbons - Silica (TRH-Silica) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents.
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.
MA-1523	This method covers the analysis of per- and polyfluoroalkyl substances (PFAS) in aqueous, solid and biosolid samples and solvent extracts, determined as the total of linear and branched isomers. After spiking with isotopically labelled quantification surrogates and clean-up via SPE cartridges sample extracts are analysed by liquid chromatography/mass spectrometry (LC-MS/MS). PFAS concentrations are determined by isotope dilution quantification.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE208922 R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	6

LABORATORY DETAILS

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Laboratory	SGS Alexandria Environmental
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Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE208922 R0**
Date Received	20 Jul 2020
Date Reported	27 Jul 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Surrogate	Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples - Low Level	4 items
Duplicate	Trace Metals (Dissolved) in Water by ICPMS	1 item

SAMPLE SUMMARY

HOLDING TIME SUMMARY

SE208922 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW11	SE208922.001	LB205054	20 Jul 2020	20 Jul 2020	17 Aug 2020	24 Jul 2020	17 Aug 2020	24 Jul 2020
GW10	SE208922.002	LB205054	20 Jul 2020	20 Jul 2020	17 Aug 2020	24 Jul 2020	17 Aug 2020	24 Jul 2020
GW08	SE208922.003	LB205054	20 Jul 2020	20 Jul 2020	17 Aug 2020	24 Jul 2020	17 Aug 2020	24 Jul 2020
GW014	SE208922.004	LB205054	20 Jul 2020	20 Jul 2020	17 Aug 2020	24 Jul 2020	17 Aug 2020	24 Jul 2020
GW015	SE208922.005	LB205054	20 Jul 2020	20 Jul 2020	17 Aug 2020	24 Jul 2020	17 Aug 2020	24 Jul 2020
GW016	SE208922.006	LB205054	20 Jul 2020	20 Jul 2020	17 Aug 2020	24 Jul 2020	17 Aug 2020	24 Jul 2020

OC Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW11	SE208922.001	LB205050	20 Jul 2020	20 Jul 2020	27 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
GW10	SE208922.002	LB205050	20 Jul 2020	20 Jul 2020	27 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
GW08	SE208922.003	LB205050	20 Jul 2020	20 Jul 2020	27 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
GW014	SE208922.004	LB205050	20 Jul 2020	20 Jul 2020	27 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
GW015	SE208922.005	LB205050	20 Jul 2020	20 Jul 2020	27 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
GW016	SE208922.006	LB205050	20 Jul 2020	20 Jul 2020	27 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020

OP Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW11	SE208922.001	LB205050	20 Jul 2020	20 Jul 2020	27 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
GW10	SE208922.002	LB205050	20 Jul 2020	20 Jul 2020	27 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
GW08	SE208922.003	LB205050	20 Jul 2020	20 Jul 2020	27 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
GW014	SE208922.004	LB205050	20 Jul 2020	20 Jul 2020	27 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
GW015	SE208922.005	LB205050	20 Jul 2020	20 Jul 2020	27 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
GW016	SE208922.006	LB205050	20 Jul 2020	20 Jul 2020	27 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW11	SE208922.001	LB205050	20 Jul 2020	20 Jul 2020	27 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
GW10	SE208922.002	LB205050	20 Jul 2020	20 Jul 2020	27 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
GW08	SE208922.003	LB205050	20 Jul 2020	20 Jul 2020	27 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
GW014	SE208922.004	LB205050	20 Jul 2020	20 Jul 2020	27 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
GW015	SE208922.005	LB205050	20 Jul 2020	20 Jul 2020	27 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
GW016	SE208922.006	LB205050	20 Jul 2020	20 Jul 2020	27 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020

PCBs in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW11	SE208922.001	LB205050	20 Jul 2020	20 Jul 2020	27 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
GW10	SE208922.002	LB205050	20 Jul 2020	20 Jul 2020	27 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
GW08	SE208922.003	LB205050	20 Jul 2020	20 Jul 2020	27 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
GW014	SE208922.004	LB205050	20 Jul 2020	20 Jul 2020	27 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
GW015	SE208922.005	LB205050	20 Jul 2020	20 Jul 2020	27 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
GW016	SE208922.006	LB205050	20 Jul 2020	20 Jul 2020	27 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020

Speciated Phenols in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW11	SE208922.001	LB205050	20 Jul 2020	20 Jul 2020	10 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
GW10	SE208922.002	LB205050	20 Jul 2020	20 Jul 2020	10 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
GW08	SE208922.003	LB205050	20 Jul 2020	20 Jul 2020	10 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
GW014	SE208922.004	LB205050	20 Jul 2020	20 Jul 2020	10 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
GW015	SE208922.005	LB205050	20 Jul 2020	20 Jul 2020	10 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
GW016	SE208922.006	LB205050	20 Jul 2020	20 Jul 2020	10 Aug 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW11	SE208922.001	LB205080	20 Jul 2020	20 Jul 2020	16 Jan 2021	24 Jul 2020	16 Jan 2021	27 Jul 2020
GW10	SE208922.002	LB205080	20 Jul 2020	20 Jul 2020	16 Jan 2021	24 Jul 2020	16 Jan 2021	27 Jul 2020
GW08	SE208922.003	LB205080	20 Jul 2020	20 Jul 2020	16 Jan 2021	24 Jul 2020	16 Jan 2021	27 Jul 2020
GW014	SE208922.004	LB205080	20 Jul 2020	20 Jul 2020	16 Jan 2021	24 Jul 2020	16 Jan 2021	27 Jul 2020
GW015	SE208922.005	LB205080	20 Jul 2020	20 Jul 2020	16 Jan 2021	24 Jul 2020	16 Jan 2021	27 Jul 2020
GW016	SE208922.006	LB205080	20 Jul 2020	20 Jul 2020	16 Jan 2021	24 Jul 2020	16 Jan 2021	27 Jul 2020

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref

HOLDING TIME SUMMARY

SE208922 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

TRH (Total Recoverable Hydrocarbons) in Water (continued)

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW11	SE208922.001	LB205050	20 Jul 2020	20 Jul 2020	27 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
GW10	SE208922.002	LB205050	20 Jul 2020	20 Jul 2020	27 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
GW08	SE208922.003	LB205050	20 Jul 2020	20 Jul 2020	27 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
GW014	SE208922.004	LB205050	20 Jul 2020	20 Jul 2020	27 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
GW015	SE208922.005	LB205050	20 Jul 2020	20 Jul 2020	27 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
GW016	SE208922.006	LB205050	20 Jul 2020	20 Jul 2020	27 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW11	SE208922.001	LB205064	20 Jul 2020	20 Jul 2020	27 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
GW10	SE208922.002	LB205064	20 Jul 2020	20 Jul 2020	27 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
GW08	SE208922.003	LB205064	20 Jul 2020	20 Jul 2020	27 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
GW014	SE208922.004	LB205064	20 Jul 2020	20 Jul 2020	27 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
GW015	SE208922.005	LB205064	20 Jul 2020	20 Jul 2020	27 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
GW016	SE208922.006	LB205064	20 Jul 2020	20 Jul 2020	27 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW11	SE208922.001	LB205064	20 Jul 2020	20 Jul 2020	27 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
GW10	SE208922.002	LB205064	20 Jul 2020	20 Jul 2020	27 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
GW08	SE208922.003	LB205064	20 Jul 2020	20 Jul 2020	27 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
GW014	SE208922.004	LB205064	20 Jul 2020	20 Jul 2020	27 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
GW015	SE208922.005	LB205064	20 Jul 2020	20 Jul 2020	27 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020
GW016	SE208922.006	LB205064	20 Jul 2020	20 Jul 2020	27 Jul 2020	24 Jul 2020	02 Sep 2020	27 Jul 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	GW11	SE208922.001	%	40 - 130%	60
	GW10	SE208922.002	%	40 - 130%	63
	GW08	SE208922.003	%	40 - 130%	74

OP Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	GW11	SE208922.001	%	40 - 130%	78
d14-p-terphenyl (Surrogate)	GW11	SE208922.001	%	40 - 130%	90

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	GW11	SE208922.001	%	40 - 130%	78
d14-p-terphenyl (Surrogate)	GW11	SE208922.001	%	40 - 130%	90
d5-nitrobenzene (Surrogate)	GW11	SE208922.001	%	40 - 130%	40

PCBs in Water

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (Surrogate)	GW11	SE208922.001	%	40 - 130%	60
	GW10	SE208922.002	%	40 - 130%	63
	GW08	SE208922.003	%	40 - 130%	74
	GW014	SE208922.004	%	40 - 130%	65
	GW015	SE208922.005	%	40 - 130%	84
	GW016	SE208922.006	%	40 - 130%	86

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples - Low Level

Method: MA-1523

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C2_PFTeDA) Surrogate	GW10	SE208922.002	%	10 - 150%	94
	GW08	SE208922.003	%	10 - 150%	77
	GW014	SE208922.004	%	10 - 150%	97
	GW015	SE208922.005	%	10 - 150%	101
(13C2-4:2 FTS) Surrogate	GW10	SE208922.002	%	10 - 150%	105
	GW08	SE208922.003	%	10 - 150%	83
	GW014	SE208922.004	%	10 - 150%	195 †
	GW015	SE208922.005	%	10 - 150%	164 †
(13C2-6:2 FTS) Surrogate	GW10	SE208922.002	%	10 - 150%	89
	GW08	SE208922.003	%	10 - 150%	84
	GW014	SE208922.004	%	10 - 150%	202 †
	GW015	SE208922.005	%	10 - 150%	153 †
(13C2-8:2 FTS) Surrogate	GW10	SE208922.002	%	10 - 150%	89
	GW08	SE208922.003	%	10 - 150%	74
	GW014	SE208922.004	%	10 - 150%	150
	GW015	SE208922.005	%	10 - 150%	125
(13C2-PFDoA) Surrogate	GW10	SE208922.002	%	10 - 150%	92
	GW08	SE208922.003	%	10 - 150%	75
	GW014	SE208922.004	%	10 - 150%	99
	GW015	SE208922.005	%	10 - 150%	84
(13C2-PFHxDA) Surrogate	GW10	SE208922.002	%	10 - 150%	75
	GW08	SE208922.003	%	10 - 150%	39
	GW014	SE208922.004	%	10 - 150%	51
	GW015	SE208922.005	%	10 - 150%	66
(13C3-PFBS) Surrogate	GW10	SE208922.002	%	10 - 150%	121
	GW08	SE208922.003	%	10 - 150%	107
	GW014	SE208922.004	%	10 - 150%	112
	GW015	SE208922.005	%	10 - 150%	113
(13C3-PFHxS) Surrogate	GW10	SE208922.002	%	10 - 150%	96
	GW08	SE208922.003	%	10 - 150%	96
	GW014	SE208922.004	%	10 - 150%	90
	GW015	SE208922.005	%	10 - 150%	95
(13C4_PFOA) Surrogate	GW10	SE208922.002	%	10 - 150%	112
	GW08	SE208922.003	%	10 - 150%	113
	GW014	SE208922.004	%	10 - 150%	113
	GW015	SE208922.005	%	10 - 150%	110

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous Samples - Low Level (continued) **Method: MA-1523**

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
(13C4-PFBA) Surrogate	GW10	SE208922.002	%	10 - 150%	102
	GW08	SE208922.003	%	10 - 150%	100
	GW014	SE208922.004	%	10 - 150%	105
	GW015	SE208922.005	%	10 - 150%	106
(13C4-PFHpA) Surrogate	GW10	SE208922.002	%	10 - 150%	103
	GW08	SE208922.003	%	10 - 150%	101
	GW014	SE208922.004	%	10 - 150%	106
	GW015	SE208922.005	%	10 - 150%	106
(13C5-PFHxA) Surrogate	GW10	SE208922.002	%	10 - 150%	127
	GW08	SE208922.003	%	10 - 150%	119
	GW014	SE208922.004	%	10 - 150%	131
	GW015	SE208922.005	%	10 - 150%	125
(13C5-PFPeA) Surrogate	GW10	SE208922.002	%	10 - 150%	92
	GW08	SE208922.003	%	10 - 150%	98
	GW014	SE208922.004	%	10 - 150%	105
	GW015	SE208922.005	%	10 - 150%	118
(13C6-PFDA) Surrogate	GW10	SE208922.002	%	10 - 150%	116
	GW08	SE208922.003	%	10 - 150%	117
	GW014	SE208922.004	%	10 - 150%	108
	GW015	SE208922.005	%	10 - 150%	112
(13C7-PFUdA) Surrogate	GW10	SE208922.002	%	10 - 150%	94
	GW08	SE208922.003	%	10 - 150%	91
	GW014	SE208922.004	%	10 - 150%	93
	GW015	SE208922.005	%	10 - 150%	89
(13C8-PFOS) Surrogate	GW10	SE208922.002	%	10 - 150%	91
	GW08	SE208922.003	%	10 - 150%	106
	GW014	SE208922.004	%	10 - 150%	104
	GW015	SE208922.005	%	10 - 150%	92
(13C8-PFOSA) Surrogate	GW10	SE208922.002	%	10 - 150%	76
	GW08	SE208922.003	%	10 - 150%	91
	GW014	SE208922.004	%	10 - 150%	79
	GW015	SE208922.005	%	10 - 150%	80
(13C9-PFNA) Surrogate	GW10	SE208922.002	%	10 - 150%	101
	GW08	SE208922.003	%	10 - 150%	99
	GW014	SE208922.004	%	10 - 150%	96
	GW015	SE208922.005	%	10 - 150%	100
(D3-N-MeFOSA) Surrogate	GW10	SE208922.002	%	10 - 150%	74
	GW08	SE208922.003	%	10 - 150%	87
	GW014	SE208922.004	%	10 - 150%	83
	GW015	SE208922.005	%	10 - 150%	71
(D3-N-MeFOSAA) Surrogate	GW10	SE208922.002	%	10 - 150%	80
	GW08	SE208922.003	%	10 - 150%	98
	GW014	SE208922.004	%	10 - 150%	101
	GW015	SE208922.005	%	10 - 150%	98
(D5-N-EtFOSA) Surrogate	GW10	SE208922.002	%	10 - 150%	85
	GW08	SE208922.003	%	10 - 150%	95
	GW014	SE208922.004	%	10 - 150%	86
	GW015	SE208922.005	%	10 - 150%	76
(D5-N-EtFOSAA) Surrogate	GW10	SE208922.002	%	10 - 150%	102
	GW08	SE208922.003	%	10 - 150%	93
	GW014	SE208922.004	%	10 - 150%	93
	GW015	SE208922.005	%	10 - 150%	91
(D7-N-MeFOSE) Surrogate	GW10	SE208922.002	%	10 - 150%	80
	GW08	SE208922.003	%	10 - 150%	92
	GW014	SE208922.004	%	10 - 150%	80
	GW015	SE208922.005	%	10 - 150%	69
(D9-N-EtFOSE) Surrogate	GW10	SE208922.002	%	10 - 150%	73
	GW08	SE208922.003	%	10 - 150%	87
	GW014	SE208922.004	%	10 - 150%	71
	GW015	SE208922.005	%	10 - 150%	69

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Speciated Phenols in Water

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	GW11	SE208922.001	%	40 - 130%	64
d5-phenol (Surrogate)	GW11	SE208922.001	%	20 - 90%	45

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	GW11	SE208922.001	%	40 - 130%	103
	GW10	SE208922.002	%	40 - 130%	103
	GW08	SE208922.003	%	40 - 130%	104
	GW014	SE208922.004	%	40 - 130%	104
	GW015	SE208922.005	%	40 - 130%	103
	GW016	SE208922.006	%	40 - 130%	104
d4-1,2-dichloroethane (Surrogate)	GW11	SE208922.001	%	40 - 130%	100
	GW10	SE208922.002	%	40 - 130%	95
	GW08	SE208922.003	%	40 - 130%	102
	GW014	SE208922.004	%	40 - 130%	98
	GW015	SE208922.005	%	40 - 130%	100
	GW016	SE208922.006	%	40 - 130%	98
d8-toluene (Surrogate)	GW11	SE208922.001	%	40 - 130%	95
	GW10	SE208922.002	%	40 - 130%	96
	GW08	SE208922.003	%	40 - 130%	95
	GW014	SE208922.004	%	40 - 130%	96
	GW015	SE208922.005	%	40 - 130%	96
	GW016	SE208922.006	%	40 - 130%	101

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	GW11	SE208922.001	%	40 - 130%	103
	GW10	SE208922.002	%	40 - 130%	103
	GW08	SE208922.003	%	40 - 130%	104
	GW014	SE208922.004	%	40 - 130%	104
	GW015	SE208922.005	%	40 - 130%	103
	GW016	SE208922.006	%	40 - 130%	104
d4-1,2-dichloroethane (Surrogate)	GW11	SE208922.001	%	60 - 130%	100
	GW10	SE208922.002	%	60 - 130%	95
	GW08	SE208922.003	%	60 - 130%	102
	GW014	SE208922.004	%	60 - 130%	98
	GW015	SE208922.005	%	60 - 130%	100
	GW016	SE208922.006	%	60 - 130%	98
d8-toluene (Surrogate)	GW11	SE208922.001	%	40 - 130%	95
	GW10	SE208922.002	%	40 - 130%	96
	GW08	SE208922.003	%	40 - 130%	95
	GW014	SE208922.004	%	40 - 130%	96
	GW015	SE208922.005	%	40 - 130%	96
	GW016	SE208922.006	%	40 - 130%	101

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

Sample Number	Parameter	Units	LOR	Result
LB205054.001	Mercury	mg/L	0.0001	<0.0001

OC Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB205050.001		Alpha BHC	µg/L	0.1	<0.1
		Hexachlorobenzene (HCB)	µg/L	0.1	<0.1
		Beta BHC	µg/L	0.1	<0.1
		Lindane (gamma BHC)	µg/L	0.1	<0.1
		Delta BHC	µg/L	0.1	<0.1
		Heptachlor	µg/L	0.1	<0.1
		Aldrin	µg/L	0.1	<0.1
		Heptachlor epoxide	µg/L	0.1	<0.1
		Gamma Chlordane	µg/L	0.1	<0.1
		Alpha Chlordane	µg/L	0.1	<0.1
		Alpha Endosulfan	µg/L	0.1	<0.1
		p,p'-DDE	µg/L	0.1	<0.1
		Dieldrin	µg/L	0.1	<0.1
		Endrin	µg/L	0.1	<0.1
		Beta Endosulfan	µg/L	0.1	<0.1
		p,p'-DDD	µg/L	0.1	<0.1
		Endosulfan sulphate	µg/L	0.1	<0.1
		p,p'-DDT	µg/L	0.1	<0.1
		Endrin ketone	µg/L	0.1	<0.1
		Methoxychlor	µg/L	0.1	<0.1
		Endrin aldehyde	µg/L	0.1	<0.1
		Isodrin	µg/L	0.1	<0.1
		Mirex	µg/L	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	89

OP Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB205050.001		Dichlorvos	µg/L	0.5	<0.5
		Dimethoate	µg/L	0.5	<0.5
		Diazinon (Dimpylate)	µg/L	0.5	<0.5
		Fenitrothion	µg/L	0.2	<0.2
		Malathion	µg/L	0.2	<0.2
		Chlorpyrifos (Chlorpyrifos Ethyl)	µg/L	0.2	<0.2
		Parathion-ethyl (Parathion)	µg/L	0.2	<0.2
		Bromophos Ethyl	µg/L	0.2	<0.2
		Methidathion	µg/L	0.5	<0.5
		Ethion	µg/L	0.2	<0.2
		Azinphos-methyl	µg/L	0.2	<0.2
	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	66
		d14-p-terphenyl (Surrogate)	%	-	84

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB205050.001	Naphthalene	µg/L	0.1	<0.1
	2-methylnaphthalene	µg/L	0.1	<0.1
	1-methylnaphthalene	µg/L	0.1	<0.1
	Acenaphthylene	µg/L	0.1	<0.1
	Acenaphthene	µg/L	0.1	<0.1
	Fluorene	µg/L	0.1	<0.1
	Phenanthrene	µg/L	0.1	<0.1
	Anthracene	µg/L	0.1	<0.1
	Fluoranthene	µg/L	0.1	<0.1
	Pyrene	µg/L	0.1	<0.1
	Benzo(a)anthracene	µg/L	0.1	<0.1
	Chrysene	µg/L	0.1	<0.1
	Benzo(a)pyrene	µg/L	0.1	<0.1

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

PAH (Polynuclear Aromatic Hydrocarbons) in Water (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB205050.001		Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1
		Dibenzo(ah)anthracene	µg/L	0.1	<0.1
		Benzo(ghi)perylene	µg/L	0.1	<0.1
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	60
		2-fluorobiphenyl (Surrogate)	%	-	66
		d14-p-terphenyl (Surrogate)	%	-	84

PCBs in Water

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB205050.001	Arochlor 1016	µg/L	1	<1
	Arochlor 1221	µg/L	1	<1
	Arochlor 1232	µg/L	1	<1
	Arochlor 1242	µg/L	1	<1
	Arochlor 1248	µg/L	1	<1
	Arochlor 1254	µg/L	1	<1
	Arochlor 1260	µg/L	1	<1
	Arochlor 1262	µg/L	1	<1
	Arochlor 1268	µg/L	1	<1

Speciated Phenols in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB205050.001		Phenol	µg/L	0.5	<0.5
		2-methyl phenol (o-cresol)	µg/L	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	µg/L	1	<1
		2-chlorophenol	µg/L	0.5	<0.5
		2,4-dimethylphenol	µg/L	0.5	<0.5
		2,6-dichlorophenol	µg/L	0.5	<0.5
		2,4-dichlorophenol	µg/L	0.5	<0.5
		2,4,6-trichlorophenol	µg/L	0.5	<0.5
		2-nitrophenol	µg/L	0.5	<0.5
		4-nitrophenol	µg/L	1	<1
		2,4,5-trichlorophenol	µg/L	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	µg/L	1	<1
		Pentachlorophenol	µg/L	0.5	<0.5
		2,4-dinitrophenol	µg/L	2	<2
		4-chloro-3-methylphenol	µg/L	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	90
		d5-phenol (Surrogate)	%	-	83

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Sample Number	Parameter	Units	LOR	Result
LB205080.001	Arsenic, As	µg/L	1	<1
	Cadmium, Cd	µg/L	0.1	<0.1
	Chromium, Cr	µg/L	1	<1
	Copper, Cu	µg/L	1	<1
	Lead, Pb	µg/L	1	<1
	Nickel, Ni	µg/L	1	<1
	Zinc, Zn	µg/L	5	<5

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB205050.001	TRH C10-C14	µg/L	50	<50
	TRH C15-C28	µg/L	200	<200
	TRH C29-C36	µg/L	200	<200
	TRH C37-C40	µg/L	200	<200

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB205064.001	Fumigants	2,2-dichloropropane	µg/L	0.5	<0.5
		1,2-dichloropropane	µg/L	0.5	<0.5
		cis-1,3-dichloropropene	µg/L	0.5	<0.5
		trans-1,3-dichloropropene	µg/L	0.5	<0.5
		1,2-dibromoethane (EDB)	µg/L	0.5	<0.5

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOCs in Water (continued) Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB205064.001	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	µg/L	5	<5
		Chloromethane	µg/L	5	<5
		Vinyl chloride (Chloroethene)	µg/L	0.3	<0.3
		Bromomethane	µg/L	10	<10
		Chloroethane	µg/L	5	<5
		Trichlorofluoromethane	µg/L	1	<1
		Iodomethane	µg/L	5	<5
		1,1-dichloroethene	µg/L	0.5	<0.5
		Dichloromethane (Methylene chloride)	µg/L	5	<5
		Allyl chloride	µg/L	2	<2
		trans-1,2-dichloroethene	µg/L	0.5	<0.5
		1,1-dichloroethane	µg/L	0.5	<0.5
		cis-1,2-dichloroethene	µg/L	0.5	<0.5
		Bromochloromethane	µg/L	0.5	<0.5
		1,2-dichloroethane	µg/L	0.5	<0.5
		1,1,1-trichloroethane	µg/L	0.5	<0.5
		1,1-dichloropropene	µg/L	0.5	<0.5
		Carbon tetrachloride	µg/L	0.5	<0.5
		Dibromomethane	µg/L	0.5	<0.5
		Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	<0.5
		1,1,2-trichloroethane	µg/L	0.5	<0.5
		1,3-dichloropropane	µg/L	0.5	<0.5
		Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	<0.5
		1,1,1,2-tetrachloroethane	µg/L	0.5	<0.5
		cis-1,4-dichloro-2-butene	µg/L	1	<1
		1,1,2,2-tetrachloroethane	µg/L	0.5	<0.5
		1,2,3-trichloropropane	µg/L	0.5	<0.5
		trans-1,4-dichloro-2-butene	µg/L	1	<1
		1,2-dibromo-3-chloropropane	µg/L	0.5	<0.5
		Hexachlorobutadiene	µg/L	0.5	<0.5
	Halogenated Aromatics	Chlorobenzene	µg/L	0.5	<0.5
		Bromobenzene	µg/L	0.5	<0.5
		2-chlorotoluene	µg/L	0.5	<0.5
		4-chlorotoluene	µg/L	0.5	<0.5
		1,3-dichlorobenzene	µg/L	0.5	<0.5
		1,4-dichlorobenzene	µg/L	0.3	<0.3
		1,2-dichlorobenzene	µg/L	0.5	<0.5
		1,2,4-trichlorobenzene	µg/L	0.5	<0.5
		1,2,3-trichlorobenzene	µg/L	0.5	<0.5
	Monocyclic Aromatic Hydrocarbons	Benzene	µg/L	0.5	<0.5
		Toluene	µg/L	0.5	<0.5
		Ethylbenzene	µg/L	0.5	<0.5
		m/p-xylene	µg/L	1	<1
		o-xylene	µg/L	0.5	<0.5
		Styrene (Vinyl benzene)	µg/L	0.5	<0.5
		Isopropylbenzene (Cumene)	µg/L	0.5	<0.5
		n-propylbenzene	µg/L	0.5	<0.5
		1,3,5-trimethylbenzene	µg/L	0.5	<0.5
		tert-butylbenzene	µg/L	0.5	<0.5
		1,2,4-trimethylbenzene	µg/L	0.5	<0.5
		sec-butylbenzene	µg/L	0.5	<0.5
		p-isopropyltoluene	µg/L	0.5	<0.5
		n-butylbenzene	µg/L	0.5	<0.5
	Nitrogenous Compounds	Acrylonitrile	µg/L	0.5	<0.5
	Oxygenated Compounds	Acetone (2-propanone)	µg/L	10	<10
		MtBE (Methyl-tert-butyl ether)	µg/L	2	<1
		Vinyl acetate	µg/L	10	<10
		MEK (2-butanone)	µg/L	10	<10
		MIBK (4-methyl-2-pentanone)	µg/L	5	<5
		2-hexanone (MBK)	µg/L	5	<5
	Polycyclic VOCs	Naphthalene	µg/L	0.5	<0.5

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOCs in Water (continued) — Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB205064.001	Sulphonated	Carbon disulfide	µg/L	2	<2
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	77
		d8-toluene (Surrogate)	%	-	103
		Bromofluorobenzene (Surrogate)	%	-	98
	Trihalomethanes	Chloroform (THM)	µg/L	0.5	<0.5
		Bromodichloromethane (THM)	µg/L	0.5	<0.5
		Dibromochloromethane (THM)	µg/L	0.5	<0.5
		Bromoform (THM)	µg/L	0.5	<0.5

Volatile Petroleum Hydrocarbons in Water — Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB205064.001		TRH C6-C9	µg/L	40	<40
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	77
		d8-toluene (Surrogate)	%	-	103
		Bromofluorobenzene (Surrogate)	%	-	98

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208988.002	LB205054.014	Mercury	µg/L	0.0001	0.0053	-0.00596	200	196
SE209037.012	LB205054.019	Mercury	µg/L	0.0001	-0.00506	-0.00064	200	0

OC Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208922.002	LB205050.020		Alpha BHC	µg/L	0.1	<0.1	0	200	0
			Hexachlorobenzene (HCB)	µg/L	0.1	<0.1	0	200	0
			Beta BHC	µg/L	0.1	<0.1	0	200	0
			Lindane (gamma BHC)	µg/L	0.1	<0.1	0	200	0
			Delta BHC	µg/L	0.1	<0.1	0	200	0
			Heptachlor	µg/L	0.1	<0.1	0	200	0
			Aldrin	µg/L	0.1	<0.1	0	200	0
			Heptachlor epoxide	µg/L	0.1	<0.1	0	200	0
			Gamma Chlordane	µg/L	0.1	<0.1	0	200	0
			Alpha Chlordane	µg/L	0.1	<0.1	0	200	0
			Alpha Endosulfan	µg/L	0.1	<0.1	0	200	0
			o,p'-DDE	µg/L	0.1	<0.1	0	200	0
			p,p'-DDE	µg/L	0.1	<0.1	0	200	0
			Dieldrin	µg/L	0.1	<0.1	0	200	0
			Endrin	µg/L	0.1	<0.1	0	200	0
			Beta Endosulfan	µg/L	0.1	<0.1	0	200	0
			o,p'-DDD	µg/L	0.1	<0.1	0	200	0
			p,p'-DDD	µg/L	0.1	<0.1	0	200	0
			Endosulfan sulphate	µg/L	0.1	<0.1	0	200	0
			o,p'-DDT	µg/L	0.1	<0.1	0	200	0
			p,p'-DDT	µg/L	0.1	<0.1	0	200	0
			Endrin ketone	µg/L	0.1	<0.1	0	200	0
			Methoxychlor	µg/L	0.1	<0.1	0	200	0
			trans-Nonachlor	µg/L	0.1	<0.1	0	200	0
			Endrin aldehyde	µg/L	0.1	<0.1	0	200	0
			Isodrin	µg/L	0.1	<0.1	0	200	0
			Mirex	µg/L	0.1	<0.1	0	200	0
		Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	µg/L	-	0.10	0.115	30	19

PCBs in Water

Method: ME-(AU)-[ENV]AN420

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208922.002	LB205050.020		Arochlor 1016	µg/L	1	<1	0	200	0
			Arochlor 1221	µg/L	1	<1	0	200	0
			Arochlor 1232	µg/L	1	<1	0	200	0
			Arochlor 1242	µg/L	1	<1	0	200	0
			Arochlor 1248	µg/L	1	<1	0	200	0
			Arochlor 1254	µg/L	1	<1	0	200	0
			Arochlor 1260	µg/L	1	<1	0	200	0
			Arochlor 1262	µg/L	1	<1	0	200	0
			Arochlor 1268	µg/L	1	<1	0	200	0
		Surrogates	Tetrachloro-m-xylene (Surrogate)	µg/L	-	0.1	0.115	30	19

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE209091.034	LB205080.023	Arsenic, As	µg/L	1	-0.01	-0.004	200	0
		Cadmium, Cd	µg/L	0.1	0.003	0.001	200	0
		Chromium, Cr	µg/L	1	0.096	0.073	200	0
		Copper, Cu	µg/L	1	-0.629	-0.872	148	0
		Lead, Pb	µg/L	1	0.051	0.006	200	0
		Nickel, Ni	µg/L	1	0.037	3.365	74	108 ③
		Zinc, Zn	µg/L	5	2.45	2.205	200	0

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Original	Duplicate	Parameter	Units	LOR

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

TRH (Total Recoverable Hydrocarbons) in Water (continued)

Method: ME-(AU)-[ENV]AN403

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208922.002	LB205050.020		TRH C10-C14	µg/L	50	<50	0	200	0
			TRH C15-C28	µg/L	200	<200	0	200	0
			TRH C29-C36	µg/L	200	<200	0	200	0
			TRH C37-C40	µg/L	200	<200	0	200	0
			TRH C10-C40	µg/L	320	<320	0	200	0
		TRH F Bands	TRH >C10-C16	µg/L	60	<60	0	200	0
			TRH >C10-C16 - Naphthalene (F2)	µg/L	60	<60	0	200	0
			TRH >C16-C34 (F3)	µg/L	500	<500	0	200	0
			TRH >C34-C40 (F4)	µg/L	500	<500	0	200	0

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208848.031	LB205064.028	Monocyclic	Benzene	µg/L	0.5	0	0	200	0
		Aromatic	Toluene	µg/L	0.5	0.0521545634	0.053746381	200	0
			Ethylbenzene	µg/L	0.5	0.0154365521	0.02469164	200	0
			m/p-xylene	µg/L	1	0.0515488564	0.074976485	200	0
			o-xylene	µg/L	0.5	0.0133547450	0.021206412	200	0
		Polycyclic	Naphthalene	µg/L	0.5	0.0456087627	0.091625875	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	10.5544270661	9.994486869	30	5
			d8-toluene (Surrogate)	µg/L	-	9.9461861449	9.456004505	30	5
			Bromofluorobenzene (Surrogate)	µg/L	-	10.5439864564	11.0098939	30	4
SE208922.001	LB205064.029	Fumigants	2,2-dichloropropane	µg/L	0.5	<0.5	0	200	0
			1,2-dichloropropane	µg/L	0.5	<0.5	0	200	0
			cis-1,3-dichloropropene	µg/L	0.5	<0.5	0.000645105	200	0
			trans-1,3-dichloropropene	µg/L	0.5	<0.5	0.009685022	200	0
			1,2-dibromoethane (EDB)	µg/L	0.5	<0.5	0	200	0
		Halogenated	Dichlorodifluoromethane (CFC-12)	µg/L	5	<5	0.016431315	200	0
		Aliphatics	Chloromethane	µg/L	5	<5	0.172630762	200	0
			Vinyl chloride (Chloroethene)	µg/L	0.3	<0.3	0.196872732	200	0
			Bromomethane	µg/L	10	<10	0.01723559	200	0
			Chloroethane	µg/L	5	<5	0	200	0
			Trichlorofluoromethane	µg/L	1	<1	0.00120896	200	0
			Iodomethane	µg/L	5	<5	0.026831649	200	0
			1,1-dichloroethene	µg/L	0.5	<0.5	0.007504924	200	0
			Dichloromethane (Methylene chloride)	µg/L	5	<5	0.108465085	200	0
			Allyl chloride	µg/L	2	<2	0	200	0
			trans-1,2-dichloroethene	µg/L	0.5	<0.5	0.088060499	200	0
			1,1-dichloroethane	µg/L	0.5	<0.5	0.108257561	200	0
			cis-1,2-dichloroethene	µg/L	0.5	<0.5	0.001581701	200	0
			Bromochloromethane	µg/L	0.5	<0.5	0	200	0
			1,2-dichloroethane	µg/L	0.5	<0.5	0	200	0
			1,1,1-trichloroethane	µg/L	0.5	<0.5	0	200	0
			1,1-dichloropropene	µg/L	0.5	<0.5	0	200	0
			Carbon tetrachloride	µg/L	0.5	<0.5	0	200	0
			Dibromomethane	µg/L	0.5	<0.5	0	200	0
			Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	<0.5	0.016723708	200	0
			1,1,2-trichloroethane	µg/L	0.5	<0.5	0	200	0
			1,3-dichloropropane	µg/L	0.5	<0.5	0	200	0
			Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	<0.5	0.006795838	200	0
			1,1,1,2-tetrachloroethane	µg/L	0.5	<0.5	0	200	0
			cis-1,4-dichloro-2-butene	µg/L	1	<1	0.007532973	200	0
			1,1,2,2-tetrachloroethane	µg/L	0.5	<0.5	0	200	0
			1,2,3-trichloropropane	µg/L	0.5	<0.5	0	200	0
			trans-1,4-dichloro-2-butene	µg/L	1	<1	0	200	0
			1,2-dibromo-3-chloropropane	µg/L	0.5	<0.5	0	200	0
			Hexachlorobutadiene	µg/L	0.5	<0.5	0	200	0
		Halogenated	Chlorobenzene	µg/L	0.5	<0.5	0.006848564	200	0
		Aromatics	Bromobenzene	µg/L	0.5	<0.5	0.04366697	200	0
			2-chlorotoluene	µg/L	0.5	<0.5	0	200	0
			4-chlorotoluene	µg/L	0.5	<0.5	0	200	0
			1,3-dichlorobenzene	µg/L	0.5	<0.5	0.008388057	200	0

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOCs in Water (continued)

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208922.001	LB205064.029	Halogenated	1,4-dichlorobenzene	µg/L	0.3	<0.3	0.007719841	200	0
		Aromatics	1,2-dichlorobenzene	µg/L	0.5	<0.5	0.028841413	200	0
			1,2,4-trichlorobenzene	µg/L	0.5	<0.5	0.000661478	200	0
			1,2,3-trichlorobenzene	µg/L	0.5	<0.5	0.003848968	200	0
		Monocyclic	Benzene	µg/L	0.5	<0.5	0	200	0
		Aromatic	Toluene	µg/L	0.5	<0.5	0.036269612	200	0
			Ethylbenzene	µg/L	0.5	<0.5	0.013185719	200	0
			m/p-xylene	µg/L	1	<1	0.050626943	200	0
			o-xylene	µg/L	0.5	<0.5	0.011724711	200	0
			Styrene (Vinyl benzene)	µg/L	0.5	<0.5	0	200	0
			Isopropylbenzene (Cumene)	µg/L	0.5	<0.5	0.005059338	200	0
			n-propylbenzene	µg/L	0.5	<0.5	0.001090914	200	0
			1,3,5-trimethylbenzene	µg/L	0.5	<0.5	0.006810979	200	0
			tert-butylbenzene	µg/L	0.5	<0.5	0.003022464	200	0
			1,2,4-trimethylbenzene	µg/L	0.5	<0.5	0.002046393	200	0
			sec-butylbenzene	µg/L	0.5	<0.5	0.002230856	200	0
			p-isopropyltoluene	µg/L	0.5	<0.5	0.002750445	200	0
			n-butylbenzene	µg/L	0.5	<0.5	0.004251065	200	0
		Nitrogenous	Acrylonitrile	µg/L	0.5	<0.5	0.022316296	200	0
		Oxygenated	Acetone (2-propanone)	µg/L	10	<10	0.593803592	200	0
		Compounds	MtBE (Methyl-tert-butyl ether)	µg/L	2	<2	0.005629189	200	0
			Vinyl acetate	µg/L	10	<10	0	200	0
			MEK (2-butanone)	µg/L	10	<10	0	200	0
			MIBK (4-methyl-2-pentanone)	µg/L	5	<5	0	200	0
			2-hexanone (MBK)	µg/L	5	<5	0	200	0
		Polycyclic	Naphthalene	µg/L	0.5	<0.5	0.035758725	200	0
		Sulphonated	Carbon disulfide	µg/L	2	<2	0.029577136	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	10.0	10.10339716	30	1
			d8-toluene (Surrogate)	µg/L	-	9.5	9.661349801	30	2
			Bromofluorobenzene (Surrogate)	µg/L	-	10.3	11.18525334	30	8
		Trihalomethan	Chloroform (THM)	µg/L	0.5	<0.5	0.050412967	200	0
		es	Bromodichloromethane (THM)	µg/L	0.5	<0.5	0.002105394	200	0
			Dibromochloromethane (THM)	µg/L	0.5	<0.5	0.003819431	200	0
			Bromoform (THM)	µg/L	0.5	<0.5	0	200	0

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208848.031	LB205064.028		TRH C6-C10	µg/L	50	0	0	200	0
			TRH C6-C9	µg/L	40	0	0	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	10.55442706619	9.994486869	30	5
			d8-toluene (Surrogate)	µg/L	-	9.9461861449	9.456004505	30	5
			Bromofluorobenzene (Surrogate)	µg/L	-	10.5439864564	11.0098939	30	4
		VPH F Bands	Benzene (F0)	µg/L	0.5	0	0	200	0
			TRH C6-C10 minus BTEX (F1)	µg/L	50	0	0	200	0
SE208922.001	LB205064.029		TRH C6-C10	µg/L	50	<50	0	200	0
			TRH C6-C9	µg/L	40	<40	0	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	10.0	10.10339716	30	1
			d8-toluene (Surrogate)	µg/L	-	9.5	9.661349801	30	2
			Bromofluorobenzene (Surrogate)	µg/L	-	10.3	11.18525334	30	8
		VPH F Bands	Benzene (F0)	µg/L	0.5	<0.5	0	200	0
			TRH C6-C10 minus BTEX (F1)	µg/L	50	<50	0	200	0

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

OC Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205050.002		Delta BHC	µg/L	0.1	0.2	0.2	60 - 140	87
		Heptachlor	µg/L	0.1	0.1	0.2	60 - 140	71
		Aldrin	µg/L	0.1	0.2	0.2	60 - 140	95
		Dieldrin	µg/L	0.1	0.2	0.2	60 - 140	95
		Endrin	µg/L	0.1	0.2	0.2	60 - 140	80
		p,p'-DDT	µg/L	0.1	0.1	0.2	60 - 140	73
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	µg/L	-	0.14	0.15	40 - 130	96

OP Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205050.002		Dichlorvos	µg/L	0.5	7.8	8	60 - 140	97
		Diazinon (Dimpylate)	µg/L	0.5	6.7	8	60 - 140	84
		Chlorpyrifos (Chlorpyrifos Ethyl)	µg/L	0.2	6.8	8	60 - 140	85
		Ethion	µg/L	0.2	6.1	8	60 - 140	76
	Surrogates	2-fluorobiphenyl (Surrogate)	µg/L	-	0.3	0.5	40 - 130	64
		d14-p-terphenyl (Surrogate)	µg/L	-	0.4	0.5	40 - 130	70

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205050.002		Naphthalene	µg/L	0.1	27	40	60 - 140	66
		Acenaphthylene	µg/L	0.1	32	40	60 - 140	79
		Acenaphthene	µg/L	0.1	29	40	60 - 140	73
		Phenanthrene	µg/L	0.1	32	40	60 - 140	79
		Anthracene	µg/L	0.1	31	40	60 - 140	78
		Fluoranthene	µg/L	0.1	37	40	60 - 140	93
		Pyrene	µg/L	0.1	32	40	60 - 140	79
		Benzo(a)pyrene	µg/L	0.1	38	40	60 - 140	94
	Surrogates	d5-nitrobenzene (Surrogate)	µg/L	-	0.3	0.5	40 - 130	64
		2-fluorobiphenyl (Surrogate)	µg/L	-	0.3	0.5	40 - 130	64
		d14-p-terphenyl (Surrogate)	µg/L	-	0.4	0.5	40 - 130	70

PCBs in Water

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205050.002	Arochlor 1260	µg/L	1	<1	0.4	60 - 140	80

Speciated Phenols in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205050.002		Phenol	µg/L	0.5	33	40	60 - 140	83
		2,4-dichlorophenol	µg/L	0.5	35	40	60 - 140	87
		2,4,6-trichlorophenol	µg/L	0.5	41	40	60 - 140	103
		Pentachlorophenol	µg/L	0.5	24	40	60 - 140	60
	Surrogates	2,4,6-Tribromophenol (Surrogate)	µg/L	-	4.7	5	40 - 130	95
		d5-phenol (Surrogate)	µg/L	-	1.9	2	40 - 130	95

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205080.002	Arsenic, As	µg/L	1	19	20	80 - 120	96
	Cadmium, Cd	µg/L	0.1	21	20	80 - 120	103
	Chromium, Cr	µg/L	1	21	20	80 - 120	107
	Copper, Cu	µg/L	1	21	20	80 - 120	105
	Lead, Pb	µg/L	1	21	20	80 - 120	106
	Nickel, Ni	µg/L	1	21	20	80 - 120	103
	Zinc, Zn	µg/L	5	23	20	80 - 120	113

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205050.002		TRH C10-C14	µg/L	50	1000	1200	60 - 140	87
		TRH C15-C28	µg/L	200	1300	1200	60 - 140	107
		TRH C29-C36	µg/L	200	1300	1200	60 - 140	109
	TRH F Bands	TRH >C10-C16	µg/L	60	1200	1200	60 - 140	99
		TRH >C16-C34 (F3)	µg/L	500	1300	1200	60 - 140	111
		TRH >C34-C40 (F4)	µg/L	500	670	600	60 - 140	111

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205064.002	Halogenated	1,1-dichloroethene	µg/L	0.5	55	45.45	60 - 140	122
	Aliphatics	1,2-dichloroethane	µg/L	0.5	49	45.45	60 - 140	108
		Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	49	45.45	60 - 140	107
	Halogenated	Chlorobenzene	µg/L	0.5	53	45.45	60 - 140	118
	Monocyclic	Benzene	µg/L	0.5	47	45.45	60 - 140	103
	Aromatic	Toluene	µg/L	0.5	49	45.45	60 - 140	108
		Ethylbenzene	µg/L	0.5	46	45.45	60 - 140	102
		m/p-xylene	µg/L	1	92	90.9	60 - 140	102
		o-xylene	µg/L	0.5	47	45.45	60 - 140	102
	Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	10.3	10	60 - 140	103
		d8-toluene (Surrogate)	µg/L	-	10.3	10	70 - 130	103
		Bromofluorobenzene (Surrogate)	µg/L	-	10.0	10	70 - 130	100
	Trihalomethan	Chloroform (THM)	µg/L	0.5	53	45.45	60 - 140	117

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205064.002		TRH C6-C10	µg/L	50	780	946.63	60 - 140	83
		TRH C6-C9	µg/L	40	680	818.71	60 - 140	83
	Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	10.3	10	60 - 140	103
		d8-toluene (Surrogate)	µg/L	-	10.3	10	70 - 130	103
		Bromofluorobenzene (Surrogate)	µg/L	-	10.0	10	70 - 130	100
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	µg/L	50	500	639.67	60 - 140	79

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208922.001	LB205054.004	Mercury	mg/L	0.0001	0.0069	<0.0001	0.008	86

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208919A.01	LB205080.004	Zinc, Zn	µg/L	5	26	<5	20	115

VOCs in Water

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208915.001	LB205064.030	Fumigants	2,2-dichloropropane	µg/L	0.5	<0.5	<0.5	-	-
			1,2-dichloropropane	µg/L	0.5	<0.5	<0.5	-	-
			cis-1,3-dichloropropene	µg/L	0.5	<0.5	<0.5	-	-
			trans-1,3-dichloropropene	µg/L	0.5	<0.5	<0.5	-	-
			1,2-dibromoethane (EDB)	µg/L	0.5	<0.5	<0.5	-	-
		Halogenated	Dichlorodifluoromethane (CFC-12)	µg/L	5	<5	<5	-	-
		Aliphatics	Chloromethane	µg/L	5	<5	<5	-	-
			Vinyl chloride (Chloroethene)	µg/L	0.3	<0.3	<0.3	-	-
			Bromomethane	µg/L	10	<10	<10	-	-
			Chloroethane	µg/L	5	<5	<5	-	-
			Trichlorofluoromethane	µg/L	1	<1	<1	-	-
			Iodomethane	µg/L	5	<5	<5	-	-
			1,1-dichloroethene	µg/L	0.5	50	<0.5	45.45	110
			Dichloromethane (Methylene chloride)	µg/L	5	<5	<5	-	-
			Allyl chloride	µg/L	2	<2	<2	-	-
			trans-1,2-dichloroethene	µg/L	0.5	<0.5	<0.5	-	-
			1,1-dichloroethane	µg/L	0.5	<0.5	<0.5	-	-
			cis-1,2-dichloroethene	µg/L	0.5	<0.5	<0.5	-	-
			Bromochloromethane	µg/L	0.5	<0.5	<0.5	-	-
			1,2-dichloroethane	µg/L	0.5	52	<0.5	45.45	114
			1,1,1-trichloroethane	µg/L	0.5	<0.5	<0.5	-	-
			1,1-dichloropropene	µg/L	0.5	<0.5	<0.5	-	-
			Carbon tetrachloride	µg/L	0.5	<0.5	<0.5	-	-
			Dibromomethane	µg/L	0.5	<0.5	<0.5	-	-
			Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	47	<0.5	45.45	103
			1,1,2-trichloroethane	µg/L	0.5	<0.5	<0.5	-	-
			1,3-dichloropropane	µg/L	0.5	<0.5	<0.5	-	-
			Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	<0.5	<0.5	-	-
			1,1,1,2-tetrachloroethane	µg/L	0.5	<0.5	<0.5	-	-
			cis-1,4-dichloro-2-butene	µg/L	1	<1	<1	-	-
			1,1,2,2-tetrachloroethane	µg/L	0.5	<0.5	<0.5	-	-
			1,2,3-trichloropropane	µg/L	0.5	<0.5	<0.5	-	-
			trans-1,4-dichloro-2-butene	µg/L	1	<1	<1	-	-
			1,2-dibromo-3-chloropropane	µg/L	0.5	<0.5	<0.5	-	-
			Hexachlorobutadiene	µg/L	0.5	<0.5	<0.5	-	-
		Halogenated	Chlorobenzene	µg/L	0.5	56	<0.5	45.45	124
		Aromatics	Bromobenzene	µg/L	0.5	<0.5	<0.5	-	-
			2-chlorotoluene	µg/L	0.5	<0.5	<0.5	-	-
			4-chlorotoluene	µg/L	0.5	<0.5	<0.5	-	-
			1,3-dichlorobenzene	µg/L	0.5	<0.5	<0.5	-	-
			1,4-dichlorobenzene	µg/L	0.3	<0.3	<0.3	-	-
			1,2-dichlorobenzene	µg/L	0.5	<0.5	<0.5	-	-
			1,2,4-trichlorobenzene	µg/L	0.5	<0.5	<0.5	-	-
			1,2,3-trichlorobenzene	µg/L	0.5	<0.5	<0.5	-	-
		Monocyclic	Benzene	µg/L	0.5	48	<0.5	45.45	106
		Aromatic	Toluene	µg/L	0.5	50	<0.5	45.45	109
			Ethylbenzene	µg/L	0.5	48	<0.5	45.45	107
			m/p-xylene	µg/L	1	99	<1	90.9	109
			o-xylene	µg/L	0.5	44	<0.5	45.45	97

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOCs in Water (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208915.001	LB205064.030	Monocyclic Aromatic	Styrene (Vinyl benzene)	µg/L	0.5	<0.5	<0.5	-	-
			Isopropylbenzene (Cumene)	µg/L	0.5	<0.5	<0.5	-	-
			n-propylbenzene	µg/L	0.5	<0.5	<0.5	-	-
			1,3,5-trimethylbenzene	µg/L	0.5	<0.5	<0.5	-	-
			tert-butylbenzene	µg/L	0.5	<0.5	<0.5	-	-
			1,2,4-trimethylbenzene	µg/L	0.5	<0.5	<0.5	-	-
			sec-butylbenzene	µg/L	0.5	<0.5	<0.5	-	-
			p-isopropyltoluene	µg/L	0.5	<0.5	<0.5	-	-
			n-butylbenzene	µg/L	0.5	<0.5	<0.5	-	-
		Nitrogenous	Acrylonitrile	µg/L	0.5	<0.5	<0.5	-	-
		Oxygenated Compounds	Acetone (2-propanone)	µg/L	10	<10	<10	-	-
			MtBE (Methyl-tert-butyl ether)	µg/L	2	<2	<2	-	-
			Vinyl acetate	µg/L	10	<10	<10	-	-
			MEK (2-butanone)	µg/L	10	<10	<10	-	-
			MIBK (4-methyl-2-pentanone)	µg/L	5	<5	<5	-	-
			2-hexanone (MBK)	µg/L	5	<5	<5	-	-
		Polycyclic	Naphthalene	µg/L	0.5	<0.5	<0.5	-	-
		Sulphonated	Carbon disulfide	µg/L	2	<2	<2	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	10.6	10	-	106
			d8-toluene (Surrogate)	µg/L	-	9.6	9.5	-	96
			Bromofluorobenzene (Surrogate)	µg/L	-	11.5	11	-	115
		Trihalomethanes	Chloroform (THM)	µg/L	0.5	59	<0.5	45.45	130
			Bromodichloromethane (THM)	µg/L	0.5	<0.5	<0.5	-	-
			Dibromochloromethane (THM)	µg/L	0.5	<0.5	<0.5	-	-
			Bromoform (THM)	µg/L	0.5	<0.5	<0.5	-	-

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE208915.001	LB205064.030		TRH C6-C10	µg/L	50	770	<50	946.63	82
			TRH C6-C9	µg/L	40	660	<40	818.71	80
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	11	10	-	106
			d8-toluene (Surrogate)	µg/L	-	9.6	9.5	-	96
			Bromofluorobenzene (Surrogate)	µg/L	-	12	11	-	115
		VPH F Bands	Benzene (F0)	µg/L	0.5	48	<0.5	-	-
			TRH C6-C10 minus BTEX (F1)	µg/L	50	480	<50	639.67	75

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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CHAIN OF CUSTODY DOCUMENTATION

SLR Consulting Australia Pty Ltd

ABN 29 001 584 612

E-MAILED 24/7/20 3:05p

SLR

PROJECT OFFICE (Tick one)

- ☐ BRISBANE: Level 2, 15 Astor Terrace, Spring Hill, QLD 4000
- ☐ GOLD COAST: 194 Varsity Parade, Varsity Lakes, QLD 4227
- ☐ NEWCASTLE: 10 Kings Road, New Lambton, NSW 2305
- ● SYDNEY: 2 Lincoln Street, Lane Cove, Sydney, NSW 2066
- ☐ NELSON: 6/A Cambridge Street, Richmond, Port Nelson, 7020 NZ
- ☐ CANBERRA: GPO Box 410, Canberra, ACT 2600
- ☐ MACKAY: 21 River Street, Mackay, QLD 4740
- ☐ PERTH: 503 Murray Street, Perth, WA 6000
- ☐ TOWNSVILLE: 514 Sturt Street, Townsville, QLD 4810
- ☐ NEW PLYMOUTH: Level 2, 10 Devon Street East, New Plymouth, 4310 NZ
- ☐ DARWIN: 21 Parap Rd, Dewin, NT 0830
- ☐ MELBOURNE: Suite 2, 2 Domville Avenue, Hawthorn, VIC 3122
- ☐ ROCKHAMPTON: rockhampton@slrconsulting.com
- ☐ AUCKLAND: 68 Beach Road, Auckland 1010 NZ

CLIENT: Defence Housing Australia	**LABORATORY: SGS Australia**
PROJECT: Randwick Barracks	**LABORATORY ADDRESS: Unit 16/33 Maddox St, Alexandria NSW 2015**
PROJECT NUMBER: 610.30041	**SAMPLER** [redacted]
PROJECT MANAGER: [redacted]	**SAMPLER CONTACT No:** [redacted]
PM CONTACT No: [redacted]	**Email Reports and Invoices to: LQRSYD@slrconsulting.com** [redacted]

Turnaround Time (TAT)

☐ Standard TAT

☐ Non Standard or Urgent TAT

Required TAT: Standard

COC Number of

COMMENTS OR ADDITIONAL DIRECTIONS

REQUESTED ANALYSIS

No.	Sample ID	Date & Time	Matrix (Soil, water, ACM, etc)	Containers and Preservatives	Suite A and D	Suite E and H	Suite A	Suite F	Suite E, H, D and MTBEs	Major Cations and Anions	TDS		Additional Information (Comment on any gross contamination or specific requirements)
1	GW01	20-07-2020	Water		x					x	x		
2	GW02	20-07-2020	Water			x				x	x		
3	GW03	20-07-2020	Water				x			x	x		
4	GW04	20-07-2020	Water		x					x	x		
5	GW05	20-07-2020	Water					x		x	x		
6	GW06	20-07-2020	Water					x		x	x		
7	GW07	20-07-2020	Water						x	x	x		
8	GW09	20-07-2020	Water				x			x	x		

SGS EHS Sydney COC

SE209051

I attest that the proper field sampling procedures were used during the collection of these samples.

Relinquished By Sampler	[redacted]	Date / Time	20-07-2020	**Received by**	Sign [redacted]	Date / Time	20/07/20
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	4.20
Relinquished By	Sign	Date / Time		**Received by**	Sign	Date / Time	

Temperature Received:

SAMPLE RECEIPT ADVICE

SE209051

CLIENT DETAILS

Contact	[redacted]
Client	JACOBS GROUP (AUSTRALIA) PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	(Not specified)
Samples	8

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
Samples Received	Mon 20/7/2020
Report Due	Wed 29/7/2020
SGS Reference	**SE209051**

SUBMISSION DETAILS

This is to confirm that 8 samples were received on Monday 20/7/2020. Results are expected to be ready by COB Wednesday 29/7/2020. Please quote SGS reference SE209051 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	8 Water
Date documentation received	22/7/2020 @3:05PM	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	1.3°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

Explosives subcontracted subcontracted to SGS Melbourne, 10/585 Blackburn Road, Notting Hill, VIC, NATA Accreditation Numbe. 2562/14420.

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SAMPLE RECEIPT ADVICE

SE209051

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	OC Pesticides in Water	OP Pesticides in Water	PAH (Polynuclear Aromatic Hydrocarbons) in Water	PCBs in Water	Speciated Phenols in Water	TRH (Total Recoverable Hydrocarbons) in Water	VOCs in Water	Volatile Petroleum Hydrocarbons in Water
001	GW01	28	13	22	11	18	9	78	7
002	GW02	-	-	22	-	-	-	-	-
003	GW03	28	13	22	11	18	9	78	7
004	GW04	28	13	22	11	18	9	78	7
005	GW05	-	-	-	11	-	9	78	7
006	GW06	-	-	-	11	-	9	78	7
007	GW07	-	-	22	-	18	-	12	-
008	GW09	28	13	22	11	18	9	78	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE209051

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Alkalinity	Anions by Ion Chromatography in Water	Mercury (dissolved) in Water	Metals in Water (Dissolved) by ICPOES	Total Dissolved Solids (TDS) in water	Trace Metals (Dissolved) in Water by ICPMS
001	GW01	1	2	1	4	1	7
002	GW02	1	2	1	4	1	11
003	GW03	1	2	1	4	1	7
004	GW04	1	2	1	4	1	7
005	GW05	1	2	1	4	1	7
006	GW06	1	2	1	4	1	7
007	GW07	1	2	1	4	1	11
008	GW09	1	2	1	4	1	7

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

SE209051

CLIENT DETAILS

Client JACOBS GROUP (AUSTRALIA) PTY LTD

Project 610.30041 Randwick Barracks

SUMMARY OF ANALYSIS

No.	Sample ID	Explosives in Water
002	GW02	16
007	GW07	16

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	Lego Building, 2 Lincoln Street (PO Box 176 NSW LANECOVE 1595) NSW 2066
Telephone	[redacted]
Facsimile	
Email	
Project	**610.30041 Randwick Barracks**
Order Number	**610.30041**
Samples	8

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Alexandria Environmental
Address	Unit 16, 33 Maddox St Alexandria NSW 2015
Telephone	+61 2 8594 0400
Facsimile	+61 2 8594 0499
Email	au.environmental.sydney@sgs.com
SGS Reference	**SE209051 R0**
Date Received	20/7/2020
Date Reported	4/8/2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(4354).

SIGNATORIES

[redacted]

Chemist | Senior Organic Chemist/Metals Chemist | Metals/Inorganics Team Leader

[redacted]

Senior Chemist | Organic Section Head | Inorganic/Metals Chemist

VOCs in Water [AN433] Tested: 27/7/2020

PARAMETER	UOM	LOR	GW01 WATER - 20/7/2020 SE209051.001	GW03 WATER - 20/7/2020 SE209051.003	GW04 WATER - 20/7/2020 SE209051.004	GW05 WATER - 20/7/2020 SE209051.005	GW06 WATER - 20/7/2020 SE209051.006
Benzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Toluene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
m/p-xylene	µg/L	1	<1	<1	<1	<1	<1
o-xylene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Naphthalene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Total Xylenes	µg/L	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
Total BTEX	µg/L	3	<3	<3	<3	<3	<3
Dichlorodifluoromethane (CFC-12)	µg/L	5	<5	<5	<5	<5	<5
Chloromethane	µg/L	5	<5	<5	<5	<5	<5
Vinyl chloride (Chloroethene)	µg/L	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
Bromomethane	µg/L	10	<10	<10	<10	<10	<10
Chloroethane	µg/L	5	<5	<5	<5	<5	<5
Trichlorofluoromethane	µg/L	1	<1	<1	<1	<1	<1
Acetone (2-propanone)	µg/L	10	<10	<10	<10	<10	<10
Iodomethane	µg/L	5	<5	<5	<5	<5	<5
1,1-dichloroethene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Acrylonitrile	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dichloromethane (Methylene chloride)	µg/L	5	<5	<5	<5	<5	<5
Allyl chloride	µg/L	2	<2	<2	<2	<2	<2
Carbon disulfide	µg/L	2	<2	<2	<2	<2	<2
trans-1,2-dichloroethene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MtBE (Methyl-tert-butyl ether)	µg/L	2	<2	<2	<2	<2	<2
1,1-dichloroethane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Vinyl acetate	µg/L	10	<10	<10	<10	<10	<10
MEK (2-butanone)	µg/L	10	<10	<10	<10	<10	<10
cis-1,2-dichloroethene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromochloromethane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloroform (THM)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,2-dichloropropane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-dichloroethane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1-trichloroethane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1-dichloropropene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Carbon tetrachloride	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromomethane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-dichloropropane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitropropane	µg/L	100	<100	<100	<100	<100	<100
Bromodichloromethane (THM)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
MIBK (4-methyl-2-pentanone)	µg/L	5	<5	<5	<5	<5	<5
cis-1,3-dichloropropene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,3-dichloropropene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2-trichloroethane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,3-dichloropropane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Dibromochloromethane (THM)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-hexanone (MBK)	µg/L	5	<5	<5	<5	<5	<5
1,2-dibromoethane (EDB)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,1,2-tetrachloroethane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromoform (THM)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
cis-1,4-dichloro-2-butene	µg/L	1	<1	<1	<1	<1	<1
Styrene (Vinyl benzene)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,1,2,2-tetrachloroethane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2,3-trichloropropane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
trans-1,4-dichloro-2-butene	µg/L	1	<1	<1	<1	<1	<1

VOCs in Water [AN433] Tested: 27/7/2020 (continued)

PARAMETER	UOM	LOR	GW01 WATER - 20/7/2020 SE209051.001	GW03 WATER - 20/7/2020 SE209051.003	GW04 WATER - 20/7/2020 SE209051.004	GW05 WATER - 20/7/2020 SE209051.005	GW06 WATER - 20/7/2020 SE209051.006
Isopropylbenzene (Cumene)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Bromobenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
n-propylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-chlorotoluene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-chlorotoluene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,3,5-trimethylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
tert-butylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2,4-trimethylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
sec-butylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,3-dichlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,4-dichlorobenzene	µg/L	0.3	<0.3	<0.3	<0.3	<0.3	<0.3
p-isopropyltoluene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-dichlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
n-butylbenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2-dibromo-3-chloropropane	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2,4-trichlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Hexachlorobutadiene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
1,2,3-trichlorobenzene	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Total VOC	µg/L	10	<10	<10	<10	<10	<10

VOCs in Water [AN433] Tested: 27/7/2020 (continued)

PARAMETER	UOM	LOR	GW07 WATER - 20/7/2020 SE209051.007	GW09 WATER - 20/7/2020 SE209051.008
Benzene	µg/L	0.5	<0.5	<0.5
Toluene	µg/L	0.5	<0.5	<0.5
Ethylbenzene	µg/L	0.5	<0.5	<0.5
m/p-xylene	µg/L	1	<1	<1
o-xylene	µg/L	0.5	<0.5	<0.5
Naphthalene	µg/L	0.5	<0.5	<0.5
Total Xylenes	µg/L	1.5	<1.5	<1.5
Total BTEX	µg/L	3	<3	<3
Dichlorodifluoromethane (CFC-12)	µg/L	5	-	<5
Chloromethane	µg/L	5	-	<5
Vinyl chloride (Chloroethene)	µg/L	0.3	-	<0.3
Bromomethane	µg/L	10	-	<10
Chloroethane	µg/L	5	-	<5
Trichlorofluoromethane	µg/L	1	-	<1
Acetone (2-propanone)	µg/L	10	-	<10
Iodomethane	µg/L	5	-	<5
1,1-dichloroethene	µg/L	0.5	-	<0.5
Acrylonitrile	µg/L	0.5	-	<0.5
Dichloromethane (Methylene chloride)	µg/L	5	-	<5
Allyl chloride	µg/L	2	-	<2
Carbon disulfide	µg/L	2	-	<2
trans-1,2-dichloroethene	µg/L	0.5	-	<0.5
MtBE (Methyl-tert-butyl ether)	µg/L	2	<2	<2
1,1-dichloroethane	µg/L	0.5	-	<0.5
Vinyl acetate	µg/L	10	-	<10
MEK (2-butanone)	µg/L	10	-	<10
cis-1,2-dichloroethene	µg/L	0.5	-	<0.5
Bromochloromethane	µg/L	0.5	-	<0.5
Chloroform (THM)	µg/L	0.5	-	<0.5
2,2-dichloropropane	µg/L	0.5	-	<0.5
1,2-dichloroethane	µg/L	0.5	-	<0.5
1,1,1-trichloroethane	µg/L	0.5	-	<0.5
1,1-dichloropropene	µg/L	0.5	-	<0.5
Carbon tetrachloride	µg/L	0.5	-	<0.5
Dibromomethane	µg/L	0.5	-	<0.5
1,2-dichloropropane	µg/L	0.5	-	<0.5
Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	-	<0.5
2-nitropropane	µg/L	100	-	<100
Bromodichloromethane (THM)	µg/L	0.5	-	<0.5
MIBK (4-methyl-2-pentanone)	µg/L	5	-	<5
cis-1,3-dichloropropene	µg/L	0.5	-	<0.5
trans-1,3-dichloropropene	µg/L	0.5	-	<0.5
1,1,2-trichloroethane	µg/L	0.5	-	<0.5
1,3-dichloropropane	µg/L	0.5	-	<0.5
Dibromochloromethane (THM)	µg/L	0.5	-	<0.5
2-hexanone (MBK)	µg/L	5	-	<5
1,2-dibromoethane (EDB)	µg/L	0.5	-	<0.5
Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	-	<0.5
1,1,1,2-tetrachloroethane	µg/L	0.5	-	<0.5
Chlorobenzene	µg/L	0.5	-	<0.5
Bromoform (THM)	µg/L	0.5	-	<0.5
cis-1,4-dichloro-2-butene	µg/L	1	-	<1
Styrene (Vinyl benzene)	µg/L	0.5	-	<0.5
1,1,2,2-tetrachloroethane	µg/L	0.5	-	<0.5
1,2,3-trichloropropane	µg/L	0.5	-	<0.5
trans-1,4-dichloro-2-butene	µg/L	1	-	<1

VOCs in Water [AN433] Tested: 27/7/2020 (continued)

PARAMETER	UOM	LOR	GW07 WATER - 20/7/2020 SE209051.007	GW09 WATER - 20/7/2020 SE209051.008
Isopropylbenzene (Cumene)	µg/L	0.5	-	<0.5
Bromobenzene	µg/L	0.5	-	<0.5
n-propylbenzene	µg/L	0.5	-	<0.5
2-chlorotoluene	µg/L	0.5	-	<0.5
4-chlorotoluene	µg/L	0.5	-	<0.5
1,3,5-trimethylbenzene	µg/L	0.5	-	<0.5
tert-butylbenzene	µg/L	0.5	-	<0.5
1,2,4-trimethylbenzene	µg/L	0.5	-	<0.5
sec-butylbenzene	µg/L	0.5	-	<0.5
1,3-dichlorobenzene	µg/L	0.5	-	<0.5
1,4-dichlorobenzene	µg/L	0.3	-	<0.3
p-isopropyltoluene	µg/L	0.5	-	<0.5
1,2-dichlorobenzene	µg/L	0.5	-	<0.5
n-butylbenzene	µg/L	0.5	-	<0.5
1,2-dibromo-3-chloropropane	µg/L	0.5	-	<0.5
1,2,4-trichlorobenzene	µg/L	0.5	-	<0.5
Hexachlorobutadiene	µg/L	0.5	-	<0.5
1,2,3-trichlorobenzene	µg/L	0.5	-	<0.5
Total VOC	µg/L	10	-	<10

Volatile Petroleum Hydrocarbons in Water [AN433] Tested: 27/7/2020

PARAMETER	UOM	LOR	GW01 WATER - 20/7/2020 SE209051.001	GW03 WATER - 20/7/2020 SE209051.003	GW04 WATER - 20/7/2020 SE209051.004	GW05 WATER - 20/7/2020 SE209051.005	GW06 WATER - 20/7/2020 SE209051.006
Benzene (F0)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
TRH C6-C9	µg/L	40	<40	<40	<40	<40	<40
TRH C6-C10	µg/L	50	<50	<50	<50	<50	<50
TRH C6-C10 minus BTEX (F1)	µg/L	50	<50	<50	<50	<50	<50

PARAMETER	UOM	LOR	GW09 WATER - 20/7/2020 SE209051.008
Benzene (F0)	µg/L	0.5	<0.5
TRH C6-C9	µg/L	40	<40
TRH C6-C10	µg/L	50	<50
TRH C6-C10 minus BTEX (F1)	µg/L	50	<50

TRH (Total Recoverable Hydrocarbons) in Water [AN403] Tested: 28/7/2020

PARAMETER	UOM	LOR	GW01 WATER - 20/7/2020 SE209051.001	GW03 WATER - 20/7/2020 SE209051.003	GW04 WATER - 20/7/2020 SE209051.004	GW05 WATER - 20/7/2020 SE209051.005	GW06 WATER - 20/7/2020 SE209051.006
TRH C10-C14	µg/L	50	<50	<50	<50	<50	<50
TRH C15-C28	µg/L	200	<200	<200	<200	<200	<200
TRH C29-C36	µg/L	200	<200	<200	<200	<200	<200
TRH C37-C40	µg/L	200	<200	<200	<200	<200	<200
TRH >C10-C16	µg/L	60	<60	<60	<60	<60	<60
TRH >C10-C16 - Naphthalene (F2)	µg/L	60	<60	<60	<60	<60	<60
TRH >C16-C34 (F3)	µg/L	500	<500	<500	<500	<500	<500
TRH >C34-C40 (F4)	µg/L	500	<500	<500	<500	<500	<500
TRH C10-C40	µg/L	320	<320	<320	<320	<320	<320

PARAMETER	UOM	LOR	GW09 WATER - 20/7/2020 SE209051.008
TRH C10-C14	µg/L	50	<50
TRH C15-C28	µg/L	200	<200
TRH C29-C36	µg/L	200	<200
TRH C37-C40	µg/L	200	<200
TRH >C10-C16	µg/L	60	<60
TRH >C10-C16 - Naphthalene (F2)	µg/L	60	<60
TRH >C16-C34 (F3)	µg/L	500	<500
TRH >C34-C40 (F4)	µg/L	500	<500
TRH C10-C40	µg/L	320	<320

PAH (Polynuclear Aromatic Hydrocarbons) in Water [AN420] Tested: 28/7/2020

PARAMETER	UOM	LOR	GW01 WATER - 20/7/2020 SE209051.001	GW02 WATER - 20/7/2020 SE209051.002	GW03 WATER - 20/7/2020 SE209051.003	GW04 WATER - 20/7/2020 SE209051.004	GW07 WATER - 20/7/2020 SE209051.007
Naphthalene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-methylnaphthalene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1-methylnaphthalene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b&j)fluoranthene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(k)fluoranthene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)pyrene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(ah)anthracene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(ghi)perylene	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Total PAH (18)	µg/L	1	<1	<1	<1	<1	<1

PARAMETER	UOM	LOR	GW09 WATER - 20/7/2020 SE209051.008
Naphthalene	µg/L	0.1	<0.1
2-methylnaphthalene	µg/L	0.1	<0.1
1-methylnaphthalene	µg/L	0.1	<0.1
Acenaphthylene	µg/L	0.1	<0.1
Acenaphthene	µg/L	0.1	<0.1
Fluorene	µg/L	0.1	<0.1
Phenanthrene	µg/L	0.1	<0.1
Anthracene	µg/L	0.1	<0.1
Fluoranthene	µg/L	0.1	<0.1
Pyrene	µg/L	0.1	<0.1
Benzo(a)anthracene	µg/L	0.1	<0.1
Chrysene	µg/L	0.1	<0.1
Benzo(b&j)fluoranthene	µg/L	0.1	<0.1
Benzo(k)fluoranthene	µg/L	0.1	<0.1
Benzo(a)pyrene	µg/L	0.1	<0.1
Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1
Dibenzo(ah)anthracene	µg/L	0.1	<0.1
Benzo(ghi)perylene	µg/L	0.1	<0.1
Total PAH (18)	µg/L	1	<1

Speciated Phenols in Water [AN420] Tested: 28/7/2020

PARAMETER	UOM	LOR	GW01 WATER - 20/7/2020 SE209051.001	GW03 WATER - 20/7/2020 SE209051.003	GW04 WATER - 20/7/2020 SE209051.004	GW07 WATER - 20/7/2020 SE209051.007	GW09 WATER - 20/7/2020 SE209051.008
Phenol	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-methyl phenol (o-cresol)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
3/4-methyl phenol (m/p-cresol)	µg/L	1	<1	<1	<1	<1	<1
Total Cresol	µg/L	1.5	<1.5	<1.5	<1.5	<1.5	<1.5
2-chlorophenol	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dimethylphenol	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,6-dichlorophenol	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dichlorophenol	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4,6-trichlorophenol	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2-nitrophenol	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
4-nitrophenol	µg/L	1	<1	<1	<1	<1	<1
2,4,5-trichlorophenol	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,3,4,6/2,3,5,6-tetrachlorophenol	µg/L	1	<1	<1	<1	<1	<1
Pentachlorophenol	µg/L	0.5	<0.5	<0.5	<0.5	<0.5	<0.5
2,4-dinitrophenol	µg/L	2	<2	<2	<2	<2	<2
4-chloro-3-methylphenol	µg/L	2	<2	<2	<2	<2	<2

OC Pesticides in Water [AN420] Tested: 28/7/2020

PARAMETER	UOM	LOR	GW01 WATER - 20/7/2020 SE209051.001	GW03 WATER - 20/7/2020 SE209051.003	GW04 WATER - 20/7/2020 SE209051.004	GW09 WATER - 20/7/2020 SE209051.008
Alpha BHC	µg/L	0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorobenzene (HCB)	µg/L	0.1	<0.1	<0.1	<0.1	<0.1
Beta BHC	µg/L	0.1	<0.1	<0.1	<0.1	<0.1
Lindane (gamma BHC)	µg/L	0.1	<0.1	<0.1	<0.1	<0.1
Delta BHC	µg/L	0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor	µg/L	0.1	<0.1	<0.1	<0.1	<0.1
Aldrin	µg/L	0.1	<0.1	<0.1	<0.1	<0.1
Heptachlor epoxide	µg/L	0.1	<0.1	<0.1	<0.1	<0.1
Gamma Chlordane	µg/L	0.1	<0.1	<0.1	<0.1	<0.1
Alpha Chlordane	µg/L	0.1	<0.1	<0.1	<0.1	<0.1
Alpha Endosulfan	µg/L	0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDE	µg/L	0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDE	µg/L	0.1	<0.1	<0.1	<0.1	<0.1
Dieldrin	µg/L	0.1	<0.1	<0.1	<0.1	<0.1
Endrin	µg/L	0.1	<0.1	<0.1	<0.1	<0.1
Beta Endosulfan	µg/L	0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDD	µg/L	0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDD	µg/L	0.1	<0.1	<0.1	<0.1	<0.1
Endosulfan sulphate	µg/L	0.1	<0.1	<0.1	<0.1	<0.1
o,p'-DDT	µg/L	0.1	<0.1	<0.1	<0.1	<0.1
p,p'-DDT	µg/L	0.1	<0.1	<0.1	<0.1	<0.1
Endrin ketone	µg/L	0.1	<0.1	<0.1	<0.1	<0.1
Methoxychlor	µg/L	0.1	<0.1	<0.1	<0.1	<0.1
trans-Nonachlor	µg/L	0.1	<0.1	<0.1	<0.1	<0.1
Endrin aldehyde	µg/L	0.1	<0.1	<0.1	<0.1	<0.1
Isodrin	µg/L	0.1	<0.1	<0.1	<0.1	<0.1
Mirex	µg/L	0.1	<0.1	<0.1	<0.1	<0.1

OP Pesticides in Water [AN420] Tested: 28/7/2020

PARAMETER	UOM	LOR	GW01 WATER - 20/7/2020 SE209051.001	GW03 WATER - 20/7/2020 SE209051.003	GW04 WATER - 20/7/2020 SE209051.004	GW09 WATER - 20/7/2020 SE209051.008
Dichlorvos	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
Dimethoate	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
Diazinon (Dimpylate)	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
Fenitrothion	µg/L	0.2	<0.2	<0.2	<0.2	<0.2
Malathion	µg/L	0.2	<0.2	<0.2	<0.2	<0.2
Chlorpyrifos (Chlorpyrifos Ethyl)	µg/L	0.2	<0.2	<0.2	<0.2	<0.2
Parathion-ethyl (Parathion)	µg/L	0.2	<0.2	<0.2	<0.2	<0.2
Bromophos Ethyl	µg/L	0.2	<0.2	<0.2	<0.2	<0.2
Methidathion	µg/L	0.5	<0.5	<0.5	<0.5	<0.5
Ethion	µg/L	0.2	<0.2	<0.2	<0.2	<0.2
Azinphos-methyl	µg/L	0.2	<0.2	<0.2	<0.2	<0.2

PCBs in Water [AN420] Tested: 28/7/2020

PARAMETER	UOM	LOR	GW01 WATER - 20/7/2020 SE209051.001	GW03 WATER - 20/7/2020 SE209051.003	GW04 WATER - 20/7/2020 SE209051.004	GW05 WATER - 20/7/2020 SE209051.005	GW06 WATER - 20/7/2020 SE209051.006
Arochlor 1016	µg/L	1	<1	<1	<1	<1	<1
Arochlor 1221	µg/L	1	<1	<1	<1	<1	<1
Arochlor 1232	µg/L	1	<1	<1	<1	<1	<1
Arochlor 1242	µg/L	1	<1	<1	<1	<1	<1
Arochlor 1248	µg/L	1	<1	<1	<1	<1	<1
Arochlor 1254	µg/L	1	<1	<1	<1	<1	<1
Arochlor 1260	µg/L	1	<1	<1	<1	<1	<1
Arochlor 1262	µg/L	1	<1	<1	<1	<1	<1
Arochlor 1268	µg/L	1	<1	<1	<1	<1	<1
Total Arochlors*	µg/L	5	<5	<5	<5	<5	<5

PARAMETER	UOM	LOR	GW09 WATER - 20/7/2020 SE209051.008
Arochlor 1016	µg/L	1	<1
Arochlor 1221	µg/L	1	<1
Arochlor 1232	µg/L	1	<1
Arochlor 1242	µg/L	1	<1
Arochlor 1248	µg/L	1	<1
Arochlor 1254	µg/L	1	<1
Arochlor 1260	µg/L	1	<1
Arochlor 1262	µg/L	1	<1
Arochlor 1268	µg/L	1	<1
Total Arochlors*	µg/L	5	<5

Anions by Ion Chromatography in Water [AN245] Tested: 28/7/2020

PARAMETER	UOM	LOR	GW01 WATER - 20/7/2020 SE209051.001	GW02 WATER - 20/7/2020 SE209051.002	GW03 WATER - 20/7/2020 SE209051.003	GW04 WATER - 20/7/2020 SE209051.004	GW05 WATER - 20/7/2020 SE209051.005
Chloride	mg/L	1	14	21	41	45	83
Sulfate, SO4	mg/L	1	13	8.5	17	13	16

PARAMETER	UOM	LOR	GW06 WATER - 20/7/2020 SE209051.006	GW07 WATER - 20/7/2020 SE209051.007	GW09 WATER - 20/7/2020 SE209051.008
Chloride	mg/L	1	28	17	55
Sulfate, SO4	mg/L	1	10	1.3	22

Alkalinity [AN135] Tested: 28/7/2020

PARAMETER	UOM	LOR	GW01 WATER - 20/7/2020 SE209051.001	GW02 WATER - 20/7/2020 SE209051.002	GW03 WATER - 20/7/2020 SE209051.003	GW04 WATER - 20/7/2020 SE209051.004	GW05 WATER - 20/7/2020 SE209051.005
Total Alkalinity as CaCO3	mg/L	5	46	37	49	30	34

PARAMETER	UOM	LOR	GW06 WATER - 20/7/2020 SE209051.006	GW07 WATER - 20/7/2020 SE209051.007	GW09 WATER - 20/7/2020 SE209051.008
Total Alkalinity as CaCO3	mg/L	5	30	31	36

Total Dissolved Solids (TDS) in water [AN113] Tested: 24/7/2020

PARAMETER	UOM	LOR	GW01 WATER - 20/7/2020 SE209051.001	GW02 WATER - 20/7/2020 SE209051.002	GW03 WATER - 20/7/2020 SE209051.003	GW04 WATER - 20/7/2020 SE209051.004	GW05 WATER - 20/7/2020 SE209051.005
Total Dissolved Solids Dried at 175-185°C	mg/L	10	180	140	250	200	330

PARAMETER	UOM	LOR	GW06 WATER - 20/7/2020 SE209051.006	GW07 WATER - 20/7/2020 SE209051.007	GW09 WATER - 20/7/2020 SE209051.008
Total Dissolved Solids Dried at 175-185°C	mg/L	10	140	140	300

Metals in Water (Dissolved) by ICPOES [AN320] Tested: 24/7/2020

PARAMETER	UOM	LOR	GW01 WATER - 20/7/2020 SE209051.001	GW02 WATER - 20/7/2020 SE209051.002	GW03 WATER - 20/7/2020 SE209051.003	GW04 WATER - 20/7/2020 SE209051.004	GW05 WATER - 20/7/2020 SE209051.005
Calcium, Ca	mg/L	0.2	13	20	33	22	35
Magnesium, Mg	mg/L	0.1	1.9	1.8	4.5	3.6	5.6
Sodium, Na	mg/L	0.5	21	12	23	17	29
Potassium, K	mg/L	0.1	5.5	3.3	5.7	4.4	5.7

PARAMETER	UOM	LOR	GW06 WATER - 20/7/2020 SE209051.006	GW07 WATER - 20/7/2020 SE209051.007	GW09 WATER - 20/7/2020 SE209051.008
Calcium, Ca	mg/L	0.2	16	12	26
Magnesium, Mg	mg/L	0.1	1.9	1.4	4.5
Sodium, Na	mg/L	0.5	16	13	37
Potassium, K	mg/L	0.1	3.1	4.0	5.8

Trace Metals (Dissolved) in Water by ICPMS [AN318] Tested: 24/7/2020

PARAMETER	UOM	LOR	GW01 WATER - 20/7/2020 SE209051.001	GW02 WATER - 20/7/2020 SE209051.002	GW03 WATER - 20/7/2020 SE209051.003	GW04 WATER - 20/7/2020 SE209051.004	GW05 WATER - 20/7/2020 SE209051.005
Arsenic, As	µg/L	1	<1	<1	<1	<1	<1
Cadmium, Cd	µg/L	0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Chromium, Cr	µg/L	1	<1	<1	<1	<1	<1
Copper, Cu	µg/L	1	10	6	5	7	7
Lead, Pb	µg/L	1	<1	<1	<1	<1	<1
Nickel, Ni	µg/L	1	2	2	2	2	3
Zinc, Zn	µg/L	5	31	22	28	23	23
Beryllium, Be	µg/L	1	-	<1	-	-	-
Boron, B	µg/L	5	-	33	-	-	-
Cobalt, Co	µg/L	1	-	<1	-	-	-
Manganese, Mn	µg/L	1	-	5	-	-	-

PARAMETER	UOM	LOR	GW06 WATER - 20/7/2020 SE209051.006	GW07 WATER - 20/7/2020 SE209051.007	GW09 WATER - 20/7/2020 SE209051.008
Arsenic, As	µg/L	1	<1	<1	<1
Cadmium, Cd	µg/L	0.1	0.1	<0.1	<0.1
Chromium, Cr	µg/L	1	<1	<1	<1
Copper, Cu	µg/L	1	6	7	<1
Lead, Pb	µg/L	1	<1	<1	<1
Nickel, Ni	µg/L	1	2	2	<1
Zinc, Zn	µg/L	5	24	22	<5
Beryllium, Be	µg/L	1	-	<1	-
Boron, B	µg/L	5	-	26	-
Cobalt, Co	µg/L	1	-	<1	-
Manganese, Mn	µg/L	1	-	2	-

Mercury (dissolved) in Water [AN311(Perth)/AN312] Tested: 27/7/2020

PARAMETER	UOM	LOR	GW01 WATER - 20/7/2020 SE209051.001	GW02 WATER - 20/7/2020 SE209051.002	GW03 WATER - 20/7/2020 SE209051.003	GW04 WATER - 20/7/2020 SE209051.004	GW05 WATER - 20/7/2020 SE209051.005
Mercury	mg/L	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001

PARAMETER	UOM	LOR	GW06 WATER - 20/7/2020 SE209051.006	GW07 WATER - 20/7/2020 SE209051.007	GW09 WATER - 20/7/2020 SE209051.008
Mercury	mg/L	0.0001	<0.0001	<0.0001	<0.0001

Explosives in Water [MA-1129] Tested: 4/8/2020

PARAMETER	UOM	LOR	GW02 WATER - 20/7/2020 SE209051.002	GW07 WATER - 20/7/2020 SE209051.007
2-Amino-4,6-Dinitrotoluene	mg/L	0.001	<0.002↑	<0.002↑
4-Amino-2,6-Dinitrotoluene	mg/L	0.001	<0.002↑	<0.002↑
1,3-Dinitrobenzene	mg/L	0.001	<0.002↑	<0.002↑
1,4-Dinitrobenzene	mg/L	0.001	<0.002↑	<0.002↑
DNT (2,4 & 2,6 isomeric mixture)	mg/L	0.001	<0.002↑	<0.002↑
HMX	mg/L	0.001	<0.002↑	<0.002↑
2-Nitrotoluene	mg/L	0.001	<0.002↑	<0.002↑
3-Nitrotoluene	mg/L	0.001	<0.002↑	<0.002↑
4-Nitrotoluene	mg/L	0.001	<0.002↑	<0.002↑
Nitrobenzene	mg/L	0.001	<0.002↑	<0.002↑
Nitroglycerine	mg/L	0.001	<0.002↑	<0.002↑
PETN	mg/L	0.001	<0.002↑	<0.002↑
RDX	mg/L	0.001	<0.002↑	<0.002↑
Tetryl	mg/L	0.001	<0.002↑	<0.002↑
1,3,5-Trinitrobenzene	mg/L	0.001	<0.002↑	<0.002↑
2,4,6-TNT	mg/L	0.001	<0.002↑	<0.002↑

METHOD	METHODOLOGY SUMMARY
AN020	Unpreserved water sample is filtered through a 0.45µm membrane filter and acidified with nitric acid similar to APHA3030B.
AN113	Total Dissolved Solids: A well-mixed filtered sample of known volume is evaporated to dryness at 180°C and the residue weighed. Approximate methods for correlating chemical analysis with dissolved solids are available. Reference APHA 2540 C.
AN113	The Total Dissolved Solids residue may also be ignited at 550 C and volatile TDS (Organic TDS) and non-volatile TDS (Inorganic) can be determined.
AN135	Alkalinity (and forms of) by Titration: The sample is titrated with standard acid to pH 8.3 (P titre) and pH 4.5 (T titre) and permanent and/or total alkalinity calculated. The results are expressed as equivalents of calcium carbonate or recalculated as bicarbonate, carbonate and hydroxide. Reference APHA 2320. Internal Reference AN135
AN245	Anions by Ion Chromatography: A water sample is injected into an eluent stream that passes through the ion chromatographic system where the anions of interest ie Br, Cl, NO2, NO3 and SO4 are separated on their relative affinities for the active sites on the column packing material. Changes to the conductivity and the UV-visible absorbance of the eluent enable identification and quantitation of the anions based on their retention time and peak height or area. APHA 4110 B
AN311(Perth)/AN312	Mercury by Cold Vapour AAS in Waters: Mercury ions are reduced by stannous chloride reagent in acidic solution to elemental mercury. This mercury vapour is purged by nitrogen into a cold cell in an atomic absorption spectrometer or mercury analyser. Quantification is made by comparing absorbances to those of the calibration standards. Reference APHA 3112/3500.
AN318	Determination of elements at trace level in waters by ICP-MS technique,, referenced to USEPA 6020B and USEPA 200.8 (5.4).
AN320	Metals by ICP-OES: Samples are preserved with 10% nitric acid for a wide range of metals and some non-metals. This solution is measured by Inductively Coupled Plasma. Solutions are aspirated into an argon plasma at 8000-10000K and emit characteristic energy or light as a result of electron transitions through unique energy levels. The emitted light is focused onto a diffraction grating where it is separated into components.
AN320	Photomultipliers or CCDs are used to measure the light intensity at specific wavelengths. This intensity is directly proportional to concentration. Corrections are required to compensate for spectral overlap between elements. Reference APHA 3120 B.
AN403	Total Recoverable Hydrocarbons: Determination of Hydrocarbons by gas chromatography after a solvent extraction. Detection is by flame ionisation detector (FID) that produces an electronic signal in proportion to the combustible matter passing through it. Total Recoverable Hydrocarbons (TRH) are routinely reported as four alkane groupings based on the carbon chain length of the compounds: C6-C9, C10-C14, C15-C28 and C29-C36 and in recognition of the NEPM 1999 (2013), >C10-C16 (F2), >C16-C34 (F3) and >C34-C40 (F4). Where F2 is corrected for Naphthalene, the VOC data for Naphthalene is used.
AN403	Additionally, the volatile C6-C9/C6-C10 fractions may be determined by a purge and trap technique and GC/MS because of the potential for volatiles loss. Total Recoveerable Hydrocarbons - Silica (TRH-Silica) follows the same method of analysis after silica gel cleanup of the solvent extract. Aliphatic/Aromatic Speciation follows the same method of analysis after fractionation of the solvent extract over silica with differential polarity of the eluent solvents.
AN403	The GC/FID method is not well suited to the analysis of refined high boiling point materials (ie lubricating oils or greases) but is particularly suited for measuring diesel, kerosene and petrol if care to control volatility is taken. This method will detect naturally occurring hydrocarbons, lipids, animal fats, phenols and PAHs if they are present at sufficient levels, dependent on the use of specific cleanup/fractionation techniques. Reference USEPA 3510B, 8015B.
AN420	(SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols (etc) in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN420	SVOC Compounds: Semi-Volatile Organic Compounds (SVOCs) including OC, OP, PCB, Herbicides, PAH, Phthalates and Speciated Phenols in soils, sediments and waters are determined by GCMS/ECD technique following appropriate solvent extraction process (Based on USEPA 3500C and 8270D).
AN433	VOCs and C6-C9 Hydrocarbons by GC-MS P&T: VOC`s are volatile organic compounds. The sample is presented to a gas chromatograph via a purge and trap (P&T) concentrator and autosampler and is detected with a Mass Spectrometer (MSD). Solid samples are initially extracted with methanol whilst liquid samples are processed directly. References: USEPA 5030B, 8020A, 8260.
Calculation	Free and Total Carbon Dioxide may be calculated using alkalinity forms only when the samples TDS is <500mg/L. If TDS is >500mg/L free or total carbon dioxide cannot be reported. APHA4500CO2 D.

MA1129	This method is intended for the trace analysis of explosive residues by high performance liquid chromatography using a diode array detector. This method is based on the USEPA 8330 method for Explosives. To achieve the low detection limit required of water samples, solid phase extraction (SPE) is used or alternatively liquid/liquid extraction can be used. For solid phase extraction, water sample is passed through a pre-washed SPE cartridge then eluted with acetonitrile. The eluate is then diluted with calcium chloride. The sample is then filtered through a 0.45µm Teflon filter disc, and 100µL is injected into a HPLC.

FOOTNOTES

*	NATA accreditation does not cover the performance of this service.	-	Not analysed.	UOM	Unit of Measure.
		NVL	Not validated.	LOR	Limit of Reporting.
**	Indicative data, theoretical holding time exceeded.	IS	Insufficient sample for analysis.	↑↓	Raised/lowered Limit of Reporting.
		LNR	Sample listed, but not received.		

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calculated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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ANALYTICAL REPORT

Accreditation No. 2562

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Order Number	**SE209051**
Samples	8

LABORATORY DETAILS

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SGS Reference	**ME315836 R0**
Date Received	27 Jul 2020
Date Reported	04 Aug 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(14420).

SIGNATORIES

[redacted]

Senior Chemist

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name ME315836.001 Water 20 Jul 2020 SE209051.001	ME315836.002 Water 20 Jul 2020 SE209051.002	ME315836.003 Water 20 Jul 2020 SE209051.003	ME315836.004 Water 20 Jul 2020 SE209051.004
Explosives in Water Method: MA-1129 Tested: 4/8/2020						
2-Amino-4,6-Dinitrotoluene	mg/L	0.001	-	<0.002↑	-	-
4-Amino-2,6-Dinitrotoluene	mg/L	0.001	-	<0.002↑	-	-
1,3-Dinitrobenzene	mg/L	0.001	-	<0.002↑	-	-
1,4-Dinitrobenzene	mg/L	0.001	-	<0.002↑	-	-
DNT (2,4 & 2,6 isomeric mixture)	mg/L	0.001	-	<0.002↑	-	-
HMX	mg/L	0.001	-	<0.002↑	-	-
2-Nitrotoluene	mg/L	0.001	-	<0.002↑	-	-
3-Nitrotoluene	mg/L	0.001	-	<0.002↑	-	-
4-Nitrotoluene	mg/L	0.001	-	<0.002↑	-	-
Nitrobenzene	mg/L	0.001	-	<0.002↑	-	-
Nitroglycerine	mg/L	0.001	-	<0.002↑	-	-
PETN	mg/L	0.001	-	<0.002↑	-	-
RDX	mg/L	0.001	-	<0.002↑	-	-
Tetryl	mg/L	0.001	-	<0.002↑	-	-
1,3,5-Trinitrobenzene	mg/L	0.001	-	<0.002↑	-	-
2,4,6-TNT	mg/L	0.001	-	<0.002↑	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME315836.005 Water 20 Jul 2020 SE209051.005	ME315836.006 Water 20 Jul 2020 SE209051.006	ME315836.007 Water 20 Jul 2020 SE209051.007	ME315836.008 Water 20 Jul 2020 SE209051.008
Explosives in Water Method: MA-1129 Tested: 4/8/2020							
2-Amino-4,6-Dinitrotoluene	mg/L	0.001		-	-	<0.002↑	-
4-Amino-2,6-Dinitrotoluene	mg/L	0.001		-	-	<0.002↑	-
1,3-Dinitrobenzene	mg/L	0.001		-	-	<0.002↑	-
1,4-Dinitrobenzene	mg/L	0.001		-	-	<0.002↑	-
DNT (2,4 & 2,6 isomeric mixture)	mg/L	0.001		-	-	<0.002↑	-
HMX	mg/L	0.001		-	-	<0.002↑	-
2-Nitrotoluene	mg/L	0.001		-	-	<0.002↑	-
3-Nitrotoluene	mg/L	0.001		-	-	<0.002↑	-
4-Nitrotoluene	mg/L	0.001		-	-	<0.002↑	-
Nitrobenzene	mg/L	0.001		-	-	<0.002↑	-
Nitroglycerine	mg/L	0.001		-	-	<0.002↑	-
PETN	mg/L	0.001		-	-	<0.002↑	-
RDX	mg/L	0.001		-	-	<0.002↑	-
Tetryl	mg/L	0.001		-	-	<0.002↑	-
1,3,5-Trinitrobenzene	mg/L	0.001		-	-	<0.002↑	-
2,4,6-TNT	mg/L	0.001		-	-	<0.002↑	-

QC SUMMARY

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage.* Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Explosives in Water **Method: MA-1129**

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
2-Amino-4,6-Dinitrotoluene	LB034565	mg/L	0.001	<0.001	NA
4-Amino-2,6-Dinitrotoluene	LB034565	mg/L	0.001	<0.001	
1,3-Dinitrobenzene	LB034565	mg/L	0.001	<0.001	NA
1,4-Dinitrobenzene	LB034565	mg/L	0.001	<0.001	NA
DNT (2,4 & 2,6 isomeric mixture)	LB034565	mg/L	0.001	<0.001	NA
HMX	LB034565	mg/L	0.001	<0.001	NA
2-Nitrotoluene	LB034565	mg/L	0.001	<0.001	NA
3-Nitrotoluene	LB034565	mg/L	0.001	<0.001	
4-Nitrotoluene	LB034565	mg/L	0.001	<0.001	NA
Nitrobenzene	LB034565	mg/L	0.001	<0.001	
Nitroglycerine	LB034565	mg/L	0.001	<0.001	
PETN	LB034565	mg/L	0.001	<0.001	
RDX	LB034565	mg/L	0.001	<0.001	
Tetryl	LB034565	mg/L	0.001	<0.001	
1,3,5-Trinitrobenzene	LB034565	mg/L	0.001	<0.001	
2,4,6-TNT	LB034565	mg/L	0.001	<0.001	NA

METHOD SUMMARY

ME315836 R0

METHOD	METHODOLOGY SUMMARY
MA1129	This method is intended for the trace analysis of explosive residues by high performance liquid chromatography using a diode array detector. This method is based on the USEPA 8330 method for Explosives. To achieve the low detection limit required of water samples , solid phase extraction (SPE) is used or alternatively liquid/liquid extraction can be used. For solid phase extraction, water sample is passed through a pre-washed SPE cartridge then eluted with acetonitrile. The eluate is then diluted with calcium chloride. The sample is then filtered through a 0.45µm Teflon filter disc, and 100µL is injected into a HPLC.

FOOTNOTES

IS	Insufficient sample for analysis.	LOR	Limit of Reporting
LNR	Sample listed, but not received.	↑↓	Raised or Lowered Limit of Reporting
*	NATA accreditation does not cover the performance of this service.	QFH	QC result is above the upper tolerance
		QFL	QC result is below the lower tolerance
**	Indicative data, theoretical holding time exceeded.	-	The sample was not analysed for this analyte
		NVL	Not Validated

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calcuated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

SE209051 R0

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Order Number	**610.30041**
Samples	8

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SGS Reference	**SE209051 R0**
Date Received	20 Jul 2020
Date Reported	04 Aug 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met with the exception of the following:

Extraction Date	OC Pesticides in Water	4 items
	OP Pesticides in Water	4 items
	PAH (Polynuclear Aromatic Hydrocarbons) in Water	6 items
	PCBs in Water	6 items
	TRH (Total Recoverable Hydrocarbons) in Water	6 items
Duplicate	Total Dissolved Solids (TDS) in water	1 item
	VOCs in Water	1 item
Matrix Spike	Volatile Petroleum Hydrocarbons in Water	1 item

SAMPLE SUMMARY

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice
Samples received in correct containers	Yes	Sample counts by matrix	8 Water
Date documentation received	22/7/2020 @3:05PM	Type of documentation received	COC
Samples received in good order	Yes	Samples received without headspace	Yes
Sample temperature upon receipt	1.3°C	Sufficient sample for analysis	Yes
Turnaround time requested	Standard		

HOLDING TIME SUMMARY

SE209051 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

Alkalinity

Method: ME-(AU)-[ENV]AN135

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW01	SE209051.001	LB205363	20 Jul 2020	20 Jul 2020	03 Aug 2020	28 Jul 2020	03 Aug 2020	28 Jul 2020
GW02	SE209051.002	LB205363	20 Jul 2020	20 Jul 2020	03 Aug 2020	28 Jul 2020	03 Aug 2020	28 Jul 2020
GW03	SE209051.003	LB205363	20 Jul 2020	20 Jul 2020	03 Aug 2020	28 Jul 2020	03 Aug 2020	28 Jul 2020
GW04	SE209051.004	LB205363	20 Jul 2020	20 Jul 2020	03 Aug 2020	28 Jul 2020	03 Aug 2020	28 Jul 2020
GW05	SE209051.005	LB205363	20 Jul 2020	20 Jul 2020	03 Aug 2020	28 Jul 2020	03 Aug 2020	28 Jul 2020
GW06	SE209051.006	LB205363	20 Jul 2020	20 Jul 2020	03 Aug 2020	28 Jul 2020	03 Aug 2020	28 Jul 2020
GW07	SE209051.007	LB205363	20 Jul 2020	20 Jul 2020	03 Aug 2020	28 Jul 2020	03 Aug 2020	28 Jul 2020
GW09	SE209051.008	LB205363	20 Jul 2020	20 Jul 2020	03 Aug 2020	28 Jul 2020	03 Aug 2020	28 Jul 2020

Anions by Ion Chromatography in Water

Method: ME-(AU)-[ENV]AN245

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW01	SE209051.001	LB205332	20 Jul 2020	20 Jul 2020	17 Aug 2020	28 Jul 2020	17 Aug 2020	03 Aug 2020
GW02	SE209051.002	LB205332	20 Jul 2020	20 Jul 2020	17 Aug 2020	28 Jul 2020	17 Aug 2020	03 Aug 2020
GW03	SE209051.003	LB205332	20 Jul 2020	20 Jul 2020	17 Aug 2020	28 Jul 2020	17 Aug 2020	03 Aug 2020
GW04	SE209051.004	LB205332	20 Jul 2020	20 Jul 2020	17 Aug 2020	28 Jul 2020	17 Aug 2020	03 Aug 2020
GW05	SE209051.005	LB205332	20 Jul 2020	20 Jul 2020	17 Aug 2020	28 Jul 2020	17 Aug 2020	03 Aug 2020
GW06	SE209051.006	LB205332	20 Jul 2020	20 Jul 2020	17 Aug 2020	28 Jul 2020	17 Aug 2020	03 Aug 2020
GW07	SE209051.007	LB205332	20 Jul 2020	20 Jul 2020	17 Aug 2020	28 Jul 2020	17 Aug 2020	03 Aug 2020
GW09	SE209051.008	LB205332	20 Jul 2020	20 Jul 2020	17 Aug 2020	28 Jul 2020	17 Aug 2020	03 Aug 2020

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW01	SE209051.001	LB205205	20 Jul 2020	20 Jul 2020	17 Aug 2020	27 Jul 2020	17 Aug 2020	27 Jul 2020
GW02	SE209051.002	LB205205	20 Jul 2020	20 Jul 2020	17 Aug 2020	27 Jul 2020	17 Aug 2020	27 Jul 2020
GW03	SE209051.003	LB205205	20 Jul 2020	20 Jul 2020	17 Aug 2020	27 Jul 2020	17 Aug 2020	27 Jul 2020
GW04	SE209051.004	LB205205	20 Jul 2020	20 Jul 2020	17 Aug 2020	27 Jul 2020	17 Aug 2020	27 Jul 2020
GW05	SE209051.005	LB205205	20 Jul 2020	20 Jul 2020	17 Aug 2020	27 Jul 2020	17 Aug 2020	27 Jul 2020
GW06	SE209051.006	LB205205	20 Jul 2020	20 Jul 2020	17 Aug 2020	27 Jul 2020	17 Aug 2020	27 Jul 2020
GW07	SE209051.007	LB205205	20 Jul 2020	20 Jul 2020	17 Aug 2020	27 Jul 2020	17 Aug 2020	27 Jul 2020
GW09	SE209051.008	LB205205	20 Jul 2020	20 Jul 2020	17 Aug 2020	27 Jul 2020	17 Aug 2020	27 Jul 2020

Metals in Water (Dissolved) by ICPOES

Method: ME-(AU)-[ENV]AN320

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW01	SE209051.001	LB205149	20 Jul 2020	20 Jul 2020	16 Jan 2021	24 Jul 2020	16 Jan 2021	24 Jul 2020
GW02	SE209051.002	LB205149	20 Jul 2020	20 Jul 2020	16 Jan 2021	24 Jul 2020	16 Jan 2021	24 Jul 2020
GW03	SE209051.003	LB205149	20 Jul 2020	20 Jul 2020	16 Jan 2021	24 Jul 2020	16 Jan 2021	24 Jul 2020
GW04	SE209051.004	LB205149	20 Jul 2020	20 Jul 2020	16 Jan 2021	24 Jul 2020	16 Jan 2021	24 Jul 2020
GW05	SE209051.005	LB205149	20 Jul 2020	20 Jul 2020	16 Jan 2021	24 Jul 2020	16 Jan 2021	24 Jul 2020
GW06	SE209051.006	LB205149	20 Jul 2020	20 Jul 2020	16 Jan 2021	24 Jul 2020	16 Jan 2021	24 Jul 2020
GW07	SE209051.007	LB205149	20 Jul 2020	20 Jul 2020	16 Jan 2021	24 Jul 2020	16 Jan 2021	24 Jul 2020
GW09	SE209051.008	LB205149	20 Jul 2020	20 Jul 2020	16 Jan 2021	24 Jul 2020	16 Jan 2021	24 Jul 2020

OC Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW01	SE209051.001	LB205336	20 Jul 2020	20 Jul 2020	27 Jul 2020	28 Jul 2020†	06 Sep 2020	30 Jul 2020
GW02	SE209051.002	LB205336	20 Jul 2020	20 Jul 2020	27 Jul 2020	28 Jul 2020†	06 Sep 2020	30 Jul 2020
GW03	SE209051.003	LB205336	20 Jul 2020	20 Jul 2020	27 Jul 2020	28 Jul 2020†	06 Sep 2020	30 Jul 2020
GW04	SE209051.004	LB205336	20 Jul 2020	20 Jul 2020	27 Jul 2020	28 Jul 2020†	06 Sep 2020	30 Jul 2020
GW05	SE209051.005	LB205336	20 Jul 2020	20 Jul 2020	27 Jul 2020	28 Jul 2020†	06 Sep 2020	30 Jul 2020
GW06	SE209051.006	LB205336	20 Jul 2020	20 Jul 2020	27 Jul 2020	28 Jul 2020†	06 Sep 2020	30 Jul 2020
GW07	SE209051.007	LB205336	20 Jul 2020	20 Jul 2020	27 Jul 2020	28 Jul 2020†	06 Sep 2020	30 Jul 2020
GW09	SE209051.008	LB205336	20 Jul 2020	20 Jul 2020	27 Jul 2020	28 Jul 2020†	06 Sep 2020	30 Jul 2020

OP Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW01	SE209051.001	LB205336	20 Jul 2020	20 Jul 2020	27 Jul 2020	28 Jul 2020†	06 Sep 2020	29 Jul 2020
GW02	SE209051.002	LB205336	20 Jul 2020	20 Jul 2020	27 Jul 2020	28 Jul 2020†	06 Sep 2020	30 Jul 2020
GW03	SE209051.003	LB205336	20 Jul 2020	20 Jul 2020	27 Jul 2020	28 Jul 2020†	06 Sep 2020	29 Jul 2020
GW04	SE209051.004	LB205336	20 Jul 2020	20 Jul 2020	27 Jul 2020	28 Jul 2020†	06 Sep 2020	29 Jul 2020
GW05	SE209051.005	LB205336	20 Jul 2020	20 Jul 2020	27 Jul 2020	28 Jul 2020†	06 Sep 2020	30 Jul 2020
GW06	SE209051.006	LB205336	20 Jul 2020	20 Jul 2020	27 Jul 2020	28 Jul 2020†	06 Sep 2020	30 Jul 2020
GW07	SE209051.007	LB205336	20 Jul 2020	20 Jul 2020	27 Jul 2020	28 Jul 2020†	06 Sep 2020	30 Jul 2020

HOLDING TIME SUMMARY

SE209051 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

OP Pesticides in Water (continued)

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW09	SE209051.008	LB205336	20 Jul 2020	20 Jul 2020	27 Jul 2020	28 Jul 2020†	06 Sep 2020	29 Jul 2020

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW01	SE209051.001	LB205336	20 Jul 2020	20 Jul 2020	27 Jul 2020	28 Jul 2020†	06 Sep 2020	29 Jul 2020
GW02	SE209051.002	LB205336	20 Jul 2020	20 Jul 2020	27 Jul 2020	28 Jul 2020†	06 Sep 2020	29 Jul 2020
GW03	SE209051.003	LB205336	20 Jul 2020	20 Jul 2020	27 Jul 2020	28 Jul 2020†	06 Sep 2020	29 Jul 2020
GW04	SE209051.004	LB205336	20 Jul 2020	20 Jul 2020	27 Jul 2020	28 Jul 2020†	06 Sep 2020	29 Jul 2020
GW05	SE209051.005	LB205336	20 Jul 2020	20 Jul 2020	27 Jul 2020	28 Jul 2020†	06 Sep 2020	30 Jul 2020
GW06	SE209051.006	LB205336	20 Jul 2020	20 Jul 2020	27 Jul 2020	28 Jul 2020†	06 Sep 2020	30 Jul 2020
GW07	SE209051.007	LB205336	20 Jul 2020	20 Jul 2020	27 Jul 2020	28 Jul 2020†	06 Sep 2020	29 Jul 2020
GW09	SE209051.008	LB205336	20 Jul 2020	20 Jul 2020	27 Jul 2020	28 Jul 2020†	06 Sep 2020	29 Jul 2020

PCBs in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW01	SE209051.001	LB205336	20 Jul 2020	20 Jul 2020	27 Jul 2020	28 Jul 2020†	06 Sep 2020	30 Jul 2020
GW02	SE209051.002	LB205336	20 Jul 2020	20 Jul 2020	27 Jul 2020	28 Jul 2020†	06 Sep 2020	30 Jul 2020
GW03	SE209051.003	LB205336	20 Jul 2020	20 Jul 2020	27 Jul 2020	28 Jul 2020†	06 Sep 2020	30 Jul 2020
GW04	SE209051.004	LB205336	20 Jul 2020	20 Jul 2020	27 Jul 2020	28 Jul 2020†	06 Sep 2020	30 Jul 2020
GW05	SE209051.005	LB205336	20 Jul 2020	20 Jul 2020	27 Jul 2020	28 Jul 2020†	06 Sep 2020	29 Jul 2020
GW06	SE209051.006	LB205336	20 Jul 2020	20 Jul 2020	27 Jul 2020	28 Jul 2020†	06 Sep 2020	29 Jul 2020
GW07	SE209051.007	LB205336	20 Jul 2020	20 Jul 2020	27 Jul 2020	28 Jul 2020†	06 Sep 2020	30 Jul 2020
GW09	SE209051.008	LB205336	20 Jul 2020	20 Jul 2020	27 Jul 2020	28 Jul 2020†	06 Sep 2020	30 Jul 2020

Speciated Phenols in Water

Method: ME-(AU)-[ENV]AN420

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW01	SE209051.001	LB205336	20 Jul 2020	20 Jul 2020	10 Aug 2020	28 Jul 2020	06 Sep 2020	29 Jul 2020
GW02	SE209051.002	LB205336	20 Jul 2020	20 Jul 2020	10 Aug 2020	28 Jul 2020	06 Sep 2020	30 Jul 2020
GW03	SE209051.003	LB205336	20 Jul 2020	20 Jul 2020	10 Aug 2020	28 Jul 2020	06 Sep 2020	29 Jul 2020
GW04	SE209051.004	LB205336	20 Jul 2020	20 Jul 2020	10 Aug 2020	28 Jul 2020	06 Sep 2020	29 Jul 2020
GW05	SE209051.005	LB205336	20 Jul 2020	20 Jul 2020	10 Aug 2020	28 Jul 2020	06 Sep 2020	30 Jul 2020
GW06	SE209051.006	LB205336	20 Jul 2020	20 Jul 2020	10 Aug 2020	28 Jul 2020	06 Sep 2020	30 Jul 2020
GW07	SE209051.007	LB205336	20 Jul 2020	20 Jul 2020	10 Aug 2020	28 Jul 2020	06 Sep 2020	30 Jul 2020
GW09	SE209051.008	LB205336	20 Jul 2020	20 Jul 2020	10 Aug 2020	28 Jul 2020	06 Sep 2020	29 Jul 2020

Total Dissolved Solids (TDS) in water

Method: ME-(AU)-[ENV]AN113

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW01	SE209051.001	LB205144	20 Jul 2020	20 Jul 2020	27 Jul 2020	24 Jul 2020	27 Jul 2020	27 Jul 2020
GW02	SE209051.002	LB205144	20 Jul 2020	20 Jul 2020	27 Jul 2020	24 Jul 2020	27 Jul 2020	27 Jul 2020
GW03	SE209051.003	LB205144	20 Jul 2020	20 Jul 2020	27 Jul 2020	24 Jul 2020	27 Jul 2020	27 Jul 2020
GW04	SE209051.004	LB205144	20 Jul 2020	20 Jul 2020	27 Jul 2020	24 Jul 2020	27 Jul 2020	27 Jul 2020
GW05	SE209051.005	LB205144	20 Jul 2020	20 Jul 2020	27 Jul 2020	24 Jul 2020	27 Jul 2020	27 Jul 2020
GW06	SE209051.006	LB205144	20 Jul 2020	20 Jul 2020	27 Jul 2020	24 Jul 2020	27 Jul 2020	27 Jul 2020
GW07	SE209051.007	LB205144	20 Jul 2020	20 Jul 2020	27 Jul 2020	24 Jul 2020	27 Jul 2020	27 Jul 2020
GW09	SE209051.008	LB205144	20 Jul 2020	20 Jul 2020	27 Jul 2020	24 Jul 2020	27 Jul 2020	27 Jul 2020

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW01	SE209051.001	LB205151	20 Jul 2020	20 Jul 2020	16 Jan 2021	24 Jul 2020	16 Jan 2021	27 Jul 2020
GW02	SE209051.002	LB205151	20 Jul 2020	20 Jul 2020	16 Jan 2021	24 Jul 2020	16 Jan 2021	27 Jul 2020
GW03	SE209051.003	LB205151	20 Jul 2020	20 Jul 2020	16 Jan 2021	24 Jul 2020	16 Jan 2021	27 Jul 2020
GW04	SE209051.004	LB205151	20 Jul 2020	20 Jul 2020	16 Jan 2021	24 Jul 2020	16 Jan 2021	27 Jul 2020
GW05	SE209051.005	LB205151	20 Jul 2020	20 Jul 2020	16 Jan 2021	24 Jul 2020	16 Jan 2021	27 Jul 2020
GW06	SE209051.006	LB205151	20 Jul 2020	20 Jul 2020	16 Jan 2021	24 Jul 2020	16 Jan 2021	27 Jul 2020
GW07	SE209051.007	LB205151	20 Jul 2020	20 Jul 2020	16 Jan 2021	24 Jul 2020	16 Jan 2021	27 Jul 2020
GW09	SE209051.008	LB205151	20 Jul 2020	20 Jul 2020	16 Jan 2021	24 Jul 2020	16 Jan 2021	27 Jul 2020

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW01	SE209051.001	LB205336	20 Jul 2020	20 Jul 2020	27 Jul 2020	28 Jul 2020†	06 Sep 2020	30 Jul 2020
GW02	SE209051.002	LB205336	20 Jul 2020	20 Jul 2020	27 Jul 2020	28 Jul 2020†	06 Sep 2020	30 Jul 2020
GW03	SE209051.003	LB205336	20 Jul 2020	20 Jul 2020	27 Jul 2020	28 Jul 2020†	06 Sep 2020	30 Jul 2020
GW04	SE209051.004	LB205336	20 Jul 2020	20 Jul 2020	27 Jul 2020	28 Jul 2020†	06 Sep 2020	30 Jul 2020

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the sampled date is not supplied then compliance with criteria cannot be determined. If the received date is after one or both due dates then holding time will fail by default.

TRH (Total Recoverable Hydrocarbons) in Water (continued)

Method: ME-(AU)-[ENV]AN403

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW05	SE209051.005	LB205336	20 Jul 2020	20 Jul 2020	27 Jul 2020	28 Jul 2020†	06 Sep 2020	29 Jul 2020
GW06	SE209051.006	LB205336	20 Jul 2020	20 Jul 2020	27 Jul 2020	28 Jul 2020†	06 Sep 2020	29 Jul 2020
GW07	SE209051.007	LB205336	20 Jul 2020	20 Jul 2020	27 Jul 2020	28 Jul 2020†	06 Sep 2020	30 Jul 2020
GW09	SE209051.008	LB205336	20 Jul 2020	20 Jul 2020	27 Jul 2020	28 Jul 2020†	06 Sep 2020	30 Jul 2020

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW01	SE209051.001	LB205243	20 Jul 2020	20 Jul 2020	27 Jul 2020	27 Jul 2020	05 Sep 2020	28 Jul 2020
GW03	SE209051.003	LB205243	20 Jul 2020	20 Jul 2020	27 Jul 2020	27 Jul 2020	05 Sep 2020	28 Jul 2020
GW04	SE209051.004	LB205243	20 Jul 2020	20 Jul 2020	27 Jul 2020	27 Jul 2020	05 Sep 2020	28 Jul 2020
GW05	SE209051.005	LB205243	20 Jul 2020	20 Jul 2020	27 Jul 2020	27 Jul 2020	05 Sep 2020	28 Jul 2020
GW06	SE209051.006	LB205243	20 Jul 2020	20 Jul 2020	27 Jul 2020	27 Jul 2020	05 Sep 2020	28 Jul 2020
GW07	SE209051.007	LB205243	20 Jul 2020	20 Jul 2020	27 Jul 2020	27 Jul 2020	05 Sep 2020	28 Jul 2020
GW09	SE209051.008	LB205243	20 Jul 2020	20 Jul 2020	27 Jul 2020	27 Jul 2020	05 Sep 2020	28 Jul 2020

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
GW01	SE209051.001	LB205243	20 Jul 2020	20 Jul 2020	27 Jul 2020	27 Jul 2020	05 Sep 2020	28 Jul 2020
GW03	SE209051.003	LB205243	20 Jul 2020	20 Jul 2020	27 Jul 2020	27 Jul 2020	05 Sep 2020	28 Jul 2020
GW04	SE209051.004	LB205243	20 Jul 2020	20 Jul 2020	27 Jul 2020	27 Jul 2020	05 Sep 2020	28 Jul 2020
GW05	SE209051.005	LB205243	20 Jul 2020	20 Jul 2020	27 Jul 2020	27 Jul 2020	05 Sep 2020	28 Jul 2020
GW06	SE209051.006	LB205243	20 Jul 2020	20 Jul 2020	27 Jul 2020	27 Jul 2020	05 Sep 2020	28 Jul 2020
GW07	SE209051.007	LB205243	20 Jul 2020	20 Jul 2020	27 Jul 2020	27 Jul 2020	05 Sep 2020	28 Jul 2020
GW09	SE209051.008	LB205243	20 Jul 2020	20 Jul 2020	27 Jul 2020	27 Jul 2020	05 Sep 2020	28 Jul 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

OC Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (TCMX) (Surrogate)	GW01	SE209051.001	%	40 - 130%	75
	GW03	SE209051.003	%	40 - 130%	68
	GW04	SE209051.004	%	40 - 130%	74
	GW09	SE209051.008	%	40 - 130%	60

OP Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	GW01	SE209051.001	%	40 - 130%	112
	GW03	SE209051.003	%	40 - 130%	98
	GW04	SE209051.004	%	40 - 130%	92
	GW09	SE209051.008	%	40 - 130%	116
d14-p-terphenyl (Surrogate)	GW01	SE209051.001	%	40 - 130%	104
	GW03	SE209051.003	%	40 - 130%	118
	GW04	SE209051.004	%	40 - 130%	112
	GW09	SE209051.008	%	40 - 130%	100

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2-fluorobiphenyl (Surrogate)	GW01	SE209051.001	%	40 - 130%	112
	GW02	SE209051.002	%	40 - 130%	50
	GW03	SE209051.003	%	40 - 130%	98
	GW04	SE209051.004	%	40 - 130%	92
	GW07	SE209051.007	%	40 - 130%	66
	GW09	SE209051.008	%	40 - 130%	116
d14-p-terphenyl (Surrogate)	GW01	SE209051.001	%	40 - 130%	104
	GW02	SE209051.002	%	40 - 130%	72
	GW03	SE209051.003	%	40 - 130%	118
	GW04	SE209051.004	%	40 - 130%	112
	GW07	SE209051.007	%	40 - 130%	96
	GW09	SE209051.008	%	40 - 130%	100
d5-nitrobenzene (Surrogate)	GW01	SE209051.001	%	40 - 130%	54
	GW02	SE209051.002	%	40 - 130%	46
	GW03	SE209051.003	%	40 - 130%	42
	GW04	SE209051.004	%	40 - 130%	58
	GW07	SE209051.007	%	40 - 130%	60
	GW09	SE209051.008	%	40 - 130%	50

PCBs in Water

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Tetrachloro-m-xylene (Surrogate)	GW01	SE209051.001	%	40 - 130%	75
	GW03	SE209051.003	%	40 - 130%	68
	GW04	SE209051.004	%	40 - 130%	74
	GW05	SE209051.005	%	40 - 130%	48
	GW06	SE209051.006	%	40 - 130%	65
	GW09	SE209051.008	%	40 - 130%	60

Speciated Phenols in Water

Method: ME-(AU)-[ENV]AN420

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
2,4,6-Tribromophenol (Surrogate)	GW01	SE209051.001	%	40 - 130%	48
	GW03	SE209051.003	%	40 - 130%	82
	GW04	SE209051.004	%	40 - 130%	75
	GW07	SE209051.007	%	40 - 130%	68
	GW09	SE209051.008	%	40 - 130%	77
d5-phenol (Surrogate)	GW01	SE209051.001	%	20 - 90%	41
	GW03	SE209051.003	%	20 - 90%	42
	GW04	SE209051.004	%	20 - 90%	41
	GW07	SE209051.007	%	20 - 90%	52
	GW09	SE209051.008	%	20 - 90%	45

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	GW01	SE209051.001	%	40 - 130%	106
	GW03	SE209051.003	%	40 - 130%	105

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOCs in Water (continued) — Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	GW04	SE209051.004	%	40 - 130%	105
	GW05	SE209051.005	%	40 - 130%	103
	GW06	SE209051.006	%	40 - 130%	103
	GW07	SE209051.007	%	40 - 130%	103
	GW09	SE209051.008	%	40 - 130%	101
d4-1,2-dichloroethane (Surrogate)	GW01	SE209051.001	%	40 - 130%	103
	GW03	SE209051.003	%	40 - 130%	102
	GW04	SE209051.004	%	40 - 130%	103
	GW05	SE209051.005	%	40 - 130%	102
	GW06	SE209051.006	%	40 - 130%	101
	GW07	SE209051.007	%	40 - 130%	101
	GW09	SE209051.008	%	40 - 130%	101
d8-toluene (Surrogate)	GW01	SE209051.001	%	40 - 130%	106
	GW03	SE209051.003	%	40 - 130%	102
	GW04	SE209051.004	%	40 - 130%	101
	GW05	SE209051.005	%	40 - 130%	101
	GW06	SE209051.006	%	40 - 130%	101
	GW07	SE209051.007	%	40 - 130%	101
	GW09	SE209051.008	%	40 - 130%	102

Volatile Petroleum Hydrocarbons in Water — Method: ME-(AU)-[ENV]AN433

Parameter	Sample Name	Sample Number	Units	Criteria	Recovery %
Bromofluorobenzene (Surrogate)	GW01	SE209051.001	%	40 - 130%	106
	GW03	SE209051.003	%	40 - 130%	105
	GW04	SE209051.004	%	40 - 130%	105
	GW05	SE209051.005	%	40 - 130%	103
	GW06	SE209051.006	%	40 - 130%	103
	GW09	SE209051.008	%	40 - 130%	101
d4-1,2-dichloroethane (Surrogate)	GW01	SE209051.001	%	60 - 130%	103
	GW03	SE209051.003	%	60 - 130%	102
	GW04	SE209051.004	%	60 - 130%	103
	GW05	SE209051.005	%	60 - 130%	102
	GW06	SE209051.006	%	60 - 130%	101
	GW09	SE209051.008	%	60 - 130%	101
d8-toluene (Surrogate)	GW01	SE209051.001	%	40 - 130%	106
	GW03	SE209051.003	%	40 - 130%	102
	GW04	SE209051.004	%	40 - 130%	101
	GW05	SE209051.005	%	40 - 130%	101
	GW06	SE209051.006	%	40 - 130%	101
	GW09	SE209051.008	%	40 - 130%	102

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Alkalinity

Method: ME-(AU)-[ENV]AN135

Sample Number	Parameter	Units	LOR	Result
LB205363.001	Total Alkalinity as CaCO3	mg/L	5	<5

Anions by Ion Chromatography in Water

Method: ME-(AU)-[ENV]AN245

Sample Number	Parameter	Units	LOR	Result
LB205332.001	Chloride	mg/L	1	<0.05
	Sulfate, SO4	mg/L	1	<1.0

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

Sample Number	Parameter	Units	LOR	Result
LB205205.001	Mercury	mg/L	0.0001	<0.0001

Metals in Water (Dissolved) by ICPOES

Method: ME-(AU)-[ENV]AN320

Sample Number	Parameter	Units	LOR	Result
LB205149.001	Calcium, Ca	mg/L	0.2	<0.2
	Magnesium, Mg	mg/L	0.1	<0.1
	Potassium, K	mg/L	0.1	<0.1
	Sodium, Na	mg/L	0.5	<0.5

OC Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB205336.001		Alpha BHC	µg/L	0.1	<0.1
		Hexachlorobenzene (HCB)	µg/L	0.1	<0.1
		Beta BHC	µg/L	0.1	<0.1
		Lindane (gamma BHC)	µg/L	0.1	<0.1
		Delta BHC	µg/L	0.1	<0.1
		Heptachlor	µg/L	0.1	<0.1
		Aldrin	µg/L	0.1	<0.1
		Heptachlor epoxide	µg/L	0.1	<0.1
		Gamma Chlordane	µg/L	0.1	<0.1
		Alpha Chlordane	µg/L	0.1	<0.1
		Alpha Endosulfan	µg/L	0.1	<0.1
		p,p'-DDE	µg/L	0.1	<0.1
		Dieldrin	µg/L	0.1	<0.1
		Endrin	µg/L	0.1	<0.1
		Beta Endosulfan	µg/L	0.1	<0.1
		p,p'-DDD	µg/L	0.1	<0.1
		Endosulfan sulphate	µg/L	0.1	<0.1
		p,p'-DDT	µg/L	0.1	<0.1
		Endrin ketone	µg/L	0.1	<0.1
		Methoxychlor	µg/L	0.1	<0.1
		Endrin aldehyde	µg/L	0.1	<0.1
		Isodrin	µg/L	0.1	<0.1
		Mirex	µg/L	0.1	<0.1
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	%	-	89

OP Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB205336.001	Dichlorvos	µg/L	0.5	<0.5
	Dimethoate	µg/L	0.5	<0.5
	Diazinon (Dimpylate)	µg/L	0.5	<0.5
	Fenitrothion	µg/L	0.2	<0.2
	Malathion	µg/L	0.2	<0.2
	Chlorpyrifos (Chlorpyrifos Ethyl)	µg/L	0.2	<0.2
	Parathion-ethyl (Parathion)	µg/L	0.2	<0.2
	Bromophos Ethyl	µg/L	0.2	<0.2
	Methidathion	µg/L	0.5	<0.5
	Ethion	µg/L	0.2	<0.2
	Azinphos-methyl	µg/L	0.2	<0.2

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

OP Pesticides in Water (continued)

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB205336.001	Surrogates	2-fluorobiphenyl (Surrogate)	%	-	68
		d14-p-terphenyl (Surrogate)	%	-	92

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB205336.001		Naphthalene	µg/L	0.1	<0.1
		2-methylnaphthalene	µg/L	0.1	<0.1
		1-methylnaphthalene	µg/L	0.1	<0.1
		Acenaphthylene	µg/L	0.1	<0.1
		Acenaphthene	µg/L	0.1	<0.1
		Fluorene	µg/L	0.1	<0.1
		Phenanthrene	µg/L	0.1	<0.1
		Anthracene	µg/L	0.1	<0.1
		Fluoranthene	µg/L	0.1	<0.1
		Pyrene	µg/L	0.1	<0.1
		Benzo(a)anthracene	µg/L	0.1	<0.1
		Chrysene	µg/L	0.1	<0.1
		Benzo(a)pyrene	µg/L	0.1	<0.1
		Indeno(1,2,3-cd)pyrene	µg/L	0.1	<0.1
		Dibenzo(ah)anthracene	µg/L	0.1	<0.1
		Benzo(ghi)perylene	µg/L	0.1	<0.1
	Surrogates	d5-nitrobenzene (Surrogate)	%	-	60
		2-fluorobiphenyl (Surrogate)	%	-	68
		d14-p-terphenyl (Surrogate)	%	-	92

PCBs in Water

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result
LB205336.001	Arochlor 1016	µg/L	1	<1
	Arochlor 1221	µg/L	1	<1
	Arochlor 1232	µg/L	1	<1
	Arochlor 1242	µg/L	1	<1
	Arochlor 1248	µg/L	1	<1
	Arochlor 1254	µg/L	1	<1
	Arochlor 1260	µg/L	1	<1
	Arochlor 1262	µg/L	1	<1
	Arochlor 1268	µg/L	1	<1

Speciated Phenols in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result
LB205336.001		Phenol	µg/L	0.5	<0.5
		2-methyl phenol (o-cresol)	µg/L	0.5	<0.5
		3/4-methyl phenol (m/p-cresol)	µg/L	1	<1
		2-chlorophenol	µg/L	0.5	<0.5
		2,4-dimethylphenol	µg/L	0.5	<0.5
		2,6-dichlorophenol	µg/L	0.5	<0.5
		2,4-dichlorophenol	µg/L	0.5	<0.5
		2,4,6-trichlorophenol	µg/L	0.5	<0.5
		2-nitrophenol	µg/L	0.5	<0.5
		4-nitrophenol	µg/L	1	<1
		2,4,5-trichlorophenol	µg/L	0.5	<0.5
		2,3,4,6/2,3,5,6-tetrachlorophenol	µg/L	1	<1
		Pentachlorophenol	µg/L	0.5	<0.5
		2,4-dinitrophenol	µg/L	2	<2
		4-chloro-3-methylphenol	µg/L	2	<2
	Surrogates	2,4,6-Tribromophenol (Surrogate)	%	-	90
		d5-phenol (Surrogate)	%	-	83

Total Dissolved Solids (TDS) in water

Method: ME-(AU)-[ENV]AN113

Sample Number	Parameter	Units	LOR	Result
LB205144.001	Total Dissolved Solids Dried at 175-185°C	mg/L	10	<10

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Sample Number	Parameter	Units	LOR	Result
LB205151.001	Arsenic, As	µg/L	1	<1
	Beryllium, Be	µg/L	1	<1
	Boron, B	µg/L	5	<5
	Cadmium, Cd	µg/L	0.1	<0.1
	Chromium, Cr	µg/L	1	<1
	Cobalt, Co	µg/L	1	<1
	Copper, Cu	µg/L	1	<1
	Lead, Pb	µg/L	1	<1
	Manganese, Mn	µg/L	1	<1
	Nickel, Ni	µg/L	1	<1
	Zinc, Zn	µg/L	5	<5

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Sample Number	Parameter	Units	LOR	Result
LB205336.001	TRH C10-C14	µg/L	50	<50
	TRH C15-C28	µg/L	200	<200
	TRH C29-C36	µg/L	200	<200
	TRH C37-C40	µg/L	200	<200

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB205243.001	Fumigants	2,2-dichloropropane	µg/L	0.5	<0.5
		1,2-dichloropropane	µg/L	0.5	<0.5
		cis-1,3-dichloropropene	µg/L	0.5	<0.5
		trans-1,3-dichloropropene	µg/L	0.5	<0.5
		1,2-dibromoethane (EDB)	µg/L	0.5	<0.5
	Halogenated Aliphatics	Dichlorodifluoromethane (CFC-12)	µg/L	5	<5
		Chloromethane	µg/L	5	<5
		Vinyl chloride (Chloroethene)	µg/L	0.3	<0.3
		Bromomethane	µg/L	10	<10
		Chloroethane	µg/L	5	<5
		Trichlorofluoromethane	µg/L	1	<1
		Iodomethane	µg/L	5	<5
		1,1-dichloroethene	µg/L	0.5	<0.5
		Dichloromethane (Methylene chloride)	µg/L	5	<5
		Allyl chloride	µg/L	2	<2
		trans-1,2-dichloroethene	µg/L	0.5	<0.5
		1,1-dichloroethane	µg/L	0.5	<0.5
		cis-1,2-dichloroethene	µg/L	0.5	<0.5
		Bromochloromethane	µg/L	0.5	<0.5
		1,2-dichloroethane	µg/L	0.5	<0.5
		1,1,1-trichloroethane	µg/L	0.5	<0.5
		1,1-dichloropropene	µg/L	0.5	<0.5
		Carbon tetrachloride	µg/L	0.5	<0.5
		Dibromomethane	µg/L	0.5	<0.5
		Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	<0.5
		1,1,2-trichloroethane	µg/L	0.5	<0.5
		1,3-dichloropropane	µg/L	0.5	<0.5
		Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	<0.5
		1,1,1,2-tetrachloroethane	µg/L	0.5	<0.5
		cis-1,4-dichloro-2-butene	µg/L	1	<1
		1,1,2,2-tetrachloroethane	µg/L	0.5	<0.5
		1,2,3-trichloropropane	µg/L	0.5	<0.5
		trans-1,4-dichloro-2-butene	µg/L	1	<1
		1,2-dibromo-3-chloropropane	µg/L	0.5	<0.5
		Hexachlorobutadiene	µg/L	0.5	<0.5
	Halogenated Aromatics	Chlorobenzene	µg/L	0.5	<0.5
		Bromobenzene	µg/L	0.5	<0.5
		2-chlorotoluene	µg/L	0.5	<0.5
		4-chlorotoluene	µg/L	0.5	<0.5
		1,3-dichlorobenzene	µg/L	0.5	<0.5
		1,4-dichlorobenzene	µg/L	0.3	<0.3

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOCs in Water (continued)

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB205243.001	Halogenated Aromatics	1,2-dichlorobenzene	µg/L	0.5	<0.5
		1,2,4-trichlorobenzene	µg/L	0.5	<0.5
		1,2,3-trichlorobenzene	µg/L	0.5	<0.5
	Monocyclic Aromatic	Benzene	µg/L	0.5	<0.5
	Hydrocarbons	Toluene	µg/L	0.5	<0.5
		Ethylbenzene	µg/L	0.5	<0.5
		m/p-xylene	µg/L	1	<1
		o-xylene	µg/L	0.5	<0.5
		Styrene (Vinyl benzene)	µg/L	0.5	<0.5
		Isopropylbenzene (Cumene)	µg/L	0.5	<0.5
		n-propylbenzene	µg/L	0.5	<0.5
		1,3,5-trimethylbenzene	µg/L	0.5	<0.5
		tert-butylbenzene	µg/L	0.5	<0.5
		1,2,4-trimethylbenzene	µg/L	0.5	<0.5
		sec-butylbenzene	µg/L	0.5	<0.5
		p-isopropyltoluene	µg/L	0.5	<0.5
		n-butylbenzene	µg/L	0.5	<0.5
	Nitrogenous Compounds	Acrylonitrile	µg/L	0.5	<0.5
	Oxygenated Compounds	Acetone (2-propanone)	µg/L	10	<10
		MtBE (Methyl-tert-butyl ether)	µg/L	2	<1
		Vinyl acetate	µg/L	10	<10
		MEK (2-butanone)	µg/L	10	<10
		MIBK (4-methyl-2-pentanone)	µg/L	5	<5
		2-hexanone (MBK)	µg/L	5	<5
	Polycyclic VOCs	Naphthalene	µg/L	0.5	<0.5
	Sulphonated	Carbon disulfide	µg/L	2	<2
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	99
		d8-toluene (Surrogate)	%	-	99
		Bromofluorobenzene (Surrogate)	%	-	100
	Trihalomethanes	Chloroform (THM)	µg/L	0.5	<0.5
		Bromodichloromethane (THM)	µg/L	0.5	<0.5
		Dibromochloromethane (THM)	µg/L	0.5	<0.5
		Bromoform (THM)	µg/L	0.5	<0.5

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result
LB205243.001		TRH C6-C9	µg/L	40	<40
	Surrogates	d4-1,2-dichloroethane (Surrogate)	%	-	99
		d8-toluene (Surrogate)	%	-	99
		Bromofluorobenzene (Surrogate)	%	-	100

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Alkalinity

Method: ME-(AU)-[ENV]AN135

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE209121.002	LB205363.013	Total Alkalinity as CaCO3	mg/L	5	250	250	17	3

Anions by Ion Chromatography in Water

Method: ME-(AU)-[ENV]AN245

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE209051.006	LB205332.015	Chloride	mg/L	1	28	28	15	2
		Sulfate, SO4	mg/L	1	10	10	25	3
SE209121.002	LB205332.024	Sulfate, SO4	mg/L	1	440	440	15	1

Mercury (dissolved) in Water

Method: ME-(AU)-[ENV]AN311(Perth)/AN312

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE209074.030	LB205205.014	Mercury	µg/L	0.0001	<0.0001	0.0001	128	27

Total Dissolved Solids (TDS) in water

Method: ME-(AU)-[ENV]AN113

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE208980.001	LB205144.014	Total Dissolved Solids Dried at 175-185°C	mg/L	10	1900	060.000000000	16	8
	LB205144.025	Total Dissolved Solids Dried at 175-185°C	mg/L	10	1900	793.000000000	16	6
SE208988.005	LB205144.028	Total Dissolved Solids Dried at 175-185°C	mg/L	10	<10	59	45	142 †
SE209051.007	LB205144.030	Total Dissolved Solids Dried at 175-185°C	mg/L	10	140	51.000000000	22	5
SE209078.001	LB205144.024	Total Dissolved Solids Dried at 175-185°C	mg/L	10	4400	4700	15	5

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE209074.030	LB205151.014	Arsenic, As	µg/L	1	2	2	70	8
		Cadmium, Cd	µg/L	0.1	0.2	0.2	72	13
		Chromium, Cr	µg/L	1	1	2	78	19
		Copper, Cu	µg/L	1	5	5	35	12
		Lead, Pb	µg/L	1	<1	1	110	12
		Nickel, Ni	µg/L	1	53	54	17	2
		Zinc, Zn	µg/L	5	920	980	16	6

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE209101.002	LB205243.022	Monocyclic	Benzene	µg/L	0.5	<0.5	<0.5	200	0
		Aromatic	Toluene	µg/L	0.5	<0.5	<0.5	200	0
			Ethylbenzene	µg/L	0.5	<0.5	<0.5	200	0
			m/p-xylene	µg/L	1	<1	<1	200	0
			o-xylene	µg/L	0.5	<0.5	<0.5	200	0
		Polycyclic	Naphthalene	µg/L	0.5	<0.5	<0.5	200	0
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	9.9	9.9	30	0
			d8-toluene (Surrogate)	µg/L	-	10	9.4	30	9
			Bromofluorobenzene (Surrogate)	µg/L	-	10	9.5	30	9
SE209157.002	LB205243.021	Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	10	9.0	30	12
			d8-toluene (Surrogate)	µg/L	-	10	10	30	2
			Bromofluorobenzene (Surrogate)	µg/L	-	10	10	30	1
		Trihalomethanes	Chloroform (THM)	µg/L	0.5	<0.0005	<0.50	184	200 †
			Bromodichloromethane (THM)	µg/L	0.5	0.0032	<0.50	44	25
			Dibromochloromethane (THM)	µg/L	0.5	0.021	<0.50	32	14
			Bromoform (THM)	µg/L	0.5	0.043	<0.50	31	11

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Original	Duplicate		Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
SE209101.002	LB205243.025		TRH C6-C10	µg/L	50	91	67	93	30
			TRH C6-C9	µg/L	40	78	62	87	24
		Surrogates	d4-1,2-dichloroethane (Surrogate)	µg/L	-	9.9	9.9	30	0
			d8-toluene (Surrogate)	µg/L	-	10	9.4	30	9
			Bromofluorobenzene (Surrogate)	µg/L	-	10	9.5	30	9
		VPH F Bands	Benzene (F0)	µg/L	0.5	<0.5	<0.5	200	0
			TRH C6-C10 minus BTEX (F1)	µg/L	50	91	67	93	30

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Alkalinity

Method: ME-(AU)-[ENV]AN135

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205363.002	Total Alkalinity as CaCO3	mg/L	5	63	59.5	76 - 124	106

Anions by Ion Chromatography in Water

Method: ME-(AU)-[ENV]AN245

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205332.002	Chloride	mg/L	1	19	20	80 - 120	95
	Sulfate, SO4	mg/L	1	19	20	80 - 120	95

Metals in Water (Dissolved) by ICPOES

Method: ME-(AU)-[ENV]AN320

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205149.002	Calcium, Ca	mg/L	0.2	52	50.5	80 - 120	103
	Magnesium, Mg	mg/L	0.1	52	50.5	80 - 120	102
	Potassium, K	mg/L	0.1	52	55	80 - 120	94
	Sodium, Na	mg/L	0.5	52	50.5	80 - 120	104

OC Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205336.002		Delta BHC	µg/L	0.1	0.2	0.2	60 - 140	87
		Heptachlor	µg/L	0.1	0.1	0.2	60 - 140	71
		Aldrin	µg/L	0.1	0.2	0.2	60 - 140	95
		Dieldrin	µg/L	0.1	0.2	0.2	60 - 140	95
		Endrin	µg/L	0.1	0.2	0.2	60 - 140	80
		p,p'-DDT	µg/L	0.1	0.1	0.2	60 - 140	73
	Surrogates	Tetrachloro-m-xylene (TCMX) (Surrogate)	µg/L	-	0.14	0.15	40 - 130	96

OP Pesticides in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205336.002		Dichlorvos	µg/L	0.5	7.4	8	60 - 140	92
		Diazinon (Dimpylate)	µg/L	0.5	7.8	8	60 - 140	98
		Chlorpyrifos (Chlorpyrifos Ethyl)	µg/L	0.2	7.3	8	60 - 140	92
		Ethion	µg/L	0.2	7.3	8	60 - 140	91
	Surrogates	2-fluorobiphenyl (Surrogate)	µg/L	-	0.4	0.5	40 - 130	74
		d14-p-terphenyl (Surrogate)	µg/L	-	0.5	0.5	40 - 130	90

PAH (Polynuclear Aromatic Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205336.002		Naphthalene	µg/L	0.1	27	40	60 - 140	69
		Acenaphthylene	µg/L	0.1	33	40	60 - 140	83
		Acenaphthene	µg/L	0.1	33	40	60 - 140	83
		Phenanthrene	µg/L	0.1	38	40	60 - 140	95
		Anthracene	µg/L	0.1	35	40	60 - 140	88
		Fluoranthene	µg/L	0.1	40	40	60 - 140	100
		Pyrene	µg/L	0.1	40	40	60 - 140	99
		Benzo(a)pyrene	µg/L	0.1	36	40	60 - 140	91
	Surrogates	d5-nitrobenzene (Surrogate)	µg/L	-	0.3	0.5	40 - 130	66
		2-fluorobiphenyl (Surrogate)	µg/L	-	0.4	0.5	40 - 130	74
		d14-p-terphenyl (Surrogate)	µg/L	-	0.5	0.5	40 - 130	90

PCBs in Water

Method: ME-(AU)-[ENV]AN420

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205336.002	Arochlor 1260	µg/L	1	<1	0.4	60 - 140	80

Speciated Phenols in Water

Method: ME-(AU)-[ENV]AN420

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205336.002		Phenol	µg/L	0.5	32	40	60 - 140	80
		2,4-dichlorophenol	µg/L	0.5	35	40	60 - 140	87
		2,4,6-trichlorophenol	µg/L	0.5	41	40	60 - 140	103
		Pentachlorophenol	µg/L	0.5	24	40	60 - 140	60
	Surrogates	2,4,6-Tribromophenol (Surrogate)	µg/L	-	4.7	5	40 - 130	95
		d5-phenol (Surrogate)	µg/L	-	1.9	2	40 - 130	95

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Total Dissolved Solids (TDS) in water

Method: ME-(AU)-[ENV]AN113

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205144.002	Total Dissolved Solids Dried at 175-185°C	mg/L	10	310	293	81 - 119	105

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205151.002	Arsenic, As	µg/L	1	19	20	80 - 120	97
	Beryllium, Be	µg/L	1	23	20	80 - 120	114
	Boron, B	µg/L	5	23	20	80 - 120	115
	Cadmium, Cd	µg/L	0.1	21	20	80 - 120	103
	Chromium, Cr	µg/L	1	22	20	80 - 120	108
	Cobalt, Co	µg/L	1	22	20	80 - 120	112
	Copper, Cu	µg/L	1	21	20	80 - 120	107
	Lead, Pb	µg/L	1	21	20	80 - 120	105
	Manganese, Mn	µg/L	1	21	20	80 - 120	105
	Nickel, Ni	µg/L	1	21	20	80 - 120	106
	Zinc, Zn	µg/L	5	22	20	80 - 120	109

TRH (Total Recoverable Hydrocarbons) in Water

Method: ME-(AU)-[ENV]AN403

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205336.002		TRH C10-C14	µg/L	50	1200	1200	60 - 140	97
		TRH C15-C28	µg/L	200	1400	1200	60 - 140	118
		TRH C29-C36	µg/L	200	1400	1200	60 - 140	119
	TRH F Bands	TRH >C10-C16	µg/L	60	1300	1200	60 - 140	107
		TRH >C16-C34 (F3)	µg/L	500	1500	1200	60 - 140	124
		TRH >C34-C40 (F4)	µg/L	500	790	600	60 - 140	131

VOCs in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205243.002	Halogenated	1,1-dichloroethene	µg/L	0.5	52	45.45	60 - 140	114
	Aliphatics	1,2-dichloroethane	µg/L	0.5	49	45.45	60 - 140	108
		Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	49	45.45	60 - 140	107
	Halogenated	Chlorobenzene	µg/L	0.5	55	45.45	60 - 140	121
	Monocyclic	Benzene	µg/L	0.5	54	45.45	60 - 140	118
	Aromatic	Toluene	µg/L	0.5	57	45.45	60 - 140	126
		Ethylbenzene	µg/L	0.5	55	45.45	60 - 140	121
		m/p-xylene	µg/L	1	110	90.9	60 - 140	116
		o-xylene	µg/L	0.5	54	45.45	60 - 140	118
	Trihalomethan	Chloroform (THM)	µg/L	0.5	53	45.45	60 - 140	116

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

Sample Number		Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB205243.002		TRH C6-C10	µg/L	50	810	946.63	60 - 140	86
		TRH C6-C9	µg/L	40	700	818.71	60 - 140	86
	VPH F Bands	TRH C6-C10 minus BTEX (F1)	µg/L	50	490	639.67	60 - 140	76

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

Metals in Water (Dissolved) by ICPOES

Method: ME-(AU)-[ENV]AN320

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE209051.001	LB205149.004	Calcium, Ca	mg/L	0.2	65	13	50.5	104
		Magnesium, Mg	mg/L	0.1	54	1.9	50.5	104
		Potassium, K	mg/L	0.1	69	5.5	55	116
		Sodium, Na	mg/L	0.5	85	21	50.5	126

Trace Metals (Dissolved) in Water by ICPMS

Method: ME-(AU)-[ENV]AN318

QC Sample	Sample Number	Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE209051.001	LB205151.004	Arsenic, As	µg/L	1	23	<1	20	114
		Cadmium, Cd	µg/L	0.1	23	<0.1	20	113
		Chromium, Cr	µg/L	1	23	<1	20	115
		Copper, Cu	µg/L	1	34	10	20	119
		Lead, Pb	µg/L	1	23	<1	20	111
		Nickel, Ni	µg/L	1	21	2	20	96
		Zinc, Zn	µg/L	5	56	31	20	122

VOCs in Water

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE209051.003	LB205243.020	Fumigants	2,2-dichloropropane	µg/L	0.5	<0.5	<0.5	-	-
			1,2-dichloropropane	µg/L	0.5	<0.5	<0.5	-	-
			cis-1,3-dichloropropene	µg/L	0.5	<0.5	<0.5	-	-
			trans-1,3-dichloropropene	µg/L	0.5	<0.5	<0.5	-	-
			1,2-dibromoethane (EDB)	µg/L	0.5	<0.5	<0.5	-	-
		Halogenated	Dichlorodifluoromethane (CFC-12)	µg/L	5	<5	<5	-	-
		Aliphatics	Chloromethane	µg/L	5	<5	<5	-	-
			Vinyl chloride (Chloroethene)	µg/L	0.3	<0.3	<0.3	-	-
			Bromomethane	µg/L	10	<10	<10	-	-
			Chloroethane	µg/L	5	<5	<5	-	-
			Trichlorofluoromethane	µg/L	1	<1	<1	-	-
			Iodomethane	µg/L	5	0	<5	-	-
			1,1-dichloroethene	µg/L	0.5	49	<0.5	45.45	108
			Dichloromethane (Methylene chloride)	µg/L	5	0	<5	-	-
			Allyl chloride	µg/L	2	0	<2	-	-
			trans-1,2-dichloroethene	µg/L	0.5	<0.5	<0.5	-	-
			1,1-dichloroethane	µg/L	0.5	<0.5	<0.5	-	-
			cis-1,2-dichloroethene	µg/L	0.5	<0.5	<0.5	-	-
			Bromochloromethane	µg/L	0.5	<0.5	<0.5	-	-
			1,2-dichloroethane	µg/L	0.5	50	<0.5	45.45	110
			1,1,1-trichloroethane	µg/L	0.5	<0.5	<0.5	-	-
			1,1-dichloropropene	µg/L	0.5	<0.5	<0.5	-	-
			Carbon tetrachloride	µg/L	0.5	<0.5	<0.5	-	-
			Dibromomethane	µg/L	0.5	<0.5	<0.5	-	-
			Trichloroethene (Trichloroethylene,TCE)	µg/L	0.5	50	<0.5	45.45	110
			1,1,2-trichloroethane	µg/L	0.5	<0.5	<0.5	-	-
			1,3-dichloropropane	µg/L	0.5	<0.5	<0.5	-	-
			Tetrachloroethene (Perchloroethylene,PCE)	µg/L	0.5	<0.5	<0.5	-	-
			1,1,1,2-tetrachloroethane	µg/L	0.5	<0.5	<0.5	-	-
			cis-1,4-dichloro-2-butene	µg/L	1	0	<1	-	-
			1,1,2,2-tetrachloroethane	µg/L	0.5	<0.5	<0.5	-	-
			1,2,3-trichloropropane	µg/L	0.5	<0.5	<0.5	-	-
			trans-1,4-dichloro-2-butene	µg/L	1	0	<1	-	-
			1,2-dibromo-3-chloropropane	µg/L	0.5	<0.5	<0.5	-	-
			Hexachlorobutadiene	µg/L	0.5	<0.5	<0.5	-	-
		Halogenated	Chlorobenzene	µg/L	0.5	58	<0.5	45.45	128
		Aromatics	Bromobenzene	µg/L	0.5	<0.5	<0.5	-	-
			2-chlorotoluene	µg/L	0.5	<0.5	<0.5	-	-
			4-chlorotoluene	µg/L	0.5	<0.5	<0.5	-	-
			1,3-dichlorobenzene	µg/L	0.5	<0.5	<0.5	-	-
			1,4-dichlorobenzene	µg/L	0.3	<0.3	<0.3	-	-
			1,2-dichlorobenzene	µg/L	0.5	<0.5	<0.5	-	-
			1,2,4-trichlorobenzene	µg/L	0.5	<0.5	<0.5	-	-
			1,2,3-trichlorobenzene	µg/L	0.5	<0.5	<0.5	-	-
		Monocyclic	Benzene	µg/L	0.5	58	<0.5	45.45	128

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

VOCs in Water (continued)

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE209051.003	LB205243.020	Monocyclic	Toluene	µg/L	0.5	55	<0.5	45.45	120
		Aromatic	Ethylbenzene	µg/L	0.5	54	<0.5	45.45	118
			m/p-xylene	µg/L	1	110	<1	90.9	120
			o-xylene	µg/L	0.5	53	<0.5	45.45	116
			Styrene (Vinyl benzene)	µg/L	0.5		<0.5	-	-
			Isopropylbenzene (Cumene)	µg/L	0.5		<0.5	-	-
			n-propylbenzene	µg/L	0.5		<0.5	-	-
			1,3,5-trimethylbenzene	µg/L	0.5		<0.5	-	-
			tert-butylbenzene	µg/L	0.5		<0.5	-	-
			1,2,4-trimethylbenzene	µg/L	0.5		<0.5	-	-
			sec-butylbenzene	µg/L	0.5		<0.5	-	-
			p-isopropyltoluene	µg/L	0.5		<0.5	-	-
			n-butylbenzene	µg/L	0.5		<0.5	-	-
		Nitrogenous	Acrylonitrile	µg/L	0.5		<0.5	-	-
		Oxygenated	Acetone (2-propanone)	µg/L	10		<10	-	-
		Compounds	MtBE (Methyl-tert-butyl ether)	µg/L	2		<2	-	-
			Vinyl acetate	µg/L	10		<10	-	-
			MEK (2-butanone)	µg/L	10		<10	-	-
			MIBK (4-methyl-2-pentanone)	µg/L	5		<5	-	-
			2-hexanone (MBK)	µg/L	5		<5	-	-
		Polycyclic	Naphthalene	µg/L	0.5	<0.5	<0.5	-	-
		Sulphonated	Carbon disulfide	µg/L	2		<2	-	-
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/L	-	9.6	0.0	-	96
			d8-toluene (Surrogate)	mg/L	-	9.7	0.0	-	97
			Bromofluorobenzene (Surrogate)	mg/L	-	10.3	0.0	-	103
		Trihalometha	Chloroform (THM)	µg/L	0.5	50	<0.5	45.45	110
		nes	Bromodichloromethane (THM)	µg/L	0.5	<0.5	<0.5	-	-
			Dibromochloromethane (THM)	µg/L	0.5	<0.5	<0.5	-	-
			Bromoform (THM)	µg/L	0.5	<0.5	<0.5	-	-

Volatile Petroleum Hydrocarbons in Water

Method: ME-(AU)-[ENV]AN433

QC Sample	Sample Number		Parameter	Units	LOR	Result	Original	Spike	Recovery%
SE209051.003	LB205243.026		TRH C6-C10	µg/L	50	700	<50	946.63	74
			TRH C6-C9	µg/L	40	700	<40	818.71	85
		Surrogates	d4-1,2-dichloroethane (Surrogate)	mg/L	-	9.6	0.0	-	96
			d8-toluene (Surrogate)	mg/L	-	9.7	0.0	-	97
			Bromofluorobenzene (Surrogate)	mg/L	-	10.3	0.0	-	103
		VPH F	Benzene (F0)	µg/L	0.5	58	<0.5	-	-
		Bands	TRH C6-C10 minus BTEX (F1)	µg/L	50	370	<50	639.67	58 ④

MATRIX SPIKE DUPLICATES

SE209051 R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.

①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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APPENDIX G

Equipment Calibration Certificates

PID Calibration Certificate

Instrument **PhoCheck Tiger**
Serial No. **T-113968**

airmet

Air-Met Scientific Pty Ltd
1300 137 067

Item	Test	Pass	Comments			
Battery	Charge Condition	✓				
	Fuses	✓				
	Capacity	✓				
	Recharge OK?	✓				
Switch/keypad	Operation	✓				
Display	Intensity	✓				
	Operation (segments)	✓				
Grill Filter	Condition	✓				
	Seal	✓				
Pump	Operation	✓				
	Filter	✓				
	Flow	✓				
	Valves, Diaphragm	✓				
PCB	Condition	✓				
Connectors	Condition	✓				
Sensor	PID	✓	10.6ev			
Alarms	Beeper	✓	Low	High	TWA	STEL
	Settings	✓	50ppm	100ppm	N/A	N/A
Software	Version	✓				
Data logger	Operation	✓				
Download	Operation	✓				
Other tests:						

Certificate of Calibration

This is to certify that the above instrument has been calibrated to the following specifications:

Sensor	Serial no	Calibration gas and concentration	Certified	Gas bottle No		Instrument Reading
PID Lamp		92ppm Isobutylene	NATA	SY245		92.3ppm

Calibrated by: [redacted]

Calibration date: **12/06/2020**

Next calibration due: **9/12/2020**

PID Calibration Certificate

Instrument PhoCheck Tiger
Serial No. T-105927

airmet

Air-Met Scientific Pty Ltd
1300 137 067

Item	Test	Pass	Comments			
Battery	Charge Condition	✓				
	Fuses	✓				
	Capacity	✓				
	Recharge OK?	✓				
Switch/keypad	Operation	✓				
Display	Intensity	✓				
	Operation (segments)	✓				
Grill Filter	Condition	✓				
	Seal	✓				
Pump	Operation	✓				
	Filter	✓				
	Flow	✓				
	Valves, Diaphragm	✓				
PCB	Condition	✓				
Connectors	Condition	✓				
Sensor	PID	✓	10.6eV			
Alarms	Beeper	✓	Low	High	TWA	STEL
	Settings	✓	50ppm	100ppm	N/A	N/A
Software	Version	✓				
Data logger	Operation	✓				
Download	Operation	✓				
Other tests:						

Certificate of Calibration

This is to certify that the above instrument has been calibrated to the following specifications:

Sensor	Serial no	Calibration gas and concentration	Certified	Gas bottle No		Instrument Reading
PID Lamp		92ppm Isobutylene	NATA	SY245		92.5ppm

Calibrated by: [redacted]

Calibration date: 12/06/2020

Next calibration due: 9/12/2020

PID Calibration Certificate

Instrument **PhoCheck Tiger**
Serial No. **T-111100**

airmet
Air-Met Scientific Pty Ltd
1300 137 067

Item	Test	Pass	Comments			
Battery	Charge Condition	✓				
	Fuses	✓				
	Capacity	✓				
	Recharge OK?	✓				
Switch/keypad	Operation	✓				
Display	Intensity	✓				
	Operation (segments)	✓				
Grill Filter	Condition	✓				
	Seal	✓				
Pump	Operation	✓				
	Filter	✓				
	Flow	✓				
	Valves, Diaphragm	✓				
PCB	Condition	✓				
Connectors	Condition	✓				
Sensor	PID	✓	10.6 ev			
Alarms	Beeper	✓	Low	High	TWA	STEL
	Settings	✓	50ppm	100ppm		
Software	Version	✓				
Data logger	Operation	✓				
Download	Operation	✓				
Other tests:						

Post sampling results

This is to certify that the above instrument has been calibrated to the following specifications:

Sensor	Serial no	Calibration gas and concentration	Certified	Gas bottle No		Instrument Reading
PID Lamp		92ppm Isobutylene	NATA	SY245		90.0ppm

Calibrated by: [redacted]

Calibration date: **12/06/2020**

Next calibration due: **12/07/2020**

PID Calibration Certificate

Instrument **PhoCheck Tiger**
Serial No. **T-105522**

airmet

Air-Met Scientific Pty Ltd
1300 137 067

Item	Test	Pass	Comments
Battery	Charge Condition	✓	
	Fuses	✓	
	Capacity	✓	
	Recharge OK?	✓	
Switch/keypad	Operation	✓	
Display	Intensity	✓	
	Operation (segments)	✓	
Grill Filter	Condition	✓	
	Seal	✓	
Pump	Operation	✓	
	Filter	✓	
	Flow	✓	
	Valves, Diaphragm	✓	
PCB	Condition	✓	
Connectors	Condition	✓	
Sensor	PID	✓	10.6 ev
Alarms	Beeper	✓	Low: 50ppm; High: 100ppm; TWA: N/A; STEL: N/A
	Settings	✓	
Software	Version	✓	
Data logger	Operation	✓	
Download	Operation	✓	
Other tests:			

Certificate of Calibration

This is to certify that the above instrument has been calibrated to the following specifications:

Sensor	Serial no	Calibration gas and concentration	Certified	Gas bottle No		Instrument Reading
PID Lamp		92ppm Isobutylene	NATA	SY245		92.2ppm

Calibrated by: [redacted]

Calibration date: **12/06/2020**

Next calibration due: **9/12/2020**

Oil / Water Interface Meter

airmet

Air-Met Scientific Pty Ltd
1300 137 067

Instrument **Interface Meter (30M)**
Serial No. **348896**

Item	Test	Pass	Comments
Battery	Compartment	✓	
	Capacity	✓	
Probe	Cleaned/Decon.	✓	
	Operation	✓	
Connectors	Condition	✓	
		✓	
Tape Check	Cleaned	✓	
	Checked for cuts	✓	
Instrument Test	At surface level	✓	

Certificate of Calibration

This is to certify that the above instrument has been cleaned and tested.

Calibrated by: [redacted]

Calibration date: **16/06/2020**

Next calibration due: **15/08/2020**

Oil / Water Interface Meter

airmet
Air-Met Scientific Pty Ltd
1300 137 067

Instrument Interface Meter (30M)
Serial No. 313359

Item	Test	Pass	Comments
Battery	Compartment	✓	
	Capacity	✓	
Probe	Cleaned/Decon.	✓	
	Operation	✓	
Connectors	Condition	✓	
		✓	
Tape Check	Cleaned	✓	
	Checked for cuts	✓	
Instrument Test	At surface level	✓	

Certificate of Calibration

This is to certify that the above instrument has been cleaned and tested.

Calibrated by: [redacted]

Calibration date: 8/07/2020

Next calibration due: 6/09/2020

Multi Parameter Water Meter

airmet

Air-Met Scientific Pty Ltd
1300 137 067

Instrument YSI Quatro Pro Plus
Serial No. 13D100015

Item	Test	Pass	Comments
Battery	Charge Condition	✓	
	Fuses	✓	
	Capacity	✓	
Switch/keypad	Operation	✓	
Display	Intensity	✓	
	Operation (segments)	✓	
Grill Filter	Condition	✓	
	Seal	✓	
PCB	Condition	✓	
Connectors	Condition	✓	
Sensor	1. pH	✓	
	2. mV	✓	
	3. EC	✓	
	4. D.O	✓	
	5. Temp	✓	
Alarms	Beeper		
	Settings		
Software	Version		
Data logger	Operation		
Download	Operation		
Other tests:			

Certificate of Calibration

This is to certify that the above instrument has been calibrated to the following specifications:

Sensor	Serial no	Standard Solutions	Certified	Solution Bottle Number	Instrument Reading
pH 10		pH 10.0		352607	pH 9.53
1. pH 7.00		pH 7.00		330737	pH 6.81
2. pH 4.00		pH 4.00		330734	pH 4.06
3. mV		236.2mV		346052/342074	235.7mV
4. EC		2.76mS		343511	2.77mS
5. D.O		0.00ppm		1904288592	0.00ppm
6. Temp		18.7°C		MultiTherm	18.6°C

Calibrated by: [redacted]

Calibration date: 10/07/2020

Next calibration due: 9/08/2020

Multi Parameter Water Meter

airmet
Air-Met Scientific Pty Ltd
1300 137 067

Instrument YSI Quatro Pro Plus
Serial No. 10E101052

Item	Test	Pass	Comments
Battery	Charge Condition	✓	
	Fuses	✓	
	Capacity	✓	
Switch/keypad	Operation	✓	
Display	Intensity	✓	
	Operation (segments)	✓	
Grill Filter	Condition	✓	
	Seal	✓	
PCB	Condition	✓	
Connectors	Condition	✓	
Sensor	1. pH	✓	
	2. mV	✓	
	3. EC	✓	
	4. D.O	✓	
	5. Temp	✓	
Alarms	Beeper		
	Settings		
Software	Version		
Data logger	Operation		
Download	Operation		
Other tests:			

Certificate of Calibration

This is to certify that the above instrument has been calibrated to the following specifications:

Sensor	Serial no	Standard Solutions	Certified	Solution Bottle Number	Instrument Reading
1. pH 10.00		pH 10.00		352607	pH 9.53
2. pH 7.00		pH 7.00		330737	pH 6.76
3. pH 4.00		pH 4.00		330734	pH 3.98
4. mV		234mV		346052/342074	234.1mV
5. EC		2.76mS		343511	2.74mS
6. D.O		0.00ppm		1904288592	0.10ppm
7. Temp		20.2°C		MultiTherm	19.7°C

Calibrated by: [redacted]

Calibration date: 10/07/2020

Next calibration due: 9/08/2020

PID Calibration Certificate

Instrument PhoCheck Tiger
Serial No. T-108801

airmet
Air-Met Scientific Pty Ltd
1300 137 067

Item	Test	Pass	Comments			
Battery	Charge Condition	✓				
	Fuses	✓				
	Capacity	✓				
	Recharge OK?	✓				
Switch/keypad	Operation	✓				
Display	Intensity	✓				
	Operation (segments)	✓				
Grill Filter	Condition	✓				
	Seal	✓				
Pump	Operation	✓				
	Filter	✓				
	Flow	✓				
	Valves, Diaphragm	✓				
PCB	Condition	✓				
Connectors	Condition	✓				
Sensor	PID	✓	10.6 ev			
Alarms	Beeper	✓	Low	High	TWA	STEL
	Settings	✓	50ppm	100ppm		
Software	Version	✓				
Data logger	Operation	✓				
Download	Operation	✓				
Other tests:						

Certificate of Calibration

This is to certify that the above instrument has been calibrated to the following specifications:

Sensor	Serial no	Calibration gas and concentration	Certified	Gas bottle No		Instrument Reading
PID Lamp		92ppm Isobutylene	NATA	SY245		91.2ppm

Calibrated by: [redacted]

Calibration date: **12/10/2020**

Next calibration due: **13/04/2021**

PID Calibration Certificate

Instrument PhoCheck Tiger
Serial No. T-111096

airmet
Air-Met Scientific Pty Ltd
1300 137 067

Item	Test	Pass	Comments
Battery	Charge Condition	✓	
	Fuses	✓	
	Capacity	✓	
	Recharge OK?	✓	
Switch/keypad	Operation	✓	
Display	Intensity	✓	
	Operation (segments)	✓	
Grill Filter	Condition	✓	
	Seal	✓	
Pump	Operation	✓	
	Filter	✓	
	Flow	✓	
	Valves, Diaphragm	✓	
PCB	Condition	✓	
Connectors	Condition	✓	
Sensor	PID	✓	10.6 ev
Alarms	Beeper	✓	Low: 50ppm; High: 100ppm; TWA: ; STEL:
	Settings	✓	
Software	Version	✓	
Data logger	Operation	✓	
Download	Operation	✓	
Other tests:			

Certificate of Calibration

This is to certify that the above instrument has been calibrated to the following specifications:

Sensor	Serial no	Calibration gas and concentration	Certified	Gas bottle No		Instrument Reading
PID Lamp		92ppm Isobutylene	NATA	SY245		90.8ppm

Calibrated by: [redacted]

Calibration date: **2/11/2020**

Next calibration due: **2/12/2020**

Oil / Water Interface Meter

airmet

Air-Met Scientific Pty Ltd
1300 137 067

Instrument **Geotech Interface Meter (30M)**
Serial No. **4253**

Item	Test	Pass	Comments
Battery	Compartment	✓	
	Capacity	✓	
Probe	Cleaned/Decon.	✓	
	Operation	✓	
Connectors	Condition	✓	
		✓	
Tape Check	Cleaned	✓	
Connectors	Checked for cuts	✓	
Instrument Test	At surface level	✓	

Certificate of Calibration

This is to certify that the above instrument has been cleaned and tested.

Calibrated by: [redacted]

Calibration date: **12/10/2020**

Next calibration due: **11/12/2020**

Oil / Water Interface Meter

Instrument **Interface Meter (30M)**
Serial No. **348896**

airmet
Air-Met Scientific Pty Ltd
1300 137 067

Item	Test	Pass	Comments
Battery	Compartment	✓	
	Capacity	✓	
Probe	Cleaned/Decon.	✓	
	Operation	✓	
Connectors	Condition	✓	
		✓	
Tape Check	Cleaned	✓	
	Checked for cuts	✓	
Instrument Test	At surface level	✓	

Certificate of Calibration

This is to certify that the above instrument has been cleaned and tested.

Calibrated by: [redacted]

Calibration date: **27/10/2020**

Next calibration due: **26/12/2020**

Multi Parameter Water Meter

Instrument **YSI Quatro Pro Plus**
Serial No. **10H100317**

airmet
Air-Met Scientific Pty Ltd
1300 137 067

Item	Test	Pass	Comments
Battery	Charge Condition	✓	
	Fuses	✓	
	Capacity	✓	
Switch/keypad	Operation	✓	
Display	Intensity	✓	
	Operation (segments)	✓	
Grill Filter	Condition	✓	
	Seal	✓	
PCB	Condition	✓	
Connectors	Condition	✓	
Sensor	1. pH	✓	
	2. mV	✓	
	3. EC	✓	
	4. D.O	✓	
	5. Temp	✓	
Alarms	Beeper		
	Settings		
Software	Version		
Data logger	Operation		
Download	Operation		
Other tests:			

Certificate of Calibration

This is to certify that the above instrument has been calibrated to the following specifications:

Sensor	Serial no	Standard Solutions	Certified	Solution Bottle Number	Instrument Reading
1. pH 10.00		pH 10.00		349846	pH 9.74
1. pH 7.00		pH 7.00		330737	pH 6.98
2. pH 4.00		pH 4.00		347027	pH 4.04
3. mV		229.6mV		357172/357173	229.7mV
4. EC		2.76mS		350510	2.75mS
5. D.O		0.00ppm		1904288592	0.03ppm
6. Temp		22.0°C		MultiTherm	21.6°C

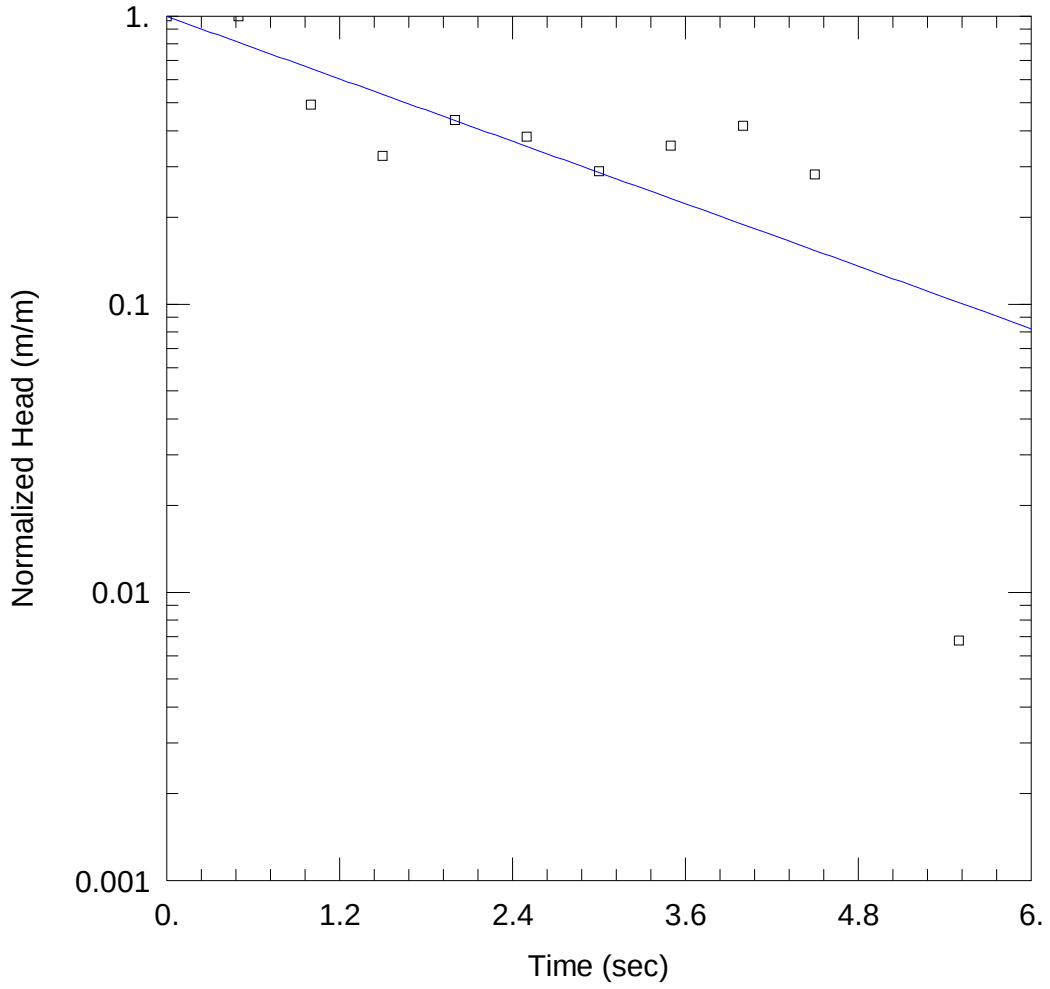
Calibrated by: [redacted]

Calibration date: **20/10/2020**

Next calibration due: **19/11/2020**

APPENDIX H

Slug Test Results



GW08_FH1

Data Set: H:\...\GW08_FH1.aqt
Date: 11/18/20 Time: 16:44:41

PROJECT INFORMATION

Company: SLR
Project: Randwick DHA
Location: Randwick
Test Well: GW08
Test Date: 30/10/2020

AQUIFER DATA

Saturated Thickness: 10. m Anisotropy Ratio (Kz/Kr): 1.

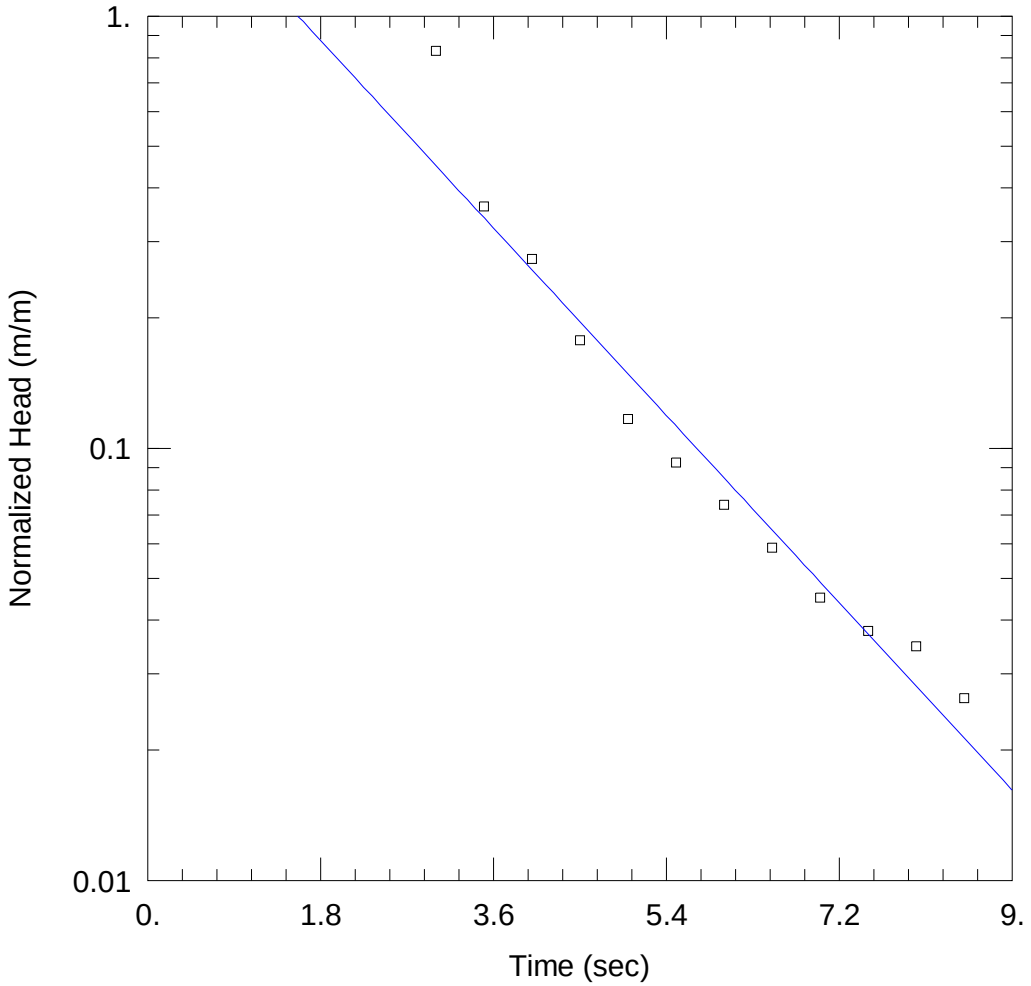
WELL DATA (GW08)

Initial Displacement: 0.663 m
Total Well Penetration Depth: 8.5 m
Casing Radius: 0.025 m
Static Water Column Height: 2. m
Screen Length: 4.5 m
Well Radius: 0.025 m
Gravel Pack Porosity: 0.

SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice

K = 8.529 m/day y0 = 0.6605 m



GW08_RH1

Data Set: H:\...\GW08_RH1.aqt
Date: 11/18/20 Time: 16:48:52

PROJECT INFORMATION

Company: SLR
Project: Randwick DHA
Location: Randwick
Test Well: GW08
Test Date: 30/10/2020

AQUIFER DATA

Saturated Thickness: 10. m Anisotropy Ratio (Kz/Kr): 1.

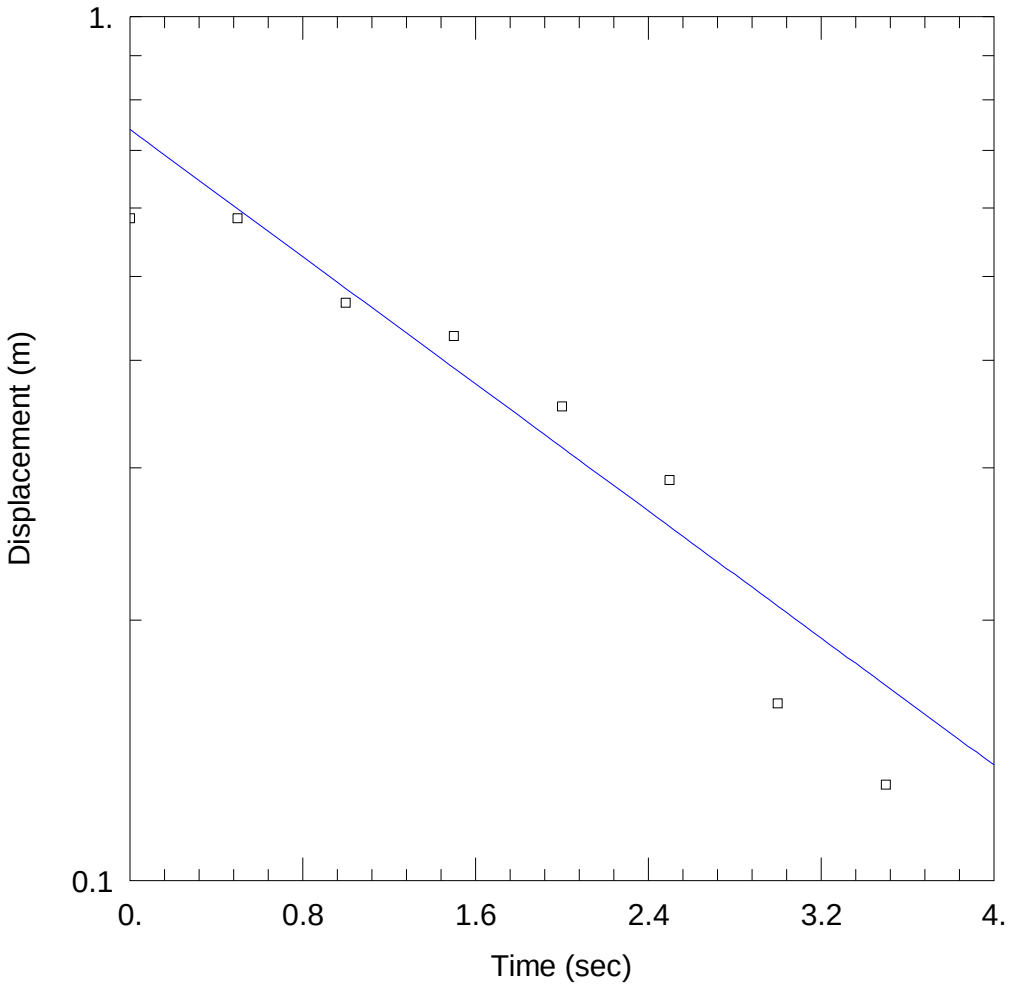
WELL DATA (GW08)

Initial Displacement: -0.649 m
Total Well Penetration Depth: 8.5 m
Casing Radius: 0.025 m
Static Water Column Height: 2. m
Screen Length: 4.5 m
Well Radius: 0.025 m
Gravel Pack Porosity: 0.

SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice

K = 11.38 m/day y0 = -1.546 m



GW10_FH1

Data Set: H:\...\GW10_FH1.aqt
Date: 11/18/20 Time: 15:40:13

PROJECT INFORMATION

Company: SLR
Project: Randwick DHA
Location: Randwick
Test Well: GW10
Test Date: 30/10/2020

AQUIFER DATA

Saturated Thickness: 10. m Anisotropy Ratio (Kz/Kr): 1.

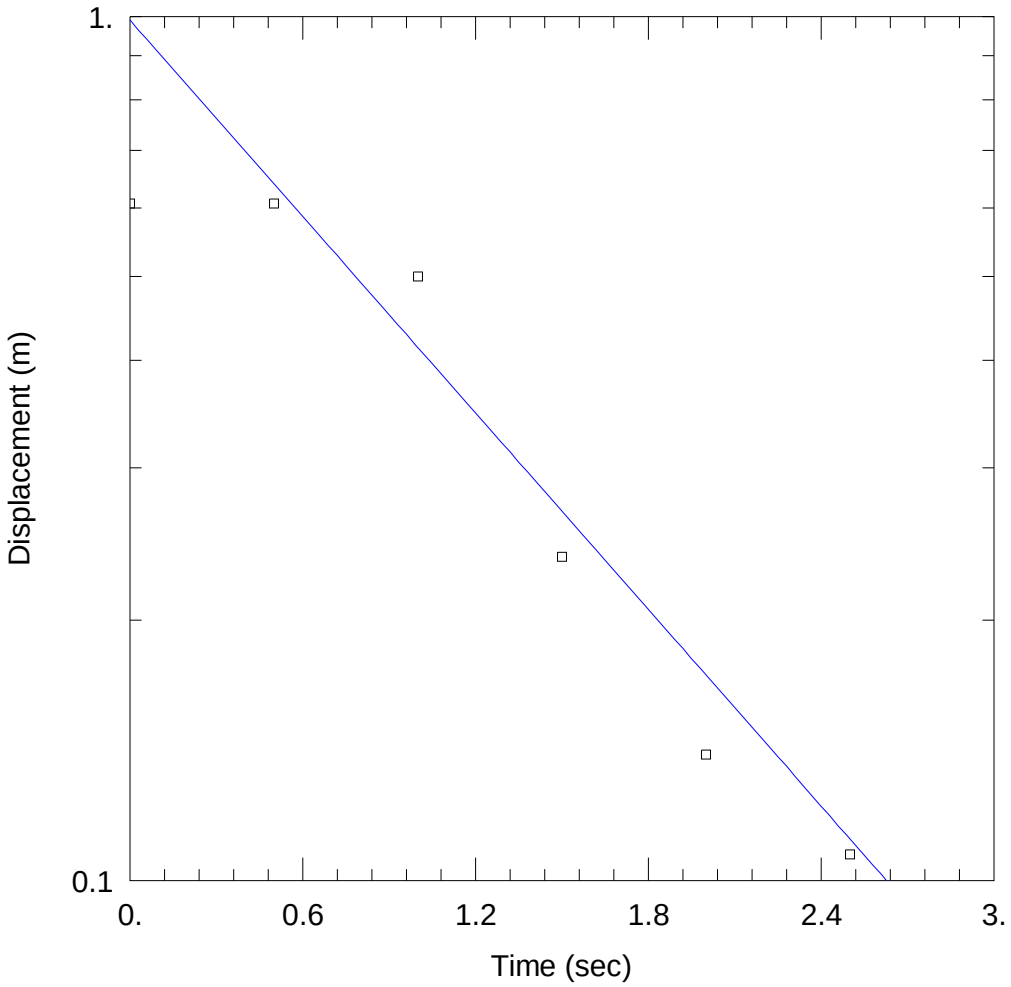
WELL DATA (GW10)

Initial Displacement: 0.5835 m
Total Well Penetration Depth: 9.5 m
Casing Radius: 0.025 m
Static Water Column Height: 3. m
Screen Length: 5. m
Well Radius: 0.025 m
Gravel Pack Porosity: 0.

SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice

K = 8.242 m/day y0 = 0.7396 m



GW10_FH2

Data Set: H:\...\GW10_FH2.aqt
Date: 11/18/20 Time: 15:37:56

PROJECT INFORMATION

Company: SLR
Project: Randwick DHA
Location: Randwick
Test Well: GW10
Test Date: 30/10/2020

AQUIFER DATA

Saturated Thickness: 10. m Anisotropy Ratio (Kz/Kr): 1.

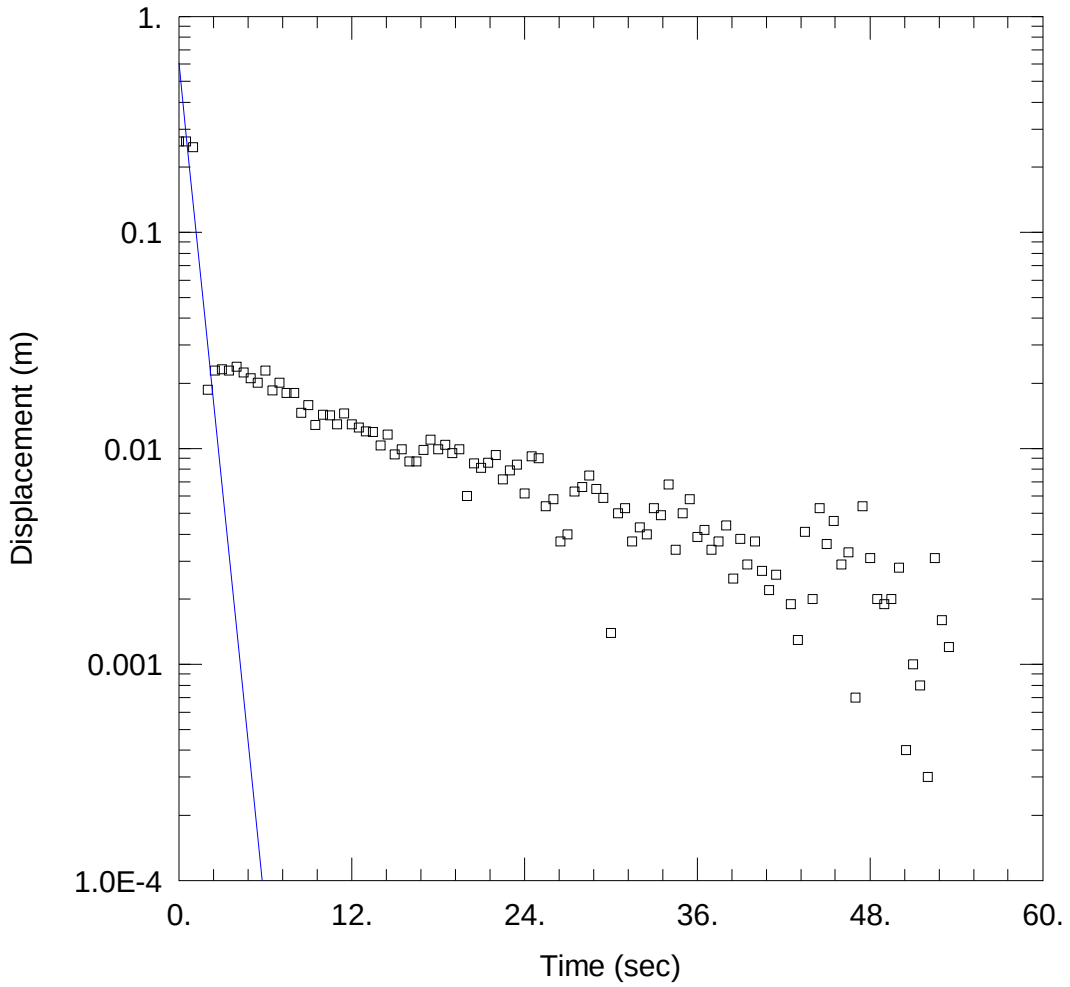
WELL DATA (GW10)

Initial Displacement: 0.6071 m
Total Well Penetration Depth: 9.5 m
Casing Radius: 0.025 m
Static Water Column Height: 3. m
Screen Length: 5. m
Well Radius: 0.025 m
Gravel Pack Porosity: 0.

SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice

K = 16.98 m/day y0 = 0.9904 m



GW11_FH1

Data Set:
Date: 11/18/20 Time: 14:20:41

PROJECT INFORMATION

Company: SLR
Project: Randwick DHA
Location: Randwick
Test Well: GW11
Test Date: 30/10/2020

AQUIFER DATA

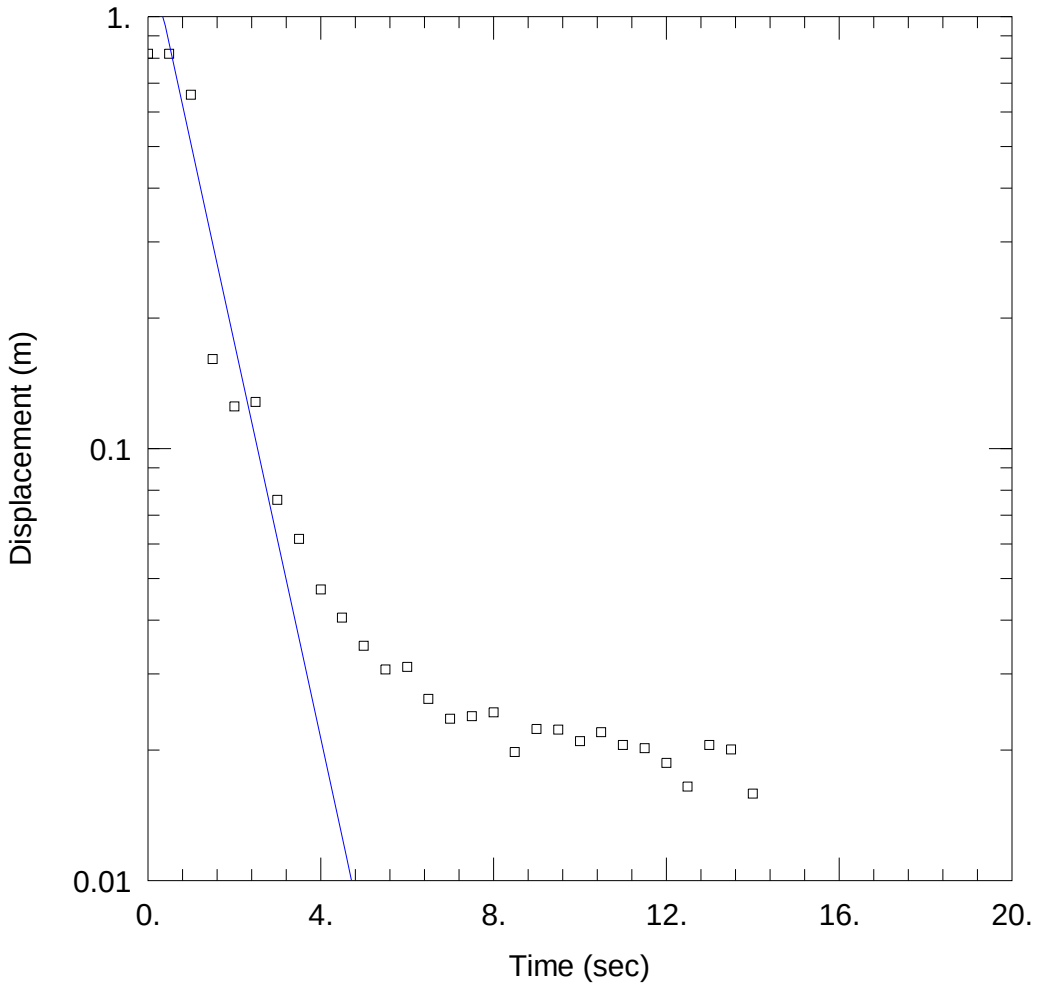
Saturated Thickness: 10. m Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (GW11)

Initial Displacement: 0.2631 m
Total Well Penetration Depth: 9.5 m
Casing Radius: 0.025 m
Static Water Column Height: 3. m
Screen Length: 5. m
Well Radius: 0.025 m
Gravel Pack Porosity: 0.

SOLUTION

Aquifer Model: Unconfined
Solution Method: Bouwer-Rice
K = 29.25 m/day
y0 = 0.6105 m



GW11_RH1

Data Set: H:\...\GW11_RH1.aqt
Date: 11/18/20 Time: 14:43:18

PROJECT INFORMATION

Company: SLR
Project: Randwick DHA
Location: Randwick
Test Well: GW11
Test Date: 30/10/2020

AQUIFER DATA

Saturated Thickness: 10. m Anisotropy Ratio (Kz/Kr): 1.

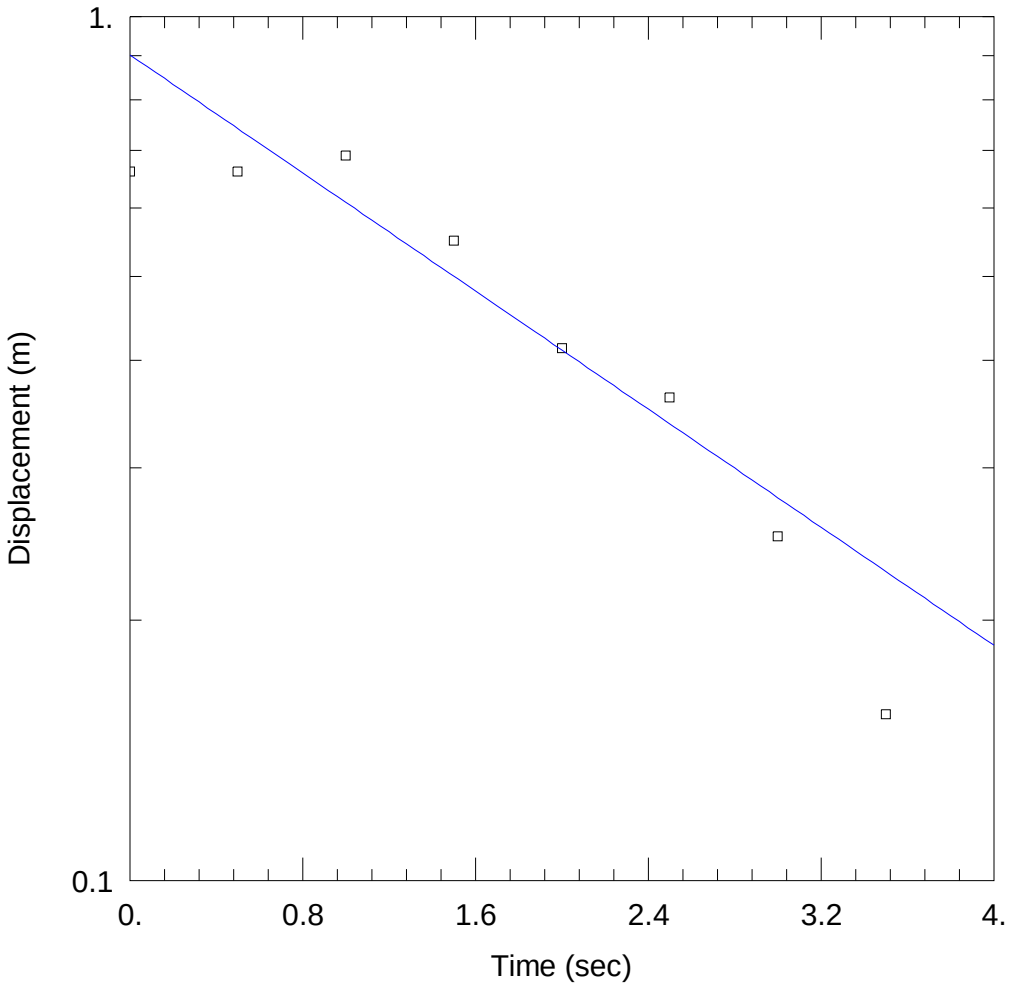
WELL DATA (GW11)

Initial Displacement: 0.8178 m
Total Well Penetration Depth: 9.5 m
Casing Radius: 0.025 m
Static Water Column Height: 3. m
Screen Length: 5. m
Well Radius: 0.025 m
Gravel Pack Porosity: 0.

SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice

K = 20.52 m/day y0 = 1.451 m



GW13_FH1

Data Set: H:\...\GW13_FH1.aqt
Date: 11/18/20 Time: 16:06:54

PROJECT INFORMATION

Company: SLR
Project: Randwick DHA
Location: Randwick
Test Well: GW13
Test Date: 30/10/2020

AQUIFER DATA

Saturated Thickness: 10. m Anisotropy Ratio (Kz/Kr): 1.

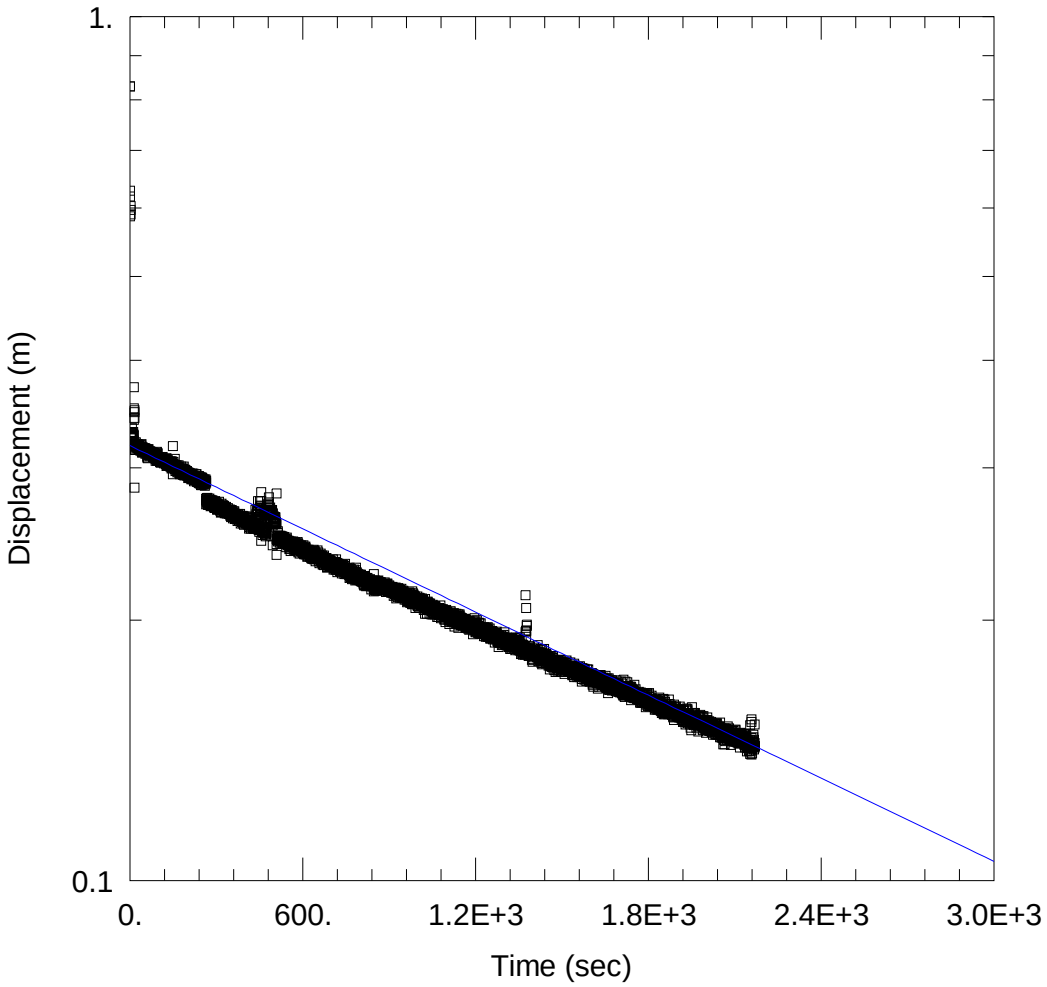
WELL DATA (GW13)

Initial Displacement: 0.6608 m
Total Well Penetration Depth: 3.1 m
Casing Radius: 0.025 m
Static Water Column Height: 3. m
Screen Length: 1.8 m
Well Radius: 0.025 m
Gravel Pack Porosity: 0.

SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice

K = 15.2 m/day y0 = 0.9026 m



GW15_FH2

Data Set: H:\...\GW13_RH1.aqt
Date: 11/18/20 Time: 16:34:38

PROJECT INFORMATION

Company: SLR
Project: Randwick DHA
Location: Randwick
Test Well: GW15
Test Date: 30/10/2020

AQUIFER DATA

Saturated Thickness: 10. m Anisotropy Ratio (Kz/Kr): 1.

WELL DATA (GW15)

Initial Displacement: 0.8293 m
Total Well Penetration Depth: 9.5 m
Casing Radius: 0.025 m
Static Water Column Height: 7. m
Screen Length: 7. m
Well Radius: 0.025 m
Gravel Pack Porosity: 0.

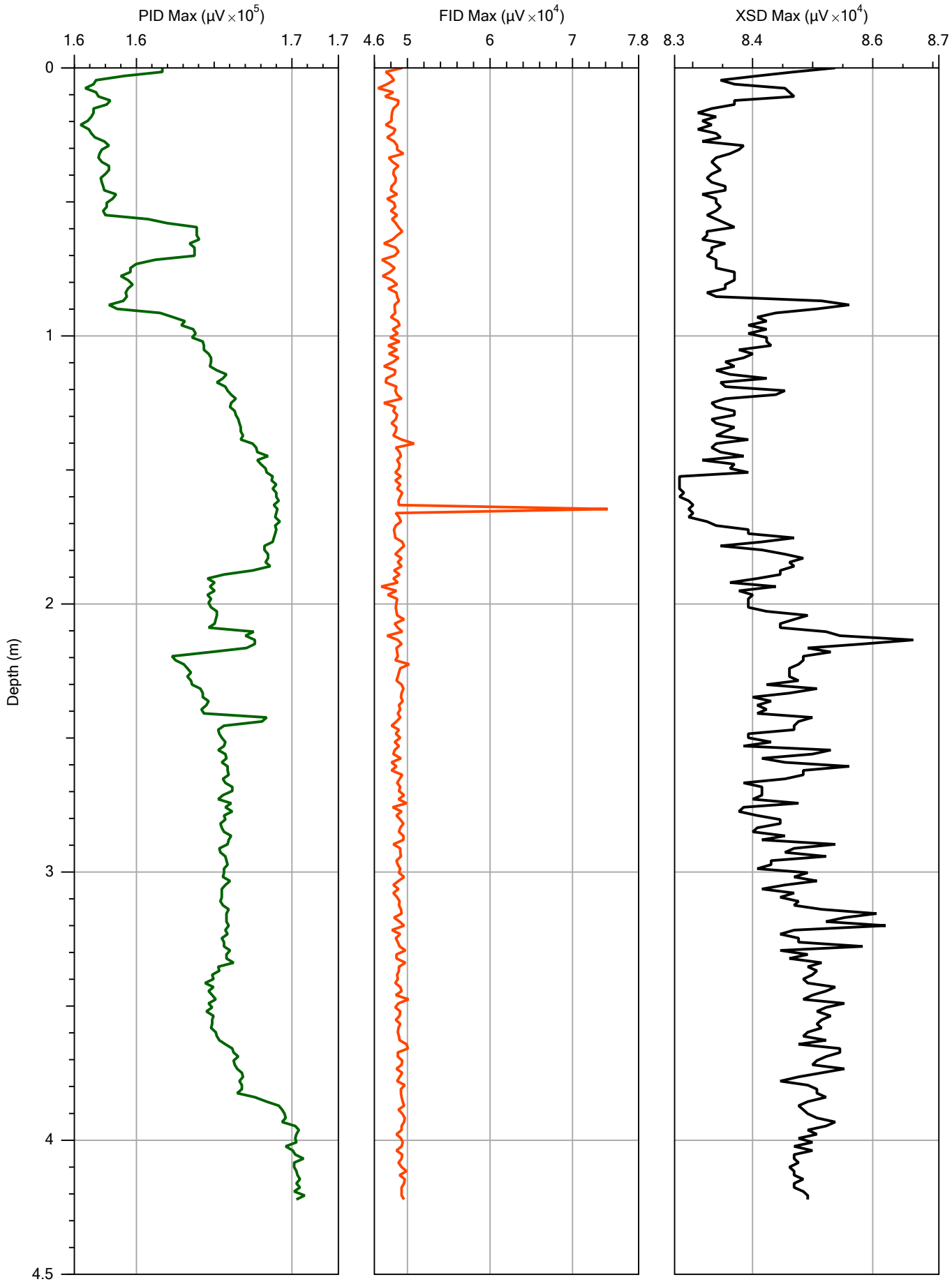
SOLUTION

Aquifer Model: Unconfined Solution Method: Bouwer-Rice

K = 0.005304 m/day y0 = 0.3185 m

APPENDIX I

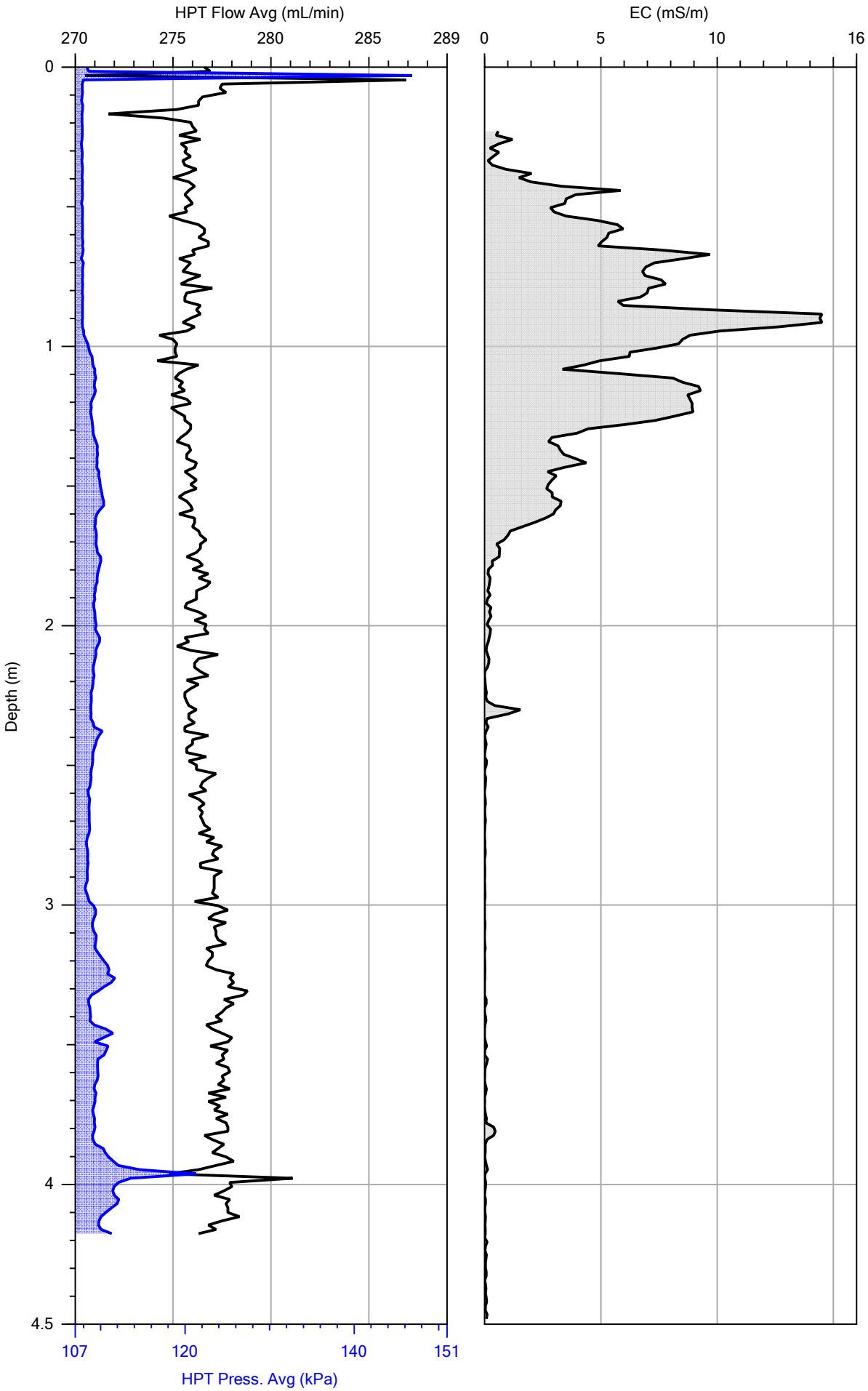
MIP Data



numac

Numac Drilling Services PTY Ltd.
www.numac.co.au
Ph. - 1300 131 019
Em. - info@numac.com.au

		File: MIP001.MHP
Company: DHA - Randwick	Operator: ADU	Date: 15/06/20
Project ID: 610.30041	Client: SLR	Location:



numac
Numac Drilling Services PTY Ltd.
www.numac.co.au
Ph. - 1300 131 019
Em. - info@numac.com.au

		File: MIP001.MHP
Company: DHA - Randwick	Operator: ADU	Date: 15/06/20
Project ID: 610.30041	Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.3	0.6	PASS
High	290.0	294.5	1.6	PASS

MIP001.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA - Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP001.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Mon Jun 15 2020 12:19:56

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Mon Jun 15 2020 12:31:05

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.526	0.0	107.050
TOP with FLOW>0	16.027	274.9	110.500
BOTTOM with FLOW=0	15.302	0.0	105.500
BOTTOM with FLOW>0	15.807	273.8	108.990

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840

Probe advancement with HPT flow valve and/or pump switch turned off at 0.00 ft (0.000 m).
LOG START TIME: Mon Jun 15 2020 12:36:33

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4
0.00	0.000	1	1	1	1

LOG END DEPTH: 13.95 ft (4.252 m)
LOG END TIME: Mon Jun 15 2020 13:28:08

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS 0.00 FEET
GPS Quality: None

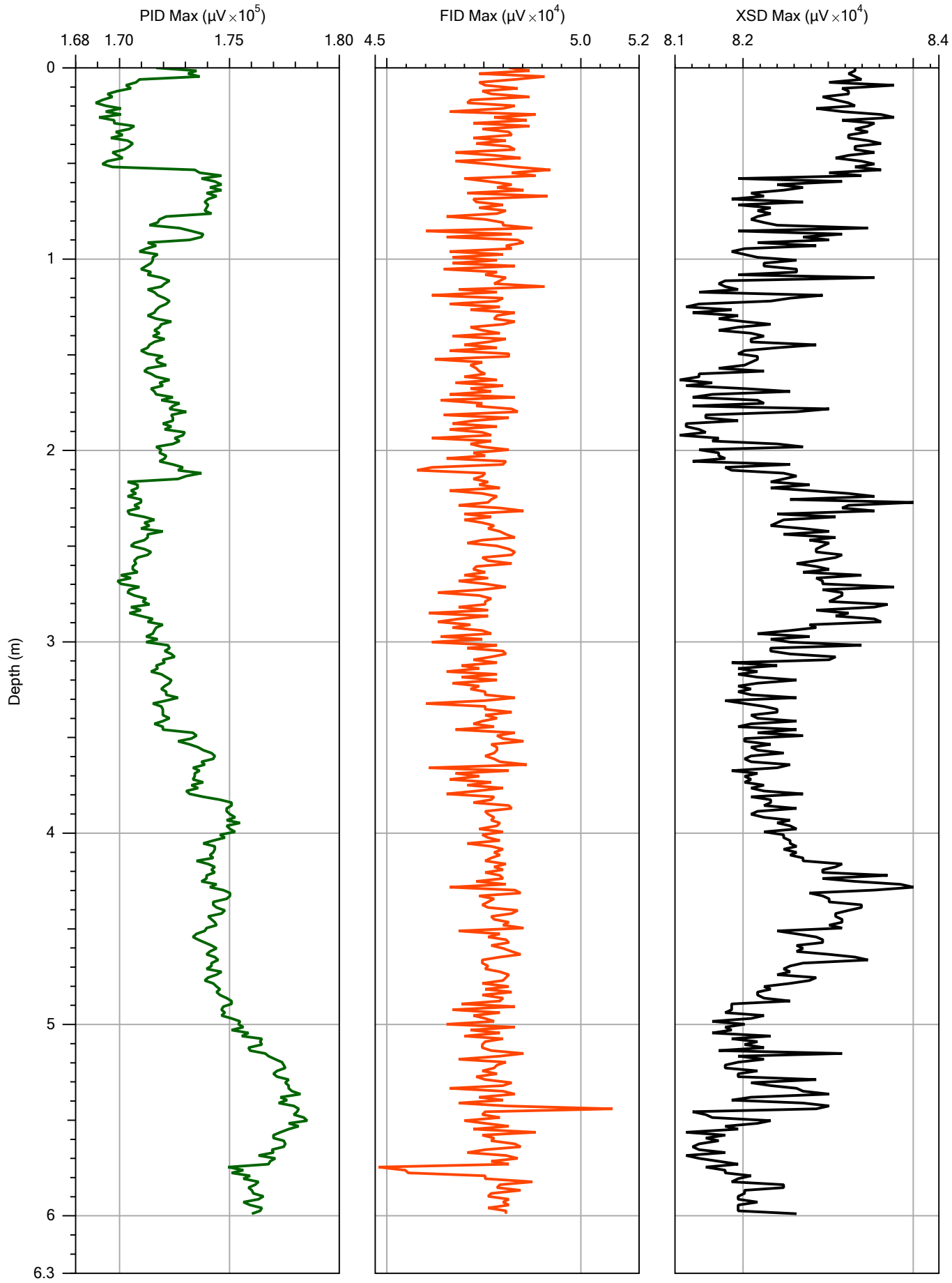
MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Mon Jun 15 2020 13:28:19

POST-LOG HPT REFERENCE TESTS BYPASSED

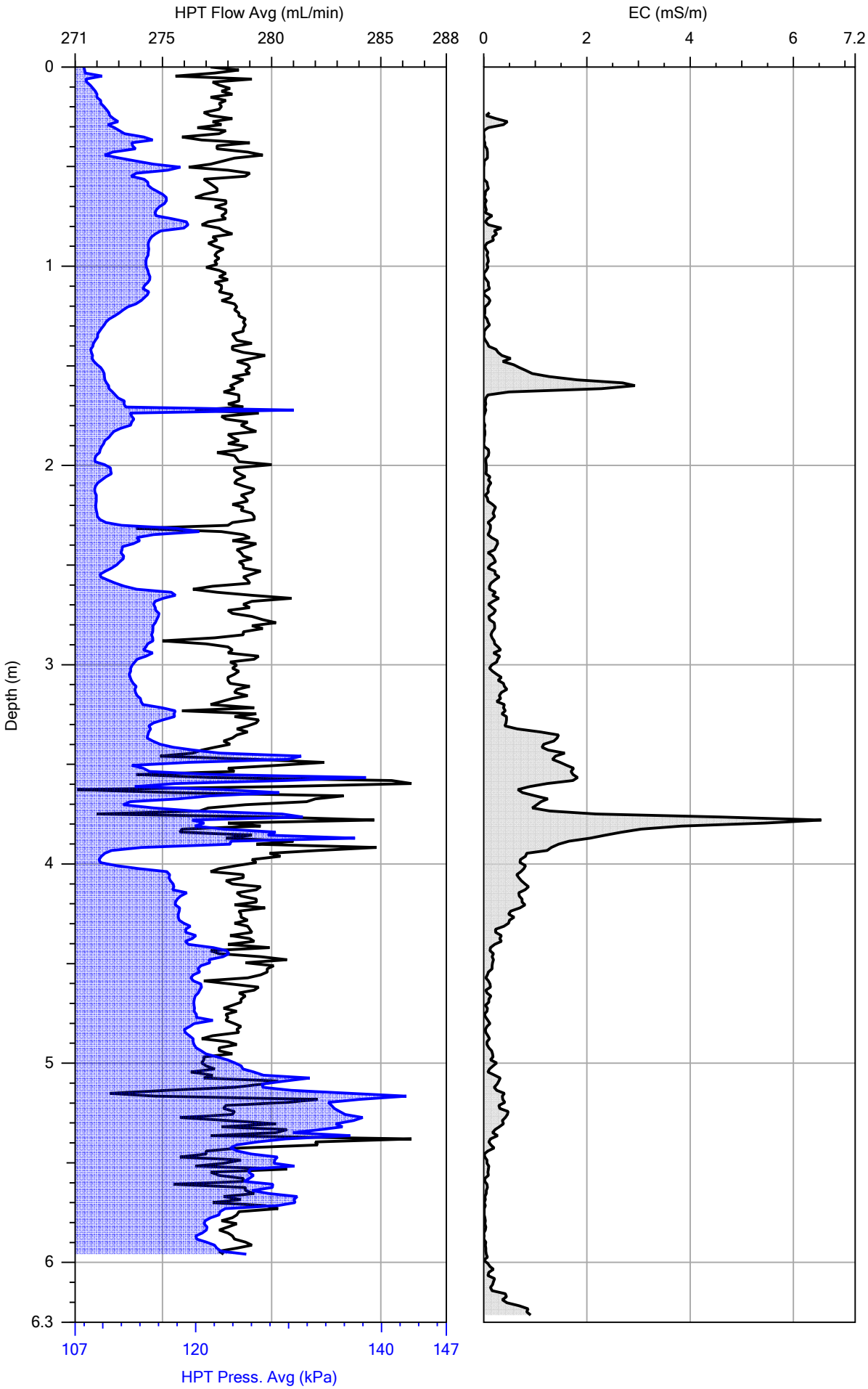
EC POST-LOG TESTS BYPASSED



numac

Numac Drilling Services PTY Ltd.
www.numac.co.au
Ph. - 1300 131 019
Em. - info@numac.com.au

		File: MIP002.MHP
Company: DHA - Randwick	Operator: ADU	Date: 15/06/20
Project ID: 610.30041	Client: SLR	Location:



numac
Numac Drilling Services PTY Ltd.
www.numac.co.au
Ph. - 1300 131 019
Em. - info@numac.com.au

		File: MIP002.MHP
Company: DHA - Randwick	Operator: ADU	Date: 15/06/20
Project ID: 610.30041	Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.3	0.5	PASS
High	290.0	284.0	2.1	PASS

MIP002.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA - Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP002.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Mon Jun 15 2020 14:02:41

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Mon Jun 15 2020 14:08:02

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.504	0.0	106.900
TOP with FLOW>0	15.956	277.5	110.010
BOTTOM with FLOW=0	15.292	0.0	105.430
BOTTOM with FLOW>0	15.760	276.5	108.660

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.21 psi (1.5 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840

LOG START TIME: Mon Jun 15 2020 14:17:22

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4
0.00	0.000	1	1	1	1

LOG END DEPTH: 19.80 ft (6.035 m)
LOG END TIME: Mon Jun 15 2020 15:14:24

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS 0.00 FEET
GPS Quality: None

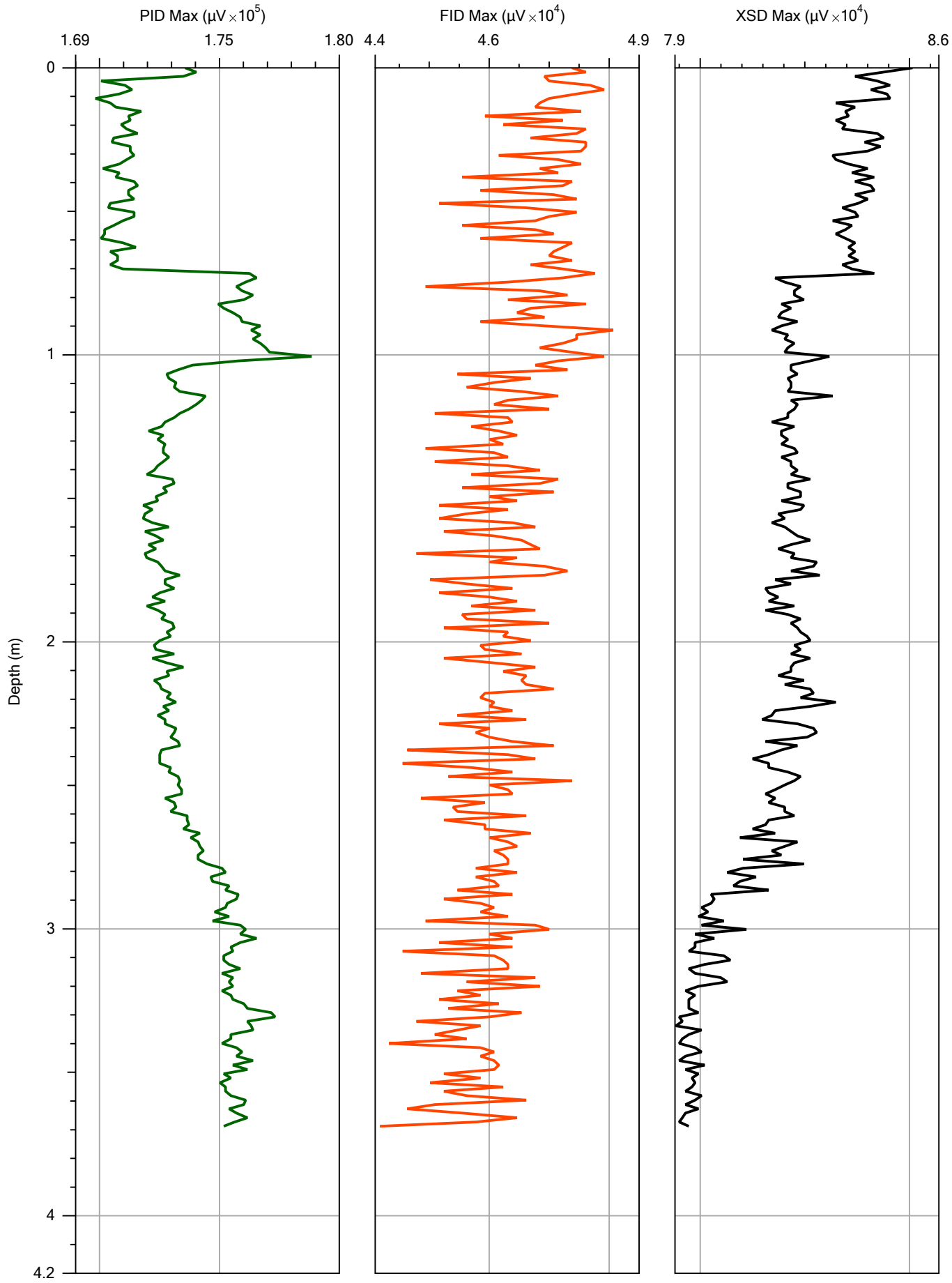
MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Mon Jun 15 2020 15:31:47

POST-LOG HPT REFERENCE TESTS BYPASSED

EC POST-LOG TESTS BYPASSED



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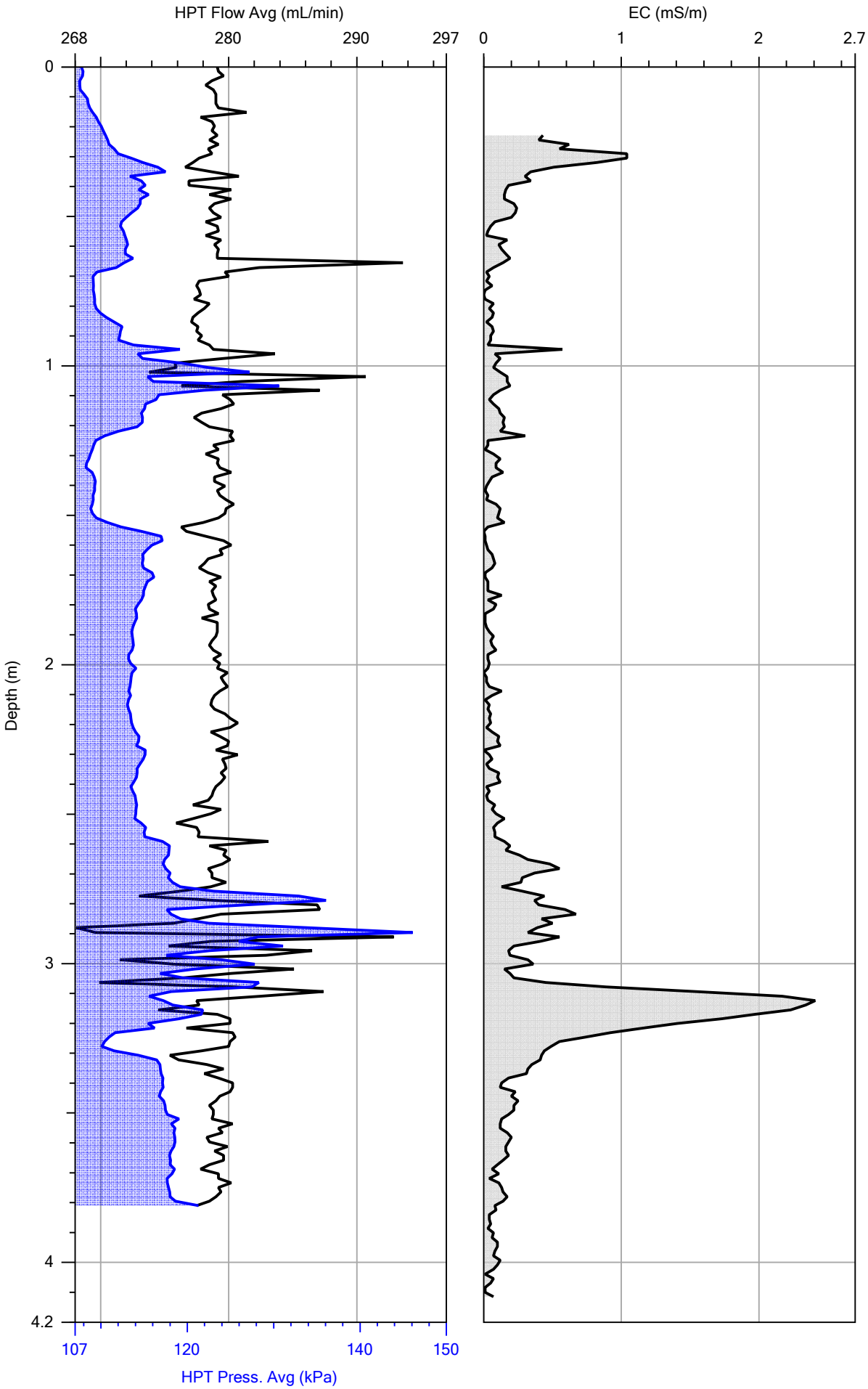
		File: MIP003.MHP
Company: DHA - Randwick	Operator: ADU	Date: 15/06/20
Project ID: 610.30041	Client: SLR	Location:



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		File: MIP003.MHP
Company: DHA - Randwick	Operator: ADU	Date: 15/06/20
Project ID: 610.30041	Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.4	0.8	PASS
High	290.0	297.0	2.4	PASS

MIP003.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA - Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP003.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Mon Jun 15 2020 15:58:00

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Mon Jun 15 2020 16:03:06

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.521	0.0	107.010
TOP with FLOW>0	16.019	277.6	110.440
BOTTOM with FLOW=0	15.302	0.0	105.510
BOTTOM with FLOW>0	15.873	277.8	109.440

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840

LOG START TIME: Mon Jun 15 2020 16:06:12

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4
0.00	0.000	1	1	1	1

LOG END DEPTH: 12.75 ft (3.886 m)
LOG END TIME: Mon Jun 15 2020 16:58:34

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS 0.00 FEET
GPS Quality: None

MIP POST-LOG RESPONSE TEST

FILENAME: MIP003.post.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Mon Jun 15 2020 17:10:54

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Mon Jun 15 2020 17:15:35

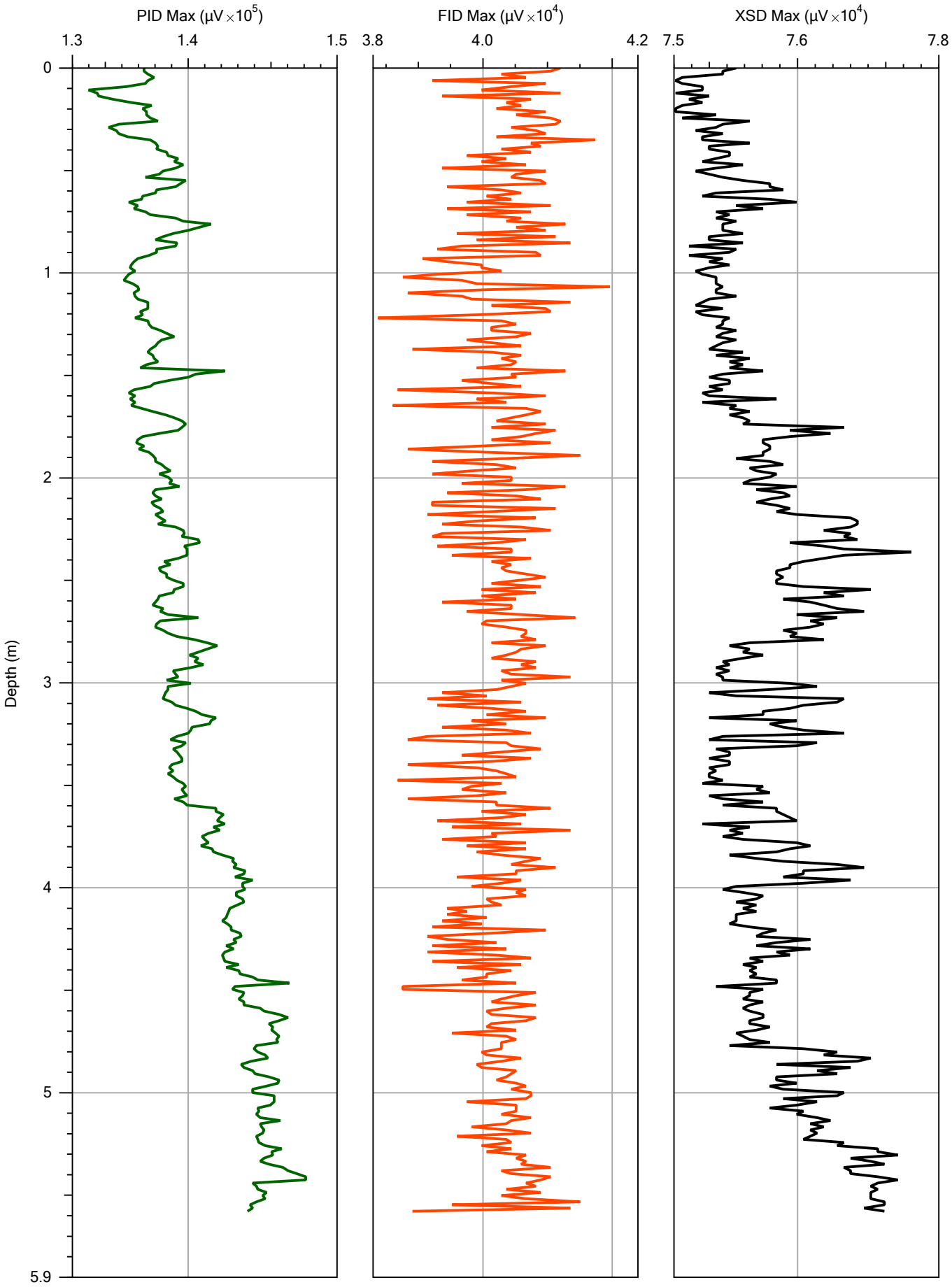
TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.520	0.0	107.010
TOP with FLOW>0	15.963	278.6	110.060
BOTTOM with FLOW=0	15.299	0.0	105.480
BOTTOM with FLOW>0	15.750	277.8	108.590

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

TRANSDUCER TEST PASSED

Post-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.3	0.6	PASS
High	290.0	274.1	5.5	PASS



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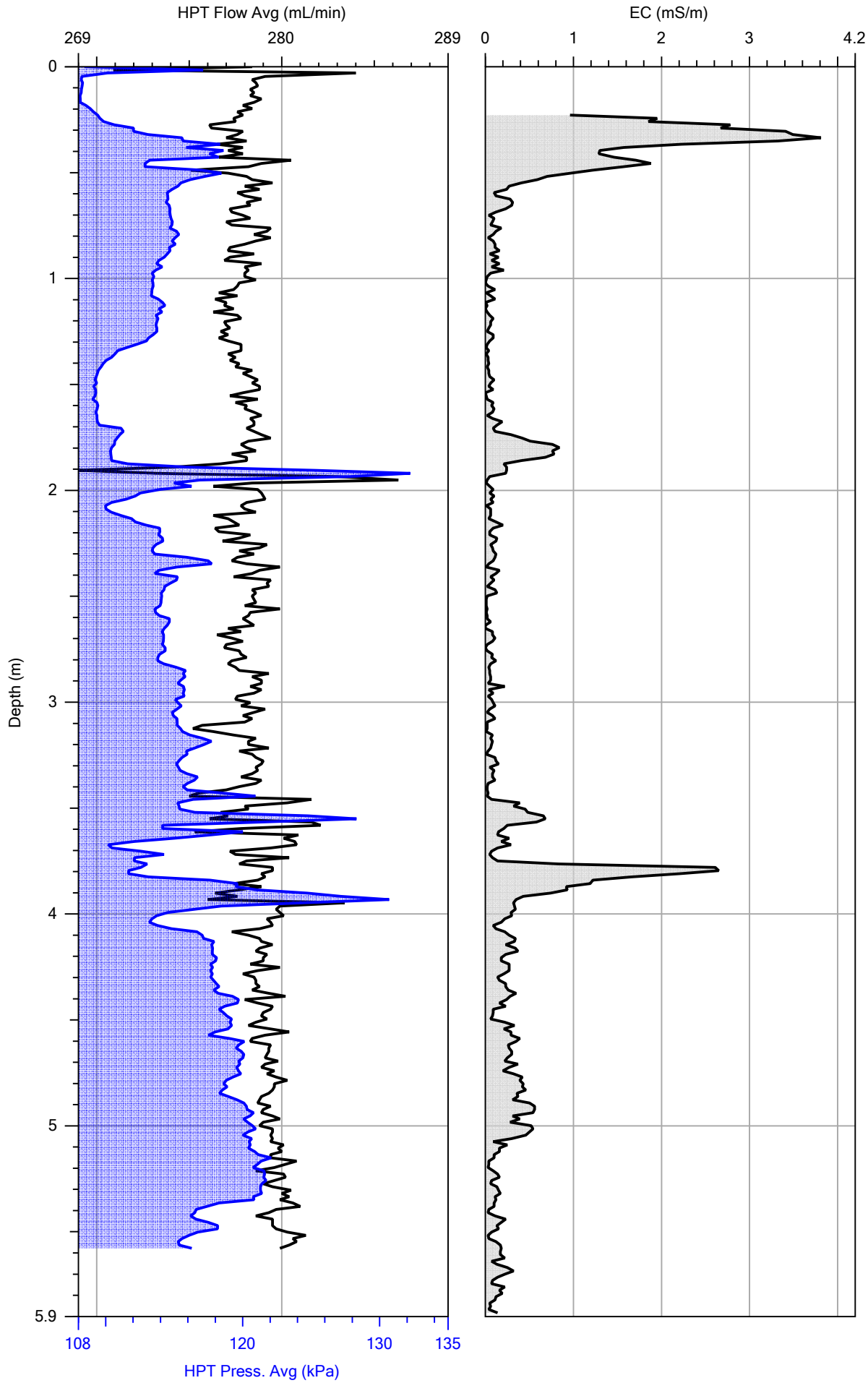
		File: MIP004.MHP
Company: DHA-Randwick	Operator: ADU	Date: 16/06/20
Project ID: 610.30041	Client: SLR	Location:



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		File: MIP004.MHP
Company: DHA-Randwick	Operator: ADU	Date: 16/06/20
Project ID: 610.30041	Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.5	0.9	PASS
High	290.0	297.0	2.4	PASS

MIP004.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA-Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP004.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Tue Jun 16 2020 07:57:42

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Tue Jun 16 2020 08:03:30

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.591	0.0	107.500
TOP with FLOW>0	16.071	276.7	110.810
BOTTOM with FLOW=0	15.365	0.0	105.940
BOTTOM with FLOW>0	15.886	276.3	109.530

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.23 psi (1.6 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840

LOG START TIME: Tue Jun 16 2020 08:08:13

Temperature out of range (150.6 deg C) at 4.85 ft (1.478 m)

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4
0.00	0.000	1	1	1	1

LOG END DEPTH: 18.55 ft (5.654 m)
LOG END TIME: Tue Jun 16 2020 08:56:31

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS 0.00 FEET
GPS Quality: None

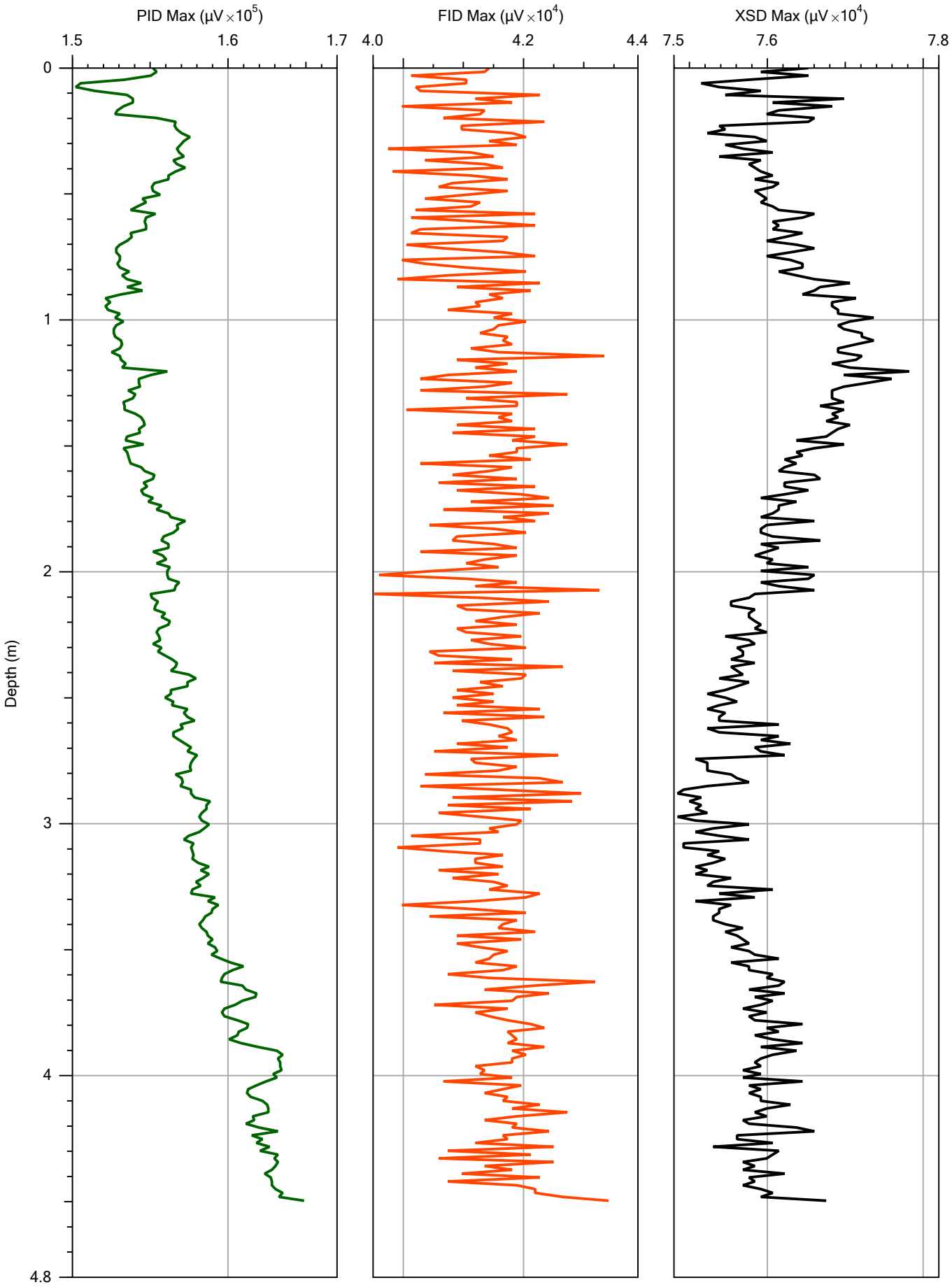
MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Tue Jun 16 2020 09:12:56

POST-LOG HPT REFERENCE TESTS BYPASSED

EC POST-LOG TESTS BYPASSED



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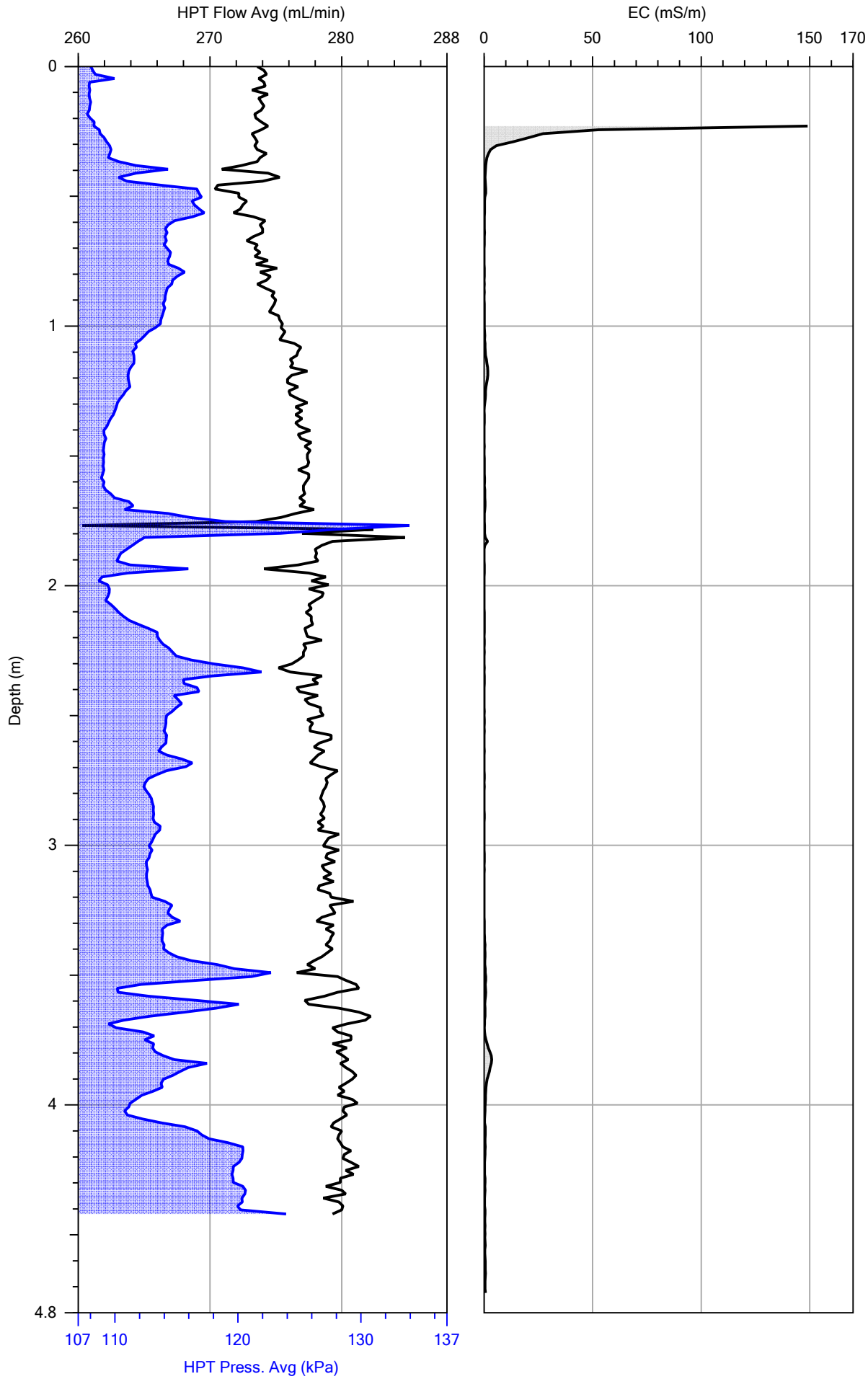
		File: MIP005.MHP
Company: DHA-Randwick	Operator: ADU	Date: 16/06/20
Project ID: 610.30041	Client: SLR	Location:



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		File: MIP005.MHP
Company: DHA-Randwick	Operator: ADU	Date: 16/06/20
Project ID: 610.30041	Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.3	0.6	PASS
High	290.0	283.0	2.4	PASS

MIP005.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA-Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP005.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Tue Jun 16 2020 09:54:30

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Tue Jun 16 2020 09:59:43

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.572	0.0	107.360
TOP with FLOW>0	16.053	272.5	110.680
BOTTOM with FLOW=0	15.343	0.0	105.790
BOTTOM with FLOW>0	15.846	271.1	109.250

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.23 psi (1.6 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840

LOG START TIME: Tue Jun 16 2020 10:03:40

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4
0.00	0.000	1	1	1	1

LOG END DEPTH: 14.75 ft (4.496 m)
LOG END TIME: Tue Jun 16 2020 10:41:12

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS 0.00 FEET
GPS Quality: None

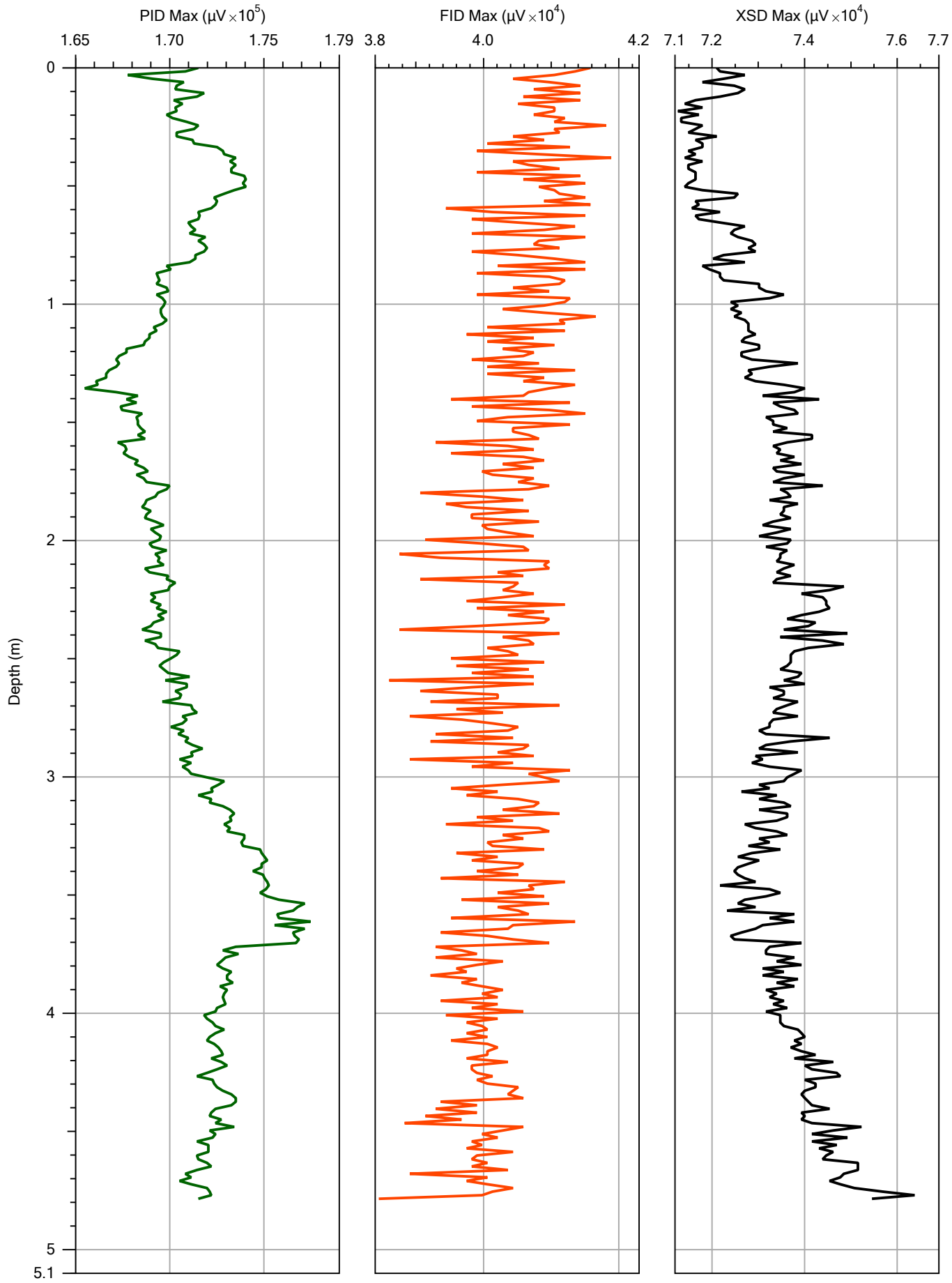
MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Tue Jun 16 2020 10:41:16

POST-LOG HPT REFERENCE TESTS BYPASSED

EC POST-LOG TESTS BYPASSED



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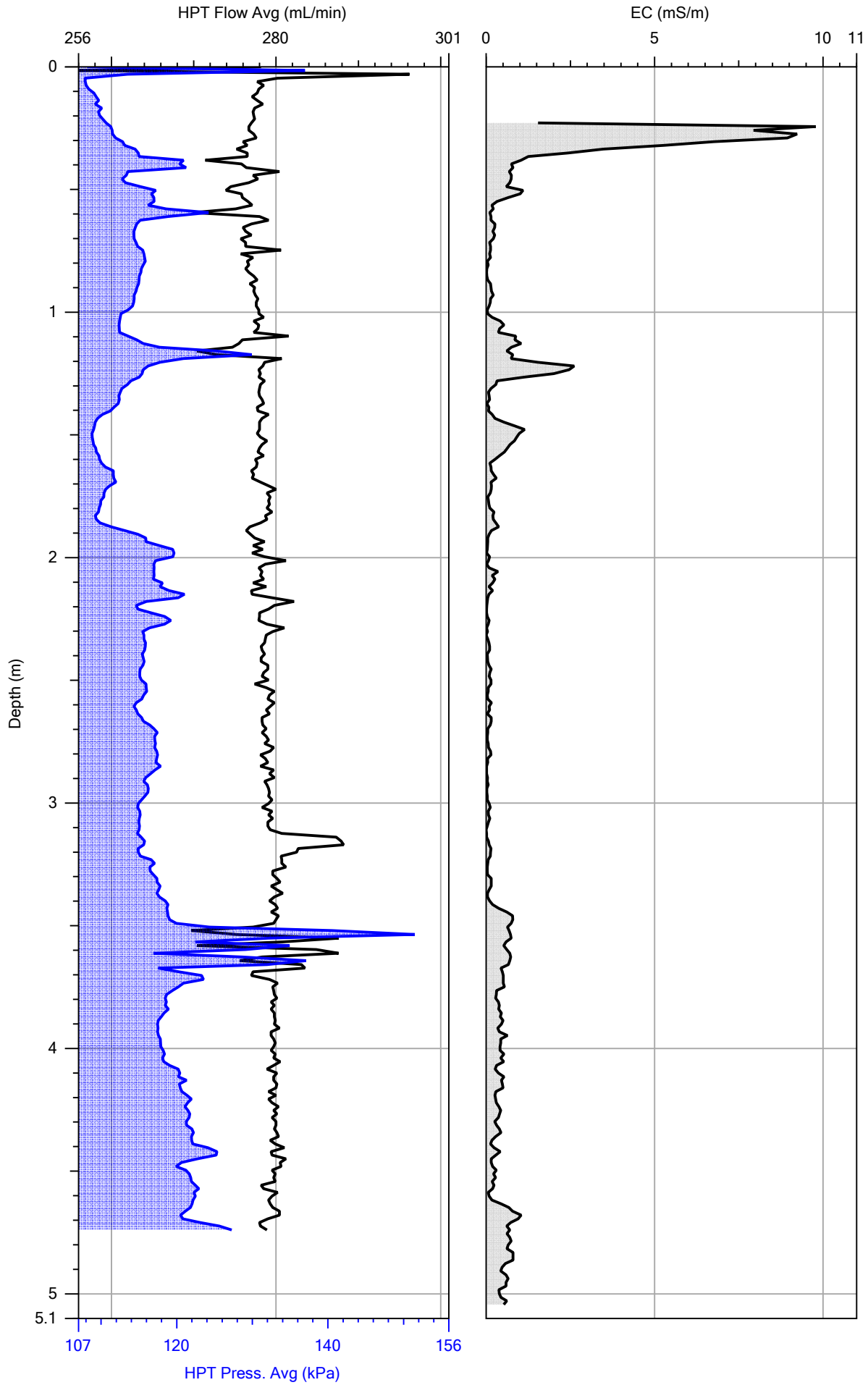
		File: MIP006.MHP
Company: DHA-Randwick	Operator: ADU	Date: 16/06/20
Project ID: 610.30041	Client: SLR	Location:



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		File: MIP006.MHP
Company: DHA-Randwick	Operator: ADU	Date: 16/06/20
Project ID: 610.30041	Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.3	0.6	PASS
High	290.0	281.9	2.8	PASS

MIP006.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA-Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP006.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Tue Jun 16 2020 10:58:51

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Tue Jun 16 2020 11:03:55

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.542	0.0	107.160
TOP with FLOW>0	16.001	276.1	110.330
BOTTOM with FLOW=0	15.331	0.0	105.700
BOTTOM with FLOW>0	15.793	279.5	108.890

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.21 psi (1.5 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840

Probe advancement with HPT flow valve and/or pump switch turned off at 0.00 ft (0.000 m).
Probe advancement with HPT flow valve and/or pump switch turned off at 0.00 ft (0.000 m).
LOG START TIME: Tue Jun 16 2020 11:06:31

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4
0.00	0.000	1	1	1	1

LOG END DEPTH: 15.80 ft (4.816 m)
LOG END TIME: Tue Jun 16 2020 11:54:58

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS 0.00 FEET
GPS Quality: None

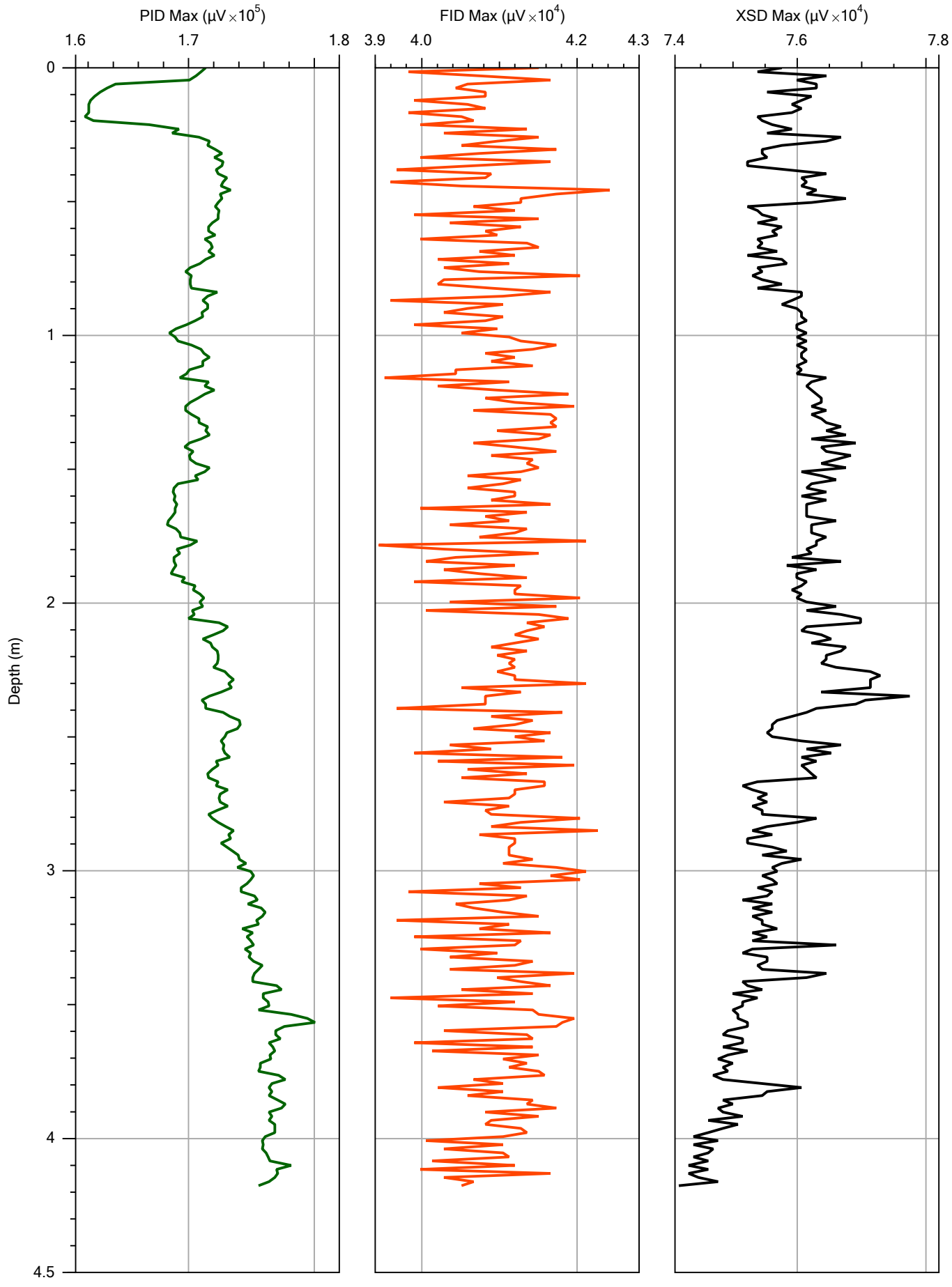
MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Tue Jun 16 2020 12:27:53

POST-LOG HPT REFERENCE TESTS BYPASSED

EC POST-LOG TESTS BYPASSED



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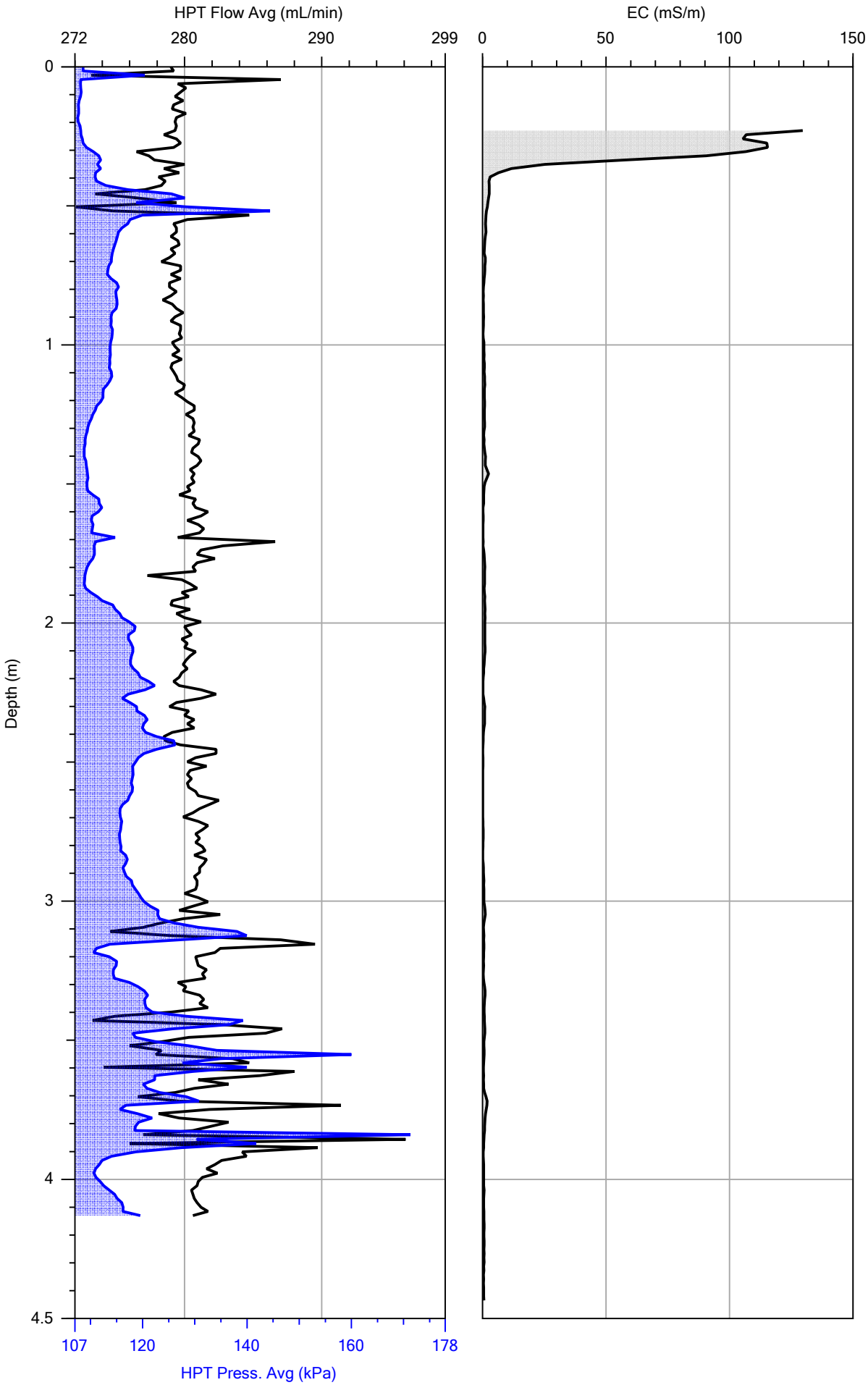
		File: MIP007.MHP
Company: DHA-Randwick	Operator: ADU	Date: 16/06/20
Project ID: 610.30041	Client: SLR	Location:



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		File: MIP007.MHP
Company: DHA-Randwick	Operator: ADU	Date: 16/06/20
Project ID: 610.30041	Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.3	0.6	PASS
High	290.0	284.5	1.9	PASS

MIP007.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA-Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP007.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Tue Jun 16 2020 12:37:50

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Tue Jun 16 2020 12:42:50

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.558	0.0	107.270
TOP with FLOW>0	16.373	276.3	112.890
BOTTOM with FLOW=0	15.331	0.0	105.700
BOTTOM with FLOW>0	16.156	276.9	111.390

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.23 psi (1.6 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840

LOG START TIME: Tue Jun 16 2020 12:47:16

Temperature out of range (79.8 deg C) at 0.75 ft (0.229 m)

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4
0.00	0.000	1	1	1	1

LOG END DEPTH: 13.80 ft (4.206 m)
LOG END TIME: Tue Jun 16 2020 13:22:49

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS 0.00 FEET
GPS Quality: None

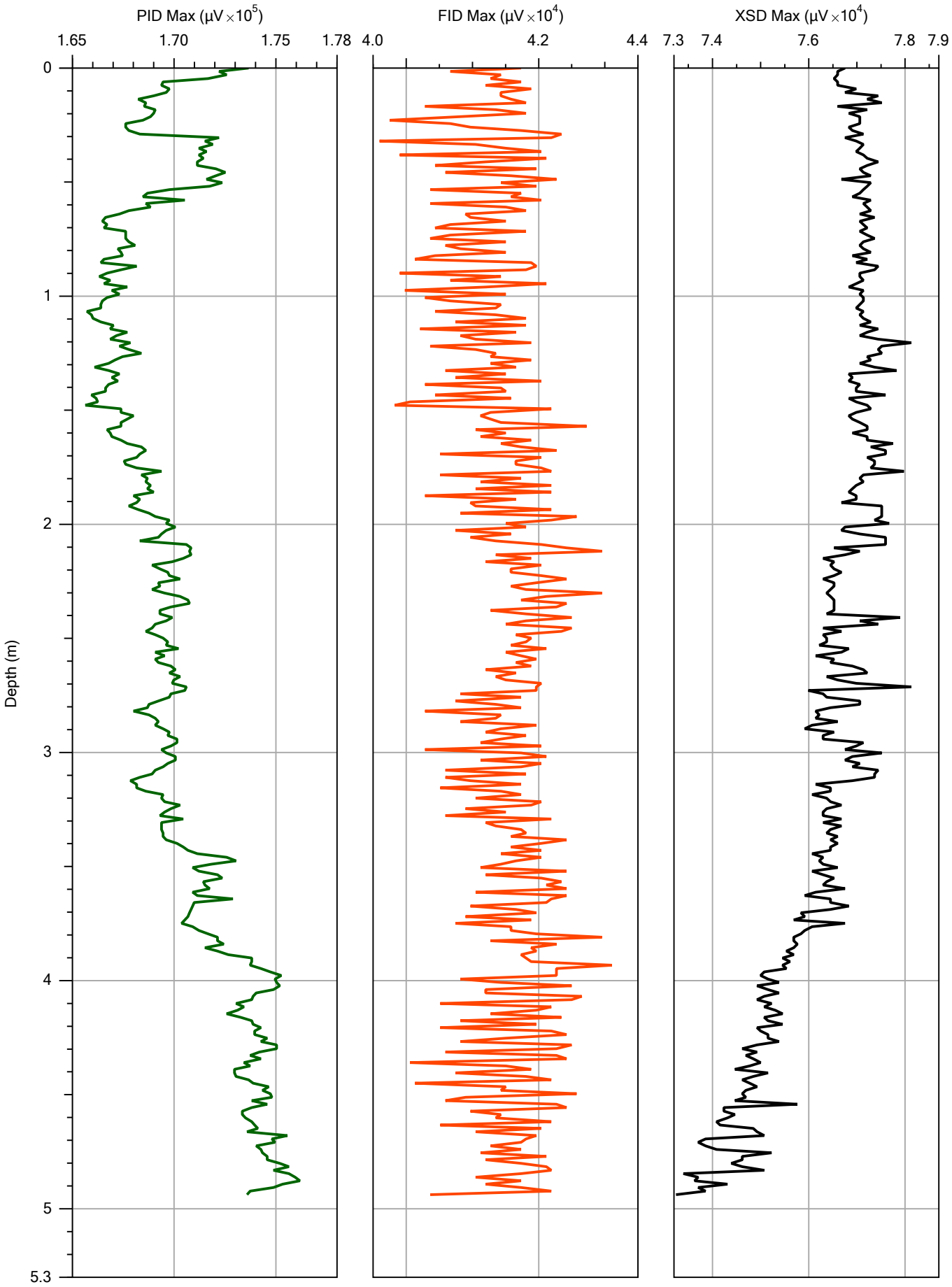
MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Tue Jun 16 2020 13:23:09

POST-LOG HPT REFERENCE TESTS BYPASSED

EC POST-LOG TESTS BYPASSED



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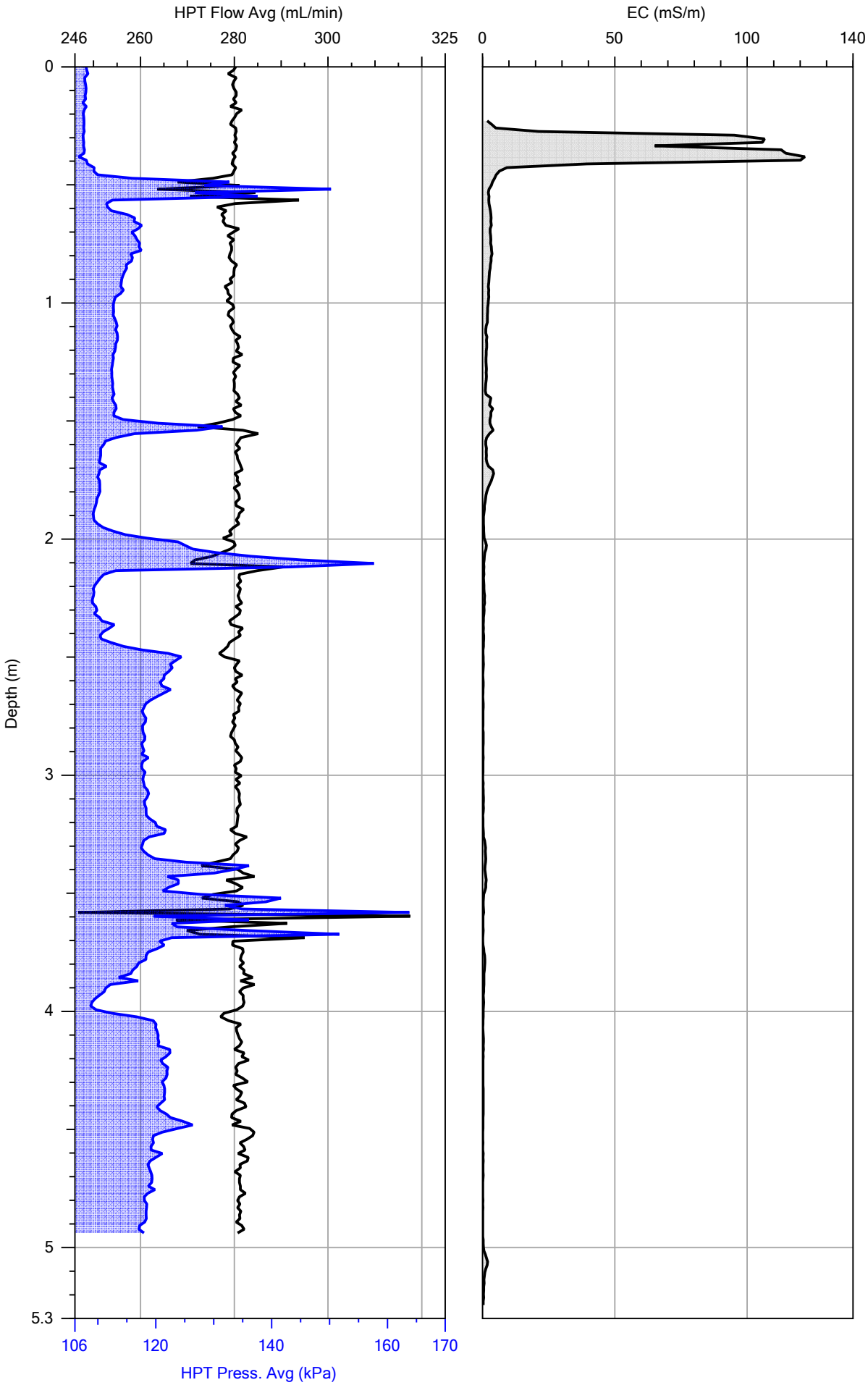
		File: MIP008.MHP
Company: DHA-Randwick	Operator: ADU	Date: 16/06/20
Project ID: 610.30041	Client: SLR	Location:



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		File: MIP008.MHP
Company: DHA-Randwick	Operator: ADU	Date: 16/06/20
Project ID: 610.30041	Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.3	0.5	PASS
High	290.0	290.0	0.0	PASS

MIP008.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA-Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP008.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Tue Jun 16 2020 13:45:00

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Tue Jun 16 2020 14:00:37

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.522	0.0	107.020
TOP with FLOW>0	15.907	278.9	109.680
BOTTOM with FLOW=0	15.299	0.0	105.480
BOTTOM with FLOW>0	15.693	278.4	108.200

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840

Temperature out of range (79.9 deg C) at 0.00 ft (0.000 m)

LOG START TIME: Tue Jun 16 2020 14:04:32

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4
0.00	0.000	1	1	1	1

LOG END DEPTH: 16.45 ft (5.014 m)
LOG END TIME: Tue Jun 16 2020 15:01:51

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS 0.00 FEET
GPS Quality: None

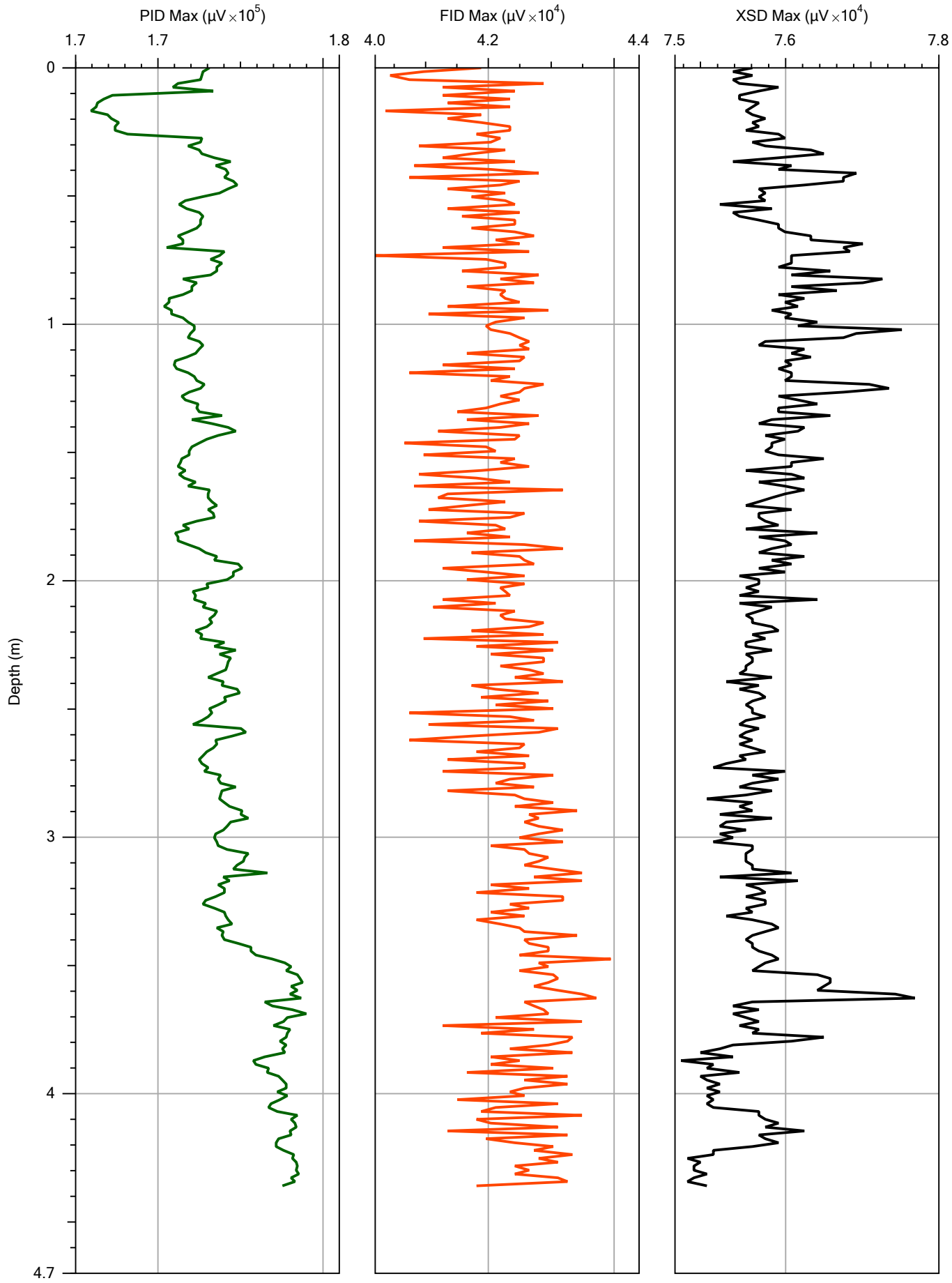
MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Tue Jun 16 2020 15:01:55

POST-LOG HPT REFERENCE TESTS BYPASSED

EC POST-LOG TESTS BYPASSED



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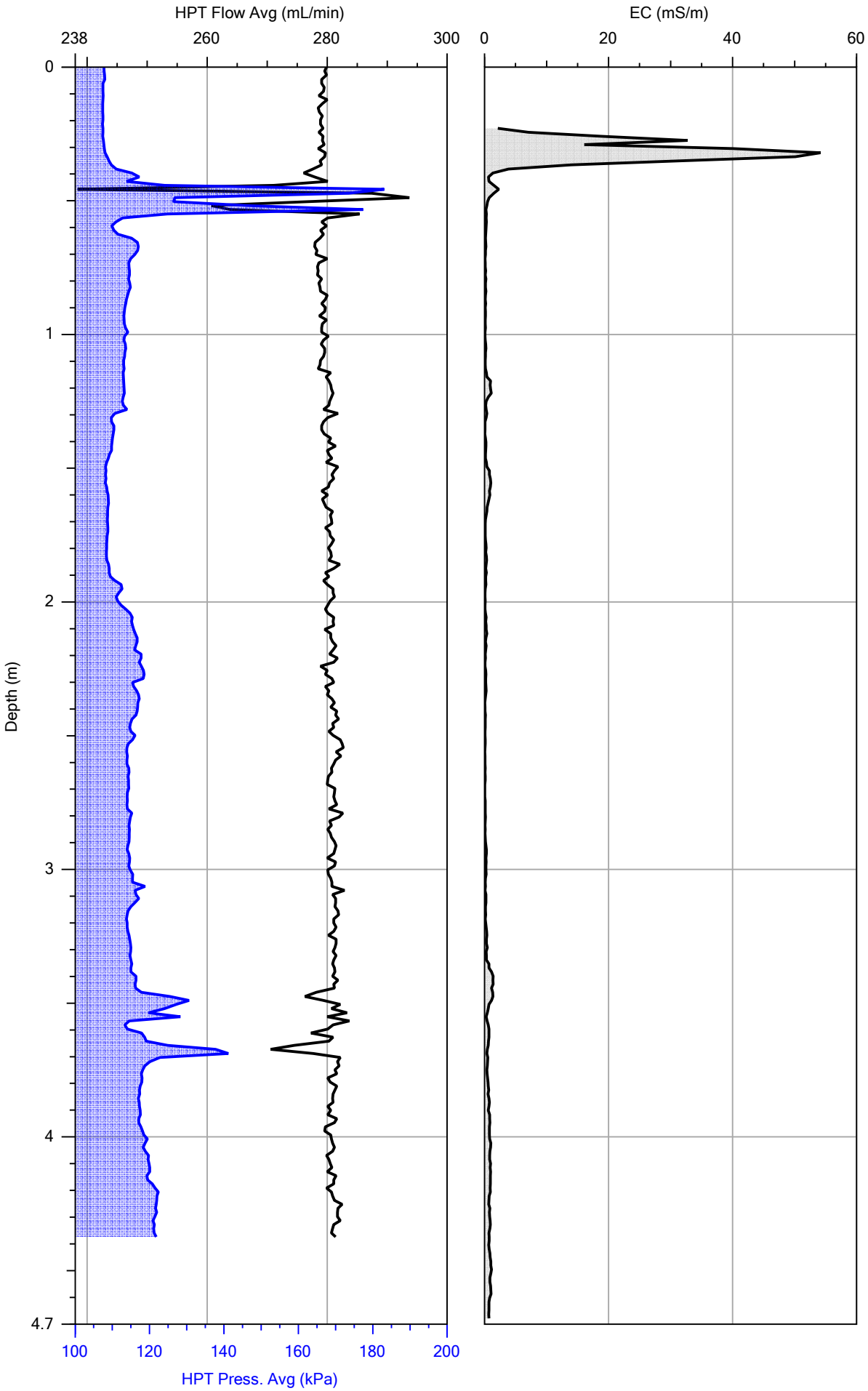
Ph. - 1300 131 019
Em. - info@numac.com.au

		File: MIP009.MHP
Company: DHA-Randwick	Operator: ADU	Date: 16/06/20
Project ID: 610.30041	Client: SLR	Location:



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		File: MIP009.MHP
Company: DHA-Randwick	Operator: ADU	Date: 16/06/20
Project ID: 610.30041	Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.4	0.7	PASS
High	290.0	296.8	2.4	PASS

MIP009.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA-Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP009.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Tue Jun 16 2020 15:31:12

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Tue Jun 16 2020 15:36:09

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.495	0.0	106.830
TOP with FLOW>0	15.991	278.7	110.250
BOTTOM with FLOW=0	15.273	0.0	105.300
BOTTOM with FLOW>0	15.769	279.1	108.720

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840

LOG START TIME: Tue Jun 16 2020 15:38:36

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4
0.00	0.000	1	1	1	1

LOG END DEPTH: 14.60 ft (4.450 m)
LOG END TIME: Tue Jun 16 2020 16:20:46

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS 0.00 FEET
GPS Quality: None

MIP POST-LOG RESPONSE TEST

FILENAME: MIP009.post.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Tue Jun 16 2020 16:35:51

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Tue Jun 16 2020 16:41:51

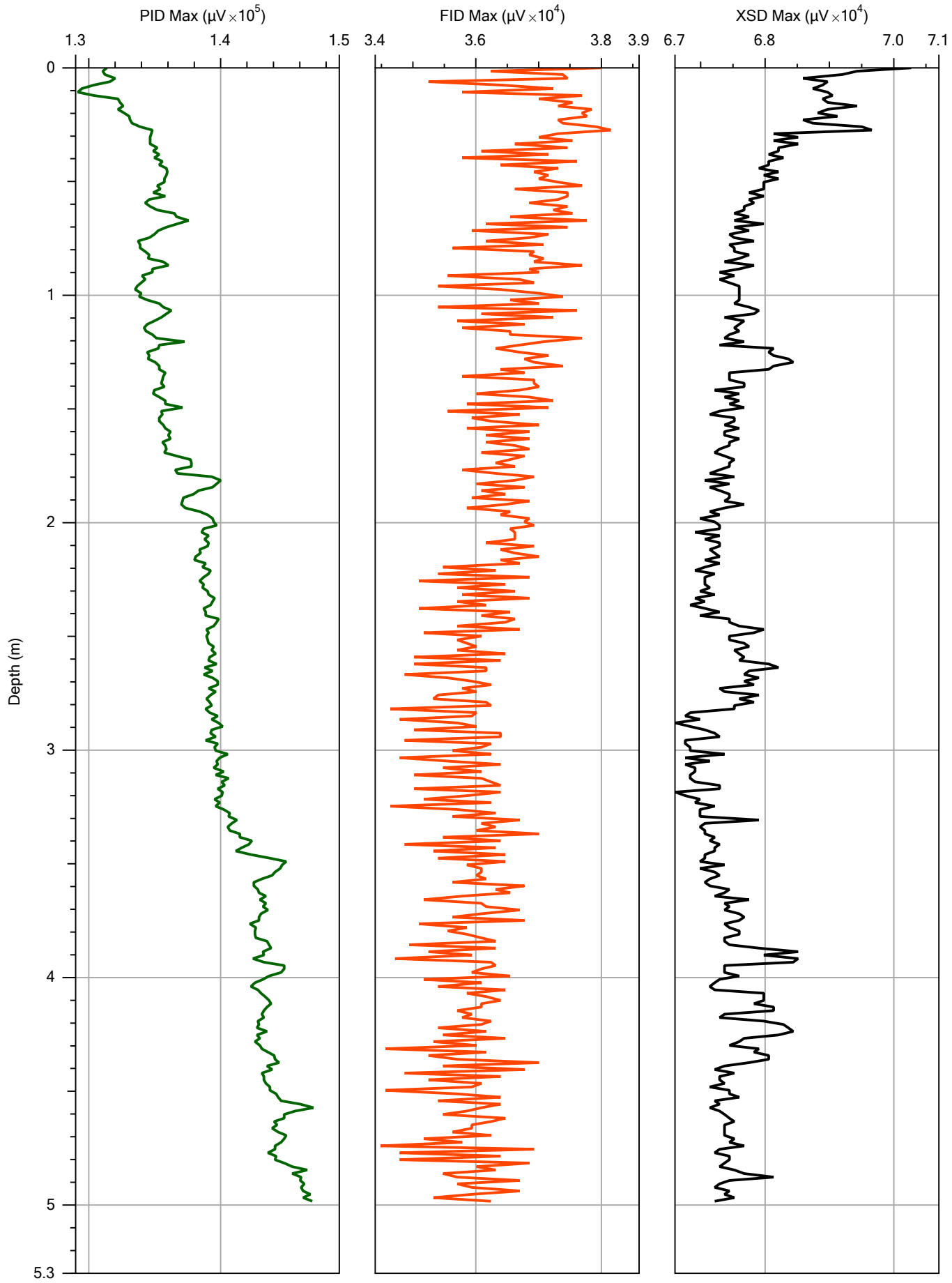
TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.533	0.0	107.100
TOP with FLOW>0	15.966	274.9	110.080
BOTTOM with FLOW=0	15.308	0.0	105.550
BOTTOM with FLOW>0	15.755	277.6	108.630

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

TRANSDUCER TEST PASSED

Post-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.9	1.6	PASS
High	290.0	297.2	2.5	PASS



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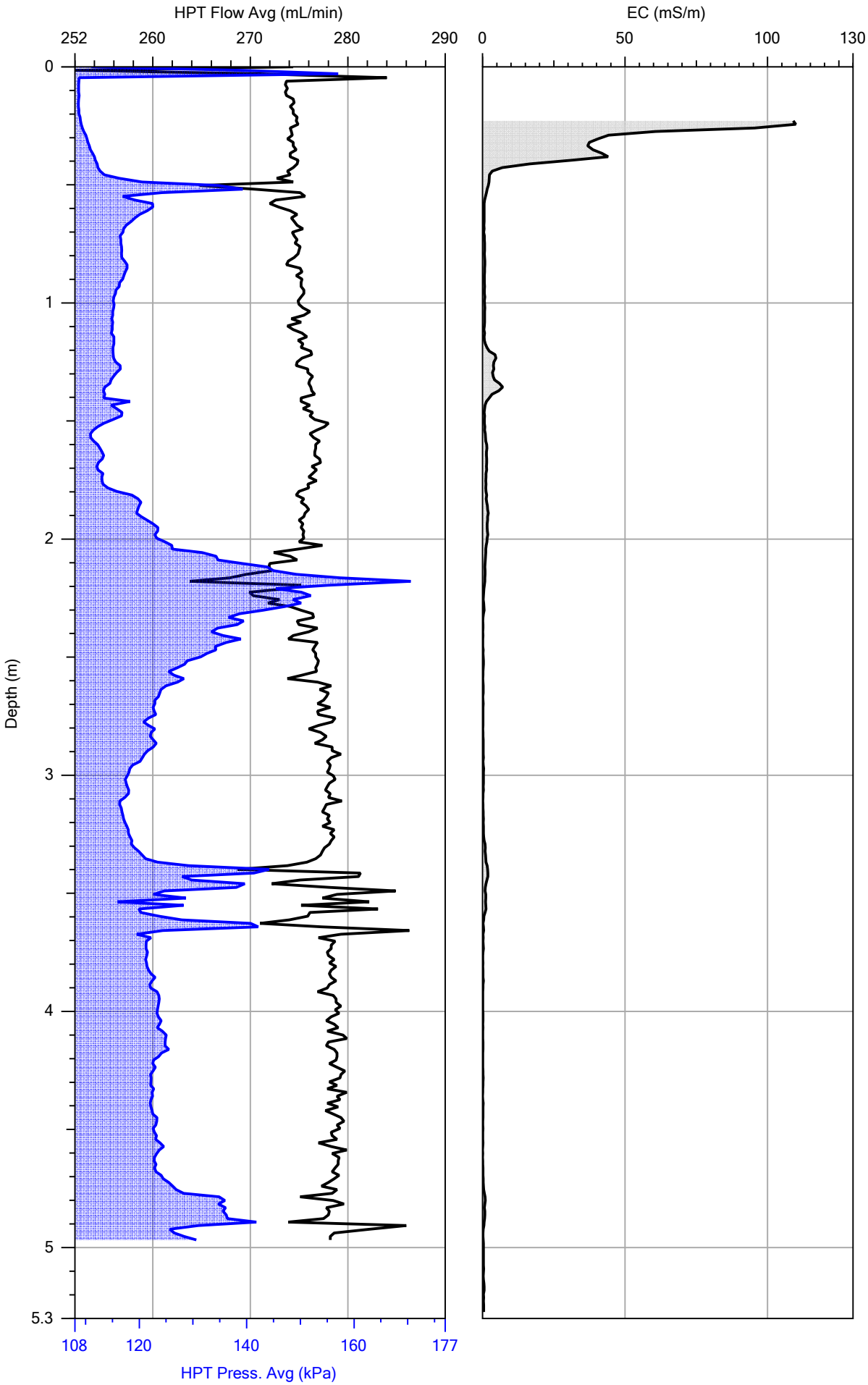
		File: MIP010.MHP
Company: DHA - Randwick	Operator: ADU	Date: 17/06/20
Project ID: 610.30041	Client: SLR	Location:



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		File: MIP010.MHP
Company: DHA - Randwick	Operator: ADU	Date: 17/06/20
Project ID: 610.30041	Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.3	0.5	PASS
High	290.0	297.1	2.5	PASS

MIP010.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA - Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP010.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Wed Jun 17 2020 07:54:52

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Wed Jun 17 2020 08:00:27

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.727	0.0	108.430
TOP with FLOW>0	16.121	271.8	111.150
BOTTOM with FLOW=0	15.504	0.0	106.900
BOTTOM with FLOW>0	15.904	271.4	109.650

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840

LOG START TIME: Wed Jun 17 2020 08:05:43

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4
0.00	0.000	1	1	1	1

LOG END DEPTH: 16.55 ft (5.044 m)
LOG END TIME: Wed Jun 17 2020 08:48:43

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS 0.00 FEET
GPS Quality: None

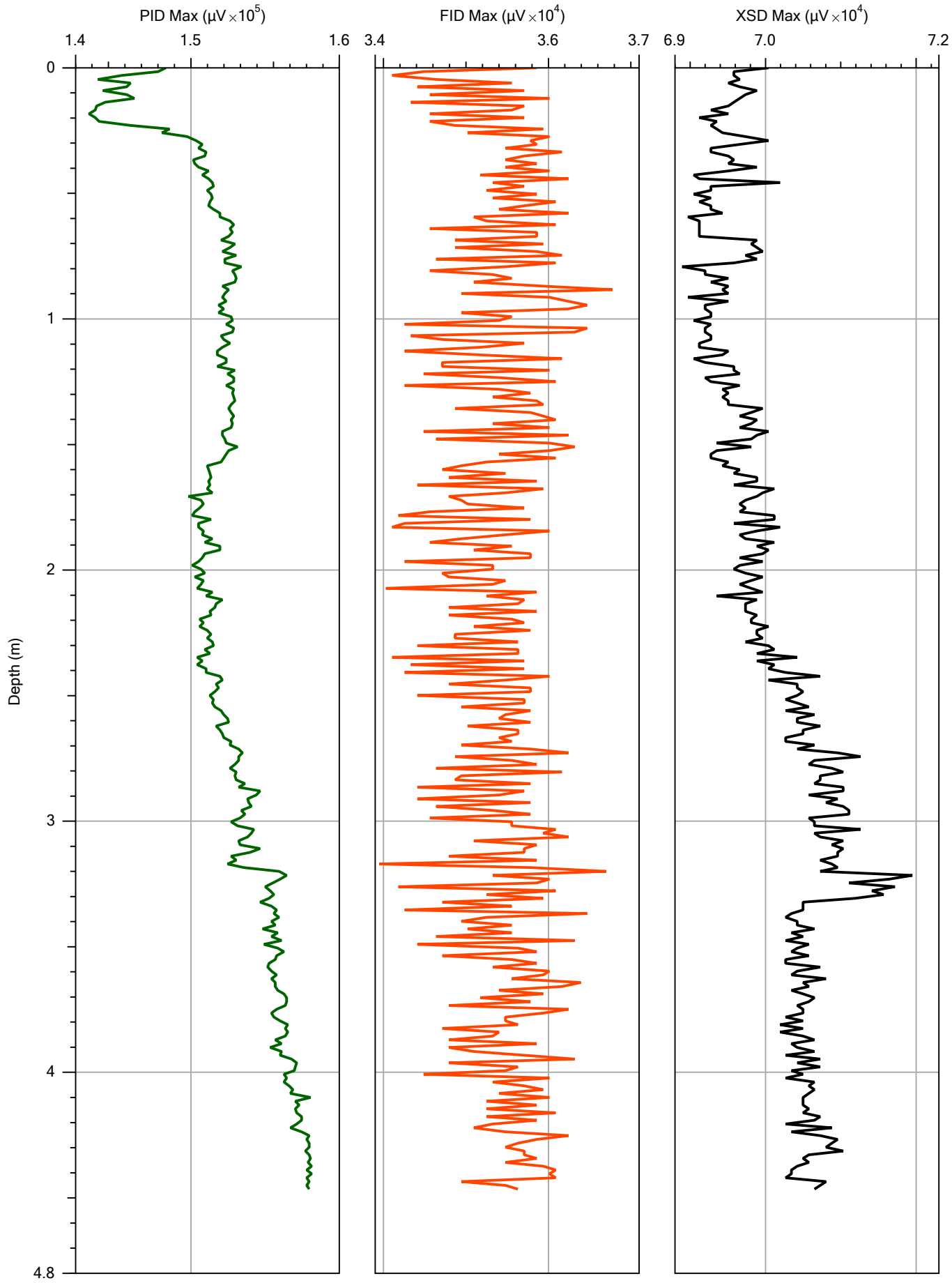
MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Wed Jun 17 2020 08:48:48

POST-LOG HPT REFERENCE TESTS BYPASSED

EC POST-LOG TESTS BYPASSED



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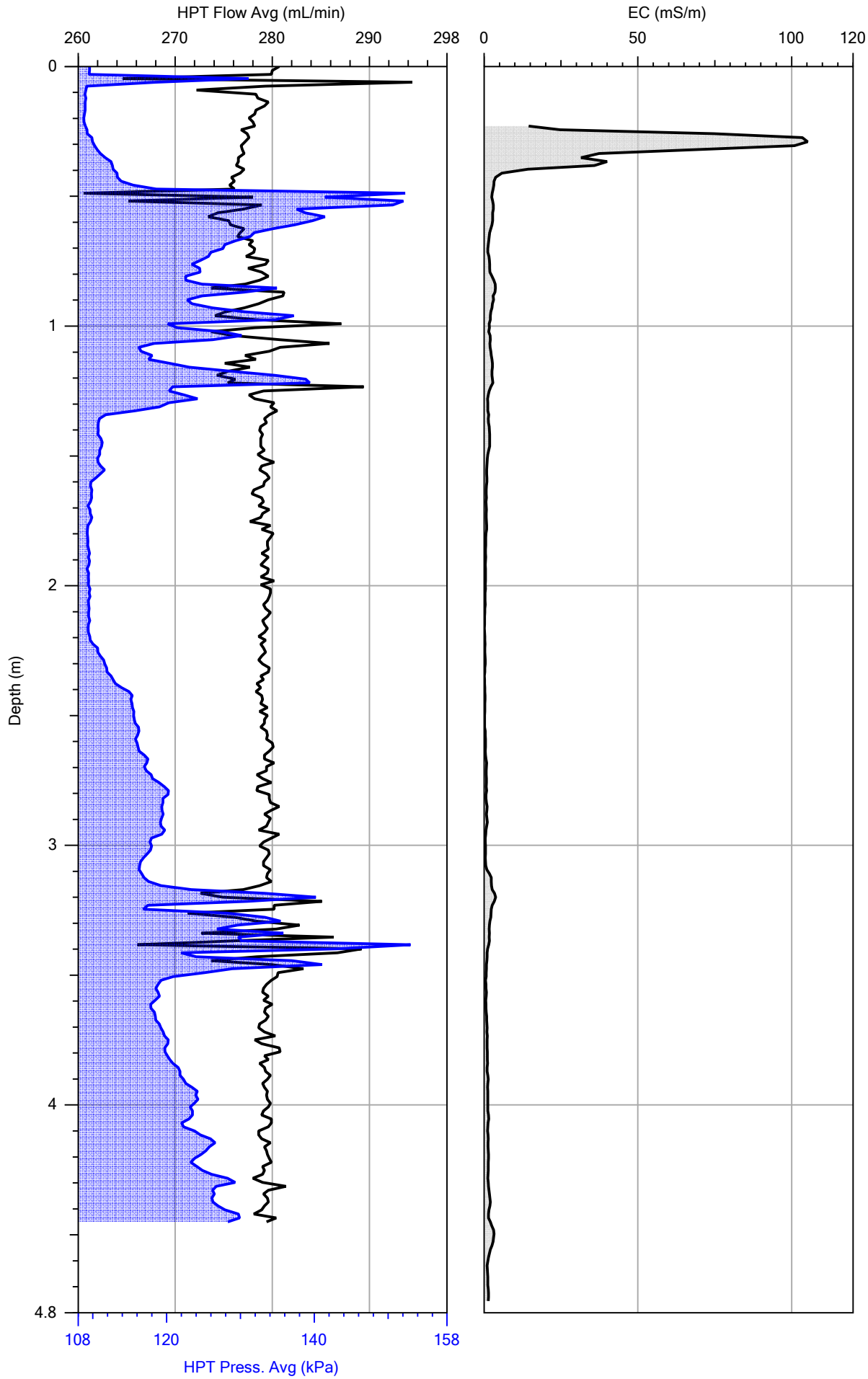
		File: MIP011.MHP
Company: DHA - Randwick	Operator: ADU	Date: 17/06/20
Project ID: 610.30041	Client: SLR	Location:



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		File: MIP011.MHP
Company: DHA - Randwick	Operator: ADU	Date: 17/06/20
Project ID: 610.30041	Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.5	0.8	PASS
High	290.0	297.2	2.5	PASS

MIP011.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA - Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP011.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Wed Jun 17 2020 09:31:39

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Wed Jun 17 2020 09:37:01

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.732	0.0	108.470
TOP with FLOW>0	16.193	279.7	111.650
BOTTOM with FLOW=0	15.513	0.0	106.960
BOTTOM with FLOW>0	15.981	279.0	110.180

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840

LOG START TIME: Wed Jun 17 2020 09:41:27

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4
0.00	0.000	1	1	1	1

LOG END DEPTH: 14.85 ft (4.526 m)
LOG END TIME: Wed Jun 17 2020 10:23:36

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS 0.00 FEET
GPS Quality: None

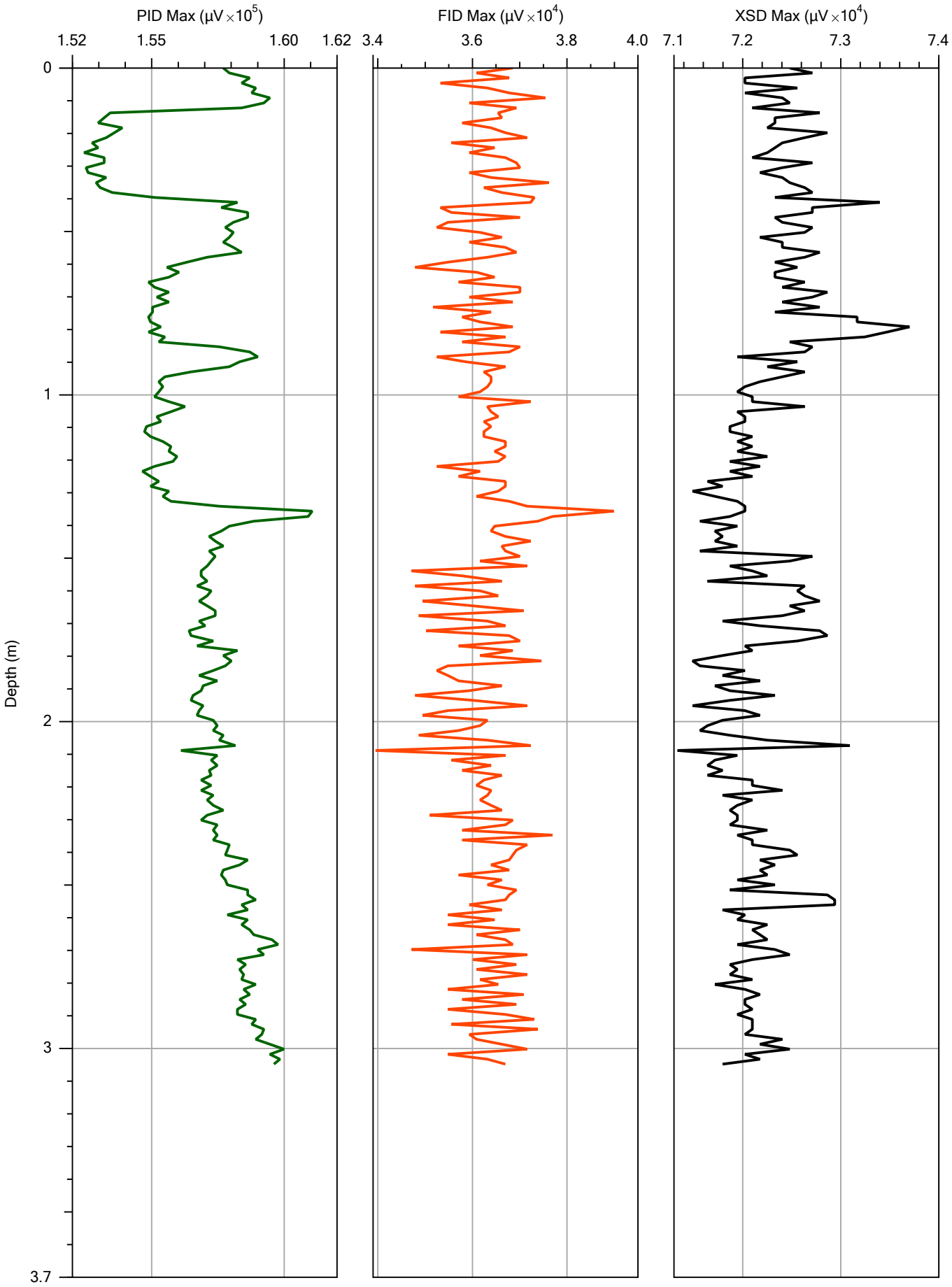
MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Wed Jun 17 2020 10:23:46

POST-LOG HPT REFERENCE TESTS BYPASSED

EC POST-LOG TESTS BYPASSED



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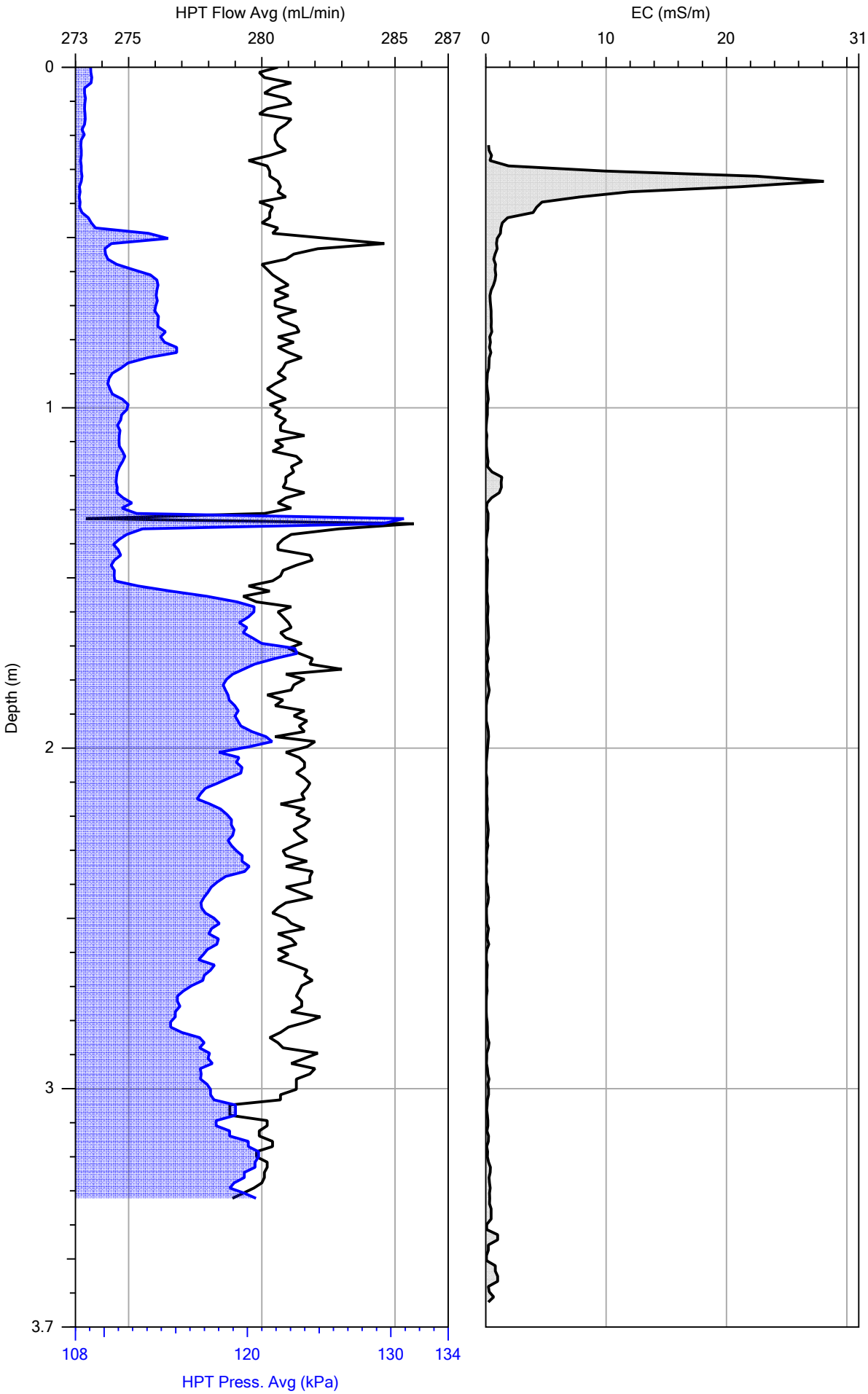
		File: MIP012.MHP
Company: DHA - Randwick	Operator: ADU	Date: 17/06/20
Project ID: 610.30041	Client: SLR	Location:



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		File: MIP012.MHP
Company: DHA - Randwick	Operator: ADU	Date: 17/06/20
Project ID: 610.30041	Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.9	1.6	PASS
High	290.0	296.9	2.4	PASS

MIP012.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA - Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP012.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Wed Jun 17 2020 11:12:55

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Wed Jun 17 2020 11:18:19

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.689	0.0	108.170
TOP with FLOW>0	16.172	279.8	111.500
BOTTOM with FLOW=0	15.466	0.0	106.630
BOTTOM with FLOW>0	15.949	281.7	109.960

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840

LOG START TIME: Wed Jun 17 2020 11:20:47

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4
0.00	0.000	1	1	1	1

LOG END DEPTH: 11.15 ft (3.399 m)
LOG END TIME: Wed Jun 17 2020 11:44:43

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS 0.00 FEET
GPS Quality: None

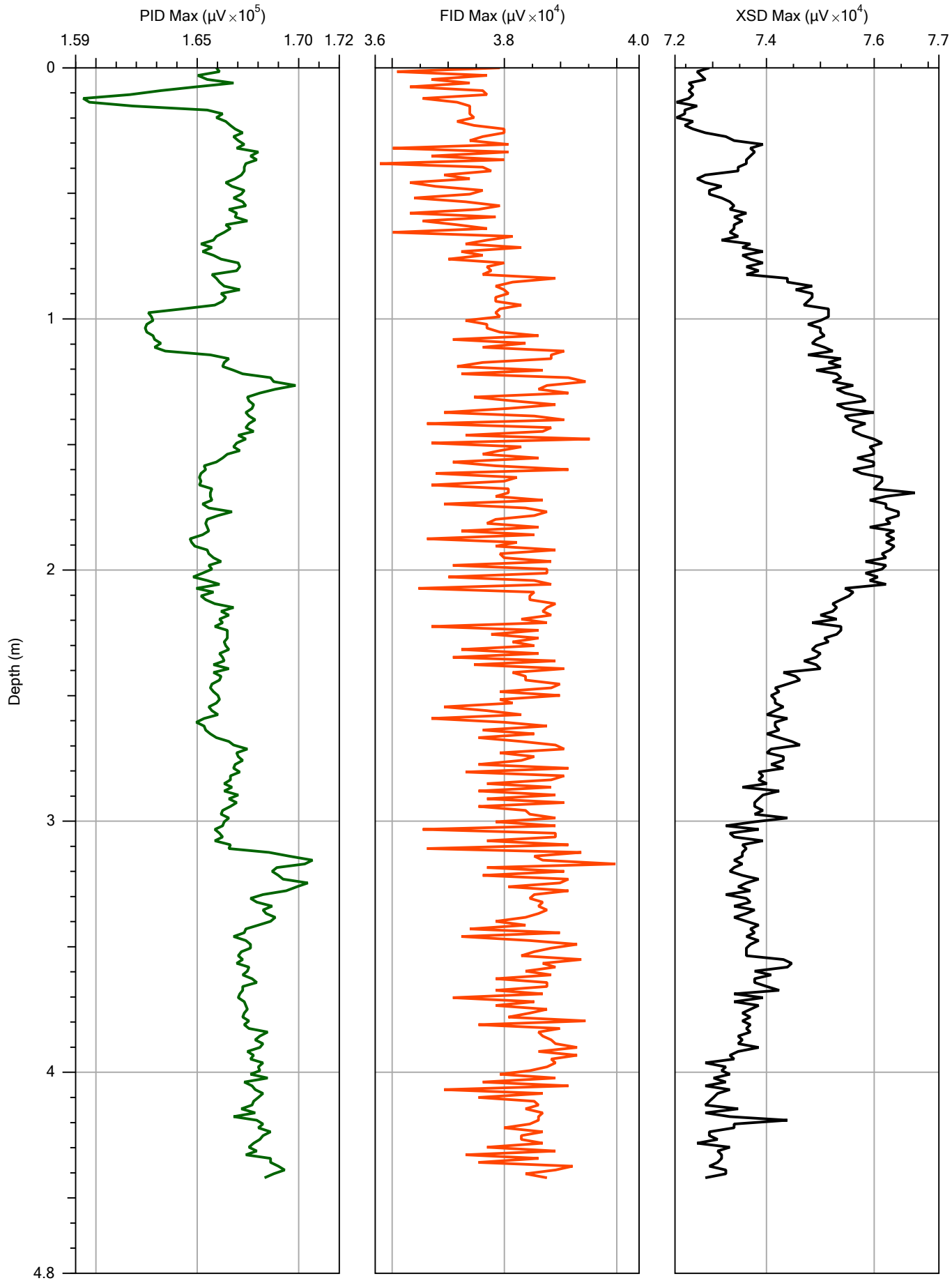
MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Wed Jun 17 2020 11:44:51

POST-LOG HPT REFERENCE TESTS BYPASSED

EC POST-LOG TESTS BYPASSED



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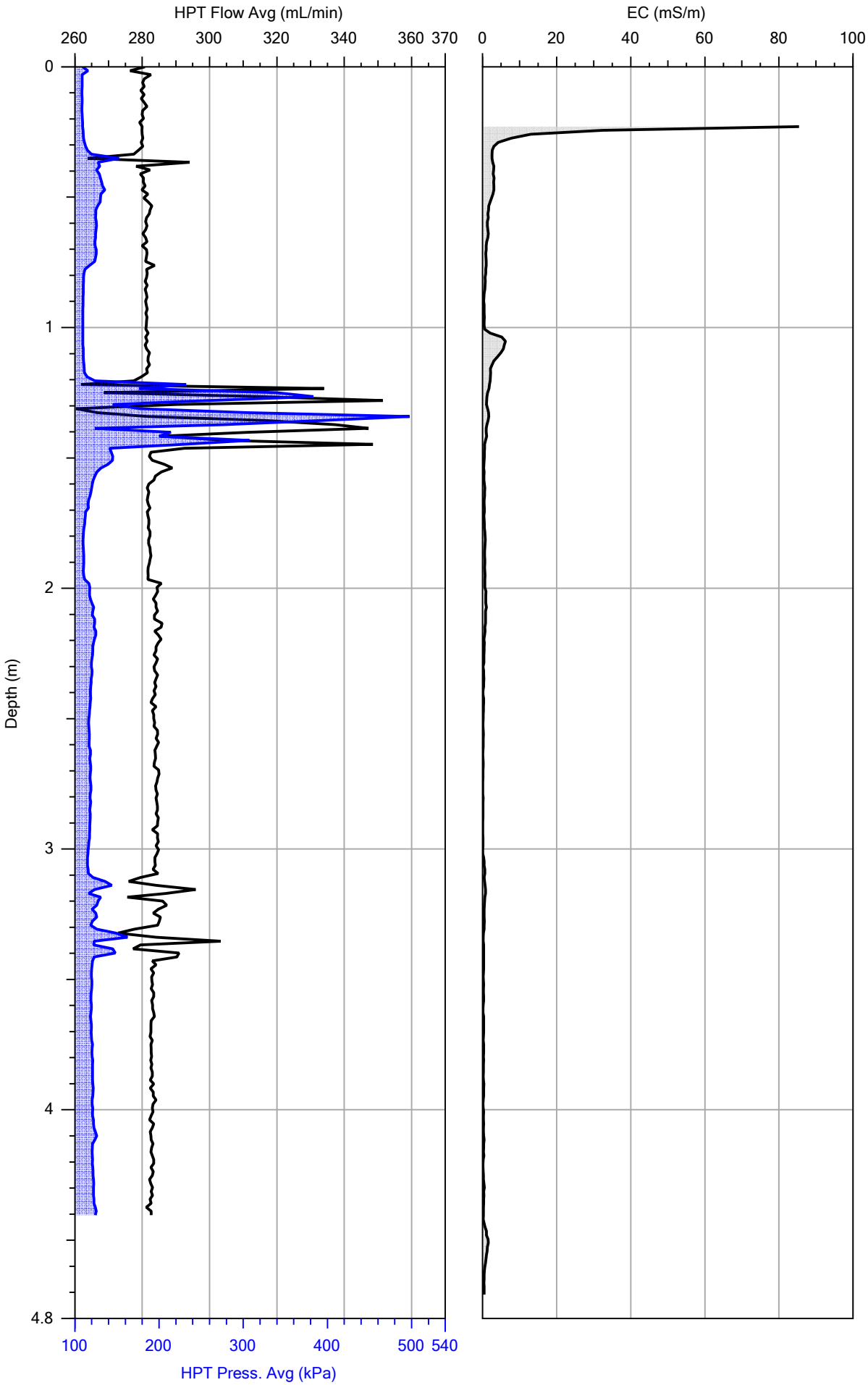
		File: MIP013.MHP
Company: DHA - Randwick	Operator: ADU	Date: 17/06/20
Project ID: 610.30041	Client: SLR	Location:



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		File: MIP013.MHP
Company: DHA - Randwick	Operator: ADU	Date: 17/06/20
Project ID: 610.30041	Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	54.9	0.2	PASS
High	290.0	297.1	2.5	PASS

MIP013.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA - Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP013.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Wed Jun 17 2020 12:19:15

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Wed Jun 17 2020 12:27:40

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.696	0.0	108.220
TOP with FLOW>0	16.104	281.8	111.030
BOTTOM with FLOW=0	15.485	0.0	106.760
BOTTOM with FLOW>0	15.891	280.9	109.560

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.21 psi (1.5 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840

LOG START TIME: Wed Jun 17 2020 12:33:39

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4
0.00	0.000	1	1	1	1

LOG END DEPTH: 14.70 ft (4.481 m)
LOG END TIME: Wed Jun 17 2020 13:13:35

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS 0.00 FEET
GPS Quality: None

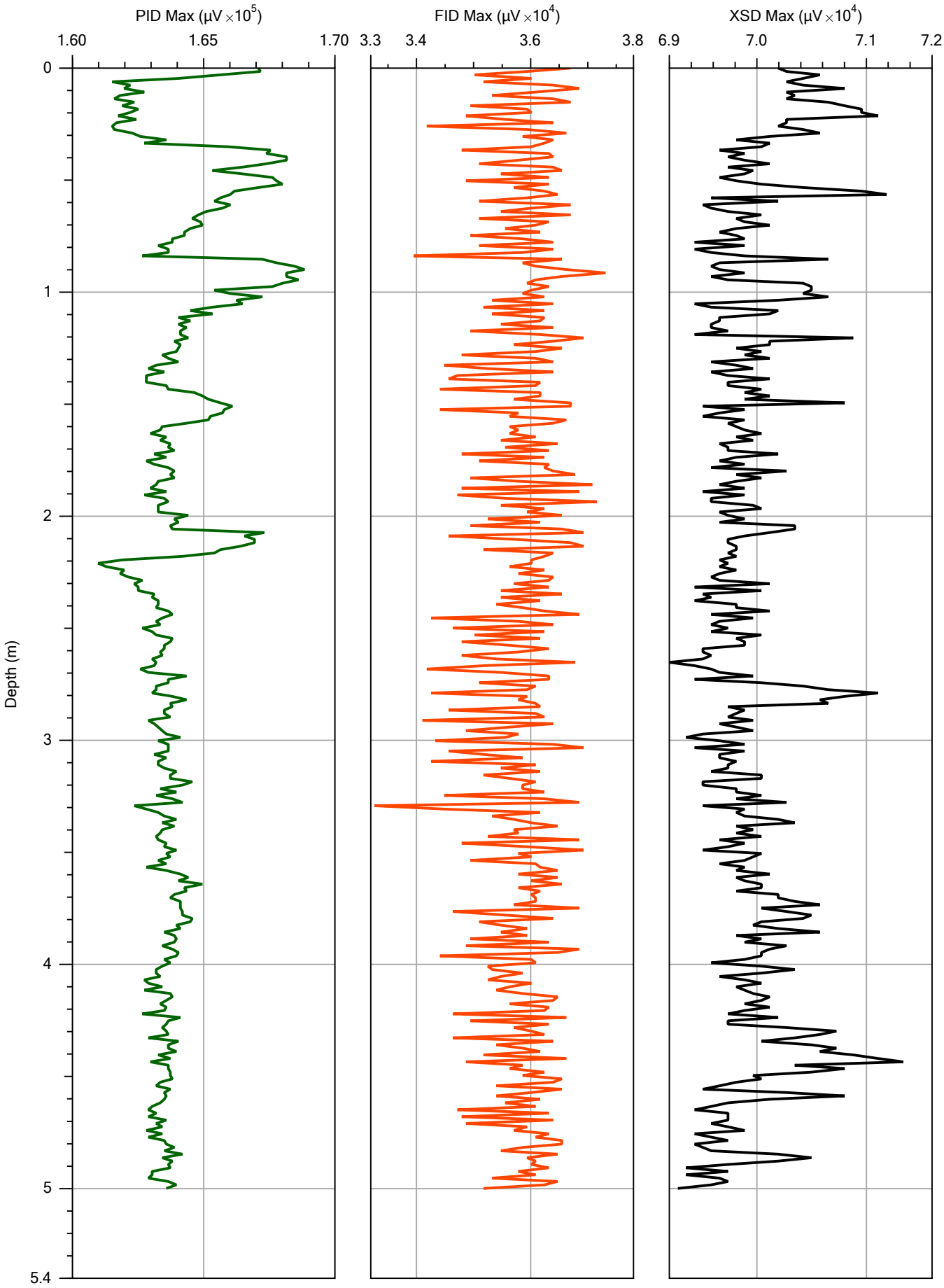
MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Wed Jun 17 2020 13:21:04

POST-LOG HPT REFERENCE TESTS BYPASSED

EC POST-LOG TESTS BYPASSED



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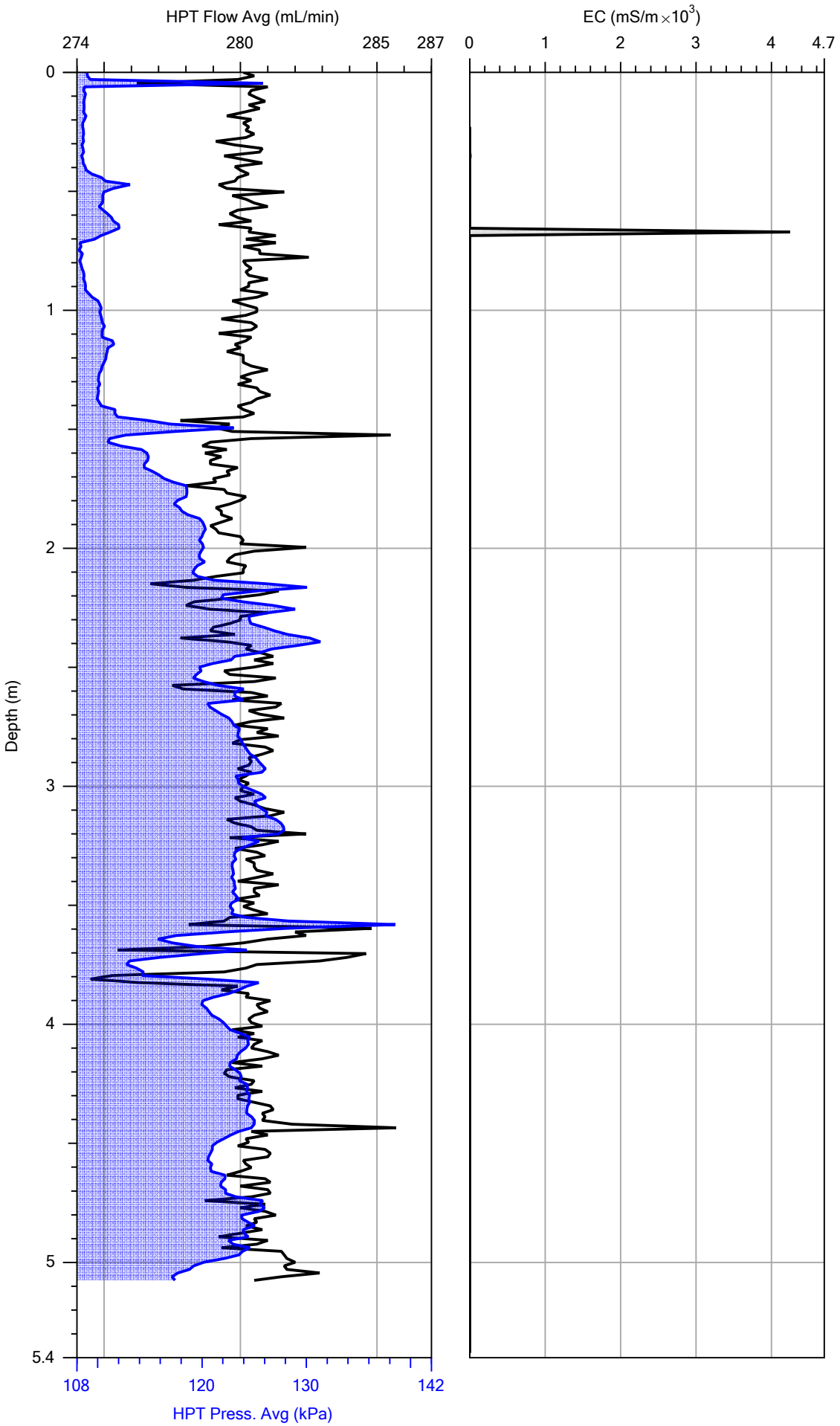
		File: MIP016.MHP
Company: DHA - Randwick	Operator: ADU	Date: 17/06/20
Project ID: 610.30041	Client: SLR	Location:



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		File: MIP016.MHP
Company: DHA - Randwick	Operator: ADU	Date: 17/06/20
Project ID: 610.30041	Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.3	0.5	PASS
High	290.0	296.1	2.1	PASS

MIP016.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA - Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP016.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Wed Jun 17 2020 15:19:56

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Wed Jun 17 2020 15:28:06

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.710	0.0	108.320
TOP with FLOW>0	16.072	279.3	110.820
BOTTOM with FLOW=0	15.489	0.0	106.790
BOTTOM with FLOW>0	15.848	279.7	109.270

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840

LOG START TIME: Wed Jun 17 2020 15:30:26

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4
0.00	0.000	1	1	1	1

LOG END DEPTH: 16.90 ft (5.151 m)
LOG END TIME: Wed Jun 17 2020 16:07:01

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS 0.00 FEET
GPS Quality: None

MIP POST-LOG RESPONSE TEST

FILENAME: MIP016.post.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Wed Jun 17 2020 16:38:45

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Wed Jun 17 2020 16:46:19

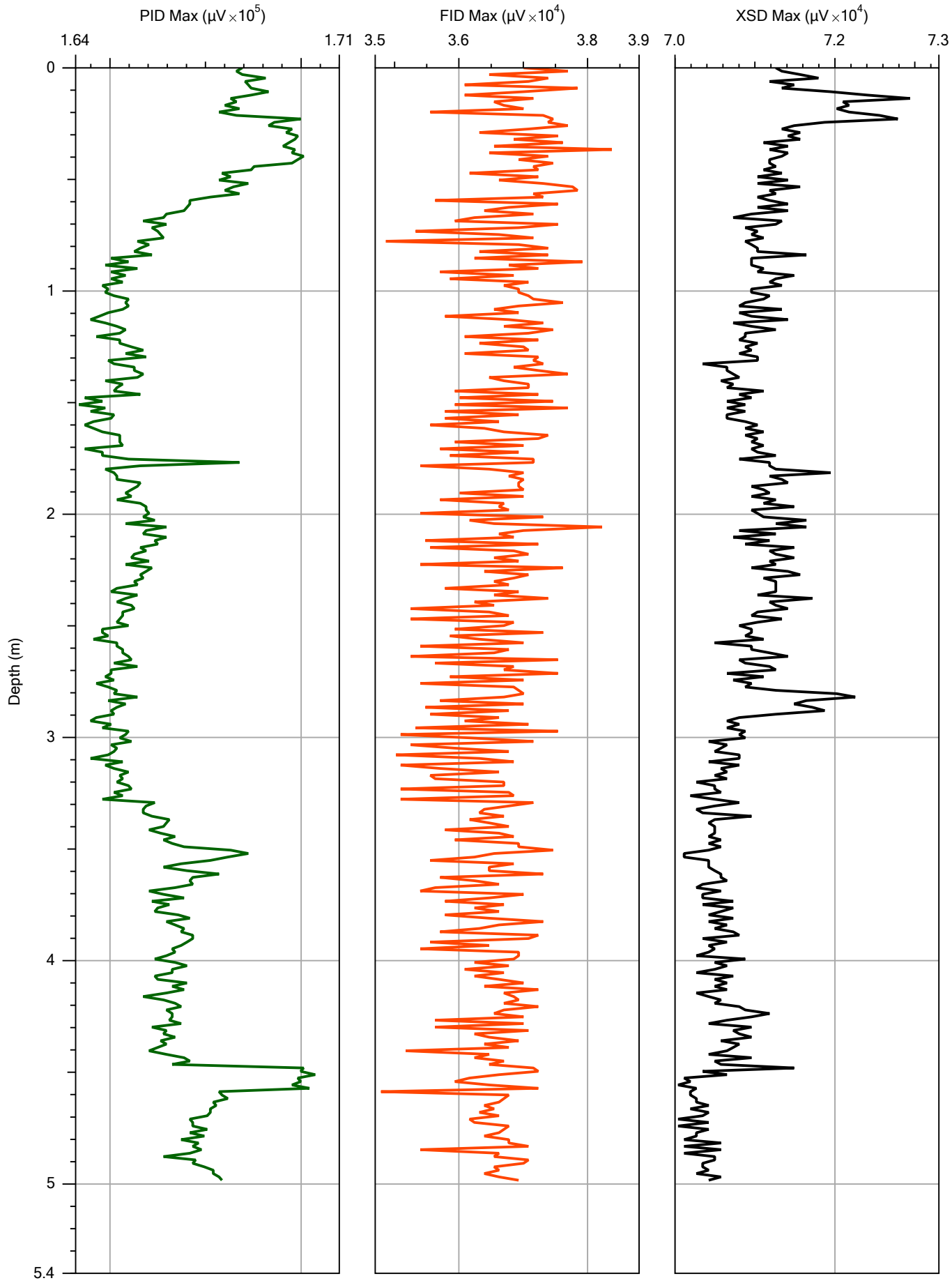
TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.693	0.0	108.200
TOP with FLOW>0	16.117	276.4	111.120
BOTTOM with FLOW=0	15.472	0.0	106.680
BOTTOM with FLOW>0	15.903	276.4	109.650

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

TRANSDUCER TEST PASSED

Post-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.4	0.7	PASS
High	290.0	296.5	2.2	PASS



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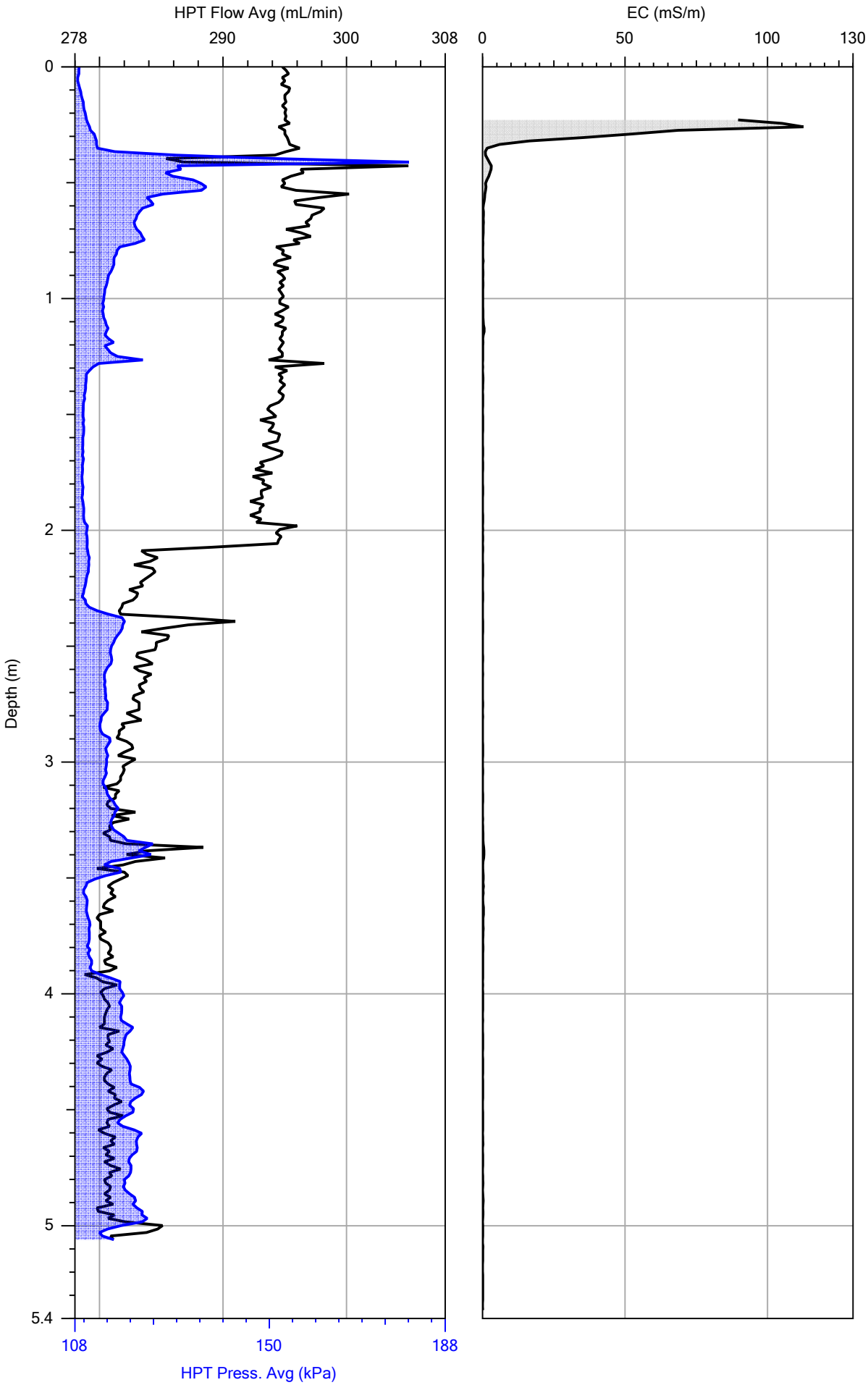
		File: MIP015.MHP
Company: DHA - Randwick	Operator: ADU	Date: 17/06/20
Project ID: 610.30041	Client: SLR	Location:



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		File: MIP015.MHP
Company: DHA - Randwick	Operator: ADU	Date: 17/06/20
Project ID: 610.30041	Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.5	1.0	PASS
High	290.0	297.3	2.5	PASS

MIP015.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA - Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP015.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Wed Jun 17 2020 14:11:42

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Wed Jun 17 2020 14:16:35

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.678	0.0	108.100
TOP with FLOW>0	16.098	291.1	110.990
BOTTOM with FLOW=0	15.454	0.0	106.550
BOTTOM with FLOW>0	15.882	288.5	109.510

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840

LOG START TIME: Wed Jun 17 2020 14:19:22

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4
0.00	0.000	1	1	1	1

LOG END DEPTH: 16.85 ft (5.136 m)
LOG END TIME: Wed Jun 17 2020 15:05:25

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS 0.00 FEET
GPS Quality: None

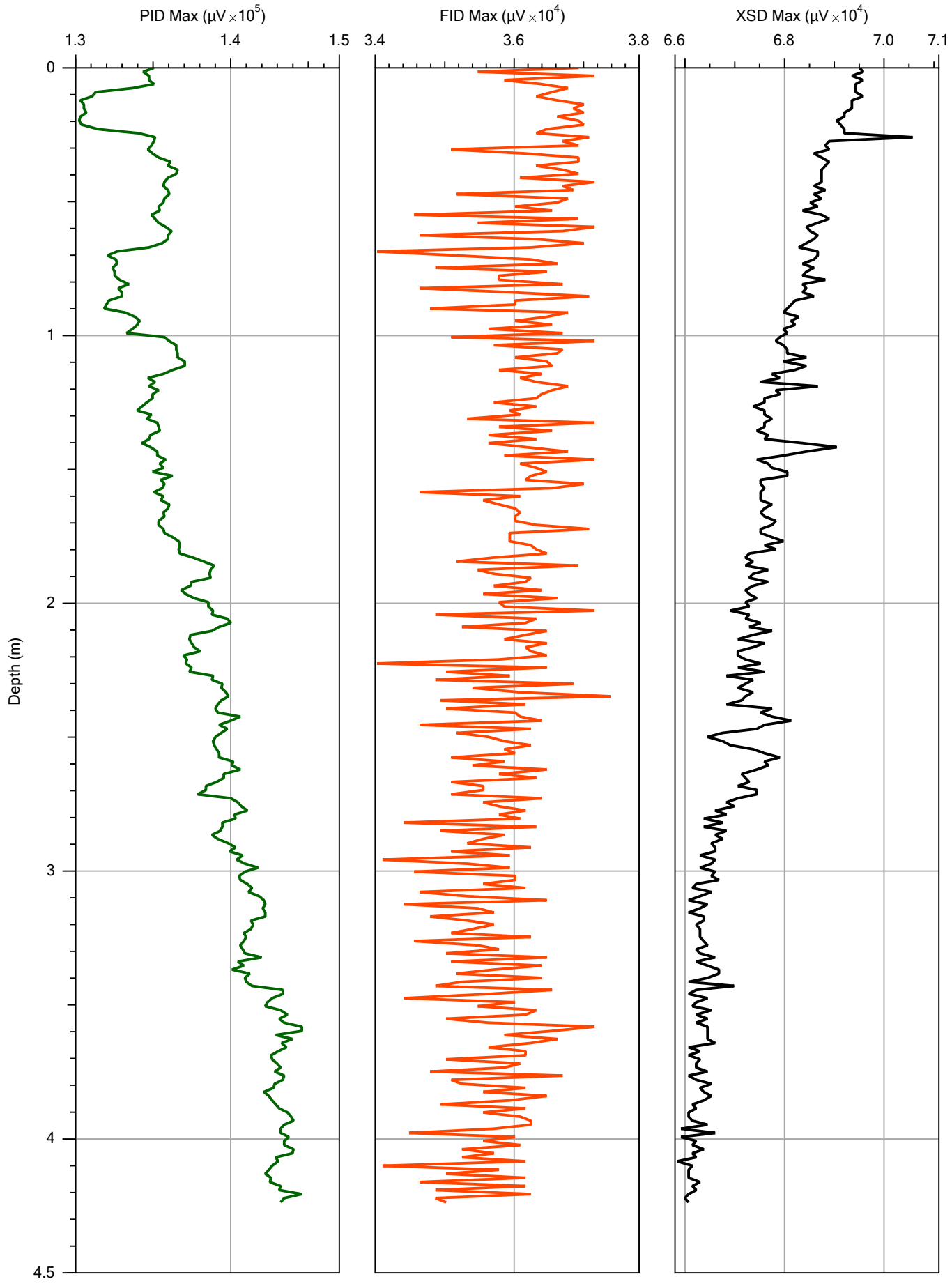
MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Wed Jun 17 2020 15:05:31

POST-LOG HPT REFERENCE TESTS BYPASSED

EC POST-LOG TESTS BYPASSED



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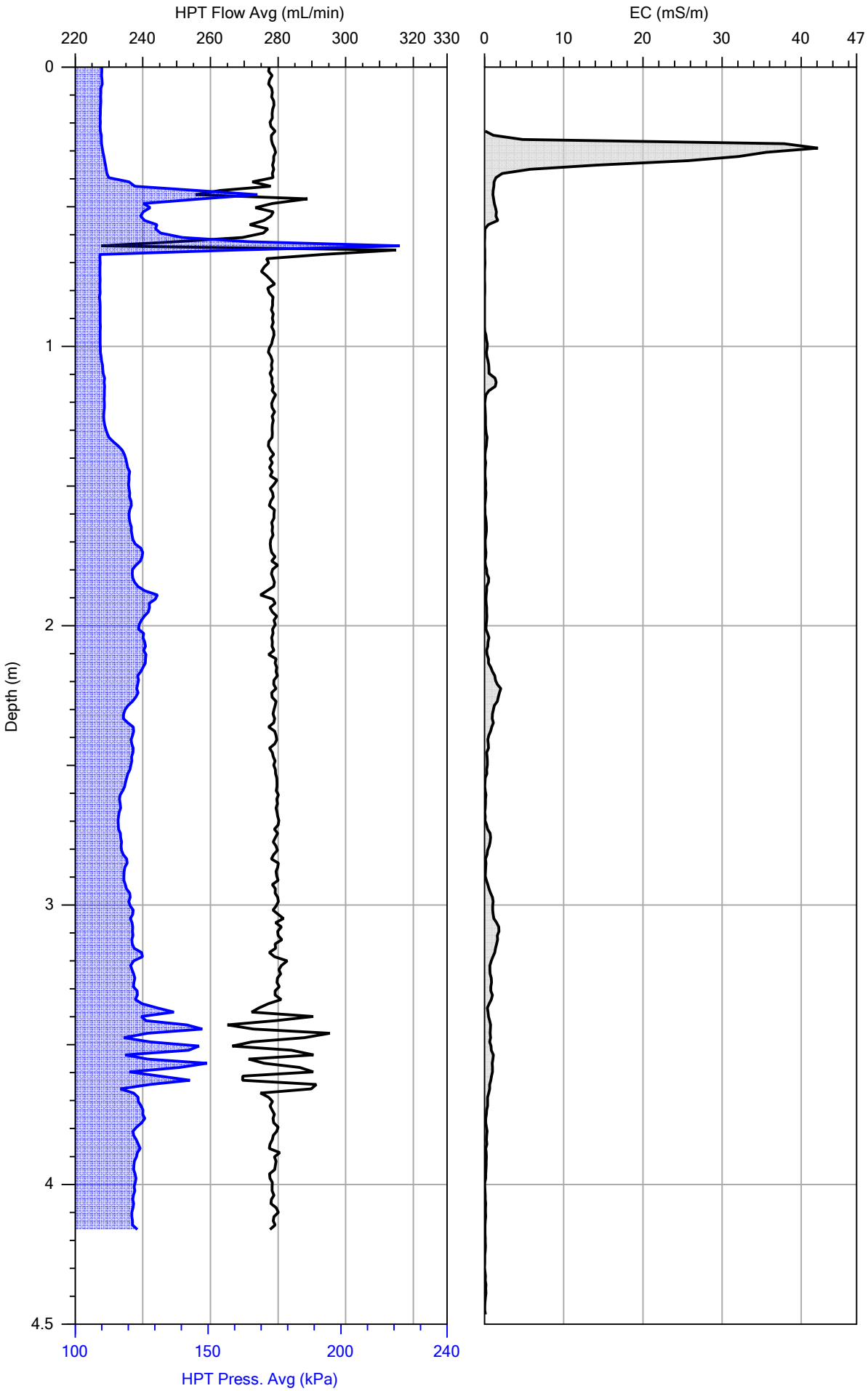
		File: MIP014.MHP
Company: DHA - Randwick	Operator: ADU	Date: 18/06/20
Project ID: 610.30041	Client: SLR	Location:



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		File: MIP014.MHP
Company: DHA - Randwick	Operator: ADU	Date: 18/06/20
Project ID: 610.30041	Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.6	1.2	PASS
High	290.0	295.9	2.0	PASS

MIP014.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA - Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP014.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Thu Jun 18 2020 08:26:18

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Thu Jun 18 2020 08:37:22

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.794	0.0	108.900
TOP with FLOW>0	16.228	275.4	111.890
BOTTOM with FLOW=0	15.571	0.0	107.360
BOTTOM with FLOW>0	16.003	272.1	110.340

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840

LOG START TIME: Thu Jun 18 2020 08:47:40

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4
0.00	0.000	1	1	1	1

LOG END DEPTH: 13.90 ft (4.237 m)
LOG END TIME: Thu Jun 18 2020 09:18:52

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS 0.00 FEET
GPS Quality: None

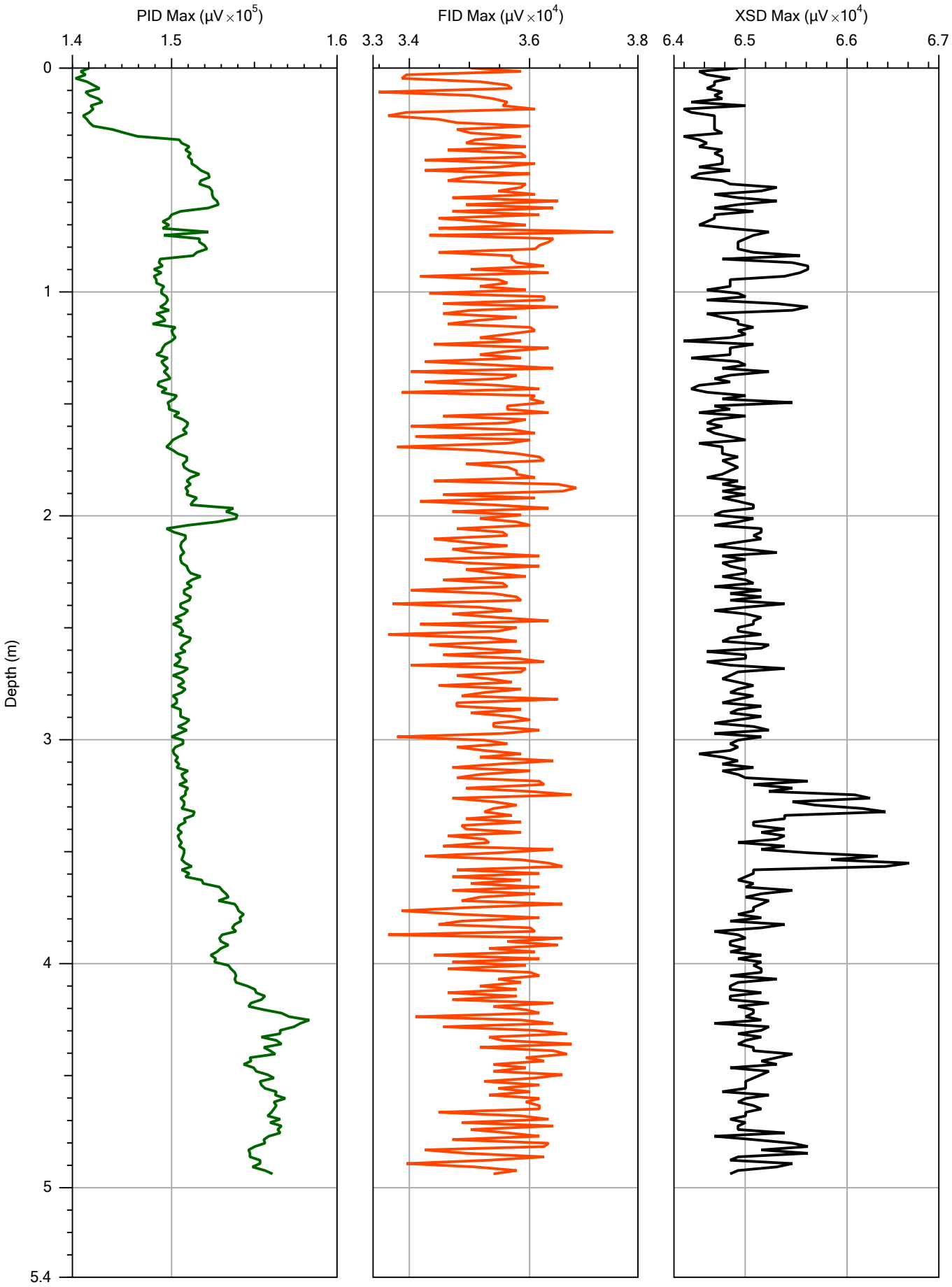
MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Thu Jun 18 2020 09:21:44

POST-LOG HPT REFERENCE TESTS BYPASSED

EC POST-LOG TESTS BYPASSED



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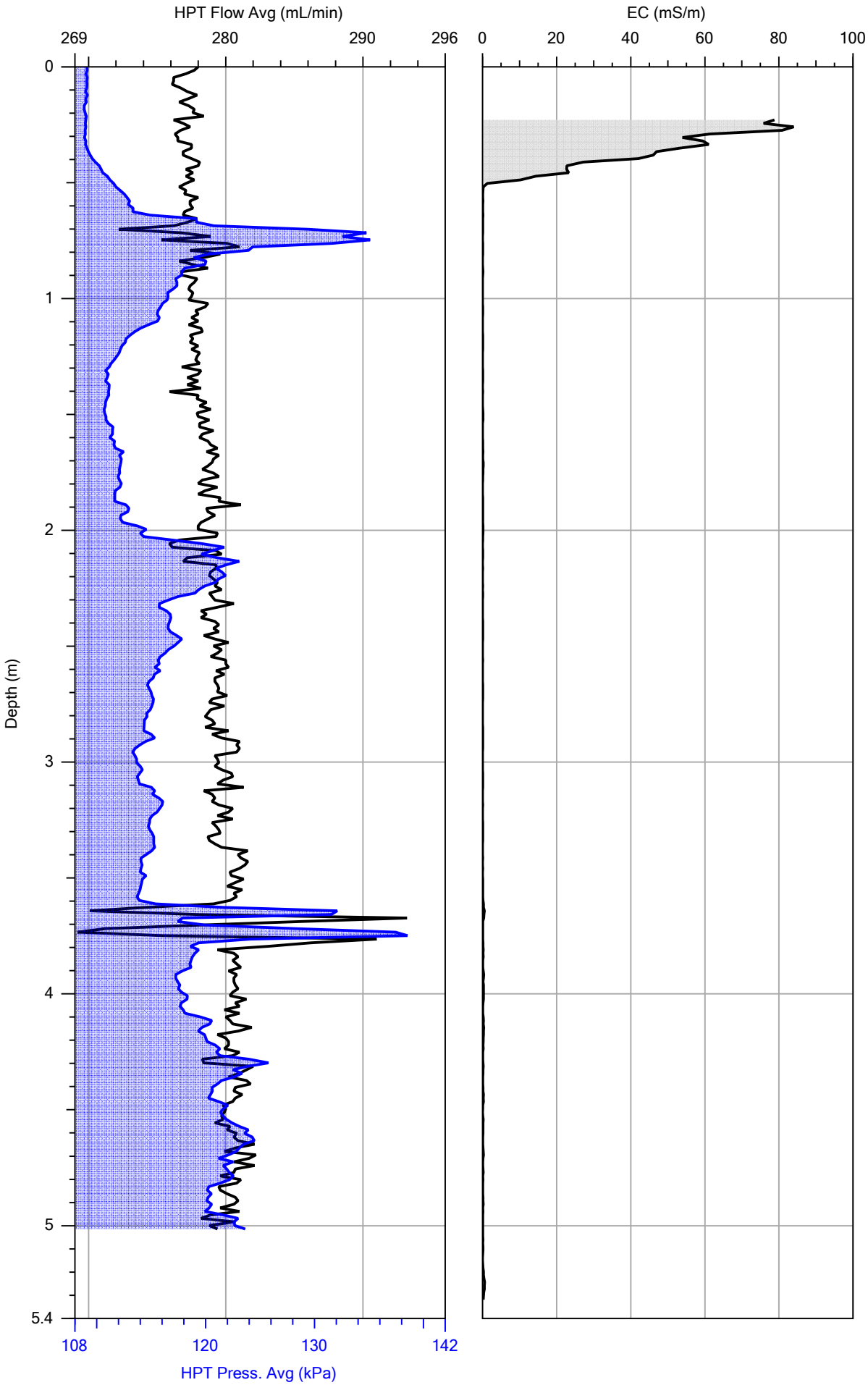
		File: MIP017.MHP
Company: DHA - Randwick	Operator: ADU	Date: 18/06/20
Project ID: 610.30041	Client:	Location:



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		File: MIP017.MHP
Company: DHA - Randwick	Operator: ADU	Date: 18/06/20
Project ID: 610.30041	Client:	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.0	0.0	PASS
High	290.0	295.7	2.0	PASS

MIP017.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA - Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP017.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Thu Jun 18 2020 14:53:24

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Thu Jun 18 2020 15:05:35

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.742	0.0	108.530
TOP with FLOW>0	16.215	274.7	111.800
BOTTOM with FLOW=0	15.525	0.0	107.040
BOTTOM with FLOW>0	15.989	275.1	110.240

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840

Temperature out of range (79.8 deg C) at 0.00 ft (0.000 m)

LOG START TIME: Thu Jun 18 2020 15:10:28

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4
0.00	0.000	1	1	1	1

LOG END DEPTH: 16.70 ft (5.090 m)
LOG END TIME: Thu Jun 18 2020 15:54:41

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS 0.00 FEET
GPS Quality: None

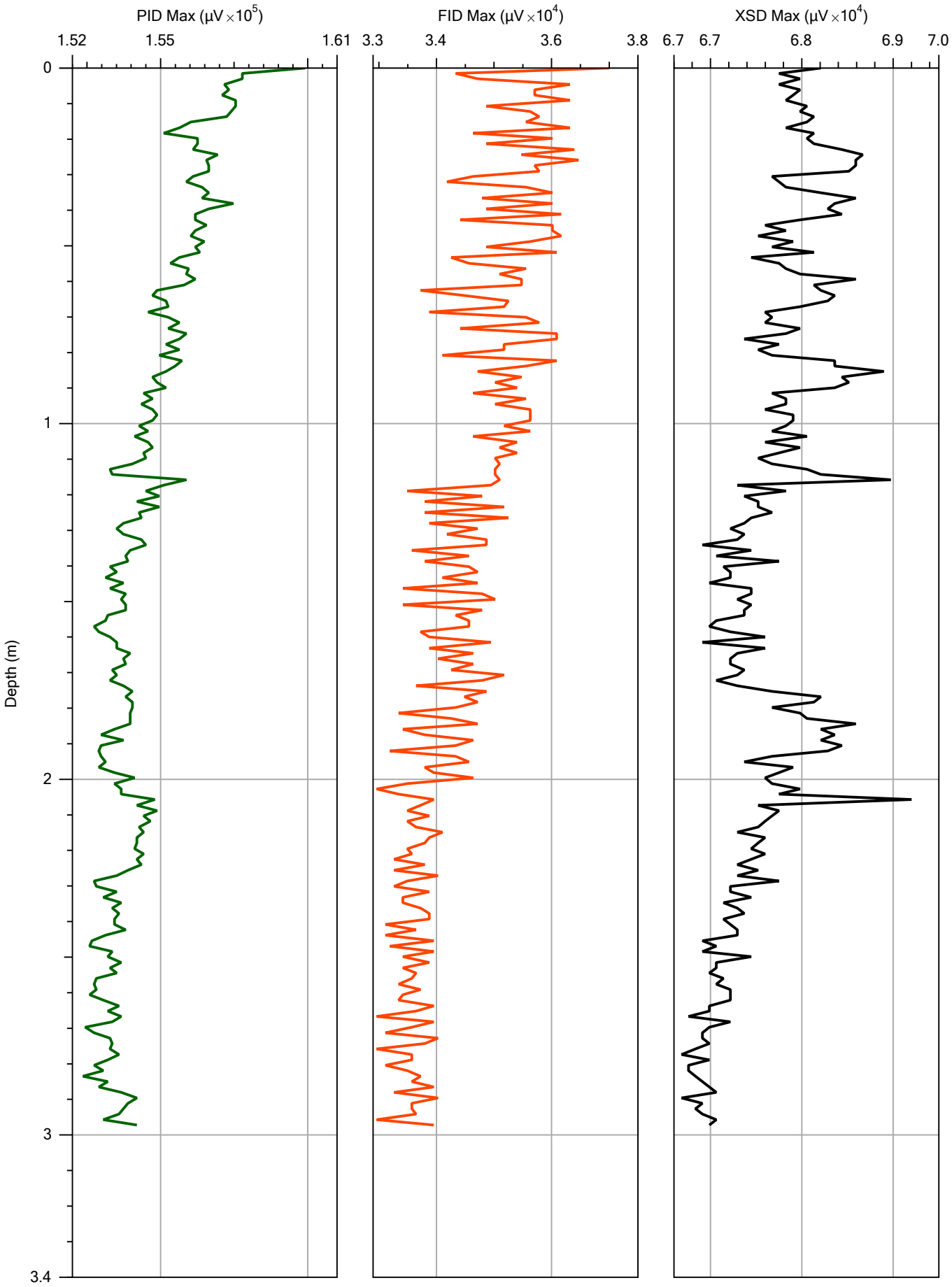
MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Thu Jun 18 2020 15:54:45

POST-LOG HPT REFERENCE TESTS BYPASSED

EC POST-LOG TESTS BYPASSED



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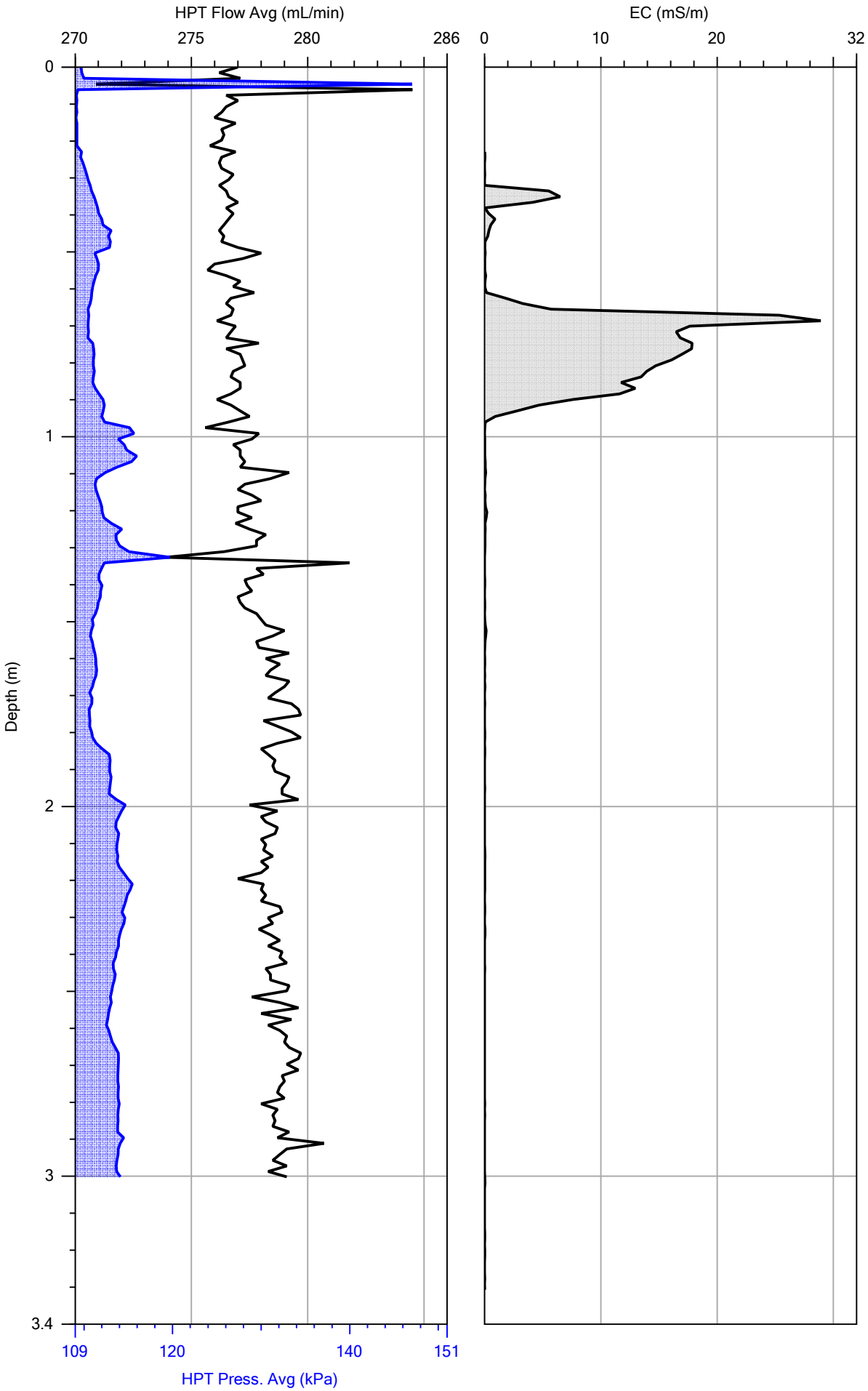
		File: MIP018.MHP
Company: DHA-Randwick	Operator: ADU	Date: 19/06/20
Project ID: 610.30041	Client: SLR	Location:



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		File: MIP018.MHP
Company: DHA-Randwick	Operator: ADU	Date: 19/06/20
Project ID: 610.30041	Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.6	1.1	PASS
High	290.0	297.1	2.4	PASS

MIP018.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA-Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP018.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Fri Jun 19 2020 10:37:54

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Fri Jun 19 2020 10:42:33

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.696	0.0	108.220
TOP with FLOW>0	16.212	276.1	111.780
BOTTOM with FLOW=0	15.478	0.0	106.720
BOTTOM with FLOW>0	15.984	276.5	110.210

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840

LOG START TIME: Fri Jun 19 2020 10:46:02

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4
0.00	0.000	1	1	1	1

LOG END DEPTH: 10.10 ft (3.078 m)
LOG END TIME: Fri Jun 19 2020 11:07:31

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS 0.00 FEET
GPS Quality: None

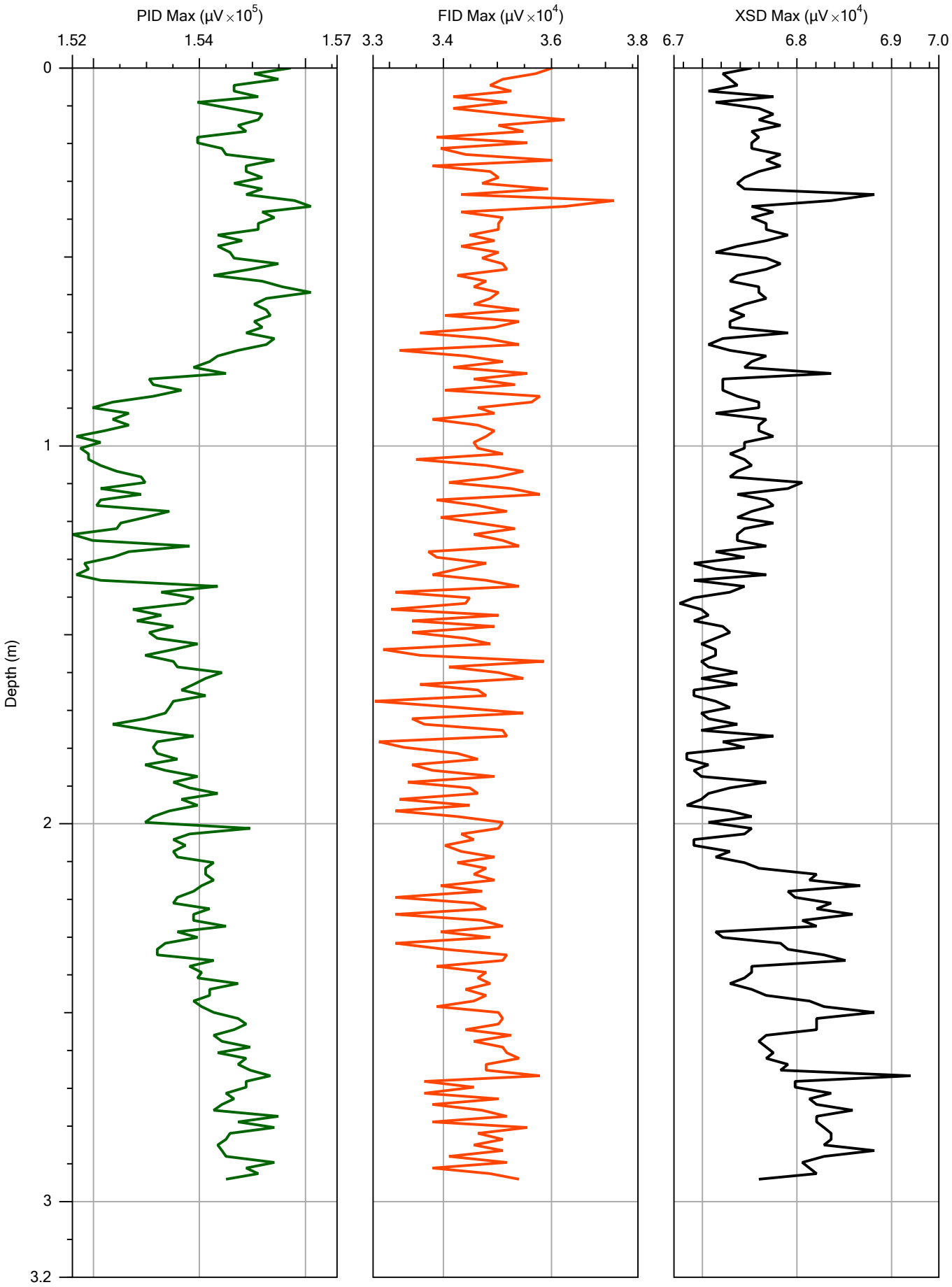
MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Fri Jun 19 2020 11:24:42

POST-LOG HPT REFERENCE TESTS BYPASSED

EC POST-LOG TESTS BYPASSED



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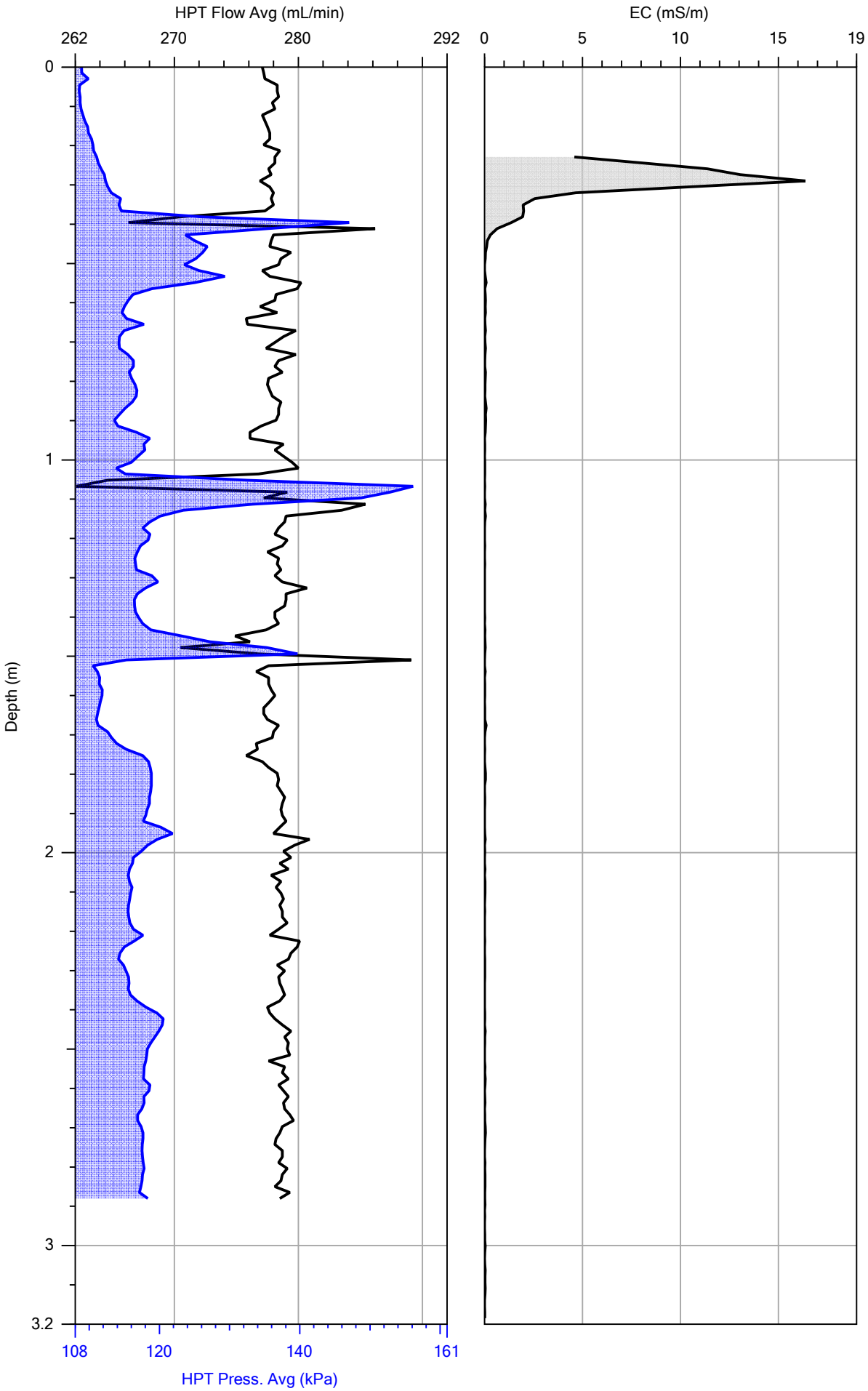
		File: MIP019.MHP
Company: DHA-Randwick	Operator: ADU	Date: 19/06/20
Project ID: 610.30041	Client: SLR	Location:



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		File: MIP019.MHP
Company: DHA-Randwick	Operator: ADU	Date: 19/06/20
Project ID: 610.30041	Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.8	1.4	PASS
High	290.0	296.6	2.3	PASS

MIP019.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA-Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP019.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Fri Jun 19 2020 11:37:59

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Fri Jun 19 2020 11:42:22

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.686	0.0	108.150
TOP with FLOW>0	16.174	276.5	111.520
BOTTOM with FLOW=0	15.468	0.0	106.650
BOTTOM with FLOW>0	15.957	276.0	110.020

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840

LOG START TIME: Fri Jun 19 2020 11:45:27

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4
0.00	0.000	1	1	1	1

LOG END DEPTH: 9.70 ft (2.957 m)
LOG END TIME: Fri Jun 19 2020 12:10:39

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS 0.00 FEET
GPS Quality: None

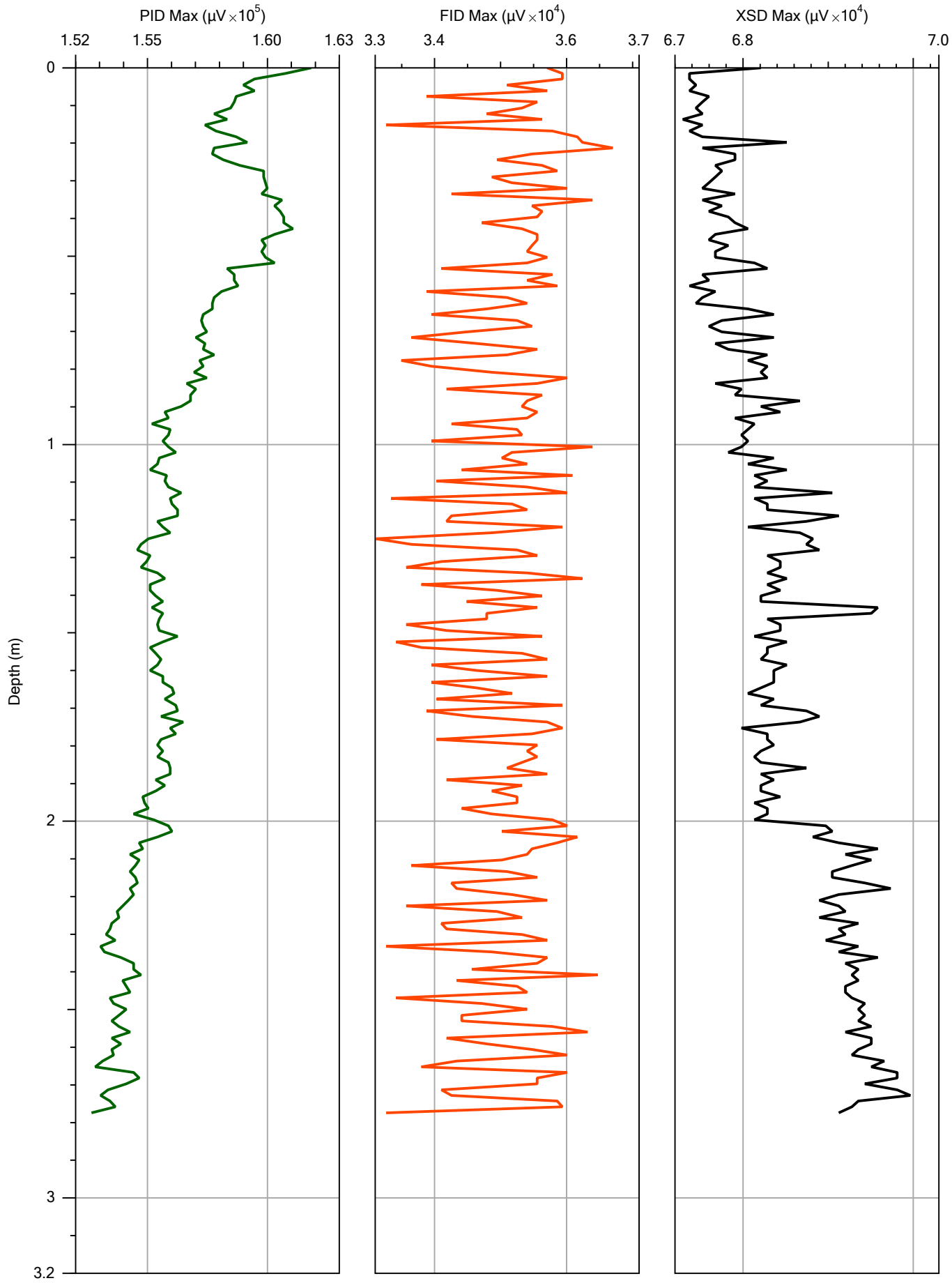
MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Fri Jun 19 2020 12:20:54

POST-LOG HPT REFERENCE TESTS BYPASSED

EC POST-LOG TESTS BYPASSED



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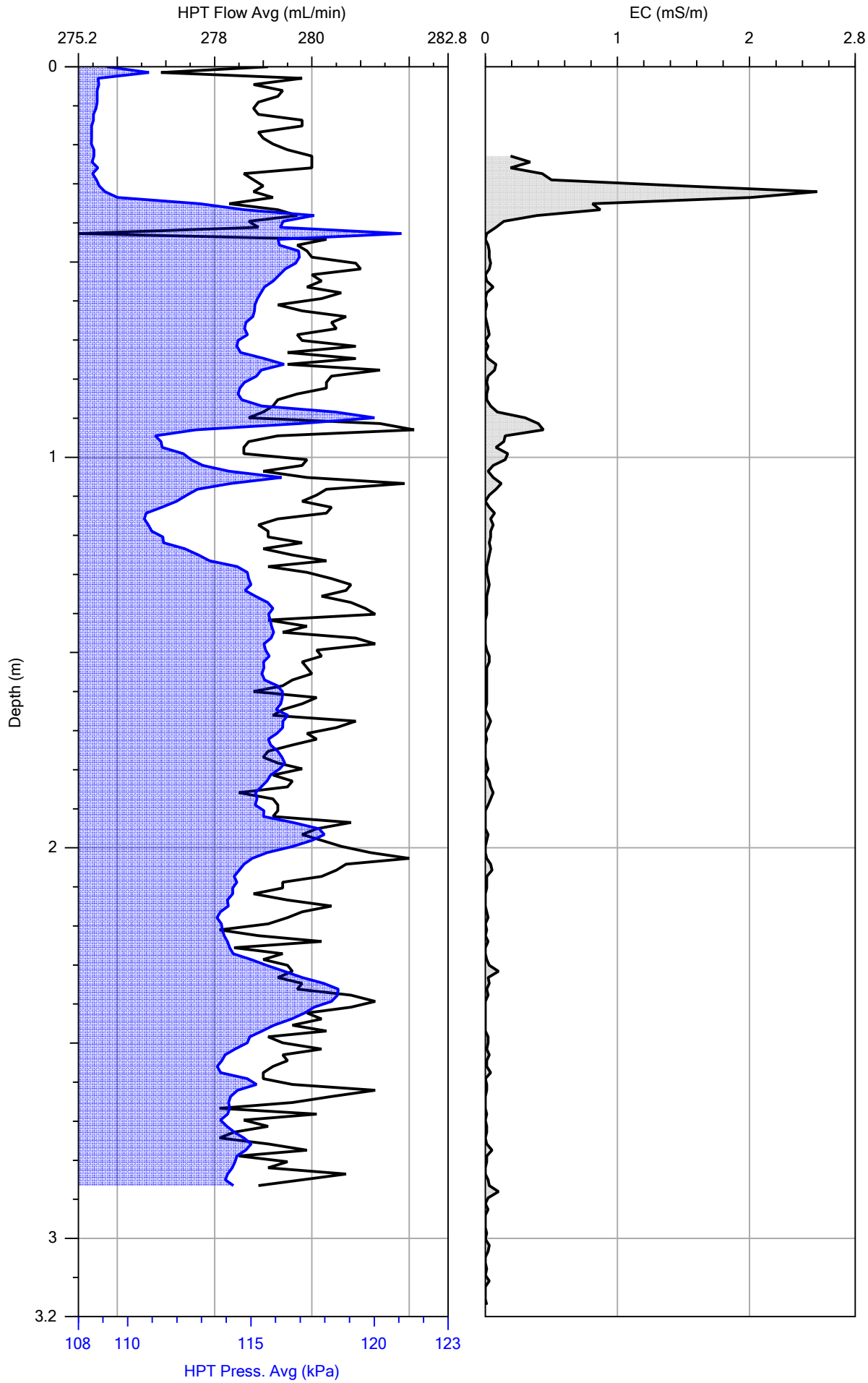
		File: MIP020.MHP
Company: DHA-Randwick	Operator: ADU	Date: 19/06/20
Project ID: 610.30041	Client: SLR	Location:



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		File: MIP020.MHP
Company: DHA-Randwick	Operator: ADU	Date: 19/06/20
Project ID: 610.30041	Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.1	0.1	PASS
High	290.0	289.5	0.2	PASS

MIP020.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA-Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP020.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Fri Jun 19 2020 12:23:51

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Fri Jun 19 2020 12:28:31

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.678	0.0	108.100
TOP with FLOW>0	16.122	279.1	111.160
BOTTOM with FLOW=0	15.460	0.0	106.590
BOTTOM with FLOW>0	15.901	278.9	109.630

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840

LOG START TIME: Fri Jun 19 2020 12:32:32

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4
0.00	0.000	1	1	1	1

LOG END DEPTH: 9.65 ft (2.941 m)
LOG END TIME: Fri Jun 19 2020 12:51:46

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS 0.00 FEET
GPS Quality: None

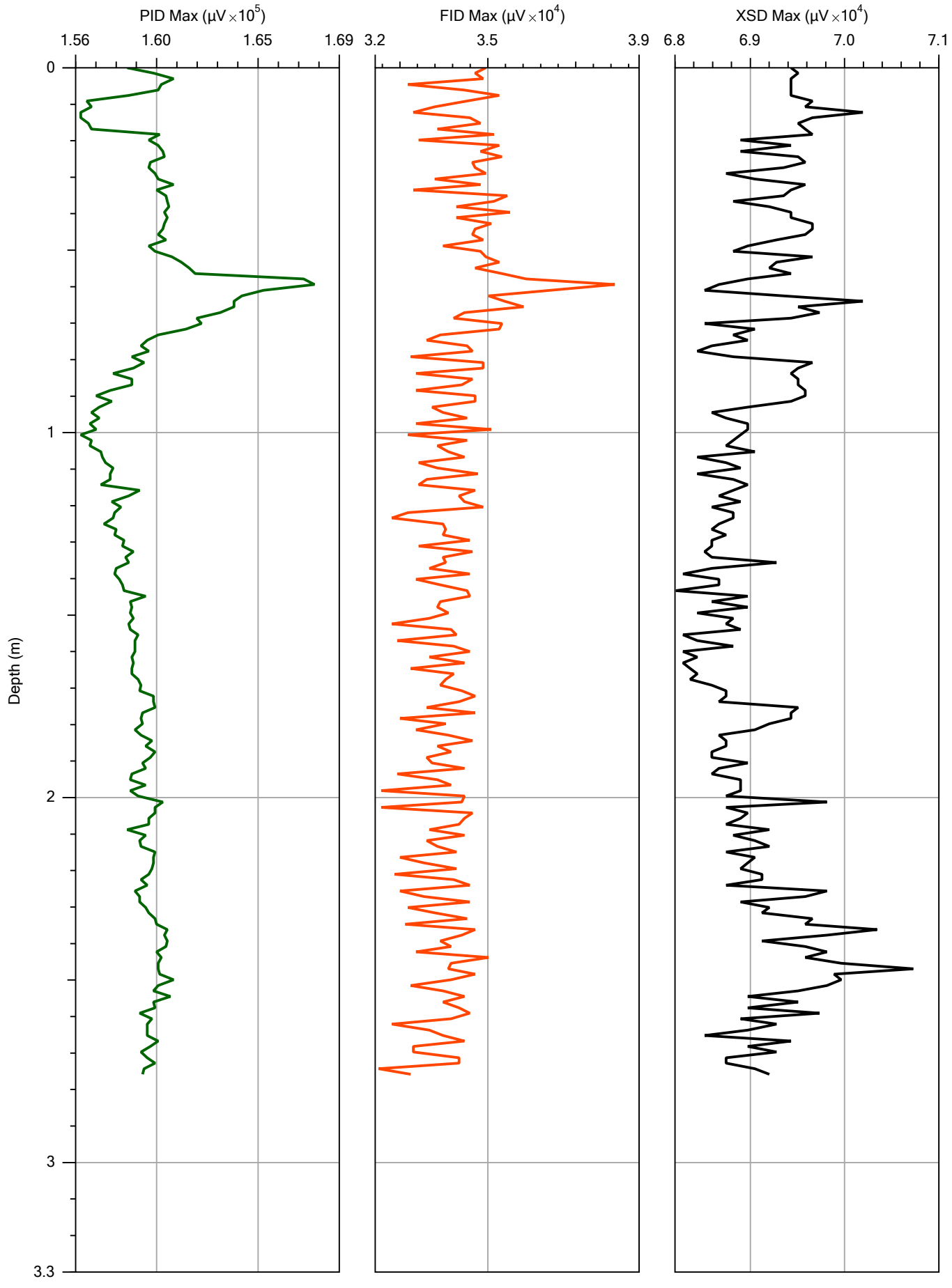
MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Fri Jun 19 2020 13:14:14

POST-LOG HPT REFERENCE TESTS BYPASSED

EC POST-LOG TESTS BYPASSED



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Ph. - 1300 131 019
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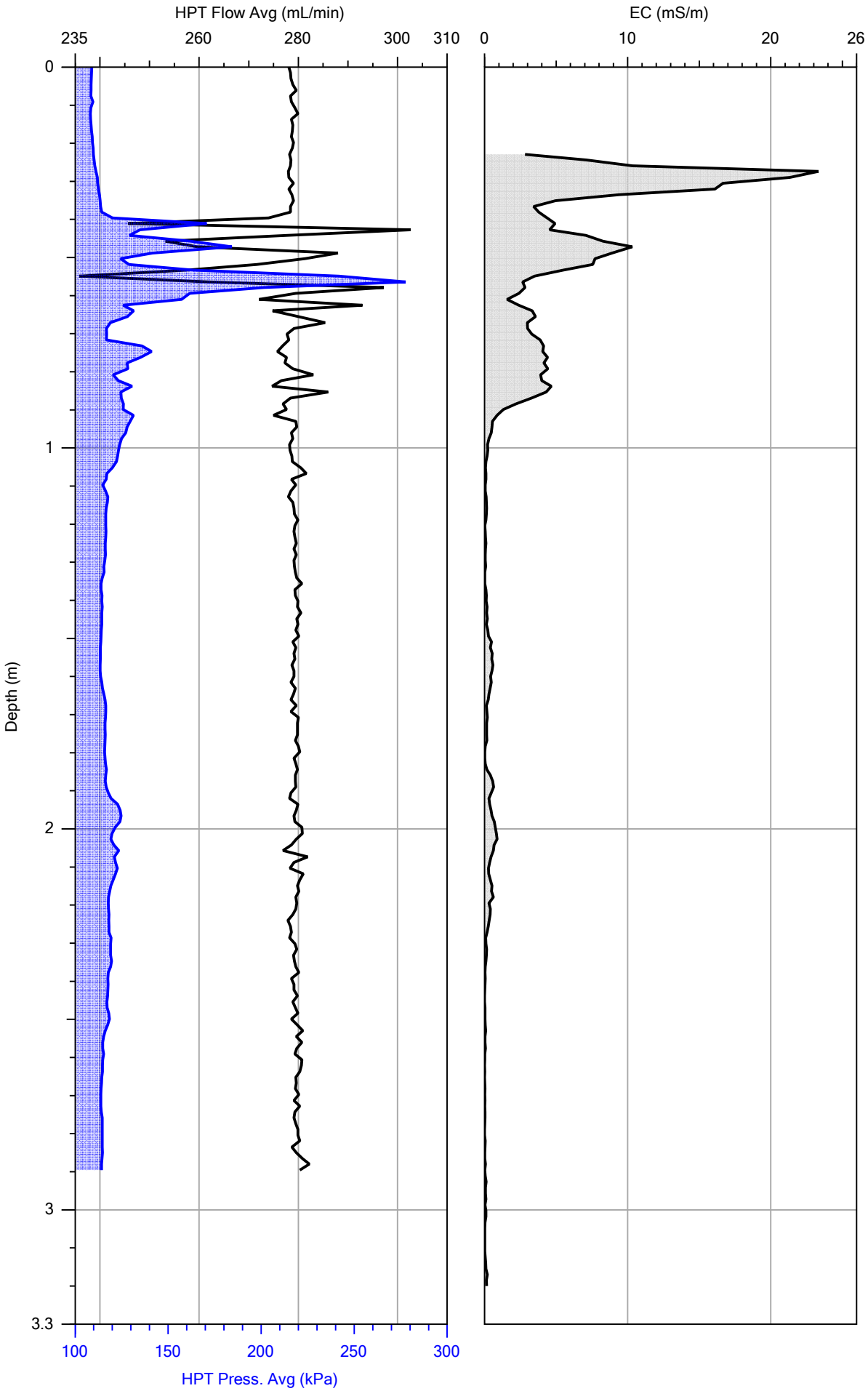
		File: MIP021.MHP
Company: DHA-Randwick	Operator: ADU	Date: 19/06/20
Project ID: 610.30041	Client: SLR	Location:



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		File: MIP021.MHP
Company: DHA-Randwick	Operator: ADU	Date: 19/06/20
Project ID: 610.30041	Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	51.3	6.8	PASS
High	290.0	274.9	5.2	PASS

MIP021.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA-Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP021.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Fri Jun 19 2020 13:15:00

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Fri Jun 19 2020 13:21:16

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.667	0.0	108.020
TOP with FLOW>0	16.108	277.7	111.060
BOTTOM with FLOW=0	15.439	0.0	106.450
BOTTOM with FLOW>0	15.887	279.4	109.540

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.23 psi (1.6 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840

LOG START TIME: Fri Jun 19 2020 13:25:00

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4
0.00	0.000	1	1	1	1

LOG END DEPTH: 9.75 ft (2.972 m)
LOG END TIME: Fri Jun 19 2020 13:44:23

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS 0.00 FEET
GPS Quality: None

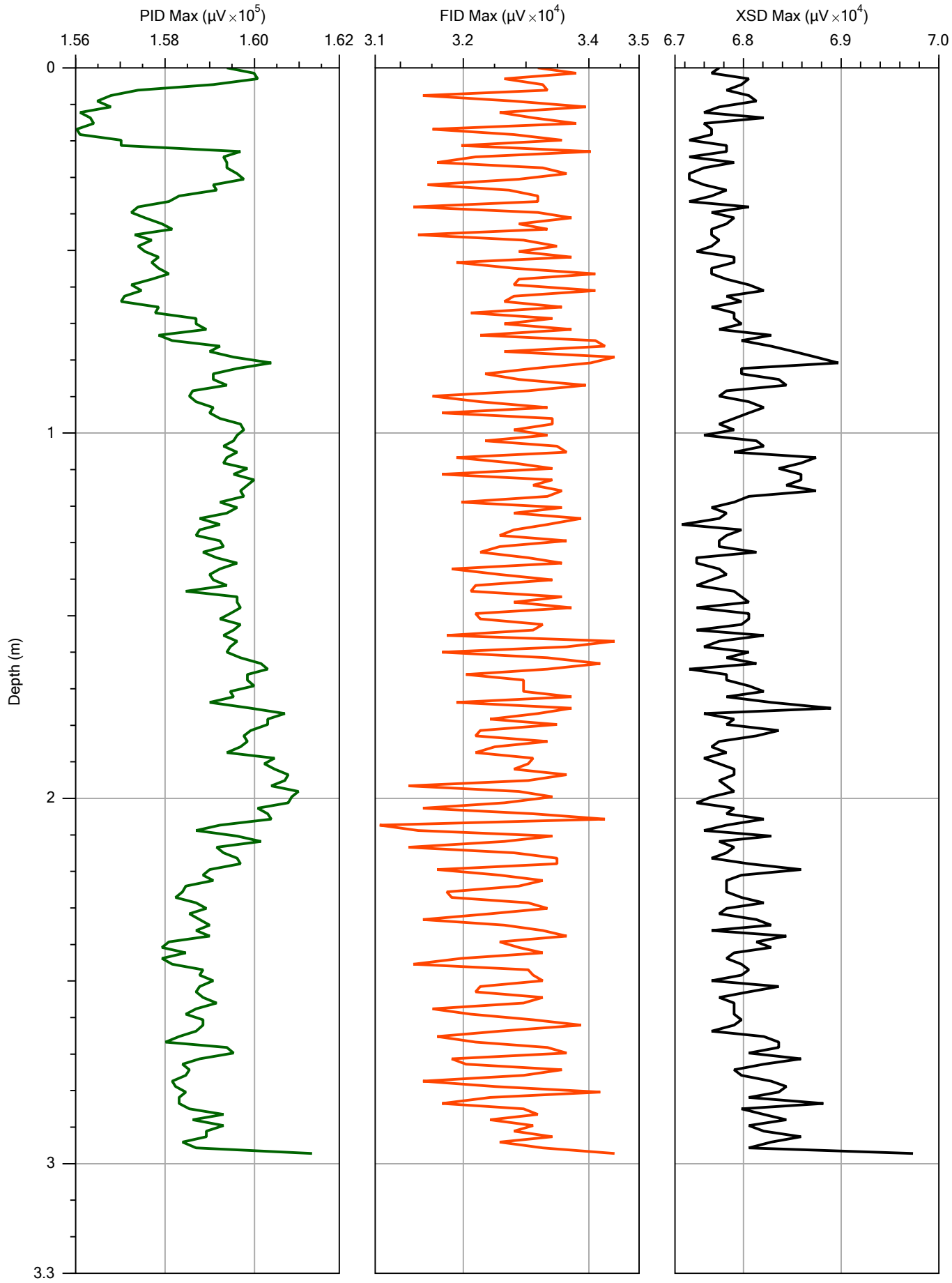
MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Fri Jun 19 2020 13:53:58

POST-LOG HPT REFERENCE TESTS BYPASSED

EC POST-LOG TESTS BYPASSED



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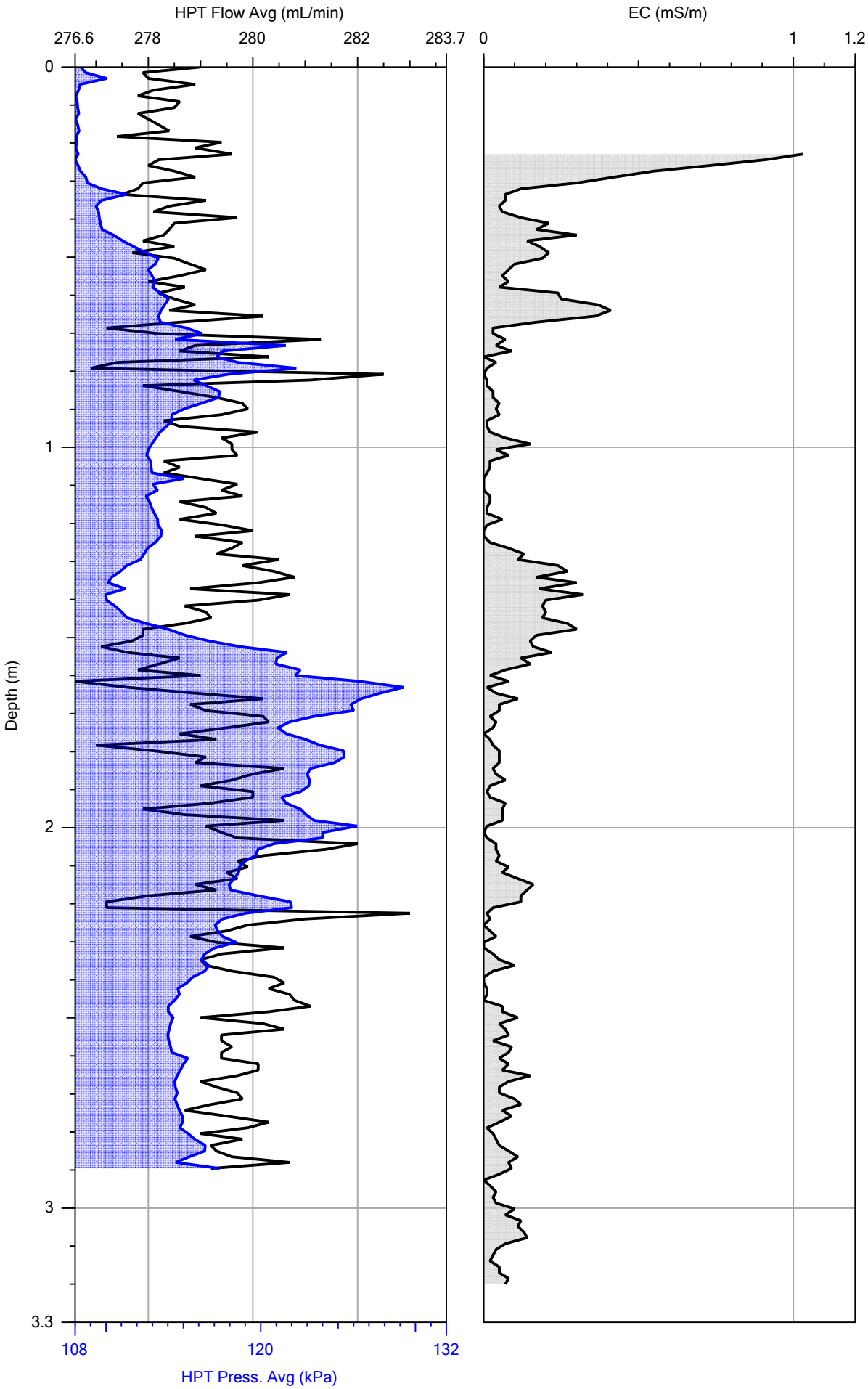
		File: MIP022.MHP
Company: DHA-Randwick	Operator: ADU	Date: 19/06/20
Project ID: 610.30041	Client: SLR	Location:



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		File: MIP022.MHP
Company: DHA-Randwick	Operator: ADU	Date: 19/06/20
Project ID: 610.30041	Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.2	0.4	PASS
High	290.0	296.4	2.2	PASS

MIP022.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA-Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP022.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Fri Jun 19 2020 13:54:33

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Fri Jun 19 2020 14:03:19

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.591	0.0	107.490
TOP with FLOW>0	16.069	277.8	110.790
BOTTOM with FLOW=0	15.371	0.0	105.980
BOTTOM with FLOW>0	15.856	278.1	109.320

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840

LOG START TIME: Fri Jun 19 2020 14:07:02

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4
0.00	0.000	1	1	1	1

LOG END DEPTH: 9.75 ft (2.972 m)
LOG END TIME: Fri Jun 19 2020 14:39:09

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS 0.00 FEET
GPS Quality: None

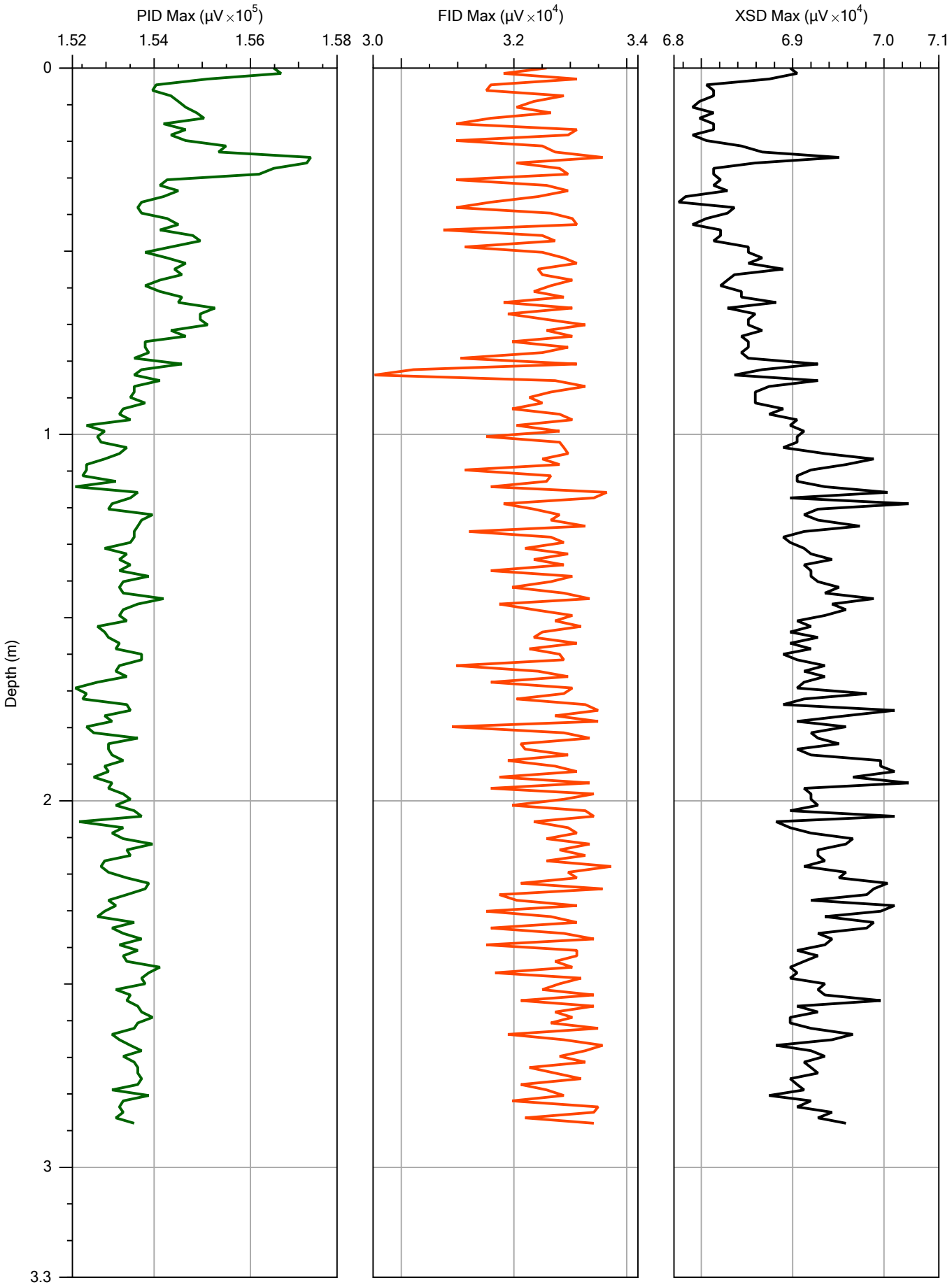
MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Fri Jun 19 2020 14:47:37

POST-LOG HPT REFERENCE TESTS BYPASSED

EC POST-LOG TESTS BYPASSED



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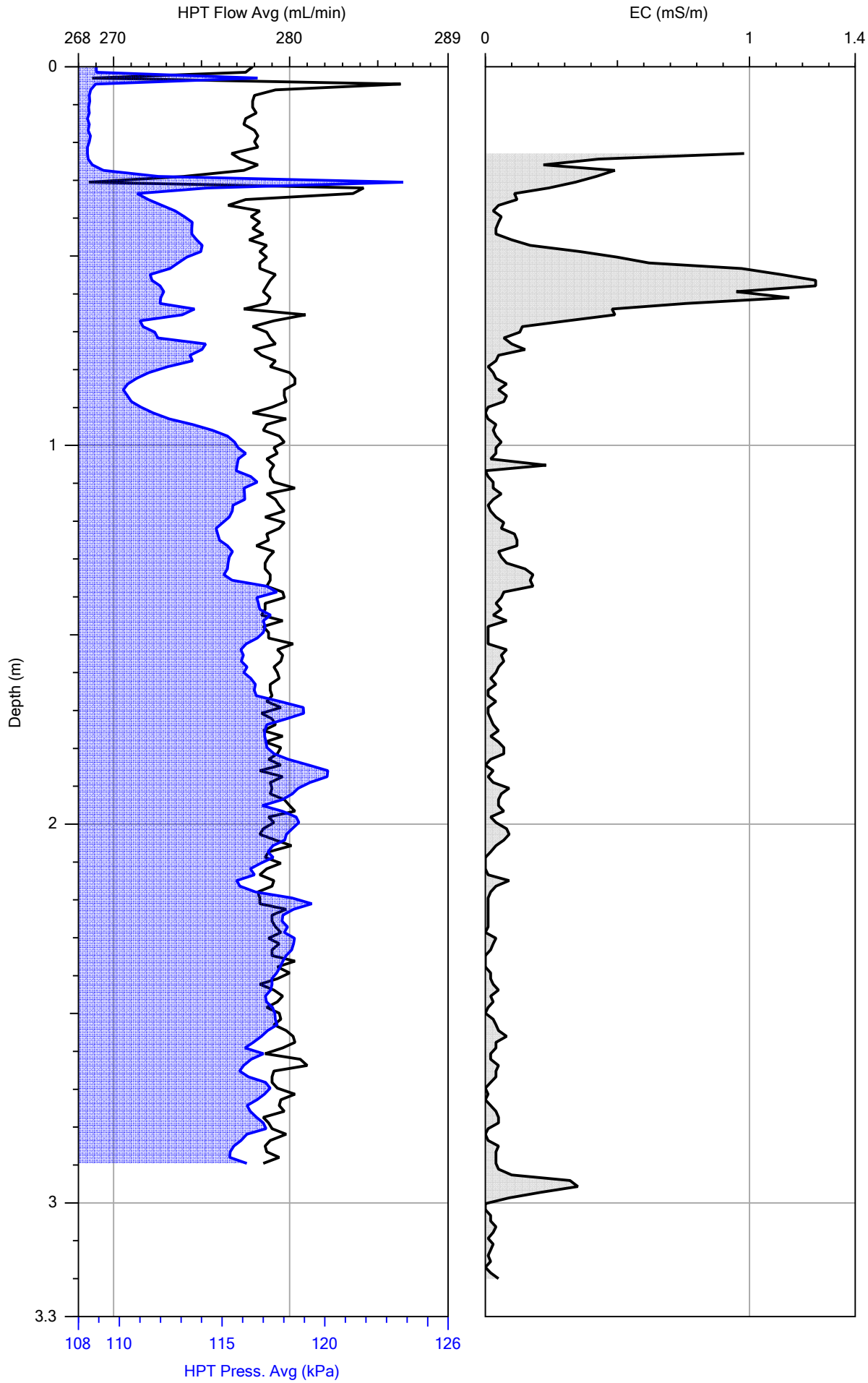
		File: MIP023.MHP
Company: DHA-Randwick	Operator: ADU	Date: 19/06/20
Project ID: 610.30041	Client: SLR	Location:



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		File: MIP023.MHP
Company: DHA-Randwick	Operator: ADU	Date: 19/06/20
Project ID: 610.30041	Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	54.2	1.4	PASS
High	290.0	296.5	2.2	PASS

MIP023.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA-Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP023.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Fri Jun 19 2020 14:55:28

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Fri Jun 19 2020 15:02:21

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.608	0.0	107.610
TOP with FLOW>0	15.991	278.1	110.250
BOTTOM with FLOW=0	15.383	0.0	106.060
BOTTOM with FLOW>0	15.761	277.9	108.670

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.23 psi (1.6 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840

LOG START TIME: Fri Jun 19 2020 15:05:55

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4
0.00	0.000	1	1	1	1

LOG END DEPTH: 9.75 ft (2.972 m)
LOG END TIME: Fri Jun 19 2020 15:28:35

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS 0.00 FEET
GPS Quality: None

MIP POST-LOG RESPONSE TEST

FILENAME: MIP023.post.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Fri Jun 19 2020 15:56:28

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Fri Jun 19 2020 16:02:20

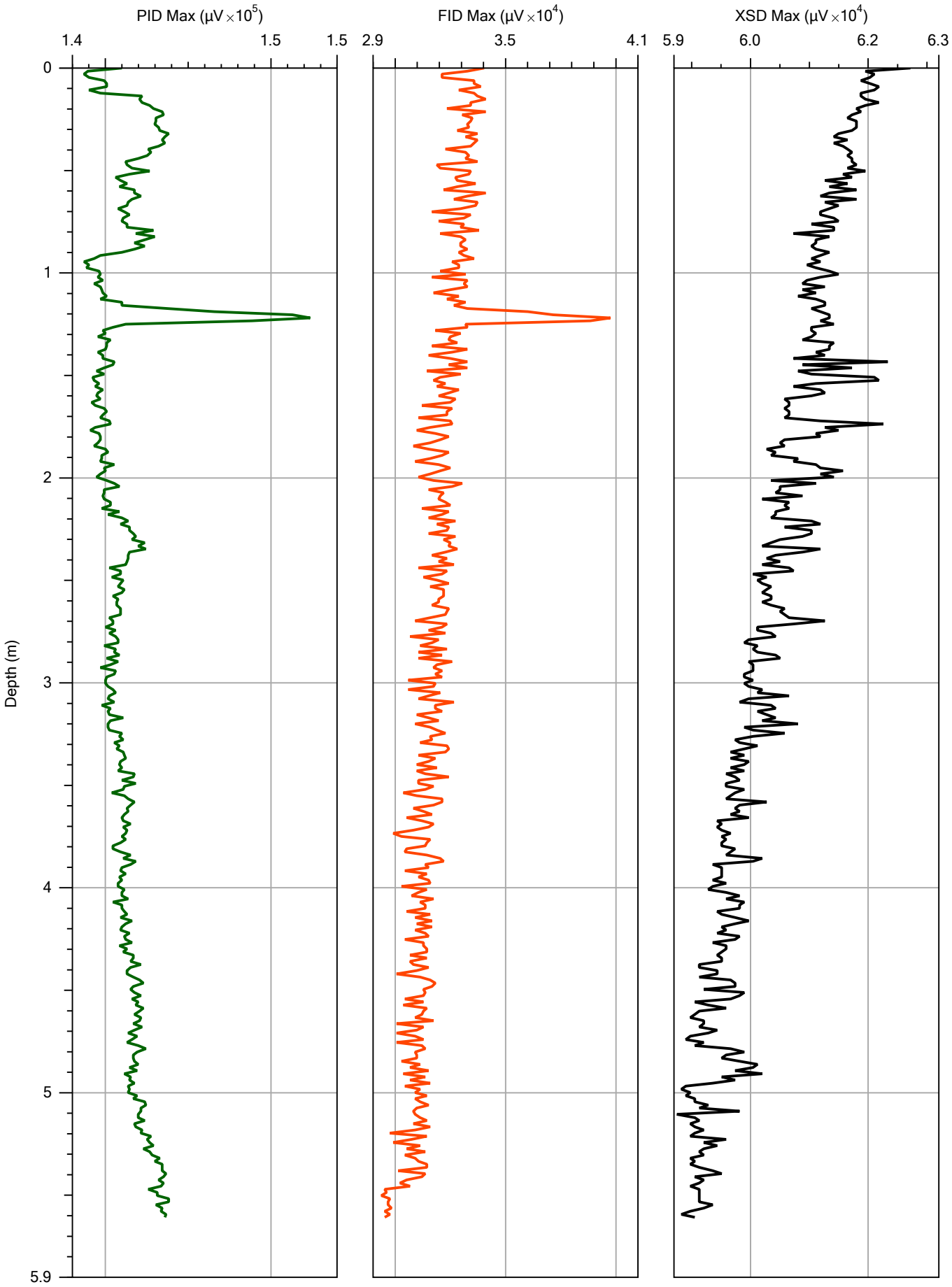
TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.649	0.0	107.890
TOP with FLOW>0	16.095	277.9	110.970
BOTTOM with FLOW=0	15.424	0.0	106.350
BOTTOM with FLOW>0	15.867	277.1	109.400

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

TRANSDUCER TEST PASSED

Post-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.0	0.0	PASS
High	290.0	295.8	2.0	PASS



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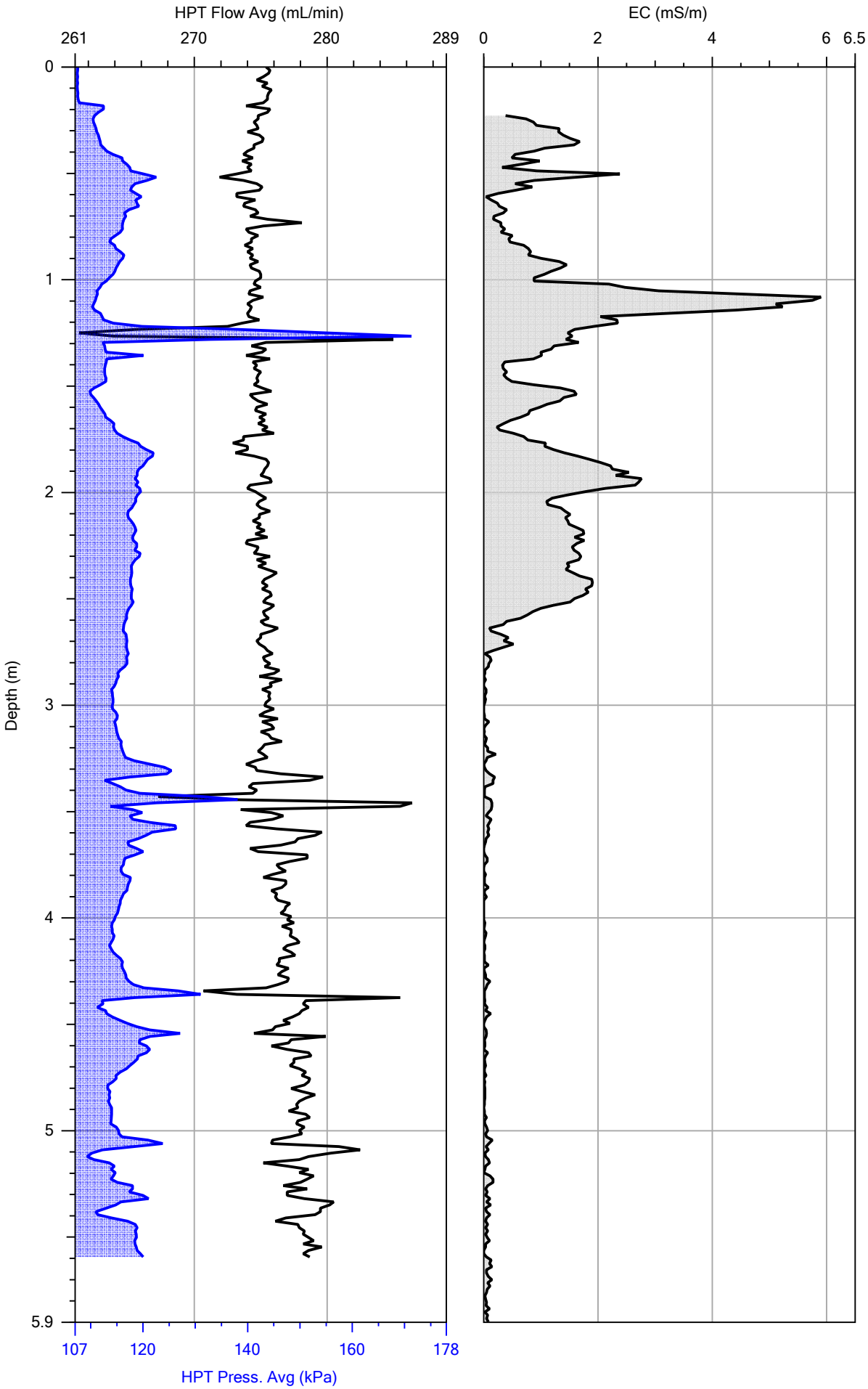
			File: MIP024.MHP
Company: DHA-Randwick		Operator: ADU	Date: 22/06/20
Project ID: 610.30041		Client: SLR	Location:



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		File: MIP024.MHP
Company: DHA-Randwick	Operator: ADU	Date: 22/06/20
Project ID: 610.30041	Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.1	0.3	PASS
High	290.0	296.1	2.1	PASS

MIP024.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA-Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP024.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Mon Jun 22 2020 08:29:14

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Mon Jun 22 2020 08:34:20

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.433	0.0	106.410
TOP with FLOW>0	15.945	274.9	109.940
BOTTOM with FLOW=0	15.209	0.0	104.870
BOTTOM with FLOW>0	15.724	274.5	108.410

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840

LOG START TIME: Mon Jun 22 2020 08:39:02

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4
0.00	0.000	1	1	1	1

LOG END DEPTH: 18.60 ft (5.669 m)
LOG END TIME: Mon Jun 22 2020 09:28:35

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS 0.00 FEET
GPS Quality: None

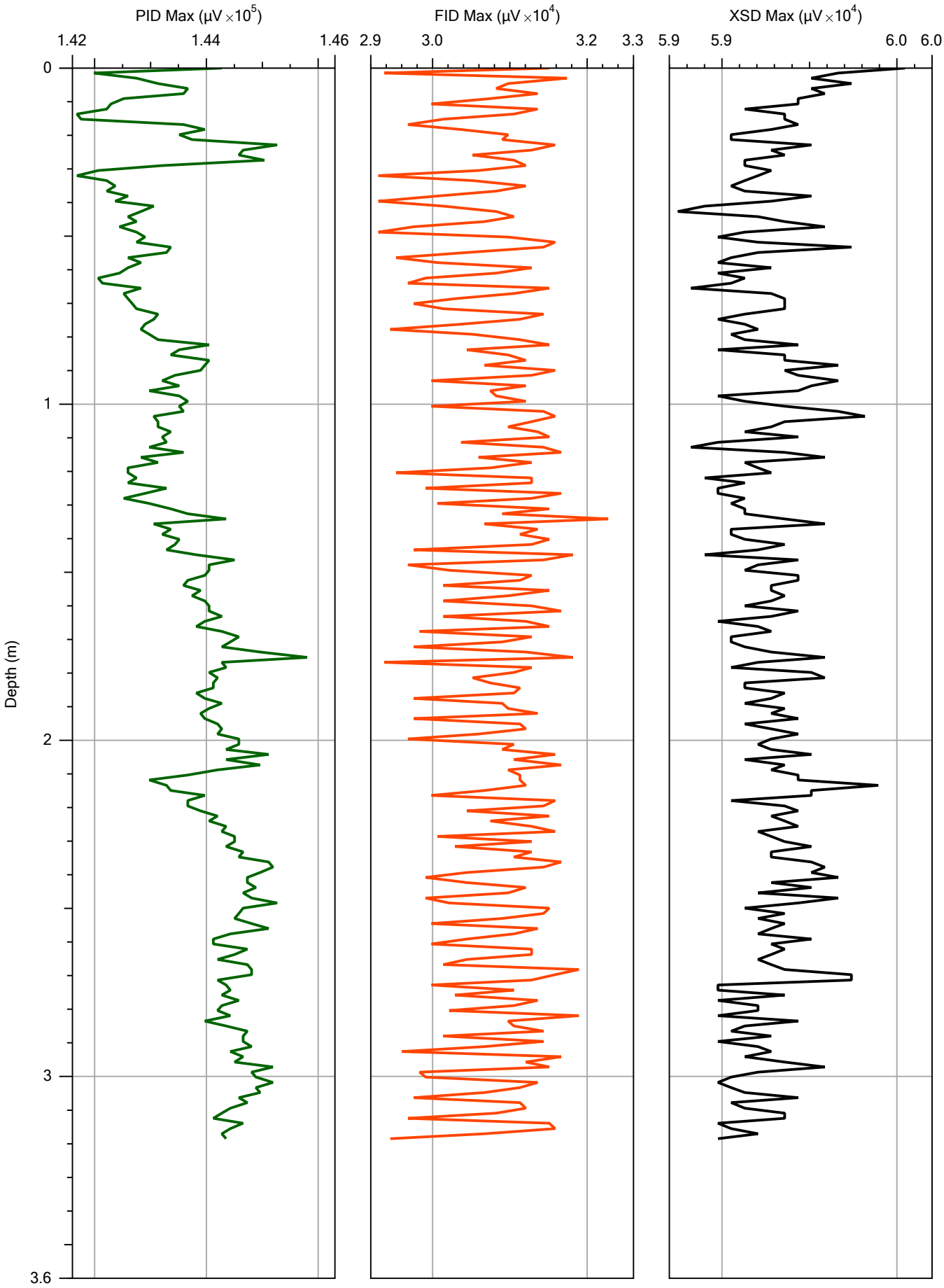
MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Mon Jun 22 2020 09:28:45

POST-LOG HPT REFERENCE TESTS BYPASSED

EC POST-LOG TESTS BYPASSED



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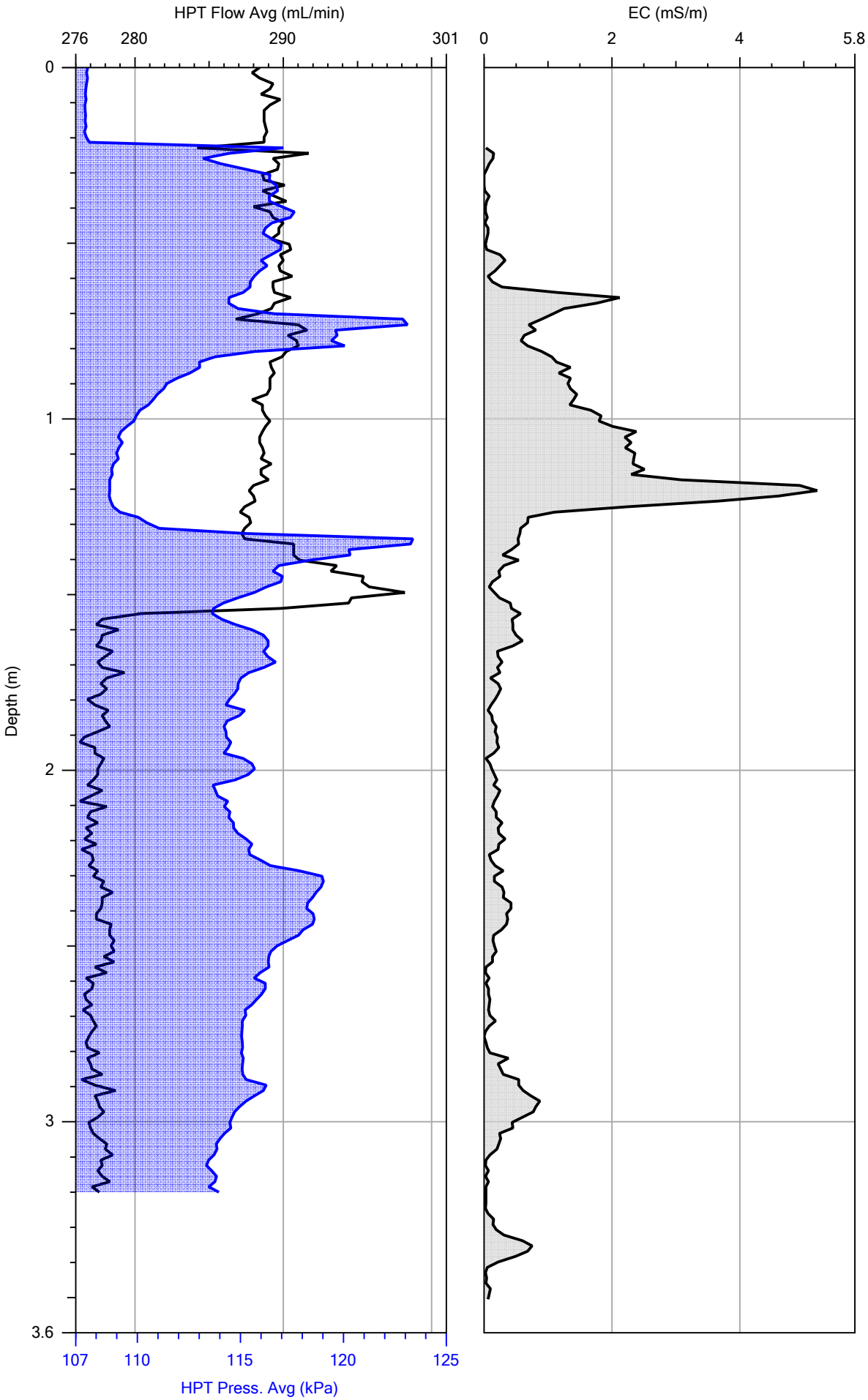
		File: MIP025.MHP
Company: DHA-Randwick	Operator: ADU	Date: 22/06/20
Project ID: 610.30041	Client: SLR	Location:



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		File: MIP025.MHP
Company: DHA-Randwick	Operator: ADU	Date: 22/06/20
Project ID: 610.30041	Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.3	0.5	PASS
High	290.0	297.3	2.5	PASS

MIP025.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA-Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP025.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Mon Jun 22 2020 09:51:01

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Mon Jun 22 2020 09:56:16

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.429	0.0	106.380
TOP with FLOW>0	15.863	289.7	109.370
BOTTOM with FLOW=0	15.218	0.0	104.930
BOTTOM with FLOW>0	15.654	289.6	107.930

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.21 psi (1.5 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840

LOG START TIME: Mon Jun 22 2020 09:59:35

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4
0.00	0.000	1	1	1	1

LOG END DEPTH: 10.75 ft (3.277 m)
LOG END TIME: Mon Jun 22 2020 10:22:57

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS 0.00 FEET
GPS Quality: None

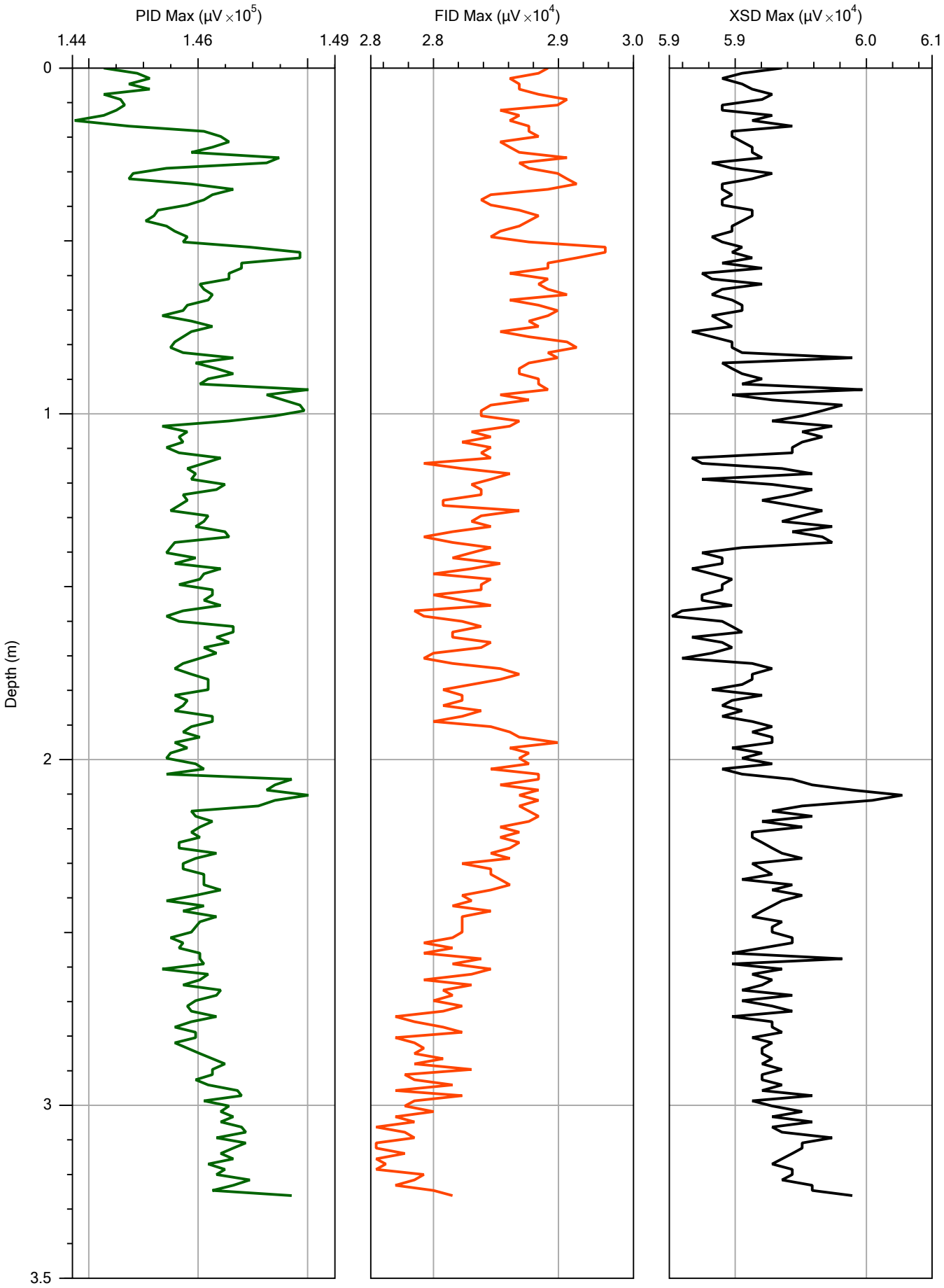
MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Mon Jun 22 2020 10:23:22

POST-LOG HPT REFERENCE TESTS BYPASSED

EC POST-LOG TESTS BYPASSED



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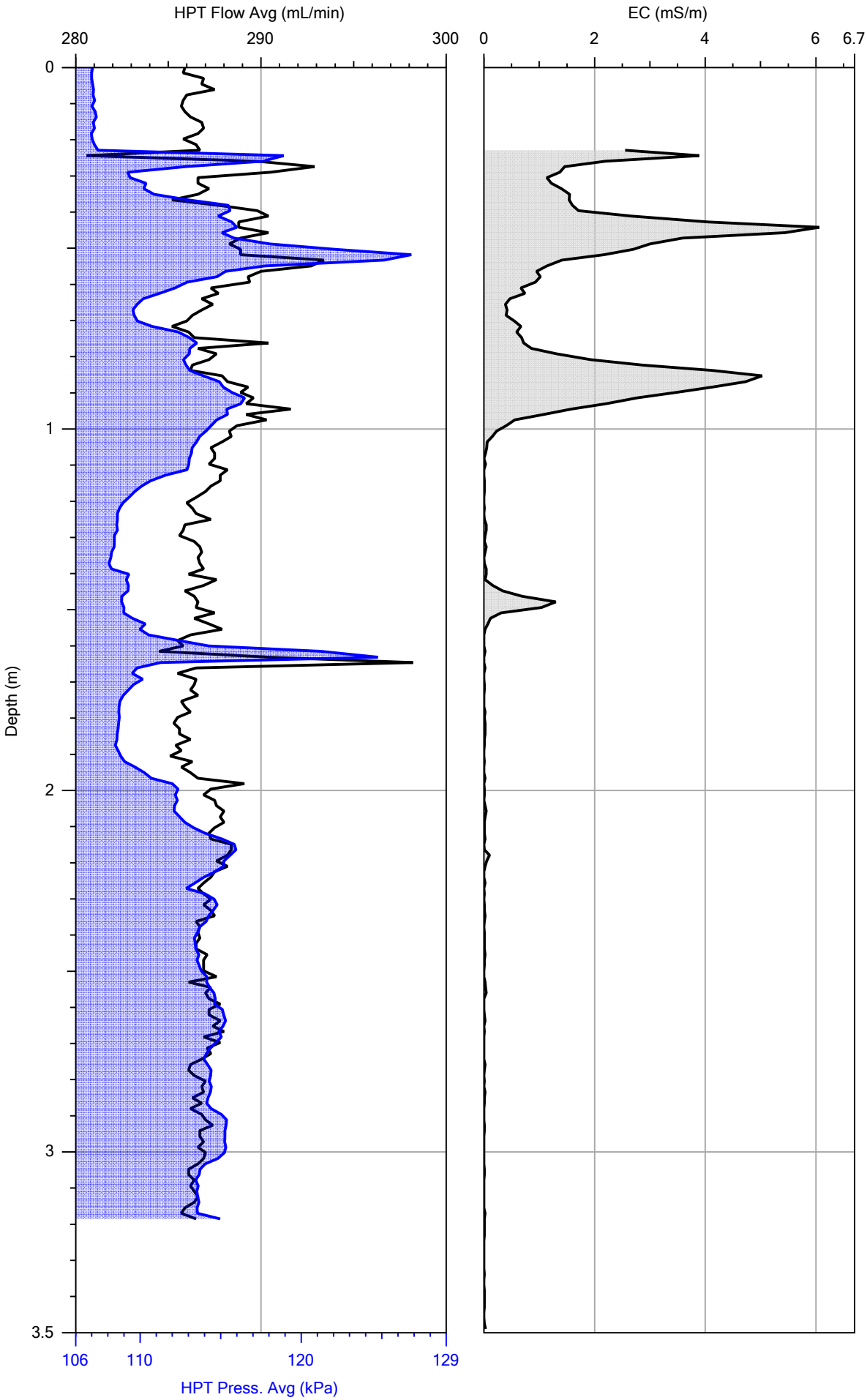
		File: MIP026.MHP
Company: DHA-Randwick	Operator: ADU	Date: 22/06/20
Project ID: 610.30041	Client: SLR	Location:



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		File: MIP026.MHP
Company: DHA-Randwick	Operator: ADU	Date: 22/06/20
Project ID: 610.30041	Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.4	0.7	PASS
High	290.0	297.5	2.6	PASS

MIP026.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA-Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP026.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Mon Jun 22 2020 10:37:01

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Mon Jun 22 2020 10:42:24

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.391	0.0	106.120
TOP with FLOW>0	15.839	288.4	109.200
BOTTOM with FLOW=0	15.175	0.0	104.630
BOTTOM with FLOW>0	15.612	283.4	107.640

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840

LOG START TIME: Mon Jun 22 2020 10:51:15

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4
0.00	0.000	1	1	1	1

LOG END DEPTH: 10.70 ft (3.261 m)
LOG END TIME: Mon Jun 22 2020 11:20:01

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS 0.00 FEET
GPS Quality: None

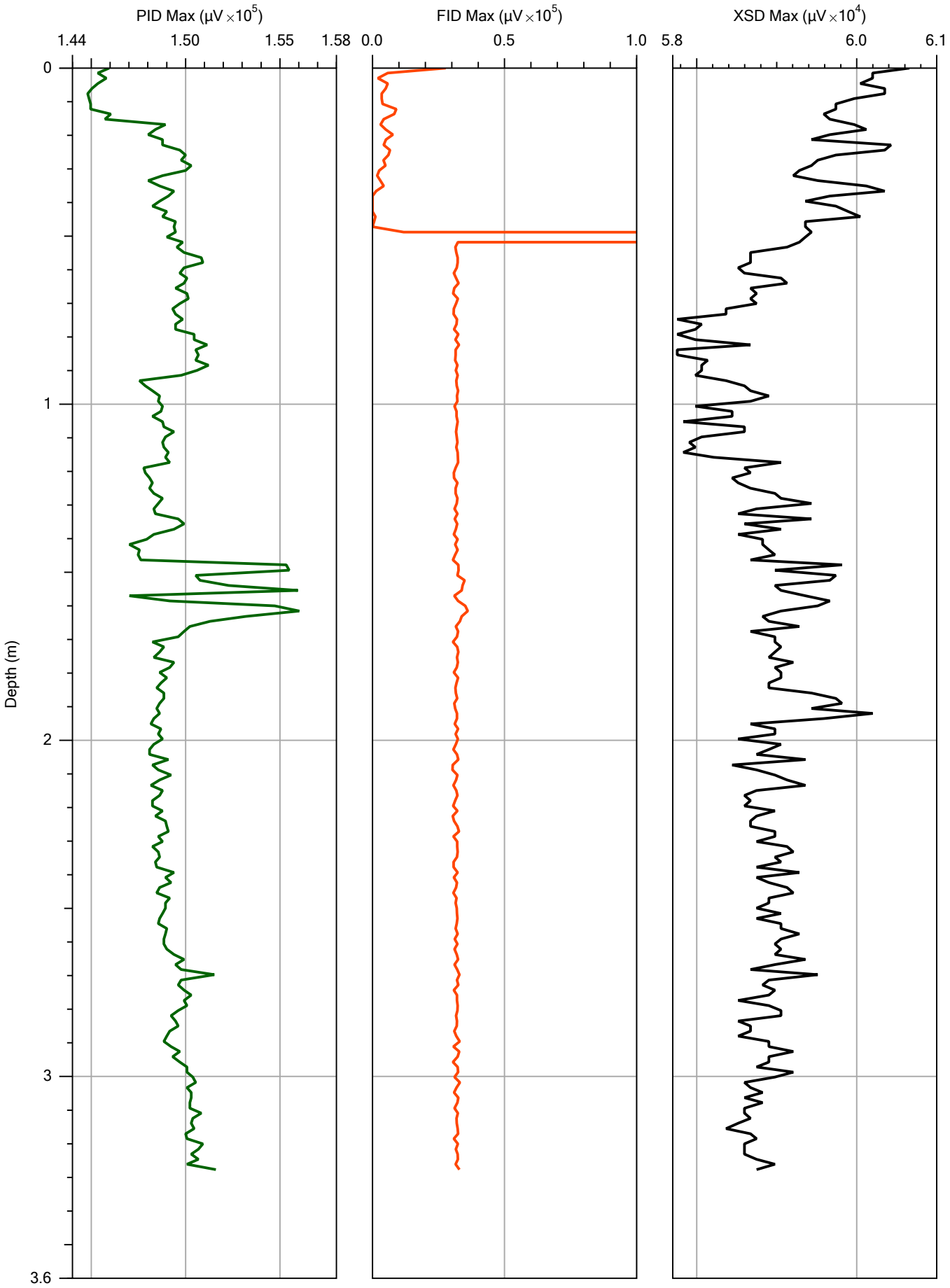
MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Mon Jun 22 2020 11:20:10

POST-LOG HPT REFERENCE TESTS BYPASSED

EC POST-LOG TESTS BYPASSED



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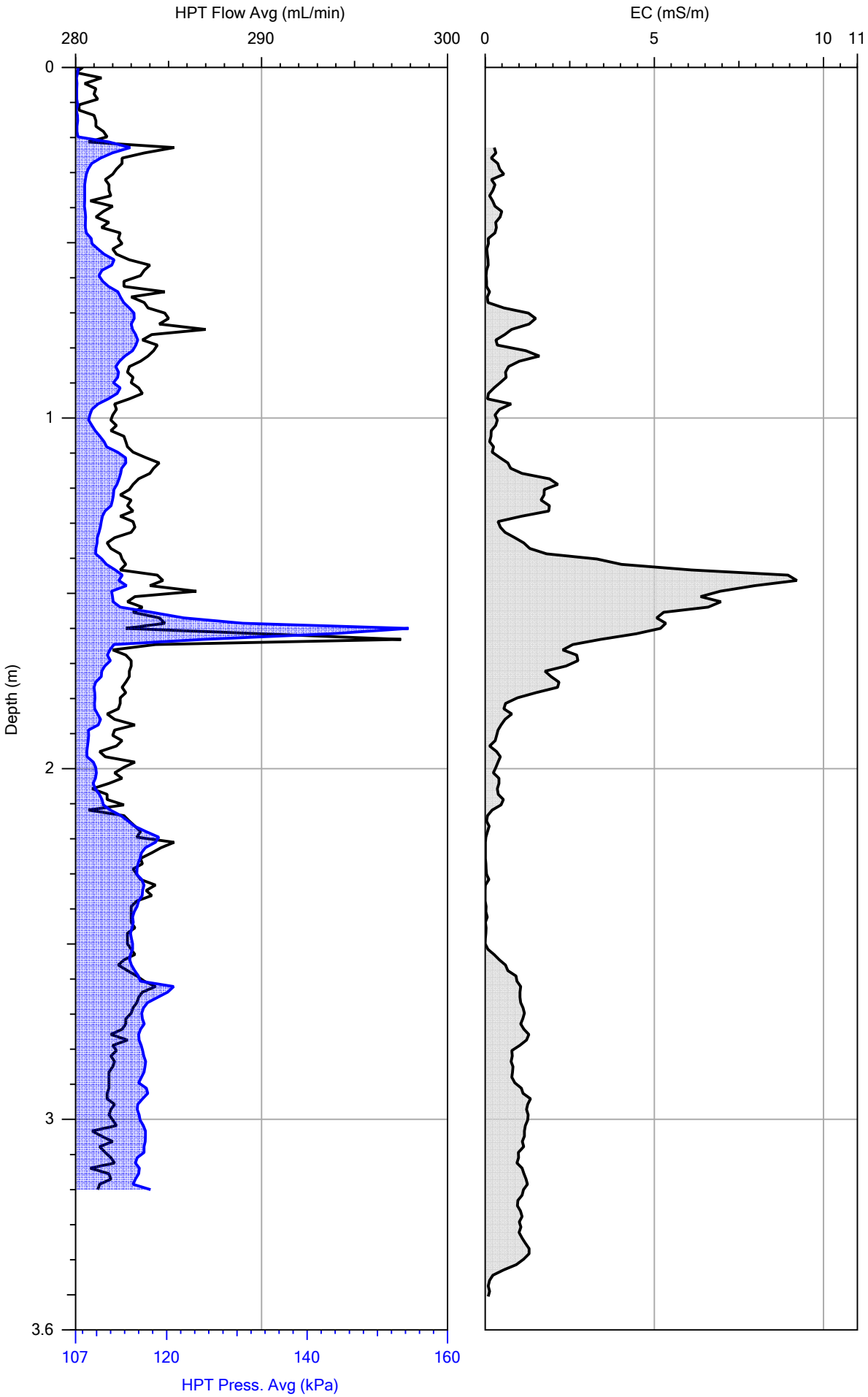
		File: MIP027.MHP
Company: DHA-Randwick	Operator: ADU	Date: 22/06/20
Project ID: 610.30041	Client: SLR	Location:



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		File: MIP027.MHP
Company: DHA-Randwick	Operator: ADU	Date: 22/06/20
Project ID: 610.30041	Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.3	0.6	PASS
High	290.0	296.2	2.1	PASS

MIP027.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA-Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP027.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Mon Jun 22 2020 11:38:49

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Mon Jun 22 2020 11:43:55

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.414	0.0	106.270
TOP with FLOW>0	15.812	284.2	109.020
BOTTOM with FLOW=0	15.191	0.0	104.740
BOTTOM with FLOW>0	15.594	281.9	107.520

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840

LOG START TIME: Mon Jun 22 2020 11:48:25

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4
0.00	0.000	1	1	1	1

LOG END DEPTH: 10.75 ft (3.277 m)
LOG END TIME: Mon Jun 22 2020 12:26:34

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS 0.00 FEET
GPS Quality: None

MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

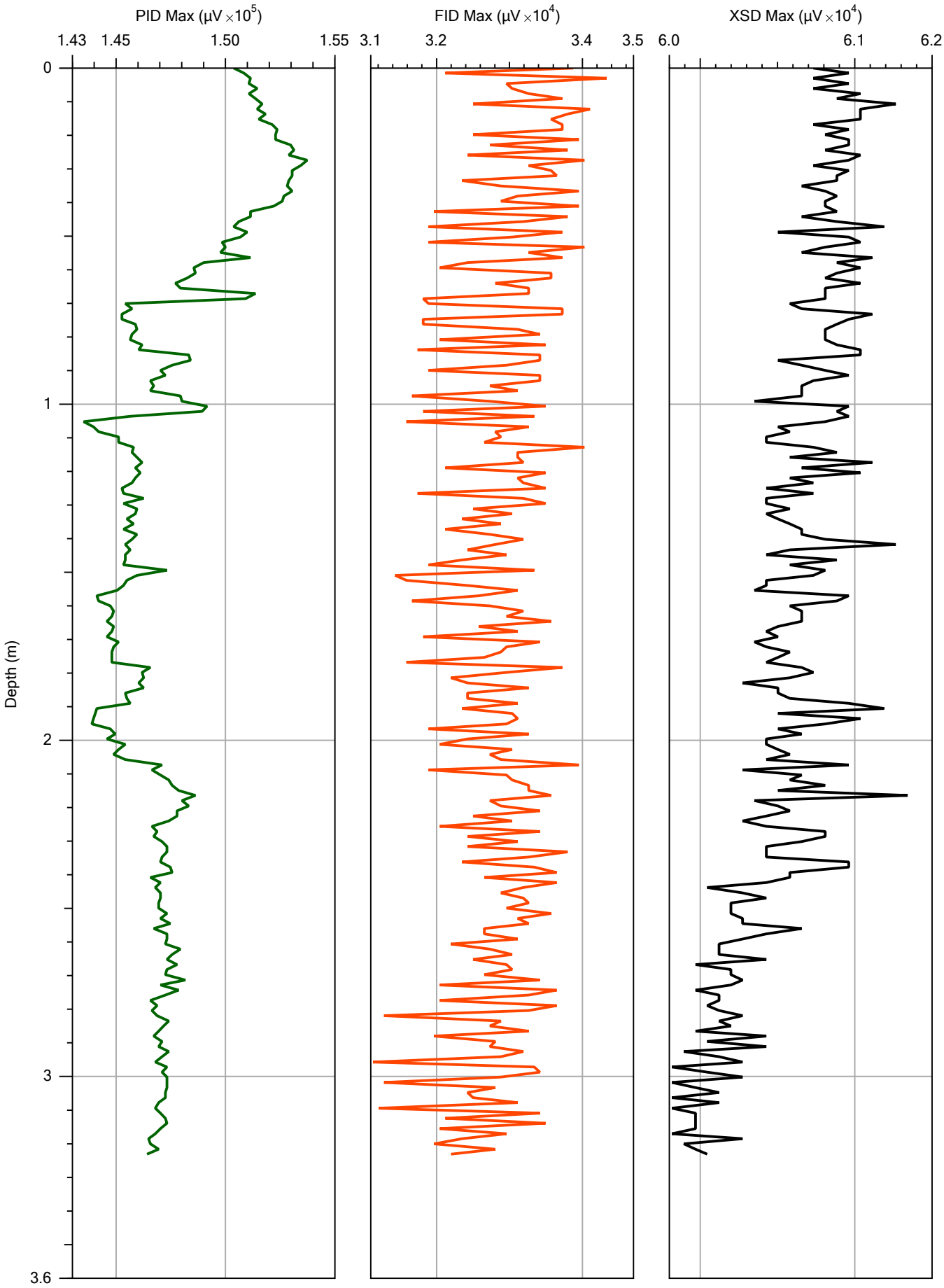
POST TEST TIME: Mon Jun 22 2020 12:27:02

POST-LOG HPT REFERENCE TESTS BYPASSED

EC POST-LOG TESTS BYPASSED

********** USER NOTES **********

Please disregard the FID readings at 0.5m as the flame extinguished and had to be re-ignited generating the spike observed in the readings.



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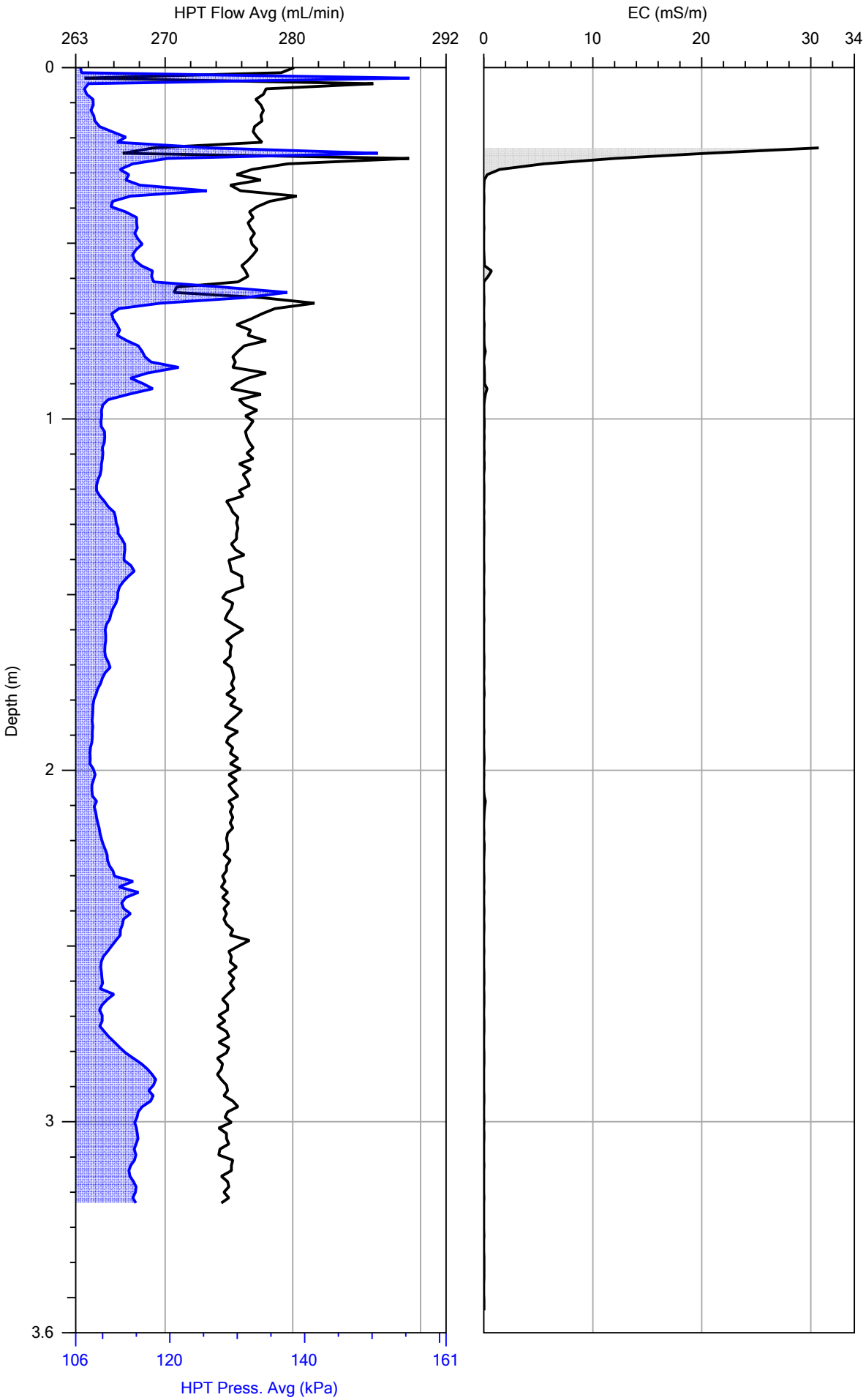
		File: MIP028.MHP
Company: DHA-Randwick	Operator: ADU	Date: 22/06/20
Project ID: 610.30041	Client: SLR	Location:



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		File: MIP028.MHP
Company: DHA-Randwick	Operator: ADU	Date: 22/06/20
Project ID: 610.30041	Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.2	0.4	PASS
High	290.0	297.1	2.4	PASS

MIP028.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA-Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP028.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Mon Jun 22 2020 13:15:21

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Mon Jun 22 2020 13:20:36

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.381	0.0	106.050
TOP with FLOW>0	15.779	278.1	108.790
BOTTOM with FLOW=0	15.163	0.0	104.550
BOTTOM with FLOW>0	15.565	278.2	107.320

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840

LOG START TIME: Mon Jun 22 2020 13:24:30

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4
0.00	0.000	1	1	1	1

LOG END DEPTH: 10.85 ft (3.307 m)
LOG END TIME: Mon Jun 22 2020 13:57:45

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS 0.00 FEET
GPS Quality: None

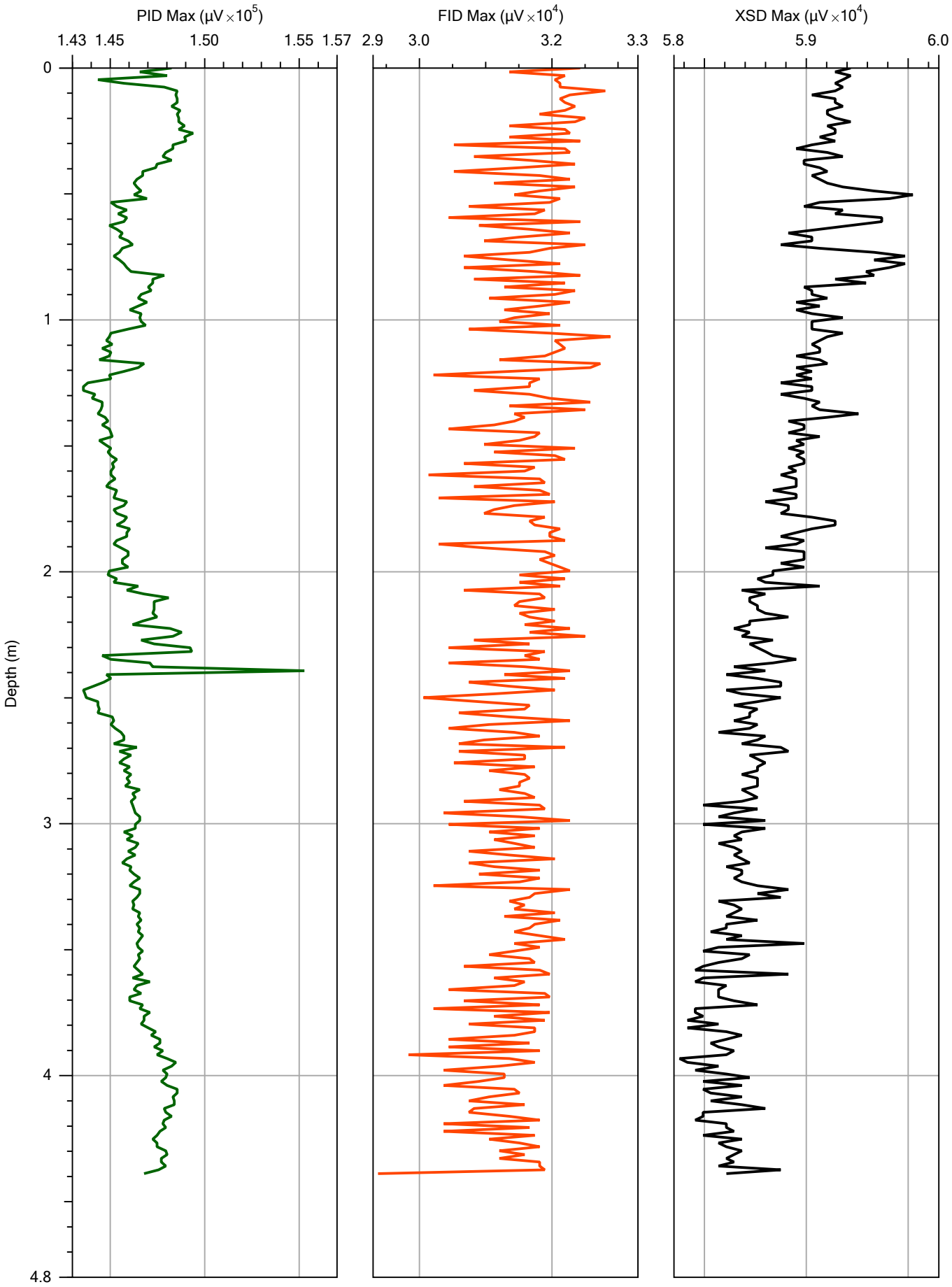
MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Mon Jun 22 2020 14:18:42

POST-LOG HPT REFERENCE TESTS BYPASSED

EC POST-LOG TESTS BYPASSED



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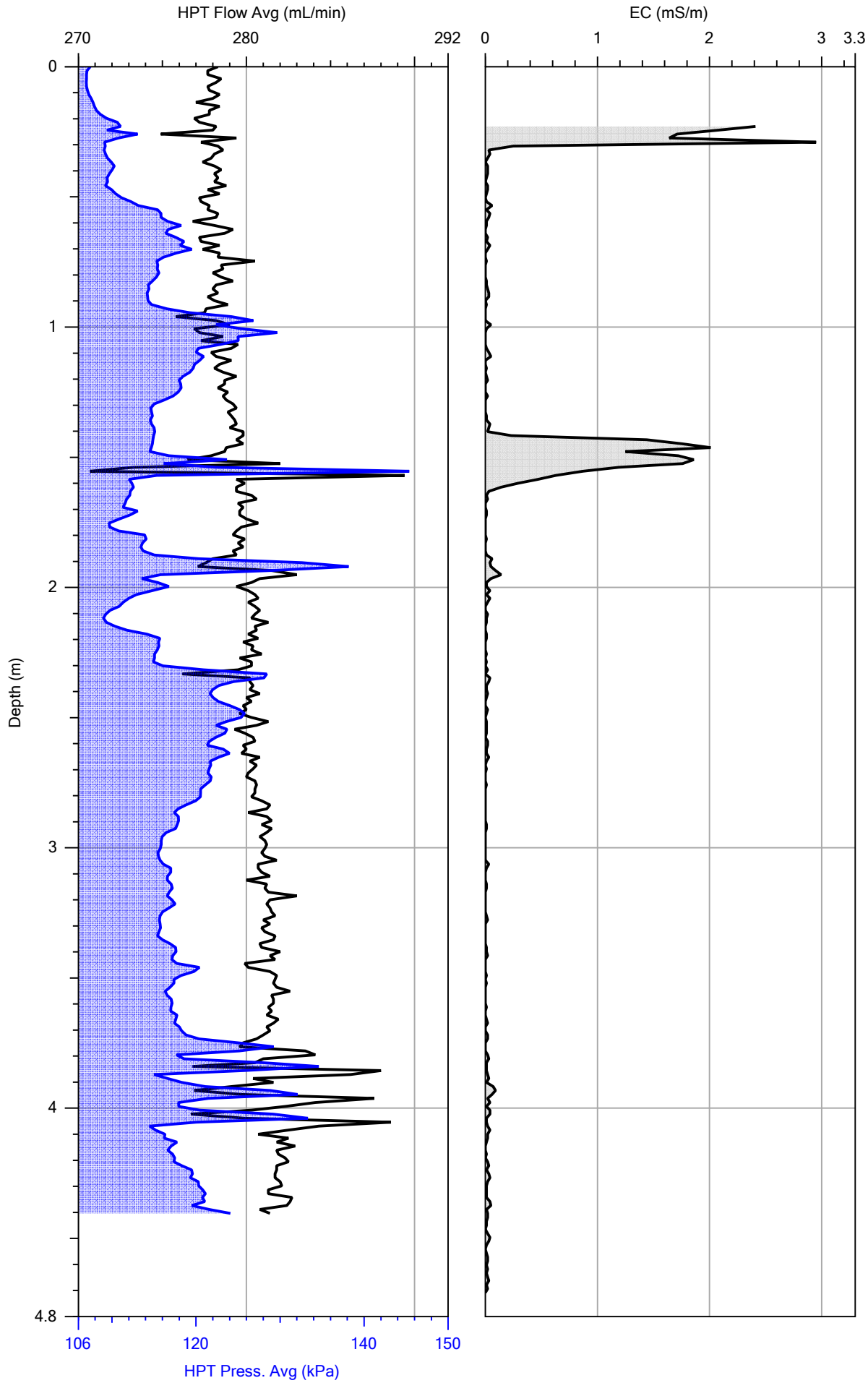
		File: MIP029.MHP
Company: DHA-Randwick	Operator: ADU	Date: 22/06/20
Project ID: 610.30041	Client: SLR	Location:



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		File: MIP029.MHP
Company: DHA-Randwick	Operator: ADU	Date: 22/06/20
Project ID: 610.30041	Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.3	0.6	PASS
High	290.0	297.1	2.4	PASS

MIP029.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA-Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP029.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Mon Jun 22 2020 14:21:34

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Mon Jun 22 2020 14:27:00

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.389	0.0	106.100
TOP with FLOW>0	15.784	277.0	108.830
BOTTOM with FLOW=0	15.164	0.0	104.550
BOTTOM with FLOW>0	15.561	276.9	107.290

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.23 psi (1.6 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840

LOG START TIME: Mon Jun 22 2020 14:32:05

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4
0.00	0.000	1	1	1	1

LOG END DEPTH: 14.70 ft (4.481 m)
LOG END TIME: Mon Jun 22 2020 15:18:06

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS 0.00 FEET
GPS Quality: None

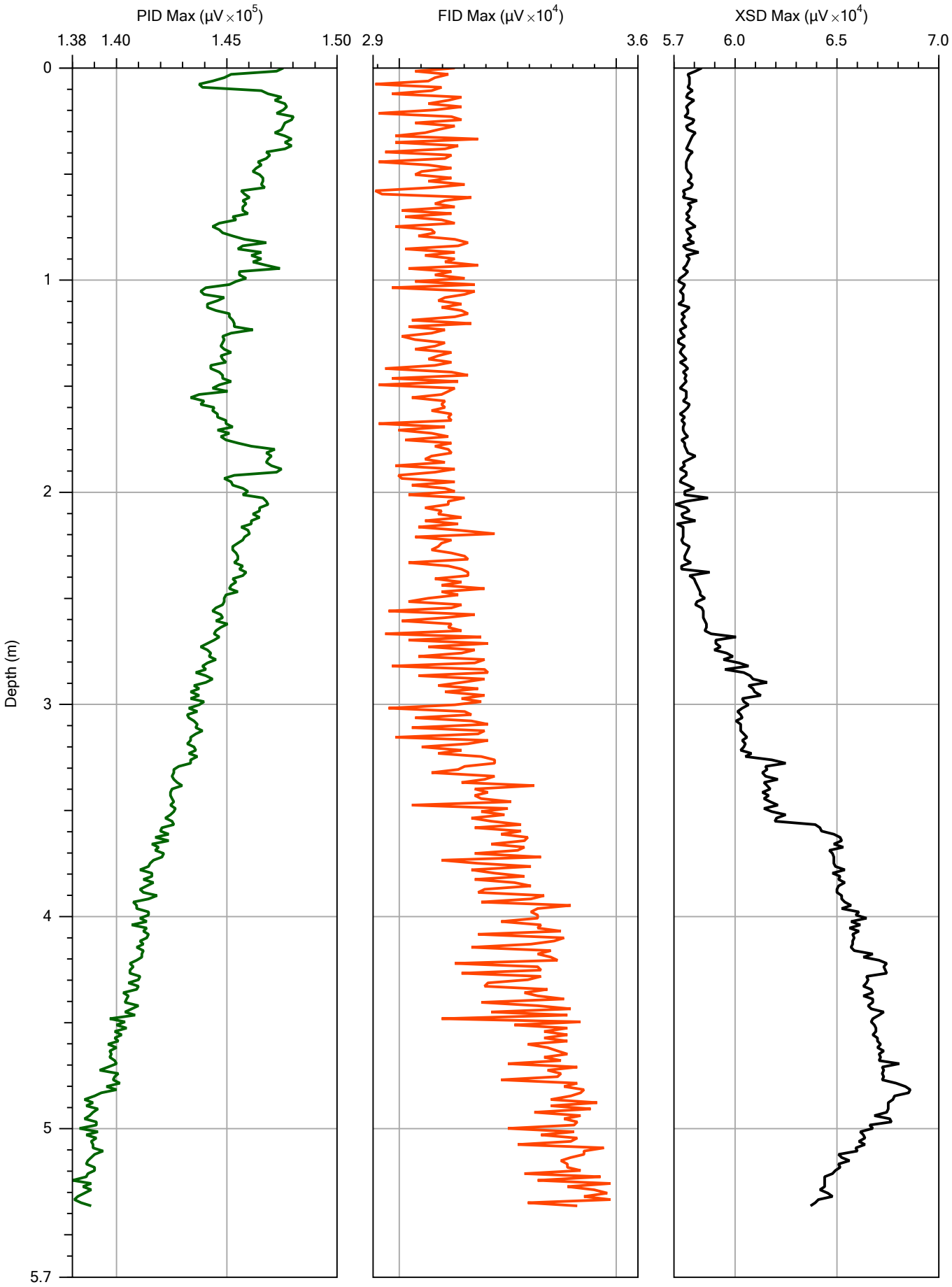
MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Mon Jun 22 2020 15:18:16

POST-LOG HPT REFERENCE TESTS BYPASSED

EC POST-LOG TESTS BYPASSED



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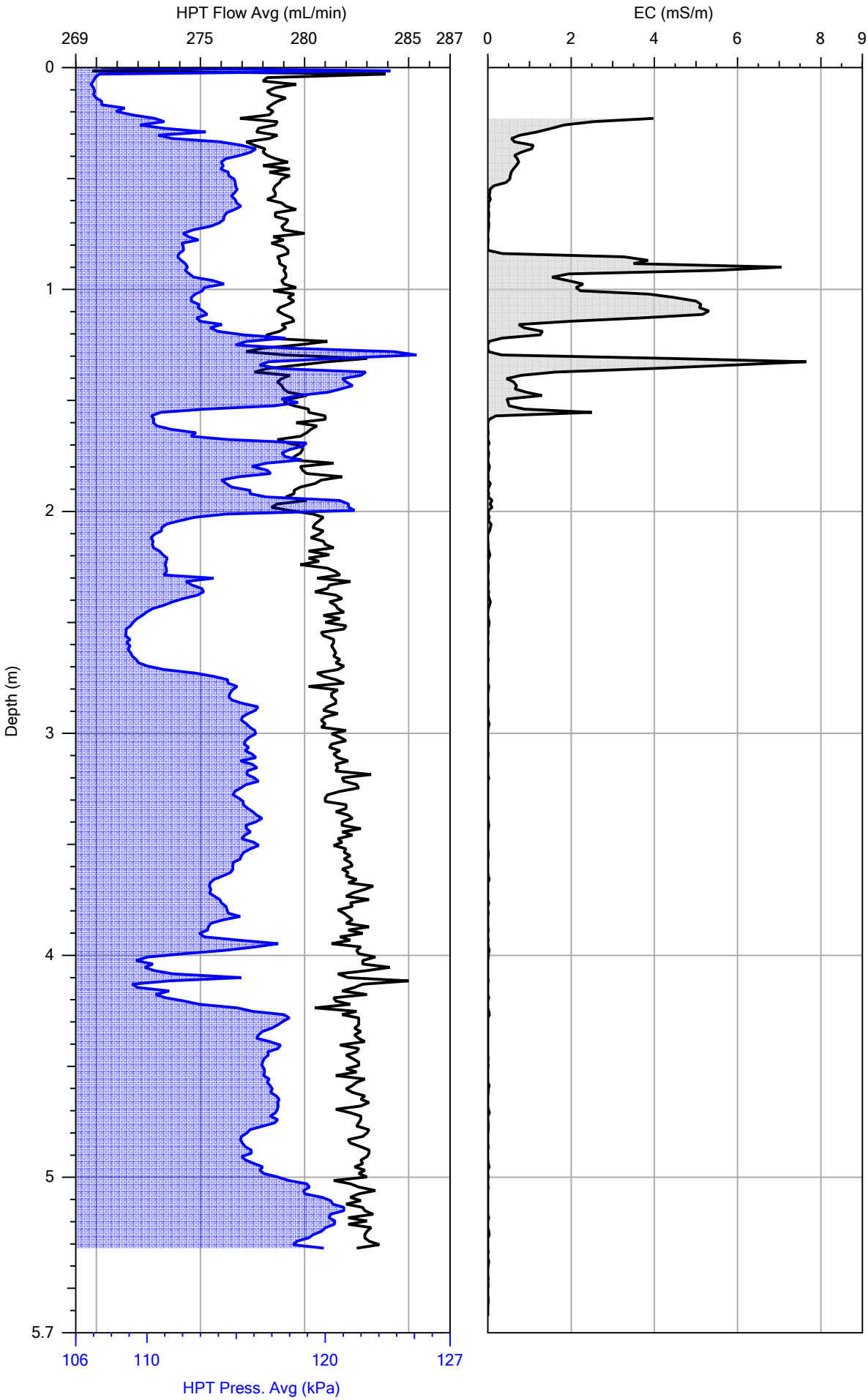
		File: MIP030.MHP
Company: DHA-Randwick	Operator: ADU	Date: 22/06/20
Project ID: 610.30041	Client: SLR	Location:



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		File: MIP030.MHP
Company: DHA-Randwick	Operator: ADU	Date: 22/06/20
Project ID: 610.30041	Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.9	1.6	PASS
High	290.0	294.1	1.4	PASS

MIP030.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA-Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP030.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Mon Jun 22 2020 15:43:19

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Mon Jun 22 2020 15:48:50

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.379	0.0	106.040
TOP with FLOW>0	15.907	278.0	109.680
BOTTOM with FLOW=0	15.157	0.0	104.510
BOTTOM with FLOW>0	15.689	278.8	108.170

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840

LOG START TIME: Mon Jun 22 2020 15:52:40

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4
0.00	0.000	1	1	1	1

LOG END DEPTH: 17.70 ft (5.395 m)
LOG END TIME: Mon Jun 22 2020 16:40:48

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS 0.00 FEET
GPS Quality: None

MIP POST-LOG RESPONSE TEST

FILENAME: MIP030.post.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Mon Jun 22 2020 16:52:46

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Mon Jun 22 2020 16:57:20

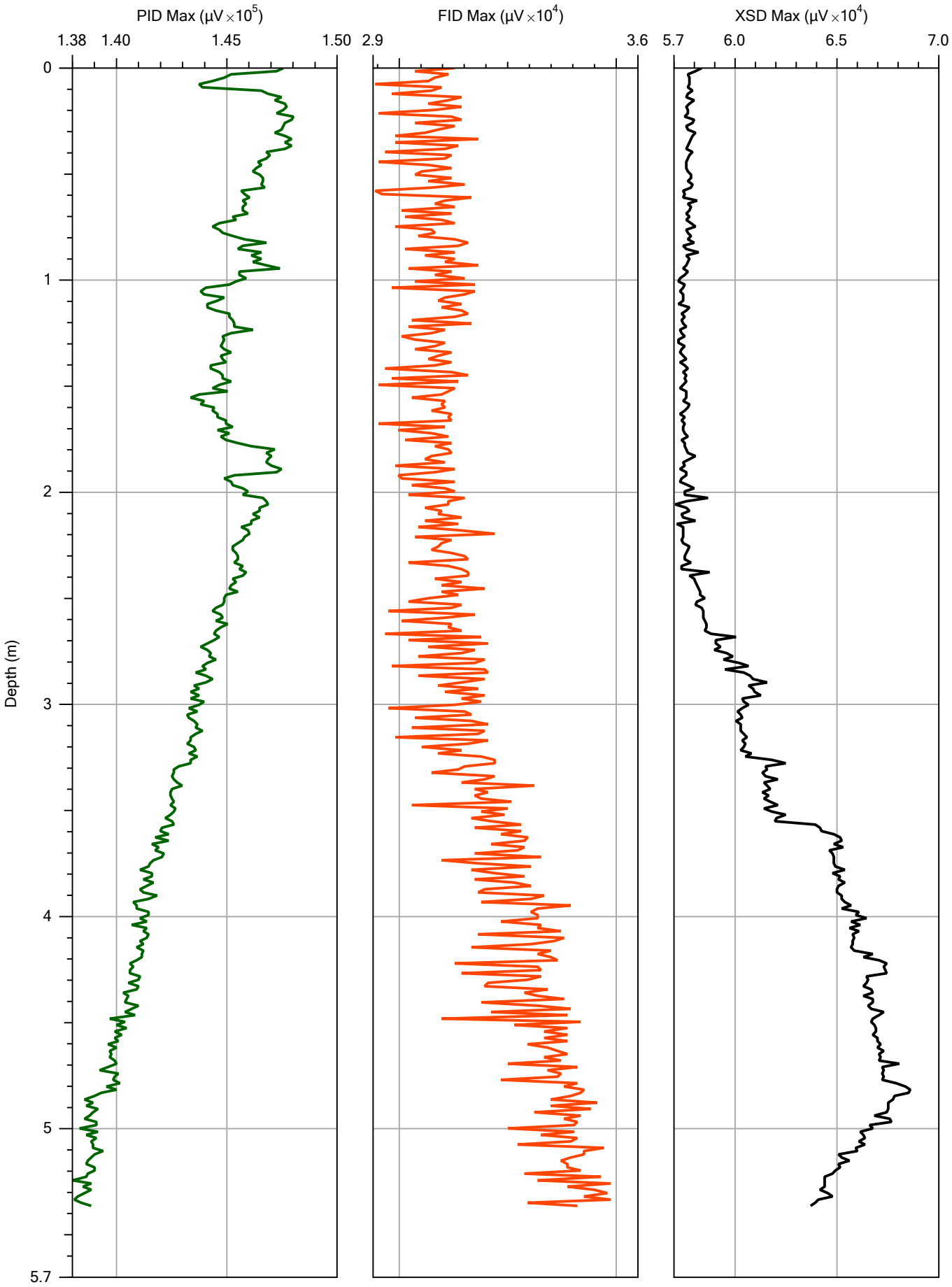
TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.372	0.0	105.990
TOP with FLOW>0	15.844	278.7	109.240
BOTTOM with FLOW=0	15.157	0.0	104.500
BOTTOM with FLOW>0	15.623	277.0	107.720

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

TRANSDUCER TEST PASSED

Post-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.5	0.9	PASS
High	290.0	297.5	2.6	PASS



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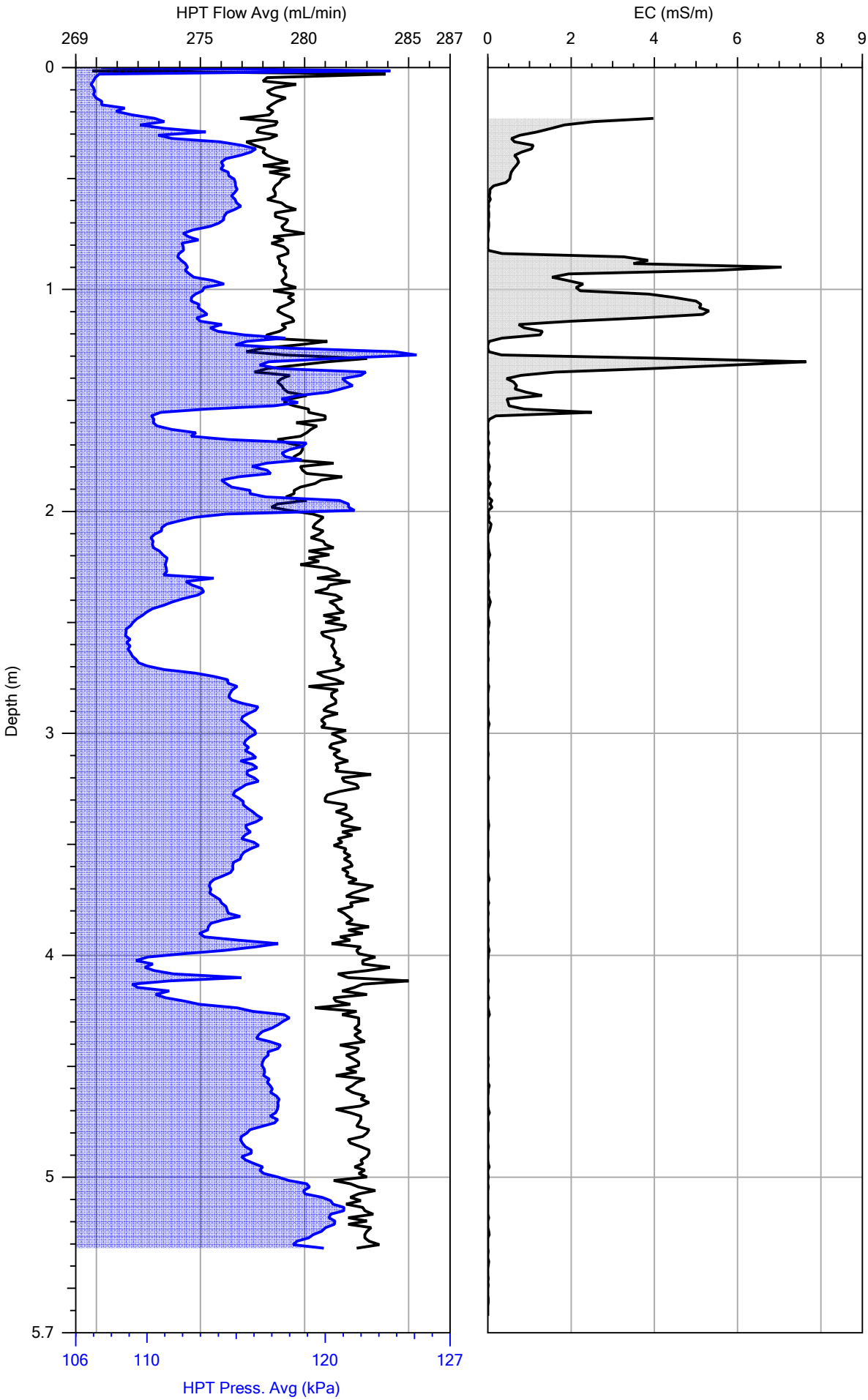
		File: MIP030.MHP
Company: DHA-Randwick	Operator: ADU	Date: 22/06/20
Project ID: 610.30041	Client: SLR	Location:



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		File: MIP030.MHP
Company: DHA-Randwick	Operator: ADU	Date: 22/06/20
Project ID: 610.30041	Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.9	1.6	PASS
High	290.0	294.1	1.4	PASS

MIP030.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA-Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP030.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Mon Jun 22 2020 15:43:19

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Mon Jun 22 2020 15:48:50

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.379	0.0	106.040
TOP with FLOW>0	15.907	278.0	109.680
BOTTOM with FLOW=0	15.157	0.0	104.510
BOTTOM with FLOW>0	15.689	278.8	108.170

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840

LOG START TIME: Mon Jun 22 2020 15:52:40

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4
0.00	0.000	1	1	1	1

LOG END DEPTH: 17.70 ft (5.395 m)
LOG END TIME: Mon Jun 22 2020 16:40:48

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS 0.00 FEET
GPS Quality: None

MIP POST-LOG RESPONSE TEST

FILENAME: MIP030.post.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Mon Jun 22 2020 16:52:46

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Mon Jun 22 2020 16:57:20

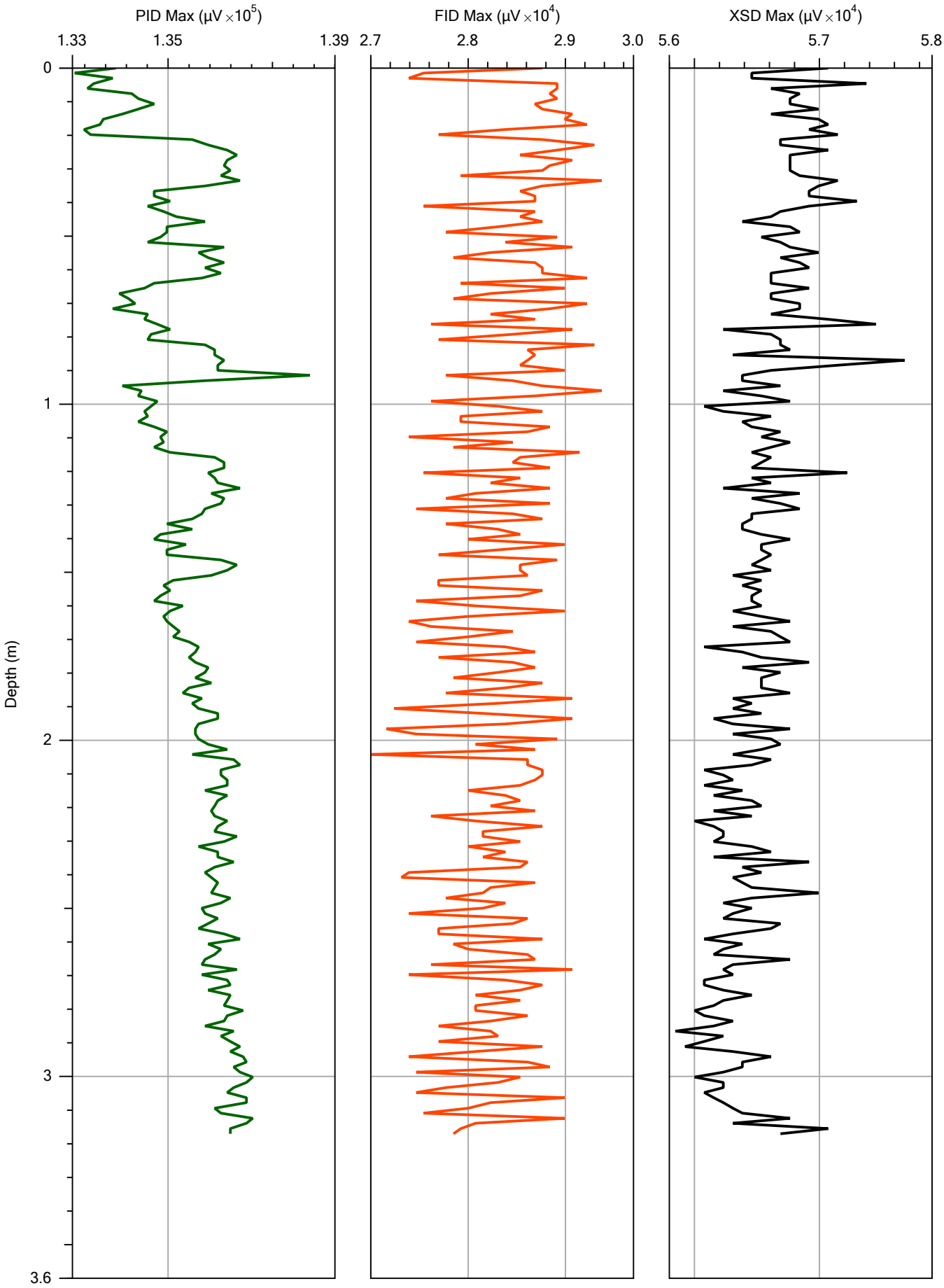
TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.372	0.0	105.990
TOP with FLOW>0	15.844	278.7	109.240
BOTTOM with FLOW=0	15.157	0.0	104.500
BOTTOM with FLOW>0	15.623	277.0	107.720

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

TRANSDUCER TEST PASSED

Post-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.5	0.9	PASS
High	290.0	297.5	2.6	PASS



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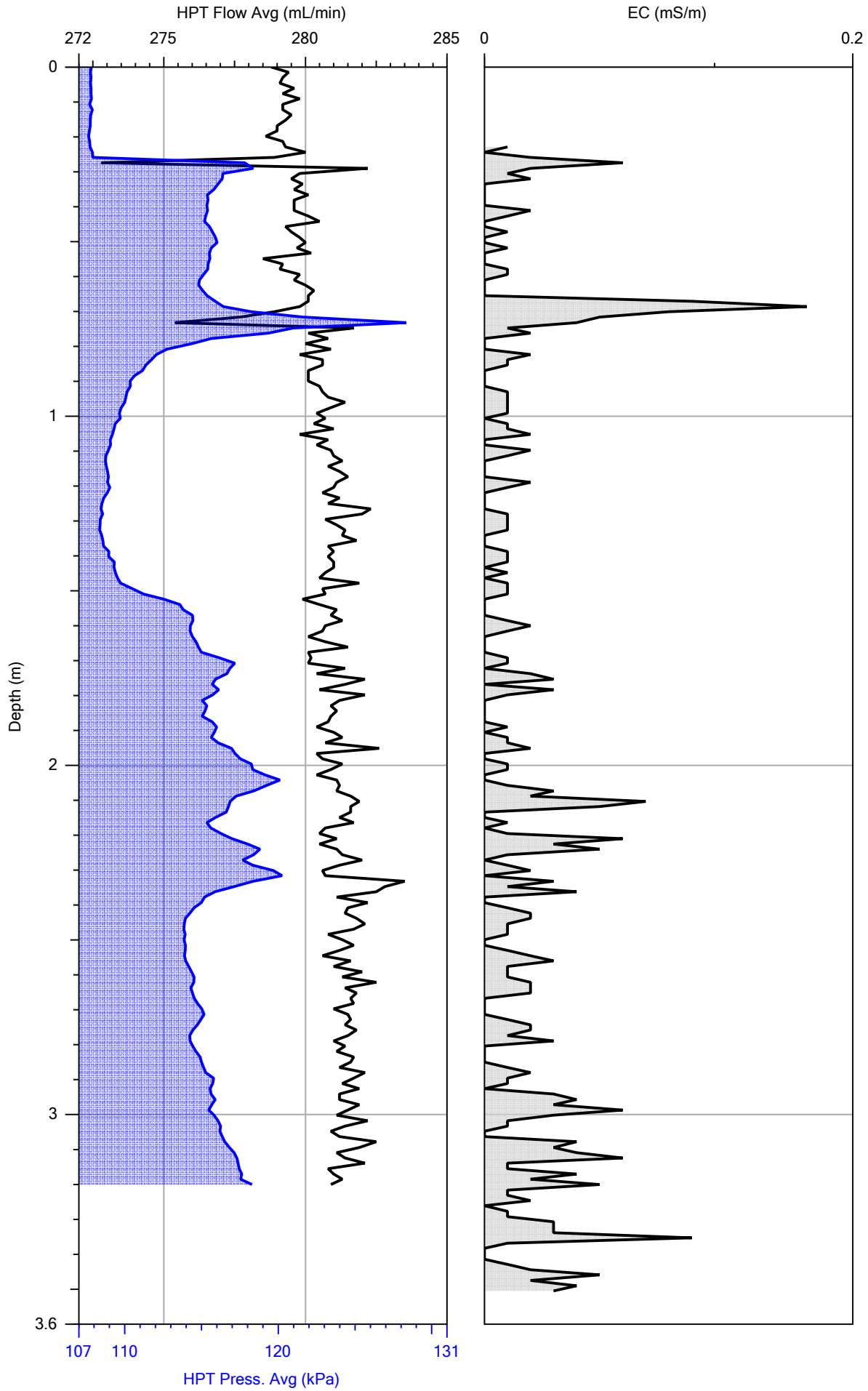
Numac Drilling Services PTY Ltd.
www.numac.co.au
Ph. - 1300 131 019
Em. - info@numac.com.au

		File: MIP032.MHP
Company: DHA-Randwick	Operator: ADU	Date: 23/06/20
Project ID: 610.30041	Client: SLR	Location:



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Em. - info@numac.com.au

		File: MIP032.MHP
Company: DHA-Randwick	Operator: ADU	Date: 23/06/20
Project ID: 610.30041	Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.1	0.3	PASS
High	290.0	277.0	4.5	PASS

MIP032.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA-Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP032.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Tue Jun 23 2020 09:45:02

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Tue Jun 23 2020 09:50:04

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.437	0.0	106.440
TOP with FLOW>0	15.911	277.2	109.700
BOTTOM with FLOW=0	15.217	0.0	104.920
BOTTOM with FLOW>0	15.697	277.7	108.220

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840

LOG START TIME: Tue Jun 23 2020 09:55:32

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4
0.00	0.000	1	1	1	1

LOG END DEPTH: 10.75 ft (3.277 m)
LOG END TIME: Tue Jun 23 2020 10:28:44

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS 0.00 FEET
GPS Quality: None

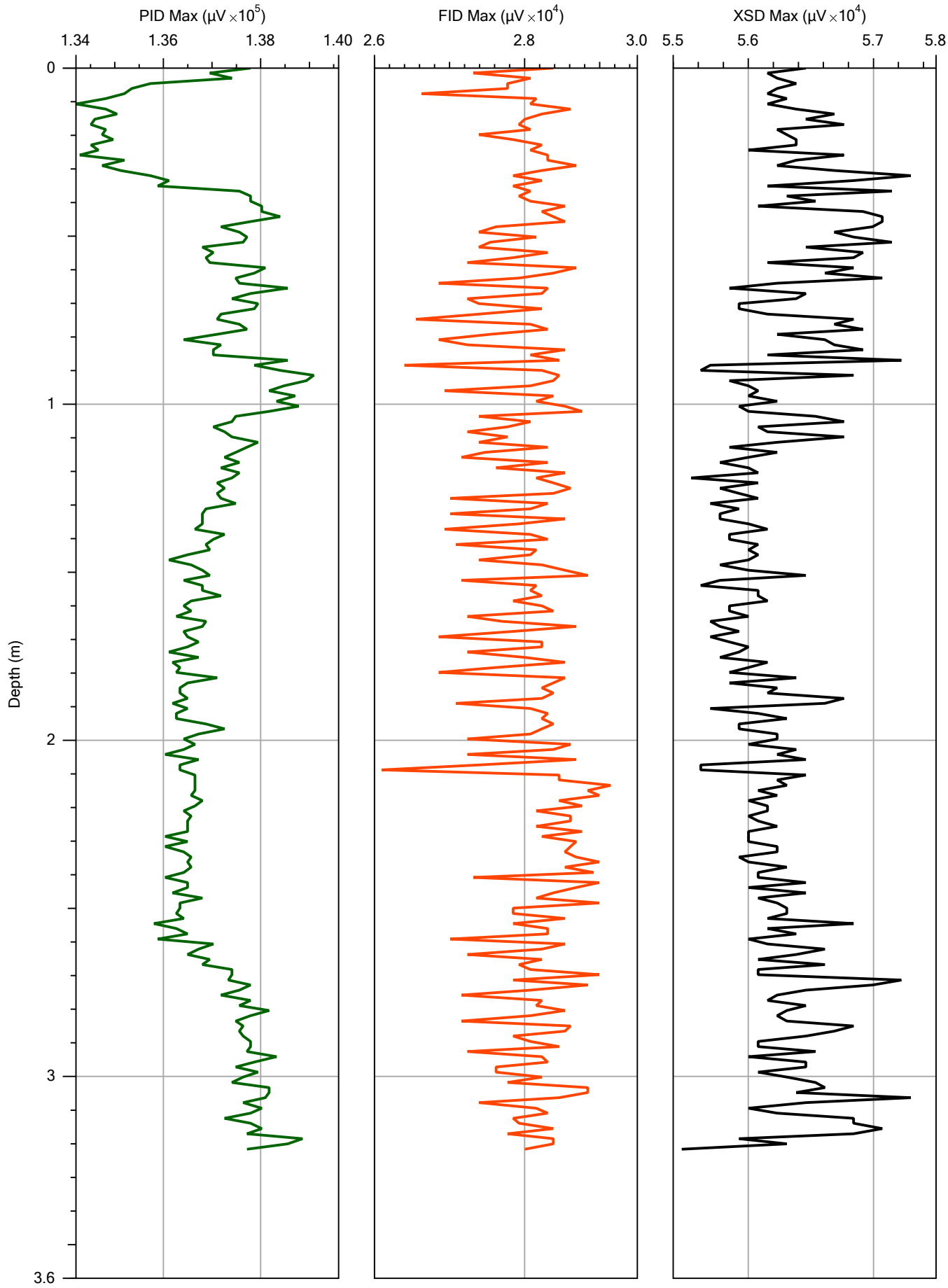
MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Tue Jun 23 2020 11:42:05

POST-LOG HPT REFERENCE TESTS BYPASSED

EC POST-LOG TESTS BYPASSED



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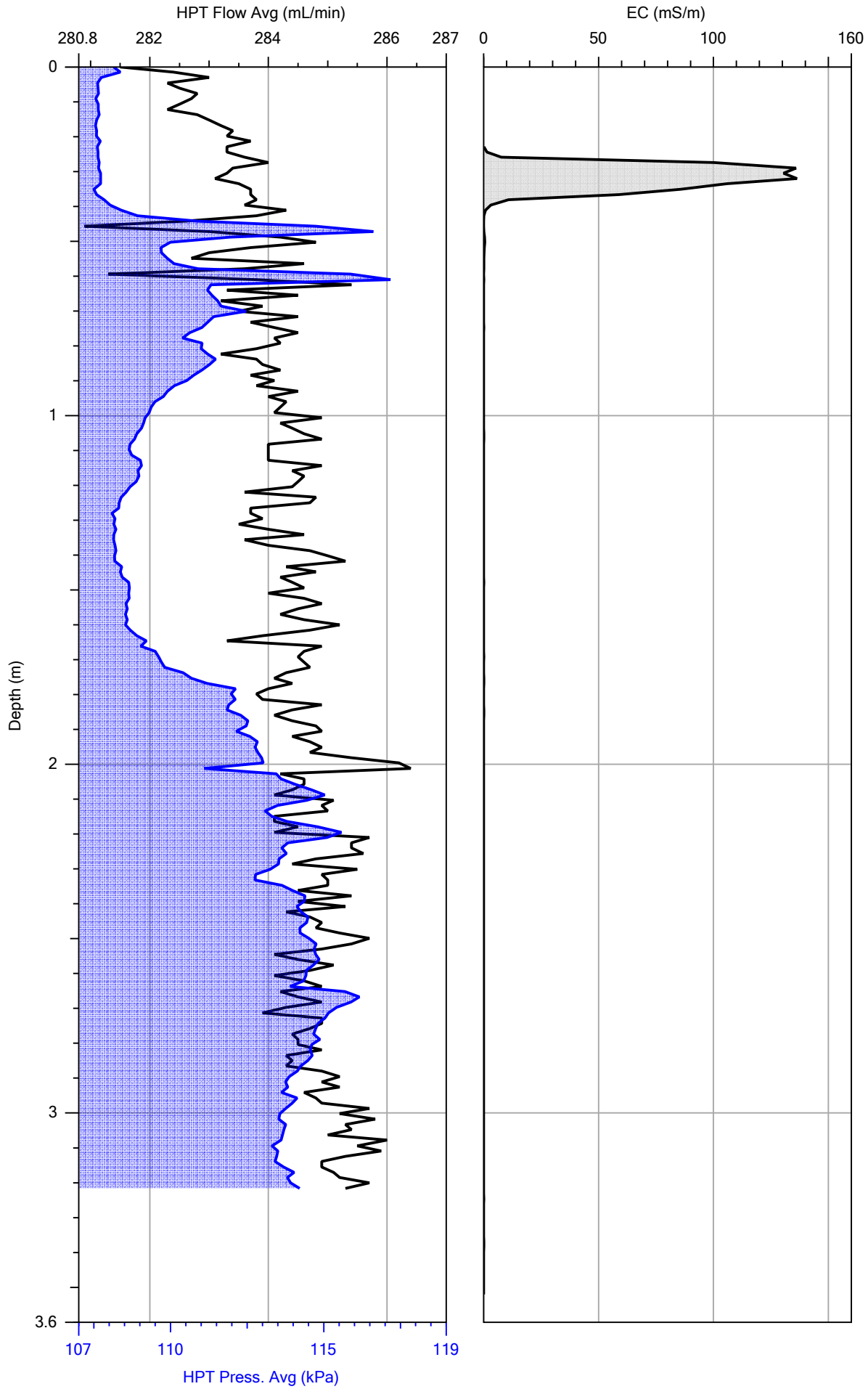
		File: MIP033.MHP
Company: DHA-Randwick	Operator: ADU	Date: 23/06/20
Project ID: 610.30041	Client: SLR	Location:



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		File: MIP033.MHP
Company: DHA-Randwick	Operator: ADU	Date: 23/06/20
Project ID: 610.30041	Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.2	0.4	PASS
High	290.0	295.9	2.0	PASS

MIP033.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA-Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP033.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Tue Jun 23 2020 11:43:11

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Tue Jun 23 2020 11:55:24

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.443	0.0	106.470
TOP with FLOW>0	15.906	280.7	109.670
BOTTOM with FLOW=0	15.223	0.0	104.960
BOTTOM with FLOW>0	15.691	278.7	108.180

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840

LOG START TIME: Tue Jun 23 2020 12:05:28

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4
0.00	0.000	1	1	1	1

LOG END DEPTH: 10.80 ft (3.292 m)
LOG END TIME: Tue Jun 23 2020 12:37:05

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS 0.00 FEET
GPS Quality: None

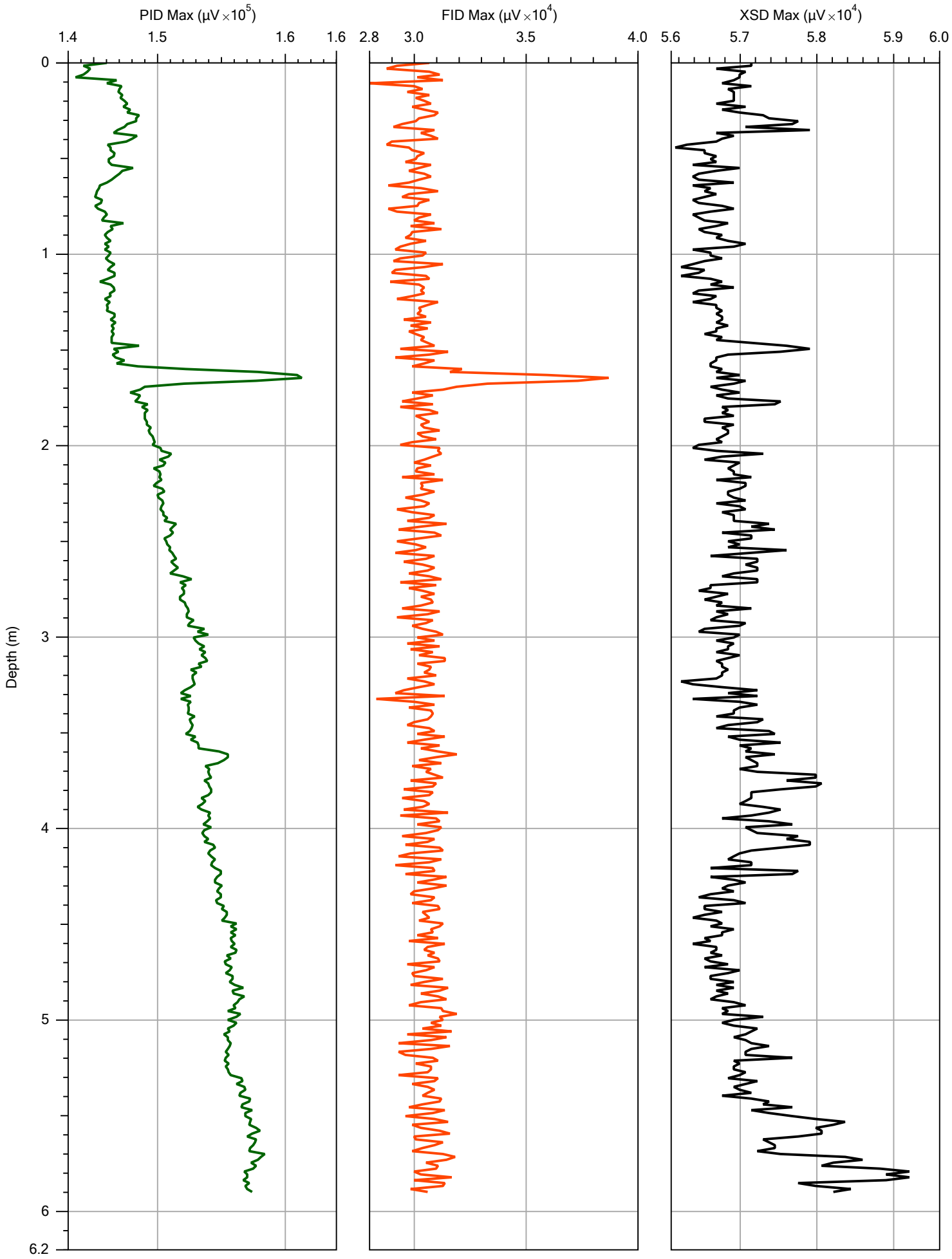
MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Tue Jun 23 2020 12:37:27

POST-LOG HPT REFERENCE TESTS BYPASSED

EC POST-LOG TESTS BYPASSED



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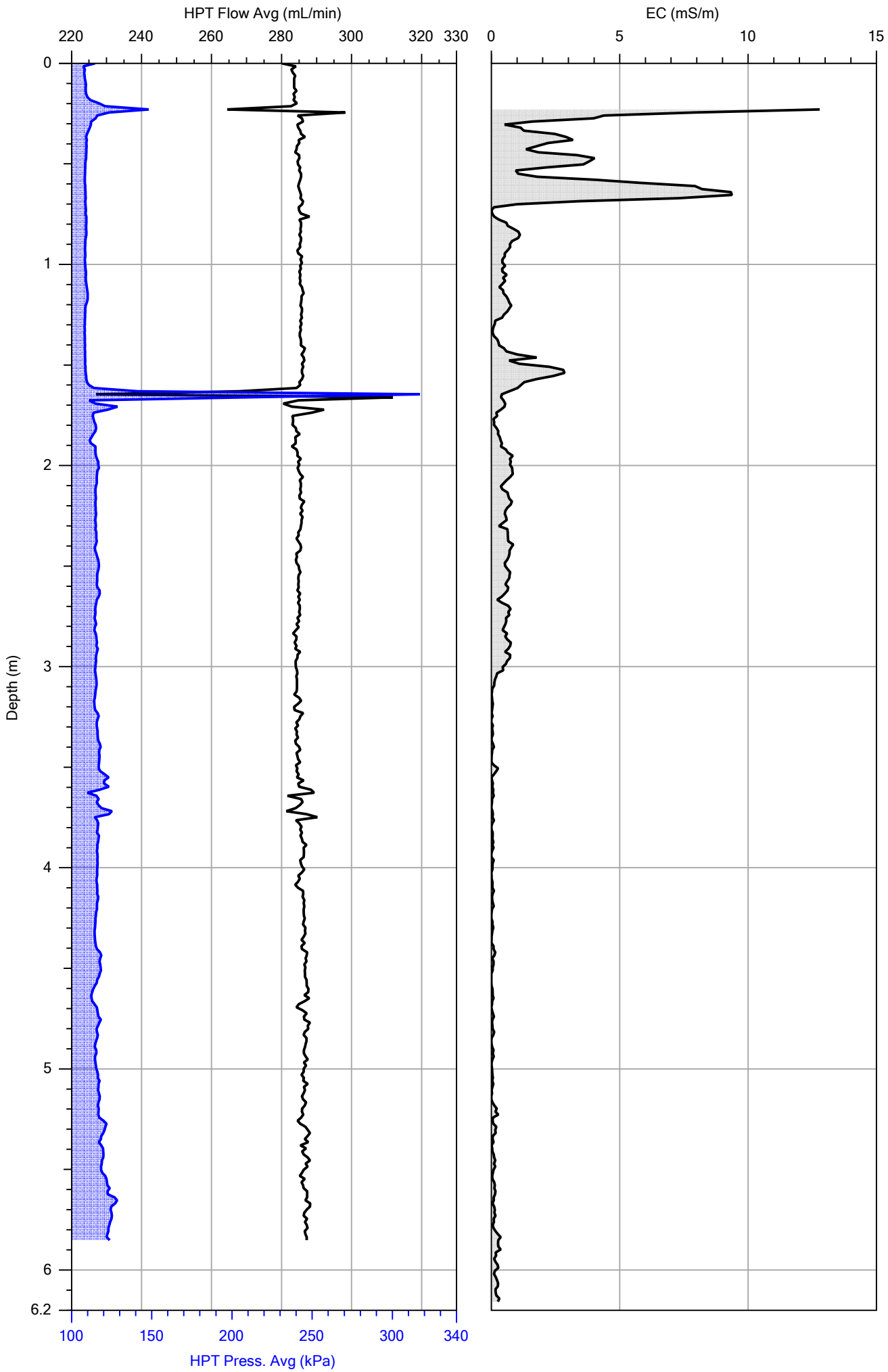
			File: MIP034.MHP
Company: DHA-Randwick		Operator: ADU	Date: 23/06/20
Project ID: 610.30041		Client: SLR	Location:



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Em. - info@numac.com.au

			File: MIP034.MHP
Company: DHA-Randwick		Operator: ADU	Date: 23/06/20
Project ID: 610.30041		Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.2	0.4	PASS
High	290.0	296.7	2.3	PASS

MIP034.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA-Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP034.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Tue Jun 23 2020 13:37:51

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Tue Jun 23 2020 13:42:59

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.413	0.0	106.270
TOP with FLOW>0	15.885	283.4	109.520
BOTTOM with FLOW=0	15.196	0.0	104.770
BOTTOM with FLOW>0	15.662	283.3	107.990

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

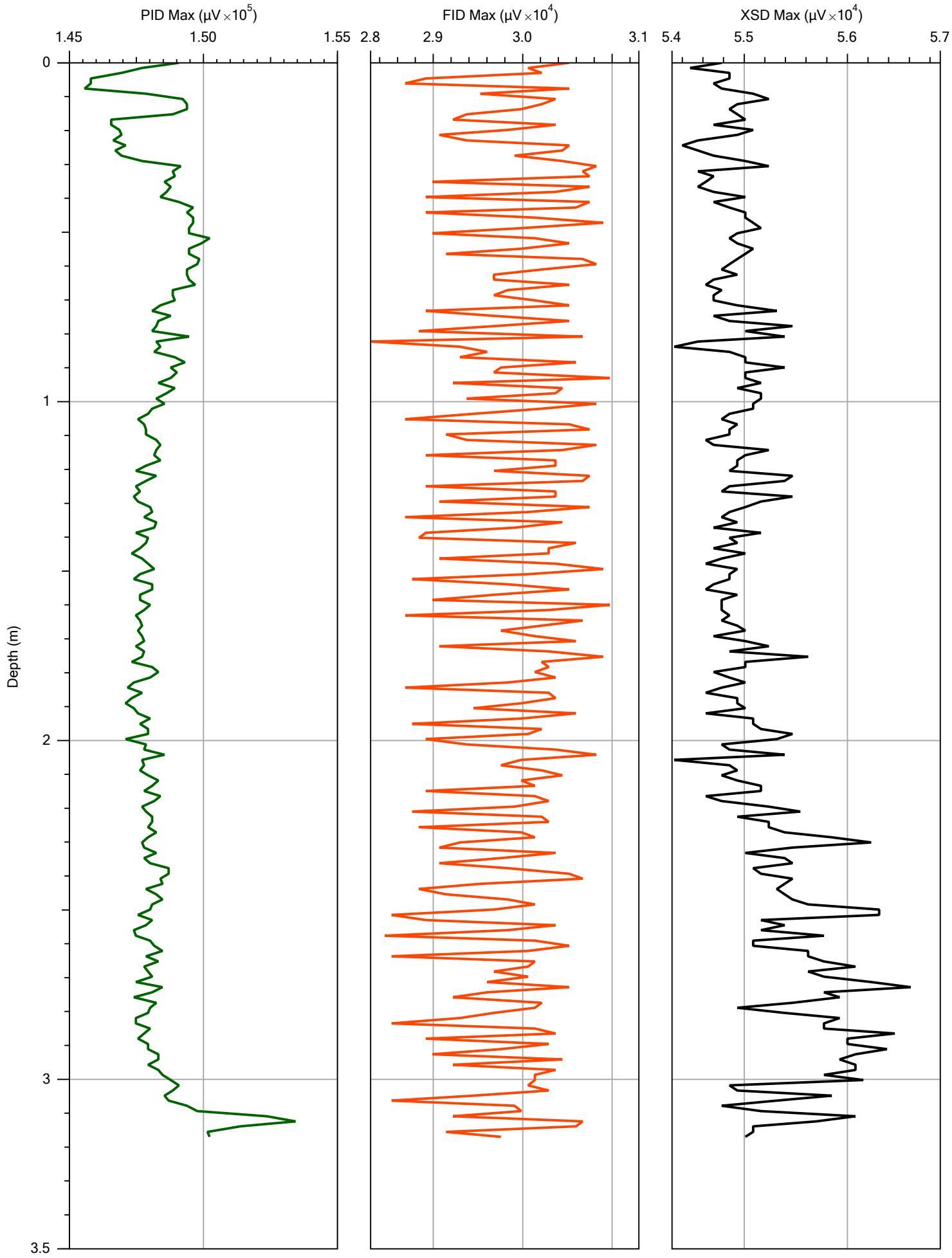
TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840
LOG START TIME: Tue Jun 23 2020 13:47:23

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4

```
      0.00          0.000          1       1       1       1
LOG END DEPTH: 19.45 ft (5.928 m)
LOG END TIME: Tue Jun 23 2020 14:40:29

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS  0.00 FEET
GPS Quality: None



MIP POST-LOG RESPONSE TEST BYPASSED




POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Tue Jun 23 2020 14:40:33

POST-LOG HPT REFERENCE TESTS BYPASSED



EC POST-LOG TESTS BYPASSED
```



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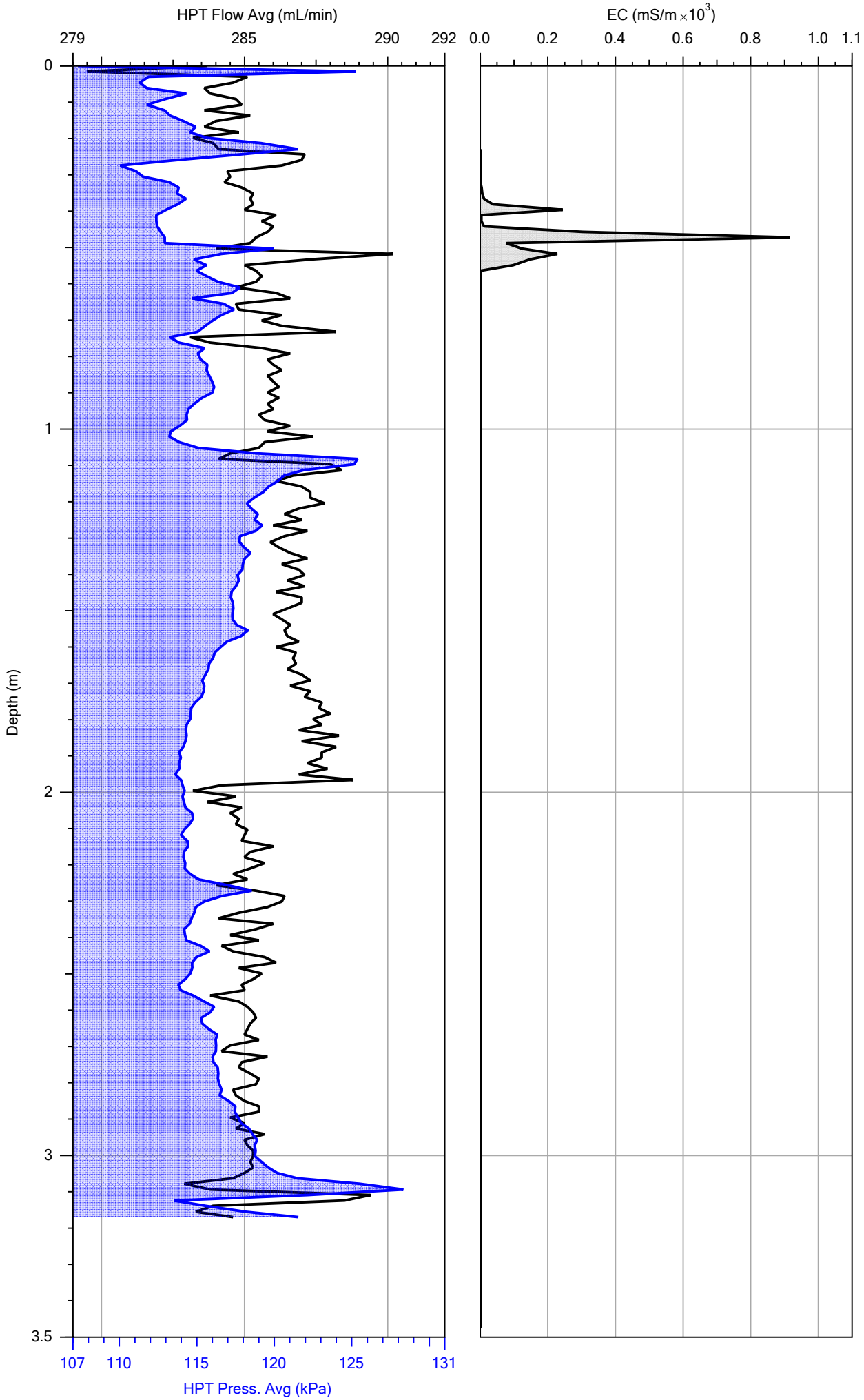
			File: MIP035.MHP
Company: DHA-Randwick		Operator: ADU	Date: 23/06/20
Project ID: 610.30041		Client: SLR	Location:



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			File: MIP035.MHP
Company: DHA-Randwick		Operator: ADU	Date: 23/06/20
Project ID: 610.30041		Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.6	1.1	PASS
High	290.0	297.5	2.6	PASS

MIP035.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA-Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP035.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Tue Jun 23 2020 15:50:38

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Tue Jun 23 2020 15:55:28

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.423	0.0	106.340
TOP with FLOW>0	15.878	280.4	109.470
BOTTOM with FLOW=0	15.204	0.0	104.830
BOTTOM with FLOW>0	15.653	280.2	107.920

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840
LOG START TIME: Tue Jun 23 2020 15:58:30

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4

0.00	0.000	1	1	1	1

LOG END DEPTH: 10.65 ft (3.246 m)
LOG END TIME: Tue Jun 23 2020 16:19:24

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS 0.00 FEET
GPS Quality: None

MIP POST-LOG RESPONSE TEST

FILENAME: MIP035.post.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Tue Jun 23 2020 16:29:57

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Tue Jun 23 2020 16:36:31

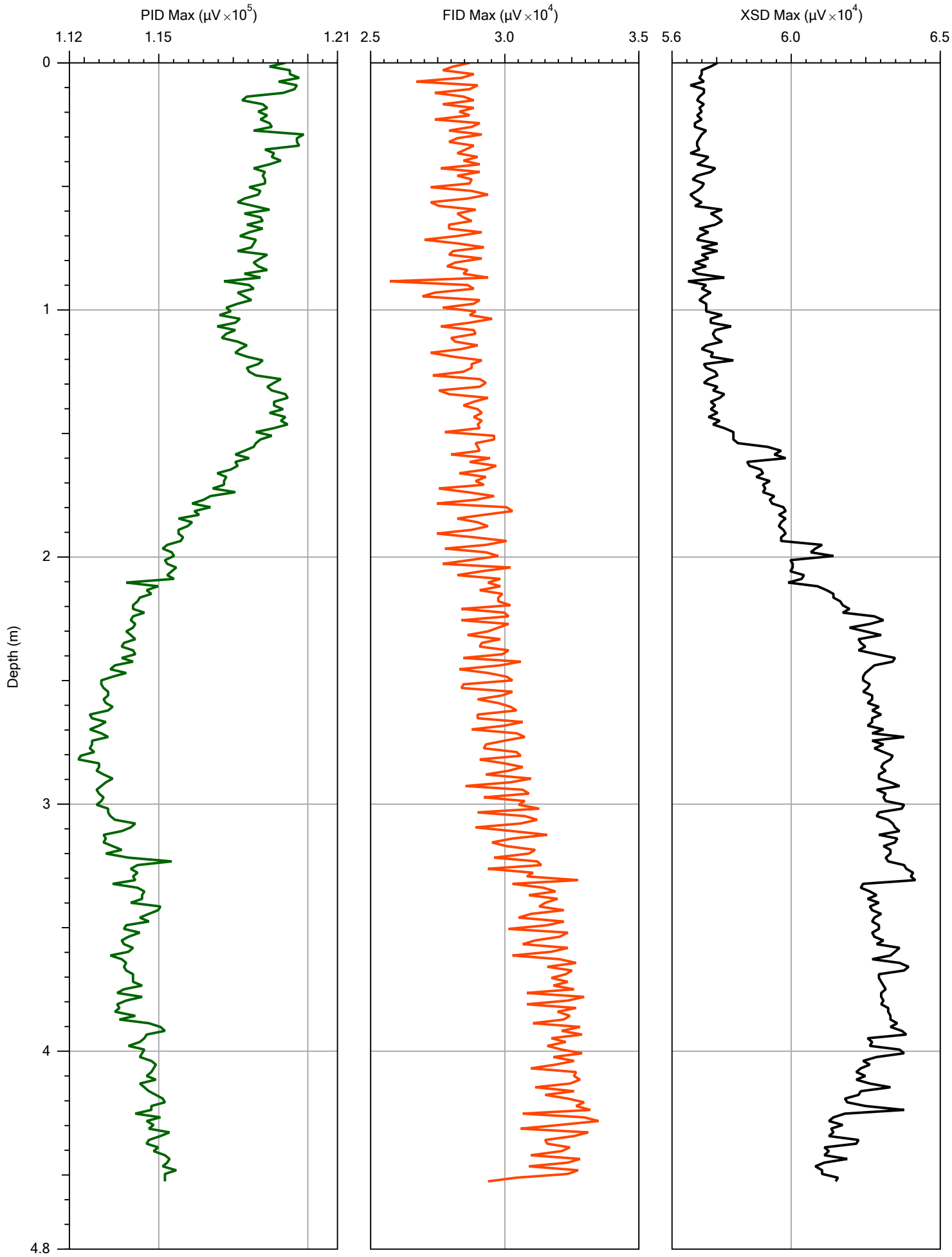
TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.400	0.0	106.180
TOP with FLOW>0	15.866	276.5	109.390
BOTTOM with FLOW=0	15.175	0.0	104.630
BOTTOM with FLOW>0	15.646	275.8	107.870

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

TRANSDUCER TEST PASSED

Post-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.6	1.0	PASS
High	290.0	297.3	2.5	PASS



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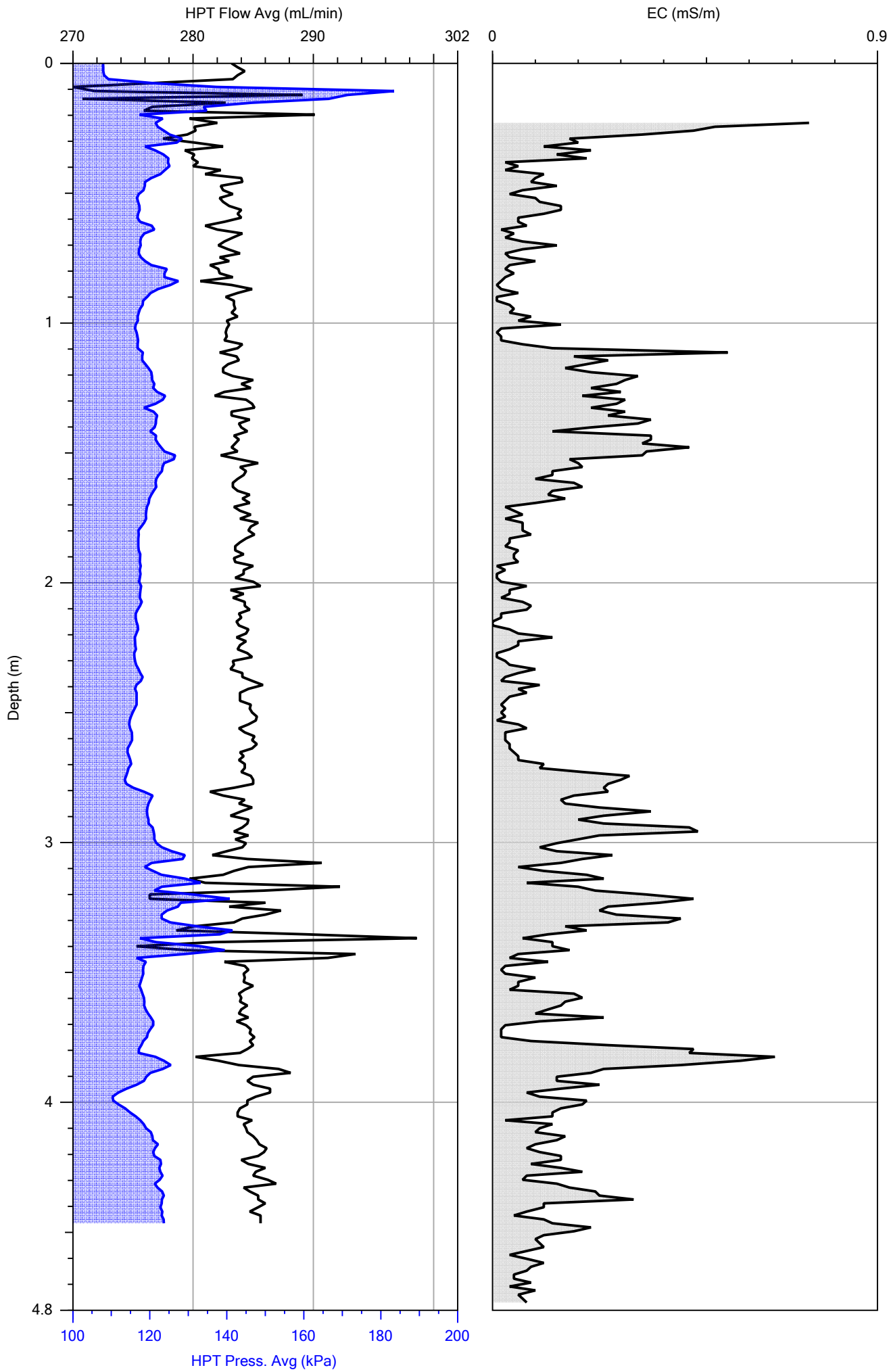
			File: MIP036.MHP
Company: DHA-Randwick		Operator: ADU	Date: 24/06/20
Project ID: 610.30041		Client: SLR	Location:



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Ph. - 1300 131 019
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			File: MIP036.MHP
Company: DHA-Randwick		Operator: ADU	Date: 24/06/20
Project ID: 610.30041		Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.1	0.1	PASS
High	290.0	296.9	2.4	PASS

MIP036.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA-Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP036.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Wed Jun 24 2020 08:16:58

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Wed Jun 24 2020 08:23:15

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.492	0.0	106.820
TOP with FLOW>0	15.932	278.4	109.850
BOTTOM with FLOW=0	15.275	0.0	105.320
BOTTOM with FLOW>0	15.713	277.8	108.340

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

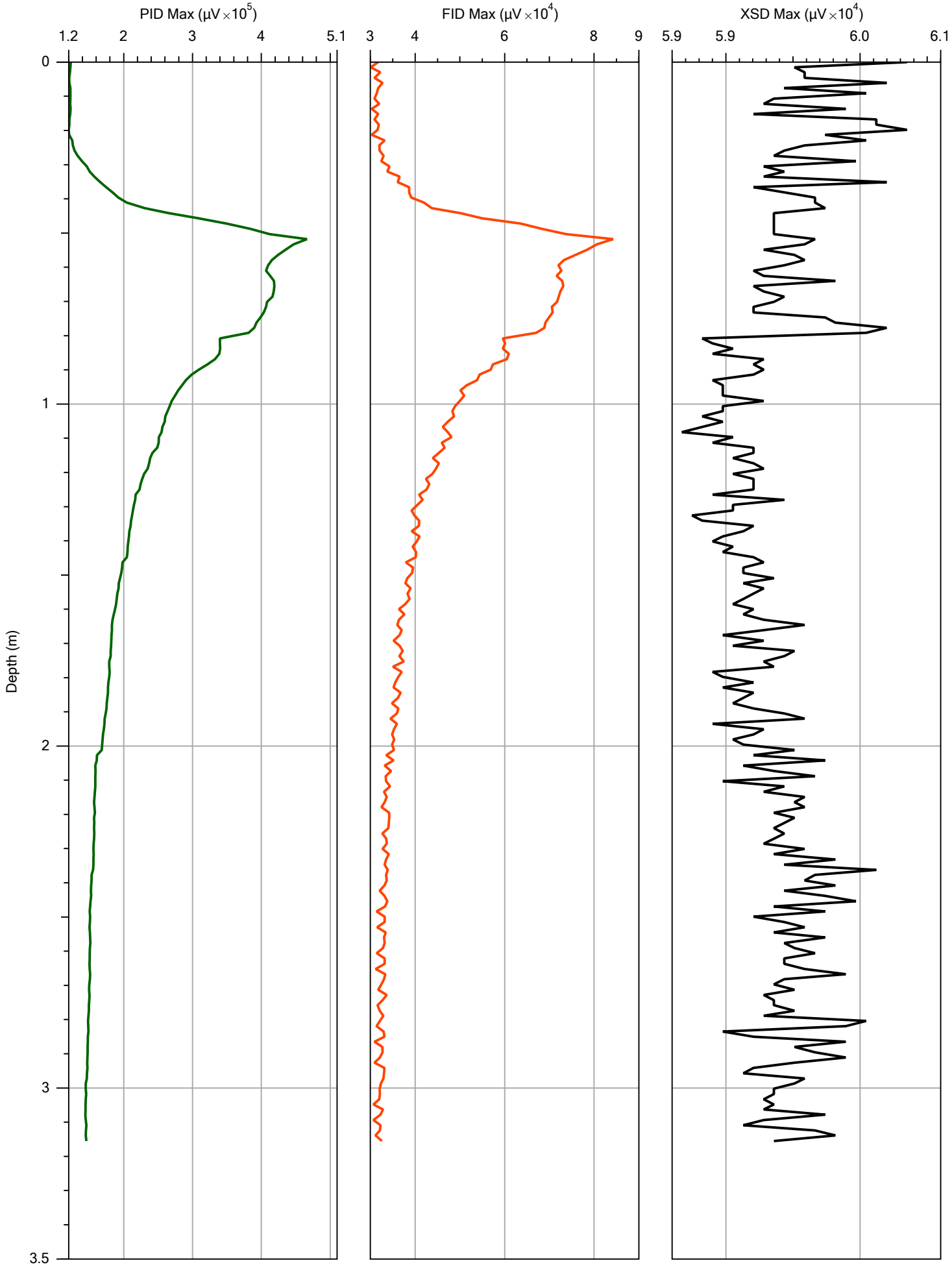
TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840
LOG START TIME: Wed Jun 24 2020 08:31:01

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4

```
      0.00          0.000          1       1       1       1
LOG END DEPTH: 14.90 ft (4.542 m)
LOG END TIME: Wed Jun 24 2020 09:10:39

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS  0.00 FEET
GPS Quality: None



MIP POST-LOG RESPONSE TEST BYPASSED




POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Wed Jun 24 2020 09:21:00

POST-LOG HPT REFERENCE TESTS BYPASSED



EC POST-LOG TESTS BYPASSED
```



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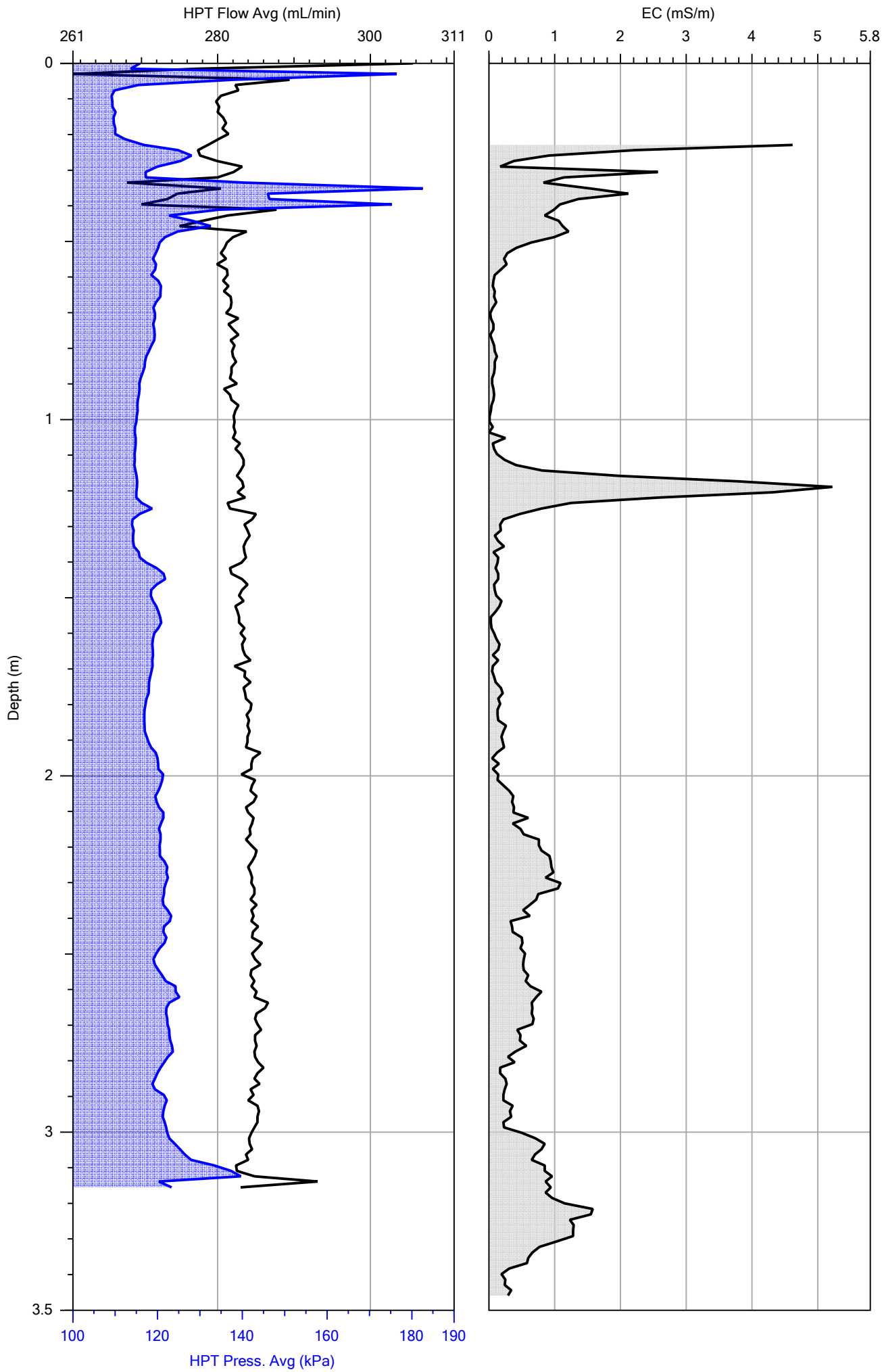
		File: MIP037.MHP
Company: DHA-Randwick	Operator: ADU	Date: 24/06/20
Project ID: 610.30041	Client: SLR	Location:



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			File: MIP037.MHP
Company: DHA-Randwick		Operator: ADU	Date: 24/06/20
Project ID: 610.30041		Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.3	0.5	PASS
High	290.0	296.6	2.3	PASS

MIP037.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA-Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP037.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Wed Jun 24 2020 09:25:48

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Wed Jun 24 2020 09:30:35

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.423	0.0	106.340
TOP with FLOW>0	15.939	280.7	109.890
BOTTOM with FLOW=0	15.203	0.0	104.820
BOTTOM with FLOW>0	15.721	279.5	108.390

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

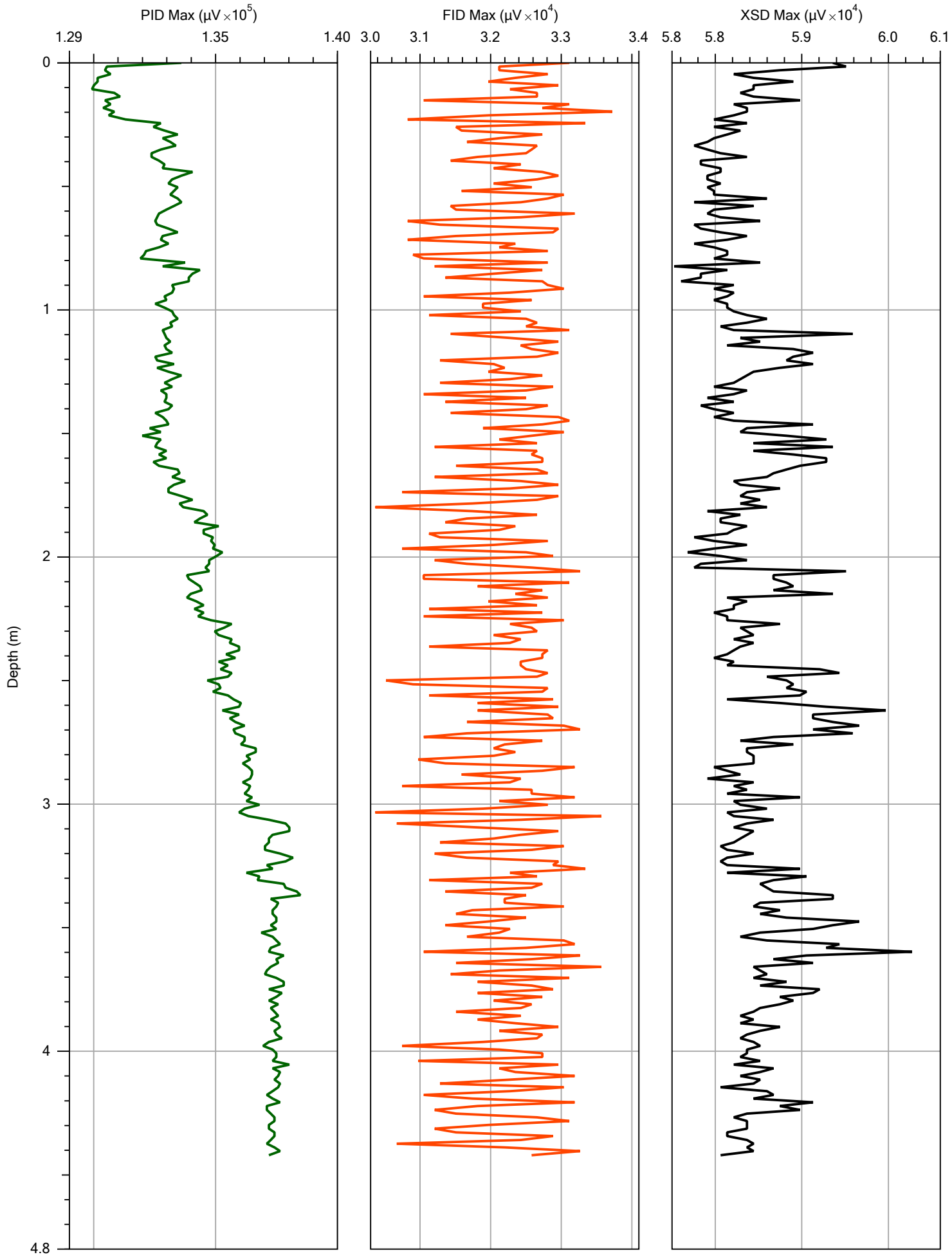
TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840
LOG START TIME: Wed Jun 24 2020 09:37:05

ATTENUATION CHANGES

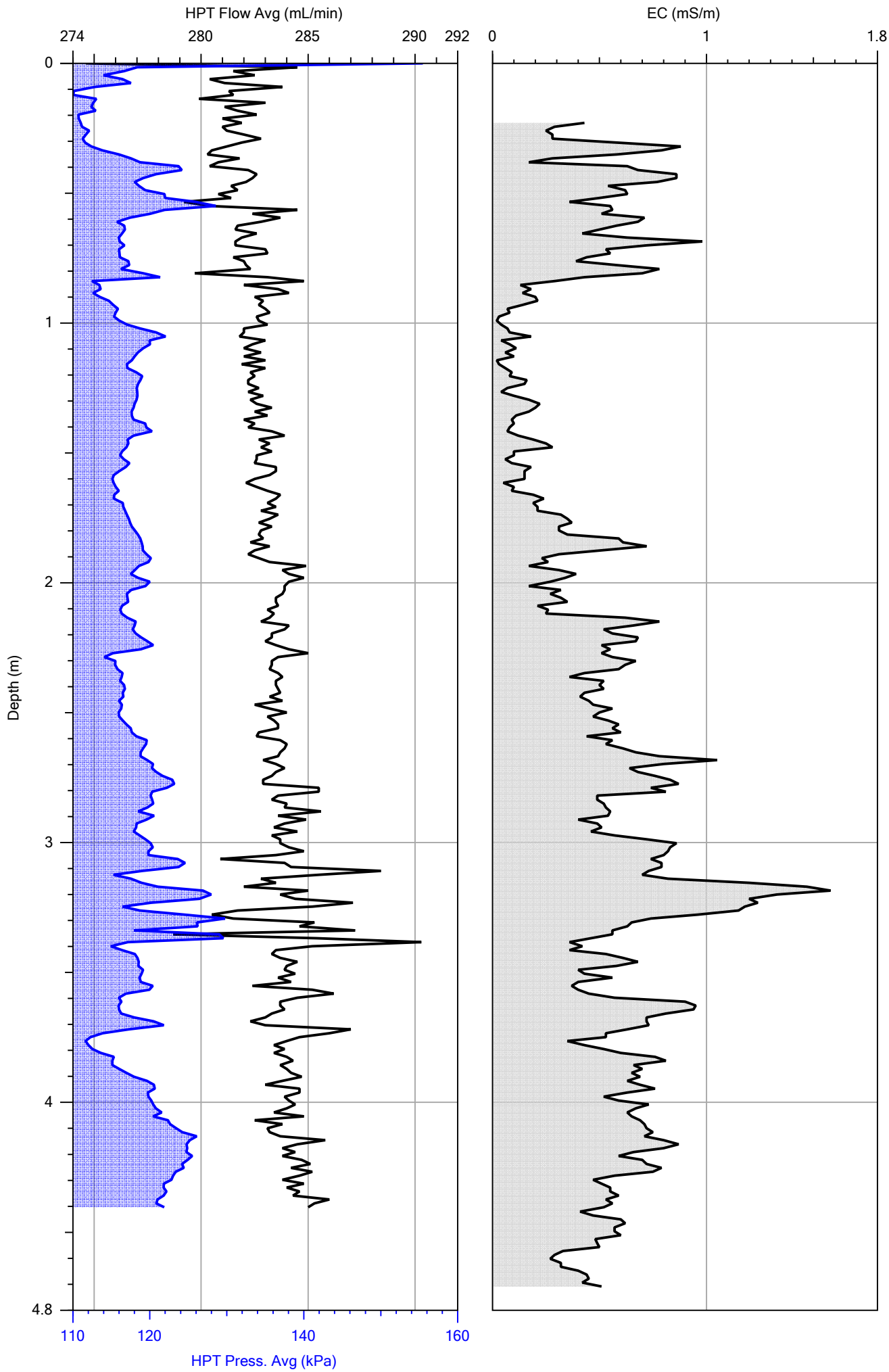
DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4

```
      0.00          0.000          1       1       1       1
LOG END DEPTH: 10.60 ft (3.231 m)
LOG END TIME: Wed Jun 24 2020 10:06:12

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS  0.00 FEET
GPS Quality: None



MIP POST-LOG RESPONSE TEST BYPASSED




POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Wed Jun 24 2020 10:28:47

POST-LOG HPT REFERENCE TESTS BYPASSED



EC POST-LOG TESTS BYPASSED
```



numac
Numac Drilling Services PTY Ltd.
www.numac.co.au
Ph. - 1300 131 019
Em. - info@numac.com.au

			File: MIP038.MHP
Company: DHA-Randwick		Operator: ADU	Date: 24/06/20
Project ID: 610.30041		Client: SLR	Location:



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		File: MIP038.MHP
Company: DHA-Randwick	Operator: ADU	Date: 24/06/20
Project ID: 610.30041	Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.3	0.5	PASS
High	290.0	295.4	1.9	PASS

MIP038.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA-Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP038.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Wed Jun 24 2020 10:41:03

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Wed Jun 24 2020 10:47:49

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.478	0.0	106.720
TOP with FLOW>0	15.923	280.8	109.790
BOTTOM with FLOW=0	15.264	0.0	105.240
BOTTOM with FLOW>0	15.703	280.7	108.270

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.21 psi (1.5 kPa)

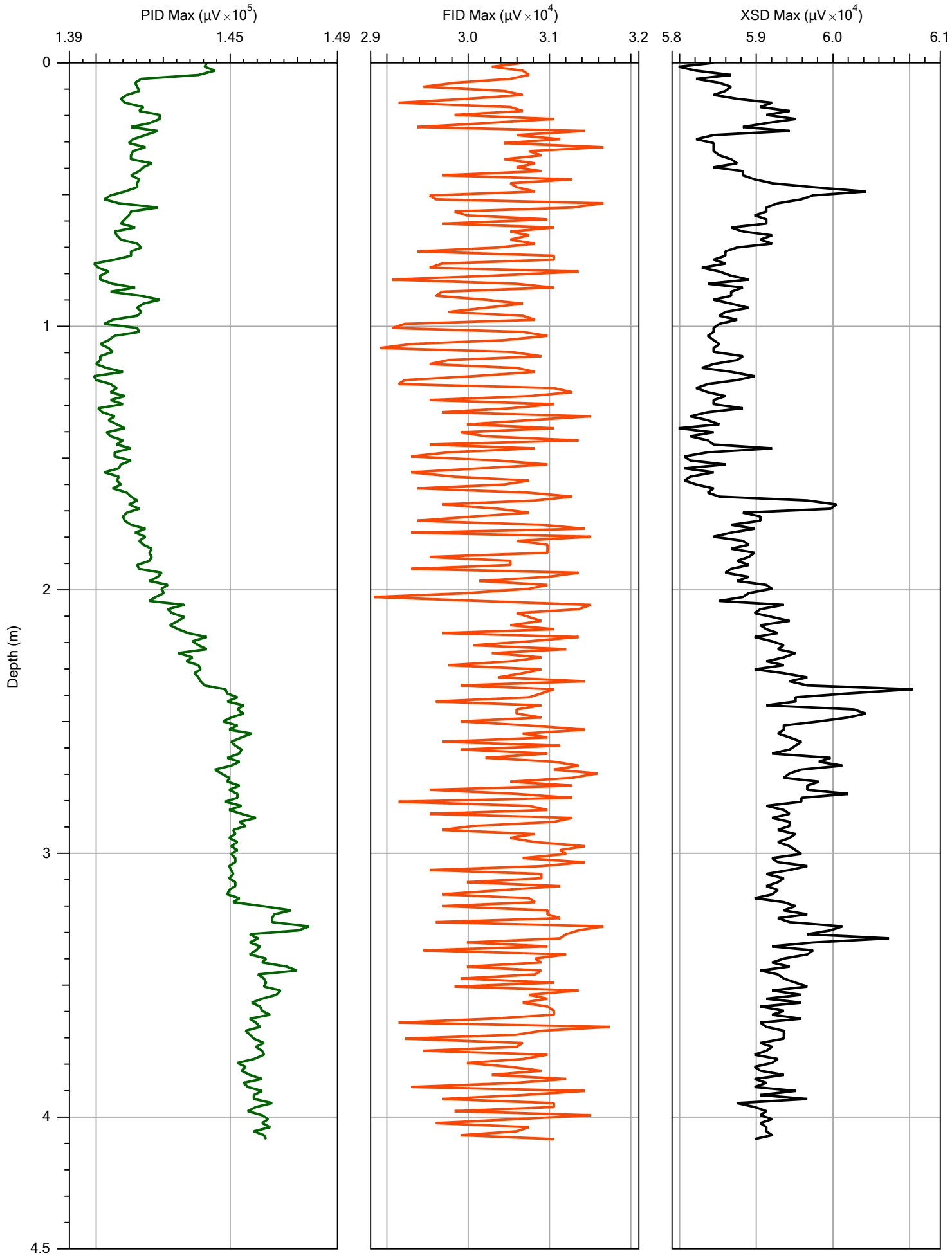
TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840
LOG START TIME: Wed Jun 24 2020 10:52:15

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4

```
      0.00          0.000          1       1       1       1
LOG END DEPTH: 14.70 ft (4.481 m)
LOG END TIME: Wed Jun 24 2020 11:45:28

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS  0.00 FEET
GPS Quality: None



MIP POST-LOG RESPONSE TEST BYPASSED




POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Wed Jun 24 2020 11:54:10

POST-LOG HPT REFERENCE TESTS BYPASSED



EC POST-LOG TESTS BYPASSED
```



numac
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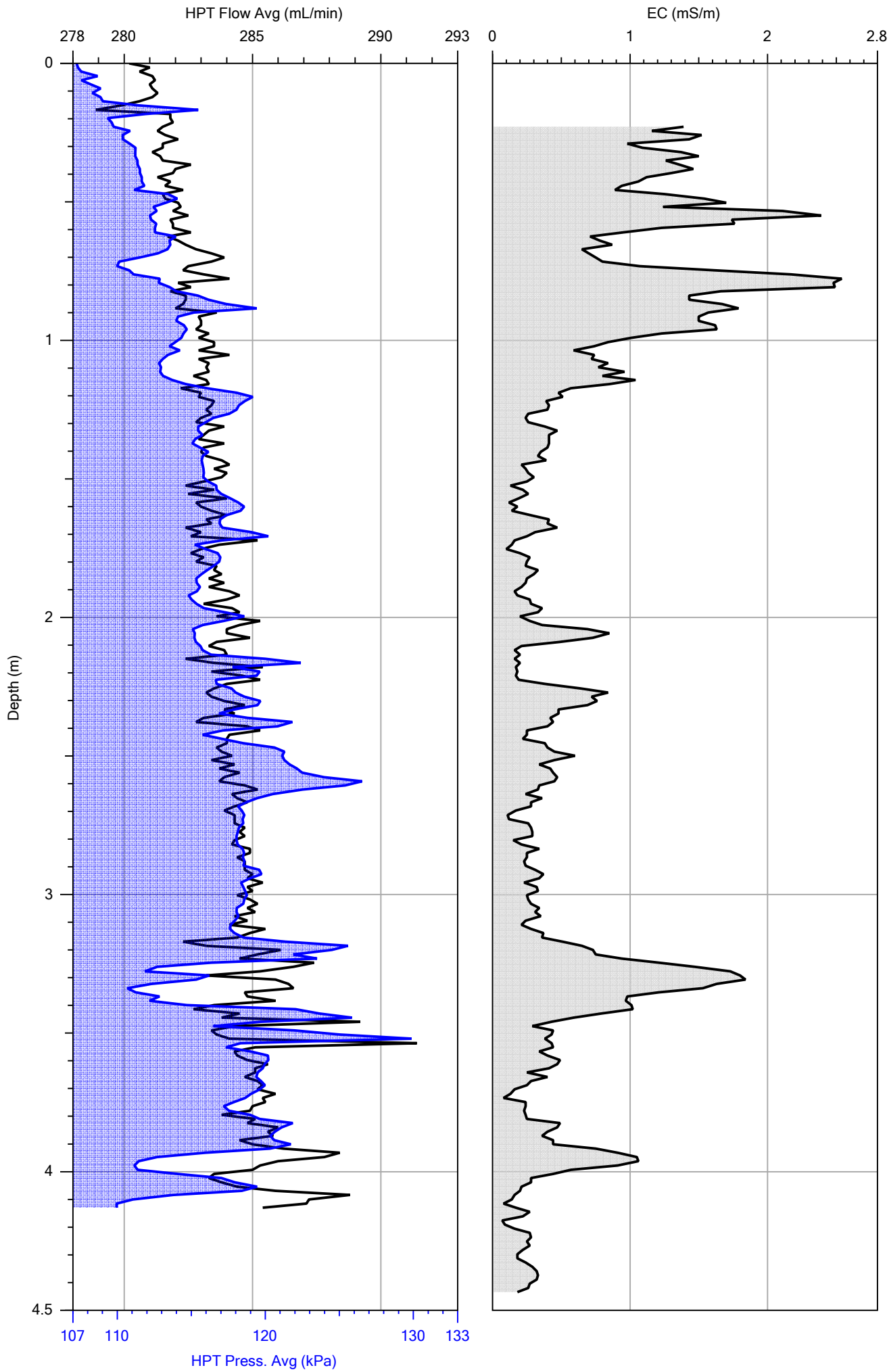
			File: MIP039.MHP
Company: DHA-Randwick		Operator: ADU	Date: 24/06/20
Project ID: 610.30041		Client: SLR	Location:



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Em. - info@numac.com.au

		File: MIP039.MHP
Company: DHA-Randwick	Operator: ADU	Date: 24/06/20
Project ID: 610.30041	Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.3	0.5	PASS
High	290.0	296.5	2.2	PASS

MIP039.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA-Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP039.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Wed Jun 24 2020 13:08:48

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Wed Jun 24 2020 13:14:13

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.453	0.0	106.540
TOP with FLOW>0	15.922	281.3	109.780
BOTTOM with FLOW=0	15.231	0.0	105.020
BOTTOM with FLOW>0	15.702	277.1	108.260

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

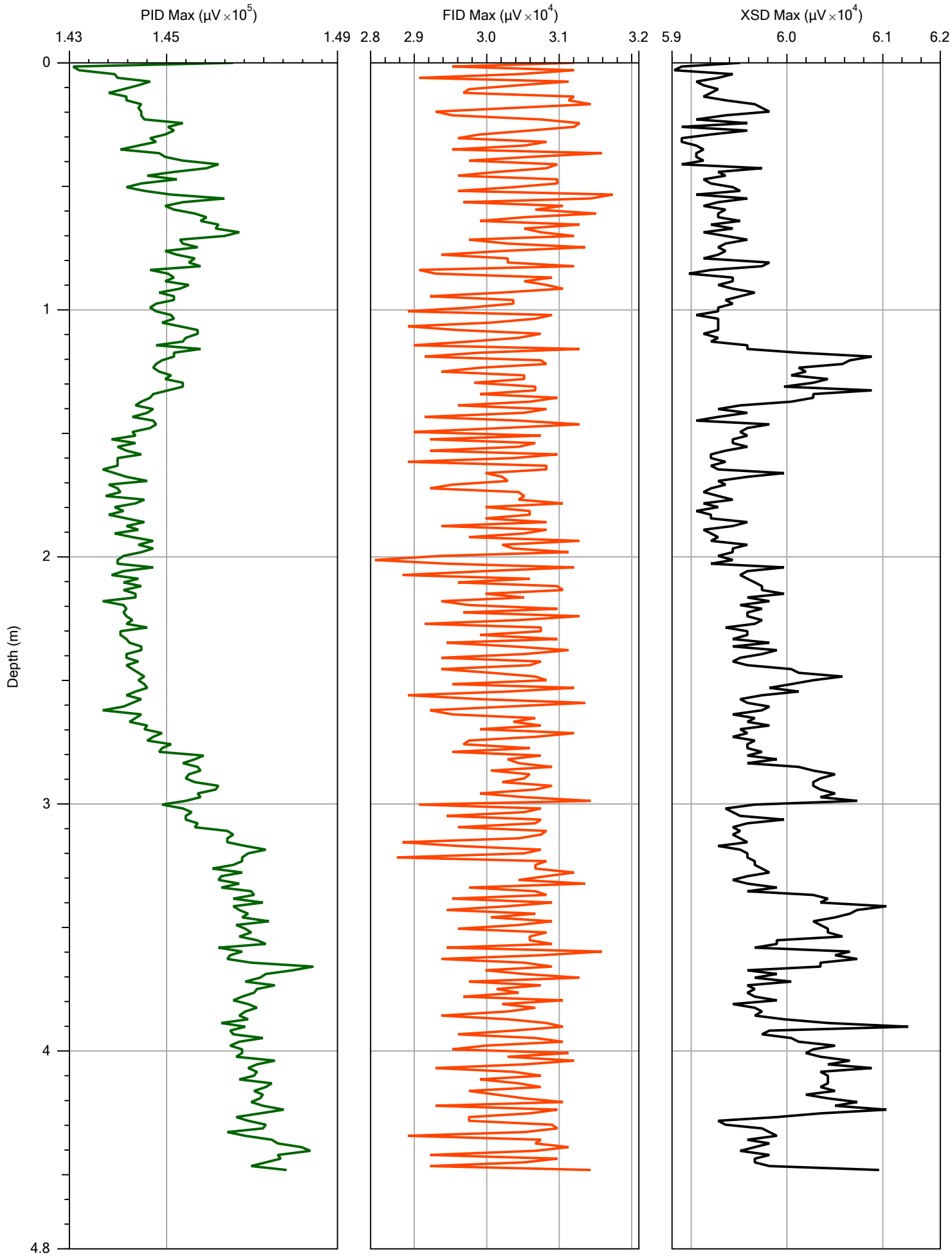
TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840
LOG START TIME: Wed Jun 24 2020 13:19:38

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4

```
      0.00          0.000          1       1       1       1
LOG END DEPTH: 13.80 ft (4.206 m)
LOG END TIME: Wed Jun 24 2020 13:57:40

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS  0.00 FEET
GPS Quality: None



MIP POST-LOG RESPONSE TEST BYPASSED




POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Wed Jun 24 2020 13:57:46

POST-LOG HPT REFERENCE TESTS BYPASSED



EC POST-LOG TESTS BYPASSED
```



numac
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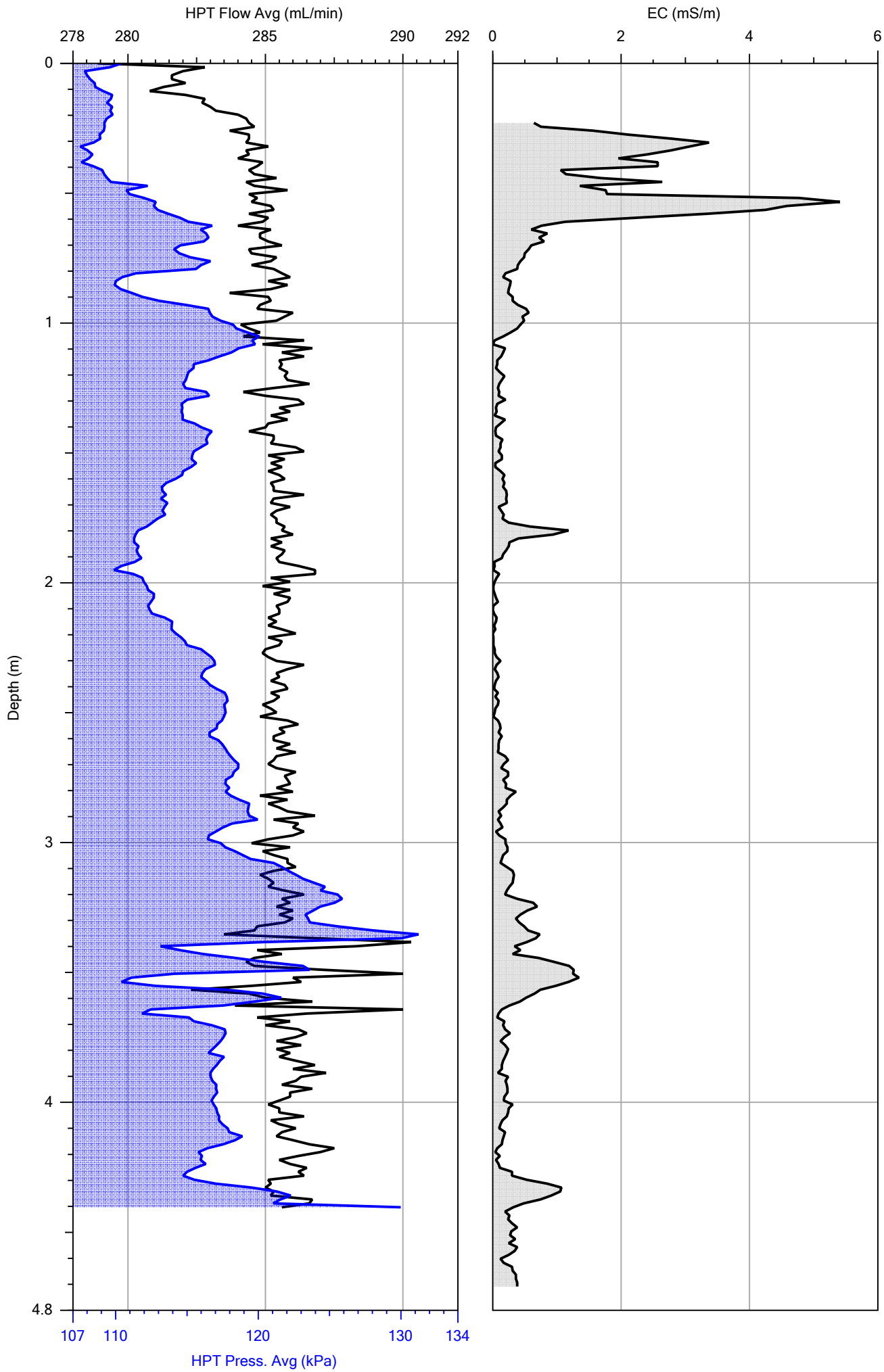
			File: MIP040.MHP
Company: DHA-Randwick		Operator: ADU	Date: 24/06/20
Project ID: 610.30041		Client: SLR	Location:



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Ph. - 1300 131 019
Em. - info@numac.com.au

			File: MIP040.MHP
Company: DHA-Randwick		Operator: ADU	Date: 24/06/20
Project ID: 610.30041		Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.4	0.8	PASS
High	290.0	295.8	2.0	PASS

MIP040.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA-Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP040.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Wed Jun 24 2020 14:20:58

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Wed Jun 24 2020 14:25:44

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.426	0.0	106.360
TOP with FLOW>0	15.894	279.5	109.580
BOTTOM with FLOW=0	15.212	0.0	104.880
BOTTOM with FLOW>0	15.676	279.7	108.080

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.21 psi (1.5 kPa)

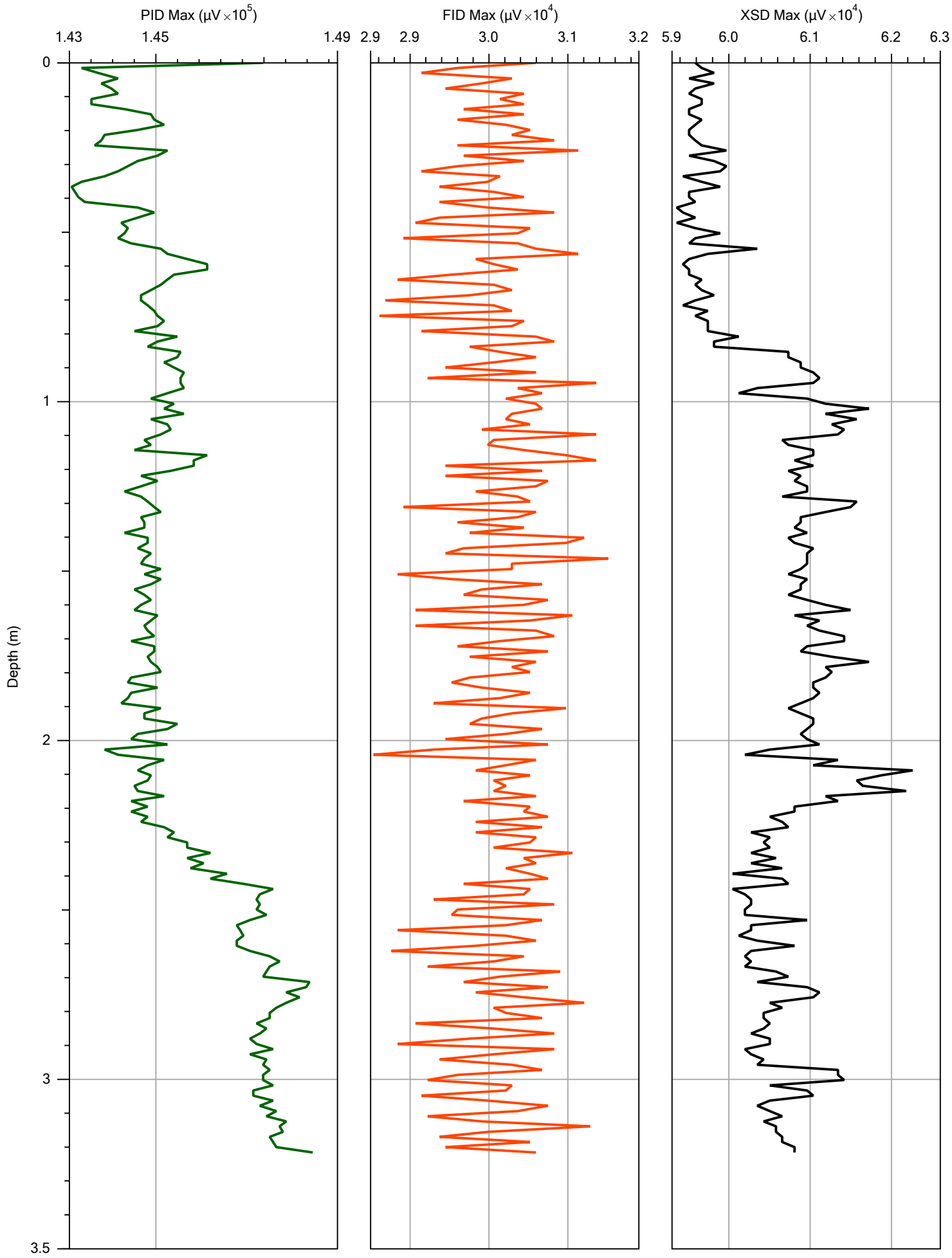
TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840
LOG START TIME: Wed Jun 24 2020 14:30:42

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4

```
      0.00          0.000          1       1       1       1
LOG END DEPTH: 14.70 ft (4.481 m)
LOG END TIME: Wed Jun 24 2020 15:10:10

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS  0.00 FEET
GPS Quality: None



MIP POST-LOG RESPONSE TEST BYPASSED




POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Wed Jun 24 2020 15:10:14

POST-LOG HPT REFERENCE TESTS BYPASSED



EC POST-LOG TESTS BYPASSED
```



numac
Numac Drilling Services PTY Ltd.
www.numac.co.au
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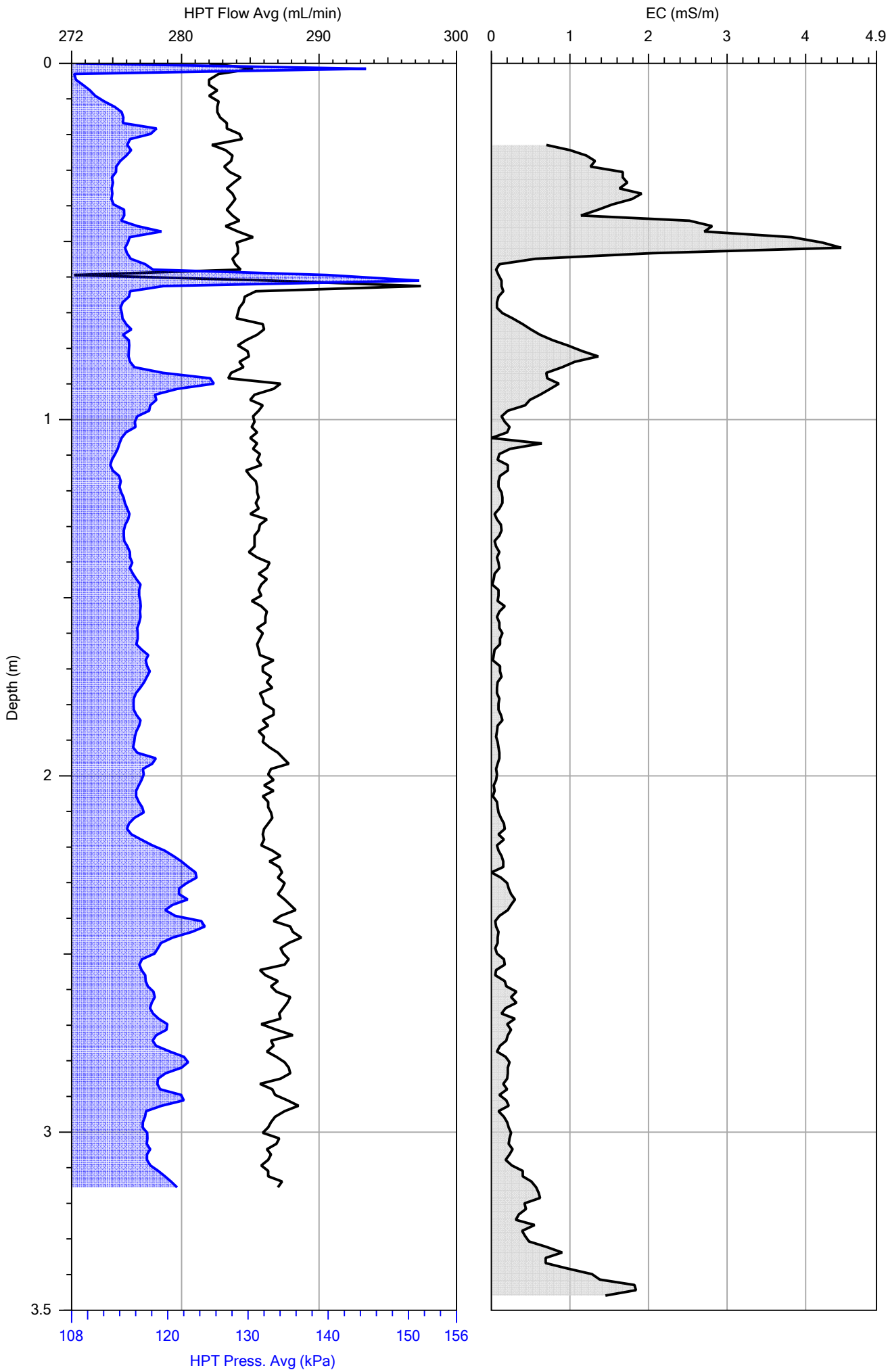
Em. - info@numac.com.au

			File: MIP041.MHP
Company: DHA-Randwick		Operator: ADU	Date: 24/06/20
Project ID: 610.30041		Client: SLR	Location:



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Em. - info@numac.com.au

			File: MIP041.MHP
Company: DHA-Randwick		Operator: ADU	Date: 24/06/20
Project ID: 610.30041		Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.8	1.4	PASS
High	290.0	296.7	2.3	PASS

MIP041.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA-Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP041.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Wed Jun 24 2020 15:39:55

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Wed Jun 24 2020 15:44:47

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.448	0.0	106.510
TOP with FLOW>0	15.876	280.3	109.460
BOTTOM with FLOW=0	15.230	0.0	105.010
BOTTOM with FLOW>0	15.658	278.6	107.960

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840
LOG START TIME: Wed Jun 24 2020 15:47:13

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4

0.00	0.000	1	1	1	1

LOG END DEPTH: 10.60 ft (3.231 m)
LOG END TIME: Wed Jun 24 2020 16:12:43

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS 0.00 FEET
GPS Quality: None

MIP POST-LOG RESPONSE TEST

FILENAME: MIP041.post.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Wed Jun 24 2020 16:28:32

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Wed Jun 24 2020 16:34:23

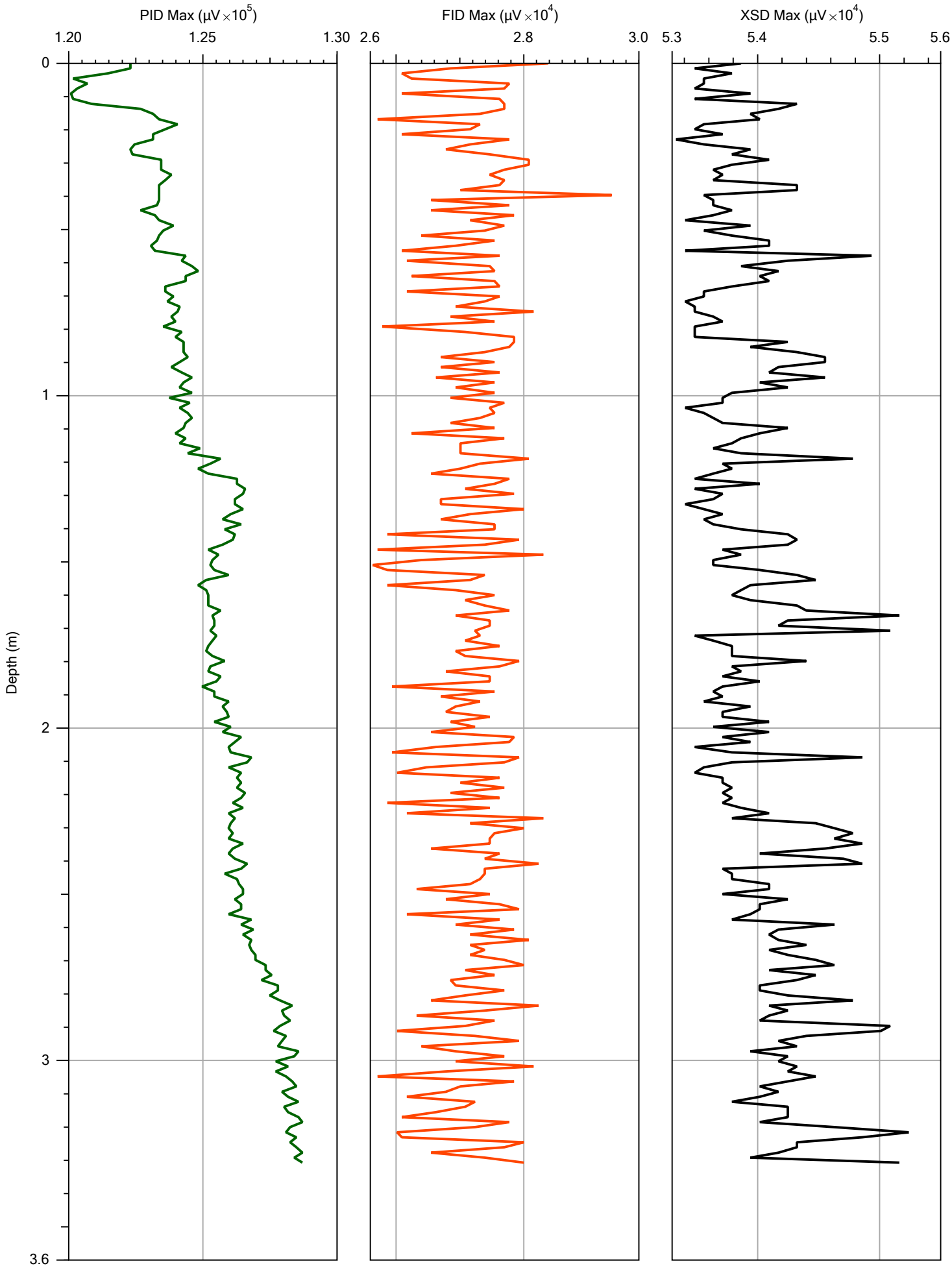
TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.459	0.0	106.590
TOP with FLOW>0	15.908	284.0	109.680
BOTTOM with FLOW=0	15.237	0.0	105.050
BOTTOM with FLOW>0	15.690	282.4	108.180

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

TRANSDUCER TEST PASSED

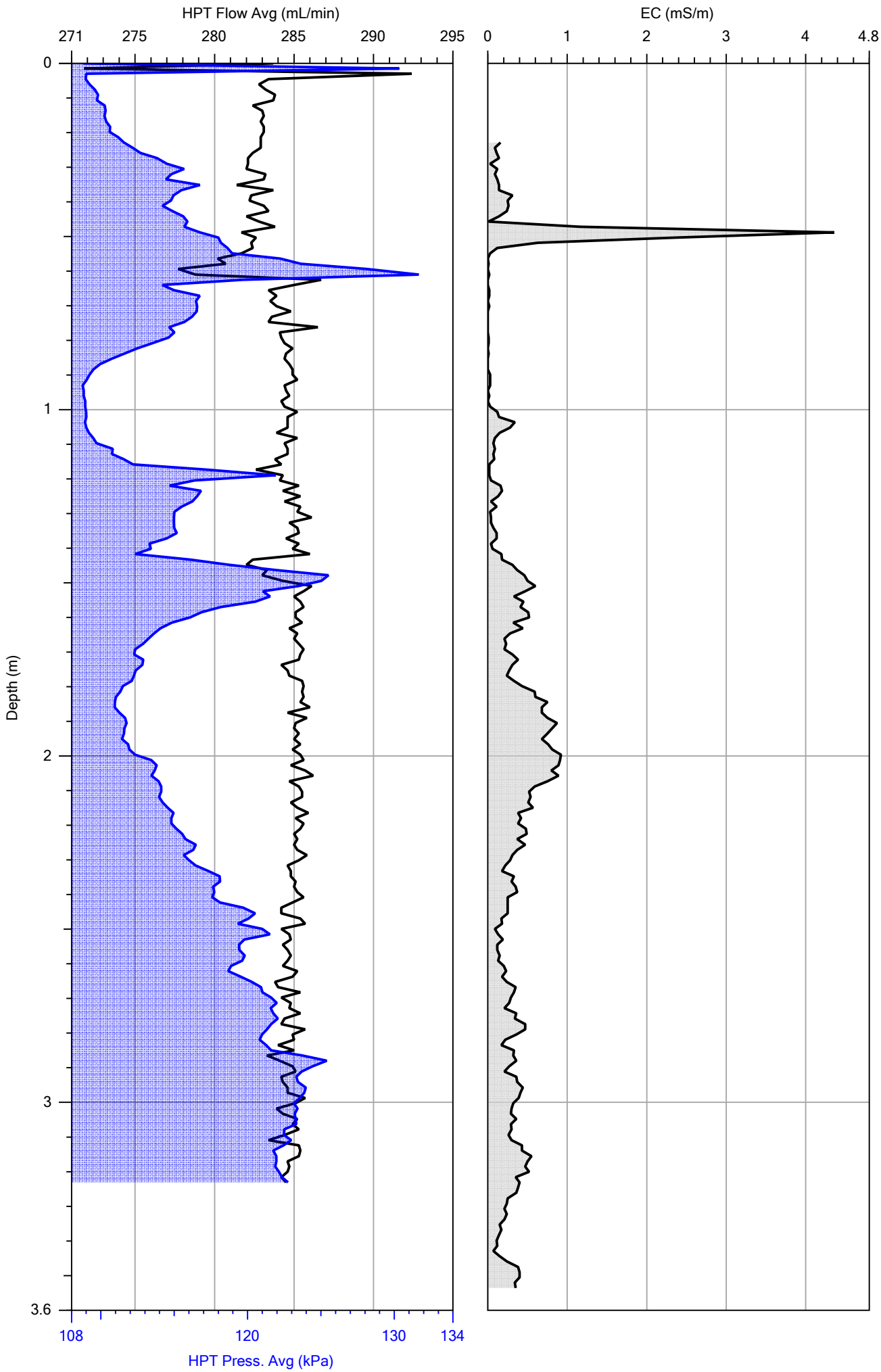
Post-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	54.1	1.6	PASS
High	290.0	296.5	2.2	PASS



numac
Numac Drilling Services PTY Ltd.
www.numac.co.au
Ph. - 1300 131 019
Em. - info@numac.com.au

			File: MIP042.MHP
Company: DHA - Randwick		Operator: ADU	Date: 25/06/20
Project ID: 610-30041		Client: SLR	Location:



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Em. - info@numac.com.au

			File: MIP042.MHP
Company: DHA - Randwick		Operator: ADU	Date: 25/06/20
Project ID: 610-30041		Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.4	0.7	PASS
High	290.0	294.2	1.4	PASS

MIP042.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA - Randwick
OPERATOR: ADU
PROJECT ID: 610-30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP042.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Thu Jun 25 2020 08:34:53

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Thu Jun 25 2020 08:41:36

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.539	0.0	107.140
TOP with FLOW>0	16.011	279.6	110.390
BOTTOM with FLOW=0	15.320	0.0	105.630
BOTTOM with FLOW>0	15.789	279.1	108.860

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

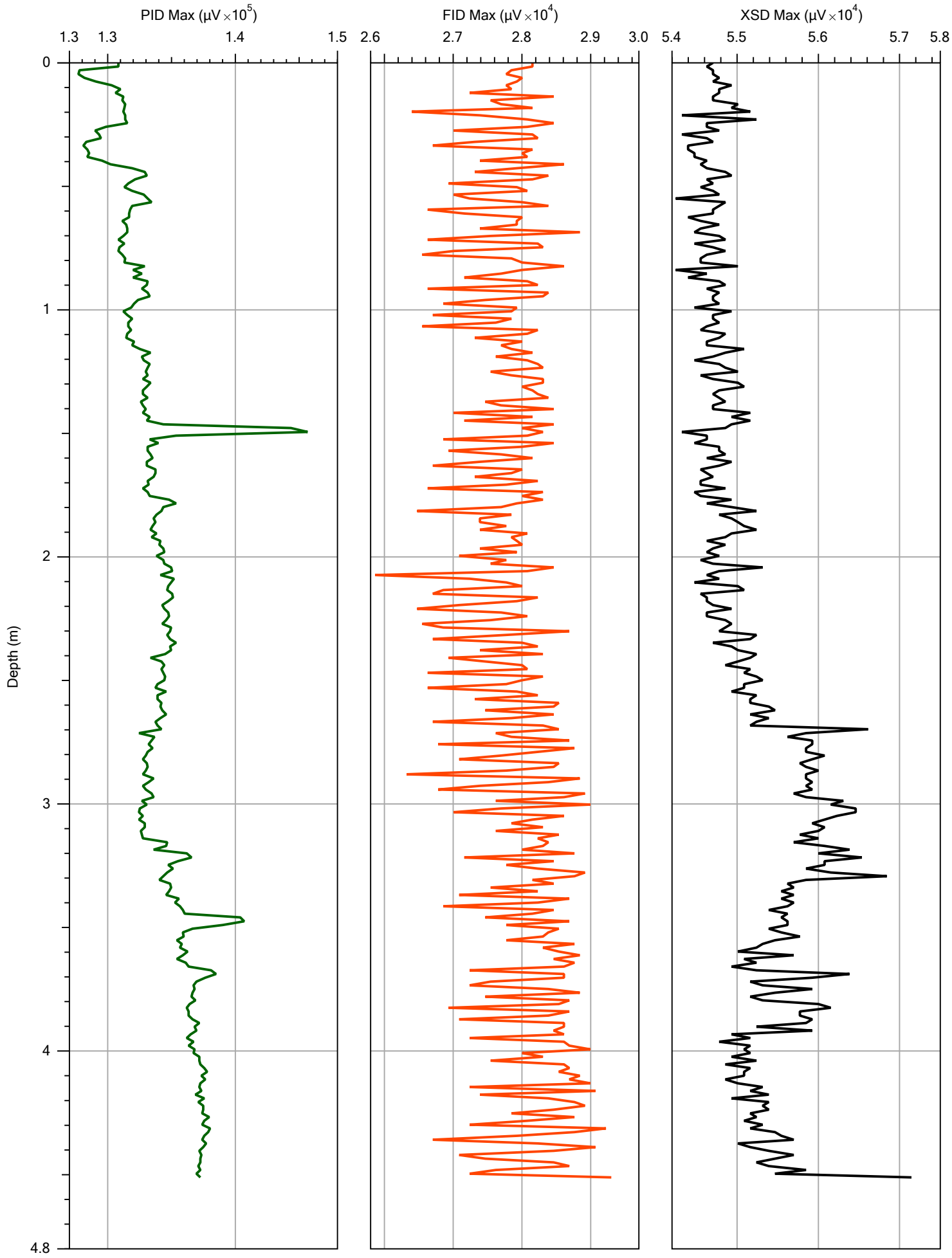
TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840
LOG START TIME: Thu Jun 25 2020 08:53:39

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4

```
      0.00          0.000          1       1       1       1
LOG END DEPTH: 10.85 ft (3.307 m)
LOG END TIME: Thu Jun 25 2020 09:46:35

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS  0.00 FEET
GPS Quality: None



MIP POST-LOG RESPONSE TEST BYPASSED




POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Thu Jun 25 2020 09:46:44

POST-LOG HPT REFERENCE TESTS BYPASSED



EC POST-LOG TESTS BYPASSED
```



numac
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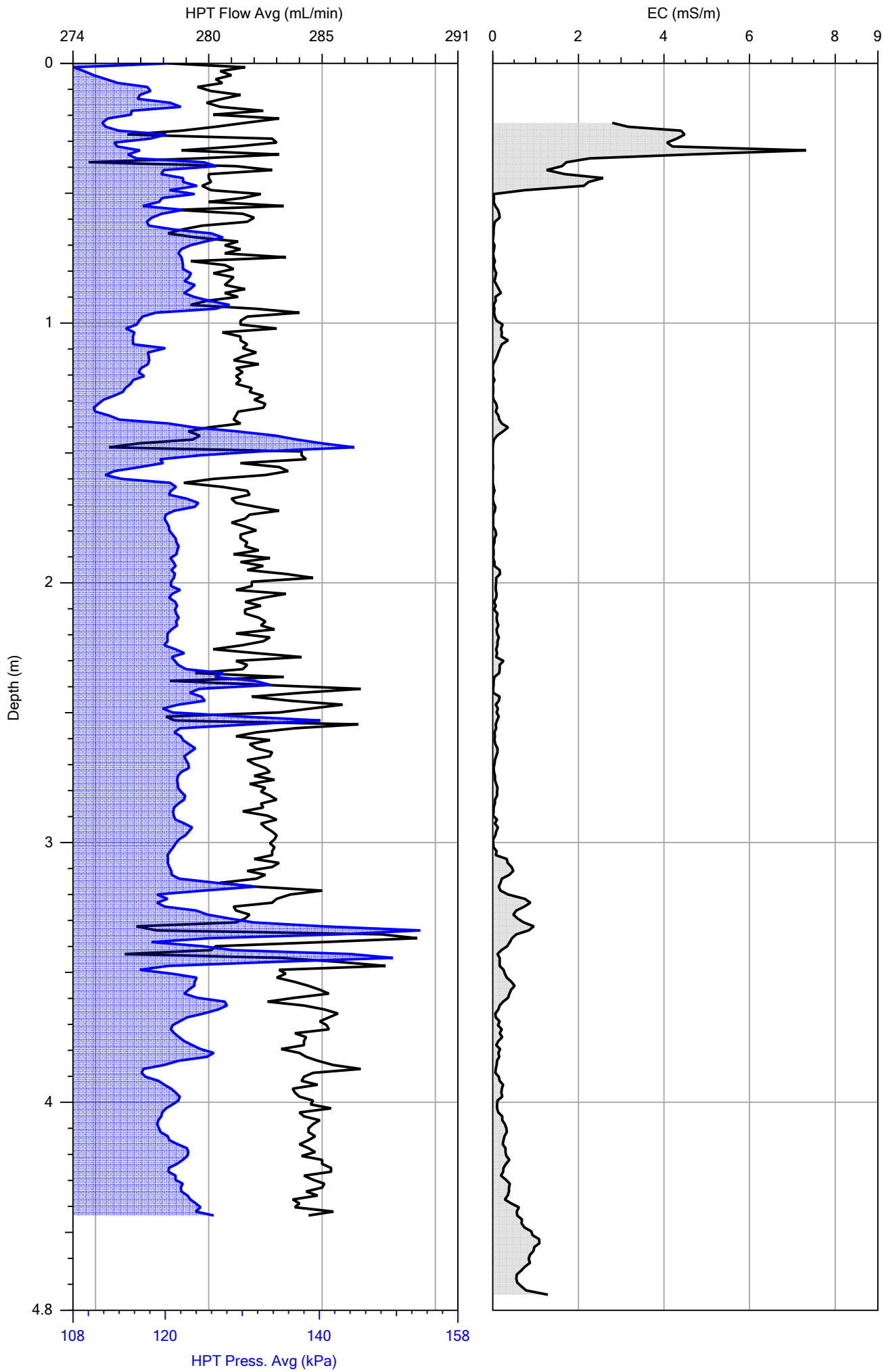
			File: MIP043.MHP
Company: DHA - Randwick		Operator: ADU	Date: 25/06/20
Project ID: 610-30041		Client: SLR	Location:



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		File: MIP043.MHP
Company: DHA - Randwick	Operator: ADU	Date: 25/06/20
Project ID: 610-30041	Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.1	0.2	PASS
High	290.0	295.9	2.0	PASS

MIP043.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA - Randwick
OPERATOR: ADU
PROJECT ID: 610-30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP043.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Thu Jun 25 2020 10:16:01

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Thu Jun 25 2020 10:21:56

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.537	0.0	107.120
TOP with FLOW>0	16.062	278.4	110.750
BOTTOM with FLOW=0	15.316	0.0	105.600
BOTTOM with FLOW>0	15.841	277.7	109.220

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

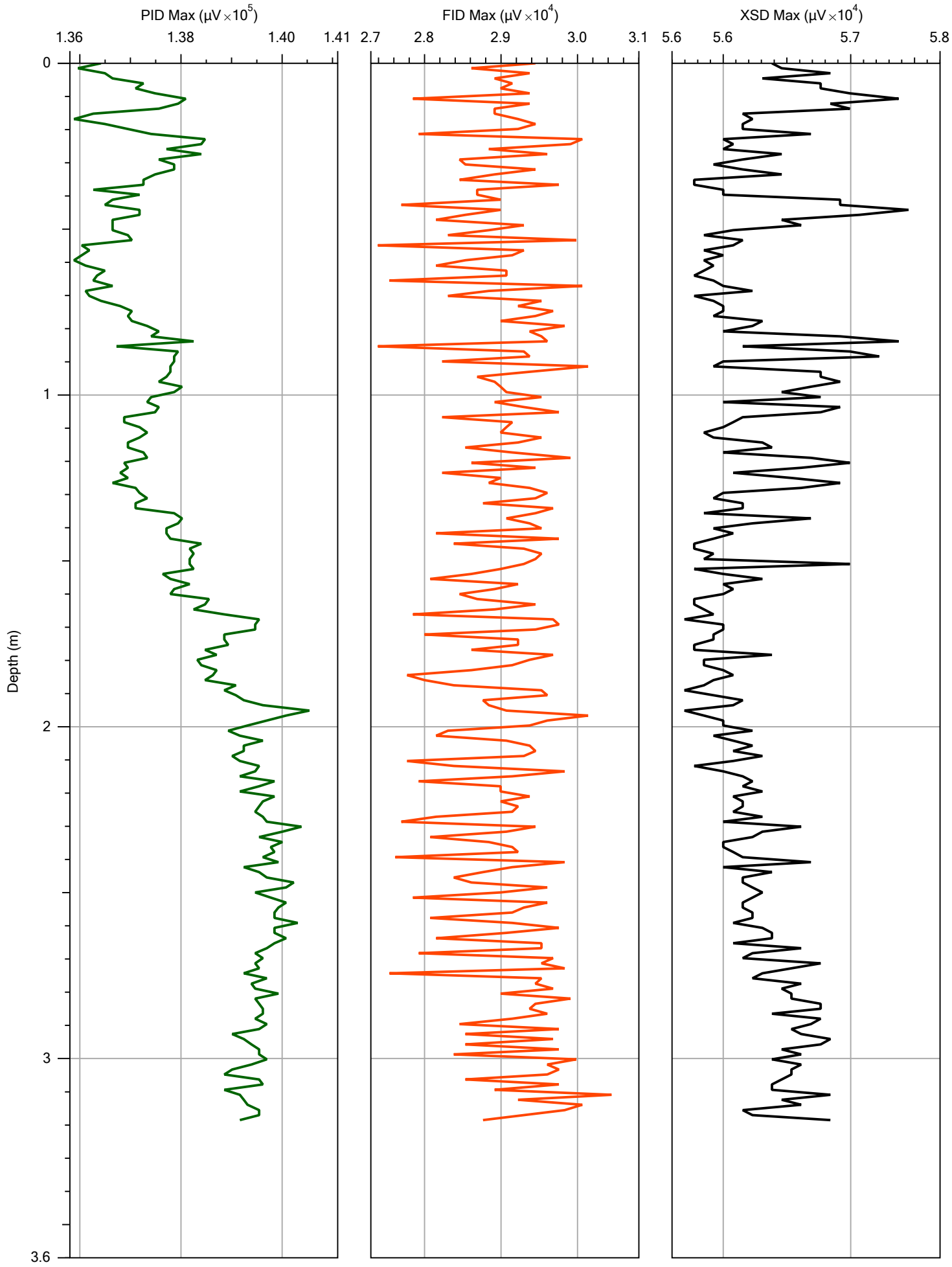
TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840
LOG START TIME: Thu Jun 25 2020 10:30:46

ATTENUATION CHANGES

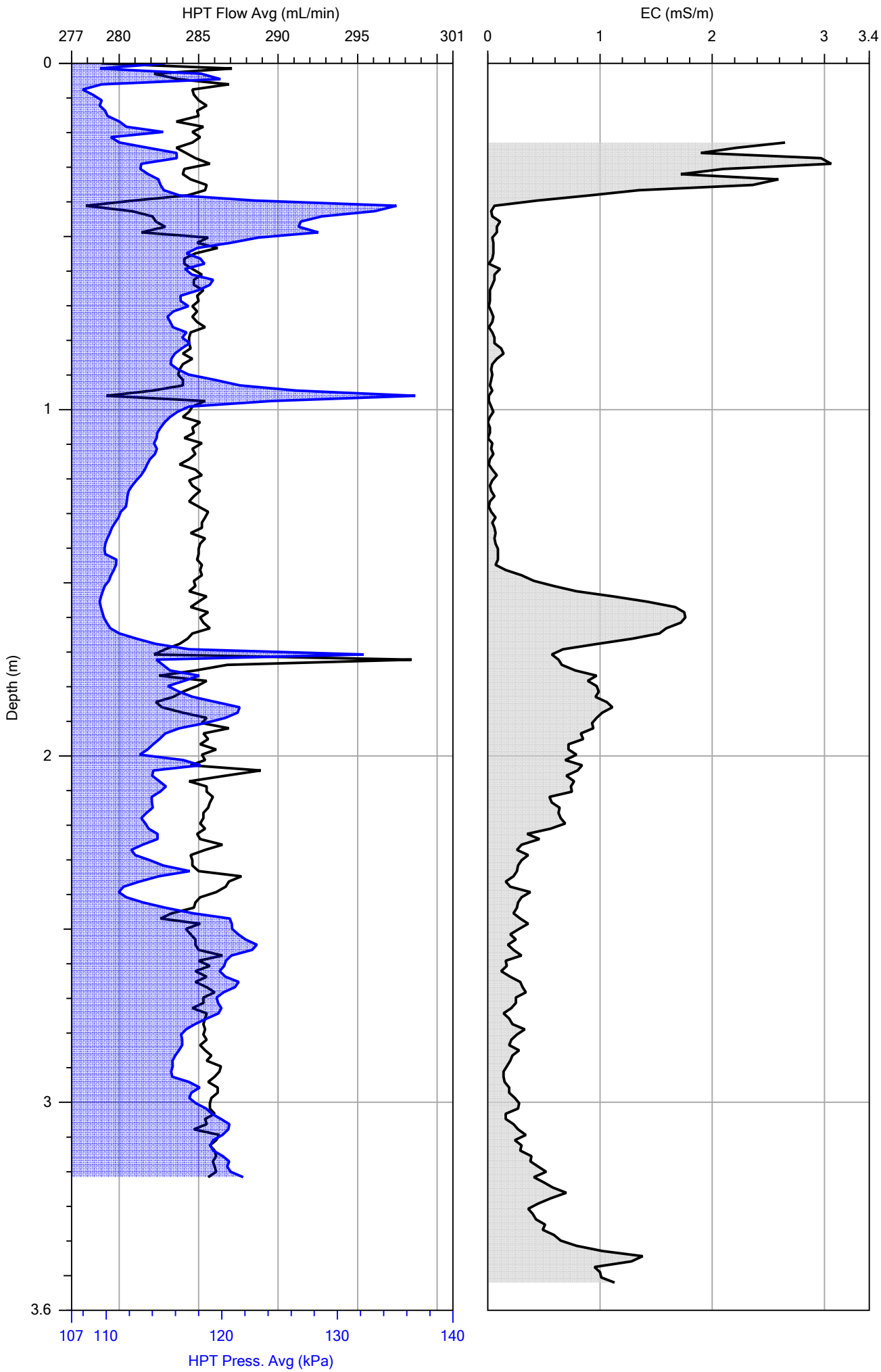
DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4

```
      0.00          0.000          1       1       1       1
LOG END DEPTH: 14.80 ft (4.511 m)
LOG END TIME: Thu Jun 25 2020 11:15:19

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS  0.00 FEET
GPS Quality: None



MIP POST-LOG RESPONSE TEST BYPASSED




POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Thu Jun 25 2020 11:15:28

POST-LOG HPT REFERENCE TESTS BYPASSED



EC POST-LOG TESTS BYPASSED
```



numac
Numac Drilling Services PTY Ltd.
www.numac.co.au
Ph. - 1300 131 019
Em. - info@numac.com.au

			File: MIP044.MHP
Company: DHA - Randwick		Operator: ADU	Date: 25/06/20
Project ID: 610-30041		Client: SLR	Location:



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Em. - info@numac.com.au

			File: MIP044.MHP
Company: DHA - Randwick		Operator: ADU	Date: 25/06/20
Project ID: 610-30041		Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	54.9	0.2	PASS
High	290.0	296.8	2.4	PASS

MIP044.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA - Randwick
OPERATOR: ADU
PROJECT ID: 610-30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP044.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Thu Jun 25 2020 11:29:44

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Thu Jun 25 2020 11:35:03

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.491	0.0	106.810
TOP with FLOW>0	15.976	278.2	110.150
BOTTOM with FLOW=0	15.268	0.0	105.270
BOTTOM with FLOW>0	15.755	281.0	108.630

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

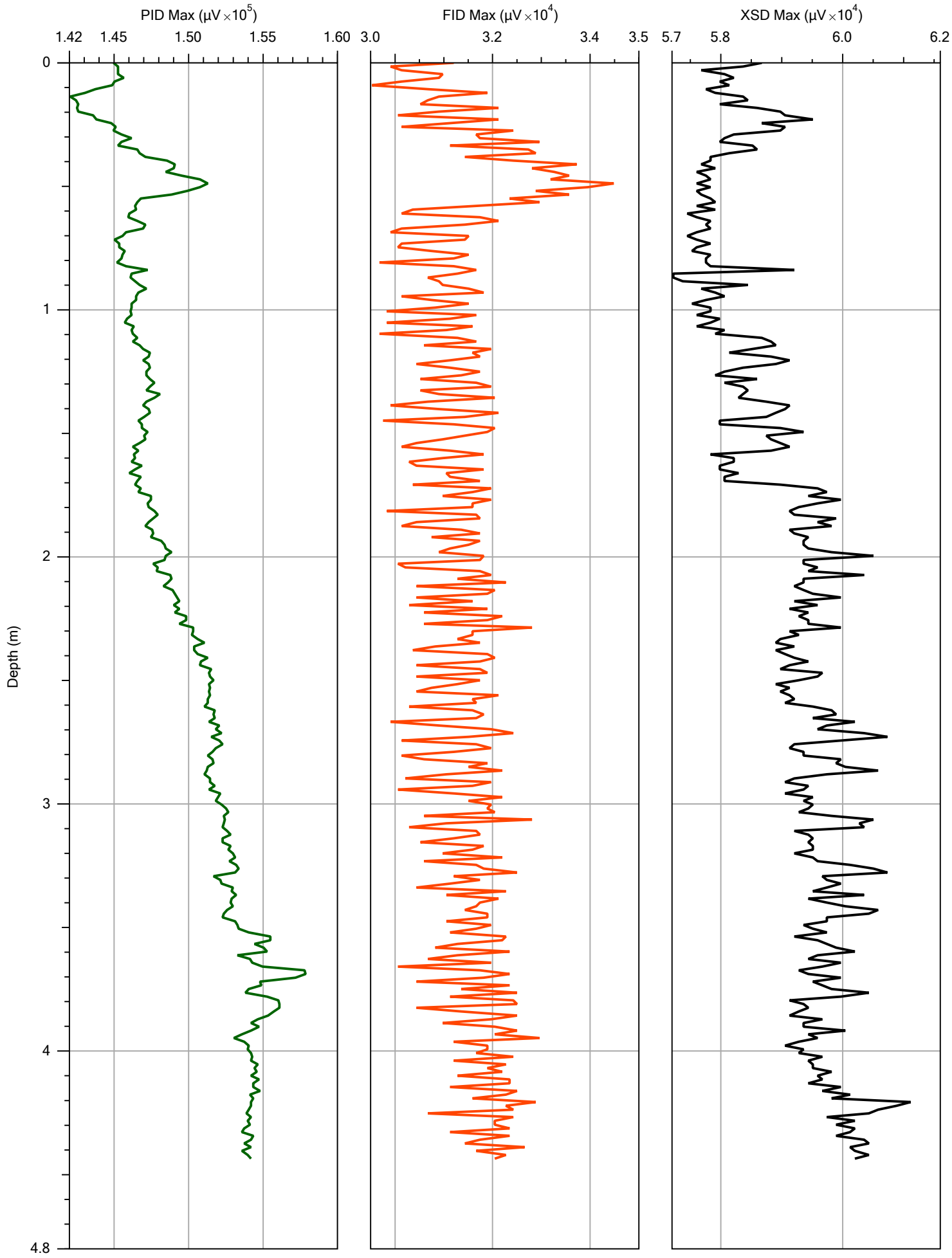
TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840
LOG START TIME: Thu Jun 25 2020 11:39:54

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4

```
      0.00          0.000          1       1       1       1
LOG END DEPTH: 10.80 ft (3.292 m)
LOG END TIME: Thu Jun 25 2020 12:12:05

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS  0.00 FEET
GPS Quality: None



MIP POST-LOG RESPONSE TEST BYPASSED




POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Thu Jun 25 2020 12:12:10

POST-LOG HPT REFERENCE TESTS BYPASSED



EC POST-LOG TESTS BYPASSED
```



numac
Numac Drilling Services PTY Ltd.
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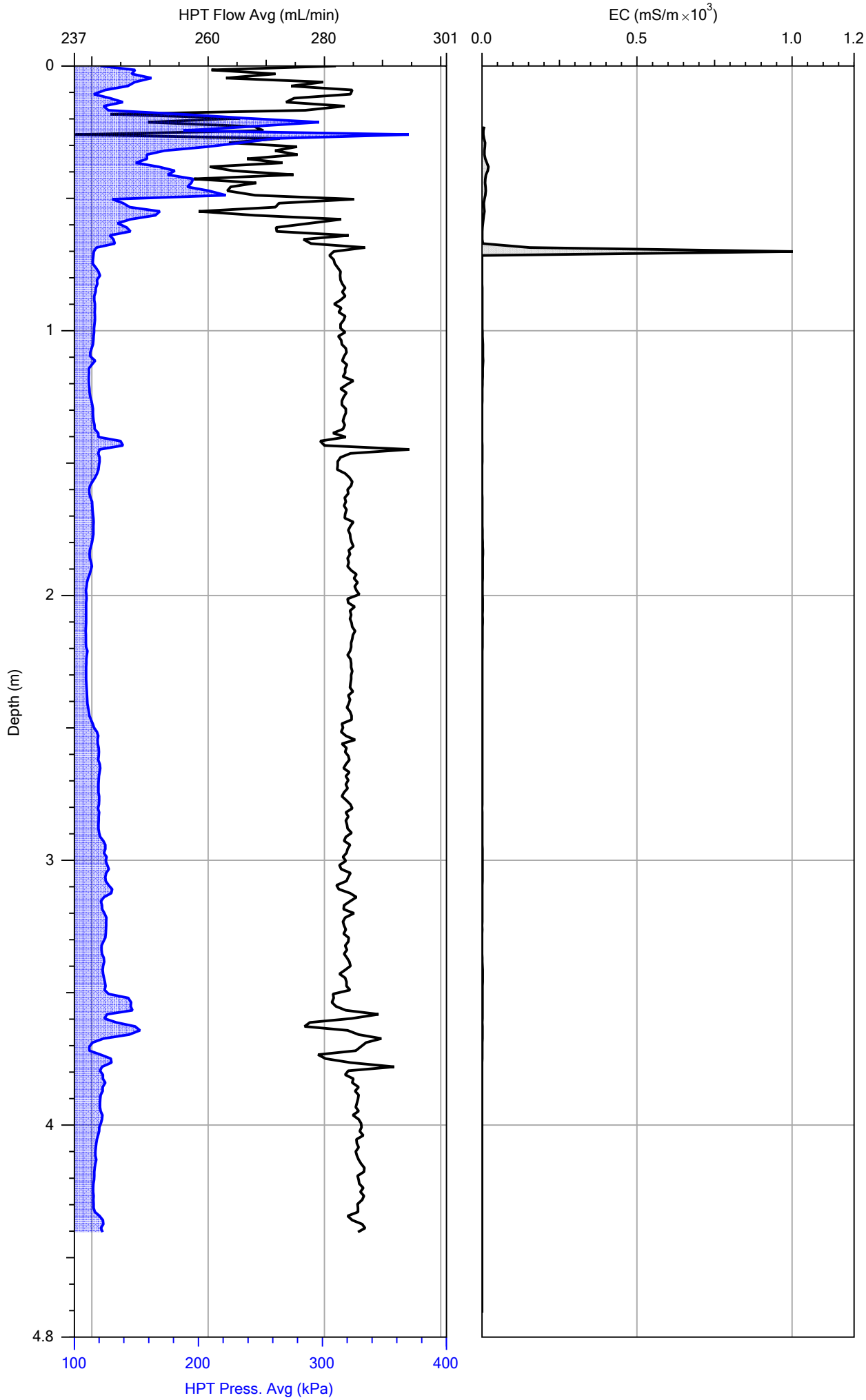
Em. - info@numac.com.au

			File: MIP045.MHP
Company: DHA - Randwick		Operator: ADU	Date: 25/06/20
Project ID: 610-30041		Client: SLR	Location:



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Em. - info@numac.com.au

			File: MIP045.MHP
Company: DHA - Randwick		Operator: ADU	Date: 25/06/20
Project ID: 610-30041		Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	54.2	1.4	PASS
High	290.0	295.9	2.0	PASS

MIP045.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA - Randwick
OPERATOR: ADU
PROJECT ID: 610-30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP045.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Thu Jun 25 2020 13:00:08

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Thu Jun 25 2020 13:05:18

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.480	0.0	106.730
TOP with FLOW>0	16.055	282.1	110.690
BOTTOM with FLOW=0	15.264	0.0	105.240
BOTTOM with FLOW>0	15.831	279.6	109.150

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

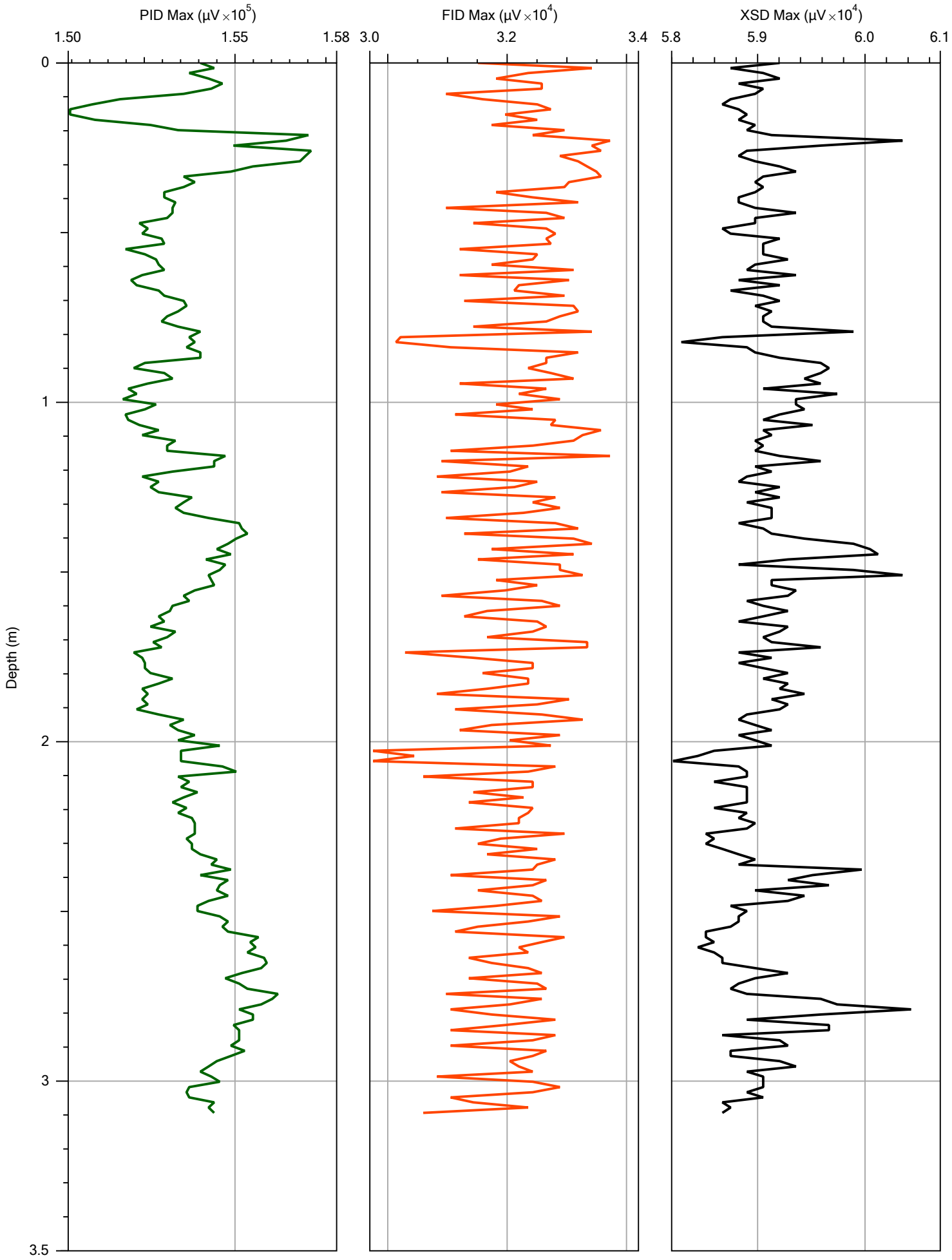
TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840
LOG START TIME: Thu Jun 25 2020 13:11:21

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4

```
      0.00          0.000          1       1       1       1
LOG END DEPTH: 14.70 ft (4.481 m)
LOG END TIME: Thu Jun 25 2020 13:48:57

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS  0.00 FEET
GPS Quality: None



MIP POST-LOG RESPONSE TEST BYPASSED




POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Thu Jun 25 2020 13:52:54

POST-LOG HPT REFERENCE TESTS BYPASSED



EC POST-LOG TESTS BYPASSED
```



numac
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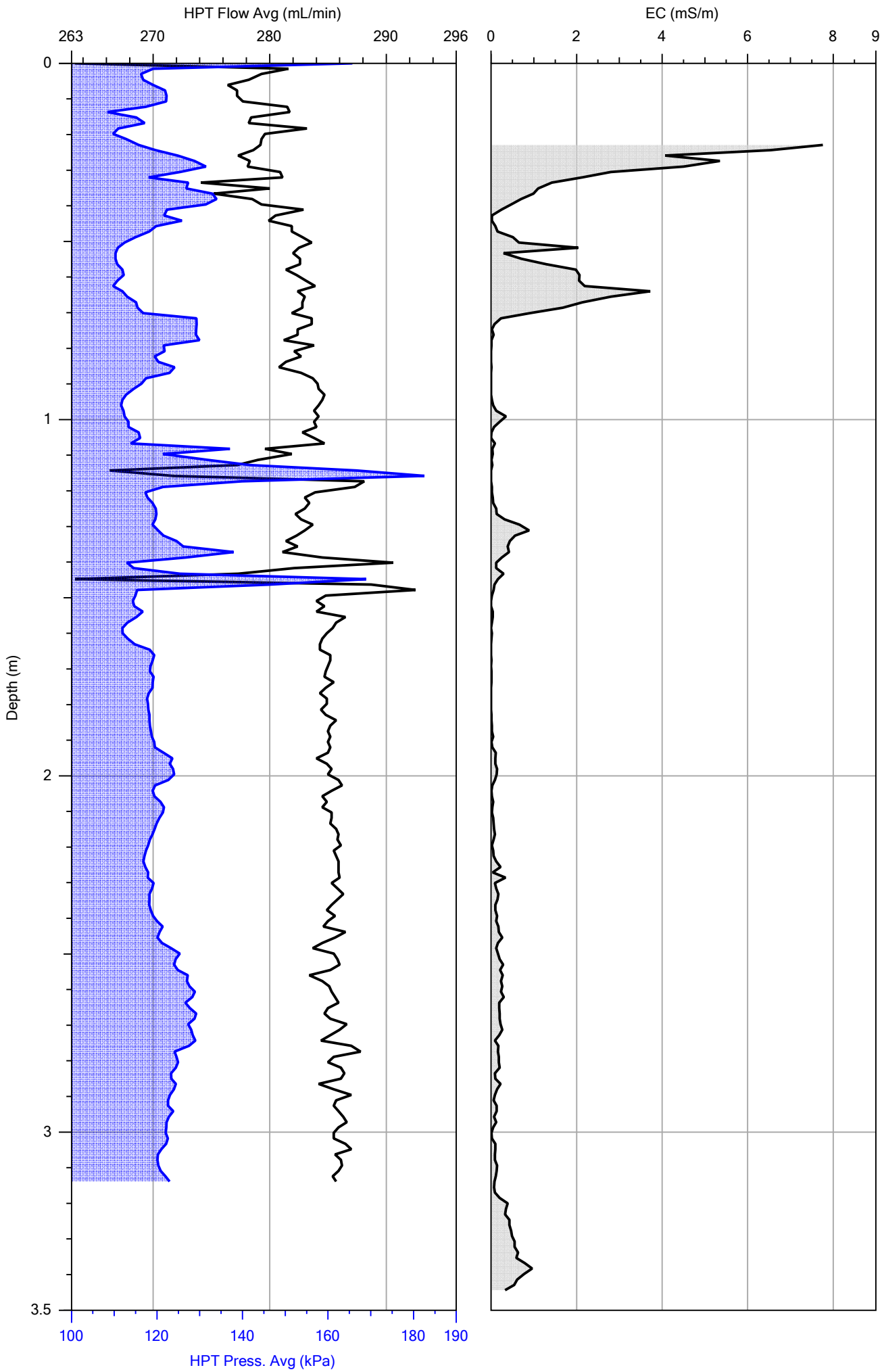
			File: MIP046.MHP
Company: DHA - Randwick		Operator: ADU	Date: 25/06/20
Project ID: 610-30041		Client: SLR	Location:



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Ph. - 1300 131 019
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			File: MIP046.MHP
Company: DHA - Randwick		Operator: ADU	Date: 25/06/20
Project ID: 610-30041		Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.0	0.1	PASS
High	290.0	296.2	2.1	PASS

MIP046.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA - Randwick
OPERATOR: ADU
PROJECT ID: 610-30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP046.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Thu Jun 25 2020 14:05:32

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Thu Jun 25 2020 14:12:45

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.485	0.0	106.770
TOP with FLOW>0	15.986	278.6	110.220
BOTTOM with FLOW=0	15.273	0.0	105.300
BOTTOM with FLOW>0	15.768	275.8	108.710

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.21 psi (1.5 kPa)

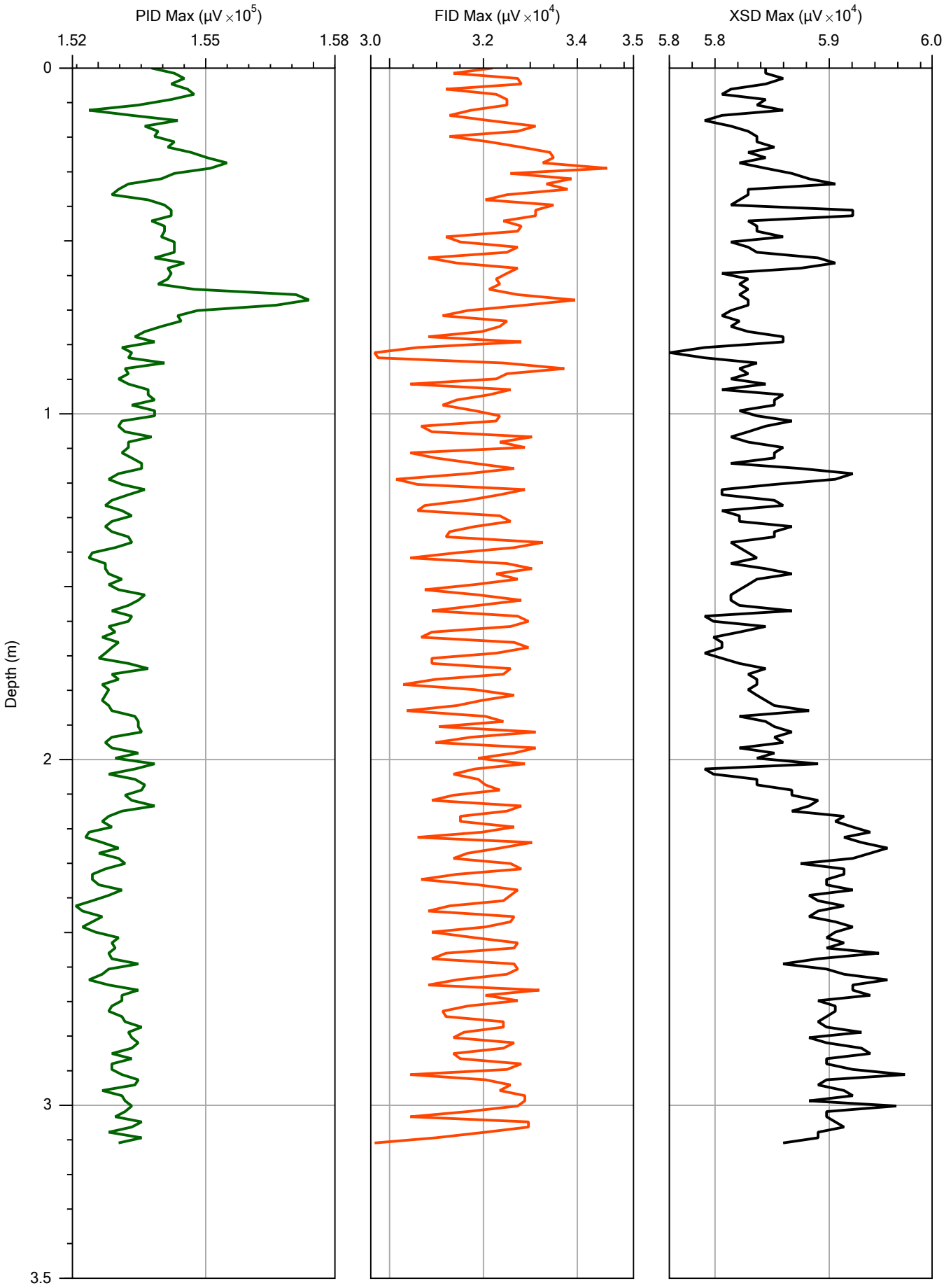
TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840
LOG START TIME: Thu Jun 25 2020 14:15:21

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4

```
      0.00          0.000          1       1       1       1
LOG END DEPTH: 10.55 ft (3.216 m)
LOG END TIME: Thu Jun 25 2020 14:42:38

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS  0.00 FEET
GPS Quality: None



MIP POST-LOG RESPONSE TEST BYPASSED




POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Thu Jun 25 2020 14:51:10

POST-LOG HPT REFERENCE TESTS BYPASSED



EC POST-LOG TESTS BYPASSED
```



numac
Numac Drilling Services PTY Ltd.
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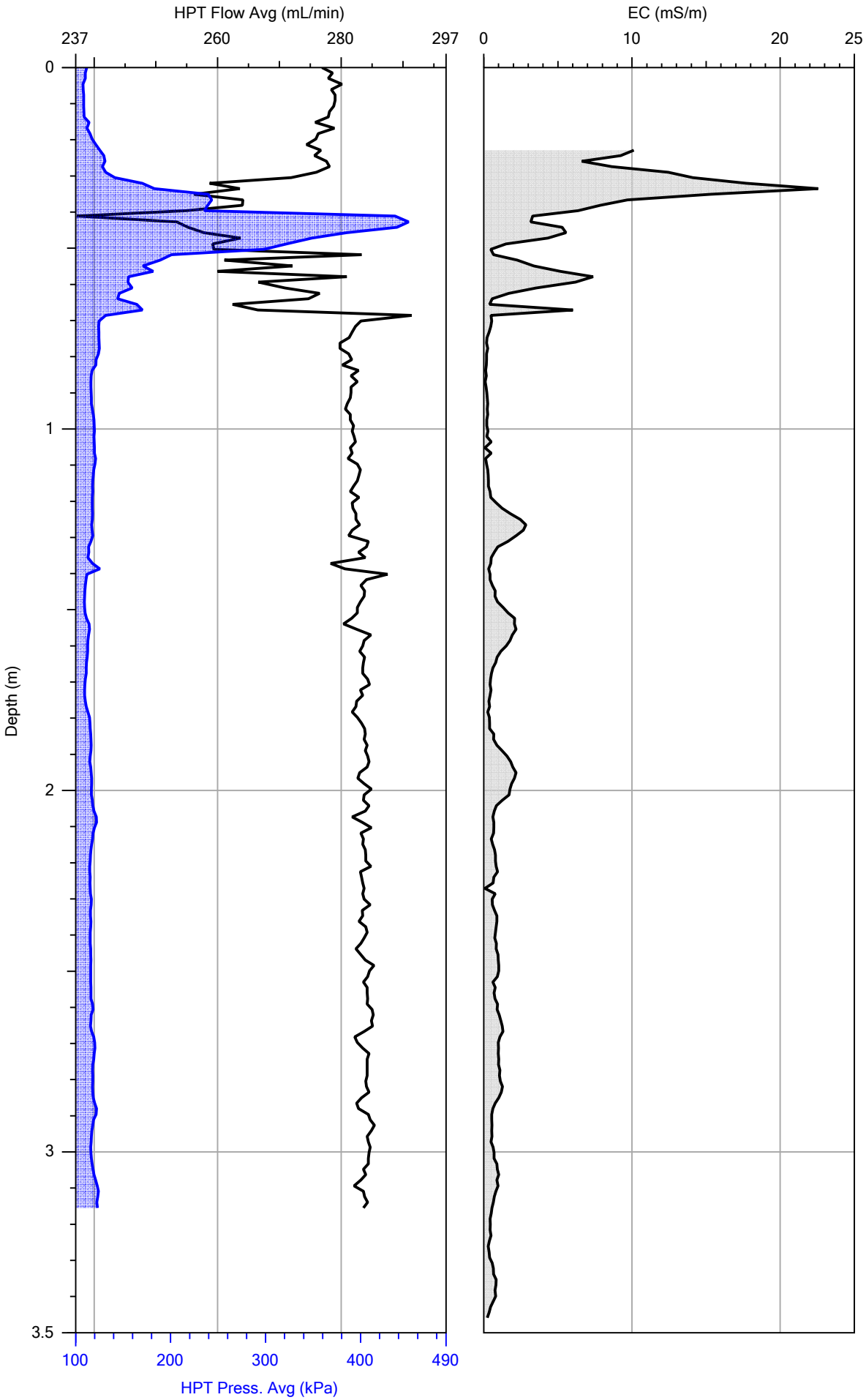
		File: MIP047.MHP
Company: DHA - Randwick	Operator: ADU	Date: 25/06/20
Project ID: 610-30041	Client: SLR	Location:



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		File: MIP047.MHP
Company: DHA - Randwick	Operator: ADU	Date: 25/06/20
Project ID: 610-30041	Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.2	0.3	PASS
High	290.0	295.6	1.9	PASS

MIP047.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA - Randwick
OPERATOR: ADU
PROJECT ID: 610-30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP047.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Thu Jun 25 2020 14:58:08

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Thu Jun 25 2020 15:02:15

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.480	0.0	106.730
TOP with FLOW>0	15.873	276.7	109.440
BOTTOM with FLOW=0	15.262	0.0	105.220
BOTTOM with FLOW>0	15.650	276.6	107.910

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840

LOG START TIME: Thu Jun 25 2020 15:04:44

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4
0.00	0.000	1	1	1	1

LOG END DEPTH: 10.60 ft (3.231 m)
LOG END TIME: Thu Jun 25 2020 15:29:45

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS 0.00 FEET
GPS Quality: None

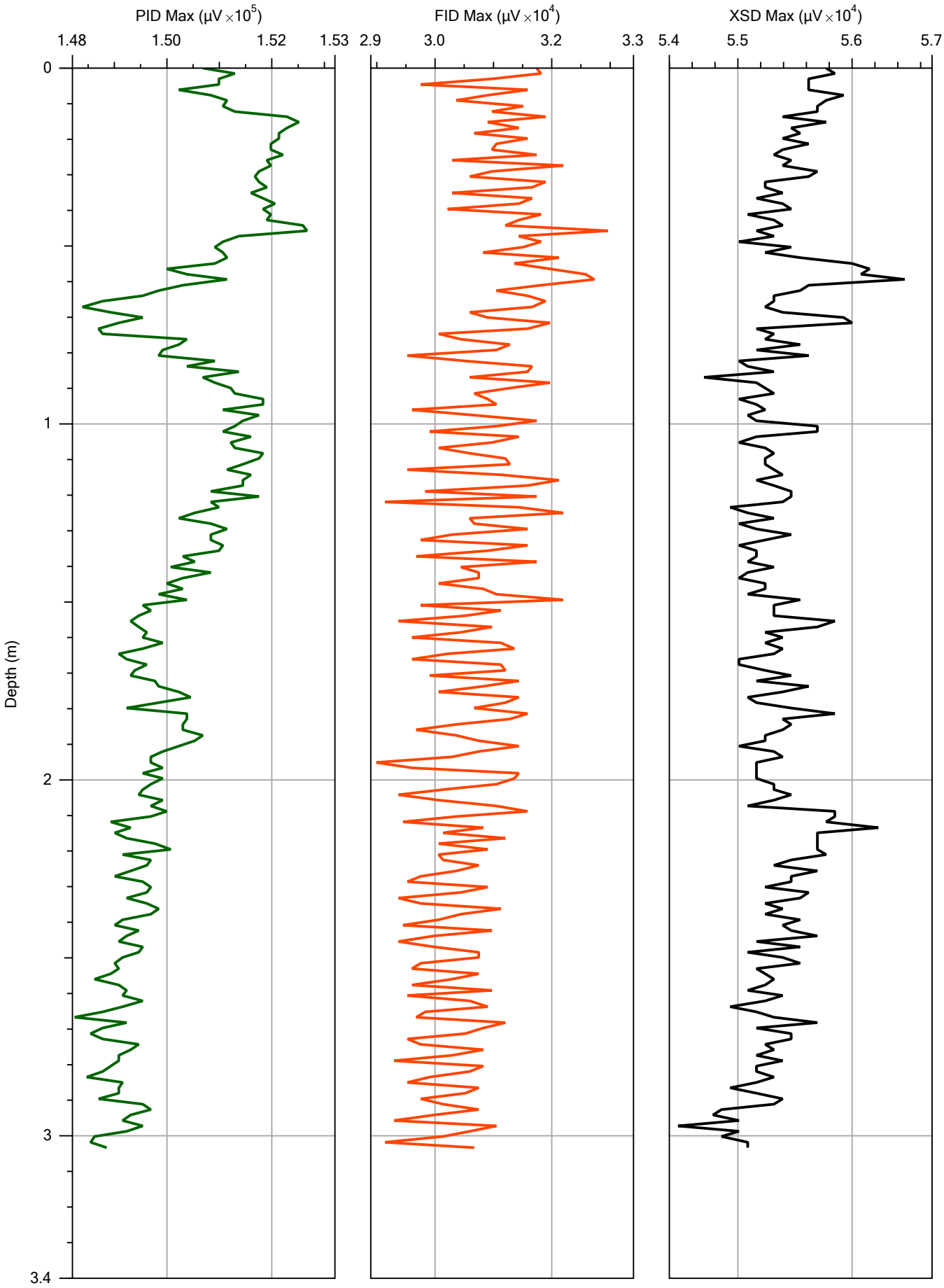
MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Thu Jun 25 2020 15:29:49

POST-LOG HPT REFERENCE TESTS BYPASSED

EC POST-LOG TESTS BYPASSED



numac
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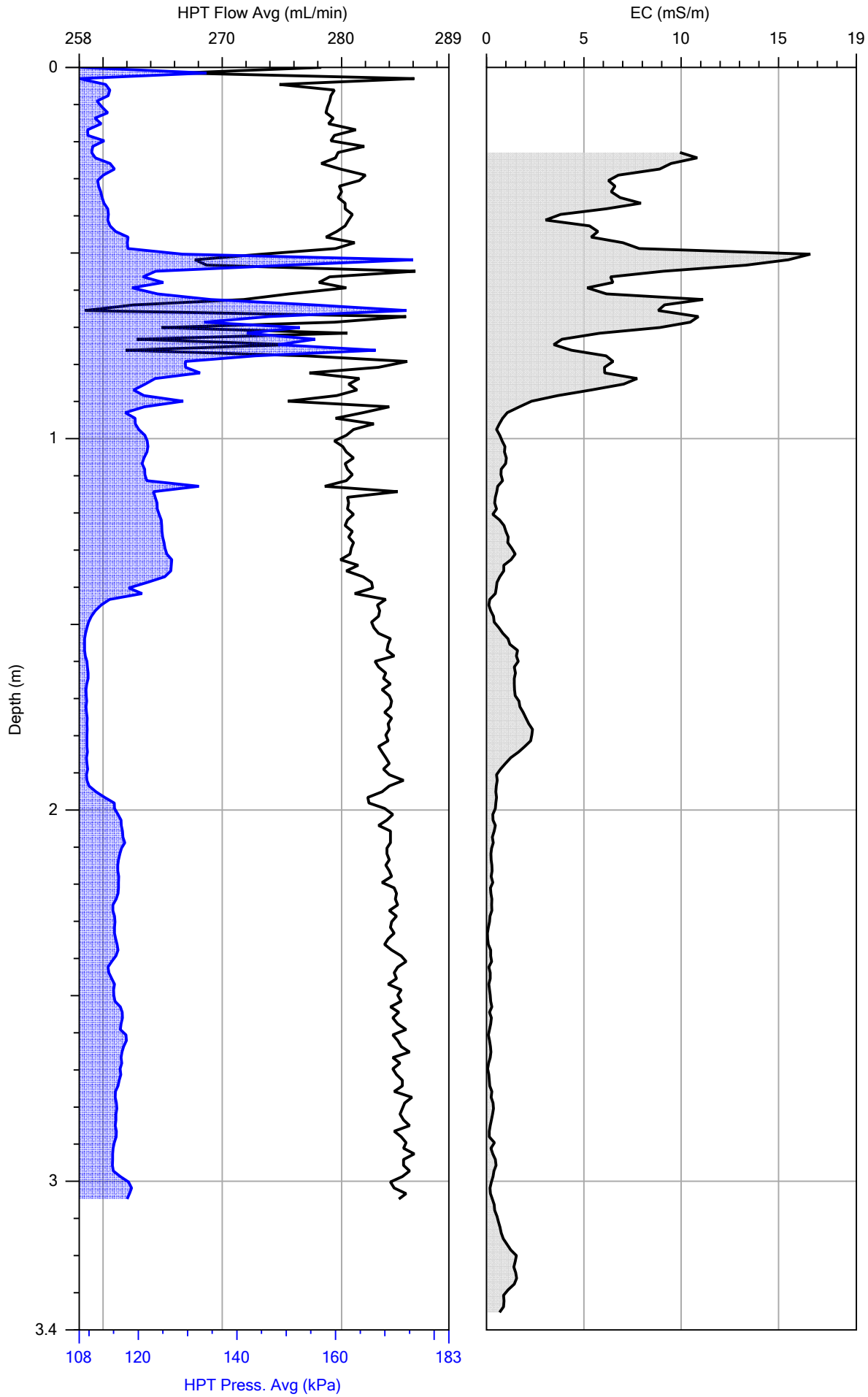
		File: MIP048.MHP
Company: DHA - Randwick	Operator: ADU	Date: 25/06/20
Project ID: 610-30041	Client: SLR	Location:



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Ph. - 1300 131 019
Em. - info@numac.com.au

		File: MIP048.MHP
Company: DHA - Randwick	Operator: ADU	Date: 25/06/20
Project ID: 610-30041	Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.1	0.1	PASS
High	290.0	297.0	2.4	PASS

MIP048.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA - Randwick
OPERATOR: ADU
PROJECT ID: 610-30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP048.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Thu Jun 25 2020 15:59:24

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Thu Jun 25 2020 16:04:41

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.484	0.0	106.760
TOP with FLOW>0	16.058	276.7	110.720
BOTTOM with FLOW=0	15.267	0.0	105.260
BOTTOM with FLOW>0	15.845	276.8	109.250

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840

LOG START TIME: Thu Jun 25 2020 16:08:52

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4
0.00	0.000	1	1	1	1

LOG END DEPTH: 10.25 ft (3.124 m)
LOG END TIME: Thu Jun 25 2020 16:30:24

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS 0.00 FEET
GPS Quality: None

MIP POST-LOG RESPONSE TEST

FILENAME: MIP048.post.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Thu Jun 25 2020 16:44:41

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Thu Jun 25 2020 16:53:29

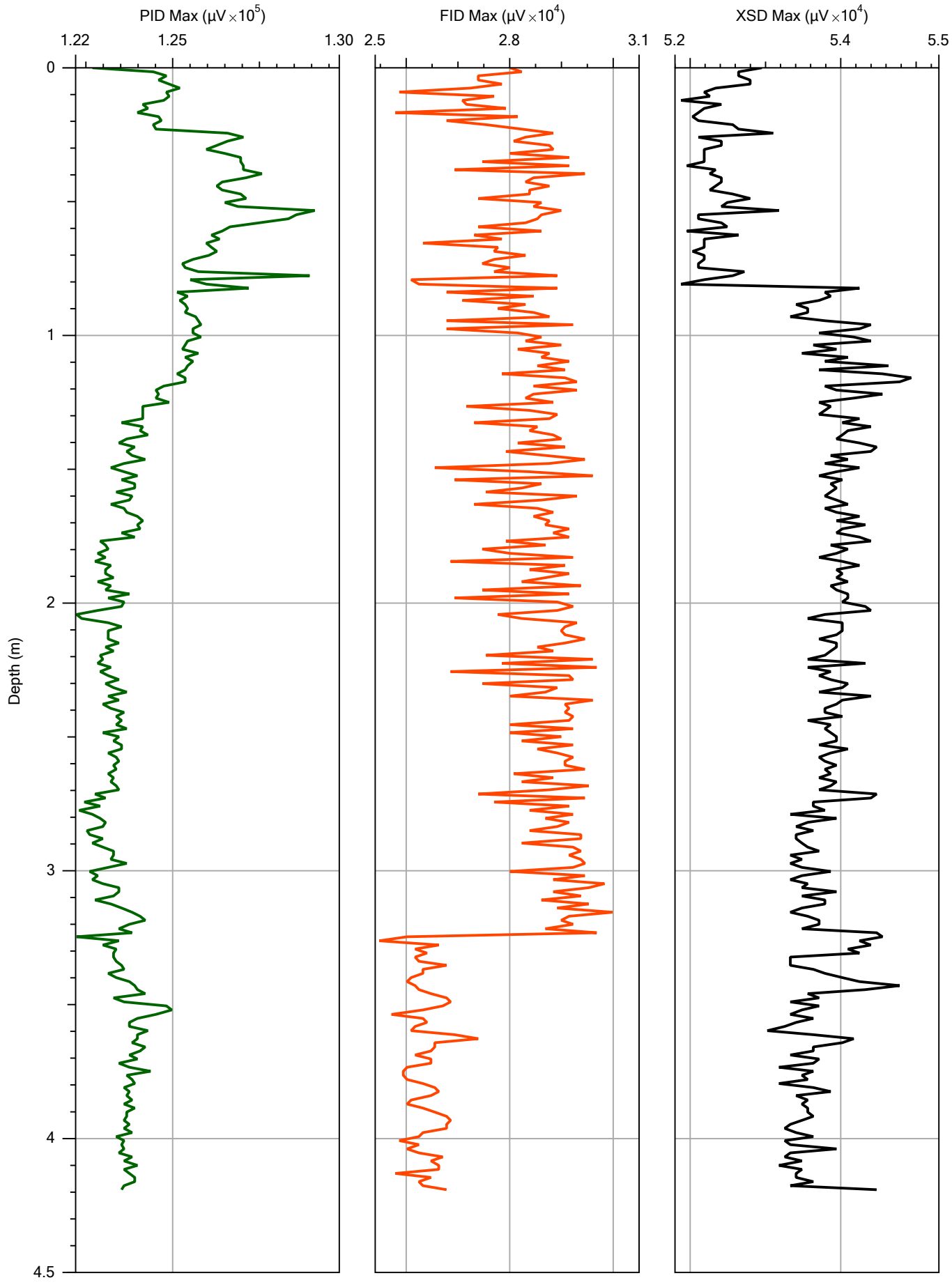
TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.480	0.0	106.730
TOP with FLOW>0	16.069	278.7	110.790
BOTTOM with FLOW=0	15.260	0.0	105.210
BOTTOM with FLOW>0	15.856	277.8	109.330

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

TRANSDUCER TEST PASSED

Post-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	56.0	1.8	PASS
High	290.0	297.1	2.5	PASS



numac
Numac Drilling Services PTY Ltd.
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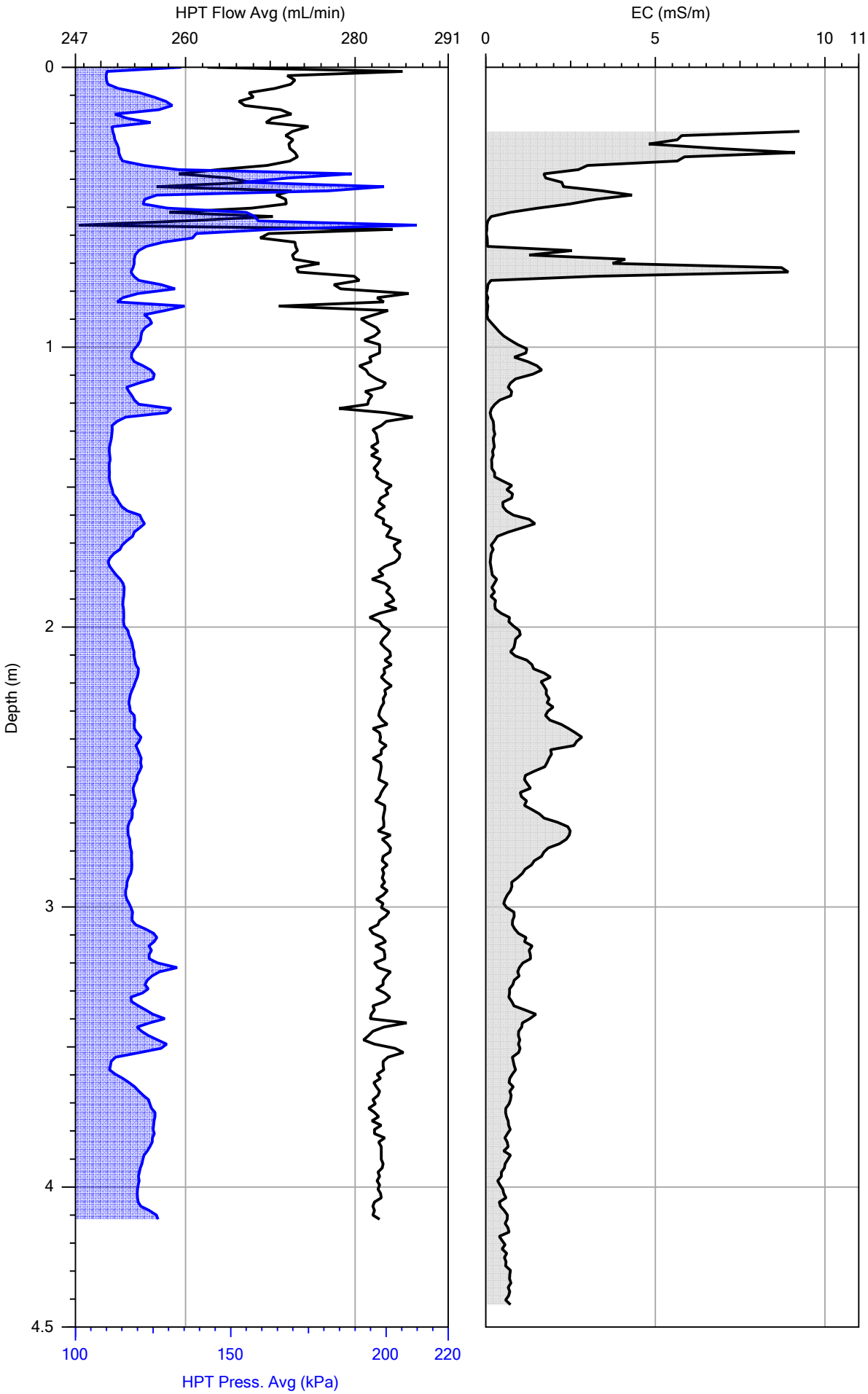
			File: MIP049.MHP
Company: DHA - Randwick		Operator: ADU	Date: 26/06/20
Project ID: 610.30041		Client: SLR	Location:



numac
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Ph. - 1300 131 019
Em. - info@numac.com.au

		File: MIP049.MHP
Company: DHA - Randwick	Operator: ADU	Date: 26/06/20
Project ID: 610.30041	Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.6	1.1	PASS
High	290.0	296.9	2.4	PASS

MIP049.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA - Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP049.pre.tim
COMPOUND: BZ
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Fri Jun 26 2020 08:13:29

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Fri Jun 26 2020 08:18:26

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.529	0.0	107.070
TOP with FLOW>0	16.134	270.0	111.240
BOTTOM with FLOW=0	15.317	0.0	105.610
BOTTOM with FLOW>0	15.917	270.6	109.740

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.21 psi (1.5 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840

LOG START TIME: Fri Jun 26 2020 08:24:00

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4
0.00	0.000	1	1	1	1

LOG END DEPTH: 13.75 ft (4.191 m)
LOG END TIME: Fri Jun 26 2020 09:09:57

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS 0.00 FEET
GPS Quality: None

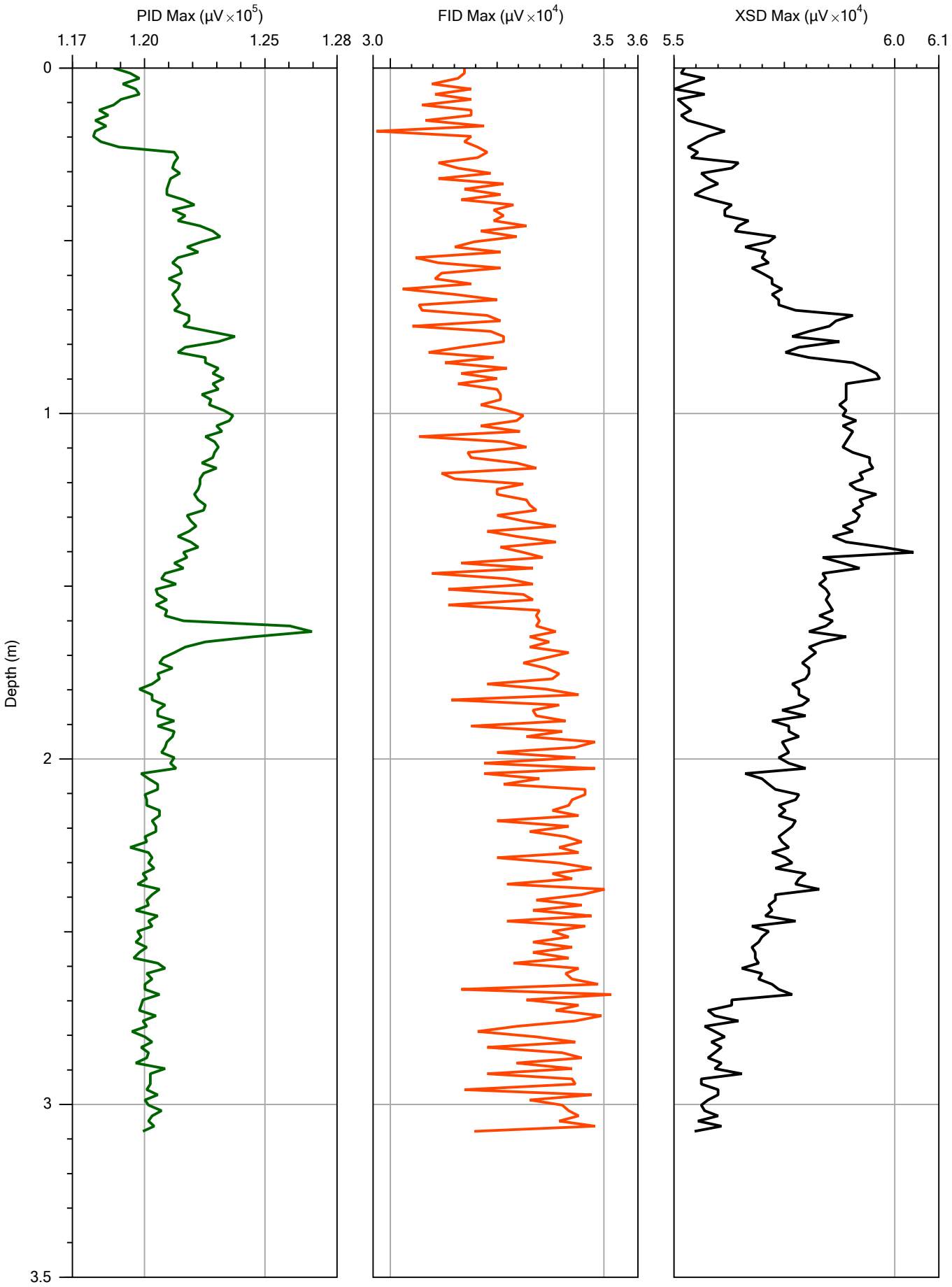
MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Fri Jun 26 2020 09:10:05

POST-LOG HPT REFERENCE TESTS BYPASSED

EC POST-LOG TESTS BYPASSED



numac
Numac Drilling Services PTY Ltd.
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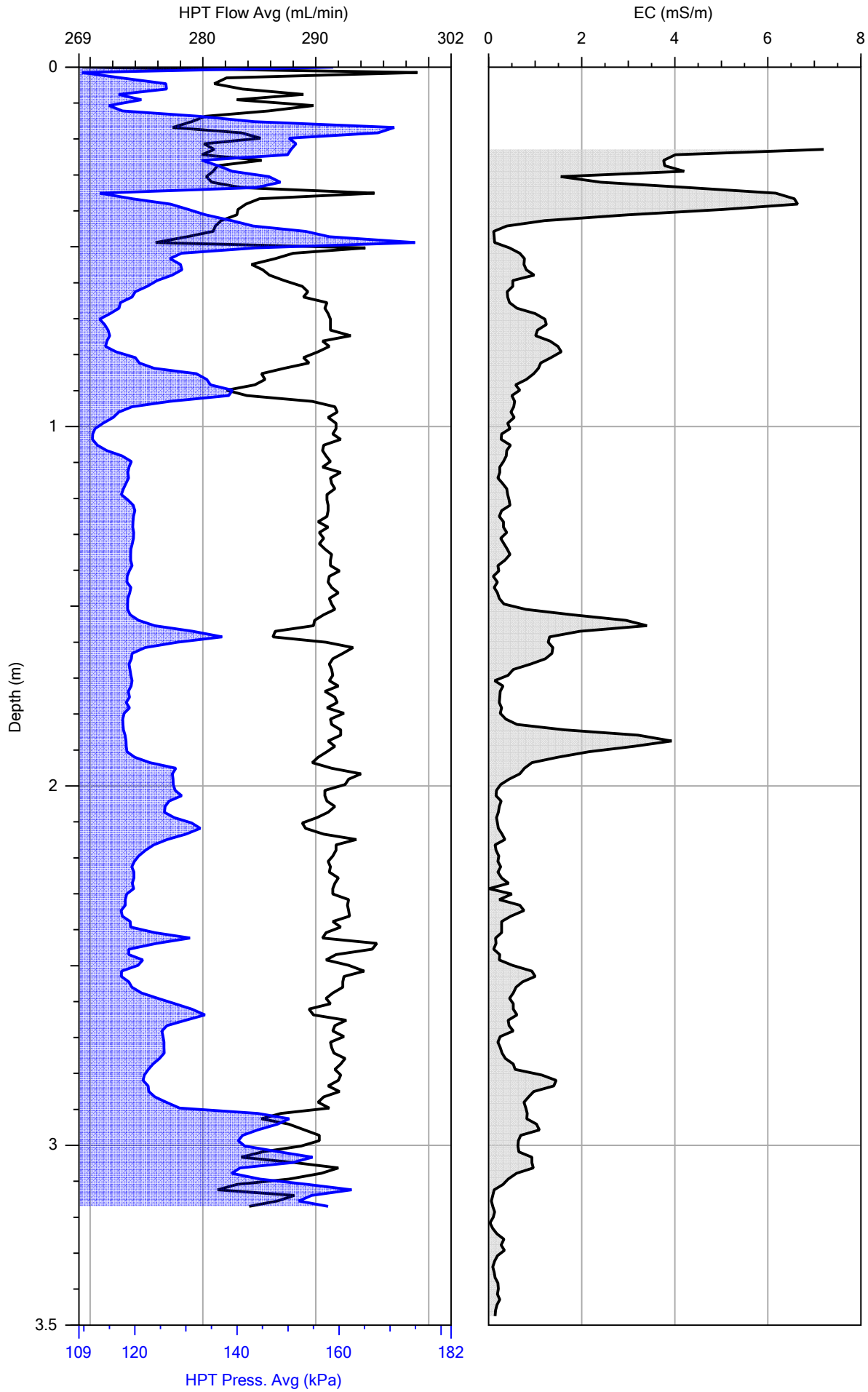
Ph. - 1300 131 019
Em. - info@numac.com.au

		File: MIP050.MHP
Company: DHA - Randwick	Operator: ADU	Date: 26/06/20
Project ID: 610.30041	Client: SLR	Location:



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		File: MIP050.MHP
Company: DHA - Randwick	Operator: ADU	Date: 26/06/20
Project ID: 610.30041	Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.5	0.8	PASS
High	290.0	296.8	2.3	PASS

MIP050.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA - Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP050.pre.tim
COMPOUND: BZ
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Fri Jun 26 2020 09:40:02

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Fri Jun 26 2020 09:44:58

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.534	0.0	107.110
TOP with FLOW>0	16.099	284.8	111.000
BOTTOM with FLOW=0	15.317	0.0	105.610
BOTTOM with FLOW>0	15.882	282.0	109.500

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840

LOG START TIME: Fri Jun 26 2020 09:52:36

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4
0.00	0.000	1	1	1	1

LOG END DEPTH: 10.65 ft (3.246 m)
LOG END TIME: Fri Jun 26 2020 10:17:10

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS 0.00 FEET
GPS Quality: None

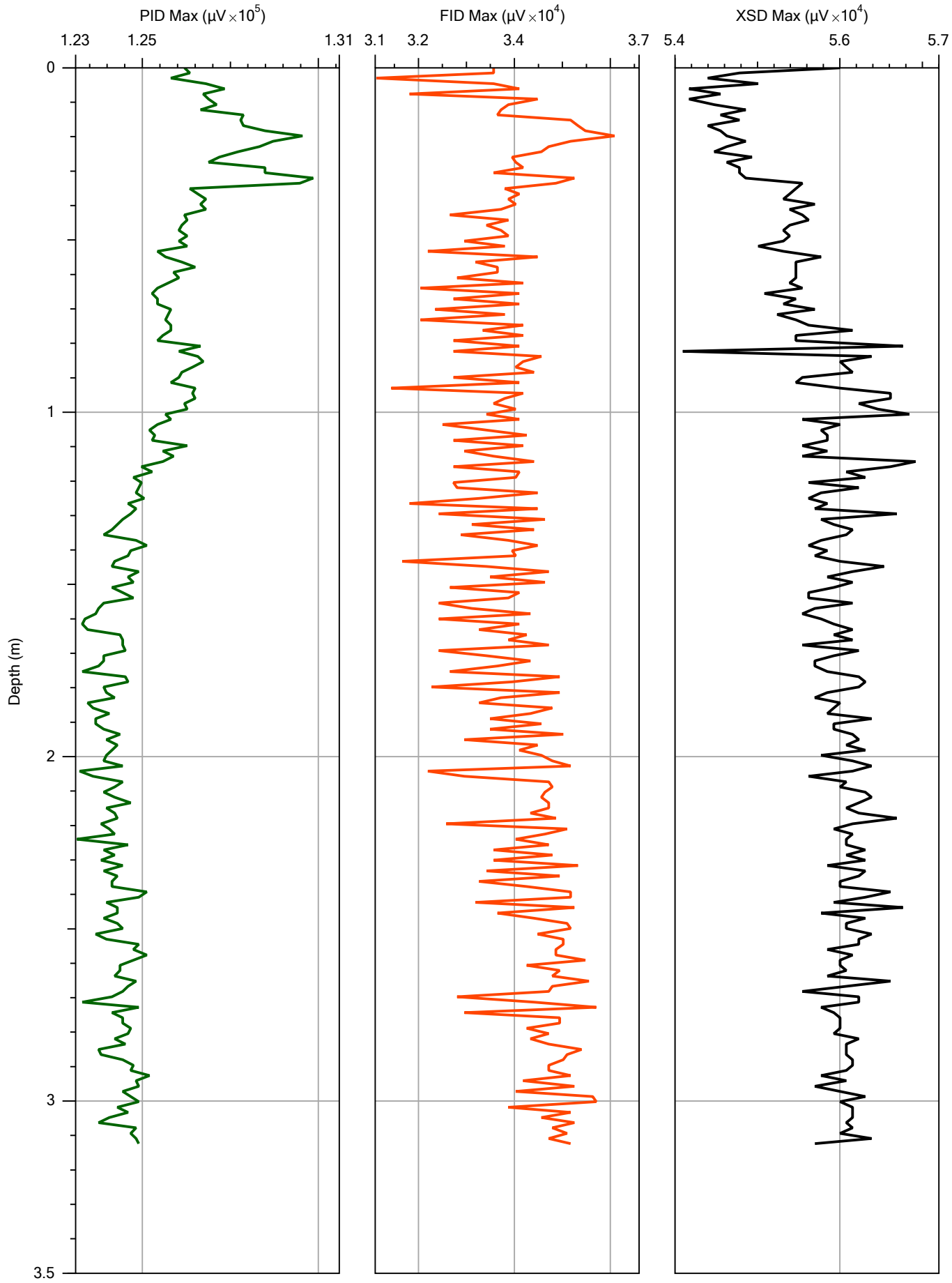
MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Fri Jun 26 2020 10:18:22

POST-LOG HPT REFERENCE TESTS BYPASSED

EC POST-LOG TESTS BYPASSED



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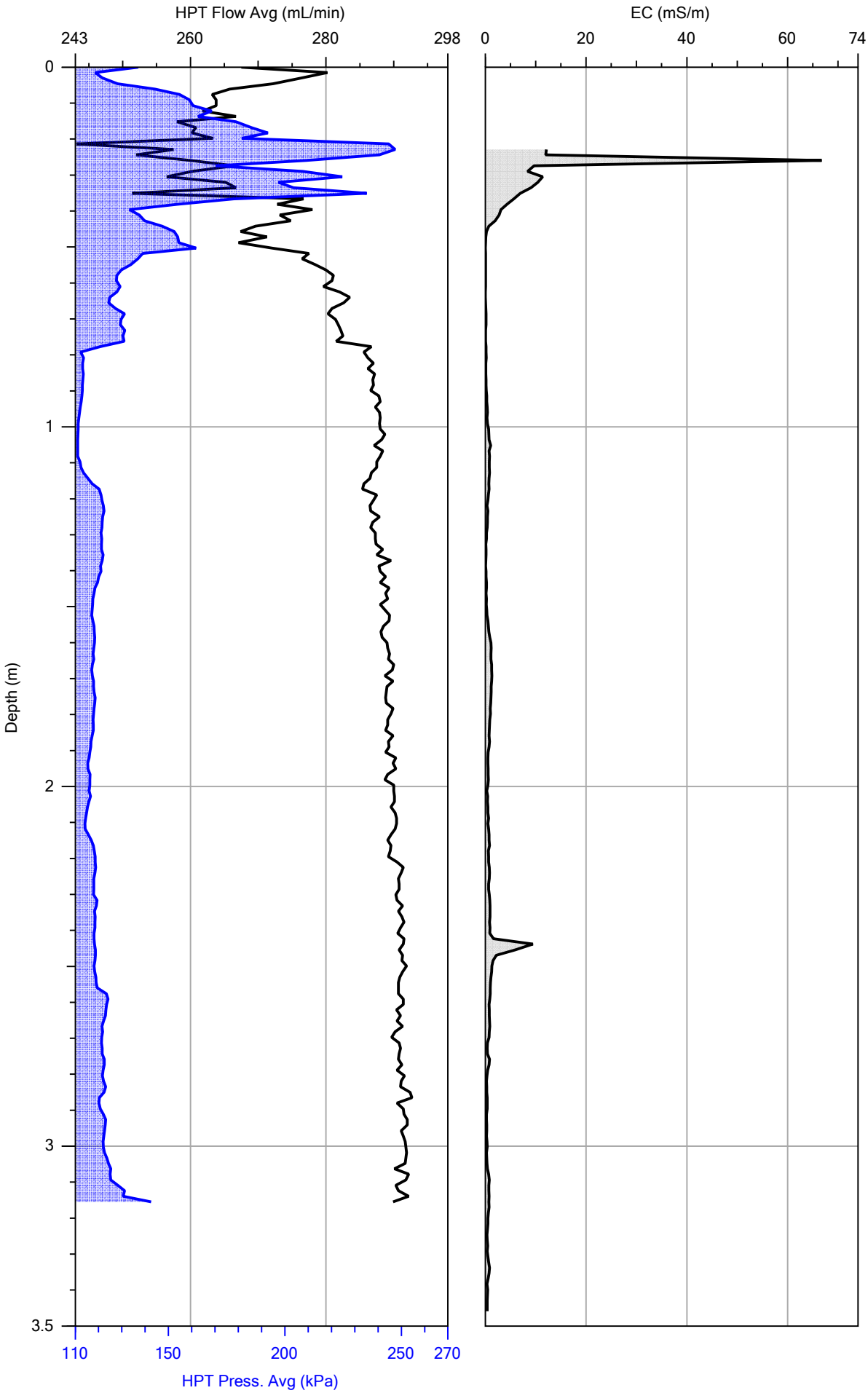
		File: MIP051.MHP
Company: DHA - Randwick	Operator: ADU	Date: 26/06/20
Project ID: 610.30041	Client: SLR	Location:



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		File: MIP051.MHP
Company: DHA - Randwick	Operator: ADU	Date: 26/06/20
Project ID: 610.30041	Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.8	1.4	PASS
High	290.0	297.2	2.5	PASS

MIP051.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA - Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP051.pre.tim
COMPOUND: BZ
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Fri Jun 26 2020 10:55:52

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Fri Jun 26 2020 11:01:47

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.564	0.0	107.310
TOP with FLOW>0	16.058	276.0	110.720
BOTTOM with FLOW=0	15.342	0.0	105.780
BOTTOM with FLOW>0	15.834	275.6	109.170

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840

LOG START TIME: Fri Jun 26 2020 11:09:39

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4
0.00	0.000	1	1	1	1

LOG END DEPTH: 10.60 ft (3.231 m)
LOG END TIME: Fri Jun 26 2020 11:36:39

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS 0.00 FEET
GPS Quality: None

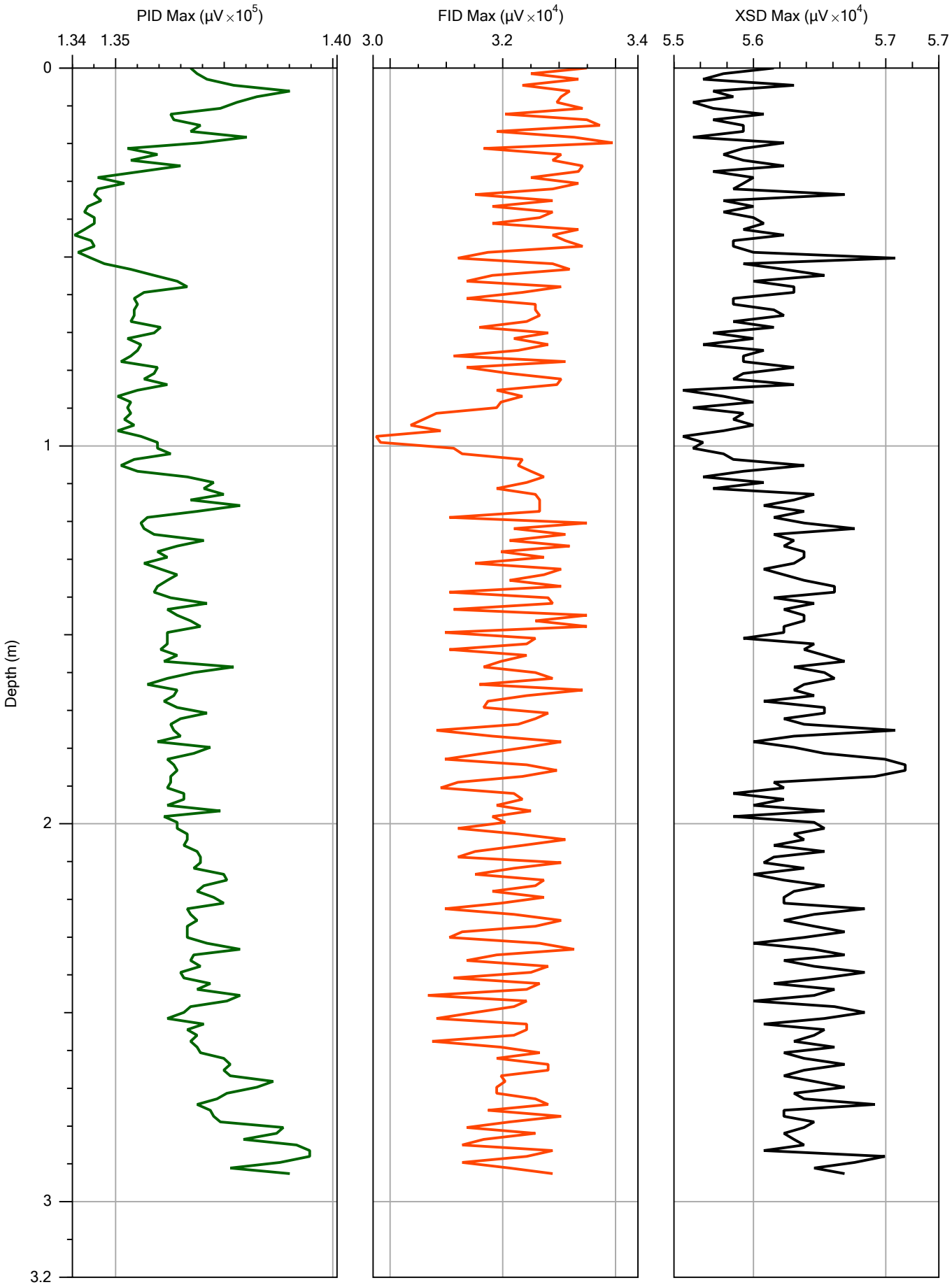
MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Fri Jun 26 2020 11:36:50

POST-LOG HPT REFERENCE TESTS BYPASSED

EC POST-LOG TESTS BYPASSED



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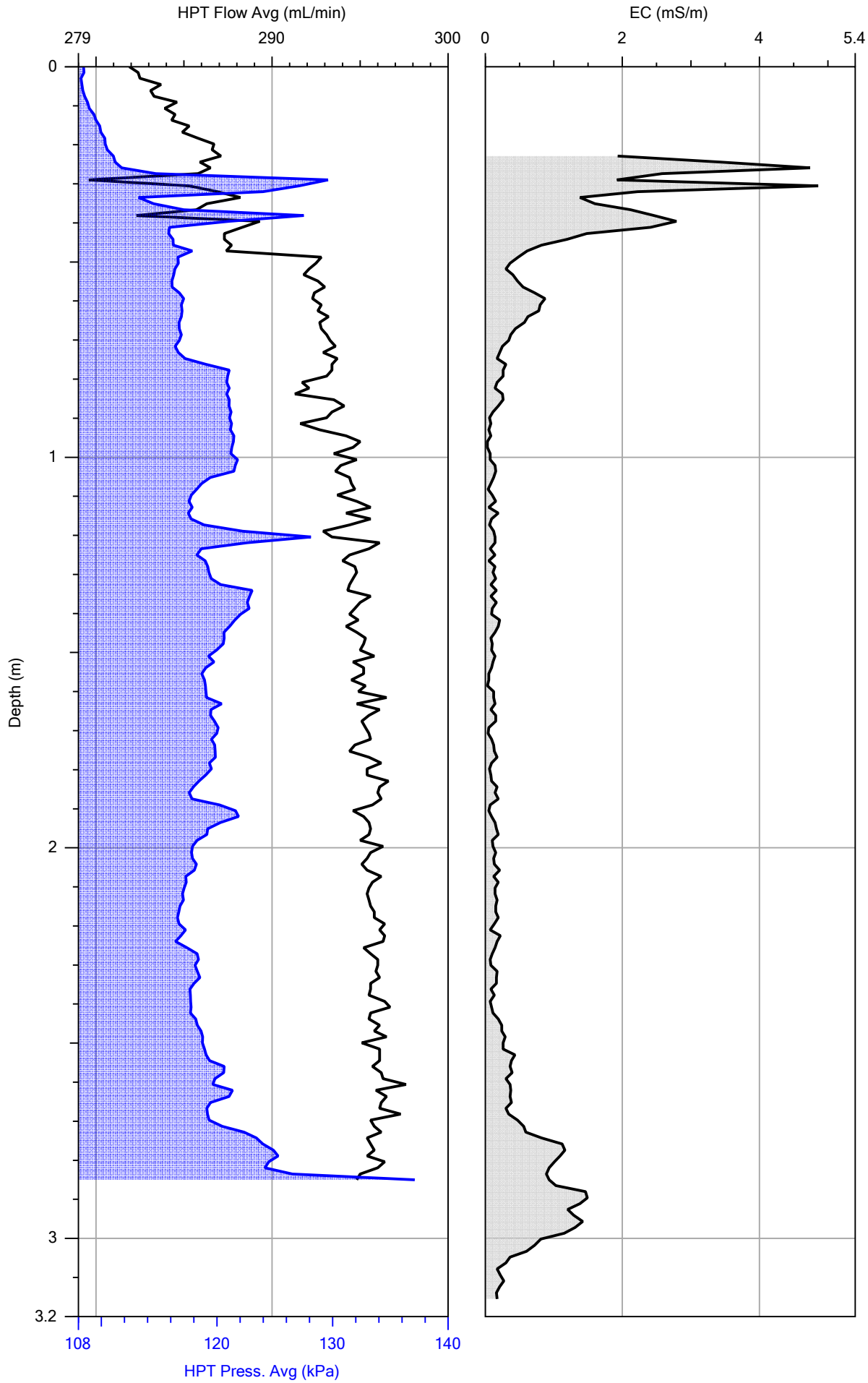
		File: MIP052.MHP
Company: DHA - Randwick	Operator: ADU	Date: 26/06/20
Project ID: 610.30041	Client: SLR	Location:



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		File: MIP052.MHP
Company: DHA - Randwick	Operator: ADU	Date: 26/06/20
Project ID: 610.30041	Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	56.0	1.8	PASS
High	290.0	296.6	2.3	PASS

MIP052.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA - Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP052.pre.tim
COMPOUND: BZ
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Fri Jun 26 2020 12:31:07

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Fri Jun 26 2020 12:38:20

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.505	0.0	106.900
TOP with FLOW>0	16.097	290.2	110.980
BOTTOM with FLOW=0	15.290	0.0	105.420
BOTTOM with FLOW>0	15.881	289.2	109.500

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840

LOG START TIME: Fri Jun 26 2020 12:43:02

Temperature out of range (71.2 deg C) at 1.50 ft (0.457 m)

Temperature out of range (78.9 deg C) at 1.50 ft (0.457 m)

Temperature out of range (69.3 deg C) at 1.80 ft (0.549 m)

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4
0.00	0.000	1	1	1	1

LOG END DEPTH: 9.60 ft (2.926 m)
LOG END TIME: Fri Jun 26 2020 13:11:41

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS 0.00 FEET
GPS Quality: None

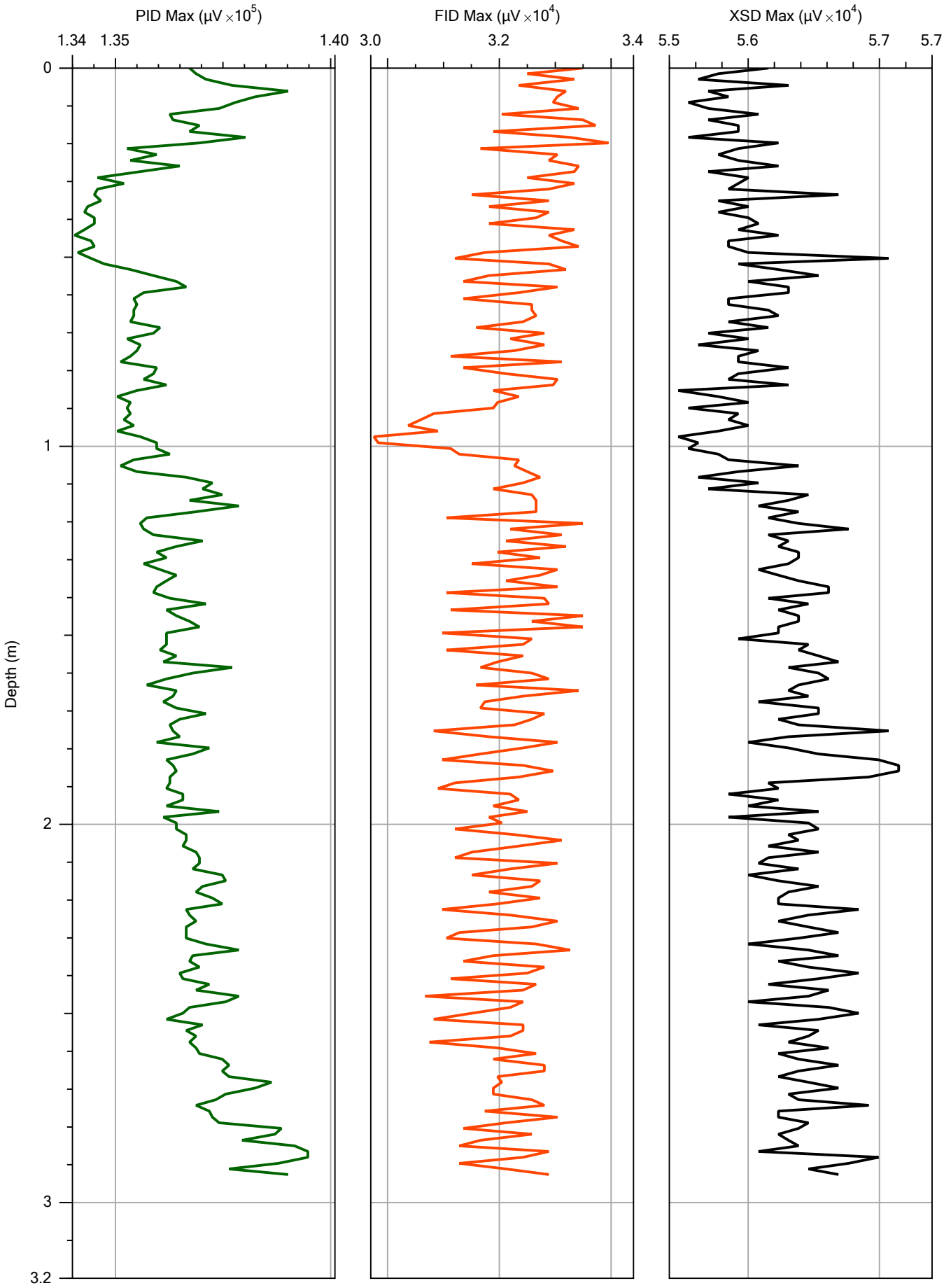
MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Fri Jun 26 2020 13:11:46

POST-LOG HPT REFERENCE TESTS BYPASSED

EC POST-LOG TESTS BYPASSED



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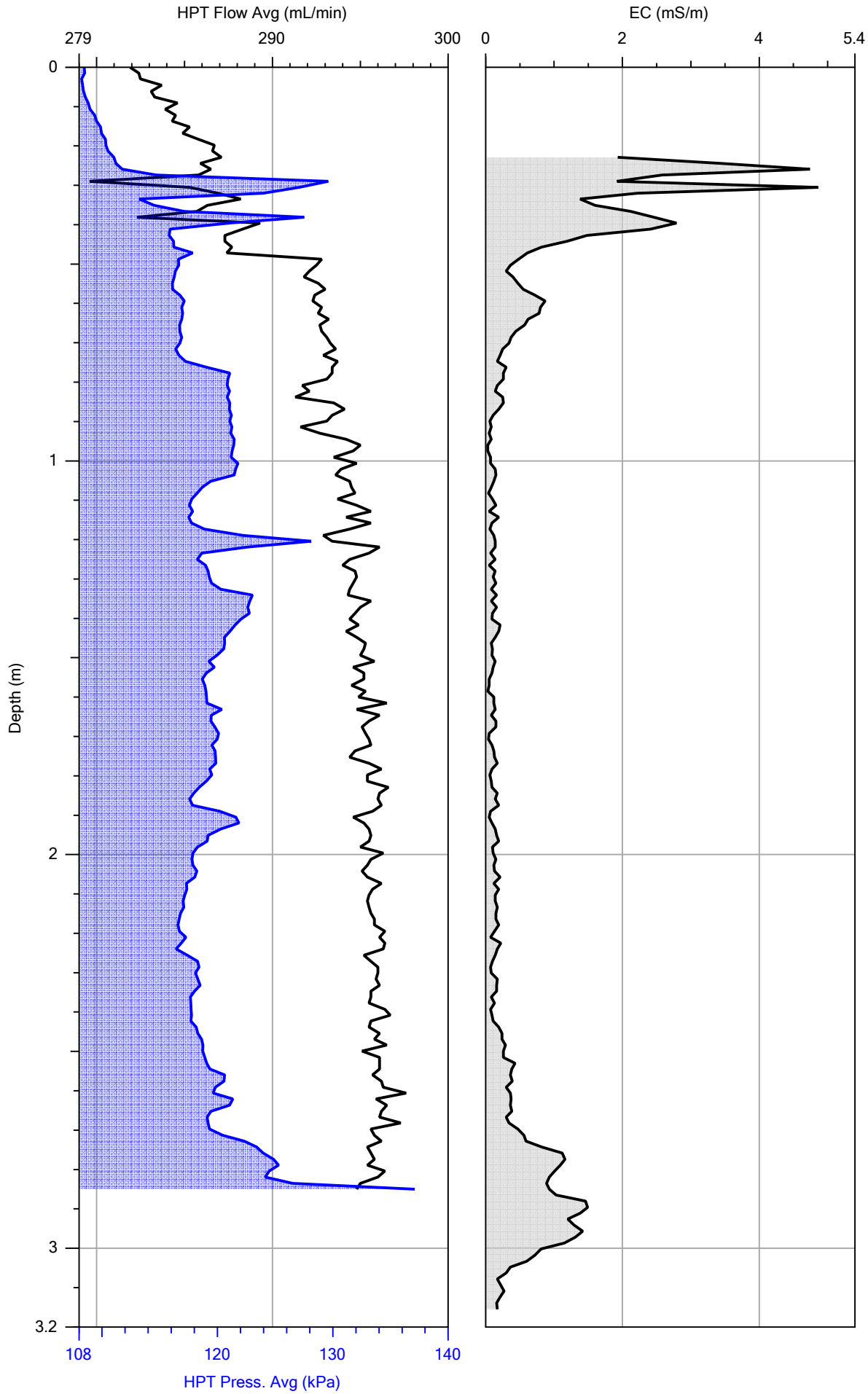
		File: MIP052.MHP
Company: DHA - Randwick	Operator: ADU	Date: 26/06/20
Project ID: 610.30041	Client: SLR	Location:



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		File: MIP052.MHP
Company: DHA - Randwick	Operator: ADU	Date: 26/06/20
Project ID: 610.30041	Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	56.0	1.8	PASS
High	290.0	296.6	2.3	PASS

MIP052.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA - Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP052.pre.tim
COMPOUND: BZ
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Fri Jun 26 2020 12:31:07

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Fri Jun 26 2020 12:38:20

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.505	0.0	106.900
TOP with FLOW>0	16.097	290.2	110.980
BOTTOM with FLOW=0	15.290	0.0	105.420
BOTTOM with FLOW>0	15.881	289.2	109.500

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840

LOG START TIME: Fri Jun 26 2020 12:43:02

Temperature out of range (71.2 deg C) at 1.50 ft (0.457 m)

Temperature out of range (78.9 deg C) at 1.50 ft (0.457 m)

Temperature out of range (69.3 deg C) at 1.80 ft (0.549 m)

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4
0.00	0.000	1	1	1	1

LOG END DEPTH: 9.60 ft (2.926 m)
LOG END TIME: Fri Jun 26 2020 13:11:41

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS 0.00 FEET
GPS Quality: None

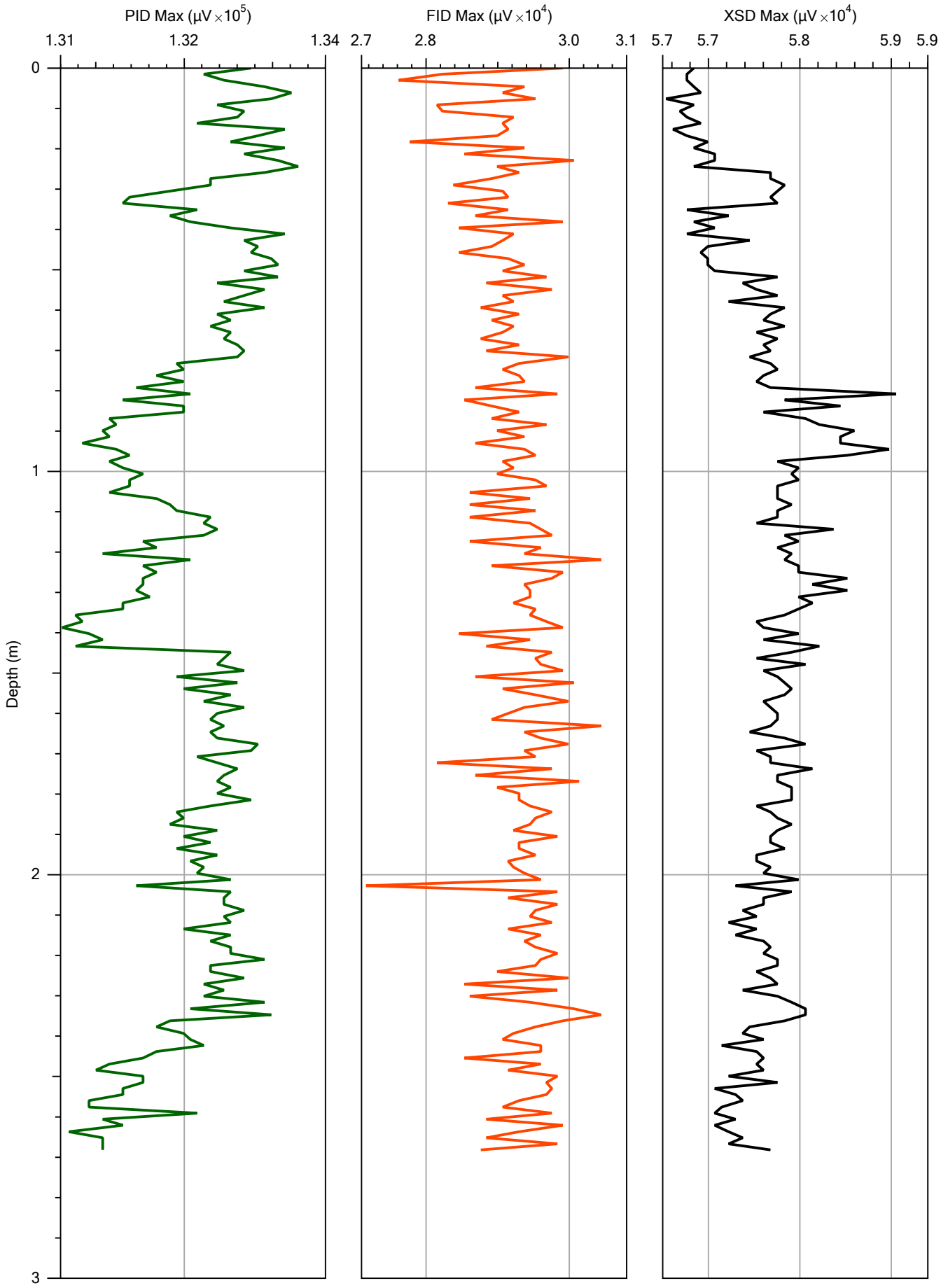
MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Fri Jun 26 2020 13:11:46

POST-LOG HPT REFERENCE TESTS BYPASSED

EC POST-LOG TESTS BYPASSED



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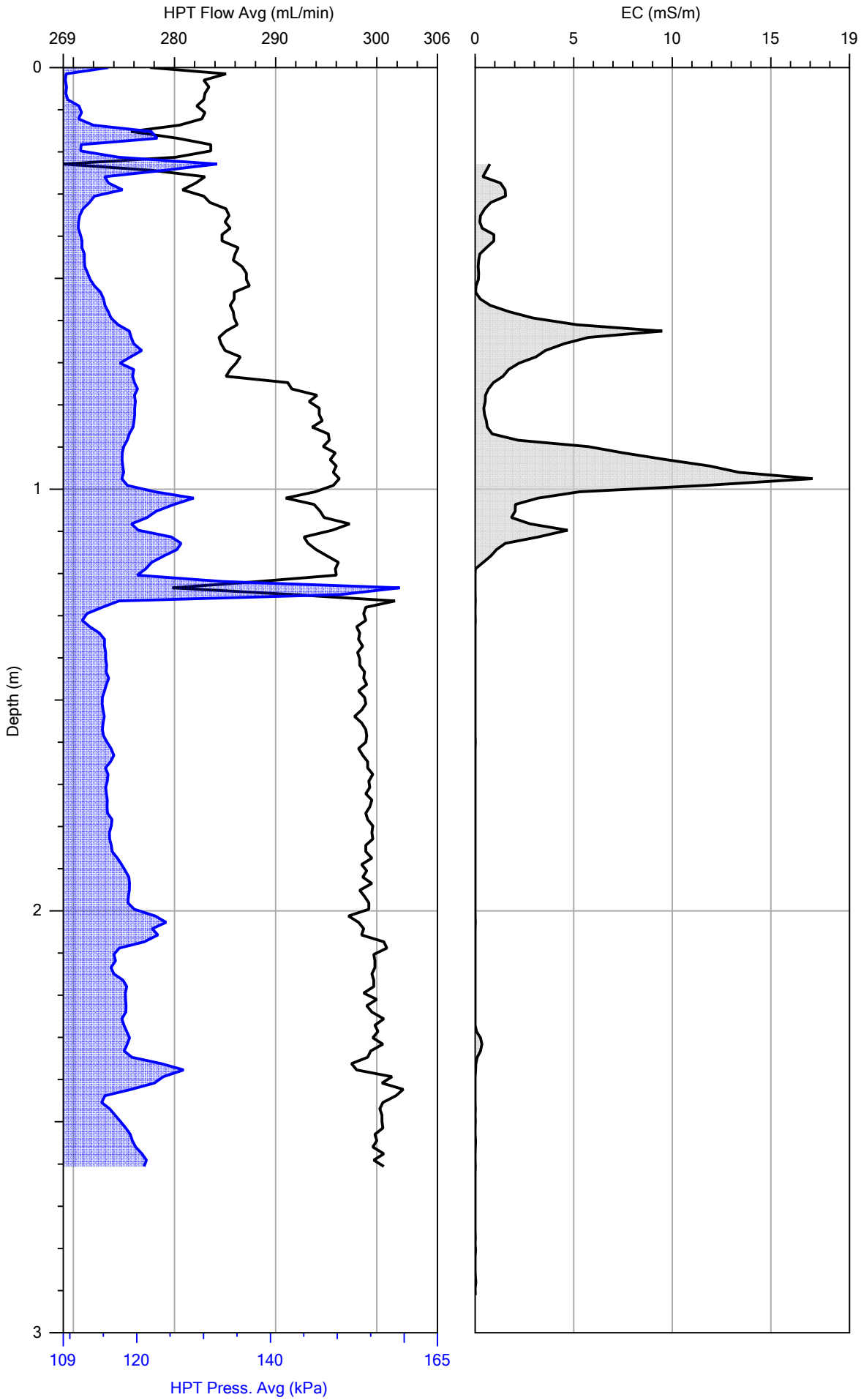
		File: MIP054.MHP
Company: DHA - Randwick	Operator: ADU	Date: 29/06/20
Project ID: 610.30041	Client:	Location:



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		File: MIP054.MHP
Company: DHA - Randwick	Operator: ADU	Date: 29/06/20
Project ID: 610.30041	Client:	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.5	0.9	PASS
High	290.0	296.5	2.3	PASS

MIP054.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA - Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP054.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Mon Jun 29 2020 08:31:49

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Mon Jun 29 2020 08:38:42

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.648	0.0	107.890
TOP with FLOW>0	16.180	274.5	111.560
BOTTOM with FLOW=0	15.428	0.0	106.370
BOTTOM with FLOW>0	15.964	274.6	110.070

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840
LOG START TIME: Mon Jun 29 2020 08:43:20

Temperature out of range (180.9 deg C) at 4.90 ft (1.494 m)

Temperature out of range (189.2 deg C) at 4.95 ft (1.509 m)

Temperature out of range (188.1 deg C) at 5.00 ft (1.524 m)

Temperature out of range (173.1 deg C) at 6.00 ft (1.829 m)

Temperature out of range (157.3 deg C) at 6.05 ft (1.844 m)

Temperature out of range (158.9 deg C) at 6.05 ft (1.844 m)

Temperature out of range (50.7 deg C) at 6.10 ft (1.859 m)

Temperature out of range (176.5 deg C) at 6.15 ft (1.875 m)

Temperature out of range (239.4 deg C) at 6.15 ft (1.875 m)

Temperature out of range (76.0 deg C) at 6.30 ft (1.920 m)

Temperature out of range (210.7 deg C) at 6.30 ft (1.920 m)

Temperature out of range (157.6 deg C) at 6.30 ft (1.920 m)

Temperature out of range (196.8 deg C) at 6.40 ft (1.951 m)

Temperature out of range (78.9 deg C) at 6.50 ft (1.981 m)

Temperature out of range (171.8 deg C) at 6.50 ft (1.981 m)

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4
0.00	0.000	1	1	1	1

LOG END DEPTH: 8.80 ft (2.682 m)
LOG END TIME: Mon Jun 29 2020 09:17:54

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS 0.00 FEET
GPS Quality: None

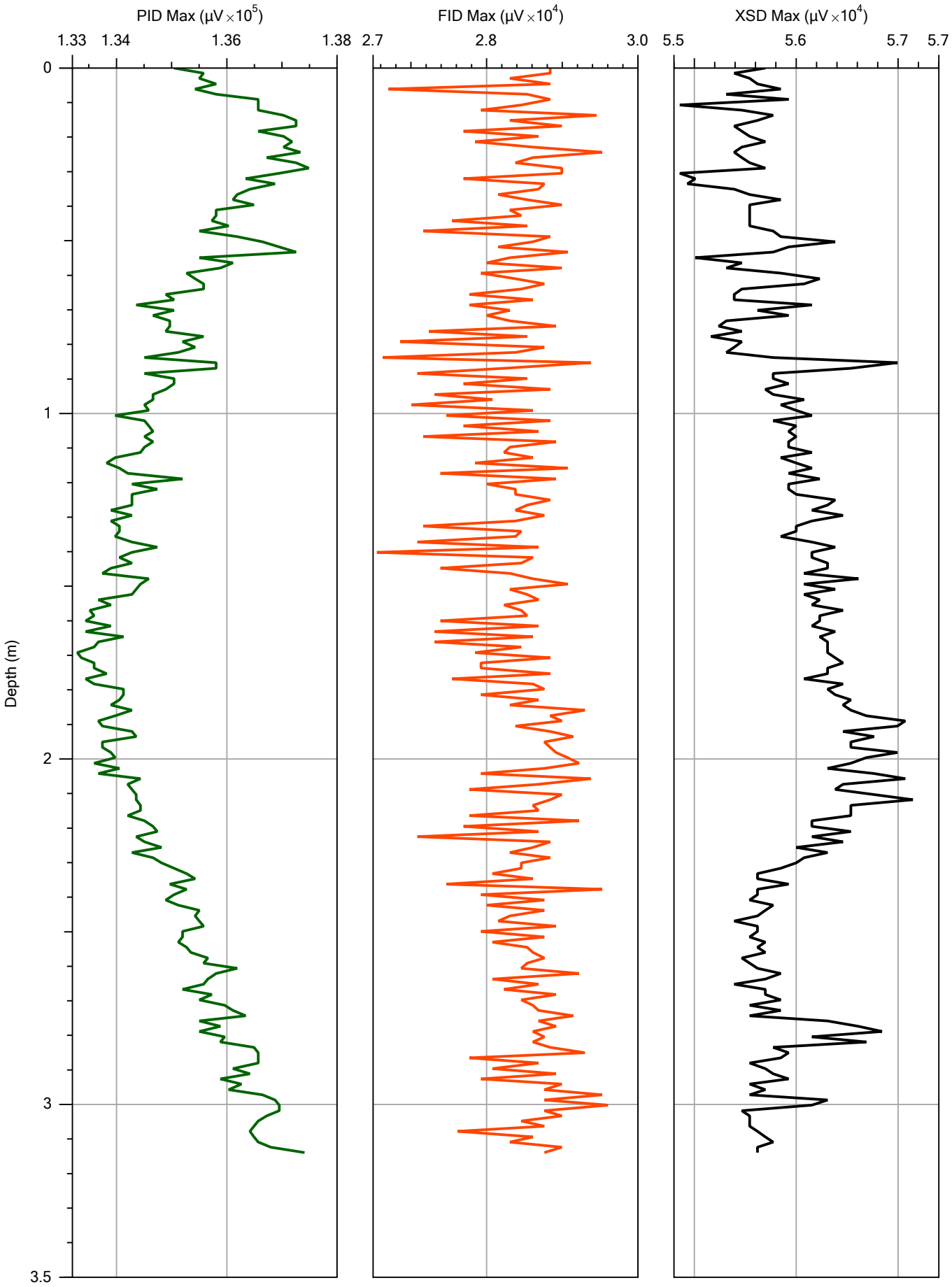
MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Mon Jun 29 2020 09:20:06

POST-LOG HPT REFERENCE TESTS BYPASSED

EC POST-LOG TESTS BYPASSED



numac

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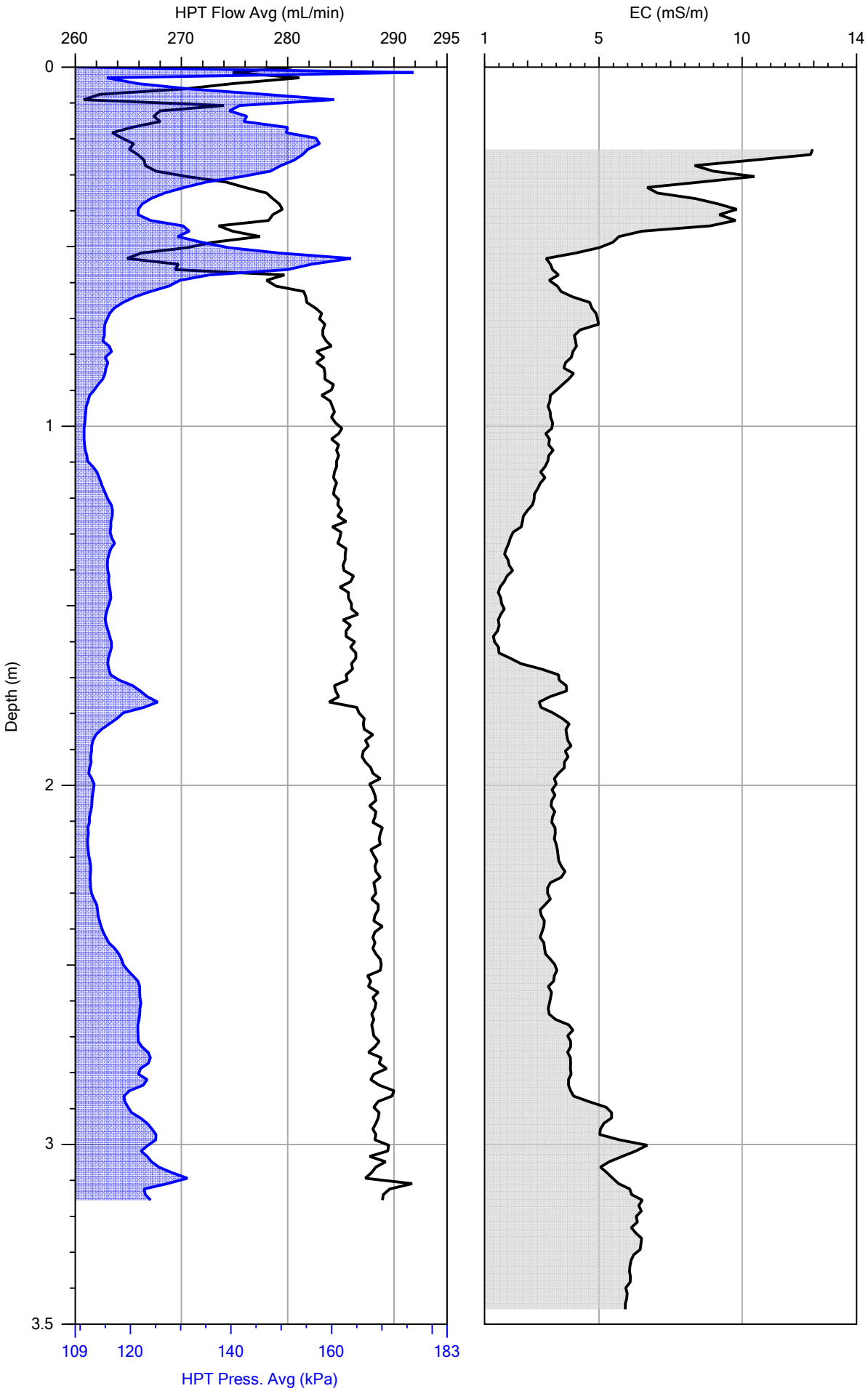
		File: MIP055.MHP
Company: DHA - Randwick	Operator: ADU	Date: 29/06/20
Project ID: 610.30041	Client: SLR	Location:



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Em. - info@numac.com.au

		File: MIP055.MHP
Company: DHA - Randwick	Operator: ADU	Date: 29/06/20
Project ID: 610.30041	Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.3	0.5	PASS
High	290.0	296.2	2.1	PASS

MIP055.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA - Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP055.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Mon Jun 29 2020 10:22:29

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Mon Jun 29 2020 10:27:25

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.611	0.0	107.630
TOP with FLOW>0	16.155	277.0	111.380
BOTTOM with FLOW=0	15.393	0.0	106.130
BOTTOM with FLOW>0	15.938	277.5	109.890

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840

LOG START TIME: Mon Jun 29 2020 10:33:23

Temperature out of range (153.0 deg C) at 4.25 ft (1.295 m)

Temperature out of range (201.9 deg C) at 5.60 ft (1.707 m)

Temperature out of range (172.8 deg C) at 5.65 ft (1.722 m)

Temperature out of range (170.8 deg C) at 5.65 ft (1.722 m)

Temperature out of range (174.6 deg C) at 5.85 ft (1.783 m)

Temperature out of range (162.0 deg C) at 5.95 ft (1.814 m)

Temperature out of range (155.8 deg C) at 6.00 ft (1.829 m)

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4
0.00	0.000	1	1	1	1

LOG END DEPTH: 10.60 ft (3.231 m)
LOG END TIME: Mon Jun 29 2020 10:59:46

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS 0.00 FEET
GPS Quality: None

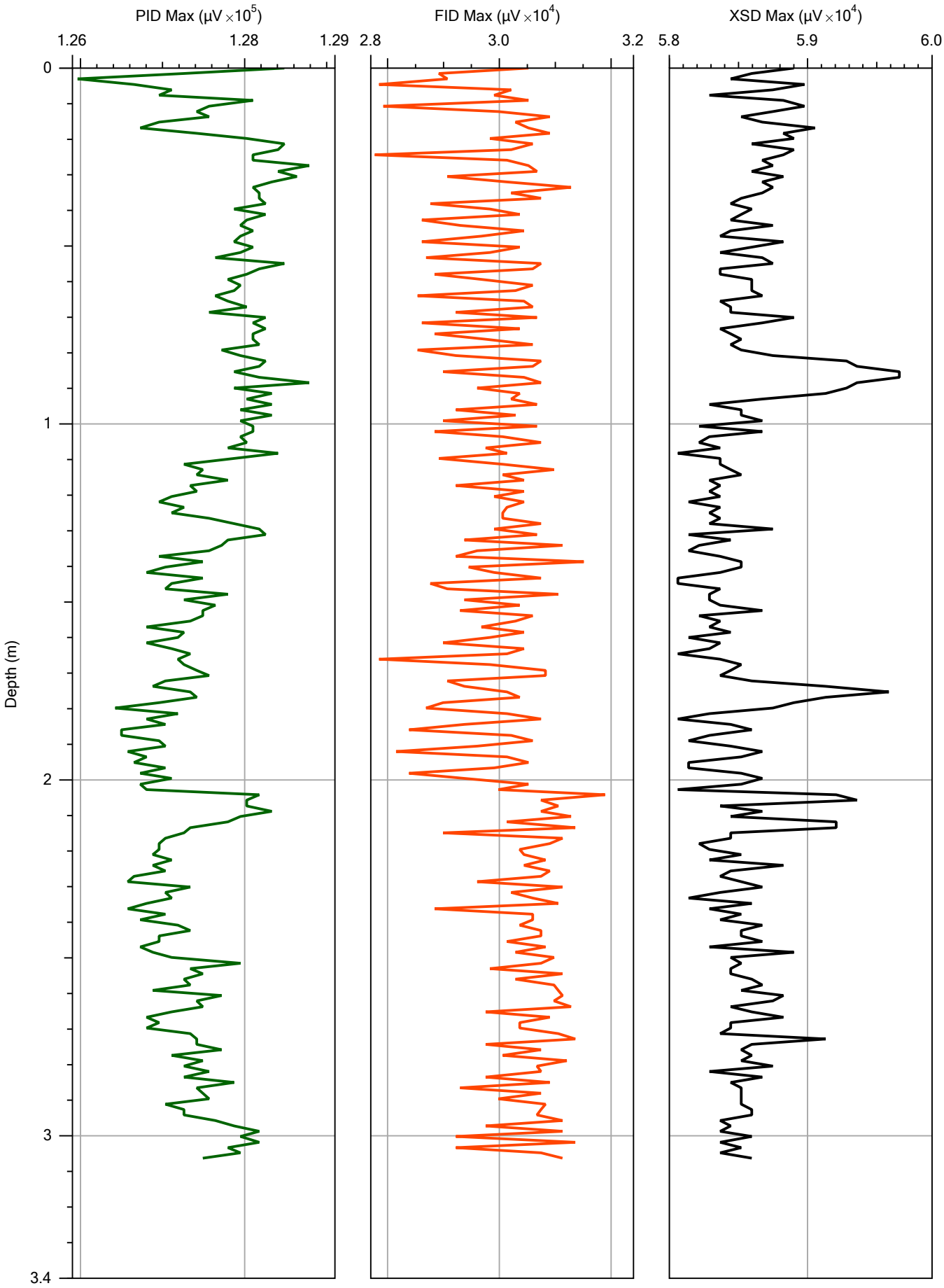
MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Mon Jun 29 2020 10:59:55

POST-LOG HPT REFERENCE TESTS BYPASSED

EC POST-LOG TESTS BYPASSED



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Ph. - 1300 131 019
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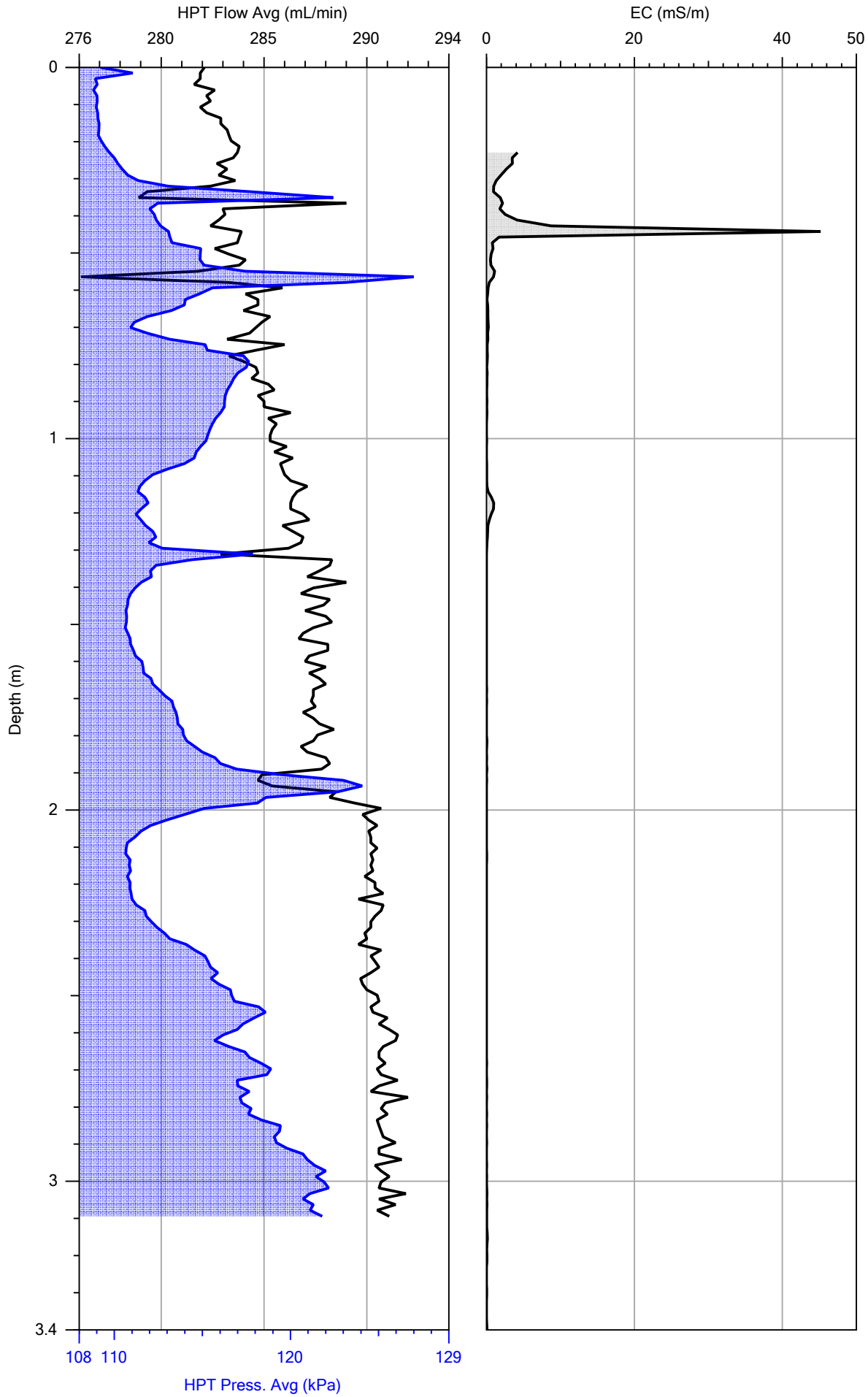
		File: MIP056.MHP
Company: DHA - Randwick	Operator: ADU	Date: 29/06/20
Project ID: 610.30041	Client: SLR	Location:



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		File: MIP056.MHP
Company: DHA - Randwick	Operator: ADU	Date: 29/06/20
Project ID: 610.30041	Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.2	0.4	PASS
High	290.0	295.8	2.0	PASS

MIP056.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA - Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP056.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Mon Jun 29 2020 11:16:02

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Mon Jun 29 2020 11:21:15

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.591	0.0	107.490
TOP with FLOW>0	16.148	281.2	111.340
BOTTOM with FLOW=0	15.375	0.0	106.010
BOTTOM with FLOW>0	15.928	280.3	109.820

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840

Temperature out of range (175.5 deg C) at 0.40 ft (0.122 m)

Temperature out of range (37.9 deg C) at 0.50 ft (0.152 m)

LOG START TIME: Mon Jun 29 2020 11:25:35

Temperature out of range (208.1 deg C) at 6.35 ft (1.935 m)

Temperature out of range (172.6 deg C) at 6.45 ft (1.966 m)

Temperature out of range (237.4 deg C) at 6.60 ft (2.012 m)

Temperature out of range (250.0 deg C) at 6.70 ft (2.042 m)

Temperature out of range (167.2 deg C) at 6.70 ft (2.042 m)

Temperature out of range (170.7 deg C) at 6.70 ft (2.042 m)

Temperature out of range (59.2 deg C) at 6.70 ft (2.042 m)

Temperature out of range (179.7 deg C) at 6.90 ft (2.103 m)

Temperature out of range (73.3 deg C) at 6.90 ft (2.103 m)

Temperature out of range (162.1 deg C) at 6.95 ft (2.118 m)

Temperature out of range (183.0 deg C) at 7.95 ft (2.423 m)

Temperature out of range (156.1 deg C) at 8.05 ft (2.454 m)

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4
0.00	0.000	1	1	1	1

LOG END DEPTH: 10.40 ft (3.170 m)
LOG END TIME: Mon Jun 29 2020 11:49:23

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS 0.00 FEET
GPS Quality: None

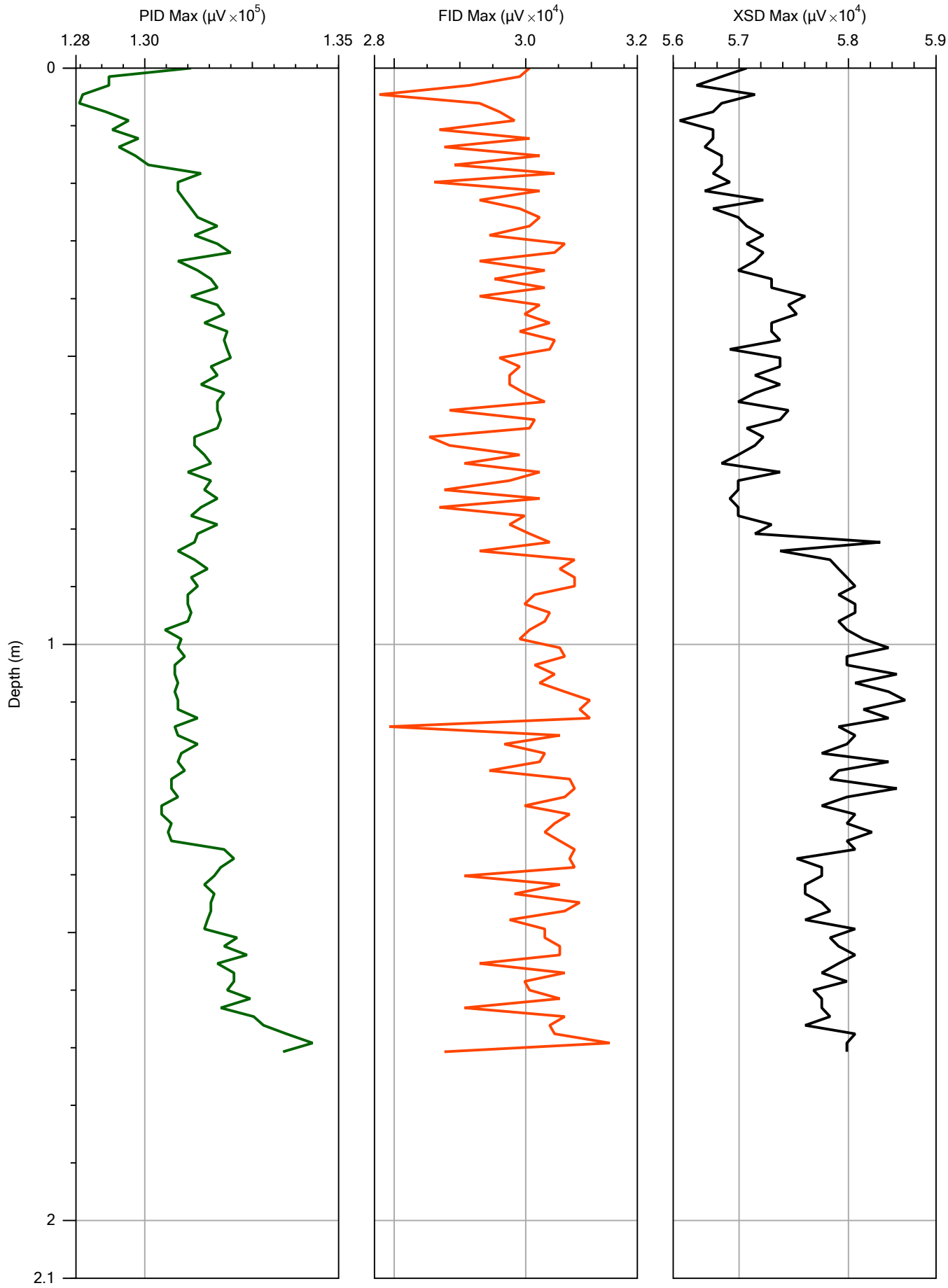
MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Mon Jun 29 2020 11:49:30

POST-LOG HPT REFERENCE TESTS BYPASSED

EC POST-LOG TESTS BYPASSED



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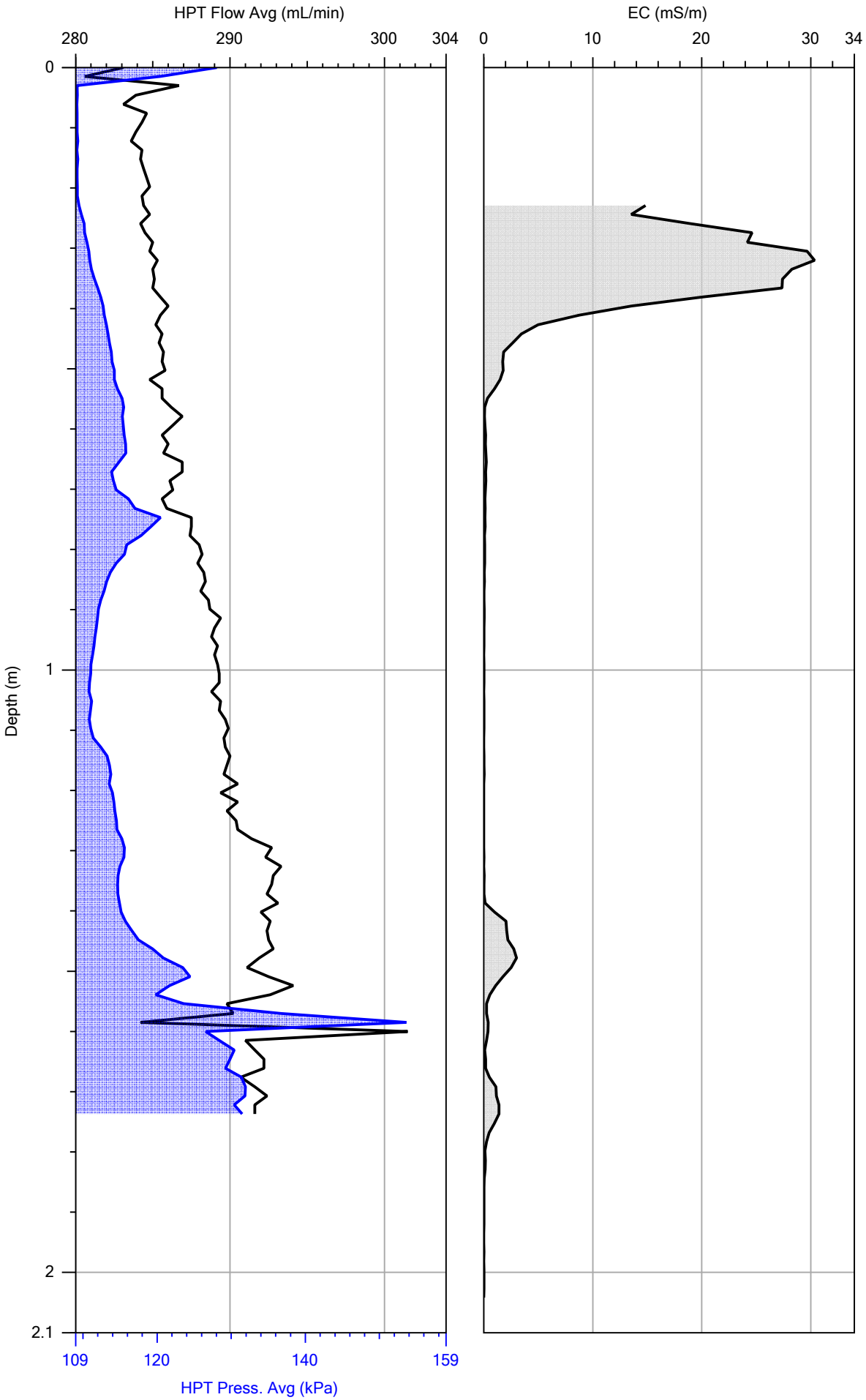
			File: MIP057.MHP
Company: DHA - Randwick		Operator: ADU	Date: 29/06/20
Project ID: 610.30041		Client: SLR	Location:



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		File: MIP057.MHP
Company: DHA - Randwick	Operator: ADU	Date: 29/06/20
Project ID: 610.30041	Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.3	0.5	PASS
High	290.0	292.0	0.7	PASS

MIP057.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA - Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP057.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Mon Jun 29 2020 12:10:11

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Mon Jun 29 2020 12:14:34

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.659	0.0	107.960
TOP with FLOW>0	16.133	281.4	111.230
BOTTOM with FLOW=0	15.436	0.0	106.430
BOTTOM with FLOW>0	15.913	282.1	109.720

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840

LOG START TIME: Mon Jun 29 2020 12:18:18

Temperature out of range (153.6 deg C) at 1.25 ft (0.381 m)

Temperature out of range (183.6 deg C) at 1.60 ft (0.488 m)

Temperature out of range (180.6 deg C) at 1.65 ft (0.503 m)

Temperature out of range (190.3 deg C) at 2.00 ft (0.610 m)

Temperature out of range (44.2 deg C) at 2.55 ft (0.777 m)

Temperature out of range (172.7 deg C) at 2.60 ft (0.792 m)

Temperature out of range (59.8 deg C) at 2.70 ft (0.823 m)

Temperature out of range (173.1 deg C) at 2.85 ft (0.869 m)

Temperature out of range (182.1 deg C) at 2.85 ft (0.869 m)

Temperature out of range (69.0 deg C) at 2.85 ft (0.869 m)

Temperature out of range (238.2 deg C) at 2.90 ft (0.884 m)

Temperature out of range (53.7 deg C) at 2.95 ft (0.899 m)

Temperature out of range (170.6 deg C) at 2.95 ft (0.899 m)

Temperature out of range (156.9 deg C) at 3.00 ft (0.914 m)

Temperature out of range (152.4 deg C) at 3.00 ft (0.914 m)

Temperature out of range (196.6 deg C) at 3.00 ft (0.914 m)

Temperature out of range (36.4 deg C) at 3.10 ft (0.945 m)

Temperature out of range (191.7 deg C) at 3.10 ft (0.945 m)

Temperature out of range (169.6 deg C) at 3.65 ft (1.113 m)

Temperature out of range (180.0 deg C) at 3.80 ft (1.158 m)

Temperature out of range (173.4 deg C) at 3.95 ft (1.204 m)

Temperature out of range (150.6 deg C) at 4.00 ft (1.219 m)

Temperature out of range (182.9 deg C) at 4.00 ft (1.219 m)

Temperature out of range (157.0 deg C) at 4.10 ft (1.250 m)

Temperature out of range (41.8 deg C) at 4.10 ft (1.250 m)

Temperature out of range (204.8 deg C) at 4.10 ft (1.250 m)

Temperature out of range (75.2 deg C) at 4.45 ft (1.356 m)

Temperature out of range (188.9 deg C) at 4.45 ft (1.356 m)

Temperature out of range (197.9 deg C) at 4.45 ft (1.356 m)

Temperature out of range (158.9 deg C) at 4.45 ft (1.356 m)

Temperature out of range (152.8 deg C) at 4.45 ft (1.356 m)

Temperature out of range (176.9 deg C) at 4.50 ft (1.372 m)

Temperature out of range (178.6 deg C) at 4.50 ft (1.372 m)

Temperature out of range (64.1 deg C) at 4.55 ft (1.387 m)

Temperature out of range (211.4 deg C) at 4.55 ft (1.387 m)

Temperature out of range (177.5 deg C) at 4.55 ft (1.387 m)

Temperature out of range (192.6 deg C) at 4.60 ft (1.402 m)

Temperature out of range (44.1 deg C) at 4.90 ft (1.494 m)

Temperature out of range (67.4 deg C) at 4.90 ft (1.494 m)

Temperature out of range (203.5 deg C) at 4.95 ft (1.509 m)

Temperature out of range (215.1 deg C) at 5.00 ft (1.524 m)

Temperature out of range (205.5 deg C) at 5.05 ft (1.539 m)

Temperature out of range (46.9 deg C) at 5.15 ft (1.570 m)

Temperature out of range (236.9 deg C) at 5.15 ft (1.570 m)

Temperature out of range (74.1 deg C) at 5.20 ft (1.585 m)

Temperature out of range (73.0 deg C) at 5.25 ft (1.600 m)

Temperature out of range (162.8 deg C) at 5.35 ft (1.631 m)

Temperature out of range (192.2 deg C) at 5.40 ft (1.646 m)

Temperature out of range (22.7 deg C) at 5.40 ft (1.646 m)

Temperature out of range (193.9 deg C) at 5.40 ft (1.646 m)

Temperature out of range (182.6 deg C) at 5.45 ft (1.661 m)

Temperature out of range (204.3 deg C) at 5.65 ft (1.722 m)

Temperature out of range (197.0 deg C) at 5.70 ft (1.737 m)

Temperature out of range (74.8 deg C) at 5.75 ft (1.753 m)

Temperature out of range (59.9 deg C) at 5.85 ft (1.783 m)

Temperature out of range (201.4 deg C) at 5.85 ft (1.783 m)

Temperature out of range (79.0 deg C) at 5.90 ft (1.798 m)

Temperature out of range (177.2 deg C) at 5.90 ft (1.798 m)

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4
0.00	0.000	1	1	1	1

LOG END DEPTH: 5.95 ft (1.814 m)
LOG END TIME: Mon Jun 29 2020 12:46:52

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS 0.00 FEET
GPS Quality: None

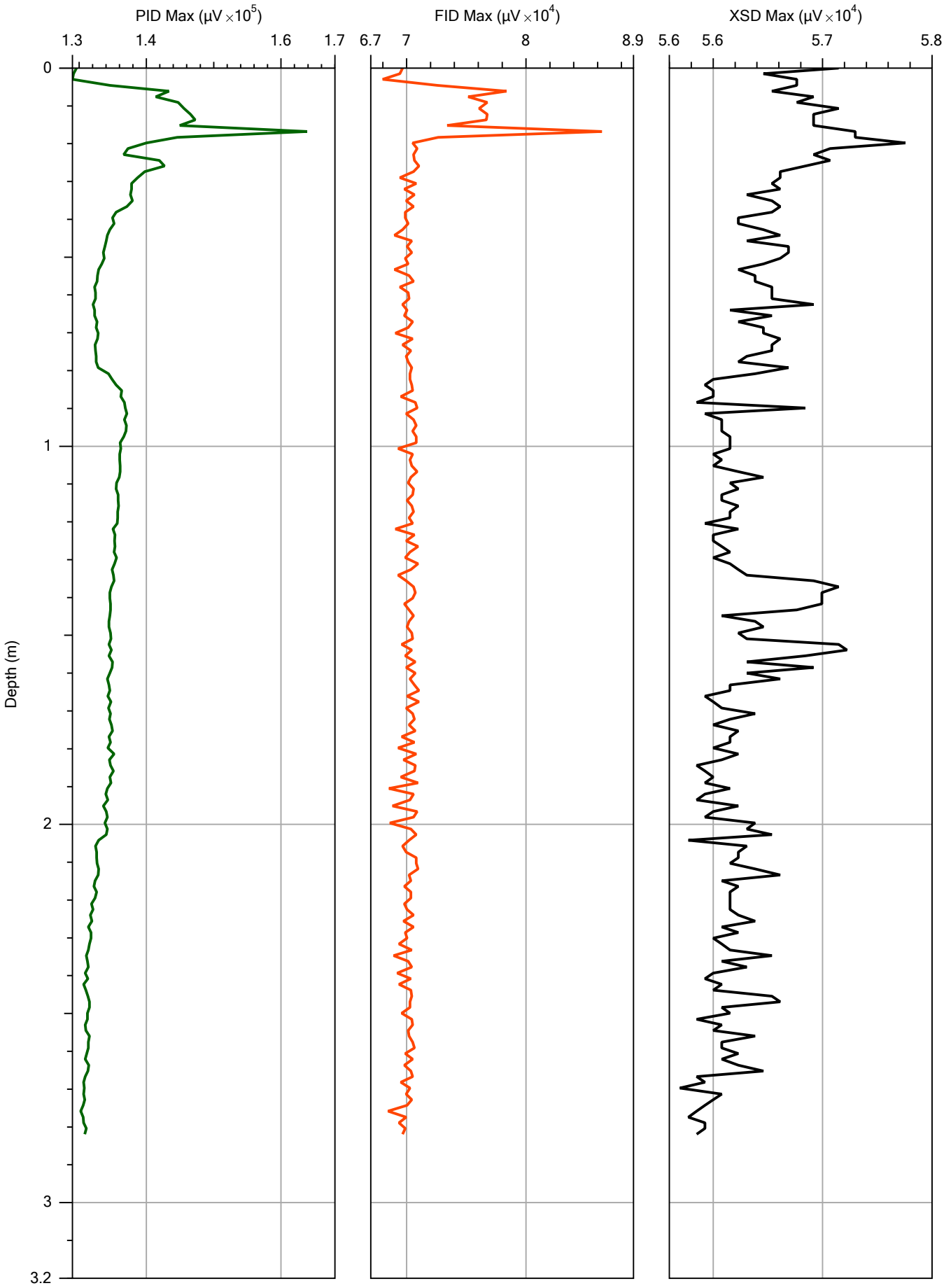
MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Mon Jun 29 2020 12:48:30

POST-LOG HPT REFERENCE TESTS BYPASSED

EC POST-LOG TESTS BYPASSED



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Ph. - 1300 131 019
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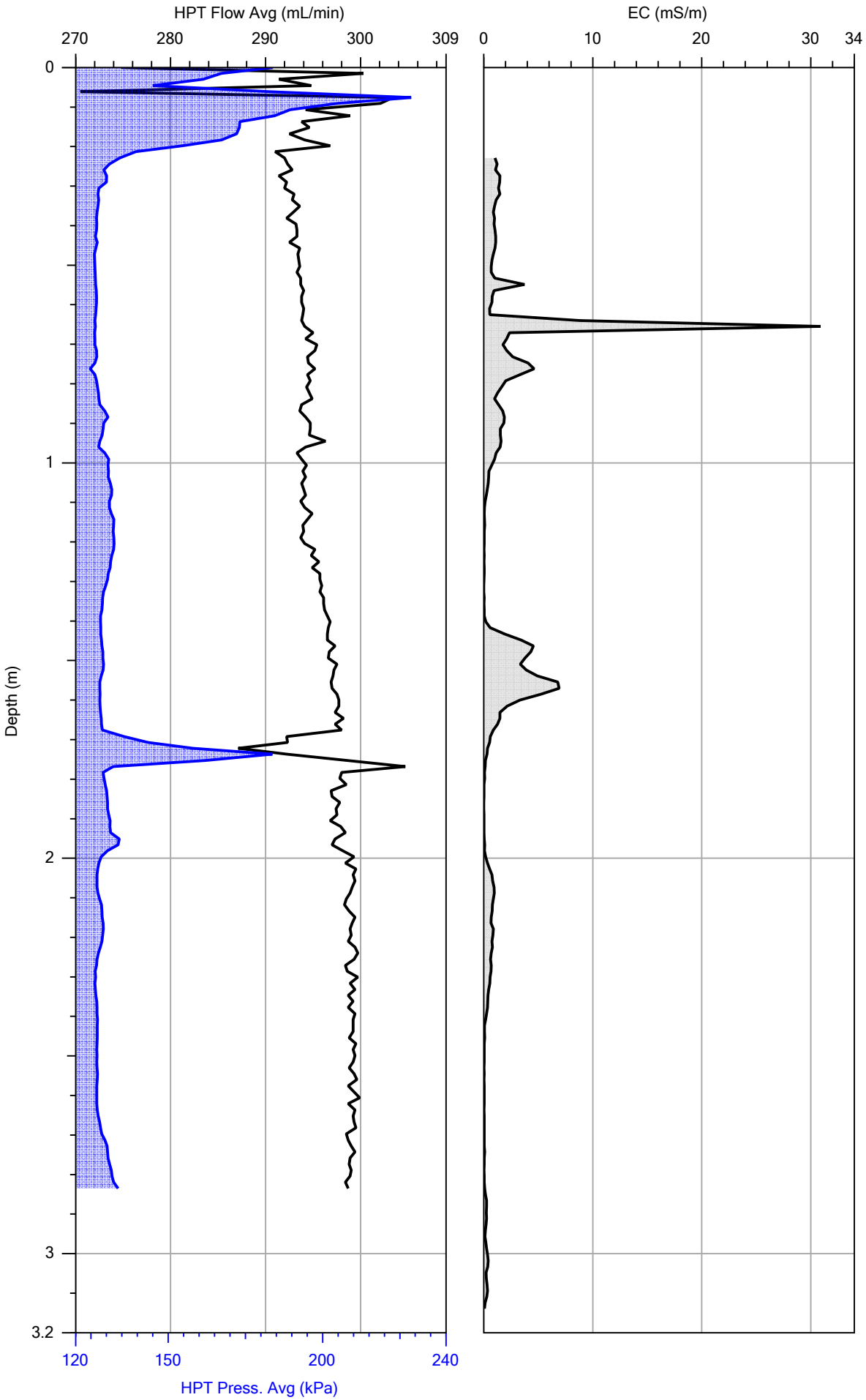
		File: MIP058.MHP
Company: DHA - Randwick	Operator: ADU	Date: 29/06/20
Project ID: 610.30041	Client: SLR	Location:



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		File: MIP058.MHP
Company: DHA - Randwick	Operator: ADU	Date: 29/06/20
Project ID: 610.30041	Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.5	1.0	PASS
High	290.0	296.8	2.3	PASS

MIP058.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA - Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP058.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Mon Jun 29 2020 15:51:56

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Mon Jun 29 2020 15:57:53

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.579	0.0	107.410
TOP with FLOW>0	18.167	289.3	125.260
BOTTOM with FLOW=0	15.356	0.0	105.870
BOTTOM with FLOW>0	17.940	283.8	123.690

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31063A,0.0000,0.0000,0.0000,0.0000,9.9590e-1,-1.3840

LOG START TIME: Mon Jun 29 2020 16:04:47

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4
0.00	0.000	1	1	1	1

LOG END DEPTH: 9.55 ft (2.911 m)
LOG END TIME: Mon Jun 29 2020 16:26:55

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS 0.00 FEET
GPS Quality: None

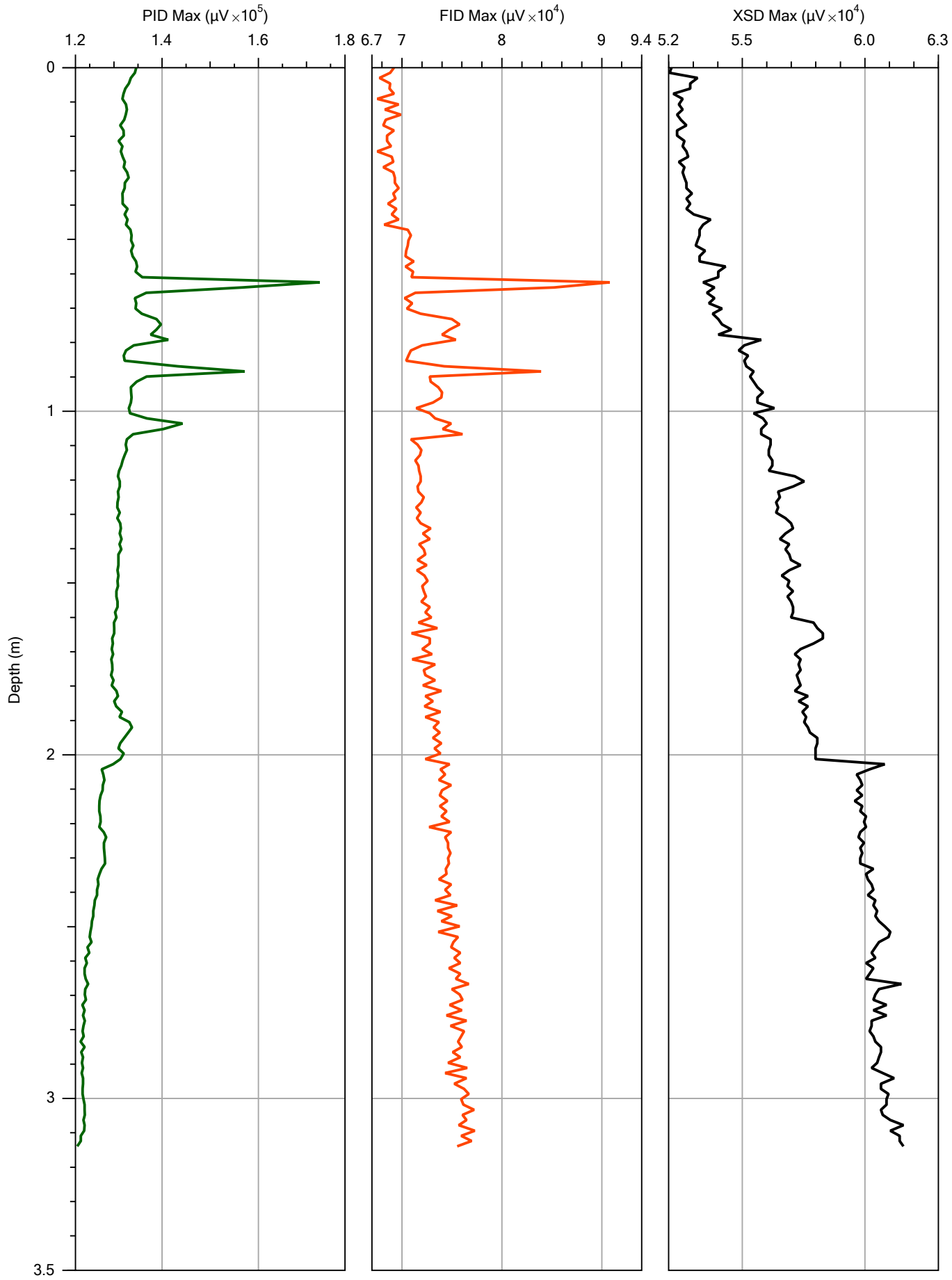
MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Mon Jun 29 2020 16:27:02

POST-LOG HPT REFERENCE TESTS BYPASSED

EC POST-LOG TESTS BYPASSED



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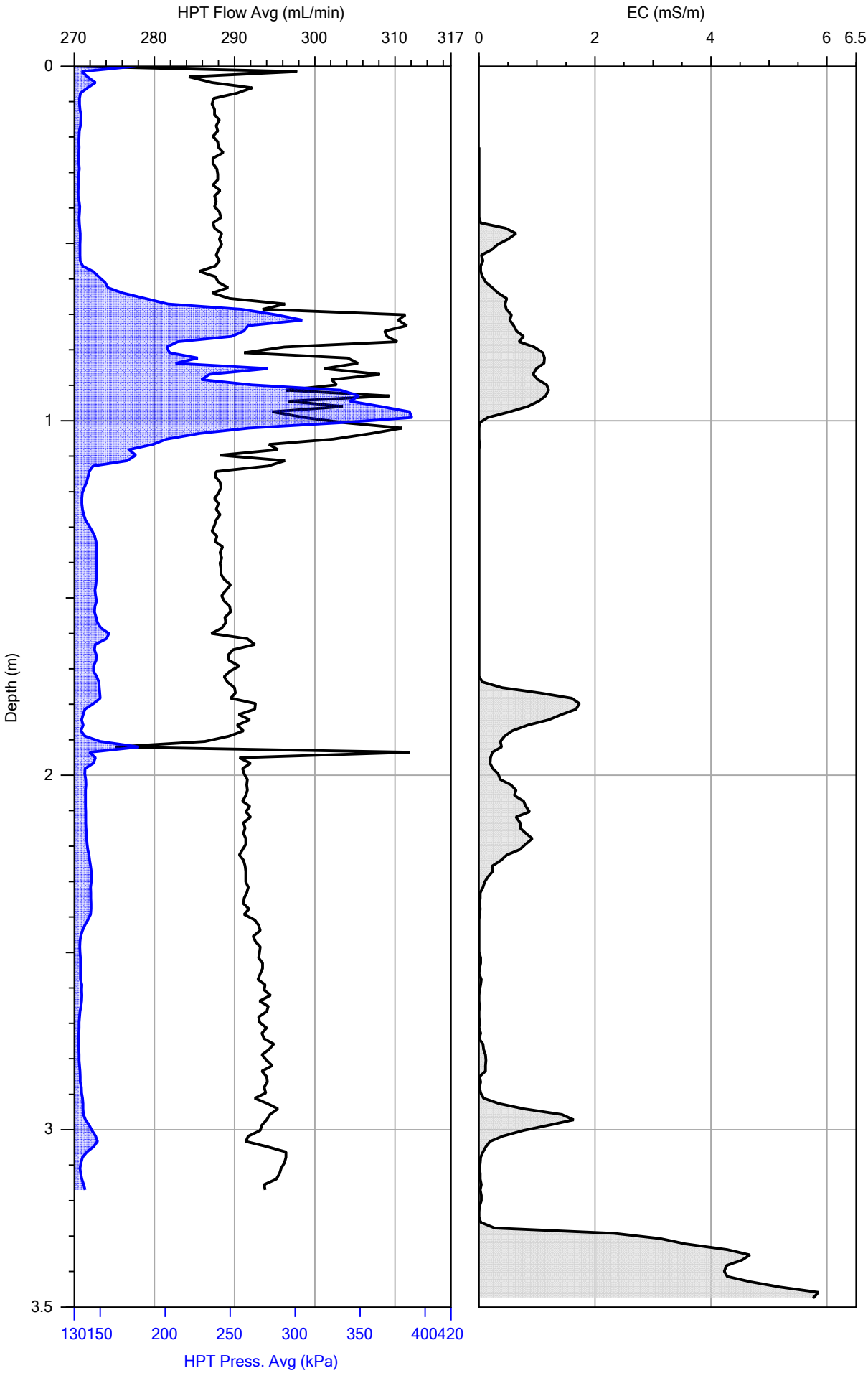
		File: MIP059.MHP
Company: DHA - Randwick	Operator: ADU	Date: 30/06/20
Project ID: 610.30041	Client: SLR	Location:



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		File: MIP059.MHP
Company: DHA - Randwick	Operator: ADU	Date: 30/06/20
Project ID: 610.30041	Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.0	0.0	PASS
High	290.0	297.1	2.4	PASS

MIP059.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA - Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP059.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Tue Jun 30 2020 07:44:59

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Tue Jun 30 2020 07:50:54

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.563	0.0	107.310
TOP with FLOW>0	19.205	287.5	132.420
BOTTOM with FLOW=0	15.337	0.0	105.740
BOTTOM with FLOW>0	18.980	285.7	130.860

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.23 psi (1.6 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31059A,0.0000,0.0000,0.0000,0.0000,9.9500e-1,-1.3760

LOG START TIME: Tue Jun 30 2020 07:54:50

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4
0.00	0.000	1	1	1	1

LOG END DEPTH: 10.65 ft (3.246 m)
LOG END TIME: Tue Jun 30 2020 08:18:28

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS 0.00 FEET
GPS Quality: None

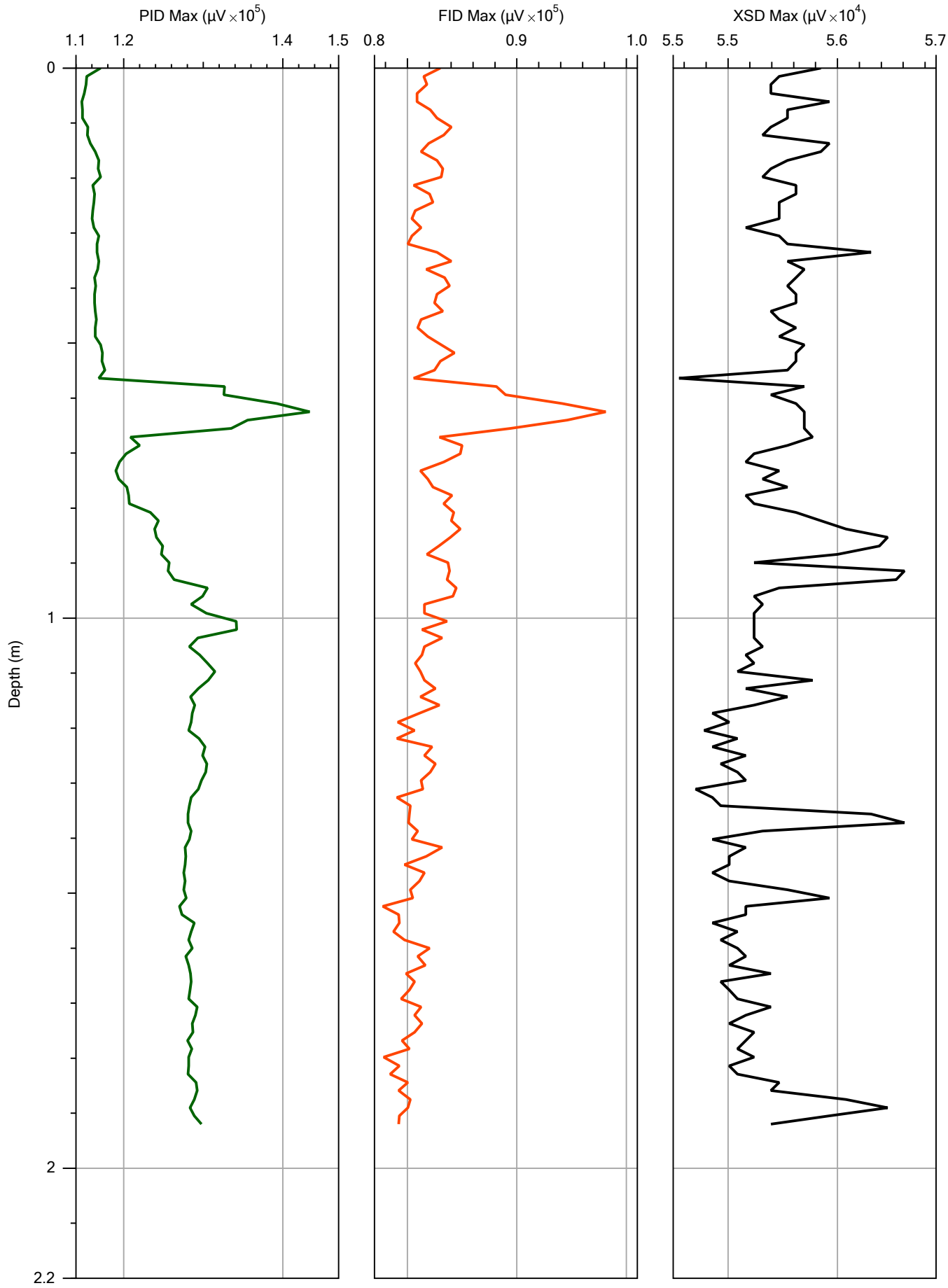
MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Tue Jun 30 2020 08:18:33

POST-LOG HPT REFERENCE TESTS BYPASSED

EC POST-LOG TESTS BYPASSED



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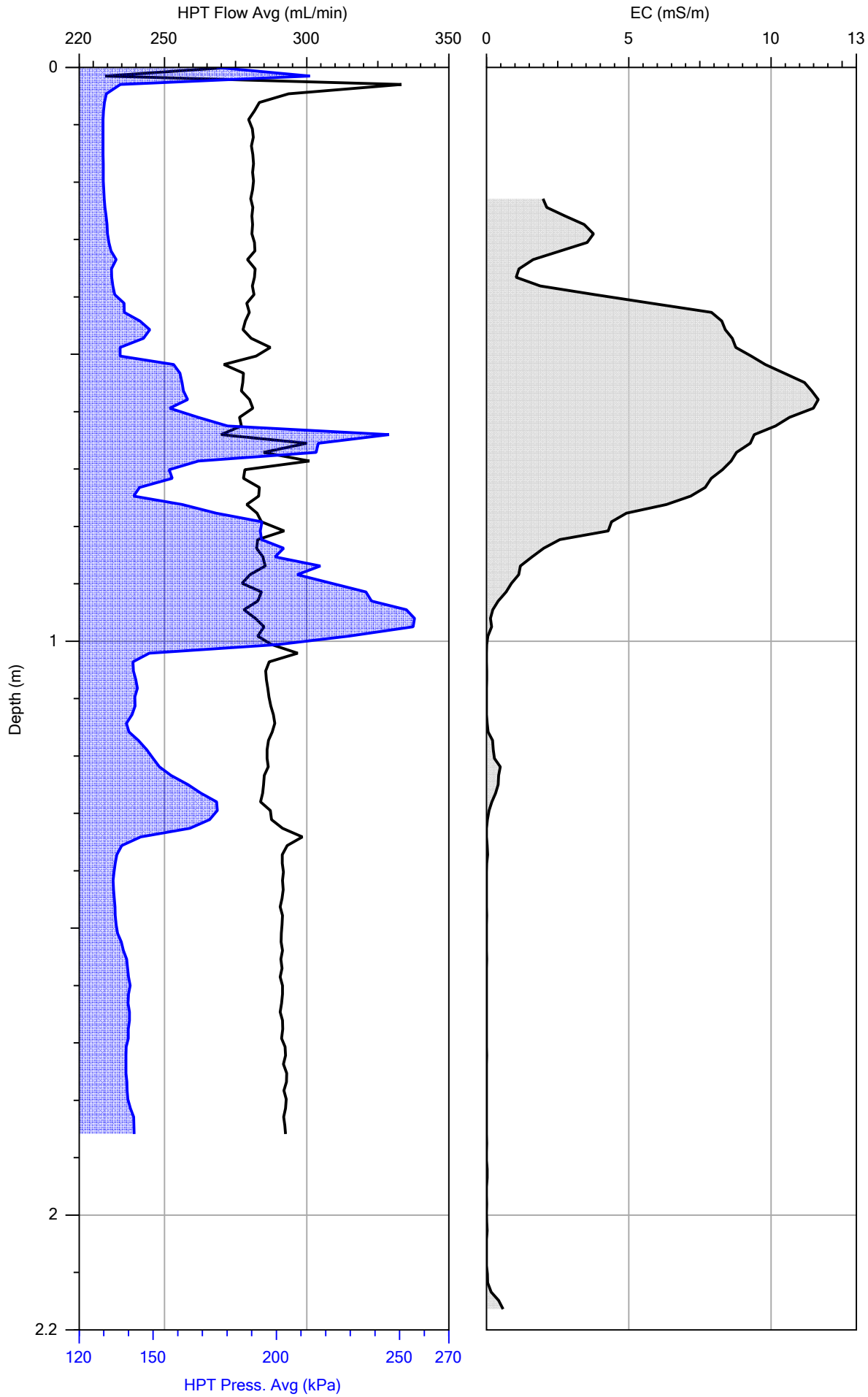
		File: MIP060.MHP
Company: DHA - Randwick	Operator: ADU	Date: 30/06/20
Project ID: 610.30041	Client: SLR	Location:



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		File: MIP060.MHP
Company: DHA - Randwick	Operator: ADU	Date: 30/06/20
Project ID: 610.30041	Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.2	0.3	PASS
High	290.0	296.8	2.4	PASS

MIP060.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA - Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP060.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Tue Jun 30 2020 08:34:58

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Tue Jun 30 2020 08:39:06

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.585	0.0	107.450
TOP with FLOW>0	19.103	276.9	131.710
BOTTOM with FLOW=0	15.367	0.0	105.950
BOTTOM with FLOW>0	18.877	276.4	130.160

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31059A,0.0000,0.0000,0.0000,0.0000,9.9500e-1,-1.3760

LOG START TIME: Tue Jun 30 2020 08:43:19

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4
0.00	0.000	1	1	1	1

LOG END DEPTH: 6.35 ft (1.935 m)
LOG END TIME: Tue Jun 30 2020 08:57:30

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS 0.00 FEET
GPS Quality: None

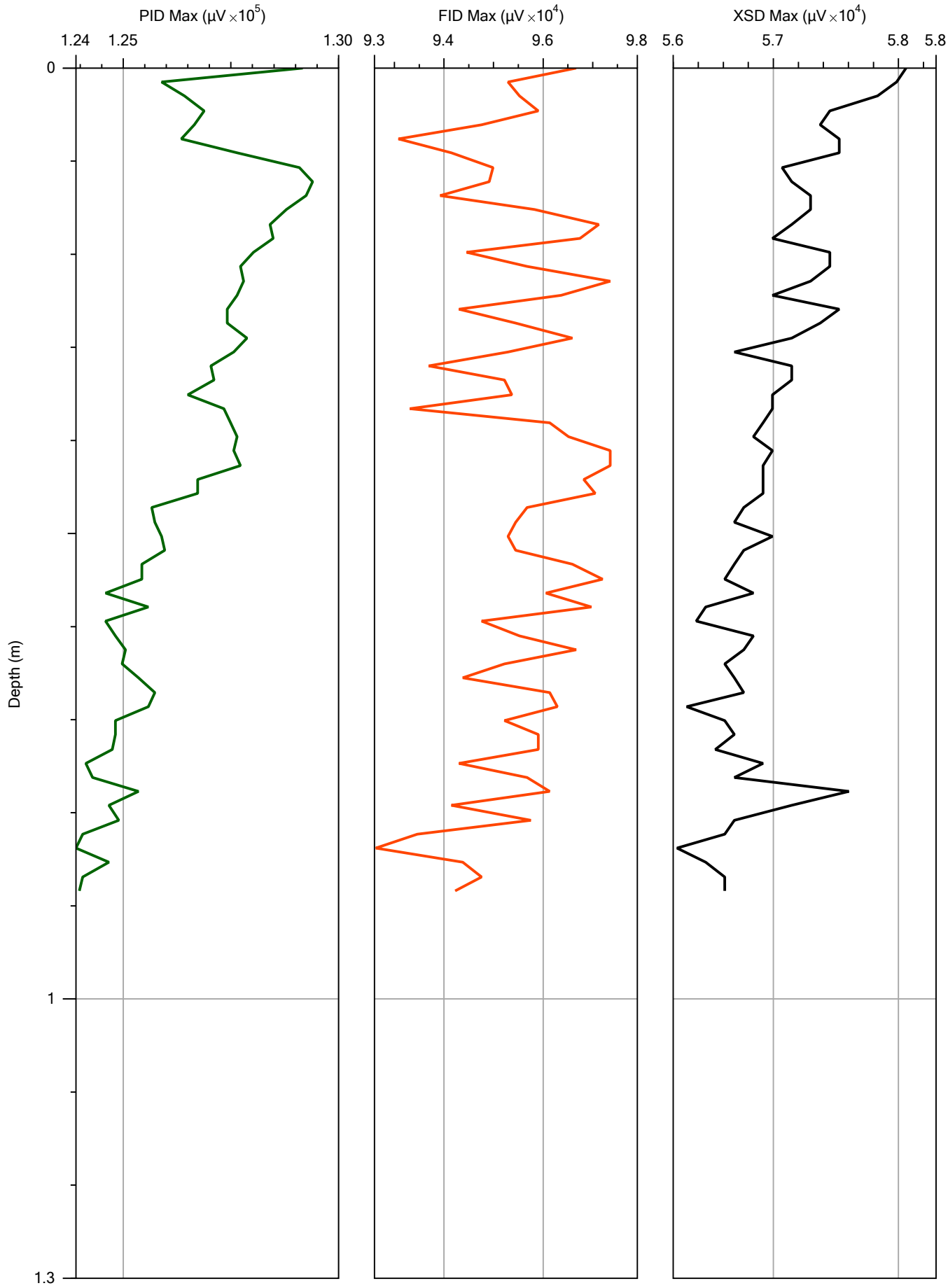
MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Tue Jun 30 2020 08:57:38

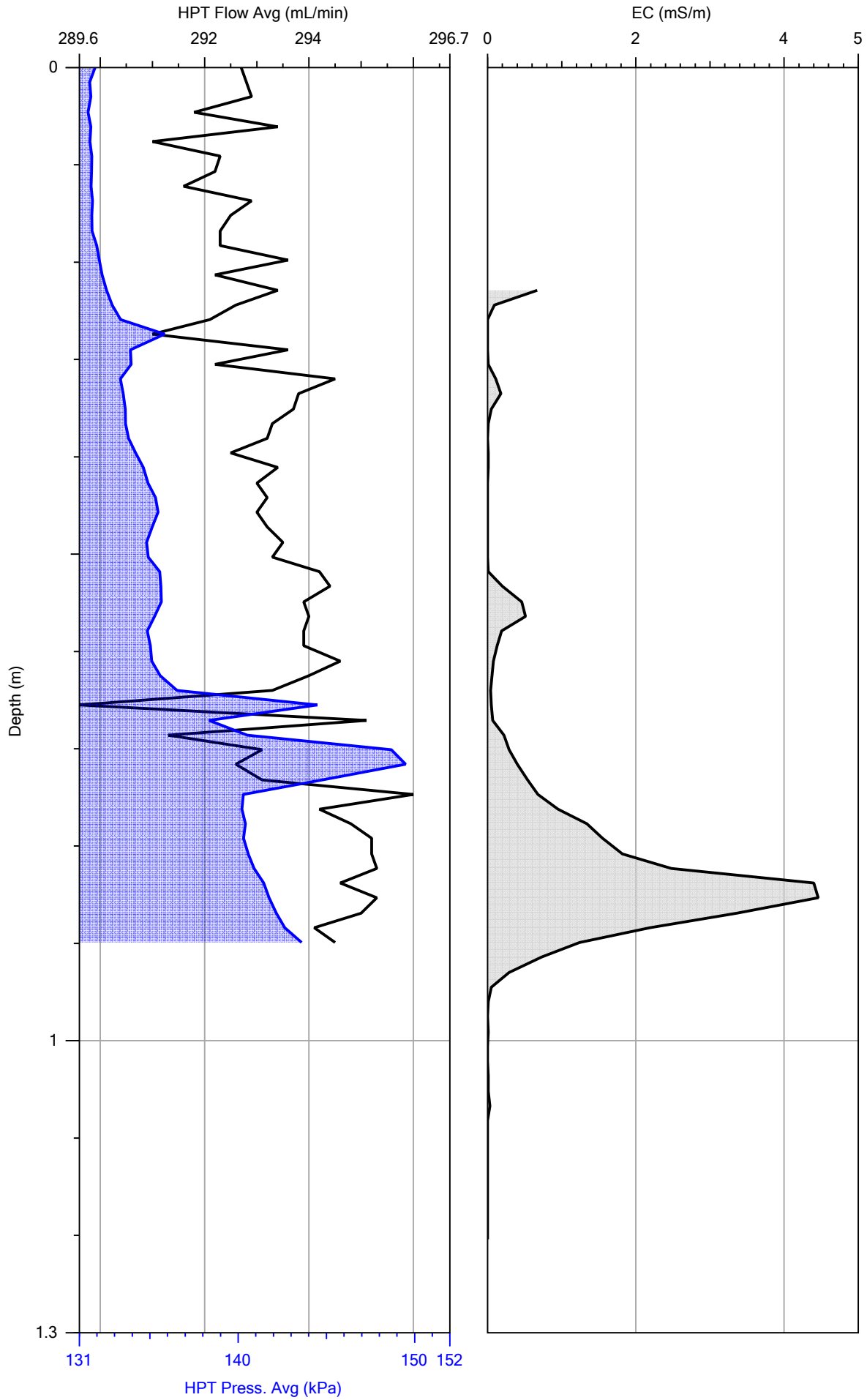
POST-LOG HPT REFERENCE TESTS BYPASSED

EC POST-LOG TESTS BYPASSED



numac
Numac Drilling Services PTY Ltd.
www.numac.co.au
Ph. - 1300 131 019
Em. - info@numac.com.au

		File: MIP061.MHP
Company: DHA - Randwick	Operator: ADU	Date: 30/06/20
Project ID: 610.30041	Client: SLR	Location:



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		File: MIP061.MHP
Company: DHA - Randwick	Operator: ADU	Date: 30/06/20
Project ID: 610.30041	Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.1	0.2	PASS
High	290.0	296.7	2.3	PASS

MIP061.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA - Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP061.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Tue Jun 30 2020 09:29:27

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Tue Jun 30 2020 09:34:11

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.587	0.0	107.470
TOP with FLOW>0	19.332	287.7	133.290
BOTTOM with FLOW=0	15.368	0.0	105.960
BOTTOM with FLOW>0	19.109	287.3	131.750

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31059A,0.0000,0.0000,0.0000,0.0000,9.9500e-1,-1.3760

LOG START TIME: Tue Jun 30 2020 09:37:45

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4
0.00	0.000	1	1	1	1

LOG END DEPTH: 3.20 ft (0.975 m)
LOG END TIME: Tue Jun 30 2020 09:45:48

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS 0.00 FEET
GPS Quality: None

MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

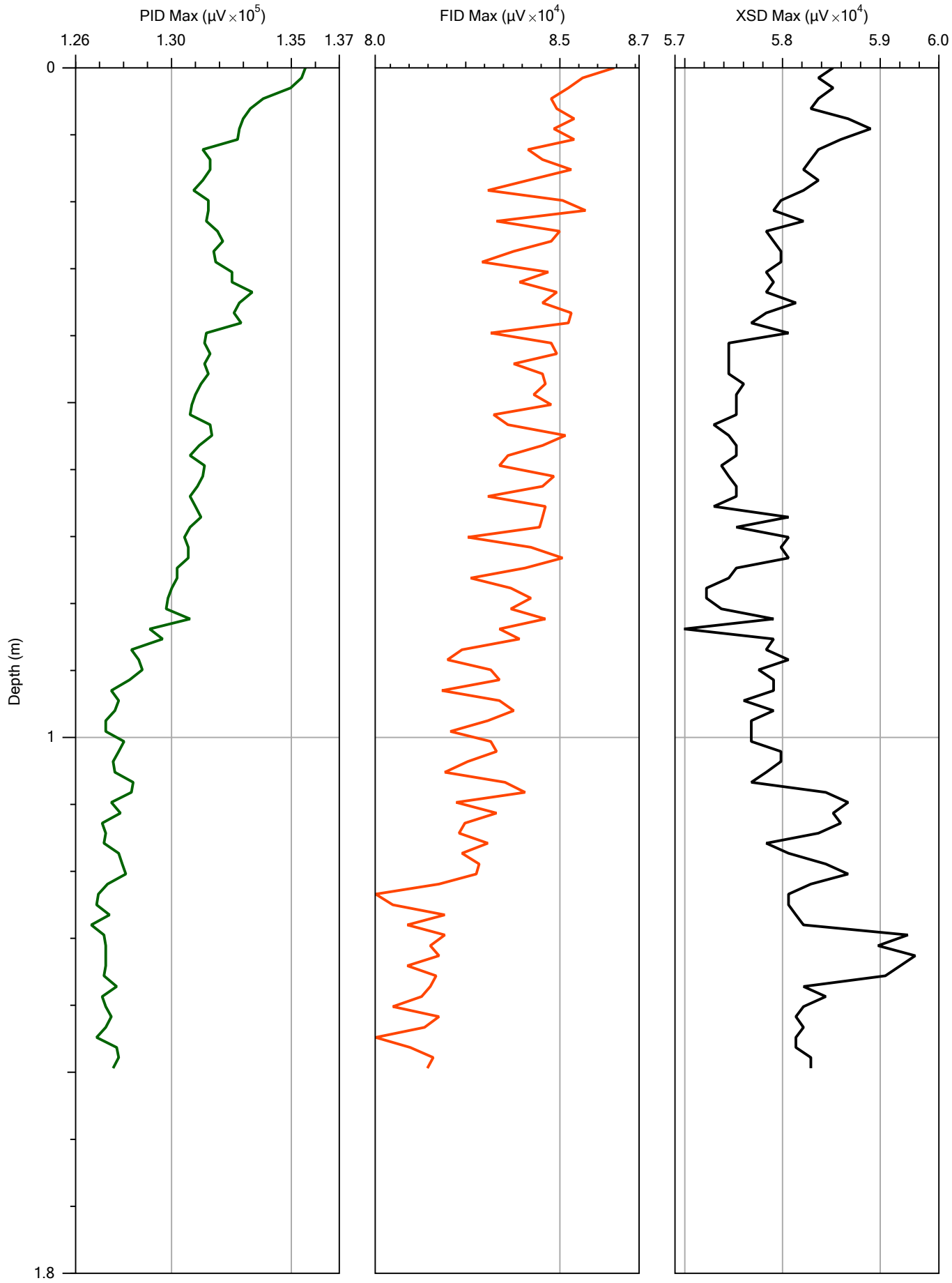
POST TEST TIME: Tue Jun 30 2020 09:49:05

POST-LOG HPT REFERENCE TESTS BYPASSED

EC POST-LOG TESTS BYPASSED

********** USER NOTES **********

Refusal at 1.2mBGS



numac
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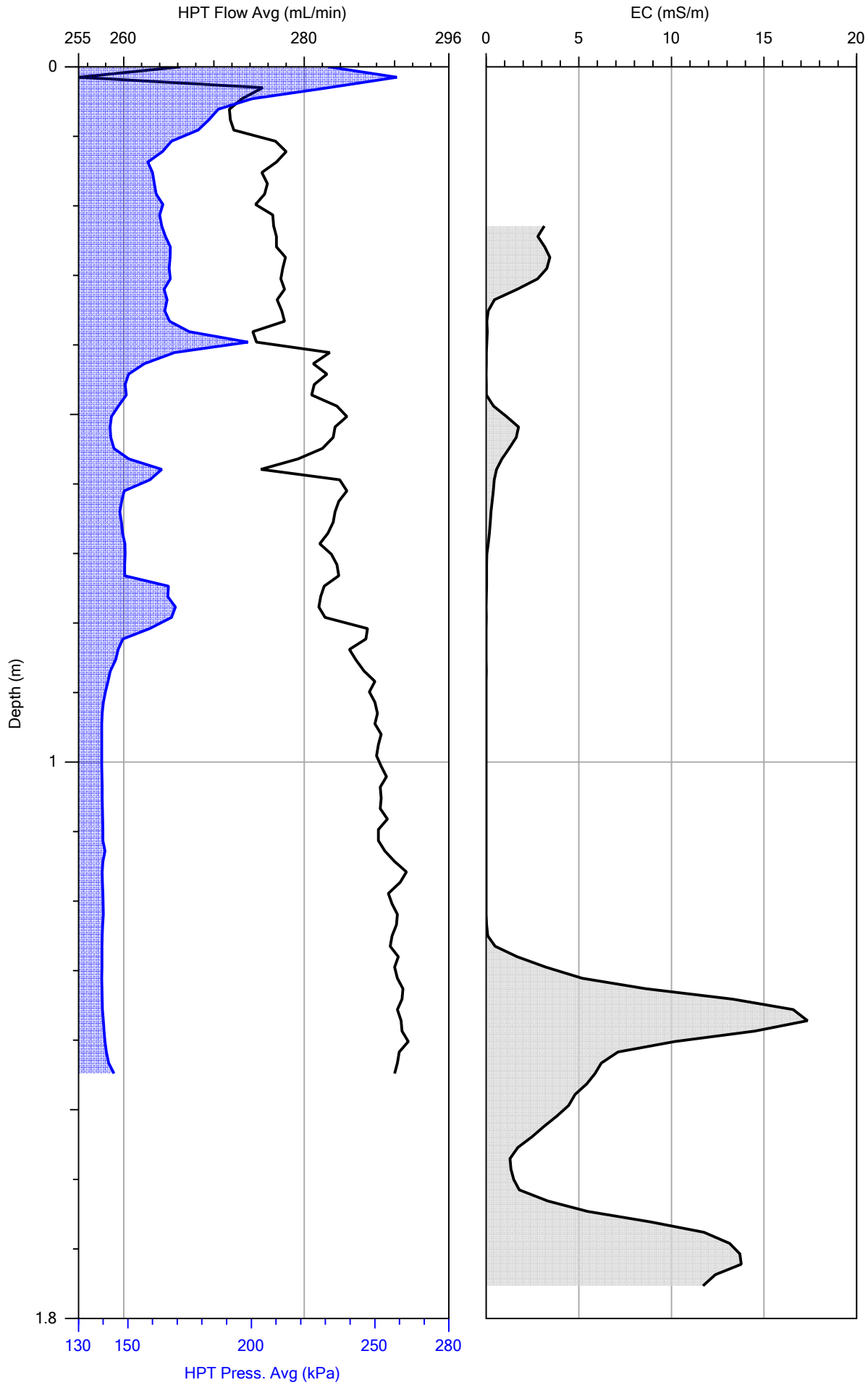
www.numac.co.au
Ph. - 1300 131 019
Em. - info@numac.com.au

		File: MIP062.MHP
Company: DHA - Randwick	Operator: ADU	Date: 30/06/20
Project ID: 610.30041	Client: SLR	Location:



numac
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www.numac.co.au
Ph. - 1300 131 019
Em. - info@numac.com.au

		File: MIP062.MHP
Company: DHA - Randwick	Operator: ADU	Date: 30/06/20
Project ID: 610.30041	Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.4	0.7	PASS
High	290.0	298.3	2.9	PASS

MIP062.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA - Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP062.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Tue Jun 30 2020 11:02:36

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Tue Jun 30 2020 11:07:07

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.575	0.0	107.380
TOP with FLOW>0	19.100	282.5	131.690
BOTTOM with FLOW=0	15.359	0.0	105.900
BOTTOM with FLOW>0	18.884	281.9	130.200

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31059A,0.0000,0.0000,0.0000,0.0000,9.9500e-1,-1.3760

LOG START TIME: Tue Jun 30 2020 11:15:03

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4
0.00	0.000	1	1	1	1

LOG END DEPTH: 5.00 ft (1.524 m)
LOG END TIME: Tue Jun 30 2020 11:27:39

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS 0.00 FEET
GPS Quality: None

MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

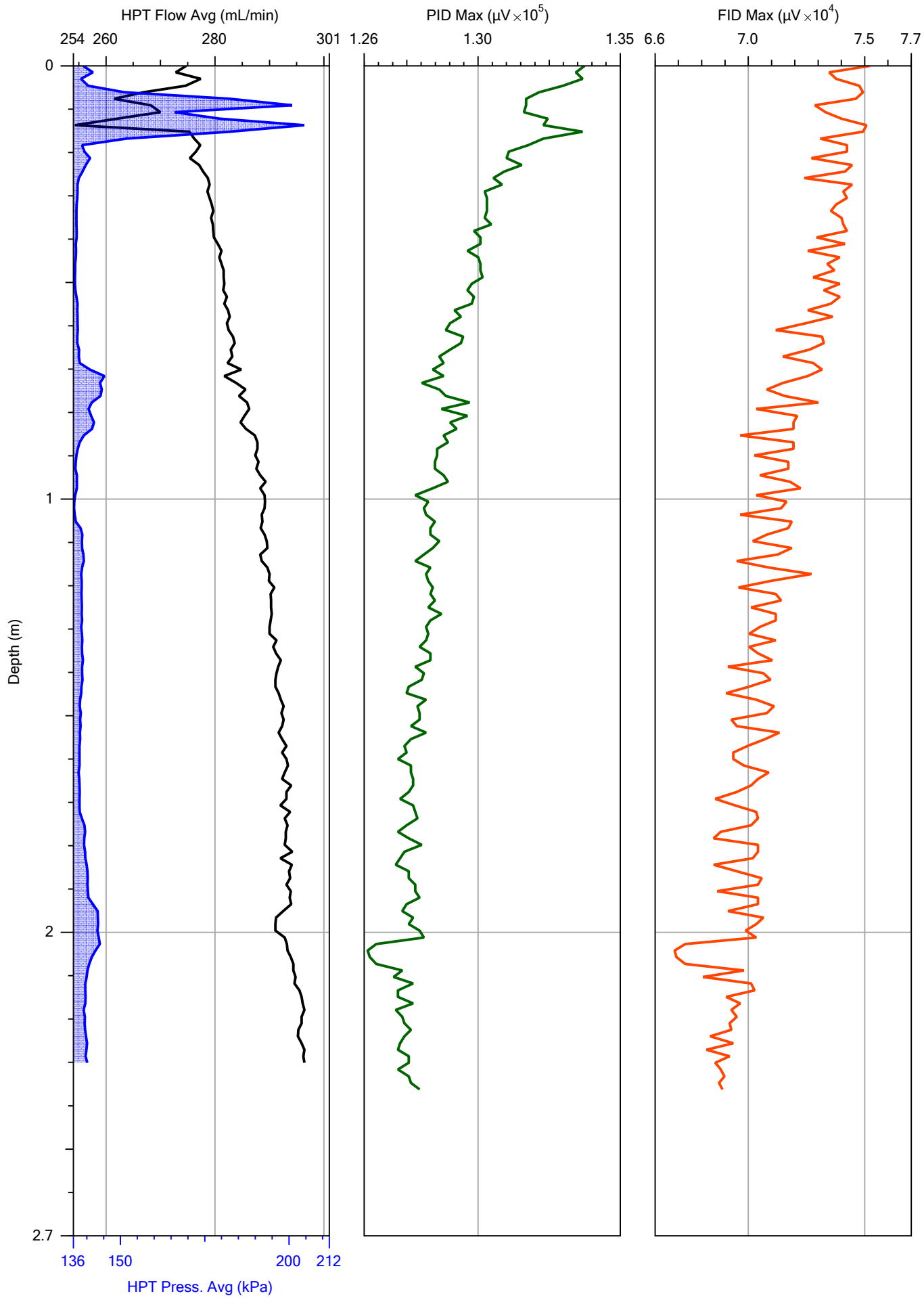
POST TEST TIME: Tue Jun 30 2020 11:27:53

POST-LOG HPT REFERENCE TESTS BYPASSED

EC POST-LOG TESTS BYPASSED

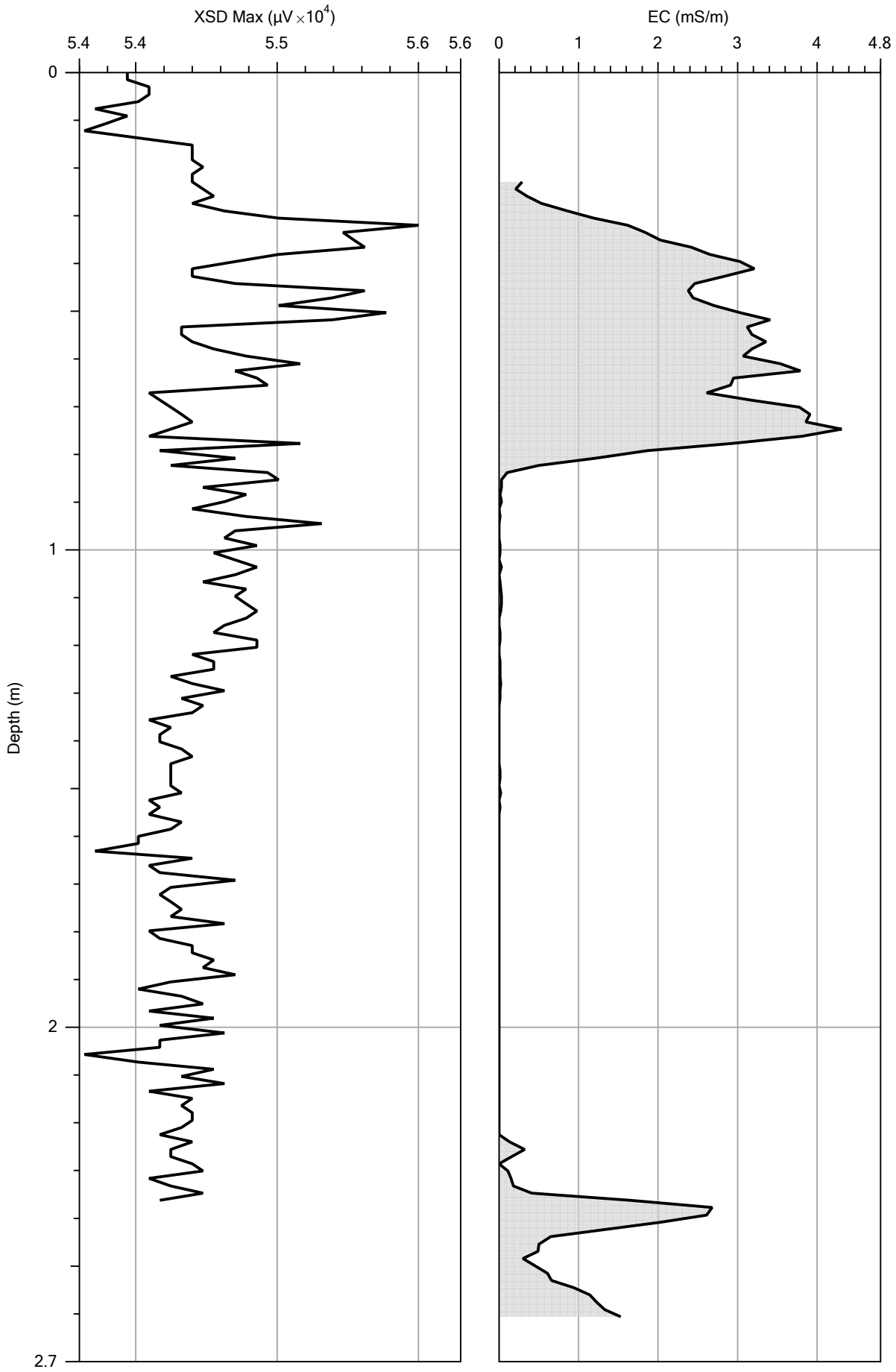
********** USER NOTES **********

Refusal at 1.7mBGS



numac
Numac Drilling Services PTY Ltd.
www.numac.co.au
Ph. - 1300 131 019
Em. - info@numac.com.au

		File: MIP063.MHP
Company: DHA - Randwick	Operator: ADU	Date: 30/06/20
Project ID: 610.30041	Client: SLR	Location:



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Em. - info@numac.com.au

		File: MIP063.MHP
Company: DHA - Randwick	Operator: ADU	Date: 30/06/20
Project ID: 610.30041	Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.3	0.5	PASS
High	290.0	297.9	2.7	PASS

MIP063.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA - Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP063.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Tue Jun 30 2020 12:14:45

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Tue Jun 30 2020 12:19:14

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.515	0.0	106.970
TOP with FLOW>0	19.511	269.9	134.520
BOTTOM with FLOW=0	15.292	0.0	105.430
BOTTOM with FLOW>0	19.306	273.5	133.110

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31059A,0.0000,0.0000,0.0000,0.0000,9.9500e-1,-1.3760

LOG START TIME: Tue Jun 30 2020 12:24:23

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4
0.00	0.000	1	1	1	1

LOG END DEPTH: 7.80 ft (2.377 m)
LOG END TIME: Tue Jun 30 2020 12:43:23

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS 0.00 FEET
GPS Quality: None

MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

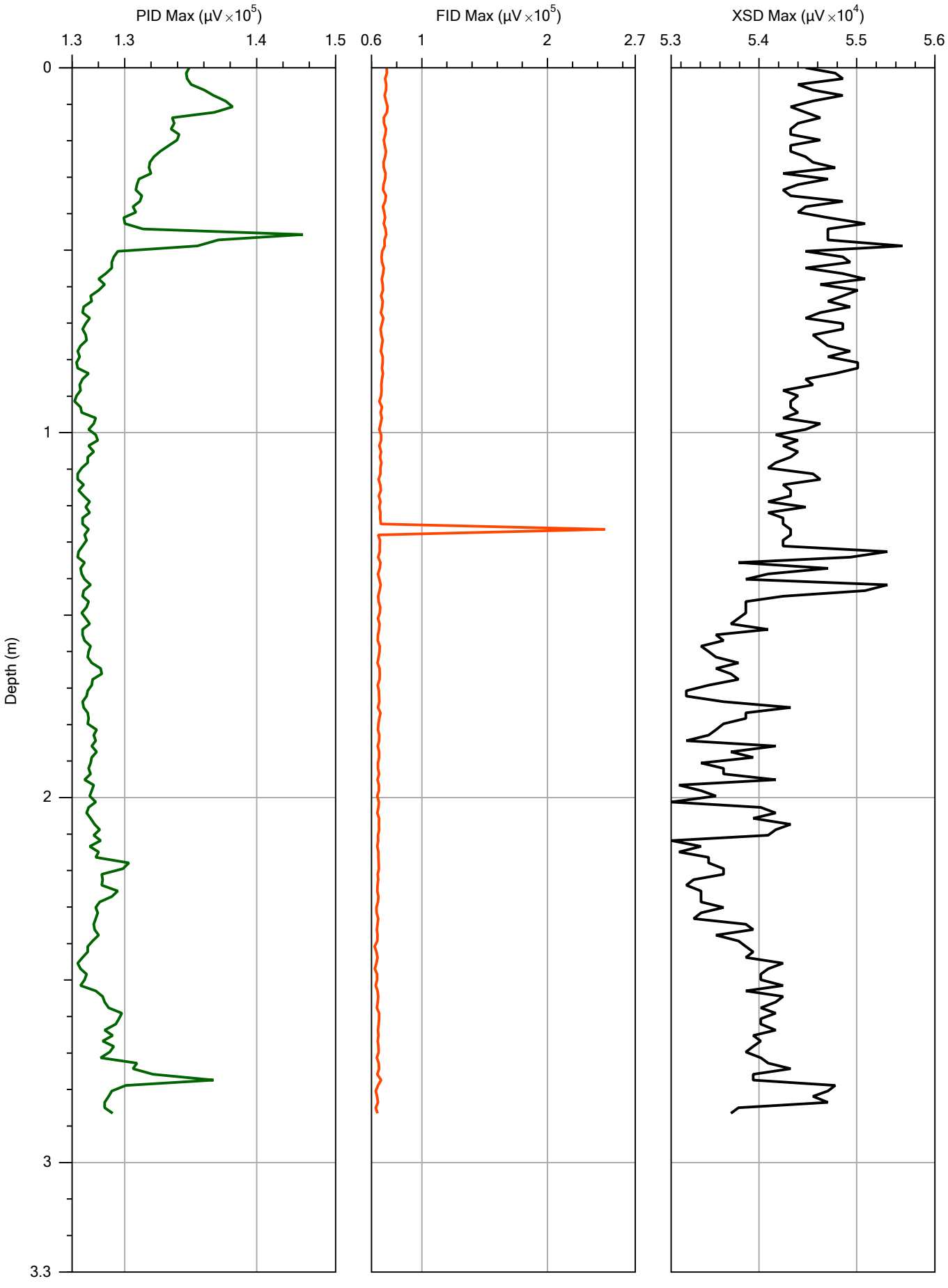
POST TEST TIME: Tue Jun 30 2020 12:43:32

POST-LOG HPT REFERENCE TESTS BYPASSED

EC POST-LOG TESTS BYPASSED

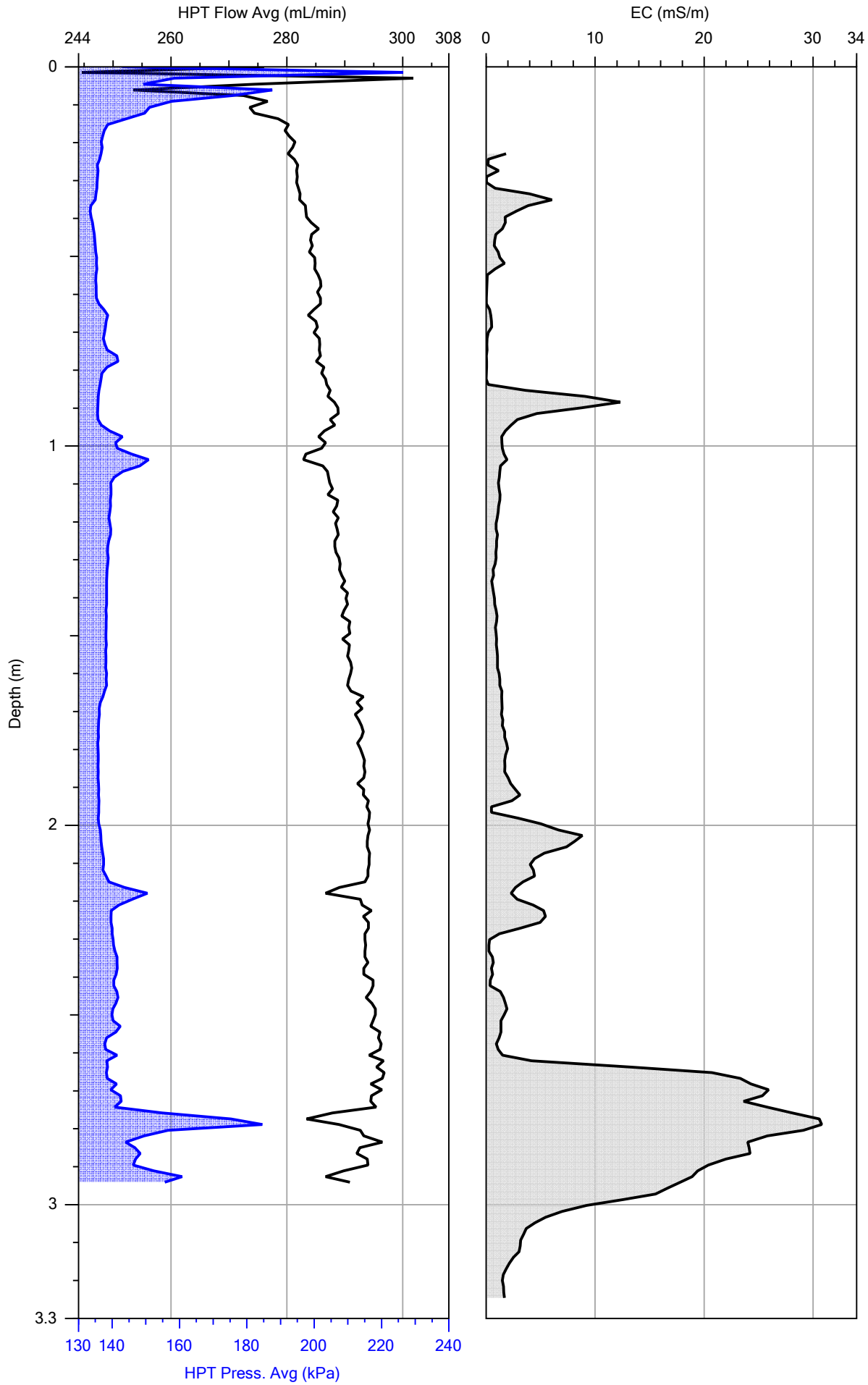
********** USER NOTES **********

Refusal at 2.6mBGS



numac
Numac Drilling Services PTY Ltd.
www.numac.co.au
Ph. - 1300 131 019
Em. - info@numac.com.au

		File: MIP064.MHP
Company: DHA - Randwick	Operator: ADU	Date: 30/06/20
Project ID: 610.30041	Client: SLR	Location:



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www.numac.co.au
Ph. - 1300 131 019
Em. - info@numac.com.au

		File: MIP064.MHP
Company: DHA - Randwick	Operator: ADU	Date: 30/06/20
Project ID: 610.30041	Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.6	1.1	PASS
High	290.0	298.1	2.8	PASS

MIP064.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA - Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP064.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Tue Jun 30 2020 13:02:42

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Tue Jun 30 2020 13:07:25

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.536	0.0	107.110
TOP with FLOW>0	19.477	274.6	134.290
BOTTOM with FLOW=0	15.315	0.0	105.590
BOTTOM with FLOW>0	19.260	275.3	132.790

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31059A,0.0000,0.0000,0.0000,0.0000,9.9500e-1,-1.3760

LOG START TIME: Tue Jun 30 2020 13:10:59

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4
0.00	0.000	1	1	1	1

LOG END DEPTH: 9.90 ft (3.018 m)
LOG END TIME: Tue Jun 30 2020 13:32:58

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS 0.00 FEET
GPS Quality: None

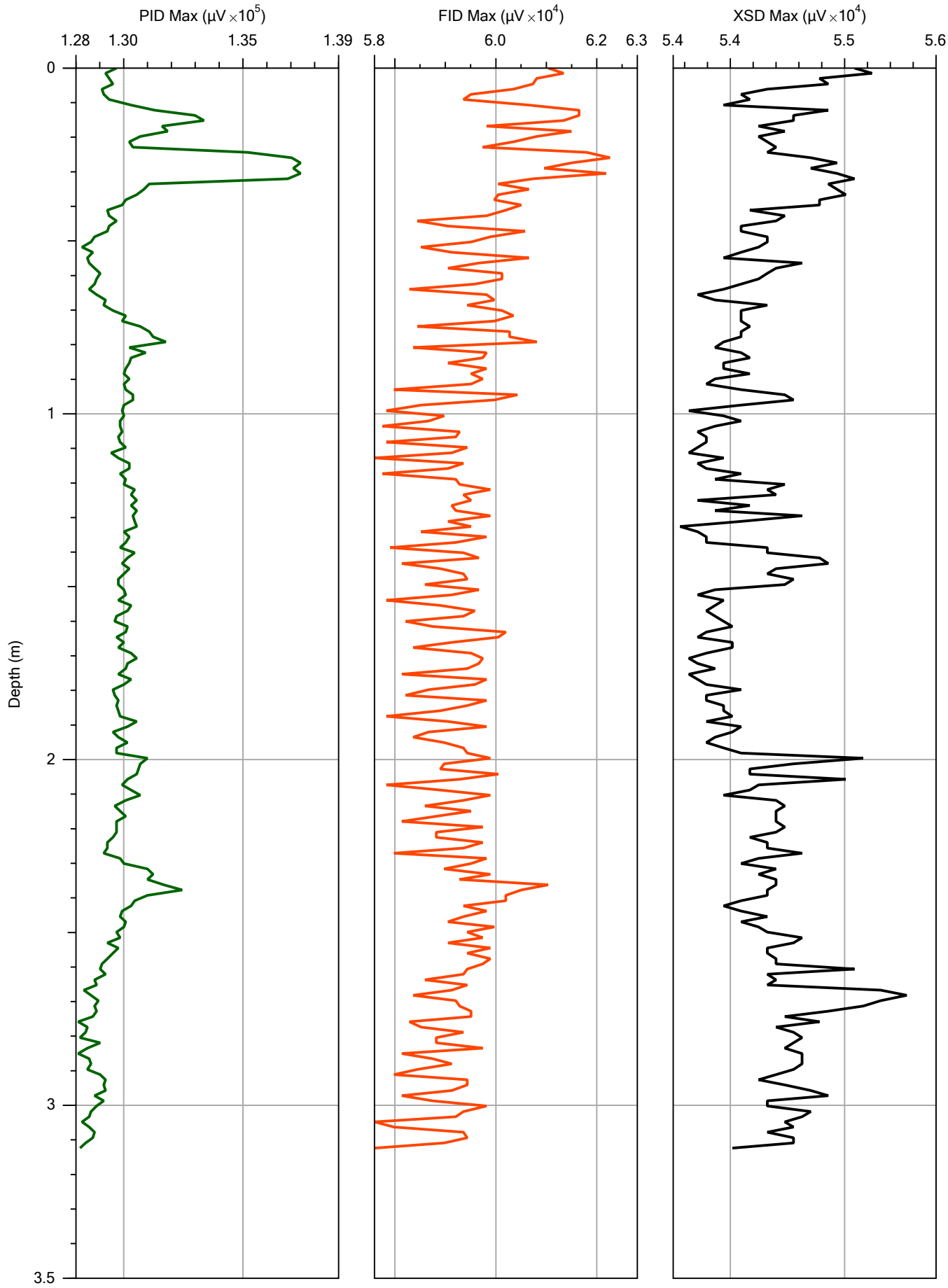
MIP POST-LOG RESPONSE TEST BYPASSED

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Tue Jun 30 2020 13:33:04

POST-LOG HPT REFERENCE TESTS BYPASSED

EC POST-LOG TESTS BYPASSED



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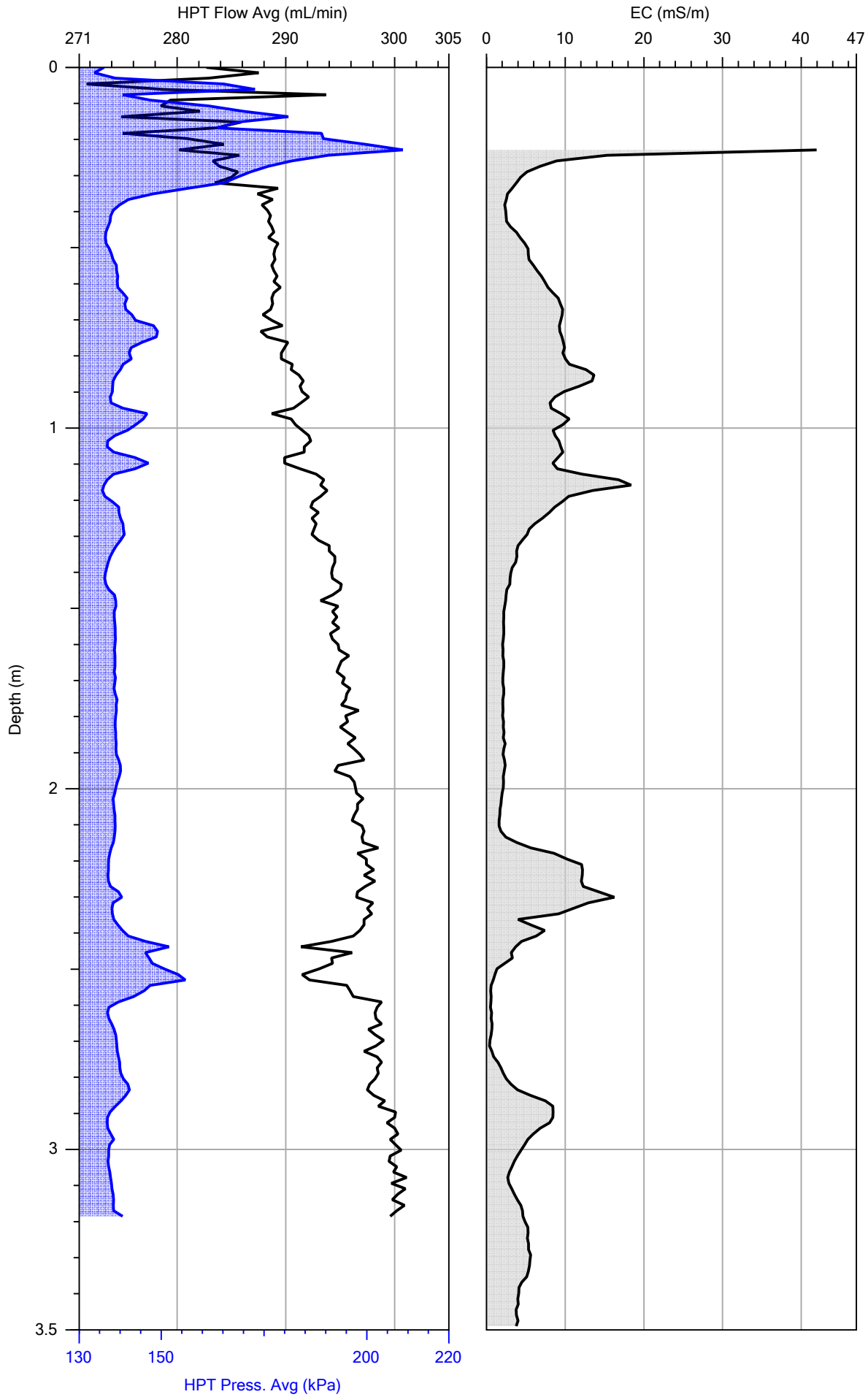
Ph. - 1300 131 019
Em. - info@numac.com.au

		File: MIP065.MHP
Company: DHA - Randwick	Operator: ADU	Date: 30/06/20
Project ID: 610.30041	Client: SLR	Location:



numac
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www.numac.co.au
Ph. - 1300 131 019
Em. - info@numac.com.au

		File: MIP065.MHP
Company: DHA - Randwick	Operator: ADU	Date: 30/06/20
Project ID: 610.30041	Client: SLR	Location:

Pre-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.4	0.7	PASS
High	290.0	298.1	2.8	PASS

MIP065.zip

SITE INFORMATION -- DIRECT IMAGE MIP+HPT PROBE

Geoprobe DI Acquisition Software for Windows
Version: 1.6 Build: 14139

COMPANY: DHA - Randwick
OPERATOR: ADU
PROJECT ID: 610.30041
CLIENT: SLR
UNITS: METRIC
PROBE AND ARRAY: MH6530/6532 MiHPT Probe with Top Dipole
100 INCH STRING POT USED
ROD LENGTH: 4 feet

MIP PRE-LOG RESPONSE TEST

FILENAME: MIP065.pre.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Tue Jun 30 2020 13:54:28

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

TRIP TIME: 50 sec
Gas Used: nitrogen

PRE-LOG HPT REFERENCE TEST VALUES

PRE TEST TIME: Tue Jun 30 2020 13:58:56

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.525	0.0	107.040
TOP with FLOW>0	19.530	280.7	134.660
BOTTOM with FLOW=0	15.304	0.0	105.520
BOTTOM with FLOW>0	19.312	282.2	133.150

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa)

TRANSDUCER TEST PASSED

DETECTOR NAME: PID FID XSD None
HPT IDEAL COEFFS: 2.2696e1,-2.2356
HPT SENSOR CAL NUMBERS: XD31059A,0.0000,0.0000,0.0000,0.0000,9.9500e-1,-1.3760

LOG START TIME: Tue Jun 30 2020 14:03:46

ATTENUATION CHANGES

DEPTH (ft)	DEPTH (m)	DET1	DET2	DET3	DET4
0.00	0.000	1	1	1	1

LOG END DEPTH: 10.70 ft (3.261 m)
LOG END TIME: Tue Jun 30 2020 14:23:34

LATITUDE: 0.000000000
LONGITUDE: 0.000000000
ELEVATION: 0.000 METERS 0.00 FEET
GPS Quality: None

MIP POST-LOG RESPONSE TEST

FILENAME: MIP065.post.tim
COMPOUND: BZ-TCE
CONCENTRATION: 5-5 ppm
FLOW: 40 mL/min
RESPONSE TEST START TIME: Tue Jun 30 2020 14:34:36

RESPONSE TEST ATTENUATION CHANGES

TIME	DET1	DET2	DET3	DET4
0	1	1	1	1

POST-LOG HPT REFERENCE TEST VALUES

POST TEST TIME: Tue Jun 30 2020 14:39:04

TEST	HPT PRESSURE (psi)	FLOW (mL/min)	HPT PRESSURE (kPa)
TOP with FLOW=0	15.498	0.0	106.850
TOP with FLOW>0	19.536	287.0	134.690
BOTTOM with FLOW=0	15.289	0.0	105.420
BOTTOM with FLOW>0	19.328	289.4	133.260

EXPECTED FLOW=0 HPT DIFF.: 0.22 psi (1.5 kPa) +/- 10%
  ACTUAL FLOW=0 HPT DIFF.: 0.21 psi (1.4 kPa)

TRANSDUCER TEST PASSED

Post-Log EC Load Tests

Test	Target (mS/m)	Actual (mS/m)	% Diff	P/F
Low	55.0	55.4	0.8	PASS
High	290.0	298.4	2.9	PASS

APPENDIX J

Soil Gas Sampling Data

A.B.N. 44 000 964 278
10 / 585 Blackburn Road
Notting Hill, Vic, 3168
Telephone: (03) 9574 3200

Chartered Chemists

27-Jul-2020

REPORT NUMBER: M202118
Site/Client Ref: Randwick WMS
Order No: TBA

Jacobs

Level 10, 100 Christie Street
St Leonards
NSW 2065
Attention: Jeremy Bobinskas

CERTIFICATE OF ANALYSIS

SAMPLES:	Twenty-nine samples were received for analysis
DATE RECEIVED:	**17-Jul-2020**
DATE COMMENCED:	**17-Jul-2020**
METHODS:	See Attached Results
RESULTS:	Please refer to attached pages for results.

Note: Results are based on samples as received at SGS laboratories

REPORTED BY:

[redacted]

Australian Chemistry Manager

NATA Accredited Laboratory Number: 2562
Corporate Site Number: 14420
Accredited for compliance
with ISO/IEC 17025 - Testing.

The sampling for the samples in this report was carried out in accordance with SGS's NATA accredited sampling methods

ANALYTICAL RESULTS

Matrix: Passive Sampler
Method: MA-5.WL.04 Volatile Organics
Sample units are expressed in µg/m³

Test Started: 23/07/2020

Analyte Name	Sampled Date / PQL	Leeder ID: 2020033210 Client ID: PSG-1 AN-LU-19-595 16/07/2020	Leeder ID: 2020033211 Client ID: PSG-2 AN-LU-19-599 16/07/2020	Leeder ID: 2020033212 Client ID: PSG-2 Field Dup AN-LU-19-594 16/07/2020	Leeder ID: 2020033213 Client ID: PSG-3 AN-LU-19-592 16/07/2020	Leeder ID: 2020033214 Client ID: PSG-4 AN-LU-19-593 16/07/2020
Benzene		<3.7	<3.7	<3.7	<3.7	<3.7
2-butanone(MEK)		<7.1	<7.1	<7.1	<7.1	<7.1
Carbon tetrachloride		<5.8	<5.8	<5.8	<5.8	<5.8
Chlorobenzene		<2.2	<2.2	<2.2	<2.2	<2.2
Chloroform		<4.6	<4.6	<4.6	<4.6	<4.6
12-Dichlorobenzene		<1.2	<1.2	<1.2	<1.2	<1.2
13-Dichlorobenzene		<1.3	<1.3	<1.3	<1.3	<1.3
14-Dichlorobenzene		<1.3	<1.3	<1.3	<1.3	<1.3
1,1-Dichloroethane		<9.2	<9.2	<9.2	<9.2	<9.2
12-Dichloroethane		<3.7	<3.7	<3.7	<3.7	<3.7
1,1-Dichloroethene		<11	<11	<11	<11	<11
cis-1,2-Dichloroethene		<4.7	<4.7	<4.7	<4.7	<4.7
trans-1,2-Dichloroethene		<4.9	<4.9	<4.9	<4.9	<4.9
Ethylbenzene		<2	<2	<2	<2	<2
Hexane		<4.9	<4.9	<4.9	<4.9	<4.9
Isopropylbenzene		<0.95	<0.95	<0.95	<0.95	<0.95
Naphthalene		<2.5	<2.5	<2.5	<2.5	<2.5
Tetrachloroethene		<2.2	5.4	4.3	<2.2	<2.2
Toluene		<2.5	<2.5	<2.5	<2.5	<2.5
111-Trichloroethane		<7.1	<7.1	<7.1	<7.1	<7.1
112-Trichloroethane		<2.8	<2.8	<2.8	<2.8	<2.8
Trichloroethene		<2.8	5.3	<2.8	<2.8	<2.8
124-Trimethylbenzene		<1.4	<1.4	<1.4	<1.4	<1.4
Vinyl Chloride		<18	<18	<18	<18	<18
o-Xylene		<2.1	<2	<2	<2	<2
m&p-Xylenes		<2.1	<2	<2	<2	<2
Dichlorodifluoromethane		<49	<49	<49	<49	<49
Trichlorofluoromethane		<18	<18	<18	<18	<18
124-Trichlorobenzene		<2	<2	<2	<2	<2
123-Trichlorobenzene		<1.2	<1.2	<1.2	<1.2	<1.2
Halothane		<17	<17	<17	<17	<17

ANALYTICAL RESULTS

Matrix: Passive Sampler
Method: MA-5.WL.04 Volatile Organics
Sample units are expressed in µg/m³

Test Started: 23/07/2020

Analyte Name	Sampled Date / PQL	Leeder ID: 2020033215 Client ID: PSG-5 AN-LU-19-597 16/07/2020	Leeder ID: 2020033216 Client ID: PSG-6 AN-LU-19-598 16/07/2020	Leeder ID: 2020033217 Client ID: PSG-7 AN-LU-19-591 16/07/2020	Leeder ID: 2020033218 Client ID: PSG-8 AN-LU-19-596 16/07/2020	Leeder ID: 2020033219 Client ID: PSG-9 AN-LU-19-581 16/07/2020
Benzene		<3.7	<3.7	<3.7	<3.7	<3.7
2-butanone(MEK)		<7.1	<7.1	<7.1	<7.1	<7.1
Carbon tetrachloride		<5.8	<5.8	<5.8	<5.8	<5.8
Chlorobenzene		<2.2	<2.2	<2.2	<2.2	<2.2
Chloroform		<4.6	<4.6	<4.6	<4.6	<4.6
12-Dichlorobenzene		<1.2	<1.2	<1.2	<1.2	<1.2
13-Dichlorobenzene		<1.3	<1.3	<1.3	<1.3	<1.3
14-Dichlorobenzene		<1.3	<1.3	<1.3	<1.3	<1.3
1,1-Dichloroethane		<9.2	<9.2	<9.2	<9.2	<9.2
12-Dichloroethane		<3.7	<3.7	<3.7	<3.7	<3.7
1,1-Dichloroethene		<11	<11	<11	<11	<11
cis-1,2-Dichloroethene		<4.7	<4.7	<4.7	<4.7	<4.7
trans-1,2-Dichloroethene		<4.9	<4.9	<4.9	<4.9	<4.9
Ethylbenzene		<2	<2	<2	<2	<2
Hexane		<4.9	<4.9	<4.9	<4.9	<4.9
Isopropylbenzene		<0.95	<0.96	<0.96	<0.96	<0.96
Naphthalene		<2.5	<2.5	<2.5	<2.5	<2.5
Tetrachloroethene		<2.2	2.6	<2.2	<2.2	<2.2
Toluene		<2.5	<2.5	<2.5	<2.5	<2.5
111-Trichloroethane		<7.1	<7.1	<7.1	<7.1	<7.1
112-Trichloroethane		<2.8	<2.8	<2.8	<2.8	<2.8
Trichloroethene		<2.8	5.1	<2.8	<2.8	<2.8
124-Trimethylbenzene		<1.4	<1.4	<1.4	<1.4	<1.4
Vinyl Chloride		<18	<18	<18	<18	<18
o-Xylene		<2.1	<2.1	<2.1	<2.1	<2.1
m&p-Xylenes		<2.1	<2.1	<2.1	<2.1	<2.1
Dichlorodifluoromethane		<49	<49	<49	<49	<49
Trichlorofluoromethane		<18	<18	<18	<18	<18
124-Trichlorobenzene		<2	<2	<2	<2	<2
123-Trichlorobenzene		<1.2	<1.2	<1.2	<1.2	<1.2
Halothane		<17	<17	<17	<17	<17

ANALYTICAL RESULTS

Matrix: Passive Sampler
Method: MA-5.WL.04 Volatile Organics
Sample units are expressed in µg/m³

Test Started: 23/07/2020

Analyte Name	Sampled Date / PQL	Leeder ID: 2020033220 Client ID: PSG-10 AN-LU-19-582 16/07/2020	2020033221 PSG-11 AN-LU-19-585 16/07/2020	2020033222 PSG-12 AN-LU-19-583 16/07/2020	2020033223 PSG-12 Field Dup AN-LU-19-584 16/07/2020	2020033224 PSG-13 AN-LU-19-590 16/07/2020
Benzene		<3.7	<3.7	<3.7	<3.7	<3.7
2-butanone(MEK)		<7.1	<7.1	<7.1	<7.1	<7.1
Carbon tetrachloride		<5.8	<5.8	<5.8	<5.8	<5.8
Chlorobenzene		<2.2	<2.2	<2.2	<2.2	<2.2
Chloroform		<4.6	<4.6	<4.6	<4.6	<4.6
12-Dichlorobenzene		<1.2	<1.2	<1.2	<1.2	<1.2
13-Dichlorobenzene		<1.3	<1.3	<1.3	<1.3	<1.3
14-Dichlorobenzene		<1.3	<1.3	<1.3	<1.3	<1.3
1,1-Dichloroethane		<9.2	<9.2	<9.2	<9.2	<9.3
12-Dichloroethane		<3.7	<3.7	<3.7	<3.7	<3.7
1,1-Dichloroethene		<11	<11	<11	<11	<11
cis-1,2-Dichloroethene		<4.7	<4.7	<4.7	<4.7	<4.7
trans-1,2-Dichloroethene		<4.9	<4.9	<4.9	<4.9	<4.9
Ethylbenzene		<2	<2	<2	<2	<2
Hexane		<4.9	<4.9	<4.9	<4.9	<4.9
Isopropylbenzene		<0.96	<0.96	<0.96	<0.96	<0.96
Naphthalene		<2.5	<2.5	<2.5	<2.5	<2.5
Tetrachloroethene		<2.2	<2.2	<2.2	<2.2	<2.2
Toluene		2.7	<2.5	<2.5	<2.5	<2.5
111-Trichloroethane		<7.1	<7.1	<7.1	<7.1	<7.1
112-Trichloroethane		<2.8	<2.8	<2.8	<2.8	<2.8
Trichloroethene		<2.8	<2.8	<2.8	<2.8	<2.8
124-Trimethylbenzene		<1.4	<1.4	<1.4	<1.4	<1.4
Vinyl Chloride		<18	<18	<18	<18	<18
o-Xylene		<2.1	<2.1	<2.1	<2.1	<2.1
m&p-Xylenes		<2.1	<2.1	<2.1	<2.1	<2.1
Dichlorodifluoromethane		<49	<49	<49	<49	<49
Trichlorofluoromethane		<18	<18	<18	<18	<18
124-Trichlorobenzene		<2	<2	<2	<2	<2
123-Trichlorobenzene		<1.2	<1.2	<1.2	<1.2	<1.2
Halothane		<17	<17	<17	<17	<17

ANALYTICAL RESULTS

Matrix: Passive Sampler
Method: MA-5.WL.04 Volatile Organics
Sample units are expressed in µg/m³

Test Started: 23/07/2020

Analyte Name	Sampled Date / PQL	Leeder ID: 2020033225 Client ID: PSG-14 AN-LU-19-589 16/07/2020	Leeder ID: 2020033226 Client ID: PSG-15 AN-LU-19-587 16/07/2020	Leeder ID: 2020033227 Client ID: PSG-16 AN-LU-19-586 16/07/2020	Leeder ID: 2020033228 Client ID: PSG-17 AN-LU-19-588 16/07/2020	Leeder ID: 2020033229 Client ID: PSG-18 AN-LU-19-575 16/07/2020
Benzene		<3.7	<3.7	<3.7	<3.7	<3.7
2-butanone(MEK)		<7.1	<7.1	<7.2	<7.2	<7.2
Carbon tetrachloride		<5.8	<5.8	<5.8	<5.8	<5.8
Chlorobenzene		<2.2	<2.2	<2.2	<2.2	<2.2
Chloroform		<4.6	<4.6	4.9	<4.6	6.0
12-Dichlorobenzene		<1.2	<1.2	<1.2	<1.2	<1.2
13-Dichlorobenzene		<1.3	<1.3	<1.3	<1.3	<1.3
14-Dichlorobenzene		<1.3	<1.3	<1.3	<1.3	<1.3
1,1-Dichloroethane		<9.3	<9.3	<9.3	<9.3	<9.3
12-Dichloroethane		<3.7	<3.7	<3.7	<3.7	<3.7
1,1-Dichloroethene		<11	<11	<11	<11	<11
cis-1,2-Dichloroethene		<4.7	<4.7	<4.7	<4.7	<4.7
trans-1,2-Dichloroethene		<4.9	<4.9	<4.9	<4.9	<4.9
Ethylbenzene		<2	<2	<2	<2	<2
Hexane		<4.9	<4.9	<4.9	<4.9	<4.9
Isopropylbenzene		<0.96	<0.96	<0.96	<0.96	<0.96
Naphthalene		<2.5	<2.5	<2.5	<2.5	<2.5
Tetrachloroethene		<2.2	<2.2	<2.2	3.0	2.4
Toluene		<2.5	<2.5	<2.5	<2.5	<2.5
111-Trichloroethane		<7.1	<7.1	<7.2	<7.2	<7.2
112-Trichloroethane		<2.8	<2.8	<2.8	<2.8	<2.8
Trichloroethene		<2.8	<2.8	<2.8	95	110
124-Trimethylbenzene		<1.4	<1.4	<1.4	<1.4	<1.4
Vinyl Chloride		<18	<18	<18	<18	<18
o-Xylene		<2.1	<2.1	<2.1	<2.1	<2.1
m&p-Xylenes		<2.1	<2.1	<2.1	<2.1	<2.1
Dichlorodifluoromethane		<49	<49	<49	<49	<49
Trichlorofluoromethane		<18	<18	<18	<18	<18
124-Trichlorobenzene		<2	<2	<2	<2	<2
123-Trichlorobenzene		<1.2	<1.2	<1.2	<1.2	<1.2
Halothane		<17	<17	<17	<17	<17

ANALYTICAL RESULTS

Matrix: Passive Sampler
Method: MA-5.WL.04 Volatile Organics
Sample units are expressed in µg/m³

Test Started: 23/07/2020

Analyte Name	Sampled Date / PQL	Leeder ID: 2020033230 Client ID: PSG-19 AN-LU-19-573 16/07/2020	Leeder ID: 2020033231 Client ID: PSG-20 AN-LU-19-579 16/07/2020	Leeder ID: 2020033232 Client ID: PSG-20 Field Dup AN-LU-19-580 16/07/2020	Leeder ID: 2020033233 Client ID: PSG-21 AN-LU-19-574 16/07/2020	Leeder ID: 2020033234 Client ID: PSG-22 AN-LU-19-578 16/07/2020
Benzene		<3.7	<3.7	<3.7	<3.7	<3.7
2-butanone(MEK)		<7.2	<7.2	<7.2	<7.2	<7.2
Carbon tetrachloride		<5.8	<5.8	<5.8	<5.8	<5.8
Chlorobenzene		<2.2	<2.2	<2.2	<2.2	<2.2
Chloroform		<4.6	<4.6	<4.6	<4.6	6.2
12-Dichlorobenzene		<1.2	<1.2	<1.2	<1.2	<1.2
13-Dichlorobenzene		<1.3	<1.3	<1.3	<1.3	<1.3
14-Dichlorobenzene		<1.3	<1.3	<1.3	<1.3	<1.3
1,1-Dichloroethane		<9.3	<9.3	<9.3	<9.3	<9.3
12-Dichloroethane		<3.7	<3.7	<3.7	<3.7	<3.7
1,1-Dichloroethene		<11	<11	<11	<11	<11
cis-1,2-Dichloroethene		<4.7	<4.7	<4.7	<4.7	<4.7
trans-1,2-Dichloroethene		<4.9	<4.9	<4.9	<4.9	<4.9
Ethylbenzene		<2	<2	<2	<2	<2
Hexane		<4.9	<4.9	<4.9	<4.9	<4.9
Isopropylbenzene		<0.96	<0.96	<0.96	<0.96	<0.96
Naphthalene		<2.5	<2.5	<2.5	<2.5	<2.5
Tetrachloroethene		29	16	15	<2.2	46
Toluene		<2.5	<2.5	<2.5	6.4	<2.5
111-Trichloroethane		<7.2	<7.2	<7.2	<7.2	<7.2
112-Trichloroethane		<2.8	<2.8	<2.8	<2.8	<2.8
Trichloroethene		2300	220	290	8.3	2000
124-Trimethylbenzene		<1.4	<1.4	<1.4	<1.4	<1.4
Vinyl Chloride		<18	<18	<18	<18	<18
o-Xylene		<2.1	<2.1	<2.1	<2.1	<2.1
m&p-Xylenes		<2.1	<2.1	<2.1	<2.1	<2.1
Dichlorodifluoromethane		<49	<49	<49	<49	<49
Trichlorofluoromethane		<18	<18	<18	<18	<18
124-Trichlorobenzene		<2	<2	<2	<2	<2
123-Trichlorobenzene		<1.2	<1.2	<1.2	<1.2	<1.2
Halothane		<17	<17	<17	<17	<17

ANALYTICAL RESULTS

Matrix: Passive Sampler
Method: MA-5.WL.04 Volatile Organics
Sample units are expressed in µg/m³

Test Started: 23/07/2020

Analyte Name	PQL	Leeder ID: 2020033235 Client ID: PSG-23 AN-LU-19-572 Sampled Date: 16/07/2020
Benzene		<3.7
2-butanone(MEK)		<7.2
Carbon tetrachloride		<5.8
Chlorobenzene		<2.2
Chloroform		8.8
12-Dichlorobenzene		<1.2
13-Dichlorobenzene		<1.3
14-Dichlorobenzene		<1.3
1,1-Dichloroethane		<9.3
12-Dichloroethane		<3.7
1,1-Dichloroethene		<11
cis-1,2-Dichloroethene		<4.7
trans-1,2-Dichloroethene		<4.9
Ethylbenzene		<2
Hexane		<4.9
Isopropylbenzene		<0.97
Naphthalene		<2.5
Tetrachloroethene		110
Toluene		<2.5
111-Trichloroethane		<7.2
112-Trichloroethane		<2.8
Trichloroethene		4400
124-Trimethylbenzene		<1.4
Vinyl Chloride		<18
o-Xylene		<2.1
m&p-Xylenes		<2.1
Dichlorodifluoromethane		<49
Trichlorofluoromethane		<18
124-Trichlorobenzene		<2
123-Trichlorobenzene		<1.2
Halothane		<17

ANALYTICAL RESULTS

Matrix: Passive Sampler
Method: MA-5.WL.03 Volatile Organics
Sample units are expressed in µg total

Test Started: 23/07/2020

Analyte Name	Sampled Date / PQL	Leeder ID: 2020033236 Client ID: Field Blank 1 AN-LU-19-568	Leeder ID: 2020033237 Client ID: Field Blank 2 AN-LU-19-571	Leeder ID: 2020033238 Client ID: Field Blank 3 AN-LU-19-569	Leeder ID: 2020033239 Client ID: Method Blank
Benzene	0.05	nd	nd	nd	nd
2-butanone(MEK)	0.05	nd	nd	nd	nd
Carbon tetrachloride	0.05	nd	nd	nd	nd
Chlorobenzene	0.05	nd	nd	nd	nd
Chloroform	0.05	nd	nd	nd	nd
12-Dichlorobenzene	0.05	nd	nd	nd	nd
13-Dichlorobenzene	0.05	nd	nd	nd	nd
14-Dichlorobenzene	0.05	nd	nd	nd	nd
1,1-Dichloroethane	0.05	nd	nd	nd	nd
12-Dichloroethane	0.05	nd	nd	nd	nd
1,1-Dichloroethene	0.05	nd	nd	nd	nd
cis-1,2-Dichloroethene	0.05	nd	nd	nd	nd
trans-1,2-Dichloroethene	0.05	nd	nd	nd	nd
Ethylbenzene	0.05	nd	nd	nd	nd
Hexane	0.05	nd	nd	nd	nd
Isopropylbenzene	0.05	nd	nd	nd	nd
Naphthalene	0.05	nd	nd	nd	nd
Tetrachloroethene	0.05	nd	nd	nd	nd
Toluene	0.05	nd	nd	nd	nd
111-Trichloroethane	0.05	nd	nd	nd	nd
112-Trichloroethane	0.05	nd	nd	nd	nd
Trichloroethene	0.05	nd	nd	nd	nd
124-Trimethylbenzene	0.05	nd	nd	nd	nd
Vinyl Chloride	0.05	nd	nd	nd	nd
o-Xylene	0.05	nd	nd	nd	nd
m&p-Xylenes	0.05	nd	nd	nd	nd
Dichlorodifluoromethane	0.05	nd	nd	nd	nd
Trichlorofluoromethane	0.05	nd	nd	nd	nd
124-Trichlorobenzene	0.05	nd	nd	nd	nd
123-Trichlorobenzene	0.05	nd	nd	nd	nd
Halothane	0.05	nd	nd	nd	nd

ANALYTICAL RESULTS

Matrix: Passive Sampler
Method: MA-5.WL.03 Volatile Organics
Sample units are expressed in µg total

Test Started: 23/07/2020

Analyte Name	Leeder ID / Client ID / Sampled Date / PQL	2020033240 Method Blank
Benzene	0.05	nd
2-butanone(MEK)	0.05	nd
Carbon tetrachloride	0.05	nd
Chlorobenzene	0.05	nd
Chloroform	0.05	nd
12-Dichlorobenzene	0.05	nd
13-Dichlorobenzene	0.05	nd
14-Dichlorobenzene	0.05	nd
1,1-Dichloroethane	0.05	nd
12-Dichloroethane	0.05	nd
1,1-Dichloroethene	0.05	nd
cis-1,2-Dichloroethene	0.05	nd
trans-1,2-Dichloroethene	0.05	nd
Ethylbenzene	0.05	nd
Hexane	0.05	nd
Isopropylbenzene	0.05	nd
Naphthalene	0.05	nd
Tetrachloroethene	0.05	nd
Toluene	0.05	nd
111-Trichloroethane	0.05	nd
112-Trichloroethane	0.05	nd
Trichloroethene	0.05	nd
124-Trimethylbenzene	0.05	nd
Vinyl Chloride	0.05	nd
o-Xylene	0.05	nd
m&p-Xylenes	0.05	nd
Dichlorodifluoromethane	0.05	nd
Trichlorofluoromethane	0.05	nd
124-Trichlorobenzene	0.05	nd
123-Trichlorobenzene	0.05	nd
Halothane	0.05	nd

QA/QC RESULTS

Matrix: Passive Sampler
Method: MA-5.WL.03 Volatile Organics
Quality Control Results are expressed in Percent Recovery of expected result

Test Started: 23/07/2020

Analyte Name	Leeder ID / Client ID / Sampled Date / PQL	2020033241 Method Spike	2020033242 Method Spike Dup	2020033243 Method Spike	2020033244 Method Spike Dup
Benzene		107	101	95	100
Chlorobenzene		97	92	90	95
12-Dichlorobenzene		91	86	87	96
13-Dichlorobenzene		96	93	92	100
14-Dichlorobenzene		94	88	91	96
Ethylbenzene		98	95	93	97
Toluene		101	99	95	102
o-Xylene		92	91	87	97
m&p-Xylenes		102	99	96	108

QUALIFIERS / NOTES FOR REPORTED RESULTS

PQL	Practical Quantitation Limit
nd	Not Detected – The analyte was not detected above the reported PQL.
is	Insufficient Sample to perform this analysis.
T	Tentative identification based on computer library search of mass spectra.
NC	Not calculated and/or Results below PQL
NV	No Vacuum, Canister received above standard atmospheric pressure
nr	Not Requested for analysis.
R	Rejected Result – results for this analysis failed QC checks.
SQ	Semi-Quantitative result – quantitation based on a generic response factor for this class of analyte.
IM	Inappropriate method of analysis for this compound
U	Unable to provide Quality Control data – high levels of compounds in sample interfered with analysis of QC results.
UF	Unable to provide Quality Control data- Surrogates failed QC checks due to sample matrix effects
L	Analyte detected at a level above the linear response of calibration curve.
E	Estimated result. NATA accreditation does not cover estimated results.
C1	These compounds co-elute.
--	Parameter Not Determined
CT	Elevated concentration. Results reported from carbon tube analysis
**	Sample shows non-petroleum hydrocarbon profile

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APPENDIX ONE.

CHAIN OF CUSTODY DOCUMENT

Passive Sample Collection

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Notting Hill VIC 3168
Ph: (03) 9574 3311
au.samplereceipt.melbourne@sgs.com

SGS

Project Manager: [redacted]
Sampled by: (Print and Sign) [redacted]
Company Jacobs
Address Sydney
City _____ State _____ Post Code _____
Phone: _____
ABN: _____

Email address: [redacted]@jacobs.com

Project Info
Purchase Order Number: _____
Suburb & State: Randwick
Project Number: _____
Project Name: _____

Turn Around Time
Normal: ✓
Rapid: —
(surcharges apply)
Specify: — (days)

Lab ID	Field Sample I.D. (Location)	Sampler I.D (WMS Code)	Date of Deployment	Time of Deployment	Date of Retrieval	Time of Retrieval	Analysis Required	Indoor Air	Outdoor Air	Workplace Monitoring	Other ( )
	PSA-1	AN-LH-19-595	2-7-20	0924	16-7-20	0908	VOC				
	PSA-2	AN-LH-19-599	~~16/7/20~~	0948		1014					
	PSA-2 Dup	AN-LH-19-594		0951		1016					
	PSA-3	AN-LH-19-592		1008		1020					
	PSA-4	AN-LH-19-593		1012		1025					
	PSA-5	AN-LH-19-597		1043		1028					
	PSA-6	AN-LH-19-598		1058		1031					
	PSA-7	AN-LH-19-591		1107		1039					
	PSA-8	AN-LH-19-596		1125		1045					
	PSA-9	AN-LH-19-581		1135		1049					
	PSA-10	AN-LH-19-582		1145		1055					

Relinquished By: Name, Signature, Date/Time	Received by: Name, Signature, Date/Time	Air Temp and Weather Description:
[redacted] 16-7-20 1230	[redacted] 17/7/20 11:45am	
Relinquished By: Name, Signature, Date/Time	Received by: Name, Signature, Date/Time	Notes:
Relinquished By: Name, Signature, Date/Time	Received by: Name, Signature, Date/Time	

Passive Sample Collection

Unit 10 /585 Blackburn Road,
Notting Hill VIC 3168
Ph: (03) 9574 3311
au.samplereceipt.melbourne@sgs.com

SGS

Project Manager: [redacted]
Sampled by: (Print and Sign) [redacted]
Company Jacobs
Address
City Sydney State Post Code
Phone:
ABN:

Email address: [redacted]

Project Info
Purchase Order Number:
Suburb & State: Randwick
Project Number:
Project Name:

Turn Around Time
Normal: ✓
Rapid: –
(surcharges apply)
Specify: (days)

Lab ID	Field Sample I.D. (Location)	Sampler I.D (WMS Code)	Date of Deployment	Time of Deployment	Date of Retrieval	Time of Retrieval	Analysis Required	Indoor Air	Outdoor Air	Workplace Monitoring	Other ( )
	PSA 11	AN-LH-19-585	2-7-20	1255	16-07-20	1058	VOC				
	PSA 12	AN-LH-19-583		1313		1103					
	PSA 12-DUP	AN-LH-19-584		1315		1105					
	PSA 13	AN-LH-19-590		1355		1112					
	PSA 14	AN-LH-19-589		1405		1117					
	PSA 15	AN-LH-19-587		1415		1121					
	PSA 16	AN-LH-19-586		1425		1126					
	PSA 17	AN-LH-19-588		1435		1132					
	PSA 18	AN-LH-19-575		1445		1137					
	PSA 19	AN-LH-19-573		1455		1142					

Relinquished By: Name, Signature, Date/Time	Received by: Name, Signature, Date/Time	Air Temp and Weather Description:
[redacted] 16.7.20 12:30	[redacted] 17/7/20 11:45am	
Relinquished By: Name, Signature, Date/Time	Received by: Name, Signature, Date/Time	Notes:
Relinquished By: Name, Signature, Date/Time	Received by: Name, Signature, Date/Time	

Passive Sample Collection

Unit 10 /585 Blackburn Road,
Notting Hill VIC 3168
Ph: (03) 9574 3311
au.samplereceipt.melbourne@sgs.com

SGS

Project Manager: [redacted]
Sampled by: (Print and Sign) [redacted]
Company JACOBS
Address
City Sydney State Post Code
Phone:
ABN:

Email address: [redacted]@jacobs.com

Project Info
Purchase Order Number:
Suburb & State: Randwick
Project Number:
Project Name:

Turn Around Time
Normal: ✓
Rapid: —
(surcharges apply)
Specify: — (days)

Lab ID	Field Sample I.D. (Location)	Sampler I.D (WMS Code)	Date of Deployment	Time of Deployment	Date of Retrieval	Time of Retrieval	Analysis Required	Indoor Air	Outdoor Air	Workplace Monitoring	Other ( )
	PSA20	AN-LW-19-579	2-7-20	1505	16-7-20	1148	VOC				
	PSA20 - DUP	AN-LW-19-580		1508		1148					
	PSA21	AN-LW-19-574		1530		1152					
	PSA22	AN-LW-19-573		1545		1156					
	PSA23	AN-LW-19-572		1600		1200					
	TRIP BLANK 1	AN-LW-19-568	—	—	—	—					
	TRIP BLANK 2	AN-LW-19-571	—	—	—	—					
	TRIP BLAK 3	AN-LW-19-569	—	—	—	—					

Relinquished By: Name, Signature, Date/Time
[redacted] 16.7.20 1230

Received by: Name, Signature, Date/Time
[redacted] 17/7/20 11:45am

Air Temp and Weather Description:

Relinquished By: Name, Signature, Date/Time

Received by: Name, Signature, Date/Time
[redacted]

Notes:

Relinquished By: Name, Signature, Date/Time

Received by: Name, Signature, Date/Time

ANALYTICAL REPORT

Accreditation No. 2562

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	NATIONAL ACCOUNTS PAYABLE PO BOX 176 LANE COVE NSW 1595
Telephone	[redacted]
Facsimile	
Email	
Project	**Randwick**
Order Number	**610.30041**
Samples	26

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Melbourne EH&S
Address	10/585 Blackburn Road Notting Hill Victoria 3168
Telephone	+61395743200
Facsimile	+61395743399
Email	Au.SampleReceipt.Melbourne@sgs.com
SGS Reference	**ME317274 R0**
Date Received	13 Nov 2020
Date Reported	23 Nov 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(14420).

PSG34 broken in transit and 3/4 empty.
PSG24 broken in transit and not able to be salvaged.

SIGNATORIES

[redacted]
Australian Chemistry Manager

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name ME317274.001 Canister 11/11/20 10:56 ASG01	ME317274.002 Canister 11/11/20 11:02 ASG01 Field Dup	ME317274.003 Canister 11/11/20 11:19 ASG02	ME317274.004 Canister 11/11/20 11:38 ASG03
Receipt Pressure/Vacuum of Canisters Method: TO-15 Tested: 16/11/2020						
Receipt Vacuum (inch Hg below std atmospheric	No unit	-	**2.86**	**3.67**	**6.53**	**2.65**
Receipt Pressure (PSIA)*	No unit	-	**13.2**	**12.8**	**11.4**	**13.3**
TO-15 in Air Method: TO15 Tested: 16/11/2020						
Acrolein	µg/m³	-	<3.5	<3.4	<3.7	<3.2
Acrylonitrile	µg/m³	-	<9	<8.7	<9.6	<8.2
tert-Amyl Methyl Ether	µg/m³	-	<3	<2.9	<3.2	<2.7
Benzene	µg/m³	-	<2.5	**6.8**	<2.7	<2.3
Bromodichloromethane	µg/m³	-	<5	<4.8	<5.3	<4.6
Bromoform	µg/m³	-	<6	<5.8	<6.4	<5.5
Bromomethane	µg/m³	-	<4.5	<4.3	<4.8	<4.1
1,3-Butadiene	µg/m³	-	<1.5	<1.4	<1.6	<1.4
2-Butanone (Methyl Ethyl Ketone)	µg/m³	-	<2.5	<2.4	<2.7	<2.3
tert-Butyl Alcohol	µg/m³	-	<2.5	<2.4	<2.7	<2.3
n-Butylbenzene	µg/m³	-	<4	<3.8	<4.2	<3.6
sec-Butylbenzene	µg/m³	-	<4	<3.8	<4.2	<3.6
tert-Butylbenzene	µg/m³	-	<4	<3.8	<4.2	<3.6
Carbon Tetrachloride	µg/m³	-	<5	<4.8	<5.3	<4.6
Chlorobenzene	µg/m³	-	<3	<2.9	<3.2	<2.7
Chloroethane	µg/m³	-	<3	<2.9	<3.2	<2.7
Chloroform	µg/m³	-	**7.1**	**6.8**	**5.6**	**20**
Chloromethane	µg/m³	-	<3.5	<3.4	<3.7	<3.2
2-Chloroprene	µg/m³	-	<5.5	<5.3	<5.8	<5
3-Chloropropene	µg/m³	-	<3.5	<3.4	<3.7	<3.2
2-Chlorotoluene	µg/m³	-	<4.5	<4.3	<4.8	<4.1
alpha-Chlorotoluene	µg/m³	-	<3.5	<3.4	<3.7	<3.2
Cumene	µg/m³	-	<4	<3.8	<4.2	<3.6
Cyclohexane	µg/m³	-	<2	<1.9	<2.1	<1.8
o-Cymene	µg/m³	-	<4	<3.8	<4.2	<3.6
Dibromochloromethane	µg/m³	-	<6	<5.8	<6.4	<5.5
1,2-Dibromoethane (EDB)	µg/m³	-	<6	<5.8	<6.4	<5.5
1,2-Dichlorobenzene	µg/m³	-	<6.5	<6.2	<6.9	<5.9
1,3-Dichlorobenzene	µg/m³	-	<6.5	<6.2	<6.9	<5.9
1,4-Dichlorobenzene	µg/m³	-	<6.5	<6.2	<6.9	<5.9
1,1-Dichloroethane	µg/m³	-	<3.5	<3.4	<3.7	<3.2
1,2-Dichloroethane	µg/m³	-	<5	<4.8	<5.3	<4.6
1,1-Dichloroethene	µg/m³	-	<3	<2.9	<3.2	<2.7
cis-1,2-Dichloroethene	µg/m³	-	<4	<3.8	<4.2	<3.6
trans-1,2-Dichloroethene	µg/m³	-	<3	<2.9	<3.2	<2.7
1,2-Dichloropropane	µg/m³	-	<9	<8.7	<9.6	<8.2
cis-1,3-Dichloropropene	µg/m³	-	<3	<2.9	<3.2	<2.7
trans-1,3-Dichloropropene	µg/m³	-	<3.5	<3.4	<3.7	<3.2
Diisopropyl Ether	µg/m³	-	<3.5	<3.4	<3.7	<3.2
1,4-Dioxane	µg/m³	-	<3	<2.9	<3.2	<2.7
Ethyl Acetate	µg/m³	-	<4	<3.8	<4.2	<3.6
Ethyl Benzene	µg/m³	-	<3	**4.5**	<3.2	<2.7
Ethyl tert-Butyl Ether	µg/m³	-	<2.5	<2.4	<2.7	<2.3
4-Ethyltoluene	µg/m³	-	<3	<2.9	<3.2	<2.7
Freon 11	µg/m³	-	<1.5	<1.4	<1.6	<1.4
Freon 113	µg/m³	-	<5	<4.8	<5.3	<4.6
Freon 114	µg/m³	-	<1.5	<1.4	<1.6	<1.4
Freon 12	µg/m³	-	<2	<1.9	<2.1	<1.8
Heptane	µg/m³	-	<3.5	<3.4	<3.7	<3.2
Hexachlorobutadiene	µg/m³	-	<10	<9.6	<11	<9.1
Hexane	µg/m³	-	<3	<2.9	<3.2	<2.7
2-Hexanone	µg/m³	-	<3	<2.9	<3.2	<2.7
m,p-Xylene	µg/m³	-	<6.5	**20**	<6.9	<5.9
Methyl Methacrylate	µg/m³	-	<3.5	<3.4	<3.7	<3.2
Methyl tert-butyl ether	µg/m³	-	<3	<2.9	<3.2	<2.7

Parameter	Units	LOR	Sample Number: ME317274.001 Sample Matrix: Canister Sample Date: 11/11/20 10:56 Sample Name: ASG01	ME317274.002 Canister 11/11/20 11:02 ASG01 Field Dup	ME317274.003 Canister 11/11/20 11:19 ASG02	ME317274.004 Canister 11/11/20 11:38 ASG03
TO-15 in Air Method: TO15 Tested: 16/11/2020 (continued)						
4-Methyl-2-pentanone	µg/m³	-	<3	<2.9	<3.2	<2.7
Naphthalene	µg/m³	-	<11	<10	<11	<9.6
2-Propanol	µg/m³	-	<50	<48	<53	<46
Propene	µg/m³	-	<5	<4.8	<5.3	<4.6
Propylbenzene	µg/m³	-	<3.5	<3.4	<3.7	<3.2
Styrene	µg/m³	-	<3	<2.9	<3.2	<2.7
1,1,1,2-Tetrachloroethane	µg/m³	-	<5	<4.8	<5.3	<4.6
1,1,2,2-Tetrachloroethane	µg/m³	-	<3.5	<3.4	<3.7	<3.2
Tetrachloroethene	µg/m³	-	**17**	**25**	**49**	**74**
Tetrahydrofuran	µg/m³	-	<2	<1.9	<2.1	<1.8
Toluene	µg/m³	-	**10**	**24**	<3.2	<2.7
1,2,4-Trichlorobenzene	µg/m³	-	<18	<17	<19	<16
1,1,1-Trichloroethane	µg/m³	-	<4	<3.8	<4.2	<3.6
1,1,2-Trichloroethane	µg/m³	-	<4	<3.8	<4.2	<3.6
Trichloroethene	µg/m³	-	**1900**	**1800**	**2300**	**2700**
1,2,4-Trimethylbenzene	µg/m³	-	<4	<3.8	<4.2	<3.6
1,3,5-Trimethylbenzene	µg/m³	-	<3	**10**	<3.2	<2.7
2,2,4-Trimethylpentane	µg/m³	-	<4.5	<4.3	<4.8	<4.1
Vinyl Acetate	µg/m³	-	<3.5	<3.4	<3.7	<3.2
Vinyl Bromide	µg/m³	-	<4	<3.8	<4.2	<3.6
Vinyl Chloride	µg/m³	-	<2	<1.9	<2.1	<1.8
o-Xylene	µg/m³	-	<3	**22**	<3.2	<2.7
Isopropanol in Sorbent Tubes Method: MA5 Tested: 20/11/2020						
Isopropanol	mg/m³	-	-	-	-	-
VOC in Waterloo Samplers MA-5.WL.LU Method: MA5 Tested: 20/11/2020						
Benzene	µg/m³	-	-	-	-	-
2-butanone (MEK)	µg/m³	-	-	-	-	-
Carbon tetrachloride	µg/m³	-	-	-	-	-
Chlorobenzene	µg/m³	-	-	-	-	-
Chloroform	µg/m³	-	-	-	-	-
1,2-Dichlorobenzene	µg/m³	-	-	-	-	-
1,3-Dichlorobenzene	µg/m³	-	-	-	-	-
1,4-Dichlorobenzene	µg/m³	-	-	-	-	-
1,1-Dichloroethane	µg/m³	-	-	-	-	-
1,2-Dichloroethane	µg/m³	-	-	-	-	-
1,1-Dichloroethene	µg/m³	-	-	-	-	-
cis-1,2-Dichloroethene	µg/m³	-	-	-	-	-
trans-1,2-Dichloroethene	µg/m³	-	-	-	-	-
Dichlorodifluoromethane	µg/m³	-	-	-	-	-
Ethylbenzene	µg/m³	-	-	-	-	-
Hexane	µg/m³	-	-	-	-	-
Naphthalene	µg/m³	-	-	-	-	-
Tetrachloroethene	µg/m³	-	-	-	-	-
Toluene	µg/m³	-	-	-	-	-
1,1,1-Trichloroethane	µg/m³	-	-	-	-	-
1,1,2-Trichloroethane	µg/m³	-	-	-	-	-
Trichloroethene	µg/m³	-	-	-	-	-
Trichlorofluoromethane	µg/m³	-	-	-	-	-
1,2,4-Trimethylbenzene	µg/m³	-	-	-	-	-
Vinyl Chloride	µg/m³	-	-	-	-	-
o-Xylene	µg/m³	-	-	-	-	-
m&p-Xylene	µg/m³	-	-	-	-	-
1,2,4-Trichlorobenzene	µg/m³	-	-	-	-	-
1,2,3-Trichlorobenzene	µg/m³	-	-	-	-	-
Haloethane	µg/m³	-	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name ME317274.001 Canister 11/11/20 10:56 ASG01	ME317274.002 Canister 11/11/20 11:02 ASG01 Field Dup	ME317274.003 Canister 11/11/20 11:19 ASG02	ME317274.004 Canister 11/11/20 11:38 ASG03
VOC in Waterloo Samplers MA-5.WL.LU Method: MA5 Tested: 20/11/2020						
Benzene	µg total	0.05	-	-	-	-
2-butanone (MEK)	µg total	0.05	-	-	-	-
Carbon tetrachloride	µg total	0.05	-	-	-	-
Chlorobenzene	µg total	0.05	-	-	-	-
Chloroform	µg total	0.05	-	-	-	-
1,2-Dichlorobenzene	µg total	0.05	-	-	-	-
1,3-Dichlorobenzene	µg total	0.05	-	-	-	-
1,4-Dichlorobenzene	µg total	0.05	-	-	-	-
1,1-Dichloroethane	µg total	0.05	-	-	-	-
1,2-Dichloroethane	µg total	0.05	-	-	-	-
1,1-Dichloroethene	µg total	0.05	-	-	-	-
cis-1,2-Dichloroethene	µg total	0.05	-	-	-	-
trans-1,2-Dichloroethene	µg total	0.05	-	-	-	-
Dichlorodifluoromethane	µg total	0.05	-	-	-	-
Ethylbenzene	µg total	0.05	-	-	-	-
Hexane	µg total	0.05	-	-	-	-
Naphthalene	µg total	0.05	-	-	-	-
Tetrachloroethene	µg total	0.05	-	-	-	-
Toluene	µg total	0.05	-	-	-	-
1,1,1-Trichloroethane	µg total	0.05	-	-	-	-
1,1,2-Trichloroethane	µg total	0.05	-	-	-	-
Trichloroethene	µg total	0.05	-	-	-	-
Trichlorofluoromethane	µg total	0.05	-	-	-	-
1,2,4-Trimethylbenzene	µg total	0.05	-	-	-	-
Vinyl Chloride	µg total	0.05	-	-	-	-
o-Xylene	µg total	0.05	-	-	-	-
m&p-Xylene	µg total	0.05	-	-	-	-
1,2,4-Trichlorobenzene	µg total	0.05	-	-	-	-
1,2,3-Trichlorobenzene	µg total	0.05	-	-	-	-
Haloethane	µg total	0.05	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name ME317274.005 Canister 11/11/20 11:55 ASG04	ME317274.006 Canister 11/11/20 12:19 ASG05	ME317274.007 Canister 11/11/20 12:34 ASG06	ME317274.008 Carbon Tube 11 Nov 2020 IPA Shroud
Receipt Pressure/Vacuum of Canisters Method: TO-15 Tested: 16/11/2020						
Receipt Vacuum (inch Hg below std atmospheric	No unit	-	**3.47**	**4.49**	**1.84**	-
Receipt Pressure (PSIA)*	No unit	-	**12.9**	**12.4**	**13.7**	-
TO-15 in Air Method: TO15 Tested: 16/11/2020						
Acrolein	µg/m³	-	<3.3	<3.4	<3.1	-
Acrylonitrile	µg/m³	-	<8.5	<8.7	<7.9	-
tert-Amyl Methyl Ether	µg/m³	-	<2.8	<2.9	<2.6	-
Benzene	µg/m³	-	**16**	<2.4	<2.2	-
Bromodichloromethane	µg/m³	-	<4.7	<4.8	<4.4	-
Bromoform	µg/m³	-	<5.7	<5.8	<5.2	-
Bromomethane	µg/m³	-	<4.3	<4.4	<3.9	-
1,3-Butadiene	µg/m³	-	<1.4	<1.5	<1.3	-
2-Butanone (Methyl Ethyl Ketone)	µg/m³	-	<2.4	<2.4	<2.2	-
tert-Butyl Alcohol	µg/m³	-	<2.4	<2.4	<2.2	-
n-Butylbenzene	µg/m³	-	<3.8	<3.9	<3.5	-
sec-Butylbenzene	µg/m³	-	<3.8	<3.9	<3.5	-
tert-Butylbenzene	µg/m³	-	<3.8	<3.9	<3.5	-
Carbon Tetrachloride	µg/m³	-	<4.7	<4.8	<4.4	-
Chlorobenzene	µg/m³	-	<2.8	<2.9	<2.6	-
Chloroethane	µg/m³	-	<2.8	<2.9	<2.6	-
Chloroform	µg/m³	-	**8.2**	<4.4	**6.3**	-
Chloromethane	µg/m³	-	<3.3	<3.4	<3.1	-
2-Chloroprene	µg/m³	-	<5.2	<5.3	<4.8	-
3-Chloropropene	µg/m³	-	<3.3	<3.4	<3.1	-
2-Chlorotoluene	µg/m³	-	<4.3	<4.4	<3.9	-
alpha-Chlorotoluene	µg/m³	-	<3.3	<3.4	<3.1	-
Cumene	µg/m³	-	<3.8	<3.9	<3.5	-
Cyclohexane	µg/m³	-	<1.9	<1.9	<1.7	-
o-Cymene	µg/m³	-	<3.8	<3.9	<3.5	-
Dibromochloromethane	µg/m³	-	<5.7	<5.8	<5.2	-
1,2-Dibromoethane (EDB)	µg/m³	-	<5.7	<5.8	<5.2	-
1,2-Dichlorobenzene	µg/m³	-	<6.2	<6.3	<5.7	-
1,3-Dichlorobenzene	µg/m³	-	<6.2	<6.3	<5.7	-
1,4-Dichlorobenzene	µg/m³	-	<6.2	<6.3	<5.7	-
1,1-Dichloroethane	µg/m³	-	<3.3	<3.4	<3.1	-
1,2-Dichloroethane	µg/m³	-	<4.7	<4.8	<4.4	-
1,1-Dichloroethene	µg/m³	-	<2.8	<2.9	<2.6	-
cis-1,2-Dichloroethene	µg/m³	-	<3.8	<3.9	<3.5	-
trans-1,2-Dichloroethene	µg/m³	-	<2.8	<2.9	<2.6	-
1,2-Dichloropropane	µg/m³	-	<8.5	<8.7	<7.9	-
cis-1,3-Dichloropropene	µg/m³	-	<2.8	<2.9	<2.6	-
trans-1,3-Dichloropropene	µg/m³	-	<3.3	<3.4	<3.1	-
Diisopropyl Ether	µg/m³	-	<3.3	<3.4	<3.1	-
1,4-Dioxane	µg/m³	-	<2.8	<2.9	<2.6	-
Ethyl Acetate	µg/m³	-	<3.8	<3.9	<3.5	-
Ethyl Benzene	µg/m³	-	**5.7**	<2.9	<2.6	-
Ethyl tert-Butyl Ether	µg/m³	-	<2.4	<2.4	<2.2	-
4-Ethyltoluene	µg/m³	-	<2.8	<2.9	<2.6	-
Freon 11	µg/m³	-	<1.4	<1.5	<1.3	-
Freon 113	µg/m³	-	<4.7	<4.8	<4.4	-
Freon 114	µg/m³	-	<1.4	<1.5	<1.3	-
Freon 12	µg/m³	-	<1.9	<1.9	<1.7	-
Heptane	µg/m³	-	<3.3	<3.4	<3.1	-
Hexachlorobutadiene	µg/m³	-	<9.5	<9.7	<8.7	-
Hexane	µg/m³	-	<2.8	<2.9	<2.6	-
2-Hexanone	µg/m³	-	<2.8	<2.9	<2.6	-
m,p-Xylene	µg/m³	-	**19**	<6.3	<5.7	-
Methyl Methacrylate	µg/m³	-	<3.3	<3.4	<3.1	-
Methyl tert-butyl ether	µg/m³	-	<2.8	<2.9	<2.6	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name ME317274.005 Canister 11/11/20 11:55 ASG04	ME317274.006 Canister 11/11/20 12:19 ASG05	ME317274.007 Canister 11/11/20 12:34 ASG06	ME317274.008 Carbon Tube 11 Nov 2020 IPA Shroud
TO-15 in Air Method: TO15 Tested: 23/11/2020 (continued)						
4-Methyl-2-pentanone	µg/m³	-	<2.8	<2.9	<2.6	-
Naphthalene	µg/m³	-	<10	<10	<9.2	-
2-Propanol	µg/m³	-	<47	<48	<44	-
Propene	µg/m³	-	<4.7	<4.8	<4.4	-
Propylbenzene	µg/m³	-	<3.3	<3.4	<3.1	-
Styrene	µg/m³	-	<2.8	<2.9	<2.6	-
1,1,1,2-Tetrachloroethane	µg/m³	-	<4.7	<4.8	<4.4	-
1,1,2,2-Tetrachloroethane	µg/m³	-	<3.3	<3.4	<3.1	-
Tetrachloroethene	µg/m³	-	**60**	**110**	**340**	-
Tetrahydrofuran	µg/m³	-	<1.9	<1.9	<1.7	-
Toluene	µg/m³	-	**29**	**2.9**	<2.6	-
1,2,4-Trichlorobenzene	µg/m³	-	<17	<17	<16	-
1,1,1-Trichloroethane	µg/m³	-	<3.8	<3.9	<3.5	-
1,1,2-Trichloroethane	µg/m³	-	<3.8	<3.9	<3.5	-
Trichloroethene	µg/m³	-	**2500**	**18**	<3.9	-
1,2,4-Trimethylbenzene	µg/m³	-	**10**	<3.9	<3.5	-
1,3,5-Trimethylbenzene	µg/m³	-	**7.5**	<2.9	<2.6	-
2,2,4-Trimethylpentane	µg/m³	-	<4.3	<4.4	<3.9	-
Vinyl Acetate	µg/m³	-	<3.3	<3.4	<3.1	-
Vinyl Bromide	µg/m³	-	<3.8	<3.9	<3.5	-
Vinyl Chloride	µg/m³	-	<1.9	<1.9	<1.7	-
o-Xylene	µg/m³	-	**21**	<2.9	<2.6	-
Isopropanol in Sorbent Tubes Method: MA5 Tested: 20/11/2020						
Isopropanol	mg/m³	-	-	-	-	**120000**
VOC in Waterloo Samplers MA-5.WL.LU Method: MA5 Tested: 20/11/2020						
Benzene	µg/m³	-	-	-	-	-
2-butanone (MEK)	µg/m³	-	-	-	-	-
Carbon tetrachloride	µg/m³	-	-	-	-	-
Chlorobenzene	µg/m³	-	-	-	-	-
Chloroform	µg/m³	-	-	-	-	-
1,2-Dichlorobenzene	µg/m³	-	-	-	-	-
1,3-Dichlorobenzene	µg/m³	-	-	-	-	-
1,4-Dichlorobenzene	µg/m³	-	-	-	-	-
1,1-Dichloroethane	µg/m³	-	-	-	-	-
1,2-Dichloroethane	µg/m³	-	-	-	-	-
1,1-Dichloroethene	µg/m³	-	-	-	-	-
cis-1,2-Dichloroethene	µg/m³	-	-	-	-	-
trans-1,2-Dichloroethene	µg/m³	-	-	-	-	-
Dichlorodifluoromethane	µg/m³	-	-	-	-	-
Ethylbenzene	µg/m³	-	-	-	-	-
Hexane	µg/m³	-	-	-	-	-
Naphthalene	µg/m³	-	-	-	-	-
Tetrachloroethene	µg/m³	-	-	-	-	-
Toluene	µg/m³	-	-	-	-	-
1,1,1-Trichloroethane	µg/m³	-	-	-	-	-
1,1,2-Trichloroethane	µg/m³	-	-	-	-	-
Trichloroethene	µg/m³	-	-	-	-	-
Trichlorofluoromethane	µg/m³	-	-	-	-	-
1,2,4-Trimethylbenzene	µg/m³	-	-	-	-	-
Vinyl Chloride	µg/m³	-	-	-	-	-
o-Xylene	µg/m³	-	-	-	-	-
m&p-Xylene	µg/m³	-	-	-	-	-
1,2,4-Trichlorobenzene	µg/m³	-	-	-	-	-
1,2,3-Trichlorobenzene	µg/m³	-	-	-	-	-
Haloethane	µg/m³	-	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME317274.005 Canister 11/11/20 11:55 ASG04	ME317274.006 Canister 11/11/20 12:19 ASG05	ME317274.007 Canister 11/11/20 12:34 ASG06	ME317274.008 Carbon Tube 11 Nov 2020 IPA Shroud
VOC in Waterloo Samplers MA-5.WL.LU Method: MA5 Tested: 20/11/2020							
Benzene	µg total	0.05		-	-	-	-
2-butanone (MEK)	µg total	0.05		-	-	-	-
Carbon tetrachloride	µg total	0.05		-	-	-	-
Chlorobenzene	µg total	0.05		-	-	-	-
Chloroform	µg total	0.05		-	-	-	-
1,2-Dichlorobenzene	µg total	0.05		-	-	-	-
1,3-Dichlorobenzene	µg total	0.05		-	-	-	-
1,4-Dichlorobenzene	µg total	0.05		-	-	-	-
1,1-Dichloroethane	µg total	0.05		-	-	-	-
1,2-Dichloroethane	µg total	0.05		-	-	-	-
1,1-Dichloroethene	µg total	0.05		-	-	-	-
cis-1,2-Dichloroethene	µg total	0.05		-	-	-	-
trans-1,2-Dichloroethene	µg total	0.05		-	-	-	-
Dichlorodifluoromethane	µg total	0.05		-	-	-	-
Ethylbenzene	µg total	0.05		-	-	-	-
Hexane	µg total	0.05		-	-	-	-
Naphthalene	µg total	0.05		-	-	-	-
Tetrachloroethene	µg total	0.05		-	-	-	-
Toluene	µg total	0.05		-	-	-	-
1,1,1-Trichloroethane	µg total	0.05		-	-	-	-
1,1,2-Trichloroethane	µg total	0.05		-	-	-	-
Trichloroethene	µg total	0.05		-	-	-	-
Trichlorofluoromethane	µg total	0.05		-	-	-	-
1,2,4-Trimethylbenzene	µg total	0.05		-	-	-	-
Vinyl Chloride	µg total	0.05		-	-	-	-
o-Xylene	µg total	0.05		-	-	-	-
m&p-Xylene	µg total	0.05		-	-	-	-
1,2,4-Trichlorobenzene	µg total	0.05		-	-	-	-
1,2,3-Trichlorobenzene	µg total	0.05		-	-	-	-
Haloethane	µg total	0.05		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME317274.009 Carbon Tube 11 Nov 2020 Field Blank	ME317274.010 Passive Sampler 11/11/20 8:45 PSG24	ME317274.011 Passive Sampler 11/11/20 8:50 PSG25	ME317274.012 Passive Sampler 11/11/20 8:53 PSG25 Field Dup
Receipt Pressure/Vacuum of Canisters Method: TO-15 Tested: 23/11/2020							
Receipt Vacuum (inch Hg below std atmospheric	No unit	-		-	-	-	-
Receipt Pressure (PSIA)*	No unit	-		-	-	-	-
TO-15 in Air Method: TO15 Tested: 23/11/2020							
Acrolein	µg/m³	-		-	-	-	-
Acrylonitrile	µg/m³	-		-	-	-	-
tert-Amyl Methyl Ether	µg/m³	-		-	-	-	-
Benzene	µg/m³	-		-	-	-	-
Bromodichloromethane	µg/m³	-		-	-	-	-
Bromoform	µg/m³	-		-	-	-	-
Bromomethane	µg/m³	-		-	-	-	-
1,3-Butadiene	µg/m³	-		-	-	-	-
2-Butanone (Methyl Ethyl Ketone)	µg/m³	-		-	-	-	-
tert-Butyl Alcohol	µg/m³	-		-	-	-	-
n-Butylbenzene	µg/m³	-		-	-	-	-
sec-Butylbenzene	µg/m³	-		-	-	-	-
tert-Butylbenzene	µg/m³	-		-	-	-	-
Carbon Tetrachloride	µg/m³	-		-	-	-	-
Chlorobenzene	µg/m³	-		-	-	-	-
Chloroethane	µg/m³	-		-	-	-	-
Chloroform	µg/m³	-		-	-	-	-
Chloromethane	µg/m³	-		-	-	-	-
2-Chloroprene	µg/m³	-		-	-	-	-
3-Chloropropene	µg/m³	-		-	-	-	-
2-Chlorotoluene	µg/m³	-		-	-	-	-
alpha-Chlorotoluene	µg/m³	-		-	-	-	-
Cumene	µg/m³	-		-	-	-	-
Cyclohexane	µg/m³	-		-	-	-	-
o-Cymene	µg/m³	-		-	-	-	-
Dibromochloromethane	µg/m³	-		-	-	-	-
1,2-Dibromoethane (EDB)	µg/m³	-		-	-	-	-
1,2-Dichlorobenzene	µg/m³	-		-	-	-	-
1,3-Dichlorobenzene	µg/m³	-		-	-	-	-
1,4-Dichlorobenzene	µg/m³	-		-	-	-	-
1,1-Dichloroethane	µg/m³	-		-	-	-	-
1,2-Dichloroethane	µg/m³	-		-	-	-	-
1,1-Dichloroethene	µg/m³	-		-	-	-	-
cis-1,2-Dichloroethene	µg/m³	-		-	-	-	-
trans-1,2-Dichloroethene	µg/m³	-		-	-	-	-
1,2-Dichloropropane	µg/m³	-		-	-	-	-
cis-1,3-Dichloropropene	µg/m³	-		-	-	-	-
trans-1,3-Dichloropropene	µg/m³	-		-	-	-	-
Diisopropyl Ether	µg/m³	-		-	-	-	-
1,4-Dioxane	µg/m³	-		-	-	-	-
Ethyl Acetate	µg/m³	-		-	-	-	-
Ethyl Benzene	µg/m³	-		-	-	-	-
Ethyl tert-Butyl Ether	µg/m³	-		-	-	-	-
4-Ethyltoluene	µg/m³	-		-	-	-	-
Freon 11	µg/m³	-		-	-	-	-
Freon 113	µg/m³	-		-	-	-	-
Freon 114	µg/m³	-		-	-	-	-
Freon 12	µg/m³	-		-	-	-	-
Heptane	µg/m³	-		-	-	-	-
Hexachlorobutadiene	µg/m³	-		-	-	-	-
Hexane	µg/m³	-		-	-	-	-
2-Hexanone	µg/m³	-		-	-	-	-
m,p-Xylene	µg/m³	-		-	-	-	-
Methyl Methacrylate	µg/m³	-		-	-	-	-
Methyl tert-butyl ether	µg/m³	-		-	-	-	-

Parameter	Units	LOR	Sample Number: ME317274.009 Sample Matrix: Carbon Tube Sample Date: 11 Nov 2020 Sample Name: Field Blank	ME317274.010 Passive Sampler 11/11/20 8:45 PSG24	ME317274.011 Passive Sampler 11/11/20 8:50 PSG25	ME317274.012 Passive Sampler 11/11/20 8:53 PSG25 Field Dup
TO-15 in Air Method: TO15 Tested: 23/11/2020 (continued)						
4-Methyl-2-pentanone	µg/m³	-	-	-	-	-
Naphthalene	µg/m³	-	-	-	-	-
2-Propanol	µg/m³	-	-	-	-	-
Propene	µg/m³	-	-	-	-	-
Propylbenzene	µg/m³	-	-	-	-	-
Styrene	µg/m³	-	-	-	-	-
1,1,1,2-Tetrachloroethane	µg/m³	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/m³	-	-	-	-	-
Tetrachloroethene	µg/m³	-	-	-	-	-
Tetrahydrofuran	µg/m³	-	-	-	-	-
Toluene	µg/m³	-	-	-	-	-
1,2,4-Trichlorobenzene	µg/m³	-	-	-	-	-
1,1,1-Trichloroethane	µg/m³	-	-	-	-	-
1,1,2-Trichloroethane	µg/m³	-	-	-	-	-
Trichloroethene	µg/m³	-	-	-	-	-
1,2,4-Trimethylbenzene	µg/m³	-	-	-	-	-
1,3,5-Trimethylbenzene	µg/m³	-	-	-	-	-
2,2,4-Trimethylpentane	µg/m³	-	-	-	-	-
Vinyl Acetate	µg/m³	-	-	-	-	-
Vinyl Bromide	µg/m³	-	-	-	-	-
Vinyl Chloride	µg/m³	-	-	-	-	-
o-Xylene	µg/m³	-	-	-	-	-
Isopropanol in Sorbent Tubes Method: MA5 Tested: 20/11/2020						
Isopropanol	mg/m³	-	-	-	-	-
VOC in Waterloo Samplers MA-5.WL.LU Method: MA5 Tested: 20/11/2020						
Benzene	µg/m³	-	-	-	<3.7	<3.7
2-butanone (MEK)	µg/m³	-	-	-	<7.1	<7.1
Carbon tetrachloride	µg/m³	-	-	-	<5.8	<5.8
Chlorobenzene	µg/m³	-	-	-	<2.2	<2.2
Chloroform	µg/m³	-	-	-	<4.6	<4.6
1,2-Dichlorobenzene	µg/m³	-	-	-	<1.2	<1.2
1,3-Dichlorobenzene	µg/m³	-	-	-	<1.3	<1.3
1,4-Dichlorobenzene	µg/m³	-	-	-	<1.3	<1.3
1,1-Dichloroethane	µg/m³	-	-	-	<9.2	<9.2
1,2-Dichloroethane	µg/m³	-	-	-	<3.7	<3.7
1,1-Dichloroethene	µg/m³	-	-	-	<11	<11
cis-1,2-Dichloroethene	µg/m³	-	-	-	<4.7	<4.7
trans-1,2-Dichloroethene	µg/m³	-	-	-	<4.9	<4.9
Dichlorodifluoromethane	µg/m³	-	-	-	<49	<49
Ethylbenzene	µg/m³	-	-	-	<2	<2
Hexane	µg/m³	-	-	-	<4.9	<4.9
Naphthalene	µg/m³	-	-	-	**3.3**	<2.5
Tetrachloroethene	µg/m³	-	-	-	<2.2	**2.2**
Toluene	µg/m³	-	-	-	<2.5	<2.5
1,1,1-Trichloroethane	µg/m³	-	-	-	<7.1	<7.1
1,1,2-Trichloroethane	µg/m³	-	-	-	<2.8	<2.8
Trichloroethene	µg/m³	-	-	-	<2.8	<2.8
Trichlorofluoromethane	µg/m³	-	-	-	<18	<18
1,2,4-Trimethylbenzene	µg/m³	-	-	-	<1.4	<1.4
Vinyl Chloride	µg/m³	-	-	-	<18	<18
o-Xylene	µg/m³	-	-	-	<2	<2
m&p-Xylene	µg/m³	-	-	-	<2	<2
1,2,4-Trichlorobenzene	µg/m³	-	-	-	<2	<2
1,2,3-Trichlorobenzene	µg/m³	-	-	-	<1.2	<1.2
Haloethane	µg/m³	-	-	-	<17	<17

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name ME317274.009 Carbon Tube 11 Nov 2020 Field Blank	ME317274.010 Passive Sampler 11/11/20 8:45 PSG24	ME317274.011 Passive Sampler 11/11/20 8:50 PSG25	ME317274.012 Passive Sampler 11/11/20 8:53 PSG25 Field Dup
VOC in Waterloo Samplers MA-5.WL.LU Method: MA5 Tested: 20/11/2020						
Benzene	µg total	0.05	-	-	-	-
2-butanone (MEK)	µg total	0.05	-	-	-	-
Carbon tetrachloride	µg total	0.05	-	-	-	-
Chlorobenzene	µg total	0.05	-	-	-	-
Chloroform	µg total	0.05	-	-	-	-
1,2-Dichlorobenzene	µg total	0.05	-	-	-	-
1,3-Dichlorobenzene	µg total	0.05	-	-	-	-
1,4-Dichlorobenzene	µg total	0.05	-	-	-	-
1,1-Dichloroethane	µg total	0.05	-	-	-	-
1,2-Dichloroethane	µg total	0.05	-	-	-	-
1,1-Dichloroethene	µg total	0.05	-	-	-	-
cis-1,2-Dichloroethene	µg total	0.05	-	-	-	-
trans-1,2-Dichloroethene	µg total	0.05	-	-	-	-
Dichlorodifluoromethane	µg total	0.05	-	-	-	-
Ethylbenzene	µg total	0.05	-	-	-	-
Hexane	µg total	0.05	-	-	-	-
Naphthalene	µg total	0.05	-	-	-	-
Tetrachloroethene	µg total	0.05	-	-	-	-
Toluene	µg total	0.05	-	-	-	-
1,1,1-Trichloroethane	µg total	0.05	-	-	-	-
1,1,2-Trichloroethane	µg total	0.05	-	-	-	-
Trichloroethene	µg total	0.05	-	-	-	-
Trichlorofluoromethane	µg total	0.05	-	-	-	-
1,2,4-Trimethylbenzene	µg total	0.05	-	-	-	-
Vinyl Chloride	µg total	0.05	-	-	-	-
o-Xylene	µg total	0.05	-	-	-	-
m&p-Xylene	µg total	0.05	-	-	-	-
1,2,4-Trichlorobenzene	µg total	0.05	-	-	-	-
1,2,3-Trichlorobenzene	µg total	0.05	-	-	-	-
Haloethane	µg total	0.05	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME317274.013 Passive Sampler 11/11/20 9:00 PSG26	ME317274.014 Passive Sampler 11/11/20 9:05 PSG27	ME317274.015 Passive Sampler 11/11/20 9:10 PSG28	ME317274.016 Passive Sampler 11/11/20 9:15 PSG29
Receipt Pressure/Vacuum of Canisters Method: TO-15 Tested: 23/11/2020							
Receipt Vacuum (inch Hg below std atmospheric	No unit	-		-	-	-	-
Receipt Pressure (PSIA)*	No unit	-		-	-	-	-
TO-15 in Air Method: TO15 Tested: 23/11/2020							
Acrolein	µg/m³	-		-	-	-	-
Acrylonitrile	µg/m³	-		-	-	-	-
tert-Amyl Methyl Ether	µg/m³	-		-	-	-	-
Benzene	µg/m³	-		-	-	-	-
Bromodichloromethane	µg/m³	-		-	-	-	-
Bromoform	µg/m³	-		-	-	-	-
Bromomethane	µg/m³	-		-	-	-	-
1,3-Butadiene	µg/m³	-		-	-	-	-
2-Butanone (Methyl Ethyl Ketone)	µg/m³	-		-	-	-	-
tert-Butyl Alcohol	µg/m³	-		-	-	-	-
n-Butylbenzene	µg/m³	-		-	-	-	-
sec-Butylbenzene	µg/m³	-		-	-	-	-
tert-Butylbenzene	µg/m³	-		-	-	-	-
Carbon Tetrachloride	µg/m³	-		-	-	-	-
Chlorobenzene	µg/m³	-		-	-	-	-
Chloroethane	µg/m³	-		-	-	-	-
Chloroform	µg/m³	-		-	-	-	-
Chloromethane	µg/m³	-		-	-	-	-
2-Chloroprene	µg/m³	-		-	-	-	-
3-Chloropropene	µg/m³	-		-	-	-	-
2-Chlorotoluene	µg/m³	-		-	-	-	-
alpha-Chlorotoluene	µg/m³	-		-	-	-	-
Cumene	µg/m³	-		-	-	-	-
Cyclohexane	µg/m³	-		-	-	-	-
o-Cymene	µg/m³	-		-	-	-	-
Dibromochloromethane	µg/m³	-		-	-	-	-
1,2-Dibromoethane (EDB)	µg/m³	-		-	-	-	-
1,2-Dichlorobenzene	µg/m³	-		-	-	-	-
1,3-Dichlorobenzene	µg/m³	-		-	-	-	-
1,4-Dichlorobenzene	µg/m³	-		-	-	-	-
1,1-Dichloroethane	µg/m³	-		-	-	-	-
1,2-Dichloroethane	µg/m³	-		-	-	-	-
1,1-Dichloroethene	µg/m³	-		-	-	-	-
cis-1,2-Dichloroethene	µg/m³	-		-	-	-	-
trans-1,2-Dichloroethene	µg/m³	-		-	-	-	-
1,2-Dichloropropane	µg/m³	-		-	-	-	-
cis-1,3-Dichloropropene	µg/m³	-		-	-	-	-
trans-1,3-Dichloropropene	µg/m³	-		-	-	-	-
Diisopropyl Ether	µg/m³	-		-	-	-	-
1,4-Dioxane	µg/m³	-		-	-	-	-
Ethyl Acetate	µg/m³	-		-	-	-	-
Ethyl Benzene	µg/m³	-		-	-	-	-
Ethyl tert-Butyl Ether	µg/m³	-		-	-	-	-
4-Ethyltoluene	µg/m³	-		-	-	-	-
Freon 11	µg/m³	-		-	-	-	-
Freon 113	µg/m³	-		-	-	-	-
Freon 114	µg/m³	-		-	-	-	-
Freon 12	µg/m³	-		-	-	-	-
Heptane	µg/m³	-		-	-	-	-
Hexachlorobutadiene	µg/m³	-		-	-	-	-
Hexane	µg/m³	-		-	-	-	-
2-Hexanone	µg/m³	-		-	-	-	-
m,p-Xylene	µg/m³	-		-	-	-	-
Methyl Methacrylate	µg/m³	-		-	-	-	-
Methyl tert-butyl ether	µg/m³	-		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name ME317274.013 Passive Sampler 11/11/20 9:00 PSG26	ME317274.014 Passive Sampler 11/11/20 9:05 PSG27	ME317274.015 Passive Sampler 11/11/20 9:10 PSG28	ME317274.016 Passive Sampler 11/11/20 9:15 PSG29
TO-15 in Air Method: TO15 Tested: 23/11/2020 (continued)						
4-Methyl-2-pentanone	µg/m³	-	-	-	-	-
Naphthalene	µg/m³	-	-	-	-	-
2-Propanol	µg/m³	-	-	-	-	-
Propene	µg/m³	-	-	-	-	-
Propylbenzene	µg/m³	-	-	-	-	-
Styrene	µg/m³	-	-	-	-	-
1,1,1,2-Tetrachloroethane	µg/m³	-	-	-	-	-
1,1,2,2-Tetrachloroethane	µg/m³	-	-	-	-	-
Tetrachloroethene	µg/m³	-	-	-	-	-
Tetrahydrofuran	µg/m³	-	-	-	-	-
Toluene	µg/m³	-	-	-	-	-
1,2,4-Trichlorobenzene	µg/m³	-	-	-	-	-
1,1,1-Trichloroethane	µg/m³	-	-	-	-	-
1,1,2-Trichloroethane	µg/m³	-	-	-	-	-
Trichloroethene	µg/m³	-	-	-	-	-
1,2,4-Trimethylbenzene	µg/m³	-	-	-	-	-
1,3,5-Trimethylbenzene	µg/m³	-	-	-	-	-
2,2,4-Trimethylpentane	µg/m³	-	-	-	-	-
Vinyl Acetate	µg/m³	-	-	-	-	-
Vinyl Bromide	µg/m³	-	-	-	-	-
Vinyl Chloride	µg/m³	-	-	-	-	-
o-Xylene	µg/m³	-	-	-	-	-
Isopropanol in Sorbent Tubes Method: MA5 Tested: 20/11/2020						
Isopropanol	mg/m³	-	-	-	-	-
VOC in Waterloo Samplers MA-5.WL.LU Method: MA5 Tested: 19/11/2020						
Benzene	µg/m³	-	<3.7	<3.7	<3.7	<3.7
2-butanone (MEK)	µg/m³	-	<7.1	<7.1	<7.1	<7.1
Carbon tetrachloride	µg/m³	-	<5.8	<5.8	<5.8	<5.8
Chlorobenzene	µg/m³	-	<2.2	<2.2	<2.2	<2.2
Chloroform	µg/m³	-	<4.6	<4.6	<4.6	<4.6
1,2-Dichlorobenzene	µg/m³	-	<1.2	<1.2	<1.2	<1.2
1,3-Dichlorobenzene	µg/m³	-	<1.3	<1.3	<1.3	<1.3
1,4-Dichlorobenzene	µg/m³	-	<1.3	<1.3	<1.3	<1.3
1,1-Dichloroethane	µg/m³	-	<9.2	<9.2	<9.2	<9.2
1,2-Dichloroethane	µg/m³	-	<3.7	<3.7	<3.7	<3.7
1,1-Dichloroethene	µg/m³	-	<11	<11	<11	<11
cis-1,2-Dichloroethene	µg/m³	-	<4.7	<4.7	<4.7	<4.7
trans-1,2-Dichloroethene	µg/m³	-	<4.9	<4.9	<4.9	<4.9
Dichlorodifluoromethane	µg/m³	-	<49	<49	<49	<49
Ethylbenzene	µg/m³	-	<2	<2	<2	<2
Hexane	µg/m³	-	<4.9	<4.9	<4.9	<4.9
Naphthalene	µg/m³	-	<2.5	<2.5	<2.5	<2.5
Tetrachloroethene	µg/m³	-	<2.2	<2.2	<2.2	<2.2
Toluene	µg/m³	-	<2.5	<2.5	<2.5	<2.5
1,1,1-Trichloroethane	µg/m³	-	<7.1	<7.1	<7.1	<7.1
1,1,2-Trichloroethane	µg/m³	-	<2.8	<2.8	<2.8	<2.8
Trichloroethene	µg/m³	-	<2.8	<2.8	<2.8	<2.8
Trichlorofluoromethane	µg/m³	-	<18	<18	<18	<18
1,2,4-Trimethylbenzene	µg/m³	-	<1.4	<1.4	<1.4	<1.4
Vinyl Chloride	µg/m³	-	<18	<18	<18	<18
o-Xylene	µg/m³	-	<2	<2	<2.1	<2.1
m&p-Xylene	µg/m³	-	<2	<2	<2.1	<2.1
1,2,4-Trichlorobenzene	µg/m³	-	<2	<2	<2	<2
1,2,3-Trichlorobenzene	µg/m³	-	<1.2	<1.2	<1.2	<1.2
Haloethane	µg/m³	-	<17	<17	<17	<17

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name ME317274.013 Passive Sampler 11/11/20 9:00 PSG26	ME317274.014 Passive Sampler 11/11/20 9:05 PSG27	ME317274.015 Passive Sampler 11/11/20 9:10 PSG28	ME317274.016 Passive Sampler 11/11/20 9:15 PSG29
VOC in Waterloo Samplers MA-5.WL.LU Method: MA5 Tested: 20/11/2020						
Benzene	µg total	0.05	-	-	-	-
2-butanone (MEK)	µg total	0.05	-	-	-	-
Carbon tetrachloride	µg total	0.05	-	-	-	-
Chlorobenzene	µg total	0.05	-	-	-	-
Chloroform	µg total	0.05	-	-	-	-
1,2-Dichlorobenzene	µg total	0.05	-	-	-	-
1,3-Dichlorobenzene	µg total	0.05	-	-	-	-
1,4-Dichlorobenzene	µg total	0.05	-	-	-	-
1,1-Dichloroethane	µg total	0.05	-	-	-	-
1,2-Dichloroethane	µg total	0.05	-	-	-	-
1,1-Dichloroethene	µg total	0.05	-	-	-	-
cis-1,2-Dichloroethene	µg total	0.05	-	-	-	-
trans-1,2-Dichloroethene	µg total	0.05	-	-	-	-
Dichlorodifluoromethane	µg total	0.05	-	-	-	-
Ethylbenzene	µg total	0.05	-	-	-	-
Hexane	µg total	0.05	-	-	-	-
Naphthalene	µg total	0.05	-	-	-	-
Tetrachloroethene	µg total	0.05	-	-	-	-
Toluene	µg total	0.05	-	-	-	-
1,1,1-Trichloroethane	µg total	0.05	-	-	-	-
1,1,2-Trichloroethane	µg total	0.05	-	-	-	-
Trichloroethene	µg total	0.05	-	-	-	-
Trichlorofluoromethane	µg total	0.05	-	-	-	-
1,2,4-Trimethylbenzene	µg total	0.05	-	-	-	-
Vinyl Chloride	µg total	0.05	-	-	-	-
o-Xylene	µg total	0.05	-	-	-	-
m&p-Xylene	µg total	0.05	-	-	-	-
1,2,4-Trichlorobenzene	µg total	0.05	-	-	-	-
1,2,3-Trichlorobenzene	µg total	0.05	-	-	-	-
Haloethane	µg total	0.05	-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME317274.017 Passive Sampler 11/11/20 9:20 PSG30	ME317274.018 Passive Sampler 11/11/20 9:25 PSG31	ME317274.019 Passive Sampler 11/11/20 9:30 PSG32	ME317274.020 Passive Sampler 11/11/20 9:35 PSG33
Receipt Pressure/Vacuum of Canisters Method: TO-15 Tested: 23/11/2020							
Receipt Vacuum (inch Hg below std atmospheric	No unit	-		-	-	-	-
Receipt Pressure (PSIA)*	No unit	-		-	-	-	-
TO-15 in Air Method: TO15 Tested: 23/11/2020							
Acrolein	µg/m³	-		-	-	-	-
Acrylonitrile	µg/m³	-		-	-	-	-
tert-Amyl Methyl Ether	µg/m³	-		-	-	-	-
Benzene	µg/m³	-		-	-	-	-
Bromodichloromethane	µg/m³	-		-	-	-	-
Bromoform	µg/m³	-		-	-	-	-
Bromomethane	µg/m³	-		-	-	-	-
1,3-Butadiene	µg/m³	-		-	-	-	-
2-Butanone (Methyl Ethyl Ketone)	µg/m³	-		-	-	-	-
tert-Butyl Alcohol	µg/m³	-		-	-	-	-
n-Butylbenzene	µg/m³	-		-	-	-	-
sec-Butylbenzene	µg/m³	-		-	-	-	-
tert-Butylbenzene	µg/m³	-		-	-	-	-
Carbon Tetrachloride	µg/m³	-		-	-	-	-
Chlorobenzene	µg/m³	-		-	-	-	-
Chloroethane	µg/m³	-		-	-	-	-
Chloroform	µg/m³	-		-	-	-	-
Chloromethane	µg/m³	-		-	-	-	-
2-Chloroprene	µg/m³	-		-	-	-	-
3-Chloropropene	µg/m³	-		-	-	-	-
2-Chlorotoluene	µg/m³	-		-	-	-	-
alpha-Chlorotoluene	µg/m³	-		-	-	-	-
Cumene	µg/m³	-		-	-	-	-
Cyclohexane	µg/m³	-		-	-	-	-
o-Cymene	µg/m³	-		-	-	-	-
Dibromochloromethane	µg/m³	-		-	-	-	-
1,2-Dibromoethane (EDB)	µg/m³	-		-	-	-	-
1,2-Dichlorobenzene	µg/m³	-		-	-	-	-
1,3-Dichlorobenzene	µg/m³	-		-	-	-	-
1,4-Dichlorobenzene	µg/m³	-		-	-	-	-
1,1-Dichloroethane	µg/m³	-		-	-	-	-
1,2-Dichloroethane	µg/m³	-		-	-	-	-
1,1-Dichloroethene	µg/m³	-		-	-	-	-
cis-1,2-Dichloroethene	µg/m³	-		-	-	-	-
trans-1,2-Dichloroethene	µg/m³	-		-	-	-	-
1,2-Dichloropropane	µg/m³	-		-	-	-	-
cis-1,3-Dichloropropene	µg/m³	-		-	-	-	-
trans-1,3-Dichloropropene	µg/m³	-		-	-	-	-
Diisopropyl Ether	µg/m³	-		-	-	-	-
1,4-Dioxane	µg/m³	-		-	-	-	-
Ethyl Acetate	µg/m³	-		-	-	-	-
Ethyl Benzene	µg/m³	-		-	-	-	-
Ethyl tert-Butyl Ether	µg/m³	-		-	-	-	-
4-Ethyltoluene	µg/m³	-		-	-	-	-
Freon 11	µg/m³	-		-	-	-	-
Freon 113	µg/m³	-		-	-	-	-
Freon 114	µg/m³	-		-	-	-	-
Freon 12	µg/m³	-		-	-	-	-
Heptane	µg/m³	-		-	-	-	-
Hexachlorobutadiene	µg/m³	-		-	-	-	-
Hexane	µg/m³	-		-	-	-	-
2-Hexanone	µg/m³	-		-	-	-	-
m,p-Xylene	µg/m³	-		-	-	-	-
Methyl Methacrylate	µg/m³	-		-	-	-	-
Methyl tert-butyl ether	µg/m³	-		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME317274.017 Passive Sampler 11/11/20 9:20 PSG30	ME317274.018 Passive Sampler 11/11/20 9:25 PSG31	ME317274.019 Passive Sampler 11/11/20 9:30 PSG32	ME317274.020 Passive Sampler 11/11/20 9:35 PSG33
TO-15 in Air Method: TO15 Tested: 23/11/2020 (continued)							
4-Methyl-2-pentanone	µg/m³	-		-	-	-	-
Naphthalene	µg/m³	-		-	-	-	-
2-Propanol	µg/m³	-		-	-	-	-
Propene	µg/m³	-		-	-	-	-
Propylbenzene	µg/m³	-		-	-	-	-
Styrene	µg/m³	-		-	-	-	-
1,1,1,2-Tetrachloroethane	µg/m³	-		-	-	-	-
1,1,2,2-Tetrachloroethane	µg/m³	-		-	-	-	-
Tetrachloroethene	µg/m³	-		-	-	-	-
Tetrahydrofuran	µg/m³	-		-	-	-	-
Toluene	µg/m³	-		-	-	-	-
1,2,4-Trichlorobenzene	µg/m³	-		-	-	-	-
1,1,1-Trichloroethane	µg/m³	-		-	-	-	-
1,1,2-Trichloroethane	µg/m³	-		-	-	-	-
Trichloroethene	µg/m³	-		-	-	-	-
1,2,4-Trimethylbenzene	µg/m³	-		-	-	-	-
1,3,5-Trimethylbenzene	µg/m³	-		-	-	-	-
2,2,4-Trimethylpentane	µg/m³	-		-	-	-	-
Vinyl Acetate	µg/m³	-		-	-	-	-
Vinyl Bromide	µg/m³	-		-	-	-	-
Vinyl Chloride	µg/m³	-		-	-	-	-
o-Xylene	µg/m³	-		-	-	-	-
Isopropanol in Sorbent Tubes Method: MA5 Tested: 20/11/2020							
Isopropanol	mg/m³	-		-	-	-	-
VOC in Waterloo Samplers MA-5.WL.LU Method: MA5 Tested: 19/11/2020							
Benzene	µg/m³	-		<3.7	<3.7	<3.7	<3.7
2-butanone (MEK)	µg/m³	-		<7.1	<7.1	<7.1	<7.1
Carbon tetrachloride	µg/m³	-		<5.8	<5.8	<5.8	<5.8
Chlorobenzene	µg/m³	-		<2.2	<2.2	<2.2	<2.2
Chloroform	µg/m³	-		<4.6	<4.6	<4.6	<4.6
1,2-Dichlorobenzene	µg/m³	-		<1.2	<1.2	<1.2	<1.2
1,3-Dichlorobenzene	µg/m³	-		<1.3	<1.3	<1.3	<1.3
1,4-Dichlorobenzene	µg/m³	-		<1.3	<1.3	<1.3	<1.3
1,1-Dichloroethane	µg/m³	-		<9.2	<9.2	<9.2	<9.2
1,2-Dichloroethane	µg/m³	-		<3.7	<3.7	<3.7	<3.7
1,1-Dichloroethene	µg/m³	-		<11	<11	<11	<11
cis-1,2-Dichloroethene	µg/m³	-		<4.7	<4.7	<4.7	<4.7
trans-1,2-Dichloroethene	µg/m³	-		<4.9	<4.9	<4.9	<4.9
Dichlorodifluoromethane	µg/m³	-		<49	<49	<49	<49
Ethylbenzene	µg/m³	-		<2	<2	<2	<2
Hexane	µg/m³	-		<4.9	<4.9	<4.9	<4.9
Naphthalene	µg/m³	-		<2.5	<2.5	<2.5	<2.5
Tetrachloroethene	µg/m³	-		<2.2	<2.2	<2.2	<2.2
Toluene	µg/m³	-		<2.5	<2.5	<2.5	<2.5
1,1,1-Trichloroethane	µg/m³	-		<7.1	<7.1	<7.1	<7.1
1,1,2-Trichloroethane	µg/m³	-		<2.8	<2.8	<2.8	<2.8
Trichloroethene	µg/m³	-		<2.8	<2.8	<2.8	<2.8
Trichlorofluoromethane	µg/m³	-		<18	<18	<18	<18
1,2,4-Trimethylbenzene	µg/m³	-		<1.4	<1.4	<1.4	<1.4
Vinyl Chloride	µg/m³	-		<18	<18	<18	<18
o-Xylene	µg/m³	-		<2.1	<2.1	<2.1	<2.1
m&p-Xylene	µg/m³	-		<2.1	<2.1	<2.1	<2.1
1,2,4-Trichlorobenzene	µg/m³	-		<2	<2	<2	<2
1,2,3-Trichlorobenzene	µg/m³	-		<1.2	<1.2	<1.2	<1.2
Haloethane	µg/m³	-		<17	<17	<17	<17

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME317274.017 Passive Sampler 11/11/20 9:20 PSG30	ME317274.018 Passive Sampler 11/11/20 9:25 PSG31	ME317274.019 Passive Sampler 11/11/20 9:30 PSG32	ME317274.020 Passive Sampler 11/11/20 9:35 PSG33
VOC in Waterloo Samplers MA-5.WL.LU Method: MA5 Tested: 20/11/2020							
Benzene	µg total	0.05		-	-	-	-
2-butanone (MEK)	µg total	0.05		-	-	-	-
Carbon tetrachloride	µg total	0.05		-	-	-	-
Chlorobenzene	µg total	0.05		-	-	-	-
Chloroform	µg total	0.05		-	-	-	-
1,2-Dichlorobenzene	µg total	0.05		-	-	-	-
1,3-Dichlorobenzene	µg total	0.05		-	-	-	-
1,4-Dichlorobenzene	µg total	0.05		-	-	-	-
1,1-Dichloroethane	µg total	0.05		-	-	-	-
1,2-Dichloroethane	µg total	0.05		-	-	-	-
1,1-Dichloroethene	µg total	0.05		-	-	-	-
cis-1,2-Dichloroethene	µg total	0.05		-	-	-	-
trans-1,2-Dichloroethene	µg total	0.05		-	-	-	-
Dichlorodifluoromethane	µg total	0.05		-	-	-	-
Ethylbenzene	µg total	0.05		-	-	-	-
Hexane	µg total	0.05		-	-	-	-
Naphthalene	µg total	0.05		-	-	-	-
Tetrachloroethene	µg total	0.05		-	-	-	-
Toluene	µg total	0.05		-	-	-	-
1,1,1-Trichloroethane	µg total	0.05		-	-	-	-
1,1,2-Trichloroethane	µg total	0.05		-	-	-	-
Trichloroethene	µg total	0.05		-	-	-	-
Trichlorofluoromethane	µg total	0.05		-	-	-	-
1,2,4-Trimethylbenzene	µg total	0.05		-	-	-	-
Vinyl Chloride	µg total	0.05		-	-	-	-
o-Xylene	µg total	0.05		-	-	-	-
m&p-Xylene	µg total	0.05		-	-	-	-
1,2,4-Trichlorobenzene	µg total	0.05		-	-	-	-
1,2,3-Trichlorobenzene	µg total	0.05		-	-	-	-
Haloethane	µg total	0.05		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME317274.021 Passive Sampler 11/11/20 9:45 PSG34	ME317274.022 Passive Sampler 11/11/20 9:47 PSG34 Field Dup	ME317274.023 Passive Sampler 11/11/20 9:50 PSG35	ME317274.024 Passive Sampler 11/11/20 9:55 PSG36
Receipt Pressure/Vacuum of Canisters Method: TO-15 Tested: 23/11/2020							
Receipt Vacuum (inch Hg below std atmospheric	No unit	-		-	-	-	-
Receipt Pressure (PSIA)*	No unit	-		-	-	-	-
TO-15 in Air Method: TO15 Tested: 23/11/2020							
Acrolein	µg/m³	-		-	-	-	-
Acrylonitrile	µg/m³	-		-	-	-	-
tert-Amyl Methyl Ether	µg/m³	-		-	-	-	-
Benzene	µg/m³	-		-	-	-	-
Bromodichloromethane	µg/m³	-		-	-	-	-
Bromoform	µg/m³	-		-	-	-	-
Bromomethane	µg/m³	-		-	-	-	-
1,3-Butadiene	µg/m³	-		-	-	-	-
2-Butanone (Methyl Ethyl Ketone)	µg/m³	-		-	-	-	-
tert-Butyl Alcohol	µg/m³	-		-	-	-	-
n-Butylbenzene	µg/m³	-		-	-	-	-
sec-Butylbenzene	µg/m³	-		-	-	-	-
tert-Butylbenzene	µg/m³	-		-	-	-	-
Carbon Tetrachloride	µg/m³	-		-	-	-	-
Chlorobenzene	µg/m³	-		-	-	-	-
Chloroethane	µg/m³	-		-	-	-	-
Chloroform	µg/m³	-		-	-	-	-
Chloromethane	µg/m³	-		-	-	-	-
2-Chloroprene	µg/m³	-		-	-	-	-
3-Chloropropene	µg/m³	-		-	-	-	-
2-Chlorotoluene	µg/m³	-		-	-	-	-
alpha-Chlorotoluene	µg/m³	-		-	-	-	-
Cumene	µg/m³	-		-	-	-	-
Cyclohexane	µg/m³	-		-	-	-	-
o-Cymene	µg/m³	-		-	-	-	-
Dibromochloromethane	µg/m³	-		-	-	-	-
1,2-Dibromoethane (EDB)	µg/m³	-		-	-	-	-
1,2-Dichlorobenzene	µg/m³	-		-	-	-	-
1,3-Dichlorobenzene	µg/m³	-		-	-	-	-
1,4-Dichlorobenzene	µg/m³	-		-	-	-	-
1,1-Dichloroethane	µg/m³	-		-	-	-	-
1,2-Dichloroethane	µg/m³	-		-	-	-	-
1,1-Dichloroethene	µg/m³	-		-	-	-	-
cis-1,2-Dichloroethene	µg/m³	-		-	-	-	-
trans-1,2-Dichloroethene	µg/m³	-		-	-	-	-
1,2-Dichloropropane	µg/m³	-		-	-	-	-
cis-1,3-Dichloropropene	µg/m³	-		-	-	-	-
trans-1,3-Dichloropropene	µg/m³	-		-	-	-	-
Diisopropyl Ether	µg/m³	-		-	-	-	-
1,4-Dioxane	µg/m³	-		-	-	-	-
Ethyl Acetate	µg/m³	-		-	-	-	-
Ethyl Benzene	µg/m³	-		-	-	-	-
Ethyl tert-Butyl Ether	µg/m³	-		-	-	-	-
4-Ethyltoluene	µg/m³	-		-	-	-	-
Freon 11	µg/m³	-		-	-	-	-
Freon 113	µg/m³	-		-	-	-	-
Freon 114	µg/m³	-		-	-	-	-
Freon 12	µg/m³	-		-	-	-	-
Heptane	µg/m³	-		-	-	-	-
Hexachlorobutadiene	µg/m³	-		-	-	-	-
Hexane	µg/m³	-		-	-	-	-
2-Hexanone	µg/m³	-		-	-	-	-
m,p-Xylene	µg/m³	-		-	-	-	-
Methyl Methacrylate	µg/m³	-		-	-	-	-
Methyl tert-butyl ether	µg/m³	-		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME317274.021 Passive Sampler 11/11/20 9:45 PSG34	ME317274.022 Passive Sampler 11/11/20 9:47 PSG34 Field Dup	ME317274.023 Passive Sampler 11/11/20 9:50 PSG35	ME317274.024 Passive Sampler 11/11/20 9:55 PSG36
TO-15 in Air Method: TO15 Tested: 23/11/2020 (continued)							
4-Methyl-2-pentanone	µg/m³	-		-	-	-	-
Naphthalene	µg/m³	-		-	-	-	-
2-Propanol	µg/m³	-		-	-	-	-
Propene	µg/m³	-		-	-	-	-
Propylbenzene	µg/m³	-		-	-	-	-
Styrene	µg/m³	-		-	-	-	-
1,1,1,2-Tetrachloroethane	µg/m³	-		-	-	-	-
1,1,2,2-Tetrachloroethane	µg/m³	-		-	-	-	-
Tetrachloroethene	µg/m³	-		-	-	-	-
Tetrahydrofuran	µg/m³	-		-	-	-	-
Toluene	µg/m³	-		-	-	-	-
1,2,4-Trichlorobenzene	µg/m³	-		-	-	-	-
1,1,1-Trichloroethane	µg/m³	-		-	-	-	-
1,1,2-Trichloroethane	µg/m³	-		-	-	-	-
Trichloroethene	µg/m³	-		-	-	-	-
1,2,4-Trimethylbenzene	µg/m³	-		-	-	-	-
1,3,5-Trimethylbenzene	µg/m³	-		-	-	-	-
2,2,4-Trimethylpentane	µg/m³	-		-	-	-	-
Vinyl Acetate	µg/m³	-		-	-	-	-
Vinyl Bromide	µg/m³	-		-	-	-	-
Vinyl Chloride	µg/m³	-		-	-	-	-
o-Xylene	µg/m³	-		-	-	-	-
Isopropanol in Sorbent Tubes Method: MA5 Tested: 20/11/2020							
Isopropanol	mg/m³	-		-	-	-	-
VOC in Waterloo Samplers MA-5.WL.LU Method: MA5 Tested: 19/11/2020							
Benzene	µg/m³	-		<3.7	<3.7	<3.7	<3.7
2-butanone (MEK)	µg/m³	-		<7.1	<7.1	<7.1	<7.1
Carbon tetrachloride	µg/m³	-		<5.8	<5.8	<5.8	<5.8
Chlorobenzene	µg/m³	-		<2.2	<2.2	<2.2	<2.2
Chloroform	µg/m³	-		<4.6	<4.6	<4.6	<4.6
1,2-Dichlorobenzene	µg/m³	-		<1.2	<1.2	<1.2	<1.2
1,3-Dichlorobenzene	µg/m³	-		<1.3	<1.3	<1.3	<1.3
1,4-Dichlorobenzene	µg/m³	-		<1.3	<1.3	<1.3	<1.3
1,1-Dichloroethane	µg/m³	-		<9.2	<9.2	<9.2	<9.2
1,2-Dichloroethane	µg/m³	-		<3.7	<3.7	<3.7	<3.7
1,1-Dichloroethene	µg/m³	-		<11	<11	<11	<11
cis-1,2-Dichloroethene	µg/m³	-		<4.7	<4.7	<4.7	<4.7
trans-1,2-Dichloroethene	µg/m³	-		<4.9	<4.9	<4.9	<4.9
Dichlorodifluoromethane	µg/m³	-		<49	<49	<49	<49
Ethylbenzene	µg/m³	-		<2	<2	<2	<2
Hexane	µg/m³	-		<4.9	<4.9	<4.9	<4.9
Naphthalene	µg/m³	-		<2.5	<2.5	<2.5	<2.5
Tetrachloroethene	µg/m³	-		**4.5**	**81**	**130**	**25**
Toluene	µg/m³	-		<2.5	<2.5	<2.5	<2.5
1,1,1-Trichloroethane	µg/m³	-		<7.1	<7.1	<7.1	<7.1
1,1,2-Trichloroethane	µg/m³	-		<2.8	<2.8	<2.8	<2.8
Trichloroethene	µg/m³	-		<2.8	<2.8	<2.8	<2.8
Trichlorofluoromethane	µg/m³	-		<18	<18	<18	<18
1,2,4-Trimethylbenzene	µg/m³	-		<1.4	<1.4	<1.4	<1.4
Vinyl Chloride	µg/m³	-		<18	<18	<18	<18
o-Xylene	µg/m³	-		<2.1	<2.1	<2.1	<2.1
m&p-Xylene	µg/m³	-		<2.1	<2.1	<2.1	<2.1
1,2,4-Trichlorobenzene	µg/m³	-		<2	<2	<2	<2
1,2,3-Trichlorobenzene	µg/m³	-		<1.2	<1.2	<1.2	<1.2
Haloethane	µg/m³	-		<17	<17	<17	<17

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME317274.021 Passive Sampler 11/11/20 9:45 PSG34	ME317274.022 Passive Sampler 11/11/20 9:47 PSG34 Field Dup	ME317274.023 Passive Sampler 11/11/20 9:50 PSG35	ME317274.024 Passive Sampler 11/11/20 9:55 PSG36
VOC in Waterloo Samplers MA-5.WL.LU Method: MA5 Tested: 20/11/2020							
Benzene	µg total	0.05		-	-	-	-
2-butanone (MEK)	µg total	0.05		-	-	-	-
Carbon tetrachloride	µg total	0.05		-	-	-	-
Chlorobenzene	µg total	0.05		-	-	-	-
Chloroform	µg total	0.05		-	-	-	-
1,2-Dichlorobenzene	µg total	0.05		-	-	-	-
1,3-Dichlorobenzene	µg total	0.05		-	-	-	-
1,4-Dichlorobenzene	µg total	0.05		-	-	-	-
1,1-Dichloroethane	µg total	0.05		-	-	-	-
1,2-Dichloroethane	µg total	0.05		-	-	-	-
1,1-Dichloroethene	µg total	0.05		-	-	-	-
cis-1,2-Dichloroethene	µg total	0.05		-	-	-	-
trans-1,2-Dichloroethene	µg total	0.05		-	-	-	-
Dichlorodifluoromethane	µg total	0.05		-	-	-	-
Ethylbenzene	µg total	0.05		-	-	-	-
Hexane	µg total	0.05		-	-	-	-
Naphthalene	µg total	0.05		-	-	-	-
Tetrachloroethene	µg total	0.05		-	-	-	-
Toluene	µg total	0.05		-	-	-	-
1,1,1-Trichloroethane	µg total	0.05		-	-	-	-
1,1,2-Trichloroethane	µg total	0.05		-	-	-	-
Trichloroethene	µg total	0.05		-	-	-	-
Trichlorofluoromethane	µg total	0.05		-	-	-	-
1,2,4-Trimethylbenzene	µg total	0.05		-	-	-	-
Vinyl Chloride	µg total	0.05		-	-	-	-
o-Xylene	µg total	0.05		-	-	-	-
m&p-Xylene	µg total	0.05		-	-	-	-
1,2,4-Trichlorobenzene	µg total	0.05		-	-	-	-
1,2,3-Trichlorobenzene	µg total	0.05		-	-	-	-
Haloethane	µg total	0.05		-	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name	ME317274.025 Passive Sampler 11/11/20 10:00 PSG37	ME317274.026 Passive Sampler Field Blank
Receipt Pressure/Vacuum of Canisters Method: TO-15 Tested: 23/11/2020					
Receipt Vacuum (inch Hg below std atmospheric	No unit	-		-	-
Receipt Pressure (PSIA)*	No unit	-		-	-
TO-15 in Air Method: TO15 Tested: 23/11/2020					
Acrolein	µg/m³	-		-	-
Acrylonitrile	µg/m³	-		-	-
tert-Amyl Methyl Ether	µg/m³	-		-	-
Benzene	µg/m³	-		-	-
Bromodichloromethane	µg/m³	-		-	-
Bromoform	µg/m³	-		-	-
Bromomethane	µg/m³	-		-	-
1,3-Butadiene	µg/m³	-		-	-
2-Butanone (Methyl Ethyl Ketone)	µg/m³	-		-	-
tert-Butyl Alcohol	µg/m³	-		-	-
n-Butylbenzene	µg/m³	-		-	-
sec-Butylbenzene	µg/m³	-		-	-
tert-Butylbenzene	µg/m³	-		-	-
Carbon Tetrachloride	µg/m³	-		-	-
Chlorobenzene	µg/m³	-		-	-
Chloroethane	µg/m³	-		-	-
Chloroform	µg/m³	-		-	-
Chloromethane	µg/m³	-		-	-
2-Chloroprene	µg/m³	-		-	-
3-Chloropropene	µg/m³	-		-	-
2-Chlorotoluene	µg/m³	-		-	-
alpha-Chlorotoluene	µg/m³	-		-	-
Cumene	µg/m³	-		-	-
Cyclohexane	µg/m³	-		-	-
o-Cymene	µg/m³	-		-	-
Dibromochloromethane	µg/m³	-		-	-
1,2-Dibromoethane (EDB)	µg/m³	-		-	-
1,2-Dichlorobenzene	µg/m³	-		-	-
1,3-Dichlorobenzene	µg/m³	-		-	-
1,4-Dichlorobenzene	µg/m³	-		-	-
1,1-Dichloroethane	µg/m³	-		-	-
1,2-Dichloroethane	µg/m³	-		-	-
1,1-Dichloroethene	µg/m³	-		-	-
cis-1,2-Dichloroethene	µg/m³	-		-	-
trans-1,2-Dichloroethene	µg/m³	-		-	-
1,2-Dichloropropane	µg/m³	-		-	-
cis-1,3-Dichloropropene	µg/m³	-		-	-
trans-1,3-Dichloropropene	µg/m³	-		-	-
Diisopropyl Ether	µg/m³	-		-	-
1,4-Dioxane	µg/m³	-		-	-
Ethyl Acetate	µg/m³	-		-	-
Ethyl Benzene	µg/m³	-		-	-
Ethyl tert-Butyl Ether	µg/m³	-		-	-
4-Ethyltoluene	µg/m³	-		-	-
Freon 11	µg/m³	-		-	-
Freon 113	µg/m³	-		-	-
Freon 114	µg/m³	-		-	-
Freon 12	µg/m³	-		-	-
Heptane	µg/m³	-		-	-
Hexachlorobutadiene	µg/m³	-		-	-
Hexane	µg/m³	-		-	-
2-Hexanone	µg/m³	-		-	-
m,p-Xylene	µg/m³	-		-	-
Methyl Methacrylate	µg/m³	-		-	-
Methyl tert-butyl ether	µg/m³	-		-	-

Parameter	Units	Sample Number Sample Matrix Sample Name LOR	ME317274.025 Passive Sampler 11/11/20 10:00 PSG37	ME317274.026 Passive Sampler Field Blank
TO-15 in Air Method: TO15 Tested: 23/11/2020 (continued)				
4-Methyl-2-pentanone	µg/m³	-	-	-
Naphthalene	µg/m³	-	-	-
2-Propanol	µg/m³	-	-	-
Propene	µg/m³	-	-	-
Propylbenzene	µg/m³	-	-	-
Styrene	µg/m³	-	-	-
1,1,1,2-Tetrachloroethane	µg/m³	-	-	-
1,1,2,2-Tetrachloroethane	µg/m³	-	-	-
Tetrachloroethene	µg/m³	-	-	-
Tetrahydrofuran	µg/m³	-	-	-
Toluene	µg/m³	-	-	-
1,2,4-Trichlorobenzene	µg/m³	-	-	-
1,1,1-Trichloroethane	µg/m³	-	-	-
1,1,2-Trichloroethane	µg/m³	-	-	-
Trichloroethene	µg/m³	-	-	-
1,2,4-Trimethylbenzene	µg/m³	-	-	-
1,3,5-Trimethylbenzene	µg/m³	-	-	-
2,2,4-Trimethylpentane	µg/m³	-	-	-
Vinyl Acetate	µg/m³	-	-	-
Vinyl Bromide	µg/m³	-	-	-
Vinyl Chloride	µg/m³	-	-	-
o-Xylene	µg/m³	-	-	-

Parameter	Units	LOR	Sample Number Sample Matrix Sample Date Sample Name ME317274.025 Passive Sampler 11/11/20 10:00 PSG37	ME317274.026 Passive Sampler Field Blank
Isopropanol in Sorbent Tubes Method: MA5 Tested: 20/11/2020				
Isopropanol	mg/m³	-	-	-
VOC in Waterloo Samplers MA-5.WL.LU Method: MA5 Tested: 19/11/2020				
Benzene	µg/m³	-	<3.7	-
2-butanone (MEK)	µg/m³	-	<7.1	-
Carbon tetrachloride	µg/m³	-	<5.8	-
Chlorobenzene	µg/m³	-	<2.2	-
Chloroform	µg/m³	-	<4.6	-
1,2-Dichlorobenzene	µg/m³	-	<1.2	-
1,3-Dichlorobenzene	µg/m³	-	<1.3	-
1,4-Dichlorobenzene	µg/m³	-	<1.3	-
1,1-Dichloroethane	µg/m³	-	<9.2	-
1,2-Dichloroethane	µg/m³	-	<3.7	-
1,1-Dichloroethene	µg/m³	-	<11	-
cis-1,2-Dichloroethene	µg/m³	-	<4.7	-
trans-1,2-Dichloroethene	µg/m³	-	<4.9	-
Dichlorodifluoromethane	µg/m³	-	<49	-
Ethylbenzene	µg/m³	-	<2	-
Hexane	µg/m³	-	<4.9	-
Naphthalene	µg/m³	-	<2.5	-
Tetrachloroethene	µg/m³	-	**16**	-
Toluene	µg/m³	-	<2.5	-
1,1,1-Trichloroethane	µg/m³	-	<7.1	-
1,1,2-Trichloroethane	µg/m³	-	<2.8	-
Trichloroethene	µg/m³	-	<2.8	-
Trichlorofluoromethane	µg/m³	-	<18	-
1,2,4-Trimethylbenzene	µg/m³	-	<1.4	-
Vinyl Chloride	µg/m³	-	<18	-
o-Xylene	µg/m³	-	<2.1	-
m&p-Xylene	µg/m³	-	<2.1	-
1,2,4-Trichlorobenzene	µg/m³	-	<2	-
1,2,3-Trichlorobenzene	µg/m³	-	<1.2	-
Haloethane	µg/m³	-	<17	-
VOC in Waterloo Samplers MA-5.WL.LU Method: MA5 Tested: 20/11/2020				
Benzene	µg total	0.05	-	<0.05
2-butanone (MEK)	µg total	0.05	-	<0.05
Carbon tetrachloride	µg total	0.05	-	<0.05
Chlorobenzene	µg total	0.05	-	<0.05
Chloroform	µg total	0.05	-	<0.05
1,2-Dichlorobenzene	µg total	0.05	-	<0.05
1,3-Dichlorobenzene	µg total	0.05	-	<0.05
1,4-Dichlorobenzene	µg total	0.05	-	<0.05
1,1-Dichloroethane	µg total	0.05	-	<0.05
1,2-Dichloroethane	µg total	0.05	-	<0.05
1,1-Dichloroethene	µg total	0.05	-	<0.05
cis-1,2-Dichloroethene	µg total	0.05	-	<0.05
trans-1,2-Dichloroethene	µg total	0.05	-	<0.05
Dichlorodifluoromethane	µg total	0.05	-	<0.05
Ethylbenzene	µg total	0.05	-	<0.05
Hexane	µg total	0.05	-	<0.05
Naphthalene	µg total	0.05	-	<0.05
Tetrachloroethene	µg total	0.05	-	<0.05
Toluene	µg total	0.05	-	<0.05
1,1,1-Trichloroethane	µg total	0.05	-	<0.05
1,1,2-Trichloroethane	µg total	0.05	-	<0.05
Trichloroethene	µg total	0.05	-	<0.05
Trichlorofluoromethane	µg total	0.05	-	<0.05

Parameter	Units	LOR	Sample Number Sample Matrix Sample Name ME317274.025 Passive Sampler 11/11/20 10:00 PSG37	ME317274.026 Passive Sampler Field Blank
VOC in Waterloo Samplers MA-5.WL.LU Method: MA5 Tested: 19/11/2020 (continued)				
1,2,4-Trimethylbenzene	µg total	0.05	-	<0.05
Vinyl Chloride	µg total	0.05	-	<0.05
o-Xylene	µg total	0.05	-	<0.05
m&p-Xylene	µg total	0.05	-	<0.05
1,2,4-Trichlorobenzene	µg total	0.05	-	<0.05
1,2,3-Trichlorobenzene	µg total	0.05	-	<0.05
Haloethane	µg total	0.05	-	<0.05

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage.* Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

Isopropanol in Sorbent Tubes **Method: MA5**

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Isopropanol	LB037058	mg/m³	-	<10	80%

TO-15 in Air **Method: TO15**

Parameter	QC Reference	Units	LOR	MB	DUP %RPD	LCS %Recovery
Acrolein	LB036935	µg/m³	-	<7.0		NA
Acrylonitrile	LB036935	µg/m³	-	<18		76%
tert-Amyl Methyl Ether	LB036935	µg/m³	-	<6.0		NA
Benzene	LB036935	µg/m³	-	<5.0		90%
Bromodichloromethane	LB036935	µg/m³	-	<10		NA
Bromoform	LB036935	µg/m³	-	<12		NA
Bromomethane	LB036935	µg/m³	-	<9.0		NA
1,3-Butadiene	LB036935	µg/m³	-	<3.0		72%
2-Butanone (Methyl Ethyl Ketone)	LB036935	µg/m³	-	<5.0		NA
tert-Butyl Alcohol	LB036935	µg/m³	-	<5.0		NA
n-Butylbenzene	LB036935	µg/m³	-	<8.0		NA
sec-Butylbenzene	LB036935	µg/m³	-	<8.0		NA
tert-Butylbenzene	LB036935	µg/m³	-	<8.0		NA
Carbon Tetrachloride	LB036935	µg/m³	-	<10		NA
Chlorobenzene	LB036935	µg/m³	-	<6.0		NA
Chloroethane	LB036935	µg/m³	-	<6.0		NA
Chloroform	LB036935	µg/m³	-	<9.0	4%	79%
Chloromethane	LB036935	µg/m³	-	<7.0		NA
2-Chloroprene	LB036935	µg/m³	-	<11		NA
3-Chloropropene	LB036935	µg/m³	-	<7.0		NA
2-Chlorotoluene	LB036935	µg/m³	-	<9.0		NA
alpha-Chlorotoluene	LB036935	µg/m³	-	<7.0		NA
Cumene	LB036935	µg/m³	-	<8.0		NA
Cyclohexane	LB036935	µg/m³	-	<4.0		NA
o-Cymene	LB036935	µg/m³	-	<8.0		NA
Dibromochloromethane	LB036935	µg/m³	-	<12		NA
1,2-Dibromoethane (EDB)	LB036935	µg/m³	-	<12		NA
1,2-Dichlorobenzene	LB036935	µg/m³	-	<13		NA
1,3-Dichlorobenzene	LB036935	µg/m³	-	<13		NA
1,4-Dichlorobenzene	LB036935	µg/m³	-	<13		NA
1,1-Dichloroethane	LB036935	µg/m³	-	<7.0		NA
1,2-Dichloroethane	LB036935	µg/m³	-	<10		90%
1,1-Dichloroethene	LB036935	µg/m³	-	<6.0		NA
cis-1,2-Dichloroethene	LB036935	µg/m³	-	<8.0		NA
trans-1,2-Dichloroethene	LB036935	µg/m³	-	<6.0		NA
1,2-Dichloropropane	LB036935	µg/m³	-	<18		NA
cis-1,3-Dichloropropene	LB036935	µg/m³	-	<6.0		NA
trans-1,3-Dichloropropene	LB036935	µg/m³	-	<7.0		NA
Diisopropyl Ether	LB036935	µg/m³	-	<7.0		NA
1,4-Dioxane	LB036935	µg/m³	-	<6.0		NA
Ethyl Acetate	LB036935	µg/m³	-	<8.0		NA
Ethyl Benzene	LB036935	µg/m³	-	<6.0		NA
Ethyl tert-Butyl Ether	LB036935	µg/m³	-	<5.0		NA
4-Ethyltoluene	LB036935	µg/m³	-	<6.0		NA
Freon 11	LB036935	µg/m³	-	<3.0		NA
Freon 113	LB036935	µg/m³	-	<10		NA
Freon 114	LB036935	µg/m³	-	<3.0		NA
Freon 12	LB036935	µg/m³	-	<4.0		NA
Heptane	LB036935	µg/m³	-	<7.0		NA
Hexachlorobutadiene	LB036935	µg/m³	-	<20		NA
Hexane	LB036935	µg/m³	-	<6.0		NA

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage.* Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

TO-15 in Air **Method: TO15 (continued)**

				MB	DUP %RPD	LCS %Recovery
2-Hexanone	LB036935	µg/m³	-	<6.0		NA
m,p-Xylene	LB036935	µg/m³	-	<13		NA
Methyl Methacrylate	LB036935	µg/m³	-	<7.0		NA
Methyl tert-butyl ether	LB036935	µg/m³	-	<6.0		NA
4-Methyl-2-pentanone	LB036935	µg/m³	-	<6.0		NA
Naphthalene	LB036935	µg/m³	-	<21		NA
2-Propanol	LB036935	µg/m³	-	<100		NA
Propene	LB036935	µg/m³	-	<10		NA
Propylbenzene	LB036935	µg/m³	-	<7.0		NA
Styrene	LB036935	µg/m³	-	<6.0		NA
1,1,1,2-Tetrachloroethane	LB036935	µg/m³	-	<10		NA
1,1,2,2-Tetrachloroethane	LB036935	µg/m³	-	<7.0		NA
Tetrachloroethene	LB036935	µg/m³	-	<11	4%	77%
Tetrahydrofuran	LB036935	µg/m³	-	<4.0		NA
Toluene	LB036935	µg/m³	-	<6.0	5%	NA
1,2,4-Trichlorobenzene	LB036935	µg/m³	-	<36		NA
1,1,1-Trichloroethane	LB036935	µg/m³	-	<8.0		NA
1,1,2-Trichloroethane	LB036935	µg/m³	-	<8.0		NA
Trichloroethene	LB036935	µg/m³	-	<9.0	2%	79%
1,2,4-Trimethylbenzene	LB036935	µg/m³	-	<8.0		NA
1,3,5-Trimethylbenzene	LB036935	µg/m³	-	<6.0		NA
2,2,4-Trimethylpentane	LB036935	µg/m³	-	<9.0		NA
Vinyl Acetate	LB036935	µg/m³	-	<7.0		NA
Vinyl Bromide	LB036935	µg/m³	-	<8.0		NA
Vinyl Chloride	LB036935	µg/m³	-	<4.0		113%
o-Xylene	LB036935	µg/m³	-	<6.0		NA

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage.* Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

VOC in Waterloo Samplers MA-5.WL.LU Method: MA5

Parameter	QC Reference	Units	LOR	MB	LCS %Recovery
Benzene	LB037056	µg total	0.05	<0.05	88%
2-butanone (MEK)	LB037056	µg total	0.05	<0.05	NA
Carbon tetrachloride	LB037056	µg total	0.05	<0.05	NA
Chlorobenzene	LB037056	µg total	0.05	<0.05	93%
Chloroform	LB037056	µg total	0.05	<0.05	NA
1,2-Dichlorobenzene	LB037056	µg total	0.05	<0.05	87%
1,3-Dichlorobenzene	LB037056	µg total	0.05	<0.05	89%
1,4-Dichlorobenzene	LB037056	µg total	0.05	<0.05	90%
1,1-Dichloroethane	LB037056	µg total	0.05	<0.05	NA
1,2-Dichloroethane	LB037056	µg total	0.05	<0.05	NA
1,1-Dichloroethene	LB037056	µg total	0.05	<0.05	NA
cis-1,2-Dichloroethene	LB037056	µg total	0.05	<0.05	NA
trans-1,2-Dichloroethene	LB037056	µg total	0.05	<0.05	NA
Dichlorodifluoromethane	LB037056	µg total	0.05	<0.05	NA
Ethylbenzene	LB037056	µg total	0.05	<0.05	91%
Hexane	LB037056	µg total	0.05	<0.05	NA
Naphthalene	LB037056	µg total	0.05	<0.05	NA
Tetrachloroethene	LB037056	µg total	0.05	<0.05	NA
Toluene	LB037056	µg total	0.05	<0.05	91%
1,1,1-Trichloroethane	LB037056	µg total	0.05	<0.05	NA
1,1,2-Trichloroethane	LB037056	µg total	0.05	<0.05	NA
Trichloroethene	LB037056	µg total	0.05	<0.05	NA
Trichlorofluoromethane	LB037056	µg total	0.05	<0.05	NA
1,2,4-Trimethylbenzene	LB037056	µg total	0.05	<0.05	NA
Vinyl Chloride	LB037056	µg total	0.05	<0.05	NA
o-Xylene	LB037056	µg total	0.05	<0.05	90%
m&p-Xylene	LB037056	µg total	0.05	<0.05	95%
1,2,4-Trichlorobenzene	LB037056	µg total	0.05	<0.05	NA
1,2,3-Trichlorobenzene	LB037056	µg total	0.05	<0.05	NA
Haloethane	LB037056	µg total	0.05	<0.05	NA
Benzene	LB037055	µg/m³	-	<1.9	89%
2-butanone (MEK)	LB037055	µg/m³	-	<3.5	NA
Carbon tetrachloride	LB037055	µg/m³	-	<2.9	NA
Chlorobenzene	LB037055	µg/m³	-	<1.1	93%
Chloroform	LB037055	µg/m³	-	<2.3	NA
1,2-Dichlorobenzene	LB037055	µg/m³	-	<0.58	87%
1,3-Dichlorobenzene	LB037055	µg/m³	-	<0.67	89%
1,4-Dichlorobenzene	LB037055	µg/m³	-	<0.65	90%
1,1-Dichloroethane	LB037055	µg/m³	-	<4.6	NA
1,2-Dichloroethane	LB037055	µg/m³	-	<1.9	NA
1,1-Dichloroethene	LB037055	µg/m³	-	<5.4	NA
cis-1,2-Dichloroethene	LB037055	µg/m³	-	<2.3	NA
trans-1,2-Dichloroethene	LB037055	µg/m³	-	<2.4	NA
Dichlorodifluoromethane	LB037055	µg/m³	-	<24	NA
Ethylbenzene	LB037055	µg/m³	-	<0.99	91%
Hexane	LB037055	µg/m³	-	<2.4	NA
Naphthalene	LB037055	µg/m³	-	<1.2	NA
Tetrachloroethene	LB037055	µg/m³	-	<1.1	NA
Toluene	LB037055	µg/m³	-	<1.3	91%
1,1,1-Trichloroethane	LB037055	µg/m³	-	<3.5	NA
1,1,2-Trichloroethane	LB037055	µg/m³	-	<1.4	NA
Trichloroethene	LB037055	µg/m³	-	<1.4	NA
Trichlorofluoromethane	LB037055	µg/m³	-	<8.9	NA
1,2,4-Trimethylbenzene	LB037055	µg/m³	-	<0.68	NA
Vinyl Chloride	LB037055	µg/m³	-	<8.9	NA
o-Xylene	LB037055	µg/m³	-	<1.0	90%

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage.* Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

VOC in Waterloo Samplers MA-5.WL.LU Method: MA5 (continued)

				MB	LCS %Recovery
m&p-Xylene	LB037055	µg/m³	-	<1.0	95%
1,2,4-Trichlorobenzene	LB037055	µg/m³	-	<0.98	NA
1,2,3-Trichlorobenzene	LB037055	µg/m³	-	<0.58	NA
Haloethane	LB037055	µg/m³	-	<8.3	NA

METHOD	METHODOLOGY SUMMARY
MA5	This method is used for the analysis of volatile organics compounds which have been sampled from air by the use of Waterloo Samplers.
MA5-ST	This method is used for the analysis of additional volatile organic compounds which have been sampled from air by the use of solvent desorption tube. Extraction of analytes is achieved by desorption in carbon disulfide which is, in turn, analysed by GC/MS using direct injection.
TO-15	"This method is intended for the analysis of Volatile Organic Compounds (VOCs) for ambient air or soil gas, sampled onto canisters and analysed by gas chromatography mass spectrometry (GCMS) coupled with the Markes sample introduction units. This method is based on the USEPA Method TO-15.
TO-15	This method involves GC-MS analysis of the air sample collected in evacuated canisters. In the lab, a portion of sample is pre-screened if from an unknown source or is suspected to be high. Once the pre-screening is complete the sample is passed onto a sorbent trap, and is desorbed to the GC where the analytes are separated, and are then passed into the MS where fragmentation of the molecules occurs, to produce mass spectra of each analyte. The data is recorded on a Total Ion Chromatogram (TIC) from which each analyte detected can be individually identified (using the Mass Spectra) and quantitated against standards.
TO15-Vacuum	Canisters returned containing samples have the receipt pressure measured using Model 4600A Dynamic Diluter.

FOOTNOTES

IS	Insufficient sample for analysis.	LOR	Limit of Reporting
LNR	Sample listed, but not received.	↑↓	Raised or Lowered Limit of Reporting
*	NATA accreditation does not cover the performance of this service.	QFH	QC result is above the upper tolerance
		QFL	QC result is below the lower tolerance
**	Indicative data, theoretical holding time exceeded.	-	The sample was not analysed for this analyte
***	Indicates that both * and ** apply.	NVL	Not Validated

Unless it is reported that sampling has been performed by SGS, the samples have been analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calcuated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC and MU criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: www.sgs.com.au/en-gb/environment-health-and-safety.

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STATEMENT OF QA/QC PERFORMANCE

ME317274 R0

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	NATIONAL ACCOUNTS PAYABLE PO BOX 176 LANE COVE NSW 1595
Telephone	[redacted]
Facsimile	
Email	
Project	**Randwick**
Order Number	**610.30041**
Samples	26

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Melbourne EH&S
Address	10/585 Blackburn Road Notting Hill Victoria 3168
Telephone	+61395743200
Facsimile	+61395743399
Email	Au.SampleReceipt.Melbourne@sgs.com
SGS Reference	**ME317274 R0**
Date Received	13 Nov 2020
Date Reported	23 Nov 2020

COMMENTS

All the laboratory data for each environmental matrix was compared to SGS' stated Data Quality Objectives (DQO). Comments arising from the comparison were made and are reported below.

The data relating to sampling was taken from the Chain of Custody document.
This QA/QC Statement must be read in conjunction with the referenced Analytical Report.
The Statement and the Analytical Report must not be reproduced except in full.

All Data Quality Objectives were met (within the SGS Melbourne EH&S laboratory).

SAMPLE SUMMARY

HOLDING TIME SUMMARY

ME317274 R0

SGS holding time criteria are drawn from current regulations and are highly dependent on sample container preservation as specified in the SGS "Field Sampling Guide for Containers and Holding Time" (ref: GU-(AU)-ENV.001). Soil samples guidelines are derived from NEPM "Schedule B(3) Guideline on Laboratory Analysis of Potentially Contaminated Soils". Water sample guidelines are derived from "AS/NZS 5667.1 : 1998 Water Quality - sampling part 1" and APHA "Standard Methods for the Examination of Water and Wastewater" 21st edition 2005.

Extraction and analysis holding time due dates listed are calculated from the date sampled, although holding times may be extended after laboratory extraction for some analytes. The due dates are the suggested dates that samples may be held before extraction or analysis and still be considered valid.

Extraction and analysis dates are shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria. If the

Isopropanol in Sorbent Tubes

Method: MA5

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
IPA Shroud	ME317274.008	LB037058	11 Nov 2020	13 Nov 2020	09 Dec 2020	19 Nov 2020	09 Dec 2020	20 Nov 2020

TO-15 in Air

Method: TO15

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
ASG01	ME317274.001	LB036935	11 Nov 2020	13 Nov 2020	25 Nov 2020	16 Nov 2020	14 Dec 2020	23 Nov 2020
ASG01 Field Dup	ME317274.002	LB036935	11 Nov 2020	13 Nov 2020	25 Nov 2020	16 Nov 2020	14 Dec 2020	23 Nov 2020
ASG02	ME317274.003	LB036935	11 Nov 2020	13 Nov 2020	25 Nov 2020	16 Nov 2020	14 Dec 2020	23 Nov 2020
ASG03	ME317274.004	LB036935	11 Nov 2020	13 Nov 2020	25 Nov 2020	16 Nov 2020	14 Dec 2020	23 Nov 2020
ASG04	ME317274.005	LB036935	11 Nov 2020	13 Nov 2020	25 Nov 2020	16 Nov 2020	14 Dec 2020	23 Nov 2020
ASG05	ME317274.006	LB036935	11 Nov 2020	13 Nov 2020	25 Nov 2020	16 Nov 2020	14 Dec 2020	23 Nov 2020
ASG06	ME317274.007	LB036935	11 Nov 2020	13 Nov 2020	25 Nov 2020	16 Nov 2020	14 Dec 2020	23 Nov 2020

VOC in Waterloo Samplers MA-5.WL.LU

Method: MA5

Sample Name	Sample No.	QC Ref	Sampled	Received	Extraction Due	Extracted	Analysis Due	Analysed
PSG24	ME317274.010	LB037055	11 Nov 2020	13 Nov 2020	25 Nov 2020	19 Nov 2020	26 Nov 2020	23 Nov 2020
PSG25	ME317274.011	LB037055	11 Nov 2020	13 Nov 2020	25 Nov 2020	19 Nov 2020	26 Nov 2020	20 Nov 2020
PSG25 Field Dup	ME317274.012	LB037055	11 Nov 2020	13 Nov 2020	25 Nov 2020	19 Nov 2020	26 Nov 2020	20 Nov 2020
PSG26	ME317274.013	LB037055	11 Nov 2020	13 Nov 2020	25 Nov 2020	19 Nov 2020	26 Nov 2020	20 Nov 2020
PSG27	ME317274.014	LB037055	11 Nov 2020	13 Nov 2020	25 Nov 2020	19 Nov 2020	26 Nov 2020	20 Nov 2020
PSG28	ME317274.015	LB037055	11 Nov 2020	13 Nov 2020	25 Nov 2020	19 Nov 2020	26 Nov 2020	20 Nov 2020
PSG29	ME317274.016	LB037055	11 Nov 2020	13 Nov 2020	25 Nov 2020	19 Nov 2020	26 Nov 2020	20 Nov 2020
PSG30	ME317274.017	LB037055	11 Nov 2020	13 Nov 2020	25 Nov 2020	19 Nov 2020	26 Nov 2020	20 Nov 2020
PSG31	ME317274.018	LB037055	11 Nov 2020	13 Nov 2020	25 Nov 2020	19 Nov 2020	26 Nov 2020	20 Nov 2020
PSG32	ME317274.019	LB037055	11 Nov 2020	13 Nov 2020	25 Nov 2020	19 Nov 2020	26 Nov 2020	20 Nov 2020
PSG33	ME317274.020	LB037055	11 Nov 2020	13 Nov 2020	25 Nov 2020	19 Nov 2020	26 Nov 2020	20 Nov 2020
PSG34	ME317274.021	LB037055	11 Nov 2020	13 Nov 2020	25 Nov 2020	19 Nov 2020	26 Nov 2020	20 Nov 2020
PSG34 Field Dup	ME317274.022	LB037055	11 Nov 2020	13 Nov 2020	25 Nov 2020	19 Nov 2020	26 Nov 2020	20 Nov 2020
PSG35	ME317274.023	LB037055	11 Nov 2020	13 Nov 2020	25 Nov 2020	19 Nov 2020	26 Nov 2020	20 Nov 2020
PSG36	ME317274.024	LB037055	11 Nov 2020	13 Nov 2020	25 Nov 2020	19 Nov 2020	26 Nov 2020	20 Nov 2020
PSG37	ME317274.025	LB037055	11 Nov 2020	13 Nov 2020	25 Nov 2020	19 Nov 2020	26 Nov 2020	20 Nov 2020
Field Blank	ME317274.026	LB037056	-	13 Nov 2020	-	19 Nov 2020	-	20 Nov 2020

Surrogate results are evaluated against upper and lower limit criteria established in the SGS QA/QC plan (Ref: MP-(AU)-[ENV]QU-022). At least two of three routine level soil sample surrogate spike recoveries for BTEX/VOC are to be within 70-130% where control charts have not been developed and within the established control limits for charted surrogates. Matrix effects may void this as an acceptance criterion. Water sample surrogate spike recoveries are to be within 40-130%. The presence of emulsions, surfactants and particulates may void this as an acceptance criterion.

Result is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No surrogates were required for this job.

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Isopropanol in Sorbent Tubes

Method: MA5

Sample Number	Parameter	Units	LOR	Result
LB037058.001	Isopropanol	mg/m³	-	<10

TO-15 in Air

Method: TO15

Sample Number	Parameter	Units	LOR	Result
LB036935.001	Acrolein	µg/m³	-	<7.0
	Acrylonitrile	µg/m³	-	<18
	tert-Amyl Methyl Ether	µg/m³	-	<6.0
	Benzene	µg/m³	-	<5.0
	Bromodichloromethane	µg/m³	-	<10
	Bromoform	µg/m³	-	<12
	Bromomethane	µg/m³	-	<9.0
	1,3-Butadiene	µg/m³	-	<3.0
	2-Butanone (Methyl Ethyl Ketone)	µg/m³	-	<5.0
	tert-Butyl Alcohol	µg/m³	-	<5.0
	n-Butylbenzene	µg/m³	-	<8.0
	sec-Butylbenzene	µg/m³	-	<8.0
	tert-Butylbenzene	µg/m³	-	<8.0
	Carbon Tetrachloride	µg/m³	-	<10
	Chlorobenzene	µg/m³	-	<6.0
	Chloroethane	µg/m³	-	<6.0
	Chloroform	µg/m³	-	<9.0
	Chloromethane	µg/m³	-	<7.0
	2-Chloroprene	µg/m³	-	<11
	3-Chloropropene	µg/m³	-	<7.0
	2-Chlorotoluene	µg/m³	-	<9.0
	alpha-Chlorotoluene	µg/m³	-	<7.0
	Cumene	µg/m³	-	<8.0
	Cyclohexane	µg/m³	-	<4.0
	o-Cymene	µg/m³	-	<8.0
	Dibromochloromethane	µg/m³	-	<12
	1,2-Dibromoethane (EDB)	µg/m³	-	<12
	1,2-Dichlorobenzene	µg/m³	-	<13
	1,3-Dichlorobenzene	µg/m³	-	<13
	1,4-Dichlorobenzene	µg/m³	-	<13
	1,1-Dichloroethane	µg/m³	-	<7.0
	1,2-Dichloroethane	µg/m³	-	<10
	1,1-Dichloroethene	µg/m³	-	<6.0
	cis-1,2-Dichloroethene	µg/m³	-	<8.0
	trans-1,2-Dichloroethene	µg/m³	-	<6.0
	1,2-Dichloropropane	µg/m³	-	<18
	cis-1,3-Dichloropropene	µg/m³	-	<6.0
	trans-1,3-Dichloropropene	µg/m³	-	<7.0
	Diisopropyl Ether	µg/m³	-	<7.0
	1,4-Dioxane	µg/m³	-	<6.0
	Ethyl Acetate	µg/m³	-	<8.0
	Ethyl Benzene	µg/m³	-	<6.0
	Ethyl tert-Butyl Ether	µg/m³	-	<5.0
	4-Ethyltoluene	µg/m³	-	<6.0
	Freon 11	µg/m³	-	<3.0
	Freon 113	µg/m³	-	<10
	Freon 114	µg/m³	-	<3.0
	Freon 12	µg/m³	-	<4.0
	Heptane	µg/m³	-	<7.0
	Hexachlorobutadiene	µg/m³	-	<20
	Hexane	µg/m³	-	<6.0
	2-Hexanone	µg/m³	-	<6.0
	m,p-Xylene	µg/m³	-	<13
	Methyl Methacrylate	µg/m³	-	<7.0
	Methyl tert-butyl ether	µg/m³	-	<6.0

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

TO-15 in Air (continued)

Method: TO15

Sample Number	Parameter	Units	LOR	Result
LB036935.001	4-Methyl-2-pentanone	µg/m³	-	<6.0
	Naphthalene	µg/m³	-	<21
	2-Propanol	µg/m³	-	<100
	Propene	µg/m³	-	<10
	Propylbenzene	µg/m³	-	<7.0
	Styrene	µg/m³	-	<6.0
	1,1,1,2-Tetrachloroethane	µg/m³	-	<10
	1,1,2,2-Tetrachloroethane	µg/m³	-	<7.0
	Tetrachloroethene	µg/m³	-	<11
	Tetrahydrofuran	µg/m³	-	<4.0
	Toluene	µg/m³	-	<6.0
	1,2,4-Trichlorobenzene	µg/m³	-	<36
	1,1,1-Trichloroethane	µg/m³	-	<8.0
	1,1,2-Trichloroethane	µg/m³	-	<8.0
	Trichloroethene	µg/m³	-	<9.0
	1,2,4-Trimethylbenzene	µg/m³	-	<8.0
	1,3,5-Trimethylbenzene	µg/m³	-	<6.0
	2,2,4-Trimethylpentane	µg/m³	-	<9.0
	Vinyl Acetate	µg/m³	-	<7.0
	Vinyl Bromide	µg/m³	-	<8.0
	Vinyl Chloride	µg/m³	-	<4.0
	o-Xylene	µg/m³	-	<6.0

VOC in Waterloo Samplers MA-5.WL.LU

Method: MA5

Sample Number	Parameter	Units	LOR	Result
LB037055.001	Benzene	µg/m³	-	<1.9
	2-butanone (MEK)	µg/m³	-	<3.5
	Carbon tetrachloride	µg/m³	-	<2.9
	Chlorobenzene	µg/m³	-	<1.1
	Chloroform	µg/m³	-	<2.3
	1,2-Dichlorobenzene	µg/m³	-	<0.58
	1,3-Dichlorobenzene	µg/m³	-	<0.67
	1,4-Dichlorobenzene	µg/m³	-	<0.65
	1,1-Dichloroethane	µg/m³	-	<4.6
	1,2-Dichloroethane	µg/m³	-	<1.9
	1,1-Dichloroethene	µg/m³	-	<5.4
	cis-1,2-Dichloroethene	µg/m³	-	<2.3
	trans-1,2-Dichloroethene	µg/m³	-	<2.4
	Dichlorodifluoromethane	µg/m³	-	<24
	Ethylbenzene	µg/m³	-	<0.99
	Hexane	µg/m³	-	<2.4
	Naphthalene	µg/m³	-	<1.2
	Tetrachloroethene	µg/m³	-	<1.1
	Toluene	µg/m³	-	<1.3
	1,1,1-Trichloroethane	µg/m³	-	<3.5
	1,1,2-Trichloroethane	µg/m³	-	<1.4
	Trichloroethene	µg/m³	-	<1.4
	Trichlorofluoromethane	µg/m³	-	<8.9
	1,2,4-Trimethylbenzene	µg/m³	-	<0.68
	Vinyl Chloride	µg/m³	-	<8.9
	o-Xylene	µg/m³	-	<1.0
	m&p-Xylene	µg/m³	-	<1.0
	1,2,4-Trichlorobenzene	µg/m³	-	<0.98
	1,2,3-Trichlorobenzene	µg/m³	-	<0.58
	Haloethane	µg/m³	-	<8.3
LB037056.001	Benzene	µg total	0.05	<0.05
	2-butanone (MEK)	µg total	0.05	<0.05
	Carbon tetrachloride	µg total	0.05	<0.05
	Chlorobenzene	µg total	0.05	<0.05
	Chloroform	µg total	0.05	<0.05
	1,2-Dichlorobenzene	µg total	0.05	<0.05

Blank results are evaluated against the limit of reporting (LOR), for the chosen method and its associated instrumentation, typically 2.5 times the statistically determined method detection limit (MDL).

Result is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

VOC in Waterloo Samplers MA-5.WL.LU (continued) **Method: MA5**

Sample Number	Parameter	Units	LOR	Result
LB037056.001	1,3-Dichlorobenzene	µg total	0.05	<0.05
	1,4-Dichlorobenzene	µg total	0.05	<0.05
	1,1-Dichloroethane	µg total	0.05	<0.05
	1,2-Dichloroethane	µg total	0.05	<0.05
	1,1-Dichloroethene	µg total	0.05	<0.05
	cis-1,2-Dichloroethene	µg total	0.05	<0.05
	trans-1,2-Dichloroethene	µg total	0.05	<0.05
	Dichlorodifluoromethane	µg total	0.05	<0.05
	Ethylbenzene	µg total	0.05	<0.05
	Hexane	µg total	0.05	<0.05
	Naphthalene	µg total	0.05	<0.05
	Tetrachloroethene	µg total	0.05	<0.05
	Toluene	µg total	0.05	<0.05
	1,1,1-Trichloroethane	µg total	0.05	<0.05
	1,1,2-Trichloroethane	µg total	0.05	<0.05
	Trichloroethene	µg total	0.05	<0.05
	Trichlorofluoromethane	µg total	0.05	<0.05
	1,2,4-Trimethylbenzene	µg total	0.05	<0.05
	Vinyl Chloride	µg total	0.05	<0.05
	o-Xylene	µg total	0.05	<0.05
	m&p-Xylene	µg total	0.05	<0.05
	1,2,4-Trichlorobenzene	µg total	0.05	<0.05
	1,2,3-Trichlorobenzene	µg total	0.05	<0.05
	Haloethane	µg total	0.05	<0.05

Duplicates are calculated as Relative Percentage Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

TO-15 in Air — **Method: TO15**

Original	Duplicate	Parameter	Units	LOR	Original	Duplicate	Criteria %	RPD %
ME317274.001	LB036935.004	Chloroform	µg/m³	-	7.1	6.8	30	4
		1,2-Dichloroethane	µg/m³	-	<5	<5.0		
		Tetrachloroethene	µg/m³	-	17	16	30	4
		Toluene	µg/m³	-	10	9.8	30	5
		1,1,2-Trichloroethane	µg/m³	-	<4	<4.0		
		Trichloroethene	µg/m³	-	1900	1800	30	2

Laboratory Control Standard (LCS) results are evaluated against an expected result, typically the concentration of analyte spiked into the control during the sample preparation stage, producing a percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA /QC plan (Ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended dagger symbol (†) when outside suggested criteria.

Isopropanol in Sorbent Tubes

Method: MA5

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB037058.002	Isopropanol	mg/m³	-	16	20	60 - 140	80

TO-15 in Air

Method: TO15

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB036935.002	Acrylonitrile	µg/m³	-	17	22	60 - 140	76
	Benzene	µg/m³	-	29	32.4	60 - 140	90
	1,3-Butadiene	µg/m³	-	16	22.4	60 - 140	72
	Chloroform	µg/m³	-	39	49.4	60 - 140	79
	1,2-Dichloroethane	µg/m³	-	37	41.1	60 - 140	90
	Tetrachloroethene	µg/m³	-	53	68.8	60 - 140	77
	Trichloroethene	µg/m³	-	43	54.5	60 - 140	79
	Vinyl Chloride	µg/m³	-	29	25.93	60 - 140	113

VOC in Waterloo Samplers MA-5.WL.LU

Method: MA5

Sample Number	Parameter	Units	LOR	Result	Expected	Criteria %	Recovery %
LB037055.002	Benzene	µg/m³	-	0.89	1	60 - 140	89
	Chlorobenzene	µg/m³	-	0.93	1	60 - 140	93
	1,2-Dichlorobenzene	µg/m³	-	0.87	1	60 - 140	87
	1,3-Dichlorobenzene	µg/m³	-	0.89	1	60 - 140	89
	1,4-Dichlorobenzene	µg/m³	-	0.90	1	60 - 140	90
	Ethylbenzene	µg/m³	-	0.91	1	60 - 140	91
	Toluene	µg/m³	-	0.91	1	60 - 140	91
	o-Xylene	µg/m³	-	0.90	1	60 - 140	90
	m&p-Xylene	µg/m³	-	1.9	2	60 - 140	95
LB037056.002	Benzene	µg total	0.05	0.88	1	60 - 140	88
	Chlorobenzene	µg total	0.05	0.93	1	60 - 140	93
	1,2-Dichlorobenzene	µg total	0.05	0.87	1	60 - 140	87
	1,3-Dichlorobenzene	µg total	0.05	0.89	1	60 - 140	89
	1,4-Dichlorobenzene	µg total	0.05	0.90	1	60 - 140	90
	Ethylbenzene	µg total	0.05	0.91	1	60 - 140	91
	Toluene	µg total	0.05	0.91	1	60 - 140	91
	o-Xylene	µg total	0.05	0.90	1	60 - 140	90
	m&p-Xylene	µg total	0.05	1.9	2	60 - 140	95

Matrix Spike (MS) results are evaluated as the percentage recovery of an expected result, typically the concentration of analyte spiked into a field sub -sample during the sample preparation stage. The original sample's result is subtracted from the sub-sample result before determining the percentage recovery. The criteria applied to the percentage recovery is established in the SGS QA/QC plan (ref: MP-(AU)-[ENV]QU-022). For more information refer to the footnotes in the concluding page of this report.

Recovery is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the end of this report for failure reasons.

No matrix spikes were required for this job.

MATRIX SPIKE DUPLICATES

ME317274 R0

Matrix spike duplicates are calculated as Relative Percent Difference (RPD) using the formula: RPD = | OriginalResult - ReplicateResult | x 100 / Mean

The original result is the analyte concentration of the matrix spike. The Duplicate result is the analyte concentration of the matrix spike duplicate.

The RPD is evaluated against the Maximum Allowable Difference (MAD) criteria and can be graphically represented by a curve calculated from the Statistical Detection Limit (SDL) and Limiting Repeatability (LR) using the formula: MAD = 100 x SDL / Mean + LR

Where the Maximum Allowable Difference evaluates to a number larger than 200 it is displayed as 200.

RPD is shown in **Green** when within suggested criteria or **Red** with an appended reason identifer when outside suggested criteria. Refer to the footnotes section at the

No matrix spike duplicates were required for this job.

Samples analysed as received.

Solid samples expressed on a dry weight basis.

QC criteria are subject to internal review according to the SGS QA/QC plan and may be provided on request or alternatively can be found here: https://www.sgs.com.au/~/media/Local/Australia/Documents/Technical Documents/MP-AU-ENV-QU-022 QA QC Plan.pdf

*	NATA accreditation does not cover the performance of this service.
**	Indicative data, theoretical holding time exceeded.
***	Indicates that both * and ** apply.
-	Sample not analysed for this analyte.
IS	Insufficient sample for analysis.
LNR	Sample listed, but not received.
LOR	Limit of reporting.
QFH	QC result is above the upper tolerance.
QFL	QC result is below the lower tolerance.
①	At least 2 of 3 surrogates are within acceptance criteria.
②	RPD failed acceptance criteria due to sample heterogeneity.
③	Results less than 5 times LOR preclude acceptance criteria for RPD.
④	Recovery failed acceptance criteria due to matrix interference.
⑤	Recovery failed acceptance criteria due to the presence of significant concentration of analyte (i.e. the concentration of analyte exceeds the spike level).
⑥	LOR was raised due to sample matrix interference.
⑦	LOR was raised due to dilution of significantly high concentration of analyte in sample.
⑧	Reanalysis of sample in duplicate confirmed sample heterogeneity and inconsistency of results.
⑨	Recovery failed acceptance criteria due to sample heterogeneity.
⑩	LOR was raised due to high conductivity of the sample (required dilution).
†	Refer to relevant report comments for further information.

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SGS

TO-15 Canister Chain of Custody Record

Dispatch samples to: Unit 10/585 Blackburn Road, Notting Hill, Victoria 3168, Australia

Attn: Sample Reception - Contact Ph: +613 9574 3311
Email: au.samplereceipt.melbourne@sgs.com

CLIENT NAME: SLR
CLIENT ADDRESS: SYDNEY
ABN:
CONTACT: [redacted]
SAMPLED BY: [redacted]
PROJECT REF: RANDWICK

CONTACT PHONE No: [redacted]
CONTACT FAX No:
RESULTS REQUIRED BY:
EMAIL ADDRESS [redacted]@slrconsulting.com
LAB QUOTE NUMBER:
PURCHASE ORDER NUMBER:

PAGE 1 OF 1

Client Sample ID (Field Location)	Canister #	Back up Carbon Tube #	Soil Gas Train/ Mass Flow Controller #	Purge Volume	Leak Test Passed	PID	Vacuum	Carbon Tube Sample Volume	Date of Collection	Collection Time: Time on	Collection Time: Time Off	Canister Pressure/Vacuum: Inital	Canister Pressure/Vacuum: Final	Analysis Requested: TO-15	HOLD	IPA		
ASG01	1064	520059	0091	300mL	✓	-	0"Hg	500mL	11-11-20	1049	1056	-30"Hg	-4"Hg	x				
ASG01_DUP	1102	520060	0073	300mL	✓	-	-2"Hg	500mL		1056	1102	-29"Hg	-4"Hg	x				
ASG02	3701	520063	0077	300mL	✓	-	0"Hg	500mL		1114	1119	-26"Hg	-4"Hg	x				
ASG03	1070	~~0090~~ 520058	0090	300mL	✓	-	0"Hg	500mL		1131	1138	-30"Hg	-4"Hg	x				
ASG04	3721	520054	0052	300mL	✓	-	0"Hg	500mL		1149	1155	-30"Hg	-4"Hg	x				
ASG05	1122	520052	0012	100mL	✓	-	0"Hg	500mL		1213	1219	-30"Hg	-4"Hg	x				
ASG06	1023	520056	0016	100mL	✓	-	0"Hg	500mL		1228	1234	-30"Hg	-4"Hg	x				
TRIP BLANK	-	520095	-	-	-	-	-	-		-	-	-	-		x			
SHROUD	-	520051	-	-	-	-	-	50mL		-	-	-	-			x		

RELEASED BY: (Name) [redacted] (Signature) [redacted] (Date / Time) 11-11-20 1400

RECEIVED BY: (Name) [redacted] (Signature) (Date / Time) 9:35am

Notes:

SGS Melbourne EHS
ME317274 COC
Received: 13 – Nov – 2020

Passive Sample Collection

Unit 10 /585 Blackburn Road,
Notting Hill VIC 3168
Ph: (03) 9574 3311
au.samplereceipt.melbourne@sgs.com

SGS

Project Manager: [redacted]
Sampled by: (Print and Sign) [redacted]
Company SLR
Address Sydney
City [redacted] State Post Code
Phone [redacted]
ABN:

Email address: [redacted]@slrconsulting.com

Project Info
Purchase Order Number:
Suburb & State:
Project Number:
Project Name:

Turn Around Time
Normal: ✓
Rapid: —
(surcharges apply)
Specify: — (days)

Lab ID	Field Sample I.D. (Location)	Sampler I.D (WMS Code)	Date of Deployment	Time of Deployment	Date of Retrieval	Time of Retrieval	Analysis Required	Indoor Air	Outdoor Air	Workplace Monitoring	Other (Soil Vapour)
	PSG24	AN-LH-20-700	28-10-20	0925	11-11-20	0845	VOC				X
	PSG25	AN-LH-20-717	↓	0835	↓	0850	↓				X
	PSG25-DUP	AN-LH-20-710		0845		0853					X
	PSG26	AN-LH-20-711		0855		0900					X
	PSG27	AN-LH-20-715		0905		0905					X
	PSG28	AN-LH-20-718		0925		0910					X
	PSG29	AN-LH-20-713		0935		0915					X
	PSG30	AN-LH-20-716		1005		0920					X
	PSG 31	AN-LH-20-712		1015		0925					X
	PSG 32	AN-LH-20-714		1025		0930					X
	PSG 33	AN-LH-20-719	↓	1035	↓	0935	↓				X

Relinquished By: Name, Signature, Date/Time	Received by: Name, Signature, Date/Time	Air Temp and Weather Description:
[redacted] 11-11-20 / 1400	[redacted] 16/11/20 9:40am	
Relinquished By: Name, Signature, Date/Time	Received by: Name, Signature, Date/Time	Notes:
Relinquished By: Name, Signature, Date/Time	Received by: Name, Signature, Date/Time	

Passive Sample Collection

Unit 10 /585 Blackburn Road,
Notting Hill VIC 3168
Ph: (03) 9574 3311
au.samplereceipt.melbourne@sgs.com

SGS

Project Manager: [redacted]
Sampled by: (Print and Sign) [redacted]
Company SLR
Address Sydney
City _____ State _____ Post Code _____
Phone: [redacted]
ABN: _____

Email address: [redacted]@slrconsulting.com

Project Info
Purchase Order Number: _____
Suburb & State: _____
Project Number: _____
Project Name: _____

Turn Around Time
Normal: ✓
Rapid: –
(surcharges apply)
Specify: – (days)

Lab ID	Field Sample I.D. (Location)	Sampler I.D (WMS Code)	Date of Deployment	Time of Deployment	Date of Retrieval	Time of Retrieval	Analysis Required	Indoor Air	Outdoor Air	Workplace Monitoring	Other (Soil Vapour)
	PSA34	AN-LH-20-707	28-10-20	1055	11-11-20	0945	VOC				X
	PSA34_DUP	AN-LH-20-709	↓	1105	↓	0947	↓				X
	PSA35	AN-LH-20-708	↓	1115	↓	0950	↓				X
	PSA36	AN-LH-20-706	↓	1125	↓	0955	↓				X
	PSA37	AN-LH-20-701	↓	1135	↓	1000	↓				X
	TRIP BLANK	AN-LH20-705	–	–	–	–	X				X

Relinquished By: Name, Signature, Date/Time	Received by: Name, Signature, Date/Time	Air Temp and Weather Description:
[redacted] 11-11-20 / 1400	[redacted] 16/11/20 9:40	
Relinquished By: Name, Signature, Date/Time	Received by: Name, Signature, Date/Time	Notes:
Relinquished By: Name, Signature, Date/Time	Received by: Name, Signature, Date/Time	

SAMPLE RECEIPT ADVICE

ME317274

CLIENT DETAILS

Contact	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD
Address	NATIONAL ACCOUNTS PAYABLE PO BOX 176 LANE COVE NSW 1595
Telephone	[redacted]
Facsimile	
Email	
Project	**Randwick**
Order Number	**610.30041**
Samples	26

LABORATORY DETAILS

Manager	[redacted]
Laboratory	SGS Melbourne EH&S
Address	10/585 Blackburn Road Notting Hill Victoria 3168
Telephone	+61395743200
Facsimile	+61395743399
Email	Au.SampleReceipt.Melbourne@sgs.com
Samples Received	Fri 13/11/2020
Report Due	Mon 23/11/2020
SGS Reference	**ME317274**

SUBMISSION DETAILS

This is to confirm that 26 samples were received on Friday 13/ 11/2020. Results are expected to be ready by COB Monday 23/ 11/2020. Please quote SGS reference ME317274 when making enquiries. Refer below for details relating to sample integrity upon receipt.

Samples clearly labelled	Yes	Complete documentation received	Yes
Sample container provider	SGS	Sample cooling method	Ice Bricks
Samples received in correct containers	Yes	Sample counts by matrix	
Date documentation received		Type of documentation received	COC
Number of eskies/boxes received		Samples received in good order	Yes
Samples received without headspace	Yes	Sample temperature upon receipt	
Sufficient sample for analysis	Yes	Turnaround time requested	Standard

Unless otherwise instructed, water and bulk samples will be held for one month from date of report, and soil samples will be held for two months.

COMMENTS

Canisters received 13/11. WMS Received 16/11 due to delay in transit.

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SAMPLE RECEIPT ADVICE

ME317274

CLIENT DETAILS

Client SLR CONSULTING AUSTRALIA PTY LTD

Project Randwick

SUMMARY OF ANALYSIS

No.	Sample ID	Isopropanol in Sorbent Tubes	Receipt Pressure/Vacuum of Canisters	TO-15 in Air	VOC in Waterloo Samplers MA-5.WL.LU
001	ASG01	-	2	77	-
002	ASG01 Field Dup	-	2	77	-
003	ASG02	-	2	77	-
004	ASG03	-	2	77	-
005	ASG04	-	2	77	-
006	ASG05	-	2	77	-
007	ASG06	-	2	77	-
008	IPA Shroud	1	-	-	-
010	PSG24	-	-	-	30
011	PSG25	-	-	-	30
012	PSG25 Field Dup	-	-	-	30
013	PSG26	-	-	-	30
014	PSG27	-	-	-	30
015	PSG28	-	-	-	30
016	PSG29	-	-	-	30
017	PSG30	-	-	-	30
018	PSG31	-	-	-	30
019	PSG32	-	-	-	30
020	PSG33	-	-	-	30
021	PSG34	-	-	-	30
022	PSG34 Field Dup	-	-	-	30
023	PSG35	-	-	-	30
024	PSG36	-	-	-	30

CONTINUED OVERLEAF

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

SAMPLE RECEIPT ADVICE

ME317274

CLIENT DETAILS

Client SLR CONSULTING AUSTRALIA PTY LTD

Project Randwick

SUMMARY OF ANALYSIS

No.	Sample ID	VOC in Waterloo Samplers MA-5.WL.LU
025	PSG37	30
026	Field Blank	30

The above table represents SGS' interpretation of the client-supplied Chain Of Custody document.
The numbers shown in the table indicate the number of results requested in each package.
Please indicate as soon as possible should your request differ from these details .
Testing as per this table shall commence immediately unless the client intervenes with a correction .

CERTIFICATE OF CLEANLINESS

Accreditation No. 2562

CLIENT DETAILS		LABORATORY DETAILS	
Contact	[redacted]	Manager	[redacted]
Client	SLR CONSULTING AUSTRALIA PTY LTD	Laboratory	SGS Melbourne EH&S
Address	NATIONAL ACCOUNTS PAYABLE PO BOX 176 LANE COVE NSW 1595	Address	10/585 Blackburn Road Notting Hill Victoria 3168
Telephone	[redacted]	Telephone	+61395743200
Facsimile		Facsimile	+61395743399
Email		Email	Au.SampleReceipt.Melbourne@sgs.com
Project	[redacted] - SLR Supplies	SGS Reference	**ME317274S R0**
Order Number	(Not specified)	Date Received	06 Nov 2020
Samples	10	Date Reported	09 Nov 2020

COMMENTS

Accredited for compliance with ISO/IEC 17025 - Testing. NATA accredited laboratory 2562(14420).

SIGNATORIES

Parameter	Units	LOR	Sample Number Sample Depth Sample Name ME317274S.001 200929K SC1023	ME317274S.002 201027C SC4240	ME317274S.003 201027C SC3701	ME317274S.004 201027C SC1122
TO-15 in Air TO-15 Certification Method: TO15_CERT Tested: 6/11/2020						
Acetone	µg/m³	20	<20	<20	<20	<20
Acetonitrile	µg/m³	20	<20	<20	<20	<20
Acrolein	µg/m³	1.4	<1.4	<1.4	<1.4	<1.4
Acrylonitrile	µg/m³	3.6	<3.6	<3.6	<3.6	<3.6
tert-Amyl Methyl Ether	µg/m³	1.2	<1.2	<1.2	<1.2	<1.2
Benzene	µg/m³	1	<1	<1	<1	<1
Bromodichloromethane	µg/m³	2	<2	<2	<2	<2
Bromoform	µg/m³	2.4	<2.4	<2.4	<2.4	<2.4
Bromomethane	µg/m³	1.8	<1.8	<1.8	<1.8	<1.8
1,3-Butadiene	µg/m³	0.6	<0.6	<0.6	<0.6	<0.6
2-Butanone (Methyl Ethyl Ketone)	µg/m³	1	<1	<1	<1	<1
tert-Butyl Alcohol	µg/m³	1	<1	<1	<1	<1
n-Butylbenzene	µg/m³	1.6	<1.6	<1.6	<1.6	<1.6
sec-Butylbenzene	µg/m³	1.6	<1.6	<1.6	<1.6	<1.6
tert-Butylbenzene	µg/m³	1.6	<1.6	<1.6	<1.6	<1.6
Carbon Disulfide	µg/m³	20	<20	<20	<20	<20
Carbon Tetrachloride	µg/m³	2	<2	<2	<2	<2
Chlorobenzene	µg/m³	1.2	<1.2	<1.2	<1.2	<1.2
Chloroethane	µg/m³	1.2	<1.2	<1.2	<1.2	<1.2
Chloroform	µg/m³	1.8	<1.8	<1.8	<1.8	<1.8
Chloromethane	µg/m³	1.4	<1.4	<1.4	<1.4	<1.4
2-Chloroprene	µg/m³	2.2	<2.2	<2.2	<2.2	<2.2
3-Chloropropene	µg/m³	1.4	<1.4	<1.4	<1.4	<1.4
2-Chlorotoluene	µg/m³	1.8	<1.8	<1.8	<1.8	<1.8
alpha-Chlorotoluene	µg/m³	1.4	<1.4	<1.4	<1.4	<1.4
Cumene	µg/m³	1.6	<1.6	<1.6	<1.6	<1.6
Cyclohexane	µg/m³	0.8	<0.8	<0.8	<0.8	<0.8
o-Cymene	µg/m³	1.6	<1.6	<1.6	<1.6	<1.6
Dibromochloromethane	µg/m³	2.4	<2.4	<2.4	<2.4	<2.4
1,2-Dibromoethane (EDB)	µg/m³	2.4	<2.4	<2.4	<2.4	<2.4
1,2-Dichlorobenzene	µg/m³	2	<2	<2	<2	<2
1,3-Dichlorobenzene	µg/m³	2.6	<2.6	<2.6	<2.6	<2.6
1,4-Dichlorobenzene	µg/m³	2.6	<2.6	<2.6	<2.6	<2.6
1,1-Dichloroethane	µg/m³	1.4	<1.4	<1.4	<1.4	<1.4
1,2-Dichloroethane	µg/m³	2	<2	<2	<2	<2
1,1-Dichloroethene	µg/m³	1.2	<1.2	<1.2	<1.2	<1.2
cis-1,2-Dichloroethene	µg/m³	1.6	<1.6	<1.6	<1.6	<1.6
trans-1,2-Dichloroethene	µg/m³	1.2	<1.2	<1.2	<1.2	<1.2
1,2-Dichloropropane	µg/m³	1.6	<1.6	<1.6	<1.6	<1.6
cis-1,3-Dichloropropene	µg/m³	1.2	<1.2	<1.2	<1.2	<1.2
trans-1,3-Dichloropropene	µg/m³	1.4	<1.4	<1.4	<1.4	<1.4
Diisopropyl Ether	µg/m³	1.4	<1.4	<1.4	<1.4	<1.4
1,4-Dioxane	µg/m³	1.2	<1.2	<1.2	<1.2	<1.2
Ethanol	µg/m³	20	<20	<20	<20	<20
Ethyl Acetate	µg/m³	1.6	<1.6	<1.6	<1.6	<1.6
Ethyl Benzene	µg/m³	1.2	<1.2	<1.2	<1.2	<1.2
Ethyl tert-Butyl Ether	µg/m³	1	<1	<1	<1	<1
4-Ethyltoluene	µg/m³	1.2	<1.2	<1.2	<1.2	<1.2
Freon 11	µg/m³	0.6	<0.6	<0.6	<0.6	<0.6
Freon 113	µg/m³	2	<2	<2	<2	<2
Freon 114	µg/m³	0.6	<0.6	<0.6	<0.6	<0.6
Freon 12	µg/m³	0.8	<0.8	<0.8	<0.8	<0.8
Heptane	µg/m³	1.4	<1.4	<1.4	<1.4	<1.4
Hexachlorobutadiene	µg/m³	4	<4	<4	<4	<4
Hexane	µg/m³	1.2	<1.2	<1.2	<1.2	<1.2
2-Hexanone	µg/m³	1.2	<1.2	<1.2	<1.2	<1.2
m,p-Xylene	µg/m³	2.6	<2.6	<2.6	<2.6	<2.6
Methyl Methacrylate	µg/m³	1.4	<1.4	<1.4	<1.4	<1.4
Methyl tert-butyl ether	µg/m³	1.2	<1.2	<1.2	<1.2	<1.2

Parameter	Units	LOR	Sample Number Sample Depth Sample Name ME317274S.001 200929K SC1023	ME317274S.002 201027C SC4240	ME317274S.003 201027C SC3701	ME317274S.004 201027C SC1122
TO-15 in Air TO-15 Certification Method: TO15_CERT Tested: 6/11/2020 (continued)						
4-Methyl-2-pentanone	µg/m³	1.2	<1.2	<1.2	<1.2	<1.2
Methylene Chloride	µg/m³	20	<20	<20	<20	<20
Naphthalene	µg/m³	4.2	<4.2	<4.2	<4.2	<4.2
2-Propanol	µg/m³	20	<20	<20	<20	<20
Propene	µg/m³	2	<2	<2	<2	<2
Propylbenzene	µg/m³	1.4	<1.4	<1.4	<1.4	<1.4
Styrene	µg/m³	1.2	<1.2	<1.2	<1.2	<1.2
1,1,1,2-Tetrachloroethane	µg/m³	2	<2	<2	<2	<2
1,1,2,2-Tetrachloroethane	µg/m³	1.4	<1.4	<1.4	<1.4	<1.4
Tetrachloroethene	µg/m³	2.2	<2.2	<2.2	<2.2	<2.2
Tetrahydrofuran	µg/m³	0.8	<0.8	<0.8	<0.8	<0.8
Toluene	µg/m³	1.2	<1.2	<1.2	<1.2	<1.2
1,2,4-Trichlorobenzene	µg/m³	7.2	<7.2	<7.2	<7.2	<7.2
1,1,1-Trichloroethane	µg/m³	1.6	<1.6	<1.6	<1.6	<1.6
1,1,2-Trichloroethane	µg/m³	1.6	<1.6	<1.6	<1.6	<1.6
Trichloroethene	µg/m³	1.8	<1.8	<1.8	<1.8	<1.8
1,2,4-Trimethylbenzene	µg/m³	1.6	<1.6	<1.6	<1.6	<1.6
1,3,5-Trimethylbenzene	µg/m³	1.2	<1.2	<1.2	<1.2	<1.2
2,2,4-Trimethylpentane	µg/m³	1.8	<1.8	<1.8	<1.8	<1.8
Vinyl Acetate	µg/m³	1.4	<1.4	<1.4	<1.4	<1.4
Vinyl Bromide	µg/m³	1.6	<1.6	<1.6	<1.6	<1.6
Vinyl Chloride	µg/m³	0.8	<0.8	<0.8	<0.8	<0.8
o-Xylene	µg/m³	1.2	<1.2	<1.2	<1.2	<1.2
Xylenes	µg/m³	3.8	<3.8	<3.8	<3.8	<3.8

Parameter	Units	LOR	Sample Number Sample Depth Sample Name ME317274S.005 201027H SC1102	ME317274S.006 201027H SC1064	ME317274S.007 201027H SC1070	ME317274S.008 201027H SC3721
TO-15 in Air TO-15 Certification Method: TO15_CERT Tested: 6/11/2020						
Acetone	µg/m³	20	<20	<20	<20	<20
Acetonitrile	µg/m³	20	<20	<20	<20	<20
Acrolein	µg/m³	1.4	<1.4	<1.4	<1.4	<1.4
Acrylonitrile	µg/m³	3.6	<3.6	<3.6	<3.6	<3.6
tert-Amyl Methyl Ether	µg/m³	1.2	<1.2	<1.2	<1.2	<1.2
Benzene	µg/m³	1	<1	<1	<1	<1
Bromodichloromethane	µg/m³	2	<2	<2	<2	<2
Bromoform	µg/m³	2.4	<2.4	<2.4	<2.4	<2.4
Bromomethane	µg/m³	1.8	<1.8	<1.8	<1.8	<1.8
1,3-Butadiene	µg/m³	0.6	<0.6	<0.6	<0.6	<0.6
2-Butanone (Methyl Ethyl Ketone)	µg/m³	1	<1	<1	<1	<1
tert-Butyl Alcohol	µg/m³	1	<1	<1	<1	<1
n-Butylbenzene	µg/m³	1.6	<1.6	<1.6	<1.6	<1.6
sec-Butylbenzene	µg/m³	1.6	<1.6	<1.6	<1.6	<1.6
tert-Butylbenzene	µg/m³	1.6	<1.6	<1.6	<1.6	<1.6
Carbon Disulfide	µg/m³	20	<20	<20	<20	<20
Carbon Tetrachloride	µg/m³	2	<2	<2	<2	<2
Chlorobenzene	µg/m³	1.2	<1.2	<1.2	<1.2	<1.2
Chloroethane	µg/m³	1.2	<1.2	<1.2	<1.2	<1.2
Chloroform	µg/m³	1.8	<1.8	<1.8	<1.8	<1.8
Chloromethane	µg/m³	1.4	<1.4	<1.4	<1.4	<1.4
2-Chloroprene	µg/m³	2.2	<2.2	<2.2	<2.2	<2.2
3-Chloropropene	µg/m³	1.4	<1.4	<1.4	<1.4	<1.4
2-Chlorotoluene	µg/m³	1.8	<1.8	<1.8	<1.8	<1.8
alpha-Chlorotoluene	µg/m³	1.4	<1.4	<1.4	<1.4	<1.4
Cumene	µg/m³	1.6	<1.6	<1.6	<1.6	<1.6
Cyclohexane	µg/m³	0.8	<0.8	<0.8	<0.8	<0.8
o-Cymene	µg/m³	1.6	<1.6	<1.6	<1.6	<1.6
Dibromochloromethane	µg/m³	2.4	<2.4	<2.4	<2.4	<2.4
1,2-Dibromoethane (EDB)	µg/m³	2.4	<2.4	<2.4	<2.4	<2.4
1,2-Dichlorobenzene	µg/m³	2	<2	<2	<2	<2
1,3-Dichlorobenzene	µg/m³	2.6	<2.6	<2.6	<2.6	<2.6
1,4-Dichlorobenzene	µg/m³	2.6	<2.6	<2.6	<2.6	<2.6
1,1-Dichloroethane	µg/m³	1.4	<1.4	<1.4	<1.4	<1.4
1,2-Dichloroethane	µg/m³	2	<2	<2	<2	<2
1,1-Dichloroethene	µg/m³	1.2	<1.2	<1.2	<1.2	<1.2
cis-1,2-Dichloroethene	µg/m³	1.6	<1.6	<1.6	<1.6	<1.6
trans-1,2-Dichloroethene	µg/m³	1.2	<1.2	<1.2	<1.2	<1.2
1,2-Dichloropropane	µg/m³	1.6	<1.6	<1.6	<1.6	<1.6
cis-1,3-Dichloropropene	µg/m³	1.2	<1.2	<1.2	<1.2	<1.2
trans-1,3-Dichloropropene	µg/m³	1.4	<1.4	<1.4	<1.4	<1.4
Diisopropyl Ether	µg/m³	1.4	<1.4	<1.4	<1.4	<1.4
1,4-Dioxane	µg/m³	1.2	<1.2	<1.2	<1.2	<1.2
Ethanol	µg/m³	20	<20	<20	<20	<20
Ethyl Acetate	µg/m³	1.6	<1.6	<1.6	<1.6	<1.6
Ethyl Benzene	µg/m³	1.2	<1.2	<1.2	<1.2	<1.2
Ethyl tert-Butyl Ether	µg/m³	1	<1	<1	<1	<1
4-Ethyltoluene	µg/m³	1.2	<1.2	<1.2	<1.2	<1.2
Freon 11	µg/m³	0.6	<0.6	<0.6	<0.6	<0.6
Freon 113	µg/m³	2	<2	<2	<2	<2
Freon 114	µg/m³	0.6	<0.6	<0.6	<0.6	<0.6
Freon 12	µg/m³	0.8	<0.8	<0.8	<0.8	<0.8
Heptane	µg/m³	1.4	<1.4	<1.4	<1.4	<1.4
Hexachlorobutadiene	µg/m³	4	<4	<4	<4	<4
Hexane	µg/m³	1.2	<1.2	<1.2	<1.2	<1.2
2-Hexanone	µg/m³	1.2	<1.2	<1.2	<1.2	<1.2
m,p-Xylene	µg/m³	2.6	<2.6	<2.6	<2.6	<2.6
Methyl Methacrylate	µg/m³	1.4	<1.4	<1.4	<1.4	<1.4
Methyl tert-butyl ether	µg/m³	1.2	<1.2	<1.2	<1.2	<1.2

Parameter	Units	LOR	Sample Number: ME317274S.005 Sample Depth: 201027H Sample Name: SC1102	ME317274S.006 201027H SC1064	ME317274S.007 201027H SC1070	ME317274S.008 201027H SC3721
TO-15 in Air TO-15 Certification Method: TO15_CERT Tested: 6/11/2020 (continued)						
4-Methyl-2-pentanone	µg/m³	1.2	<1.2	<1.2	<1.2	<1.2
Methylene Chloride	µg/m³	20	<20	<20	<20	<20
Naphthalene	µg/m³	4.2	<4.2	<4.2	<4.2	<4.2
2-Propanol	µg/m³	20	<20	<20	<20	<20
Propene	µg/m³	2	<2	<2	<2	<2
Propylbenzene	µg/m³	1.4	<1.4	<1.4	<1.4	<1.4
Styrene	µg/m³	1.2	<1.2	<1.2	<1.2	<1.2
1,1,1,2-Tetrachloroethane	µg/m³	2	<2	<2	<2	<2
1,1,2,2-Tetrachloroethane	µg/m³	1.4	<1.4	<1.4	<1.4	<1.4
Tetrachloroethene	µg/m³	2.2	<2.2	<2.2	<2.2	<2.2
Tetrahydrofuran	µg/m³	0.8	<0.8	<0.8	<0.8	<0.8
Toluene	µg/m³	1.2	<1.2	<1.2	<1.2	<1.2
1,2,4-Trichlorobenzene	µg/m³	7.2	<7.2	<7.2	<7.2	<7.2
1,1,1-Trichloroethane	µg/m³	1.6	<1.6	<1.6	<1.6	<1.6
1,1,2-Trichloroethane	µg/m³	1.6	<1.6	<1.6	<1.6	<1.6
Trichloroethene	µg/m³	1.8	<1.8	<1.8	<1.8	<1.8
1,2,4-Trimethylbenzene	µg/m³	1.6	<1.6	<1.6	<1.6	<1.6
1,3,5-Trimethylbenzene	µg/m³	1.2	<1.2	<1.2	<1.2	<1.2
2,2,4-Trimethylpentane	µg/m³	1.8	<1.8	<1.8	<1.8	<1.8
Vinyl Acetate	µg/m³	1.4	<1.4	<1.4	<1.4	<1.4
Vinyl Bromide	µg/m³	1.6	<1.6	<1.6	<1.6	<1.6
Vinyl Chloride	µg/m³	0.8	<0.8	<0.8	<0.8	<0.8
o-Xylene	µg/m³	1.2	<1.2	<1.2	<1.2	<1.2
Xylenes	µg/m³	3.8	<3.8	<3.8	<3.8	<3.8

Parameter	Units	LOR	Sample Number Sample Name ME317274S.009 10 x Carbon Tubes	ME317274S.010 Other
TO-15 in Air TO-15 Certification Method: TO15_CERT Tested: 6/11/2020				
Acetone	µg/m³	20	-	-
Acetonitrile	µg/m³	20	-	-
Acrolein	µg/m³	1.4	-	-
Acrylonitrile	µg/m³	3.6	-	-
tert-Amyl Methyl Ether	µg/m³	1.2	-	-
Benzene	µg/m³	1	-	-
Bromodichloromethane	µg/m³	2	-	-
Bromoform	µg/m³	2.4	-	-
Bromomethane	µg/m³	1.8	-	-
1,3-Butadiene	µg/m³	0.6	-	-
2-Butanone (Methyl Ethyl Ketone)	µg/m³	1	-	-
tert-Butyl Alcohol	µg/m³	1	-	-
n-Butylbenzene	µg/m³	1.6	-	-
sec-Butylbenzene	µg/m³	1.6	-	-
tert-Butylbenzene	µg/m³	1.6	-	-
Carbon Disulfide	µg/m³	20	-	-
Carbon Tetrachloride	µg/m³	2	-	-
Chlorobenzene	µg/m³	1.2	-	-
Chloroethane	µg/m³	1.2	-	-
Chloroform	µg/m³	1.8	-	-
Chloromethane	µg/m³	1.4	-	-
2-Chloroprene	µg/m³	2.2	-	-
3-Chloropropene	µg/m³	1.4	-	-
2-Chlorotoluene	µg/m³	1.8	-	-
alpha-Chlorotoluene	µg/m³	1.4	-	-
Cumene	µg/m³	1.6	-	-
Cyclohexane	µg/m³	0.8	-	-
o-Cymene	µg/m³	1.6	-	-
Dibromochloromethane	µg/m³	2.4	-	-
1,2-Dibromoethane (EDB)	µg/m³	2.4	-	-
1,2-Dichlorobenzene	µg/m³	2	-	-
1,3-Dichlorobenzene	µg/m³	2.6	-	-
1,4-Dichlorobenzene	µg/m³	2.6	-	-
1,1-Dichloroethane	µg/m³	1.4	-	-
1,2-Dichloroethane	µg/m³	2	-	-
1,1-Dichloroethene	µg/m³	1.2	-	-
cis-1,2-Dichloroethene	µg/m³	1.6	-	-
trans-1,2-Dichloroethene	µg/m³	1.2	-	-
1,2-Dichloropropane	µg/m³	1.6	-	-
cis-1,3-Dichloropropene	µg/m³	1.2	-	-
trans-1,3-Dichloropropene	µg/m³	1.4	-	-
Diisopropyl Ether	µg/m³	1.4	-	-
1,4-Dioxane	µg/m³	1.2	-	-
Ethanol	µg/m³	20	-	-
Ethyl Acetate	µg/m³	1.6	-	-
Ethyl Benzene	µg/m³	1.2	-	-
Ethyl tert-Butyl Ether	µg/m³	1	-	-
4-Ethyltoluene	µg/m³	1.2	-	-
Freon 11	µg/m³	0.6	-	-
Freon 113	µg/m³	2	-	-
Freon 114	µg/m³	0.6	-	-
Freon 12	µg/m³	0.8	-	-
Heptane	µg/m³	1.4	-	-
Hexachlorobutadiene	µg/m³	4	-	-
Hexane	µg/m³	1.2	-	-
2-Hexanone	µg/m³	1.2	-	-
m,p-Xylene	µg/m³	2.6	-	-
Methyl Methacrylate	µg/m³	1.4	-	-
Methyl tert-butyl ether	µg/m³	1.2	-	-

Parameter	Units	LOR	Sample Number Sample Name ME317274S.009 10 x Carbon Tubes	ME317274S.010 Other
TO-15 in Air TO-15 Certification Method: TO15_CERT Tested: 6/11/2020 (continued)				
4-Methyl-2-pentanone	µg/m³	1.2	-	-
Methylene Chloride	µg/m³	20	-	-
Naphthalene	µg/m³	4.2	-	-
2-Propanol	µg/m³	20	-	-
Propene	µg/m³	2	-	-
Propylbenzene	µg/m³	1.4	-	-
Styrene	µg/m³	1.2	-	-
1,1,1,2-Tetrachloroethane	µg/m³	2	-	-
1,1,2,2-Tetrachloroethane	µg/m³	1.4	-	-
Tetrachloroethene	µg/m³	2.2	-	-
Tetrahydrofuran	µg/m³	0.8	-	-
Toluene	µg/m³	1.2	-	-
1,2,4-Trichlorobenzene	µg/m³	7.2	-	-
1,1,1-Trichloroethane	µg/m³	1.6	-	-
1,1,2-Trichloroethane	µg/m³	1.6	-	-
Trichloroethene	µg/m³	1.8	-	-
1,2,4-Trimethylbenzene	µg/m³	1.6	-	-
1,3,5-Trimethylbenzene	µg/m³	1.2	-	-
2,2,4-Trimethylpentane	µg/m³	1.8	-	-
Vinyl Acetate	µg/m³	1.4	-	-
Vinyl Bromide	µg/m³	1.6	-	-
Vinyl Chloride	µg/m³	0.8	-	-
o-Xylene	µg/m³	1.2	-	-
Xylenes	µg/m³	3.8	-	-

QC SUMMARY

MB blank results are compared to the Limit of Reporting
LCS and MS spike recoveries are measured as the percentage of analyte recovered from the sample compared the the amount of analyte spiked into the sample.
DUP and MSD relative percent differences are measured against their original counterpart samples according to the formula : *the absolute difference of the two results divided by the average of the two results as a percentage.* Where the DUP RPD is 'NA' , the results are less than the LOR and thus the RPD is not applicable.

No QC samples were reported for this job.

METHOD SUMMARY

METHOD	METHODOLOGY SUMMARY
TO15-Cert	This method includes the preparation of the canisters and certification of cleanliness. This method is based on the USEPA TO-14 “Determination of Volatile Organic Compounds (VOCs) in Ambient Air using specially prepared canisters with subsequent analysis by Gas Chromatography” and USEPA TO-15 “Determination of Volatile Organic Compounds (VOCs) in Air collected in specially-prepared canisters and analysed by Gas Chromatography/ Mass Spectrometry (GC/MS).

FOOTNOTES

IS	Insufficient sample for analysis.	LOR	Limit of Reporting
LNR	Sample listed, but not received.	↑↓	Raised or Lowered Limit of Reporting
*	NATA accreditation does not cover the performance of this service.	QFH	QC result is above the upper tolerance
		QFL	QC result is below the lower tolerance
**	Indicative data, theoretical holding time exceeded.	-	The sample was not analysed for this analyte
		NVL	Not Validated

Samples analysed as received.
Solid samples expressed on a dry weight basis.

Where "Total" analyte groups are reported (for example, Total PAHs, Total OC Pesticides) the total will be calculated as the sum of the individual analytes, with those analytes that are reported as <LOR being assumed to be zero. The summed (Total) limit of reporting is calcuated by summing the individual analyte LORs and dividing by two. For example, where 16 individual analytes are being summed and each has an LOR of 0.1 mg/kg, the "Totals" LOR will be 1.6 / 2 (0.8 mg/kg). Where only 2 analytes are being summed, the " Total" LOR will be the sum of those two LORs.

Some totals may not appear to add up because the total is rounded after adding up the raw values.

If reported, measurement uncertainty follow the ± sign after the analytical result and is expressed as the expanded uncertainty calculated using a coverage factor of 2, providing a level of confidence of approximately 95%, unless stated otherwise in the comments section of this report.

Results reported for samples tested under test methods with codes starting with ARS-SOP, radionuclide or gross radioactivity concentrations are expressed in becquerel (Bq) per unit of mass or volume or per wipe as stated on the report. Becquerel is the SI unit for activity and equals one nuclear transformation per second.
Note that in terms of units of radioactivity:

a. 1 Bq is equivalent to 27 pCi
b. 37 MBq is equivalent to 1 mCi

For results reported for samples tested under test methods with codes starting with ARS-SOP, less than (<) values indicate the detection limit for each radionuclide or parameter for the measurement system used. The respective detection limits have been calculated in accordance with ISO 11929.

The QC criteria are subject to internal review according to the SGS QAQC plan and may be provided on request or alternatively can be found here: http://www.sgs.com.au/~/media/Local/Australia/Documents/Technical%20Documents/MP-AU-ENV-QU-022%20QA%20QC%20Plan.pdf

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WATERLOO MEMBRANE SAMPLER (WMS) INSTALLATION METHODOLOGY

SCOPE

This method is intended for the passive sampling of Volatile Organic Compounds (VOCs) in ambient air and soil gas - using Waterloo membrane samplers (WMS'). This method is a guide on the installation process for WMS' and does not purport to address all of the aspects of site assessment such as implementation of sampling pattern, sampling density/frequency, data interpretation, modelling, outside influences or technical issues.

PRINCIPLE

VOC's in a gaseous phase move across a permeable membrane and sorb to absorbent medium within a glass vial. The membrane is made of poly-dimethyl siloxane (PDMS) which has known permeability values for a range of compounds. The movement of VOC's across the PDMS membrane is controlled by the molecular mass of the individual organic compounds and the surface area of the membrane which is available for the VOC diffusion.

REFERENCES

(a) ASTM D7758-11 Passive Soil Gas Sampling in the Vadose Zone for Source Identification, Spatial Variability Assessment, Monitoring, and Vapour Intrusion Evaluations, 2011.

(b) ASTM D5314 – 92), Standard Guide for Soil Gas Monitoring in the Vadose Zone, (Revised 2001.

(c) Calibration of Permeation Passive Samplers with Silicone Membranes Based on Physiochemical Properties of the Analytes, Zabiegala Et al, 2003.

SAFETY:

This procedure does not purport to address all of the safety problems associated with its use. It is the responsibility of the user of this procedure to establish appropriate safety and health practices. Appropriate PPE should be worn.

EQUIPMENT

a) Hand-Auger or drill rig
b) Electric or Cordless Hammer Drill
c) Narrow bottle brush and/or Wet dry vacuum
d) WMS media including QA/QC units
e) Plastic sleeves
f) Foam Plugs
g) Suitable diameter and length pipe and dowel
h) Foil
i) Thin rope, cord, fishing line or string
j) Chain of custody documentation
k) Cement for re-grouting core holes after WMS retrieval

PROCEDURE

Prior to any excavation or penetration of the ground surface, the area must be cleared of services by a suitably qualified services locator.

The exposure period for the WMS's should be assessed by field screening with a PID. For high soil gas PID readings, a shorter exposure period should be considered to avoid saturation of the sample media.

1. Advance a borehole to the desired depth (generally a minimum of 1m) or just below the base of a concrete slab for sub-slab installations.
2. Take a PID reading from the base of the open borehole by connecting a PID to a 1m length of Teflon tubing.
3. Record PID measurement on Chain of Custody and open the WMS from packaging and connect to a pre-measured length of nylon cord or 2kg fishing line.
4. Lower the WMS to the desired depth within the borehole and secure at the surface (Approximately 5cm from the base of the borehole). Document the time and date of the installation on the Passive sampling COC (PF-AU-ENV-MIT-QU-142-Passive Sampling COC)
5. Insert a foam plug into the base of the PVC pipe and then insert the pipe inside a clean plastic sleeve.
6. Lower pipe with plug and plastic sleeve into the borehole to a depth just above (10cm) the level of the WMS, use the length of dowel to poke the foam plug out of the pipe and this will expand and push the plastic sleeve against the walls of the borehole.
7. Cover the surface of the open borehole with aluminium foil and place a solid object over the hole to prevent the WMS from being tampered with and to encourage water to run away from the borehole rather than to drain into the hole. A thin 'skin' of concrete can also be used to prevent surface water entering the hole.
8. To retrieve the WMS' simply take the protective cover from the surface of the borehole and pull the plastic sleeve and plug from the borehole. Then remove the WMS by raising to the surface with the cord or fishing line. Document the time and date of the retrieval on the Passive sampling COC (PF-AU-ENV-MIT-QU-142-Passive Sampling COC) and place the WMS back inside its unique coded glass vial and ziplock bag. Transport to laboratory and indicate on the COC the required analysis.

RECORDS:

The following records need to be kept for each sampling job:

- Time/Date of WMS deployment and the sample location ID that correlates to the WMS ID code.
- Samplers name
- Time/date of WMS retrieval
- Weather Conditions over the exposure period
- Required Analysis

QUALITY CONTROL

Sample locations should be sampled in duplicate at a rate of one in ten unless otherwise specified by the client. Trip Blanks should be included with each type of media at a rate of one in ten. Laboratory analysis is conducted on each batch of samplers as they are received to assess for VOC's present from manufacturing processes or transportation.









ENVIRONMENTAL WELL ASG01

PROJECT NUMBER 610.30041.00000	**DRILLING COMPANY** Numac Drilling	**COORDINATES**
PROJECT NAME Randwick DHA DSI	**DRILLER**	**COORD SYS**
CLIENT DHA	**DRILL RIG** Geoprobe 7822DT	**SURFACE ELEVATION**
ADDRESS 373 A Avoca Street, Kingsford, NSW	**DRILLING METHOD** Hollow flight	**WELL TOC**
DRILLING DATE 15/10/2020	**TOTAL DEPTH** 1.2 mbgl	**LOGGED BY** [redacted]
LICENCE NO.	**DIAMETER** 50mm	**CHECKED BY** [redacted]
COMPLETION15/10/20	**CASING** uPVC	**SCREEN** uPVC Factory Slotted

COMMENTS ASG01 installed by SGS Australia

Depth (m)	ASG Installation	Graphic Log	Material Description	Moisture	Additional Observations
0.05			Topsoil: Gravelly sand, fine to coarse, brown, loose	SM	100mm PVC stickup to secure 1/4" tubing
0.1			FILL: Gravelly sand, fine to coarse, pale grey to pale brown, dense		
0.15					
0.2					
0.25					
0.3					
0.35					
0.4					
0.45					
0.5					
0.55					
0.6					
0.65					
0.7					
0.75					
0.8					
0.85					
0.9			FILL: Gravelly sand, fine to coarse, dark brown, dense		ASG01 installed at 1.1mbgl
0.95					
1					
1.05					
1.1			SAND: Fine to coarse grained, brown to dark brown, loose		
1.15					
1.2			Termination Depth at:1.2mbgl		

ENVIRONMENTAL WELL ASG02

PROJECT NUMBER 610.30041.00000	**DRILLING COMPANY** Numac Drilling	**COORDINATES**
PROJECT NAME Randwick DHA DSI	**DRILLER**	**COORD SYS**
CLIENT DHA	**DRILL RIG** Geoprobe 7822DT	**SURFACE ELEVATION**
ADDRESS 373 A Avoca Street, Kingsford, NSW	**DRILLING METHOD** Hollow flight	**WELL TOC**
DRILLING DATE 15/10/2020	**TOTAL DEPTH** 1.2 mbgl	**LOGGED BY** [redacted]
LICENCE NO.	**DIAMETER** 50mm	**CHECKED BY** [redacted]
COMPLETION15/10/20	**CASING** uPVC	**SCREEN** uPVC Factory Slotted

COMMENTS ASG02 installed by SGS Australia

Depth (m)	ASG Installation	Graphic Log	Material Description	Moisture	Additional Observations
0.05			Topsoil: Gravelly sand, fine to coarse, brown, loose	SM	100mm PVC stickup to secure 1/4" tubing
0.1			FILL: Gravelly sand, fine to coarse, pale grey to pale brown, dense		
0.15					
0.2					
0.25					
0.3					
0.35					
0.4					
0.45					
0.5					
0.55					
0.6					
0.65					
0.7					
0.75					
0.8					
0.85					
0.9			FILL: Gravelly sand, fine to coarse, dark brown, dense		ASG02 installed at 1.1mbgl
0.95					
1					
1.05					
1.1			SAND: Fine to coarse grained, brown to dark brown, loose		
1.15					
1.2			Termination Depth at:1.2mbgl		

ENVIRONMENTAL WELL ASG03

PROJECT NUMBER 610.30041.00000	**DRILLING COMPANY** Numac Drilling	**COORDINATES**
PROJECT NAME Randwick DHA DSI	**DRILLER**	**COORD SYS**
CLIENT DHA	**DRILL RIG** Geoprobe 7822DT	**SURFACE ELEVATION**
ADDRESS 373 A Avoca Street, Kingsford, NSW	**DRILLING METHOD** Hollow flight	**WELL TOC**
DRILLING DATE 15/10/2020	**TOTAL DEPTH** 1.2 mbgl	**LOGGED BY** [redacted]
LICENCE NO.	**DIAMETER** 50mm	**CHECKED BY** [redacted]
COMPLETION15/10/20	**CASING** uPVC	**SCREEN** uPVC Factory Slotted

COMMENTS ASG03 installed by SGS Australia

Depth (m)	ASG Installation	Graphic Log	Material Description	Moisture	Additional Observations
0.05			Topsoil: Gravelly sand, fine to coarse, brown, loose	SM	100mm PVC stickup to secure 1/4" tubing
0.1			FILL: Gravelly sand, fine to coarse, pale grey to pale brown, dense		
0.15					
0.2					
0.25					
0.3					
0.35					
0.4					
0.45					
0.5					
0.55					
0.6					
0.65					
0.7					
0.75					
0.8					
0.85					
0.9					ASG03 installed at 1.1mbgl
0.95					
1					
1.05					
1.1			SAND: Fine to coarse grained, brown to dark brown, loose		
1.15					
1.2			Termination Depth at:1.2mbgl		

ENVIRONMENTAL WELL ASG04

PROJECT NUMBER 610.30041.00000	**DRILLING COMPANY** Numac Drilling	**COORDINATES**
PROJECT NAME Randwick DHA DSI	**DRILLER**	**COORD SYS**
CLIENT DHA	**DRILL RIG** Geoprobe 7822DT	**SURFACE ELEVATION**
ADDRESS 373 A Avoca Street, Kingsford, NSW	**DRILLING METHOD** Hollow flight	**WELL TOC**
DRILLING DATE 15/10/2020	**TOTAL DEPTH** 1.2 mbgl	**LOGGED BY** [redacted]
LICENCE NO.	**DIAMETER** 50mm	**CHECKED BY** [redacted]
COMPLETION15/10/20	**CASING** uPVC	**SCREEN** uPVC Factory Slotted

COMMENTS ASG04 installed by SGS Australia

Depth (m)	ASG Installation	Graphic Log	Material Description	Moisture	Additional Observations
0.05			Topsoil: Gravelly sand, fine to coarse, brown, loose	SM	100mm PVC stickup to secure 1/4" tubing
0.1			FILL: Gravelly sand, fine to coarse, pale grey to pale brown, dense		
0.15					
0.2					
0.25					
0.3					
0.35					
0.4					
0.45					
0.5					
0.55					
0.6					
0.65					
0.7					
0.75					
0.8					
0.85					
0.9					ASG04 installed at 1.1mbgl
0.95					
1					
1.05					
1.1			SAND: Fine to coarse grained, brown to dark brown, loose		
1.15					
1.2			Termination Depth at:1.2mbgl		

ENVIRONMENTAL WELL ASG05

PROJECT NUMBER 610.30041.00000	**DRILLING COMPANY** Numac Drilling	**COORDINATES**
PROJECT NAME Randwick DHA DSI	**DRILLER**	**COORD SYS**
CLIENT DHA	**DRILL RIG** Geoprobe 7822DT	**SURFACE ELEVATION**
ADDRESS 373 A Avoca Street, Kingsford, NSW	**DRILLING METHOD** Hollow flight	**WELL TOC**
DRILLING DATE 11/11/2020	**TOTAL DEPTH** 0.05 mbgl	**LOGGED BY** [redacted]
LICENCE NO.	**DIAMETER** 50mm	**CHECKED BY** [redacted]

COMPLETION11/11/20	**CASING** uPVC	**SCREEN** uPVC Factory Slotted

COMMENTS ASG05 installed by SGS Australia

Depth (m)	ASG Installation	Graphic Log	Material Description	Moisture	Additional Observations
0.02			Concrete slab	SM	ASG05 installed sub slab.
0.04					
0.06					
0.08					
0.1					
0.12					
0.14					
0.16					
0.18					
0.2					
0.22					
0.24					
0.26					
0.28					
0.3					
0.32					
0.34					
0.36					
0.38					
0.4					
0.42					
0.44					
0.46					
0.48					

ENVIRONMENTAL WELL ASG06

PROJECT NUMBER 610.30041.00000	**DRILLING COMPANY** Numac Drilling	**COORDINATES**
PROJECT NAME Randwick DHA DSI	**DRILLER**	**COORD SYS**
CLIENT DHA	**DRILL RIG** Geoprobe 7822DT	**SURFACE ELEVATION**
ADDRESS 373 A Avoca Street, Kingsford, NSW	**DRILLING METHOD** Hollow flight	**WELL TOC**
DRILLING DATE 11/11/2020	**TOTAL DEPTH** 0.05 mbgl	**LOGGED BY** [redacted]
LICENCE NO.	**DIAMETER** 50mm	**CHECKED BY** [redacted]
COMPLETION11/11/20	**CASING** uPVC	**SCREEN** uPVC Factory Slotted

COMMENTS ASG06 installed by SGS Australia

Depth (m)	ASG Installation	Graphic Log	Material Description	Moisture	Additional Observations
0.02			Concrete slab	SM	ASG06 installed sub slab.
0.04					
0.06					
0.08					
0.1					
0.12					
0.14					
0.16					
0.18					
0.2					
0.22					
0.24					
0.26					
0.28					
0.3					
0.32					
0.34					
0.36					
0.38					
0.4					
0.42					
0.44					
0.46					
0.48					

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